

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·TWNEILDAFHTYQVIYFgQaITNEQhIaF	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
FT_Tv3	SEQ ID NO:37	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:40	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:43	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:46	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:47	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
FT_Tv7	SEQ ID NO:48	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	SEQ ID NO:49	SRRFGPVDVPVLLKSIIEGYPEVQIMIRREANESGRVIGDDWHTDSTFLDAPPAAVVMRAIDVPEHGGDTGF	140
	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	LSMYTAWETLSPTMQATIEGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPGS	210
	SEQ ID NO:1	LSMYTAYDALSDGLKKLISGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPGS	210
	SEQ ID NO:4	LSMYTAYDALSDGLKKLISGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPGS	210
	SEQ ID NO:7	LSMYTAYDALSDGLKKLISGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPGS	210
	SEQ ID NO:9	LSMYTAYDALSDGLKKLISGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPGS	210
FT_5	SEQ ID NO:11	LSMYTAWETLSPTMQATIEGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPET	210
FT_T	SEQ ID NO:14	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
FT_R	SEQ ID NO:18	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:22	ASMYTAWETLSPTMQATIEGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPET	210
	SEQ ID NO:25	LSMYTAWETLSPTMQATIEGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
FT_C	SEQ ID NO:28	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:31	LSMYSAWDTLSDTMKATIEGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:34	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:37	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:40	LSMYSAWDTLSDTMKATIEGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:43	LSMYSAWDTLSDTMKATIEGLNVVHSATRVFGSLYQACNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:46	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
FT_Tv3	SEQ ID NO:47	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:48	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:49	LSMYSAWETLSPAMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:50	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
FT_Tv7	SEQ ID NO:51	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
	SEQ ID NO:52	LSMYSAWETLSPTMQATIEGLNVVHSATKVFGLYQATNRRFSNTSVKVMVDAGDRETVMPLVTHPMT	210
Consensus		LSMYAw.tLS.tm.atIeGLNVVHSATVFGSLYQA.N.RfShTSVKVMDVdaGDRETVMPLVtHP.t	210

FIG.6C

RdpA	SEQ ID NO:60	GRKGLYNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:1	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
	SEQ ID NO:4	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
	SEQ ID NO:7	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
	SEQ ID NO:9	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
FT_5	SEQ ID NO:11	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
FT_T	SEQ ID NO:14	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
FT_R	SEQ ID NO:18	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:22	GRKGLYNQVYCCRIEGMSEKESEPLLSFLFAHATKPEFTCRVRWKKDQVLVWDNLCTMHYAINDYHGQT	280
	SEQ ID NO:25	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
FT_C	SEQ ID NO:28	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:31	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:34	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:37	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:40	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:43	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:46	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
FT_Tv3	SEQ ID NO:47	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:48	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:49	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:50	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
FT_Tv7	SEQ ID NO:51	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	280
	SEQ ID NO:52	GRRALYCNQVYCCRIEGMTDAESKPLQLFLYEATRFDFTCRVRWKKDQVLVWDNLCTMHRAVPDYACKF	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