*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XVIII-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-44-1	^{t}Bu	H	H	H	Bz	OCH_3	F	H	OH	H	H
XVIII-44-2	^{t}Bu	H	H	CH_3	Bz	OCH_3	F	H	OH	H	H
XVIII-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-44-5	^{t}Bu	H	H	CH_2Ph	Bz	OCH_3	F	H	OH	H	H
XVIII-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	H	OH	H	H
XVIII-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	H	OH	H	H
XVIII-44-8	^{t}Bu	*	H	*	Bz	OCH_3	F	H	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XVIII-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-45-1	Ph	H	H	H	Bz	OCH_3	F	H	OH	H	H
XVIII-45-2	Ph	H	H	CH_3	Bz	OCH_3	F	H	OH	H	H
XVIII-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-45-5	Ph	H	H	CH_2Ph	Bz	OCH_3	F	H	OH	H	H
XVIII-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	H	OH	H	H
XVIII-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	H	OH	H	H
XVIII-45-8	Ph	*	H	*	Bz	OCH_3	F	H	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XVIII-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-46-1	p-Me-Ph	H	H	H	Bz	OCH_3	F	H	OH	H	H
XVIII-46-2	p-Me-Ph	H	H	CH_3	Bz	OCH_3	F	H	OH	H	H
XVIII-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	OCH_3	F	H	OH	H	H
XVIII-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	H	OH	H	H
XVIII-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	H	OH	H	H

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-46-8	p-Me-Ph	*	H	*	Bz	OCH_3	F	H	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XVIII-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-47-1	p-F-Ph	H	H	H	Bz	OCH_3	F	H	OH	H	H
XVIII-47-2	p-F-Ph	H	H	CH_3	Bz	OCH_3	F	H	OH	H	H
XVIII-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-47-5	p-F-Ph	H	H	CH_2Ph	Bz	OCH_3	F	H	OH	H	H
XVIII-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	H	OH	H	H
XVIII-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	H	OH	H	H
XVIII-47-8	p-F-Ph	*	H	*	Bz	OCH_3	F	H	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XVIII-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-48-1	p-Cl-Ph	H	H	H	Bz	OCH_3	F	H	OH	H	H
XVIII-48-2	p-Cl-Ph	H	H	CH_3	Bz	OCH_3	F	H	OH	H	H
XVIII-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	OCH_3	F	H	OH	H	H
XVIII-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	H	OH	H	H
XVIII-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	H	OH	H	H
XVIII-48-8	p-Cl-Ph	*	H	*	Bz	OCH_3	F	H	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XVIII-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-49-1	p-Br-Ph	H	H	H	Bz	OCH_3	F	H	OH	H	H
XVIII-49-2	p-Br-Ph	H	H	CH_3	Bz	OCH_3	F	H	OH	H	H
XVIII-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	OCH_3	F	H	OH	H	H

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	H	OH	H	H
XVIII-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	H	OH	H	H
XVIII-49-8	p-Br-Ph	*	H	*	Bz	OCH_3	F	H	OH	H	H

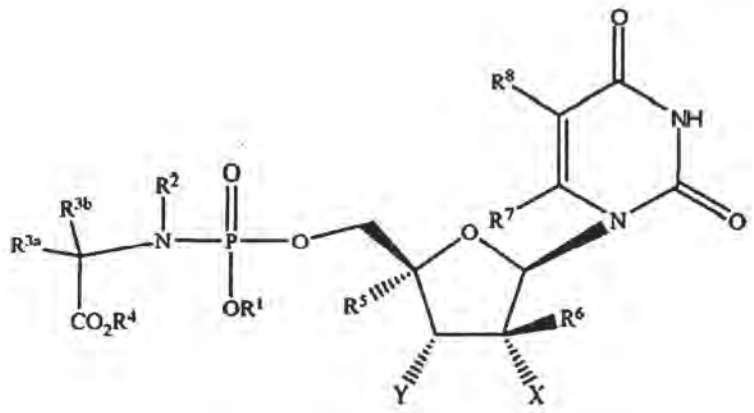
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XVIII-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XVIII-50-1	p-I-Ph	H	H	H	Bz	OCH_3	F	H	OH	H	H
XVIII-50-2	p-I-Ph	H	H	CH_3	Bz	OCH_3	F	H	OH	H	H
XVIII-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	H	OH	H	H
XVIII-50-5	p-I-Ph	H	H	CH_2Ph	Bz	OCH_3	F	H	OH	H	H
XVIII-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	H	OH	H	H
XVIII-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	H	OH	H	H
XVIII-50-8	p-I-Ph	*	H	*	Bz	OCH_3	F	H	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XIX

Table XIX-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-1-1	CH_3	H	H	H	CH_3	OCH_3	F	F	OH	H	H

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-1-2	CH_3	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-1-5	CH_3	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-1-8	CH_3	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-2-1	Et	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-2-2	Et	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-2-5	Et	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-2-8	Et	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-3-1	^{i}Pr	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-3-2	^{i}Pr	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-3-8	^{i}Pr	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-4.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-4-1	^{t}Bu	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-4-2	^{t}Bu	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-4-8	^{t}Bu	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-5-1	Ph	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-5-2	Ph	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-5-5	Ph	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-5-8	Ph	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-6-1	p-Me-Ph	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-6-2	p-Me-Ph	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-6-8	p-Me-Ph	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-7-1	p-F-Ph	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-7-2	p-F-Ph	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-7-20	p-F-Ph	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-8-1	p-Cl-Ph	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-8-2	p-Cl-Ph	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-8-8	p-Cl-Ph	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-9-1	p-Br-Ph	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-9-2	p-Br-Ph	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-9-20	p-Br-Ph	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-10-1	p-I-Ph	H	H	H	CH_3	OCH_3	F	F	OH	H	H
XIX-10-2	p-I-Ph	H	H	CH_3	CH_3	OCH_3	F	F	OH	H	H
XIX-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	F	F	OH	H	H
XIX-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	OCH_3	F	F	OH	H	H
XIX-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	F	F	OH	H	H
XIX-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	F	F	OH	H	H
XIX-10-8	p-I-Ph	*	H	*	CH_3	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-11-1	CH_3	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-11-2	CH_3	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-11-5	CH_3	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-11-8	CH_3	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-12-1	Et	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-12-2	Et	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-12-3	Et	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-12-5	Et	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-12-6	Et	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-12-8	Et	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-13-1	^{i}Pr	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-13-2	^{i}Pr	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-13-5	^{i}Pr	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-13-8	^{i}Pr	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-14-1	^{t}Bu	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-14-2	^{t}Bu	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-14-5	^{t}Bu	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-14-8	^{t}Bu	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-15-1	Ph	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-15-2	Ph	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-15-3	Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-15-5	Ph	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-15-6	Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-15-8	Ph	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-16-1	p-Me-Ph	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-16-2	p-Me-Ph	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-16-5	p-Me-Ph	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-16-8	p-Me-Ph	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-17-1	p-F-Ph	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-17-2	p-F-Ph	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-17-5	p-F-Ph	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-17-8	p-F-Ph	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-18-1	p-Cl-Ph	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-18-2	p-Cl-Ph	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-18-8	p-Cl-Ph	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-19-1	p-Br-Ph	H	H	H	Et	OCH_3	F	F	OH	H	H
XIX-19-2	p-Br-Ph	H	H	CH_3	Et	OCH_3	F	F	OH	H	H
XIX-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H	H
XIX-19-5	p-Br-Ph	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H	H
XIX-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H	H
XIX-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H	H
XIX-19-8	p-Br-Ph	*	H	*	Et	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7
XIX-20-1	p-I-Ph	H	H	H	Et	OCH_3	F	F	OH	H
XIX-20-2	p-I-Ph	H	H	CH_3	Et	OCH_3	F	F	OH	H
XIX-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	F	F	OH	H
XIX-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	F	F	OH	H
XIX-20-5	p-I-Ph	H	H	CH_2Ph	Et	OCH_3	F	F	OH	H
XIX-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	F	F	OH	H
XIX-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	F	F	OH	H
XIX-20-8	p-I-Ph	*	H	*	Et	OCH_3	F	F	OH	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-21-1	CH_3	H	H	H	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-21-2	CH_3	H	H	CH_3	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-21-8	CH_3	*	H	*	^{i}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-22-1	Et	H	H	H	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-22-2	Et	H	H	CH_3	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-22-5	Et	H	H	CH_2Ph	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-22-8	Et	*	H	*	^{i}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-23-1	^{i}Pr	H	H	H	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-23-8	^{i}Pr	*	H	*	^{i}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-24-1	^{t}Bu	H	H	H	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-24-8	^{t}Bu	*	H	*	^{i}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-25-1	Ph	H	H	H	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-25-2	Ph	H	H	CH_3	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-25-3	Ph	H	H	$CH(CH_3)_2$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-25-5	Ph	H	H	CH_2Ph	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-25-6	Ph	H	H	CH_2-indol-3-yl	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-25-8	Ph	*	H	*	^{t}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-26-1	p-Me-Ph	H	H	H	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-26-2	p-Me-Ph	H	H	CH_3	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-26-5	p-Me-Ph	H	H	CH_2Ph	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-26-8	p-Me-Ph	*	H	*	^{t}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-27-1	p-F-Ph	H	H	H	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-27-2	p-F-Ph	H	H	CH_3	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-27-5	p-F-Ph	H	H	CH_2Ph	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{t}Pr	OCH_3	F	F	OH	H	H
XIX-27-8	p-F-Ph	*	H	*	^{t}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-28-1	p-Cl-Ph	H	H	H	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-28-8	p-Cl-Ph	*	H	*	^{i}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-29-1	p-Br-Ph	H	H	H	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-29-8	p-Br-Ph	*	H	*	^{i}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-30-1	p-I-Ph	H	H	H	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	F	F	OH	H	H
XIX-30-8	p-I-Ph	*	H	*	^{i}Pr	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-31-1	CH_3	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-31-2	CH_3	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-31-8	CH_3	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-32-1	Et	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-32-2	Et	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-32-5	Et	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-32-8	Et	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-33-1	^{i}Pr	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-33-8	^{i}Pr	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-34-1	^{t}Bu	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-34-8	^{t}Bu	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-35-1	Ph	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-35-2	Ph	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-35-5	Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-35-8	Ph	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-36-1	p-Me-Ph	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-36-8	p-Me-Ph	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-37-1	p-F-Ph	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-37-8	p-F-Ph	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-38-1	p-Cl-Ph	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-38-7	p-Cl-Ph	H	H	$CH_3CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-38-8	p-Cl-Ph	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-39-1	p-Br-Ph	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-39-8	p-Br-Ph	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-40-1	p-I-Ph	H	H	H	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	F	F	OH	H	H
XIX-40-8	p-I-Ph	*	H	*	^{n}Bu	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-41-1	CH_3	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-41-2	CH_3	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-41-5	CH_3	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-41-8	CH_3	*	H	*	Bz	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-42-1	Et	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-42-2	Et	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-42-3	Et	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-42-5	Et	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-42-6	Et	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-42-8	Et	*	H	*	Bz	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XIX-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-43-1	^{i}Pr	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-43-2	^{i}Pr	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-43-5	^{i}Pr	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-43-8	^{i}Pr	*	H	*	Bz	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-44-1	^{t}Bu	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-44-2	^{t}Bu	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-44-5	^{t}Bu	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-44-8	^{t}Bu	*	H	*	Bz	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-45-1	Ph	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-45-2	Ph	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-45-5	Ph	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-45-8	Ph	*	H	*	Bz	OCH_3	F	F	OH	H	H

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-46-1	p-Me-Ph	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-46-2	p-Me-Ph	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-46-8	p-Me-Ph	*	H	*	Bz	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-47-1	p-F-Ph	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-47-2	p-F-Ph	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-47-5	p-F-Ph	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-47-8	p-F-Ph	*	H	*	Bz	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-48-1	p-Cl-Ph	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-48-2	p-Cl-Ph	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-48-8	p-Cl-Ph	*	H	*	Bz	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-49-1	p-Br-Ph	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-49-2	p-Br-Ph	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-49-8	p-Br-Ph	*	H	*	Bz	OCH_3	F	F	OH	H	H

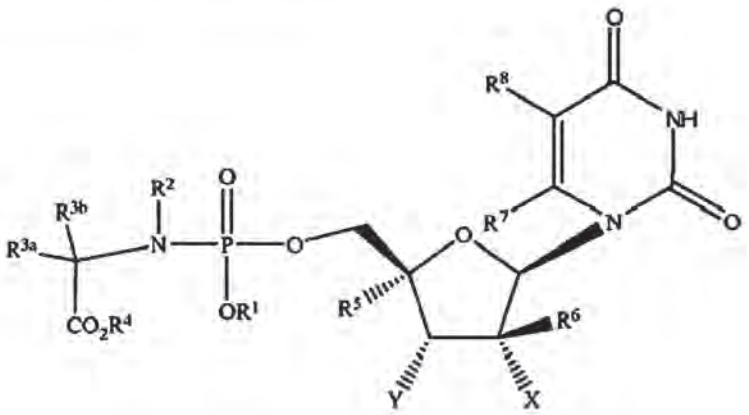
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XIX-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XIX-50-1	p-I-Ph	H	H	H	Bz	OCH_3	F	F	OH	H	H
XIX-50-2	p-I-Ph	H	H	CH_3	Bz	OCH_3	F	F	OH	H	H
XIX-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	F	F	OH	H	H
XIX-50-5	p-I-Ph	H	H	CH_2Ph	Bz	OCH_3	F	F	OH	H	H
XIX-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	F	F	OH	H	H
XIX-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	F	F	OH	H	H
XIX-50-8	p-I-Ph	*	H	*	Bz	OCH_3	F	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-1-1	CH_3	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-1-2	CH_3	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-1-5	CH_3	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-1-8	CH_3	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-2-1	Et	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-2-2	Et	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-2-5	Et	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-2-8	Et	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-3-1	^{i}Pr	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-3-2	^{i}Pr	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-3-8	^{i}Pr	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-4-1	^{t}Bu	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-4-2	^{t}Bu	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-4-8	^{t}Bu	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-5-1	Ph	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-5-2	Ph	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-5-5	Ph	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-5-8	Ph	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-6-1	p-Me-Ph	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-6-2	p-Me-Ph	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-6-8	p-Me-Ph	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-7-1	p-F-Ph	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-7-2	p-F-Ph	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-7-20	p-F-Ph	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-8-1	p-Cl-Ph	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-8-2	p-Cl-Ph	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-8-8	p-Cl-Ph	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-9-1	p-Br-Ph	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-9-2	p-Br-Ph	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-9-20	p-Br-Ph	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-10-1	p-I-Ph	H	H	H	CH_3	OCH_3	H	F	OH	H	H
XX-10-2	p-I-Ph	H	H	CH_3	CH_3	OCH_3	H	F	OH	H	H
XX-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	OCH_3	H	F	OH	H	H
XX-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	OCH_3	H	F	OH	H	H
XX-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	OCH_3	H	F	OH	H	H
XX-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	OCH_3	H	F	OH	H	H
XX-10-8	p-I-Ph	*	H	*	CH_3	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-11-1	CH_3	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-11-2	CH_3	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-11-5	CH_3	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-11-8	CH_3	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-12-1	Et	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-12-2	Et	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-12-3	Et	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-12-5	Et	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-12-6	Et	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-12-8	Et	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-13-1	^{i}Pr	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-13-2	^{i}Pr	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-13-5	^{i}Pr	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-13-8	^{i}Pr	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-14-1	^{t}Bu	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-14-2	^{t}Bu	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-14-5	^{t}Bu	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-14-8	^{t}Bu	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-15-1	Ph	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-15-2	Ph	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-15-3	Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-15-5	Ph	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-15-6	Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-15-8	Ph	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-16-1	p-Me-Ph	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-16-2	p-Me-Ph	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-16-5	p-Me-Ph	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-16-8	p-Me-Ph	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-17-1	p-F-Ph	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-17-2	p-F-Ph	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-17-5	p-F-Ph	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-17-8	p-F-Ph	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-18-1	p-Cl-Ph	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-18-2	p-Cl-Ph	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-18-8	p-Cl-Ph	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-19-1	p-Br-Ph	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-19-2	p-Br-Ph	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-19-5	p-Br-Ph	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-19-8	p-Br-Ph	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-20-1	p-I-Ph	H	H	H	Et	OCH_3	H	F	OH	H	H
XX-20-2	p-I-Ph	H	H	CH_3	Et	OCH_3	H	F	OH	H	H
XX-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	OCH_3	H	F	OH	H	H
XX-20-5	p-I-Ph	H	H	CH_2Ph	Et	OCH_3	H	F	OH	H	H
XX-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	OCH_3	H	F	OH	H	H
XX-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	OCH_3	H	F	OH	H	H
XX-20-8	p-I-Ph	*	H	*	Et	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-21-1	CH_3	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-21-2	CH_3	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-21-8	CH_3	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-22-1	Et	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-22-2	Et	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-22-5	Et	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-22-8	Et	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-23-1	^{i}Pr	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-23-8	^{i}Pr	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-24-1	^{t}Bu	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-24-8	^{t}Bu	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-25-1	Ph	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-25-2	Ph	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-25-5	Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-25-8	Ph	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-26-1	p-Me-Ph	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-26-8	p-Me-Ph	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-27-1	p-F-Ph	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-27-8	p-F-Ph	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-28-1	p-Cl-Ph	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-28-8	p-Cl-Ph	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-29-1	p-Br-Ph	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-29-8	p-Br-Ph	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-30-1	p-I-Ph	H	H	H	^{i}Pr	OCH_3	H	F	OH	H	H
XX-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	OCH_3	H	F	OH	H	H
XX-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	OCH_3	H	F	OH	H	H
XX-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	OCH_3	H	F	OH	H	H
XX-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	OCH_3	H	F	OH	H	H
XX-30-8	p-I-Ph	*	H	*	^{i}Pr	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-31-1	CH_3	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-31-2	CH_3	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-31-8	CH_3	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-32-1	Et	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-32-2	Et	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-32-5	Et	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-32-8	Et	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-33-1	^{i}Pr	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-33-8	^{i}Pr	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-34-1	^{t}Bu	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-34-8	^{t}Bu	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-35-1	Ph	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-35-2	Ph	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-35-5	Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-35-8	Ph	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-36-1	p-Me-Ph	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-36-8	p-Me-Ph	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-37-1	p-F-Ph	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-37-8	p-F-Ph	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-38-1	p-Cl-Ph	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-38-8	p-Cl-Ph	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-39-1	p-Br-Ph	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-39-8	p-Br-Ph	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-40-1	p-I-Ph	H	H	H	^{n}Bu	OCH_3	H	F	OH	H	H
XX-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	OCH_3	H	F	OH	H	H
XX-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	OCH_3	H	F	OH	H	H
XX-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	OCH_3	H	F	OH	H	H
XX-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	OCH_3	H	F	OH	H	H
XX-40-8	p-I-Ph	*	H	*	^{n}Bu	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-41-1	CH_3	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-41-2	CH_3	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-41-5	CH_3	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-41-8	CH_3	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XX-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-42-1	Et	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-42-2	Et	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-42-3	Et	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-42-5	Et	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-42-6	Et	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-42-8	Et	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-43-1	^{i}Pr	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-43-2	^{i}Pr	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-43-5	^{i}Pr	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-43-8	^{i}Pr	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-44-1	^{t}Bu	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-44-2	^{t}Bu	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-44-5	^{t}Bu	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-44-8	^{t}Bu	*	H	*	Bz	OCH_3	H	F	OH	H	H

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-45-1	Ph	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-45-2	Ph	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-45-5	Ph	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-45-8	Ph	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-46-1	p-Me-Ph	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-46-2	p-Me-Ph	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-46-8	p-Me-Ph	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-47-1	p-F-Ph	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-47-2	p-F-Ph	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-47-5	p-F-Ph	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-47-8	p-F-Ph	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-48-1	p-Cl-Ph	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-48-2	p-Cl-Ph	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-48-8	p-Cl-Ph	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XX-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-49-1	p-Br-Ph	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-49-2	p-Br-Ph	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H
XX-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-49-8	p-Br-Ph	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

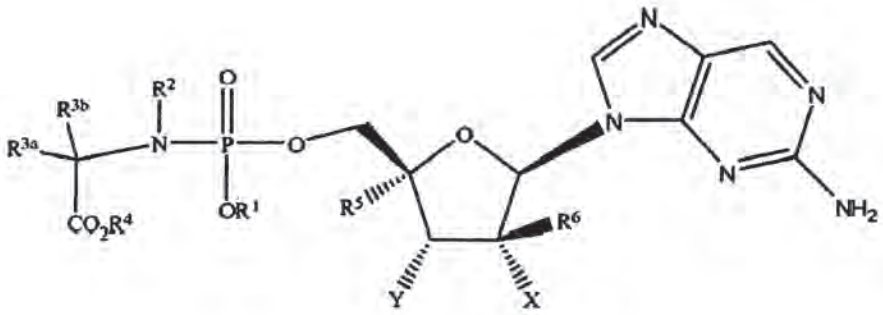
Table XX-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-50-1	p-I-Ph	H	H	H	Bz	OCH_3	H	F	OH	H	H
XX-50-2	p-I-Ph	H	H	CH_3	Bz	OCH_3	H	F	OH	H	H
XX-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	OCH_3	H	F	OH	H	H
XX-50-5	p-I-Ph	H	H	CH_2Ph	Bz	OCH_3	H	F	OH	H	H

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
XX-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	OCH_3	H	F	OH	H	H
XX-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	OCH_3	H	F	OH	H	H
XX-50-8	p-I-Ph	*	H	*	Bz	OCH_3	H	F	OH	H	H

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.



XXI

Table XXI-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-1-1	CH_3	H	H	H	CH_3	H	CH_3	F	OH
XXI-1-2	CH_3	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-1-5	CH_3	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-1-8	CH_3	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-2-1	Et	H	H	H	CH_3	H	CH_3	F	OH
XXI-2-2	Et	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-2-5	Et	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-2-8	Et	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-3-1	^{i}Pr	H	H	H	CH_3	H	CH_3	F	OH
XXI-3-2	^{i}Pr	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-3-8	^{i}Pr	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-4-1	^{t}Bu	H	H	H	CH_3	H	CH_3	F	OH
XXI-4-2	^{t}Bu	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-4-8	^{t}Bu	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-5-1	Ph	H	H	H	CH_3	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-5-2	Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-5-5	Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-5-8	Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-6-1	p-Me-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXI-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-6-8	p-Me-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-7-1	p-F-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXI-7-2	p-F-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-7-20	p-F-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-8.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-8-1	p-Cl-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXI-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-8-8	p-Cl-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-9-1	p-Br-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXI-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-9-20	p-Br-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-10-1	p-I-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXI-10-2	p-I-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXI-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXI-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXI-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXI-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXI-10-8	p-I-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-11-1	CH_3	H	H	H	Et	H	CH_3	F	OH
XXI-11-2	CH_3	H	H	CH_3	Et	H	CH_3	F	OH
XXI-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-11-5	CH_3	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-11-8	CH_3	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-12-1	Et	H	H	H	Et	H	CH_3	F	OH
XXI-12-2	Et	H	H	CH_3	Et	H	CH_3	F	OH
XXI-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-12-5	Et	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-12-8	Et	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-13-1	^{i}Pr	H	H	H	Et	H	CH_3	F	OH
XXI-13-2	^{i}Pr	H	H	CH_3	Et	H	CH_3	F	OH
XXI-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-13-8	^{i}Pr	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-14-1	^{t}Bu	H	H	H	Et	H	CH_3	F	OH
XXI-14-2	^{t}Bu	H	H	CH_3	Et	H	CH_3	F	OH
XXI-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-14-8	^{t}Bu	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-15-1	Ph	H	H	H	Et	H	CH_3	F	OH
XXI-15-2	Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXI-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-15-5	Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-15-8	Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-16-1	p-Me-Ph	H	H	H	Et	H	CH_3	F	OH
XXI-16-2	p-Me-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXI-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-16-8	p-Me-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-17-1	p-F-Ph	H	H	H	Et	H	CH_3	F	OH
XXI-17-2	p-F-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXI-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-17-8	p-F-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-18-1	p-Cl-Ph	H	H	H	Et	H	CH_3	F	OH
XXI-18-2	p-Cl-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXI-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-18-8	p-Cl-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-19-1	p-Br-Ph	H	H	H	Et	H	CH_3	F	OH
XXI-19-2	p-Br-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXI-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-19-8	p-Br-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-20-1	p-I-Ph	H	H	H	Et	H	CH_3	F	OH
XXI-20-2	p-I-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXI-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXI-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXI-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXI-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXI-20-8	p-I-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-21-1	CH_3	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-21-2	CH_3	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-21-8	CH_3	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-22-1	Et	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-22-2	Et	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-22-8	Et	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-23-1	^{i}Pr	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-23-8	^{i}Pr	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-24-1	^{t}Bu	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-24-8	^{t}Bu	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-25-1	Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-25-2	Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-25-8	Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-27-1	p-F-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-27-8	p-F-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-30-1	p-I-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXI-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXI-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXI-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXI-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXI-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXI-30-8	p-I-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-31-1	CH_3	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-31-2	CH_3	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-31-8	CH_3	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-32-1	Et	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-32-2	Et	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-32-8	Et	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-33-1	^{i}Pr	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-33-8	^{i}Pr	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-34-1	^{t}Bu	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-34-8	^{t}Bu	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-35-1	Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-35-2	Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-35-8	Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-37-1	p-F-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-37-8	p-F-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-40-1	p-I-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXI-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXI-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXI-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXI-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXI-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXI-40-8	p-I-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXI-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-41-1	CH_3	H	H	H	Bz	H	CH_3	F	OH
XXI-41-2	CH_3	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-41-5	CH_3	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-41-8	CH_3	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-42-1	Et	H	H	H	Bz	H	CH_3	F	OH
XXI-42-2	Et	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-42-5	Et	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-42-8	Et	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-43-1	^{i}Pr	H	H	H	Bz	H	CH_3	F	OH
XXI-43-2	^{i}Pr	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-43-8	^{i}Pr	*	H	*	Bz	H	CH_3	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-44-1	^{t}Bu	H	H	H	Bz	H	CH_3	F	OH
XXI-44-2	^{t}Bu	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-44-8	^{t}Bu	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-45-1	Ph	H	H	H	Bz	H	CH_3	F	OH
XXI-45-2	Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-45-5	Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-45-8	Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-46-1	p-Me-Ph	H	H	H	Bz	H	CH_3	F	OH
XXI-46-2	p-Me-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-46-8	p-Me-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-47-1	p-F-Ph	H	H	H	Bz	H	CH_3	F	OH
XXI-47-2	p-F-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-47-8	p-F-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-48-1	p-Cl-Ph	H	H	H	Bz	H	CH_3	F	OH
XXI-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-48-8	p-Cl-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-49-1	p-Br-Ph	H	H	H	Bz	H	CH_3	F	OH
XXI-49-2	p-Br-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-49-8	p-Br-Ph	*	H	*	Bz	H	CH_3	F	OH

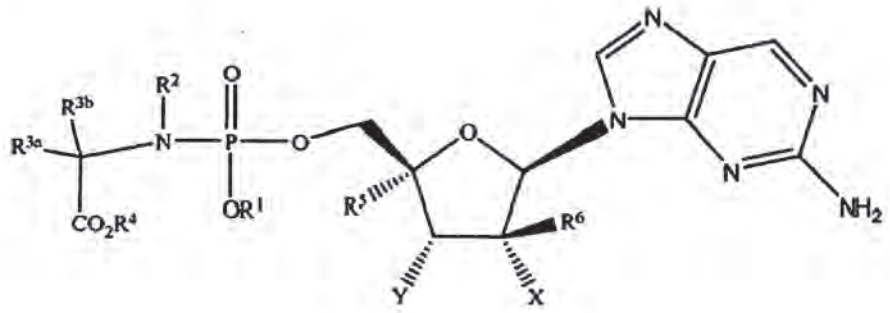
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXI-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXI-50-1	p-I-Ph	H	H	H	Bz	H	CH_3	F	OH
XXI-50-2	p-I-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXI-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXI-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXI-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXI-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXI-50-8	p-I-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XXII

Table XXII-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-1-1	CH_3	H	H	H	CH_3	H	F	H	OH
XXII-1-2	CH_3	H	H	CH_3	CH_3	H	F	H	OH
XXII-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-1-5	CH_3	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-1-8	CH_3	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-2-1	Et	H	H	H	CH_3	H	F	H	OH
XXII-2-2	Et	H	H	CH_3	CH_3	H	F	H	OH
XXII-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-2-5	Et	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-2-8	Et	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-3-1	^{i}Pr	H	H	H	CH_3	H	F	H	OH
XXII-3-2	^{i}Pr	H	H	CH_3	CH_3	H	F	H	OH
XXII-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-3-8	^{i}Pr	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-4-1	^{t}Bu	H	H	H	CH_3	H	F	H	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-4-2	^{t}Bu	H	H	CH_3	CH_3	H	F	H	OH
XXII-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-4-8	^{t}Bu	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-5-1	Ph	H	H	H	CH_3	H	F	H	OH
XXII-5-2	Ph	H	H	CH_3	CH_3	H	F	H	OH
XXII-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-5-5	Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-5-8	Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-6-1	p-Me-Ph	H	H	H	CH_3	H	F	H	OH
XXII-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXII-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-6-8	p-Me-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-7.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-7-1	p-F-Ph	H	H	H	CH_3	H	F	H	OH
XXII-7-2	p-F-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXII-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-7-20	p-F-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-8-1	p-Cl-Ph	H	H	H	CH_3	H	F	H	OH
XXII-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXII-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-8-8	p-Cl-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-9-1	p-Br-Ph	H	H	H	CH_3	H	F	H	OH
XXII-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXII-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-9-20	p-Br-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-10-1	p-I-Ph	H	H	H	CH_3	H	F	H	OH
XXII-10-2	p-I-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXII-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXII-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXII-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXII-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXII-10-8	p-I-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-11-1	CH_3	H	H	H	Et	H	F	H	OH
XXII-11-2	CH_3	H	H	CH_3	Et	H	F	H	OH
XXII-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-11-5	CH_3	H	H	CH_2Ph	Et	H	F	H	OH
XXII-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-11-8	CH_3	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-12-1	Et	H	H	H	Et	H	F	H	OH
XXII-12-2	Et	H	H	CH_3	Et	H	F	H	OH
XXII-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-12-5	Et	H	H	CH_2Ph	Et	H	F	H	OH
XXII-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-12-8	Et	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-13-1	^{i}Pr	H	H	H	Et	H	F	H	OH
XXII-13-2	^{i}Pr	H	H	CH_3	Et	H	F	H	OH
XXII-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	F	H	OH
XXII-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-13-8	^{i}Pr	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-14-1	^{t}Bu	H	H	H	Et	H	F	H	OH
XXII-14-2	^{t}Bu	H	H	CH_3	Et	H	F	H	OH
XXII-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	H	OH
XXII-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-14-8	^{t}Bu	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-15-1	Ph	H	H	H	Et	H	F	H	OH
XXII-15-2	Ph	H	H	CH_3	Et	H	F	H	OH
XXII-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-15-5	Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXII-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-15-8	Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-16-1	p-Me-Ph	H	H	H	Et	H	F	H	OH
XXII-16-2	p-Me-Ph	H	H	CH_3	Et	H	F	H	OH
XXII-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXII-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-16-8	p-Me-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-17-1	p-F-Ph	H	H	H	Et	H	F	H	OH
XXII-17-2	p-F-Ph	H	H	CH_3	Et	H	F	H	OH
XXII-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXII-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-17-8	p-F-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-18-1	p-Cl-Ph	H	H	H	Et	H	F	H	OH
XXII-18-2	p-Cl-Ph	H	H	CH_3	Et	H	F	H	OH
XXII-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXII-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-18-8	p-Cl-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-19-1	p-Br-Ph	H	H	H	Et	H	F	H	OH
XXII-19-2	p-Br-Ph	H	H	CH_3	Et	H	F	H	OH
XXII-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXII-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-19-8	p-Br-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-20-1	p-I-Ph	H	H	H	Et	H	F	H	OH
XXII-20-2	p-I-Ph	H	H	CH_3	Et	H	F	H	OH
XXII-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXII-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXII-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXII-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXII-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXII-20-8	p-I-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-21-1	CH_3	H	H	H	^iPr	H	F	H	OH
XXII-21-2	CH_3	H	H	CH_3	^iPr	H	F	H	OH
XXII-21-3	CH_3	H	H	$CH(CH_3)_2$	^iPr	H	F	H	OH
XXII-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^iPr	H	F	H	OH
XXII-21-5	CH_3	H	H	CH_2Ph	^iPr	H	F	H	OH
XXII-21-6	CH_3	H	H	CH_2-indol-3-yl	^iPr	H	F	H	OH
XXII-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^iPr	H	F	H	OH
XXII-21-8	CH_3	*	H	*	^iPr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-22-1	Et	H	H	H	^{i}Pr	H	F	H	OH
XXII-22-2	Et	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-22-8	Et	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	H	OH
XXII-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-23-8	^{i}Pr	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-24-1	^{t}Bu	H	H	H	^{i}Pr	H	F	H	OH
XXII-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-24-8	^{t}Bu	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-25-1	Ph	H	H	H	^{i}Pr	H	F	H	OH
XXII-25-2	Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-25-8	Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXII-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-27-1	p-F-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXII-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-27-8	p-F-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXII-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXII-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-30-1	p-I-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXII-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXII-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXII-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXII-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXII-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXII-30-8	p-I-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-31-1	CH_3	H	H	H	^{n}Bu	H	F	H	OH
XXII-31-2	CH_3	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-31-8	CH_3	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-32-1	Et	H	H	H	^{n}Bu	H	F	H	OH
XXII-32-2	Et	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-32-8	Et	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-33-1	^{i}Pr	H	H	H	^{n}Bu	H	F	H	OH
XXII-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-33-8	^{i}Pr	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-34-1	^{t}Bu	H	H	H	^{n}Bu	H	F	H	OH
XXII-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-34-8	^{t}Bu	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-35-1	Ph	H	H	H	^{n}Bu	H	F	H	OH
XXII-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-35-8	Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXII-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-37-1	p-F-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXII-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-37-8	p-F-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXII-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXII-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-40-1	p-I-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXII-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXII-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXII-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXII-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXII-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXII-40-8	p-I-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-41-1	CH_3	H	H	H	Bz	H	F	H	OH
XXII-41-2	CH_3	H	H	CH_3	Bz	H	F	H	OH
XXII-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-41-8	CH_3	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-42-1	Et	H	H	H	Bz	H	F	H	OH
XXII-42-2	Et	H	H	CH_3	Bz	H	F	H	OH
XXII-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-42-5	Et	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-42-8	Et	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXII-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-43-1	^{i}Pr	H	H	H	Bz	H	F	H	OH
XXII-43-2	^{i}Pr	H	H	CH_3	Bz	H	F	H	OH
XXII-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-43-8	^{i}Pr	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-44-1	^{t}Bu	H	H	H	Bz	H	F	H	OH
XXII-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	H	OH
XXII-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-44-8	^{t}Bu	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-45-1	Ph	H	H	H	Bz	H	F	H	OH
XXII-45-2	Ph	H	H	CH_3	Bz	H	F	H	OH
XXII-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-45-5	Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-45-8	Ph	*	H	*	Bz	H	F	H	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-46-1	p-Me-Ph	H	H	H	Bz	H	F	H	OH
XXII-46-2	p-Me-Ph	H	H	CH_3	Bz	H	F	H	OH
XXII-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-46-8	p-Me-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-47-1	p-F-Ph	H	H	H	Bz	H	F	H	OH
XXII-47-2	p-F-Ph	H	H	CH_3	Bz	H	F	H	OH
XXII-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-47-8	p-F-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-48-1	p-Cl-Ph	H	H	H	Bz	H	F	H	OH
XXII-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	F	H	OH
XXII-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-48-8	p-Cl-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-49-1	p-Br-Ph	H	H	H	Bz	H	F	H	OH
XXII-49-2	p-Br-Ph	H	H	CH_3	Bz	H	F	H	OH
XXII-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-49-8	p-Br-Ph	*	H	*	Bz	H	F	H	OH

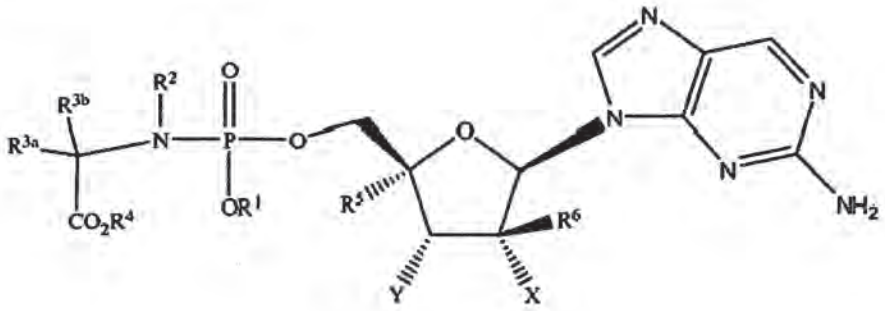
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXII-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXII-50-1	p-I-Ph	H	H	H	Bz	H	F	H	OH
XXII-50-2	p-I-Ph	H	H	CH_3	Bz	H	F	H	OH
XXII-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXII-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXII-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXII-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXII-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXII-50-8	p-I-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XXIII

Table XXIII-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-1-1	CH_3	H	H	H	CH_3	H	F	F	OH
XXIII-1-2	CH_3	H	H	CH_3	CH_3	H	F	F	OH
XXIII-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-1-5	CH_3	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-1-8	CH_3	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-2-1	Et	H	H	H	CH_3	H	F	F	OH
XXIII-2-2	Et	H	H	CH_3	CH_3	H	F	F	OH
XXIII-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-2-5	Et	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-2-8	Et	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-3.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-3-1	^{i}Pr	H	H	H	CH_3	H	F	F	OH
XXIII-3-2	^{i}Pr	H	H	CH_3	CH_3	H	F	F	OH
XXIII-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-3-8	^{i}Pr	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-4-1	^{t}Bu	H	H	H	CH_3	H	F	F	OH
XXIII-4-2	^{t}Bu	H	H	CH_3	CH_3	H	F	F	OH
XXIII-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-4-8	^{t}Bu	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-5-1	Ph	H	H	H	CH_3	H	F	F	OH
XXIII-5-2	Ph	H	H	CH_3	CH_3	H	F	F	OH
XXIII-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-5-5	Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-5-8	Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-6-1	p-Me-Ph	H	H	H	CH_3	H	F	F	OH
XXIII-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXIII-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-6-8	p-Me-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-7-1	p-F-Ph	H	H	H	CH_3	H	F	F	OH
XXIII-7-2	p-F-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXIII-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-7-20	p-F-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-8-1	p-Cl-Ph	H	H	H	CH_3	H	F	F	OH
XXIII-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXIII-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-8-8	p-Cl-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-9-1	p-Br-Ph	H	H	H	CH_3	H	F	F	OH
XXIII-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXIII-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-9-20	p-Br-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-10-1	p-I-Ph	H	H	H	CH_3	H	F	F	OH
XXIII-10-2	p-I-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXIII-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXIII-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXIII-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXIII-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXIII-10-8	p-I-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-11-1	CH_3	H	H	H	Et	H	F	F	OH
XXIII-11-2	CH_3	H	H	CH_3	Et	H	F	F	OH
XXIII-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-11-5	CH_3	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-11-8	CH_3	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-12-1	Et	H	H	H	Et	H	F	F	OH
XXIII-12-2	Et	H	H	CH_3	Et	H	F	F	OH
XXIII-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-12-5	Et	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-12-8	Et	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-13-1	^{i}Pr	H	H	H	Et	H	F	F	OH
XXIII-13-2	^{i}Pr	H	H	CH_3	Et	H	F	F	OH
XXIII-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-13-8	^{i}Pr	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-14-1	^{t}Bu	H	H	H	Et	H	F	F	OH
XXIII-14-2	^{t}Bu	H	H	CH_3	Et	H	F	F	OH
XXIII-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-14-8	^{t}Bu	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-15-1	Ph	H	H	H	Et	H	F	F	OH
XXIII-15-2	Ph	H	H	CH_3	Et	H	F	F	OH
XXIII-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-15-5	Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-15-8	Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-16-1	p-Me-Ph	H	H	H	Et	H	F	F	OH
XXIII-16-2	p-Me-Ph	H	H	CH_3	Et	H	F	F	OH
XXIII-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-16-8	p-Me-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-17-1	p-F-Ph	H	H	H	Et	H	F	F	OH
XXIII-17-2	p-F-Ph	H	H	CH_3	Et	H	F	F	OH
XXIII-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-17-8	p-F-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-18-1	p-Cl-Ph	H	H	H	Et	H	F	F	OH
XXIII-18-2	p-Cl-Ph	H	H	CH_3	Et	H	F	F	OH
XXIII-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-18-8	p-Cl-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-19-1	p-Br-Ph	H	H	H	Et	H	F	F	OH
XXIII-19-2	p-Br-Ph	H	H	CH_3	Et	H	F	F	OH
XXIII-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-19-8	p-Br-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-20-1	p-I-Ph	H	H	H	Et	H	F	F	OH
XXIII-20-2	p-I-Ph	H	H	CH_3	Et	H	F	F	OH
XXIII-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXIII-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXIII-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXIII-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXIII-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXIII-20-8	p-I-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-21-1	CH_3	H	H	H	^{i}Pr	H	F	F	OH
XXIII-21-2	CH_3	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-21-8	CH_3	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-22-1	Et	H	H	H	^{i}Pr	H	F	F	OH
XXIII-22-2	Et	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-22-8	Et	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	F	OH
XXIII-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-23-8	^{i}Pr	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-24-1	^{t}Bu	H	H	H	^{i}Pr	H	F	F	OH
XXIII-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-24-8	^{t}Bu	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-25-1	Ph	H	H	H	^{i}Pr	H	F	F	OH
XXIII-25-2	Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-25-8	Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXIII-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-27-1	p-F-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXIII-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-27-8	p-F-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXIII-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXIII-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-30-1	p-I-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXIII-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXIII-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXIII-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXIII-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXIII-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXIII-30-8	p-I-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-31-1	CH_3	H	H	H	^{n}Bu	H	F	F	OH
XXIII-31-2	CH_3	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-31-8	CH_3	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-32-1	Et	H	H	H	^{n}Bu	H	F	F	OH
XXIII-32-2	Et	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-32-8	Et	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-33-1	^{i}Pr	H	H	H	^{n}Bu	H	F	F	OH
XXIII-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-33-8	^{i}Pr	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-34-1	^{t}Bu	H	H	H	^{n}Bu	H	F	F	OH
XXIII-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-34-8	^{t}Bu	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-35-1	Ph	H	H	H	^{n}Bu	H	F	F	OH
XXIII-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-35-8	Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXIII-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-37-1	p-F-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXIII-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-37-8	p-F-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXIII-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXIII-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-40-1	p-I-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXIII-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXIII-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXIII-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXIII-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXIII-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXIII-40-8	p-I-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-41-1	CH_3	H	H	H	Bz	H	F	F	OH
XXIII-41-2	CH_3	H	H	CH_3	Bz	H	F	F	OH
XXIII-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-41-8	CH_3	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIII-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-42-1	Et	H	H	H	Bz	H	F	F	OH
XXIII-42-2	Et	H	H	CH_3	Bz	H	F	F	OH
XXIII-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-42-5	Et	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-42-8	Et	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-43-1	^{i}Pr	H	H	H	Bz	H	F	F	OH
XXIII-43-2	^{i}Pr	H	H	CH_3	Bz	H	F	F	OH
XXIII-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-43-8	^{i}Pr	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-44-1	^{t}Bu	H	H	H	Bz	H	F	F	OH
XXIII-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	F	OH
XXIII-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-44-8	^{t}Bu	*	H	*	Bz	H	F	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-45-1	Ph	H	H	H	Bz	H	F	F	OH
XXIII-45-2	Ph	H	H	CH_3	Bz	H	F	F	OH
XXIII-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-45-5	Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-45-8	Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-46-1	p-Me-Ph	H	H	H	Bz	H	F	F	OH
XXIII-46-2	p-Me-Ph	H	H	CH_3	Bz	H	F	F	OH
XXIII-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-46-8	p-Me-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-47-1	p-F-Ph	H	H	H	Bz	H	F	F	OH
XXIII-47-2	p-F-Ph	H	H	CH_3	Bz	H	F	F	OH
XXIII-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-47-8	p-F-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-48-1	p-Cl-Ph	H	H	H	Bz	H	F	F	OH
XXIII-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	F	F	OH
XXIII-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-48-8	p-Cl-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIII-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-49-1	p-Br-Ph	H	H	H	Bz	H	F	F	OH
XXIII-49-2	p-Br-Ph	H	H	CH_3	Bz	H	F	F	OH
XXIII-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXIII-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-49-8	p-Br-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

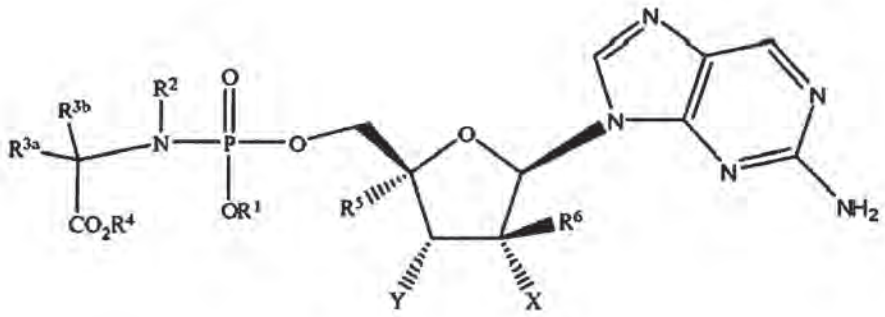
Table XXIII-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-50-1	p-I-Ph	H	H	H	Bz	H	F	F	OH
XXIII-50-2	p-I-Ph	H	H	CH_3	Bz	H	F	F	OH
XXIII-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXIII-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	F	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIII-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXIII-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXIII-50-8	p-I-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.



