

	10	20	30	40	50	60		
1	MASRERL	FELWMLYC	TKKDPDY	LKLWLD	NFVSSYE	QFLDVDFE	KLPTRVDDVPPGISLLP	Cfa_NBEAL1
1	MASRERL	FELWMLYC	TKKDPDY	LKLWLD	NFVSSYE	QFLDVDFE	KLPTRVDDVPPGISLLP	Ame_NBEAL1
1		MVFLFQ	KDPDY	LKLWLD	NFVSNYE	QFLDVDFE	KLPTRVDDVPPGISLLP	Oor_NBEAL1
1		MVFLFQ	KDPDY	LKLWLD	NFVSNYE	QFLDVDFE	KLPTRVDDVPPGISLLP	Ttru_NBEAL1
1	MASRERL	FELWMLYC	TKKDPDY	LKLWLD	NFVSSYE	QFLDVDFE	KLPTRVDDVPPGISLLP	Efu_NBEAL1
1		MVFLFQ	KDPDY	LKLWLD	SFVSSYE	QFLDVDFE	KLPTRVDDVPPGISLLP	Tla_NBEAL1
1	MASRERL	FELWMLYC	TKKDPDY	LKLWLD	TFVSSYE	QFLDVDFE	KLPTRVDDMPPGISLLP	Hsa_NBEAL1
1	MAARERL	FELWMLYC	TKKDPDY	RLWLD	NFVLSYE	QFLDVDFE	KLPTRVDDMPPGISLLP	Mmu_NBEAL1
1	MASRERL	YELWMLYC	NKKDPDY	LKLWLD	SFVSSYE	QFLDVDFE	KLPTRVDDIPPGISLLP	Pbi_NBEAL1
1	MASRERL	YELWMLYC	SKKDPDY	LKLWLD	SFVSSYE	QFLDVDFE	KLPTRVDDIPPGISLLP	Gga_NBEAL1
1	MASRERL	YELWMLYC	NKKDPDY	RLWLD	SFVSGYE	QFLDVDFE	DELPTRIDDEPPGISLLP	Xtr_NBEAL1
1	MATAERL	YELWMLYC	NKKDPDY	LKLWLES	FIATYE	KFLDVDFE	KPTRLDEVPPGISLLP	Cmi_NBEAL1
	masrerlfelwMlyc-kKDPDYLkLWLD-fVssYEqFLDVDFeklPTRvDdvPPGiSLLP							consensus

	70	80	90	100	110	120		
61	DNILQVLR	IQLLQCV	QKMADGLE	EQQA	LSILLVKFF	IILCRNLS	NVEEIGTCSYINHVI	Cfa_NBEAL1
61	DNILQVLR	IQLLQCV	QKMADGLE	EQQA	LSILLVKFF	IILCRNLS	NVEEIGTCSYINHII	Ame_NBEAL1
50	DNILQVLR	TQLLQCV	QKMADGLE	EQQA	LSILLIKFF	IVLCRNLS	NVEEIGTCSYINHVI	Oor_NBEAL1
50	DNILQVLR	TQLLHC	VQKMADGLE	EQQA	LSILLIKFF	IVLCRNLS	NVEEIGTCSYINHVI	Ttru_NBEAL1
61	DNILQVLR	IQLLHC	VQKMADGLE	EQQA	LSILLVKFF	IILCRNLS	NVEEIGTCSYINHVI	Efu_NBEAL1
50	DNILQVLR	IQLLQCV	QKTADGLE	EQQA	LSILLVKFF	IILCRNLS	NVEEIGTCSYINHII	Tla_NBEAL1
61	DNILQVLR	IQLLQCV	QKMADGLE	EQQA	LSILLVKFF	IILCRNLS	NVEEIGTCSYINYVI	Hsa_NBEAL1
61	DNILQVLR	IQLLHC	VQKTADGLE	EQQA	LSILLVKFF	IILCRNLS	NVEEIGTCSYINHVI	Mmu_NBEAL1
61	DNILQVLR	LQLLHC	VQKLESGLEE	PQQA	TLILLVKFF	IILCRNLD	NVEEIGTCSYINHVI	Pbi_NBEAL1
61	DNILQVLR	LQLLQCV	QKMSDGLE	EQQA	LSILLVKFF	IILCRNLA	NVEEIGMCSYINHVI	Gga_NBEAL1
61	DHILQVLR	LQLLYC	VQKTADGM	EEEQ	TLSELLVKFF	IILCRNLS	NVEEIGCCSYINHVI	Xtr_NBEAL1
61	DNILQIL	RQLVQ	CMQKLS	DGLEEE	EQQLAL	ILVKFLII	ILCRNLANVEEIGTCSYINHVI	Cmi_NBEAL1
	DnILQvLRiQLlqCvQKmadGLEEQQAlsillvKffIilCRNLSNVEEIGtCSYINHvI							consensus

	130	140	150	160	170	180	
121	TMTTLYI	QQLKSKKKEKE	LADQTSIEEF	VIHALAF	CESLYDPYRN	WRHRISGRILSTVEK	Cfa_NBEAL1
121	TMTTLYI	QQLKSKKKEKE	LADQTSIEEF	VIHALAF	CESLYDPYRN	WRHRISGRILSTVEK	Ame_NBEAL1
110	TMTTLYI	QQLKSKKKEKE	LADQTSIEEF	VIHALAF	CESLYDPYRN	WRHRISGRILSTVEK	Oor_NBEAL1
110	TMTTLYI	QQLKSKKKEKE	LADQTSIEEF	VIHALAF	CESLYDPYRN	WRHRISGRILSTVEK	Ttru_NBEAL1
121	TMTTLYI	QQLKSNKKEKE	LADQTSIEEF	VIHALAF	CESLYDPYRN	WRHRISGRILSTVEK	Efu_NBEAL1
110	TMTTLYI	QQLKSKKKEKE	MADQTSIEEF	VIHALAF	CESLYDPYRN	WRHRISGRILSTVEK	Tla_NBEAL1
121	TMTTLYI	QQLKSKKKEKE	MADQTCIEEF	VIHALAF	CESLYDPYRN	WRHRISGRILSTVEK	Hsa_NBEAL1
121	TMTTLYI	QQLKSKKKEKE	MADQTSIEEF	VIHALAF	CESLYDPYRN	WRHRISGRILSVEK	Mmu_NBEAL1
121	TMTTLYI	QQLKTKEKE	VADQTSIEEF	VRHALAF	CESLYDPYRN	WRQRIRAGRILNVEK	Pbi_NBEAL1
121	TMTTLYI	QQLKSKTKEKE	MADQTPIEEF	VRHALAF	CESLYDPYRN	WRQRIRAGRILSTVEK	Gga_NBEAL1
121	TMTTLYV	QQLKSNKKE	MDQSSIEEF	VRHALV	CESLYDPYRN	WRQRIRAGKITCPVEK	Xtr_NBEAL1
121	TMTTVY	QQLKSKTKEKE	MADQTSAE	DFARHALT	CESLYDPYRN	WRQRIRAGEVASVEK	Cmi_NBEAL1
	TMTTLYi	QQLKs	kkKEKE	lADQtsi	EeFvi	HALaFCESLYDPYRNWRhrisGrilstVEK	consensus

	190	200	210	220	230	240	
181	SRQKYK	PASLTVEFV	PFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Cfa_NBEAL1
181	SRQKYK	PASLTVEFV	PFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Ame_NBEAL1
170	SRQKYK	PASLTVEFV	PFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Oor_NBEAL1
170	SRQKYK	PASLTVEFV	PFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Ttru_NBEAL1
181	SRQKYK	PASLTVEFV	PFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Efu_NBEAL1
170	SRQKYK	PASLTVEF	IPFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Tla_NBEAL1
181	SRQKYK	PASLTVEFV	PFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Hsa_NBEAL1
181	SRQKYK	PASLTVEFV	PFFYQCFQ	ESEHLK	DSLKCLLHL	FGAIVAGGQRNALQAISPATM	Mmu_NBEAL1
181	SRQKYK	PALTLVEFV	PFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Pbi_NBEAL1
181	SRQKYK	PASLTVEFV	PFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAVSPATM	Gga_NBEAL1
181	SRQKYK	AASLTVEF	IPFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATI	Xtr_NBEAL1
181	SRQKYK	AASLTVEF	IPFFYQCFQ	ESEHLKES	SLKCLLHL	FGAIVAGGQRNALQAISPATM	Cmi_NBEAL1
	SRQKYKp	AsLTVEFv	PFFYQCFQ	ESEHLKe	SLKCLLHL	FgaIvaGgQrNALQAiSPATm	consensus

	250	260	270	280	290	300																																																			
241	EVL	MR	V	L	A	D	C	S	W	E	D	G	N	P	E	E	V	G	R	K	V	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	I	L	E	N	Y	F	K	Cfa_NBEAL1
241	EVL	MR	V	L	A	D	C	S	W	E	D	R	H	P	E	E	V	G	R	K	V	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	N	T	I	L	E	N	Y	F	K	Ame_NBEAL1
230	EVL	MR	V	L	A	D	C	S	W	E	E	G	N	P	E	E	V	G	R	K	V	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	I	L	E	N	Y	F	K	Oor_NBEAL1
230	EVL	MR	V	L	A	D	C	S	W	E	E	G	N	P	E	E	V	G	R	K	V	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	I	L	E	N	Y	F	K	Ttru_NBEAL1
241	EVL	MR	V	L	A	D	C	S	W	E	D	G	N	P	E	E	V	G	R	K	V	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	I	L	E	N	Y	F	K	Efu_NBEAL1
230	EVL	MR	V	L	A	D	C	S	W	E	D	G	D	P	E	E	V	G	R	K	V	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	I	L	E	N	Y	F	K	Tla_NBEAL1
241	EVL	MR	V	L	A	D	C	S	W	E	D	G	D	P	E	E	V	G	R	K	A	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	I	L	E	N	Y	F	K	Hsa_NBEAL1
241	EVL	MR	V	L	S	D	C	S	W	E	E	G	D	P	E	E	V	G	R	K	R	E	L	T	L	K	C	L	T	Q	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	I	L	E	N	Y	F	K	Mmu_NBEAL1
241	EVL	MR	V	L	A	D	C	M	W	D	N	R	D	P	D	E	V	S	R	K	A	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	V	L	E	N	Y	F	K	Pbi_NBEAL1
241	EVL	MR	V	L	A	D	C	N	W	D	D	G	S	P	E	E	V	S	R	K	A	E	L	T	L	K	C	L	T	E	V	V	H	I	L	L	T	S	S	S	D	Q	R	Q	V	E	T	S	T	I	L	E	N	Y	F	K	Gga_NBEAL1
241	EVL	MR	I	L	A	D	C	T	W	N	D	G	D	T	G	E	V	S	R	K	A	E	L	T	L	K	C	L	T	E	V	I	H	I	L	L	V	S	S	S	D	Q	R	Q	V	E	I	S	T	I	L	E	N	Y	F	K	Xtr_NBEAL1
241	EVL	MR	V	L	A	D	C	L	L	D	D	K	D	P	D	D	V	S	H	K	L	E	L	T	L	K	C	L	T	E	V	V	H	V	L	L	T	S	S	S	D	Q	R	Q	V	E	I	S	T	I	L	E	N	Y	F	K	Cmi_NBEAL1
	EVLMRvLaDCdswedg-peeVgrKvELTLKCLTeVvHiLLtSsSDQRQVEtsTiLENYFK																															consensus																									

	310	320	330	340	350	360																																																						
301	LL	N	S	D	P	S	A	L	P	N	Q	R	R	S	R	Q	W	E	S	R	F	I	T	L	Q	I	K	M	L	N	T	I	T	A	M	L	D	C	T	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Cfa_NBEAL1
301	LL	N	S	D	H	S	A	L	P	N	Q	R	R	S	R	Q	W	E	S	R	F	I	A	L	Q	I	K	M	L	N	T	I	T	A	M	L	D	C	T	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Ame_NBEAL1
290	LL	N	S	D	H	S	A	L	P	N	Q	R	R	S	R	L	W	E	S	R	F	I	A	L	Q	I	K	M	L	N	T	I	T	A	M	L	D	C	R	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Oor_NBEAL1
290	LL	N	S	D	H	S	A	L	P	N	Q	R	R	S	R	L	W	E	S	R	F	I	A	L	Q	I	K	M	L	N	T	I	T	A	M	L	D	C	R	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Ttru_NBEAL1
301	LL	N	S	D	H	S	A	L	P	N	Q	R	R	S	R	E	W	E	S	R	F	I	A	L	Q	I	K	M	L	N	T	I	T	A	M	L	D	C	T	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Efu_NBEAL1
290	LL	N	S	D	H	S	A	L	P	N	Q	R	R	S	R	Q	W	E	S	R	F	I	A	L	Q	I	K	M	L	N	T	I	T	A	M	L	D	C	T	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Tla_NBEAL1
301	LL	N	S	D	H	S	A	L	P	N	Q	R	R	S	R	Q	W	E	N	R	F	I	A	L	Q	I	K	M	L	N	T	I	T	A	M	L	D	C	T	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Hsa_NBEAL1
301	LL	N	S	D	H	S	A	L	P	K	Q	G	R	S	R	R	W	E	S	Q	F	I	A	L	Q	I	K	M	L	N	T	I	T	S	M	L	D	C	T	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Mmu_NBEAL1
301	LL	N	S	D	H	A	A	L	P	N	S	R	R	S	R	Q	W	E	S	R	F	I	A	L	Q	I	Q	M	L	N	T	I	T	A	M	L	D	C	A	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Pbi_NBEAL1
301	LL	N	S	D	H	S	A	L	P	K	P	R	R	C	R	Q	W	E	S	R	F	I	A	L	Q	I	Q	M	L	N	T	I	T	A	M	L	D	C	T	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Gga_NBEAL1
301	LL	N	S	D	H	S	A	L	S	S	Q	R	R	S	R	H	W	E	N	R	F	I	T	L	Q	I	K	M	L	T	C	M	T	D	M	L	N	C	K	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	I	R	Xtr_NBEAL1
301	LL	N	S	D	H	T	A	L	L	V	N	R	K	S	R	N	W	E	S	S	F	I	A	L	Q	I	Q	M	L	N	T	I	P	Q	I	L	N	C	P	D	R	P	V	L	Q	A	I	F	L	N	S	N	C	F	E	H	L	T	R	Cmi_NBEAL1
	LLNSDhsALpnqrrsRqWesrFiaLQIkMLntitamLdCtDRPVLQAIFLNSNCFEHLiR																															consensus																												

