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PKS_OUT 1 -----
Arth_CHS 1 -----MVMAGASSLDEI---
Ledu_ASCL 1 -----ARRVQSPFQGSRVDSGSGSSNGNGFVPRPMA---
Anag_ASCL 1 -----MAPFQKDSASISPVNPTIDASIHAGAPVPALADSVRN---
Phca_ASCL 1 -----RN---
Zema_PKSA 1 -----MTGSGSTGAN---
Orsa_PKSA 1 -----MADLGFGDARSGNG---
Mapo_ASCL 1 -----MAARAVALARFDTDAAAGNCGSLISGAGT---
Rali_ASCL 1 -----
Lej_sp_ASCL 1 -----SCKDL---
Spfa_ASCL 1 -----MAPGQRMEATFDAQAIEFGTVNGTVAAGTNTIQL
Spma_ASCL 1 -----MAPGQRVEATFDAHAIEFGTVNGTVAAGTNTMQL
Spfa_ASCL2 1 -----MISRRMEATFDAQVIEFGTVNVPATKMHSGAIGKCR---
Spma_ASCL2 1 -----MEATFDAQAIEFGTVNVPATKMQSGAIGKCR---
Anru_ASCL 1 -----MASYRRVEAAFDDGQAVELGSNGSVQSNGERG---
Phpa_ASCL 1 -----MASRRVEAAFDDGQAVELGATIPAANGNGTHQS IKVP---
Syca_ASCL 1 -----
Cepu_ASCL 1 -----MASRRVEAAFAGQSVELGTTTTKPTNGTNGHNGHTTKN---
Phdr_ASCL 1 -----
Dico_ASCL 1 MATMIQTRHYVQETPDSVEEAKGFLKKVGDISHAQPNGIVKANGFSV---
Semo_ASCL 1 -----MSNGSSSGVKRK---
Iso_sp_ASCL 1 -----ASNGNGVSKNQISSP---
Muac_ASCL 1 -----MGSFPGA---
Gnmo_PKSA 1 -----PYASHSIPFHHT---
Scdi_ASCL3 1 -----TQNGVSV---
Scdi_ASCL 1 -----
Scdi_ASCL2 1 -----
Lyja_ASCL 1 -----
Azfi_ASCL 1 -----ASCLMSSPIVVVPSNNNNNNNGQLKV---
Ceri_ASCL 1 -----MSSPTGEVFSNGSKVTNSNNKTKVSSGMDGE---
Poac_ASCL 1 -----
Adte_ASCL 1 -----
Poac_ASCL2 1 -----
Adte_ASCL2 1 -----
Zema_PKSB 1 -----MVSSSMDTTSKDRAS---
Orsa_PKSB 1 -----MVSTNAGGIASKQA---
Nyco_PKSB 1 -----MVVGAPKPGEN---
Metr_PKSB 1 -----MGDEGIVRG---
Arly_PKSB 1 -----TMGSIDA AVLG---
Arth_PKSB 1 -----MGSIDA AVLG---
Amtr_PKSB 1 -----
Litu_ASCL1 1 -----MGSVDSLDC---
Eugr_PKSB 1 -----MENGEQAQQPF---
Soly_PKSB 1 -----MGILEKMEG---
Hean_PKSB 1 -----MFRKQ---
Soly_PKSA 1 -----MSHNNKNVNGASNH---
Cagr_PKSC 1 -----MLASARLEKRKEIGKS---
Arly_PKSC 1 -----MLASARVEKQKEFGKS---
Arth_PKSC 1 -----MLVSARVEK---
Hype_PKS1 1 -----
Eugr_PKSA 1 -----MSKVDANGSAKPRPAS---
Metr_PKSA 1 -----MPQGDNLGSSSANGER---
Amtr_PKSA 1 -----MANGQNGSD---
Arly_PKSA 1 -----MSNSRMNGVEKLSSIS---
Arth_PKSA 1 -----MSNSRMNGVEKLSSKS---
Hean_PKSA 1 -----
Nyco_PKSA 1 -----MMRTDLNEIPLADP---
Chse_ASCL 1 -----
Cika_ASCL 1 -----MLGGGGCCFS---
Litu_ASCL2 1 -----MSRADGNDNAGHGAFAT---
Maof_ASCL 1 -----
Gibi_ASCL 1 -----MGSNGNMQSAVNGCKT---
Thpl_ASCL 1 -----MASNGSSVSDSN---
pita_PKSA 1 -----MSASNGTNGVVAVK---
Wemi_ASCL 1 -----MEHKHKHENGSAKNGQAPATCAFQ---

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PKS_OUT	51	-----	-----
Arth_CHS	13	-----	RQA
Ledu_ASCL	34	-----	VKR
Anag_ASCL	40	-----	AKR
Phca_ASCL	3	-----	SKR
Zema_PKSA	11	-----	GKS
Orsa_PKSA	15	-----	SRS
Mapo_ASCL	30	-----	TER
Rali_ASCL	1	-----	-----
Lej_sp_ASCL	6	-----	GQR
Spfa_ASCL	35	GTVNGTVT-----AATNTMQQTSAFAPYGT	SRRPAVTGR
Spma_ASCL	35	GTVNGTVTTATNTMQLGTVNGVAAATNTMQQTS	AFAPYGT
Spfa_ASCL2	38	-----	SGR
Spma_ASCL2	33	-----	SGR
Anru_ASCL	32	-----	RVVPPR
Phpa_ASCL	37	-----	GHR
Syca_ASCL	1	-----	-----
Cepu_ASCL	40	-----	GINSSPR
Phdr_ASCL	1	-----	R
Dico_ASCL	48	-----	PRR
Semo_ASCL	13	-----	NLR
Iso_sp_ASCL	16	-----	SLR
Muac_ASCL	8	-----	ESF
Gnmo_PKSA	13	-----	NNG
Scdi_ASCL3	8	-----	PHR
Scdi_ASCL	1	-----	HR
Scdi_ASCL2	1	-----	R
Lyja_ASCL	1	-----	-----
Azfi_ASCL	26	-----	NVL
Ceri_ASCL	32	-----	GLS
Poac_ASCL	1	-----	-----
Adte_ASCL	1	-----	-----
Poac_ASCL2	1	-----	-----
Adte_ASCL2	1	-----	-----
Zema_PKSB	16	-----	SML
Orsa_PKSB	15	-----	SSM
Nyco_PKSB	12	-----	TLP
Metr_PKSB	10	-----	VTK
Arly_PKSB	12	-----	SVK
Arth_PKSB	11	-----	SEK
Amtr_PKSB	1	-----	-----
Litu_ASCL1	10	-----	VPK
Eugr_PKSB	12	-----	AWK
Soly_PKSB	10	-----	RN
Hean_PKSB	6	-----	ILM
Soly_PKSA	15	-----	FLR
Cagr_PKSC	17	-----	SRR
Arly_PKSC	17	-----	TKR
Arth_PKSC	10	-----	QKR
Hype_PKS1	1	-----	-----
Eugr_PKSA	17	-----	TRR
Metr_PKSA	17	-----	VTR
Amtr_PKSA	10	-----	NGF
Arly_PKSA	17	-----	TRR
Arth_PKSA	17	-----	TRR
Hean_PKSA	1	-----	-----
Nyco_PKSA	15	-----	RTN
Chse_ASCL	1	-----	-----
Cika_ASCL	11	-----	DER
Litu_ASCL2	17	-----	YKR
Maof_ASCL	1	-----	-----
Gibi_ASCL	17	-----	-----
Thpl_ASCL	13	-----	AHP
pita_PKSA	15	-----	SRR
Wemi_ASCL	25	-----	QRR

PKS\_OUT 101 ----MPLI-LHGIGTAVPSRRLSQADAVQVAHR-INAE-TP----EQVRL  
 Arth\_CHS 16 QRADGPAG-ILAI GTANPENHVLQAEYPDYFRI TNSEHMT----DLKEK  
 Ledu\_ASCL 37 EPTPGVAS-VLALGRALPATNVLQDGLAERFFRETGVV-DP----PLQAK  
 Anag\_ASCL 43 EPAAGVAT-VLALGRALPGTVIYQEHVAAGFFKRTGID-NP----PMQAK  
 Phca\_ASCL 6 EPAAGVAT-VLALGRALPGTVIYQEHVAAGFFKRTGID-NP----PLQAK  
 Zema\_PKSA 14 QSSRAKAM-LLALGKSFDPQVLPQEKVVESYLQESSCD-DP----ATRAK  
 Orsa\_PKSA 18 QCSRKAM-LLALGKGLPEQVLPQEKVVETYLQDTICD-DP----ATRAK  
 Mapo\_ASCL 33 CARPGKAT-VLAIGRAVPGVVVKQEGMAERYLRDVHRDDP----ILLAK  
 Rali\_ASCL 1 -----  
 Lej\_sp\_ASCL 9 QANPGKAT-ILAI GRAVPDRVINQEGMAEQFLRDVNCQDP----AVVAK  
 Spfa\_ASCL 70 HARPGKVT-VLAIGRAVPEMMIKNEGLADNFLRDANVD-DP----IMLAK  
 Spma\_ASCL 85 HARPGKVT-VLAIGRAVPEMMIKNEGLADNFLREANVD-DP----IMLAK  
 Spfa\_ASCL2 41 HARPGKVT-VLAIGRAVPEMMIKNEGLADNFRDADVD-DP----VLLAK  
 Spma\_ASCL2 36 HARPGKVT-VLAIGRAVPEMMIKNEGLADNFRDADVD-DP----VLLAK  
 Anru\_ASCL 38 QSRPGKAT-VMAIGRALPDVIVKNETLADQYIEDFKLE-DP----VIQAK  