XXIV

Table XXIV-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-1-1	CH_3	H	H	H	CH_3	H	H	F	OH
XXIV-1-2	CH_3	H	H	CH_3	CH_3	H	H	F	OH
XXIV-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-1-5	CH_3	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-1-8	CH_3	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-2-1	Et	H	H	H	CH_3	H	H	F	OH
XXIV-2-2	Et	H	H	CH_3	CH_3	H	H	F	OH
XXIV-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-2-5	Et	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-2-8	Et	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-3-1	^{i}Pr	H	H	H	CH_3	H	H	F	OH
XXIV-3-2	^{i}Pr	H	H	CH_3	CH_3	H	H	F	OH
XXIV-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-3-8	^{i}Pr	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-4-1	^{t}Bu	H	H	H	CH_3	H	H	F	OH
XXIV-4-2	^{t}Bu	H	H	CH_3	CH_3	H	H	F	OH
XXIV-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-4-8	^{t}Bu	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-5-1	Ph	H	H	H	CH_3	H	H	F	OH
XXIV-5-2	Ph	H	H	CH_3	CH_3	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-5-5	Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-5-8	Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-6-1	p-Me-Ph	H	H	H	CH_3	H	H	F	OH
XXIV-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXIV-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-6-8	p-Me-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-7-1	p-F-Ph	H	H	H	CH_3	H	H	F	OH
XXIV-7-2	p-F-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXIV-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-7-20	p-F-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-8-1	p-Cl-Ph	H	H	H	CH_3	H	H	F	OH
XXIV-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXIV-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-8-8	p-Cl-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-9-1	p-Br-Ph	H	H	H	CH_3	H	H	F	OH
XXIV-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXIV-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-9-20	p-Br-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-10-1	p-I-Ph	H	H	H	CH_3	H	H	F	OH
XXIV-10-2	p-I-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXIV-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXIV-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXIV-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXIV-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXIV-10-8	p-I-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-11-1	CH_3	H	H	H	Et	H	H	F	OH
XXIV-11-2	CH_3	H	H	CH_3	Et	H	H	F	OH
XXIV-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-11-5	CH_3	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-11-8	CH_3	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-12-1	Et	H	H	H	Et	H	H	F	OH
XXIV-12-2	Et	H	H	CH_3	Et	H	H	F	OH
XXIV-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-12-5	Et	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-12-8	Et	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-13-1	^iPr	H	H	H	Et	H	H	F	OH
XXIV-13-2	^iPr	H	H	CH_3	Et	H	H	F	OH
XXIV-13-3	^iPr	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-13-4	^iPr	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-13-5	^iPr	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-13-6	^iPr	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-13-7	^iPr	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-13-8	^iPr	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-14-1	^{t}Bu	H	H	H	Et	H	H	F	OH
XXIV-14-2	^{t}Bu	H	H	CH_3	Et	H	H	F	OH
XXIV-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-14-8	^{t}Bu	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-15-1	Ph	H	H	H	Et	H	H	F	OH
XXIV-15-2	Ph	H	H	CH_3	Et	H	H	F	OH
XXIV-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-15-5	Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-15-8	Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-16-1	p-Me-Ph	H	H	H	Et	H	H	F	OH
XXIV-16-2	p-Me-Ph	H	H	CH_3	Et	H	H	F	OH
XXIV-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-16-8	p-Me-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-17-1	p-F-Ph	H	H	H	Et	H	H	F	OH
XXIV-17-2	p-F-Ph	H	H	CH_3	Et	H	H	F	OH
XXIV-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-17-8	p-F-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-18-1	p-Cl-Ph	H	H	H	Et	H	H	F	OH
XXIV-18-2	p-Cl-Ph	H	H	CH_3	Et	H	H	F	OH
XXIV-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-18-8	p-Cl-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-19-1	p-Br-Ph	H	H	H	Et	H	H	F	OH
XXIV-19-2	p-Br-Ph	H	H	CH_3	Et	H	H	F	OH
XXIV-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-19-8	p-Br-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-20-1	p-I-Ph	H	H	H	Et	H	H	F	OH
XXIV-20-2	p-I-Ph	H	H	CH_3	Et	H	H	F	OH
XXIV-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXIV-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXIV-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXIV-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXIV-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXIV-20-8	p-I-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-21-1	CH_3	H	H	H	^{i}Pr	H	H	F	OH
XXIV-21-2	CH_3	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-21-8	CH_3	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-22-1	Et	H	H	H	^{i}Pr	H	H	F	OH
XXIV-22-2	Et	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-22-8	Et	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-23-1	^{i}Pr	H	H	H	^{i}Pr	H	H	F	OH
XXIV-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-23-8	^{i}Pr	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-24-1	^{t}Bu	H	H	H	^{i}Pr	H	H	F	OH
XXIV-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-24-8	^{t}Bu	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-25-1	Ph	H	H	H	^{i}Pr	H	H	F	OH
XXIV-25-2	Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-25-8	Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXIV-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-27-1	p-F-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXIV-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-27-8	p-F-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXIV-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXIV-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-30-1	p-I-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXIV-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXIV-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXIV-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXIV-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXIV-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXIV-30-8	p-I-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-31-1	CH_3	H	H	H	^{n}Bu	H	H	F	OH
XXIV-31-2	CH_3	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-31-8	CH_3	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-32-1	Et	H	H	H	^{n}Bu	H	H	F	OH
XXIV-32-2	Et	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-32-8	Et	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-33-1	^{i}Pr	H	H	H	^{n}Bu	H	H	F	OH
XXIV-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-33-8	^{i}Pr	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-34-1	^{t}Bu	H	H	H	^{n}Bu	H	H	F	OH
XXIV-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-34-8	^{t}Bu	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-35-1	Ph	H	H	H	^{n}Bu	H	H	F	OH
XXIV-35-2	Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-35-8	Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXIV-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-37-1	p-F-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXIV-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-37-8	p-F-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXIV-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXIV-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-40-1	p-I-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXIV-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXIV-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXIV-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXIV-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXIV-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXIV-40-8	p-I-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIV-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-41-1	CH_3	H	H	H	Bz	H	H	F	OH
XXIV-41-2	CH_3	H	H	CH_3	Bz	H	H	F	OH
XXIV-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-41-5	CH_3	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-41-8	CH_3	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-42-1	Et	H	H	H	Bz	H	H	F	OH
XXIV-42-2	Et	H	H	CH_3	Bz	H	H	F	OH
XXIV-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-42-5	Et	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-42-8	Et	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-43-1	^{i}Pr	H	H	H	Bz	H	H	F	OH
XXIV-43-2	^{i}Pr	H	H	CH_3	Bz	H	H	F	OH
XXIV-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-43-8	^{i}Pr	*	H	*	Bz	H	H	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-44-1	^{t}Bu	H	H	H	Bz	H	H	F	OH
XXIV-44-2	^{t}Bu	H	H	CH_3	Bz	H	H	F	OH
XXIV-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-44-8	^{t}Bu	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-45-1	Ph	H	H	H	Bz	H	H	F	OH
XXIV-45-2	Ph	H	H	CH_3	Bz	H	H	F	OH
XXIV-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-45-5	Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-45-8	Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-46-1	p-Me-Ph	H	H	H	Bz	H	H	F	OH
XXIV-46-2	p-Me-Ph	H	H	CH_3	Bz	H	H	F	OH
XXIV-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-46-8	p-Me-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-47-1	p-F-Ph	H	H	H	Bz	H	H	F	OH
XXIV-47-2	p-F-Ph	H	H	CH_3	Bz	H	H	F	OH
XXIV-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-47-8	p-F-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-48-1	p-Cl-Ph	H	H	H	Bz	H	H	F	OH
XXIV-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	H	F	OH
XXIV-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-48-8	p-Cl-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-49-1	p-Br-Ph	H	H	H	Bz	H	H	F	OH
XXIV-49-2	p-Br-Ph	H	H	CH_3	Bz	H	H	F	OH
XXIV-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-49-8	p-Br-Ph	*	H	*	Bz	H	H	F	OH

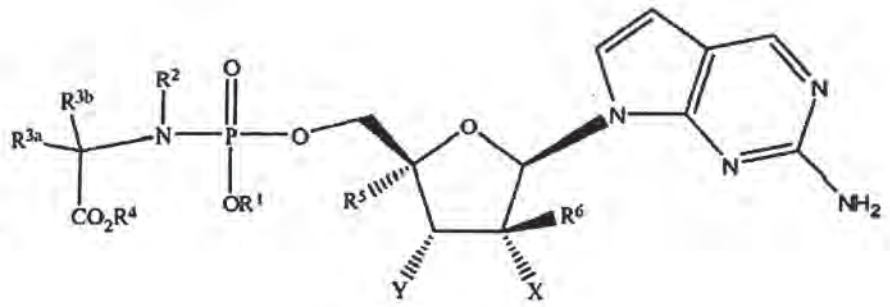
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIV-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIV-50-1	p-I-Ph	H	H	H	Bz	H	H	F	OH
XXIV-50-2	p-I-Ph	H	H	CH_3	Bz	H	H	F	OH
XXIV-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXIV-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXIV-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXIV-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXIV-50-8	p-I-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XXV

Table XXV-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-1-1	CH_3	H	H	H	CH_3	H	CH_3	F	OH
XXV-1-2	CH_3	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-1-5	CH_3	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-1-8	CH_3	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-2-1	Et	H	H	H	CH_3	H	CH_3	F	OH
XXV-2-2	Et	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-2-5	Et	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-2-8	Et	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-3-1	^{i}Pr	H	H	H	CH_3	H	CH_3	F	OH
XXV-3-2	^{i}Pr	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-3-8	^{i}Pr	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-4-1	^{t}Bu	H	H	H	CH_3	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-4-2	'Bu	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-4-3	'Bu	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-4-4	'Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-4-5	'Bu	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-4-6	'Bu	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-4-7	'Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-4-8	'Bu	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-5-1	Ph	H	H	H	CH_3	H	CH_3	F	OH
XXV-5-2	Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-5-5	Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-5-8	Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-6-1	p-Me-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXV-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-6-8	p-Me-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-7.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-7-1	p-F-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXV-7-2	p-F-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-7-20	p-F-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-8-1	p-Cl-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXV-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-8-8	p-Cl-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-9-1	p-Br-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXV-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-9-20	p-Br-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-10-1	p-I-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXV-10-2	p-I-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXV-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXV-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXV-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXV-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXV-10-8	p-I-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-11-1	CH_3	H	H	H	Et	H	CH_3	F	OH
XXV-11-2	CH_3	H	H	CH_3	Et	H	CH_3	F	OH
XXV-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-11-5	CH_3	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-11-8	CH_3	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-12-1	Et	H	H	H	Et	H	CH_3	F	OH
XXV-12-2	Et	H	H	CH_3	Et	H	CH_3	F	OH
XXV-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-12-5	Et	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-12-8	Et	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-13-1	^{i}Pr	H	H	H	Et	H	CH_3	F	OH
XXV-13-2	^{i}Pr	H	H	CH_3	Et	H	CH_3	F	OH
XXV-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-13-8	^{i}Pr	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-14-1	^{t}Bu	H	H	H	Et	H	CH_3	F	OH
XXV-14-2	^{t}Bu	H	H	CH_3	Et	H	CH_3	F	OH
XXV-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-14-8	^{t}Bu	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-15-1	Ph	H	H	H	Et	H	CH_3	F	OH
XXV-15-2	Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXV-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-15-5	Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-15-8	Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-16-1	p-Me-Ph	H	H	H	Et	H	CH_3	F	OH
XXV-16-2	p-Me-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXV-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-16-8	p-Me-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-17-1	p-F-Ph	H	H	H	Et	H	CH_3	F	OH
XXV-17-2	p-F-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXV-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-17-8	p-F-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-18-1	p-Cl-Ph	H	H	H	Et	H	CH_3	F	OH
XXV-18-2	p-Cl-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXV-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-18-8	p-Cl-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-19-1	p-Br-Ph	H	H	H	Et	H	CH_3	F	OH
XXV-19-2	p-Br-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXV-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-19-8	p-Br-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-20-1	p-I-Ph	H	H	H	Et	H	CH_3	F	OH
XXV-20-2	p-I-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXV-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXV-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXV-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXV-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXV-20-8	p-I-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-21-1	CH_3	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-21-2	CH_3	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-21-8	CH_3	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-22-1	Et	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-22-2	Et	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-22-8	Et	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-23-1	^{i}Pr	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-23-8	^{i}Pr	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-24-1	^{t}Bu	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-24-8	^{t}Bu	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-25-1	Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-25-2	Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-25-8	Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-27-1	p-F-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-27-8	p-F-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-30-1	p-I-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXV-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXV-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXV-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXV-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXV-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXV-30-8	p-I-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-31-1	CH_3	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-31-2	CH_3	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-31-8	CH_3	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-32-1	Et	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-32-2	Et	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-32-8	Et	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-33-1	^{i}Pr	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-33-8	^{i}Pr	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-34-1	^{t}Bu	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-34-8	^{t}Bu	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-35-1	Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-35-2	Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-35-8	Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-37-1	p-F-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-37-8	p-F-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-40-1	p-I-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXV-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXV-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXV-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXV-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXV-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXV-40-8	p-I-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-41-1	CH_3	H	H	H	Bz	H	CH_3	F	OH
XXV-41-2	CH_3	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-41-5	CH_3	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-41-8	CH_3	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-42-1	Et	H	H	H	Bz	H	CH_3	F	OH
XXV-42-2	Et	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-42-5	Et	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-42-8	Et	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXV-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-43-1	^{i}Pr	H	H	H	Bz	H	CH_3	F	OH
XXV-43-2	^{i}Pr	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-43-8	^{i}Pr	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-44-1	^{t}Bu	H	H	H	Bz	H	CH_3	F	OH
XXV-44-2	^{t}Bu	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-44-8	^{t}Bu	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-45-1	Ph	H	H	H	Bz	H	CH_3	F	OH
XXV-45-2	Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-45-5	Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-45-8	Ph	*	H	*	Bz	H	CH_3	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-46-1	p-Me-Ph	H	H	H	Bz	H	CH_3	F	OH
XXV-46-2	p-Me-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-46-8	p-Me-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-47-1	p-F-Ph	H	H	H	Bz	H	CH_3	F	OH
XXV-47-2	p-F-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-47-8	p-F-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-48-1	p-Cl-Ph	H	H	H	Bz	H	CH_3	F	OH
XXV-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-48-8	p-Cl-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-49-1	p-Br-Ph	H	H	H	Bz	H	CH_3	F	OH
XXV-49-2	p-Br-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-49-8	p-Br-Ph	*	H	*	Bz	H	CH_3	F	OH

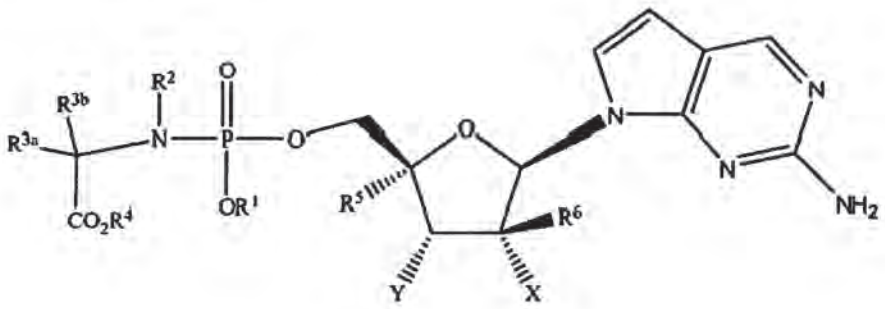
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXV-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXV-50-1	p-I-Ph	H	H	H	Bz	H	CH_3	F	OH
XXV-50-2	p-I-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXV-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXV-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXV-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXV-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXV-50-8	p-I-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XXVI

Table XXVI-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-1-1	CH_3	H	H	H	CH_3	H	F	H	OH
XXVI-1-2	CH_3	H	H	CH_3	CH_3	H	F	H	OH
XXVI-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-1-5	CH_3	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-1-8	CH_3	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-2-1	Et	H	H	H	CH_3	H	F	H	OH
XXVI-2-2	Et	H	H	CH_3	CH_3	H	F	H	OH
XXVI-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-2-5	Et	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-2-8	Et	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-3.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-3-1	^{i}Pr	H	H	H	CH_3	H	F	H	OH
XXVI-3-2	^{i}Pr	H	H	CH_3	CH_3	H	F	H	OH
XXVI-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-3-8	^{i}Pr	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-4-1	^{t}Bu	H	H	H	CH_3	H	F	H	OH
XXVI-4-2	^{t}Bu	H	H	CH_3	CH_3	H	F	H	OH
XXVI-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-4-8	^{t}Bu	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-5-1	Ph	H	H	H	CH_3	H	F	H	OH
XXVI-5-2	Ph	H	H	CH_3	CH_3	H	F	H	OH
XXVI-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-5-5	Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-5-8	Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-6-1	p-Me-Ph	H	H	H	CH_3	H	F	H	OH
XXVI-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXVI-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-6-8	p-Me-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-7-1	p-F-Ph	H	H	H	CH_3	H	F	H	OH
XXVI-7-2	p-F-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXVI-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-7-20	p-F-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-8-1	p-Cl-Ph	H	H	H	CH_3	H	F	H	OH
XXVI-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXVI-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-8-8	p-Cl-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-9-1	p-Br-Ph	H	H	H	CH_3	H	F	H	OH
XXVI-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXVI-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-9-20	p-Br-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-10-1	p-I-Ph	H	H	H	CH_3	H	F	H	OH
XXVI-10-2	p-I-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXVI-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXVI-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXVI-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXVI-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXVI-10-8	p-I-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-11-1	CH_3	H	H	H	Et	H	F	H	OH
XXVI-11-2	CH_3	H	H	CH_3	Et	H	F	H	OH
XXVI-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-11-5	CH_3	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-11-8	CH_3	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-12-1	Et	H	H	H	Et	H	F	H	OH
XXVI-12-2	Et	H	H	CH_3	Et	H	F	H	OH
XXVI-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-12-5	Et	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-12-8	Et	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-13-1	^{i}Pr	H	H	H	Et	H	F	H	OH
XXVI-13-2	^{i}Pr	H	H	CH_3	Et	H	F	H	OH
XXVI-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-13-8	^{i}Pr	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-14-1	^{t}Bu	H	H	H	Et	H	F	H	OH
XXVI-14-2	^{t}Bu	H	H	CH_3	Et	H	F	H	OH
XXVI-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-14-8	^{t}Bu	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-15-1	Ph	H	H	H	Et	H	F	H	OH
XXVI-15-2	Ph	H	H	CH_3	Et	H	F	H	OH
XXVI-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-15-5	Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-15-8	Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-16-1	p-Me-Ph	H	H	H	Et	H	F	H	OH
XXVI-16-2	p-Me-Ph	H	H	CH_3	Et	H	F	H	OH
XXVI-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-16-8	p-Me-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-17-1	p-F-Ph	H	H	H	Et	H	F	H	OH
XXVI-17-2	p-F-Ph	H	H	CH_3	Et	H	F	H	OH
XXVI-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-17-8	p-F-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-18-1	p-Cl-Ph	H	H	H	Et	H	F	H	OH
XXVI-18-2	p-Cl-Ph	H	H	CH_3	Et	H	F	H	OH
XXVI-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-18-8	p-Cl-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-19-1	p-Br-Ph	H	H	H	Et	H	F	H	OH
XXVI-19-2	p-Br-Ph	H	H	CH_3	Et	H	F	H	OH
XXVI-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-19-8	p-Br-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-20-1	p-I-Ph	H	H	H	Et	H	F	H	OH
XXVI-20-2	p-I-Ph	H	H	CH_3	Et	H	F	H	OH
XXVI-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXVI-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXVI-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXVI-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXVI-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXVI-20-8	p-I-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-21-1	CH_3	H	H	H	^{i}Pr	H	F	H	OH
XXVI-21-2	CH_3	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-21-8	CH_3	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-22-1	Et	H	H	H	^{i}Pr	H	F	H	OH
XXVI-22-2	Et	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-22-8	Et	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	H	OH
XXVI-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-23-8	^{i}Pr	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-24-1	^{t}Bu	H	H	H	^{i}Pr	H	F	H	OH
XXVI-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-24-8	^{t}Bu	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-25-1	Ph	H	H	H	^{i}Pr	H	F	H	OH
XXVI-25-2	Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-25-8	Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXVI-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-27-1	p-F-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXVI-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-27-8	p-F-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXVI-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXVI-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-30-1	p-I-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXVI-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXVI-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXVI-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXVI-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXVI-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXVI-30-8	p-I-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-31-1	CH_3	H	H	H	^{n}Bu	H	F	H	OH
XXVI-31-2	CH_3	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-31-8	CH_3	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-32-1	Et	H	H	H	^{n}Bu	H	F	H	OH
XXVI-32-2	Et	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-32-8	Et	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-33-1	^{i}Pr	H	H	H	^{n}Bu	H	F	H	OH
XXVI-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-33-8	^{i}Pr	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-34-1	^{t}Bu	H	H	H	^{n}Bu	H	F	H	OH
XXVI-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-34-8	^{t}Bu	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-35-1	Ph	H	H	H	^{n}Bu	H	F	H	OH
XXVI-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-35-8	Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXVI-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-37-1	p-F-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXVI-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-37-8	p-F-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXVI-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXVI-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-40-1	p-I-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXVI-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXVI-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXVI-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXVI-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXVI-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXVI-40-8	p-I-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-41-1	CH_3	H	H	H	Bz	H	F	H	OH
XXVI-41-2	CH_3	H	H	CH_3	Bz	H	F	H	OH
XXVI-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-41-8	CH_3	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVI-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-42-1	Et	H	H	H	Bz	H	F	H	OH
XXVI-42-2	Et	H	H	CH_3	Bz	H	F	H	OH
XXVI-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-42-5	Et	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-42-8	Et	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-43-1	^{i}Pr	H	H	H	Bz	H	F	H	OH
XXVI-43-2	^{i}Pr	H	H	CH_3	Bz	H	F	H	OH
XXVI-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-43-8	^{i}Pr	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-44-1	^{t}Bu	H	H	H	Bz	H	F	H	OH
XXVI-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	H	OH
XXVI-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-44-8	^{t}Bu	*	H	*	Bz	H	F	H	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-45-1	Ph	H	H	H	Bz	H	F	H	OH
XXVI-45-2	Ph	H	H	CH_3	Bz	H	F	H	OH
XXVI-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-45-5	Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-45-8	Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-46-1	p-Me-Ph	H	H	H	Bz	H	F	H	OH
XXVI-46-2	p-Me-Ph	H	H	CH_3	Bz	H	F	H	OH
XXVI-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-46-8	p-Me-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-47-1	p-F-Ph	H	H	H	Bz	H	F	H	OH
XXVI-47-2	p-F-Ph	H	H	CH_3	Bz	H	F	H	OH
XXVI-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-47-8	p-F-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-48-1	p-Cl-Ph	H	H	H	Bz	H	F	H	OH
XXVI-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	F	H	OH
XXVI-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-48-8	p-Cl-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVI-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-49-1	p-Br-Ph	H	H	H	Bz	H	F	H	OH
XXVI-49-2	p-Br-Ph	H	H	CH_3	Bz	H	F	H	OH
XXVI-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXVI-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-49-8	p-Br-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

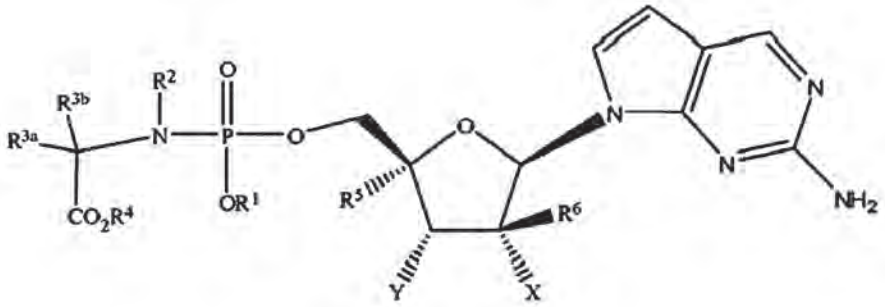
Table XXVI-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-50-1	p-I-Ph	H	H	H	Bz	H	F	H	OH
XXVI-50-2	p-I-Ph	H	H	CH_3	Bz	H	F	H	OH
XXVI-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXVI-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	F	H	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVI-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXVI-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXVI-50-8	p-I-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.



XXVII

Table XXVII-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-1-1	CH_3	H	H	H	CH_3	H	F	F	OH
XXVII-1-2	CH_3	H	H	CH_3	CH_3	H	F	F	OH
XXVII-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-1-5	CH_3	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-1-8	CH_3	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-2-1	Et	H	H	H	CH_3	H	F	F	OH
XXVII-2-2	Et	H	H	CH_3	CH_3	H	F	F	OH
XXVII-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-2-5	Et	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-2-8	Et	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-3-1	^{i}Pr	H	H	H	CH_3	H	F	F	OH
XXVII-3-2	^{i}Pr	H	H	CH_3	CH_3	H	F	F	OH
XXVII-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-3-8	^{i}Pr	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-4-1	^{t}Bu	H	H	H	CH_3	H	F	F	OH
XXVII-4-2	^{t}Bu	H	H	CH_3	CH_3	H	F	F	OH
XXVII-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-4-8	^{t}Bu	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-5-1	Ph	H	H	H	CH_3	H	F	F	OH
XXVII-5-2	Ph	H	H	CH_3	CH_3	H	F	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-5-5	Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-5-8	Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-6-1	p-Me-Ph	H	H	H	CH_3	H	F	F	OH
XXVII-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXVII-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-6-8	p-Me-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-7-1	p-F-Ph	H	H	H	CH_3	H	F	F	OH
XXVII-7-2	p-F-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXVII-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-7-20	p-F-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-8-1	p-Cl-Ph	H	H	H	CH_3	H	F	F	OH
XXVII-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXVII-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-8-8	p-Cl-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-9-1	p-Br-Ph	H	H	H	CH_3	H	F	F	OH
XXVII-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXVII-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-9-20	p-Br-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-10-1	p-I-Ph	H	H	H	CH_3	H	F	F	OH
XXVII-10-2	p-I-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXVII-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXVII-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXVII-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXVII-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXVII-10-8	p-I-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-11-1	CH_3	H	H	H	Et	H	F	F	OH
XXVII-11-2	CH_3	H	H	CH_3	Et	H	F	F	OH
XXVII-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-11-5	CH_3	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-11-8	CH_3	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-12-1	Et	H	H	H	Et	H	F	F	OH
XXVII-12-2	Et	H	H	CH_3	Et	H	F	F	OH
XXVII-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-12-5	Et	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-12-8	Et	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-13-1	^{i}Pr	H	H	H	Et	H	F	F	OH
XXVII-13-2	^{i}Pr	H	H	CH_3	Et	H	F	F	OH
XXVII-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-13-8	^{i}Pr	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-14-1	^{t}Bu	H	H	H	Et	H	F	F	OH
XXVII-14-2	^{t}Bu	H	H	CH_3	Et	H	F	F	OH
XXVII-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-14-8	^{t}Bu	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-15-1	Ph	H	H	H	Et	H	F	F	OH
XXVII-15-2	Ph	H	H	CH_3	Et	H	F	F	OH
XXVII-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-15-5	Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-15-8	Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-16-1	p-Me-Ph	H	H	H	Et	H	F	F	OH
XXVII-16-2	p-Me-Ph	H	H	CH_3	Et	H	F	F	OH
XXVII-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-16-8	p-Me-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-17-1	p-F-Ph	H	H	H	Et	H	F	F	OH
XXVII-17-2	p-F-Ph	H	H	CH_3	Et	H	F	F	OH
XXVII-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-17-8	p-F-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-18-1	p-Cl-Ph	H	H	H	Et	H	F	F	OH
XXVII-18-2	p-Cl-Ph	H	H	CH_3	Et	H	F	F	OH
XXVII-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-18-8	p-Cl-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-19-1	p-Br-Ph	H	H	H	Et	H	F	F	OH
XXVII-19-2	p-Br-Ph	H	H	CH_3	Et	H	F	F	OH
XXVII-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-19-8	p-Br-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-20-1	p-I-Ph	H	H	H	Et	H	F	F	OH
XXVII-20-2	p-I-Ph	H	H	CH_3	Et	H	F	F	OH
XXVII-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXVII-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXVII-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXVII-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXVII-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXVII-20-8	p-I-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-21-1	CH_3	H	H	H	^{i}Pr	H	F	F	OH
XXVII-21-2	CH_3	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-21-8	CH_3	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-22-1	Et	H	H	H	^{i}Pr	H	F	F	OH
XXVII-22-2	Et	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-22-8	Et	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	F	OH
XXVII-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-23-8	^{i}Pr	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-24-1	^{t}Bu	H	H	H	^{i}Pr	H	F	F	OH
XXVII-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-24-8	^{t}Bu	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-25-1	Ph	H	H	H	^{i}Pr	H	F	F	OH
XXVII-25-2	Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-25-8	Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXVII-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-27-1	p-F-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXVII-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-27-8	p-F-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXVII-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXVII-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-30-1	p-I-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXVII-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXVII-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXVII-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXVII-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXVII-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXVII-30-8	p-I-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-31-1	CH_3	H	H	H	^{n}Bu	H	F	F	OH
XXVII-31-2	CH_3	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-31-8	CH_3	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-32-1	Et	H	H	H	^{n}Bu	H	F	F	OH
XXVII-32-2	Et	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-32-8	Et	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-33-1	^{i}Pr	H	H	H	^{n}Bu	H	F	F	OH
XXVII-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-33-8	^{i}Pr	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-34-1	^{t}Bu	H	H	H	^{n}Bu	H	F	F	OH
XXVII-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-34-8	^{t}Bu	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-35-1	Ph	H	H	H	^{n}Bu	H	F	F	OH
XXVII-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-35-8	Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXVII-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-37-1	p-F-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXVII-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-37-8	p-F-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXVII-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXVII-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-40-1	p-I-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXVII-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXVII-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXVII-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXVII-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXVII-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXVII-40-8	p-I-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVII-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-41-1	CH_3	H	H	H	Bz	H	F	F	OH
XXVII-41-2	CH_3	H	H	CH_3	Bz	H	F	F	OH
XXVII-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-41-8	CH_3	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-42-1	Et	H	H	H	Bz	H	F	F	OH
XXVII-42-2	Et	H	H	CH_3	Bz	H	F	F	OH
XXVII-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-42-5	Et	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-42-8	Et	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-43-1	^{i}Pr	H	H	H	Bz	H	F	F	OH
XXVII-43-2	^{i}Pr	H	H	CH_3	Bz	H	F	F	OH
XXVII-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-43-8	^{i}Pr	*	H	*	Bz	H	F	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-44-1	^{t}Bu	H	H	H	Bz	H	F	F	OH
XXVII-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	F	OH
XXVII-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-44-8	^{t}Bu	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-45-1	Ph	H	H	H	Bz	H	F	F	OH
XXVII-45-2	Ph	H	H	CH_3	Bz	H	F	F	OH
XXVII-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-45-5	Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-45-8	Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-46-1	p-Me-Ph	H	H	H	Bz	H	F	F	OH
XXVII-46-2	p-Me-Ph	H	H	CH_3	Bz	H	F	F	OH
XXVII-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-46-8	p-Me-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-47-1	p-F-Ph	H	H	H	Bz	H	F	F	OH
XXVII-47-2	p-F-Ph	H	H	CH_3	Bz	H	F	F	OH
XXVII-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-47-8	p-F-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-48-1	p-Cl-Ph	H	H	H	Bz	H	F	F	OH
XXVII-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	F	F	OH
XXVII-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-48-8	p-Cl-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-49-1	p-Br-Ph	H	H	H	Bz	H	F	F	OH
XXVII-49-2	p-Br-Ph	H	H	CH_3	Bz	H	F	F	OH
XXVII-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	F	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-49-8	p-Br-Ph	*	H	*	Bz	H	F	F	OH

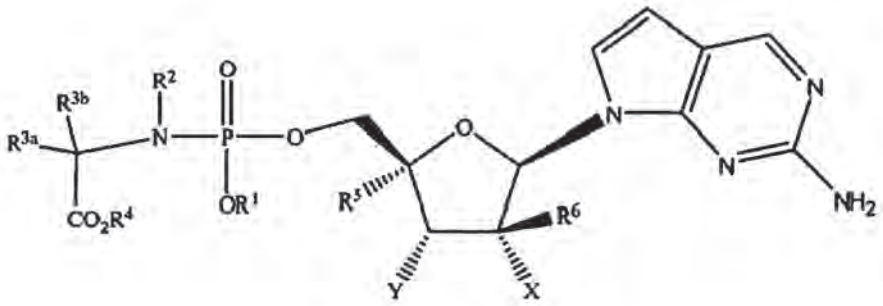
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVII-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVII-50-1	p-I-Ph	H	H	H	Bz	H	F	F	OH
XXVII-50-2	p-I-Ph	H	H	CH_3	Bz	H	F	F	OH
XXVII-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXVII-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXVII-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXVII-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXVII-50-8	p-I-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XXVIII

Table XXVIII-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-1-1	CH_3	H	H	H	CH_3	H	H	F	OH
XXVIII-1-2	CH_3	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-1-5	CH_3	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-1-8	CH_3	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-2-1	Et	H	H	H	CH_3	H	H	F	OH
XXVIII-2-2	Et	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-2-5	Et	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-2-8	Et	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-3-1	^{i}Pr	H	H	H	CH_3	H	H	F	OH
XXVIII-3-2	^{i}Pr	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-3-8	^{i}Pr	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-4-1	^{t}Bu	H	H	H	CH_3	H	H	F	OH
XXVIII-4-2	^{t}Bu	H	H	CH_3	CH_3	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-4-8	^{t}Bu	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-5-1	Ph	H	H	H	CH_3	H	H	F	OH
XXVIII-5-2	Ph	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-5-5	Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-5-8	Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-6-1	p-Me-Ph	H	H	H	CH_3	H	H	F	OH
XXVIII-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-6-8	p-Me-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-7-1	p-F-Ph	H	H	H	CH_3	H	H	F	OH
XXVIII-7-2	p-F-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-7-20	p-F-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-8-1	p-Cl-Ph	H	H	H	CH_3	H	H	F	OH
XXVIII-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-8-8	p-Cl-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-9-1	p-Br-Ph	H	H	H	CH_3	H	H	F	OH
XXVIII-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-9-20	p-Br-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-10-1	p-I-Ph	H	H	H	CH_3	H	H	F	OH
XXVIII-10-2	p-I-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXVIII-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXVIII-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXVIII-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXVIII-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXVIII-10-8	p-I-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-11-1	CH_3	H	H	H	Et	H	H	F	OH
XXVIII-11-2	CH_3	H	H	CH_3	Et	H	H	F	OH
XXVIII-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-11-5	CH_3	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-11-8	CH_3	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-12-1	Et	H	H	H	Et	H	H	F	OH
XXVIII-12-2	Et	H	H	CH_3	Et	H	H	F	OH
XXVIII-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-12-5	Et	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-12-8	Et	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-13-1	^{i}Pr	H	H	H	Et	H	H	F	OH
XXVIII-13-2	^{i}Pr	H	H	CH_3	Et	H	H	F	OH
XXVIII-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-13-8	^{i}Pr	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-14-1	^{t}Bu	H	H	H	Et	H	H	F	OH
XXVIII-14-2	^{t}Bu	H	H	CH_3	Et	H	H	F	OH
XXVIII-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-14-8	^{t}Bu	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-15-1	Ph	H	H	H	Et	H	H	F	OH
XXVIII-15-2	Ph	H	H	CH_3	Et	H	H	F	OH
XXVIII-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-15-5	Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-15-8	Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-16-1	p-Me-Ph	H	H	H	Et	H	H	F	OH
XXVIII-16-2	p-Me-Ph	H	H	CH_3	Et	H	H	F	OH
XXVIII-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-16-8	p-Me-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-17-1	p-F-Ph	H	H	H	Et	H	H	F	OH
XXVIII-17-2	p-F-Ph	H	H	CH_3	Et	H	H	F	OH
XXVIII-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-17-8	p-F-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-18-1	p-Cl-Ph	H	H	H	Et	H	H	F	OH
XXVIII-18-2	p-Cl-Ph	H	H	CH_3	Et	H	H	F	OH
XXVIII-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-18-8	p-Cl-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-19-1	p-Br-Ph	H	H	H	Et	H	H	F	OH
XXVIII-19-2	p-Br-Ph	H	H	CH_3	Et	H	H	F	OH
XXVIII-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-19-8	p-Br-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-20-1	p-I-Ph	H	H	H	Et	H	H	F	OH
XXVIII-20-2	p-I-Ph	H	H	CH_3	Et	H	H	F	OH
XXVIII-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXVIII-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXVIII-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXVIII-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXVIII-20-8	p-I-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-21-1	CH_3	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-21-2	CH_3	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-21-8	CH_3	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-22-1	Et	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-22-2	Et	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-22-8	Et	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-23-1	^{i}Pr	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-23-8	^{i}Pr	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-24-1	^{t}Bu	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-24-8	^{t}Bu	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-25-1	Ph	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-25-2	Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-25-8	Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-27-1	p-F-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-27-8	p-F-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-30-1	p-I-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXVIII-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXVIII-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXVIII-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXVIII-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXVIII-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXVIII-30-8	p-I-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-31-1	CH_3	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-31-2	CH_3	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-31-8	CH_3	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-32-1	Et	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-32-2	Et	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-32-8	Et	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-33-1	^{i}Pr	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-33-8	^{i}Pr	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-34-1	^{t}Bu	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-34-8	^{t}Bu	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-35-1	Ph	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-35-2	Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-35-8	Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-37-1	p-F-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-37-8	p-F-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-40-1	p-I-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXVIII-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXVIII-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXVIII-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXVIII-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXVIII-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXVIII-40-8	p-I-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-41-1	CH_3	H	H	H	Bz	H	H	F	OH
XXVIII-41-2	CH_3	H	H	CH_3	Bz	H	H	F	OH
XXVIII-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-41-5	CH_3	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-41-8	CH_3	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-42-1	Et	H	H	H	Bz	H	H	F	OH
XXVIII-42-2	Et	H	H	CH_3	Bz	H	H	F	OH
XXVIII-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-42-5	Et	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-42-8	Et	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXVIII-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-43-1	^{i}Pr	H	H	H	Bz	H	H	F	OH
XXVIII-43-2	^{i}Pr	H	H	CH_3	Bz	H	H	F	OH
XXVIII-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-43-8	^{i}Pr	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-44-1	^{t}Bu	H	H	H	Bz	H	H	F	OH
XXVIII-44-2	^{t}Bu	H	H	CH_3	Bz	H	H	F	OH
XXVIII-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-44-8	^{t}Bu	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-45-1	Ph	H	H	H	Bz	H	H	F	OH
XXVIII-45-2	Ph	H	H	CH_3	Bz	H	H	F	OH
XXVIII-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-45-5	Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-45-8	Ph	*	H	*	Bz	H	H	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-46-1	p-Me-Ph	H	H	H	Bz	H	H	F	OH
XXVIII-46-2	p-Me-Ph	H	H	CH_3	Bz	H	H	F	OH
XXVIII-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-46-8	p-Me-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-47-1	p-F-Ph	H	H	H	Bz	H	H	F	OH
XXVIII-47-2	p-F-Ph	H	H	CH_3	Bz	H	H	F	OH
XXVIII-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-47-8	p-F-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-48-1	p-Cl-Ph	H	H	H	Bz	H	H	F	OH
XXVIII-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	H	F	OH
XXVIII-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-48-8	p-Cl-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-49-1	p-Br-Ph	H	H	H	Bz	H	H	F	OH
XXVIII-49-2	p-Br-Ph	H	H	CH_3	Bz	H	H	F	OH
XXVIII-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-49-8	p-Br-Ph	*	H	*	Bz	H	H	F	OH

