

## Signal peptide

TaCLE1a	1	--MRRPGGA-----APVVVLLMMA-----	ALTFAFHGCGGG--LLRCGSSVAVVERDRRPASLPRKMLLAVES
TaCLE1d	1	--MRRPGGA-----APVVVLLMMA-----	ALTFAFHGCGGG--LLVRGSSVAVVERDRRPASLPRKMLLAVES
TaCLE1b	1	--MRRPGGA-----APVVVLLMMA-----	ALTFAFHGCGGG--LLRCG--LAVQLD--HPASLPRKMLLVVES
TaCLE15a	1	--MVRDTGGA-----LQL-LAVLLELV-----	ASELATFSCGHR-----I-PRADVAAWK--
TaCLE15b	1	--MVRDTGGA-----LQL-LAVLLELV-----	ASELATFSCGHR-----I-PRADVAAWK--
TaCLE15d	1	--MVRDTGGA-----LHL-LAVLLELV-----	ASELATFSCGHR-----I-PRADVAAWK--
TaCLE28b	1	--MRRRAGGAGTPPLPDTLSVSLLELV-----	ATELGTAACVCG-----VLKADAVAAA--
TaCLE28d	1	--MRRRAGGAGAPPLPDTLSVSLLELV-----	ATELGTAACVCG-----VLKADAVASA--
TaCLE3b	1	--MARSRD-----RLRLTELVAV-----	LLVVDVAVSVCHG-----RRTP--DVDAM--
TaCLE3d	1	--MARSRD-----RLRLTELVAV-----	LLVVDVAVSVSHG-----RRTP--DVDAM--
TaCLE3a	1	--MARSRD-----RLRLTELVAV-----	LLVVDVAVSVSHG-----RRTP--DVDAM--
TaCLE30b	1	--MRRPSQQH-----SLLPCILLEML-----	VSMSSH-PSSSHG-----LRTLREEEEAVG--
TaCLE30d	1	--MRRSSQQH-----SLLPCILLEML-----	AMSH-PSSSHG-----LRTLREEEEAVG--
TaCLE30a	1	--MRRSSQQH-----SLLPCILLEML-----	VSMSC-PSSSHG-----LRTLREEEEAVG--
TaCLE5a	1	--MARSWSCA-----LRLFLASLLILCSALPPPPPP--GRGSAT----	ELTDADEAVIARMCNPRAG-----PRPAWCEELHLIK
TaCLE5d	1	--MGRSWSCA-----LRLFLASLLILCSALPPPPPP--GRGSASASPAELTADEAVIARMCNPRAG-----	PRPAWCEELHLIR
TaCLE5b	1	--MARSCSCA-----LRLFLASLLILCSAPPPPPPPPPGRGSAS--PAELTADEAVIARMCNPRAG-----	PRPAWCEELHLIR
TaCLE2a	1	-----MN-----CVKILVLSLI-----	PLALRGASLL-----VVPSPSPADSAS
TaCLE2d	1	-----MN-----CVKILVLSLI-----	PLALRGASLL-----VVPSPSPDSAS
TaCLE2b	1	-----MN-----CVKILVLSLI-----	PLALRGASLL-----VVPSPSPA-DPAS
TaCLE20a	1	--MGGGVVRC-----CVKILALSLV-----	PLALRAGSLLGH-----VVAPPPSSARPA
TaCLE20d	1	--MGGGVVRC-----CVKILALSLV-----	PLALRAGSFLGH-----VVAPPPSSARPA
TaCLE20b	1	--MGG--VVR-----CVKILALSLV-----	PLALRAGSLLGH-----VVAPPPSS----A
TaCLE14b	1	--MRVPSLAL-----AILVLASAA-----	TGRPAVIAARTP-----GVLLAPTSSRGVD
TaCLE14d	1	--MRVPSLAL-----AILVLASAG-----	TSRPGVIAARSP-----GVLLAPTSSRGVE
TaCLE14a	1	--MRVPSLAL-----AILVLASAA-----	TGRPGVIAARSP-----GVLLASTSRRGAE
TaCLE21b	1	-----MVCCSRR-----	RDTPAAGGLGSG-----WLLIAVLVQSSLL
TaCLE21d	1	-----MVCCSRR-----	RDRPAAGGLGSG-----WLLIAVLVQSSLL
TaCLE21a	1	-----MVCCSRR-----	RDTPAAGGLGSG-----CLLIAVLVQSSLL
TaCLE16a	1	--MGRQRRWS-----RAALLACTVLI-----	AAAACADSARPG-----PLAAAATEGLPAG
TaCLE16d	1	--MGRQRRWS-----RAALVACTVLI-----	AAAACAESARPG-----PLAAA--TEGLPAG
