

```

*          20          *          40          *          60          *          80          *          100
Pt_FEZ1  : -----MEAPLVSLDEEFEDLRPCCSEDP----- : 24
Hs_FEZ1  : -----MEAPLVSLDEEFEDLRPCCSEDP----- : 24
Mf_FEZ1  : -----MEAPLVSLDEEFEDLRPCCSEDP----- : 24
Mmt_FEZ1 : -----MEAPLVSLDEEFEDLRPCCSEDP----- : 24
Bt_FEZ1  : -----MEAPLVSLDEEFEDLRPCCSEDP----- : 24
Cf_FEZ1  : -----MEAPLVSLDEEFEDLRPCCSEGE----- : 24
Rn_FEZ1  : -----MEAPLVSLDEEFEDIRPCCTEDP----- : 24
Mm_FEZ1  : -----MEAPLVSLDEEFEDIRPCTEPE----- : 24
Md_FEZ1  : -----MEAPLVSLDEEFEDLRPCYSEDRD----- : 24
Xt_FEZ1  : -----MEAPLVCLDEEFEDIR-SYSEDRQ----- : 23
Dr_FEZ1  : -----MEAPLVCLDEEFEDLRPCKMEELC----- : 25
Ss_FEZ1  : -----MEAPLVCLDEEFEDLRPCRVEDMDR----- : 25
Gg_FEZ1  : -----MEAPLVSLDEEFEEGEP----- : 16
Xt_FEZ2  : -----MAAPLAQFDEDWQDFYEFRAASSSDSGCLDKVNSNTPSAVAPLL----- : 44
Xl_FEZ2  : -----LDKVNNSPPPSERIQ----- : 16
Cf_FEZ2  : -----MAADGDWQDFYEFQ----- : 14
Bt_FEZ2  : -----MAADGDWQDFYEFQ----- : 14
Hs_FEZ2  : -----MAADGDWQDFYEFQ----- : 14
Pt_FEZ2  : -----MAADGDWQDFYEFQ----- : 14
Rn_FEZ2  : -----MAADGDWQDFYEFQ----- : 14
Mm_FEZ2  : -----AAGAMAADGDWQDFYEFQ----- : 18
Md_FEZ2  : -----MAADGDWQDFYEFQ----- : 14
Tg_FEZ2  : MAAQEKKYKIKKSHPKLLRVSAQYKASKGWARESQCSWLRQTTLGLPLLPDEPPLVGAELGVKRDITVPGSKGAATARLCCGCCPSPARPGPALRA----- : 96
Ec_FEZ2  : -----MDNSSELTQWHITMDWDC----- : 17
Tn_FEZ2  : -----MAAPLAQFDEDWQDFNEFK----- : 20
Dr_FEZ2  : -----MAAPVAQFDEDWEDFNEFK----- : 19
Bf_FEZ2b : -----MMESFKMAAPLAQIDDEWLDFTSPS----- : 25
Bf_FEZ2a : -----MAAPLAQIDDEWLDFTSPS----- : 19
Ci_FEZ1sim : -----MAAPLAQIEDWESAFSPTRLN----- : 24
Ce_UNC76 : -----MEAADLRVPDIPLASCDD----- : 19
Bm_UNC76 : -----MGTGMVENINCSVPEVPLAHLEDD----- : 24
Dps_UNC76 : -----MAELKFEAPLAKFEET-DEWGGCDFISNQNALNDTLNLN---LKEVSV : 44
Dp_UNC76 : -----MRDLGTRMAELKFEAPLAKFEET-DEWGGCDFISNQNALNDTLNLN---LKEVSV : 51
Ds_UNC76 : -----MAELKFEAPLAKFEET-DEWGGCDFISSQNAINDTLNLN---LKDSSA : 44
Dm_UNC76 : -----MRDLGTRMAELKFEAPLAKFEET-DEWGGCDFISSQNAINDTLNLN---LKDSSA : 51
Dy_UNC76 : -----MRDLGTRMAELKFEAPLAKFEET-DEWGGCDFISSQNALNDTLNLN---LKDSSS : 51
Da_UNC76 : -----MRDLGTRMAELKFEAPLAKFEET-DEWGGCDYISNQNALNDTLNLN---LKDAAA : 51
Dw_UNC76 : -----MRDLGTRMAELKFEAPLAKFEET-DEWGGCDFISNQNALNDTLNLN---LKD--- : 48
Dv_UNC76 : -----MAELKFEAPLAKFEET-DEWGGCDFISNQNALNDTLNLNLSNRRNQD : 47
Dmo_UNC76 : -----MRDLGTRMAELKFEAPLAKFEET-DEWGGCDFISNQNALNDTLNLNLSNRRNQKE : 54
Dg_UNC76 : -----MAELKFEAPLAKFEET-DEWGGCDFISNQNALN---ANRNLKD : 39
Tc_UNC76 : -----MRDLATKMAELKFEAPLAQFEES-DEWGSTEFQNAIKN----- : 38
Ag_UNC76 : -----MRDLANKMAELKFEAPLAQFEES-DEWGPVEYQSSNVANGKTAAVT----- : 45
Nv_UNC76 : -----MKDMATKIAELKFEAPLACFEES-E---STTIRN----- : 30
Am_UNC76 : -----MRDMAGKIAELKFEAPLARFEES-D---TASLKN----- : 30
Ph_UNC76 : -----MLDTARQMAELKFEAPLAQFEESSEDEWAIGGMTINTNDVVDN----- : 42
Ap_UNC76 : -----MLDMMNKMAELKFEAPLAQFEES-DEWTK--MMDDSDPLQSS----- : 39

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*      120      *      140      *      160      *      180      *      200      *
Pt_FEZ1 : -----EKPCFCYFGSSPHHLEDPS-----LSELENFSS-- : 51
Hs_FEZ1 : -----EKPCFCYFGSSPHHLEDPS-----LSELENFSS-- : 51
Mf_FEZ1 : -----EKPRCFYFGSSPHHLEDPS-----LSELENFSS-- : 51
Mmt_FEZ1 : -----EKPRCFYFGSSPHHLEDPS-----LSELENFSS-- : 51
Bt_FEZ1 : -----EKPRCFYFGSSPHHLEDPS-----LSELENFSS-- : 51
Cf_FEZ1 : -----EKPPSFYFGSSPHHLEDPS-----LSELENFSS-- : 51
Rn_FEZ1 : -----EKPQSLYGTSPHHLEDPS-----LSELENFSS-- : 51
Mm_FEZ1 : -----EKPQCPLYGTSPHHLEDPS-----LSELENFSS-- : 51
Md_FEZ1 : -----EKPRCFYFGSSPHHLEDPS-----LSELENFSS-- : 51
Xt_FEZ1 : -----EKSRGMVMTSSKHIEDAS-----LSELENFSS-- : 50