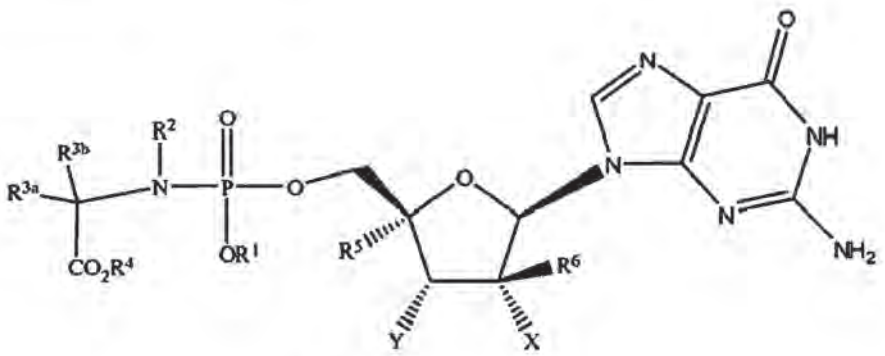
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXVIII-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXVIII-50-1	p-I-Ph	H	H	H	Bz	H	H	F	OH
XXVIII-50-2	p-I-Ph	H	H	CH_3	Bz	H	H	F	OH
XXVIII-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXVIII-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXVIII-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXVIII-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXVIII-50-8	p-I-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XXIX

Table XXIX-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-1-1	CH_3	H	H	H	CH_3	H	CH_3	F	OH
XXIX-1-2	CH_3	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-1-5	CH_3	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-1-8	CH_3	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-2-1	Et	H	H	H	CH_3	H	CH_3	F	OH
XXIX-2-2	Et	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-2-5	Et	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-2-8	Et	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-3.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-3-1	^{i}Pr	H	H	H	CH_3	H	CH_3	F	OH
XXIX-3-2	^{i}Pr	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-3-8	^{i}Pr	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-4-1	^{t}Bu	H	H	H	CH_3	H	CH_3	F	OH
XXIX-4-2	^{t}Bu	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-4-8	^{t}Bu	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-5-1	Ph	H	H	H	CH_3	H	CH_3	F	OH
XXIX-5-2	Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-5-5	Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-5-8	Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-6-1	p-Me-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXIX-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-6-8	p-Me-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-7-1	p-F-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXIX-7-2	p-F-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-7-20	p-F-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-8-1	p-Cl-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXIX-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-8-8	p-Cl-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-9-1	p-Br-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXIX-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-9-20	p-Br-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-10-1	p-I-Ph	H	H	H	CH_3	H	CH_3	F	OH
XXIX-10-2	p-I-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH
XXIX-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH
XXIX-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH
XXIX-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH
XXIX-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH
XXIX-10-8	p-I-Ph	*	H	*	CH_3	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-11-1	CH_3	H	H	H	Et	H	CH_3	F	OH
XXIX-11-2	CH_3	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-11-5	CH_3	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-11-8	CH_3	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-12-1	Et	H	H	H	Et	H	CH_3	F	OH
XXIX-12-2	Et	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-12-5	Et	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-12-8	Et	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-13-1	^{i}Pr	H	H	H	Et	H	CH_3	F	OH
XXIX-13-2	^{i}Pr	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-13-8	^{i}Pr	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-14-1	^{t}Bu	H	H	H	Et	H	CH_3	F	OH
XXIX-14-2	^{t}Bu	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)$ 2	Et	H	CH_3	F	OH
XXIX-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-14-7	^{t}Bu	H	H	CH_2CH_2SCH	Et	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-14-8	^{t}Bu	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-15-1	Ph	H	H	H	Et	H	CH_3	F	OH
XXIX-15-2	Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-15-5	Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-15-8	Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-16-1	p-Me-Ph	H	H	H	Et	H	CH_3	F	OH
XXIX-16-2	p-Me-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-16-8	p-Me-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-17-1	p-F-Ph	H	H	H	Et	H	CH_3	F	OH
XXIX-17-2	p-F-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-17-8	p-F-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-18-1	p-Cl-Ph	H	H	H	Et	H	CH_3	F	OH
XXIX-18-2	p-Cl-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-18-8	p-Cl-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-19-1	p-Br-Ph	H	H	H	Et	H	CH_3	F	OH
XXIX-19-2	p-Br-Ph	H	H	CH_3	Et	H	CH_3	F	OH
XXIX-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-19-8	p-Br-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-20-1	p-I-Ph	H	H	H	Et	H	CH_3	F	OH
XXIX-20-2	p-I-Ph	H	H	CH_3	Et	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH
XXIX-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH
XXIX-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH
XXIX-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH
XXIX-20-8	p-I-Ph	*	H	*	Et	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-21-1	CH_3	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-21-2	CH_3	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-21-8	CH_3	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-22-1	Et	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-22-2	Et	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-22-8	Et	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-23-1	^{i}Pr	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-23-8	^{i}Pr	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-24-1	^{t}Bu	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-24-8	^{t}Bu	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-25-1	Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-25-2	Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-25-8	Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-27-1	p-F-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-27-8	p-F-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-30-1	p-I-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH
XXIX-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH
XXIX-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH
XXIX-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH
XXIX-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH
XXIX-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH
XXIX-30-8	p-I-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-31-1	CH_3	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-31-2	CH_3	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-31-8	CH_3	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-32-1	Et	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-32-2	Et	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-32-8	Et	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-33-1	^{i}Pr	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-33-8	^{i}Pr	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-34-1	^{t}Bu	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-34-8	^{t}Bu	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-35-1	Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-35-2	Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-35-8	Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-37-1	p-F-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-37-8	p-F-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-40-1	p-I-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH
XXIX-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH
XXIX-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH
XXIX-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH
XXIX-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH
XXIX-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH
XXIX-40-8	p-I-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXIX-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-41-1	CH_3	H	H	H	Bz	H	CH_3	F	OH
XXIX-41-2	CH_3	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-41-5	CH_3	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-41-8	CH_3	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-42-1	Et	H	H	H	Bz	H	CH_3	F	OH
XXIX-42-2	Et	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-42-5	Et	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-42-8	Et	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-43-1	^iPr	H	H	H	Bz	H	CH_3	F	OH
XXIX-43-2	^iPr	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-43-3	^iPr	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-43-4	^iPr	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-43-5	^iPr	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-43-6	^iPr	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-43-7	^iPr	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-43-8	^iPr	*	H	*	Bz	H	CH_3	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-44-1	^{t}Bu	H	H	H	Bz	H	CH_3	F	OH
XXIX-44-2	^{t}Bu	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-44-8	^{t}Bu	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-45-1	Ph	H	H	H	Bz	H	CH_3	F	OH
XXIX-45-2	Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-45-5	Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-45-8	Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-46-1	p-Me-Ph	H	H	H	Bz	H	CH_3	F	OH
XXIX-46-2	p-Me-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-46-8	p-Me-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-47-1	p-F-Ph	H	H	H	Bz	H	CH_3	F	OH
XXIX-47-2	p-F-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-47-8	p-F-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-48-1	p-Cl-Ph	H	H	H	Bz	H	CH_3	F	OH
XXIX-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-48-8	p-Cl-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-49-1	p-Br-Ph	H	H	H	Bz	H	CH_3	F	OH
XXIX-49-2	p-Br-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-49-8	p-Br-Ph	*	H	*	Bz	H	CH_3	F	OH

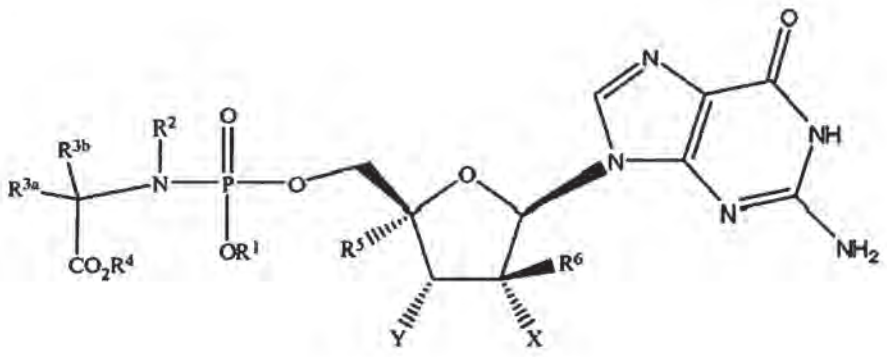
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXIX-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXIX-50-1	p-I-Ph	H	H	H	Bz	H	CH_3	F	OH
XXIX-50-2	p-I-Ph	H	H	CH_3	Bz	H	CH_3	F	OH
XXIX-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH
XXIX-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH
XXIX-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH
XXIX-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH
XXIX-50-8	p-I-Ph	*	H	*	Bz	H	CH_3	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XXX

Table XXX-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-1-1	CH_3	H	H	H	CH_3	H	F	H	OH
XXX-1-2	CH_3	H	H	CH_3	CH_3	H	F	H	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-1-5	CH_3	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-1-8	CH_3	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-2-1	Et	H	H	H	CH_3	H	F	H	OH
XXX-2-2	Et	H	H	CH_3	CH_3	H	F	H	OH
XXX-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-2-5	Et	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-2-8	Et	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-3-1	^{i}Pr	H	H	H	CH_3	H	F	H	OH
XXX-3-2	^{i}Pr	H	H	CH_3	CH_3	H	F	H	OH
XXX-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-3-8	^{i}Pr	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-4-1	'Bu	H	H	H	CH_3	H	F	H	OH
XXX-4-2	'Bu	H	H	CH_3	CH_3	H	F	H	OH
XXX-4-3	'Bu	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-4-4	'Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-4-5	'Bu	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-4-6	'Bu	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-4-7	'Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-4-8	'Bu	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-5-1	Ph	H	H	H	CH_3	H	F	H	OH
XXX-5-2	Ph	H	H	CH_3	CH_3	H	F	H	OH
XXX-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-5-5	Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-5-8	Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-6-1	p-Me-Ph	H	H	H	CH_3	H	F	H	OH
XXX-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXX-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-6-8	p-Me-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-7-1	p-F-Ph	H	H	H	CH_3	H	F	H	OH
XXX-7-2	p-F-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXX-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-7-20	p-F-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-8-1	p-Cl-Ph	H	H	H	CH_3	H	F	H	OH
XXX-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXX-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-8-8	p-Cl-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-9-1	p-Br-Ph	H	H	H	CH_3	H	F	H	OH
XXX-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXX-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-9-20	p-Br-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-10-1	p-I-Ph	H	H	H	CH_3	H	F	H	OH
XXX-10-2	p-I-Ph	H	H	CH_3	CH_3	H	F	H	OH
XXX-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH
XXX-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH
XXX-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH
XXX-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH
XXX-10-8	p-I-Ph	*	H	*	CH_3	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-11-1	CH_3	H	H	H	Et	H	F	H	OH
XXX-11-2	CH_3	H	H	CH_3	Et	H	F	H	OH
XXX-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-11-5	CH_3	H	H	CH_2Ph	Et	H	F	H	OH
XXX-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-11-8	CH_3	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-12-1	Et	H	H	H	Et	H	F	H	OH
XXX-12-2	Et	H	H	CH_3	Et	H	F	H	OH
XXX-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-12-5	Et	H	H	CH_2Ph	Et	H	F	H	OH
XXX-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-12-8	Et	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-13-1	^{i}Pr	H	H	H	Et	H	F	H	OH
XXX-13-2	^{i}Pr	H	H	CH_3	Et	H	F	H	OH
XXX-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	F	H	OH
XXX-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-13-8	^{i}Pr	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-14-1	^{t}Bu	H	H	H	Et	H	F	H	OH
XXX-14-2	^{t}Bu	H	H	CH_3	Et	H	F	H	OH
XXX-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	H	OH
XXX-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-14-8	^{t}Bu	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-15-1	Ph	H	H	H	Et	H	F	H	OH
XXX-15-2	Ph	H	H	CH_3	Et	H	F	H	OH
XXX-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-15-5	Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXX-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-15-8	Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-16-1	p-Me-Ph	H	H	H	Et	H	F	H	OH
XXX-16-2	p-Me-Ph	H	H	CH_3	Et	H	F	H	OH
XXX-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXX-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-16-8	p-Me-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-17-1	p-F-Ph	H	H	H	Et	H	F	H	OH
XXX-17-2	p-F-Ph	H	H	CH_3	Et	H	F	H	OH
XXX-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXX-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-17-8	p-F-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-18-1	p-Cl-Ph	H	H	H	Et	H	F	H	OH
XXX-18-2	p-Cl-Ph	H	H	CH_3	Et	H	F	H	OH
XXX-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXX-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-18-8	p-Cl-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-19-1	p-Br-Ph	H	H	H	Et	H	F	H	OH
XXX-19-2	p-Br-Ph	H	H	CH_3	Et	H	F	H	OH
XXX-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXX-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-19-8	p-Br-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-20-1	p-I-Ph	H	H	H	Et	H	F	H	OH
XXX-20-2	p-I-Ph	H	H	CH_3	Et	H	F	H	OH
XXX-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH
XXX-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH
XXX-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	H	OH
XXX-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH
XXX-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH
XXX-20-8	p-I-Ph	*	H	*	Et	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-21-1	CH_3	H	H	H	^{i}Pr	H	F	H	OH
XXX-21-2	CH_3	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-21-8	CH_3	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-22-1	Et	H	H	H	^{i}Pr	H	F	H	OH
XXX-22-2	Et	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-22-8	Et	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	H	OH
XXX-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-23-8	^{i}Pr	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-24-1	^{t}Bu	H	H	H	^{i}Pr	H	F	H	OH
XXX-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-24-8	^{t}Bu	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-25-1	Ph	H	H	H	^{i}Pr	H	F	H	OH
XXX-25-2	Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-25-8	Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXX-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-27-1	p-F-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXX-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-27-8	p-F-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXX-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXX-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-30-1	p-I-Ph	H	H	H	^{i}Pr	H	F	H	OH
XXX-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH
XXX-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH
XXX-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH
XXX-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH
XXX-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH
XXX-30-8	p-I-Ph	*	H	*	^{i}Pr	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-31-1	CH_3	H	H	H	^{n}Bu	H	F	H	OH
XXX-31-2	CH_3	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-31-8	CH_3	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-32-1	Et	H	H	H	^{n}Bu	H	F	H	OH
XXX-32-2	Et	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-32-8	Et	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-33-1	^{i}Pr	H	H	H	^{n}Bu	H	F	H	OH
XXX-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-33-8	^{i}Pr	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-34-1	^{t}Bu	H	H	H	^{n}Bu	H	F	H	OH
XXX-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-34-8	^{t}Bu	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-35-1	Ph	H	H	H	^{n}Bu	H	F	H	OH
XXX-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-35-8	Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXX-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-37-1	p-F-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXX-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-37-8	p-F-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXX-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXX-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-40-1	p-I-Ph	H	H	H	^{n}Bu	H	F	H	OH
XXX-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH
XXX-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH
XXX-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH
XXX-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH
XXX-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH
XXX-40-8	p-I-Ph	*	H	*	^{n}Bu	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-41-1	CH_3	H	H	H	Bz	H	F	H	OH
XXX-41-2	CH_3	H	H	CH_3	Bz	H	F	H	OH
XXX-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-41-8	CH_3	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-42-1	Et	H	H	H	Bz	H	F	H	OH
XXX-42-2	Et	H	H	CH_3	Bz	H	F	H	OH
XXX-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-42-5	Et	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-42-8	Et	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXX-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-43-1	^{i}Pr	H	H	H	Bz	H	F	H	OH
XXX-43-2	^{i}Pr	H	H	CH_3	Bz	H	F	H	OH
XXX-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-43-8	^{i}Pr	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-44-1	^{t}Bu	H	H	H	Bz	H	F	H	OH
XXX-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	H	OH
XXX-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-44-8	^{t}Bu	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-45-1	Ph	H	H	H	Bz	H	F	H	OH
XXX-45-2	Ph	H	H	CH_3	Bz	H	F	H	OH
XXX-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-45-5	Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-45-8	Ph	*	H	*	Bz	H	F	H	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-46-1	p-Me-Ph	H	H	H	Bz	H	F	H	OH
XXX-46-2	p-Me-Ph	H	H	CH_3	Bz	H	F	H	OH
XXX-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-46-8	p-Me-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-47-1	p-F-Ph	H	H	H	Bz	H	F	H	OH
XXX-47-2	p-F-Ph	H	H	CH_3	Bz	H	F	H	OH
XXX-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-47-8	p-F-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-48-1	p-Cl-Ph	H	H	H	Bz	H	F	H	OH
XXX-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	F	H	OH
XXX-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-48-8	p-Cl-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-49-1	p-Br-Ph	H	H	H	Bz	H	F	H	OH
XXX-49-2	p-Br-Ph	H	H	CH_3	Bz	H	F	H	OH
XXX-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-49-8	p-Br-Ph	*	H	*	Bz	H	F	H	OH

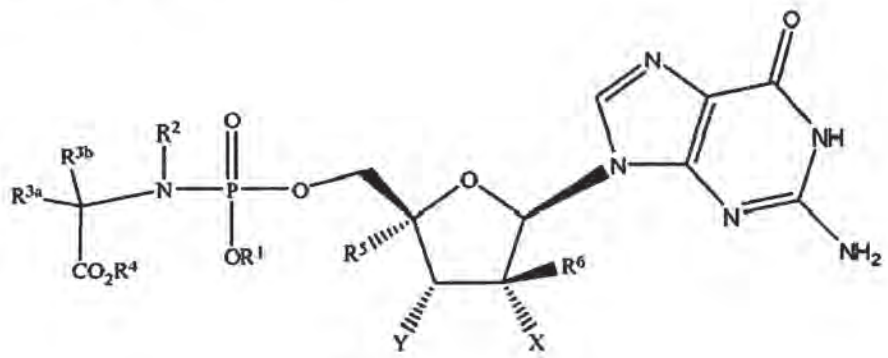
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXX-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXX-50-1	p-I-Ph	H	H	H	Bz	H	F	H	OH
XXX-50-2	p-I-Ph	H	H	CH_3	Bz	H	F	H	OH
XXX-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH
XXX-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH
XXX-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	F	H	OH
XXX-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH
XXX-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH
XXX-50-8	p-I-Ph	*	H	*	Bz	H	F	H	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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XXXI

Table XXXI-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-1-1	CH_3	H	H	H	CH_3	H	F	F	OH
XXXI-1-2	CH_3	H	H	CH_3	CH_3	H	F	F	OH
XXXI-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-1-5	CH_3	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-1-8	CH_3	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-2-1	Et	H	H	H	CH_3	H	F	F	OH
XXXI-2-2	Et	H	H	CH_3	CH_3	H	F	F	OH
XXXI-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-2-5	Et	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-2-8	Et	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-3.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-3-1	^{i}Pr	H	H	H	CH_3	H	F	F	OH
XXXI-3-2	^{i}Pr	H	H	CH_3	CH_3	H	F	F	OH
XXXI-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-3-8	^{i}Pr	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-4-1	^{t}Bu	H	H	H	CH_3	H	F	F	OH
XXXI-4-2	^{t}Bu	H	H	CH_3	CH_3	H	F	F	OH
XXXI-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-4-8	^{t}Bu	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-5-1	Ph	H	H	H	CH_3	H	F	F	OH
XXXI-5-2	Ph	H	H	CH_3	CH_3	H	F	F	OH
XXXI-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-5-5	Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-5-8	Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-6-1	p-Me-Ph	H	H	H	CH_3	H	F	F	OH
XXXI-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXXI-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-6-8	p-Me-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-7-1	p-F-Ph	H	H	H	CH_3	H	F	F	OH
XXXI-7-2	p-F-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXXI-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-7-20	p-F-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-8-1	p-Cl-Ph	H	H	H	CH_3	H	F	F	OH
XXXI-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXXI-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-8-8	p-Cl-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-9-1	p-Br-Ph	H	H	H	CH_3	H	F	F	OH
XXXI-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXXI-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-9-20	p-Br-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-10-1	p-I-Ph	H	H	H	CH_3	H	F	F	OH
XXXI-10-2	p-I-Ph	H	H	CH_3	CH_3	H	F	F	OH
XXXI-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH
XXXI-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH
XXXI-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH
XXXI-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH
XXXI-10-8	p-I-Ph	*	H	*	CH_3	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-11-1	CH_3	H	H	H	Et	H	F	F	OH
XXXI-11-2	CH_3	H	H	CH_3	Et	H	F	F	OH
XXXI-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-11-5	CH_3	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-11-8	CH_3	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-12-1	Et	H	H	H	Et	H	F	F	OH
XXXI-12-2	Et	H	H	CH_3	Et	H	F	F	OH
XXXI-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-12-5	Et	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-12-8	Et	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-13-1	^{i}Pr	H	H	H	Et	H	F	F	OH
XXXI-13-2	^{i}Pr	H	H	CH_3	Et	H	F	F	OH
XXXI-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-13-8	^{i}Pr	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-14-1	^{t}Bu	H	H	H	Et	H	F	F	OH
XXXI-14-2	^{t}Bu	H	H	CH_3	Et	H	F	F	OH
XXXI-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-14-8	^{t}Bu	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-15-1	Ph	H	H	H	Et	H	F	F	OH
XXXI-15-2	Ph	H	H	CH_3	Et	H	F	F	OH
XXXI-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-15-5	Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-15-8	Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-16-1	p-Me-Ph	H	H	H	Et	H	F	F	OH
XXXI-16-2	p-Me-Ph	H	H	CH_3	Et	H	F	F	OH
XXXI-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-16-8	p-Me-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-17-1	p-F-Ph	H	H	H	Et	H	F	F	OH
XXXI-17-2	p-F-Ph	H	H	CH_3	Et	H	F	F	OH
XXXI-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-17-8	p-F-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-18-1	p-Cl-Ph	H	H	H	Et	H	F	F	OH
XXXI-18-2	p-Cl-Ph	H	H	CH_3	Et	H	F	F	OH
XXXI-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-18-8	p-Cl-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-19-1	p-Br-Ph	H	H	H	Et	H	F	F	OH
XXXI-19-2	p-Br-Ph	H	H	CH_3	Et	H	F	F	OH
XXXI-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-19-8	p-Br-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-20-1	p-I-Ph	H	H	H	Et	H	F	F	OH
XXXI-20-2	p-I-Ph	H	H	CH_3	Et	H	F	F	OH
XXXI-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH
XXXI-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH
XXXI-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	F	OH
XXXI-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH
XXXI-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH
XXXI-20-8	p-I-Ph	*	H	*	Et	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-21-1	CH_3	H	H	H	^{i}Pr	H	F	F	OH
XXXI-21-2	CH_3	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-21-8	CH_3	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-22-1	Et	H	H	H	^{i}Pr	H	F	F	OH
XXXI-22-2	Et	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-22-8	Et	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	F	OH
XXXI-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-23-8	^{i}Pr	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-24-1	^{t}Bu	H	H	H	^{i}Pr	H	F	F	OH
XXXI-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-24-8	^{t}Bu	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-25-1	Ph	H	H	H	^{i}Pr	H	F	F	OH
XXXI-25-2	Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-25-8	Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXXI-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-27-1	p-F-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXXI-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-27-8	p-F-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXXI-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXXI-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-30-1	p-I-Ph	H	H	H	^{i}Pr	H	F	F	OH
XXXI-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH
XXXI-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH
XXXI-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH
XXXI-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH
XXXI-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH
XXXI-30-8	p-I-Ph	*	H	*	^{i}Pr	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-31-1	CH_3	H	H	H	^{n}Bu	H	F	F	OH
XXXI-31-2	CH_3	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-31-8	CH_3	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-32-1	Et	H	H	H	^{n}Bu	H	F	F	OH
XXXI-32-2	Et	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-32-8	Et	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-33-1	^{i}Pr	H	H	H	^{n}Bu	H	F	F	OH
XXXI-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-33-8	^{i}Pr	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-34-1	^{t}Bu	H	H	H	^{n}Bu	H	F	F	OH
XXXI-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-34-8	^{t}Bu	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-35-1	Ph	H	H	H	^{n}Bu	H	F	F	OH
XXXI-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-35-8	Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXXI-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-37-1	p-F-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXXI-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-37-8	p-F-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXXI-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXXI-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-40-1	p-I-Ph	H	H	H	^{n}Bu	H	F	F	OH
XXXI-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH
XXXI-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH
XXXI-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH
XXXI-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH
XXXI-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH
XXXI-40-8	p-I-Ph	*	H	*	^{n}Bu	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-41-1	CH_3	H	H	H	Bz	H	F	F	OH
XXXI-41-2	CH_3	H	H	CH_3	Bz	H	F	F	OH
XXXI-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-41-8	CH_3	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXI-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-42-1	Et	H	H	H	Bz	H	F	F	OH
XXXI-42-2	Et	H	H	CH_3	Bz	H	F	F	OH
XXXI-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-42-5	Et	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-42-8	Et	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-43-1	^{i}Pr	H	H	H	Bz	H	F	F	OH
XXXI-43-2	^{i}Pr	H	H	CH_3	Bz	H	F	F	OH
XXXI-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-43-8	^{i}Pr	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-44-1	^{t}Bu	H	H	H	Bz	H	F	F	OH
XXXI-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	F	OH
XXXI-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-44-8	^{t}Bu	*	H	*	Bz	H	F	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-45-1	Ph	H	H	H	Bz	H	F	F	OH
XXXI-45-2	Ph	H	H	CH_3	Bz	H	F	F	OH
XXXI-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-45-5	Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-45-8	Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-46-1	p-Me-Ph	H	H	H	Bz	H	F	F	OH
XXXI-46-2	p-Me-Ph	H	H	CH_3	Bz	H	F	F	OH
XXXI-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-46-8	p-Me-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-47-1	p-F-Ph	H	H	H	Bz	H	F	F	OH
XXXI-47-2	p-F-Ph	H	H	CH_3	Bz	H	F	F	OH
XXXI-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-47-8	p-F-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-48-1	p-Cl-Ph	H	H	H	Bz	H	F	F	OH
XXXI-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	F	F	OH
XXXI-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-48-8	p-Cl-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXI-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-49-1	p-Br-Ph	H	H	H	Bz	H	F	F	OH
XXXI-49-2	p-Br-Ph	H	H	CH_3	Bz	H	F	F	OH
XXXI-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	F	F	OH
XXXI-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-49-8	p-Br-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

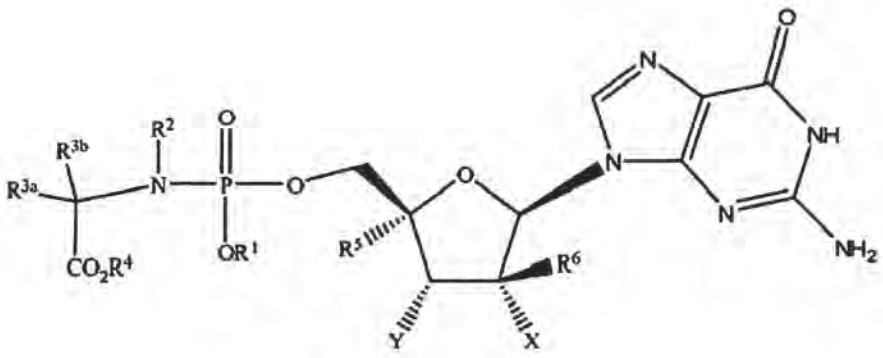
Table XXXI-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-50-1	p-I-Ph	H	H	H	Bz	H	F	F	OH
XXXI-50-2	p-I-Ph	H	H	CH_3	Bz	H	F	F	OH
XXXI-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH
XXXI-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	F	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXI-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH
XXXI-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH
XXXI-50-8	p-I-Ph	*	H	*	Bz	H	F	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.



XXXII

Table XXXII-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-1-1	CH_3	H	H	H	CH_3	H	H	F	OH
XXXII-1-2	CH_3	H	H	CH_3	CH_3	H	H	F	OH
XXXII-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-1-5	CH_3	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-1-8	CH_3	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-2-1	Et	H	H	H	CH_3	H	H	F	OH
XXXII-2-2	Et	H	H	CH_3	CH_3	H	H	F	OH
XXXII-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-2-5	Et	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-2-8	Et	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-3-1	^{i}Pr	H	H	H	CH_3	H	H	F	OH
XXXII-3-2	^{i}Pr	H	H	CH_3	CH_3	H	H	F	OH
XXXII-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-3-8	^{i}Pr	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-4-1	^{t}Bu	H	H	H	CH_3	H	H	F	OH
XXXII-4-2	^{t}Bu	H	H	CH_3	CH_3	H	H	F	OH
XXXII-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-4-8	^{t}Bu	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-5-1	Ph	H	H	H	CH_3	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-5-2	Ph	H	H	CH_3	CH_3	H	H	F	OH
XXXII-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-5-5	Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-5-8	Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-6-1	p-Me-Ph	H	H	H	CH_3	H	H	F	OH
XXXII-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXXII-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-6-8	p-Me-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-7-1	p-F-Ph	H	H	H	CH_3	H	H	F	OH
XXXII-7-2	p-F-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXXII-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-7-20	p-F-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-8.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-8-1	p-Cl-Ph	H	H	H	CH_3	H	H	F	OH
XXXII-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXXII-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-8-8	p-Cl-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-9-1	p-Br-Ph	H	H	H	CH_3	H	H	F	OH
XXXII-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXXII-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-9-20	p-Br-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-10-1	p-I-Ph	H	H	H	CH_3	H	H	F	OH
XXXII-10-2	p-I-Ph	H	H	CH_3	CH_3	H	H	F	OH
XXXII-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH
XXXII-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH
XXXII-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH
XXXII-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH
XXXII-10-8	p-I-Ph	*	H	*	CH_3	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-11-1	CH_3	H	H	H	Et	H	H	F	OH
XXXII-11-2	CH_3	H	H	CH_3	Et	H	H	F	OH
XXXII-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-11-5	CH_3	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-11-8	CH_3	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-12-1	Et	H	H	H	Et	H	H	F	OH
XXXII-12-2	Et	H	H	CH_3	Et	H	H	F	OH
XXXII-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-12-5	Et	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-12-8	Et	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-13-1	^{i}Pr	H	H	H	Et	H	H	F	OH
XXXII-13-2	^{i}Pr	H	H	CH_3	Et	H	H	F	OH
XXXII-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-13-8	^{i}Pr	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-14-1	^{t}Bu	H	H	H	Et	H	H	F	OH
XXXII-14-2	^{t}Bu	H	H	CH_3	Et	H	H	F	OH
XXXII-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-14-8	^{t}Bu	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-15-1	Ph	H	H	H	Et	H	H	F	OH
XXXII-15-2	Ph	H	H	CH_3	Et	H	H	F	OH
XXXII-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-15-5	Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-15-8	Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-16-1	p-Me-Ph	H	H	H	Et	H	H	F	OH
XXXII-16-2	p-Me-Ph	H	H	CH_3	Et	H	H	F	OH
XXXII-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-16-8	p-Me-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-17-1	p-F-Ph	H	H	H	Et	H	H	F	OH
XXXII-17-2	p-F-Ph	H	H	CH_3	Et	H	H	F	OH
XXXII-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-17-8	p-F-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-18-1	p-Cl-Ph	H	H	H	Et	H	H	F	OH
XXXII-18-2	p-Cl-Ph	H	H	CH_3	Et	H	H	F	OH
XXXII-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-18-8	p-Cl-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-19-1	p-Br-Ph	H	H	H	Et	H	H	F	OH
XXXII-19-2	p-Br-Ph	H	H	CH_3	Et	H	H	F	OH
XXXII-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-19-8	p-Br-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-20-1	p-I-Ph	H	H	H	Et	H	H	F	OH
XXXII-20-2	p-I-Ph	H	H	CH_3	Et	H	H	F	OH
XXXII-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH
XXXII-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH
XXXII-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	H	F	OH
XXXII-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH
XXXII-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH
XXXII-20-8	p-I-Ph	*	H	*	Et	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-21-1	CH_3	H	H	H	^{i}Pr	H	H	F	OH
XXXII-21-2	CH_3	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-21-8	CH_3	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-22-1	Et	H	H	H	^{i}Pr	H	H	F	OH
XXXII-22-2	Et	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-22-8	Et	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-23-1	^{i}Pr	H	H	H	^{i}Pr	H	H	F	OH
XXXII-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-23-8	^{i}Pr	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-24-1	^{t}Bu	H	H	H	^{i}Pr	H	H	F	OH
XXXII-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-24-8	^{t}Bu	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-25-1	Ph	H	H	H	^{i}Pr	H	H	F	OH
XXXII-25-2	Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-25-8	Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXXII-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-27-1	p-F-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXXII-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-27-8	p-F-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXXII-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXXII-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-30-1	p-I-Ph	H	H	H	^{i}Pr	H	H	F	OH
XXXII-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH
XXXII-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH
XXXII-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH
XXXII-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH
XXXII-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH
XXXII-30-8	p-I-Ph	*	H	*	^{i}Pr	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-31-1	CH_3	H	H	H	^{n}Bu	H	H	F	OH
XXXII-31-2	CH_3	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-31-8	CH_3	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-32-1	Et	H	H	H	^{n}Bu	H	H	F	OH
XXXII-32-2	Et	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-32-8	Et	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-33-1	^{i}Pr	H	H	H	^{n}Bu	H	H	F	OH
XXXII-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-33-8	^{i}Pr	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-34-1	^{t}Bu	H	H	H	^{n}Bu	H	H	F	OH
XXXII-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-34-8	^{t}Bu	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-35-1	Ph	H	H	H	^{n}Bu	H	H	F	OH
XXXII-35-2	Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-35-8	Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXXII-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-37-1	p-F-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXXII-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-37-8	p-F-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXXII-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXXII-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-40-1	p-I-Ph	H	H	H	^{n}Bu	H	H	F	OH
XXXII-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH
XXXII-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH
XXXII-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH
XXXII-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH
XXXII-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH
XXXII-40-8	p-I-Ph	*	H	*	^{n}Bu	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

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Table XXXII-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-41-1	CH_3	H	H	H	Bz	H	H	F	OH
XXXII-41-2	CH_3	H	H	CH_3	Bz	H	H	F	OH
XXXII-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-41-5	CH_3	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-41-8	CH_3	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-42-1	Et	H	H	H	Bz	H	H	F	OH
XXXII-42-2	Et	H	H	CH_3	Bz	H	H	F	OH
XXXII-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-42-5	Et	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-42-8	Et	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-43-1	^{i}Pr	H	H	H	Bz	H	H	F	OH
XXXII-43-2	^{i}Pr	H	H	CH_3	Bz	H	H	F	OH
XXXII-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-43-8	^{i}Pr	*	H	*	Bz	H	H	F	OH

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*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-44-1	^{t}Bu	H	H	H	Bz	H	H	F	OH
XXXII-44-2	^{t}Bu	H	H	CH_3	Bz	H	H	F	OH
XXXII-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-44-8	^{t}Bu	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-45-1	Ph	H	H	H	Bz	H	H	F	OH
XXXII-45-2	Ph	H	H	CH_3	Bz	H	H	F	OH
XXXII-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-45-5	Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-45-8	Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-46-1	p-Me-Ph	H	H	H	Bz	H	H	F	OH
XXXII-46-2	p-Me-Ph	H	H	CH_3	Bz	H	H	F	OH
XXXII-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-46-8	p-Me-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-47-1	p-F-Ph	H	H	H	Bz	H	H	F	OH
XXXII-47-2	p-F-Ph	H	H	CH_3	Bz	H	H	F	OH
XXXII-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-47-8	p-F-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-48-1	p-Cl-Ph	H	H	H	Bz	H	H	F	OH
XXXII-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	H	F	OH
XXXII-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-48-8	p-Cl-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-49-1	p-Br-Ph	H	H	H	Bz	H	H	F	OH
XXXII-49-2	p-Br-Ph	H	H	CH_3	Bz	H	H	F	OH
XXXII-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	H	F	OH

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-49-8	p-Br-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table XXXII-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y
XXXII-50-1	p-I-Ph	H	H	H	Bz	H	H	F	OH
XXXII-50-2	p-I-Ph	H	H	CH_3	Bz	H	H	F	OH
XXXII-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH
XXXII-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	H	F	OH
XXXII-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH
XXXII-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH
XXXII-50-8	p-I-Ph	*	H	*	Bz	H	H	F	OH

*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

DOSAGE, ADMINISTRATION, AND USE

A sixth embodiment of the present invention is directed to a composition for the treatment of any of the viral agents disclosed herein said composition comprising a pharmaceutically acceptable medium selected from among an excipient, carrier, diluent, and equivalent medium and a compound, that is intended to include its salts (acid or basic addition salts), hydrates, solvates, and crystalline forms can be obtained, represented by formula I.

It is contemplated that the formulation of the sixth embodiment can contain any of the compounds contemplated in any of the aspects of the first, second, third, fourth, and fifth embodiments or those specifically recited in the tables above or exemplified herein, either alone or in combination with another compound of the present invention.

The compounds of the present invention may be formulated in a wide variety of oral administration dosage forms and carriers. Oral administration can be in the form of tablets, coated tablets, hard and soft gelatin capsules, solutions, emulsions, syrups, or

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suspensions. Compounds of the present invention are efficacious when administered by suppository administration, among other routes of administration. The most convenient manner of administration is generally oral using a convenient daily dosing regimen which can be adjusted according to the severity of the disease and the patient's response to the antiviral medication.

A compound or compounds of the present invention, as well as their pharmaceutically acceptable salts, together with one or more conventional excipients, carriers, or diluents, may be placed into the form of pharmaceutical compositions and unit dosages. The pharmaceutical compositions and unit dosage forms may be comprised of conventional ingredients in conventional proportions, with or without additional active compounds and the unit dosage forms may contain any suitable effective amount of the active ingredient commensurate with the intended daily dosage range to be employed. The pharmaceutical compositions may be employed as solids, such as tablets or filled capsules, semisolids, powders, sustained release formulations, or liquids such as suspensions, emulsions, or filled capsules for oral use; or in the form of suppositories for rectal or vaginal administration. A typical preparation will contain from about 5% to about 95% active compound or compounds (w/w). The term "preparation" or "dosage form" is intended to include both solid and liquid formulations of the active compound and one skilled in the art will appreciate that an active ingredient can exist in different preparations depending on the desired dose and pharmacokinetic parameters.

