

Human	136	--MGD-FVVV	YTGCCSSNG	RR--RPRAGI	GV---YWGGP	HPLNVGIRLP	GRQ--TNQRA	186
E.coli	1	--MLK-QVEI	FTGSCLGNP	GP--GGYGAI	LR---YRGRE	KTFSAGYT--	--RT-TNNRME	48
XMRV	515	--PDA-DYTW	YTGSSFLQE	GQ--R-RAGA	AV---TTETE	VIWARALP--	AGT-SAQRAR	562
MoMLV	515	--PDA-DHTW	YTGSSLLQE	GQ--R-KAGA	AV---TTETE	VIWAKALP--	AGT-SAQRAR	562
B.hal	62	---EIIWESL	SVVGSQGNP	GI--VEYKGV	D----TKTGE	VLFERE-PIP	IG--TNNMGE	109
HIV-1	434	-IVGA--ETF	YVGAANRET	KL---GKAGY	VT--NKGRO	KVVPLTNT--	----TNQKTE	478
PFV	591	----QYEGVF	YTGSAIKSP	DPTKSNNAGM	GIVHATYKPE	YQVLNQWSIP	LGNHTAQMAR	646

α/β PFV



β1



β2



β3



αA

Human	187	IHAACKAIEQ	AKTQ	NINKLV	LYTD	SMFTIN	GITN	NWVQGWK	KNGW	KTSAGK	EVINK	EDFVA	246
E.coli	49	LMAAIVALEA	LK-EHC-EVI	LSTD	SQYVRQ	GITQ	WIHNWK	KRGW	KTADCK	PVKN	VDLWQR	106	
XMRV	563	LIALTQALKM	AEGK---	KLN	VYTD	SRYAFA	TAHV	HGEIYR	RRGL	LTSEGR	EIKN	KNEILA	619
MoMLV	563	LIALTQALKM	AEGK---	KLN	VYTD	SRYAFA	TAHI	HGEIYR	RRGL	LTSEGR	EIKN	KDEILA	619
B.hal	110	FLAIVHGLRY	LKERN-SRKP	IYSDS----	Q	TAIKW	VKD	AKST	LV-RNE	ETALI	WKLVD	163	
HIV-1	479	LQAIYLAQD	SGLE----	VN	IVTD	SQYALG	IIQAQ-----	-----	PDKS	ESELV	NQII-	522	
PFV	647	IAAVEFACKK	AL-KIPGPVL	VITD	SFYVAE	SANKEL	PHYWK	SN	GFVN	NNKKK	PLKH	ISKWKS	705

α/β PFV



β4



αB



αC



basic loop



αD

Human	247	L-ERLTQGM	IQWMHVP	GHSG	-GF-I----	G	NEEA	RLARE	GAKQS--	ED-	-----	286
E.coli	107	L-DAALGQH	IKWEWVK	GHGA	-GH-P----	E	NERC	ELARA	AAMNPT	LED	GYQVEV	155
XMRV	620	LLKALFLPKR	LSIIHCP	GHQ	KGN-SAEARG	NRMARQAARE	AAMKAV	LETS	TL---	L	671	
MoMLV	620	LLKALFLPKR	LSIIHCP	GHQ	KGH-SAEARG	NRMARQAARK	AAITET	PDTS	TL---	L	671	
B.hal	164	EAEEWLN	THYT	ETPILK	WQTD	DKW-----	G	EIKAD-YGRK	-----	-----	196	
HIV-1	523	--EQLIKKEK	VYLA	WPAHK	-GIG-----	G	NEQV	KLVS	A	GIRKI----	---LFL	562
PFV	706	IABCLSMKPD	ITIQHEK	GHQ	PTNTS	IHTEG	NALAK	KLATQ	GSYVV--	-N-	-----	751

α/β PFV



β5



αE