Dr_FEZ1 : -----EQPPCR-PHKTIPLAPLIC-----R-----EDFSELENFS : 53
Ss_FEZ1 : -----AVPLSRFPYSTIPIIAPMAPLAPITR-----EDFSELENFS : 60
Gg_FEZ1 : -----GDNNGVPRRTMDPA-----LAELESFST : 39
Xt_FEZ2 : -----GQG-AGAVVALEDLAEILDN-----GFSMEIMG : 70
Xl_FEZ2 : -----GPGGAGAVVALEDLAEILDN-----GFSMEIMG : 43
Cf_FEZ2 : -----EPARSLQDQENCNASP-----EAGAGPGG : 38
Bt_FEZ2 : -----EPARSLQDQENCNASP-----EAGAGPGG : 38
Hs_FEZ2 : -----EPARSLLDQENCNASPEP-----GAEAGAGAGG : 42
Pt_FEZ2 : -----EPARSLLDQENCNASPEP-----GAGAGAGAGW : 42
Rn_FEZ2 : -----EPAGSVRDQENCNASP-----EAGAGAHA : 38
Mm_FEZ2 : -----EPAGSVQEQENCNASP-----EAGAGAHA : 42
Md_FEZ2 : -----EPARGRLDQENRNNSGA-----KMLIDE : 36
Tg_FEZ2 : -----IARPGFARLCGRCLSPARRAPLGARTAGSA-----QHRERAAPFRSQLW : 139
Ec_FEZ2 : -----PAEAEVLRRLNLGSKQKQKLELDS-----KHSKASPWS : 50
Tn_FEZ2 : -----SSASADQLDQLNSNVVD-----SASGLDIFSD : 47
Dr_FEZ2 : -----AADSHTSWTATPEN-----SPR-LQSFAS : 42
Bf_FEZ2b : -----DVVNSNDTTSCTDDNQD-----VDNVNDCFGF : 53
Bf_FEZ2a : -----DVVNSNDTTSCTDDNQD-----VDNVNDCFGF : 47
Ci_FEZ1sim : -----MCSTNVEQLEDVKNQNSMFGNS-----ENLDSIDNFIPI : 58
Ce_UNC76 : -----DIDSNKN-----LSNHSSDEKH-----HCNSNSDEE : 45
Bm_UNC76 : -----LDFIKV-----ASQQTSD-----CENNFDEN : 46
Dps_UNC76 : GRKP---DASKLRLLLEDVAVRDAHISKNGGV-----GSSAG-TISPNCNSSLGSSATDLGVSDAGLVPGDGA-----GLDKPSAAQG-DHVDN-- : 121
Dp_UNC76 : GRKP---DASKLRLLLEDVAVRDAHISKNGGV-----GSSAG-TISPNCNSSLGSSVTDLGVSDAGLVPGDGE-----VLDKPSAAQG-DHVDN-- : 128
Ds_UNC76 : GGKP---DSTKLRLLEDVAVRDAHISKNGGG-----VVGGAAG-SISPNCNTLHGGLSIEIGLSDVGLVPGEGAGVGLDGLKRSVAVG-DHVDN-- : 128
Dm_UNC76 : GGKP---DASKLRLLLEDVAVRDAHISKNGGG-----VVGGAAG-SISPNCNTLHGGLSIEIGLSDVGLVPGEGAGVGLDGLKRSVAVG-DHVDN-- : 135
Dy_UNC76 : GGKP---DAAKLRLLLEDVAVRDAHISKNGGGGG-----VMGGGAG-SISPNCNTLHGGLSIEIGLSDVGLVPGEGAGVGLDGLKRSVAVG-DHVDN-- : 137
Da_UNC76 : SGKSGDQTAGKLRLLLEDVAVRDAHISKNGGVDA--AAGASIGGSIISPNCNTMQG--ALDLGLSDVGLVPGEDA-----PQRCSGSD-DHVDN-- : 133
Dw_UNC76 : GGVVETAANNKLRLLLEDVAVRDAHISKNGGAG-----AGTGS-SISPNCNMGGG--TDLGISDGLVPGDGAG-----GAAAGSARGSDHVDN-- : 130
Dv_UNC76 : GNAKQQQQ-DKLRLLLEDVAVRDAHISKN-----GGGGGG-----GAGAG-NISPNCNTHNLG--ELGLADM--SGPAGG-----QDKRGADNVN-- : 121
Dmo_UNC76 : GSAKQQQQQDKLRLLLEDVAVRDAHISKNGAVATGAVGGAGAGGTGTGTGAG-NISPNCNTQNL--ELGLTD-----GLAGG-----QDKRGADNVN-- : 139
Dg_UNC76 : GNAKQQQQ-DKLRLLLEDVAVRDAHISKNGGAAAAVSGAGAAGSG-----SGTSG-NISPNCNTNLSD--VLGEATPGVGLGIGL-----GDRRAADNVN-- : 126
Tc_UNC76 : -----ENELNINLNKIKIKIIN-----DVLNDFNEDILN-----NSNTETLPPKN-----VILKNGETASVADN-- : 92
Ag_UNC76 : -----ISDTLNLNKLKESLRLSDGNQQQQQ-----NQKQDDDLNMLNLDNLLGDDTVRGGGDSNTTTTTTTA-----NNNNNIKVGP IKDNV-- : 122
Nv_UNC76 : -----MNIFSDHILDVNIERNFVE-----NRKNTTAN-----THET-SDIIQE----- : 68
Am_UNC76 : -----MNLTEQLLDTSLNNTTYGE-----NCNANEPA-----TRENGETDILQE----- : 69
Ph_UNC76 : -----FKNILLNSPLKKNINENFTN-----NIKNSKSGIFISNKGEINNMDFAYEKINGYSKE-----DMLKNLNQGNVSSEN-- : 110
Ap_UNC76 : -----AKHNLNHHHHHQGNSQLTSG-----GSVRDVDEEQLDNMLSNSS--RALEPANKSCTQCGAN-----NNVGVVEVTTSTTDN-- : 110

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	220	240	260	280	300	