	370	380	390	400	410	420		
361	LLQNCK	.....	.....	VFQGQLDCLA	ISTIQALTAVM	NKSP	Cfa_NBEAL1
361	LLQNCK	.....	.....	VFQGQLDCLA	ISTIQALTAVM	NKSP	Ame_NBEAL1
350	LLQNCK	.....	.....	VFQVQLDCLAVSTI	QALTAVM	NKSP	Oor_NBEAL1
350	LLQNCK	.....	.....	VFQVQLDCLAVSTI	QALTAVM	NKSP	Ttru_NBEAL1
361	LLQNCK	LFLNANNKVADKNEKDLANKLLTEINEDQ	A	VFQGQLDCLAVSTI	QALTAVM	NKSP	Efu_NBEAL1	
350	LLQNCK	.....	.....	VFQGQLDCLAVSTI	QALTAVM	DKSP	Tla_NBEAL1
361	LLQNCK	.....	.....	VFQGQLDCLA	ISTIQALTAVM	NKSP	Hsa_NBEAL1
361	LLQNCK	LFLNAHSKVTDKNEKDLANQLLTEMSEDQ	V	VFQGQLDCLAVSAI	QALTAVM	KSSP	Mmu_NBEAL1	
361	LLQNCK	VFQGQLDR	LAVSAI	QALTAVM	HRSP	Pbi_NBEAL1
361	LLQNCK	.....	.....	VFQGHLDCLAVSTI	QALTAVM	HKSP	Gga_NBEAL1
361	LLQNC	.....	.....	VFQERLDRL	SVTTIQALTAV	KHKSP	Xtr_NBEAL1
361	LIQNSK	..LFVSSKAADKSEKDLANKLLTEMNVNQ	V	VFQGRLDIMAVATI	KALTAVM	HKSP	Cmi_NBEAL1	
	LlQnck	-----	-----	vFqgqLdclavstIqALTAVm	-kSP		consensus	

	430	440	450	460	470	480		
392	AAKEVFKERIGY	THMFEVLKSLG	QPPELELLKELMNM	AVEGDHTSVGILGIS	NVHP	PLLLLI	Cfa_NBEAL1	
392	AAKEVFKERIGY	THMFEVLKSLG	QPPELELLKELMNM	AVEGDHTSVGILGIS	NVHP	PLLLLI	Ame_NBEAL1	
381	AAKEVFKERIGY	THMFEVLKSLG	QPPELELLKELMNM	AVEGDHTSVGILGIS	NVQ	PLLLLI	Oor_NBEAL1	
381	AAKEVFKERIGY	THMFEVLKSLG	QPPELELLKELMNM	AVEGDHTSVGILGIS	NVQ	PLLLLI	Ttru_NBEAL1	
421	AAKEVFKERIGY	AHMFEVLKSLG	QPSLELLKELMNM	AVEGDHTSVGILGIS	NVQ	PLLLLI	Efu_NBEAL1	
381	AAKEVFKERIGY	THMFEVLKSLG	QPPELELLKELMNM	AVEGDHTSVGILGIS	NVQ	PLLLLI	Tla_NBEAL1	
392	AAKEVFKERIGY	THML	EVKSLGQPPELELLKELMNM	AVEGDHTSVGILGIS	NVQ	PLLLLI	Hsa_NBEAL1	
421	AAKEVFKERIGY	MHMFEVLKSLG	PPQ	ELLKELMNM	AVEGDHTSVGILGIS	NVQLL	VLI	Mmu_NBEAL1
392	AAKEVFKERIGY	AHIF	EVLKSMGQPSQELLEEL	NMAVEGDH	ASVGM	LGISNVQ	PLLLLI	Pbi_NBEAL1
392	AAKEVFKERIGY	AHI	YEVKSLGQPSRE	ELLEELMNM	AVEGDHMA	VGILGISNVQ	PLLLLI	Gga_NBEAL1
392	SAKEVFKERIGY	AHFLD	VLKSLGQPT	RLLEEL	NMAVEGDHNI	VGILGISNVQ	PLLLLI	Xtr_NBEAL1
419	AAKEVFKERIGY	TQLYEILKTL	GEPSRDLLKELMNM	AVEGEHTSVGMLGI	NVQ	PLLLLI	Cmi_NBEAL1	
	aAKEVFKERIGY	thmfevLkSlGqPpLeLLkELmNM	AVEGDhtsvGiLGIsNVqPLLLLI				consensus	

	490	500	510	520	530	540	
452	QWLPELES	HDLQIFIS	DWLKRICCINR	QSRTTCVNANMGI	HIIKTL	DSHSSLHRTCAENL	Cfa_NBEAL1
452	QWLPELES	QDLQIFIS	DWLKRICCINR	QSRTTCVNANMGI	HIETL	DSHSSLHRTCAENL	Ame_NBEAL1
441	QWLPELES	HDLQIFIS	DWLKRICCINR	QSRTTCVNANMGI	RIETL	NSHSSLHRTCAENL	Oor_NBEAL1
441	QWLPELES	HDLQIFIS	DWLKRICCINR	QSRTTCVNANMGI	RIETL	NSHSSLHRTCAENL	Ttru_NBEAL1
481	QWLPELES	QDLQIFIS	DWLKRICCINR	QSRTTCVNSNMGI	RIETL	DSHSSLHRTCAENL	Efu_NBEAL1
441	QWLPELES	HDLQIFIS	DWLKRICCINR	QSRTTCVNANMGI	RIEAL	DFHSSLHRAACAENL	Tla_NBEAL1
452	QWLPEL	QSHDLQIFIS	DWLKRICCINR	QSRTTCVNANMGI	RIETL	DLHSSLHQTCENL	Hsa_NBEAL1
481	QWLPELES	HDLQIFVS	DWLKRICCINR	QSRTTCVNANMGI	KIIEAL	ESHSSLHRTCAENL	Mmu_NBEAL1
452	QWLPELES	HELQILIS	NLLKRICCINR	QSRAICVN	TNMVIRIETL	SKHPQLHGACAENL	Pbi_NBEAL1
452	QWLPELES	HDLQIFIS	NWLRRICCINR	QSRAICVN	ADMVIRIETL	NHHS TLHCTCAENL	Gga_NBEAL1
452	QWLPEIQ	SHDLQIFIS	EWLKRICCINR	QSRTM	CVNANMVIRIETL	NSHYS LHRACAENL	Xtr_NBEAL1
479	QWLPEMDS	FELQIFIS	DWLKRICCINR	QSRTFCVNAN	IVNRILETL	NCHANLHRTCAENL	Cmi_NBEAL1
	QWLPEleShdLQIfiSdwLkrICcINrQSrttCVNanmgirIietL-sHssLHrtCAENL						consensus

	550	560	570	580	590	600	
512	IALHGSLGSQS	VSSEEIR	RLRLRLRVDESEY	IHPYTT	PVTRAIL	TMARKQSLESALQYFN	Cfa_NBEAL1
512	IALHGSLGSQS	VSSEEIR	RLRLRLRVDESEY	IHPYTT	PVTRAIL	TMARKQSLESALQYFN	Ame_NBEAL1
501	IALHGSLGSQS	VSSEEIR	QLLRLRLRVDESEY	IHPYTT	LVTRAIL	TMARKQSLESALQYFN	Oor_NBEAL1
501	IALHGSLGSQS	VSSEEIR	QLLRLRLRVDESEY	IHPYTT	LVTRAIL	TMARKQSLESALQYFN	Ttru_NBEAL1
541	IALHGSLGSQS	VSSEEIR	RLRLRLRVDESEY	IHPYTT	PVTRAIL	TMARKQSLESALQYFN	Efu_NBEAL1
501	IALHGSLGSQS	VSSEEVR	RLRLRLRVDEFEY	IHPYTI	PVTRAIL	TMARKQSLESALQYFN	Tla_NBEAL1
512	IAIHGSLGSQS	VSSEEIR	RLRLRLRVDESES	VHPYVT	PVTRAIL	TMARKLSLESALQYFN	Hsa_NBEAL1
541	IAIHGSLGSQS	VSSEEIR	RLRLRLRVDESEC	IHPYTI	PVTRAVL	TMARKLSFESALQYFN	Mmu_NBEAL1
512	IALLGSLGSL	SMSSGELHQLIQ	LLRTKDPKQT	HPYVVPV	MRAIL	TMARKQGLDSALQYFD	Pbi_NBEAL1
512	IALLGSLGSS	MGSEELQLIR	LLRTEEPKQA	HPYVIPV	VRAIL	AMARKQGMASALQYFN	Gga_NBEAL1
512	IGLLGSLS	QSMSSSEELF	HLLSLLRTEHKQS	HPYVIPV	TRAIL	LAITRKQGLCSALQYFN	Xtr_NBEAL1
539	ITLLGSLS	QSLSSGEIF	QSMRLLRTDD	PKQHPY	VIPMT	CAMLGMARKQGLDNALQYFN	Cmi_NBEAL1
	IalhGSLGSqSvsSeEir-llrLLRvdese-iHPYt-pvtrAiLtmarKqslesALQYFn						consensus

	610	620	630	640	650	660																																																							
572	L	S	H	S	M	A	G	I	T	V	P	S	I	Q	K	W	P	G	S	A	F	S	F	N	A	W	F	C	L	D	Q	D	Q	L	T	L	G	I	A	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	M	G	F	E	Cfa_NBEAL1
572	L	S	H	S	M	A	G	I	S	V	P	S	I	Q	K	W	P	G	S	A	F	S	F	N	A	W	F	C	L	D	Q	D	Q	L	T	L	G	S	T	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	M	G	F	E	Ame_NBEAL1
561	L	S	H	S	M	A	G	I	S	V	P	S	I	Q	K	W	P	G	S	A	F	S	F	N	A	W	F	C	L	D	Q	D	Q	L	T	L	G	N	A	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	M	G	F	E	Oor_NBEAL1
561	L	S	H	S	M	A	G	I	S	V	P	S	I	Q	K	W	P	G	S	A	F	S	F	N	A	W	F	C	L	D	Q	D	Q	L	T	L	G	N	A	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	M	G	F	E	Ttru_NBEAL1
601	L	S	H	S	M	A	G	I	S	V	P	S	I	Q	K	W	P	G	S	A	F	S	F	N	A	W	F	C	L	D	Q	D	Q	L	T	L	G	N	A	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	M	G	F	E	Efu_NBEAL1
561	L	S	H	S	M	A	G	I	S	V	P	S	I	Q	K	W	P	G	S	A	F	S	F	N	A	W	F	C	L	D	Q	N	Q	L	T	A	G	I	A	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	I	G	F	E	Tla_NBEAL1
572	L	S	H	S	M	A	G	I	S	V	P	P	I	Q	K	W	P	G	S	A	F	S	F	S	A	W	F	C	L	D	Q	D	Q	L	T	L	G	I	A	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	M	G	F	E	Hsa_NBEAL1
601	L	S	H	S	M	A	G	I	S	V	P	A	I	Q	R	W	P	G	S	A	F	S	F	T	A	W	F	C	L	D	Q	D	P	L	T	L	G	S	A	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	M	G	F	E	Mmu_NBEAL1
572	L	S	H	S	M	A	G	I	A	V	P	A	I	H	K	W	P	G	S	A	F	A	F	D	A	W	L	C	L	D	Q	N	Q	M	I	P	D	A	S	S	K	G	G	K	R	K	Q	L	Y	S	F	F	T	G	G	M	G	F	E	Pbi_NBEAL1	
572	L	C	H	S	M	A	G	I	V	V	P	S	I	Q	K	W	P	G	S	A	F	S	F	N	A	W	L	C	L	D	Q	D	V	D	P	S	T	A	S	K	T	G	K	R	K	Q	L	Y	S	F	F	T	G	S	G	M	G	F	E	Gga_NBEAL1	
572	L	S	H	S	L	A	G	I	A	V	P	T	V	Q	K	W	P	G	S	A	F	S	F	F	A	W	L	C	L	D	Q	D	S	F	S	A	V	S	S	S	G	T	K	R	K	Q	L	Y	S	F	F	T	S	S	G	T	G	F	E	Xtr_NBEAL1	
599	L	S	H	S	M	A	G	I	M	V	P	T	I	Q	R	W	P	G	Y	A	F	S	F	Y	A	W	M	C	L	D	Q	D	R	T	S	G	Q	F	N	K	G	G	K	R	K	Q	L	Y	S	F	F	T	A	S	G	T	G	F	E	Cmi_NBEAL1	
	LsHSmAGIsVPsiqkWPGsAFsFnAWfCLDQdqlltlg-ankggKrkQLYSFFTGsGmGFE																																consensus																												