TaCLE16b	1	--MGRQRRWS-----RAALLACTVLI-----	AAA--CAESARPG-----PLAAA--SEGLPRG
TaCLE27a	1	--MGR--RPLA-----SAAAFVAAV-----	LLVVVAVHVGAG-----VPSSSVMASVGN
TaCLE27d	1	--MGR--RPLA-----SAAAFVAAV-----	LLVVVAVHVGAG-----VPSLSVMASAGNG
TaCLE27b	1	--MGR--RPLA-----SAVAFVAAV-----	LVVVAGAVHVGAG-----VPSSSVMASAGNG
TaCLE33b	1	--MRR--RRWA-----RAAALC--ATA-----	VLLQLAVHAGAG-----AWAARMPAFSTRA
TaCLE4b	1	--MGRRPDRS-----LGASACCCRVAV-----	IFIVCHALLVVM-----VAMTSGAGVSGIPA
TaCLE4d	1	--MGRRPDRS-----LGASACCCRVAV-----	IFIVCHALLVVM-----VATTSGAGVSLGPA
TaCLE4a	1	--MGRRPDRS-----LGASACCCRVAV-----	IFIVCHALLVVM-----VATTSGAGVFGPA
TaCLE22a	1	--MGGTAAGR-----CRISGLAALVCAV-----	LISAT--NANGIR-----TGAVGGTGAPGPAA
TaCLE22d	1	--MGGTAGGR-----CRISGLAALVCAV-----	LISATTNANGIR-----TGAADGTGAPGPAA
TaCLE25a	1	MRGPAASGG-----RASAAA--VLEGV-----	LVLVSLVVVVAE-----RPSTPAIRGRRMIL
TaCLE25d	1	MRGPAASGG-----RASAAAPAVLEGV-----	LVLVSLVVVVAE-----RPSAPATGGRRMIL
TaCLE25b	1	MRGPAASGG-----RASAAA--VLEGV-----	LVLVSLVVVVAE-----RPPAPATGGRRMIL
TaCLE29b	1	MATARCAGR-----WSAPAL--LELLI-----	LLLCALVALVAV-----PLAALPGG-----
TaCLE29d	1	MATARCAGG-----WSAPALP--LELLI-----	ALLCALVALVAA-----PLAAPPGETARLP
TaCLE6a	1	-----MAAARVG--IVLLVV-----	MVIAAQLVATP-----E
TaCLE6d	1	-----MAAARVG--IVLLVV-----	MVIAAQLVAP-----E
TaCLE17a	1	-----MAARIGAAVLCVV-----	LIVSLGIATPT-----E
TaCLE17b	1	-----MAARIGAAVLCV-----	LIVSLGIATPT-----E
TaCLE17d	1	-----MAARIGAAVLCMV-----	LIVSAGIVATPT-----E
TaCLE18a	1	-----MAARVGAVVLCMV-----	LIVSAGIVATPT-----E
TaCLE18d	1	-----MAARVGAVVLCMF-----	LIVSAGIVATPT-----E
TaCLE18b	1	-----MAARIGAVVLCMV-----	LIVSAGIVATPT-----E
TaCLE13b	1	-----MAHAADARSRCVV-----	AVLFVAVFLAC-----LPPAATAS--SS
TaCLE13d	1	-----MAHAADARSRCVV-----	AVLFVAVFLAC-----LPPAATAS--SS
TaCLE13a	1	-----MAHAHAARSRCVV-----	AVLFVAVFLAC-----LPPAATASASSS
TaCLE32b	1	-----MASSRVAVLLELV-----	CTLGVARKMEEAR-----MMHKGEVVLGNGG
TaCLE32d	1	-----MASSRMVAVLLELV-----	CTLGVARKMEEAR-----MMQKGDVVVVGNGG
TaCLE32a	1	-----MASURMAVLELV-----	CTLGVARKMEEAR-----MMQGEVVVVGNGG
TaCLE7a.1	1	-----MAKACILRGVG-----	LVVVALLLSPSF-----MAAEATGRKWDHG
TaCLE7b.1	1	-----MAKACILRGVV-----	LVVVALLLSSHF-----LAAEPAGROWDHG
TaCLE7a.2	1	-----MAKACILGGVV-----	MVVVALLLSSSF-----VAAEPGGRQWGHG
TaCLE7b.2	1	-----MAKACILRGVL-----	MVVVALLLSSSF-----VAAEPGGRQWAGH
TaCLE7d	1	-----MAKACILRGAT-----	LMVVALLLSSSF-----IAAEPAGROWDHG
TaCLE8b.1	1	-----MAKACILRGAA-----	LMVCTLLLLSSSF-----IVVEPAGROWDHG