Pt_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTEN---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Hs_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTEN---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Mf_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTEN---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Nmt_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTEN---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Bf_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTEN---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Ct_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTET---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Rn_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTEN---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Nm_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTES---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Md_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTEN---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Xt_FE21	---EII SFKSMEDLVN FDEKINVCFRNNAKTEN---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Dr_FE21	---EMMSFKSMEDLVN FDEKINVCFRNNAKTETEG---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Ss_FE21	---EMMSFKSMEDLVN FDEKINVCFRNNAKTETEG---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Gg_FE21	---EMMSFKSMEDLVN FDEKINVCFRNNAKTETEG---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Xt_FE22	---GFKSMEDLVN FDEKINVCFRNNAKTET---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Xl_FE22	---GFKSMEDLVN FDEKINVCFRNNAKTET---	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Ct_FE22	---GGDGFPAACSLBEKLSLCFRPSPG---	GAEPPRAARPIPECSLTC	---GDEIWNALTDNYG-VMPVDRKSSHTR---	108		
Bf_FE22	---GGDGFPAACSLBEKLSLCFRPSPG---	GAEPPRAARPIPECSLTC	---GDEIWNALTDNYG-VMPVDRKSSHTR---	108		
Hs_FE22	---GADGFPAACSLBEKLSLCFRPSPD---	GAEPPRTAARPIPECSLTC	---GDEIWNALTDNYG-VMPVDRKSSHTR---	112		
Pt_FE22	---GRRSPFGVCSMSQSLTCIYSSSPL---	LALPPEPSPARSAATATVLC	---TSEIWNALTDNYG-VMPVDRKSSHTR---	114		
Rn_FE22	---GGDGFPAACSLBEKLSLCFRPSPD---	ADEPPRAARPIPECSLTC	---GDEIWNALTDNYG-VMPVDRKSSHTR---	107		
Nm_FE22	---GGDGFPAACSLBEKLSLCFRPSPD---	ADEPPRAARPIPECSLTC	---GDEIWNALTDNYG-VMPVDRKSSHTR---	111		
Md_FE22	---GGVGFSAACGLBEKLSLCFRPSPD---	DTESPRAAARPIPECSLTC	---GDEIWNALTDNYG-VMPVDRKSSHTR---	106		
Td_FE22	---RRQLRPRSETRAIGRSRDSSPPREFRACLRQGLRGRGSRGEAVPTASPGADPPGACGLR	RRLSFPFPGQLPGAAGPRTWALTDNYG	---VMPVDRKSSHTR---	243		
Ec_FE22	---KGDRAVNIREDSGTERDPNAARLTG---	PRGPPRGESSALRCLG---	GARVWALTDNYG-VMPVDRKSSHTR---	118		
Tn_FE22	---LDNSFSGECSKSMEDLVN FDEKLTVCFRNNTTTD	LAPVKNQIQIQEEETLC	---EEVWDALTDNYIP-SISEQRDPNI---	126		
Dr_FE22	---LDETHS---ASFP---YSCSACTNDSYTAVSESITR---	---	---DDIWNALTDNYG-VMPVDRKSSHTR---	99		
Bf_FE22b	---VVSFKSMEDLVN FDEKINVCFRNNAKTEN---	TDSIAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	124		
Bf_FE22a	---VVSFKSMEDLVN FDEKINVCFRNNAKTEN---	TDSIAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	118		
Ci_FE21sim	---PELLSYSMEDLVN FDEKINVCFRNNAKTEN---	VQENPKPFNAETITD	---DYIWKRLSDNYGL-VQPLNGETSLVR---	132		
Ca UNC76	---RLHDFSGSLEDLVN FDEKINVCFRNNAKTEN---	TADTAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	119		
Em UNC76	---FTDENLGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	120		
Dps UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	194		
Dp UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	201		
Ds UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	201		
Lm UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	208		
Dy UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	210		
Da UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	206		
Dw UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	203		
Dv UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	194		
Lmo UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	212		
Dg UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	199		
Tc UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	165		