	670	680	690	700	710	720																																																								
632	A	F	I	T	H	S	G	M	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	S	F	C	D	S	L	W	H	N	I	T	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	D	N	G	Q	Cfa_NBEAL1	
632	A	F	I	T	H	S	G	M	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	S	F	C	D	S	L	W	H	N	I	T	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	D	N	G	Q	Ame_NBEAL1	
621	A	F	I	T	H	S	G	M	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	S	F	C	D	S	L	W	H	N	I	T	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	D	N	G	Q	Oor_NBEAL1	
621	A	F	I	T	H	S	G	M	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	S	F	C	D	S	L	W	H	N	I	T	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	D	N	G	Q	Ttru_NBEAL1	
661	A	F	I	T	H	S	G	M	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	S	F	C	D	S	L	W	H	N	I	T	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	D	N	G	Q	Efu_NBEAL1	
621	A	F	I	T	H	S	G	M	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	S	F	C	D	S	L	W	H	N	I	T	V	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	D	N	G	Q	Tla_NBEAL1
632	A	F	I	T	H	S	G	M	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	S	F	C	D	S	L	W	H	N	I	T	V	V	H	M	P	G	K	R	P	F	G	Q	S	F	V	Y	I	Y	D	N	G	Q	Hsa_NBEAL1	
661	A	F	I	T	H	S	G	V	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	S	F	C	D	S	L	W	H	N	I	T	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	D	N	G	Q	Mmu_NBEAL1	
632	A	F	I	T	C	S	G	V	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	S	D	H	C	F	C	D	S	L	W	H	N	I	C	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	V	N	G	Q	Pbi_NBEAL1	
632	A	F	I	T	C	S	G	V	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	C	F	F	D	S	L	W	H	N	I	T	I	V	H	M	P	G	K	R	P	F	G	Q	S	L	V	Y	I	Y	V	N	G	Q	Gga_NBEAL1	
632	A	F	I	T	S	S	G	V	L	V	V	A	V	C	T	K	R	E	Y	A	T	V	M	L	P	D	H	C	F	C	D	S	L	W	H	N	I	T	V	I	V	H	V	P	G	K	R	P	F	G	Q	S	F	V	Y	I	Y	V	N	G	Q	Xtr_NBEAL1
659	A	F	I	T	S	S	G	V	L	V	V	A	V	C	T	K	R	E	Y	M	T	V	M	L	P	D	H	C	F	C	D	S	L	W	H	G	I	A	V	L	H	V	P	G	K	R	P	F	G	H	S	L	V	Y	I	Y	V	N	G	Q	Cmi_NBEAL1	
	AFIThSGmLVVAVCTKrEYaTVMLpDHsFcDSLWWhnitivHmPGKRPFgqSlVYIYdNGQ																																consensus																													

	730	740	750	760	770	780	
692	QKVSAPLRFPAMNEPFI	SCCIGSAGQRTTTPPPSQIPDPFFSSPITPHRTS	FGGILSSAS				Cfa_NBEAL1
692	QKVSAPLRFPAMNEPFI	SCCIGSAGQRTTTPPPSQIPDPFFSSPITPHRTS	FGGILSSAS				Ame_NBEAL1
681	QKVSAPLRFPATNEPFI	SCCIGSAGQRTTTPPPSQIPDPFFSSPITPHRTS	FGGILSSAS				Oor_NBEAL1
681	QKVSAPLRFPATNEPFI	SCCIGSAGQRTTTPPPSQIPDPFFSSPITPHRTS	FGGILSSAS				Ttru_NBEAL1
721	QKVSAPLRFPAMNEPFI	SCCIGSAGQRTTTPPPSQIPDPFFSSPITPHRTS	FGGILSSAS				Efu_NBEAL1
681	QKVSAPLRFPALNEPFT	SCCIGSAGQRTTTPPPSQIPDPFFSSPIMPHRTS	FGGILSSAS				Tla_NBEAL1
692	QKVSAPLRFPAMNEPFT	SCCIGSAGQRTTTPPPSQIPDPFFSSPITPHRTS	FGGILSSAS				Hsa_NBEAL1
721	QKVSAPLRFPAMNEPFT	SCCIGSAGQRTTTPPPSQIPDPFFS	TPIPHRTS	FGGILSSAS			Mmu_NBEAL1
692	QKVSAPLRFPALNEPFT	SCCIGSAGQRTTTPPPSQIPDPFFSSP	MTPPRTS	LGGIL	GPGS		Pbi_NBEAL1
692	QKISAPLRFPAMNEPFT	SCCIGSAGQRTTTPPPSQIPDPFFSSP	IMPHRTS	LGGIL	SPGS		Gga_NBEAL1
692	QKASAPLRKFP	SMNEAFTSCCIGSAGQRTNTPPPSQIPDPPI	SPSAGRTS	LGGIL	SSPS		Xtr_NBEAL1
719	QKLSAPLRKCP	TFNEPFTSCCIGSAGHRTTTPPPSQIPDPFF	LSAS	SGRSS	LGAML	SSPT	Cmi_NBEAL1
	QKvSAPLRfPamNEpFt	SCCIGSAGqRtTtPPPSQIPDPpF	SspitphRtSfGgiLssas				consensus

	790	800	810	820	830	840	
752	WGSLEKSKLITKLISAGTQDSEWGCPTSLEGQLGSVIF	YEALQPPQVKALYLAGPNCL					Cfa_NBEAL1
752	WGGTLEKSKLITKLISAGTQDSEWGCPTSLEGQLGSVIF	FEALQPPQVKALYLAGPNCL					Ame_NBEAL1
741	WGGTMEKSKLITKLISAGTQDSEWGCPTSLEGQLGSVIF	YEALQPLQVKALYLAGPNCL					Oor_NBEAL1
741	WGGTMEKSKLITKLISAGTQDSEWGCPTSLEGQLGSVIF	YEALQPLQVKALYLAGPNCL					Ttru_NBEAL1
781	WGGTIEKSKLM	TKLISAGTQDSEWGCPTSLEGQLGSVIF	YEALQPPQVKALYLAGPNCL				Efu_NBEAL1
741	WGGTSEKSKLITKLISAGTQDSEWGCPTSLEGQLGSVIF	YEALQPSQVKALYLAGPNCL					Tla_NBEAL1
752	WGGTIEKSKLITKLISAGTQDSEWGCPTSLEGQLGSVIF	YEPLQPPQVKALYLAGPNCL					Hsa_NBEAL1
781	WGGTIEKSKLF	TKLISAGTQDSEWGCPTSLEGQLGSVIF	HEALQPPQVKALYLAGPNCL				Mmu_NBEAL1
752	W	SGLLGKPELITKLISAGTQDSEWGCPTSLEGQLGSVIF	HEVLP	SHV	KALYLAGPNCL		Pbi_NBEAL1
752	W	GMLAKPELITKMISAGTQDSEWGCPTSLEGQLGSVIF	HEALQPPQVKALYLAGPNCL				Gga_NBEAL1
752	W	SGTHGKT	DGVTKLISAGTQDSEWGSPTSLEGHLGSVLI	FHDV	LQAAQVK	TLYLAGPNCL	Xtr_NBEAL1
779	W	GLLGK	PESVTKLISAGTQDSEWGSPTSLEGQLGSVL	VFHD	ALQPS	QIKALYLAGPNCL	Cmi_NBEAL1
	WgGtleKskliTKLISAGTQDSEWgcPTSLEGqLGSViiF	yealQp-qvKaLYLAGPNcl					consensus

	850	860	870	880	890	900	
812	SPWKFQESDMADLPGNILLHYTAKACKNSICLDLSTNCLHGRLTGNKVVNWDIKDIINCI						Cfa_NBEAL1
812	SPWKFQESDMADLPGNILLHYTAKACKNSICLDLSTNCLHGRLTGNKVVNWDIKDIINCI						Ame_NBEAL1
801	SPWKFQESDMADLPGNILLHYTAKACKNSICLDLSTNCLHGRLTGNKVVNWDIKDSINCI						Oor_NBEAL1
801	SPWKFQESDMADLPGNILLHYTAKACKNSICLDLSTNCLHGRLTGNKVVNWDIKDSINCI						Ttru_NBEAL1
841	SPWKFQESDMADLPGNVLLHYTAKACKNSICLDLSTNCLHGRLTGNKVVNWDIKDIINCI						Efu_NBEAL1
801	SPWKCQESDMADLPGNILLHYTPKACKNPICLDLSTNCLHGRLTGNKVVNWDIKDIINCI						Tla_NBEAL1
812	SPWKCQESDMADLPGNILLHYTPKACKNSICLDLSTNCLHGRLTGNKVVNWDIKDIINCI						Hsa_NBEAL1
841	SPWKCQDCMADLPSNILLHYTPKACKNSICLDLSTNCLHGRLTGNKVVNWDIKDIINCI						Mmu_NBEAL1
812	TPWKSQESELADLSSKILFHYPKACKNSICLDLSTNCLHGRLTGNKVVNWDIKDMINCI						Pbi_NBEAL1
812	TPWKSQEPEVADLPSKIVLLHYTPKACKNPICLDLSTNCLHGRLTGNKVVNWDIKDMINCI						Gga_NBEAL1
812	SLWKSQESELTDLPKLLLYTPKACKNPICLDLSTNCLHGRLTGNKVVNWDIKDMINCI						Xtr_NBEAL1
839	APFKSQDTELADLPNKLLLYTPKACKSPICLDLSTNCLHGRLTGNKVVNWDIKDMINCI						Cmi_NBEAL1
	spwK-QesdmaDLpgniLlhYtaKACknsICLDLStNclHGRLTGnKvVnWDIKDiINCI						consensus

	910	920	930	940	950	960	
872	GGLNVLFPLLEQISRFGEGQISE.....GMNESTVSELVTPVEGDWVVLTSKASESRLE						Cfa_NBEAL1
872	GGLNVLFPLLEQISHFEGEGQISE.....GMNESTVSELITPVEGDWVVLTSKASESRLE						Ame_NBEAL1
861	GGVNVLFPLMEQISHFEGEGQIPE.....GLNESTVPELITPVEGDWVVLNLSKASESRLE						Oor_NBEAL1
861	GGVNVLFPLMEQISHFEGEGQIPE.....GLNESTVPELITPVEGDWVVLNLSKASESRLE						Ttru_NBEAL1
901	GGINVLFPLLEQISHFSEGQIPE.....GINEITVSELITPVEGDWVLPSTKTSERLE						Efu_NBEAL1
861	GGLNVLFPLLEQISHFSEGQIPE.....GTNESTVSELITPVEGDWVVLTSKTSERLE						Tla_NBEAL1
872	GGLNVLFPLLEQISHFSEGQIPE.....EKNESTVPESEVTPVEGDWLVWVTSKASESRLE						Hsa_NBEAL1
901	GGLNVLFPLLEQISHFSEGQTSE.....AMSENTVPELVTPSEQECMGLASTRASESRLE						Mmu_NBEAL1
872	GGLNVLFPLLEQISFLDGLPER.....SEGEVLPHELLTPVEGDWVVLTSKASEARLE						Pbi_NBEAL1
872	GGINVLFPLLEQISFLGRQMPEK.....SVGETLPPEVVTTPVEGDWVVLSSAKASEARLE						Gga_NBEAL1
872	GGLNSLFPLLEQISYLNELPCEK.....TDSCVTATEHLTPIEGDFVVLSSKASEARLE						Xtr_NBEAL1
899	GGLNVLFPLLEQISNLESQVTEKNGDGRGAVDFVSPDVNSPSESDDWVVVPSSTRASEARLE						Cmi_NBEAL1
	GGLNvLFPLLEQIShf-egqi-e----gmnestv-elitPvEgdwvvlTSkaSEsRLE						consensus

	970	980	990	1000	1010	1020	
927	RNLIATFILIVKHFIQRHPINQ	DNLIHSHGVATLGALLQKVPS	ALMDVNVLMAT	QLLIEQ			Cfa_NBEAL1
927	RNLIATFILIVKHFIQRHPINQ	DNLIHSHGVATLGALLQKVPS	SLMDVNVLMAT	QLLIEQ			Ame_NBEAL1
916	RNLIATFILIVKHFIQRHPINQ	DNLIHSHGVATLGALLQKVPS	TLMDEVNVLMAI	QLLIEQ			Oor_NBEAL1
916	RNLIATFILIVKHFIQRHPINQ	DNLIHSHGVATLGALLQKVPS	TLMDEVNVLMAI	QLLIEQ			Ttru_NBEAL1
956	RSLVATFILIVKHLIQRHPINQ	DNLIHSHGVATLGALLQKVPS	TLMDEVNVLMAI	QLLIEQ			Efu_NBEAL1
916	RNLVATFILIVKHFIQRHPINQ	DNLIHSHGVATLGALLQKVPS	TLMDEVNVLMAV	QLLIEQ			Tla_NBEAL1
927	RNLVATFILIVKHFIQRHPINQ	GNLIHSHGVATLGALLQKVPS	TLMDEVNVLMAV	QLLIEQ			Hsa_NBEAL1
956	KNLIATFILIVKHFIQRHPINQ	DNLIHSHGVATLGALLQKVP	SGMDVNVLMAT	QLLIEQ			Mmu_NBEAL1
927	KNIIATFILMIKHFIQRHPINQ	DNLIHTHGATLG	VLLQKVPSRFMDVNVLMAV	QLLIEQ			Pbi_NBEAL1
927	KNIVATFILVIKHFIQRHPINQ	ENLIHSHGVATLGTLLQKVPS	ILMDVNVLMAV	QLLIEQ			Gga_NBEAL1
927	KNIVATFILLIKHLIQRHPINQ	EVLTYSHGVATLGVLLQKV	SGNLMDEVNVLMAV	QLLIEQ			Xtr_NBEAL1
959	KNVIATFLLTIKHFIQRHPINQ	ENLIHSHGVATLGALLQKV	SSGLADVNM	LVAVQLLIEQ			Cmi_NBEAL1
	rnliATFiLivKHfIqRHpiNQdnLihsHGvAtLGaLLQKVpstlMDVNVLmAvQLLIEQ						consensus

