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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	37JD-199059-US11
First Named Inventor	Jinfa Du et al.
Title	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
Priority Mail Express® Label No.	E-FILED

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. [ ] **Fee Transmittal Form** (PTO/SB/17 or equivalent)
2. [ ] **Applicant asserts small entity status.** See 37 CFR 1.27
3. [ ] **Applicant certifies micro entity status.** See 37 CFR 1.29. Applicant must attach form PTO/SB/15A or B or equivalent.
4. [X] **Specification** [*Total Pages* 737]
   Both the claims and abstract must start on a new page.
   (See MPEP § 608.01(a) for information on the preferred arrangement)
5. [ ] **Drawing(s)** (35 U.S.C. 113) [*Total Sheets*]
6. **Inventor's Oath or Declaration** [*Total Pages* 4]
   (including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e))
   a. [ ] Newly executed (original or copy)
   b. [X] A copy from a prior application (37 CFR 1.63(d))
7. [X] **Application Data Sheet** ** See note below.*
   See 37 CFR 1.76 (PTO/AIA/14 or equivalent)
8. **CD-ROM or CD-R** in duplicate, large table, or Computer Program (*Appendix*)
   [ ] Landscape Table on CD
9. **Nucleotide and/or Amino Acid Sequence Submission** (*if applicable, items a. – c. are required*)
   a. [X] Computer Readable Form (CRF)
   b. [ ] Specification Sequence Listing on:
      i. [ ] CD-ROM or CD-R (2 copies); or
      ii. [ ] Paper
   c. [ ] Statements verifying identity of above copies

ADDRESS TO:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ACCOMPANYING APPLICATION PAPERS

10. [ ] **Assignment Papers** (cover sheet & document(s))
    Name of Assignee
11. [ ] **37 CFR 3.73(c) Statement** (*when there is an assignee*) [ ] **Power of Attorney**
12. [ ] **English Translation Document** (*if applicable*)
13. [ ] **Information Disclosure Statement** (PTO/SB/08 or PTO-1449)
    [ ] Copies of citations attached
14. [X] **Preliminary Amendment**
15. [ ] **Return Receipt Postcard** (*MPEP § 503*) (*Should be specifically itemized*)
16. [ ] **Certified Copy of Priority Document(s)** (*if foreign priority is claimed*)
17. [ ] **Nonpublication Request** Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.
18. [X] **Other:** Request for a Transfer of a Computer Readable Form

***Note:** (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 **must** be included in an Application Data Sheet (ADS).
(2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

19. CORRESPONDENCE ADDRESS

[X] The address associated with Customer Number: 117796 **OR** [ ] Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

Signature	/Lorna L. Tanner/	Date	July 18, 2019
Name (Print/Type)	Lorna L. Tanner	Registration No. (Attorney/Agent)	50,782

Electronic Acknowledgement Receipt

EFS ID:	36630790
Application Number:	16516192
International Application Number:	
Confirmation Number:	5358
Title of Invention:	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS
First Named Inventor/Applicant Name:	Jinfa Du
Customer Number:	117796
Filer:	Neeta C. Thakur/Joannah Laluces
Filer Authorized By:	Neeta C. Thakur
Attorney Docket Number:	37JD-199059-US11
Receipt Date:	18-JUL-2019
Filing Date:	
Time Stamp:	20:53:54
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	Specification	37JD-199059-US11_Specification_Part1.pdf	18833214 48c51e5df4ba8c2d2646e595c935fd34673fc685	no	368

Warnings:

Information:					
2	Specification	37JD-199059-US11_Specification_Part2.pdf	20292579 edb739897cc440d1e25aec6ff02d0e3abac10dac	no	368
Warnings:					
Information:					
3	Application Data Sheet	37JD-199059-US11_Application_Data_Sheet.pdf	277919 47603a270957428dff9bba9116fab229a6b8b3f5	no	10
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
4	Oath or Declaration filed	37JD-199059-US11_Executed_Declarations.pdf	775836 718f380f0f3cccb8a1aa6e8d179da59b2f9ad7c2	no	4
Warnings:					
Information:					
5	Sequence Listing	37JD-199059-US11_Sequence_Listing.pdf	35864 a6c2cde35a4eb58e439a4da0aaa85a59a9b677bf	no	2
Warnings:					
Information:					
6	Request for Transfer of a Computer Readable Form	37JD-199059-US11_Request_for_Transfer_of_Computer_Readable_Form.pdf	103737 4fd6c7f11acc214c6de4e577d4de31ad3549351d	no	1
Warnings:					
Information:					
7	Preliminary Amendment	37JD-199059-US11_Preliminary_Amendment.pdf	100553 267277c37aec6511435c00a88a8ceb0cccb606f3	no	3
Warnings:					
Information:					
8	Transmittal of New Application	37JD-199059-US11_Utility_Patent_Application_Transmittal.pdf	106690 f0eda908e438c155c39e41330db92895a97ec50d	no	1
Warnings:					
Information:					

Total Files Size (in bytes):	40526392

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.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jinfa		Du	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Redwood City	State/Province	CA	Country of Residence	US

Mailing Address of Inventor:

Address 1	813 Bay Harbour Drive		
Address 2			
City	Redwood City	State/Province	CA
Postal Code	94065	Country	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Dhanapalan		Nagarathnam	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Bethany	State/Province	CT	Country of Residence	US

Mailing Address of Inventor:

Address 1	52 Virginia Rail Drive		
Address 2			
City	Bethany	State/Province	CT
Postal Code	06524	Country	US

Inventor 3 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Michael	Joseph	Sofia	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

City	Doylestown	State/Province	PA	Country of Residence	US

Mailing Address of Inventor:

Address 1	3066 Antler Drive		
Address 2			
City	Doylestown	State/Province	PA
Postal Code	18902	Country	US

Inventor 4 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Peiyuan		Wang	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	San Mateo	State/Province	CA	Country of Residence	US

Mailing Address of Inventor:

Address 1	c/o Gilead Sciences, Inc.		
Address 2	333 Lakeside Drive		
City	Foster City	State/Province	CA
Postal Code	94404	Country	US

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	117796		
Email Address	SVIPdocketing@sheppardmullin.com	Add Email	Remove Email

Application Information:

Title of the Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS		
Attorney Docket Number	37JD-199059-US11	Small Entity Status Claimed	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)		Suggested Figure for Publication (if any)	

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	117796		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.
When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
This Application	Continuation of	16/169878	2018-10-24

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
16/169878	Continuation of	15/411506	2017-01-20	10183037	2019-01-22
Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
15/411506	Continuation of	14/656546	2015-03-12	9585906	2017-03-07
Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
14/656546	Continuation of	14/013237	2013-08-29	9085573	2015-07-21
Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
14/013237	Continuation of	13/609614	2012-09-11	8580765	2013-11-12
Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
13/609614	Continuation of	13/099671	2011-05-03	8334270	2012-12-18
Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
13/099671	Continuation of	12/053015	2008-03-21	7964580	2011-06-21
Prior Application Status	Expired			Remove	
Application Number	Continuity Type		Prior Application Number		Filing or 371(c) Date (YYYY-MM-DD)
12/053015	An application claiming the benefit under 35 USC 119(e)		60/982309		2007-10-24
Prior Application Status	Expired			Remove	
Application Number	Continuity Type		Prior Application Number		Filing or 371(c) Date (YYYY-MM-DD)
12/053015	An application claiming the benefit under 35 USC 119(e)		60/909315		2007-03-30

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

Foreign Priority Information:

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)[i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Remove

Application Number	Country[i]	Filing Date (YYYY-MM-DD)	Access Code[i] (if applicable)

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

Gilead Exhibit 2022
PGR2023-00046 - Page 0010

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant 1

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

◉ Assignee	○ Legal Representative under 35 U.S.C. 117	○ Joint Inventor
○ Person to whom the inventor is obligated to assign.	○ Person who shows sufficient proprietary interest	

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor:

If the Applicant is an Organization check here. ☒

Organization Name	Gilead Pharmasset LLC

Mailing Address Information For Applicant:

Address 1	c/o Gilead Sciences, Inc.		
Address 2	333 Lakeside Drive		
City	Foster City	**State/Province**	CA
Country US		Postal Code	94404
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button.

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

If the Assignee or Non-Applicant Assignee is an Organization check here. ☐

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		**State/Province**	
Country		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.

Signature:

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Lorna L. Tanner/			Date (YYYY-MM-DD)	2019-07-18
First Name	Lorna L.	Last Name	Tanner	Registration Number	50,782

Additional Signature may be generated within this form by selecting the Add button.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	37JD-199059-US11
	Application Number	Not Yet Assigned
Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	

This collection of information is required by 37 CFR 1.76. 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 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet 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.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

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1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent CooperationTreaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS

As the below named inventor, I hereby declare that:

This declaration is directed to:

- [ ] The attached application, or
- [x] United States application or PCT international application number 14/013,237 filed on August 29, 2013

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Jinfa Du Date (Optional):

Signature: 1/16/2014

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

PTO/AIA/01 (06-12)
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LEGAL NAME OF INVENTOR

Inventor: Dhanapalan Nagarathnam Date (Optional): _____

Signature: _____

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

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LEGAL NAME OF INVENTOR

Inventor: Michael Joseph Sofia Date (Optional): 12/12/13

Signature: Michael Joseph Sofia

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

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As the below named inventor, I hereby declare that:

This declaration is directed to:

- [ ] The attached application, or
- [x] United States application or PCT international application number 14/013,237 filed on August 29, 2013.

The above-identified application was made or authorized to be made by me.

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WARNING:

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LEGAL NAME OF INVENTOR

Inventor: Peiyuan Wang Date (Optional): 1/16/2014

Signature: Peiyuan Wang

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

SEQUENCE LISTING

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NAGARATHNAM, DHANAPALAN
SOFIA, MICHAEL JOSEPH
WANG, PEIYUAN

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PGR2023-00046 - Page 0020

Doc Code: CRF.TRNS.REQ
Document Description: Request for Transfer of a Computer Readable Form

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REQUEST FOR TRANSFER OF A COMPUTER READABLE FORM UNDER 37 CFR 1.821(e)

Application No.:	Not Yet Assigned	First Named Inventor:	Jinfa Du et al.
Filing Date:	Concurrently Herewith	Practitioner Docket No.:	37JD-199059-US11

Title of the Invention: NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS

The sequence information in the paper copy or PDF file of the Sequence Listing submitted in this application in accordance with 37 CFR 1.821(c),

- [x] as part of the originally-filed specification of this application
- [ ] as a separate amendment of the specification filed
  - [ ] herewith
  - [ ] on _____

is identical to the sequence information in the

- [ ] only computer readable form
- [ ] last filed computer readable form
- [x] other computer readable form, which was filed on September 13, 2017

in application number 15/411,506, which was filed on January 20, 2017.

This computer readable form was compliant with 37 CFR 1.821-1.825, and applicant hereby requests that it be used as the computer readable form for the present application, in accordance with 37 CFR 1.821(e).

The above referenced paper copy or PDF file of the Sequence Listing contains no new matter.

A sequence listing text file submitted via EFS-Web that complies with the requirements of 37 CFR 1.824(a) (2)-(6) and (b) (i.e., is a compliant sequence listing ASCII text file), serves as both the paper copy required by 37 CFR 1.821(c) and the CRF required by 37 CFR 1.821(e). If a user submits a compliant sequence listing ASCII text file via EFS-Web, the U.S. Patent and Trademark Office will not carry out a request to use a compliant computer readable "Sequence Listing" that is already on file for another application pursuant to 37 CFR 1.821(e) but will use the sequence listing submitted with the application as originally filed via EFS-Web.

It is understood that upon the transfer of a copy of the computer readable form to this application, the U.S. Patent and Trademark Office will update the copy of the computer readable form to reflect the application number and filing date for this application.

Signature /Lorna L. Tanner/	Date July 18, 2019
Name (Print/Typed) Lorna L. Tanner	Practitioner Registration Number 50,782

Note: *This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.**

[x] *Total of 1 forms are submitted.

Docket No.: 37JD-199059-US11
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Gilead Pharmasset LLC

Application No.: Not Yet Assigned	Confirmation No.: Not Yet Assigned
Filed: Concurrently Herewith	Art Unit: Not Yet Assigned
For: NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS	Examiner: Not Yet Assigned

PRELIMINARY AMENDMENT UNDER 37 C.F.R. § 1.115

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

Prior to examination on the merits, please amend the above-identified U.S. patent application as follows:

Amendments to the Specification begin on page 2 of this paper.

Remarks/Arguments begin on page 3 of this paper.

AMENDMENTS TO THE SPECIFICATION

Please insert the following paragraph on page 1 after the title but before the subheading "Field of Invention":

-- CROSS REFERENCE TO RELATED APPLICATIONS

This application is a continuation of U.S. Patent Application No. 16/169,878, filed October 24, 2018, which is a continuation of U.S. Patent Application No. 15/411,506, filed January 20, 2017, now U.S. Patent No. 10,183,037, which is a continuation of U.S. Patent Application No. 14/656,546, filed March 12, 2015, now U.S. Patent No. 9,585,906, which is a continuation of U.S. Patent Application No. 14/013,237, filed August 29, 2013, now U.S. Patent No. 9,085,573, which is a continuation of U.S. Patent Application No. 13/609,614, filed September 11, 2012, now U.S. Patent No. 8,580,765, which is a continuation of U.S. Patent Application No. 13/099,671, filed May 3, 2011, now U.S. Patent No. 8,334,270, which is a continuation of U.S. Patent Application No. 12/053,015, filed March 21, 2008, now U.S. Patent No. 7,964,580, which claims the benefit under 35 U.S.C. § 119(e) to U.S. Provisional Application Nos. 60/909,315, filed March 30, 2007, and 60/982,309, filed October 24, 2007, all of which are hereby incorporated by reference in their entireties. --

Please insert the following paragraph on page 1 after the subheading "CROSS REFERENCE TO RELATED APPLICATIONS" but before the sub-heading "Field of Invention":

-- Sequence Listing

The instant application contains a Sequence Listing which has been submitted electronically in ASCII format and is hereby incorporated by reference in its entirety. --

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REMARKS

Applicant respectfully requests that the foregoing amendments be made prior to examination of the present application.

Favorable consideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Dated: July 18, 2019

By /Lorna L. Tanner/

Lorna L. Tanner
Registration No.: 50,782
Attorney for Applicant
SHEPPARD MULLIN RICHTER & HAMPTON LLP
379 Lytton Avenue
Palo Alto, California 94301
(650) 815-2658
Customer Number: 117796

NUCLEOSIDE PHOSPHORAMIDATE PRODRUGS

Field of Invention

The present invention pertains to nucleoside phosphoramidates and their use as agents for treating viral diseases. These compounds are inhibitors of RNA-dependent RNA viral replication and are useful as inhibitors of HCV NS5B polymerase, as inhibitors of HCV replication and for treatment of hepatitis C infection in mammals. The invention provides novel chemical compounds, and the use of these compounds alone or in combination with other antiviral agents for treating HCV infection.

Background

Hepatitis C virus (HCV) infection is a major health problem that leads to chronic liver disease, such as cirrhosis and hepatocellular carcinoma, in a substantial number of infected individuals, estimated to be 2-15% of the world's population. There are an estimated 4.5 million infected people in the United States alone, according to the U.S. Center for Disease Control. According to the World Health Organization, there are more than 200 million infected individuals worldwide, with at least 3 to 4 million people being infected each year. Once infected, about 20% of people clear the virus, but the rest can harbor HCV the rest of their lives. Ten to twenty percent of chronically infected individuals eventually develop liver-destroying cirrhosis or cancer. The viral disease is transmitted parenterally by contaminated blood and blood products, contaminated needles, or sexually and vertically from infected mothers or carrier mothers to their offspring. Current treatments for HCV infection, which are restricted to immunotherapy

with recombinant interferon-α alone or in combination with the nucleoside analog ribavirin, are of limited clinical benefit. Moreover, there is no established vaccine for HCV. Consequently, there is an urgent need for improved therapeutic agents that effectively combat chronic HCV infection.

The HCV virion is an enveloped positive-strand RNA virus with a single oligoribonucleotide genomic sequence of about 9600 bases which encodes a polyprotein of about 3,010 amino acids. The protein products of the HCV gene consist of the structural proteins C, E1, and E2, and the non-structural proteins NS2, NS3, NS4A and NS4B, and NS5A and NS5B. The nonstructural (NS) proteins are believed to provide the catalytic machinery for viral replication. The NS3 protease releases NS5B, the RNA-dependent RNA polymerase from the polyprotein chain. HCV NS5B polymerase is required for the synthesis of a double-stranded RNA from a single-stranded viral RNA that serves as a template in the replication cycle of HCV. Therefore, NS5B polymerase is considered to be an essential component in the HCV replication complex (K. Ishi, et al, *Heptology*, 1999, 29: 1227-1235; V. Lohmann, et al., *Virology*, 1998, 249: 108-118). Inhibition of HCV NS5B polymerase prevents formation of the double-stranded HCV RNA and therefore constitutes an attractive approach to the development of HCV-specific antiviral therapies.

HCV belongs to a much larger family of viruses that share many common features.

Flaviviridae Viruses

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The Flaviviridae family of viruses comprises at least three distinct genera: *pestiviruses*, which cause disease in cattle and pigs; *flavivruses*, which are the primary cause of diseases such as dengue fever and yellow fever; and *hepaciviruses*, whose sole member is HCV. The flavivirus genus includes more than 68 members separated into groups on the basis of serological relatedness (Calisher et al., *J. Gen. Virol*, 1993,70,37-43). Clinical symptoms vary and include fever, encephalitis and hemorrhagic fever (*Fields Virology*, Editors: Fields, B. N., Knipe, D. M., and Howley, P. M., Lippincott-Raven Publishers, Philadelphia, PA, 1996, Chapter 31, 931-959). Flaviviruses of global concern that are associated with human disease include the Dengue Hemorrhagic Fever viruses (DHF), yellow fever virus, shock syndrome and Japanese encephalitis virus (Halstead, S. B., *Rev. Infect. Dis.*, 1984, 6, 251-264; Halstead, S. B., *Science*, 239:476-481, 1988; Monath, T. P., *New Eng. J. Med*, 1988, 319, 64 1-643).

The pestivirus genus includes bovine viral diarrhea virus (BVDV), classical swine fever virus (CSFV, also called hog cholera virus) and border disease virus (BDV) of sheep (Moennig, V. et al. *Adv. Vir. Res.* 1992, 41, 53-98). Pestivirus infections of domesticated livestock (cattle, pigs and sheep) cause significant economic losses worldwide. BVDV causes mucosal disease in cattle and is of significant economic importance to the livestock industry (Meyers, G. and Thiel, H.J., Advances in Virus Research, 1996, 47, 53-118; Moennig V., et al, Adv. Vir. Res. 1992, 41, 53-98). Human pestiviruses have not been as extensively characterized as the animal pestiviruses. However, serological surveys indicate considerable pestivirus exposure in humans.

Pestiviruses and hepaciviruses are closely related virus groups within the Flaviviridae family. Other closely related viruses in this family include the GB virus A,

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GB virus A-like agents, GB virus-B and GB virus-C (also called hepatitis G virus, HGV). The hepacivirus group (hepatitis C virus; HCV) consists of a number of closely related but genotypically distinguishable viruses that infect humans. There are at least 6 HCV genotypes and more than 50 subtypes. Due to the similarities between pestiviruses and hepaciviruses, combined with the poor ability of hepaciviruses to grow efficiently in cell culture, bovine viral diarrhea virus (BVDV) is often used as a surrogate to study the HCV virus.

The genetic organization of pestiviruses and hepaciviruses is very similar. These positive stranded RNA viruses possess a single large open reading frame (ORF) encoding all the viral proteins necessary for virus replication. These proteins are expressed as a polyprotein that is co- and post-translationally processed by both cellular and virus-encoded proteinases to yield the mature viral proteins. The viral proteins responsible for the replication of the viral genome RNA are located within approximately the carboxy-terminal. Two-thirds of the ORF are termed nonstructural (NS) proteins. The genetic organization and polyprotein processing of the nonstructural protein portion of the ORF for pestiviruses and hepaciviruses is very similar. For both the pestiviruses and hepaciviruses, the mature nonstructural (NS) proteins, in sequential order from the amino-terminus of the nonstructural protein coding region to the carboxy-terminus of the ORF, consist of p7, NS2, NS3, NS4A, NS4B, NS5A, and NS5B.