Ag UNC76	---DFAEAFSGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	196		
Nv UNC76	---GSFSPFSGSLEDLVN FDEKINVCFRNNAKTEN---	VESLAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	142		
Am UNC76	---GTFSPFSGSLEDLVN FDEKINVCFRNNAKTEN---	VESLAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	143		
Ph UNC76	---FTTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	183		
Ap UNC76	---FGTFFGGSLEDLVN FDEKINVCFRNNAKTEN---	VEELAPVQVRSQEEIMN	---ECQMWWTITGNFGN-ILPIDRKSXYR---	183		

	320	*	340	*	360	*	380	*	400	*	420
Pt_FE21	: --EALNGNCSDTEIHE						KEEE	EFNEKSEND	SGINEEP		: 160
Hs_FE21	: --EALNGNCSDTEIHE						KEEE	EFNEKSEND	SGINEEP		: 160
Mf_FE21	: --EALNGNCSDPEIHE						KEEE	EFNEKSEND	SGINEEP		: 160
Nmt_FE21	: --EALNGNCSDTEIHE						KEEE	EFNEKSEND	SGINEEP		: 160
Bt_FE21	: --EALNGNNSDTEIHE						KEEE	EFNEKSEHD	SGITEEP		: 160
Cf_FE21	: --EALNGNSSDTEIHE						KEEE	EFNEKSEHD	SGINEEP		: 160
Rn_FE21	: --EALNGNSSDTEIHE						KEEDEFIERSEND	SGINEEP		: 161	
Nm_FE21	: --EALNGNSDIEIHE						KEEE	EFNEKSEND	SGINEEP		: 160
Md_FE21	: --EALNGNNSDTEIHE						KEEE	EFNEKSEND	SGINEEP		: 160
Xt_FE21	: --ESLNGNNSDSEFHE						KDEE	EFNEKSEND	SGIIEEP		: 159
Dr_FE21	: --ETLNGNNSDQETHE						KDED	ENNEKNENA	NCINEEP		: 162
Ss_FE21	: --EGFNGNNSDQETHE						KEEE	ENNEKNENA	NCISEEP		: 169
Gg_FE21	: --EAPDG--TDPOLCE						KEDE	EFNERSEHD	SGINEEP		: 147
Xt_FE22	: A HLPTLN LDKAVNEN					LN	LDLSDEE	E IREQ LD MSI IVSCINEEP		: 185	
XI_FE22	: A HLPTLN LDKAVNDN					IN	LDLSDEE	E IREQ LD MSI IVSCINEEP		: 158	
Cf_FE22	: T HLLT LN SEK GVSDS					LL	FLTSDEE	E IREQ LD MSI IVSCVNEEP		: 154	
Bt_FE22	: T HLLT LN SEK GVSDG					LL	FLTSDEE	E IREQ LD MSI IVSCVNDPE		: 154	
Hs_FE22	: T HLLT LN SEK GVSDS					LL	FLTSDEE	E IREQ LD MSI IVSCVNDPE		: 158	
Rt_FE22	: T HLLT LN SEK GVSDS					LL	FLTSDEE	E IREQ LD MSI IVSCVNDPE		: 160	
Rn_FE22	: T HLLT LN SEK GVSDG					LP	FLTSDEE	E IREQ LD MSI IVSCVNEEP		: 153	
Nm_FE22	: T HLLT LN SEK GMNDG					LL	FLASDEE	E IREQ LD MSI IVSCVNEEP		: 157	
Md_FE22	: T HLLT LN SEK GINDN					LI	FLASDEE	E IREQ LD MSI IVSCVNDPE		: 152	
Tg_FE22	: A HLPTLN SEKGVNDN					LN	LDLSDEE	E IREQ LD MSI IVSCINEEP		: 289	
Ec_FE22	: T HLLT LN SEK GVSDS					LL	FLTSDEE	E IREQ LD MSI IVSCVDEE		: 164	
Tn_FE22	: S HLP ILN SEK QEKVSD					QS	LDLSDEE	E IREQ LD MSI IVSSVDEE		: 172	
Dr_FE22	: S HLP ILN RPQ ERLEV					NN	LDLSDEE	E IRDQ LD MSI IVSCVNEEP		: 145	
Bf_FE22b	: Q YNK ALN NEQ R-REE					PMN	LDLSDEE	E IRSF LD MSI IVSSVQEP		: 170	
Bf_FE22a	: Q YNK ALN NEQ RVREE					PMN	LDLSDEE	E IRSF LD MSI IVSSVQEP		: 165	
Ci_FE21sim	: K HIP AN DP EKATS							EKEVKAETDPE JEKQ LD MSI IVSSVQEP		: 195	
Ca UNC76	: K KMAA AN SD SLRDD							A STR RSMTNSD ED LD MSI IVSSVQEP		: 174	
Em UNC76	: R QL EAL DD QGPKE							NSD-LGILSEDEE-E IR SAL DM HAL DL INGLN-G		: 169	
DPs UNC76	: Q HMP TLN GC NHTKC	QQQQQHQRNQHQLQKHQHSYPHTP					GGDEFN	DLASEDEAN LD MSIIVSSVQEP		: 271	
Ds UNC76	: Q HMP TLN GC NHTKC	QQQQQHQRNQHQLQKHQHSYPHTP					GGDEFN	DLASEDEAN LD MSIIVSSVQEP		: 278	
Dp UNC76	: Q HMP TLN GC NHTKC	QQQNRNQQQQLHTQSHQ-AYPHTN	GAGSGSGLDAQTPGDEFN					DLTSEDEAN LD MSIIVSSVQEP		: 289	
Lm UNC76	: Q HMP TLN GC NHTKC	QQQNRNQQQQLHNQSHQ-AYPHTN	GLSGSGSGLDAQTPGDEFN					DLTSEDEAN LD MSIIVSSVQEP		: 298	
Dy UNC76	: Q HMP TLN GC NHTKC	QQQARNQQQQLHNQSHQ-AYPHTN	GSSAGLDAQTPGDEFN					DLTSEDEAN LD MSIIVSSVQEP		: 296	
Da UNC76	: Q HMP TLN GC NPTRC	QQNSRNQQQQQLHHTQSHSNGF	FGSGSGSSEAQTTPGDEFN					DLTSEDEAN LD MSIIVSSVQEP		: 297	
Dw UNC76	: Q HMP TLN GC SLTRC	QQQQRNQQQQQQQQQQHQYQQQQHQ					QQQHNACTPSEDEFN	DLTSEDEAN LD MSIIVSSVQEP		: 289	