TaCLE8b.2	1	-----MAKACILRCVV-----	LMVCTLLLLSSSF-----MAAETAGROWDHG
TaCLE8a	1	-----MAKACILRGAV-----	LIVCTLLLLSSSF-----MAAEPAGQLDHL
TaCLE8d	1	-----MAKACILRGAV-----	LMVVALLLSSAF-----VAAERAGQWDNG
TaCLE11b	1	-----MAKACILRRVV-----	LVVVALLLSSTF-----VVAEATGGQLDHG
TaCLE11d	1	-----MAMAKACVLCVV-----	LVVVALLLSSTF-----VVAEATFGQLDHG
TaCLE9a	1	-----MAKACILRGAV-----	LVVVALLVSSAS-----AAVEAAGRQRGHG
TaCLE9d	1	-----MAKACILRGAV-----	LVVVALLVSSAS-----ASAEAAGRQSGHG
TaCLE12b	1	-----MASACILRGTV-----	LVVVALLVSSAS-----AAREAAGRQRAHG
TaCLE12d	1	-----MASACILRGAV-----	LVVVALLVSSAS-----AAAAAAGRQRGHG
TaCLE10b	1	-----MAKTRVLRCAV-----	LVVVALLVSSAS-----AAAAAAGRQRGHG
TaCLE10a	1	-----MAKARVLRCAV-----	LVVVALLLSSAS-----AAAAAAGRQRGHG
TaCLE10d	1	-----MAKARVLRCAV-----	LMVVALLVSS-----EAAGRQRGHG
TaCLE19a	1	MARTTGLG-----	FTICAVILLAAAV-----PLESARVLR----
TaCLE19b	1	MARTTGLG-----	FTICAVILLAAAV-----PLESARVLR----
TaCLE19d	1	MARTTSLG-----	FTICAVILLAAAV-----PLESARVLR----
TaCLE23a	1	-----MRLLLCFC-----	CFVLLI--AGSSP-----DPFSERCPLRH--
TaCLE23d	1	-----MRLLLCFC-----	CFVLLI--AGSSP-----DSHSERCPLQH--
TaCLE23b	1	-----MRLLLCFC-----	CFVLLI--AGSSS-----DSLSERCPLQH--
TaCLE24a	1	-----MTRLLLCFC-----	YCFVVLVAGSSP-----ADLLSGRCPLHH--
TaCLE24d	1	-----MTRLLPCFC-----	YCFVVLVLAGSSP-----ADPLSGRCPLHHH
TaCLE24b	1	-----MMRLIPCFC-----	VCLVVVLVVGSSP-----ADLLAGRCPLHH--
TaCLE31a	1	-----MKLVMLC-----	FIIVLVI--TSSP-----IAVSGDRPLMLG
TaCLE31d	1	-----MKLVMLC-----	FIIVLVI--TASP-----IAVSGDRPLMLG
TaCLE31b	1	-----MKLVMLC-----	FIIVLVI--ASSP-----IPVSGDRPLMLG
TaCLE34a	1	-----MPAAVCAV-----	LVLILLS--AVSR-----CEADLLQVTVAGG
TaCLE34d.1	1	-----MPAAVCAV-----	LILLILLSV-AVPC-----CEADLLQVTVSGG
TaCLE35a	1	-----MP-AVCAV-----	LILLILLS-AASR-----CEADLLQVTVAG-
TaCLE35b.1	1	-----MP-AVCAV-----	LILLILLS-AASR-----CEADLLQVTVAG-
TaCLE35b.2	1	-----MP-AVCAV-----	LILLILLS-AASR-----CKADHLQVTVAG-
TaCLE35d	1	-----MP-AVCAV-----	LILLILLS-AASR-----CEADHLQVTVAG-
TaCLE34d.2	1	-----MP-AVCAV-----	LILLILLS-AVSR-----CEANLLQVTVGG-

## Central variable domain

TaCLE1a	61	RSLDPSS-----	---AAGAPQDQHHHHHQHHHHHRAGHHHRQRHHRLPSKWNWQRVPPSAAPGD--	GEE--VDPRY--VE-----
TaCLE1d	61	QSLDPSS-----	---AAGAPQDQHHHH---HHHHHRGGHHHRQRHHRLPSKWNWQRVPPSAAPGD--	GQE-IDPRY--VE-----
TaCLE1b	59	RSLDPSS-----	---AAGAPQDQQRHH---HHHHHRGGRRHQRHHRLPSKWNWQRLPPSAAPGD--	GEE--VDPRY--VE-----
TaCLE15a	42	RGATPT-----	---GRTPST-----	TTTTTATRAGG-AAA--AAL--DS-----
TaCLE15b	42	RGPTPT-----	---GRPST-----	TTTTTATRAGG-AAA--AAL--DS-----