The NS proteins of pestiviruses and hepaciviruses share sequence domains that are characteristic of specific protein functions. For example, the NS3 proteins of viruses in both groups possess amino acid sequence motifs characteristic of serine proteinases and of helicases (Gorbalenya et al., *Nature,* 1988, 333, 22; Bazan and Fletterick *Virology*

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, 1989,171,637-639; Gorbalenya et al., *Nucleic Acid Res.*, 1989, 17, 3889-3897). Similarly, the NS5B proteins of pestiviruses and hepaciviruses have the motifs characteristic of RNA-directed RNA polymerases (Koonin, E.V. and Dolja, V.V., *Crir. Rev. Biochem. Molec. Biol.* 1993, 28, 375-430).

The actual roles and functions of the NS proteins of pestiviruses and hepaciviruses in the lifecycle of the viruses are directly analogous. In both cases, the NS3 serine proteinase is responsible for all proteolytic processing of polyprotein precursors downstream of its position in the ORF (Wiskerchen and Collett, *Virology*, 1991, 184, 341-350; Bartenschlager et al., *J. Virol.* 1993, 67, 3835-3844; Eckart et al. *Biochem. Biophys. Res. Comm.* 1993,192, 399-406; Grakoui et al., *J. Virol.* 1993, 67, 2832-2843; Grakoui et al., *Proc. Natl. Acad Sci. USA* 1993, 90, 10583-10587; Hijikata et al., *J. Virol.* 1993, 67, 4665-4675; Tome et al., *J. Virol.*, 1993, 67, 4017-4026). The NS4A protein, in both cases, acts as a cofactor with the NS3 serine protease (Bartenschlager et al., *J. Virol.* 1994, 68, 5045-5055; Failla et al., *J. Virol.* 1994, 68, 3753-3760; Xu et al., *J. Virol.*, 1997, 71:53 12-5322). The NS3 protein of both viruses also functions as a helicase (Kim et al., *Biochem. Biophys. Res. Comm.*, 1995, 215, 160-166; Jin and Peterson, *Arch. Biochem. Biophys.*, 1995, 323, 47-53; Warrener and Collett, *J. Virol.* 1995, 69,1720-1726). Finally, the NS5B proteins of pestiviruses and hepaciviruses have the predicted RNA-directed RNA polymerases activity (Behrens et al., EMBO, 1996, 15, 12-22; Lechmann et al., *J. Virol.*, 1997, 71, 8416-8428; Yuan et al., *Biochem. Biophys. Res. Comm.* 1997, 232, 231-235; Hagedorn, PCT WO 97/12033; Zhong et al, *J. Virol.*, 1998, 72, 9365-9369).

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Currently, there are limited treatment options for individuals infected with hepatitis C virus. The current approved therapeutic option is the use of immunotherapy with recombinant interferon-α alone or in combination with the nucleoside analog ribavirin. This therapy is limited in its clinical effectiveness and only 50% of treated patients respond to therapy. Therefore, there is significant need for more effective and novel therapies to address the unmet medical need posed by HCV infection.

A number of potential molecular targets for drug development of direct acting antivirals as anti -HCV therapeutics have now been identified including, but not limited to, the NS2-NS3 autoprotease, the N3 protease, the N3 helicase and the NS5B polymerase. The RNA-dependent RNA polymerase is absolutely essential for replication of the single-stranded, positive sense, RNA genome and this enzyme has elicited significant interest among medicinal chemists.

Inhibitors of HCV NS5B as potential therapies for HCV infection have been reviewed: Tan, S.-L., et al., *Nature Rev. Drug Discov.*, 2002, 1, 867-881; Walker, M.P. et al., *Exp. Opin. Investigational Drugs*, 2003, 12, 1269-1280; Ni, Z-J., et al., *Current Opinion in Drug Discovery and Development*, 2004, 7, 446-459; Beaulieu, P. L., et al., *Current Opinion in Investigational Drugs*, 2004, 5, 838-850; Wu, J., et al., *Current Drug Targets-Infectious Disorders*, 2003, 3, 207-219; Griffith, R.C., et al, *Annual Reports in Medicinal Chemistry*, 2004, 39, 223-237; Carrol, S., et al., *Infectious Disorders-Drug Targets*, 2006, 6, 17-29. The potential for the emergence of resistant HCV strains and the need to identify agents with broad genotype coverage supports the need for continuing efforts to identify novel and more effective nucleosides as HCV NS5B inhibitors.

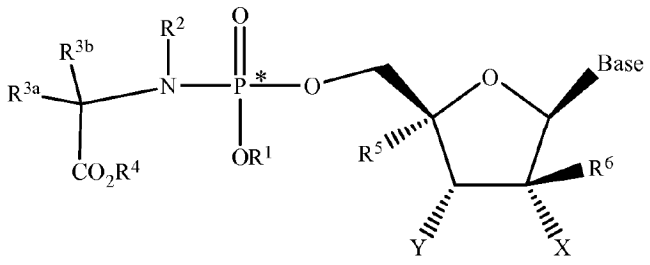
Nucleoside inhibitors of NS5B polymerase can act either as a non-natural substrate that results in chain termination or as a competitive inhibitor which competes with nucleotide binding to the polymerase. To function as a chain terminator the nucleoside analog must be taken up by the cell and converted *in vivo* to a triphosphate to compete for the polymerase nucleotide binding site. This conversion to the triphosphate is commonly mediated by cellular kinases which imparts additional structural requirements on a potential nucleoside polymerase inhibitor. Unfortunately, this limits the direct evaluation of nucleosides as inhibitors of HCV replication to cell-based assays capable of *in situ* phosphorylation.

In some cases, the biological activity of a nucleoside is hampered by its poor substrate characteristics for one or more of the kinases needed to convert it to the active triphosphate form. Formation of the monophosphate by a nucleoside kinase is generally viewed as the rate limiting step of the three phosphorylation events. To circumvent the need for the initial phosphorylation step in the metabolism of a nucleoside to the active triphosphate analog, the preparation of stable phosphate prodrugs has been reported. Nucleoside phosphoramidate prodrugs have been shown to be precursors of the active nucleoside triphosphate and to inhibit viral replication when administered to viral infected whole cells (McGuigan, C., et al., *J. Med. Chem.*, 1996, 39, 1748-1753; Valette, G., et al., *J. Med. Chem.*, 1996, 39, 1981-1990; Balzarini, J., et al., *Proc. National Acad Sci USA*, 1996, 93, 7295-7299; Siddiqui, A. Q., et al., *J. Med. Chem.*, 1999, 42, 4122-4128; Eisenberg, E. J., et al., *Nucleosides, Nucleotides and Nucleic Acids*, 2001, 20, 1091-1098; Lee, W.A., et al., *Antimicrobial Agents and Chemotherapy*, 2005, 49, 1898); US 2006/0241064; and WO 2007/095269.

Also limiting the utility of nucleosides as viable therapeutic agents is their sometimes poor physicochemical and pharmacokinetic properties. These poor properties can limit the intestinal absorption of an agent and limit uptake into the target tissue or cell. To improve on their properties prodrugs of nucleosides have been employed. It has been demonstrated that preparation of nucleoside phosphoramidates improves the systemic absorption of a nucleoside and furthermore, the phosphoramidate moiety of these "pronucleotides" is masked with neutral lipophilic groups to obtain a suitable partition coefficient to optimize uptake and transport into the cell dramatically enhancing the intracellular concentration of the nucleoside monophosphate analog relative to administering the parent nucleoside alone. Enzyme-mediated hydrolysis of the phosphate ester moiety produces a nucleoside monophosphate wherein the rate limiting initial phosphorylation is unnecessary.

SUMMARY OF THE INVENTION

The present invention is directed toward novel phosphoramidate prodrugs of nucleoside derivatives for the treatment of viral infections in mammals, which is a compound, its stereoisomers, salts (acid or basic addition salts), hydrates, solvates, or crystalline forms thereof, represented by the following structure:



I

wherein

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(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, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, 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

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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;

(c) 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;

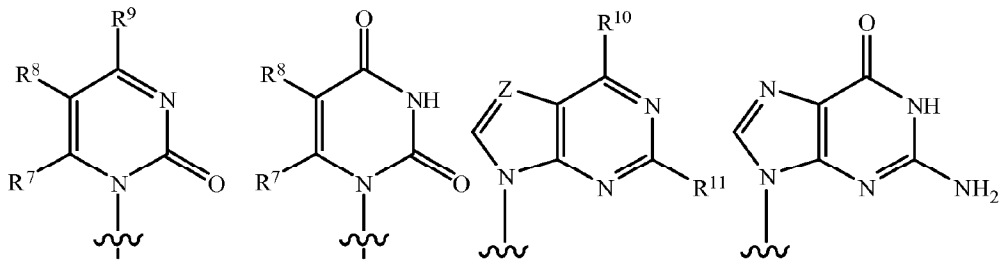
(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(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)$_2$;

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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

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R^{12} is 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) $-NO_2$.

DEFINITIONS

The phrase "a" or "an" entity as used herein refers to one or more of that entity; for example, a compound refers to one or more compounds or at least one compound. As such, the terms "a" (or "an"), "one or more", and "at least one" can be used interchangeably herein.

The phrase "as defined herein above" refers to the first definition provided in the Summary of the Invention.

The terms "optional" or "optionally" as used herein means that a subsequently described event or circumstance may but need not occur, and that the description includes instances where the event or circumstance occurs and instances in which it does not. For example, "optional bond" means that the bond may or may not be present, and that the description includes single, double, or triple bonds.

The term "independently" is used herein to indicate that a variable is applied in any one instance without regard to the presence or absence of a variable having that same or a different definition within the same compound. Thus, in a compound in which R appears twice and is defined as "independently carbon or nitrogen", both R's can be carbon, both R's can be nitrogen, or one R' can be carbon and the other nitrogen.

The term "alkenyl" refers to an unsubstituted hydrocarbon chain radical having from 2 to 10 carbon atoms having one or two olefinic double bonds, preferably one olefinic double bond. The term "$C_{2\text{-}N}$ alkenyl" refers to an alkenyl comprising 2 to N

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carbon atoms, where N is an integer having the following values: 3, 4, 5, 6, 7, 8, 9, or 10. The term "C_{2-10} alkenyl" refers to an alkenyl comprising 2 to 10 carbon atoms. The term "C_{2-4} alkenyl" refers to an alkenyl comprising 2 to 4 carbon atoms. Examples include, but are not limited to, vinyl, 1-propenyl, 2-propenyl (allyl) or 2-butenyl (crotyl).

The term "halogenated alkenyl" refers to an alkenyl comprising at least one of F, Cl, Br, and I.

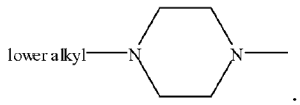
The term "alkyl" refers to an unbranched or branched chain, saturated, monovalent hydrocarbon residue containing 1 to 30 carbon atoms. The term "C_{1-M} alkyl" refers to an alkyl comprising 1 to M carbon atoms, where M is an integer having the following values: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, or 30. The term "C_{1-4} alkyl" refers to an alkyl containing 1 to 4 carbon atoms. The term "lower alkyl" denotes a straight or branched chain hydrocarbon residue comprising 1 to 6 carbon atoms. "C_{1-20} alkyl" as used herein refers to an alkyl comprising 1 to 20 carbon atoms. "C_{1-10} alkyl" as used herein refers to an alkyl comprising 1 to 10 carbons. Examples of alkyl groups include, but are not limited to, lower alkyl groups include methyl, ethyl, propyl, *i*-propyl, *n*-butyl, *i*-butyl, *t*-butyl or pentyl, isopentyl, neopentyl, hexyl, heptyl, and octyl. The term (ar)alkyl or (heteroaryl)alkyl indicate the alkyl group is optionally substituted by an aryl or a heteroaryl group respectively.

The term "cycloalkyl" refers to an unsubstituted or substituted carbocycle, in which the carbocycle contains 3 to 10 carbon atoms; preferably 3 to 8 carbon atoms; more preferably 3 to 6 carbon atoms (i.e., lower cycloalkyls). Examples of cycloalkyl groups include, but are not limited to, cyclopropyl, 2-methyl-cyclopropyl, cyclobutyl, cyclopentyl, and cyclohexyl.

The term "cycloalkyl alkyl" refers to an additionally unsubstituted or substituted alkyl substituted by a lower cycloalkyl. Examples of cycloalkyl alkyls include, but are not limited to, any one of methyl, ethyl, propyl, i-propyl, n-butyl, i-butyl, t-butyl or pentyl, isopentyl, neopentyl, hexyl, heptyl, and octyl that is substituted with cyclopropyl, 2-methyl-cyclopropyl, cyclobutyl, cyclopentyl, and cyclohexyl.

The term "cycloheteroalkyl" refers to an unsubstituted or substituted heterocycle, in which the heterocycle contains 2 to 9 carbon atoms; preferably 2 to 7 carbon atoms; more preferably 2 to 5 carbon atoms. Examples of cycloheteroalkyls include, but are not limited to, aziridin-2-yl, *N*-C_{1-3}-alkyl-aziridin-2-yl, azetidinyl, *N*-C_{1-3}-alkyl-azetidin-m'-yl, pyrrolidin-m'-yl, *N*-C_{1-3}-alkyl-pyrrolidin-m'-yl, piperidin-m'-yl, and *N*-C_{1-3}-alkyl-piperidin-m'-yl, where m' is 2, 3, or 4 depending on the cycloheteroalkyl. Specific examples of N-C_{1-3}-alkyl-cycloheteroalkyls include, but are not limited to, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-2-yl, N-methyl-piperidin-3-yl, and N-methyl-piperidin-4-yl. In the instance of R^4, the point of attachment between the cycloheteroalkyl ring carbon and the oxygen occurs at any one of m'

The term "heterocycle" refers to an unsubstituted or substituted heterocycle containing carbon, hydrogen, and at least one of N, O, and S, where the C and N can be trivalent or tetravalent, i.e., sp^2- or sp^3-hybridized. Examples of heterocycles include, but are not limited to, aziridine, azetidine, pyrrolidine, piperidine, imidazole, oxazole, piperazine, etc. In the instance of piperazine, as related to R^{10} for NR'_2, the corresponding opposite nitrogen atom of the piperazinyl is substituted by a lower alkyl represented by the following structure:



Preferably, the opposite nitrogen of the piperazinyl is substituted by a methyl group.

The term "halogenated alkyl" (or "haloalkyl") refers to an unbranched or branched chain alkyl comprising at least one of F, Cl, Br, and I. The term "C_{1-M} haloalkyl" refers to an alkyl comprising 1 to M carbon atoms that comprises at least one of F, Cl, Br, and I, where M is an integer having the following values: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, or 30. "C_{1-3} haloalkyl" refers to a haloalkyl comprising 1 to 3 carbons and at least one of F, Cl, Br, and I. The term "halogenated lower alkyl" (or "lower haloalkyl") refers to a haloalkyl comprising 1 to 6

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carbon atoms and at least one of F, Cl, Br, and I. Examples include, but are not limited to, fluoromethyl, chloromethyl, bromomethyl, iodomethyl, difluoromethyl, dichloromethyl, dibromomethyl, diiodomethyl, trifluoromethyl, trichloromethyl, tribromomethyl, triiodomethyl, 1-fluoroethyl, 1-chloroethyl, 1-bromoethyl, 1-iodoethyl, 2-fluoroethyl, 2-chloroethyl, 2-bromoethyl, 2-iodoethyl, 2,2-difluoroethyl, 2,2-dichloroethyl, 2,2-dibromomethyl, 2-2-diiodomethyl, 3-fluoropropyl, 3-chloropropyl, 3-bromopropyl, 2,2,2-trifluoroethyl or 1,1,2,2,2-pentafluoroethyl.

The term "alkynyl" refers to an unbranched or branched hydrocarbon chain radical having from 2 to 10 carbon atoms, preferably 2 to 5 carbon atoms, and having one triple bond. The term "$C_{2\text{-}N}$ alkynyl" refers to an alkynyl comprising 2 to N carbon atoms, where N is an integer having the following values: 3, 4, 5, 6, 7, 8, 9, or 10. The term "C $C_{2\text{-}4}$ alkynyl" refers to an alkynyl comprising 2 to 4 carbon atoms. The term "$C_{2\text{-}10}$ alkynyl" refers to an alkynyl comprising 2 to 10 carbons. Examples include, but are limited to, ethynyl, 1-propynyl, 2-propynyl, 1-butynyl, 2-butynyl or 3-butynyl.

The term "halogenated alkynyl" refers to an unbranched or branched hydrocarbon chain radical having from 2 to 10 carbon atoms, preferably 2 to 5 carbon atoms, and having one triple bond and at least one of F, Cl, Br, and I.

The term "cycloalkyl" refers to a saturated carbocyclic ring comprising 3 to 8 carbon atoms, i.e. cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl or cyclooctyl. The term "$C_{3\text{-}7}$ cycloalkyl" as used herein refers to a cycloalkyl comprising 3 to 7 carbons in the carbocyclic ring.

The term "alkoxy" refers to an -O-alkyl group or an –O-cycloalkyl group, wherein alkyl and cycloalkyl are as defined above. Examples of –O-alkyl groups include, but are not limited to, methoxy, ethoxy, *n*-propyloxy, *i*-propyloxy, *n*-butyloxy, *i*-butyloxy, *t*-butyloxy. "Lower alkoxy" as used herein denotes an alkoxy group with a "lower alkyl" group as previously defined. "$C_{1\text{-}10}$ alkoxy" refers to an-O-alkyl wherein alkyl is $C_{1\text{-}10}$. Examples of –O-cycloalkyl groups include, but are not limited to, -O-*c*-propyl, -O-*c*-butyl, -O-*c*-pentyl, and –O-*c*-hexyl.

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The term "halogenated alkoxy" refers to an –O-alkyl group in which the alkyl group comprises at least one of F, Cl, Br, and I.

The term "halogenated lower alkoxy" refers to an –O-(lower alkyl) group in which the lower alkyl group comprises at least one of F, Cl, Br, and I.

The term "amino acid" includes naturally occurring and synthetic α, β γ or δ amino acids, and includes but is not limited to, amino acids found in proteins, i.e. glycine, alanine, valine, leucine, isoleucine, methionine, phenylalanine, tryptophan, proline, serine, threonine, cysteine, tyrosine, asparagine, glutamine, aspartate, glutamate, lysine, arginine and histidine. In a preferred embodiment, the amino acid is in the L-configuration. Alternatively, the amino acid can be a derivative of alanyl, valinyl, leucinyl, isoleucinyl, prolinyl, phenylalaninyl, tryptophanyl, methioninyl, glycinyl, serinyl, threoninyl, cysteinyl, tyrosinyl, asparaginyl, glutaminyl, aspartoyl, glutaroyl, lysinyl, argininyl, histidinyl, β-alanyl, β-valinyl, β-leucinyl, β-isoleucinyl, β-prolinyl, β-phenylalaninyl, β-tryptophanyl, β-methioninyl, β-glycinyl, β-serinyl, β-threoninyl, β-cysteinyl, β-tyrosinyl, β-asparaginyl, β-glutaminyl, β-aspartoyl, β-glutaroyl, β-lysinyl, β-argininyl or β-histidinyl. When the term amino acid is used, it is considered to be a specific and independent disclosure of each of the esters of α, β γ or δ glycine, alanine, valine, leucine, isoleucine, methionine, phenylalanine, tryptophan, proline, serine, threonine, cysteine, tyrosine, asparagine, glutamine, aspartate, glutamate, lysine, arginine and histidine in the D and L-configurations.