Dv UNC76	: Q HMP TLN GC SRTKC	QQQQRNQLQQQQQQQQQQQQSQ					TLDAQTPVDEFN	DLTSEDEAN LD MSIIVSSVQEP		: 277	
Lmo UNC76	: Q HMP TLN GC SRTKC	QQQQQRNQLQQQQQQQQQQQQSQ					TPVDEFN	DLTSEDEAN LD MSIIVSSVQEP		: 287	
Dg UNC76	: Q HMP TLN GC NRTRC	RSQQQQQQQQQQQQQQSPHRQQQQQ					QQNAQTPVDEFN	DLTSEDEAN LD MSIIVSSVQEP		: 283	
Tc UNC76	: K HMP ALN NEK EATT						PDDDL	DLTSEDEAN LD MSIIVSSVQEP		: 215	
Ag UNC76	: Q HVP ALN GM RKPGT						PDDDEL	DLTSEDEAN LD MSIIVSSVQEP		: 248	
Nv UNC76	: K HVP ALN NE SAKSF						DGNGL	DLTSEDEAN LD MSIIVSSVQEP		: 196	
Am UNC76	: K HMP ALN NEA PVSC						EPELE	DLTSEDEAN LD MSIIVSSVQEP		: 197	
Ph UNC76	: K HVP ALN TE NNGGN						SNDDII	NLSRDEAN LD MSIIVSSVQEP		: 234	
Ap UNC76	: K QL EVN LN NNNIQDE						SSD	DLTSEDEAN LD MSIIVSSVQEP		: 231	

	* 440	* 460	* 480	* 500	* 520										
Pt_FE21	: LLTADQVIEIEBMMNSPDP	-----EEEEVLEB	EDGGETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEE	LRHMSGSEITELL	LDQVGAIRD	-FS	: 248						
Hs_FE21	: LLTADQVIEIEBMMNSPDP	-----EEEEVLEB	EDGGETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-FS	: 247						
Mf_FE21	: LLTADQVIEIEBMMNSPDP	-----EEEEVLEB	EDGGETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-FS	: 247						
Nmt_FE21	: LLTADQVIEIEBMMNSPDP	-----EEEEVLEB	EDGGETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-FS	: 247						
Lb_FE21	: LLTADQVIEIEBMMNSPDP	-----EEEEVLEB	EDGGETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-FS	: 247						
Cf_FE21	: LLTADQVIEIEBMMNSPDP	-----EEEEVLEB	EDGEETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-FS	: 247						
Rn_FE21	: LLTADQVIEIEBMMNSPDP	-----EEEVEVLEB	EDGEETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-FS	: 248						
Nm_FE21	: LLTADQVIEIEBMMNSPDP	-----EEEEVLEB	EDGEETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-FS	: 247						
Nd_FE21	: LLTADQVIEIEBMMNSPDP	-----EDEEEVLEB	DIGGETSSQADS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-YS	: 247						
Xt_FE21	: LLTADQVIEIEBMMNSPDP	-----EEDLDDEHD	HTEINSSHSDS	-----VLLQCMCAITQT	FNNNW-SVEG	LRHMSGSEITELL	LDQVGAIRD	-YS	: 248						
Kr_FE21	: LLTADQVIEIEBMMNSPDP	-----GETEE	EEDLIGVSSKSSP	-----SLLE	LRMLSCASNNC-SVEG	LRHMSGSEITELL	LDQVGAIRD	-YS	: 247						
Ss_FE21	: LLTADQVIEIEBMMNSPDP	-----GETEE	EDEESGHSSKSSP	-----SLLE	LRQLSCASNMPSEV	LRHMSGSEITELL	LDQVGAIRD	-YS	: 256						
Gg_FE21	: LLTADQVIEIEBMMNSPDP	-----EADPEGDEDEE	EEDAANAEGD	SGSRGMEPIVLE	HTFSPFNNNC-SHEG	LRHMSGSEITELL	LDQVGAIRD	-LS	: 248						
Xt_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDTHC	SIRLSMLS	-----CEICTL	LKKA-STNR-SHED	LRHMSGSEITELL	LDQVGAIRD	-YS	: 264						
Xl_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDTPC	SIRLSMLS	-----CEICTL	LKKS-STNS-SHEAK	VRKRSVAFIND	LEBEI	TAI	KD	-YS	: 237				
Cf_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-STG-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 232				
Bf_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-STG-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 232				
Hs_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-STG-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 236				
Rt_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-STG-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 238				
Pn_FE22	: LFTAEQVIEIEBMMNSPDL	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-SMS-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 231				
Nm_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-SMS-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 235				
Md_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-SMS-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 230				