TaCLE15d	42	RGATPT-----	---GRTPS-----	TTTTTATRAGG-AAA--AAL--DS-----
TaCLE28b	51	TAAAAAR-----	---KRGGTVLQ-----	TGPPAAACTGE--AGG--AAYDS-----
TaCLE28d	51	TAAAAAR-----	---KRGRTVLQ-----	TGPPAAACAGE--AGG--AAYDS-----
TaCLE3b	40	--AALDG-----	---APPPKGYFAEQ-----	SSSTARQHTARV--YRR--MHRVS-----
TaCLE3d	40	--ALVGG-----	---GPPPKAYSSEQA-----	SLSTARQHTARV--YRR--MHTVS-----
TaCLE3a	42	--ALVGG-----	---GPPPKAYSSEQS-----	SSSTSREHTARV--YRR--MHRVS-----
TaCLE30b	46	--ELITG-----	---QHELPTISPTQE-----	AGGDDVAAADDI--GAG--KFTVS-----
TaCLE30d	44	--ELIKG-----	---QHELPTISPTQE-----	AGGDDVAAADDI--GAG--KFTVS-----
TaCLE30a	45	--ELIKG-----	---QHELPTISPTQQ-----	AGGDDVAAANDI--GAG--KFTVS-----
TaCLE5a	69	RRALRGG-----	---ARHRHH--RHHHR-----	QGAPAVPLPPP--GRDEVDMRYEVS-----
TaCLE5d	73	RRVLRGG-----	---ARHRHGGHHHH-----	QGAPTVPLPPP--GRDEVDMRYEVS-----
TaCLE5b	72	RRALRGG-----	---ARHRHGGHHHHQ-----	QGAPAVPLPPP--GRDEVDMRYEVS-----
TaCLE2a	36	RTGVLAP-----	---VPAEQWRQERRR-----	TVGRQTRGGRATT-IAPFAPRRFE-----GFFRDD
TaCLE2d	36	RTGVLAP-----	---VQAEQWRQERRR-----	TAGRQARGGRATT-IAPFAPRRFE-----GFFRDD
TaCLE2b	35	RAGVLAP-----	---VQAEQWRQORRR-----	TAG--QAQGGRT--IAPFAPRRFE--GAAGGFFRDD
TaCLE20a	45	AARSASV-----	---VVSGBHGHKTPE-----	GAALAAARPRSG--AGGG--VFG-----DD
TaCLE20d	45	AARRAS-----	---VVAGSBHVTSE-----	GAALAAARNRNG--AGVG--GFG-----DD
TaCLE20b	39	ATRSAS-----	---VSDSBHGHKTSE-----	GAALAAARFRSG--ASVG--GFG-----DD
TaCLE14b	45	QPRRLVE-----	---AGGNCPAASLD-----	ASGKPVAAAGSS--PPPT--VFDADR-----MS
TaCLE14d	45	QPQLVE-----	---AGGNCPAASLD-----	ASGKPVAAAGPS--PPPT--VFDADR-----MS
TaCLE14a	45	QPRRLVE-----	---AGGNCPVASFD-----	ASGKPVAAAGPS--PPPT--MFDADR-----MS
TaCLE21b	33	GSTFLLA-----	---V--DAARTSAFM-----	AMA-PLPAVAMA--PSPS--GLKDD-----
TaCLE21d	33	GSTFLLA-----	---V--DAARTSAFM-----	AMA-PLPAVAMA--PSPS--GLKDD-----
TaCLE21a	33	GSTFLLA-----	---V--DAARTSAFM-----	AMA-PLPAVAMA--PSPS--GLKDD-----
TaCLE16a	45	ASVSASG-----	---NEDGGDCPRRSAFD-----	ALVEGLVSI GLG--RRWRAGDGVGLVD-----GD
TaCLE16d	44	AMESAS-----	---IDGGDCPRRSAFD-----	VLVEGLVSI GLG--RRWRAGDGVGLVD-----GD
TaCLE16b	43	ASVSAD-----	---DSGGDCPRRSAFD-----	VLVEGLVSI GLG--RRWRAGDGVGLVD-----GD
TaCLE27a	44	RGRAVV-----	---ATATFDDAAR-----	CKEQRKKKAGG--AAAWARGDDED-----DD
TaCLE27d	44	RGRAVV-----	---ATATFDDAAR-----	CKEQRKKKAGG--AVAWAGYGDDED-----DD
TaCLE27b	44	RGRAVV-----	---ATASFDAAR-----	CKEQRKKKAGG--AAAWAGDGDDED-----DD