The term "excipient" as used herein refers to a compound that is used to prepare a pharmaceutical composition, and is generally safe, non-toxic and neither biologically nor otherwise undesirable, and includes excipients that are acceptable for veterinary use as well as human pharmaceutical use. The compounds of this invention can be administered alone but will generally be administered in admixture with one or more suitable pharmaceutical excipients, diluents or carriers selected with regard to the intended route of administration and standard pharmaceutical practice.

A "pharmaceutically acceptable salt" form of an active ingredient may also initially confer a desirable pharmacokinetic property on the active ingredient which were

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absent in the non-salt form, and may even positively affect the pharmacodynamics of the active ingredient with respect to its therapeutic activity in the body. The phrase "pharmaceutically acceptable salt" of a compound as used herein means a salt that is pharmaceutically acceptable and that possesses the desired pharmacological activity of the parent compound. Such salts include: (1) acid addition salts, formed with inorganic acids such as hydrochloric acid, hydrobromic acid, sulfuric acid, nitric acid, phosphoric acid, and the like; or formed with organic acids such as glycolic acid, pyruvic acid, lactic acid, malonic acid, malic acid, maleic acid, fumaric acid, tartaric acid, citric acid, 3-(4-hydroxybenzoyl)benzoic acid, cinnamic acid, mandelic acid, methanesulfonic acid, ethanesulfonic acid, 1,2-ethane-disulfonic acid, 2-hydroxyethanesulfonic acid, benzenesulfonic acid, 4-chlorobenzenesulfonic acid, 2-naphthalenesulfonic acid, 4-toluenesulfonic acid, camphorsulfonic acid, lauryl sulfuric acid, gluconic acid, glutamic acid, salicylic acid, muconic acid, and the like or (2) basic addition salts formed with the conjugate bases of any of the inorganic acids listed above, wherein the conjugate bases comprise a cationic component selected from among Na^+, K^+, Mg^{2+}, Ca^{2+}, and $NH_gR^-_{4-g}{}^+$, in which R^- is a C_{1-3} alkyl and g is a number selected from among 0, 1, 2, 3, or 4. It should be understood that all references to pharmaceutically acceptable salts include solvent addition forms (solvates) or crystal forms (polymorphs) as defined herein, of the same acid addition salt.

Solid form preparations include powders, tablets, pills, capsules, suppositories, and dispersible granules. A solid carrier may be one or more substances which may also act as diluents, flavoring agents, solubilizers, lubricants, suspending agents, binders, preservatives, tablet disintegrating agents, or an encapsulating material. In powders, the carrier generally is a finely divided solid which is a mixture with the finely divided active component. In tablets, the active component generally is mixed with the carrier having the necessary binding capacity in suitable proportions and compacted in the shape and size desired. Suitable carriers include but are not limited to magnesium carbonate, magnesium stearate, talc, sugar, lactose, pectin, dextrin, starch, gelatin, tragacanth, methylcellulose, sodium carboxymethylcellulose, a low melting wax, cocoa butter, and the like. Solid form preparations may contain, in addition to the active component, colorants, flavors, stabilizers, buffers, artificial and natural sweeteners, dispersants,

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thickeners, solubilizing agents, and the like.

Liquid formulations also are suitable for oral administration include liquid formulation including emulsions, syrups, elixirs and aqueous suspensions. These include solid form preparations which are intended to be converted to liquid form preparations shortly before use. Emulsions may be prepared in solutions, for example, in aqueous propylene glycol solutions or may contain emulsifying agents such as lecithin, sorbitan monooleate, or acacia. Aqueous suspensions can be prepared by dispersing the finely divided active component in water with viscous material, such as natural or synthetic gums, resins, methylcellulose, sodium carboxymethylcellulose, and other well known suspending agents.

The compounds of the present invention may be formulated for administration as suppositories. A low melting wax, such as a mixture of fatty acid glycerides or cocoa butter is first melted and the active component is dispersed homogeneously, for example, by stirring. The molten homogeneous mixture is then poured into convenient sized molds, allowed to cool, and to solidify.

The compounds of the present invention may be formulated for vaginal administration. Pessaries, tampons, creams, gels, pastes, foams or sprays containing in addition to the active ingredient such carriers as are known in the art to be appropriate.

Suitable formulations along with pharmaceutical carriers, diluents and expcipients are described in *Remington: The Science and Practice of Pharmacy* **1995**, edited by E. W. Martin, Mack Publishing Company, 19th edition, Easton, Pennsylvania, which is hereby incorporated by reference. The compounds of the present invention can also be encapsulated in liposomes, such as those disclosed in U.S. Patent Nos. 6,180,134, 5,192,549, 5,376,380, 6,060,080, 6,132,763, each of which is incorporated by reference. A skilled formulation scientist may modify the formulations within the teachings of the specification to provide numerous formulations for a particular route of administration without rendering the compositions of the present invention unstable or compromising their therapeutic activity.

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The modification of the present compounds to render them more soluble in water or other vehicle, for example, may be easily accomplished by minor modifications (e.g., salt formulation), which are well within the ordinary skill in the art. It is also well within the ordinary skill of the art to modify the route of administration and dosage regimen of a particular compound in order to manage the pharmacokinetics of the present compounds for maximum beneficial effect in patients.

A seventh embodiment of the present invention is directed to a use of the compound represented by formula I in the manufacture of a medicament for the treatment of any condition the result of an infection by any one of the following viral agents: hepatitis C virus, West Nile virus, yellow fever virus, dengue virus, rhinovirus, polio virus, hepatitis A virus, bovine viral diarrhea virus and Japanese encephalitis virus.

The term "medicament" means a substance used in a method of treatment and/or prophylaxis of a subject in need thereof, wherein the substance includes, but is not limited to, a composition, a formulation, a dosage form, and the like, comprising the compound of formula I. It is contemplated that the compound of the use of the compound represented by formula I in the manufacture of a medicament for the treatment of any of the antiviral conditions disclosed herein of the seventh embodiment can be any of the compounds contemplated in any of the aspects of the first, second, third, fourth, fifth embodiments or those specifically recited in the tables above or exemplified herein, either alone or in combination with another compound of the present invention. A medicament includes, but is not limited to, any one of the compositions contemplated by the sixth embodiment of the present invention.

A eighth embodiment of the present invention is directed to a method of treatment and/or prophylaxis in a subject in need thereof said method comprises administering a therapeutically effective amount of the compound represented by formula I to the subject.

A first aspect of the eighth embodiment is directed to a method of treatment and/or prophylaxis in a subject in need thereof said method comprises administering a therapeutically effective of at least two or more different compounds falling within the scope of the compound represented by formula I to the subject.

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A second aspect of the eighth embodiment is directed to a method of treatment and/or prophylaxis in a subject in need thereof said method comprises alternatively or concurrently administering a therapeutically effective of at least two compounds falling within the scope of the compound represented by formula I to the subject.

It is intended that a subject in need thereof is one that has any condition the result of an infection by any of the viral agents disclosed herein, which includes, but is not limited to, hepatitis C virus, West Nile virus, yellow fever virus, dengue virus, rhinovirus, polio virus, hepatitis A virus, bovine viral diarrhea virus or Japanese encephalitis virus, flaviviridae viruses or pestiviruses or hepaciviruses or a viral agent causing symptoms equivalent or comparable to any of the above-listed viruses.

The term "subject" means a mammal, which includes, but is not limited to, cattle, pigs, sheep, chicken, turkey, buffalo, llama, ostrich, dogs, cats, and humans, preferably the subject is a human. It is contemplated that in the method of treating a subject thereof of the sixth embodiment can be any of the compounds contemplated in any of the aspects of the first, second, and third embodiments or those specifically recited in the tables above, either alone or in combination with another compound of the present invention.

The term "therapeutically effective amount" as used herein means an amount required to reduce symptoms of the disease in an individual. The dose will be adjusted to the individual requirements in each particular case. That dosage can vary within wide limits depending upon numerous factors such as the severity of the disease to be treated, the age and general health condition of the patient, other medicaments with which the patient is being treated, the route and form of administration and the preferences and experience of the medical practitioner involved. For oral administration, a daily dosage of between about 0.1 and about 10 g, including all values in between, such as 0.25, 0.5, 0.75, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, and 9.5, per day should be appropriate in monotherapy and/or in combination therapy. A preferred daily dosage is between about 0.5 and about 7.5 g per day, more preferred 1.5 and about 6.0 g per day. Generally, treatment is initiated with a large initial "loading dose" to rapidly reduce or eliminate the virus following by a decreasing the dose to a level sufficient to prevent

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resurgence of the infection. One of ordinary skill in treating diseases described herein will be able, without undue experimentation and in reliance on personal knowledge, experience and the disclosures of this application, to ascertain a therapeutically effective amount of the compounds of the present invention for a given disease and patient.

Therapeutic efficacy can be ascertained from tests of liver function including, but not limited to protein levels such as serum proteins (e.g., albumin, clotting factors, alkaline phosphatase, aminotransferases (e.g., alanine transaminase, aspartate transaminase), 5'-nucleosidase, γ-glutaminyltranspeptidase, etc.), synthesis of bilirubin, synthesis of cholesterol, and synthesis of bile acids; a liver metabolic function, including, but not limited to, carbohydrate metabolism, amino acid and ammonia metabolism. Alternatively the therapeutic effectiveness may be monitored by measuring HCV-RNA. The results of these tests will allow the dose to be optimized.

A third aspect of the eighth embodiment, is directed to a method of treatment and/or prophylaxis in a subject in need thereof said method comprises administering to the subject a therapeutically effective of a compound represented by formula **I** and a therapeutically effective amount of another antiviral agent; wherein the administration is concurrent or alternative. It is understood that the time between alternative administration can range between 1-24 hours, which includes any sub-range in between including, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23 hours. Examples of "another antiviral agents" include, but are not limited to: HCV NS3 protease inhibitors (see WO 2008010921, WO 2008010921, EP 1881001, WO 2007015824, WO 2007014925, WO 2007014926, WO 2007014921, WO 2007014920, WO 2007014922, US 2005267018, WO 2005095403, WO 2005037214, WO 2004094452, US 2003187018, WO 200364456, WO 2005028502, and WO 2003006490); HCV NS5B Inhibitors (see US 2007275947, US20072759300, WO2007095269, WO 2007092000, WO 2007076034, WO 200702602, US 2005-98125, WO 2006093801, US 2006166964, WO 2006065590, WO 2006065335, US 2006040927, US 2006040890, WO 2006020082, WO 2006012078, WO 2005123087, US 2005154056, US 2004229840, WO 2004065367, WO 2004003138, WO 2004002977, WO 2004002944, WO 2004002940, WO 2004000858, WO 2003105770,

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WO 2003010141, WO 2002057425, WO 2002057287, WO 2005021568, WO 2004041201, US 20060293306, US 20060194749, US 20060241064, US 6784166, WO 2007088148, WO 2007039142, WO 2005103045, WO 2007039145, WO 2004096210, and WO 2003037895); HCV NS4 Inhibitors (see WO 2007070556 and WO 2005067900); HCV NS5a Inhibitors (see US 2006276511, WO 2006120252, WO 2006120251, WO 2006100310, WO 2006035061); Toll-like receptor agonists (seeWO 2007093901); and other inhibitors (see WO 2004035571, WO 2004014852, WO 2004014313, WO 2004009020, WO 2003101993, WO 2000006529).

A fourth aspect of the eighth embodiment, is directed to a method of treatment in a subject in need thereof said method comprises alternatively or concurrently administering a therapeutically effective of a compound represented by formula I and another antiviral agent to the subject. It is understood that the time between alternative administration can range between 1-24 hours, which includes any sub-range in between including, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23 hours.

A fifth aspect of the eighth embodiment, is directed to a method of treatment and/or prophylaxis in a subject in need thereof said method comprises administering to the subject a therapeutically effective of at least one compound represented by formula I and a therapeutically effective amount of another antiviral agent; wherein the administration is concurrent or alternative. It is understood that the time between alternative administration can range between 1-24 hours, which includes any sub-range in between including, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23 hours.

A sixth aspect of the eighth embodiment, is directed to a method of treatment in a subject in need thereof said method comprises alternatively or concurrently administering a therapeutically effective of at least one compound represented by formula I and another antiviral agent to the subject. It is understood that the time between alternative administration can range between 1-24 hours, which includes any sub-range in between

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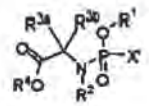
including, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23 hours.

It is contemplated that the another antiviral agent includes, but is not limited to interferon -α , interferon-β, pegylated interferon-α, ribavirin, levovirin, viramidine, another nucleoside HCV polymerase inhibitor, a HCV non-nucleoside polymerase inhibitor, a HCV protease inhibitor, a HCV helicase inhibitor or a HCV fusion inhibitor. When the active compound or its derivative or salt are administered in combination with another antiviral agent the activity may be increased over the parent compound. When the treatment is combination therapy, such administration may be concurrent or sequential with respect to that of the nucleoside derivatives. "Concurrent administration" as used herein thus includes administration of the agents at the same time or at different times. Administration of two or more agents at the same time can be achieved by a single formulation containing two or more active ingredients or by substantially simultaneous administration of two or more dosage forms with a single active agent.

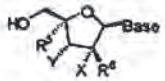
It will be understood that references herein to treatment extend to prophylaxis as well as to the treatment of existing conditions. Furthermore, the term "treatment" of a HCV infection, as used herein, also includes treatment or prophylaxis of a disease or a condition associated with or mediated by HCV infection, or the clinical symptoms thereof.

PROCESS FOR PREPARATION

An ninth embodiment of the present invention is directed to a process for preparing the compound of formula I, which comprises reacting a suitably substituted phosphochloridate compound **4** with a nucleoside analog **5**



4



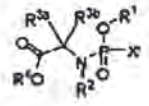
5

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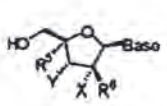
wherein the substituents R^1, R^2, R^{3a}, R^{3b}, R^4, R^5, X, Y, R^6, and base have their meanings as disclosed in the Detailed Description of the Invention and X' is a leaving group, such as Cl, Br, I, tosylate, mesylate, trifluoroacetate, trifluorosulfonate, pentafluorophenoxide, p-NO_2-phenoxide, or other commonly used leaving groups as disclosed in *Advanced Organic Chemistry* by March, Fourth Edition. Leaving groups and methods that can be used to effect the formation of a phosphoramidate nucleoside conjugate are found in US 20060142238 and WO 2007095269. Preferably, the leaving group is Cl.

This reaction is performed in an anhydrous aprotic solvent such tetrahydrofuran, dioxane, or both tetrahydrofuran and dioxane, or any functional equivalent thereof, with tetrahydrofuran being the preferred solvent. The reaction is typically initiated at a temperature range from -78°C to 40°C with the preferred reaction temperature being between 0°C and room temperature. The nucleoside is first stirred with a base (5 to 12 equivalents) such as N-methylimidazole, collidine, pyridine, 2,6-lutidine, 2, 6-^{t}Bu-pyridine, etc. a tertiary amine base, such as triethylamine, diisopropylethylamine, etc., or an alkyl Grignard reagent, such as tBuMgCl, tBuMgBr, MeMgCl, MeMgBr, etc. The phosphorochloridate (3-10 equivalents) is dissolved in the reaction solvent and added to the mixture of the nucleoside and base. The reaction is then allowed to stir over a period of time at a temperature between room temperature and 40°C for a period of 30 min to 24 hr. with the preferred reaction temperature being room temperature and time being 24 hr. The solvent is removed from the reaction mixture and the product is purified by chromatography on silica gel.

A tenth embodiment of the present invention is directed to a product obtained by a process which comprises reacting a suitably substituted phosphochloridate compound **4** with a nucleoside analog **5**



4



5

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wherein the substituents R^1, R^2, R^{3a}, R^{3b}, R^4, R^5, X, Y, R^6, X', and base have their meanings as disclosed in the Detailed Description of the Invention.

This reaction can be performed in an anhydrous aprotic solvent or other suitable solvent, such as tetrahydrofuran, dioxane, or a mixture of tetrahydrofuran and dioxane, with tetrahydrofuran being the preferred solvent. The reaction is typically initiated at a temperature range from -78°C to 40°C with the preferred reaction temperature being between 0°C and room temperature. The nucleoside is first stirred with a base (5 to 12 equivalents) such as N-methylimidazole, a tertiary amine base or tButyl Magnesium Chloride. A phosphorochloridate (3-10 equivalents (or suitable "phosphoro-(leaving group)-date")) is dissolved in the reaction solvent and added to the mixture of the nucleoside and base. The reaction is then allowed to stir over a period of time at a temperature between room temperature and 40°C for a period of 30 min to 24 hr. with the preferred reaction temperature being room temperature and time being 24 hr. The solvent is removed from the reaction mixture and the product is purified by chromatography on silica gel.

Compounds and Preparation

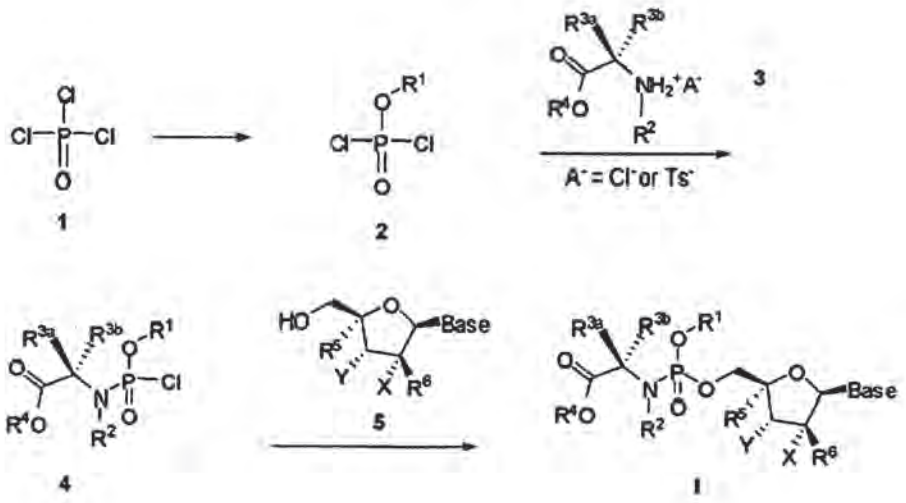
Phosphoramidate compounds of the present invention can be prepared by condensation of a nucleoside analog **5** with a suitably substituted phosphochloridate compound **4** (Scheme 1). The nucleoside analog is made by conventional procedures disclosed in any one of U.S. Published Application Nos. 2005/0009737, 2006/0199783, 2006/0122146, and 2007/0197463, each of which is incorporated by reference in its entirety.

Disclosed 1H-NMR values were recorded on a Varian AS-400 instrument. Mass spectral data were obtain using either a Micromass-Quattromicro API or a Waters Acquity.

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Thus, by way of example only, a suitably substituted phenol can be reacted with phosphorus oxychloride (**1**) to afford an aryloxy phosphorodichloridate **2** (see Example 1) which is subsequently treated with a acid addition salt of an α-amino acid ester in the presence of TEA to afford an aryloxy phosphorochloridate **4**. This arylalkoxy-amino acid phosphoramidate is reacted with the nucleoside analog to provide the product **I** (for procedure see, e.g., C. McGuigan et al. Antiviral Res. 1992 17:311-321; D. Curley et al. Antiviral Res. 1990 14:345-356; McGuigan et al. Antiviral Chem. Chemother 1990 1(2):107-113).

Scheme 1



The preparation of nucleoside phosphoramidates requires reacting an appropriately substituted phosphochloridate with a nucleoside containing a free 5'-hydroxyl moiety. In cases where only one hydroxyl group is present, preparation of the phosphoramidate usually proceeds smoothly when the phosphochloridate is reacted with

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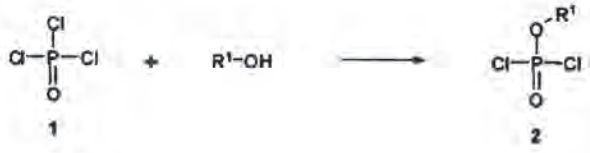
the desired nucleoside. In cases where the nucleoside contains more than one free hydroxyl group, preparation of the appropriately protected nucleoside might be required. Silyl, acetonide or other alcohol protecting groups known in the art might be warranted for protection of the sugar moiety. For protection of the nucleoside base, protecting a free amino group may require amidine protection strategy.

Condensation of the phosphochloridate can be carried out on the unprotected nucleoside. Since the 5'-OH group of a nucleoside is much less hindered than the 3'-OH group, selective phosphoramidation is possible under carefully controlled conditions. After condensation to form a protected phosphoramidate nucleoside, deprotection to obtain the free phosphoramidate nucleoside can be carried out using standard protocols for nucleic acid chemistry. In many cases, the desired product is readily separated from the starting material using column chromatography on silica gel. The synthetic scheme is summarized in Scheme 1.

A further understanding of the disclosed embodiments will be appreciated by consideration of the following examples, which are only meant to be illustrative, and not limit the disclosed invention.

EXAMPLE 1

General Procedure for Preparation of phosphorodichloridates



1 2

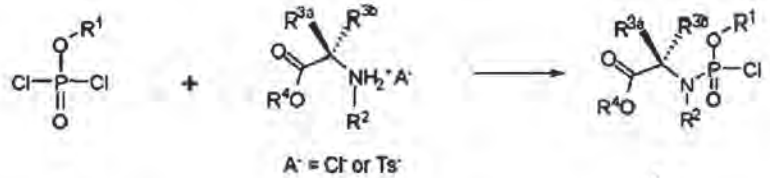
A solution of the appropriate phenol R^1-OH (1eq) and triethylamine (1 eq.) in anhydrous ether was added dropwise to a stirred solution of phosphoryl trichloride **1** (1eq) at 0 °C over a period of 3 hours under nitrogen. Then the temperature was warmed to room temperature, and the reaction was stirred overnight. The triethylamine salt was

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quickly removed with suction filtration and the filtrate concentrated *in vacuo* to dryness to afford **2** as an oil which was used without further purification.

EXAMPLE 2

General Procedure for Preparation of phosphorochloridates

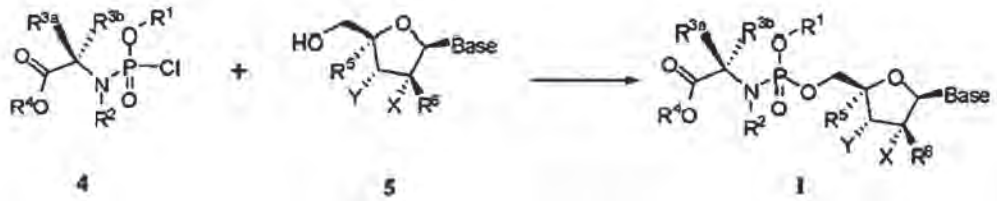


2 **3** **4**

A solution of triethylamine (2eq) in anhydrous dichloromethane was added dropwise to a solution of aryloxy-phosphodichloridate **2** (1 eq) and the appropriate amino ester **3** (1 eq) in anhydrous dichloromethane with vigorous stirring at -78 °C over a period of 30 to 120 minutes. Then the reaction temperature was allowed to warm to room temperature and stirred over night. Solvent was removed. The residue was washed with ethyl ether and filtered, the filtrate was dried over reduced pressure to give **4**.

EXAMPLE 3

General Procedures for nucleoside phosphoramidate derivatives



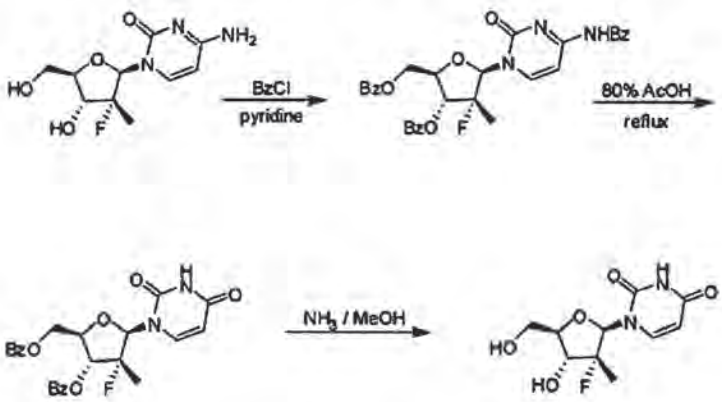
4 **5** **1**

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A solution of the appropriate phosphorochloridate 4 (6.5 equivalents) in anhydrous tetrahydrofuran (THF) was added to a mixture of nucleoside 5 (1 equivalent) and N-methylimidazole (8 equivalents) in anhydrous THF with vigorous stirring at room temperature and the reaction mixture was stirred overnight. The solvent was removed *in vacuo* and the crude was purified by column chromatography and/or preparative thin layer chromatography to give I.

EXAMPLE 4

Preparation of 2'-deoxy-2'-fluoro-2'-*C*-methyluridine



2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine (1.0g, 1 eq) (Clark, J., et al., J. Med. Chem., 2005, 48, 5504-5508) was dissolved in 10 ml of anhydrous pyridine and concentrated to dryness in vacuo. The resulting syrup was dissolved in 20 ml of anhydrous pyridine under nitrogen and cooled to 0°C with stirring. The brown solution was treated with benzoyl chloride (1.63g, 3eq) dropwise over 10 min. The ice bath was removed and stirring continued for 1.5h whereby thin-layer chromatography (TLC) showed no remaining starting material. The mixture was quenched by addition of water

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(0.5 ml) and concentrated to dryness. The residue was dissolved in 50 mL of dichloromethane (DCM) and washed with saturated $NaHCO_3$ aqueous solution and H_2O. The organic phase was dried over $NaSO_4$ and filtered, concentrated to dryness to give N^4,3',5'-tribenzoyl-2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine (2.0 g, Yield: 91%).

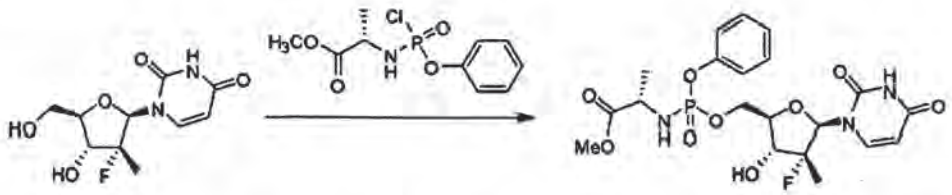
N^4,3',5'-tribenzoyl-2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine (2.0g, 1 eq) was refluxed in 80% aqueous AcOH overnight. After cooling and standing at room temperature (15 °C), most of the product precipitated and then was filtered through a sintered funnel. White precipitate was washed with water and co-evaporated with toluene to give a white solid. The filtrate was concentrated and co-evaporated with toluene to give additional product which was washed with water to give a white solid. Combining the two batches of white solid gave 1.50g of 3',5'-dibenzoyl-2'-Deoxy-2'-fluoro-2'-*C*-methyluridine (Yield: 91%).

To a solution of 3',5'-dibenzoyl-2'-Deoxy-2'-fluoro-2'-*C*-methyluridine (1.5 g, 1eq) in MeOH (10 mL) was added a solution of saturated ammonia in MeOH (20mL). The reaction mixture was stirred at 0 °C for 30 min, and then warmed to room temperature slowly. After the reaction mixture was stirred for another 18 hours, the reaction mixture was evaporated under reduced pressure to give the residue, which was purified by column chromatography to afford pure compound 2'-deoxy-2'-fluoro-2'-*C*-methyluridine (500 mg, Yield: 60 %).

EXAMPLE 5

Preparation of 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-alanyl phosphate)

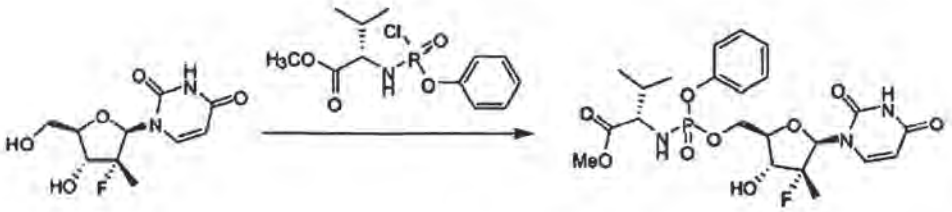
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Phenyl methoxyalaninyl phosphorochloridate (1 g, 6.5 eq) dissolved in 3 mL of THF was added to a mixture of 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine (0.15 g,1 eq) and N-methylimidazole (0.3 g, 8 eq) in 3 mL THF with vigorous stirring at room temperature, then the reaction was stirred overnight. Solvent was removed by reduced pressure. The resulting crude product was dissolved in methanol purified by prep-HPLC on a YMC 25x30X2 mm column using a water / acetonitrile gradient elution mobile phase. The acetonitrile and water were removed under reduced pressure to give the desired product (50.1 mg, 15.6%). ^{1}H NMR (DMSO-d_6) δ 1.20-1.27 (m, 6H), 3.58 (d, J = 16.0 Hz, 3H), 3.75-3.92 (m, 2H), 4.015-4.379 (m, 2H), 5.54 (t, J = 10.2 Hz, 1H), 5.83-5.91 (m, 1H), 6.00-6.16 (m, 1H), 7.18 (d, J = 8.0 Hz, 2H), 7.22 (s, 1H), 7.35 (t, J = 4.4 Hz, 2H), 7.55 (s, 1H), 11.52 (s, 1H); MS, *m/e* 502 $(M+1)^+$.

EXAMPLE 6

Preparation of 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-valyl phosphate)



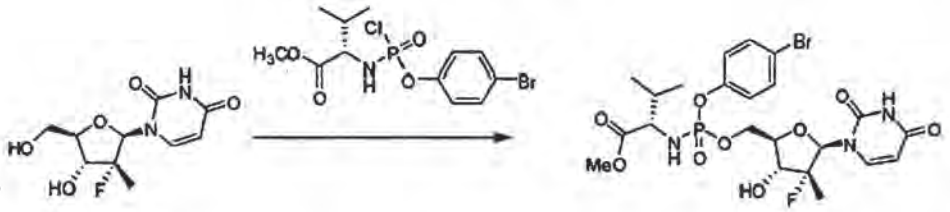
Phenyl methoxy-valyl phosphorochloridate (0.6 g, 3.6 eq) dissolved in 3 mL of THF was added to a mixture of 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine (0.15 g,1 eq) and N-methylimidazole (0.44 g, 9 eq) in 3 mL THF with vigorous stirring at room temperature, then the reaction was stirred overnight. Solvent was removed by reduced

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pressure. The resulting crude product was dissolved in methanol purified by prep-HPLC on a YMC 25x30X2 mm column using a water / acetonitrile gradient elution mobile phase. The acetonitrile and water were removed under reduced pressure to give the desired product (60 mg, 20%). ^{1}H NMR (DMSO-d_6) δ 0.74-0.847 (m, 6H), 1.20-1.28 (m, 3H), 1.89-1.92 (m, 1H), 3.50-3.54 (m, 1H), 3.58 (d, J = 10.4Hz, 3H), 3.72-3.95 (m, 1H), 4.03-4.05 (m, 1H), 4.23-4.43 (m, 2H), 5.56 (t, J = 16.0 Hz, 1H), 5.85-5.92 (m, 1H), 6.01-6.07 (m, 1H), 7.16-7.21 (m, 3H), 7.37 (t, J = 8 Hz, 2H), 7.55-7.60 (m, 1H), 11.52 (s, 1H); MS, *m/e* 530 $(M+1)^+$.

EXAMPLE 7

Preparation of 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate)



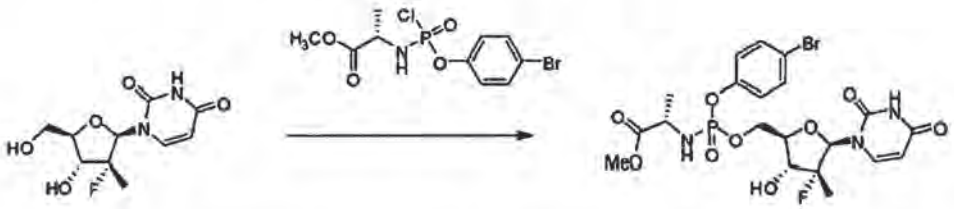
4-Bromophenyl methoxy-valyl phosphorochloridate (1 g, 3.4 eq) dissolved in 3 mL of THF was added to a mixture of 2'-deoxy-2'-fluoro-2'-*C*-methyluridine (0.2 g,1 eq) and N-methylimidazole (0.35 g, 6 eq) in 3 mL THF with vigorous stirring at room temperature, then the reaction was stirred overnight. Solvent was removed by reduced pressure. The resulting crude product was dissolved in methanol purified by prep-HPLC on a YMC 25x30X2 mm column using a water / acetonitrile gradient elution mobile phase. The acetonitrile and water were removed reduced pressure to give the desired product (120 mg, 26%). ^{1}H NMR (DMSO-d_6) δ 0.72-0.82 (m, 6H), 1.19-1.26 (m, 3H),

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1.86-1.92 (m, 1H), 3.48-3.50 (m, 1H), 3.56 (d, J = 12.0 Hz, 3H), 3.72-3.89 (m, 1H), 3.96-4.03 (m, 1H), 4.22-4.37 (m, 2H), 5.54-5.60 (m, 1H), 5.85-5.91 (m, 1H), 5.98-6.13 (m, 1H), 7.15 (d, J = 8.0 Hz, 2H), 7.49-7.56 (m, 3H), 11.53 (s, 1H); MS, *m/e* 608 $(M+1)^+$.

EXAMPLE 8

Preparation of 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-alanyl phosphate)

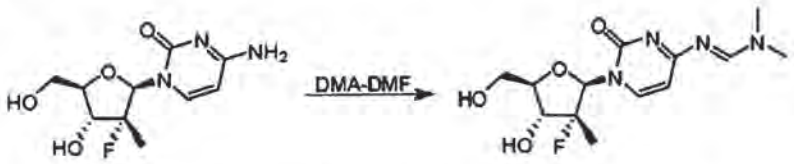


4-Bromophenyl methoxy-alanyl phosphorochloridate (0.6 g, 5 eq) dissolved in 3 mL of THF was added to a mixture of 2'-deoxy-2'-fluoro-2'-*C*-methyluridine (0.15 g, 1 eq)and N-methylimidazole (0.3 g, 7.8 eq) in 3 mL THF with vigorous stirring at room temperature, then the reaction was stirred overnight. Solvent was removed by reduced pressure. The resulting crude product was dissolved in methanol purified by prep-HPLC on a YMC 25x30X2 mm column using a water / acetonitrile gradient elution mobile phase. The acetonitrile and water were removed under reduced pressure to give the desired product (40 mg, 12 %); ^{1}H NMR (DMSO-d_6) δ 1.20-1.26 (m, 6H), 3.57 (d, J = 2.8 Hz, 3H), 3.84 (s, 1H), 3.97-4.03 (m, 1H), 4.21-4.25 (m, 1H), 4.33-4.37 (m, 2H), 5.54-5.60 (m, 1H), 5.83-5.89 (m, 1H), 5.98-6.19 (m, 1H), 7.16 (t, J = 10.2 Hz, 2H), 7.52-7.57 (m, 3H), 11.52 (s, 1 H); MS, *m/e* 580$(M+1)^+$.

EXAMPLE 9

Preparation of N^4-(*N,N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine

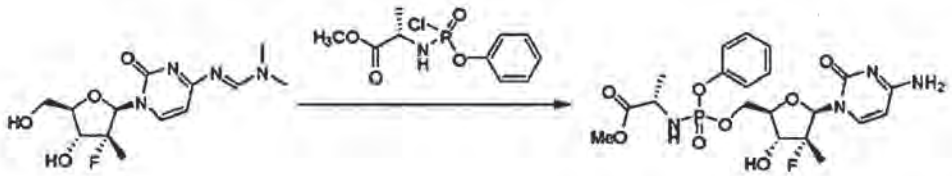
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2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine (500 mg, 1.9 mmol) was stirred with dimethylformamide dimethyl acetal in DMF (10 mL). The resulting mixture was stirred at room temperature overnight. After solvent removal the crude product was used for next step without further purification.

EXAMPLE 10

Preparation of 2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(phenyl methoxy-alanyl phosphate)

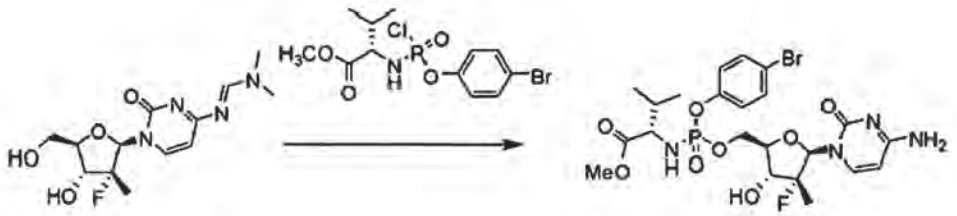


Phenyl methoxyalaninyl phosphorochloridate (0.6 g, 6 eq) dissolved in 3 mL of THF was added to a mixture of N^4-(*N,N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine (0.15 g,1 eq) and N-methylimidazole (0.3 g, 7.8 eq) in 3 mL THF with vigorous stirring at room temperature, then the reaction was stirred overnight. Solvent was removed by reduced pressure. The resulting crude product was dissolved in methanol purified by prep-HPLC on a YMC 25x30X2 mm column using a water / acetonitrile gradient elution mobile phase. The acetonitrile and water were removed under reduced pressure to give the desired product (62 mg, 20.6%). ^{1}H NMR (DMSO-d_6) δ 1.16 (d, J = 23.2 Hz, 3H), 1.22 (d, J = 7.2 Hz, 3H), 3.56 (S, 3H), 3.69-3.75 (d, J = 25.6 Hz, 1H), 3.82-3.86 (m, 1H), 3.96-3.98 (m, 1H), 4.21-4.34 (m, 2H), 5.68 (d, J = 7.2 Hz, 1H), 5.75-5.77 (m, 1H), 6.07-6.16 (m, 1H), 7.15-7.19 (m, 3H), 7.2 (d, J = 9.2 Hz, 2H), 7.39 (t, J = 7.8 Hz, 2H), 7.48 (d, J = 9.2 Hz, 1H); MS, *m/e* 501(M+1)$^+$.

EXAMPLE 11

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Preparation of 2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(4-bromophenyl methoxy-valyl phosphate)

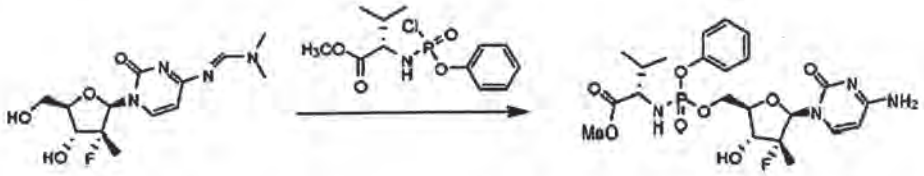


4-Bromophenyl methoxy-valyl phosphorochloridate (1.0 g, 3.4 eq.) dissolved in 3 mL of THF was added to a mixture of N^4-(*N,N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine (0.2 g,1 eq.) and N-methylimidazole (0.35 g, 6 eq.) in 3 mL THF with vigorous stirring at room temperature, then the reaction was stirred overnight. Solvent was removed by reduced pressure. The resulting crude product was dissolved in methanol purified by prep-HPLC on a YMC 25x30X2 mm column using a water / acetonitrile gradient elution mobile phase. The acetonitrile and water were removed under reduced pressure to give the desired product as a white solid (59 mg, 13%); ^{1}H NMR (DMSO-d_6) δ 0.74-0.83 (m, 6H), 1.12-1.20 (m, 3H), 1.89-1.92 (m, 1H), 3.49-3.51 (m, 1H), 3.55 (s, 3H), 3.59-3.68 (m, 1H), 3.72-.383 (m, 1H), 4.21-4.39 (m, 2H), 5.70-5.72 (m, 1H), 5.76-5.83 (m, 1H), 6.04-6.16 (m, 1H), 7.15 (d, *J* = 13.0 Hz, 2H), 7.26 (s, 1H), 7.33 (s, 1H), 7.46-7.55 (m, 1H), 7.56 (d, *J* = 4.4 Hz, 2H) ; MS, *m/e* 607 $(M+1)^+$.

EXAMPLE 12

Preparation of 2'-deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(phenyl methoxy-valyl phosphate)

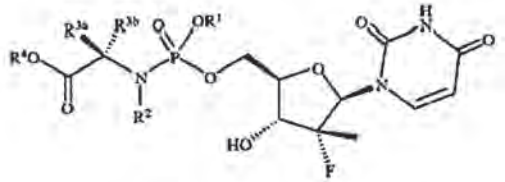
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Phenyl methoxy-valyl phosphorochloridate (0.6 g, 6 eq) dissolved in 3 mL of THF was added to a mixture of N^4-(*N,N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine (0.15 g,1 eq) and N-methylimidazole (0.3 g, 7.8 eq) in 3 mL THF with vigorous stirring at room temperature, then the reaction was stirred overnight. Solvent was removed by reduced pressure The resulting crude product was dissolved in methanol purified by prep-HPLC on a YMC 25x30X2 mm column using a water / acetonitrile gradient elution mobile phase. The acetonitrile and water were removed under reduced pressure to give the desired product as a white solid (86 mg, 42.9 %). ^{1}H NMR (DMSO-d_6) δ 0.72-0.80 (m, 6H), 1.09-1.18 (m, 3H), 1.87-1.92 (m, 1H), 3.47-3.51 (m, 1H), 3.58 (s, 3H), 3.71-3.75 (m, 1H), 3.97 (t, *J* = 11.2 Hz,1H), 4.22-4.37 (m, 2H), 5.70 (d, *J* = 8.0 Hz,1H), 5.76-5.84 (m, 1H), 6.01-6.15 (m, 1H), 7.13-7.18 (m, 3H), 7.27 (s, 2H), 7.34 (d, *J* = 4.0 Hz, 2H), 7.46-7.50 (m, 1H); MS, *m/e* 529 $(M+1)^+$.