	1030	1040	1050	1060	1070	1080			
987	VSLEKNMQLLQ	QMYQYLLFDFR	IWNRGDFPFR	IGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Cfa_NBEAL1		
987	VSLEKNMQLLQ	QMYQYLLFDFR	IWNRGDFPFR	IGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Ame_NBEAL1		
976	VSLEKNMQLLQ	QMYQYLLFDFR	IWNRGDFPFR	IGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Oor_NBEAL1		
976	VSLEKNMQLLQ	QMYQYLLFDFR	IWNRGDFPFR	IGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Ttru_NBEAL1		
1016	VSLEKNMQLLQ	QMYQYLLFDFR	IWNRGDFPFR	IGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Efu_NBEAL1		
976	VSLEKNMQLLQ	QMYQYLLFDFR	IWNRGDFPFR	IGHIQYI	STIIKDSRRVFRK	YGVQFLL	Tla_NBEAL1		
987	VSLEKNMQLLQ	QMYQYLLFDFR	IWNRGDFPFR	IGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Hsa_NBEAL1		
1016	VSLEKN	TLLQMYQC	LLFDFR	IWNRGDFPF	QIGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Mmu_NBEAL1	
987	VSVAKNA	QLLQMYQHLLFDFS	IWNRGDFPFR	IGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Pbi_NBEAL1		
987	VSVEKNL	QLLQMYQHLLFDFS	IWNSGDFPFR	IGHIQYLS	TIIKDSRRVFRK	YGVQFLL	Gga_NBEAL1		
987	VSVEKNTLL	QMYQYLLFDFR	IWNRGDFPFR	IGHIQYV	STIIKDSRKLFRK	YGVQFLL	Xtr_NBEAL1		
1019	VSIEKNTQLLH	QMYQYLLFDFR	IWSHGDFPFR	IGHIQYLS	TIIKDN	RKLFRK	YGVQFLL	Cmi_NBEAL1	
	VSleKNmqLLqQMYQyLLFDFrIWnrGDFPFrIGHIQYLS						TIIKDsRrvFRK	YGVQFLL	consensus

	1090	1100	1110	1120	1130	1140	
1047	DTLRIYYGTDCKYSEL	SLDDVRTIRTS	SLYGLIKYFLCKG	GTHEEIQSIMGYIAA	INEEEQ		Cfa_NBEAL1
1047	DTLRIYYGSDCKYSEL	SLDDVRTIRTS	SLYGLIKYFLCKG	GTHEEIQSIMGYIAA	INEEEQ		Ame_NBEAL1
1036	DTLRIYYGSDCKYSEL	SLDDIRTIRTS	SLYGLIKYFLCKG	GTHEEIQSIMGYVSA	INEEEQ		Oor_NBEAL1
1036	DTLRIYYGSDCKYSEL	SLDDIRTIRTS	SLYGLIKYFLCKG	GTHEEIQSIMGYISA	INEEEQ		Ttru_NBEAL1
1076	DTLRIYYGSDCKYSEL	SLDDIRTIRTS	SLYGLIKYFLCKG	GTHEEIQSIMGYIAA	INEEEQ		Efu_NBEAL1
1036	DTLRIYYGSGCKYNEL	SLDDIRTIRTS	SLYGLIKYFLSKG	GTHEEIQSIMGYIAA	ANEEEQ		Tla_NBEAL1
1047	DTLRIYYGNGCKYNEL	SLDDIRTIRTS	SLYGLIKYFLCKG	GSHHEEIQSIMGYIAA	TNEEEQ		Hsa_NBEAL1
1076	DTLRIYYGHGSTCNE	LSPPDIRTIRTS	SLYGLIKYFLCKG	GTHEEIQSIIGYIAA	TNEEEQ		Mmu_NBEAL1
1047	DTLRIYYGNPFRDD	DLVPDDLRTIRTS	SLYGLIKYFLTKG	GAHEEVQSIMGYIAA	TGDEEQ		Pbi_NBEAL1
1047	DTLRVYYGSGCKD	SDLPDDLRTIRMS	SLYGLIKYFLSKG	GTHEEIQSIVGYIAA	TSEEEQ		Gga_NBEAL1
1047	DTIRIYYSS...KEN	ALAAADDLTTIRTS	SLYGLIKYFLSKG	GAPEEIQSIIGYIAA	ITDEEQ		Xtr_NBEAL1
1079	DTIRMYYGNSNK	DSLDDVKTIRAS	LYGLIKYFLTKG	VTQEEVQSIIGYIAA	INDEEQ		Cmi_NBEAL1
	DTLRiYYgs-ckyseLslDDIrTIRtSLyGLIKYFlcKGgthEEiQSiImGYiaAineEEQ						consensus

	1150	1160	1170	1180	1190	1200	
1107	LFGILDMLFSL	LLRTSPTRGQL	FLLLFEPGNAD	ILYALLLNQKYS	DRLEIVFKVME	QMLK	Cfa_NBEAL1
1107	LFGILDMLFSL	LLRTSPTRGQL	FLLLFEPGNAD	ILYALLLNQKYS	DRLEIVFKVME	QMLK	Ame_NBEAL1
1096	LFGILDILFSL	LLRTSPTRGQL	FLLLFEPGNAD	ILYALLLNQKYS	DRLEIFFKVME	QMLK	Oor_NBEAL1
1096	LFGILDILFSL	LLRTSPTRGQL	FLLLFEPGNAD	ILYALLLNQKYS	DRLEIFFKVME	QMLK	Ttru_NBEAL1
1136	LFGILDILCS	LLRTSPTK	QLFLLLFEPGNAD	ILYALLLNQKYS	DRLEIFFKVME	QMLK	Efu_NBEAL1
1096	LFGILDVLFSL	LLRTSPTRGQL	FLLLFEPGNAD	ILYALLLNQKYS	DRLEIFFKVME	QMLK	Tla_NBEAL1
1107	LFGILDVLFSL	LLRTSPTRGQL	FLLLFEPGNAD	ILYALLLNQKYS	DRLEIFKIME	QMLK	Hsa_NBEAL1
1136	LFGILDILFSL	LLRTSPTRGQL	FLLLFEPGNAD	ILYALLLNQKYS	DRLEIFFKVME	QMLK	Mmu_NBEAL1
1107	LCGILDMLFSL	LLNTCPTRD	QLFLLLFEPGH	ADILYALLLNQ	RYSDRLREL	VFKIVEQMLK	Pbi_NBEAL1
1107	LCGILEVLFSL	LLHSSAPD	QLFLLLFEPGN	ADILYALLLN	HQRYS	DRVRELVFKIMEEMLK	Gga_NBEAL1
1104	IYGILEIILH	LLNGSPVLD	QLFLLLFEPGS	ADMLYALLLN	QRYS	DKLKETVFKIFEQMLK	Xtr_NBEAL1
1139	LCGILEIILN	LLQTSTAR	DQLFLLLFEPGH	ADILYSLLN	SKYS	DKLRELVFKMFERMLK	Cmi_NBEAL1
	lFGILdilfsLLrtsptrgQLFLLLFEPGnADiLYaLLLnqkYSDrIreivFKvmEqMLK						consensus

	1210	1220	1230	1240	1250	1260	
1167	CTNVYERSKQRIRLREVGYSGLGLLNEASVNTSLIKSLTNQIINTDPAINFKDLLSVVY						Cfa_NBEAL1
1167	CTNVYERSKQRIRLREVGYSGLGLLNEAPVNTSLIKSLTNQIINTDPAINFKDLLSVVY						Ame_NBEAL1
1156	CTNVYERSKQRIRLREVGYSGLGLLNEAPVNTSLIKSLTNQIINTDPAINFKDLLSVVY						Oor_NBEAL1
1156	CTNVYERSKQRIRLREVGYSGLGLLNEAPVNTSLIKSLTNQIINTDPAINFKDLLSVVY						Ttru_NBEAL1
1196	CTNVYERSKQRIRLREVGYSGLGLLNETPVNTSLIKNLINQIINTDPAINFKDLLSVVY						Efu_NBEAL1
1156	CTNVYERSKQRIRLREVGYSGLGLLNETSVNTSLVKNLNTNQIINTDPVINFKDLLSVVY						Tla_NBEAL1
1167	CTNVYERSKQHIRLREVGYSGLGLLNEALVNTSLIKNLTHQIINTDPVINFKDLLSVVY						Hsa_NBEAL1
1196	CTNVYERSKQRIRLREVGYSGLGLLNEAPVNTSLIKNLVNTNQIINTDPVINFKDLLSVVY						Mmu_NBEAL1
1167	CTKVYERSKQRMKLRVGVSGGLGLLNESPLTTSLMKNLNFQVLAHDPVVNYKDFLAVVH						Pbi_NBEAL1
1167	CTKVYERSKQHRMLRVEGVSGGLGLLNESSVTISLIKNLNFQVLYADPAVNYKDLLAVVH						Gga_NBEAL1
1164	CNKVYEKSKQRIRLREVGYSGLGLLNDSISTVLIKGLLNQILTAD.TINYKDLLAVVH						Xtr_NBEAL1
1199	CEKVYERSKQRMKLRVGVSGGLVMLLSDVPIITISLVKNLLQQILQADTVVNYKDLMAVVH						Cmi_NBEAL1
	CtnVYErSKqrirLREVGYSGLglLLne-pvntsLiKnL-nQiintDp-infKDlLSVVy						consensus

	1270	1280	1290	1300	1310	1320	
1227	ISHRTHINVRRVVCCKILQILQSQPDAAHQISQQVGVQDTLVKLFKMNfENGNTLHKHS						Cfa_NBEAL1
1227	ISHRTHMNVRRVICRKLILQILQSQPDAAHQISQQVGVQDTLVRLFLKTNfENGNTLHKHS						Ame_NBEAL1
1216	ISHRARINVRRVICRKLILQILQSQPDAAHQISQQVGVQDTLVRLFLKANfENGNTLHKHS						Oor_NBEAL1
1216	ISHRARINVRRVICRKLILQILQSQPDAAHQISQQVGVQDTLVRLFLKANfENGNTLHKHS						Ttru_NBEAL1
1256	ISHRTYINVRRVICRKLILQILQSQPDAAHQISQQVGVQDTLVRLFLKANfENGNTLHKHN						Efu_NBEAL1
1216	ISHRAYINVRRVICRKLILQILQSQPDAAYQVSSQVGVQDTLVRLFLKTNfENGNTLNKHS						Tla_NBEAL1
1227	ISHRAHINVRRVAICRKLILQILQFQPDAAHQISQQVGVQDTLVRLFLKAKfENGNTLHKHS						Hsa_NBEAL1
1256	ICHRTHVNVRRVLCRKLILQILQSQPDAAYQISQQVGVQDTFVRLFLKANfENVNSLNKHG						Mmu_NBEAL1
1227	LAHRADLNVRRVAACRKLILQILHSQQDSAQQISQQEGWQETLTQLFLKENADVRNGVRDT.						Pbi_NBEAL1
1227	LAHRSDINMRVVICRKLHLHLSQLDAAQQISQQEGWQDTLIRLFLKENSEVQIGFREN.						Gga_NBEAL1
1223	LSTRADLTVRRVAVCRKLILQLLQFQHDAAFQVCQQVGVQETLVRFFLKENLECKSNFRAS.						Xtr_NBEAL1
1259	LvhKANINVRLAVCRKIYRLLQSQQEAAQQLAKQVAVQETLVRLFLKENAENRDSAGADS						Cmi_NBEAL1
	ishra-invRvviCrKilqiLqsQpdaA-QisqQvgWQdTLvrlFlK-nfengntl-khs						consensus

	1330	1340	1350	1360	1370	1380			
1287	RAVSMKDN	DKNI	SAED	TRNF	DEKT	DEEKINSFASANVP	SDQWS	LEDR	Cfa_NBEAL1
1287	RAVSMKDS	DKNLSAEN	IKRNF	DEKI	DEEKINSFASANVSSDQWS	LEDR		Ame_NBEAL1	
1276	RAVVMKDN	DKNISAE	MKRNS	DEKT	DEEKISSFASAHVSSDQWS	LEDR		Oor_NBEAL1	
1276	RAVVMKDN	GKNISAE	MKRNS	DEKT	DEEKISSFASAHVSSDHWS	LEDR		Ttru_NBEAL1	
1316	RAVLMKDN	DKNISAV	IKRNF	DEKT	DEEKINSFASANVSSDQWS	LEDR		Tfu_NBEAL1	
1276	RTVLMKDN	ATNISAED	IKRNF	DEKT	DEEKISSFASTNVSSDQWS	LEDR		Tla_NBEAL1	
1287	RAVLMKDN	DKNMSTED	TKNS	DEKT	DEEKITSFASANVSSDQWS	LEDR		Hsa_NBEAL1	
1316	KTVSMKEN	KNMSTED	VKRNF	EKLD	DEK...MMLAD	VSSDHWS	LEDS	Mmu_NBEAL1	
1286	RS	DSTKGD	DKRASAKD	HQQCHT	SKA	DGEDGASFA	CVNGSCDQWS	LEDG	Pbi_NBEAL1
1286	RA	DSSRE	EEKKSPAEEL	QKYHT	DKM	EGDKSDTFV	SVNGLFDQWS	LEDN	Gga_NBEAL1
1282	CTDSI	KEDEQN	AVSEET	QKQSS	EV	VMDQADGCTLN	NNQYNSYF	PEES	Xtr_NBEAL1
1319	LSPNSL	DLSRQ	ADPRH	SERLKN	INVGSPMREEG	RLLDND	AADDNVSKFFGNKSF	DGLADN	Cmi_NBEAL1
	rav-mkdndknisaedikrn-dek-----					deeki-sfasanvssdqws-ledr			consensus

	1390	1400	1410	1420	1430	1440			
1335	HSLDSN	TPLFQED	SSV	GELSFKSENQEEFW	NNNLSHLS	LDL	SGIDSCELSDN	Cfa_NBEAL1	
1335	NSLDSN	TPLFQED	SSV	GELSFKSENQEEFW	NNNPSHLS	LDL	SGIDSCELSDS	Ame_NBEAL1	
1324	HSLDSN	TPLFQED	SLM	GELSFKSEN	RGEFW	NNNPSHLS	LDL	SGIDSCELSDS	Oor_NBEAL1
1324	HSLDSN	TPLFQED	SLM	GELSFKSEN	RGEFW	NNNPSHLS	LDL	SGIDSCELSDS	Ttru_NBEAL1
1364	HSLDSN	TPLFQED	SSV	GELSFKSENQEEFW	HSNPSHLS	LDL	SGIDSCELSDS	Efu_NBEAL1	
1324	HSLDSN	TPLFQED	SSV	GELSFKSENQEEFW	HSNPSHLS	LDL	SGIDSCELSDS	Tla_NBEAL1	
1335	HSLDSN	TPLFPED	SSV	GELSFKSENQEEFW	HSNPSHLS	LDL	SGIDSCEMSDS	Hsa_NBEAL1	
1359	QSLNSN	TPLFQED	SSE	GELSFKSENQEEFW	HSNTSHLS	LDL	SGIDACELSDS	Mmu_NBEAL1	
1334	K	SATVLED	TSM	GEMSF	RPE	DQEDLWQKN	SSHLSLDL	SSVDSYELGDS	Pbi_NBEAL1
1334	KSLD	VPAHFSAMP	LED	ASTAEM	SFKSE	DREELWHS	NPSHLSLDL	SSVDSYELADV	Gga_NBEAL1
1330	KSLD	SNQSSCALL	DDEE	SIFS	EAQYKVED	QGN	WPSDHS	HLTLDLTPFDAGFRE..	Xtr_NBEAL1
1379	KSID	SSHSSE	ILVED	EVSIG	SPLTES	LEGAQAQTEI	WPPKMRDL	ILDLSSTVSYEMGDS	Cmi_NBEAL1
	-sldsn---tplfqeD-----					ssvGElSfksenqeefWh-npshLsLDLsgidscelSDS			consensus