The term "aminoacyl" includes N,N-unsubstituted, N,N-monosubstituted, and N,N-disubstituted derivatives of naturally occurring and synthetic α, β γ or δ amino acyls, where the amino acyls are derived from amino acids. The amino-nitrogen can be substituted or unsubstituted. When the amino-nitrogen is substituted, the nitrogen is either mono- or di-substituted, where the substituent bound to the amino-nitrogen is a lower alkyl or an alkaryl. In the instance of its use for Y, the expression "O(aminoacyl)" is used. It is understood that the C3' carbon of the ribose is bound to the oxygen "O", which is then bound to the carbonyl carbon of the aminoacyl.

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The terms "alkylamino" or "arylamino" refer to an amino group that has one or two alkyl or aryl substituents, respectively.

The term "protected," as used herein and unless otherwise defined, refers to a group that is added to an oxygen, nitrogen, or phosphorus atom to prevent its further reaction or for other purposes. A wide variety of oxygen and nitrogen protecting groups are known to those skilled in the art of organic synthesis. Non-limiting examples include: C(O)-alkyl, C(O)Ph, C(O)aryl, CH_3, CH_2-alkyl, CH_2-alkenyl, CH_2Ph, CH_2-aryl, CH_2O-alkyl, CH_2O-aryl, SO_2-alkyl, SO_2-aryl, *tert*-butyldimethylsilyl, *tert*-butyldiphenylsilyl, and 1,3-(1,1,3,3-tetraisopropyldisiloxanylidene).

The term "aryl," as used herein, and unless otherwise specified, refers to substituted or unsubstituted phenyl (Ph), biphenyl, or naphthyl, preferably the term aryl refers to substituted or unsubstituted phenyl. The aryl group can be substituted with one or more moieties selected from among hydroxyl, F, Cl, Br, I, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid, phosphate, and phosphonate, either unprotected, or protected as necessary, as known to those skilled in the art, for example, as taught in T.W. Greene and P.G. M. Wuts, "Protective Groups in Organic Synthesis," 3rd ed., John Wiley & Sons, 1999.

The terms "alkaryl" or "alkylaryl" refer to an alkyl group with an aryl substituent, such as benzyl. The terms "aralkyl" or "arylalkyl" refer to an aryl group with an alkyl substituent.

The term "di(lower alkyl)amino-lower alkyl" refers to a lower alkyl substituted by an amino group that is itself substituted by two lower alkyl groups. Examples include, but are not limited to, $(CH_3)_2NCH_2$, $(CH_3)_2NCH_2CH_2$, $(CH_3)_2NCH_2CH_2CH_2$, etc. The examples above show lower alkyls substituted at the terminus carbon atom with an N,N-dimethyl-amino substituent. These are intended as examples only and are not intended to limit the meaning of the term "di(lower alkyl)amino-lower alkyl" so as to require the same. It is contemplated that the lower alkyl chain can be substituted with an N,N-di(lower alkyl)-amino at any point along the chain, e.g., CH_3CH(N-(lower alkyl)$_2$)CH_2CH_2.

The term "halo," as used herein, includes chloro, bromo, iodo and fluoro.

The term "acyl" refers to a substituent containing a carbonyl moiety and a non-carbonyl moiety. The carbonyl moiety contains a double-bond between the carbonyl carbon and a heteroatom, where the heteroatom is selected from among O, N and S. When the heteroatom is N, the N is substituted by a lower alkyl. The non-carbonyl moiety is selected from straight, branched, and cyclic alkyl, which includes, but is not limited to, a straight, branched, or cyclic C_{1-20} alkyl, C_{1-10} alkyl, or lower alkyl; alkoxyalkyl, including methoxymethyl; aralkyl, including benzyl; aryloxyalkyl, such as phenoxymethyl; or aryl, including phenyl optionally substituted with halogen (F, Cl, Br, I), hydroxyl, C_1 to C_4 alkyl, or C_1 to C_4 alkoxy, sulfonate esters, such as alkyl or aralkyl sulphonyl, including methanesulfonyl, the mono, di or triphosphate ester, trityl or monomethoxytrityl, substituted benzyl, trialkylsilyl (e.g. dimethyl-t-butylsilyl) or diphenylmethylsilyl. When at least one aryl group is present in the non-carbonyl moiety, it is preferred that the aryl group comprises a phenyl group.

The term "lower acyl" refers to an acyl group in which the non-carbonyl moiety is lower alkyl.

The term "purine" or "pyrimidine" base includes, but is not limited to, adenine, N^6-alkylpurines, N^6-acylpurines (wherein acyl is C(O)(alkyl, aryl, alkylaryl, or arylalkyl), N^6-benzylpurine, N^6-halopurine, N^6-vinylpurine, N^6-acetylenic purine, N^6-acyl purine, N^6-hydroxyalkyl purine, N^6-allcylaminopurine, N^6-thioallcyl purine, N^2-alkylpurines, N^2-alkyl-6-thiopurines, thymine, cytosine, 5-fluorocytosine, 5-methylcytosine, 6-azapyrimidine, including 6-azacytosine, 2- and/or 4-mercaptopyrmidine, uracil, 5-halouracil, including 5-fluorouracil, C^5-alkylpyrimidines, C^5-benzylpyrimidines, C^5-halopyrimidines, C^5-vinylpyrimidine, C^5-acetylenic pyrimidine, C^5-acyl pyrimidine, C^5-hydroxyalkyl purine, C^5-amidopyrimidine, C^5-cyanopyrimidine, ,C^5-iodopyrimidine, C^6-lodo-pyrimidine, C^5-Br-vinyl pyrimidine, C^6-Br-vinyl pyrimidine, C^5-nitropyrimidine, C^5-amino-pyrimidine, N^2-alkylpurines, N^2-alkyl-6-thiopurines, 5-azacytidinyl, 5-azauracilyl, triazolopyridinyl, imidazolopyridinyl, pyrrolopyrimidinyl, and pyrazolopyrimidinyl. Purine bases include, but are not limited to, guanine, adenine,

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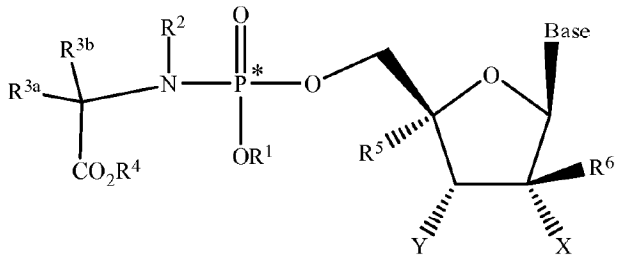
hypoxanthine, 2,6-diaminopurine, and 6-chloropurine. Functional oxygen and nitrogen groups on the base can be protected as necessary or desired. Suitable protecting groups are well known to those skilled in the art, and include trimethylsilyl, dimethylhexylsilyl, *t*-butyldimethylsilyl, and *t*-butyldiphenylsilyl, trityl, alkyl groups, and acyl groups such as acetyl and propionyl, methanesulfonyl, and p-toluenesulfonyl.

The term "tautomerism" and "tautomers" have their accepted plain meanings.

The term "P*" means that the phosphorous atom is chiral and that it has a corresponding Cahn-Ingold-Prelog designation of "R" or "S" which have their accepted plain meanings. It is contemplated that compounds of the formula I are racemic because the chirality at phosphorous. Applicants contemplate use of the racemate and/or the resolved enantiomers. In some instances, an asterisk does not appear next to the phosphoroamidate phosphorous atom. In these instances, it is understood that the phosphorous atom is chiral and that one of ordinary skill understands this to be so unless the substituents bound to the phosphorous exclude the possibility of chirality at phosphorous, such as in $P(O)Cl_3$.

DETAILED DESCRIPTION OF THE INVENTION

An aspect of the invention is directed to a compound, its salts, hydrates, solvates, crystalline forms, and the like represented by formula 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

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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, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, 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 $-N(R^{3'})_2$);

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(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;

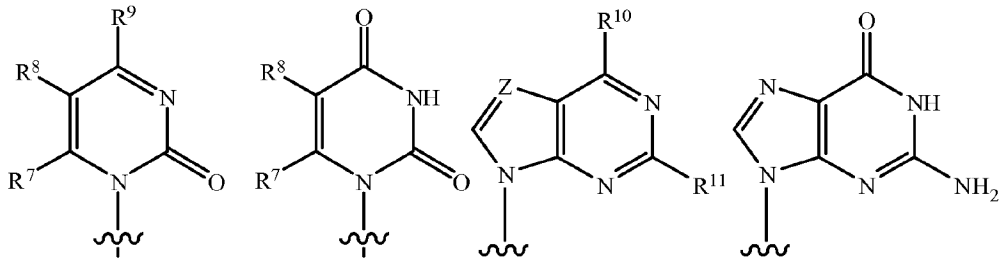
(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(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, 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

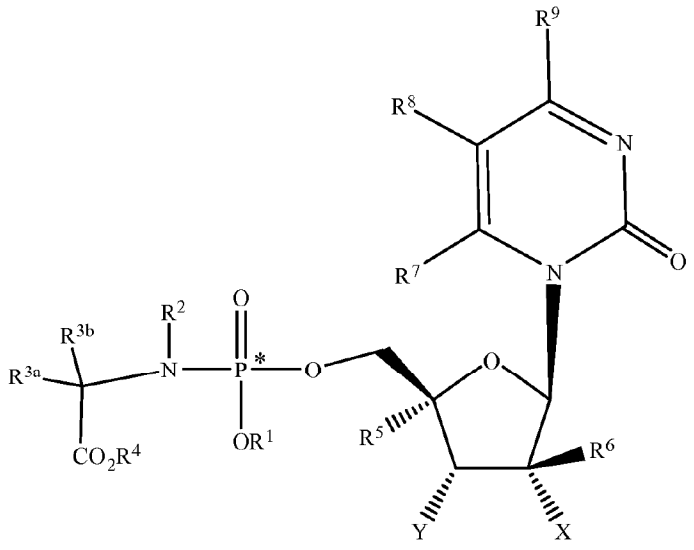
R^{12} is H, halogen (including F, Cl, Br, I), OH, OR', SH, SR', NH_2, NHR', NR'_2, NO_2 lower alkyl of C_1-C_6, halogenated (F, Cl, Br, I) lower alkyl of C_1-C_6, lower alkenyl of C_2-C_6, halogenated (F, Cl, Br, I) lower alkenyl of C_2-C_6 , lower alkynyl of C_2-C_6,

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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) $-NO_2$.

As can be appreciated from the structure represented by formula **I** above, there are myriad ways to express the several embodiments and aspects of each embodiment of the present invention. As seen below, the inventors have disclosed certain embodiments directed to the compound of formula **I**, each having several aspects, based on the identity of the modified purine or pyrimidine base. This is not intended to be an explicit or implicit admission that the three embodiments are independent or distinct nor should it be interpreted as such. Rather, it is intended to convey information so that the full breadth of the present invention can be understood. Furthermore, the following embodiments, and aspects thereof, are not meant to be limiting on the full breadth of the invention as recited by the structure of formula **I**.

A first embodiment of the invention is directed to a compound represented by formula **I-1**:



I-1

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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, $-(CH_2)_e(NR^{3'})_2$, 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)-

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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, di(lower alkyl)-amino, 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, Cl, Br, I, 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}

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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)$_2$;

(i) R^7, R^8,R^9 are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'$_2$, lower alkyl, halogenated (F, Cl, Br, I) lower alkyl, lower alkenyl of C_2-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', CONR'$_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl.

A first aspect of the first embodiment is directed to a compound represented by formula **I-1**

wherein

(a) R^1 is hydrogen, n-alkyl 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_{1-6} alkoxy, F, Cl, Br, I, nitro, cyano, C_{1-6} haloalkyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} and R^{3b} are independently (i) 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 3 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, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, 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, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, 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), or CH_2SH and R^{3b} is H;

(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, CN, CH_3, vinyl, OCH_3, OCH_2CH_3, CH_2OH, CH_2(halo), such as CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, 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;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OMe, Cl, Br, I, NH_2, or N_3;

(h) Y is OH, H, C_{1-4} alkyl, vinyl, N_3, CN, Cl, Br, F, I, O(C_{1-6} acyl), O(C_{1-4} alkyl), 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, 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_{1-4} haloalkyl, O(aminoacyl), 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)$_2$, or N(C_{1-4} acyl)$_2$;

(i) R^7, R^8,R^9 are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'$_2$, lower alkyl, halogenated (F, Cl, Br, I) lower alkyl, lower alkenyl of C_2-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', CONR'$_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl.

A second aspect of the first embodiment is directed to a compound represented by formula **I-1**

wherein

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(a) R^1 is hydrogen, n-alkyl or a substituted or unsubstituted phenyl, where the substitutent of the substituted phenyl is at least one of a C_{1-3} alkyl, a C_{1-3} alkoxy, F, Cl, Br, I, nitro, cyano, and a C_{1-3} haloalkyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} and R^{3b} are independently (i) 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 3 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, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, 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, $CH(OH)CH_3$, $CH_2((4'\text{-}OH)\text{-}Ph)$, CH_2SH, or lower cycloalkyl; or (viii) R^{3a} is CH_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, $CH(OH)CH_3$, $CH_2((4'\text{-}OH)\text{-}Ph)$, or CH_2SH and R^{3b} is H;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, di(lower alkyl)amino-lower alkyl, or aminoacyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2(halo), such as CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, 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;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OCH_3, NH_2, or N_3;

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(h) Y is OH, H, CH_3, vinyl, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3, NH_2, $NHCH_3$, NH(vinyl), NH(acetyl), $NH(C(O)CH_3)$, $N(CH_3)_2$, $N(C(O)CH_3)_2$, or O(aminoacyl);

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2H, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$; and

(j) R^9 is selected from among OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, OC(O)(C1-20 alkyl), which include but are not limited to $OC(O)(CH_2)_sCH_3$, NHC(O)(C1-20 alkyl), which include but are not limited to $NHC(O)(CH_2)_sCH_3$, and $N(C(O)(CH_2)_sCH_3)_2$, which include but is not limited to $N(C(O)(CH_2)_sCH_3)_2$, where s is an integer selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

A third aspect of the first embodiment is directed to a compound represented by formula **I-1**

wherein

(a) R^1 is hydrogen, n-alkyl or a substituted or unsubstituted phenyl, where the substitutent of the substituted phenyl is at least one of a CH_3, OCH_3, F, Cl, Br, I, nitro, cyano, and a $CH_{3-q}X_q$, where X is F, Cl, Br, or I, and q is 1-3;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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, $CH(OH)CH_3$, $CH_2((4'\text{-}OH)\text{-}Ph)$, CH_2SH, or lower cycloalkyl or R^{3a} is CH_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, $CH(OH)CH_3$, $CH_2((4'\text{-}OH)\text{-}Ph)$, CH_2SH, or lower cycloalkyl and R^{3b} is H;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, lower haloalkyl, di(lower alkyl)amino-lower alkyl, or aminoacyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2(halo), such as CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, 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;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OCH_3, NH_2, or N_3;

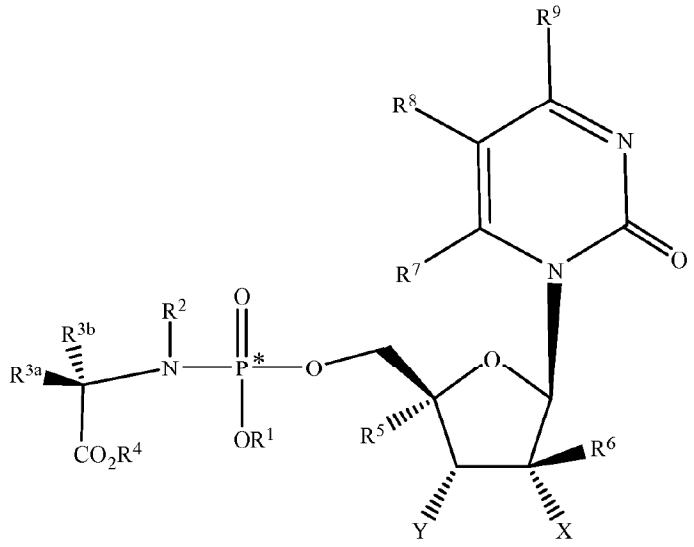
(h) Y is OH, H, CH_3, vinyl, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3, NH_2, $NHCH_3$, NH(vinyl), NH(acetyl), $NH(C(O)CH_3)$, $N(CH_3)_2$, $N(C(O)CH_3)_2$, or O(aminoacyl);

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2H, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl'; and

(j) R^9 is selected from among OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, OC(O)(C1-20 alkyl), which include but are not limited to $OC(O)(CH_2)_sCH_3$, NHC(O)(C1-20 alkyl), which include but are not limited to $NHC(O)(CH_2)_sCH_3$, and $N(C(O)(CH_2)_sCH_3)_2$, which include but is not limited to $N(C(O)(CH_2)_sCH_3)_2$, where s is an integer selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

A fourth aspect of the first embodiment is directed to a compound represented by formula **I-2**

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I-2

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, or a substituted or unsubstituted phenyl, where the substitutent of the substituted phenyl is at least one of a CH_3, OCH_3, F, Cl, Br, I, nitro, cyano, and a $CH_{3-q}X_q$, where X is F, Cl, Br, or I, and q is 1-3;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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 R^{3a} is CH_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;

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(d) R^4 is hydrogen, C_{1-10} alkyl, C_{1-10} alkyl optionally substituted with a lower alkyl, alkoxy or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, 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;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OCH_3, Cl, Br, I, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3, NH_2, $NHCH_3$, NH(vinyl), NH(acetyl), $NH(C(O)CH_3)$, $N(CH_3)_2$, $N(C(O)CH_3)_2$, or O(aminoacyl);

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2H, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl; and

(j) R^9 is selected from among OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, OC(O)(C1-20 alkyl), which include but are not limited to $OC(O)(CH_2)_sCH_3$, NHC(O)(C1-20 alkyl), which include but are not limited to $NHC(O)(CH_2)_sCH_3$, and and $N(C(O)(CH_2)_sCH_3$, which include but is not limited to $N(C(O)(CH_2)_sCH_3)_2$, where s is an integer selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

A fifth aspect of the first embodiment is directed to a compound represented by formula **I-2**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, lower haloalkyl, di(lower alkyl)amino-lower alkyl, or aminoacyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OCH_3, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3, or O(aminoacyl);

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2H, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl; and

(j) R^9 is selected from among OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, $OC(O)(C_{1-20}$ alkyl), which include but are not limited to $OC(O)(CH_2)_sCH_3$, $NHC(O)(C_{1-20}$ alkyl), which include but are not limited to $NHC(O)(CH_2)_sCH_3$, and $N(C(O)(CH_2)_sCH_3)_2$, which include but is not limited to $N(C(O)(CH_2)_sCH_3)_2$, where s is an integer selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

A sixth aspect of the first embodiment is directed to a compound represented by formula **I-2**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, $C_{1\text{-}10}$ alkyl, $C_{1\text{-}10}$ alkyl optionally substituted with a lower alkyl, alkoxy or halogen, $C_{1\text{-}10}$ haloalkyl, $C_{3\text{-}10}$ cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

(e) R^5 is H, OMe, CN, CH_2F, F, Cl, Br, or I;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, or N_3, OCH_3, $OC(O)CH_3$, or O(aminoacyl);

(i) R^7 and R^8 are independently H, F, Br, SCH_3, CH_3, $CH_{3\text{-}q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$; and

(j) R^9 is selected from among OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, $OC(O)(C_{1\text{-}20}$ alkyl), which include but are not limited to $OC(O)(CH_2)_sCH_3$, $NHC(O)(C_{1\text{-}20}$ alkyl), which include but are not limited to $NHC(O)(CH_2)_sCH_3$, and $N(C(O)(CH_2)_sCH_3)_2$, which include but is not limited to $N(C(O)(CH_2)_sCH_3)_2$, where s is an integer selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

A seventh aspect of the first embodiment is directed to a compound represented by formula **I-2**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, or N_3;

(h) Y is OH, OCH_3, $OC(O)CH_3$, or O(aminoacyl);

(i) R^7 and R^8 are independently H, F, Br, SCH_3, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$; and

(j) R^9 is selected from among OH, OCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, $OC(O)(C_{1-20}$ alkyl), which include but are not limited to $OC(O)(CH_2)_sCH_3$, $NHC(O)(C_{1-20}$ alkyl), which include but are not limited to $NHC(O)(CH_2)_sCH_3$, and $N(C(O)(CH_2)_sCH_3)_2$, which include but is not limited to $N(C(O)(CH_2)_sCH_3)_2$, where s is an integer selected from among 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

An eighth aspect of the first embodiment is directed to a compound represented by formula **I-2**

wherein

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(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, or N_3;

(h) Y is OH, OCH_3, $OC(O)CH_3$, or O(aminoacyl);

(i) R^7 and R^8 are independently H, F, Br, SCH_3, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$;

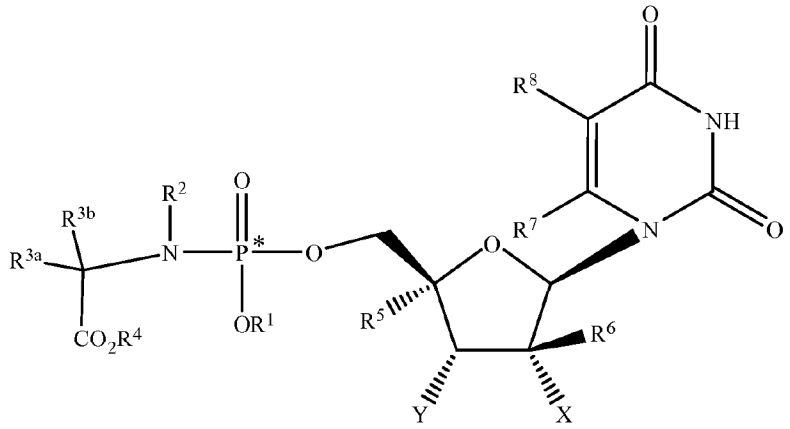
(j) R^9 is selected from among OH, OCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, $OC(O)(C_{1-20}$ alkyl), which include but are not limited to $OC(O)(CH_2)_sCH_3$, $NHC(O)(C_{1-20}$ alkyl), which include but are not limited to $NHC(O)(CH_2)_sCH_3$, and $N(C(O)(CH_2)_sCH_3)_2$, which include but is not limited to $N(C(O)(CH_2)_sCH_3)_2$, where s is an integer selected from among 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

A second embodiment of the invention is directed to a compound represented by formula **I** in which the base is a structure represented by formula **b** above, wherein R^1, R^2, R^{3a}, R^{3b}, R^4, R^5, R^6, X, Y, R^7, and $R^8$are defined in the Summary of the Invention section above.

