

RdpA	SEQ ID NO:60	MHAALSPLSQRFERIAVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:1	MHAALSPLSQRFERIAVQPLTGVLGAEITGVDLREPLSDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:4	MHAALSPLSQRFERIAVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:7	MHAALSPLSQRFERIAVQPLTGVLGAEITGVDLREPLSDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:9	MHAALSPLSQRFERIAVQPLTGVLGAEITGVDLREPLSDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
FT_5	SEQ ID NO:11	MHAALSPLSQRFERIAVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
FT_T	SEQ ID NO:14	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
FT_R	SEQ ID NO:18	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
FT_C	SEQ ID NO:22	MHAALSPLSQRFERIAVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:25	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:28	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:31	MHAALSPLSQYRFIDVQPLTGVLGAEITGVTLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:34	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
FT_Tv3	SEQ ID NO:37	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:40	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPAQQITNEQHISF	70
	SEQ ID NO:43	MHAAL TPLTNKYRF IDVQPLCGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:46	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:47	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
FT_Tv7	SEQ ID NO:48	MHAAL TPLTNKYRH IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:49	MHAAL TPLTNKYRH IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:50	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:51	MHAAL TPLTNKYRF IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
	SEQ ID NO:52	MHAAL TPLTNKYRH IDVQPLTGVLGAEITGVDLREPLDDSTWNEILDAFHTYQVIYFPGQAITNEQHIAF	70
Consensus		MHAAL·PL·.....I·VQPLtGVLGAEITGVdLREPLdS TWNEILDAFHTYQVIYFPgQaITNEQHlaF	70

FIG.6A

RdpA	SEQ ID NO:60	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:1	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSSFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:4	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:7	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:9	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
FT_5	SEQ ID NO:11	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
FT_T	SEQ ID NO:14	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
FT_R	SEQ ID NO:18	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
FT_C	SEQ ID NO:22	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:25	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:28	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:31	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:34	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:37	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:40	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:43	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
FT_Tv3	SEQ ID NO:46	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:47	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:48	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:49	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
FT_Tv7	SEQ ID NO:50	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:51	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:52	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
Consensus		SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140

FIG.6B

RdpA	SEQ ID NO:60	LSMYTAWETLSPTMQATIEGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPGS	210
	SEQ ID NO:1	LSMYTAYDALSDGLKKLISGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPGS	210
	SEQ ID NO:4	LSMYTAYDALSDGLKKLISGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPGS	210
	SEQ ID NO:7	LSMYTAYDALSDGLKKLISGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPGS	210
	SEQ ID NO:9	LSMYTAYDALSDGLKKLISGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPGS	210
FT_5	SEQ ID NO:11	LSMYTAWETLSPTMQATIEGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPET	210
FT_T	SEQ ID NO:14	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
FT_R	SEQ ID NO:18	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:22	ASMYTAWETLSPTMQATIEGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPET	210
	SEQ ID NO:25	LSMYTAWETLSPTMQATIEGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPMT	210
FT_C	SEQ ID NO:28	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:31	LSMYSAWDTLSDTMKATIEGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:34	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:37	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:40	LSMYSAWDTLSDTMKATIEGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:43	LSMYSAWDTLSDTMKATIEGLNVVHSATRVFGSLYQAQNRFSNTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:46	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
FT_Tv3	SEQ ID NO:47	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:48	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:49	LSMYSAWETLSPAMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:50	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
FT_Tv7	SEQ ID NO:51	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
	SEQ ID NO:52	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNWFSGTSVKVMVDAGDRETVHPLVTHPMT	210
Consensus		LSMYAw.tLS.tmqatIEGLNVVHSATVFGSLYQA.N.RfShTSVKVMVDaGDRETVHPLVtHP.t	210

FIG.6C

RdpA	SEQ ID NO:60	GRKGLYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:1	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
	SEQ ID NO:4	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
	SEQ ID NO:7	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
	SEQ ID NO:9	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
FT_5	SEQ ID NO:11	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
FT_T	SEQ ID NO:14	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
FT_R	SEQ ID NO:18	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:22	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
	SEQ ID NO:25	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
FT_C	SEQ ID NO:28	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:31	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:34	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:37	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:40	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:43	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:46	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
FT_Tv3	SEQ ID NO:47	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:48	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:49	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:50	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
FT_Tv7	SEQ ID NO:51	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:52	GRRALYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
Consensus		GR·LY·NQVYCC·I·GMtdaESk·LLqFLyeHAT·fdTCRVRWkkdqVLVWDNLCTMH·avpDYagkf	280

FIG.6D

RdpA	SEQ ID NO:60	RYLTRTTVGGVRPAR	295
	SEQ ID NO:1	RILHRTTVGGVRPAR	295
	SEQ ID NO:4	RILHRTTVGGVRPAR	295
	SEQ ID NO:7	RILHRTTVGGVRPAR	295
	SEQ ID NO:9	RILHRTTVGGVRPAR	295
FT_5	SEQ ID NO:11	RYLTRTTVGGVRPAR	295
FT_T	SEQ ID NO:14	RYLTRTTVAGDKPSR	295
FT_R	SEQ ID NO:18	RYLTRTTVAGDKPSR	295
	SEQ ID NO:22	RYLTRTTVGGVRPAR	295
	SEQ ID NO:25	RYLTRTTVAGDKPSR	295
FT_C	SEQ ID NO:28	RYLTRTTVAGDKPSR	295
	SEQ ID NO:31	RYLTRTTVAGDKPSR	295
	SEQ ID NO:34	RYLTRTTVAGDKPSR	295
	SEQ ID NO:37	RYLTRTTVAGDKPSR	295
	SEQ ID NO:40	RYLTRTTVAGDRPAR	295
	SEQ ID NO:43	RYLTRTTVAGDKPSR	295
	SEQ ID NO:46	RYLTRTTVAGDKPSR	295
FT_Tv3	SEQ ID NO:47	RYLTRTTVAGDKPSR	295
	SEQ ID NO:48	RYLTRTTVAGDKPSR	295
	SEQ ID NO:49	RYLTRTTVAGDKPSR	295
	SEQ ID NO:50	RYLTRTTVAGDKPSR	295
FT_Tv7	SEQ ID NO:51	RYLTRTTVAGDKPSR	295
	SEQ ID NO:52	RYLTRTTVAGDKPSR	295
Consensus		RYLTRTTV·G·P·R	295

FIG.6E