 Phpa\_ASCL 40 QVTPGKTT-IMAI GRAVPANTTFNDGLADHYIQEFNLQ-DP----VLQAK  
 Syca\_ASCL 1 -----MDVVSQ--RLVCCD-----  
 Cepu\_ASCL 48 QASPGKTT-VLAIGRAVPTNTTKNDGLADHYIEQFQLQ-DP----IVQAK  
 Phdr\_ASCL 2 VARAGKVT-ALAFGKALPETLVKQELLVDGYFRDTKVE-NP----VLRQK  
 Dico\_ASCL 51 VPRAGKVT-ALAFGKALPETLVKQELLVDGYFRDTKVE-NP----VLRQK  
 Semo\_ASCL 16 AARPGKAT-LLAFGKALPDTVVKQEYLVVDGYFRDTKVE-NA----ALKEK  
 Iso\_sp\_ASCL 19 TARPGKAT-ALAFGKALPETLVKQELLVEGYFKDTKVE-NA----VLKEK  
 Muac\_ASCL 11 SIKRKGATNILALGKAFKQVLMQDLLVDGYFRNTNCT-DP----DLKQK  
 Gnmo\_PKSA 16 AATESQQQ-QVGAEAASARKSHAHGVGE GVSAGAAGVPGGRILPQRQ  
 Scdi\_ASCL3 11 NPRPGKAA-LLAFGKAFPRQEVKQELLVDGYFNDTNCN-DP----VLRQK  
 Scdi\_ASCL 3 KPRPGKAA-LLAFGKAFPRHEVRQELLVDGYFHDTNCN-DL----VLRQK  
 Scdi\_ASCL2 2 KPRPGKAA-LLAFGKAFPRHEVRQELLVDGYFHDTNCN-DL----VLRQK  
 Lyja\_ASCL 1 -PSVGKAS-LLAFGKAFPPVEVKQELVDPGYMRDTNCD-DP----VLKSK  
 Azfi\_ASCL 29 KSTPGRAA-VFAFGRAFPRQEVKQEFLEGYLRDTNCN-DP----VLKAK  
 Ceri\_ASCL 35 KTASGKAA-LLAFGKAFPRVEVKQELLAEGYLRDTNCN-DP----VLKAK  
 Poac\_ASCL 1 -PTPGKAV-LLAFGKAFPRVEVKQEY--EGYLRDTNCN-DP----VLKAK  
 Adte\_ASCL 1 -ATPGKAA-LLAFGKAFPAVEVKQEYLAEGYLRDTNCN-DP----VLKAK  
 Poac\_ASCL2 1 -----  
 Adte\_ASCL2 1 -PTAGKAA-LLAFGKAFPAIEVKQEHLEGYLRDTNCN-DP----VLKAK  
 Zema\_PKSB 19 APNPGKAT-ILALGHAFPPQVLMQDYVVDGFMKNTNCD-DP----ELKEK  
 Orsa\_PKSB 18 APNPGKAT-ILALGHAFPPQVLMQDYVVDGFMKNTNCD-DP----ELKEK  
 Nyco\_PKSB 15 ECTPGKAA-ILALGKAFPHQLVIQDYLVVDGYFKNTNCD-DL----YLRQK  
 Metr\_PKSB 13 QVTAGKAT-ILALGKAFPHQLVMOEYLVVDGYFRDTNCD-NP----ELKQK  
 Arly\_PKSB 15 KSNPGKAT-ILALGKAFPHQLVMOEYLVVDGYFKTTNCD-DP----ELKQK  
 Arth\_PKSB 14 KSNPGKAT-ILALGKAFPHQLVMOEYLVVDGYFKTTKCD-DP----ELKQK  
 Amtr\_PKSB 1 -----  
 Litu\_ASCL1 13 RATPGKTT-IMALGKAFPHQLVMOEFLVDGYFKNTKCN-DP----DLKQK  
 Eugr\_PKSB 15 KAGRKAT-ILALGKAFPNQLVMOEFLVDGYFRNTNCD-DP----DLKQK  
 Soly\_PKSB 12 EINFGNAT-ILALGKAFPHQLVMOEFLVDGYFKNTNCD-DP----ELKQR  
 Hean\_PKSB 9 KNGVGKAN-ILALGKAFPHQLVMODLLVDGYFKDTNCD-DP----ELKQK  
 Soly\_PKSA 18 LPTPGKAT-ILAI GKALPPQVLPQDCLVEGYMRDTNCK-DL----RIKEK  
 Cagr\_PKSC 20 TANQ GKAT-VLALGKAFPSNVVSQENLVEEYLREINCD-DL----SIRDK  
 Arly\_PKSC 20 VAYQ GKAT-LLALGKAFPSNVVSQENLVEDYLREIKCD-DL----SIKDK  
 Arth\_PKSC 13 VAYQ GKAT-VLALGKALPSNVVSQENLVEEYLREIKCD-NL----SIKDK  
 Hype\_PKS1 1 -----MGKAFPKQHVPQECLEKFI SDTKCT-DA----AIKEK  
 Eugr\_PKSA 20 SPTPGKAT-ILAI GKAFPSQVIPQECLEGFIRDTKCE-DA----SIKEK  
 Metr\_PKSA 20 APVPGKAT-ILALGKAFPSQVLPQECLEGYIRDTKCE-DD----YVKEK  
 Amtr\_PKSA 13 IGEQKEAT-ILAVGKAFPEQVIPQECLEAYFRNTNCQ-DP----VIREK  
 Arly\_PKSA 20 VANPGKAT-LLALGKAFPSQVVPQENLVEGFIRDTKCE-DA----FIKEK  
 Arth\_PKSA 20 VANAGKAT-LLALGKAFPSQVVPQENLVEGFIRDTKCD-DA----FIKEK  
 Hean\_PKSA 1 -----  
 Nyco\_PKSA 18 SQSGRAK-IMALGKAFPSQLIPQECVVEGYTRDTKCE-DP----VIKEK  
 Chse\_ASCL 1 -----  
 Cika\_ASCL 14 RHTPGKAT-ILALGKAFPHQVIPQEFVQGYFRDTNCD-DL----AMKEK  
 Litu\_ASCL2 20 PRTPGKAA-ILALGKAFPNQLIPQEFVVEGYFRDTKCD-DW----AIKEK  
 Maof\_ASCL 1 -----  
 Gibi\_ASCL 17 --RPGKAT-ILAI GKALPDNLIKQELLVDGYFKDTNCD-DP----VLRQK  
 Thpl\_ASCL 16 KSRPGIAT-ALAFGKAFPDQLVMOEFLVDGYFKNTNCT-DP----ALREK  
 pita\_PKSA 18 QHRPGKTT-AMAFGRAFPDQLVMOEFLVDGYFRNTNCQ-DP----VLRQK  
 Wemi\_ASCL 28 HHRPGKTT-LMALGKAFPDQLVMOEFLVDGYFRNTNCE-DP----VLRQK

PKS OUT	151	MTRTY	-----	QKTKVLSRGSVLL	LEKDGDDGT	
Arth_CHS	61	FKRMC	-----	DKSTIRKRHMHL	-----	TEEF
Ledu_ASCL	81	LQRIC	-----	TSTTVKTRYVVL	-----	SEEI
Anag_ASCL	87	LERIC	-----	KNTTVKTRYVVM	-----	NQGI
Phca_ASCL	50	LERIC	-----	RNTTVKTRYVVV	-----	NQAI
Zema_PKSA	58	LQRLC	-----	TTTTVKTRYTVM	-----	SKEL
Orsa_PKSA	62	LERLC	-----	KTTTVRTRYTVM	-----	SKEL
Mapo_ASCL	78	LQRLC	-----	TNTTVKTRYTVL	-----	TEKM
Rali_ASCL	1	-----	-----	TTVKTRYSVL	-----	NEQL
Lej_sp_ASCL	54	LQRLC	-----	TNTTVKTRYSVL	-----	DEQV
Spfa_ASCL	114	LRLC	-----	ETTTVKTRYVVI	-----	NEQM
Spma_ASCL	129	LRLC	-----	ETTTVKTRYVVI	-----	NEQM
Spfa_ASCL2	85	LRLC	-----	ETTTVKTRYVVI	-----	NEQI
Spma_ASCL2	80	LRLC	-----	ETTTVKTRYVVI	-----	NEQN
Anru_ASCL	82	MRLC	-----	ETTTVKTRYVVM	-----	NDTI
Phpa_ASCL	84	LRLC	-----	ETTTVKTRYLVV	-----	NKEI
Syca_ASCL	13	-----	-----	-----	-----	WFDC
Cepu_ASCL	92	LRLC	-----	ETTTVKTRYMVV	-----	NKEI
Phdr_ASCL	46	LERLC	-----	KTTTVKTRYVVM	-----	TKEI
Dico_ASCL	95	LERLC	-----	KTTTVKTRYVVM	-----	TKEI
Semo_ASCL	60	LQRLC	-----	KTTTVKTRYVVM	-----	SKEI
Iso_sp_ASCL	63	LQRLC	-----	KTTTVKTRYVVM	-----	TKEI
Muac_ASCL	56	LTRLC	-----	KTTTVKTRYLVM	-----	CDEI
Gnmo_PKSA	65	LPRSR	-----	KTTTVKTRYVVM	-----	SDEI
Scdi_ASCL3	55	LERLC	-----	KTTTVKTRYVVM	-----	SPEI
Scdi_ASCL	47	LERLC	-----	KTTTVKTRYVVM	-----	SPEI
Scdi_ASCL2	46	LERLC	-----	KTTTVKTRYVVM	-----	SPEI
Lyja_ASCL	44	LERLC	-----	KSTTVKTRYVVM	-----	CPEI
Azfi_ASCL	73	LERLC	-----	KSTTVKTRYVVM	-----	SREI
Ceri_ASCL	79	LERLC	-----	KSTTVKTRYVVM	-----	SPEI
Poac_ASCL	42	LERLC	-----	KSTTVKTRYVVM	-----	SPEI
Adte_ASCL	44	LERLC	-----	KSTTVKTRYVVM	-----	SPEI
Poac_ASCL2	1	-----	-----	-----	-----	-----
Adte_ASCL2	44	LERLC	-----	KSTTVRRRYVVM	-----	SPEI
Zema_PKSB	63	LTRLC	-----	KTTTVRTRYVVM	-----	SDEI
Orsa_PKSB	62	LTRLCTVDPNLIICSYKIYSTIIEIAC	-----	KTTTVKTRYVVM	-----	SEEI