A first aspect of the second embodiment is directed to a compound represented by

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formula **I-3**



I-3

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 or CH_3;

(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

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$(CH_2)_n$ 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 or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, 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, Cl, Br, I, 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),

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$S(C_{1-4}$ 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)$_2$, or $N(C_{1-18}$ 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)$_2$, or $N(C_{1-4}$ acyl)$_2$;

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'$_2$, lower alkyl, halogenated (F, Cl, Br, I) lower alkyl, lower alkenyl of C_2-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', CONR'$_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl.

The second aspect of the second embodiment is directed to a compound represented by formula **I-3**

wherein

(a) R^1 is hydrogen, n-alkyl 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_{1-6} alkoxy, F, Cl, Br, I, nitro, cyano, C_{1-6} haloalkyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} and R^{3b} are independently (i) 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 3 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)

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R^{3a} is H and R^{3b} is H, CH_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, $CH(OH)CH_3$, $CH_2((4'\text{-}OH)\text{-}Ph)$, CH_2SH, or lower cycloalkyl; or (viii) R^{3a} is CH_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, $CH(OH)CH_3$, $CH_2((4'\text{-}OH)\text{-}Ph)$, or CH_2SH and R^{3b} is H;

(d) R^4 is hydrogen, $C_{1\text{-}10}$ alkyl, $C_{1\text{-}10}$ alkyl optionally substituted with a lower alkyl, alkoxy or halogen, $C_{1\text{-}10}$ haloalkyl, $C_{3\text{-}10}$ cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

(e) R^5 is H, CN, CH_3, vinyl, OCH_3, OCH_2CH_3, CH_2OH, CH_2(halo), such as CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, halogen, including F, Cl, Br, or I;

(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, $C_{1\text{-}4}$ alkyl, vinyl, N_3, CN, Cl, Br, F, I, $O(C_{1\text{-}6}$ acyl), $O(C_{1\text{-}4}$ alkyl), NH_2, $NH(C_{1\text{-}4}$ alkyl), $NH(C_{2\text{-}4}$ alkenyl), $NH(C_{2\text{-}4}$ alkynyl), $NH(C_{1\text{-}4}$ acyl), $N(C_{1\text{-}4}$ alkyl)$_2$, $N(C_{1\text{-}18}$ 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, $OC(O)O(C_{1\text{-}4}$ alkyl), $OC(O)O(C_{1\text{-}4}$ alkyl), $OC(O)O(C_{2\text{-}4}$ alkynyl), $OC(O)O(C_{2\text{-}4}$ alkenyl), $OC_{1\text{-}10}$ haloalkyl, O(aminoacyl), $O(C_{1\text{-}4}$ acyl), $O(C_{1\text{-}4}$ alkyl), $O(C_{2\text{-}4}$ alkenyl), $S(C_{1\text{-}4}$ acyl), $S(C_{1\text{-}4}$ alkyl), $S(C_{2\text{-}4}$ alkynyl), $S(C_{2\text{-}4}$ alkenyl), $SO(C_{1\text{-}4}$ acyl), $SO(C_{1\text{-}4}$ alkyl), $SO(C_{2\text{-}4}$ alkynyl), $SO(C_{2\text{-}4}$ alkenyl), $SO_2(C_{1\text{-}4}$ acyl), $SO_2(C_{1\text{-}4}$ alkyl), $SO_2(C_{2\text{-}4}$ alkynyl), $SO_2(C_{2\text{-}4}$ alkenyl), $OS(O)_2(C_{1\text{-}4}$ acyl), $OS(O)_2(C_{1\text{-}4}$ alkyl), $OS(O)_2(C_{2\text{-}4}$ alkenyl), NH_2, $NH(C_{1\text{-}4}$ alkyl), $NH(C_{2\text{-}4}$ alkenyl), $NH(C_{2\text{-}4}$ alkynyl), $NH(C_{1\text{-}4}$ acyl), $N(C_{1\text{-}4}$ alkyl)$_2$, $N(C_{1\text{-}4}$ acyl)$_2$;

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OR', SH, SR', NH_2, NHR', NR'_2, lower alkyl, halogenated (F, Cl, Br, I) lower alkyl, lower alkenyl of C_2-C_6, CO_2H, CO_2R', $CONH_2$, CONHR', $CONR'_2$, wherein R' is a $C_{1\text{-}20}$ alkyl; a $C_{1\text{-}20}$ cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl.

The third aspect of the second embodiment is directed to a compound represented by formula **I-3**

wherein

(a) R^1 is hydrogen, n-alkyl or a substituted or unsubstituted phenyl, where the substitutent of the substituted phenyl is at least one of a $C_{1\text{-}3}$ alkyl, a $C_{1\text{-}3}$ alkoxy, F, Cl, Br, I, nitro, cyano, and a $C_{1\text{-}3}$ haloalkyl;

(b) R^2 is hydrogen, CH_3, R^{3a} or R^{3b} and R^2 together are $(CH_2)_3$ 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} are as defined herein;

(c) R^{3a} and R^{3b} are independently (i) 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 3 to 5, n is 2 to 4, and where $R^{3'}$ is independently hydrogen or $C_{1\text{-}6}$ alkyl and $R^{3''}$ is -OR' or $-N(R^{3'})_2$); (vi) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, 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, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, 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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-

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methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2(halo), such as CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, halogen, including F, Cl, Br, or I;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OCH_3, halogen, NH_2, or N_3

(h) Y is OH, H, CH_3, vinyl, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3, NH_2, $NHCH_3$, NH(vinyl), NH(acetyl), $NH(C(O)CH_3)$, $N(CH_3)_2$, $N(C(O)CH_3)_2$;

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2H, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$.

The fourth aspect of the second embodiment is directed to a compound represented by formula **I-3**

wherein

(a) R^1 is hydrogen, n-alkyl or a substituted or unsubstituted phenyl, where the substitutent of the substituted phenyl is at least one of a CH_3, OCH_3, F, Cl, Br, I, nitro, cyano, and a $CH_{3-q}X_q$, where X is F, Cl, Br, or I, and q is 1-3;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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 R^{3a} is CH_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 and R^{3b} is H;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(c) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2(halo), such as CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, halogen, including F, Cl, Br, or I;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

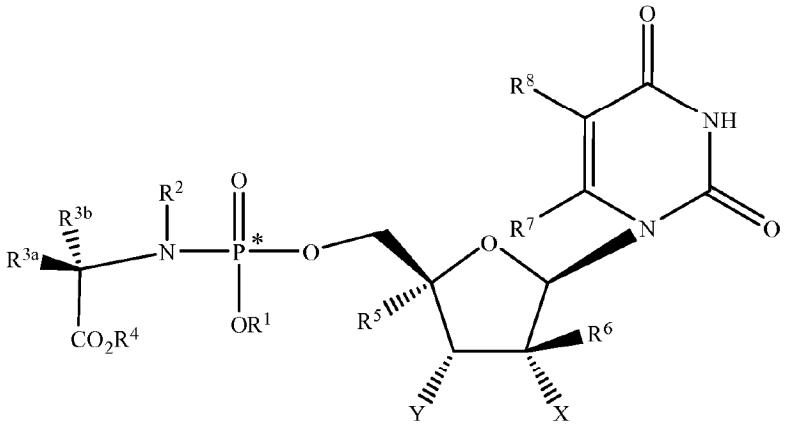
(g) X is H, OH, F, OCH_3, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3, NH_2, $NHCH_3$, NH(vinyl), NH(acetyl), $NH(C(O)CH_3)$, $N(CH_3)_2$, $N(C(O)CH_3)_2$;

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2H, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl.

The fifth aspect of the second embodiment is directed to a compound represented by formula **I-4**

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I-4

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, or a substituted or unsubstituted phenyl, where the substitutent of the substituted phenyl is at least one of a CH_3, OCH_3, F, Cl, Br, I, nitro, cyano, and a $CH_{3-q}X_q$, where X is F, Cl, Br, or I, and q is 1-3;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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 R^{3a} is CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

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(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, halogen, including F, Cl, Br, or I;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OCH_3, Cl, Br, I, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3, NH_2, $NHCH_3$, NH(vinyl), NH(acetyl), $NH(C(O)CH_3)$, $N(CH_3)_2$, $N(C(O)CH_3)_2$;

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2H, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl,

The sixth aspect of the second embodiment is directed to a compound represented by formula **I-4**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

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(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

(g) X is H, OH, F, OCH_3, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3;

(i) R^7 and R^8 are independently H, F, Cl, Br, I, OH, OCH_3, SH, SCH_3, NH_2, $NHCH_3$, $N(CH_3)_2$, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2H, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$, wherein R' is a C_{1-20} alkyl; a C_{1-20} cycloalkyl; a C_2-C_6 alkenyl, a C_2-C_6 alkynyl.

The seventh aspect of the second embodiment is directed to a compound represented by formula **I-4**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, OMe, CN, CH_2F, F, Cl, Br, or I;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

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(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 or N_3, OCH3, or $OC(O)CH_3$;

(i) R^7 and R^8 are independently H, F, Br, SCH_3, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$;

The eighth aspect of the second embodiment is directed to a compound represented by formula **I-4**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^7 and R^8 are independently H, F, Br, SCH_3, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$.

The ninth aspect of the second embodiment is directed to a compound represented by formula **I-4**

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wherein

(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, or N_3;

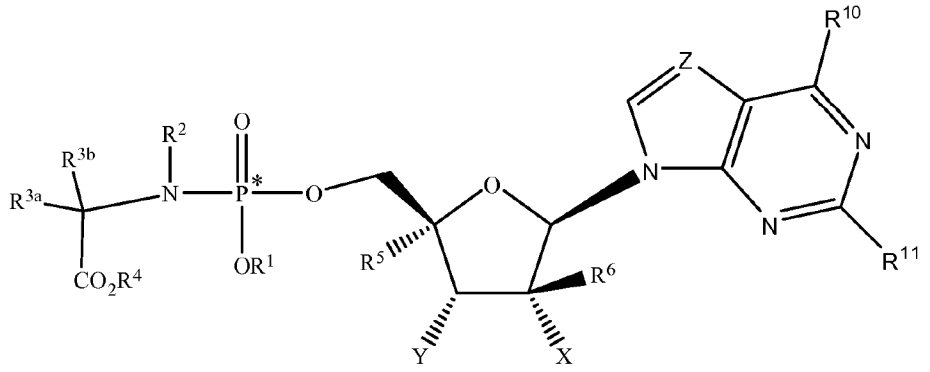
(h) Y is OH, OCH_3, or $OC(O)CH_3$;

(i) R^7 and R^8 are independently H, F, Br, SCH_3, CH_3, $CH_{3-q}X_q$, where X is F, Cl, Br, or I and q is 1 to 3, vinyl, CO_2CH_3, $CONH_2$, $CONHCH_3$, or $CON(CH_3)_2$.

A third embodiment of the invention is directed to a compound represented by formula **I** in which the base is a structure represented by formula **c** above, wherein R^1, R^2, R^{3a}, R^{3b}, R^4, R^5, R^6, X, Y, Z, R^{10}, R^{11}, and R^{12} are defined in the Summary of the Invention section above; with the proviso that R^{11} is not H.

A first aspect of the third embodiment is directed to a compound represented by formula **I-5**

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I-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 or CH_3;

(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

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or C_{1-6} alkyl and $R^{3"}$ is -OR' or $-N(R^{3'})_2$); (vi) R^{3a} is H and R^{3b} is from 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 or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, 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),

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$SO_2(C_{2-4}$ 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)$_2$;

(i) 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 $CH=CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

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

(j) Z is N or CR^{12}; 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,

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Cl, Br, I) lower alkoxy of C_1-C_6, CO_2H, CO_2R', $CONH_2$, $CONHR'$, $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A second aspect of the third embodiment is directed to a compound represented by formula **I-5**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, 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, OCH_3, Cl, Br, I, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3;

(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, $CONHR'$, $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

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wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A third aspect of the third embodiment is directed to a compound represented by formula **I-5**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_2F, F, Cl, Br, or I; with the proviso that X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 or N_3, OCH_3, or $OC(O)CH_3$;

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(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A fourth aspect of the third embodiment is directed to a compound represented by formula **I-5**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

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(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A fifth aspect of the third embodiment is directed to a compound represented by formula **I-5**

wherein

(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

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(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A sixth aspect of the third embodiment is directed to a compound represented by formula **I-5**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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;

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(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, 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, OCH_3, Cl, Br, I, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3;

(i) R^{10} is NH_2 and R^{11} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A seventh aspect of the third embodiment is directed to a compound represented by formula **I-5**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

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(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(c) R^5 is H, CN, CH_2F, F, Cl, Br, or I; with the proviso that X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 or N_3, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is NH_2 and R^{11} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

An eighth aspect of the third embodiment is directed to a compound represented by formula **I-5**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

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(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is NH_2 and R^{11} is H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=CHCO_2H, or CH=CHCO_2R';

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=CHCO_2H, or CH=CHCO_2R'.

A ninth aspect of the third embodiment is directed to a compound represented by formula **I-5**

wherein

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(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, or N-methyl-pyrrolidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is NH_2 and R^{11} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$;

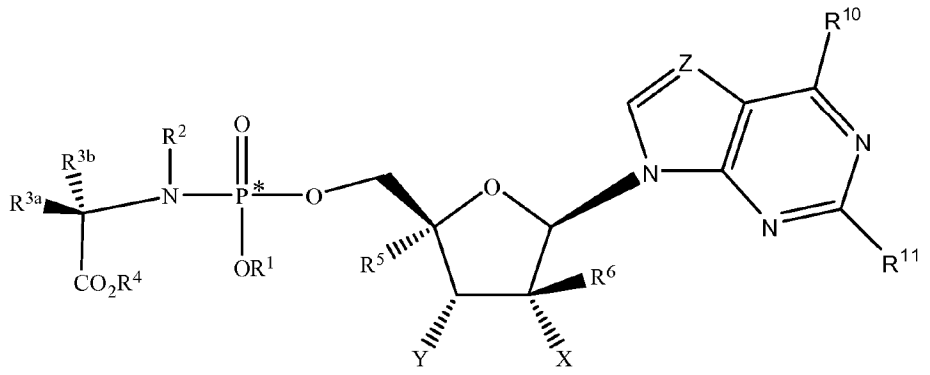
wherein R' is a lower alkyl, a lower cycloalkyl, or C(O)(lower alkyl) or alternatively, in the instance of NR'_2, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A tenth aspect of the third embodiment is directed to a compound represented by formula **I-6**

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I-6

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 or CH_3;

(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

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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 or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, 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, Cl, Br, I, 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),

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$SO_2(C_{2-4}$ 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)$_2$;

(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=CHCO_2H, or CH=CHCO_2R', with the proviso that when R^{10} is OH and R^{11} is not NH_2;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=CHCO_2H, or CH=CHCO_2R'.

An eleventh aspect of the third embodiment is directed to a compound represented by formula **I-6**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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,

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$CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, $CH_2((4'-OH)-Ph)$, CH_2SH, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(c) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, 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, OCH_3, Cl, Br, I, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3;

(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A twelvth aspect of the third embodiment is directed to a compound represented by formula **I-6**

wherein

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(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_2F, F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 or N_3, OCH_3, or $OC(O)CH_3$;

(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is a H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A thirteenth aspect of the third embodiment is directed to a compound represented

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by formula **I-6**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH{=}CHCO_2H$, or $CH{=}CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

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R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=$CHCO_2H$, or CH=$CHCO_2R'$.

A fourteenth aspect of the third embodiment is directed to a compound represented by formula **I-6**

wherein

(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=$CHCO_2H$, or CH=$CHCO_2R'$, with the proviso that when R^{10} is OH and R^{11} is not NH_2;

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wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A fifteenth aspect of the third embodiment is directed to a compound represented by formula **I-6**

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 or CH_3;

(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

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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 or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, 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),

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$SO_2(C_{2-4}$ 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)$_2$;

(i) R^{10} is NH_2 and R^{11} is H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH=CHCO_2H$, or $CH=CHCO_2$R';

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH=CHCO_2H$, or $CH=CHCO_2$R'.

An sixteenth aspect of the third embodiment is directed to a compound represented by formula **I-6**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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,

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$CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, CH_2-imidazol-4-yl, CH_2OH, $CH(OH)CH_3$, CH_2((4'-OH)-Ph), CH_2SH, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(c) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, 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, OCH_3, Cl, Br, I, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3;

(i) R^{10} is NH_2 and R^{11} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A seventeenth aspect of the third embodiment is directed to a compound represented by formula **I-6**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

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(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_2F, F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 or N_3, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is NH_2 and R^{11} is H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH{=}CHCO_2H$, or $CH{=}CHCO_2R'$;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH{=}CHCO_2H$, or $CH{=}CHCO_2R'$.

An eighteenth aspect of the third embodiment is directed to a compound represented by formula **I-6**

wherein

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(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is NH_2 and R^{11} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A nineteenth aspect of the third embodiment is directed to a compound represented by formula **I-6**

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wherein

(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is NH_2 and R^{11} are independently H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH{=}CHCO_2H$, or $CH{=}CHCO_2R'$;

wherein R' is a lower alkyl, a lower cycloalkyl, 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

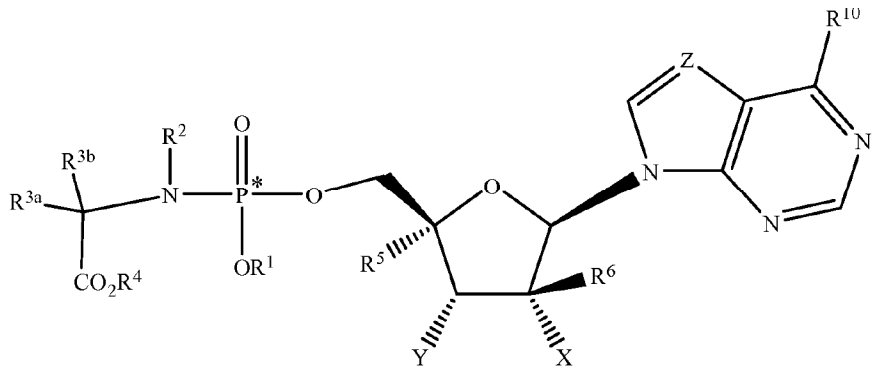
(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH{=}CHCO_2H$, or $CH{=}CHCO_2R'$.