	1450	1460	1470	1480	1490	1500						
1387	GSHMPD	SLPSTP	SPIEST	KSFSV	QSDKESI	ISDTGF	GDDFSL . . . LESQERCEEELL	Cfa_NBEAL1				
1387	GSHMPD	SLPSTP	SPIEST	KSFSV	QSDKESSV	INDPEF	GDDFSL . . . LESKERYEEELL	Ame_NBEAL1				
1376	GSQMPD	SLPSTP	SPIEST	KSFSV	QSDKESSIT	NDVGF	SDDFPL . . . LENQERCEEELL	Oor_NBEAL1				
1376	GSQMPD	SLPSTP	SPIEST	KSFSV	QSDKESSIT	NDVGF	SDDFPL . . . LENQERCEEELL	Ttru_NBEAL1				
1416	GSQMPD	SLPSTP	SPIE	CTKSFSV	QSDKESSIT	NDTGF	SDDFSL . . . LESQERCEEELL	Efu_NBEAL1				
1376	GSQMPD	SLPSTP	SPIEST	KSFSV	QPDKESG	NTDTGF	SDDFSL . . . FESQERCEEELL	Tla_NBEAL1				
1387	GSQVPD	SLPSTP	SPVE	STKSFSV	HSDRE	SSITNDMGF	SDDFSL . . . LESQERCEEELL	Hsa_NBEAL1				
1411	GSQVPD	SLPSTP	SPVE	STKSFSV	QSDKERS	ITNEMGF	SDDFSF . . . LESQERCEEELF	Mmu_NBEAL1				
1381	GSQMAD	SLPSTP	SPIEN	AKSFSG	QLDKEP	NAAEEVAF	AADLSL . . . FEIHEACEDDL	Pbi_NBEAL1				
1389	VNQMTD	SLPSTP	SPVEN	RKPFSG	QPEKEL	VDVGF	SAADLSL . . . FENQGGGDNELI	Gga_NBEAL1				
1385	.NQIPG	SLPSTP	SPVEN	SKQFV	NQSDK	DSNSLKNVFF	RDDL	SLSVN	MESREDCEEELV	Xtr_NBEAL1		
1438	ESQTPG	STTSTP	SPL	EMAKP	FPGH	HFDR	ESST	SDESSY	LDDAST	YDTFGS	REKCEEELS	Cmi_NBEAL1
	gsqmpdSlpSTPSPiEstKsFsv-qsdkessiitndvgf--dDfsl---lesqerceeeLl											consensus

	1510	1520	1530	1540	1550	1560										
1442	QLLTN	ILNYVM	CCKGLE	KSDDDT	WIERGQ	VFSAL	TKPGIS	SELLRP	SDEIKL	ILLQK	MLEW	Cfa_NBEAL1				
1442	QLLTN	ILNYVM	CCKGLE	KSDDDT	WIERGQ	VFSALS	KPGIS	SELLRP	SDELKL	ILLQN	MLEW	Ame_NBEAL1				
1431	QLLTN	ILNCVM	CCKGLE	KSDDDT	WIERGQ	VFSAL	TKPGIS	SDEIKL	ILLQK	MLEW		Oor_NBEAL1				
1431	QLLTN	ILNCVM	CCKGLE	KSDDDT	WIERGQ	VISAL	TKPGIS	SELLRP	SDEIKL	ILLQK	MLEW	Ttru_NBEAL1				
1471	QLLTD	ILNYVM	CCKGLE	KSDDDT	WIERGQ	VFSAL	TKSVI	SELLRP	SDEIKL	ILLQK	MLEW	Efu_NBEAL1				
1431	QLLTN	ILNYVM	CCKGLE	KSDDDT	WIERGQ	VFSAL	TKPGIS	SELLRP	SDEIKL	ILLQK	MLEC	Tla_NBEAL1				
1442	QLLTH	ILNYVM	CCKGLE	KSDDDT	WIERGQ	VFSALS	KPGIS	SELLRP	SDEIKL	TLLQK	MLEW	Hsa_NBEAL1				
1466	QLLTN	ILNYVM	CCKGLE	KSD	EDTW	IERGQ	VFSAL	TKPGIS	SELLRP	SDEVKL	TLLQK	MLEW	Mmu_NBEAL1			
1436	QLLTD	ILLCVM	WKGI	ERSDD	AAW	IERGQ	VFSAL	TKLGI	SNELLRP	SDEIKL	NLLEK	MLEW	Pbi_NBEAL1			
1445	QLLTD	ILLCVM	WKGI	EKSDD	EAW	MERGQ	VFSAL	TKLGI	SNELLRP	SDEIKL	KLLEK	MLEW	Gga_NBEAL1			
1443	QLVTD	ILLC	LMW	KGLD	KSDS	ATW	IERGQ	IF	SAL	TCL	ESSM	LLRS	SDEIKL	NLLEK	MPEW	Xtr_NBEAL1
1497	RILMD	MLC	IMW	RGLD	GSD	ASW	IERGQ	VFSAL	TKLGT	ANELL	CP	SDEIKL	NLLEK	MLEW	Cmi_NBEAL1	
	qllt-iln-vMckGleKSDddtWiERGQvfSALtkpgisseLLrpSDEiKL-LLqkMlEw											consensus				

	1570	1580	1590	1600	1610	1620	
1502	AITENRESKTN	PVTAENAFRL	ILIIQDFLQ	SEGLVNSNMWTEKLL	EDMLLFD	GLSVC	Cfa_NBEAL1
1502	AVTENRESKTN	PVTAENAFRL	ILIIQDFLQ	SVGLVNSNMWTEKLL	DNMLLFD	GLSVW	Ame_NBEAL1
1491	AVTENREAKFN	PVTAENAFRL	MLIIQDFLQ	SEGLVNSNMWTEKLL	EDMMLLFD	SLSVW	Oor_NBEAL1
1491	AVTENREAKFN	PVTAENAFRL	MLIIQDFLQ	SEGLVNSNMWTEKLL	EDMMLLFD	SLSVW	Ttru_NBEAL1
1531	AVTENRDAKTN	PVTAENAFRL	MLIIQDFLQ	SEGLVNSNMWTEKLL	EDMMLLFD	CLSVW	Efu_NBEAL1
1491	AVLENREAKTN	PGTAKNAFQL	MLIIQDFLQ	SEGLVNSNMWTEKLL	EDIMLLFD	CLSIV	Tla_NBEAL1
1502	AISENREAKTN	PVTAENAFRL	VLIIQDFLQ	SEGLVNSNMWTEKLL	EDMMLLFD	CLSVC	Hsa_NBEAL1
1526	AITENRDAKSS	PVTAENAFRL	MLIVQDFLQ	SEGLVNSNMWTEKLL	EDATQLLD	CLSVW	Mmu_NBEAL1
1496	AVTDTRDARSL	PVYAENAFRL	LLIVQDFLQ	AEGLVNSRLWTEKLL	EELVTLMD	TLVW	Pbi_NBEAL1
1505	SVTDNRDSKAL	PTHTEAFRL	LLIVQDFLQ	AEGLVNSRLWTEKLL	EELVTLMD	SLSVW	Gga_NBEAL1
1503	AVTENRESKSQ	PIYGENAKRLL	HIVQDFLQ	TEGLKNPVLWTEKLL	EELVTLMD	GISVW	Xtr_NBEAL1
1557	TVTDNREATAVTL	PIHTENAVRLL	HVVQDFLQ	AEGLVNPAMWTDKLL	EEMVTLMD	SLLVW	Cmi_NBEAL1
	avtenReaktN	--PvtaeNAfrLml	iiQDFLQseGLvN	snmWTeKLLed	mmllfD-l	svw	consensus

	1630	1640	1650	1660	1670	1680		
1560	CSESTIWR	ELPQIQIQLLL	GFIGRGNV	QVCAMASAKLNT	TLLQTKV	IENQNEACYILGKLE	Cfa_NBEAL1	
1560	YSEGQVW	AKLSQIQIQLLL	GFIGRGNV	QVCAMASAKLNT	TLLQTKV	IENQDEACYILGKLE	Ame_NBEAL1	
1549	YSESPVW	VKLSQIQIQMLL	GFIGRGNL	QVCASAKLNT	TLLQTKV	IENQDEACYILGKLE	Oor_NBEAL1	
1549	YSESPVW	VKLSQIQIQMLL	GFIGRGNL	QVCASAKLNT	TLLQTKV	IENQDEACYILGKLE	Ttru_NBEAL1	
1589	YSESPVW	VKLSQIQIQLLL	GFIGRGNL	QVCAMASAKLNT	TLLQTKV	IESQDEACYILGKLE	Efu_NBEAL1	
1549	YSESPKL	MELSQIQIQLLL	GFIGRGNL	QVCAMASAKLNT	TLLQTKV	IENQKEACYILGKLE	Tla_NBEAL1	
1560	YSESPVW	VKLSQIQIQLLL	GFIGRGNL	QVCAMASAKLNT	TLLQTKV	IENQDEACYILGKLE	Hsa_NBEAL1	
1584	YSENPAW	VKLSQIQTQLLE	EFIGRGS	LQVCAMASAKLNT	ALLQTKV	IENQDEACYILGKLE	Mmu_NBEAL1	
1554	YSSGPEY	VKLYQVQVQMLL	GFIGQDNL	QVCAMAAAKLNT	TLLQTKV	LDTQAESCYLEGKLE	Pbi_NBEAL1	
1563	YSAGPEAT	WFSQVQIQIQLLL	GFIAKDNL	QVCAMAAAKLNT	TLLQTKV	IESQPEACYLLGKLE	Gga_NBEAL1	
1561	YSSGPESES	LSQLFRLLL	GFIAQDNL	QVCAMAAAKLNT	TLLQTKV	IENQEEACYLLGKLE	Xtr_NBEAL1	
1617	YSSGPEW	MQLSQVGVRL	LLGFIAQDNL	IQVCAMAAAKLNT	ILQTKV	IVNRDEACFLLGKLE	Cmi_NBEAL1	
	ySe-p-wv	klSqi	qiqiqlLLgFI	grgnlQVC	AmAsAKLNT	lLQTKV	ienqdEaCyilGKLE	consensus

	1690	1700	1710	1720	1730	1740	
1620	HVLSQ	SIKEQTEIYSFLIPLVRTL	VSKIYELLFMNLHLP	SLPFTNGSSS	FFEDFQEYCS	SS	Cfa_NBEAL1
1620	HVLSQ	SIKEQTEIYSFLIPLVRTL	VSKIYELLFMNLHLP	SLPFTNGSSS	FFEDFQEYCS	SS	Ame_NBEAL1
1609	HVLSQ	SIKEQTEIYSFLIPLVRTL	VSKIYELLFMNLHLP	SLPFTNGSSS	FFEDFQEYCS	SS	Oor_NBEAL1
1609	HVLSQ	SIKEQTEIYSFLIPLVRTL	VSKIYELLFMNLHLP	SLPFTNGSSS	FFEDFQEYCS	SS	Ttru_NBEAL1
1649	HVLSQ	SIKEQTEIYSFLIPL	IRTLVSKIYELLFMNLHLP	TLPFTNGSSS	FFEDFQEYCS	SS	Efu_NBEAL1
1609	NVLSQ	SIKEQTEIYSFLIPLVRTL	VSKIYELLFMNLHLP	SLPFTNGSSS	FFEDFQEYCS	SS	Tla_NBEAL1
1620	HVLSQ	SIKEQTEIYSFLIPLVRTL	VSKIYELLFMNLHLP	SLPFTNGSSS	FFEDFQEYCS	SS	Hsa_NBEAL1
1644	HILSR	SIKEQTEIYSFLIPL	LRTL	VSKIYELLFMNLHLP	SLPFTNGS	ASFFEDFQEYCS	Mmu_NBEAL1
1614	GILSR	SIQEKTEIYSFLIPLVRTL	ISKIYDLLFMNLHLP	SLPSTNGSPS	FFEDFQDYCR	T	Pbi_NBEAL1
1623	GILSR	SIQEKTEIYSFLIPLVRTL	VSKIYELLFMNLHLP	SLPSTNGSPS	FFEDFQEYCR	S	Gga_NBEAL1
1621	GILGK	SIKEKTEIYSFLIPIVRTL	VSKIYQLLFMHLHLP	SLPI	TNGNPSL	FFEDFQEYCS	Xtr_NBEAL1
1677	GTLT	KSIKEKTEIYSFLIPI	IRTLVSKIYELLYM	KLHLP	SLPQ	SNGSPSFFEDFQEYCKC	Cmi_NBEAL1
	hvLs	-SIkEqTEiYSFLIPlvRTLv	SKiYeLLfMnLHLps	LpftNGssSf	FEDFQeYC	-s	consensus