Nyco_PKSB	59	LARLC	-----	KSTTVKTRYVVM	-----	SEEI
Metr_PKSB	57	LARLC	-----	KTTTVKTRYVVM	-----	NEEI
Arly_PKSB	59	LTRLC	-----	KTTTVKTRYVVM	-----	SEEI
Arth_PKSB	58	LTRLC	-----	KTTTVKTRYVVM	-----	SEEI
Amtr_PKSB	1	-----	-----	-----	-----	SDEI
Litu_ASCL1	57	LSRLC	-----	KTTTVKTRYVVM	-----	SEEI
Eugr_PKSB	59	LTRLC	-----	KTTTVKTRYVVM	-----	SEEI
Soly_PKSB	56	LTRLC	-----	KTTTVKTRYVVM	-----	SEEI
Hean_PKSB	53	LTRLC	-----	KTTTVKTRYVVM	-----	SQEI
Soly_PKSA	62	LERLC	-----	KTTTVKTRYTVM	-----	SKEI
Cagr_PKSC	64	LQHLC	-----	KTTTVKTRYTVM	-----	SRET
Arly_PKSC	64	LQHLC	-----	KSTTVKTRYTVM	-----	SRET
Arth_PKSC	57	LQHLC	-----	KSTTVKTRYTVM	-----	SRET
Hype_PKS1	34	LERLC	-----	ETTTVKTRYTVM	-----	CKEV
Eugr_PKSA	64	LERLC	-----	KTTTVKTRYTVM	-----	SKEI
Metr_PKSA	64	LTRLC	-----	KNTTVKTRYTVM	-----	SKEI
Amtr_PKSA	57	LERLC	-----	KNTTVKTRYTVI	-----	SKEI
Arly_PKSA	64	LEHLC	-----	KTTTVKTRYTVL	-----	SREI
Arth_PKSA	64	LEHLC	-----	KTTTVKTRYTVL	-----	TREI
Hean_PKSA	1	--MLG	-----	KTTTVKTRYTVM	-----	SKEI
Nyco_PKSA	62	LERLC	-----	KTTTVKTRYTVM	-----	SKEI
Chse_ASCL	1	-----	-----	-----	-----	-----
Cika_ASCL	58	LERLC	-----	KTTTVKTRYTVM	-----	SKEI
Litu_ASCL2	64	LERLC	-----	KTTTVKTRYTVM	-----	SKEI
Maof_ASCL	1	-----	-----	-----	-----	-----
Gibi_ASCL	59	LDRLC	-----	KNTTVKTRYVVM	-----	CNEI
Thpl_ASCL	60	LDRLC	-----	KTTTVKNRYVVM	-----	SDEI
pita_PKSA	62	LERLC	-----	KTTTVKTRYVVM	-----	SDEI
Wemi_ASCL	72	LERLC	-----	KTTTVKTRYVVM	-----	SDEI

PKS_OUT	201	TQERLSFYGEESPGTAERMQAFEDHAGELALEAAAKAISDSDISATAITH
Arth_CHS	82	LKENPHMCAYMAPSLDTRQDIVVVEVPKLGKEAAVKAIKEWGQPKSKITH
Ledu_ASCL	102	LLAHPEFLDESVPVSRQRLQVCGEELEKMGVEAGNKCLAEWGRDRSFITH
Anag_ASCL	108	LEAHPEFMDEKIPSIROKLOVCGEAELEKLSVEAANNCLAEWGRDRSSITH
Phca_ASCL	71	LEAHPEFMDEKIPSIGOKLOVCGEAELEKLGVEAADNCLAEWGRDRSSITH
Zema_PKSA	79	LDKHPELKMEGTPTLTPLRLDICNAAVIDLGAAAARAALDEWGRPAADITH
Orsa_PKSA	83	LDEHPELRTEGTPTLTPLRLDICNAAVLELGATAARAALGEWGRPAADITH
Mapo_ASCL	99	LKENPGFLIEGASTVKQRLEISADAVTKLGVEAAKKAMEEWGRPAGDITH
Rali_ASCL	15	LRENPSFLIEGASTVKQRLEISGDAVTKMGAEAAANRALEEWGGDLHAITH
Lej_sp_ASCL	75	LRDNPSFLVQGASTVKQRLEISGDAVTKMGTEAAKRALAEWGRPLDMITH
Spfa_ASCL	135	LRENPNFLIEGAPTLGARLRISGDAVTKLGVEAAVDAIREWGRPISDITH
Spma_ASCL	150	LRENPNFLIEGAPTLGARLRISGDAVTKLGVEAAVDAIREWGRPISDITH
Spfa_ASCL2	106	LRENPNFLIEGASSVGARLRISGDAVTKLGMEATEAIREWGRPLVSDITH
Spma_ASCL2	101	LRENPNFLIEGAPSVGERLRISGDAVTKLGMEATEAIREWGRPLVSDITH
Anru_ASCL	103	LKENPDLFVEGASTVRQRLEITGEAVTKMGVEAATMAINEWGOPISSITH
Phpa_ASCL	105	LDEHPEFLVDGAATVSRQLAITGEAVTQLGHEAATAAIKEWGRPASEITH
Syca_ASCL	17	LDFW-----TGEAVTQLGLEAATAAIKEWGRPVSEITH
Cepu_ASCL	113	LDEHPDLFVEGAATVSRQLAITGEAVTQLGLEAATAAIKEWGRPVSEITH
Phdr_ASCL	67	LEEHPEFYTAGAPSIQRORLEISGAAVTKLATEASMHAIKEWGRPISDITH
Dico_ASCL	116	LEKHPEFYTAGAPSIQRORLEISGAAVTKLAVEAASNAVKEWGRPISEITH
Semo_ASCL	81	LENHPEFYTPGTPSIQRORLEIAGEAVTKMGVAAATQALAEWGRPISDITH
Iso_sp_ASCL	84	LEKHPEFYTAGTPSIQRORLEISGEAVTKLAVGAATMALKEWGOPLTDITH
Muac_ASCL	77	LENHPELARDGQPTLRQRLEISHEAVTEMAIEASRSCVKAWGRPFAAITH
Gnmo_PKSA	86	LAKHPELLOEGAATVRQRLEISNAAVTELAVEACRACVAEWGRPATEITH
Scdi_ASCL3	76	LQKYPELAVEGATSVRQRLEISNEAVTEIATEAANNAIKEWGRPLSEITH
Scdi_ASCL	68	LQKYPELAVEGATSVRQRLEISNEAVTEIATEAANAIAIKEWGRPISEITH
Scdi_ASCL2	67	LQKYPELAVEGATSVRQRLEISNEAVTEIATEAANAIAIKEWGRPISEITH
Lyja_ASCL	65	LAKHPELAMEGATSIQRORLEISNEAVTTMAKEAALQAVEEWGRPISDVTH
Azfi_ASCL	94	LEKYPELTVEGATSIQRORLEISNEAVTEIGVEAAKQAIKEWGRPLSDITH
Ceri_ASCL	100	LAKYPELTVEGATSIQRORLEISNEAVTEIGVEAAKQAILEWGRPVNQITH
Poac_ASCL	63	LAKYPELTVEGATSIQRORLEISNEAVTEIGVEAAKQAISEWGRPASQITH
Adte_ASCL	65	LAKYPELTAEGATSIQRORLEISNQAVTEIGVEAARQAIAEWGRPASQITH
Poac_ASCL2	1	-----SQITH
Adte_ASCL2	65	LTKYPQLTVEGATSIQRORLEISNQAVTEIGVEAAKQAIAEWGRPTSQITH
Zema_PKSB	84	LKNYPELAQEGGLPTMNQRDLISNAAVTQMATEASLSCVRSWGGALSSITH
Orsa_PKSB	107	LKSYPELAQEGQPTMKQRDLISNKAVTQMATEASLACVRSWGGALSEITH
Nyco_PKSB	80	LKYPELAVEGLPTVQRQLDVSNEAVTKMAIEASRSCVKQWGRPASDITH
Metr_PKSB	78	LKYPELAVEGASTVKQRLEICNEAVTQMATEASQVCIKNWGGSLSDITH
Arly_PKSB	80	LKYPELAIEGGSTVTRQLDICNDAVTEMAVEASRACIKNWGRSISEITH
Arth_PKSB	79	LKYPELAIEGGSTVTRQLDICNDAVTEMAVEASRACIKNWGRSISDITH
Amtr_PKSB	6	LKYPELAIEGLPTISQRLSISNEAVTEMAIEASKACIKNWGRPVSDITH
Litu_ASCL1	78	LKYPELAVEGLPTITQRDLISNKAVTQMATEASQACIKSWGRPVSDITH
Eugr_PKSB	80	LKYPELAIEGLPTVKQRDLICNEAVTEMAIKASQDCIKKWGRPASDITH
Soly_PKSB	77	LKYPELAIEGLPTVKQRDLICNAAVTEMAIEASQSCIKKWGRPISDITH
Hean_PKSB	74	LKYPELAIEGLPTVKQRDLICNKAVTQMATEASESCKIKKWGRPVSDITH
Soly_PKSA	83	LEKYPELATEGTPTINQRLEIANEAVVEMAKEASLACIKEWGRSVDEISH
Cagr_PKSC	85	LHKYPELATEGSPTIKQRLEIANEAVVQOMAYEASLVCIKEWGRAVDITH
Arly_PKSC	85	LQKYPELATEGSPTIKQRLEIANEAVVQOMAYEASLVCIKEWGRTVEDITH
Arth_PKSC	78	LHKYPELATEGSPTIKQRLEIANEAVVQOMAYEASLVCIKEWGRAVEDITH
Hype_PKS1	55	LDKYPELAIEGSPTIRQRLEIANEAVVEMATEASHACIKEWGRPISEITH
Eugr_PKSA	85	LDKYPELVREGSPTLNQRLEIANPAVTEMALQASLSCIKQWGRPPGHITH
Metr_PKSA	85	LDEYPELFIETPTITRQKLEIANPAVTEMATRASKACIEEWGRSPPEITH
Amtr_PKSA	78	LDKYPELTTEGSPTITQRDLIANHAVLEMALQASLSCISDWGKPVSQITH
Arly_PKSA	85	LDKYPELTTEGSPTIKQRLEIANEAVVEMALEASLVCIKEWGRPVEDITH
Arth_PKSA	85	LAKYPELTTEGSPTIKQRLEIANEAVVEMALEASLVCIKEWGRPVEDITH