Tg_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-STNN-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 368				
Ec_FE22	: LFTAEQVIEIEBMMNSPDP	-----EDDE	TPTSIRLSMLS	-----CEICTL	LKRS-STG-SVEE	VRKRSVAFIND	LEBEI	SAI	KE	-YS	: 242				
Tn_FE22	: LFTAEQVIEIEBMMNSPDL	-----EDDES	SPSCLLSMLS	-----CDHAL	KRS-GSNS-SVED	LRQLSVAFIND	LEBEI	SAI	KE	-YS	: 250				
Dr_FE22	: LFTAEQVIEIEBMMNSPDL	-----EENEGSS	FLLSMMS	-----HDEHT	LAHS-TSSS-SVEE	LRGHCVSEITELL	LEBEI	SAI	KE	-FS	: 223				
Bf_FE22b	: LFTAEQVIEIEBMMNSPDL	-----EETP	VSEISLSVLS	-----CEML	LRERSNTVT-SYD	SKKPIPTQIN	LEBEI	SAI	KE	-YS	: 248				
Bf_FE22a	: LFTAEQVIEIEBMMNSPDL	-----EETP	VSEISLSVLS	-----CEML	LRERSNTVT-SYD	SKKPIPTQIN	LEBEI	SAI	KE	-YS	: 243				
Ci_FE21sim	: MCTADEVIEIEBMMNSPDL	-----AVEDYE	IQQTGILFDK	SSLEDGEFQEP	FPFASGLRPS	IGSPSSQESDRAS	VKLTLTSEL	INDADL	DDQV	KM	-LS	: 293			
Ca UNC76	: PCATADQVIEIEBMMNSPDP	-----SMMD	TRMESDMSYSS	MRSFPFSSIQSS	DDAIKLRSAQALVS	-NPN	QQLSYKTR	LELCAEM	QLDR	YN	: 267				
Em UNC76	: PCATAEVIEIEBMMNSPDP	-----SVMD	TRMESDMSYSS	MRSPLPN	-GGYD	MDIKLRQAVITS	-NPN	QQLSYKTR	LELCAEM	QLDR	YN	: 260			
Dp UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PPTCES	-----EVE	EKAREVLGAPL	-YAEK	QYLT	TQIN	LELYME	VLQ	CE	-LS	: 343	
Dd UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PPTCES	-----EVE	EKAREVLGAPL	-VRR	WFHPTG	-----	IEB	AKL	QEE	CD	: 347	
Ds UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PPTCDS	-----EVE	EKAREVLGAPL	-YAEK	QYLT	TQIN	LELYME	VLQ	CE	-LS	: 361	
Lm UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PPTCDS	-----EVE	EKAREVLGAPL	-YAEK	QYLT	TQIN	LELYME	VLQ	CE	-LS	: 370	
Dy UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PPTCDS	-----EVE	EKAREVLGAPL	-YAEK	QYLT	TQIN	LELYME	VLQ	CE	-LS	: 368	
Da UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PPTCDS	-----EVE	EKAREVLGAPL	-YAEK	QYLT	TQIN	LELYME	VLQ	CE	-LS	: 369	
Dw UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PPTCDS	-----EVE	EKAREVLGAPL	-YAEK	QYLT	TQIN	LELYME	VLQ	CE	-LS	: 361	
Dv UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PPTCDS	-----EVE	EKAREVLGAPL	-YAEK	QYLS	STQIN	LELYME	BMVLQ	CE	-LS	: 349	
Lmo UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PENCDS	-----EVE	EKAREVLGAPL	-YAEK	QYLS	STQIN	LELYME	BMVLQ	CE	-LS	: 359	
Dg UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----PLD	PENCDS	-----EVE	EKAREVLGAPL	-YAEK	QYLS	STQIN	LELYME	BMVLQ	CE	-LS	: 355	
Tc UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----DGSP	GRSDSILETN	-----EVE	EKAREVLGAPL	-YAEK	QYLS	STQIN	LELYME	BMVLQ	CE	-FS	: 293	
Ag UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----GS	DGQLEN	-----EVE	EKAREVLGAPL	-YAEK	QYLS	STQIN	LELYME	BMVLQ	CE	-FS	: 317	
Nv UNC76	: VRTADEVIREIDDI	MDAEAS	-----DVS	MNSDS	-IGAN	-----EVE	ERKREVLGAPL	-HEKN	QYLS	STQIN	LELYME	BMVLQ	CE	-LS	: 271
Am UNC76	: IRKAVBEVIREIDDI	MDAEAS	-----ERSP	SDGSLDSD	-----EVE	ERKREVLGAPL	-HEKN	QYLS	STQIN	LELYME	BMVLQ	CE	-LS	: 274	
Ph UNC76	: VRTADEVIREIDDI	MDAEAS	-----DSE	SPDC	-----EVE	ERKREVLGAPL	-HEKN	QYLS	STQIN	LELYME	BMVLQ	CE	-YS	: 305	
Ap UNC76	: P-TRAEVIREIDDI	MDAEAS	-----NECTP	-----DSE	HPK	-EVHS	PL	-LEEK	NTN	NVQIN	LELYME	BMVLQ	CE	-YS	: 295

	* 540	* 560	* 580	* 600	* 620	*	
Pt_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLK	---	: 314
Hs_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Mf_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Nmt_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Bt_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Cf_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Rn_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 335