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A fourth embodiment of the invention is directed to a compound represented by formula I in which the base is a structure represented by formula **c** above, where R^{11} is H and R^2, R^{3a}, R^{3b}, R^4, R^5, R^6, X, and Y are defined in the Summary of the Invention section above.

A first aspect of the fourth embodiment is directed to a compound represented by formula **I-7**



I-7

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 or CH_3;

(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, -

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$(CH_2)_eCOR^{3''}$, 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 or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, 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;

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(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)$_2$;

(i) R^{10} is 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

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(j) Z is N or CR^{12}; and

R^{12} is 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 R^{12} is not a: (i) –C≡C–H, (ii) –$C=CH_2$, or (iii) $–NO_2$.

A second aspect of the fourth embodiment is directed to a compound represented by formula **I-7**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H.

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

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(g) X is H, OH, F, OCH_3, halogen, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3;

(i) R^{10} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that R^{12} is not a: (i) $-C\equiv C-H$, (ii) $-C=CH_2$, or (iii) $-NO_2$.

A third aspect of the third embodiment is directed to a compound represented by formula **I-7**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

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(e) R^5 is H, CN, CH_2F, F, Cl, Br, or I; with the proviso that X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 or N_3, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH{=}CHCO_2H$, or $CH{=}CHCO_2R'$,

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, $CH{-}CHCO_2H$, or $CH{-}CHCO_2R'$; with the proviso that R^{12} is not a: (i) $-C{\equiv}C-H$, (ii) $-C{=}CH_2$, or (iii) $-NO_2$.

A fourth aspect of the fourth embodiment is directed to a compound represented by formula **I-7**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-

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methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} and R^{11} H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH–$CHCO_2H$, or CH–$CHCO_2$R',

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=$CHCO_2H$, or CH=$CHCO_2$R'; with the proviso that R^{12} is not a: (i) –C≡C–H, (ii) –C=CH_2, or (iii) –NO_2.

A fifth aspect of the fourth embodiment is directed to a compound represented by formula **I-7**

wherein

(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

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(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

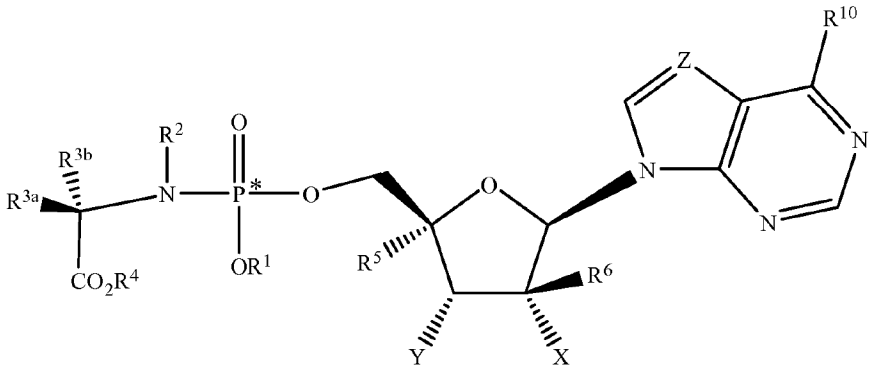
wherein R' is a lower alkyl, a lower cycloalkyl, or C(O)(lower alkyl) or alternatively, in the instance of NR'_2, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

(j) Z is N or CR^{12}; and

R^{12} is H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$.

A sixth aspect of the fourth embodiment is directed to a compound represented by formula **I-8**

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I-8

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 or CH_3;

(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

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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 or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, 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), $OC(O)O(C_{2-4}$ 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),

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$OS(O)_2(C_{1-4}$ 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$)_2$;

(i) R^{10} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, 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) $-NO_2$.

A seventh aspect of the fourth embodiment is directed to a compound represented by formula **I-8**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

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(c) R^{3a} is H and R^{3b} is H, CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, 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, OCH_3, halogen, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3;

(i) R^{10} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that R^{12} is not a: (i) $-C\equiv C-H$, (ii) $-C=CH_2$, or (iii) $-NO_2$.

An eighth aspect of the fourth embodiment is directed to a compound represented by formula **I-8**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl , N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_2F, F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 or N_3, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that R^{12} is not a: (i) $-C\equiv C-H$, (ii) $-C=CH_2$, or (iii) $-NO_2$.

A ninth aspect of the fourth embodiment is directed to a compound represented by

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formula **I-8**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is H, F, Br, I, OH, OR', NH_2, NHR', NR'_2, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$,

wherein R' is a lower alkyl, a lower cycloalkyl, 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

(j) Z is N or CR^{12}; and

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R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'$_2$, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=$CHCO_2H$, or CH=$CHCO_2R'$; with the proviso that R^{12} is not a: (i) –C≡C–H, (ii) –C=CH_2, or (iii) –NO_2.

A tenth aspect of the fourth embodiment is directed to a compound represented by formula **I-8**

wherein

(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

(i) R^{10} is H, F, Br, I, OH, OR', NH_2, NHR', NR'$_2$, CO_2R', $CONH_2$, CONHR', CONR'$_2$, CH=$CHCO_2H$, or CH=$CHCO_2R'$,

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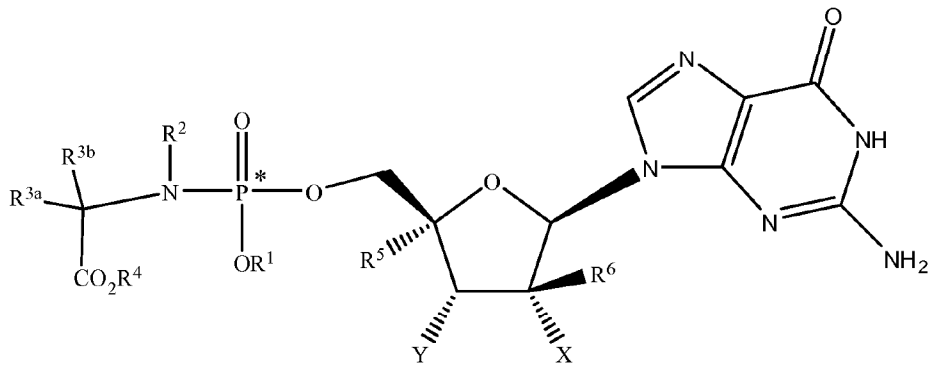
wherein R' is a lower alkyl, a lower cycloalkyl, or C(O)(lower alkyl) or alternatively, in the instance of NR'_2, each R' comprise at least one C atom that are joined to form a heterocycle comprising at least two carbon atoms; and

(j) Z is N or CR^{12}; and

R^{12} is an H, halogen (including F, Cl, Br, I), OR', NH_2, NHR', NR'_2, NO_2, lower alkyl of C_1-C_6, CO_2R', $CONH_2$, CONHR', $CONR'_2$, $CH=CHCO_2H$, or $CH=CHCO_2R'$; with the proviso that R^{12} is not a: (i) –C≡C–H, (ii) $–C=CH_2$, or (iii) $–NO_2$.

A fifth embodiment of the invention is directed to a compound represented by formula **I** in which the base is a structure represented by formula **d** above, wherein R^1, R^2, R^{3a}, R^{3b}, R^4, R^5, R^6, X, and Y are defined in the Summary of the Invention section above.

The first aspect of the fifth embodiment is directed to a compound represented by formula **I-9**



I-9

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, $-NHSO_2C_{1-6}$

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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 or CH_3;

(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, $CH_2CH_2C(O)NH_2$, $CH_2CH_2CH_2CH_2NH_2$, $-CH_2CH_2CH_2NHC(NH)NH_2$, 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 or halogen, C_{1-10} haloalkyl, C_{3-10} cycloalkyl, cycloalkyl alkyl, cycloheteroalkyl, aminoacyl, di(lower alkyl)amino-lower alkyl, aryl, such as phenyl, heteroaryl, such as, pyridinyl, substituted aryl, or substituted heteroaryl;

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(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)$_2$.

A second aspect of the fifth embodiment is directed to a compound represented by formula **I-9**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

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(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, 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, OCH_3, halogen, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3;

A third aspect of the fifth embodiment is directed to a compound represented by formula **I-9**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-

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methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_2F, F, Cl, Br, or I; with the proviso that X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 N_3, OCH_3, or $OC(O)CH_3$;

A fourth aspect of the fifth embodiment is directed to a compound represented by formula **I-9**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

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(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

A fifth aspect of the fifth embodiment is directed to a compound represented by formula **I-9**

wherein

(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

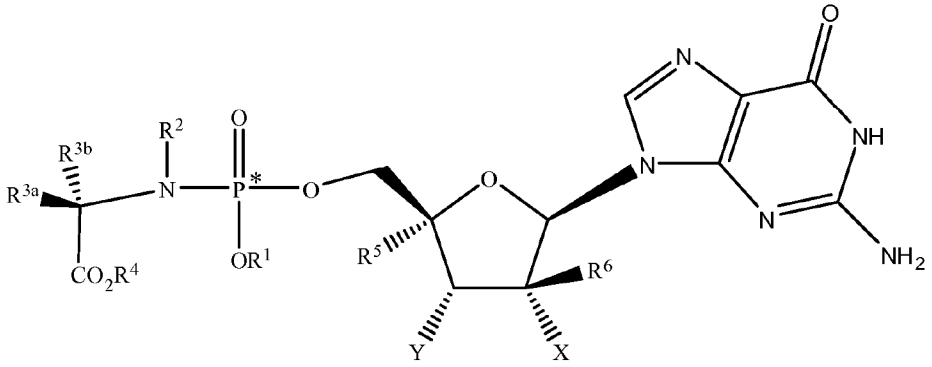
(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

A sixth aspect of the fifth embodiment is directed to a compound represented by formula **I-10**

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I-10

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, or a substituted or unsubstituted phenyl, where the substitutent of the substituted phenyl is at least one of a CH_3, OCH_3, F, Cl, Br, I, nitro, cyano, and a $CH_{3-q}X_q$, where X is F, Cl, Br, or I, and q is 1-3;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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 R^{3a} is CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

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(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, N_3, CH_2CN, CH_2N_3, CH_2NH_2, CH_2NHCH_3, $CH_2N(CH_3)_2$, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, 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, OCH_3, Cl, Br, I, NH_2, or N_3;

(h) Y is OH, H, CH_3, vinyl, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3, NH_2, $NHCH_3$, NH(vinyl), NH(acetyl), $NH(C(O)CH_3)$, $N(CH_3)_2$, $N(C(O)CH_3)_2$;

A seventh aspect of the fifth embodiment is directed to a compound represented by formula **I-10**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_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;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_3, OCH_3, CH_2OH, CH_2F, halogen, including F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, F, or CN;

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(g) X is H, OH, F, OCH_3, Cl, Br, I, NH_2, or N_3; and

(h) Y is OH, H, CH_3, vinyl, NH_2, N_3, CN, Cl, Br, F, I, $OC(O)CH_3$, OCH_3.

An eighth aspect of the fifth embodiment is directed to a compound represented by formula **I-10**

wherein

(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen or CH_3;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, CN, CH_2F, F, Cl, Br, or I, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, F, OCH_3, F, Cl, Br, I, NH_2 or N_3;

(h) Y is H, OH, CH_3, F, Cl, Br, I, NH_2 or N_3, OCH_3, or $OC(O)CH_3$;

A ninth aspect of the fifth embodiment is directed to a compound represented by formula **I-10**

wherein

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(a) R^1 is hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, phenyl, p-tolyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$;

A tenth aspect of the fifth embodiment is directed to a compound represented by formula **I-10**

wherein

(a) R^1 is hydrogen, methyl, phenyl, p-bromo-phenyl, p-chloro-phenyl, p-fluorophenyl;

(b) R^2 is hydrogen;

(c) R^{3a} is H and R^{3b} is H, CH_3, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2Ph, or lower cycloalkyl;

(d) R^4 is hydrogen, CH_3, Et, ^{i}Pr, ^{n}Pr, ^{n}Bu, 2-butyl, ^{t}Bu, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, N-methyl-aziridin-2-yl, N-methyl-azetidin-3-yl, N-

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methyl-pyrrolidin-3-yl, N-methyl-pyrrolidin-4-yl, N-methyl-piperidin-4-yl, lower haloalkyl, or di(lower alkyl)amino-lower alkyl;

(e) R^5 is H, with the provisos that when X is OH, R^6 is CH_3 or CH_2F, R^5 cannot be H;

(f) R^6 is H, CH_3, CH_2F, CHF_2, CF_3, or F;

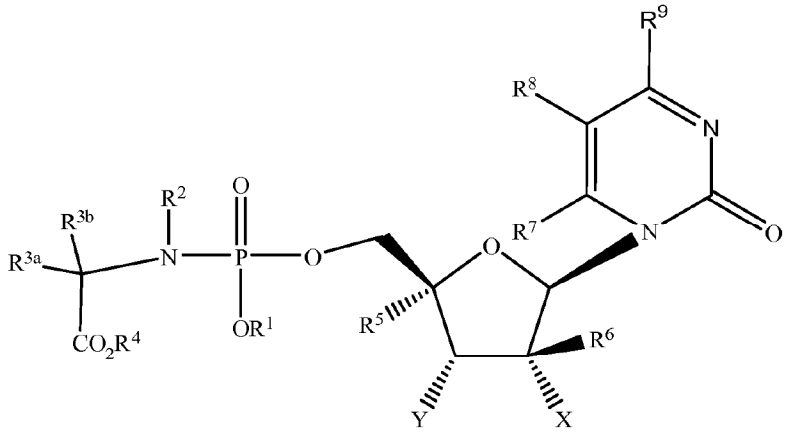
(g) X is H, OH, OCH_3, F, NH_2 or N_3;

(h) Y is OH, NH_2, OCH_3, or $OC(O)CH_3$.

The following tables contain numeric identifiers associated with various substituent designators that should be viewed in light of the accompanying structure. These structures are contemplated species of the various aspects of the disclosed embodiments and are not intended to be limiting on full breadth of the contemplated compound represented by the structure of formula **I**. However, it is contemplated that any one of the exemplified nucleoside bases can be used in combination with any one of contemplated species that specify a particular combination of R^1, R^2, R^{3a}, R^{3b}, R^4, R^5, R^6, X, and Y. In each of the presented tables, the phosphoramidate substituent containing the substituents R^{3a} and R^{3b} are depicted without reference to stereochemical structure (*cf.* structures **I-1**, **I-3**, **I-5**, **I-7**, and **I-9** above). It is contemplated that the compounds recited below embody compounds in which R^{3a} projects toward the viewer while R^{3b} projects away from the viewer (cf. structures **I-2**, **I-4**, **I-6**, **I-8**, and **I-10**). Moreover, it is contemplated that the compounds recited below also embody compounds in which R^{3a} projects away from the viewer while R^{3b} projects towards the viewer. Not meant to be limiting, however, it is contemplated that preferred compounds are those in which R^{3a} projects towards the viewer and R^{3b} projects away from the viewer such that the natural L-amino acid (S)-configuration is presented. Additionally, the inventors recognize that the phosphorus atom of the phosphoramidate moiety is another source of chirality. Although the structures below do not specifically depict chirality at phosphorus, the inventors recognize that stereochemical configurations are possible such that in a staggered (or zig-zag) line structure the oxo-substitutent projects towards the viewer

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while the OR^1 substitutent projects away from the viewer, and vice versa, i.e., where the Cahn-Ingold-Prelog stereochemical designation of phosphorous is either R or S. Therefore, the structures below include all possible stereochemical configurations possible for phosphorus.



II

Table II-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-1-1	CH_3	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-1-2	CH_3	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-1-5	CH_3	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-1-8	CH_3	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-2-1	Et	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-2-2	Et	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-2-5	Et	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-2-8	Et	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-3-1	^{i}Pr	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-3-2	^{i}Pr	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-3-8	^{i}Pr	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-4-1	^{t}Bu	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-4-2	^{t}Bu	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-4-8	^{t}Bu	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-5-1	Ph	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-5-2	Ph	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-5-5	Ph	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-5-8	Ph	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-6-1	p-Me-Ph	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-6-8	p-Me-Ph	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-7-1	p-F-Ph	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-7-2	p-F-Ph	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-7-20	p-F-Ph	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-8-1	p-Cl-Ph	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-8-8	p-Cl-Ph	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-9-1	p-Br-Ph	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-9-20	p-Br-Ph	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

Table II-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-10-1	p-I-Ph	H	H	H	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-10-2	p-I-Ph	H	H	CH_3	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	OH	OH	H	H	NH_2
II-10-8	p-I-Ph	*	H	*	CH_3	H	CH_3	OH	OH	H	H	NH_2

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

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Table II-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-11-1	CH_3	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-11-2	CH_3	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-11-5	CH_3	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-11-8	CH_3	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-12-1	Et	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-12-2	Et	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-12-5	Et	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-12-8	Et	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-13-1	^{i}Pr	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-13-2	^{i}Pr	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-13-8	^{i}Pr	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

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Table II-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-14-1	^{t}Bu	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-14-2	^{t}Bu	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-14-8	^{t}Bu	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-15-1	Ph	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-15-2	Ph	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-15-5	Ph	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-15-8	Ph	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-16-1	p-Me-Ph	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-16-2	p-Me-Ph	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-16-8	p-Me-Ph	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-17-1	p-F-Ph	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-17-2	p-F-Ph	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-17-8	p-F-Ph	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-18-1	p-Cl-Ph	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-18-2	p-Cl-Ph	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-18-8	p-Cl-Ph	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-19-1	p-Br-Ph	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-19-2	p-Br-Ph	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-19-8	p-Br-Ph	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-20-1	p-I-Ph	H	H	H	Et	H	CH_3	OH	OH	H	H	NH_2
II-20-2	p-I-Ph	H	H	CH_3	Et	H	CH_3	OH	OH	H	H	NH_2
II-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	OH	OH	H	H	NH_2
II-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	CH_3	OH	OH	H	H	NH_2
II-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	OH	OH	H	H	NH_2
II-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	OH	OH	H	H	NH_2
II-20-8	p-I-Ph	*	H	*	Et	H	CH_3	OH	OH	H	H	NH_2

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

Table II-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-21-1	CH_3	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-21-2	CH_3	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-21-8	CH_3	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-22-1	Et	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-22-2	Et	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-22-8	Et	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-23-1	^{i}Pr	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-23-8	^{i}Pr	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-24-1	^{t}Bu	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-24-8	^{t}Bu	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-25-1	Ph	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-25-2	Ph	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-25-8	Ph	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-27-1	p-F-Ph	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-27-8	p-F-Ph	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-30-1	p-I-Ph	H	H	H	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2
II-30-8	p-I-Ph	*	H	*	^{i}Pr	H	CH_3	OH	OH	H	H	NH_2

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

Table II-31.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-31-1	CH_3	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-31-2	CH_3	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-31-8	CH_3	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

Table II-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-32-1	Et	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-32-2	Et	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-32-8	Et	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

Table II-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-33-1	^{i}Pr	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-33-8	^{i}Pr	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

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Table II-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-34-1	^{t}Bu	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-34-8	^{t}Bu	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

Table II-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-35-1	Ph	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-35-2	Ph	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-35-8	Ph	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

Table II-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

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Table II-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-37-1	p-F-Ph	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-37-8	p-F-Ph	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

Table II-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

Table II-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

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Table II-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-40-1	p-I-Ph	H	H	H	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2
II-40-8	p-I-Ph	*	H	*	^{n}Bu	H	CH_3	OH	OH	H	H	NH_2

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

Table II-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-41-1	CH_3	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-41-2	CH_3	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-41-5	CH_3	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-41-8	CH_3	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