TaCLE33b	43	RGRAAQRWPSMPVHHAVPKPSPRAGARAVAFDATATAAAAR-----	---CNSKSKTSAAWKRKPTAGGRDDA-----CDE-----DD	
TaCLE4b	48	RARGRVTMSSP-----	---AQKSGGGGCGGEDAYR-----	SKRRIPKGPDP-----IHN-----
TaCLE4d	48	RARGGV-----	---AQKSGGGGCGGEDAYR-----	SKRRIPKGPDP-----IHN-----
TaCLE4a	48	QGGRVSTKSSP-----	---VQKPGGGGCGGEDAYR-----	SKRRIPKGPDP-----IHN-----
TaCLE22a	47	AAAQAATLAAAPP-----	---VAAAATTPPSEGALEDPYK-----	NSKRKVPNGPDP-----IHN-----
TaCLE22d	48	AAAQAATLAAAPP-----	---VAAAAMAPPSEGALEDPYK-----	NSKRKVPNGPDP-----IHN-----
TaCLE25a	47	AGDGGETR-----	---MTLEDFR--ADDPFQ-----	DSARRVPNGPDP-----IHN-----
TaCLE25d	49	PGDGGEAR-----	---RTLEDFR--ADDPFQ-----	DSARRVPNGPDP-----IHN-----
TaCLE25b	47	AGDGGEAR-----	---RTLENFR--ADDPFQ-----	DSARRVPNGPDP-----IHN-----
TaCLE29b	41	DAAAGRR-----	---ALVPAAR--SGRFR-----	PRPRRW-NSAGL-----VDS-----
TaCLE29d	47	PAASSSSF-----	---PVAAGGRRFAGGPR-----	SRARRW-NSAGL-----ADS-----
TaCLE6a	26	PLRIQHPA-----	---VALRHAANGK-----	PAGVPPSKWNMPRTLGA--AV-----
TaCLE6d	26	ARLIQHPA-----	---VALRHTAANGK-----	PAGVPPAKWNMRRTLGA--AV-----
TaCLE17a	27	ARAVAGVV-----	---YAAAVANAAGA-----	AAATSGAGVPPGRWN-ARRLQGDGAH-----
TaCLE17b	27	ARAVAGVV-----	---YAAAVTNAAGA-----	AAATGGAGVPPGRWN-ARRLQGDGAH-----
TaCLE17d	27	ARAVAHVL-----	---YAAAVTNAVGA-----	AS--GAGVRPGRWN-ARRLQGDGAH-----
TaCLE18a	27	ARAVPDVV-----	---YAAAG-----	GGIRRGKWN SARLEGDGAH-----
TaCLE18d	27	ARAVPDVV-----	---YSAAGNAA-----	GGGIRRGKWN SARLEGDGAH-----
TaCLE18b	27	ARAVADV-----	---YAAATNAA-----	AGGIRRGKWN SARLEGDGAH-----
TaCLE13b	36	SRSAAAAAL-----	---QRVEMAAMYP-----	QDLQEKPDVTKDAEEDVSTTGFGEE-----
TaCLE13d	36	SRSAAAAAL-----	---QRVEMAAYTP-----	QDLQEKPDVTKDAEEDVSTTGFGEE-----
TaCLE13a	38	SRAAAAAAL-----	---QRVEMAAMYP-----	QDLQEKPDVTKDAEEDVSTTGFGEE-----
TaCLE32b	40	GGGGGGNA-----	---LQHGLVDGHRP-----	RHVASFTTGDVVVEAPSSQAAGGDGA-----
TaCLE32d	40	GGGGGGNA-----	---LQHLVD-----	DAPSSQAAGGDGA-----
TaCLE32a	40	DGGR--NA-----	---LQHGFVDGHRP-----	RPVASLTMGDDVVEAPSSQAAGGDGA-----
TaCLE7a.1	38	---REAT-----	---VVMMPMAGG-----	HFARKVLRREEMVQADGD--VDIIGCS-----
TaCLE7b.1	38	---RGAT-----	---VLTMTMARG-----	RFARKVLRREEMVQADGD--VDIIGCS-----
TaCLE7a.2	38	---REAT-----	---VLTMTMARG-----	RFVRKVLREEMVQADDN-DVVDIIGCS-----
TaCLE7b.2	38	---REAT-----	---VLTMTMARG-----	RFVRKVLREEMVQADDN-GVVDIIGCS-----
TaCLE7d	38	GGRWGT-----	---VLTMLTRG-----	RFVRKVLREEMVQADDN-GVVDIIGCS-----
TaCLE8b.1	38	TN--KAA-----	---VLTMTVATG-----	RFVRKVLREEVIEVDDD-GVVDIIGCS-----