Hean_PKSA	20	LDKYPELATEGSATISQRLSIANQAVTEMAKEASLACFKQWGRPAEDITH
Nyco_PKSA	83	LDKYPELATEGSPTIKQRDLIANSVLDMAEASLACIKEWGRPLTEITH
Chse_ASCL	1	-----MAMEASLACIKEWGRPTDITH
Cika_ASCL	79	LEKYPELTREGSPTIKQRDLIANNVLEMALEASLNCIKEWGRPADITH
Litu_ASCL2	85	LDKYPELATEGSPTIKQRDLIANTAVLEMAVEASLACIREWGRPAADITH
Maof_ASCL	1	-----MAVEASLACIKEWGRPADITH
Gibi_ASCL	80	LKYPELAIEGSATIRQRLEISNKAVTDMAVEAASKCIKEWGRPTSEITH
Thpl_ASCL	81	LEKYPELTVEGSATVRQRLEIANKAVTDMAVEASEKCLKEWGRPASDITH
pita_PKSA	83	LQHPPELAIEGSATVRQRLEISNVAVTDMAVDACRDCLKEWGRPVSEITH
Wemi_ASCL	93	LQSYPDIAIEGKPTVRQRLEISNGAVTDMAVEAARNCIAEWGRPPQEITH

PKS_OUT	251	LVTVSCITGFQSPGVDLFLIEKLDLSPSVORTHIGFMGCHAAALNGLRVAHA
Arth_CHS	132	VVFCTTSGVDMPGADYQLTKLLGLRPSVKRLMMYQQGCFAGGTVLRTAKD
Ledu_ASCL	152	LTYVSSSEVRLPGGDVLIARSLGLNPDVNRVMLYMLGCFGGAAALRVAKD
Anag_ASCL	158	FITYVSSSEVRLPGGDLLVAQALGLSPDVNRVMLYMLGICYGGAAALRVAKD
Phca_ASCL	121	LVIYSSSEVRLPGGDLLVAQALGLSPDVNRVMLYMLGICYGGAAALRVAKD
Zema_PKSA	129	LTYISSSDIRLPGGDHLAARLGLSPNTVRTSLFLFLGCSGGAAALRTAKD
Orsa_PKSA	133	LVIYSSSEVRLPGGDHLAARLGLHPNTVRTSLFLFLGCSGGAAALRTAKD
Mapo_ASCL	149	LVIYSSSEVRLPGGDHLAARLGLRNDVNRVMLYMLGCCGGGAAGIRVAKD
Rali_ASCL	65	LVIYSSSEVRLPGGDHLAVSLGLRNDVNRVMLYMLGICYGGASGIRVAKD
Lej_sp_ASCL	125	LVIYSSSEVRLPGGDHLAVSLGLRNDVNRVMLYMLGICYGGSSGIRVAKD
Spfa_ASCL	185	LVIYSSSEVRLPGGDHLARHLGLRNDVNRVMLYMLGICYGGASGIRVAKD
Spma_ASCL	200	LVIYSSSEVRLPGGDHLARHLGLRNDVNRVMLYMLGICYGGASGIRVAKD
Spfa_ASCL2	156	LVIYSSSEVRLPGGDHLARHLGLRNDVNRVMLYMLGICYGGASGIRVAKD
Spma_ASCL2	151	LVIYSSSEVRLPGGDHLAKLLGLRNDVNRVMLYMLGICYGGASGIRVAKD
Anru_ASCL	153	LVIYSSSEVRLPGGDHLANSGLRNDVNRVMLYMLGICYGGSSGIRVAKD
Phpa_ASCL	155	LVIYSSSEVRLPGGDLYLAQLLGLRNDVNRVMLYMLGICYGGASGIRVAKD
Syca_ASCL	50	LVIYSSSEVRLPGGDLYLAQLLGLRNDVNRVMLYMLGICYGGASGIRVAKD
Cepu_ASCL	163	LVIYSSSEVRLPGGDLYLSQLLGLRNDVNRVMLYMLGICYGGASGIRVAKD
Phdr_ASCL	117	LVIYSSSEVRLPGGDHLAKTLGLRNDVNRVMLYMLGICYGGAAGLRTAKD
Dico_ASCL	166	LVIYSSSEVRLPGGDHLAKSLGLRNDVNRVMLYMLGICYGGAAGLRTAKD
Semo_ASCL	131	LVIYSSSEVRLPGGDLYLSKHLGLSSDTSRVMLYMLGCCGGAGGLRVSKD
Iso_sp_ASCL	134	LVIYSSSEVRLPGGDLYLAKNIGLREDVNRVMLYMLGCCGGGAAGLRVSKD
Muac_ASCL	127	LVIYSSSEVRLPGGDHLARALRLNPDVSRVMSIFAGCSGGVAGLVAKD
Gnmo_PKSA	136	LVIYSSSEVRLPGGDHLVAQRGLRNDVGRVMSMLGICYGGVTALRVARD
Scdi_ASCL3	126	LVIYSSSEVRLPGGDLYLAKILGLRNDVNRVMLYMLGICYGGLTGLRVARD
Scdi_ASCL	118	LVIYSSSEVRLPGGDLYLAKLLGLRNDVNRVMLYMLGICYGGLTGLRVARD
Scdi_ASCL2	117	LVIYSSSEVRLPGGDLYLAKLLGLRNDVNRVMLYMLGICYGGLTGLRVARD
Lyja_ASCL	115	LVIYSSSEVRLPGGDHLAKALALREDVNRVMLYMLGICYGGVTGLRVAKD
Azfi_ASCL	144	LVIYSSSEVRLPGGDHLARELGLRNDVNRVMLYMLGICYGGVTGLRVAKD
Ceri_ASCL	150	LVIYSSSEVRLPGGDHLARDLGLNTDVNRVMLYMLGICYGGVTGLRVAKD
Poac_ASCL	113	LVIYSSSEVRLPGGDHLARDLGLNTDVNRVMLYMLGICYGGVTGLRVAKD
Adte_ASCL	115	LVIYSSSEVRLPGGDHLARDLGLNTDVNRVMLYMLGICYGGVTGLRVAKD
Poac_ASCL2	6	LVIYSSSEVRLPGGDHLASRDGLSTDVNRVMLYMLGICYGGVTGLRVAKD
Adte_ASCL2	115	LVIYSSSEVRLPGGDHLARDLGLNTDVNRVMLYMLGICYGGVTGLRVAKD
Zema_PKSB	134	LVIYSSSEVRLPGGDHLARALGLSPDVRVMLAFTGCSGGVAGLVAKAG
Orsa_PKSB	157	LVIYSSSEVRLPGGDHLARALGLSPDVRVMLAFTGCSGGVAGLVAKAG
Nyco_PKSB	130	LVIYSSSEVRLPGGDHLARGLGLNPDVCRVLLYFMGCSGGVAGLVAKD
Metr_PKSB	128	LVIYSSSEVRLPGGDLYLSKGLGLNPTIRRTMLYFSGCSGGVAGLVAKD
Arly_PKSB	130	LVIYSSSEVRLPGGDLYLAKGLGLSPDTHRVLVLYFVGCSSGGVAGLVAKD
Arth_PKSB	129	LVIYSSSEVRLPGGDLYLAKGLGLSPDTHRVLVLYFVGCSSGGVAGLVAKD
Amtr_PKSB	56	LVIYSSSEVRLPGGDLYLARGLGLNPEANRVMLYFMGCSGGVAGLVAKD
Litu_ASCL1	128	LVIYSSSEVRLPGGDLYLAQGLGLSPEVSRVMLYFMGCSGGVAGLVAKD
Eugr_PKSB	130	LVIYSSSEVRLPGGDLYLAKGILKLSPETRRVLYFVGCSSGGVAGLVAKD
Soly_PKSB	127	LVIYSSSEVRLPGGDLYLAKGLGLNPETKRVMLYFAGCSGGVAGLVAKD
Hean_PKSB	124	LVIYSSSEVRLPGGDLYLAKGILGLSPDTRVMLYFSGCSGGVAGLVAKD
Soly_PKSA	133	LVIYSSSEVRLPGGDHLSTELGLRSDVGRVMLYFLGICYGGVTGLRVAKD
Cagr_PKSC	135	LVIYSSSEVRLPGGDLYLSAQLGLSNEVQVMLYFLGICYGGVSGLRVAKD
Arly_PKSC	135	LVIYSSSEVRLPGGDLYLSTQLGLRNEVQVMLYFLGICYGGVSGLRVAKD
Arth_PKSC	128	LVIYSSSEVRLPGGDLYLSAQLGLSNEVQVMLYFLGICYGGVSGLRVAKD
Hype_PKS1	105	LVIYSSSEVRLPGGDLYLASELGLRNDVRRVMLYFLGICYGGVTGLRVAKD
Eugr_PKSA	135	LVIYSSSEVRLPGGDHLATRLGLRSDVGRVMLYFLGICYGGVTGLRVAKD
Metr_PKSA	135	LVIYSSSEVRLPGGDLYLANELGLKSDVNRVMLYFLGICYGGVSGLRVAKD
Amtr_PKSA	128	LVIYSSSEVRLPGGDLYLANLGLKSDVNRVMLYFLGICYGGVTGLRVAKD
Arly_PKSA	135	LVIYSSSEVRLPGGDLYLSAKLGLRNDVNRVMLYFLGICYGGVTGLRVAKD
Arth_PKSA	135	LVIYSSSEVRLPGGDLYLSAKLGLRNDVNRVMLYFLGICYGGVTGLRVAKD
Hean_PKSA	70	LVIYSSSEVRLPGGDLYLASELGLRNDVNRVMLYFLGICYGGVTGLRTAKD
Nyco_PKSA	133	LVIYSSSEVRLPGGDLYLASQLGLRNSVGRVMLYFLGICYGGVTGLRVAKD
Chse_ASCL	23	LVIYSSSEVRLPGGDLYLASQLGLRNDVGRVMLYFLGICYGGVTGLRVAKD
Cika_ASCL	129	LVIYSSSEVRLPGGDLYLASQLGLRSDVGRVMLYFLGICYGGVTGLRVAKD
Litu_ASCL2	135	LVIYSSSEVRLPGGDLYLASQLGLRSDVGRVMLYFLGICYGGVTGLRVAKD
Maof_ASCL	23	LVIYSSSEVRLPGGDLYLASQLGLRSDVGRVMLYFLGICYGGVTGLRVAKD
Gibi_ASCL	130	LVIYSSSDIRLPGGDMHVAKELGLRNDVSRVLLYFLGCTGGVAGLVAKE
Thpl_ASCL	131	LVIYSSSEVRLPGGDVFLARGLGLRNDVSRVAVYFMGCSGGVTGLRVAKD
pita_PKSA	133	LVIYSSSEVRLPGGDLYLASRLGLRSDVSRVMLYFLGICYGGVTGLRVAKD
Wemi_ASCL	143	LVIYSSSEVRLPGGDLYLAARLGLRNDVSRVMLYFLGICYGGVTGLRVAKD

PKS_OUT	301	FAEMDPKAVVLLCAVELCSLHMAYGW-----HPEQVVANALFADGAAAV