Table II-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-42-1	Et	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-42-2	Et	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-42-5	Et	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-42-8	Et	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

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Table II-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-43-1	^{i}Pr	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-43-2	^{i}Pr	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-43-8	^{i}Pr	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

Table II-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-44-1	^{t}Bu	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-44-2	^{t}Bu	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-44-8	^{t}Bu	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

Table II-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-45-1	Ph	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-45-2	Ph	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-45-5	Ph	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-45-8	Ph	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

Table II-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-46-1	p-Me-Ph	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-46-2	p-Me-Ph	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-46-8	p-Me-Ph	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

Table II-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-47-1	p-F-Ph	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-47-2	p-F-Ph	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-47-8	p-F-Ph	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

Table II-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-48-1	p-Cl-Ph	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-48-8	p-Cl-Ph	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

Table II-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-49-1	p-Br-Ph	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-49-2	p-Br-Ph	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-49-8	p-Br-Ph	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

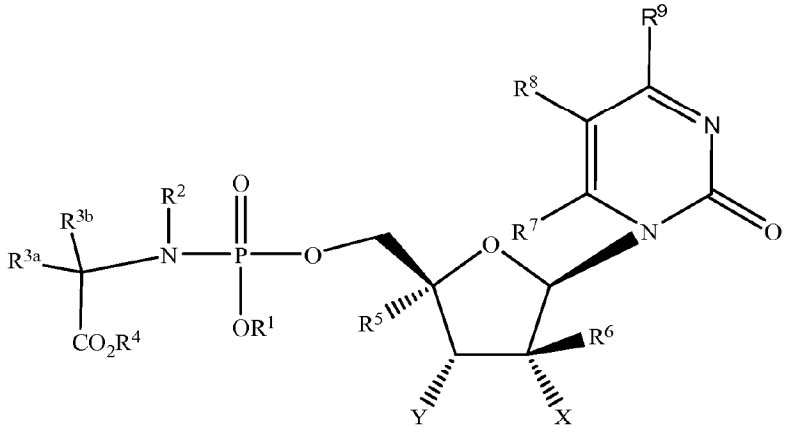
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table II-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
II-50-1	p-I-Ph	H	H	H	Bz	H	CH_3	OH	OH	H	H	NH_2
II-50-2	p-I-Ph	H	H	CH_3	Bz	H	CH_3	OH	OH	H	H	NH_2
II-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	CH_3	OH	OH	H	H	NH_2
II-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	OH	OH	H	H	NH_2
II-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	OH	OH	H	H	NH_2
II-50-8	p-I-Ph	*	H	*	Bz	H	CH_3	OH	OH	H	H	NH_2

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

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III

Table III-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-1-1	CH_3	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-1-2	CH_3	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-1-5	CH_3	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-1-8	CH_3	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

Table III-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-2-1	Et	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-2-2	Et	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-2-5	Et	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-2-8	Et	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

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Table III-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-3-1	^{i}Pr	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-3-2	^{i}Pr	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-3-8	^{i}Pr	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

Table III-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-4-1	^{t}Bu	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-4-2	^{t}Bu	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-4-8	^{t}Bu	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

Table III-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-5-1	Ph	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-5-2	Ph	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-5-5	Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-5-8	Ph	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

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Table III-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-6-1	p-Me-Ph	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-6-8	p-Me-Ph	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

Table III-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-7-1	p-F-Ph	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-7-2	p-F-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-7-20	p-F-Ph	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

Table III-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-8-1	p-Cl-Ph	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-8-8	p-Cl-Ph	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

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Table III-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-9-1	p-Br-Ph	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-9-20	p-Br-Ph	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

Table III-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-10-1	p-I-Ph	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
III-10-2	p-I-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
III-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
III-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
III-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
III-10-8	p-I-Ph	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

Table III-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-11-1	CH_3	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-11-2	CH_3	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-11-5	CH_3	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-11-8	CH_3	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

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Table III-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-12-1	Et	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-12-2	Et	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-12-5	Et	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-12-8	Et	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

Table III-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-13-1	^{i}Pr	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-13-2	^{i}Pr	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-13-8	^{i}Pr	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

Table III-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-14-1	^{t}Bu	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-14-2	^{t}Bu	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-14-8	^{t}Bu	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

Table III-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-15-1	Ph	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-15-2	Ph	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-15-5	Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-15-8	Ph	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

Table III-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-16-1	p-Me-Ph	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-16-2	p-Me-Ph	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-16-8	p-Me-Ph	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

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Table III-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-17-1	p-F-Ph	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-17-2	p-F-Ph	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-17-8	p-F-Ph	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

Table III-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-18-1	p-Cl-Ph	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-18-2	p-Cl-Ph	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-18-8	p-Cl-Ph	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

Table III-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-19-1	p-Br-Ph	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-19-2	p-Br-Ph	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-19-8	p-Br-Ph	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

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Table III-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-20-1	p-I-Ph	H	H	H	Et	H	CH_3	F	OH	H	H	NH_2
III-20-2	p-I-Ph	H	H	CH_3	Et	H	CH_3	F	OH	H	H	NH_2
III-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H	NH_2
III-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H	NH_2
III-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H	NH_2
III-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H	NH_2
III-20-8	p-I-Ph	*	H	*	Et	H	CH_3	F	OH	H	H	NH_2

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

Table III-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-21-1	CH_3	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-21-2	CH_3	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-21-8	CH_3	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

Table III-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-22-1	Et	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-22-2	Et	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-22-8	Et	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

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Table III-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-23-1	^{i}Pr	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-23-8	^{i}Pr	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

Table III-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-24-1	^{t}Bu	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-24-8	^{t}Bu	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

Table III-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-25-1	Ph	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-25-2	Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-25-8	Ph	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

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Table III-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

Table III-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-27-1	p-F-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-27-8	p-F-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

Table III-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

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Table III-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

Table III-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-30-1	p-I-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H	NH_2
III-30-8	p-I-Ph	*	H	*	^{i}Pr	H	CH_3	F	OH	H	H	NH_2

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

Table III-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-31-1	CH_3	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-31-2	CH_3	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-31-8	CH_3	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

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Table III-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-32-1	Et	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-32-2	Et	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-32-8	Et	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

Table III-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-33-1	^{i}Pr	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-33-8	^{i}Pr	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

Table III-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-34-1	^{t}Bu	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-34-8	^{t}Bu	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

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Table III-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-35-1	Ph	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-35-2	Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-35-8	Ph	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

Table III-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

Table III-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-37-1	p-F-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-37-8	p-F-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

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Table III-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

Table III-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

Table III-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-40-1	p-I-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H	NH_2
III-40-8	p-I-Ph	*	H	*	^{n}Bu	H	CH_3	F	OH	H	H	NH_2

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

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Table III-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-41-1	CH_3	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-41-2	CH_3	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-41-5	CH_3	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-41-8	CH_3	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

Table III-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-42-1	Et	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-42-2	Et	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-42-5	Et	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-42-8	Et	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

Table III-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-43-1	^{i}Pr	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-43-2	^{i}Pr	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-43-8	^{i}Pr	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

Table III-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-44-1	^{t}Bu	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-44-2	^{t}Bu	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-44-8	^{t}Bu	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

Table III-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-45-1	Ph	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-45-2	Ph	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-45-5	Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-45-8	Ph	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

Table III-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-46-1	p-Me-Ph	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-46-2	p-Me-Ph	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-46-8	p-Me-Ph	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

Table III-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-47-1	p-F-Ph	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-47-2	p-F-Ph	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-47-8	p-F-Ph	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

Table III-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-48-1	p-Cl-Ph	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-48-8	p-Cl-Ph	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

Table III-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-49-1	p-Br-Ph	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-49-2	p-Br-Ph	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-49-8	p-Br-Ph	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

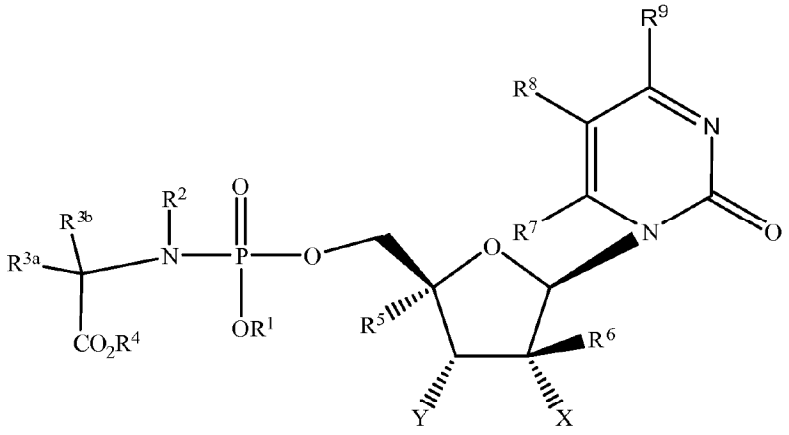
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table III-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
III-50-1	p-I-Ph	H	H	H	Bz	H	CH_3	F	OH	H	H	NH_2
III-50-2	p-I-Ph	H	H	CH_3	Bz	H	CH_3	F	OH	H	H	NH_2
III-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H	NH_2
III-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H	NH_2
III-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H	NH_2
III-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H	NH_2
III-50-8	p-I-Ph	*	H	*	Bz	H	CH_3	F	OH	H	H	NH_2

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

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IV

Table IV-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-1-1	CH_3	H	H	H	CH_3	H	F	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-1-2	CH_3	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-1-5	CH_3	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-1-8	CH_3	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

Table IV-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-2-1	Et	H	H	H	CH_3	H	F	F	OH	H	H	NH_2
IV-2-2	Et	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-2-5	Et	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-2-8	Et	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

Table IV-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-3-1	^{i}Pr	H	H	H	CH_3	H	F	F	OH	H	H	NH_2
IV-3-2	^{i}Pr	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-3-8	^{i}Pr	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

Table IV-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	R^9
IV-4-1	^{t}Bu	H	H	H	CH_3	H	CH_3	F	OH	H	H	NH_2
IV-4-2	^{t}Bu	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H	NH_2
IV-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
IV-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H	NH_2
IV-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H	NH_2
IV-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H	NH_2
IV-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H	NH_2
IV-4-8	^{t}Bu	*	H	*	CH_3	H	CH_3	F	OH	H	H	NH_2

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

Table IV-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-5-1	Ph	H	H	H	CH_3	H	F	F	OH	H	H	NH_2
IV-5-2	Ph	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-5-5	Ph	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-5-8	Ph	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

Table IV-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-6-1	p-Me-Ph	H	H	H	CH_3	H	F	F	OH	H	H	NH_2
IV-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-6-8	p-Me-Ph	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

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Table IV-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-7-1	p-F-Ph	H	H	H	CH_3	H	F	F	OH	H	H	NH_2
IV-7-2	p-F-Ph	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-7-20	p-F-Ph	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

Table IV-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-8-1	p-Cl-Ph	H	H	H	CH_3	H	F	F	OH	H	H	NH_2
IV-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-8-8	p-Cl-Ph	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

Table IV-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-9-1	p-Br-Ph	H	H	H	CH_3	H	F	F	OH	H	H	NH_2
IV-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-9-20	p-Br-Ph	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

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Table IV-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-10-1	p-I-Ph	H	H	H	CH_3	H	F	F	OH	H	H	NH_2
IV-10-2	p-I-Ph	H	H	CH_3	CH_3	H	F	F	OH	H	H	NH_2
IV-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H	NH_2
IV-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H	NH_2
IV-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H	NH_2
IV-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H	NH_2
IV-10-8	p-I-Ph	*	H	*	CH_3	H	F	F	OH	H	H	NH_2

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

Table IV-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-11-1	CH_3	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-11-2	CH_3	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-11-5	CH_3	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-11-8	CH_3	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-12-1	Et	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-12-2	Et	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-12-5	Et	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-12-8	Et	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-13-1	^{i}Pr	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-13-2	^{i}Pr	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-13-8	^{i}Pr	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-14-1	^{t}Bu	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-14-2	^{t}Bu	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-14-8	^{t}Bu	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-15-1	Ph	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-15-2	Ph	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-15-5	Ph	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-15-8	Ph	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-16-1	p-Me-Ph	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-16-2	p-Me-Ph	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-16-8	p-Me-Ph	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-17-1	p-F-Ph	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-17-2	p-F-Ph	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-17-8	p-F-Ph	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

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Table IV-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-18-1	p-Cl-Ph	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-18-2	p-Cl-Ph	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-18-8	p-Cl-Ph	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-19-1	p-Br-Ph	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-19-2	p-Br-Ph	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-19-8	p-Br-Ph	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-20-1	p-I-Ph	H	H	H	Et	H	F	F	OH	H	H	NH_2
IV-20-2	p-I-Ph	H	H	CH_3	Et	H	F	F	OH	H	H	NH_2
IV-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H	NH_2
IV-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	F	OH	H	H	NH_2
IV-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H	NH_2
IV-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H	NH_2
IV-20-8	p-I-Ph	*	H	*	Et	H	F	F	OH	H	H	NH_2

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

Table IV-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-21-1	CH_3	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-21-2	CH_3	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-21-8	CH_3	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-22-1	Et	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-22-2	Et	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-22-8	Et	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-23-8	^{i}Pr	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-24-1	^{t}Bu	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-24-8	^{t}Bu	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-25-1	Ph	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-25-2	Ph	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-25-8	Ph	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

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Table IV-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-27-1	p-F-Ph	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-27-8	p-F-Ph	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-30-1	p-I-Ph	H	H	H	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	F	OH	H	H	NH_2
IV-30-8	p-I-Ph	*	H	*	^{i}Pr	H	F	F	OH	H	H	NH_2

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

Table IV-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-31-1	CH_3	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-31-2	CH_3	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-31-8	CH_3	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

Table IV-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-32-1	Et	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-32-2	Et	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-32-8	Et	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

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Table IV-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-33-1	^{i}Pr	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-33-8	^{i}Pr	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

Table IV-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-34-1	^{t}Bu	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-34-8	^{t}Bu	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

Table IV-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-35-1	Ph	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-35-8	Ph	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

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Table IV-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

Table IV-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-37-1	p-F-Ph	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-37-8	p-F-Ph	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

Table IV-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

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Table IV-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

Table IV-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-40-1	p-I-Ph	H	H	H	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H	NH_2
IV-40-8	p-I-Ph	*	H	*	^{n}Bu	H	F	F	OH	H	H	NH_2

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

Table IV-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-41-1	CH_3	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-41-2	CH_3	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-41-8	CH_3	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

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Table IV-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-42-1	Et	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-42-2	Et	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-42-5	Et	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-42-8	Et	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

Table IV-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-43-1	^{i}Pr	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-43-2	^{i}Pr	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-43-8	^{i}Pr	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

Table IV-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-44-1	^{t}Bu	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-44-8	^{t}Bu	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

Table IV-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-45-1	Ph	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-45-2	Ph	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-45-5	Ph	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-45-8	Ph	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

Table IV-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-46-1	p-Me-Ph	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-46-2	p-Me-Ph	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-46-8	p-Me-Ph	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

Table IV-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-47-1	p-F-Ph	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-47-2	p-F-Ph	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-47-8	p-F-Ph	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

Table IV-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-48-1	p-Cl-Ph	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-48-8	p-Cl-Ph	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

Table IV-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-49-1	p-Br-Ph	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-49-2	p-Br-Ph	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2
IV-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-49-8	p-Br-Ph	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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

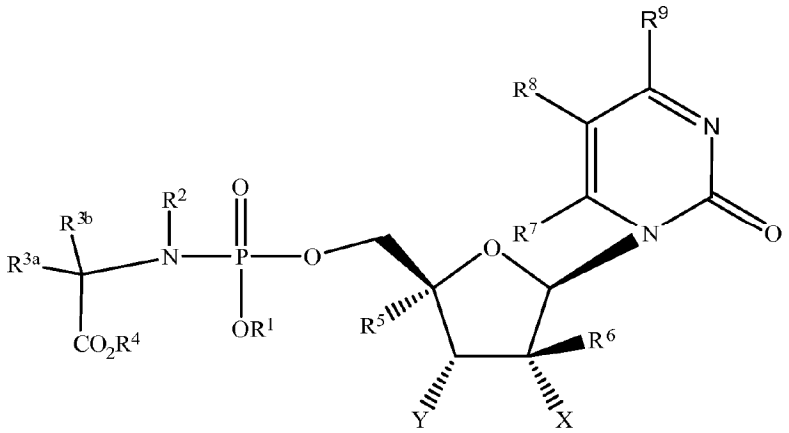
Table IV-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-50-1	p-I-Ph	H	H	H	Bz	H	F	F	OH	H	H	NH_2
IV-50-2	p-I-Ph	H	H	CH_3	Bz	H	F	F	OH	H	H	NH_2
IV-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H	NH_2
IV-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	F	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
IV-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H	NH_2
IV-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H	NH_2
IV-50-8	p-I-Ph	*	H	*	Bz	H	F	F	OH	H	H	NH_2

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



V

Table V-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-1-1	CH_3	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-1-2	CH_3	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-1-5	CH_3	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-1-8	CH_3	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

Table V-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-2-1	Et	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-2-2	Et	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-2-5	Et	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-2-8	Et	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

Table V-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-3-1	^{i}Pr	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-3-2	^{i}Pr	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-3-8	^{i}Pr	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

Table V-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-4-1	^{t}Bu	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-4-2	^{t}Bu	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-4-8	^{t}Bu	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

Table V-5.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-5-1	Ph	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-5-2	Ph	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-5-5	Ph	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-5-8	Ph	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

Table V-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-6-1	p-Me-Ph	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-6-8	p-Me-Ph	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

Table V-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-7-1	p-F-Ph	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-7-2	p-F-Ph	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-7-20	p-F-Ph	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

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Table V-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-8-1	p-Cl-Ph	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-8-8	p-Cl-Ph	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

Table V-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-9-1	p-Br-Ph	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-9-20	p-Br-Ph	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

Table V-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-10-1	p-I-Ph	H	H	H	CH_3	H	H	F	OH	H	H	NH_2
V-10-2	p-I-Ph	H	H	CH_3	CH_3	H	H	F	OH	H	H	NH_2
V-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	H	F	OH	H	H	NH_2
V-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	H	F	OH	H	H	NH_2
V-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	H	F	OH	H	H	NH_2
V-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	H	F	OH	H	H	NH_2
V-10-8	p-I-Ph	*	H	*	CH_3	H	H	F	OH	H	H	NH_2

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

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Table V-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-11-1	CH_3	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-11-2	CH_3	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-11-5	CH_3	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-11-8	CH_3	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-12-1	Et	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-12-2	Et	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-12-5	Et	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-12-8	Et	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-13-1	^{i}Pr	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-13-2	^{i}Pr	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-13-8	^{i}Pr	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

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Table V-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-14-1	^{t}Bu	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-14-2	^{t}Bu	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-14-8	^{t}Bu	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-15-1	Ph	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-15-2	Ph	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-15-5	Ph	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-15-8	Ph	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-16-1	p-Me-Ph	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-16-2	p-Me-Ph	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-16-8	p-Me-Ph	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-17-1	p-F-Ph	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-17-2	p-F-Ph	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-17-8	p-F-Ph	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-18-1	p-Cl-Ph	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-18-2	p-Cl-Ph	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-18-8	p-Cl-Ph	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-19-1	p-Br-Ph	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-19-2	p-Br-Ph	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-19-8	p-Br-Ph	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-20-1	p-I-Ph	H	H	H	Et	H	H	F	OH	H	H	NH_2
V-20-2	p-I-Ph	H	H	CH_3	Et	H	H	F	OH	H	H	NH_2
V-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	H	F	OH	H	H	NH_2
V-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	H	F	OH	H	H	NH_2
V-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	H	F	OH	H	H	NH_2
V-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	H	F	OH	H	H	NH_2
V-20-8	p-I-Ph	*	H	*	Et	H	H	F	OH	H	H	NH_2