	1750	1760	1770	1780	1790	1800		
1680	N	EWQVYIEKYI	VPYMKQYETH	HTFYNNHES	MALYWKNCYE	ALMVNMHKRD	REGGESKLFQ	Cfa_NBEAL1
1680	N	EWQVYIEKYI	VPYMKQYETH	HTFYEGHED	MALYWKNCYE	ALMVNMHKRD	REGGESKLFQ	Ame_NBEAL1
1669	N	EWQVYIEKYI	VPYMKQYETH	HA	FYDGHES	MALYWKDCYE	ALMVNMHKRD	REGGESKLFQ
1669	N	EWQVYIEKYI	VPYMKQYETH	HA	FYDGHES	MALYWKDCYE	ALMVNMHKRD	REGGESKLFQ
1709	S	EWQVYIEKYI	IPYMKQYETH	HTFYDGHEN	MALYWKDCYE	ALMVNMHKRD	REGGESKLFQ	Efu_NBEAL1
1669	N	EWQVYIEKYI	VPYMKQYESS	TFYDGR	EMALYWKDCYE	ALMVNMHKRD	REGGESKLFK	Tla_NBEAL1
1680	N	EWQVYIEKYI	VPYMKQYEA	HTFYDGHEN	MALYWKDCYE	ALMVNMHKRD	REGGESKLFQ	Hsa_NBEAL1
1704	E	EWQVYIEKYI	VPYMKQYEA	HTFYDGHEN	MALYWKNCYE	ALMVNMHKRD	REGGESKLFQ	Mmu_NBEAL1
1674	D	EWQAYIDKYI	IPSMKQYELSM	FRDGHEN	MAVFRKDCSE	ALMVSIHKRE	REERGD	SKLRFQ
1683	D	EWKVYIDKYI	IPNMKH	YEENSFR	RHGHEQ	MALYWKDCYE	AFMVNMHKRD	REERGESKLFQ
1681	D	EWRI	FDKYI	ILYMKQYEV	DTFGKCHEQ	MATYWKECYE	AQMVNMHKRE	REERGESKLFK
1737	S	EWRDYIDKYI	IPSMKQYEV	EMFSG	HERMAIFW	KECYET	MMVNLHKRD	REKGESKLFQ
		-EWqvYieKYI	vpYMKqYE	-htFydghE	-MAlYwKdCyE	AlMvnmHKRdRE	gGeSKLkFq	consensus

	1810	1820	1830	1840	1850	1860	
1740	EFFVEPFNRKARQENMRYNNTLKQLSSQQLITLRRWKA	VQLYLTS	ERGPWAERKQNP	IHW			Cfa_NBEAL1
1740	EFFVEPFSRKARQENLRYNNTLKQLSSQQLITLRRWKA	VQLYLTS	ERGPWAERKQNP	IHW			Ame_NBEAL1
1729	EFFVEPFNRKARQENLRYNMMLKQLSSPQLATLRRWKA	IKLYLTC	ERGPWAERKQNP	LHW			Oor_NBEAL1
1729	EFFVEPFNRKARQENLRYNMMLKQLSSPQLATLRRWKA	IKLYLTC	ERGPWAERKQNP	LHW			Ttru_NBEAL1
1769	EFFVEPFNRKARQENLRYNMMLKQLNTQQLATLRRWKA	IQLYLT	CERGPWAERKQNP	IHW			Efu_NBEAL1
1729	ESFVEPFNRKARQENLRYNMMLKQLNSQWLATLRRWKA	IQLYLT	CERGPWAERKQNP	IHW			Tla_NBEAL1
1740	ELFVEPFNRKARQENLRYNMMLKQLSSQQLATLRRWKA	IQLYLT	CERGPWA	KRKQNP	IHW		Hsa_NBEAL1
1764	EYFVEPFNRKARQENLRYNMMLKQLNSQQLAAVRRWKA	IRLYLT	CERGPWA	EKKQNP	IHW		Mmu_NBEAL1
1734	EFFVEPFNRARQENMRYNGMLKQLNNGHTTTLRQWRA	AKLCLT	CEQGPWAERK	LNLIHW			Pbi_NBEAL1
1743	EHFVEPFSRKARQENLRYSMLKQLNSQHTATLRQWRA	AQLYLS	ERGPWSEMKQHP	VHW			Gga_NBEAL1
1741	EFFLEPFNRKTRQENSRYNNMLKQVNSQYTATLRQWKA	AQRFLC	ERGPWADRKEN	WQYW			Xtr_NBEAL1
1797	EYFVEPFTRKGRQENLRYSMLKQLNSQHTATVRQWKA	GQHLYLT	CERGPWADKNQA	AVYW			Cmi_NBEAL1
	EfFvEPFnRkaRQENlRYNnmlKQlnsqqlatlRrWkAiqlyLtcErGPWaerkqnpihW						consensus

	1870	1880	1890	1900	1910	1920	
1800	KLANVENYSRMRLKLVPNHNFKTHEDASALRDNLGVQHS	QPSSDSLLEVV	KQVKVS	NME			Cfa_NBEAL1
1800	KLANVENYSRMRLKLVPNYNFKTHEDASALRDNLGVQHS	QPSSDSLLEVV	KQVKVS	NME			Ame_NBEAL1
1789	KLANVENYSRMRLKLVPNYNFKTHDEASALRDNLGIQHL	QPSSDSLLEVV	KQVKVSDME				Oor_NBEAL1
1789	KLANVENYSRMRLKLVPNYNFKTHDEASALRDNLGIQHL	QPSSDSLLEVV	KQVKVSDME				Ttru_NBEAL1
1829	KLANVENYSRMRLKLVPNYNFKTHDEASALRDNLGVQPS	QPSSDSLLEVV	KQVKVSDME				Efu_NBEAL1
1789	KLANVENYSRMRLKLVPNYNFRTHEEASALRDNLGIQHS	QPSSDSLLEVV	KQVKVNDME				Tla_NBEAL1
1800	KLANVENYSRMRLKLVPNYNFKTHEEASALRDNLGIQHS	QPSSDTLLEVV	KQVKVSDMV				Hsa_NBEAL1
1824	KLANVENYSRMRLKLVPNYNFKTHEEASALRDNLGVQHL	QPSSDSLLEVV	KQVKLSDME				Mmu_NBEAL1
1794	KLSNVENYSRMRLKLVQNYNFNSHQEASALRDNLGVLQMP	PSSEALLLEAV	KQVKVSDME				Pbi_NBEAL1
1803	KLSNVENFSRMRLKLVQNYNFNSHQDASDLRDNLGVYQA	QPSSSLLLEVV	KQVKVSDLE				Gga_NBEAL1
1801	KLSTVENYSRMRLKLVQNLNFDAHLEASALRDNLGVQQTE	PSSESLLEAA	KQVKVSDLE				Xtr_NBEAL1
1857	KLSSVENYSRMRLKLIQNYNFDPHSDASALRDNLGVQHTV	PTNDTLLLEAV	KQVKVSDLQ				Cmi_NBEAL1
	KlanVENySRMRLKlvpNyNfkthEeASaLRDNLGvqhsqPssdsLlLEvvKQVKvsdme						consensus

	1930	1940	1950	1960	1970	1980		
1860	EDKLDLPEEDV	TARVN	TDEKEEQD	QKEKLVLS	EDCELIT	IIDVIPGR	LEITTTQHIYFYDC	Cfa_NBEAL1
1860	EDKLDLPEEDL	TARVN	I	DEKEEQD	QKEKLVLS	EDCELIT	IIDVIPGRLEITTTQHIYFYDC	Ame_NBEAL1
1849	EDKLDLPEEEI	TARVN	I	NEKEEQD	QKEKLVLL	EDCELIT	IIAIIIPGRLEITTTQHIYFYDG	Oor_NBEAL1
1849	EDKLDLPEEEI	TARVN	I	NEKEEQD	QKEKLVLL	EDCELIT	IIAIIIPGRLEITTTQHIYFYDG	Ttru_NBEAL1
1889	EDKLDLSEEEI	TARVN	I	ENKEEQD	QKEKLVFS	V	EDCELITIIDVIPGRLEITTTQHIYFYDG	Efu_NBEAL1
1849	EDKLDLPEDDI	TARVN	I	DEKEEQD	QKEKLVLT	EDCELIT	IIDVIPGRFEITTTQHIYFYDG	Tla_NBEAL1
1860	EDKLDLPEEDI	TARVN	V	DEKEEQD	QKEKLVLM	EDCELIT	IIDVIPGRLEITTTQHIYFYDG	Hsa_NBEAL1
1884	EDKLELFEEDM	AARVN	I	DEKEEQN	QKEKLVLT	EDCELIT	VIDIIPGRLEVTTQHIYFHDN	Mmu_NBEAL1
1854	DDILELPEDEPT	SSTNM	DEKEEQG	QKEKLVLS	EDCELIT	IINIIPGRLEVTTQHIYFYDG	Pbi_NBEAL1	
1863	DDVLELPEEDTA	ASSNM	DEKDEQS	QKEKLVLS	ENCELIT	VIDVIPGRLEVTTQHLFYFDG	Gga_NBEAL1	
1861	EDQLELPEEE	.NVVNM	N	DKKEEQI	QKEKLVLS	ECDLIT	VMDAISGHLEVTTQHIYFYDG	Xtr_NBEAL1
1917	DD..RLA	DEDLSVLS	NMNEKEE	PSQ	QKEKLV	ISEDCELIT	IMDVVAGRLDVTTQHIYFFDA	Cmi_NBEAL1
	eDkldLpeeditarvNidekeEqdQKEKLVlsedCeLiTiIdvipGrleiTTQHiYfYdG							consensus

	1990	2000	2010	2020	2030	2040		
1920	SIEKEDGVGFDFK	WPHSQV	REIHLRRYNL	RRSALE	IFHVDQ	SNYFLNFKKE	IRNKVYSRL	Cfa_NBEAL1
1920	SIEKEDGVGFDFK	WPHSQV	REIHLRRYNL	RRSALE	IFHVDQ	SNYFLNFKKE	VRNKVYSRL	Ame_NBEAL1
1909	SIEKEDGVGFDFK	WPHSQV	REIHLRRYNL	RRSALE	IFHVDQ	SNYFLNFKKE	VRNKVYSRL	Oor_NBEAL1
1909	SIEKEDGVGFDFK	WPHSQV	REIHLRRYNL	RRSALE	IFHVDQ	SNYFLNFKKE	VRNKVYSRL	Ttru_NBEAL1
1949	SIEKEDGVGFDFK	WPHSQV	REIY	HLRRYNLRRSA	LEIFHVDQ	SNYFLNFKKE	VRNKVYSRL	Efu_NBEAL1
1909	SVEKEDGAG	GFDFK	WPHSQV	REIHLRRYNL	RRSALE	IFHVDQ	SNYFLNFKKEVRNRVYSRL	Tla_NBEAL1
1920	SIEKEDGVGFDFK	WPHSQI	REIHLRRYNL	RRSALE	IFHVDQ	SNYFLNFKKE	VRNKIYSRL	Hsa_NBEAL1
1944	SVEKEDGL	GFDFK	WPHSQI	REIHLRRYNL	RRSALE	IFHVDQ	SNYFLNFKKEVRNKIYSRL	Mmu_NBEAL1
1914	SIEKEEGIG	GFDFK	WPLSQI	REIHLRRYNL	RRSALE	IFFDQ	TNYFLNFKKETRNRVYSRI	Pbi_NBEAL1
1923	SVEKEEGV	GFDFK	WHL	SQIREIHLRRYNL	RRSALE	IFLTDQ	TNYFLNFNKEVRNKVYSRI	Gga_NBEAL1
1919	STEKEEGV	GFDFK	WPLSQI	REIHLRRYNL	RRSALE	IFLTDQ	TNYFLNFKKEVRNKVYSRI	Xtr_NBEAL1
1975	SVEKEEGV	GYDFK	WPLSQL	REIHLRRYNL	RRSALE	IFLTDQ	TNYFLNFKKEVRNKVYSRI	Cmi_NBEAL1
	SiEKEdGvGfDFKwphSQvREIhLRRYNLRRSALEIFhvDQsNYFLNfkKEvRNkvYSRL							consensus

	2050	2060	2070	2080	2090	2100	
1980	LSLHSPNS	.YGRSPQELFKASGLTQKWNREISNFDYLIQINTMAGRTYNDLAQYPVFP					Cfa_NBEAL1
1980	LSLHSPNS	.YGRSPQELFKASGLTQKWNREISNFDYLIQINTMAGRTYNDLAQYPVFP					Ame_NBEAL1
1969	LSLHSPNS	.YGRSPQELFKASGLTQKWNREISNFDYLIQLNTMAGRTYNDLAQYPVFP					Oor_NBEAL1
1969	LSLHSPNS	.YGRSPQELFKASGLTQKWNREISNFDYLIQLNTMAGRTYNDLAQYPVFP					Ttru_NBEAL1
2009	LSFHSPNS	.YGRSPQELFRASGLTQKWNREISNFDYLIQINTMAGRTYNDLAQYPVFP					Efu_NBEAL1
1969	LSLHSPNS	.YGRSPQELFKASGLTQKWNREISNFDYLIQINTMAGRTYNDLAQYPVFP					Tla_NBEAL1
1980	LSLHSPNS	YYSRSPQELFKASGLTQKWNREISNFDYLIQINTMAGRTYNDLAQYPVFP					Hsa_NBEAL1
2004	LSLHSP	TG.YGRSPQELFKASGLTQKWNREISNFDYLIQINTMAGRTYNDLAQYPVFP					Mmu_NBEAL1
1974	LSLCSQN	.ISGRSPQELFKASGLTQKWNREISNFDYLIQLNTMAGRTYNDLAQYPVFP					Pbi_NBEAL1
1983	LSLRSPN	.ISGRSPQELFKASGLMQKWNREISNFDYLIQLNTMAGRTYNDLAQYPVFP					Gga_NBEAL1
1979	LSLRLPN	.IYGRSPQELLKASGLTQKWNREISNFDYLIQLNTIAGRTYNDLAQYPVFP					Xtr_NBEAL1
2035	LSLRPPN	.LYGRSPQELLKASGLTQKVVTRREISNFDYLIQLNAIAGRTYNDLAQYPVFP					Cmi_NBEAL1
	LSlhspns	-yGtRSPQElfkASGLtQKWNrREIsNFDYLIQlNtmAGRTYNDLAQYPVFP					consensus