Arth_CHS	182	LAENNRGARVLLVCSEITAV----TFRGPSDLHLDSLVGQALFSDGAAAL
Ledu_ASCL	202	LAESSKGARVLLVITSETTLI----GWRPPNPDRPYDLVGAALFGDGAGAA
Anag_ASCL	208	LAENTKQARVLLVITSETTLI----GWRPPNPDRPYDLVGAALFGDGAGAA
Phca_ASCL	171	LAENTKQARVLLVITSETTLI----GWRPPNPDRPYDLVGAALFGDGAGAA
Zema_PKSA	179	IAENNPGRVLLVTAAEETTVL----GFRPPSYDRPYDLVGAALFGDGASAV
Orsa_PKSA	183	IAENNPGRVLLVAAEETTVL----GFRPPSPDRPYDLVGAALFGDGASAA
Mapo_ASCL	199	LAENNPGRVLLITSETCLI----GYRAPHNPDRPYDLVGAALFGDGAAAM
Rali_ASCL	115	LAENNPGRVLLITSDTTII----GFRAPNPDRPYDLVGAALFGDGAAAM
Lej_sp_ASCL	175	LAENNPGRVLLITCDTTII----GFRAPNPDRPYDLVGAALFGDGAAAM
Spfa_ASCL	235	LAENNPGRVLLVITSETTLI----GYRKPNRDRPYDLVGAALFGDGAAAM
Spma_ASCL	250	LAENNPGRVLLVITSETTLI----GYRKPNRDRPYDLVGAALFGDGAAAM
Spfa_ASCL2	206	LAENNPGRVLLVITSETTLI----GYRKPSRDRPYDLVGAALFGDGAAAM
Spma_ASCL2	201	LAENNPGRVLLVITSETTLI----GYRKPSRDRPYDLVGAALFGDGAAAM
Anru_ASCL	203	LAENNPGRVLLVITSECTLI----GYRPNLERPYDLVGAALFGDGAAAM
Phpa_ASCL	205	LAENNPGRVLLITSECTLI----GYKSLSPDRPYDLVGAALFGDGAAAM
Syca_ASCL	100	LAENNPGRVLLVITSECTLI----GYKSLSPDRPYDLVGAALFGDGAAAM
Cepu_ASCL	213	LAENNPGRVLLITSECTLI----GYKCLSPDRPYDLVGAALFGDGAAAM
Phdr_ASCL	167	LAENNPGRVLLATSDDTTII----GWRPPNPDRPYDLVGAALFGDGAGAM
Dico_ASCL	216	LAENNPGRVLLATSDDTTII----GWRPPNPDRPYDLVGAALFGDGAGAM
Semo_ASCL	181	LAENNPGRVLLVISDDTTII----GWRPPNPQRPYDLVGAALFGDGASAV
Iso_sp_ASCL	184	LAENNPGRVLLVISDDTTII----GWRPPNPERPYDLVGAALFGDGAAAM
Muac_ASCL	177	IAENNPGRVLLATSETTIV----GFRPPNPHRPYDLVGAALFGDGAGAV
Gnmo_PKSA	186	IAENNPGRVLLVATAEETTVL----GFRPPNADRPYDLVGAALFGDGAAAL
Scdi_ASCL3	176	IAENNPGRVLLVITSETTIL----GFRTPNPQRPYDLVGAALFGDGAHAV
Scdi_ASCL	168	LAENNPGRVLLVITSETTIL----GFRPPNPQRPYDLVGAALFGDGAHAV
Scdi_ASCL2	167	LAENNPGRVLLVITSETTIL----GFRPPNPQRPYDLVGAALFGDGAHAV
Lyja_ASCL	165	LAENNPGRVLLVITSETTLV----GYRPPSRARPYDLVGAALFGDGAAAM
Azfi_ASCL	194	LAENNPGRVLLVITSETTII----GYRPPNPNRPYDLVGAALFGDGAAAT
Ceri_ASCL	200	LAENNPGRVLLVITSETTII----GYRPPNPSRPYDLVGAALFGDGAAAV
Poac_ASCL	163	LAENNPGRVLLVITSETTII----GYRPPNPNRPYDLVGAALFGDGAAAA
Adte_ASCL	165	LAENNPGRVLLVITSETTII----GYRPPNPNRPYDLVGAALFGDGAAAA
Poac_ASCL2	56	LAENNPGRVLLVITSETTII----GYRPPNPNRPYDLVGAALFGDGAAAV
Adte_ASCL2	165	LAENNPGRVLLVITSETTII----GYRPPNPNRPYDLVGAALFGDGAAAA
Zema_PKSB	184	LAESCPCGARVLLATSETTIV----GFRPPSPDRPYDLVGAALFGDGAGAA
Orsa_PKSB	207	LAESCPCGARVLLATSETTIV----GFRPPSPDRPYDLVGAALFGDGAGAA
Nyco_PKSB	180	IAENNPGRVLLATSETTII----GFRPPSADRPYDLVGAALFGDGAGAM
Metr_PKSB	178	IAENNPGRVLLATSETTII----GFKPPSADRPYDLVGAALFGDGAGAM
Arly_PKSB	180	IAENNPGRVLLATSETTII----GFKPPSVDRPYDLVGAALFGDGAGAM
Arth_PKSB	179	IAENNPGRVLLATSETTII----GFKPPSVDRPYDLVGAALFGDGAGAM
Amtr_PKSB	106	IAENNPGRVLLATSETTII----GFKPPSASRPYDLVGAALFGDGAGAM
Litu_ASCL1	178	IAENNPGRVLLATSETTIV----GFKPPSASRPYDLVGAALFGDGAGAM
Eugr_PKSB	180	IAENNPGRVLLATSETTII----GYKPPSAERPYPYDLVGAALFGDGAGAM
Soly_PKSB	177	IAENNPGRVLLATSETTII----GFKPPSVDRPYDLVGAALFGDGAGAM
Hean_PKSB	174	IAENNPGRVLLATSETTII----GYKPPSVKRPYDLVGAALFGDGAGAM
Soly_PKSA	183	IAENNP-----AAAV
Cagr_PKSC	185	IAENNPGRVLLITSETMVL----GFRPPNKARPYDLVGAALFGDGAAAL
Arly_PKSC	185	IAENNPGRVLLITSETTVL----GFRPPNKARPYDLVGAALFGDGAAAL
Arth_PKSC	178	IAENNPGRVLLITSETTVL----GFRPPNKARPYDLVGAALFGDGAAAL
Hype_PKS1	155	IAENNPGRVLLITSETTIL----AFRPPSNARPYDLVGAALFGDGAAAV
Eugr_PKSA	185	IAENNPGRVLLITSETTIL----GFRPPNKARPYDLVGAALFGDGAAAA
Metr_PKSA	185	IAENNPGRVLLITSETTIL----GFRPPNKARPYDLVGAALFGDGAAAA
Amtr_PKSA	178	IAENNPGRVLLITAEETTVL----GYRPPNLARPYDLVGAALFGDGAAAV
Arly_PKSA	185	IAENNPGRVLLITSETTIL----GFRPPNKARPYDLVGAALFGDGAAAV
Arth_PKSA	185	IAENNPGRVLLITSETTIL----GFRPPNKARPYDLVGAALFGDGAAAV
Hean_PKSA	120	IAENNPGRVLLITSETTIL----GFRPPNKSRPYDLVGAALFGDGAAAA
Nyco_PKSA	183	IAENNPGRVLLITSETTIL----GYRPPNMARPYDLVGAALFGDGAAAV
Chse_ASCL	73	IAENNPGRVLLITSETTIL----GYRPPNMARPYDLVGAALFGDGAAAV
Cika_ASCL	179	IAENNPGRVLLITSETTIL----GYRPPNKSRPYDLVGAALFGDGAAAV
Litu_ASCL2	185	IAENNPGRVLLITSETTIL----GYRPPNMSRPYDLVGAALFGDGAAAV
Maof_ASCL	73	IAENNPGRVLLITSETTIL----GYRPPNMSRPYDLVGAALFGDGAAAV
Gibi_ASCL	180	LAENNPGRVLLATSETTII----GYRPPNPDRPYDLVGAALFGDGAGAM
Thpl_ASCL	181	LAENNPGRVLLATSETTLV----GFRPPNPERPYDLVGAALFGDGAAAM
pita_PKSA	183	LAENNPGRVLLATSETTIL----GFRPPNPERPYDLVGAALFGDGAAAM
Wemi_ASCL	193	IAENNPGRVLLATAEETTVL----GFRPPNPDRPYDLVGAALFGDGAAAV

PKS_OUT	351	VASVNP-SP	-----	THQTLALRRSGSMVIPN
Arth_CHS	228	IVGSDPDTSVG	-----	EKPIFEMVSAAQITILPD
Ledu_ASCL	248	VVGADP-LPG	-----	EAPSFELCFAGQTFPLPG
Anag_ASCL	254	VIGADP-VAG	-----	EVPSFEMRFAGQSFVPG
Phca_ASCL	217	VIGADP-VAG	-----	EVPSFELRFAGQSFVPG
Zema_PKSA	225	IIGAGP-MTPA	-----	ENPFLELEFSTQEFPLPG
Orsa_PKSA	229	IIGAGP-IAAE	-----	ESPFLLELQFSTQEFPLPG
Mapo_ASCL	245	IIGADP-IPVV	-----	ETPFFEFHWAGQSFIPQ
Rali_ASCL	161	IIGADP-LPVL	-----	ERAHFELHWAGQSFIPG
Lej_sp_ASCL	221	IIGADP-LPVL	-----	EKPYFELHWAGQSFIPG
Spfa_ASCL	281	IILGTD-LPVL	-----	ETASFELDWAGQWYLPG
Spma_ASCL	296	IILGTD-LPVL	-----	ETASFELDWAGQWYLPG
Spfa_ASCL2	252	IILGTD-LPVI	-----	ETPCFELDWAGQCYLPG
Spma_ASCL2	247	IILGTD-LPVT	-----	ETPCFELDWAGQCYLPG
Anru_ASCL	249	IMGADP-LPA	-----	ERAFELDWAGQRFPLPG