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

Table V-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-21-1	CH_3	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-21-2	CH_3	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-21-8	CH_3	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-22-1	Et	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-22-2	Et	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-22-8	Et	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-23-1	^{i}Pr	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-23-8	^{i}Pr	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-24-1	^{t}Bu	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-24-8	^{t}Bu	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-25-1	Ph	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-25-2	Ph	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-25-8	Ph	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-27-1	p-F-Ph	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-27-8	p-F-Ph	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-30-1	p-I-Ph	H	H	H	^{i}Pr	H	H	F	OH	H	H	NH_2
V-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	H	F	OH	H	H	NH_2
V-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	H	F	OH	H	H	NH_2
V-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	H	F	OH	H	H	NH_2
V-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	H	F	OH	H	H	NH_2
V-30-8	p-I-Ph	*	H	*	^{i}Pr	H	H	F	OH	H	H	NH_2

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

Table V-31.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-31-1	CH_3	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-31-2	CH_3	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-31-8	CH_3	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

Table V-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-32-1	Et	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-32-2	Et	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-32-8	Et	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

Table V-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-33-1	^{i}Pr	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-33-8	^{i}Pr	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

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Table V-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-34-1	^{t}Bu	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-34-8	^{t}Bu	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

Table V-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-35-1	Ph	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-35-2	Ph	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-35-8	Ph	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

Table V-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

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Table V-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-37-1	p-F-Ph	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-37-8	p-F-Ph	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

Table V-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

Table V-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

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Table V-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-40-1	p-I-Ph	H	H	H	^{n}Bu	H	H	F	OH	H	H	NH_2
V-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	H	F	OH	H	H	NH_2
V-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	H	F	OH	H	H	NH_2
V-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	H	F	OH	H	H	NH_2
V-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	H	F	OH	H	H	NH_2
V-40-8	p-I-Ph	*	H	*	^{n}Bu	H	H	F	OH	H	H	NH_2

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

Table V-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-41-1	CH_3	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-41-2	CH_3	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-41-5	CH_3	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-41-8	CH_3	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

Table V-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-42-1	Et	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-42-2	Et	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-42-5	Et	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-42-8	Et	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

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Table V-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-43-1	^{i}Pr	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-43-2	^{i}Pr	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-43-8	^{i}Pr	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

Table V-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-44-1	^{t}Bu	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-44-2	^{t}Bu	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-44-8	^{t}Bu	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

Table V-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-45-1	Ph	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-45-2	Ph	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-45-5	Ph	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-45-8	Ph	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

Table V-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-46-1	p-Me-Ph	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-46-2	p-Me-Ph	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-46-8	p-Me-Ph	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

Table V-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-47-1	p-F-Ph	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-47-2	p-F-Ph	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-47-8	p-F-Ph	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

Table V-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-48-1	p-Cl-Ph	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-48-8	p-Cl-Ph	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

Table V-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-49-1	p-Br-Ph	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-49-2	p-Br-Ph	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-49-8	p-Br-Ph	*	H	*	Bz	H	H	F	OH	H	H	NH_2

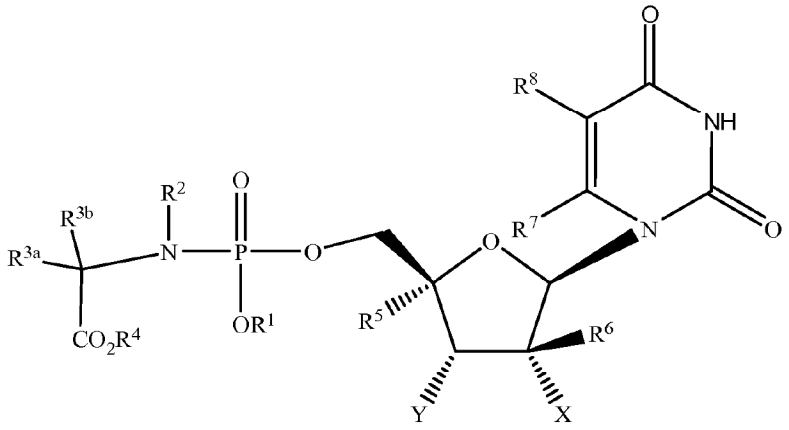
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table V-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
V-50-1	p-I-Ph	H	H	H	Bz	H	H	F	OH	H	H	NH_2
V-50-2	p-I-Ph	H	H	CH_3	Bz	H	H	F	OH	H	H	NH_2
V-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	H	F	OH	H	H	NH_2
V-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	H	F	OH	H	H	NH_2
V-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	H	F	OH	H	H	NH_2
V-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	H	F	OH	H	H	NH_2
V-50-8	p-I-Ph	*	H	*	Bz	H	H	F	OH	H	H	NH_2

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

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VI

Table VI-1.

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

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

Table VI-2.

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

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

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

Table VI-4.

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

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

Table VI-5.

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

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

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

Table VI-7.

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

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

Table VI-8.

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

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

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

Table VI-10.

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

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

Table VI-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-11-1	CH_3	H	H	H	Et	H	F	H	OH	H	H
VI-11-2	CH_3	H	H	CH_3	Et	H	F	H	OH	H	H
VI-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H
VI-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H
VI-11-5	CH_3	H	H	CH_2Ph	Et	H	F	H	OH	H	H
VI-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H
VI-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H
VI-11-8	CH_3	*	H	*	Et	H	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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Table VI-12.

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

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

Table VI-13.

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

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

Table VI-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-14-1	^{t}Bu	H	H	H	Et	H	F	H	OH	H	H
VI-14-2	^{t}Bu	H	H	CH_3	Et	H	F	H	OH	H	H
VI-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H
VI-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H
VI-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	H	OH	H	H
VI-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H
VI-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H
VI-14-8	^{t}Bu	*	H	*	Et	H	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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Table VI-15.

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

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

Table VI-16.

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

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

Table VI-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-17-1	p-F-Ph	H	H	H	Et	H	F	H	OH	H	H
VI-17-2	p-F-Ph	H	H	CH_3	Et	H	F	H	OH	H	H
VI-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H
VI-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H
VI-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	H	OH	H	H
VI-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H
VI-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H
VI-17-8	p-F-Ph	*	H	*	Et	H	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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Table VI-18.

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

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

Table VI-19.

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

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

Table VI-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-20-1	p-I-Ph	H	H	H	Et	H	F	H	OH	H	H
VI-20-2	p-I-Ph	H	H	CH_3	Et	H	F	H	OH	H	H
VI-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H
VI-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H
VI-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	H	OH	H	H
VI-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H
VI-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H
VI-20-8	p-I-Ph	*	H	*	Et	H	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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Table VI-21.

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

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

Table VI-22.

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

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

Table VI-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	H	OH	H	H
VI-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H
VI-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H
VI-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H
VI-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H
VI-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H
VI-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H
VI-23-8	^{i}Pr	*	H	*	^{i}Pr	H	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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Table VI-24.

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

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

Table VI-25.

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

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

Table VI-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	H	OH	H	H
VI-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H
VI-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H
VI-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H
VI-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H
VI-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H
VI-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H
VI-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	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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Table VI-27.

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

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

Table VI-28.

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

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

Table VI-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	H	OH	H	H
VI-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H
VI-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H
VI-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H
VI-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H
VI-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H
VI-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H
VI-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	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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Table VI-30.

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

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

Table VI-31.

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

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

Table VI-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-32-1	Et	H	H	H	^{n}Bu	H	F	H	OH	H	H
VI-32-2	Et	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H
VI-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H
VI-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H
VI-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H
VI-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H
VI-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H
VI-32-8	Et	*	H	*	^{n}Bu	H	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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Table VI-33.

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

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

Table VI-34.

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

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

Table VI-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-35-1	Ph	H	H	H	^{n}Bu	H	F	H	OH	H	H
VI-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H
VI-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H
VI-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H
VI-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H
VI-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H
VI-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H
VI-35-8	Ph	*	H	*	^{n}Bu	H	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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Table VI-36.

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

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

Table VI-37.

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

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

Table VI-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	H	OH	H	H
VI-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H
VI-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H
VI-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H
VI-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H
VI-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H
VI-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H
VI-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	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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Table VI-39.

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

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

Table VI-40.

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

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

Table VI-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
VI-41-1	CH_3	H	H	H	Bz	H	F	H	OH	H	H
VI-41-2	CH_3	H	H	CH_3	Bz	H	F	H	OH	H	H
VI-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H
VI-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H
VI-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	H	OH	H	H
VI-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H
VI-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H
VI-41-8	CH_3	*	H	*	Bz	H	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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Table VI-42.

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

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

Table VI-43.

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

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

Table VI-44.

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

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

Table VI-45.

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

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

Table VI-46.

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

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

Table VI-47.

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

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

Table VI-48.

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

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

Table VI-49.

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

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

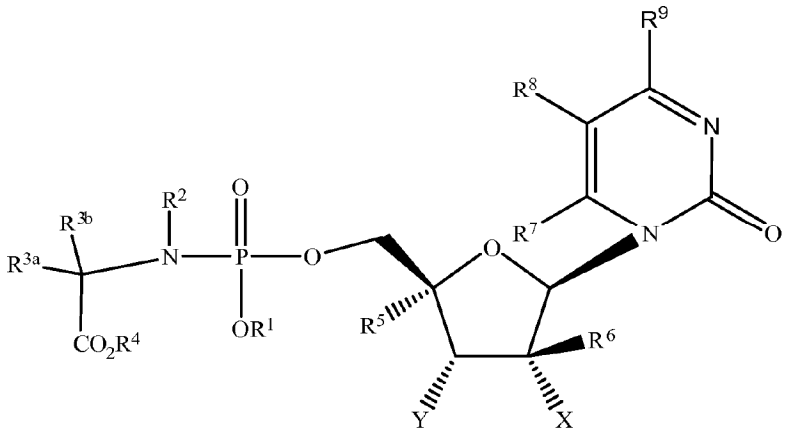
Table VI-50.

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

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



VII

Table VII-1.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-1-1	CH_3	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-1-2	CH_3	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-1-3	CH_3	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-1-4	CH_3	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-1-5	CH_3	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-1-6	CH_3	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-1-7	CH_3	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-1-8	CH_3	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

Table VII-2.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-2-1	Et	H	H	H	CH_3	H	F	H	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-2-2	Et	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-2-3	Et	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-2-4	Et	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-2-5	Et	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-2-6	Et	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-2-7	Et	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-2-8	Et	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

Table VII-3.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-3-1	^{i}Pr	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-3-2	^{i}Pr	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-3-3	^{i}Pr	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-3-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-3-5	^{i}Pr	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-3-6	^{i}Pr	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-3-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-3-8	^{i}Pr	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

Table VII-4.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-4-1	^{t}Bu	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-4-2	^{t}Bu	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-4-8	^{t}Bu	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

Table VII-5.

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-5-1	Ph	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-5-2	Ph	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-5-3	Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-5-4	Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-5-5	Ph	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-5-6	Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-5-7	Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-5-8	Ph	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

Table VII-6.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-6-1	p-Me-Ph	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-6-2	p-Me-Ph	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-6-3	p-Me-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-6-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-6-5	p-Me-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-6-6	p-Me-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-6-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-6-8	p-Me-Ph	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

Table VII-7.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-7-1	p-F-Ph	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-7-2	p-F-Ph	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-7-3	p-F-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-7-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-7-6	p-F-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-7-7	p-F-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-7-8	p-F-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-7-20	p-F-Ph	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

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Table VII-8.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-8-1	p-Cl-Ph	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-8-2	p-Cl-Ph	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-8-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-8-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-8-5	p-Cl-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-8-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-8-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-8-8	p-Cl-Ph	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

Table VII-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-9-1	p-Br-Ph	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-9-20	p-Br-Ph	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

Table VII-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-10-1	p-I-Ph	H	H	H	CH_3	H	F	H	OH	H	H	NH_2
VII-10-2	p-I-Ph	H	H	CH_3	CH_3	H	F	H	OH	H	H	NH_2
VII-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	H	OH	H	H	NH_2
VII-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	F	H	OH	H	H	NH_2
VII-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	H	OH	H	H	NH_2
VII-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	H	OH	H	H	NH_2
VII-10-8	p-I-Ph	*	H	*	CH_3	H	F	H	OH	H	H	NH_2

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

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Table VII-11.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-11-1	CH_3	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-11-2	CH_3	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-11-3	CH_3	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-11-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-11-5	CH_3	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-11-6	CH_3	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-11-7	CH_3	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-11-8	CH_3	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

Table VII-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-12-1	Et	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-12-2	Et	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-12-5	Et	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-12-8	Et	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

Table VII-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-13-1	^{i}Pr	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-13-2	^{i}Pr	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-13-8	^{i}Pr	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

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Table VII-14.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-14-1	^{t}Bu	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-14-2	^{t}Bu	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-14-3	^{t}Bu	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-14-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-14-5	^{t}Bu	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-14-6	^{t}Bu	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-14-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-14-8	^{t}Bu	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

Table VII-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-15-1	Ph	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-15-2	Ph	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-15-5	Ph	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-15-8	Ph	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

Table VII-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-16-1	p-Me-Ph	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-16-2	p-Me-Ph	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-16-8	p-Me-Ph	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

Table VII-17.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-17-1	p-F-Ph	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-17-2	p-F-Ph	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-17-3	p-F-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-17-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-17-5	p-F-Ph	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-17-6	p-F-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-17-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-17-8	p-F-Ph	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

Table VII-18.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-18-1	p-Cl-Ph	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-18-2	p-Cl-Ph	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-18-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-18-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-18-5	p-Cl-Ph	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-18-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-18-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-18-8	p-Cl-Ph	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

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Table VII-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-19-1	p-Br-Ph	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-19-2	p-Br-Ph	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-19-8	p-Br-Ph	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

Table VII-20.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-20-1	p-I-Ph	H	H	H	Et	H	F	H	OH	H	H	NH_2
VII-20-2	p-I-Ph	H	H	CH_3	Et	H	F	H	OH	H	H	NH_2
VII-20-3	p-I-Ph	H	H	$CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-20-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	H	OH	H	H	NH_2
VII-20-5	p-I-Ph	H	H	CH_2Ph	Et	H	F	H	OH	H	H	NH_2
VII-20-6	p-I-Ph	H	H	CH_2-indol-3-yl	Et	H	F	H	OH	H	H	NH_2
VII-20-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	H	OH	H	H	NH_2
VII-20-8	p-I-Ph	*	H	*	Et	H	F	H	OH	H	H	NH_2

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

Table VII-21.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-21-1	CH_3	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-21-2	CH_3	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-21-3	CH_3	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-21-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-21-5	CH_3	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-21-6	CH_3	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-21-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-21-8	CH_3	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

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Table VII-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-22-1	Et	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-22-2	Et	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-22-8	Et	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

Table VII-23.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-23-1	^{i}Pr	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-23-2	^{i}Pr	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-23-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-23-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-23-5	^{i}Pr	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-23-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-23-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-23-8	^{i}Pr	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

Table VII-24.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-24-1	^{t}Bu	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-24-2	^{t}Bu	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-24-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-24-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-24-5	^{t}Bu	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-24-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-24-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-24-8	^{t}Bu	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

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Table VII-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-25-1	Ph	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-25-2	Ph	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-25-8	Ph	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

Table VII-26.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-26-1	p-Me-Ph	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-26-2	p-Me-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-26-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-26-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-26-5	p-Me-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-26-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-26-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-26-8	p-Me-Ph	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

Table VII-27.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-27-1	p-F-Ph	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-27-2	p-F-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-27-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-27-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-27-5	p-F-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-27-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-27-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-27-8	p-F-Ph	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

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Table VII-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

Table VII-29.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-29-1	p-Br-Ph	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-29-2	p-Br-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-29-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-29-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-29-5	p-Br-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-29-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-29-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-29-8	p-Br-Ph	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

Table VII-30.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-30-1	p-I-Ph	H	H	H	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-30-2	p-I-Ph	H	H	CH_3	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-30-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-30-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-30-5	p-I-Ph	H	H	CH_2Ph	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-30-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-30-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	F	H	OH	H	H	NH_2
VII-30-8	p-I-Ph	*	H	*	^{i}Pr	H	F	H	OH	H	H	NH_2

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

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Table VII-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-31-1	CH_3	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-31-2	CH_3	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-31-8	CH_3	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

Table VII-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-32-1	Et	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-32-2	Et	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-32-8	Et	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

Table VII-33.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-33-1	^{i}Pr	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-33-2	^{i}Pr	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-33-3	^{i}Pr	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-33-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-33-5	^{i}Pr	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-33-6	^{i}Pr	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-33-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-33-8	^{i}Pr	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

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Table VII-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-34-1	^{t}Bu	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-34-8	^{t}Bu	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

Table VII-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-35-1	Ph	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-35-8	Ph	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

Table VII-36.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-36-1	p-Me-Ph	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-36-2	p-Me-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-36-3	p-Me-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-36-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-36-5	p-Me-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-36-6	p-Me-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-36-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-36-8	p-Me-Ph	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

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Table VII-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-37-1	p-F-Ph	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-37-8	p-F-Ph	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

Table VII-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

Table VII-39.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-39-1	p-Br-Ph	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-39-2	p-Br-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-39-3	p-Br-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-39-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-39-5	p-Br-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-39-6	p-Br-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-39-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-39-8	p-Br-Ph	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

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Table VII-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-40-1	p-I-Ph	H	H	H	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	H	OH	H	H	NH_2
VII-40-8	p-I-Ph	*	H	*	^{n}Bu	H	F	H	OH	H	H	NH_2

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

Table VII-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-41-1	CH_3	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-41-2	CH_3	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-41-8	CH_3	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

Table VII-42.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-42-1	Et	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-42-2	Et	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-42-3	Et	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-42-4	Et	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-42-5	Et	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-42-6	Et	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-42-7	Et	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-42-8	Et	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

Table VII-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-43-1	^{i}Pr	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-43-2	^{i}Pr	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-43-8	^{i}Pr	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

Table VII-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-44-1	^{t}Bu	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-44-8	^{t}Bu	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

Table VII-45.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-45-1	Ph	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-45-2	Ph	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-45-3	Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-45-4	Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-45-5	Ph	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-45-6	Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-45-7	Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-45-8	Ph	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

Table VII-46.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-46-1	p-Me-Ph	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-46-2	p-Me-Ph	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-46-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-46-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-46-5	p-Me-Ph	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-46-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-46-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-46-8	p-Me-Ph	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

Table VII-47.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-47-1	p-F-Ph	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-47-2	p-F-Ph	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-47-3	p-F-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-47-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-47-5	p-F-Ph	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-47-6	p-F-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-47-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-47-8	p-F-Ph	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

Table VII-48.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-48-1	p-Cl-Ph	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-48-2	p-Cl-Ph	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-48-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-48-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-48-5	p-Cl-Ph	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-48-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-48-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2

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№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-48-8	p-Cl-Ph	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

Table VII-49.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-49-1	p-Br-Ph	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-49-2	p-Br-Ph	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-49-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-49-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-49-5	p-Br-Ph	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-49-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-49-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-49-8	p-Br-Ph	*	H	*	Bz	H	F	H	OH	H	H	NH_2

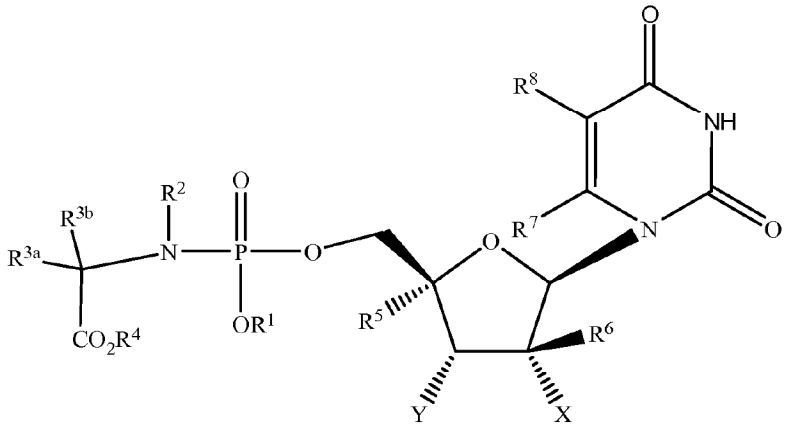
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table VII-50.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8	R^9
VII-50-1	p-I-Ph	H	H	H	Bz	H	F	H	OH	H	H	NH_2
VII-50-2	p-I-Ph	H	H	CH_3	Bz	H	F	H	OH	H	H	NH_2
VII-50-3	p-I-Ph	H	H	$CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-50-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	H	OH	H	H	NH_2
VII-50-5	p-I-Ph	H	H	CH_2Ph	Bz	H	F	H	OH	H	H	NH_2
VII-50-6	p-I-Ph	H	H	CH_2-indol-3-yl	Bz	H	F	H	OH	H	H	NH_2
VII-50-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	Bz	H	F	H	OH	H	H	NH_2
VII-50-8	p-I-Ph	*	H	*	Bz	H	F	H	OH	H	H	NH_2

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

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VIII

Table VIII-1.