TaCLE8b.2	38	T---KAT-----	---VLTMTMATG-----	RFVRKVLREEVVEVDDD-GVVDIIGCS-----
TaCLE8a	38	R---KAT-----	---VLTMTMAAG-----	RFVRNVLREEVVQADDVNGVVDIGDS-----
TaCLE8d	38	R---KAT-----	---VLTMTMATG-----	HLVRKVLREEVVQANNN-GVVDIIGCS-----
TaCLE11b	38	R---KAT-----	---VLTMTMATK-----	RLVRKLLQEEVVQADDN-GVVDIIGCS-----
TaCLE11d	40	R---KAT-----	---VLTMTMATR-----	RFVRKVLREEVVQADDN-GVVDIIGCS-----
TaCLE9a	38	R---EAT-----	---APAMAMARG-----	PFVRKVLREEMVKADGQ--GDIIGCS-----
TaCLE9d	38	R---EAT-----	---APAMAMARG-----	PFVRKVLREEMVKADGQ--GDIIGCS-----
TaCLE12b	38	R---EAT-----	---APAMAMARG-----	RFVMKVLREEMVQADGQ--GDIIGCS-----
TaCLE12d	38	R---EAT-----	---APAMAMAAGG-----	RFVRKVLREEMVQAGRQ--GDIIGCS-----
TaCLE10b	38	R---EAT-----	---APAMAMATG-----	RFVRKVLREEMVQADGH--GDIIGCS-----
TaCLE10a	38	R---EAT-----	---APAMATAKG-----	RFVRMVLREEMVQANGQ--GGIIGES-----
TaCLE10d	33	R---EATA-----	---APAMAMARG-----	RFVTKVLREEMVQANGQ--GGIIGES-----
TaCLE19a	31	---EAP-----	---SATGGTG-----	VTEVSMKVPDEGGRQ--VGKABES-----
TaCLE19b	31	---EAP-----	---SATGGTG-----	VTEVSMKVPDEGGRQ--VGKABES-----
TaCLE19d	31	---EAP-----	---SATDGAG-----	VTEVSMKVPDEGGRQ--VGKABES-----
TaCLE23a	32	RRQLQDV-----	---VVRLQA-----	ASTAFAAR--PRQEGIADPVYETS-----
TaCLE23d	32	RRQLQDV-----	---VVRLQATAA-----	ASTAAAAAR--PRQEGIADPVYETS-----
TaCLE23b	32	RRQLHVD-----	---VVRLQATAA-----	ASTAAAVG--PRQE-IADPVYETS-----
TaCLE24a	35	RRQLEDVD-----	---RGG--PAV-----	ASTTAAVR--PPQEIADLVVYETS-----
TaCLE24d	36	RRQLEDVD-----	---GGGLQATAT-----	ASTTAAVR--PPQEIADLVVYETS-----
TaCLE24b	35	RRQLEDVD-----	---SGGLQATAT-----	ASTTAAVR--PPQEIADLVVYETS-----
TaCLE31a	32	RRCLQDTV-----	---VIGGGPTPTG-----	ASTTGTL--PRDAEPDISVD-RS-----
TaCLE31d	32	RRCLQDAV-----	---VIGGSPPTTG-----	ASTTGTL--PRDAEPDISVD-RS-----
TaCLE31b	32	RRWLQDAV-----	---VIGGSPPTTA-----	ASTTGTL--PRDAEPDISVD-RS-----
TaCLE34a	33	RRMLAGGS-----	---NAARAFSRPT-----	ETTAGSSSWRAADGRATAAMPYSES-----
TaCLE34d.1	32	RRMLAGGS-----	---NAAALSROV-----	ETTAASSTWRAAGRATAAMPYSES-----
TaCLE35a	32	RRMLAGGS-----	---NLAVFVSREA-----	ATTVASSARQSAAGR--AAMPYSES-----
TaCLE35b.1	32	RRMLAGGS-----	---NAGTIFSREA-----	ATTVASSARRSAAGR--AAMPYSES-----
TaCLE35b.2	32	RRMLAGGS-----	---NLAVFVSREA-----	ETTVASSARRSAAGR--AAMPYSES-----
TaCLE35d	32	RRMLAGGS-----	---NATTVYSREA-----	ATAVANSARRSADGR--AAMPYSES-----
TaCLE34d.2	31	RRMLAGGS-----	---NAAVFSPSPA-----	ETTAASTMRWAAAGRATAAMPYSES-----