EXAMPLES

Example numbers **13-54** and **56-66** are prepared using similar procedures described for examples **5-8.** The example number, compound identification, and NMR/MS details are shown below:



Ex.	R^1	R^2	R^{3a}	R^{3b}	R^4	NMR/MS

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Ex.	R^1	R^2	R^{3a}	R^{3b}	R^4	NMR/MS
13	Ph	H	H	Me	Et	1H NMR (DMSO-d_6) δ 1.12-1.16 (m, 3H), 1.20-1.28(m,6H), 3.70-3.90 (m, 2H), 4.00-4.08 (m, 3H), 4.18-4.45 (m, 2H), 5.52-5.58 (m, 1H), 5.85-5.98 (m, 1H), 6.00-6.20 (m, 2H), 7.16-7.23 (m, 3H), 7.37-7.40 (m, 2H) , 7.54-7.60 (m, 1H), 11.54 (s.1H) ; MS, m/e 516.1 (M+1)+
14	1-Napth	H	H	Me	Bn	1H NMR (DMSO-d_6) δ 1.18-1.30 (m, 6H), 3.78-4.10 (m, 3H), 4.38-4.49 (m, 2H), 4.99-5.11 (m, 2H), 5.28-5.40 (m, 1H), 5.85-6.10 (m, 2H), 6.30-6.41 (m, 1H), 7.28-7.32 (m, 5H), 7.41-7.60 (m, 5H), 7.73-7.76(m, 1H) , 7.94-8.11(m, 1H) , 8.13-8.15(m. 1H) , 11.50 (s.1H) ; MS, m/e 628.4 (M+1)+
15	Ph	H	H	H	Me	1H NMR (DMSO-d_6) δ 1.22 (d, J=22.4 Hz, 3H), 3.59(s, 3H), 3.63-3.69 (m, 2H), 3.74-3.8(m, 1H), 4.02(d, J=11.2 Hz, 1H), 4.23-4.28(m, 1H), 4.40-4.43 (m, 1H), 5.57-5.60 (m, 1H), 5.89(d, J=6.8 Hz, 1H), 6.00-6.06(m, 2H), 7.15-7.23 (m, 3H), 7.35-7.39 (m, 2H),7.52(d, J=8 Hz, 1H), 11.52(s, 1H) ; MS, m/e 487.97 (M+1)+
16	2,4-Cl-Ph	H	H	Me	Me	1H NMR (DMSO-d_6) δ 1.22-1.28 (m, 6H), 3.57-3.60 (m, 3H), 3.84-3.92 (m, 2H), 4.00-4.04 (m, 1H), 4.31-4.44 (m, 2H), 5.54-5.61 (m, 1H), 5.85-6.10 (m, 2H), 6.32-6.43 (m, 1H), 7.44-7.54 (m, 3H), 7.72-7.75 (m, 1H), 11.54 (s.1H) ; MS, m/e 570.2 (M+1)+
17	1-Napth	H	H	Me	Me	1H NMR (DMSO-d_6) δ 1.15-1.27 (m, 6H), 3.51-3.55 (d, 3H), 3.85-3.96 (m, 2H), 4.00-4.10(m, 1H), 4.30-4.46 (m, 2H), 5.31-5.39 (m, 1H), 5.89-6.05 (m, 2H), 6.22-6.34 (m, 1H), 7.44-7.60 (m, 5H), 7.73-7.77 (m, 1H), 7.93-7.96 (m, 1H), 8.12-8.14 (m, 1H),11.50(s.1H) ; MS, m/e 552.1 (M+1)+
18	Ph	*	H	*	Me	1H NMR (DMSO-d_6) δ 1.19 (d, J=22.8 Hz, 3H), 1.69-1.84 (m, 3H), 1.99-2.04 (m, 1H), 3.16-3.21 (m, 2H), 3.58 (s, 3H), 3.68-3.8 (m, 1H), 4.00 (m, 1H), 4.01-4.13 (m, 1H), 4.22-4.25 (m, 1 H), 4.5 (d, J = 11.2 Hz, 1H), 5.54 (d, J = 8.0 Hz, 1H), 5.86 (s, 1H), 5.6 (d, J = 19.6 Hz, 1H), 7.15-7.2 (m, 3H), 7.34 (t, J = 8.0 Hz, 2H), 7.51 (d, J = 8.0 Hz, 1H), 11.38 (s, 1H) ; MS, m/e 527.93(M+1)+
19	Ph	H	H	Me	n-Bu	1H NMR (DMSO-d_6) δ 0.80-0.90 (m, 3H), 1.20-1.35 (m, 8H), 1.48-1.55 (m, 2H), 3.78-3.88 (m, 2H), 3.95-4.08 (m, 3H), 4.22-4.45 (m, 2H), 5.55-5.57(t, 1H), 5.85-6.18 (m, 3H), 7.14-7.23 (m, 3H), 7.35-7.40 (m, 2H), 7.51-7.60 (d, 1H), 11.50 (s.1H) ; MS, m/e 544.2 (M+1)+
20	Ph	H	H	Me	Bn	1H NMR (DMSO-d_6) δ 1.20-1.30 (m, 6H), 3.72-4.05 (m, 3H), 4.23-4.27 (m, 1H), 4.32-4.45 (m, 1H), 5.07-5.10(t, 2H), 5.52-5.56(t , 1H), 5.86-6.10 (m, 2H), 6.13-6.21(m,1H), 7.15-7.21 (m, 3H), 7.29-7.40 (m, 7H), 7.51-7.56 (d, 1H), 11.50 (s.1H) ; MS, m/e 578.2 (M+1)+
21	4-F-Ph	H	H	Me	Me	1H NMR (DMSO-d_6) δ 1.28-1.34 (m, 6H), 3.65(d, J= 4 Hz, 3H), 3.85-3.96 (m, 2H), 4.06-4.12 (m, 1H), 4.30-4.34 (m,1H), 4.40-4.47 (m, 1H), 5.62-5.67 (m, 1H), 5.94-6.01(m, 1H), 6.09 (d, J=18.8 Hz, 1H), 6.17-6.26 (m, 1H), 7.27-7.33(m, 4H), 7.62 (d, J = 7.6 Hz, 1H), 11.61 (s, 1H) ; MS, m/e 519.94(M+1)+
22	4-Cl-Ph	H	H	Me	Me	1H NMR (DMSO-d_6) δ 1.22-1.28 (m, 6H), 3.58 (d, 2H), 3.70-3.95(m,2H), 3.95-4.08 (m,1H), 4.23-4.45 (m, 2H), 5.55-5.61(t , 1H),

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Ex.	R^1	R^2	R^{3a}	R^{3b}	R^4	NMR/MS
						5.85-6.10 (m, 2H), 6.15-6.23(m,1H), 7.20-7.26 (m, 2H), 7.43-7.46 (m, 2H), 7.54-7.57 (d, 1H), 11.50 (s.1H) ; MS, m/e 536.1 (M+1)+
23	3,4-Cl-Ph	H	H	Me	Me	1H NMR (DMSO-d_6) δ 1.13 (m, 6H), 3.49 (s, 3H), 3.61-3.85 (m, 2H), 3.90-3.93 (m, 1H), 4.16-4.22 (m, 1H), 4.27-4.31 (m, 1H), 5.47-5.52 (m, 1H), 5.82 (d, J = 11.6 Hz, 1H), 5.93(d, J = 19.2 Hz, 1H), 6.15-6.25 (m, 1H), 7.13 (t, J = 9.6 Hz, 1H), 7.43 (d, J = 12Hz, 2H), 7.57 (d, J = 6.0 Hz, 1H), 11.43(s, 1H) ; MS, m/e 569.85 (M+1)+
24	Ph	H	H	Me	2-Bu	1H NMR (DMSO-d_6) δ 0.83 (d, J = 6.8 Hz, 6H), 1.20-1.26 (m, 6H), 1.79-1.86 (m, 1H), 3.73-3.90 (m, 4H), 4.01 (t, J = 11.2 Hz, 1H), 4.21-4.28 (m, 1H), 4.33-4.42 (m, 1H), 5.54 (t, J = 7.6 Hz, 1H), 5.85-5.92 (m, 1H), 5.99-6.13 (m, 2H), 7.19 (t, J = 8 Hz, 3H), 7.36 (t, J = 7.6 Hz, 2H), 7.53 (d, J = 7.6 Hz, 1H), 11.52 (s, 1H) ; MS, m/e 544.00 (M+1)+
25	Ph	H	H	Me	i-Pr	1H NMR (DMSO-d_6) δ 1.13-1.28 (m, 12H), 3.74-3.81 (m, 2H), 3.95-4.08 (m,1H), 4.20-4.45 (m, 2H), 4.83-4.87 (m, 1H), 5.52-5.58 (m, 1H), 5.84-6.15 (m, 3H), 7.17-7.23 (m, 3H), 7.35-7.39 (m, 2H), 7.54-7.57 (m, 1H), 11.50 (s.1H) ; MS, m/e 530.2 (M+1)+
26	4-MeO-Ph	H	H	Me	n-Bu	1HNMR (400MHz, DMSO-d_6): δ =0.78-0.82 (m, 3H), 1.29-1.47 (m, 8H), 1.49-1.54 (m, 2H), 3.66-3.87 (m, 5H), 3.96-4.02 (m, 3H), 4.21-4.39 (m, 2H), 5.57 (t, J= 12.0Hz, 1H), 5.84-6.05 (m, 3H), 6.90 (dd, J1 =8.0Hz, J2=4.0Hz, 2H), 7.09-7.14 (dd, J1=16.0Hz, J2=4.0Hz, 2H), 7.55 (d, J =8.0Hz, 1H), 11.48-11.62 (s, 1H)
27	4-F-Ph	H	H	Me	Et	1H NMR (DMSO-d_6) δ 1.12-1.28 (m, 9H), 3.72-3.94(m,2H) ,3.98-4.10 (m,3H), 4.21-4.42(m,2H), 5.55-5.61 (t, 1H), 5.85-6.20 (m, 3H), 7.18-7.25 (m,4H), 7.55-7.58 (d, 1H), 11.50 (s.1H) ; MS, m/e 533.90 (M+1)+
28	4-F-Ph	H	H	Me	i-Pr	1H NMR (DMSO-d_6) δ 1.13-1.30 (m, 12H), 3.74-3.85(m,2H) ,3.98-4.06 (m,1H), 4.23-4.41(m,2H), 4.83-4.87 (m, 1H), 5.55-5.61 (t, 1H), 5.85-6.12 (m, 3H), 7.18-7.24 (m,4H), 7.55-7.58 (d, 1H), 11.50 (s.1H) ; MS, m/e 547.91 (M+1)+
29	4-F-Ph	H	H	Me	Bn	1H NMR (DMSO-d_6) δ 1.10-1.23 (m, 6H), 3.65-3.89(m,3H) ,4.10-4.30 (m,2H), 4.96-5.00(m,2H), 5.46-5.50 (t, 1H), 5.75-5.96 (m, 2H), 6.04-6.12(m,1H), 7.05-7.11 (m,4H), 7.20-7.24 (d, 5H), 7.42-7.45(d,1H), 11.50 (s.1H) ; MS, m/e 595.94 (M+1)+
30	4-MeO-Ph	H	H	Me	i-Pr	1HNMR (400MHz, DMSO-d_6): δ=1.15-1.27 (m, 12H), 3.71-3.89 (m, 5H), 3.98-4.02 (m, 1H), 4.22-4.25 (m, 1H), 4.33-4.39 (m, 1H), 4.84-4.87 (m, 1H), 5.57 (t, J= 12.0Hz, 1H), 5.91-6.03 (m, 3H), 6.90 (d, J= 8.0Hz, 2H), 7.09-7.14 (m, 2H), 7.55 (d, J= 8.0Hz, 1H), 11.51 (s, 1H)
31	2-Cl-Ph	H	H	Me	Bn	1H NMR (DMSO-d_6) δ 1.23 (m, 6 H), 3.93-4.00 (m, 3 H), 4.27-4.40 (m, 2H), 5.0(t, J= 7.2 Hz, 2 H), 5.53 (m ,1 H), 5.80-6.0(m , 2 H), 6.39(m, 1H), 7.15 (d, J= 2.4 Hz, 1 H), 7.27 (m, 6 H), 7.51 (m, 3 H), 11.5 (s, 1 H) ; MS, m/e 579.87(M+1)+ / 596.78 (M+18)+
32	2,4-Cl-Ph	H	H	Me	n-Bu	1H NMR (DMSO-d_6) δ=0.82 (m, 3 H),1.23 (m, 8 H) , 1.47 (m, 2 H), 3.86 (m, 2 H), 3.84 (m, 3 H),4.27-4.43 (m, 2H), 5.5 (m , 1 H), 6.02 (m ,2 H), 6.35(m, 1H), 7.44 (m, 3 H), 7.77 (m, 1 H), 11.5 (s, 1 H) ; MS, m/e 611.87(M+1)+
33	4-Me-Ph	H	H	Me	i-Pr	1H NMR (DMSO-d_6) δ 1.14-1.27 (m, 12H), 2.17-2.26 (m, 3H), 3.73-3.82 (m, 1H), 3.99-4.02 (m, 1H), 4.23-4.26 (m, 1H), 4.37-4.40 (m,

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Ex.	R^1	R^2	R^{3a}	R^{3b}	R^4	NMR/MS
						1H), 4.82-4.88 (m, 1H), 5.52-5.58 (m, 1H), 5.85-6.07 (m, 3H), 7.01-7.20 (m, 4H), 7.55 (d, J = 16Hz, 1H), 11.51 (s, 1H) ; MS, m/e 543.98 (M+1)+; 1108.86 (2M+23)+
34	4-F-Ph	H	H	Me	n-Bu	1H NMR (DMSO-d_6) δ 0.82-0.89 (m,3H), 1.20-1.31 (m, 8H), 1.48-1.53 (m,2H), 3.77-3.90 (m,2H) ,3.95-4.10 (m,3H), 4.21-4.45(m,2H), 5.56-5.61 (t, 1H), 5.83-6.20 (m, 3H), 7.18-7.25 (m,4H), 7.55-7.58 (d, 1H), 11.50 (s,1H) ; MS, m/e 584.1 (M+23)+
35	3,4-diCl-Ph	H	H	Me	Et	1H NMR (DMSO-d_6) δ1.12-1.31 (m, 9H), 3.77-3.92 (m,2H), 3.95-4.08 (m,3H), 4.21-4.45(m,2H), 5.56-5.62 (t, 1H), 5.80-6.11 (m, 2H), 6.18-6.33(m,1H), 7.18-7.25 (m,1H), 7.49-7.56 (d, 2H), 7.62-7.67(m,1H), 11.50 (s,1H) ; MS, m/e 606.1 (M+23)+
36	2-Cl-Ph	H	H	Me	i-Pr	1HNMR (400MHz, DMSO-d_6): δ =1.12-1.16 (m, 6H), 1.21-1.27 (m, 6H), 3.79-3.85 (m, 2H), 4.00-4.07 (m, 1H), 4.28-4.32 (m, 1H), 4.38-4.43 (m, 1H), 4.83-4.87 (m, 1H), 5.56 (dd, J1=16.0Hz, J2=8.0Hz, 1H), 5.85-6.12 (m, 2H), 6.20-6.33 (m, 1H), 7.19-7.22 (m, 1H), 7.33 (t, J= 16.0Hz, 1H), 7.48-7.55 (m, 3H), 11.55 (s, 1H)
37	4-MeO-Ph	H	H	Me	Bn	1HNMR(400MHz, DMSO-d_6): δ=1.19-1.26 (m, 6H), 3.69-3.70 (s, 3H), 3.87 (m, 2H), 3.99 (m, 1H), 4.20-4.21 (m, 1H), 4.35 (m, 1H), 5.07-5.09 (m, 2H), 5.54 (t, J = 16.0Hz, 1H), 5.85-5.92 (m, 1H), 6.04-6.10 (m, 2H), 6.86 (d, J= 8.0Hz, 2H), 7.09 (dd, J1=16.0Hz, J2=4.0Hz, 2H), 7.30-7.34 (m, 5H), 7.53 (s, 1H), 11.52 (s, 1H)
38	Ph	H	H	Me	n-Pen	1H NMR (DMSO-d_6) δ 0.79-0.81 (m, 3H), 1.17-1.23 (m, 10H), 3.74-3.81 (m, 2H), 3.94-3.96 (m, 3H), 4.19-4.36 (m, 2H), 5.49-5.54 (m, 1H), 5.87-6.08 (m,3H), 7.14-7.33 (m, 3H), 7.31-7.35 (m, 2H), 7.51 (d, J = 8Hz, 1H), 11.51 (s, 1H) ; MS, m/e 557.9 (M+1)+; 1136.88 (2M+23)+
39	4-Cl-Ph	H	H	Me	i-Pr	1H NMR (DMSO-d_6) δ 1.04-1.19 (m, 12H), 3.76-3.80 (m , 2H), 3.98-4.08 (m, 1H), 4.42-4.42 (m, 2H), 4.82-4.85 (m, 1H), 5.55-5.60 (m, 1H), 5.80-6.20 (m,3H),7.20-7.25(m, 2H), 7.43 (d, J = 8.8Hz, 1H), 7.54 (d, J = 8Hz, 1H), 11.51 (s, 1H) ; MS, m/e 563.88 (M+1)+; 1148.73 (2M+23)+
40	4-Cl-Ph	H	H	Me	n-Bu	1H NMR (DMSO-d_6) δ 0.85 (t, J = 7.2 Hz, 3H), 1.22-1.33 (m, 8H),1.45-1.53 (m, 2H), 3.80-3.87 (m, 2H), 3.96-4.04 (m, 3H), 4.24-4.27 (m, 1H), 4.35-4.39 (m, 1H), 5.56-5.61 (m, 1H), 5.82-6.11 (m, 2H), 6.15-6.18 (m, 1H), 7.20-7.56 (m, 4H), 7.51-7.57 (m,1H) , 11.54 (s, 1H); MS, m/e577.95(M+1)+
41	4-Cl-Ph	H	H	Me	Et	1H NMR (DMSO-d_6) δ 1.14 (t, J = 7.0Hz, 3H), 1.20-1.28 (m, 6H),3.77-3.88 (m, 2H), 3.99-4.07 (m, 3H), 4.24-4.28 (m, 1H), 4.34-4.43 (m, 1H), 5.56-5.61 (m, 1H), 5.86-6.13 (m, 2H), 6.15-6.24 (m, 1H), 7.20-7.26 (m, 2H), 7.44 (d, J = 7.6Hz, 2H) , 7.55 (d, J = 7.6Hz, 1H), 11.55 (s, 1H); MS, m/e549.11(M+1)+
42	4-Me-Ph	H	H	Me	n-Bu	1H NMR (DMSO-d_6) δ 0.79-0.83 (m, 3H), 1.17-1.28 (m, 8H), 1.45-1.47 (m, 2H), 2.22 (d, J = 2.8Hz, 1H), 3.70-3.90 (m, 2H), 3.95-3.98 (m, 3H), 4.10-4.40 (m, 2H), 5.51 (t, 1H), 5.80-5.90 (m, 1H), 5.95-6.05 (m, 2H), 7.02-7.06 (m, 2H), 7.51 (t, J = 4.2Hz , 4H), 7.51 (d, 1H), 11.51 (s, 1H) ; MS, m/e 557.99(M+1)+; 1136.84(2M+23)+

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Ex.	R^1	R^2	R^{3a}	R^{3b}	R^4	NMR/MS
43	4-Me-Phe	H	H	Me	Bn	1H NMR (DMSO-d_6) δ 1.16-1.24 (m, 6H), 2.22 (s , 3H), 3.65-4.03 (m,3H), 4.11-4.38 (m, 2H), 5.04-5.05 (m, 2H), 5.48-5.50 (m, 1H), 5.77-5.87 (m,1H),5.90-6.11 (m, 2H), 6.98-7.10 (m, 4H), 7.28-7.32 (m, 5H), 7.50 (t ,1H), 11.48 (s, 1H) ; MS, m/e 592.00 (M+1)+.
44	Ph	H	H	Et	Me	1H NMR (DMSO-d_6) δ 0.70-0.80 (m, 3H), 1.11-1.26 (m, 3H), 1.42-1.61 (m, 2H), 3.50-3.54 (m, 3H), 3.58-3.80 (m, 2H), 3.91-4.02 (m, 1H), 4.12-4.38 (m, 2H), 5.47-5.52 (m,1H),5.90-6.03 (m, 2H), 7.08-7.16 (m, 3H), 7.26-7.35 (m, 2H),7.48 (t,1H),11.45 (s, 1H) ; MS, m/e 515.95 (M+1)+; 1052.82 (2M+23)+
45	Ph	H	H	Me	4-F-Bn	^{1}HNMR (400MHz, DMSO-d_6): δ 1.20-1.26 (m, 6H), 3.80-3.93 (m, 2H), 3.98 (s, 1H), 4.25-4.26 (m, 1H), 4.36-4.37 (m, 1H), 5.07 (s, 2H), 5.52-5.55 (m, 1H), 5.86-5.87(m, 1H), 5.98-6.04 (m, 1H), 6.14-6.17 (m, 1H), 7.15-7.20 (m, 5H), 7.36 (dd, J = 20.0, 8.0 Hz, 4H), 7.54 (s, 1H), 11.55 (s, 1H)
46	4-Cl-Ph	H	H	Me	n-Bu	^{1}HNMR (400MHz, DMSO-d_6): δ 1.21-1.28 (m, 6H), 3.71-3.88 (m, 1H), 3.91-3.98 (m, 1H), 4.00-4.01 (m, 1H), 4.23-4.27 (m, 1H), 4.35-4.38 (m, 1H), 5.08 (d, J = 4.0Hz, 2H), 5.57 (dd, J = 12.0, 8.0 Hz, 1H), 5.91 (d, J = 8.0 Hz, 1H), 6.01 (d, J = 8.0 Hz, 1H), 6.22-6.24 (m, 1H), 7.17-7.23 (m, 2H), 7.31-7.40 (m, 7H), 7.53 (s, 1H), 11.50 (s, 1H)
47	Ph	H	H	Me	3-Me-1-Bu	^{1}H NMR (DMSO-d_6) δ 0.80-0.82 (m, 6H), 1.18-1.40 (m, 8H), 1.50-1.58 (m, 1H), 3.71-3.82 (m, 3H), 3.97-3.4.01 (m, 3H), 4.21-4.40 (m, 2H), 5.30(t, J = 8.6 Hz, 1H), 5.81-6.10 (m, 3H), 7.15-7.20 (m, 3H), 7.32-7.36 (m, 2H), 7.48 (d, J = 8.4 Hz, 1H), 11.38 (s, 1H) ; MS, *m/e* 557.98 (M+1)$^+$; 1136.88 (2M+23)$^+$
48	3,4-diCl-Ph	H	H	Me	Bn	^{1}H NMR (DMSO-d_6) δ 1.05-1.37 (m, 6H), 3.71-3.82 (m, 1H), 3.87-4.02 (m, 2H), 4.28-4.29 (m, 1H),4.36-4.38 (m, 1H),5.04 (d, J = 3.2Hz, 2H), 5.55-5.64 (m, 1H), 5.85-5.94 (m, 1H), 6.00-6.05 (m, 1H), 6.29-6.40 (m, 1H),7.17-7.24 (m, 1H), 7.30-7.41 (m, 5H), 7.45-7.58 (m, 2H), 7.61 (d, J = 4.0Hz, 1H), 11.53 (s, 1H); MS, *m/e*545.80(M+1)$^+$;
49	Ph	H	H	Me	c-Hex	^{1}H NMR (DMSO-d_6) δ 1.18-1.41 (m, 12H), 1.59-1.67 (m, 4H), 3.74-13.80 (m, 1H), 3.96-4.02 (m, 1H), 4.19-4.26 (m, 1H), 4.31-4.39 (m, 1H), 4.60 (s, 1H), 5.52 (t, J = 7.8 Hz, 1H), 5.80-6.09 (m, 3H), 7.15-7.20 (m, 3H), 7.32-7.36 (m, 2H), 7.52 (d, J = 8 Hz, 1H), 11.50 (s, 1H) ; MS, *m/e* 569.98 (M+1)$^+$; 592.14 (M+23)$^+$
50	Ph	H	Me	H	n-Bu	1H NMR (DMSO-d_6) δ 0.76 (t, J = 7.2Hz, 3H), 1.10-1.22 (m, 8H), 1.38-1.43 (m, 2H), 3.72-3.75 (m, 2H), 3.87-3.93 (m, 3H), 4.14-4.21 (m, 1H), 4.23-4.33 (m, 1H), 5.46-5.54 (m, 1H), 5.84-6.11 (m, 3H), 7.09-7.14 (m, 2H), 7.27-7.32 (m, 2H), 7.34-7.51 (m, 1H), 11.47 (s, 1H), MS, m/e543.98(M+1)+
51	Ph	H	Me	H	i-Pr	1H NMR (DMSO-d_6) δ 1.39 (d, J = 7.2Hz, 6H), 1.19-1.29 (m, 6H), 3.65-3.75 (m, 2H), 3.95-4.05 (m, 1H), 4.20-4.22 (m, 1H), 4.31-4.33 (m, 1H), 4.79-4.82 (m, 1H), 5.48-5.57 (m, 1H), 5.84-5.91 (m, 1H), 5.96-6.07 (m, 2H), 7.12-7.35 (m, 5H), 7.44-7.54 (m,1H), 11.49(s, 1H); MS, m/e529.96 (M+1)+
52	Ph	H	Me	H	Bn	^{1}H NMR (DMSO-d_6) δ 1.18-1.28 (m, 6H), 3.70-3.83 (m, 1H), 3.87-3.94 (m, 1H), 3.99-4.01 (m, 1H), 4.23-4.26 (m, 1H), 4.33-4.37 (m,

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Ex.	R^1	R^2	R^{3a}	R^{3b}	R^4	NMR/MS
						1H), 5.03-5.12 (m, 2H), 5.51-5.59 (m, 1H), 5.87-5.90 (m, 1H), 5.95-6.07 (m, 1H), 6.10-6.27 (m, 1H), 7.15-7.23 (m, 3H), 7.31-7.38 (m, 7H), 7.47-7.56 (m, 1H), 11.50 (s, 1H); MS, m/e577.99 (M+1)+
53	2-Cl-Ph	H	H	Me	n-Bu	^{1}HNMR (400MHz, DMSO-d_6): δ 0.81-0.86 (m, 3H), 1.21-1.31 (m, 8H), 1.46-1.52 (m, 2H), 3.84-3.90 (m, 2H), 3.97-4.04 (m, 3H), 4.27-4.41 (m, 2H), 5.53-5.58 (m, 1H), 5.82-5.95 (m, 1H), 5.96-6.10 (m, 1H), 6.27-6.31 (m, 1H), 7.19-7.22 (m, 1H), 7.34 (dd, *J* = 8.0, 4.0 Hz, 1H), 7.47-7.55 (m, 3H), 11.55 (s, 1H)
54	4-Br-Ph	H	H	Me	i-Pr	^{1}HNMR (400MHz, DMSO-d_6): δ 1.10-1.14 (m, 6H), 1.20-1.27 (m, 6H), 3.74-3.81 (m, 2H), 3.99-4.01 (m, 1H), 4.21-4.25 (m, 1H), 4.37-4.38 (m, 1H), 4.81-4.85 (m, 1H), 5.58 (dd, *J* = 8.0, 4.0 Hz, 1H), 5.82-5.95 (m, 1H), 5.96-6.09 (m, 1H), 6.10-6.13 (m, 1H), 7.18 (dd, *J* = 12.0, 8.0 Hz, 2H), 7.53-7.57 (m, 3H), 11.52 (s, 1H)
55	4-F-Ph	H	H	Me	c-Hex	^{1}H NMR (DMSO-d_6) δ 1.20-1.44 (m, 12H), 1.60-1.71 (m, 4H), 3.75-4.02 (m, 2H), 3.94-4.02 (m, 1H), 4.19-4.26 (m, 2H), 4.59-4.61 (m, 1H), 5.57 (t, *J* = 8.4 Hz, 1H), 5.85-6.06 (m, 3H), 7.17-7.23 (m, 4H), 7.54 (d, *J* = 8.4 Hz, 1H), 11.50 (s, 1H) ; MS, *m/e* 587.92 (M+1)$^+$
56	4-Br-Ph	H	H	Me	c-Hex	^{1}HNMR (400MHz, DMSO-d_6): δ =1.18-1.46 (m, 12H), 1.61-1.69 (m, 4H), 3.75-3.82 (m, 2H), 3.95-4.08 (m, 1H), 4.25-4.28 (m, 1H), 4.38 (s, 1H), 4.60-4.62 (m, 1H), 5.56-5.60 (m, 1H), 5.82-5.95 (m, 1H), 6.02-6.20 (m, 2H), 7.09-7.20 (m, 2H), 7.53-7.57 (m, 3H), 11.52 (s, 1H) MS, *m/e* 650.0 (M+3)$^+$
57	Ph	H	H	Et	i-Pr	^{1}HNMR (400MHz, DMSO-d_6): δ =0.75-0.82 (m, 3H), 1.12-1.26 (m, 9H), 1.52-1.59 (m, 2H), 3.55-3.68 (m, 1H), 3.72-3.85 (m, 1H), 3.95-4.08 (m, 1H), 4.18-4.28 (m, 1H), 4.32-4.41 (m, 1H), 4.83-4.86 (m, 1H), 5.55 (m, *J*= 7.6Hz, 1H), 5.99-6.04 (m, 2H), 6.05-6.10 (m, 1H), 7.14-7.21 (m, 3H), 7.33-7.37 (m, 2H), 7.52-7.54 (m, 1H), 11.53 (s, 1H) ; MS, *m/e*566.07(M+23)$^+$
58	Ph	H	H	Et	c-Hex	^{1}HNMR (400MHz, DMSO-d_6): δ 0.75-0.88 (m, 3H), 1.26-1.46 (m, 9H), 1.52-1.69 (m, 6H), 3.60-3.63 (m, 1H), 3.72-3.90 (m, 1H), 4.02-4.03 (m, 1H), 4.24-4.27 (m, 1H), 4.37-4.38 (m, 1H), 4.63-4.65 (m, 1H), 5.55 (dd, *J* =8.0Hz, 4.4Hz, 1H), 5.80-5.95 (m, 1H), 6.00-6.07 (m, 2H), 7.15-7.22 (m, 3H), 7.34-7.38 (m, 2H), 7.54 (d, *J* =8.0Hz, 1H), 11.55 (s, 1H); MS, *m/e* 584.01 (M+1)$^+$, 606.17 (M+23)$^+$
59	4-F-Ph	H	H	Et	c-Hex	^{1}H NMR (DMSO-d_6) δ 0.75-0.84 (m, 3H), 1.24 (d, *J* = 22.8Hz, 3H), 1.29-1.47 (m, 6H), 1.51-1.70 (m, 6H), 3.59-3.66 (m, 1H), 3.77-3.84 (m, 1H), 3.98-4.04 (m, 1H), 4.21-4.27 (m, 1H), 4.34-4.41 (m, 1H), 4.60-4.65 (m, 1H), 5.56-5.60 (m, 1H), 5.84-5.90 (m, 1H), 6.00-6.08 (m, 2H), 7.20-7.24 (m, 4H), 7.56(d, *J* = 8.0Hz, 1H), 11.49 (s, 1H); MS, *m/e* 602.00(M+1)$^+$
60	Ph	H	H	Me	F-CH_2-CH_2-	^{1}H NMR (DMSO-d_6) δ 1.18-1.25(m, 6H), 3.71-3.89 (m, 2H), 3.92-3.99 (m, 1H), 4.19-4.27 (m, 4H), 4.48-4.61 (m, 2H) , 3.94-3.98 (m, 2H), 4.11-4.23 (m, 4H), 5.47-5.52 (m, 1H), 6.01-6.11 (m, 1H), 5.90-6.14

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Ex.	R^1	R^2	R^{3a}	R^{3b}	R^4	NMR/MS
						(m, 2H), 7.15-7.21 (m, 3H), 7.32-7.36 (m, 2H), 7.46-7.57 (m, 1H), 11.49 (s,1H) ; MS, *m/e* 533.86 (M+1)$^+$
61	Ph	H	H	Me	F_2CH-CH_2-	^{1}H NMR (DMSO-d_6) δ 1.17-1.24 (m, 6H), 3.67-3.81 (m, 1H), 3.89-3.98 (m, 2H),4.21-4.36 (m, 4H), 5.48-5.53 (m, 1H) , 5.82-6.05 (m, 2H), 6.18-6.22 (m, 2H), 7.15-7.20 (m, 3H), 7.32-7.36 (m , 2H), 7.51 (s, 1H),11.50 (s, 1H) ; MS, *m/e* 551.92 (M+1)$^+$;
62	Ph	H	H	Me	$(CF_3)_2$-CH-	^{1}H NMR (DMSO-d_6) δ 1.13-1.29 (m, 6H), 3.67-3.81 (m, 1H), 3.94-4.32 (m, 4H), 5.47 (t, *J* = 8 Hz 1H) , 5.82-6.01 (m, 2H), 6.33-6.36 (m, 1H), 6.70-6.78 (m, 1H), 7.09-7.15 (m, 3H), 7.28-7.32 (m , 2H), 7.43-7.46 (m, 1H),11.44 (s, 1H) ; MS, *m/e* 637.90 (M+1)$^+$
63	Ph	H	H	Me	$(CH_2F)_2$ -CH-	^{1}H NMR (DMSO-d_6) δ 1.20-1.29 (m, 6H), 3.70-3.90 (m, 1H), 3.91-4.12 (m, 2H), 4.20-4.33 (m, 1H), 4.35-4.48 (m, 1H), 4.52-4.55 (m, 2H) , 4.63-4.67 (m, 2H), 5.20-5.35 (m, 1H), 5.56 (t, *J* = 8.4 Hz, 1H), 5.80-5.95 (m, 1H), 5.95-6.10 (m, 1H), 6.18-6.21 (m, 1H), 7.18-7.23 (m, 3H), 7.35-7.39 (m , 2H), 7.54 (s, 1H),11.55 (s, 1H) ; MS, *m/e* 565.98 (M+1)$^+$
64	Ph	H	H	Me	c-Pr-CH_2-	^{1}H NMR (DMSO-d_6) δ 0.20-0.24(m, 2H), 0.47-0.48(m, 2H), 0.76-0.84(m, 3H), 1.03-1.05(m, 1H), 1.23(dd, *J= 22.4 6.8 Hz* 3H), 1.55-1.60(m, 2H), 3. 61-3.68(m, 1H), 3. 81-3.89 (m, 3H), 3.98-4.03(m, 1H), 4.23-4.29(m, 1H), 4.35-4.41(m, 1H), 5.56-6.00(m, 1H) , 5.88-5.91(m, 1H), 6.04-6.10(m, 2H), 7.20-7.24(m, 4H), 7.55 (d, *J= 7.6 Hz* 1H),11.53 (s, 1H) ; MS, *m/e* 573.17 (M+1)$^+$
65	Ph	H	H	Et	c-Pen	^{1}H NMR (DMSO-d_6) δ 0.75-0.83 (m, 3H), 1.20-1.28 (m, 3H), 1.49-1.63 (m, 8H), 1.76-1.80 (m, 2H), 3.58-3.60 (m, 1H), 3.70-3.82 (m, 1H), 3.98-4.05 (m, 1H), 4.24-4.26 (m, 1H) , 4.37-4.42 (m, 1H), 5.03 (s, 1H), 5.54-5.57 (m, 1H), 5.90-6.00 (m,1H), 6.02-6.07 (m, 2H), 7.15-7.22 (m, 3H), 7.35-7.39 (m, 2H) 7.55 (d, *J* = 8.0 Hz, 1H), 11.55 (s, 1H) ; MS, *m/e* 570.03 (M+1)$^+$

*R^2 and R^{3b} together are $-(CH_2)_3-$ as derived from L-proline

The purification procedure by Prep-HPLC:

Crude products were dissolved in methanol. Injection volumes of these solutions were 5 mL.

The preparative HPLC system including 2 sets of Gilson 306 pumps, a Gilson 156 UV/Vis detector, a Gilson 215 injector & fraction collector, with Unipoint control software. A Ymc 25×30×2 mm column was used. The mobile phase was HPLC grade

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water (A), and HPLC grade acetonitrile (B). Fractions were collected into 100*15mm glass tubes.

HPLC gradient is shown in Table 1. Once the gradient was selected, acetonitrile solution was injected into HPLC system, and then fractions collected according to UV peaks. After the separation, each glass tubes were run MS test to collect the desired compounds. The fractions with target MS were combined in a well-weighted flask. Most of acetonitrile was removed under reduce pressure and the remaining solution was freeze-dried to give desired compound.

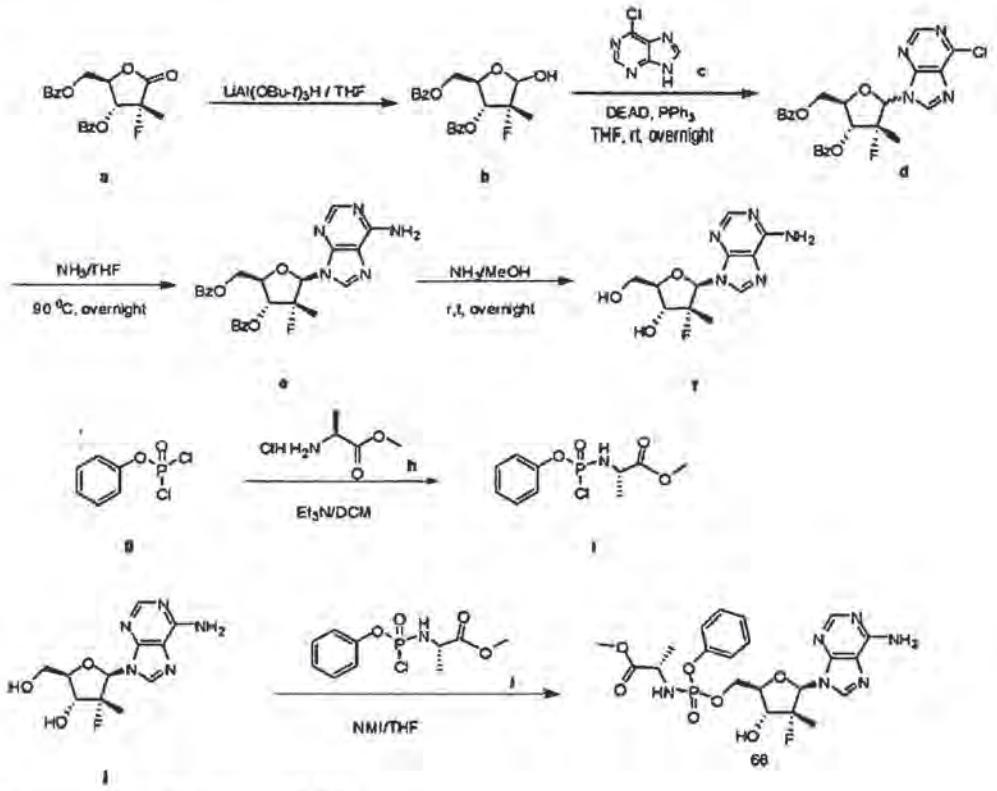
Table 1:

Preparative HPLC gradient			
Time (min)	Flow rate (mL/min)	% A	% B
0	15	90	10
30	15	60	40

Preparation of Example 66

Scheme

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Preparation of compound (b)

To a solution of compound **a** (1 g, 2.69 mmol) in anhydrous THF (30 mL) was added dropwise 1 M solution of $LiAl(OBu\text{-}t)_3H$ in THF (2.69 mL, 2.69 mmol) at -20 °C. The reaction mixture was stirred for 2-3 h at the same temperature. EtOAc (100 mL) was added followed by saturated NH_4Cl solution (10 mL) and reaction mixture was slowly brought to room temperature. Reaction mixture was extracted with EtOAc and washed with 1N HCl and water. Combined organic phase was evaporated to give 0.8 g of crude compound **b** as transparent oil, which was used directly for next reaction.

Preparation of compound (d)

To a solution of compound **b** (0.8 g, 2.1mmol), compound **c** (0.45 g, 2.5 mmol) and Ph_3P (0.56 g, 2.1 mmol) in anhydrous THF (20 mL) under nitrogen atmosphere was added DEAD (1.8 mL). The reaction mixture was stirred at room temperature overnight. The reaction solution was concentrated under reduce pressure. The residue was separated

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by preparative layer chromatography (hexanes:EtOAc = 3:1) to give crude compound **d** (0.8 g). The crude compound **d** was used to the next step without further purification.