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

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

Table VIII-2.

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

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

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Table VIII-3.

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

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

Table VIII-4.

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

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

Table VIII-5.

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

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

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Table VIII-6.

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

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

Table VIII-7.

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

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

Table VIII-8.

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

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

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Table VIII-9.

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

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

Table VIII-10.

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

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

Table VIII-11.

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

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

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Table VIII-12.

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

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

Table VIII-13.

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

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

Table VIII-14.

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

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

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Table VIII-15.

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

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

Table VIII-16.

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

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

Table VIII-17.

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

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

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Table VIII-18.

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

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

Table VIII-19.

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

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

Table VIII-20.

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

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

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Table VIII-21.

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

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

Table VIII-22.

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

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

Table VIII-23.

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

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

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Table VIII-24.

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

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

Table VIII-25.

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

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

Table VIII-26.

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

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

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Table VIII-27.

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

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

Table VIII-28.

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

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

Table VIII-29.

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

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

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Table VIII-30.

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

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

Table VIII-31.

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

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

Table VIII-32.

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

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

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Table VIII-33.

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

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

Table VIII-34.

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

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

Table VIII-35.

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

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

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Table VIII-36.

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

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

Table VIII-37.

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

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

Table VIII-38.

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

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

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Table VIII-39.

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

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

Table VIII-40.

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

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

Table VIII-41.

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

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

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Table VIII-42.

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

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

Table VIII-43.

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

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

Table VIII-44.

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

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

Table VIII-45.

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

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

Table VIII-46.

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

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

Table VIII-47.

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

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

Table VIII-48.

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

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

Table VIII-49.

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

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

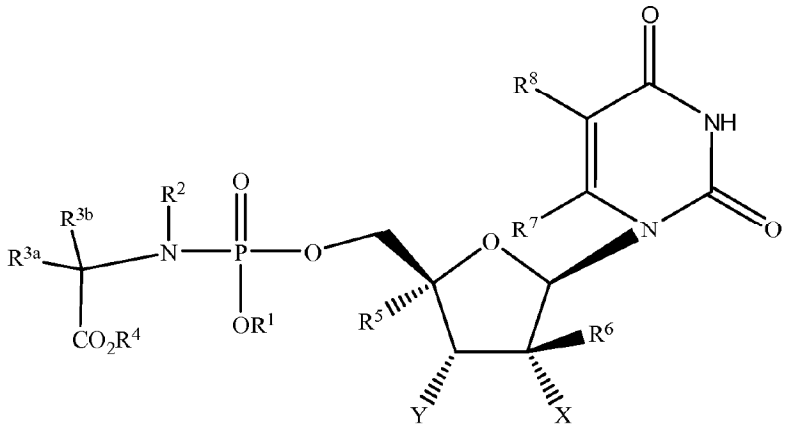
Table VIII-50.

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

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



IX

Table IX-1.

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

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

Table IX-2.

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

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

Table IX-3.

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

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

Table IX-4.

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

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

Table IX-5.

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

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

Table IX-6.

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

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

Table IX-7.

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

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

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

Table IX-9.

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

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

Table IX-10.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-10-1	p-I-Ph	H	H	H	CH_3	H	CH_3	F	OH	H	H
IX-10-2	p-I-Ph	H	H	CH_3	CH_3	H	CH_3	F	OH	H	H
IX-10-3	p-I-Ph	H	H	$CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H
IX-10-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	CH_3	F	OH	H	H
IX-10-5	p-I-Ph	H	H	CH_2Ph	CH_3	H	CH_3	F	OH	H	H
IX-10-6	p-I-Ph	H	H	CH_2-indol-3-yl	CH_3	H	CH_3	F	OH	H	H
IX-10-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	CH_3	F	OH	H	H
IX-10-8	p-I-Ph	*	H	*	CH_3	H	CH_3	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 IX-11.

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

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

Table IX-12.

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

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

Table IX-13.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-13-1	^{i}Pr	H	H	H	Et	H	CH_3	F	OH	H	H
IX-13-2	^{i}Pr	H	H	CH_3	Et	H	CH_3	F	OH	H	H
IX-13-3	^{i}Pr	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H
IX-13-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H
IX-13-5	^{i}Pr	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H
IX-13-6	^{i}Pr	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H
IX-13-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H
IX-13-8	^{i}Pr	*	H	*	Et	H	CH_3	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 IX-14.

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

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

Table IX-15.

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

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

Table IX-16.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-16-1	p-Me-Ph	H	H	H	Et	H	CH_3	F	OH	H	H
IX-16-2	p-Me-Ph	H	H	CH_3	Et	H	CH_3	F	OH	H	H
IX-16-3	p-Me-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H
IX-16-4	p-Me-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H
IX-16-5	p-Me-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H
IX-16-6	p-Me-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H
IX-16-7	p-Me-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H
IX-16-8	p-Me-Ph	*	H	*	Et	H	CH_3	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 IX-17.

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

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

Table IX-18.

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

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

Table IX-19.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-19-1	p-Br-Ph	H	H	H	Et	H	CH_3	F	OH	H	H
IX-19-2	p-Br-Ph	H	H	CH_3	Et	H	CH_3	F	OH	H	H
IX-19-3	p-Br-Ph	H	H	$CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H
IX-19-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	CH_3	F	OH	H	H
IX-19-5	p-Br-Ph	H	H	CH_2Ph	Et	H	CH_3	F	OH	H	H
IX-19-6	p-Br-Ph	H	H	CH_2-indol-3-yl	Et	H	CH_3	F	OH	H	H
IX-19-7	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	Et	H	CH_3	F	OH	H	H
IX-19-8	p-Br-Ph	*	H	*	Et	H	CH_3	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 IX-20.

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

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

Table IX-21.

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

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

Table IX-22.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-22-1	Et	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H
IX-22-2	Et	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H
IX-22-3	Et	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H
IX-22-4	Et	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H
IX-22-5	Et	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H
IX-22-6	Et	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H
IX-22-7	Et	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H
IX-22-8	Et	*	H	*	^{i}Pr	H	CH_3	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 IX-23.

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

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

Table IX-24.

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

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

Table IX-25.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-25-1	Ph	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H
IX-25-2	Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H
IX-25-3	Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H
IX-25-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H
IX-25-5	Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H
IX-25-6	Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H
IX-25-7	Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H
IX-25-8	Ph	*	H	*	^{i}Pr	H	CH_3	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 IX-26.

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

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

Table IX-27.

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

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

Table IX-28.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-28-1	p-Cl-Ph	H	H	H	^{i}Pr	H	CH_3	F	OH	H	H
IX-28-2	p-Cl-Ph	H	H	CH_3	^{i}Pr	H	CH_3	F	OH	H	H
IX-28-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H
IX-28-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{i}Pr	H	CH_3	F	OH	H	H
IX-28-5	p-Cl-Ph	H	H	CH_2Ph	^{i}Pr	H	CH_3	F	OH	H	H
IX-28-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{i}Pr	H	CH_3	F	OH	H	H
IX-28-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{i}Pr	H	CH_3	F	OH	H	H
IX-28-8	p-Cl-Ph	*	H	*	^{i}Pr	H	CH_3	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 IX-29.

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

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

Table IX-30.

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

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

Table IX-31.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-31-1	CH_3	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H
IX-31-2	CH_3	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H
IX-31-3	CH_3	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H
IX-31-4	CH_3	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H
IX-31-5	CH_3	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H
IX-31-6	CH_3	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H
IX-31-7	CH_3	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H
IX-31-8	CH_3	*	H	*	^{n}Bu	H	CH_3	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 IX-32.

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

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

Table IX-33.

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

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

Table IX-34.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-34-1	^{t}Bu	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H
IX-34-2	^{t}Bu	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H
IX-34-3	^{t}Bu	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H
IX-34-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H
IX-34-5	^{t}Bu	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H
IX-34-6	^{t}Bu	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H
IX-34-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H
IX-34-8	^{t}Bu	*	H	*	^{n}Bu	H	CH_3	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 IX-35.

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

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

Table IX-36.

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

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

Table IX-37.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-37-1	p-F-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H
IX-37-2	p-F-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H
IX-37-3	p-F-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H
IX-37-4	p-F-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H
IX-37-5	p-F-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H
IX-37-6	p-F-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H
IX-37-7	p-F-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H
IX-37-8	p-F-Ph	*	H	*	^{n}Bu	H	CH_3	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 IX-38.

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

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

Table IX-39.

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

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

Table IX-40.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-40-1	p-I-Ph	H	H	H	^{n}Bu	H	CH_3	F	OH	H	H
IX-40-2	p-I-Ph	H	H	CH_3	^{n}Bu	H	CH_3	F	OH	H	H
IX-40-3	p-I-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H
IX-40-4	p-I-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	CH_3	F	OH	H	H
IX-40-5	p-I-Ph	H	H	CH_2Ph	^{n}Bu	H	CH_3	F	OH	H	H
IX-40-6	p-I-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	CH_3	F	OH	H	H
IX-40-7	p-I-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	CH_3	F	OH	H	H
IX-40-8	p-I-Ph	*	H	*	^{n}Bu	H	CH_3	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 IX-41.

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

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

Table IX-42.

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

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

Table IX-43.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
IX-43-1	^{i}Pr	H	H	H	Bz	H	CH_3	F	OH	H	H
IX-43-2	^{i}Pr	H	H	CH_3	Bz	H	CH_3	F	OH	H	H
IX-43-3	^{i}Pr	H	H	$CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H
IX-43-4	^{i}Pr	H	H	$CH_2CH(CH_3)_2$	Bz	H	CH_3	F	OH	H	H
IX-43-5	^{i}Pr	H	H	CH_2Ph	Bz	H	CH_3	F	OH	H	H
IX-43-6	^{i}Pr	H	H	CH_2-indol-3-yl	Bz	H	CH_3	F	OH	H	H
IX-43-7	^{i}Pr	H	H	$CH_2CH_2SCH_3$	Bz	H	CH_3	F	OH	H	H
IX-43-8	^{i}Pr	*	H	*	Bz	H	CH_3	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 IX-44.

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

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

Table IX-45.

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

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

Table IX-46.

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

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

Table IX-47.

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

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

Table IX-48.

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

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

Table IX-49.

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

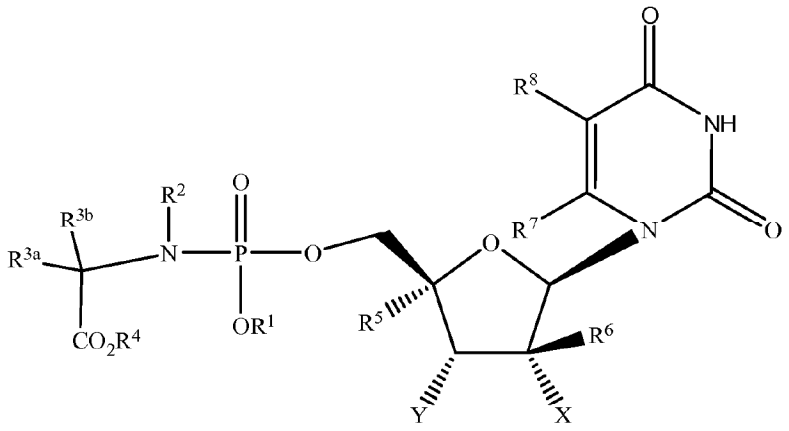
*R^2 and R^{3b} joined together by $(CH_2)_3$ to form five-membered ring.

Table IX-50.

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

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

5



X

Table X-1.

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

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

Table X-2.

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

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

Table X-3.

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

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

Table X-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
X-4-1	^{t}Bu	H	H	H	CH_3	H	F	F	OH	H	H
X-4-2	^{t}Bu	H	H	CH_3	CH_3	H	F	F	OH	H	H
X-4-3	^{t}Bu	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H
X-4-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H
X-4-5	^{t}Bu	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H
X-4-6	^{t}Bu	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H
X-4-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H
X-4-8	^{t}Bu	*	H	*	CH_3	H	F	F	OH	H	H

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

Table X-5.

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

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

Table X-6.

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

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

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

Table X-8.

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

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

Table X-9.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
X-9-1	p-Br-Ph	H	H	H	CH_3	H	F	F	OH	H	H
X-9-2	p-Br-Ph	H	H	CH_3	CH_3	H	F	F	OH	H	H
X-9-3	p-Br-Ph	H	H	$CH(CH_3)_2$	CH_3	H	F	F	OH	H	H
X-9-4	p-Br-Ph	H	H	$CH_2CH(CH_3)_2$	CH_3	H	F	F	OH	H	H
X-9-6	p-Br-Ph	H	H	CH_2Ph	CH_3	H	F	F	OH	H	H
X-9-7	p-Br-Ph	H	H	CH_2-indol-3-yl	CH_3	H	F	F	OH	H	H
X-9-8	p-Br-Ph	H	H	$CH_2CH_2SCH_3$	CH_3	H	F	F	OH	H	H
X-9-20	p-Br-Ph	*	H	*	CH_3	H	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 X-10.

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

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

Table X-11.

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

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

Table X-12.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
X-12-1	Et	H	H	H	Et	H	F	F	OH	H	H
X-12-2	Et	H	H	CH_3	Et	H	F	F	OH	H	H
X-12-3	Et	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H
X-12-4	Et	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H
X-12-5	Et	H	H	CH_2Ph	Et	H	F	F	OH	H	H
X-12-6	Et	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H
X-12-7	Et	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H
X-12-8	Et	*	H	*	Et	H	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 X-13.

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

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

Table X-14.

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

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

Table X-15.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
X-15-1	Ph	H	H	H	Et	H	F	F	OH	H	H
X-15-2	Ph	H	H	CH_3	Et	H	F	F	OH	H	H
X-15-3	Ph	H	H	$CH(CH_3)_2$	Et	H	F	F	OH	H	H
X-15-4	Ph	H	H	$CH_2CH(CH_3)_2$	Et	H	F	F	OH	H	H
X-15-5	Ph	H	H	CH_2Ph	Et	H	F	F	OH	H	H
X-15-6	Ph	H	H	CH_2-indol-3-yl	Et	H	F	F	OH	H	H
X-15-7	Ph	H	H	$CH_2CH_2SCH_3$	Et	H	F	F	OH	H	H
X-15-8	Ph	*	H	*	Et	H	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 X-16.

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

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

Table X-17.

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

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

Table X-18.

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

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

Table X-19.

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

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

Table X-20.

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

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

Table X-21.

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

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

Table X-22.

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

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

Table X-23.

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

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

Table X-24.

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

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

Table X-25.

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

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

Table X-26.

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

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

Table X-27.

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

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

Table X-28.

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

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

Table X-29.

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

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

Table X-30.

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

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

Table X-31.

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

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

Table X-32.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
X-32-1	Et	H	H	H	^{n}Bu	H	F	F	OH	H	H
X-32-2	Et	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H
X-32-3	Et	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H
X-32-4	Et	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H
X-32-5	Et	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H
X-32-6	Et	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H
X-32-7	Et	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H
X-32-8	Et	*	H	*	^{n}Bu	H	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 X-33.

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

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

Table X-34.

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

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

Table X-35.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
X-35-1	Ph	H	H	H	^{n}Bu	H	F	F	OH	H	H
X-35-2	Ph	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H
X-35-3	Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H
X-35-4	Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H
X-35-5	Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H
X-35-6	Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H
X-35-7	Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H
X-35-8	Ph	*	H	*	^{n}Bu	H	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 X-36.

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

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

Table X-37.

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

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

Table X-38.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
X-38-1	p-Cl-Ph	H	H	H	^{n}Bu	H	F	F	OH	H	H
X-38-2	p-Cl-Ph	H	H	CH_3	^{n}Bu	H	F	F	OH	H	H
X-38-3	p-Cl-Ph	H	H	$CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H
X-38-4	p-Cl-Ph	H	H	$CH_2CH(CH_3)_2$	^{n}Bu	H	F	F	OH	H	H
X-38-5	p-Cl-Ph	H	H	CH_2Ph	^{n}Bu	H	F	F	OH	H	H
X-38-6	p-Cl-Ph	H	H	CH_2-indol-3-yl	^{n}Bu	H	F	F	OH	H	H
X-38-7	p-Cl-Ph	H	H	$CH_2CH_2SCH_3$	^{n}Bu	H	F	F	OH	H	H
X-38-8	p-Cl-Ph	*	H	*	^{n}Bu	H	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 X-39.

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

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

Table X-40.

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

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

Table X-41.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
X-41-1	CH_3	H	H	H	Bz	H	F	F	OH	H	H
X-41-2	CH_3	H	H	CH_3	Bz	H	F	F	OH	H	H
X-41-3	CH_3	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H
X-41-4	CH_3	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H
X-41-5	CH_3	H	H	CH_2Ph	Bz	H	F	F	OH	H	H
X-41-6	CH_3	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H
X-41-7	CH_3	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H
X-41-8	CH_3	*	H	*	Bz	H	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 X-42.

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

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

Table X-43.

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

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

Table X-44.

№	R^1	R^2	R^{3a}	R^{3b}	R^4	R^5	R^6	X	Y	R^7	R^8
X-44-1	^{t}Bu	H	H	H	Bz	H	F	F	OH	H	H
X-44-2	^{t}Bu	H	H	CH_3	Bz	H	F	F	OH	H	H
X-44-3	^{t}Bu	H	H	$CH(CH_3)_2$	Bz	H	F	F	OH	H	H
X-44-4	^{t}Bu	H	H	$CH_2CH(CH_3)_2$	Bz	H	F	F	OH	H	H
X-44-5	^{t}Bu	H	H	CH_2Ph	Bz	H	F	F	OH	H	H
X-44-6	^{t}Bu	H	H	CH_2-indol-3-yl	Bz	H	F	F	OH	H	H
X-44-7	^{t}Bu	H	H	$CH_2CH_2SCH_3$	Bz	H	F	F	OH	H	H
X-44-8	^{t}Bu	*	H	*	Bz	H	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 X-45.

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

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

Table X-46.

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

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

Table X-47.

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

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

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

Table X-48.

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

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

Table X-49.

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

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

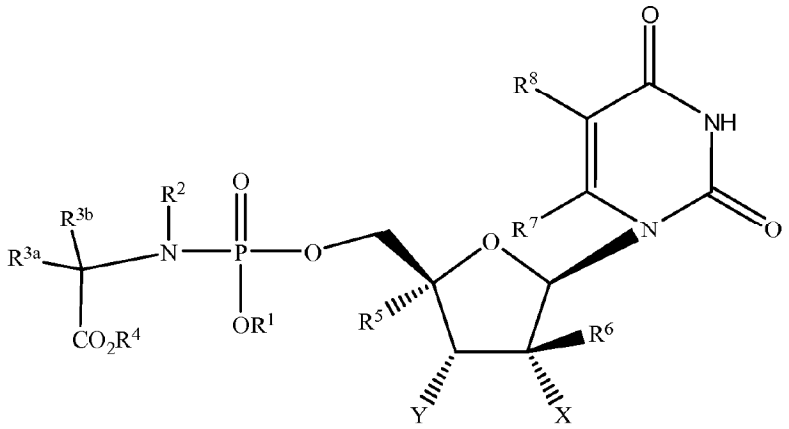
Table X-50.

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

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



XI

Table XI-1.

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

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

Table XI-2.

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

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

Table XI-3.

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

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

Table XI-4.

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

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

Table XI-5.

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