## CLE domain

TaCLE1a	128	KRLVPTGGNP <del>PHH</del> -----
TaCLE1d	126	KRLVPTGGNP <del>PHH</del> -----
TaCLE1b	124	KRLVPTGGNP <del>PHH</del> -----
TaCLE15a	74	KRLVPTGGNP <del>PHN</del> -----
TaCLE15b	74	KRLVPTGGNP <del>PHN</del> -----
TaCLE15d	76	KRLVPTGGNP <del>PHN</del> -----
TaCLE28b	86	KRMVPTGGNP <del>PHN</del> -----
TaCLE28d	86	KRMVPTGGNP <del>PHN</del> -----
TaCLE3b	78	KRLVPTGGNP <del>PHN</del> -----
TaCLE3d	78	KRLVPTGGNP <del>PHN</del> -----
TaCLE3a	80	KRLVPTGGNP <del>PHN</del> -----
TaCLE30b	84	RRAVPTGGNP <del>PHN</del> -----
TaCLE30d	82	RRAVPTGGNP <del>PHN</del> -----
TaCLE30a	83	RRAVPTGGNP <del>PHN</del> -----
TaCLE5a	110	KRRVPTGGNP <del>PHN</del> -----
TaCLE5d	115	KRRVPTGGNP <del>PHN</del> -----
TaCLE5b	116	KRRVPTGGNP <del>PHN</del> -----
TaCLE2a	84	KRFAP <del>T</del> GGNP <del>LHNL</del> -----
TaCLE2d	84	KRFAP <del>T</del> GGNP <del>LHNL</del> -----
TaCLE2b	85	KRFAP <del>T</del> GGNP <del>LHNL</del> -----
TaCLE20a	85	KRMAP <del>S</del> GGNP <del>LHNR</del> -----
TaCLE20d	84	KRMAP <del>S</del> GGNP <del>LHNL</del> -----
TaCLE20b	77	KRMAP <del>S</del> GGNP <del>LHNL</del> -----
TaCLE14b	88	KRRVR <del>R</del> GS <del>D</del> P <del>T</del> HNKC-----
TaCLE14d	88	KRRVR <del>R</del> GS <del>D</del> P <del>T</del> HNKC-----
TaCLE14a	88	KRRVR <del>R</del> GS <del>D</del> P <del>T</del> HNKC-----
TaCLE21b	70	KRRVPTG <del>A</del> NP <del>LHNR</del> -----
TaCLE21d	70	KRRVPTG <del>A</del> NP <del>LHNR</del> -----
TaCLE21a	70	KRRVPTG <del>A</del> NP <del>LHNR</del> -----
TaCLE16a	93	KRRVPTGGNP <del>LHNR</del> -----
TaCLE16d	90	KRRVPTGGNP <del>LHNR</del> -----
TaCLE16b	89	KRRVPTGGNP <del>LHNR</del> -----
TaCLE27a	83	KRVVPTGGNP <del>LHNR</del> -----
TaCLE27d	85	KRVVPTGGNP <del>LHNR</del> -----
TaCLE27b	85	KRVVPTGGNP <del>LHNR</del> -----
TaCLE33b	113	KRRIP <del>T</del> GGNP <del>LHNR</del> -----
TaCLE4b	90	RRAGKTTIA <del>P</del> RRRD-----
TaCLE4d	85	RRAGKTTIA <del>P</del> RRRD-----
TaCLE4a	90	RRAGKTTIA <del>P</del> RRRD-----
TaCLE22a	95	RRARW <del>E</del> DAPARRV-----
TaCLE22d	96	RRARW <del>E</del> DAPARRV-----
TaCLE25a	83	RGAGKSG <del>R</del> SPGRE-----
TaCLE25d	85	RGAGKSG <del>R</del> SPGRE-----
TaCLE25b	83	RGAGKSG <del>R</del> SPGRA-----
TaCLE29b	75	KHEVPTGGNP <del>DSNR</del> -----
TaCLE29d	84	KHEVPTGGNP <del>DSNR</del> -----
TaCLE6a	63	KRTVPGGP <del>D</del> PCHHY-----
TaCLE6d	64	KRTVPGGP <del>D</del> PCHHY-----