Preparation of compound (e)

Compound **d** (0.8 g, 1.57 mmol) was dissolved in THF (2 mL) and THF saturated with ammonia (5 mL) was then added to this solution. The reaction mixture was heated to 90 °C overnight. After 18 hours, the solution was cooled to room temperature by ice water, then the solvent was removed under reduced pressure and the residue was purified by column to give compound **e** (0.75 g) for the next step.

Preparation of compound (f)

Compound **e** (0.5 g, 1.01 mmol) was dissolved in methanol (2 mL) and methanol was saturated with ammonia (5 mL) was then added to this solution. The reaction mixture was stirred at room temperature overnight. After 18 hours, the solvent was removed under reduced pressure and the residue was purified by column to give crude compound **f** (0.15 g) for the next step.

Preparation of compound (i)

A solution of triethylamine (1.07 g, 10.6 mmol) in anhydrous dichloromethane (15 mL) was added dropwise to a solution of compound **g** (1.16 g, 5.3 mmol) and compound **h** (1.31 g, 5.3 mmol) in dichloromethane (10 mL) with vigorous stirring at -78 °C over a period of 2 hours. After completion of addition, the reaction temperature was allowed to warm to room temperature gradually and stirred over night. Then the solvent was removed under vacuum and anhydrous ether 20 mL was added and the precipitated salt was filtered and the precipitate was washed with ether. The combined organic phase was concentrated to give the colorless oil of compound **i** (1.0 g).

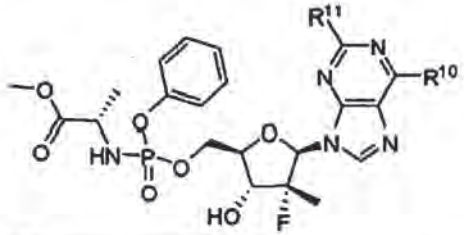
Preparation of Compound 66

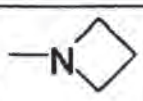
To a solution of compound **j** (0.1 g, 0.35 mmol) dissolved in 10 mL of anhydrous THF, stirred and added 0.4g NMI till the solution became clear, added compound **i** (0.8 g, 2.89 mmol) in 10 mL THF dropwise, stirred at r.t. overnight. Compound purity and identification was confirmed by LCMS. The solvent was evaporated and purified by Prep-HPLC to afford **66**. (25 mg, Yield: 13.6%). ^{1}H NMR (DMSO-d_6) δ 1.08 (d, J = 22.8 Hz, 3H), 1.17-1.24 (m, 3H), 3.50-3.52 (m, 3H), 3.78-3.83 (m, 1H), 4.10-4.13 (m,

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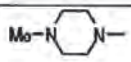
1H), 4.24-4.44 (m, 2H), 5.85-5.92 (m, 1H), 6.01-6.11 (m,1H), 6.2.-6.27 (m, 1H), 7.08-7.19 (m, 4H), 7.31-7.38 (m, 3H), 8.15 (s, 1H), 8.26 (s, 1H); MS, *m/e* 525 $(M+1)^+$.

Example numbers **67-74**, identified below, were prepared using similar procedures disclosed for Example **66**, above.



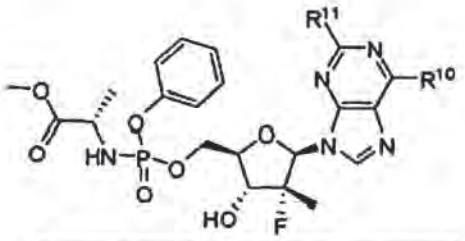
Example	R^{11}	R^{10}	NMR/MS
67	OH	NH_2	^{1}H NMR (DMSO-d_6) δ 1.06-1.13 (m, 3H), 1.20-1.24 (m, 3H), 3.27-3.33(m, 3H), 3.56 (s, 1H), 3.82-3.88 (m, 1H), 4.07-4.13 (m, 1H), 4.25-4.40 (m, 2H), 5.85-5.87 (m, 1H), 5.98-6.09 (m, 2H), 6.59 (s, 32H), 7.14-7.37 (m, 3H), 7.35-7.37 (m, 2H), 7.79 (d, *J*=7.2 Hz, 1H), 10.69 (s, 1H); MS, *m/e* 541 $(M+1)^+$;
68	NH_2	NH_2	^{1}H NMR (DMSO-d_6) δ 1.07 (d, *J*=22.8 Hz, 3H), 1.19 (d, *J*=7.2 Hz, 3H), 3.51 (s, 3H), 3.62 (s, 1H), 3.75-3.81 (m, 1H), 4.05-4.11 (m, 1H), 4.27-4.42 (m, 2H), 5.79-5.83 (m, 1H), 5.92 (s, 2H), 6.00-6.09 (m, 2H), 6.75 (s, 2H), 7.08-7.17 (m, 3H), 7.31-7.35 (m, 2H), 7.78 (s, 1H); MS, *m/e* 540 $(M+1)^+$;
69	NH_2	c-Pentyl-NH-	^{1}H NMR (DMSO-d_6) δ 1.05 (d, *J*=22.8 Hz, 3H), 1.09-1.19 (m, 3H), 1.48 (s, 4H), 1.66 (s, 1H), 1.86 (s, 1H), 3.54 (d, *J*=14 Hz, 3H), 3.65 (s, 1H), 4.25-4.43 (m, 4H), 5.71-5.82 (m, 1H), 5.94-6.04 (m, 4H), 7.11-7.24 (m, 3H), 7.26-7.34 (m, 2H), 7.77(d, *J*=3.6 Hz, 1H); MS, *m/e* 608$(M+1)^+$
70	NH_2		^{1}H NMR (DMSO-d_6) δ 1.07 (d, *J*=22.4 Hz, 3H), 2.35-2.38 (m, 2H), 3.54 (d, *J*=9.2 Hz, 3H), 3.59-3.62 (m, 2H), 3.65 (s, 1H), 3.75-3.82 (m, 1H), 4.01-4.13 (m, 2H), 4.22-4.40 (m, 6H), 5.75-5.85 (m, 1H), 6.00-6.07 (m, 4H), 7.15-7.21 (m, 3H), 7.32-7.35 (m, 2H), 7.79 (d, *J*=4.0 Hz, 1H); MS, *m/e* 580 $(M+1)^+$
71	NH_2	Et_2N-	^{1}H NMR (DMSO-d_6) δ 1.06-1.28 (m, 12H), 3.55 (d, *J*=4.8 Hz, 3H), 3.79-3.87 (m, 4H), 4.07-4.12 (m, 2H), 4.29-4.42 (m,

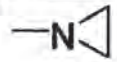
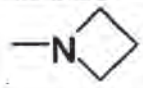
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Example	R^{11}	R^{10}	NMR/MS
			3H), 5.75-5.82 (m, 1H), 5.94 (s, 2H), 6.04-6.10 (m, 2H), 7.14-7.22 (m, 3H), 7.31-7.37 (m, 2H), 7.82 (d, *J*=4.4 Hz, 1H); MS, *m/e* 596 $(M+1)^+$
72	NH_2	n-Propyl-NH-	^1H NMR (DMSO-d_6) δ 0.84 (t, *J*=7.2 Hz, 3H), 1.01-1.01 (m, 3H), 1.09-1.12 (m, 3H), 1.51-1.56 (m, 2H), 3.48 (d, *J*=15.2 Hz, 3H), 3.79-3.82 (m, 1H), 4.04-4.05 (m, 1H), 4.27-4.38 (m, 3H), 5.72-5.79 (m, 1H), 5.98-6.04 (m, 4H), 7.13-7.20 (m, 3H), 7.26-7.32 (m, 2H), 7.76 (d, *J*=5.2 Hz, 1H); MS, *m/e* 582 $(M+1)^+$
73	NH_2	c-Butyl-NH-	^1H NMR (DMSO-d_6) δ 1.02-1.08 (m, 3H), 1.18 (d, *J*=4.8 Hz, 3H), 1.44-1.61 (m, 2H) , 2.02-2.17 (m, 4H), 3.51 (d, *J*=10.8 Hz, 3H), 3.78-3.83 (m, 1H), 4.03-4.06 (m, 1H), 4.27-4.38 (m, 2H), 4.53-4.62 (m, 1H), 5.68-5.79 (m, 1H), 5.95-6.04 (m, 4H), 7.11-7.18 (m, 3H), 7.29-7.35 (m, 2H), 7.51-7.58 (m, 1H), 7.78 (d, *J*=5.2 Hz, 1H); MS, *m/e* 594 $(M+1)^+$
74	NH_2		^1H NMR (DMSO-d_6) δ 0.97-1.20 (m, 6H), 2.18 (s, 3H), 2.19 (s, 4H), 3.43-3.47(m, 3H), 3.75 (s, 1H), 4.01-4.06 (m, 4 H), 4.22-4.35 (m, 3H), 5.69-5.75 (m, 1H), 5.98-6.05 (m, 3H), 7.09-7.15 (m, 3H), 7.25-7.29 (m, 2H), 7.77 (d, *J*=3.6 Hz, 1H); MS, *m/e* 623 $(M+1)^+$

Example numbers 75-80 are prepared using similar procedures disclosed for Example **66**, above.

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Example	R^{11}	R^{10}
75	H	n-propyl-NH-
76	H	c-Butyl-NH-
77	H	c-Pentyl-NH-
78	H	
79	H	
80	H	

EXAMPLE 81

Certain exemplified compounds were obtained as mixture of diastereomers because of the chirality at phosphorous. The diastereomers were separated on a Chiralpak-AS-H (2 X 25 cm) column under Supercritical Fluid Chromatography (SFC) conditions using 20% methanol in carbon dioxide as solvent. The absolute stereochemistry of the P-chiral center of the diastereromers were not determined. However, chromatographic resolution of these two diastereomers provides for isomers that are characterized as fast eluting and slow eluting isomers. Some examples are shown below.

Compound	EC90 (uM)
Example 15 (Diastereomeric mixture)	0.86
Fast Moving isomer of **Example 15**	1.35
Slow Moving isomer of **Example 15**	0.26

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Compound	EC90 (uM)
Example 39 (Diastereomeric mixture)	0.47
Fast Moving isomer of **Example 39**	0.78
Slow Moving isomer of **Example 39**	0.02
Example 49 (Diastereomeric mixture)	0.126
Fast Moving isomer of **Example 49**	0.03
Slow Moving isomer of **Example 49**	5.78

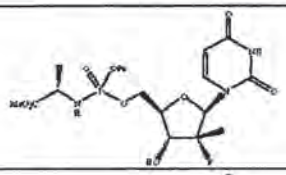
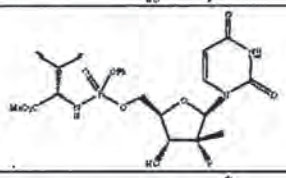
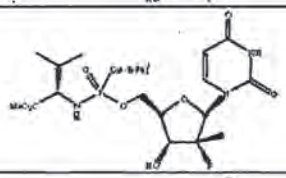
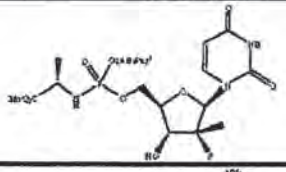
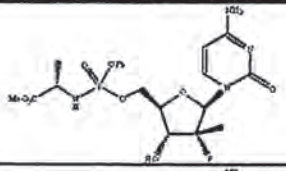
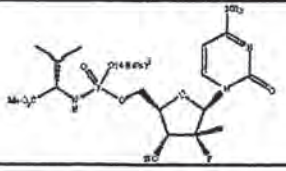
EXAMPLE 82

HCV replicon assay. HCV replicon RNA-containing Huh7 cells (clone A cells; Apath, LLC, St. Louis, Mo.) were kept at exponential growth in Dulbecco's modified Eagle's medium (high glucose) containing 10% fetal bovine serum, 4 mM L-glutamine and 1 mM sodium pyruvate, 1× nonessential amino acids, and G418 (1,000 μg/ml). Antiviral assays were performed in the same medium without G418. Cells were seeded in a 96-well plate at 1,500 cells per well, and test compounds were added immediately after seeding. Incubation time 4 days. At the end of the incubation step, total cellular RNA was isolated (RNeasy 96 kit; Qiagen). Replicon RNA and an internal control (TaqMan rRNA control reagents; Applied Biosystems) were amplified in a single-step multiplex RT-PCR protocol as recommended by the manufacturer. The HCV primers and probe were designed with Primer Express software (Applied Biosystems) and covered highly conserved 5′-untranslated region (UTR) sequences (sense, 5′-AGCCATGGCGTTAGTA(T)GAGTGT-3′, and antisense, 5′-TTCCGCAGACCACTATGG-3′; probe, 5′-FAM-CCTCCAGGACCCCCCCTCCC-TAMRA-3′).

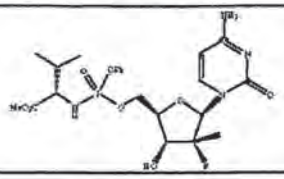
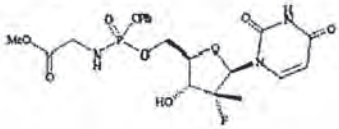
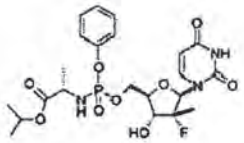
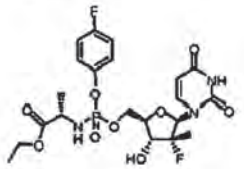
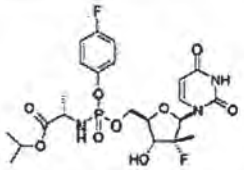
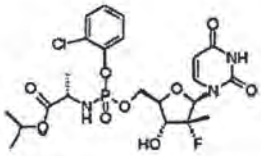
To express the antiviral effectiveness of a compound, the threshold RT-PCR cycle of the test compound was subtracted from the average threshold RT-PCR cycle of the no-drug control (ΔCt_{HCV}). A ΔCt of 3.3 equals a 1-log 10 reduction (equal to the 90%

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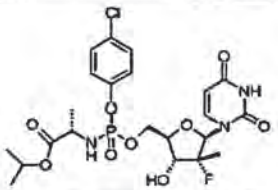
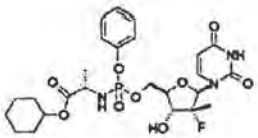
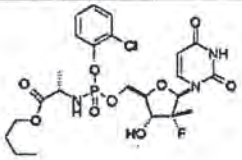
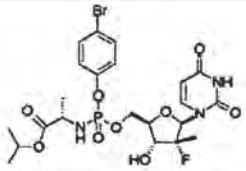
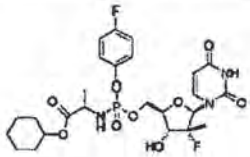
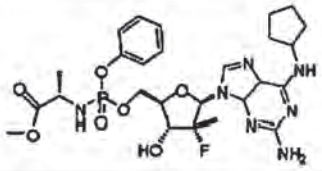
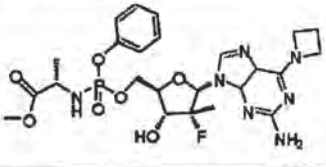
effective concentration [EC_{90}]) in replicon RNA levels. The cytotoxicity of the test compound could also be expressed by calculating the ΔCt_{rRNA} values. The $\Delta\Delta Ct$ specificity parameter could then be introduced ($\Delta Ct_{HCV} - \Delta Ct_{rRNA}$), in which the levels of HCV RNA are normalized for the rRNA levels and calibrated against the no-drug control.

Ex #	Compound	Log10 Reduction at 50μM	EC90 (μM)
5		-1.21	3.0
6		-0.45	ND
7		0.31	ND
8		-1.48	2.11
10		-1.25	19.15
11		-0.55	ND

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Ex #	Compound	Log10 Reduction at 50μM	EC90 (μM)
12		0.31	ND
15		ND	0.86
25		-2.22	0.39
27		-2.25	0.66
28		-2.16	0.75
36		-1.64	21.9

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Ex #	Compound	Log10 Reduction at 50μM	EC90 (μM)
39		-1.78	0.47
49		-2.69	0.126
53		-1.33	<0.3
54		-1.55	0.57
55		-2.38	<0.3
69		-2.25	< 0.3
70		-2.25	<0.3

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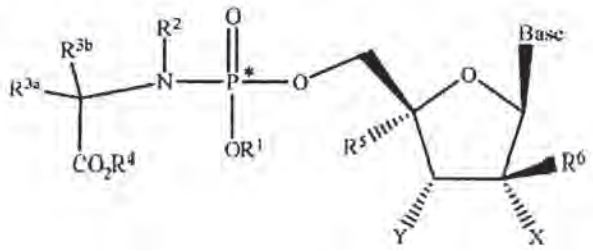
[1](4-BrPh): 4-bromo-phenyl.

The entire contents of U.S. Provisional Application Nos. 60/909,315, filed March 30, 2007, and 60/982,309, filed October 24, 2007, are hereby incorporated by reference in the present application so far as needed to supplement the present disclosure and/or rectify any errors. Moreover, the patent and non-patent references disclosed herein are incorporated by reference. In the event that the incorporated patent and non-patent reference contains a term that conflicts with a term disclosed in either one of the two Provisional Applications or the present application text, the meaning of the term contained in the present application text and the two Provisional Applications controls provided that the overall meaning of the incorporated subject matter is not lost.

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We claim:

1. A compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, represented by formula I:



I

wherein

(a) R^1 is hydrogen, n-alkyl; branched alkyl; cycloalkyl; or aryl, which includes, but is not limited to, phenyl or naphthyl, where phenyl or naphthyl are optionally substituted with at least one of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} alkoxy, F, Cl, Br, I, nitro, cyano, C_{1-6} haloalkyl, $-N(R^{1'})_2$, C_{1-6} acylamino, $-NHSO_2C_{1-6}$ alkyl, $-SO_2N(R^{1'})_2$, $COR^{1''}$, and $-SO_2C_{1-6}$ alkyl; ($R^{1'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{1''}$ is –OR' or $-N(R^{1'})_2$);

(b) R^2 is hydrogen, C_{1-10} alkyl, R^{3a} or R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, $C(O)CR^{3a}R^{3b}NHR^1$, where n is 2 to 4 and R^1, R^{3a}, and R^{3b};

(c) R^{3a} and R^{3b} are (i) independently selected from hydrogen, C_{1-10} alkyl, cycloalkyl, $-(CH_2)_c(NR^{3'})_2$, C_{1-6} hydroxyalkyl, $-CH_2SH$, $-(CH_2)_2S(O)_dMe$, $-(CH_2)_3NHC(=NH)NH_2$, (1H-indol-3-yl)methyl, (1H-imidazol-4-yl)methyl, $-(CH_2)_cCOR^{3''}$, aryl and aryl C_{1-3} alkyl, said aryl groups optionally substituted with a group selected from hydroxyl, C_{1-10} alkyl, C_{1-6} alkoxy, halogen, nitro and cyano; (ii) R^{3a} and R^{3b} both are C_{1-6} alkyl; (iii) R^{3a} and R^{3b} together are$(CH_2)_f$ so as to form a spiro ring; (iv) R^{3a} is hydrogen and R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that

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includes the adjoining N and C atoms (v) R^{3b} is hydrogen and R^{3a} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, where c is 1 to 6, d is 0 to 2, e is 0 to 3, f is 2 to 5, n is 2 to 4, and where $R^{3'}$ is independently hydrogen or C_{1-6} alkyl and $R^{3''}$ is -OR' or $-N(R^{3'})_2$); (vi) R^{3a} is H and R^{3b} is H, CH_3, CH_2CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl; or (viii) R^{3a} is CH_3, $-CH_2CH_3$, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl and R^{3b} is H, where $R^{3'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{3''}$ is –OR' or $-N(R^{3'})_2$);

(d) R^4 is hydrogen, C_{1-10} alkyl, C_{1-10} alkyl optionally substituted with a lower alkyl, alkoxy, di(lower alkyl)-amino, or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl,substituted aryl, or substituted heteroaryl;

(e) R^5 is H, a lower alkyl, CN, vinyl, O-(lower alkyl), hydroxyl lower alkyl, i.e., $-(CH_2)_pOH$, where p is 1 -6, including hydroxyl methyl (CH_2OH), CH_2F, N_3, CH_2CN, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, alkyne (optionally substituted), or halogen, including F, Cl, Br, or I, with the provisos that when X is OH, base is cytosine and R^6 is H, R^5 cannot be N_3 and when X is OH, R^6 is CH_3 or CH_2F and B is a purine base, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

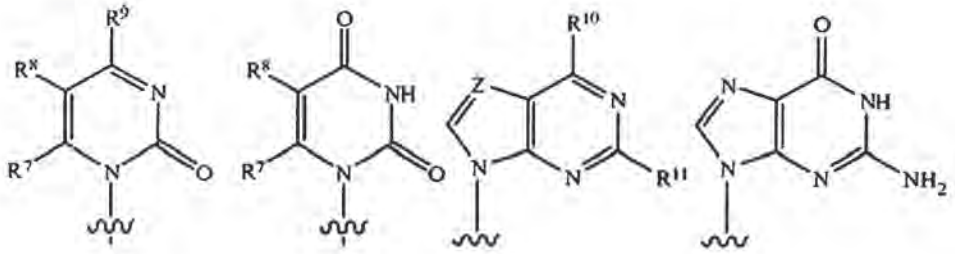
(g) X is H, OH, F, OMe, halogen, NH_2, or N_3;

(h) Y is OH, H, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, vinyl, N_3, CN, Cl, Br, F, I, NO_2, $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{2-4}$ alkynyl), $OC(O)O(C_{2-4}$

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alkenyl), OC_{1-10} haloalkyl, O(aminoacyl), $O(C_{1-10}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-18}$ acyl)$_2$, wherein alkyl, alkynyl, alkenyl and vinyl are optionally substituted by N_3, CN, one to three halogen (Cl, Br, F, I), NO_2, $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{2-4}$ alkynyl), $C(O)O(C_{2-4}$ alkenyl), $O(C_{1-4}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-4}$ acyl)$_2$;

the base is a naturally occurring or modified purine or pyrimidine base represented by the following structures:



a b c d

wherein

Z is N or CR^{12};

R^7, R^8,R^9, R^{10}, and $R^{11}$are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'$_2$, lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6, lower alkynyl of C_2-

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C_6 such as C≡CH, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, $CONHR'$, $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is an optionally substituted alkyl , which includes, but is not limited to, an optionally substituted C_{1-20} alkyl, an optionally substituted C_{1-10} alkyl, an optionally substituted lower alkyl; an optionally substituted cycloalkyl; an optionally substituted alkynyl of C_2-C_6, an optionally substituted lower alkenyl of C_2-C_6, or optionally substituted acyl, which includes but is not limited to C(O) alkyl, C(O)(C_{1-20} alkyl), C(O)(C_{1-10} alkyl), or C(O)(lower alkyl) or alternatively, in the instance of NR'_2, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

R^{12} is an H, halogen (including F, Cl, Br, I), OH, OR', SH, SR', NH_2, NHR', NR'_2, NO_2 lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6 , lower alkynyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, $CONHR'$, $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that when base is represented by the structure c with R^{11} being hydrogen, R^{12} is not a: (i) –C≡C–H, (ii) $-C=CH_2$, or (iii) $-NO_2$.

2. A compound its stereoisomer, salt, hydrate, solvate, or crystalline form thereof selected from among

5 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-alanyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester);

6 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

7 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

8 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-alanyl phosphate (((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-

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pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester);

9 N^4-(*N*,*N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine;

10 2'-Deoxy-2'-fluoro-2'-C-methylcytidine 5'-(phenyl methoxy-alanyl phosphate (((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenyoxy-phosphorylamino}-propionic acid methyl ester);

11 2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(4-bromophenyl methoxy-valyl phosphate (2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

12 2'-deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

13 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid ethyl ester;

14 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid benzyl ester;

15 {[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-acetic acid methyl ester;

16 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

17 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid methyl ester;

18 (S)-1-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphoryl}-pyrrolidine-2-carboxylic acid methyl ester;

19 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

20 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

21 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid methyl ester;

22 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

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23 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

24 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid sec-butyl ester;

25 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

26 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid butyl ester;

27 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid ethyl ester;

28 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

29 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

30 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

31 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid benzyl ester;

32 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

33 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid isopropyl ester;

34 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid butyl ester;

35 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

36 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

37 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

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38 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid pentyl ester;

39 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

40 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

41 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

42 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid butyl ester;

43 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid benzyl ester;

44 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid methyl ester;

45 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 4-fluoro-benzyl ester;

46 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

47 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 3-methyl-butyl ester;

48 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

49 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclohexyl ester;

50 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

51 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

52 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

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53 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

54 (S)-2-{(4-Bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

55 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

56 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-bromo-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

57 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid isopropyl ester;

58 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclohexyl ester;

59 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-butyric acid cyclohexyl ester;

60 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4 R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-butyric acid isopropyl ester;

61 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2-difluoro-ethyl ester;

62 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2,2-trifluoro-1-trifluoromethyl-ethyl ester;

63 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2-fluoro-1-fluoromethyl-ethyl ester;

64 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclopropyl methyl ester;

65 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclopentyl ester;

66 (S)-2-{[(2R,3R,4R,5R)-5-(6-Amino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

67 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-hydroxy-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

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68 (S)-2-{(R)-[(2R,3R,4R,5R)-5-(2,6-Diamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

69 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclopentylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

70 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-azetidin-1-yl-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

71 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-diethylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

72 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-propylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

73 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclobutylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

74 (S)-2-({(2R,3R,4R,5R)-5-[2-Amino-6-(4-methyl-piperazin-1-yl)-purin-9-yl]-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy}-phenoxy-phosphorylamino)-propionic acid methyl ester;

75 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(propylamino)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

76 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclobutylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

77 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclopentylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

78 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(aziridin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

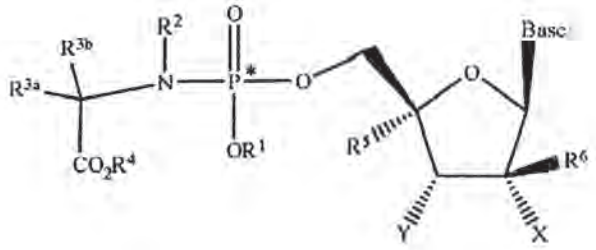
79 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(piperidin-1-yl)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate; and

80 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(azetidin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate.

3. A composition for the treatment and/or prophylaxis of any of the viral agents disclosed herein said composition comprising a pharmaceutically acceptable medium selected from among an excipient, carrier, diluent, and equivalent medium and a compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, represented

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by formula I:



I

wherein

(a) R^1 is hydrogen, n-alkyl; branched alkyl; cycloalkyl; or aryl, which includes, but is not limited to, phenyl or naphthyl, where phenyl or naphthyl are optionally substituted with at least one of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} alkoxy, F, Cl, Br, I, nitro, cyano, C_{1-6} haloalkyl, $-N(R^{1'})_2$, C_{1-6} acylamino, $-NHSO_2C_{1-6}$ alkyl, $-SO_2N(R^{1'})_2$, $COR^{1''}$, and $-SO_2C_{1-6}$ alkyl; ($R^{1'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{1''}$ is $-OR^{1'}$ or $-N(R^{1'})_2$);

(b) R^2 is hydrogen, C_{1-10} alkyl, R^{3a} or R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, $C(O)CR^{3a}R^{3b}NHR^1$, where n is 2 to 4 and R^1, R^{3a}, and R^{3b};

(c) R^{3a} and R^{3b} are (i) independently selected from hydrogen, C_{1-10} alkyl, cycloalkyl, $-(CH_2)_c(NR^{3'})_2$, C_{1-6} hydroxyalkyl, $-CH_2SH$, $-(CH_2)_2S(O)_dMe$, $-(CH_2)_3NHC(=NH)NH_2$, (1H-indol-3-yl)methyl, (1H-imidazol-4-yl)methyl, $-(CH_2)_cCOR^{3''}$, aryl and aryl C_{1-3} alkyl, said aryl groups optionally substituted with a group selected from hydroxyl, C_{1-10} alkyl, C_{1-6} alkoxy, halogen, nitro and cyano; (ii) R^{3a} and R^{3b} both are C_{1-6} alkyl; (iii) R^{3a} and R^{3b} together are$(CH_2)_f$ so as to form a spiro ring; (iv) R^{3a} is hydrogen and R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms (v) R^{3b} is hydrogen and R^{3a} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, where c is 1

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to 6, d is 0 to 2, e is 0 to 3, f is 2 to 5, n is 2 to 4, and where $R^{3'}$ is independently hydrogen or C_{1-6} alkyl and $R^{3''}$ is -OR' or $-N(R^{3'})_2$; (vi) R^{3a} is H and R^{3b} is H, CH_3, CH_2CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl; or (viii) R^{3a} is CH_3, $-CH_2CH_3$, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl and R^{3b} is H, where $R^{3'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{3''}$ is –OR' or $-N(R^{3'})_2$;

(d) R^4 is hydrogen, C_{1-10} alkyl, C_{1-10} alkyl optionally substituted with a lower alkyl, alkoxy, di(lower alkyl)-amino, or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

(e) R^5 is H, a lower alkyl, CN, vinyl, O-(lower alkyl), hydroxyl lower alkyl, i.e., $-(CH_2)_pOH$, where p is 1 -6, including hydroxyl methyl (CH_2OH), CH_2F, N_3, CH_2CN, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, alkyne (optionally substituted), or halogen, including F, Cl, Br, or I, with the provisos that when X is OH, base is cytosine and R^6 is H, R^5 cannot be N_3 and when X is OH, R^6 is CH_3 or CH_2F and B is a purine base, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

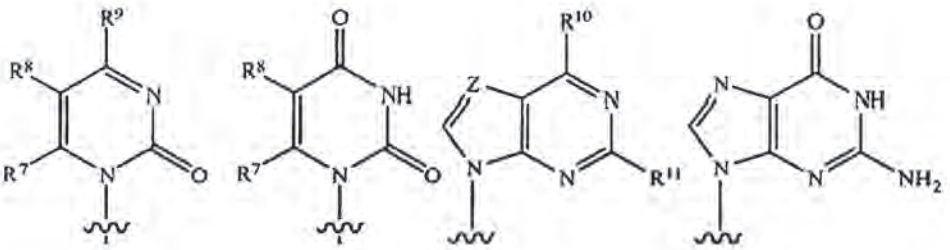
(g) X is H, OH, F, OMe, halogen, NH_2, or N_3;

(h) Y is OH, H, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, vinyl, N_3, CN, Cl, Br, F, I, NO_2, $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{2-4}$ alkynyl), $OC(O)O(C_{2-4}$ alkenyl), OC_{1-10} haloalkyl, O(aminoacyl), $O(C_{1-10}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl),

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$SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-18}$ acyl)$_2$, wherein alkyl, alkynyl, alkenyl and vinyl are optionally substituted by N_3, CN, one to three halogen (Cl, Br, F, I), NO_2, $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{2-4}$ alkynyl), $C(O)O(C_{2-4}$ alkenyl), $O(C_{1-4}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-4}$ acyl)$_2$;

the base is a naturally occurring or modified purine or pyrimidine base represented by the following structures:



a **b** **c** **d**

wherein

Z is N or CR^{12};

R^7, R^8,R^9, R^{10}, and $R^{11}$are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'$_2$, lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6, lower alkynyl of C_2-C_6 such as C≡CH, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-

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C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, $CONHR'$, $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is an optionally substituted alkyl , which includes, but is not limited to, an optionally substituted C_{1-20} alkyl, an optionally substituted C_{1-10} alkyl, an optionally substituted lower alkyl; an optionally substituted cycloalkyl; an optionally substituted alkynyl of C_2-C_6, an optionally substituted lower alkenyl of C_2-C_6, or optionally substituted acyl, which includes but is not limited to C(O) alkyl, C(O)(C_{1-20} alkyl), C(O)(C_{1-10} alkyl), or C(O)(lower alkyl) or alternatively, in the instance of NR'_2, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

R^{12} is an H, halogen (including F, Cl, Br, I), OH, OR', SH, SR', NH_2, NHR', NR'_2, NO_2 lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6 , lower alkynyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, $CONHR'$, $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that when base is represented by the structure c with R^{11} being hydrogen, R^{12} is not a: (i) $-C\equiv C-H$, (ii) $-C=CH_2$, or (iii) $-NO_2$.

4. A composition for the treatment and/or prophylaxis of any of the viral agents disclosed herein said composition comprising a pharmaceutically acceptable medium selected from among an excipient, carrier, diluent, and equivalent medium and a compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, selected from among

5 2'-Deoxy-2'-fluoro-2'-C-methyluridine 5'-(phenyl methoxy-alanyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester);

6 2'-Deoxy-2'-fluoro-2'-C-methyluridine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

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7 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

8 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-alanyl phosphate (((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester);

9 N^4-(*N*,*N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine;

10 2'-Deoxy-2'-fluoro-2'-C-methylcytidine 5'-(phenyl methoxy-alanyl phosphate (((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenyoxy-phosphorylamino}-propionic acid methyl ester);

11 2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(4-bromophenyl methoxy-valyl phosphate (2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

12 2'-deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

13 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid ethyl ester;

14 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid benzyl ester;

15 {[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-acetic acid methyl ester;

16 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

17 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid methyl ester;

18 (S)-1-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphoryl}-pyrrolidine-2-carboxylic acid methyl ester;

19 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

20 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

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21 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid methyl ester;

22 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

23 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

24 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid sec-butyl ester;

25 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

26 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid butyl ester;

27 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid ethyl ester;

28 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

29 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

30 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

31 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid benzyl ester;

32 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

33 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid isopropyl ester;

34 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid butyl ester;

35 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

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36 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

37 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

38 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid pentyl ester;

39 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

40 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

41 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

42 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid butyl ester;

43 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid benzyl ester;

44 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid methyl ester;

45 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 4-fluoro-benzyl ester;

46 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

47 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 3-methyl-butyl ester;

48 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

49 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclohexyl ester;

50 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

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51 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

52 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

53 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

54 (S)-2-{(4-Bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

55 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

56 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-bromo-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

57 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid isopropyl ester;

58 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclohexyl ester;

59 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-butyric acid cyclohexyl ester;

60 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4 R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-butyric acid isopropyl ester;

61 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2-difluoro-ethyl ester;

62 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2,2-trifluoro-1-trifluoromethyl-ethyl ester;

63 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2-fluoro-1-fluoromethyl-ethyl ester;

64 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclopropyl methyl ester;

65 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclopentyl ester;

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66 (S)-2-{[(2R,3R,4R,5R)-5-(6-Amino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

67 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-hydroxy-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

68 (S)-2-{(R)-[(2R,3R,4R,5R)-5-(2,6-Diamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

69 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclopentylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

70 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-azetidin-1-yl-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

71 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-diethylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

72 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-propylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

73 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclobutylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

74 (S)-2-({(2R,3R,4R,5R)-5-[2-Amino-6-(4-methyl-piperazin-1-yl)-purin-9-yl]-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy}-phenoxy-phosphorylamino)-propionic acid methyl ester;

75 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(propylamino)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

76 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclobutylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

77 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclopentylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

78 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(aziridin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

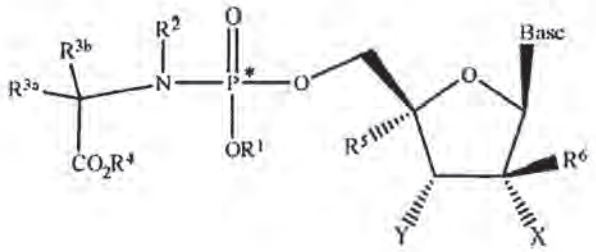
79 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(piperidin-1-yl)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate; and

80 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(azetidin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate.

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5. A use of the compound represented by formula I in the manufacture of a medicament for the treatment of any condition the result of an infection by hepatitis C virus, West Nile virus, yellow fever virus, dengue virus, rhinovirus, polio virus, hepatitis A virus, bovine viral diarrhea virus or Japanese encephalitis virus.

wherein the compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, are represented by formula I:



I

wherein

(a) R^1 is hydrogen, n-alkyl; branched alkyl; cycloalkyl; or aryl, which includes, but is not limited to, phenyl or naphthyl, where phenyl or naphthyl are optionally substituted with at least one of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} alkoxy, F, Cl, Br, I, nitro, cyano, C_{1-6} haloalkyl, $-N(R^{1'})_2$, C_{1-6} acylamino, $-NHSO_2C_{1-6}$ alkyl, $-SO_2N(R^{1'})_2$, $COR^{1''}$, and $-SO_2C_{1-6}$ alkyl; ($R^{1'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{1''}$ is $-OR^{1'}$ or $-N(R^{1'})_2$);

(b) R^2 is hydrogen, C_{1-10} alkyl, R^{3a} or R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, $C(O)CR^{3a}R^{3b}NHR^1$, where n is 2 to 4 and R^1, R^{3a}, and R^{3b};

(c) R^{3a} and R^{3b} are (i) independently selected from hydrogen, C_{1-10} alkyl, cycloalkyl, $-(CH_2)_c(NR^{3'})_2$, C_{1-6} hydroxyalkyl, $-CH_2SH$, $-(CH_2)_2S(O)_dMe$, $-(CH_2)_3NHC(=NH)NH_2$, (1H-indol-3-yl)methyl, (1H-imidazol-4-yl)methyl, $-(CH_2)_cCOR^{3''}$, aryl and aryl C_{1-3} alkyl, said aryl groups optionally substituted with a

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group selected from hydroxyl, C_{1-10} alkyl, C_{1-6} alkoxy, halogen, nitro and cyano; (ii) R^{3a} and R^{3b} both are C_{1-6} alkyl; (iii) R^{3a} and R^{3b} together are$(CH_2)_f$ so as to form a spiro ring; (iv) R^{3a} is hydrogen and R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms (v) R^{3b} is hydrogen and R^{3a} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, where c is 1 to 6, d is 0 to 2, e is 0 to 3, f is 2 to 5, n is 2 to 4, and where $R^{3'}$ is independently hydrogen or C_{1-6} alkyl and $R^{3''}$ is -OR' or $-N(R^{3'})_2$); (vi) R^{3a} is H and R^{3b} is H, CH_3, CH_2CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl; or (viii) R^{3a} is CH_3, $-CH_2CH_3$, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl and R^{3b} is H, where $R^{3'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{3''}$ is –OR' or $-N(R^{3'})_2$);

(d) R^4 is hydrogen, C_{1-10} alkyl, C_{1-10} alkyl optionally substituted with a lower alkyl, alkoxy, di(lower alkyl)-amino, or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

(e) R^5 is H, a lower alkyl, CN, vinyl, O-(lower alkyl), hydroxyl lower alkyl, i.e., $-(CH_2)_pOH$, where p is 1 -6, including hydroxyl methyl (CH_2OH), CH_2F, N_3, CH_2CN, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, alkyne (optionally substituted), or halogen, including F, Cl, Br, or I, with the provisos that when X is OH, base is cytosine and R^6 is H, R^5 cannot be N_3 and when X is OH, R^6 is CH_3 or CH_2F and B is a purine base, R^5 cannot be H;

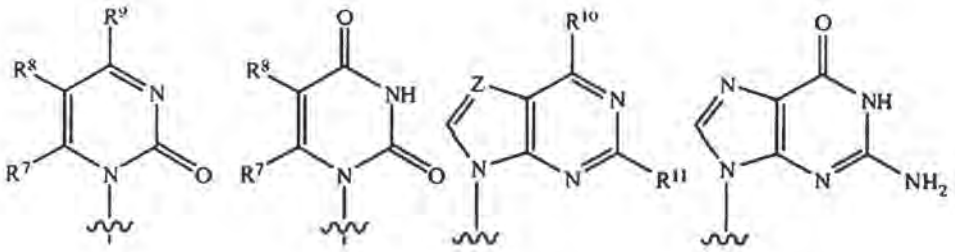
(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OMe, halogen, NH_2, or N_3;

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(h) Y is OH, H, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, vinyl, N_3, CN, Cl, Br, F, I, NO_2, $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{2-4}$ alkynyl), $OC(O)O(C_{2-4}$ alkenyl), OC_{1-10} haloalkyl, O(aminoacyl), $O(C_{1-10}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-18}$ acyl)$_2$, wherein alkyl, alkynyl, alkenyl and vinyl are optionally substituted by N_3, CN, one to three halogen (Cl, Br, F, I), NO_2, $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{2-4}$ alkynyl), $C(O)O(C_{2-4}$ alkenyl), $O(C_{1-4}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-4}$ acyl)$_2$;

the base is a naturally occurring or modified purine or pyrimidine base represented by the following structures:



a b c d

wherein

Z is N or CR^{12};

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R^7, R^8,R^9, R^{10}, and $R^{11}$are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'$_2$, lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6, lower alkynyl of C_2-C_6 such as C≡CH, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=CHCO_2H, or CH=CHCO_2R',

wherein R' is an optionally substituted alkyl , which includes, but is not limited to, an optionally substituted C_{1-20} alkyl, an optionally substituted C_{1-10} alkyl, an optionally substituted lower alkyl; an optionally substituted cycloalkyl; an optionally substituted alkynyl of C_2-C_6, an optionally substituted lower alkenyl of C_2-C_6, or optionally substituted acyl, which includes but is not limited to C(O) alkyl, C(O)(C_{1-20} alkyl), C(O)(C_{1-10} alkyl), or C(O)(lower alkyl) or alternatively, in the instance of NR'$_2$, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

R^{12} is an H, halogen (including F, Cl, Br, I), OH, OR', SH, SR', NH_2, NHR', NR'$_2$, NO_2 lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6 , lower alkynyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=CHCO_2H, or CH=CHCO_2R'; with the proviso that when base is represented by the structure c with R^{11} being hydrogen, R^{12} is not a: (i) –C≡C–H, (ii) –C=CH_2, or (iii) –NO_2.