Phpa_ASCL	251	IMGKDP-IPVL	-----	ERAFELDWAGQSFIPG
Syca_ASCL	146	IMGADP-IPVL	-----	ERAFELDWAGQCFIPN
Cepu_ASCL	259	VMGADP-IPVL	-----	ERPFFELDWAGQSFIPN
Phdr_ASCL	213	IIGADP-LPSI	-----	ETPYFELDYATQSFIPG
Dico_ASCL	262	IIGADP-LPII	-----	ETPYFELDCAEQSYIPG
Semo_ASCL	227	VIGADP-LPS	-----	ENPCYELVTASQCFVPG
Iso_sp_ASCL	230	VIGSDP-IPGV	-----	EKPSFELEWAGQSYVPG
Muac_ASCL	223	VILGTD-IPGT	-----	ETPMFELSSAIQQYLPD
Gnmo_PKSA	232	LLGADP-RPGL	-----	ERAFLELDRAVQQFLPG
Scdi_ASCL3	222	IMGAGP-LAIT	-----	EKPYFELEWAGQSYLPK
Scdi_ASCL	214	IIGAGP-LSIG	-----	EKPYFELEWAGQSYLPK
Scdi_ASCL2	213	IIGAGP-LSIG	-----	EKPYFELEWAGQSYLPK
Lyja_ASCL	211	VILGTEP-VPVR	-----	EMPYFELHWAGQSYLPG
Azfi_ASCL	240	IILGTD-RSESIPSP	IPSSNESENKNGVIYSE	EIPYFELHWAGQSFPLPG
Ceri_ASCL	246	IILGAHP-SPYL	-----	ETPFFELHWAGQSFPLPN
Poac_ASCL	209	IILGTHP-SPHS	-----	ETPFFELHWAGQSFPLPN
Adte_ASCL	211	IILGTHP-SPHV	-----	ETPFFELHWAGQSFPLPN
Poac_ASCL2	102	IILGAHP-SPHI	-----	EKSFFELHWAGQSFPLPN
Adte_ASCL2	211	IILGAHP-SPHL	-----	ETPFFELHWAGQSFPLPN
Zema_PKSB	230	VILGTD-APA	-----	ERPLFELHSALQRFPLPD
Orsa_PKSB	253	VVGADP-TPV	-----	ERPLFELHSALQRFPLPD
Nyco_PKSB	226	IILGTD-VPGV	-----	ERPSFELHYAVQTFPLPN
Metr_PKSB	224	IIGSDP-KLET	-----	EMPLFELHTSAQEFIPD
Arly_PKSB	226	IVGSDP-DPIC	-----	EKPLFELHTAIQNFPLPD
Arth_PKSB	225	IIGSDP-DPIC	-----	EKPLFELHTAIQNFPLPE
Amtr_PKSB	152	IILGTNP-TEG	-----	EKPLFELHTAIQHFLPG
Litu_ASCL1	224	IVGTDA-ILGI	-----	ETPFFELHSAIQQFLPD
Eugr_PKSB	226	IIGADP-DLSI	-----	EKPLFELNTAIQHFLPD
Soly_PKSB	223	IIGSNP-TRDI	-----	ERPLFELHTAIQHFLPD
Hean_PKSB	220	IIGSDP-TRS	-----	ERPLFELHTAIQNFPLPD
Soly_PKSA	193	IILGTEP-IGT	-----	ESPFIELNFAMQQFLPG
Cagr_PKSC	231	IIGADP-RES	-----	ESPFVLELHCAMQQFLPG
Arly_PKSC	231	IIGADP-RES	-----	ESPFMELHCALQQFLPQ
Arth_PKSC	224	IIGADP-RES	-----	ESPFMELHCAMQQFLPQ
Hype_PKSA	201	IILGTNP-VAGK	-----	ESPFMELNYATQQFLPG
Eugr_PKSA	231	IIGADPL-CHG	-----	ESPFMELRHAAQRFPLPG
Metr_PKSA	231	IILGTNP-LPNQ	-----	ERPFMELNYAVQQFLPN
Amtr_PKSA	224	IVGSGP-FSEG	-----	EKPFMELHNAVQEFPLPG
Arly_PKSA	231	IIGADP-REC	-----	EAPFMELHYAVQQFLPG
Arth_PKSA	231	IIGADP-REC	-----	EAPFMELHYAVQQFLPG
Hean_PKSA	166	IIGADP-ISKV	-----	ESPFMELSYATQQFLPG
Nyco_PKSA	229	IVGCDP-NGK	-----	ERPFMELHYAVQQFLPG
Chse_ASCL	119	VILGTD-LRGI	-----	EKPFMELNYAVQQFLPG
Cika_ASCL	225	VIGATP-RNGT	-----	ETPFMELNYAVQQFLPG
Litu_ASCL2	231	VVGTD-LVAT	-----	EIPFMELNYAVQKFLPG
Maof_ASCL	119	VVGTD-LTAT	-----	EMPFMELNYAVQQFLPG
Gibi_ASCL	226	IILGTD-SPT	-----	EKPSFELHSAIQQFLPG
Thpl_ASCL	227	MIGTNP-LAE	-----	EKPSFELDWAVQQFLPG
pita_PKSA	229	VILGTD-RPEAG	-----	EQGFLELDWAVQQFLPD
Wemi_ASCL	239	IILGTD-RPGL	-----	ESAFLELDTAVQQFLPG



PKS_OUT	401	SSDLMHWEIGDHGFAMGLSPLVPETVGAALLPWLRDWLK-----
Arth_CHS	256	SDGALDGHLEEVGLTFHLLKDVPLISKNIVKSLDEAFK-P-----
Ledu_ASCL	274	THKTIIEGELTETGIFLLGRDLPOIIEDNIAAFCDRFLT-K-----
Anag_ASCL	280	TSKTIIDGILTDGTGLFRLGRDLPOIIEDNIEAFSERFFA-KIAELQQEQP
Phca_ASCL	243	TSKTIIDGILTDGTGLFRLGRDLPOIIEDNIEAFSARFFA-KIAELKQEQR
Zema_PKSA	252	TDKVIDGKISEEGINFKLGRDLPEKIESRIEGFCRTLMDN-K-----
Orsa_PKSA	256	TDKVIDGKITEEGINFKLGRDLPEKIEENRIEGFCRTLMD-R-----
Mapo_ASCL	272	TERTIEGTLTEEGIIFFTLGRELPKLIEHNIDEFARGLLK-K-----
Rali_ASCL	188	TQGVIDGTLTEEGIIFFTLGRELPKLIEATIEDFASSLLA-K-----
Lej_sp_ASCL	248	TLGVIDGTLTEEGIIFFTLGRELPKLIEANIDEFARNLLD-KIGTRKATKK
Spfa_ASCL	308	TETTIEGTLTEEGLIFFKLGRELPKLIEANVRAFCDPVIK-R-----
Spma_ASCL	323	TETTIEGTLTEEGLIFFKLGRELPKLIEANVRAFCDPVIK-R-----
Spfa_ASCL2	279	TETTIEGNVTEEGIIFFKLGRELPKLIEANVQPFCDPIIK-R-----
Spma_ASCL2	274	TETTIEGNLTEEGIIFFKLGRELPKLIEANVQPFCDPIIK-R-----
Anru_ASCL	275	TMGTIEGRLTEEGIIFFKLGRELPKLIETNIADFCDPIIKSR-----
Phpa_ASCL	278	TNKTIIDGRLSEEGISFKLGRRELPKLIESNIQGFCDPILK-R-----
Syca_ASCL	173	TSKTIIDGRLSEEGISFKLGRRELPKLIETNIQGFCDPLIQ-R-----
Cepu_ASCL	286	TSKTIIDGRLSEEGISFKLGRRELPKLIETNVQGFCDPLLK-R-----
Phdr_ASCL	240	SESTIDGRLTEDGIVFTLGRRELPKLIEDNIEDFCRGILE-N-----
Dico_ASCL	289	TESTIDGRLTEDGIIFFTLGRELPKLIEDNIEEFQGGILQ-K-----
Semo_ASCL	253	SEKTIIDGRLTEDGIIFFSLGRELPOMIESEVEGFIQGLLK-R-----
Iso_sp_ASCL	257	TEGTIIDGRLTEDGIIFFSLGRELPOIENNIEGFVQKILK-K-----
Muac_ASCL	250	TDKTIIDGRLTEEGISFLLGRELPLVIEDHVEAFCKKLLAM-E-----
Gnmo_PKSA	259	TAGTVDGRLSEEGLSFRLGRDLPLLIEEHIEEFCHRLAG-P-----
Scdi_ASCL3	249	TDHTILGKLTTEEGIMFNLGRDLPKIIEENIEEFVQKLMK-K-----
Scdi_ASCL	241	TDHTILGRLTEEGIMFNLGRDLPKIIEENIEEFVQKLMK-K-----
Scdi_ASCL2	240	TDHTILGRLTEEGIMFNLGRDLPKIIEENIEEFVQKLMK-K-----
Lyja_ASCL	238	TEGTVIGTLTEEGLMFHLGRDLPKIIEDNIEAFCKALVH-K-----
Azfi_ASCL	289	TDHTIVGNLTEEGIIFFRLGRDLPKIIEDNIEVFCKRLLK-K-----
Ceri_ASCL	273	TDHTIVGNLTEEGLIFFHLGRDLPKIIEDNIVAFCDKLLK-I-----
Poac_ASCL	236	TDHTIVGNLTEEGLIFFHLGRDLPKIIEDNIEAFCDKLLIG-V-----
Adte_ASCL	238	TDHTIVGNLTEEGLIFFHLGRDLPKIIEDNIEAFCDKLLIR-V-----
Poac_ASCL2	129	TEHTIVGNLTEEGLIFFHLGRDLPKIIEDNIEAFCDKLLIG-V-----
Adte_ASCL2	238	TDHTIVGNLTEEGLIFFHLGRDLP-----
Zema_PKSB	256	TERTIEGRLTEEGIKFQLGRELPHIIEAHVEDFCQKLMKER-----
Orsa_PKSB	279	TDKTIIDGRLTEEGIKFQLGRELPHIIEANVEAFCDKLMQ-E-----
Nyco_PKSB	253	TEKTIIDGRLTEEGINFKLGRDLPEIIEEDHVEEFCKMLMK-K-----
Metr_PKSB	251	TEKTIIDGRLTEEGISFLLARELPQIIEDNVVEFCDRRLMD-A-----