	2110	2120	2130	2140	2150	2160	
2039	WILQDYTSEELD	LNNPSVFRDLSKPIGVVNDKN	AKAMREKYENFEDPMGTIDKFHYGTHY				Cfa_NBEAL1
2039	WILQDYTSEELD	LNNPSVFRDLSKPIGVVNDKN	AKAMREKYENFEDPMGTIDKFHYGTHY				Ame_NBEAL1
2028	WILQDYTSEELD	LNNPSVFRDLSKPIGVVNDKN	AKAMREKYENFEDPMGTIDKFHYGTHY				Oor_NBEAL1
2028	WILQDYTSEELD	LNNPSVFRDLSKPIGVVNDKN	AKAMREKYENFEDPMGTIDKFHYGTHY				Ttru_NBEAL1
2068	WILQDYTSEELD	FNNPSVFRDLSKPIGVVNDKN	AKVMREKYENFEDPMGTIDKFHYGTHY				Efu_NBEAL1
2028	WILQDYTSEELD	LNNPAVFRDLSKPIGVVNDKN	AKAMREKYENFEDPMGTIDKFHYGTHY				Tla_NBEAL1
2040	WILQDYTSEELD	LNNPAVFRDLSKPIGVVNEKN	AKAMREKYENFEDPMGTIDKFHYGTHY				Hsa_NBEAL1
2063	WILQDYTSEELD	LNNPTVFRDLSKPIGVVNEKN	AKAMREKYENFEDPMGTIDKFHYGTHY				Mmu_NBEAL1
2033	WILQDYTSEELD	LNNPAVFRDLSKPIGVVNEKN	VRAVKERYDNFEDPLGIIIDKFHYGTHY				Pbi_NBEAL1
2042	WILQDYTSEELD	LNNPAVFRDLSKPIGVVNEKN	AKAVKEYDNFEDPLGVIIIDKFHYGTHY				Gga_NBEAL1
2038	WVLDYTSEELD	LNNPAVFRDLSKPIGVVNEKN	AAIVKDKYESFEDPLGTIDKFHYGTHY				Xtr_NBEAL1
2094	WILNDYTSEELD	LNNPSVFRDLSKPIGVAN	KKNAKVVEKFDYFEDPTGTIDKFHYGTHY				Cmi_NBEAL1
	WiLqDYTSeELDlNNPs	VFRDLSKPIGVvNdKN	akamrekyenFEDPmGtIDKFHYGTHY				consensus

	2170	2180	2190	2200	2210	2220	
2099	SNSAGVMHYLIR	TEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Cfa_NBEAL1
2099	SNSAGVMHYLIR	TEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Ame_NBEAL1
2088	SNSAGVMHYLIR	TEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Oor_NBEAL1
2088	SNSAGVMHYLIR	TEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Ttru_NBEAL1
2128	SNSAGVMHYLIR	TEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Efu_NBEAL1
2088	SNSAGVMHYLIR	VEPFTSLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Tla_NBEAL1
2100	SNSAGVMHYLIR	VEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Hsa_NBEAL1
2123	SNSAGVMHYLIR	VEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Mmu_NBEAL1
2093	SNAAGVMHYLIR	VEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVNELIPEFF					Pbi_NBEAL1
2102	SNAAGVMHYLIR	VEPFTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Gga_NBEAL1
2098	SNAAGVMHYLIR	VEPYTTLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Xtr_NBEAL1
2154	SNAAGVMHYMIR	VEPFTMLHIQLQSGRFDCADRQFHSIPATWQALMDNPYDVKELIPEFF					Cmi_NBEAL1
	SNS	AGVMHYLIRvEPfTtLHIQLQSGRFDCADRQFHSIPATWQALMdNpyDVkELIPEFF					consensus

	2230	2240	2250	2260	2270	2280	
2159	YFPEFLENQNFNLG	CLQVSKEV	VNDVILPKWAKSAEDFIYKHRKALESEYVSAHLHEWI				Cfa_NBEAL1
2159	YFPEFLENQNFNLG	CLQVSKEV	VNDVILPKWAKSAEDFIYKHRKALESEYVSAHLHEWI				Ame_NBEAL1
2148	YFPEFLENQNFNLGR	LQVSREL	VNDVILPKWAKSAEDFIYKHRKALESEYVSAHLHEWI				Oor_NBEAL1
2148	YFPEFLENQNFNLGR	LQVSREL	VNDVILPKWAKSAEDFIYKHRKALESEYVSAHLHEWI				Ttru_NBEAL1
2188	YFPEFLENQNFNLGR	LQVSREL	VNDVILPKWAKSAEDFIYKHRKALESEYVSAHLHEWI				Efu_NBEAL1
2148	YFPEFLENQNFNLG	CLQVSKEV	VNDVILPKWAKSAEDFIYKHRKALESEYVSAHLHEWI				Tla_NBEAL1
2160	YFPEFLENQNFNLGR	LQISKEV	VNDVILPKWAKSAEDFIYKHRKALESEYVSAHLHEWI				Hsa_NBEAL1
2183	YFPEFLENQNFNLGH	LQVSKEV	VNDVILPKWAKSAEDFIYKHRKALESEYVSAHLHEWI				Mmu_NBEAL1
2153	YFSEFLENQNFHSL	GLQISKEE	VNDVVLPKWAHSPEDFIYKHRKALESEYVSAHLHEWI				Pbi_NBEAL1
2162	YFPEFLENQNFNLG	QLQISKEA	VNDVVLPKWAHSPEDFIYKHRKALESEYVSAHLHEWI				Gga_NBEAL1
2158	YFPEFLENKNGFD	LGHLQITKEQ	VNDVILPKWAKSPEDFILKHRKALESEFVSAHLHEWI				Xtr_NBEAL1
2214	YFPEFLENQNRFD	LGRLQISKE	RVNDVILPKWANSPEDFIYKHRKALESEHVS				Cmi_NBEAL1
	YFp	EFLENqNqFnLG-LQvske	lVNDViLPkWAkSaEDFIyKHRkALESEyVSAHLHEWI				consensus

	2290	2300	2310	2320	2330	2340	
2219	DLIFGYKQRGPAAVEALNVFYYCSYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Cfa_NBEAL1
2219	DLIFGYKQRGPAAVEALNVFYYCSYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Ame_NBEAL1
2208	DLIFGYKQRGPAAVEALNVFYYCSYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Oor_NBEAL1
2208	DLIFGYKQRGPAAVEALNVFYYCSYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Ttru_NBEAL1
2248	DLIFGYKQRGPAAVEALNVFYYCSYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Efu_NBEAL1
2208	DLIFGYKQRGPAAVDALNVFYYCSYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Tla_NBEAL1
2220	DLIFGYKQRGPAAVEALNVFYYCSYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Hsa_NBEAL1
2243	DLIFGYKQRGPAAVEALNVFYYCSYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Mmu_NBEAL1
2213	DLIFGYKQRGPAAVEALNVFYYCTYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Pbi_NBEAL1
2222	DLIFGYKQRGPAAVEALNVFYYCTYEGAVDLDA	LTDEKERKALEGMINNFGQTPCQLLKE					Gga_NBEAL1
2218	DLIFGYKQRGPAATEALNVFYYCTYEGAVDLDA	TANEKERKALEGMINNFGQTPCQLLKE					Xtr_NBEAL1
2274	DLIFGYKQRGPAAVEALNVFYYCTYEGAVDLDA	TADEKERKALEGMINSNFGQTPCQLLKE					Cmi_NBEAL1
	DLIFGYKQRGPAAVEALNVFYYCSYEGAVDLDA	ltdeKERKALEGMInNFGQTPCQLLKE					consensus

	2350	2360	2370	2380	2390	2400	
2279	PHPPRLSAAEEAVQRQTKTDTSTLNLFQHLSELKSFFIEG	ISDGVPLIKAI	VPKNQSR	SFM			Cfa_NBEAL1
2279	PHPPRLSAAEEAVQKQTKTDTSTLNLFQHLSELKSFFIEG	ISDGVPLIKAI	VPKNQSR	SFM			Ame_NBEAL1
2268	PHPSRLSAAEEAVQKQTKTDTSTFNLFYLP	ELKSFFIEG	ISDGIPLIKAI	VPKNQSR	SFI		Oor_NBEAL1
2268	PHPSRLSAAEEAVQKQTKTDTSTFNLFYLP	ELKSFFIEG	ISDGIPLIKAI	VPKNQSR	SFI		Ttru_NBEAL1
2308	PHPPRLSAAEAMQKQTKTETSTLNLFQHLSELKSFFIEG	ISDGIPLIKAI	VPKNQPR	SFM			Efu_NBEAL1
2268	PHPPRLSAAEEAVQKQTRTDTSTLNLFQHLPELKSFFIEG	ISDGIPLIKTIV	VPKNQSR	SFM			Tla_NBEAL1
2280	PHPPRLSAAEEAVQKPTKI	DTSTLNLFQHLPELKSFFIEG	ISDGIPLIKATIP	KNQY	SFM		Hsa_NBEAL1
2303	PHPPRLSAAEATIQQKTKTEISTLNLFQHLTELKSFFIEG	ISDGIPLIKAIIP	KNQSR	SFM			Mmu_NBEAL1
2273	PHPARLSVEEVVQKQNKNE	NSTLNLFQHLPELKSFFIEG	ISDGIPIV	KAI	VRN	QY	SFM
2282	PHPPRLSAAEEVQRLTRSDTSTLNLFQHLTELKSFFIEG	ISDGVPIV	KAV	VRN	QSR	SFM	Gga_NBEAL1
2278	PHPTRLSAAEEVYLKQSKLDNVTLNLFQNL	PDLSFFIEG	ISDVPV	KAV	VRN	QL	SFL
2334	PHPPRLPADEVLRQARVDN	CVLNVFQHLTELKSFFIEG	ISDNIP	IMKAV	VPKTQ	ARSFM	Cmi_NBEAL1
	PHP-RLSaeEavqkqtktdtstlNlFqHl	-eLKSFFiEGISDgiPlIKaiVpknQsRSFm					consensus

	2410	2420	2430	2440	2450	2460																																																							
2339	S	Q	G	S	P	E	L	L	V	T	V	S	M	N	Y	V	L	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	I	K	D	Q	T	V	T	N	P	K	T	Q	R	S	M	N	G	P	F	A	P	G	L	E	I	Cfa_NBEAL1
2339	S	Q	G	S	P	E	L	L	I	T	V	S	M	N	Y	I	V	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	I	K	D	Q	T	V	T	N	P	K	T	Q	R	S	M	N	G	P	F	A	P	G	L	D	I	Ame_NBEAL1
2328	S	Q	G	S	P	E	L	L	I	T	V	S	M	N	Y	V	I	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	I	R	D	Q	T	V	T	N	P	K	T	Q	R	S	M	N	G	P	F	A	P	G	L	E	I	Oor_NBEAL1
2328	S	Q	G	S	P	E	L	L	I	T	V	S	M	N	Y	V	I	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	I	R	D	Q	T	V	T	N	P	K	T	Q	R	S	M	N	G	P	F	A	P	G	L	E	I	Ttru_NBEAL
2368	S	Q	G	S	P	E	L	L	I	T	V	S	M	N	Y	V	I	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	F	K	D	Q	T	V	T	N	P	K	T	Q	R	S	L	N	G	P	F	A	P	G	L	E	I	Efu_NBEAL1
2328	S	Q	G	S	P	E	L	L	I	T	S	M	N	N	V	I	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	I	K	D	Q	T	V	T	N	P	K	T	Q	R	S	V	N	G	P	F	A	P	G	L	E	V	Tla_NBEAL1	
2340	S	Q	G	S	P	E	L	L	I	T	S	M	N	Y	V	I	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	I	K	D	Q	T	V	T	N	P	K	T	Q	R	S	I	N	G	S	F	A	P	G	L	E	I	Hsa_NBEAL1	
2363	S	Q	G	S	P	E	L	L	I	T	V	S	M	N	Y	V	I	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	I	K	D	Q	T	V	T	N	P	K	A	Q	R	T	I	S	G	P	F	A	P	G	L	E	I	Mmu_NBEAL1
2333	S	Q	G	S	P	E	L	L	V	T	V	S	L	N	F	I	I	G	T	H	G	W	L	P	Y	D	R	N	I	S	N	Y	F	T	F	L	K	D	Q	T	V	T	N	P	K	T	Q	R	N	I	G	P	F	A	P	G	L	E	I	Pbi_NBEAL1	
2342	S	Q	G	S	P	E	I	L	V	T	A	S	L	N	C	I	I	G	T	H	G	W	L	P	Y	D	K	N	I	S	N	Y	F	T	F	I	K	D	T	V	T	N	P	K	T	Q	R	N	M	S	G	P	F	A	P	G	L	E	I	Gga_NBEAL1	
2338	S	P	G	S	P	E	L	L	V	T	V	S	Q	T	L	I	I	G	T	H	G	W	L	P	Y	D	R	T	I	S	N	Y	F	T	F	S	K	D	Q	T	V	T	N	P	K	T	Q	R	L	V	S	G	P	F	A	P	G	L	E	I	Xtr_NBEAL1
2394	S	Q	G	S	P	D	I	L	V	T	L	S	H	N	C	L	I	G	T	H	G	W	L	P	Y	D	K	N	I	S	N	Y	F	T	F	I	R	D	P	T	V	S	N	P	K	T	Q	R	S	V	N	G	P	F	A	P	G	L	E	M	Cmi_NBEAL1
	S	q	G	S	P	e	l	l	i	t	v	s	m	n	y	v	i	g	t	h	g	w	l	p	y	d	r	n	i	s	n	y	f	t	f	i	k	d	q	t	v	t	n	p	k	t	q	r	s	m	n	g	p	f	a	p	g	l	e	i	consensus