6. A use of

a compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, selected from among

5 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-alanyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester);

6 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-

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hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

7 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

8 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-alanyl phosphate (((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester);

9 N^4-(*N,N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine;

10 2'-Deoxy-2'-fluoro-2'-C-methylcytidine 5'-(phenyl methoxy-alanyl phosphate (((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenyoxy-phosphorylamino}-propionic acid methyl ester);

11 2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(4-bromophenyl methoxy-valyl phosphate (2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

12 2'-deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

13 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid ethyl ester;

14 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid benzyl ester;

15 {[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-acetic acid methyl ester;

16 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

17 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid methyl ester;

18 (S)-1-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphoryl}-pyrrolidine-2-carboxylic acid methyl ester;

19 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

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20 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

21 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid methyl ester;

22 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

23 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

24 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid sec-butyl ester;

25 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

26 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid butyl ester;

27 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid ethyl ester;

28 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

29 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

30 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

31 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid benzyl ester;

32 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

33 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid isopropyl ester;

34 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid butyl ester;

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35 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

36 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

37 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

38 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid pentyl ester;

39 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

40 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

41 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

42 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid butyl ester;

43 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid benzyl ester;

44 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid methyl ester;

45 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 4-fluoro-benzyl ester;

46 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

47 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 3-methyl-butyl ester;

48 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

49 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclohexyl ester;

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50 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

51 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

52 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

53 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

54 (S)-2-{(4-Bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

55 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

56 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-bromo-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

57 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid isopropyl ester;

58 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclohexyl ester;

59 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-butyric acid cyclohexyl ester;

60 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4 R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-butyric acid isopropyl ester;

61 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2-difluoro-ethyl ester;

62 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2,2-trifluoro-1-trifluoromethyl-ethyl ester;

63 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2-fluoro-1-fluoromethyl-ethyl ester;

64 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclopropyl methyl ester;

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65 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclopentyl ester;

66 (S)-2-{[(2R,3R,4R,5R)-5-(6-Amino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

67 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-hydroxy-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

68 (S)-2-{(R)-[(2R,3R,4R,5R)-5-(2,6-Diamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

69 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclopentylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

70 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-azetidin-1-yl-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

71 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-diethylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

72 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-propylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

73 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclobutylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

74 (S)-2-({(2R,3R,4R,5R)-5-[2-Amino-6-(4-methyl-piperazin-1-yl)-purin-9-yl]-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy}-phenoxy-phosphorylamino)-propionic acid methyl ester;

75 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(propylamino)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

76 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclobutylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

77 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclopentylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

78 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(aziridin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

79 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(piperidin-1-yl)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate; and

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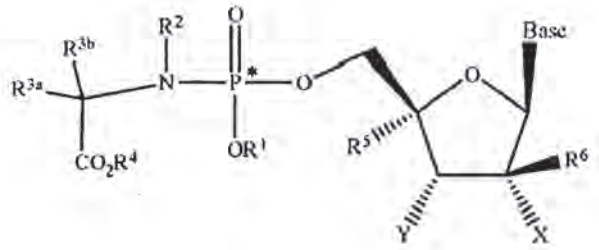
80 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(azetidin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate

in the manufacture of a medicament for the treatment of any condition the result of an infection by hepatitis C virus, West Nile virus, yellow fever virus, dengue virus, rhinovirus, polio virus, hepatitis A virus, bovine viral diarrhea virus or Japanese encephalitis virus.

7. A method of treatment in a subject in need thereof, which comprises:

administering a therapeutically effective amount of the compound represented by formula I to the subject;

wherein the compound or its stereoisomer, salt, hydrate, solvate, or crystalline form thereof represented by formula I:



I

wherein

(a) R^1 is hydrogen, n-alkyl; branched alkyl; cycloalkyl; or aryl, which includes, but is not limited to, phenyl or naphthyl, where phenyl or naphthyl are optionally substituted with at least one of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} alkoxy, F, Cl, Br, I, nitro, cyano, C_{1-6} haloalkyl, $-N(R^{1'})_2$, C_{1-6} acylamino, $-NHSO_2C_{1-6}$ alkyl, $-SO_2N(R^{1'})_2$, $COR^{1'}$, and $-SO_2C_{1-6}$ alkyl; ($R^{1'}$ is independently hydrogen or alkyl,

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which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{1'}$ is –OR' or -$N(R^{1'})_2$);

(b) R^2 is hydrogen, C_{1-10} alkyl, R^{3a} or R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, $C(O)CR^{3a}R^{3b}NHR^1$, where n is 2 to 4 and R^1, R^{3a}, and R^{3b};

(c) R^{3a} and R^{3b} are (i) independently selected from hydrogen, C_{1-10} alkyl, cycloalkyl, $-(CH_2)_c(NR^{3'})_2$, C_{1-6} hydroxyalkyl, $-CH_2SH$, $-(CH_2)_2S(O)_dMe$, $-(CH_2)_3NHC(=NH)NH_2$, (1H-indol-3-yl)methyl, (1H-imidazol-4-yl)methyl, $-(CH_2)_cCOR^{3''}$, aryl and aryl C_{1-3} alkyl, said aryl groups optionally substituted with a group selected from hydroxyl, C_{1-10} alkyl, C_{1-6} alkoxy, halogen, nitro and cyano; (ii) R^{3a} and R^{3b} both are C_{1-6} alkyl; (iii) R^{3a} and R^{3b} together are$(CH_2)_f$ so as to form a spiro ring; (iv) R^{3a} is hydrogen and R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms (v) R^{3b} is hydrogen and R^{3a} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, where c is 1 to 6, d is 0 to 2, e is 0 to 3, f is 2 to 5, n is 2 to 4, and where $R^{3'}$ is independently hydrogen or C_{1-6} alkyl and $R^{3''}$ is -OR' or $-N(R^{3'})_2$); (vi) R^{3a} is H and R^{3b} is H, CH_3, CH_2CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl; or (viii) R^{3a} is CH_3, $-CH_2CH_3$, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl and R^{3b} is H, where $R^{3'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{3''}$ is –OR' or $-N(R^{3'})_2$);

(d) R^4 is hydrogen, C_{1-10} alkyl, C_{1-10} alkyl optionally substituted with a lower alkyl, alkoxy, di(lower alkyl)-amino, or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl,

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cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

(e) R^5 is H, a lower alkyl, CN, vinyl, O-(lower alkyl), hydroxyl lower alkyl, i.e., $-(CH_2)_pOH$, where p is 1 -6, including hydroxyl methyl (CH_2OH), CH_2F, N_3, CH_2CN, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, alkyne (optionally substituted), or halogen, including F, Cl, Br, or I, with the provisos that when X is OH, base is cytosine and R^6 is H, R^5 cannot be N_3 and when X is OH, R^6 is CH_3 or CH_2F and B is a purine base, R^5 cannot be H;

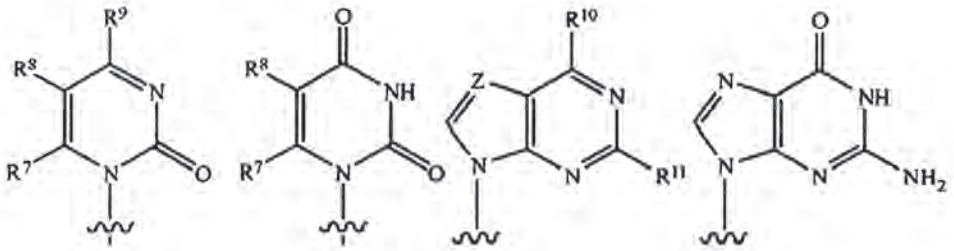
(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OMe, halogen, NH_2, or N_3;

(h) Y is OH, H, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, vinyl, N_3, CN, Cl, Br, F, I, NO_2, $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{2-4}$ alkynyl), $OC(O)O(C_{2-4}$ alkenyl), OC_{1-10} haloalkyl, O(aminoacyl), $O(C_{1-10}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-18}$ acyl)$_2$, wherein alkyl, alkynyl, alkenyl and vinyl are optionally substituted by N_3, CN, one to three halogen (Cl, Br, F, I), NO_2, $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{2-4}$ alkynyl), $C(O)O(C_{2-4}$ alkenyl), $O(C_{1-4}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-4}$ acyl)$_2$;

the base is a naturally occurring or modified purine or pyrimidine base represented by the following structures:

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a b c d

wherein

Z is N or CR^{12};

R^7, R^8,R^9, R^{10}, and $R^{11}$are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'_2, lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6, lower alkynyl of C_2-C_6 such as C≡CH, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is an optionally substituted alkyl , which includes, but is not limited to, an optionally substituted C_{1-20} alkyl, an optionally substituted C_{1-10} alkyl, an optionally substituted lower alkyl; an optionally substituted cycloalkyl; an optionally substituted alkynyl of C_2-C_6, an optionally substituted lower alkenyl of C_2-C_6, or optionally substituted acyl, which includes but is not limited to C(O) alkyl, C(O)(C_{1-20} alkyl), C(O)(C_{1-10} alkyl), or C(O)(lower alkyl) or alternatively, in the instance of NR'_2, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

R^{12} is an H, halogen (including F, Cl, Br, I), OH, OR', SH, SR', NH_2, NHR', NR'_2, NO_2 lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6 , lower alkynyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', $CONR'_2$,

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$CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that when base is represented by the structure c with R^{11} being hydrogen, R^{12} is not a: (i) $-C\equiv C-H$, (ii) $-C=CH_2$, or (iii) $-NO_2$.

8. A method of treatment in a subject in need thereof, which comprises:

administering a therapeutically effective amount of a compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, selected from among

5 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-alanyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester);

6 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

7 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

8 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-alanyl phosphate (((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester);

9 N^4-(*N*,*N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine;

10 2'-Deoxy-2'-fluoro-2'-C-methylcytidine 5'-(phenyl methoxy-alanyl phosphate (((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenyoxy-phosphorylamino}-propionic acid methyl ester);

11 2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(4-bromophenyl methoxy-valyl phosphate (2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

12 2'-deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

13 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid ethyl ester;

14 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid benzyl ester;

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15 {[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-acetic acid methyl ester;

16 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

17 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid methyl ester;

18 (S)-1-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphoryl}-pyrrolidine-2-carboxylic acid methyl ester;

19 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

20 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

21 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid methyl ester;

22 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

23 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

24 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid sec-butyl ester;

25 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

26 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid butyl ester;

27 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid ethyl ester;

28 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

29 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

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30 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

31 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid benzyl ester;

32 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

33 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid isopropyl ester;

34 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid butyl ester;

35 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

36 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

37 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

38 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid pentyl ester;

39 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

40 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

41 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

42 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid butyl ester;

43 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid benzyl ester;

44 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid methyl ester;

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45 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 4-fluoro-benzyl ester;

46 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

47 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 3-methyl-butyl ester;

48 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

49 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclohexyl ester;

50 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

51 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

52 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

53 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

54 (S)-2-{(4-Bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

55 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

56 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-bromo-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

57 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid isopropyl ester;

58 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclohexyl ester;

59 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-butyric acid cyclohexyl ester;

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60 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4 R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-butyric acid isopropyl ester;

61 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2-difluoro-ethyl ester;

62 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2,2-trifluoro-1-trifluoromethyl-ethyl ester;

63 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2-fluoro-1-fluoromethyl-ethyl ester;

64 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclopropyl methyl ester;

65 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclopentyl ester;

66 (S)-2-{[(2R,3R,4R,5R)-5-(6-Amino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

67 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-hydroxy-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

68 (S)-2-{(R)-[(2R,3R,4R,5R)-5-(2,6-Diamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

69 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclopentylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

70 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-azetidin-1-yl-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

71 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-diethylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

72 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-propylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

73 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclobutylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

74 (S)-2-({(2R,3R,4R,5R)-5-[2-Amino-6-(4-methyl-piperazin-1-yl)-purin-9-yl]-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy}-phenoxy-phosphorylamino)-propionic acid methyl ester;

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75 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(propylamino)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

76 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclobutylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

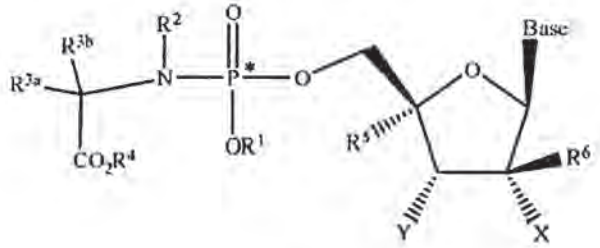
77 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclopentylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

78 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(aziridin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

79 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(piperidin-1-yl)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate; and

80 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(azetidin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate.

9. A process for preparing a compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, represented by formula I:



I

wherein

(a) R^1 is hydrogen, n-alkyl; branched alkyl; cycloalkyl; or aryl, which includes, but is not limited to, phenyl or naphthyl, where phenyl or naphthyl are optionally substituted with at least one of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} alkoxy, F, Cl, Br, I, nitro, cyano, C_{1-6} haloalkyl, $-N(R^{1'})_2$, C_{1-6} acylamino, $-NHSO_2C_{1-6}$ alkyl, $-SO_2N(R^{1'})_2$, $COR^{1''}$, and $-SO_2C_{1-6}$ alkyl; ($R^{1'}$ is independently hydrogen or alkyl,

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which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{1''}$ is –OR' or -$N(R^{1'})_2$);

(b) R^2 is hydrogen, C_{1-10} alkyl, R^{3a} or R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, $C(O)CR^{3a}R^{3b}NHR^1$, where n is 2 to 4 and R^1, R^{3a}, and R^{3b};

(c) R^{3a} and R^{3b} are (i) independently selected from hydrogen, C_{1-10} alkyl, cycloalkyl, $-(CH_2)_e(NR^{3'})_2$, C_{1-6} hydroxyalkyl, $-CH_2SH$, $-(CH_2)_2S(O)_dMe$, $-(CH_2)_3NHC(=NH)NH_2$, (1H-indol-3-yl)methyl, (1H-imidazol-4-yl)methyl, $-(CH_2)_eCOR^{3''}$, aryl and aryl C_{1-3} alkyl, said aryl groups optionally substituted with a group selected from hydroxyl, C_{1-10} alkyl, C_{1-6} alkoxy, halogen, nitro and cyano; (ii) R^{3a} and R^{3b} both are C_{1-6} alkyl; (iii) R^{3a} and R^{3b} together are$(CH_2)_f$ so as to form a spiro ring; (iv) R^{3a} is hydrogen and R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms (v) R^{3b} is hydrogen and R^{3a} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, where c is 1 to 6, d is 0 to 2, e is 0 to 3, f is 2 to 5, n is 2 to 4, and where $R^{3'}$ is independently hydrogen or C_{1-6} alkyl and $R^{3''}$ is -OR' or $-N(R^{3'})_2$); (vi) R^{3a} is H and R^{3b} is H, CH_3, CH_2CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl; or (viii) R^{3a} is CH_3, $-CH_2CH_3$, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl and R^{3b} is H, where $R^{3'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{3''}$ is –OR' or -$N(R^{3'})_2$);

(d) R^4 is hydrogen, C_{1-10} alkyl, C_{1-10} alkyl optionally substituted with a lower alkyl, alkoxy, di(lower alkyl)-amino, or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl,

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cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

(e) R^5 is H, a lower alkyl, CN, vinyl, O-(lower alkyl), hydroxyl lower alkyl, i.e., $-(CH_2)_pOH$, where p is 1 -6, including hydroxyl methyl (CH_2OH), CH_2F, N_3, CH_2CN, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, alkyne (optionally substituted), or halogen, including F, Cl, Br, or I, with the provisos that when X is OH, base is cytosine and R^6 is H, R^5 cannot be N_3 and when X is OH, R^6 is CH_3 or CH_2F and B is a purine base, R^5 cannot be H;

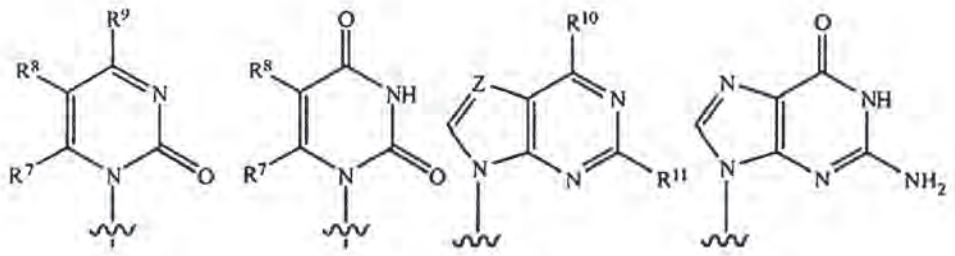
(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OMe, halogen, NH_2, or N_3;

(h) Y is OH, H, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, vinyl, N_3, CN, Cl, Br, F, I, NO_2, $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{2-4}$ alkynyl), $OC(O)O(C_{2-4}$ alkenyl), OC_{1-10} haloalkyl, O(aminoacyl), $O(C_{1-10}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-18}$ acyl)$_2$, wherein alkyl, alkynyl, alkenyl and vinyl are optionally substituted by N_3, CN, one to three halogen (Cl, Br, F, I), NO_2, $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{2-4}$ alkynyl), $C(O)O(C_{2-4}$ alkenyl), $O(C_{1-4}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-4}$ acyl)$_2$;

the base is a naturally occurring or modified purine or pyrimidine base represented by the following structures:

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a b c d

wherein

Z is N or CR^{12};

R^7, R^8,R^9, R^{10}, and $R^{11}$are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'_2, lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6, lower alkynyl of C_2-C_6 such as C≡CH, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is an optionally substituted alkyl , which includes, but is not limited to, an optionally substituted C_{1-20} alkyl, an optionally substituted C_{1-10} alkyl, an optionally substituted lower alkyl; an optionally substituted cycloalkyl; an optionally substituted alkynyl of C_2-C_6, an optionally substituted lower alkenyl of C_2-C_6, or optionally substituted acyl, which includes but is not limited to C(O) alkyl, C(O)(C_{1-20} alkyl), C(O)(C_{1-10} alkyl), or C(O)(lower alkyl) or alternatively, in the instance of NR'_2, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

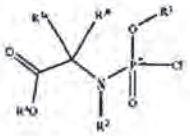
R^{12} is an H, halogen (including F, Cl, Br, I), OH, OR', SH, SR', NH_2, NHR', NR'_2, NO_2 lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6 , lower alkynyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', $CONR'_2$,

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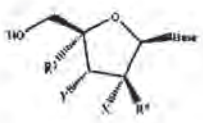
$CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that when base is represented by the structure c with R^{11} being hydrogen, R^{12} is not a: (i) $-C\equiv C-H$, (ii) $-C=CH_2$, or (iii) $-NO_2$;

said process comprising:

reacting a substituted phosphochloridate compound **4** with a nucleoside analog **5**



4



5

10. A process for preparing a compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, selected from among

5 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-alanyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester);

6 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

7 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

8 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-alanyl phosphate (((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester);

9 N^4-(*N*,*N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine;

10 2'-Deoxy-2'-fluoro-2'-C-methylcytidine 5'-(phenyl methoxy-alanyl phosphate (((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenyoxy-phosphorylamino}-propionic acid methyl ester);

11 2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(4-bromophenyl methoxy-valyl phosphate (2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

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12 2'-deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

13 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid ethyl ester;

14 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid benzyl ester;

15 {[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-acetic acid methyl ester;

16 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

17 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid methyl ester;

18 (S)-1-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphoryl}-pyrrolidine-2-carboxylic acid methyl ester;

19 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

20 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

21 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid methyl ester;

22 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

23 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

24 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid sec-butyl ester;

25 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

26 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid butyl ester;

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27 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid ethyl ester;

28 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

29 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

30 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

31 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid benzyl ester;

32 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

33 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid isopropyl ester;

34 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid butyl ester;

35 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

36 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

37 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

38 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid pentyl ester;

39 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

40 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

41 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

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42 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid butyl ester;

43 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid benzyl ester;

44 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid methyl ester;

45 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 4-fluoro-benzyl ester;

46 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

47 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 3-methyl-butyl ester;

48 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

49 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclohexyl ester;

50 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

51 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

52 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

53 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

54 (S)-2-{(4-Bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

55 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

56 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-bromo-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

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57 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid isopropyl ester;

58 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclohexyl ester;

59 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-butyric acid cyclohexyl ester;

60 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4 R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-butyric acid isopropyl ester;

61 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2-difluoro-ethyl ester;

62 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2,2-trifluoro-1-trifluoromethyl-ethyl ester;

63 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2-fluoro-1-fluoromethyl-ethyl ester;

64 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclopropyl methyl ester;

65 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclopentyl ester;

66 (S)-2-{[(2R,3R,4R,5R)-5-(6-Amino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

67 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-hydroxy-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

68 (S)-2-{(R)-[(2R,3R,4R,5R)-5-(2,6-Diamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

69 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclopentylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

70 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-azetidin-1-yl-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

71 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-diethylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

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72 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-propylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

73 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclobutylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

74 (S)-2-({(2R,3R,4R,5R)-5-[2-Amino-6-(4-methyl-piperazin-1-yl)-purin-9-yl]-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy}-phenoxy-phosphorylamino)-propionic acid methyl ester;

75 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(propylamino)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

76 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclobutylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

77 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclopentylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

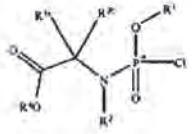
78 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(aziridin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

79 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(piperidin-1-yl)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate; and

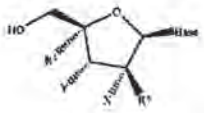
80 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(azetidin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate

said process comprising:

reacting a substituted phosphochloridate compound **4** with a nucleoside analog **5**



4

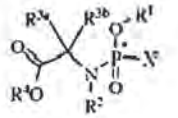


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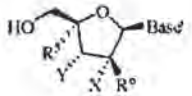
11. A product its stereoisomer, salt, hydrate, solvate or crystalline form thereof, prepared a process comprising:

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reacting a substituted phosphochloridate compound **4** with a nucleoside analog **5**



4



5

wherein

(a) R^1 is hydrogen, n-alkyl; branched alkyl; cycloalkyl; or aryl, which includes, but is not limited to, phenyl or naphthyl, where phenyl or naphthyl are optionally substituted with at least one of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} alkoxy, F, Cl, Br, I, nitro, cyano, C_{1-6} haloalkyl, $-N(R^{1'})_2$, C_{1-6} acylamino, $-NHSO_2C_{1-6}$ alkyl, $-SO_2N(R^{1'})_2$, $COR^{1''}$, and $-SO_2C_{1-6}$ alkyl; ($R^{1'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{1''}$ is $-OR'$ or $-N(R^{1'})_2$);

(b) R^2 is hydrogen, C_{1-10} alkyl, R^{3a} or R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, $C(O)CR^{3a}R^{3b}NHR^1$, where n is 2 to 4 and R^1, R^{3a}, and R^{3b};

(c) R^{3a} and R^{3b} are (i) independently selected from hydrogen, C_{1-10} alkyl, cycloalkyl, $-(CH_2)_c(NR^{3'})_2$, C_{1-6} hydroxyalkyl, $-CH_2SH$, $-(CH_2)_2S(O)_dMe$, $-(CH_2)_3NHC(=NH)NH_2$, (1H-indol-3-yl)methyl, (1H-imidazol-4-yl)methyl, $-(CH_2)_eCOR^{3''}$, aryl and aryl C_{1-3} alkyl, said aryl groups optionally substituted with a group selected from hydroxyl, C_{1-10} alkyl, C_{1-6} alkoxy, halogen, nitro and cyano; (ii) R^{3a} and R^{3b} both are C_{1-6} alkyl; (iii) R^{3a} and R^{3b} together are$(CH_2)_f$ so as to form a spiro ring; (iv) R^{3a} is hydrogen and R^{3b} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms (v) R^{3b} is hydrogen and R^{3a} and R^2 together are $(CH_2)_n$ so as to form a cyclic ring that includes the adjoining N and C atoms, where c is 1 to 6, d is 0 to 2, e is 0 to 3, f is 2 to 5, n is 2 to 4, and where $R^{3'}$ is independently hydrogen or C_{1-6} alkyl and $R^{3''}$ is $-OR'$ or $-N(R^{3'})_2$); (vi) R^{3a} is H and R^{3b} is H, CH_3, CH_2CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, -

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$CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl; or (viii) R^{3a} is CH_3, $-CH_2CH_3$, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, CH_2-indol-3-yl, $-CH_2CH_2SCH_3$, CH_2CO_2H, $CH_2C(O)NH_2$, CH_2CH_2COOH, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl and R^{3b} is H, where $R^{3'}$ is independently hydrogen or alkyl, which includes, but is not limited to, C_{1-20} alkyl, C_{1-10} alkyl, or C_{1-6} alkyl, $R^{3''}$ is –OR' or $-N(R^{3'})_2$);

(d) R^4 is hydrogen, C_{1-10} alkyl, C_{1-10} alkyl optionally substituted with a lower alkyl, alkoxy, di(lower alkyl)-amino, or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

(e) R^5 is H, a lower alkyl, CN, vinyl, O-(lower alkyl), hydroxyl lower alkyl, i.e., $-(CH_2)_pOH$, where p is 1 -6, including hydroxyl methyl (CH_2OH), CH_2F, N_3, CH_2CN, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, alkyne (optionally substituted), or halogen, including F, Cl, Br, or I, with the provisos that when X is OH, base is cytosine and R^6 is H, R^5 cannot be N_3 and when X is OH, R^6 is CH_3 or CH_2F and B is a purine base, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

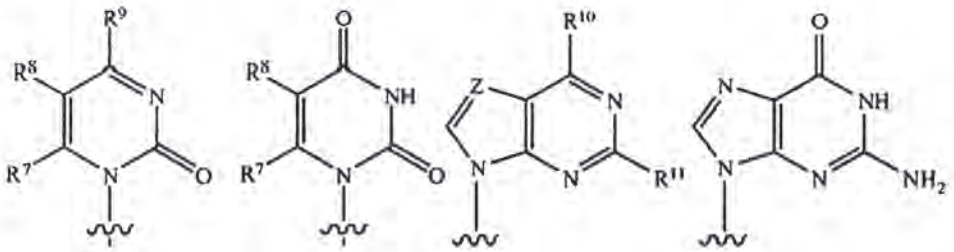
(g) X is H, OH, F, OMe, halogen, NH_2, or N_3;

(h) Y is OH, H, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, vinyl, N_3, CN, Cl, Br, F, I, NO_2, $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{1-4}$ alkyl), $OC(O)O(C_{2-4}$ alkynyl), $OC(O)O(C_{2-4}$ alkenyl), OC_{1-10} haloalkyl, O(aminoacyl), $O(C_{1-10}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-18}$ acyl)$_2$, wherein alkyl, alkynyl, alkenyl and vinyl are optionally substituted by N_3, CN,

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one to three halogen (Cl, Br, F, I), NO_2, $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{1-4}$ alkyl), $C(O)O(C_{2-4}$ alkynyl), $C(O)O(C_{2-4}$ alkenyl), $O(C_{1-4}$ acyl), $O(C_{1-4}$ alkyl), $O(C_{2-4}$ alkenyl), $S(C_{1-4}$ acyl), $S(C_{1-4}$ alkyl), $S(C_{2-4}$ alkynyl), $S(C_{2-4}$ alkenyl), $SO(C_{1-4}$ acyl), $SO(C_{1-4}$ alkyl), $SO(C_{2-4}$ alkynyl), $SO(C_{2-4}$ alkenyl), $SO_2(C_{1-4}$ acyl), $SO_2(C_{1-4}$ alkyl), $SO_2(C_{2-4}$ alkynyl), $SO_2(C_{2-4}$ alkenyl), $OS(O)_2(C_{1-4}$ acyl), $OS(O)_2(C_{1-4}$ alkyl), $OS(O)_2(C_{2-4}$ alkenyl), NH_2, $NH(C_{1-4}$ alkyl), $NH(C_{2-4}$ alkenyl), $NH(C_{2-4}$ alkynyl), $NH(C_{1-4}$ acyl), $N(C_{1-4}$ alkyl)$_2$, $N(C_{1-4}$ acyl)$_2$;

the base is a naturally occurring or modified purine or pyrimidine base represented by the following structures:



a b c d

wherein

Z is N or CR^{12};

R^7, R^8,R^9, R^{10}, and $R^{11}$are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'$_2$, lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6, lower alkynyl of C_2-C_6 such as C≡CH, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is an optionally substituted alkyl , which includes, but is not limited to, an optionally substituted C_{1-20} alkyl, an optionally substituted C_{1-10} alkyl, an optionally substituted lower alkyl; an optionally substituted cycloalkyl; an optionally substituted

alkynyl of C_2-C_6, an optionally substituted lower alkenyl of C_2-C_6, or optionally substituted acyl, which includes but is not limited to C(O) alkyl, C(O)(C_{1-20} alkyl), C(O)(C_{1-10} alkyl), or C(O)(lower alkyl) or alternatively, in the instance of NR'_2, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

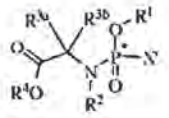
R^{12} is an H, halogen (including F, Cl, Br, I), OH, OR', SH, SR', NH_2, NHR', NR'_2, NO_2 lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6 , lower alkynyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkynyl of C_2-C_6, lower alkoxy of C_1-C_6, halogenated (F, Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that when base is represented by the structure c with R^{11} being hydrogen, R^{12} is not a: (i) $-C\equiv C-H$, (ii) $-C=CH_2$, or (iii) $-NO_2$

and

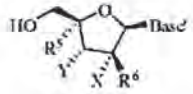
wherein X' is a leaving group, such as, Cl.

12. A product its stereoisomer, salt, hydrate, solvate or crystalline form thereof, prepared a process comprising:

reacting a substituted phosphochloridate compound **4** with a nucleoside analog **5**



4



5

wherein the product comprises a compound, its stereoisomer, salt, hydrate, solvate, or crystalline form thereof, selected from among

5 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-alanyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester);

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6 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

7 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

8 2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-alanyl phosphate (((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester);

9 N^4-(*N*,*N*-dimethylformamidinyl)-2'-deoxy-2'-fluoro-2'-*C*-methylcytidine;

10 2'-Deoxy-2'-fluoro-2'-C-methylcytidine 5'-(phenyl methoxy-alanyl phosphate (((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenyoxy-phosphorylamino}-propionic acid methyl ester);

11 2'-Deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(4-bromophenyl methoxy-valyl phosphate (2'-Deoxy-2'-fluoro-2'-*C*-methyluridine 5'-(4-bromophenyl methoxy-valyl phosphate ((S)-2-{(4-bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-3-methyl-butyric acid methyl ester);

12 2'-deoxy-2'-fluoro-2'-*C*-methylcytidine 5'-(phenyl methoxy-valyl phosphate ((S)-2-{[(2R,3R,4R,5R)-5-(2-oxo-3-amino-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-3-methyl-butyric acid methyl ester;

13 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid ethyl ester;

14 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid benzyl ester;

15 {[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-acetic acid methyl ester;

16 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

17 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(naphthalen-1-yloxy)-phosphorylamino]-propionic acid methyl ester;

18 (S)-1-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphoryl}-pyrrolidine-2-carboxylic acid methyl ester;

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19 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

20 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

21 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid methyl ester;

22 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

23 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid methyl ester;

24 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid sec-butyl ester;

25 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

26 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid butyl ester;

27 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid ethyl ester;

28 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

29 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

30 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid isopropyl ester;

31 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid benzyl ester;

32 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

33 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid isopropyl ester;

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34 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid butyl ester;

35 (S)-2-{(3,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

36 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

37 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-methoxy-phenoxy)-phosphorylamino]-propionic acid benzyl ester;

38 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid pentyl ester;

39 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

40 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

41 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

42 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid butyl ester;

43 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-p-tolyloxy-phosphorylamino}-propionic acid benzyl ester;

44 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid methyl ester;

45 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 4-fluoro-benzyl ester;

46 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

47 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 3-methyl-butyl ester;

48 (S)-2-{(2,4-Dichloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid ethyl ester;

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49 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclohexyl ester;

50 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid butyl ester;

51 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid isopropyl ester;

52 (R)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid benzyl ester;

53 (S)-2-{(2-Chloro-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid butyl ester;

54 (S)-2-{(4-Bromo-phenoxy)-[(2R,3R,4R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-propionic acid isopropyl ester;

55 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

56 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-bromo-phenoxy)-phosphorylamino]-propionic acid cyclohexyl ester;

57 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid isopropyl ester;

58 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclohexyl ester;

59 (S)-2-[[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-(4-fluoro-phenoxy)-phosphorylamino]-butyric acid cyclohexyl ester;

60 (S)-2-{(4-Chloro-phenoxy)-[(2R,3R,4 R,5R)-5-(2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phosphorylamino}-butyric acid isopropyl ester;

61 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2-difluoro-ethyl ester;

62 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2,2,2-trifluoro-1-trifluoromethyl-ethyl ester;

63 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid 2-fluoro-1-fluoromethyl-ethyl ester;

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64 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo- 3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid cyclopropyl methyl ester;

65 (S)-2-{[(2R,3R,4R,5R)-5-(2,4-Dioxo-3,4-dihydro-2H-pyrimidin-1-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-butyric acid cyclopentyl ester;

66 (S)-2-{[(2R,3R,4R,5R)-5-(6-Amino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

67 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-hydroxy-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

68 (S)-2-{(R)-[(2R,3R,4R,5R)-5-(2,6-Diamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

69 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclopentylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

70 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-azetidin-1-yl-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

71 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-diethylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

72 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-propylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

73 (S)-2-{[(2R,3R,4R,5R)-5-(2-Amino-6-cyclobutylamino-purin-9-yl)-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy]-phenoxy-phosphorylamino}-propionic acid methyl ester;

74 (S)-2-({(2R,3R,4R,5R)-5-[2-Amino-6-(4-methyl-piperazin-1-yl)-purin-9-yl]-4-fluoro-3-hydroxy-4-methyl-tetrahydro-furan-2-ylmethoxy}-phenoxy-phosphorylamino)-propionic acid methyl ester;

75 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(propylamino)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

76 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclobutylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

77 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(cyclopentylamino)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

78 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(aziridin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate;

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79 (2S)-methyl 2-((((2R,3R,4R,5R)-4-fluoro-3-hydroxy-4-methyl-5-(6-(piperidin-1-yl)-9H-purin-9-yl)tetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate; and

80 (2S)-methyl 2-((((2R,3R,4R,5R)-5-(6-(azetidin-1-yl)-9H-purin-9-yl)-4-fluoro-3-hydroxy-4-methyltetrahydrofuran-2-yl)methoxy)(phenoxy)phosphorylamino)propanoate

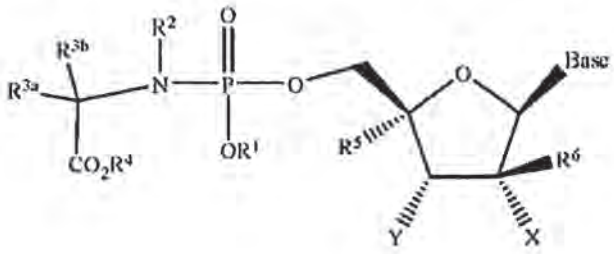
wherein Base' is as recited in each of compounds 5-74; and

wherein X' is a leaving group, such as, Cl.

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ABSTRACT

Disclosed herein are phosphoramidate prodrugs of nucleoside derivatives for the treatment of viral infections in mammals, which is a compound, its stereoisomer, salt (acid or basic addition salt), hydrate, solvate, or crystalline form thereof, represented by the following structure:



I

Also disclosed are methods of treatment, uses, and processes for preparing each of which utilize the compound represented by formula I.

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03/21/2008

PTO/SB/06 (12-04)
Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD
Substitute for Form PTO-875

Application or Docket Number
12/053,015

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	75		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	255		N/A	
EXAMINATION FEE * (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	105		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	12	*	X 25=		OR	X 50=	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	12	* 9	X 105=	945		X 200=	
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR			1,300			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))			N/A			N/A	
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	2,680		TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT A	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X =		OR	X =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X =		OR	X =	
Application Size Fee (37 CFR 1.16(s))									
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					N/A		OR	N/A	
					TOTAL ADD'T FEE		OR	TOTAL ADD'T FEE	

AMENDMENT B	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X =		OR	X =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X =		OR	X =	
Application Size Fee (37 CFR 1.16(s))									
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					N/A		OR	N/A	
					TOTAL ADD'T FEE		OR	TOTAL ADD'T FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

S/N 12/053,015 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Michael Joseph Sofia et al	Examiner:	Unassigned
Serial No.:	12/053,015	Group Art Unit:	Unassigned
Filed:	March 21, 2008	Docket No.:	60137.0034USU1
Title:	NUCLEOSIDE PHOSPHARAMIDATE PRODRUGS		

LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Applicants submit herewith the executed Declaration in the above-identified application. Please charge Deposit Account No. 13-2725 for the $130.00 late Declaration surcharge.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Date: April 1, 2008

Reg. No. 55,868

23552
PATENT TRADEMARK OFFICE

Attorney Docket No. 60137.0034USU1

MERCHANT & GOULD P.C.

United States Patent Application

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: NUCLEOSIDE PHOSPHARAMIDATE PRODRUGS

The specification of which
a. ☐ is attached hereto
b. ☒ was filed on MARCH 21, 2008 as application serial no. 12/053,015 and was amended on
(if applicable) (in the case of a PCT-filed application) described and claimed in international no. filed
and as amended on (if any), which I have reviewed and for which I solicit a United States patent.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

a. ☒ no such applications have been filed.
b. ☐ such applications have been filed as follows:

FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)
ALL FOREIGN APPLICATION(S), IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

I hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

U.S. PROVISIONAL APPLICATION NUMBER	DATE OF FILING (Day, Month, Year)
60/909,315	30 MARCH 2007
60/982,309	24 OCTOBER 2007

I acknowledge the duty to disclose information that is material to patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (reprinted below):

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim;

or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied on by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) Each inventor named in the application:

(2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

(e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby appoint the attorney(s) and/or patent agent(s) associated with the following customer number to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

23552

PATENT TRADEMARK OFFICE

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/ organization who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Merchant & Gould P.C. to the contrary.

I understand that the execution of this document, and the grant of a power of attorney, does not in itself establish an attorney-client relationship between the undersigned and the law firm Merchant & Gould P.C., or any of its attorneys.