TaCLE17a	71	KREVPGGP <del>D</del> PCHHH-----
TaCLE17b	71	KREVPGGP <del>D</del> PCHHH-----
TaCLE17d	69	KREVPGGP <del>D</del> PCHHH-----
TaCLE18a	61	KREVPGGP <del>D</del> PCHHH-----
TaCLE18d	65	KREVPGGP <del>D</del> PCHHH-----
TaCLE18b	65	KREVPGGP <del>D</del> PCHHH-----
TaCLE13b	81	BREVPTGGP <del>D</del> THH <del>B</del> GR <del>E</del> PRRRQSP
TaCLE13d	81	BREVPTGGP <del>D</del> THH <del>B</del> GR <del>E</del> PRRRQSP
TaCLE13a	83	BREVPTGGP <del>D</del> THH <del>B</del> GR <del>E</del> PRRRQSP
TaCLE32b	85	KREVPGGP <del>D</del> THH <del>B</del> GSVPPTSVAP
TaCLE32d	68	DREVPGGP <del>D</del> THH <del>B</del> GSVPPTSVAP
TaCLE32a	83	KREVPGGP <del>D</del> THH <del>B</del> GSIPPNSVAP
TaCLE7a.1	74	KRKSPGGP <del>D</del> PCHH-----
TaCLE7b.1	74	KRKSPGGP <del>D</del> PCHH-----
TaCLE7a.2	76	KRKSPGGP <del>D</del> PCHH-----
TaCLE7b.2	76	KRKSPGGP <del>D</del> PCHH-----
TaCLE7d	79	KRKSPGGP <del>D</del> PCHH-----
TaCLE8b.1	77	KRKSPGGP <del>D</del> PCHH-----
TaCLE8b.2	76	KRKSPGGP <del>D</del> PCHH-----
TaCLE8a	77	KRKSPGGP <del>D</del> PCHH-----
TaCLE8d	76	KRKSPGGP <del>D</del> PCHH-----
TaCLE11b	76	KRKSPGGP <del>D</del> PCHH-----
TaCLE11d	78	KRKSPGGP <del>D</del> PCHH-----
TaCLE9a	75	KRTSPGGP <del>D</del> PCHH-----
TaCLE9d	75	KRTSPGGP <del>D</del> PCHH-----
TaCLE12b	75	KRTSPGGP <del>D</del> PCHH-----
TaCLE12d	76	KRTSPGGP <del>D</del> PCHH-----
TaCLE10b	75	KRTSPGGP <del>D</del> PCHH-----
TaCLE10a	75	KRTSPGGP <del>D</del> PCHH-----
TaCLE10d	71	KRTSPGGP <del>D</del> PCHH-----
TaCLE19a	63	KRLSPGGSDP <del>P</del> CHH-----
TaCLE19b	63	KRLSPGGSDP <del>P</del> CHH-----
TaCLE19d	63	KRLSPGGSDP <del>P</del> CHH-----
TaCLE23a	67	KRLSPGGSNP <del>P</del> CHHR-----
TaCLE23d	70	KRLSPGGSNP <del>P</del> CHHR-----
TaCLE23b	69	KRVSPGGSNP <del>P</del> CHHR-----
TaCLE24a	71	KRLSPGGSNP <del>P</del> CHHR-----
TaCLE24d	76	KRLSPGGSNP <del>P</del> CHHR-----
TaCLE24b	75	KRLSPGGSNP <del>P</del> CHHR-----
TaCLE31a	70	KRLSPGGSNP <del>P</del> CHH-----
TaCLE31d	70	KRLSPGGSNP <del>P</del> CHH-----
TaCLE31b	70	KRLSPGGSNP <del>P</del> CHH-----
TaCLE34a	76	KRSSPGGP <del>D</del> PCHH-----
TaCLE34d.1	76	KRSSPGGP <del>D</del> PCHH-----
TaCLE35a	73	KRSSPGGP <del>D</del> PCHH-----
TaCLE35b.1	73	KRSSPGGP <del>D</del> PCHH-----
TaCLE35b.2	73	KRSSPGGP <del>D</del> PCHH-----
TaCLE35d	73	KRSSPGGP <del>D</del> PCHH-----
TaCLE34d.2	74	KRSSPGGP <del>D</del> PCHH-----
consensus	201	kr pggp p hh