Arly_PKSB	253	TEKTIIDGRLTEEGINFKLARELPQIIEDNVENFCKKLLIG-K-----
Arth_PKSB	252	TEKTIIDGRLTEEGINFKLSRELPOIIEDNVENFCKKLLIG-K-----
Amtr_PKSB	178	TEKTIIDGRLTEEGINFKLERDLPQIIEDYIEAFCKLQKLMQ-K-----
Litu_ASCL1	251	TEKTIIDGRLTEEGINFKLGRDLPOIIEDNIEGFCKMLMK-D-----
Eugr_PKSB	253	TEKTIIDGRLTEEGISFKLARELPQIIEDNIEGFCKMLME-P-----
Soly_PKSB	250	TEKTIIDGRLTEEGISFKLERELPOIIEDNIEDFCDKLIN-I-----
Hean_PKSB	246	TEKVIDGRLTEEGISFKLRELPEIIEEDNVKGFCDKLLIG-Q-----
Soly_PKSA	220	TKNVIDGRLTDEGINFKLGRDLPEKIENIEEFCKKLIAMR-----
Cagr_PKSC	257	THGVIDGRLSEEGISFKLGRDLPOKIEDNVVEFCCKLVA-E-----
Arly_PKSC	257	TQGVIDGRLSEEGISFKLGRDLPOKIEDNVVEFCCKLVA-K-----
Arth_PKSC	250	TQGVIDGRLSEEGITFKLGRDLPOKIEDNVVEFCCKLVA-K-----
Hype_PKS1	228	TQSIIDGKLEHEEGINFKLGRDLPOKIEDNIEEFCKKIMS-E-----
Eugr_PKSA	259	THDVIDGRLSDEGIYFKLGRDLPOKIEANIEEFCKGLMA-----
Metr_PKSA	258	TQNVIDGRLTEEGINFKLGRDLPOKIEDNIEEFCKKLLMA-K-----
Amtr_PKSA	251	TQGIIEGRLTEEGINFKLGRDLPOKIEGHIDIFCKNLMK-N-----
Arly_PKSA	257	TQNVIDGRLTEEGINFKLGRDLPOKIEENIEEFCKKLLMG-K-----
Arth_PKSA	257	TQNVIEGRLTEEGINFKLGRDLPOKIEENIEEFCKKLLMG-K-----
Hean_PKSA	193	THNVIDGRLTEEGINFKLGRDLPOKIIDNIEGFCKKLLME-K-----
Nyco_PKSA	256	TETIIDGRLTEEGINFKLGRDLPOKIEDHIEGFCDKMLMK-R-----
Chse_ASCL	146	THDIIDGRLTEEGINFKLGRDLPOKIEDHIEEFCKMLME-K-----
Cika_ASCL	252	THNIIDGRLTEEGINFNLGRDLPOKIEDHIQDFCKMLMD-K-----
Litu_ASCL2	258	THNIIDGRLSEEGINFKLGRDLPOKIEDNIQEFCKMLME-K-----
Maof_ASCL	146	TQNIIDGRLSEEGINFKLGRDLPOKIEDHIQEFCKMLMK-K-----
Gibi_ASCL	252	TDKTIIDGRLTEEGIIFFKLGRELPOIIEDNIEDFCKLKLIN-Q-----
Thpl_ASCL	253	TEKTIIDGRLTEEGIIFFRLGRDLPOIENNIEEFCDKLMK-K-----
pita_PKSA	257	THGTIDGRLTEEGINFKLGRRELPOIIEDHIEGFCDKMLMD-R-----
Wemi_ASCL	266	THGTVDGRLTEEGINFKLGRDLPOIIEDNIESFCRRLMR-P-----

PKS_OUT	451	-----EQAIDLEAVTSWAVHP-----
Arth_CHS	296	-----LGISDWNLSLFWIAHP-----
Ledu_ASCL	314	-----VSTFDKSD-----
Anag_ASCL	329	EGTKIESKG-----LSHHVNGTGTAPLERTKYNDVF-WAVHP-----
Phca_ASCL	292	AGKKIESNG-----VSHHVNGTGTAPLDRVKYNDVF-WAVHP-----
Zema_PKSA	292	-----VGIKDFNDIF-WAVHP-----
Orsa_PKSA	296	-----VGIKEFNDVF-WAVHP-----
Mapo_ASCL	312	-----IGLDLKYEDLF-WAVHP-----
Rali_ASCL	228	-----ITQADSQ GKDLKYNDLF-WAVHP-----
Lej_sp_ASCL	297	PRSSCDGTSANGEQAEVDETVDQVGDVDQELTYNDLF-WAVHP-----
Spfa_ASCL	348	-----VAAGTAGNLQYNDMF-WAVHP-----
Spma_ASCL	363	-----VAAGTAGNLQYNDMF-WAVHP-----
Spfa_ASCL2	319	-----VAGNLQYNDLF-WAVHP-----
Spma_ASCL2	314	-----VAGNLQYNDLF-WAVHP-----
Anru_ASCL	316	-----TSGLNYNDLF-WAVHP-----
Phpa_ASCL	318	-----AGGLKYNDIF-WAVHP-----
Syca_ASCL	213	-----IGNLGYNDIF-WAVHPGIDLML
Cepu_ASCL	326	-----IGGLAYNDIF-WAVHP-----
Phdr_ASCL	280	-----GKG DGDGDFS YNDLF-WAVHP-----
Dico_ASCL	329	-----TQLDLSYNELF-WAVHP-----
Semo_ASCL	293	-----SGRVEAGGVDYDRLF-WAHP-----
Iso_sp_ASCL	297	-----SGLGLSYDDLFWAVHP-----
Muac_ASCL	290	-----GLRGESHVDVNYNDMF-WAMHP-----
Gnmo_PKSA	299	-----ERRLEELFWAVHP-----
Scdi_ASCL3	289	-----TGCANYNDIF-WAVHP-----
Scdi_ASCL	281	-----TGCANYND-----
Scdi_ASCL2	280	-----TGCANYNDIF-WAVHP-----
Lyja_ASCL	278	-----AALQSGGAVSGFNDVF-WAVHP-----
Azfi_ASCL	329	-----AIEINGNSKTQLNYNDLF-WAVHP-----
Ceri_ASCL	313	-----A--AATGKQELNFGDLFWAVHP-----
Poac_ASCL	276	-----A--ARIGKQELHFKDLFWAVHP-----
Adte_ASCL	278	-----T--GLKGKKGIOYKDLFWAVHP-----
Poac_ASCL2	169	-----A--AGNGKQDLQYKDLFWAVHP-----
Adte_ASCL2		-----
Zema_PKSB	297	-----QSGEDADGGGPEPMSYGD MF-WAVHP-----
Orsa_PKSB	319	-----HPQAADKLT YGD MF-WAVHP-----
Nyco_PKSB	293	-----AGFEGEQYNRMFWAVHP-----
Metr_PKSB	291	-----VELENKEYNKLFWAVHP-----
Arly_PKSB	293	-----AGLAHKNYNQMF-WAVHP-----
Arth_PKSB	292	-----AGLAHKNYNQMF-WAVHP-----
Amtr_PKSB	218	-----VGLGEEGYNEMFWAVHP-----
Litu_ASCL1	291	-----IGYGEADYNKLF-WAVHP-----
Eugr_PKSB	293	-----IGLSNKDYNRIF-WAVHP-----
Soly_PKSB	290	-----SGIKDREYNKLF-WAVHP-----
Hean_PKSB	286	-----FGRDGIVDIDYNDLFWAVHP-----
Soly_PKSA	261	-----DELQGSNYNDLFWAVHP-----
Cagr_PKSC	297	-----AGSGSGSLELNDLFWAVHP-----
Arly_PKSC	297	-----AGSGSLELNDLFWAVHP-----
Arth_PKSC	290	-----AGSGALELNDLFWAVHP-----
Hype_PKS1	268	-----AGLTQFNDLFWAVHP-----
Eugr_PKSA	298	-----TAGLSEGFNDVFWAVHP-----
Metr_PKSA	298	-----SGVKEFNEMFWAVHP-----
Amtr_PKSA	291	-----ANLTEFNDLFWAVHP-----
Arly_PKSA	297	-----AGGDESMEFNDMF-WAVHP-----
Arth_PKSA	297	-----AGDESMEFNDMF-WAVHP-----
Hean_PKSA	233	-----AGGNLEDFNDLFWAVHP-----
Nyco_PKSA	296	-----ARVRDFNEMFWAHP-----
Chse_ASCL	186	-----ANLEKYNDLFWAVHP-----
Cika_ASCL	292	-----AGLDEFNDLFWAVHP-----
Litu_ASCL2	298	-----AGLKDFNDLFWAVHP-----
Maof_ASCL	186	-----AGLKEFNDLFWAVHP-----
Gibi_ASCL	292	-----TGIPGMEYNDFF-WAVHP-----
Thpl_ASCL	293	-----TGLEKVEYNDLFWAVHP-----
pita_PKSA	297	-----AGVDDYNELF-WGVHP-----
Wemi_ASCL	306	-----SGVEEFERLFWAVHP-----

PKS_OUT	501	-----	GGPKILSTCAEVLISLDPGLLHESRGI
Arth_CHS	311	-----	GGPAILDQVEIKLGLKEEKMRATRHV
Ledu_ASCL	322	-----	GGPAILNAMERRLELQPEKLVSSRAV
Anag_ASCL	365	-----	GGPAILNAVERRLQLEAGKLVSRDV
Phca_ASCL	328	-----	GGPAILNAVERRLQLEPGKLVSRDV
Zema_PKSA	307	-----	GGPAILNRLEFCLKLQPEKLVSRKA
Orsa_PKSA	311	-----	GGPAILNRLEVCLELQPEKLVSRKA
Mapo_ASCL	328	-----	GGPAILNAVEKQNLNLPDKLVSRQV
Rali_ASCL	250	-----	GGPAILNAVERQLDLLPEKLVSRQV