Nm_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Md_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Xt_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Dt_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Ss_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Gg_FE21	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 334
Xt_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 335
Xl_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Cf_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Bt_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Hs_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Pt_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Rn_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Nm_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Md_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Tg_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Ec_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Tn_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Dt_FE22	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Bf_FE22b	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Bf_FE22a	: EEIVQQLARRDELEFEKEVKNSFITVLI	EVCNKCKQRELMKKRRR	---EKGLSLQS	---	SRIEKGNCMPLKRRFSMEGINSILQSGIRQTFGS	---	: 336
Ci_FE21sim	: ADLLHGLGRDEIYIEYEVKNCFISRVLE	VCYKQGEFFKVAAPPKFKG	---	---	RLRKSATTDVSAG	---	: 356
Ca_UNC76	: ESIWDELARRDEIYIEYEMKNSFISLLI	ATCNRRRYVANDKRRVVGKASDASQ	---	---	---	---	: 320
Hm_UNC76	: DSIVDELARRDEIYIEYEMKNTFISLLI	SCNRRRHFHTNEKRRKLPKTDPSQ	---	---	---	---	: 312
Dps_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 393
Dd_UNC76	: GSIARLSSNMGATLSVRRGNEVTHIRI	CNNGDFDL	---	---	YGGK	---	: 391
Ds_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 411
Lm_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 420
Dy_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 418
Da_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 419
Dw_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 411
Dv_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 399
Lmo_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 409
Dg_UNC76	: ETLINSLARRDEIYIEYKELKNSFISLLI	AVCNRRQYHVEKRRGKRFQGP	---	---	---	---	: 405
Tc_UNC76	: ETLINSLARRDEIYIEYKELKNTFISLLI	AVCNRRQYHVEKRRGKRSLNKSTPSGL	---	---	---	---	: 348
Ag_UNC76	: ETLINSLARRDEIYIEYKELKNTFISLLI	AVCNRRQYHVEKRRGKRSAGGRGSAGM	---	---	---	---	: 371
Nv_UNC76	: ETLINSLARRDEIYIEYKELKNTFISLLI	AVCNRRQYHVEKRRGKRSNQLNGTSPLLQRR	---	---	---	---	: 328
Am_UNC76	: ETLINSLARRDEIYIEYKELKNTFISLLI	AVCNRRQYHVEKRRGKRSNQLNGTSPLLQRR	---	---	---	---	: 331
Ph_UNC76	: ETLINSLARRDEIYIEYKELKNTFISLLI	AVCNRRQYHVEKRRGKRSNQLNGTSPLLQRR	---	---	---	---	: 361
Ap_UNC76	: ETLINSLARRDEIYIEYKELKNTFISLLI	AVCNRRQYHVEKRRGKRSNQLNGTSPLLQRR	---	---	---	---	: 351

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640          *          660          *          700          *          720          *
Pt_FE21 : ----VINTVIPYEKKASPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 366
Hs_FE21 : SGTDKQINIVIPYEKKASPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 392
Mf_FE21 : SGSDKQINIVIPYEKKASPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 392
Nmt_FE21 : SGSDKQINIVIPYEKKASPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 392
Bt_FE21 : SGSDKQINIVIPYEKKASPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 392
Cf_FE21 : SGTDKQINIVIPYEKKALPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 392