	2470	2480	2490	2500	2510	2520																																																							
2399	T	S	K	L	F	I	V	S	H	D	A	K	L	L	F	S	A	G	H	W	D	N	S	I	Q	V	M	S	L	T	K	G	K	V	I	S	H	N	I	R	H	M	D	I	V	T	C	L	A	T	D	Y	C	G	I	H	L	I	S	G	Cfa_NBEAL1
2399	T	S	K	L	F	I	V	S	H	D	A	K	L	L	F	S	A	G	H	W	D	N	S	I	Q	V	M	S	L	T	K	G	K	I	I	S	H	N	I	R	H	M	D	I	V	T	C	L	A	T	D	Y	C	G	I	Y	L	I	S	G	Ame_NBEAL1
2388	T	S	K	L	F	I	V	S	H	D	A	K	L	L	F	S	A	G	H	W	D	N	S	I	Q	V	M	S	L	T	K	G	K	I	V	S	H	N	I	R	H	M	D	I	V	T	C	L	A	T	D	Y	C	G	I	H	L	I	S	G	Oor_NBEAL1
2388	T	S	K	L	F	I	V	S	H	D	A	K	L	L	F	S	A	G	H	W	D	N	S	I	Q	V	M	S	L	T	K	G	K	I	V	S	H	N	I	R	H	M	D	I	V	T	C	L	A	T	D	Y	C	G	I	H	L	I	S	G	Ttru_NBEAL
2428	T	S	K	L	F	I	V	S	H	D	S	K	L	L	F	S	A	G	H	W	D	N	S	I	Q	V	M	S	L	T	K	G	K	I	I	S	H	N	I	R	H	M	D	I	V	T	C	L	A	T	D	Y	C	G	I	H	L	I	S	G	Efu_NBEAL1
2388	T	S	K	L	F	V	V	S	H	D	A	K	L	L	F	S	A	G	H	W	D	N	S	I	Q	V	M	S	L	T	K	G	K	I	I	S	H	N	I	R	H	M	D	I	V	T	C	L	A	T	D	Y	C	G	I	H	L	I	S	G	Tla_NBEAL1
2400	T	S	K	L	F	V	V	S	H	D	A	K	L	L	F	S	A	G	Y	W	D	N	S	I	Q	V	M	S	L	T	K	G	K	I	I	S	H	I	I	R	H	M	D	I	V	T	C	L	A	T	D	Y	C	G	I	H	L	I	S	G	Hsa_NBEAL1
2423	T	S	K	L	F	V	V	S	H	D	A	K	L	L	F	S	A	G	H	W	D	N	S	I	Q	V	M	S	L	T	K	G	K	I	V	S	H	N	I	R	H	I	D	I	V	T	C	L	A	T	D	Y	C	G	I	H	L	I	S	G	Mmu_NBEAL1
2393	T	S	K	L	F	V	V	S	H	D	A	K	L	L	F	S	G	G	H	W	D	N	S	I	R	V	T	S	L	T	K	G	K	V	M	A	Q	L	I	R	H	M	D	I	V	T	C	L	A	M	D	F	C	G	I	H	L	I	S	G	Pbi_NBEAL1
2402	T	S	K	L	F	A	V	S	H	D	A	K	L	L	F	S	G	G	H	W	D	N	S	I	R	V	T	S	L	T	K	G	K	L	I	G	Q	H	I	R	H	M	D	I	V	T	C	L	A	I	D	Y	C	G	I	H	L	I	S	G	Gga_NBEAL1
2398	T	S	K	L	F	V	V	S	H	D	G	K	V	L	F	S	G	G	H	W	D	N	S	I	R	V	T	S	L	T	K	G	K	V	T	S	Q	H	I	R	H	M	D	I	V	T	C	L	S	T	D	F	C	G	I	H	L	I	S	G	Xtr_NBEAL1
2454	S	S	K	L	F	V	I	S	H	D	G	K	L	L	F	S	A	G	H	W	D	N	S	V	R	V	T	S	V	T	K	G	K	L	V	G	Q	H	V	R	H	M	D	I	V	T	C	L	A	T	D	Y	C	G	I	H	L	I	S	G	Cmi_NBEAL1
	t	S	k	L	F	v	v	S	h	D	a	K	l	L	f	S	a	G	h	W	D	N	s	i	q	V	m	S	l	T	K	G	K	i	i	S	h	n	i	R	h	M	D	I	V	T	C	l	a	T	D	y	C	G	i	h	L	i	S	g	consensus

	2530	2540	2550	2560	2570	2580				
2459	SRD	TCMIWQIT	QQGGVPVGLAS	KPFHILYGH	TDEVLSV	GISTELDM	AVSGSRDGT	VIIH	Cfa_NBEAL1	
2459	SRD	TCMIWQIT	QQGGVPVGLA	PKPFQILYGH	TNEVLSV	GISTELDM	AVSGSRDGT	VIIH	Ame_NBEAL1	
2448	SRD	TCMVWQIT	QQGGVPVGLAS	KPFQILYGH	TDEVLSV	GISTELDM	AVSGSRDGT	VIIH	Oor_NBEAL1	
2448	SRD	TCMIWQIT	QQGGVPVGLAS	KPFQILYGH	TDEVLSV	GISTELDM	AVSGSRDGT	VIIH	Ttru_NBEAL1	
2488	SRD	TCMIWQIT	QQGGVPVGLAS	KPFQILYGH	TDEVLSV	GISTELDM	AVSGSRDGT	VLIH	Efu_NBEAL1	
2448	SRD	TCMIWQIT	QQGGVPVGLAS	KPFQILYGH	TDEVLSV	GISTELDM	AVSGSRDGT	VIIH	Tla_NBEAL1	
2460	SRD	TCMIWQIT	QQGGVPVGLAS	KPFQILYGH	TNEVLSV	GISTELDM	AVSGSRDGT	VIIH	Hsa_NBEAL1	
2483	SRD	TCMIWQIT	QQGGTPVGLA	PKPFQILYGH	TDEILSV	GISTELDM	AVSGSRDGT	VIIH	Mmu_NBEAL1	
2453	SRD	TCMVWQIV	QQGGVP	IGLAPKPLQ	ILYGH	TNEVSV	GISTELDM	AVSGARDGT	VIVH	Pbi_NBEAL1
2462	SRD	TCMIWQIV	QQGGAPVGL	TPKPLQ	ILYGH	TDEVTSV	GISTELDM	AVSGSRDGT	VIIH	Gga_NBEAL1
2458	SRD	TCMIWQIG	QQGGD	...LSSKPLQ	ILYGH	TDEITSV	CISTELD	TAVSGAKDGA	VIIH	Xtr_NBEAL1
2514	SRD	TCMIWQIL	QQGGTPVGL	SPKPVQ	ILYGH	MEITSV	TISTELDM	TVSGSKDGT	VIIH	Cmi_NBEAL1
	SRD	TCMIWQIT	QQGGvpv	gLasKpFq	ILYGH	tdEvlSV	gISTELDM	avSGsrDgt	Viih	consensus

	2590	2600	2610	2620	2630	2640																																																		
2519	TIQ	KQYMRTL	RPPCESS	LLLTVPN	LAI	SWEGH	IIVIY	SSCTE	EKTS	LKDK	NALH	LFSV	NGK	Cfa_NBEAL1																																										
2519	TIQ	KQYMRTL	RPPCESS	LLLTVPN	LAI	SWEGH	IIVIY	SSS	EKTN	LKDK	NALH	LFSV	NGK	Ame_NBEAL1																																										
2508	TIQ	KQYMRTL	RPPCESS	LLLTIPN	LAI	SWEGH	IIVIY	SSS	EEST	TTLK	VYN	.....		Oor_NBEAL1																																									
2508	TIQ	KQYMRTL	RPPCESS	LLLTIPN	LAI	SWEGH	IIVIY	SSS	EEST	TTLK	DKN	ALHL	FSVNGK	Ttru_NBEAL1																																										
2548	TVQ	KQYLR	TLRPP	CESS	LLLTIPN	LAI	SWEGH	IIVIY	SSS	EET	TTLK	DKN	ALHL	FSVNGK	Efu_NBEAL1																																									
2508	TIQ	KQYMRTL	RPPCESS	LLLTIP	SLAI	SWEGH	IIVIY	SSS	EET	TTLK	DKN	T	LHL	FSVNGK	Tla_NBEAL1																																									
2520	TIQ	KQYMRTL	RPPCESS	LLFLT	IPN	LAI	SWEGH	I	VYSS	T	EET	TTLK	DKN	ALHL	FS	INGK	Hsa_NBEAL1																																							
2543	TVQ	KQYMR	TLR	LP	CESS	LLFLT	IP	SLAI	SWEGH	I	VYSS	L	EES	SVL	KDKN	L	LHL	FS	INGK	Mmu_NBEAL1																																				
2513	TIR	KQYMR	TLR	RPP	CESS	LLIT	VPN	LAI	SWEGH	L	VHT	S	IEG	K	TTLK	DKN	ALHL	Y	SVNGK	Pbi_NBEAL1																																				
2522	TIR	KQYMR	TLR	RPP	CESS	LLLT	VPH	LAV	SWEGH	I	VHT	S	IEG	K	TTLK	DKN	ALHL	Y	SVNGK	Gga_NBEAL1																																				
2515	TIR	R	GQY	V	RTL	K	PP	SESS	LLMS	I	P	N	L	A	M	S	L	D	G	H	I	V	H	S	S	I	E	G	K	.	S	I	K	N	K	N	A	L	H	L	Y	S	I	N	G	K	Xtr_NBEAL1									
2574	TIR	R	GQY	M	R	T	L	R	P	P	C	E	S	S	L	P	I	S	I	P	N	L	A	M	S	L	D	G	H	I	V	H	S	S	I	E	G	K	S	N	L	K	D	K	N	A	L	H	L	Y	S	V	N	G	K	Cmi_NBEAL1
	Ti	qkGQYm	R	T	L	r	p	P	c	E	S	S	L	l	t	i	P	n	L	a	i	S	w	e	G	H	i	v	i	y	s	s	i	E	e	k	t	t	l	K	d	k	N	a	l	h	l	f	s	v	n	g	k	consensus		

	2650	2660	2670	2680	2690	2700	
2579	YLGSQV	LTEQVSD	ICIT	GEHI	ITGSLQGFLSIRD	LHSLNLSMN	PLAMRMP
2579	YLGSQV	LTEQVSD	ICIT	GEYI	ITGSLQGFLSIRD	LHSLNLSMN	PLAMRVP
2558	.....	.....	.....	.....	SFMHLNLS	SIN	PLAMRSP
2568	YLR	SQVLKEQVSD	ICVI	GEHIVT	GSLQGFLSIRD	LHSLNLSIN	PLAMRSP
2608	CLGSQ	LLKEQVSD	ICII	GEHIVM	GSLQGFLSIRD	LHSLNLSIN	PLAMRSP
2568	YLKSQ	ILKEQVSD	ICII	GEHIVT	GSLQGFLSIRD	LHSLNLSIN	PLAMRSP
2580	YLGSQ	ILKEQVSD	ICII	GEHIVT	GSLQGFLSIRD	LHSLNLSIN	PLAMRSP
2603	YLGSQV	LSEQISDMCI	IGEHI	ITGSLQGL	LSIRELHSLKLS	SVT	PLAMRMP
2573	YLGSE	SLKEEVSD	LCV	TGEYIVM	GSLQGFLSIRD	LYSLSLSTS	PLAMRMP
2582	HLGSE	TLKEEVSD	MCI	TGEYIVM	GSLQGFLSIRD	LYSLNLSIS	PLAMRMP
2574	YLVSE	LLKEQV	TDMCI	ISENIVL	GSRQGFLSIRD	LYSLNLSIT	PLVMRVP
2634	HLQSE	MIREQVSD	LCV	SGEQIVL	GSEVGF	SIRDLYSLKLS	SAA
	ylgsqvlkeqvsdiciv-ge-iv-gslqgflsirdlHsLnLSi-PLaMRlPIHcvsvTKEy						
							consensus

	2710	2720	2730	2740	2750	2760	
2639	SHILVGL	EDGKLI	VVG	GKPAEMR	.....	.....	SGQLSRK
2639	SHILVGL	EDGKLI	VVG	GKPAEMR	.....	.....	SGQLSRK
2585	SHILVGL	EDGKLI	VVG	GKPAEMR	.....	.....	SGQLSRK
2628	SHILVGL	EDGKLI	VVG	GKPAEMR	.....	.....	SGQLSRK
2668	SHILVGL	EDGKLI	VVG	GKPAEMR	.....	.....	SGQLSRK
2628	SHILVGL	EDGKLI	VVG	GKPAEMR	.....	.....	SGQLSRK
2640	SHILVGL	EDGKLI	VVG	GKPAEMR	.....	.....	SGQLSRK
2663	SHILVGL	EDGKLI	VVG	GKPAEMR	.....	.....	SGQLSRK
2633	SHILVGL	DDGKLI	IVG	GKPAEMR	.....	.....	AGQLSRK
2642	SHILVGL	EDGKLI	IVG	GKPAE	VKPTIKNFFYRTV	GSSSLIS	AFQLSKRSP
2634	SHILVGL	EDGKLI	IVG	GKPAE	AR	.....	SGQLSRK
2694	SHILVGL	EDGKLI	IVG	GKPAEMR	.....	.....	SGQLSRK
	SHILVGLeDGKLIvvgvGKPAEmr-----sgQLSRk--lWgsskRlSg						
							consensus

2770

2680	ISAGET X EYNTQDSK	Cfa_NBEAL1
2680	ISAGET X EYNTQDSK	Ame_NBEAL1
2626	ISAGET X EYNPQDSK	Oor_NBEAL1
2669	ISAGET X EYNPQDSK	Ttru_NBEAL1
2709	ISSG X EYNTQDSN	Efu_NBEAL1
2669	ISAGET X EYNTQDSK	Tla_NBEAL1
2681	ISAGET X EYNTQDSK	Hsa_NBEAL1
2704	ISAGET X EYNTQDCK	Mmu_NBEAL1
2674	ISSG X EYNTQDSM	Pbi_NBEAL1
2702	PKALGIKQTAQPDFIRRD	Gga_NBEAL1
2675	ISSGVTEYNTQA X I	Xtr_NBEAL1
2735	ISSG X EYHPQTQPK	Cmi_NBEAL1
	isageteyntQdsk----	consensus

~~X~~ non conserved
~~X~~ similar
~~X~~ conserved
~~X~~ all match