Please direct all correspondence in this case to customer number 23552.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2	Full Name Of Inventor	Family Name SOFIA	First Given Name MICHAEL	Second Given Name JOSEPH
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Signature of Inventor 201: Michael J. Sofia				Date: 3/26/08

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0	Residence & Citizenship	City BETHANY	State or Foreign Country CT	Country of Citizenship US
4	Mailing Address	Address 52 VIRGINIA RAIL DRIVE	City BETHANY	State & Zip Code/Country 06524
Signature of Inventor 204:				Date: 3/31/08

Electronic Patent Application Fee Transmittal

Application Number:	12053015
Filing Date:	
Title of Invention:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
First Named Inventor/Applicant Name:	MICHAEL JOSEPH SOFIA
Filer:	Daniel R. Evans/Paula Hise
Attorney Docket Number:	60137.0034USU1
Filed as Large Entity	

Utility Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Late filing fee for oath or declaration	1051	1	130	130
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	130

Electronic Acknowledgement Receipt	
EFS ID:	3088215
Application Number:	12053015
International Application Number:	
Confirmation Number:	3454
Title of Invention:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
First Named Inventor/Applicant Name:	MICHAEL JOSEPH SOFIA
Customer Number:	23552
Filer:	Daniel R. Evans/Paula Hise
Filer Authorized By:	Daniel R. Evans
Attorney Docket Number:	60137.0034USU1
Receipt Date:	01-APR-2008
Filing Date:	
Time Stamp:	18:04:00
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$130
RAM confirmation Number	2898
Deposit Account	132725
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Oath or Declaration filed	601370034USU1Letter.pdf	78484 e9615f899b6bc980f75a3303a38aea838 7b5e2e26	no	1
Warnings:					
Information:					
2	Oath or Declaration filed	601370034USU1Decl.pdf	580188 02d0109887053498116f734b36aac97 028c6012	no	4
Warnings:					
Information:					
3	Fee Worksheet (PTO-06)	fee-info.pdf	8150 2bcd22569ee6c6995aa97f5c8e58dd1 9dbd11b	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	666822		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Electronic Patent Application Fee Transmittal

Application Number:	12053015
Filing Date:	
05/01/2008 MTEKLEMI 00000019 132725 12053015 01 FC:2051 65.00 DA **Title of Invention:** Adjustment date: 05/01/2008 MTEKLEMI 04/02/2008 INTEFSW 00002898 132725 12053015 01 FC:1051 130.00 CR	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
First Named Inventor/Applicant Name:	MICHAEL JOSEPH SOFIA
Filer:	Daniel R. Evans/Paula Hise
Attorney Docket Number:	60137.0034USU1
Filed as Large Entity	

Utility Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Late filing fee for oath or declaration	1051	1	130	130
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

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United States Patent and Trademark Office
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www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/053,015	03/21/2008	MICHAEL JOSEPH SOFIA	60137.0034USU1

CONFIRMATION NO. 3454

23552
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

FORMALITIES LETTER

OC000000029708328

Date Mailed: 05/02/2008

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.
  A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
  Note: If a petition under 37 CFR 1.47 is being filed, an oath or declaration in compliance with 37 CFR 1.63 signed by all available joint inventors, or if no inventor is available by a party with sufficient proprietary interest, is required.
- This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CFR 1.821(c) Applicant must provide an initial paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application** and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).
- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

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https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

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/hzewdic/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
12/053,015	03/21/2008	1614	2745	60137.0034USU1	12	12

CONFIRMATION NO. 3454

23552
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

FILING RECEIPT

OC000000029708327

Date Mailed: 05/02/2008

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

MICHAEL JOSEPH SOFIA, Doylestown, PA;
JINFA DU, New Hope, PA;
PEIYUAN WANG, Glen Rock, NJ;
DHANAPALAN NAGARATHNAM, Bethany, CT;

Assignment For Published Patent Application

PHARMASSET, INC., PRINCETON, NJ

Power of Attorney: The patent practitioners associated with Customer Number 23552

Domestic Priority data as claimed by applicant

This appln claims benefit of 60/909,315 03/30/2007
and claims benefit of 60/982,309 10/24/2007

Foreign Applications

If Required, Foreign Filing License Granted: 05/01/2008

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/053,015**

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****

Gilead Exhibit 2015
PGR2023-00046 - Page 00763

Title

NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS

Preliminary Class

514

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
12/053,015	03/21/2008	1614	2745	60137.0034USU1	12	12

CONFIRMATION NO. 3454

23552
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

FILING RECEIPT

OC000000029730047

Date Mailed: 05/02/2008

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

MICHAEL JOSEPH SOFIA, Doylestown, PA;
JINFA DU, New Hope, PA;
PEIYUAN WANG, Glen Rock, NJ;
DHANAPALAN NAGARATHNAM, Bethany, CT;

Assignment For Published Patent Application

PHARMASSET, INC., PRINCETON, NJ

Power of Attorney: The patent practitioners associated with Customer Number 23552

Domestic Priority data as claimed by applicant

This appln claims benefit of 60/909,315 03/30/2007
and claims benefit of 60/982,309 10/24/2007

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If Required, Foreign Filing License Granted: 05/01/2008

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/053,015**

Projected Publication Date: To Be Determined - pending completion of Sequence Disclosures

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****

Gilead Exhibit 2015
PGR2023-00046 - Page 00766

Title

NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS

Preliminary Class

514

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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PGR2023-00046 - Page 00767

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

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PGR2023-00046 - Page 00768

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/053,015	03/21/2008	MICHAEL JOSEPH SOFIA	60137.0034USU1

CONFIRMATION NO. 3454

23552
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

FORMALITIES LETTER

OC000000029730046

Date Mailed: 05/02/2008

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Filing Date Granted

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to comply with the sequence rules, 37 CFR §§ 1.821-1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR § 1.821(g). Extension of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR § 1.136. In no case may an applicant extend the period for response beyond the six-month statutory period. Direct the response to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

- This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CFR 1.821(c) Applicant must provide an initial paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application** and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).
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PGR2023-00046 - Page 00769

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Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

/hzewdie/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Michael Joseph Sofia et al	Examiner:	Unassigned
Serial No.:	12/053,015	Group Art Unit:	1614
Filed:	March 21, 2008	Docket No.:	60137.0034USU1
Title:	NUCLEOSIDE PHOSPHARAMIDATE PRODRUGS		

RESPONSE TO NOTICE TO COMPLY AND CERTIFICATE REGARDING SEQUENCE LISTING

MS Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

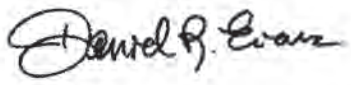
Dear Sir:

This paper is being filed in response to the communication mailed May 02, 2008. In response to the Notice to Comply and in accordance with the requirements of 37 C.F.R. § 1.821 - § 1.825, Applicants hereby submit a substitute sequence listing in computer readable form. In addition, a paper copy of the substitute sequence listing is provided. Please amend the specification by inserting the substitute sequence listing after the abstract. Applicants state that the paper copy of the substitute sequence listing in the application and the computer readable form submitted herewith are the same. Applicants submit that the substitute sequence listing does not include any new matter.

Gilead Exhibit 2015
PGR2023-00046 - Page 00771

Accordingly, it is believed the application complies with the sequence listing requirements.

Respectfully submitted,
MERCHANT & GOULD, PC



By: Daniel R. Evans
Reg. No. 55,868

Merchant & Gould, PC
191 Peachtree Street, N.E.
Suite 4300
Atlanta, GA 30303-1740
Telephone: 404.954-5100

SEQUENCE LISTING

<110> Sofia, Michael
Du, Jinfa
Wang, Peiyuan
Nagarathnam, Dhanapalan

<120> NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS

<130> 60137.0034USU1

<140> 12/053015
<141> 2008-03-21

<150> 60-909315
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Gilead Exhibit 2015
PGR2023-00046 - Page 00773

Electronic Acknowledgement Receipt

EFS ID:	3533239
Application Number:	12053015
International Application Number:	
Confirmation Number:	3454
Title of Invention:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
First Named Inventor/Applicant Name:	MICHAEL JOSEPH SOFIA
Customer Number:	23552
Filer:	Daniel R. Evans/Paula Hise
Filer Authorized By:	Daniel R. Evans
Attorney Docket Number:	60137.0034USU1
Receipt Date:	27-JUN-2008
Filing Date:	21-MAR-2008
Time Stamp:	15:51:13
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

DocCode – SEQ.TXT

SCORE Placeholder Sheet for IFW Content

Application Number: 12053015 Document Date: 06/27/2008

The presence of this form in the IFW record indicates that the following document type was received in electronic format on the date identified above. This content is stored in the SCORE database.

- Sequence Listing

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Form Revision Date: February 8, 2006

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Sequence Listing was accepted.
If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).
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Validated By CRFValidator v 1.0.3

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Nagarathnam, Dhanapalan

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
12/053,015	03/21/2008	1614	2745	60137.0034USU1	12	12

CONFIRMATION NO. 3454

23552
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

UPDATED FILING RECEIPT

OC000000031601196

Date Mailed: 08/19/2008

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

MICHAEL JOSEPH SOFIA, Doylestown, PA;
JINFA DU, New Hope, PA;
PEIYUAN WANG, Glen Rock, NJ;
DHANAPALAN NAGARATHNAM, Bethany, CT;

Assignment For Published Patent Application

PHARMASSET, INC., PRINCETON, NJ

Power of Attorney: The patent practitioners associated with Customer Number 23552

Domestic Priority data as claimed by applicant

This appln claims benefit of 60/909,315 03/30/2007
and claims benefit of 60/982,309 10/24/2007

Foreign Applications

If Required, Foreign Filing License Granted: 05/01/2008

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/053,015**

Projected Publication Date: 11/27/2008

Non-Publication Request: No

Early Publication Request: No
** **SMALL ENTITY** **

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PGR2023-00046 - Page 00781

Title

NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS

Preliminary Class

514

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Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

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For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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PGR2023-00046 - Page 00782

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Alexandria, Virginia 22313-1450
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/053,015	03/21/2008	MICHAEL JOSEPH SOFIA	60137.0034USU1

CONFIRMATION NO. 3454

NEW OR REVISED PPD NOTICE

23552
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903



NOTICE OF NEW OR REVISED PROJECTED PUBLICATION DATE

The above-identified application has a new or revised projected publication date. The current projected publication date for this application is 12/31/2009. If this is a new projected publication date (there was no previous projected publication date), the application has been cleared by Licensing & Review or a secrecy order has been rescinded and the application is now in the publication queue.

If this is a revised projected publication date (one that is different from a previously communicated projected publication date), the publication date has been revised due to processing delays in the USPTO or the abandonment and subsequent revival of an application. The application is anticipated to be published on a date that is more than six weeks different from the originally-projected publication date.

More detailed publication information is available through the private side of Patent Application Information Retrieval (PAIR) System. The direct link to access PAIR is currently http://pair.uspto.gov. Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Questions relating to this Notice should be directed to the Office of Data Management, Application Assistance Unit at (571) 272-4000, or (571) 272-4200, or 1-888-786-0101.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Sofia, et al.	Examiner:	Lewis, Patrick T
Serial No.:	12/053,015	Group Art Unit:	1623
Filed:	March 21, 2008	Docket No.:	60137.0034USU1
Title:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS		

INFORMATION DISCLOSURE STATEMENT (37 C.F.R. § 1.97(b))

Director for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted before the mailing date of a first Office Action on-the-merits. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

Applicants have cited US 2007/0087960, now U.S. Patent no. 7,608,600, on the attached PTO-1449. This reference is related to the following references: US 2007/0027065; US 2007/0027104; US 2007/0027066 (US 7384924); US 2007/0032449; US 2007/0032407 (US 7192936); US 2007/0037735; US 2007/0042939; US 2007/0042991 (US 7365057); US 2007/0042940 (US 7547704); US 2007/0042990; US 2007/0060503; US 2007/0060498; US 2007/0060504; US 2007/0060541; US 2007/0060505; US 2007/0275883 (US 7582618); and US 12/131,868 (not yet published).

Applicants have also cited U.S. Patent no. 7,105,499, which is related to WO 02/057425; US 6,777,395; US 7,125,855; and US 7,202,224.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

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PGR2023-00046 - Page 00785

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

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Respectfully submitted,
MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

/Daniel R. Evans/
Daniel R. Evans. Ph.D.
Reg. No. 55,868

Date Submitted: January 14, 2010

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia et al.	
	Filing Date: March 21, 2008	Group Art Unit: 1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6348587	02-19-2002	Schinazi			
	6455513	09-24-2002	McGuigan			
	6911424	06-28-2005	Schinazi			
	7018989	03-28-2006	McGuigan			
	7105499	09-12-2006	Carroll			
	7307065	12-11-2007	Schinazi			
	7429572	09-30-2008	Clark			
	20050009737	01-13-2005	Clark			
	20060142238	06-29-2006	McGuigan			
	20070042988	02-22-2007	Klumpp			
	20070087960	04-19-2007	Storer			
	20070197463	08-23-2007	Chun			
	20070265222	11-15-2007	MacCoss			
	20070275912	11-29-2007	Bhat			
			FOREIGN PATENT DOCUMENTS			
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES / NO
	WO2005012327	02-10-2005	PCT			
	WO2006063149	06-15-2006	PCT			
	WO2006121820	11-16-2006	PCT			
	WO2007095269	08-23-2007	PCT			
	WO2008062206	05-29-2008	PCT			
	WO2008079206	07-03-2008	PCT			

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EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449)
4208038v1

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PGR2023-00046 - Page 00787

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia et al.	
	Filing Date: March 21, 2008	Group Art Unit: 1623

	WO2008142055	11-27-2008	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Aquaro, et al. Antimicrobial Agents and Chemotherapy, 2000, 1, 173-177
		Chapman, et al. Nucleotides, Nucleosides and Nucleic Acids, 2001, 20(4-7), 1085-1090
		Chapman, et al. Nuecleotides, Nucleosides and Nucleic Acids, 2001, 20(4-7), 621-628
		Eisenberg, et al. Nucleosides, Nucleotides & Nucleic Acids, 2001, 20(4-7), 1091-1098
		Lee, et al Antimicrobial Agents and Chemotherapy, 2005, 49(5), 1898-1906
		McGuigan, et al. Antiviral Chemistry and Chemotherapy 1998, 9, 473-479
		Murakami et al. Antimicrobial Agents and Chemotherapy (Feb. 2008), 52 (2), 458-464
		Murakami, et al. Antiviral Chemistry & Chemotherapy, 2007, 51(2), 503-509
		Ray, et al. Antimicrobial Agents and Chemotherapy, 2008, 52(2), 648-654
		Stuyver, L.J. et al. Antiviral Chemistry & Chemotherapy, 2004, 48(2), 651-654

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EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

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Electronic Acknowledgement Receipt

EFS ID:	6811854
Application Number:	12053015
International Application Number:	
Confirmation Number:	3454
Title of Invention:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
First Named Inventor/Applicant Name:	MICHAEL JOSEPH SOFIA
Customer Number:	23552
Filer:	Daniel R. Evans/AMY ALBA
Filer Authorized By:	Daniel R. Evans
Attorney Docket Number:	60137.0034USU1
Receipt Date:	14-JAN-2010
Filing Date:	21-MAR-2008
Time Stamp:	15:15:44
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/053,015	03/21/2008	MICHAEL JOSEPH SOFIA	60137.0034USU1

CONFIRMATION NO. 3454

23552
MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

PUBLICATION NOTICE

OC000000039785500

Title:NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS

Publication No.US-2010-0016251-A1
Publication Date:01/21/2010

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

Gilead Exhibit 2015
PGR2023-00046 - Page 00793

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Sofia, et al.	Examiner:	Lewis, Patrick T
Serial No.:	12/053,015	Group Art Unit:	1623
Filed:	March 21, 2008	Docket No.:	60137.0034USU1
Title:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS		

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

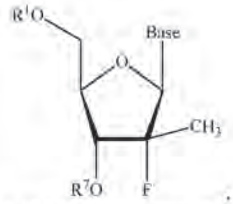
This statement should be considered because it is submitted before the mailing date of a first Office Action. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

Applicants request that the Examiner consider the pending claims of the present application in view of the pending or issued claims of the following related patents and patent applications, the subject matter of which is summarized below. Applicants also request that the Examiner consider the previously issued Office Actions for these patents and patent applications. Copies of the issued or pending claims of these patents and patent applications and their respective office actions to date are attached to this document. Furthermore, each of these items are listed on the attached modified PTO-1449 form. Applicants respectfully request that the Examiner acknowledge consideration of this information and provide an indication of the same by returning the initialed, signed, and dated modified PTO-1449 form with the first Office Action.

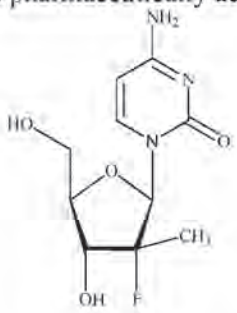
(1) U.S. Patent No. 7,429,572 ("the '572 patent") issued on September 30, 2008, which issued from U.S. Application No. 10/828,753, filed April 21, 2004 and published as US 2005/0009737 on January 13, 2005.

Claim 1 of the '572 patent is directed to a compound or its pharmaceutically acceptable salt having the following structure:

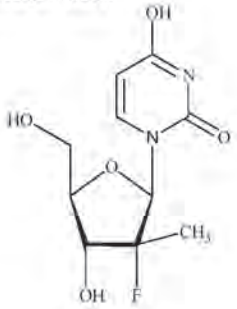
Gilead Exhibit 2015
PGR2023-00046 - Page 00794



Claims 6 and 15 of the '572 patent are directed to the respective compounds or its pharmaceutically acceptable salt:



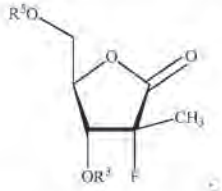
Claim 6



Claim 14

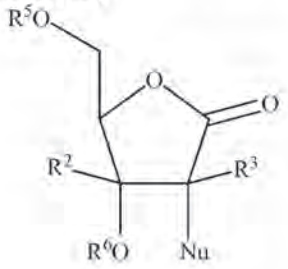
(2) U.S. Patent No. 7,601,820 ("the '820 patent") issued on October 13, 2009 from U.S. Patent Application No. 11/353,597 ("the '597 application"), filed February 13, 2006 and published as US 2006/0199783 on September 7, 2006.

Claim 1 of the '820 patent is directed to a compound of the following formula:



(3) U.S. Application No. 11/225,425 ("the '425 application"), filed September 13, 2005, published as US 2006/0122146 on June 8, 2006.

Claim 37 of the '425 application is directed to a compound of the following general formula, 49B,



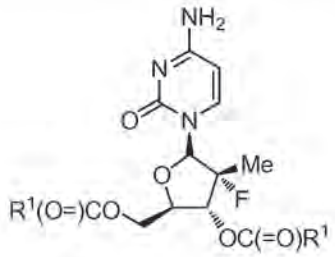
49B

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PGR2023-00046 - Page 00795

The remaining independent claims of the '425 application, claims 84 and 85, are presently withdrawn from consideration. As noted above, a copy of presently pending claims of the '425 application is attached herewith.

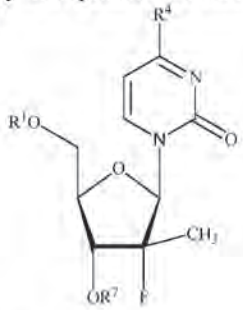
(4) U.S. Application No. 11/635,898 ("the '898 application"), filed December 8, 2006, published as US 2007/0197463 on August 23, 2007.

Claim 1 of the '898 application is directed to the following compound and acid addition salts thereof, while claim 16 is directed to a process for preparing the same.



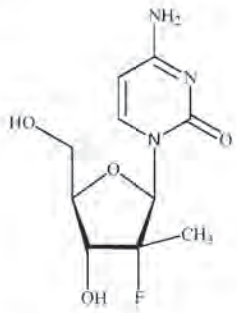
(5) U.S. Application No. 11/854,218 ("the '218 application"), filed September 12, 2007, published as US 2008/0070861 on March 20, 2008;

Claim 130 of the '218 application is directed to a method for the treatment of hepatitis C infection, which comprises administering to a mammal in need thereof an anti-virally effective amount of a compound (β-D or β-L) or its pharmaceutically acceptable salt having the following structure.

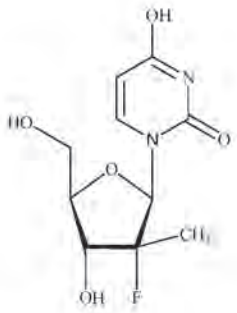


Claims 135 and 136 of the '218 application are directed to a method for the treatment of hepatitis C infection, which comprises administering to a mammal in need thereof an anti-virally effective amount of a compound (β-D) or its pharmaceutically acceptable salt having the following respective structures.

Gilead Exhibit 2015
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Claim 135

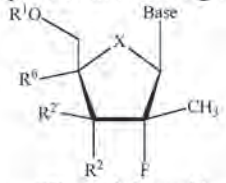


Claim 136

Claims 137, 142, and 143 are also method of treatment claims. As noted above, a copy of the presently pending claims are attached herewith.

(6) U.S. Application No. 12/142,536 ("the '536 application"), filed June 19, 2008, published as US 2009/0004135 on January 1, 2009;

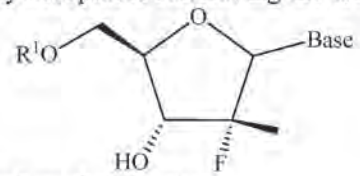
Claim 130 of the '536 application is directed to a compound (β-d or β-l) or its pharmaceutically acceptable salt having the following structure:



where the base is a purine base. The '536 application contains other independent claims, as seen by a copy of the pending claims attached herewith.

(7) U.S. Application No. 12/142,554 ("the '554 application"), filed June 19, 2008, published as US2008/0253995 on October 16, 2008.

Claim 201 of the '554 application is directed to a compound (β-d or β-l) or its pharmaceutically acceptable salt having the following structure:

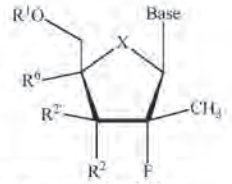


where the base is a pyrrolopyrimidine base.

(8) U.S. Application No. 12/240,342 ("the '342 application"), filed on September 29, 2008, published as 2009/0036666 on February 5, 2009.

Claim 130 of the '342 application is directed to a compound

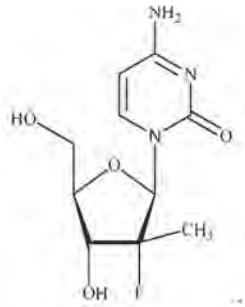
Gilead Exhibit 2015
PGR2023-00046 - Page 00797



where base is a purine or a pyrimidine.

(9) U.S. Patent Application No. 12/553,483 ("the '483 application"), filed September 9, 2009, which is a continuation of U.S Application No. the '597 application (No. 1 above), published as US 2010/0048917 on February 25, 2010.

Claim 20 of the '483 application is directed to a process for preparing the following compound:



Applicants also ask that the Examiner consider the claims of U.S. Patent Application Nos. 12/479,075; 12/645,710; 12/645,765; and 12/645,821. As these applications are not yet open to the public (37 CFR 1.11), Applicants have not submitted the claims herewith.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Please charge any required fees or credit any overpayment to Deposit Account No. 13-2725.

23552
PATENT TRADEMARK OFFICE

Date: March 18, 2010

Respectfully submitted,
MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300
/Daniel R. Evans/

Daniel R. Evans. Ph.D.
Reg. No. 55,868

Gilead Exhibit 2015
PGR2023-00046 - Page 00798

Date Submitted: March 18, 2010

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia et al.	
	Filing Date: March 21, 2008	Group Art Unit: 1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	7429572	09-30-2008	Clark			
	7601820	10-13-2009	Wang			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		U.S. application no. 10/828,753 Non-Final Rejection mailed 03-30-2007
		U.S. application no. 10/828,753 Final Rejection mailed 02-26-2008
		U.S. application no. 11/225,425 Non-Final Rejection mailed 11-13-2008
		U.S. application no. 11/225,425 Non-Final Rejection mailed 07-07-2009
		U.S. application no. 11/225,425 pending claims filed 10-02-2009
		U.S. application no. 11/225,425 Final Rejection mailed 02-18-2010
		U.S. application no. 11/353,597 Non-Final Rejection mailed 10-02-2007
		U.S. application no. 11/353,597 Non-Final Rejection mailed 07-17-2008
		U.S. application no. 11/353,597 Final Rejection mailed 12-02-2008
		U.S. application no. 11/635,898 Non-Final Rejection mailed 07-28-2009
		U.S. application no. 11/635,898 pending claims filed 12-24-2009
		U.S. application no. 11/854,218 pending claims filed 09-12-2007
		U.S. application no. 11/854,218 Non-Final Rejection mailed 10-01-2009
		U.S. application no. 12/142,536 pending claims filed 06-19-2008
		U.S. application no. 12/142,536 Non-Final Rejection mailed 10-02-2009
		U.S. application no. 12/142,554 Non-Final Rejection mailed 10-01-2009

23552
PATENT TRADEMARK OFFICE

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449)

4343031v1

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia et al.	
	Filing Date: March 21, 2008	Group Art Unit: 1623

		U.S. application no. 12/142,554 pending claims filed 12-17-2009
		U.S. application no. 12/240,342 pending claims filed 09-29-2008
		U.S. application no. 12/240,342 Non-Final Rejection mailed 10-01-2009
		U.S. application no. 12/479,075 filed 06-05-2009
		U.S. application no. 12/553,483 Non-Final Rejection mailed 12-17-2009
		U.S. application no. 12/553,483 pending claims filed 02-22-2010
		U.S. application no. 12/645,710 filed 12-23-2009
		U.S. application no. 12/645,765 filed 12-23-2009
		U.S. application no. 12/645,821 filed 12-23-2009

23552
PATENT TRADEMARK OFFICE

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

Electronic Acknowledgement Receipt

EFS ID:	7238614
Application Number:	12053015
International Application Number:	
Confirmation Number:	3454
Title of Invention:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
First Named Inventor/Applicant Name:	MICHAEL JOSEPH SOFIA
Customer Number:	23552
Filer:	Daniel R. Evans/AMY ALBA
Filer Authorized By:	Daniel R. Evans
Attorney Docket Number:	60137.0034USU1
Receipt Date:	18-MAR-2010
Filing Date:	21-MAR-2008
Time Stamp:	15:53:42
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed (SB/08)	12053015_IDS_PTO1449_RelatedCase_60137_0034usu1.pdf	141738 f8e759c4a69081f0d8822d1654beaee0d1d87c	no	7

Warnings:	
Information:	

This is not an USPTO supplied IDS fillable form					
2	NPL Documents	11225425_PendingClaimsfiled_100209.pdf	180284	no	5
Warnings:					
Information:					
3	NPL Documents	11635898_PendingClaimsfiled_122409.pdf	118538	no	4
Warnings:					
Information:					
4	NPL Documents	11854218_PendingClaimsfiled_091207.pdf	124037	no	6
Warnings:					
Information:					
5	NPL Documents	12142536_PendingClaimsfiled_061908.pdf	1966755	no	37
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6	NPL Documents	12142554_PendingClaimsfiled_121709.pdf	98470	no	3
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7	NPL Documents	12240342_PendingClaimsfiled_092908.pdf	129605	no	3
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Information:					
8	NPL Documents	12553483_PendingClaimsfiled_022210.pdf	62604	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2822031		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Sofia, et al.	Examiner:	Lewis, Patrick T
Serial No.:	12/053,015	Group Art Unit:	1623
Filed:	March 21, 2008	Docket No.:	60137.0034USU1
Title:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS		

INFORMATION DISCLOSURE STATEMENT (37 C.F.R. § 1.97(b))

Director for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted before the mailing date of a first Office Action on-the-merits. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

23552
PATENT TRADEMARK OFFICE

Respectfully submitted,
MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

/Daniel R. Evans/
Daniel R. Evans, Ph.D.
Reg. No. 55,868

4538304v1

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia	
	Filing Date: March 21, 2008	Group Art Unit: 1623

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5026687	06/25/1991	Yarchoan			
	5118820	06/02/1992	Hertel			
	5194654	03/16/1993	Hostetler			
	5223263	06/29/1993	Hostetler			
	5405598	04/11/1995	Schinazi			
	5411947	05/02/1995	Hostetler			
	5420266	05/30/1995	Britton			
	5462724	10/31/1995	Schinazi			
	5496546	03/05/1996	Wang			
	5543390	08/06/1996	Yatvin			
	5543391	08/06/1996	Yatvin			
	5703058	12/30/1997	Schinazi			
	5767097	06/16/1998	Tam			
	5905070	05/18/1999	Schinazi			
	6090932	07/18/2000	McGee			
	6130326	10/10/2000	Ramasamy			
	6156501	12/05/2000	McGall			
	6232300	05/15/2001	Schinazi			
	6239159	05/29/2001	Brown			
	6391859	05/21/2002	Schinazi			
	6455690	09/24/2002	Tam			
	6479463	11/12/2002	Wang			
	6509320	01/21/2003	Wang			

23552
PATENT TRADEMARK OFFICE

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449)
3764190v1

Gilead Exhibit 2015
PGR2023-00046 - Page 00805

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia	
	Filing Date: March 21, 2008	Group Art Unit: 1623

	6552183	04/22/2003	Ramasamy			
	6573248	06/03/2003	Ramasamy			
	6660721	12/09/2003	Devos			
	6677314	01/13/2004	Klecker			
	6677315	01/13/2004	Klecker			
	6680303	01/20/2004	Schinazi			
	6682715	01/27/2004	Klecker			
	6683045	01/27/2004	Klecker			
	6703374	03/09/2004	Klecker			
	6753309	06/22/2004	Klecker			
	6787526	09/07/2004	Bryant			
	6846810	01/25/2005	Martin			
	6897201	05/24/2005	Boyer			
	6908924	06/21/2005	Watanabe			
	6914054	07/05/2005	Sommadossi			
	6962991	11/08/2005	Dempcy			
	7081449	07/25/2006	Pietrzkowski			
	7365057	04/29/2008	LaColla			
	2002/0058635	05/16/2002	Averett			
	2002/0198173	12/26/2002	Schinazi			
	2003/0050229	03/13/2003	Sommadossi			
	2003/0060400	03/27/2003	LaColla Paulo			
	2003/0144502	07/31/2003	Pietrzkowski			
	2003/0153744	08/14/2003	Mekouar			
	2004/0006007	01/08/2004	Gosselin			

23552
PATENT TRADEMARK OFFICE

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

Gilead Exhibit 2015
PGR2023-00046 - Page 00806

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia	
	Filing Date: March 21, 2008	Group Art Unit: 1623

	2004/0014108	01/22/2004	Eldrup			
	2004/0023240	02/05/2004	Marliere			
	2004/0059104	03/25/2004	Cook			
	2004/0063622	04/01/2004	Sommadassi			
	2004/0067901	04/08/2004	Bhat			
	2004/0072788	04/15/2004	Bhat			
	2004/0097461	05/20/2004	Sommadossi			
	2004/0097462	05/20/2004	Sommadossi			
	2004/0101535	05/27/2004	Sommadossi			
	2004/0102414	05/27/2004	Sommadossi			
	2004/0110717	06/10/2004	Carroll			
	2004/0167140	08/26/2004	Schinazi			
	2004/0191824	09/30/2004	Dempcy			
	2004/0214844	10/28/2004	Otto			
	2004/0229839	11/18/2004	Babu			
	2004/0259934	12/23/2004	Olsen			
	2005/0020825	01/27/2005	Storer			
	2005/0026853	02/03/2005	Mekouar			
	2005/0031588	02/10/2005	Sommadassi			
	2005/0075309	04/07/2005	Storer			
	2005/0080034	04/14/2005	Standring			
	2005/0090660	04/28/2005	Watanabe			
	2005/0124532	06/09/2005	Sommadossi			
	2005/0130931	06/16/2005	Boyer			
	2005/0137161	06/23/2005	Sommadossi			

23552
PATENT TRADEMARK OFFICE

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

Gilead Exhibit 2015
PGR2023-00046 - Page 00807

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia	
	Filing Date: March 21, 2008	Group Art Unit: 1623

	2005/0148534	07/07/2005	Castellino			
	2005/0164960	07/28/2005	Olsen			
	2005/0215513	09/29/2005	Boojamra			
	2005/0227947	10/13/2005	Chan			
	2005/0261237	11/24/2005	Boojamra			
	2006/0003951	01/05/2006	Mekouar			
	2006/0014943	01/19/2006	Dempcy			
	2006/0040944	02/23/2006	Gosselin			
	2006/0079478	04/13/2006	Boojamra			
	2006/0110727	05/25/2006	McGall			
	2006/0122146	07/08/2006	Chun			
	2006/0122154	07/08/2006	Olsen			
	2007/0042939	02/22/2007	LaColla			
	60/392350	06/28/2002	Storer			
	60/392351	06/28/2002	Gosselin			

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FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia	
	Filing Date: March 21, 2008	Group Art Unit: 1623

			FOREIGN PATENT DOCUMENTS				
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	EP180276	05/07/1986	Europe				
	EP350287	01/10/1990	Europe				
	WO90/00555	01/25/1990	PCT				
	WO91/19721	12/26/1991	PCT				
	WO95/24185	09/14/1995	PCT				
	WO96/32403	10/17/1996	PCT				
	WO98/16184	04/23/1998	PCT				
	WO99/43691	09/02/1999	PCT				
	WO00/09531	02/24/2000	PCT				
	WO01/60315	08/23/2001	PCT				
	WO01/79246	10/25/2001	PCT				
	WO01/90121	11/29/2001	PCT				
	WO01/91737	12/06/2001	PCT				
	WO01/92282	12/06/2001	PCT				
	WO01/96353	12/20/2001	PCT				
	WO02/18404	03/07/2002	PCT				
	WO02/32920	04/25/2002	PCT				
	WO02/48165	06/20/2002	PCT				
	WO02/057287	07/25/2002	PCT				
	WO02/057425	07/25/2002	PCT				
	WO02/100415	12/19/2002	PCT				

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	Applicant: Sofia	
	Filing Date: March 21, 2008	Group Art Unit: 1623

	WO03/026589	04/03/2003	PCT				
	WO03/068244	08/21/2003	PCT				
	WO03/106477	12/24/2003	PCT				
	WO03/105770	12/24/2003	PCT				
	WO2004/000858	12/31/2003	PCT				
	WO2004/003000	01/08/2004	PCT				
	WO2004/003138	01/08/2004	PCT				
	WO2004/007512	01/22/2004	PCT				
	WO2004/009020	01/29/2004	PCT				
	WO2004/011478	02/05/2004	PCT				
	WO2004/046331	06/03/2004	PCT				
	WO2004/096286	11/11/2004	PCT				
	WO2004/106356	12/09/2004	PCT				
	WO2005/002626	01/13/2005	PCT				
	WO2005/007810	01/27/2005	PCT				
	WO2005/009418	02/03/2005	PCT				
	WO2005/020884	03/10/2005	PCT				
	WO2005/021568	03/10/2005	PCT				
	WO2005087788	09/22/2005	PCT				
	WO2006/000922	01/05/2006	PCT				
	WO2006/012440	02/02/2006	PCT				
	WO2006/029081	03/16/2006	PCT				
	WO2006/031725	03/23/2006	PCT				
	WO2006/037028	04/06/2006	PCT				

23552
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	Filing Date: March 21, 2008	Group Art Unit: 1623

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
		Asif, Pharmacokinetics of the Antiviral Agent B-D-2'-Deoxy-2'-Fluoro-2'-C-Methylcytidine in Rhesus Monkeys," Antimicrobial Agents and Chemotherapy, Vol. 51, No. 8, 2877-2882, Aug 2007
		Banker, G.S., "Modern Pharmaceutics, 3ed.", Marcel Dekker, New York, 1996, pages 451 and 596
		Battaglia, A., "Combination Therapy with Interferon and Ribavirin in the Treatment of Chronic Hepatitis C Infection," The Annals of Pharmacotherapy, Vol. 34, No. 4, pp. 487-494 (April 2000)
		Berenguer, M., "Hepatitis C virus in the transplant setting," Antiviral Therapy. Second International Conference on Therapies for Viral Hepatitis, Vol. 3, Supplement 3, pp. 125-136 (1998)
		Clark, J., "Design, Synthesis, and Antiviral Activity of 2'-Deoxy-2'-fluoro-2'-C-methylcytidine, a Potent Inhibitor of Hepatitis C Virus Replication," Journal of Medicinal Chemistry, Vol. 48, No. 17, pp. 5504-5508 (2005)
		Davis, G. L., "Current Therapy for Chronic Hepatitis C," Gastroenterology 118: S104-S114, 2000
		Eldrup, A., "Structure Activity Relationship of 2' Modified Nucleosides for Inhibition of Hepatitis C Virus," (Oral Session V: Hepatitis C Virus, Flavaviruses), 16th International Conference on Antiviral Research, Abstract No. 119, p. A75 (April 27-May 1, 2003, Savamah, GA)
		Eldrup, A., "Structure-Activity Relationship of Purine Ribonucleosides for Inhibition of Hepatitis C Virus RNA-Dependent RNA Polymerase," J. Med. Chem., Vol. 47, No. 9, pp. 2283-2295 (2004)
		Farquhar, D., "Synthesis and Biological Evaluation of Neutral Derivatives of 5-Fluoro-2'-deoxyuridine 5'-Phosphate," J. Med. Chem., Vol. 26, No. 8, pp. 1153-1158 (August 1983)
		Farquhar, D., "Synthesis of Biological Evaluation of 9-[5'-(2-Oxo-1,3,2-oxazaphosphorinan-2-yl)-ϑ-D-arabinosyl]adenine and 9-[5'-(2-Oxo-1,3,2-dioxaphosphorinan-2-yl)- ϑ-D-arabinosyl]adenine: Potential Neutral Precursors of 9-[ϑ-D-Arabinofuranosyl]adenine 5'-Monophosphate," J. Med. Chem., Vol. 28, No. 9, pp. 1358-1361 (September 1985)
		Freed, J., "Evidence for acyloxymethyl esters of pyrimidine 5'-deoxyribonucleotides as extracellular sources of active 5'-deoxyribonucleotides in cultured cells," Biochemical Pharmacology, Vol. 38, No. 19, pp. 3193-3198 (October 1, 1989)
		Hertel, "Synthesis of 2-Deoxy-2,2-difluoro-D-ribose and 2-Deoxy-2,2-difluoro-D-ribofuranosyl Nucleosides," J. Org. Chem. Vol. 53, pages 2406-2409, (1988)
		Hostetler, K., "Synthesis and Antiretroviral Activity of Phospholipid Analogs of Azidothymidine and Other Antiviral Nucleosides," J. Biol. Chem., Vol. 265, No. 11, pp. 6112-6117 (April 15, 1990)
		Hunston, R., "Synthesis and Biological Properties of Some Cyclic Phosphotriesters Derived from 2'-Deoxy-5-fluorouridine," J. Med. Chem., Vol. 27, No. 4, pp. 440-444 (April 1984)
		International Search Report of International Application No. PCT/US05/25916 mailed June 15, 2006

23552
PATENT TRADEMARK OFFICE

EXAMINER	DATE CONSIDERED

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FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 60137.0034USU1	Application Number: 12/053,015
	Applicant: Sofia	
	Filing Date: March 21, 2008	Group Art Unit: 1623

		Jones, R., "Minireview: Nucleotide Prodrugs," Antiviral Research, Vol. 27, pp. 1-17 (1995)
		Khamnei, S., "Neighboring Group Catalysis in the Design of Nucleotide Prodrugs," J. Med. Chem., Vol. 39, No. 20, pp. 4109-4115 (1996)
		Kotra, L.P., "Structure-Activity Relationships of 2'-Deoxy-2',2'-difluoro-L-erythro-pentofuranosyl Nucleosides," J. Med. Chem., Vol. 40, pp. 3635-3644, (1997)
		Kryuchkov, A., "Influence of Solvent on the Strength of Cyclic Oxygen-Containing Phosphorus Acids," Bulletin of the Academy of Sciences of the USSR. Division of Chemical Science, Vol. 36, No. 6, Part 1, pp. 1145-1148 (1987)
		Li, N.S. and Piccirilli, J., "Synthesis of the Phosphoramidite Derivative of 2'-Deoxy-2'-C-β-methylcytidine", J. Org. Chem., 2003, 68, 6799-6802
		Ma, "Characterization of the Metabolic Activation of Hepatitis C Virus Nucleoside Inhibitor B-D-2'-Deoxy-2-Fluro-2'-C-Methylcytidine (PSI-6130) and Identification of a Novel Active 5'-Triphosphate Species," The Journal of Biological Chemistry, Vol. 282, No. 41, 29812-29820, Oct 12, 2007
		Mitchell, A., "Bioreversible Protection for the Phospho Group: Bioactivation of the Di(4-acyloxybenzyl) and Mono(4-acyloxybenzyl) Phosphoesters of Methylphosphonate and Phosphonoacetate," Journal of the Chemical Society, Perkin Transactions 1, No. 18, pp. 2345-2353 (September 21, 1992)
		Olsen, D., "2'-Modified Nucleoside Analogs as Inhibitors of Hepatitis C RNA Replication," (Oral Session V: Hepatitis C Virus, Flaviviruses), 16th International Conference on Antiviral Research, Abstract No. 121, p. A76 (April 27-May 1, 2003, Savannah, GA))
		Otto, "Evaluation of Nucleoside Analogs in the Hepatitis C Virus Replicon System," Framing the Knowledge of Therapeutics for Viral Hepatitis Ed. By RF Schinazi and ER Schiff., 247-261, 2006
		Piantadosi, C., "Synthesis and Evaluation of Novel Ether Lipid Nucleoside Conjugates for Anti-HIV-1 Activity,", J. Med. Chem., Vol. 34, No. 4, pp. 1408-1414 (1991)
		Pierra, C., "Synthesis and Pharmacokinetics of Valopicitabine (NM283), an Efficient Prodrug of the Potent Anti-HCV Agent 2'-C-Methylcytidine," J. Med. Chem. 2006 49(22):6614-6620
		Starrett, Jr., J., "Synthesis, Oral Bioavailability Determination, and in Vitro Evaluation of Prodrugs of the Antiviral Agent 9-[2-(Phosphonomethoxy)ethyl]adenine (PMEA)," J. Med. Chem., Vol. 37, No. 12, pp. 1857-1864 (1994)
		Stuyver, "Inhibition of hepatitis C replicon RNA synthesis by B-D-2'-deoxy-2'-fluoro-2'-C-methlcytidine: a specific inhibitor of hepatitis C virus replication," Antiviral Chemistry & Chemotherapy" 2006, 17:79-87, 2006
		Stuyver, L., "Dynamics of Subgenomic Hepatitis C Virus Replicon RNA Levels in Huh-7 Cells after Exposure to Nucleoside Antimetabolites," Journal of Virology, Vol. 77, No. 19, pp. 10689-10694 (October 2003)
		Stuyver, L., "Ribonucleoside Analogue that Blocks Replication of Bovine Viral Diarrhea and Hepatitis C Viruses in Culture," Antimicrob. Agents Chemother., Vol. 47, No. 1, pp. 244-254 (January 2003)

23552
PATENT TRADEMARK OFFICE

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	Applicant: Sofia	
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		Wolff, Mandred E. "Burger's Medicinal Chemistry, 5ed, Part I", John Wiley & Sons, 1995, pages 975-977
		Zon, G., "4 Cyclophosphoamide Analogues," Progress in Medicinal Chemistry, Vol. 19, pp. 205-246 (1982)

23552
PATENT TRADEMARK OFFICE

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EFS ID:	7516715
Application Number:	12053015
International Application Number:	
Confirmation Number:	3454
Title of Invention:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
First Named Inventor/Applicant Name:	MICHAEL JOSEPH SOFIA
Customer Number:	23552
Filer:	Daniel R. Evans/AMY ALBA
Filer Authorized By:	Daniel R. Evans
Attorney Docket Number:	60137.0034USU1
Receipt Date:	29-APR-2010
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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