Rn_FE21 : SGADRCINIVIPYEKKSSPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 393
Nm_FE21 : SGADRCINIVIPYEKKSSPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 392
Md_FE21 : SGTDKQINIVIPYEKKASPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 392
Xt_FE21 : SGNDKQINIVIPYEKRGTPPEVSVDLQMLN-----IYAMKEDSEKVPITLLTDYILR-VLCPT : 392
Dr_FE21 : SGTEKQINIVIPYEKRGTPPEVSDDLQMLR-----IYAMKEDSEKVPITLLTDYILR-VLCPT : 394
Ss_FE21 : TGTDRQINIVIPYEKKATPEVTDLQMLN-----IYAMKEDSEKVPITLLTDYILR-VLCPT : 419
Gg_FE21 : ----VINTVIPYEKKGSPPEVSVDLQMLN-----IFAMKEDNEKVPITLLTDYILR-VLCPT : 366
Xt_FE22 : ----VLTVIPYEKNGPPEVSVDLQILR-----IIRAMIDSDKVPISLLTDYILR-VLCPT : 381
X1_FE22 : ----VLTVIPYEKNGPPEVSVDLQILR-----IIRAMIDSDKVPISLLTDYILR-VLCPT : 354
Cf_FE22 : ----VLTVIPYEKNGPPEVSVDLQILR-----IIRAMKEDSEKVPISLLTDYILR-VLCPT : 349
Bt_FE22 : SGGEKQINIVIPYEKNGPPEVSVDLQILR-----IIRAMKEDSEKVPISLLTDYILR-VLCPT : 376
Hs_FE22 : ----VLTVIPYEKNGPPEVSVDLQILR-----IIRAMKEDSEKVPISLLTDYILR-VLCPT : 353
Pt_FE22 : ----VLTVIPYEKNGPPEVSVDLQILRKRRLLVNPIPLFLSPLFGNFKSGKQLS-----IIRAMKEDSEKVPISLLTDYILR-VLCPT : 383
Rn_FE22 : ----VLTVIPYEKNGPPEVSVDLQILR-----IIRAMKEDSEKVPISLLTDYILR-VLCPT : 348
Nm_FE22 : ----VLTVIPYEKNGPPEVSVDLQILR-----IIRAMKEDSEKVPISLLTDYILR-VLCPT : 352
Md_FE22 : ----VLTVIPYEKNGPPEVSVDLQILR-----IIRAMKEDSDKVPISLLTDYILR-VLCPT : 347
Tg_FE22 : SSGEKQINIVIPYEKNGPPEVSVDLQILR-----IIRAMKEDSEKVPISLLTDYILR-VLCPT : 512
Ec_FE22 : SGAEKQINIVIPYEKNGPPEVSVDLQILR-----IIRAMKEDSEKVPISLLTDYILRGLKQAPNCPAPHVRAAGSSL-----400
Tn_FE22 : TGGDKQINIVIPYEKKAGTPEVSVDLQILR-----IIRAMIDSEKVPISLLTDYILR-GKPAATFF-----401
Dr_FE22 : ----VLTVIPYMDRSSGSEVSDDLQILR-----IIRAMKEDSDTVEALLTDYILR-VLCPT : 339
Bf_FE22b : ----FLYVIPYEKNSPMTASDLQILR-----IIVAMSESDKVPISLLTDYILRGLQGLDSETPFNWIKHIKLVASHII : 379
Bf_FE22a : ----FLYVIPYEKNSPMTASDLQILR-----IIVAMSESDKVPISLLTDYILR-----350
Ci_FE21sim : ----RNLRSVIECS-SGPTETLNLQAMIK-----IIRAMIDSDSEVPISLLTDYILR-VLCFAPNGSRTLKL-----417
Ca_UNC76 : ----LPCMLTATIPYND-HQHIDNASRSLR-----IIRAHIDNTVPTLLTDYIILT-HVCKNISC-----378
Em_UNC76 : ----LPCMLTATIPYDESLYVDNNTMLALIK-----IIRAHIDSDPAVPSMLTDYIILT-VLCPSASSSVITDLAA-----378
Dps_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVEALLTDYILR-VLCPT : 447
Dp_UNC76 : ----FATIPPELVQNYMENGELKEKNGAIEL-----KQPLCAEPTTER-----431
Ds_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVEALLTDYILR-VLCPT : 465
Lm_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVEALLTDYILR-VLCPT : 474
Dy_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVEALLTDYILR-VLCPT : 472
Da_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVEALLTDYILR-VLCPT : 473
Dw_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVEALLTDYILR-VLCPT : 465
Dv_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVPTLLTDYILR-VLCPT : 453
Lmo_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVPTLLTDYILR-VLCPT : 463
Dg_UNC76 : ----PRMLTIVIPMHLENGTENNLSLOVILR-----IIRAHIDSDPTVPTLLTDYILR-VLCPT : 459
Tc_UNC76 : ----DPRMLTIVIPMHLDSPEDNATLOVILR-----IIRAHIDSDPTVPTLLTDYILR-VLCPT : 403
Ag_UNC76 : ----DPRMLTIVIPMGLNS-TEDNATLOVILR-----IIRAHIDSDPTVEALLTDYILR-VLCPT : 425
Nv_UNC76 : SIQESRMLTIVIPYHTDNGLLDTCALQVILR-----IIRAHIDSDPAVEALLTDYILR-VLCPT : 386
Am_UNC76 : SLQESRMLTIVIPYHTDNGEDDTCALQVILR-----IIRAHIDSDPTVPTLLTDYILR-VLCPT : 389
Ph_UNC76 : ----ESKMLTIVIPYHDSGPENNALQVILR-----IIRAHIDSNPMVPTLLTDYILR-VLCPT : 416
Ap_UNC76 : ----EPRMLTIVIPMHLDSEGLSNALQVILR-----IIRAHIDSDPTVPTLLTDYILR-EINIMFLYSLLIL-----415

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