Lej_sp_ASCL	340	-----	GGPAILNAVERQLDLLPEKLVSRQV
Spfa_ASCL	368	-----	GGPAILNAVEKQLGLEHHKLQSSRQI
Spma_ASCL	383	-----	GGPAILNAVEKQLGLEHHKLQSSRQI
Spfa_ASCL2	335	-----	GGPAILNAVEKQLDLEPRKLQSSRQI
Spma_ASCL2	330	-----	GGPAILSAVEKQLDLEPRKLQSSRQI
Anru_ASCL	331	-----	GGPAILNAVEKQLELAPQKLVSRQV
Phpa_ASCL	333	-----	GGPAILNAVQQLDLAPEKLVSRQV
Syca_ASCL	234	PNLTDSSHNLVFMSESVMVVLCL	GGPAILNAVEKKLELAPKLEAARQV
Cepu_ASCL	341	-----	GGPAILNAVEKQLELAPQKLEAARQV
Phdr_ASCL	300	-----	GGPAILNAVEKQMALSPKLECSRRV
Dico_ASCL	345	-----	GGPAILNAVEKRMELSPKLVSRQV
Semo_ASCL	313	-----	GGPAILNACEKKLQLAGDKLVSRQV
Iso_sp_ASCL	313	-----	GGPAILNAVEKKLALLPDKLVSRQI
Muac_ASCL	310	-----	GGPAILNKVESRLRLCPDKLVSRQA
Gnmo_PKSA	312	-----	GGPAILNRCEQRLRLRPDALCSRRA
Scdi_ASCL3	304	-----	GGPAILNALERRLELNTDRLQISRQV
Scdi_ASCL	289	-----	GGPAILNALERRLELKPRLVTSRQV
Scdi_ASCL2	295	-----	GGPAILNALERRLELNTDRLQISRQV
Lyja_ASCL	299	-----	GGPAILNALESRLSLQPDKLVSRQV
Azfi_ASCL	352	-----	GGPAILNALEKKLDLPLEKLVSRQV
Ceri_ASCL	333	-----	GGPAILNVVEKKFNLPPEKLVSRQV
Poac_ASCL	296	-----	GGPAILNALEKKLDLPQEKLVSRQV
Adte_ASCL	298	-----	GGPAILNALEKKLELPPPEKLVSRQV
Poac_ASCL2	189	-----	GGPAILNALEKKLELPTPEKLVSRQV
Adte_ASCL2		-----	-----
Zema_PKSB	322	-----	GGPAILTKMEGRIGLIGADKLVSRCA
Orsa_PKSB	338	-----	GGPAILTKMEGRIGLDGGKLVSRSA
Nyco_PKSB	310	-----	GGPAILNRLEKRLNLLPEKLVSRRA
Metr_PKSB	308	-----	GGPAILNRVEKRLNLSPEKLVSRKA
Arly_PKSB	310	-----	GGPAILNRMEKRLNLSPEKLVSRRA
Arth_PKSB	309	-----	GGPAILNRLEKRLNLSPEKLVSRRA
Amtr_PKSB	235	-----	GGPAILNRLEKRLNLTPEKLVSRRA
Litu_ASCL1	308	-----	GGPAILNRLEKRLDLLPEKLVSRRA
Eugr_PKSB	310	-----	GGPAILNRLEKRLDLLPDKLVSRQA
Soly_PKSB	307	-----	GGPAILNRLEKRLDLSPDKLVSRRA
Hean_PKSB	306	-----	GGPAILNRLEKRFNLGPEKLVSRRA
Soly_PKSA	278	-----	GGPAILDRLEKTMKLVQNEKLVSRKA
Cagr_PKSC	316	-----	GGPAILSGLETKLVKLVKPEKLVSRRA
Arly_PKSC	314	-----	GGPAILSGLETKLVKLVKPEKLVSRRA
Arth_PKSC	307	-----	GGPAILSGLETKLVKLVKPEKLVSRRA
Hype_PKS1	283	-----	GGPAILNRVESRLGLNADKLVSRRA
Eugr_PKSA	315	-----	GGPAILNKLESTLVKLVSDKLVSRKA
Metr_PKSA	313	-----	GGPAILNKLENTLVKLVSGDKLVSRKA
Amtr_PKSA	306	-----	GGPAILNKLESNLRLNPEKLVSRKA
Arly_PKSA	315	-----	GGPAILNRLETKLVKLVKPEKLVSRRA
Arth_PKSA	314	-----	GGPAILNRLETKLVKLVKPEKLVSRRA
Hean_PKSA	250	-----	GGPAILNRLETTLKLVKLVKPEKLVSRRA
Nyco_PKSA	311	-----	GGPAILNRLESHLGLSAEKLVSRRA
Chse_ASCL	201	-----	GGPAILNRLESNLKLVSAKLVSRKA
Cika_ASCL	307	-----	GGPAILNRLEQSKLVNREEKLVSRKA
Litu_ASCL2	313	-----	GGPAILNRVESNLKLVREEKLVSRRA
Maof_ASCL	201	-----	GGPAILNRVESNLKLVREEKLVSRRA
Gibi_ASCL	309	-----	GGPAILTRVEQRINLLPEKLVSRQV
Thpl_ASCL	310	-----	GGPAILNRLEKLVKLVKPEKLVSRQA
pita_PKSA	312	-----	GGPAILNRLEKLVKLVKPEKLVSRQA
Wemi_ASCL	321	-----	GGPAILNRCEKRLGLSGEKLVSRRA

PKS_OUT	551	LQDHGMSSATILFILERLRRECSGPC-----
Arth_CHS	337	LSFYGNMSSACVLFILDEMRRKSAKDGV-----ATTGE
Ledu_ASCL	348	LRDFGNVNSNTIIVVLEYMREANLKRKK-----LAAISGELEYEQ
Anag_ASCL	391	LRDFGNVNSNTIIVVLDYMRANLKRKKLLAAG-----LSLPADEFSEH
Phca_ASCL	354	LRDFGNVNSNTIIVVLDYMRANLKRKKLLAAG-----LPLPADEFSEQ
Zema_PKSA	333	LMNYGNVSSNTIFYVLEYLRDELKKGAI-----
Orsa_PKSA	337	LMNYGNVSSNTIFYVLEYLRDELKKGMI-----
Mapo_ASCL	354	LSDYGNINSNTIIVVLDYMRKASLQKRK-----DLQCGLSTDE
Rali_ASCL	276	LMDYGNINSNTIIVVLDYMRKASAKRRE-----MAVNGANVTQ
Lej_sp_ASCL	366	LMDYGNINSNTIIVVLDYMRKASVKRRE-----MASDGANCTL
Spfa_ASCL	394	LADYGNISSSTCIYVLDHMRHSLKLKEKLAAGSNAAQ-PGSGGGAAAEI
Spma_ASCL	409	LADYGNISSSTCIYVLDHMRHSLKLKEKLAAGSNAAQ-PGSGGGAAAEI
Spfa_ASCL2	361	LADYGNISSSTCIYVLDHMRKHSLLKKE-----VNEGVDT
Spma_ASCL2	356	LADYGNVSSSTCIYVLDHMRKHSLLKKE-----VNEDVDT
Anru_ASCL	357	LADYGNINSSTCIYVLDNIRQHTLKLKE-----ANGGVNS
Phpa_ASCL	359	LRDYGNISSSTCIYVLDYMRHQSLKLKE-----ANDNVNT
Syca_ASCL	284	LRDYGNISSSTCIYVLDYMRQHSLLKKE-----AHGGVNT
Cepu_ASCL	367	LRDYGNISSSTCIYVLDYMRQHSLLKKE-----ANGGVNT
Phdr_ASCL	326	LSDYGNVNSNTIIVVLDYMRHASSSSS-----SSKED
Dico_ASCL	371	LSDFGNVNSNTIIVVLDYMRQVSSNNKN-----SSIKLETHCNK
Semo_ASCL	339	LSDYGNINGSSTIIVVLDYMRQVNAADK-----P
Iso_sp_ASCL	339	LSDYGNINGSSTIIVVLDYMRQLSLKKGQ-----QNGNLP
Muac_ASCL	336	LRDFGNASSNTIIVVLENIIEESRKKKE-----SGES
Gnmo_PKSA	338	LADFGNVSSNTIIVVLDYMRALPSC-----
Scdi_ASCL3	330	LSDYGNVSSSTIIVVLDYMRNNLKIKE-----SHENGGH
Scdi_ASCL	315	LSDYGNVSSSTIIVVLDYMRHNSLNLIKE-----SDENGGH
Scdi_ASCL2	321	LSDYGNVSSSTIIVVLDYMRNNLKIKE-----SHENGGH
Lyja_ASCL	325	LMDYGNVSSNTIIVVLDHMRHLKSAAAR-----
Azfi_ASCL	378	LMDYGNVSSNTIIVVLDYLRQQLSPSP-----PSSSSPNIN
Ceri_ASCL	359	LMDYGNVSSNTIIVVLDYLRHNRSSKVG-NVNVKTTIEE---NHADCASH
Poac_ASCL	322	LMDYGNVSSNTIIVVLDYMRHKLTTNHK-INHKTVHAEA---NNVDHVSH
Adte_ASCL	324	LMDYGNVSSNTIIVVLDHMRHKLATTAN-RNVNHKAIHTEANNNVHDVVSQ
Poac_ASCL2	215	LMDYGNVSSNTIIVVLDYMRQKSTNNHK-SNPSSNADA---NNVYGNFR
Adte_ASCL2		-----
Zema_PKSB	348	LRDFGNASSNTIIVVLENMVEDTRRRRL-----LAADDGGE
Orsa_PKSB	364	LRDFGNASSNTIIVVLENMVEETRQRRE-----EAAEEEE
Nyco_PKSB	336	LSDYGNASSNTIIVVMDYMIESTKLRE-----RGEK
Metr_PKSB	334	LMDYGNASSNTIIVVLEYMLDESCKIRK-----EG--G
Arly_PKSB	336	LMDYGNASSNSIIVVLEYMLEESKVRN-----MNEE
Arth_PKSB	335	LMDYGNASSNSIIVVLEYMLEESKVRN-----MNEE
Amtr_PKSB	261	LMDYGNVSSNTIIVVLEFMMEESLKMRD-----TGER
Litu_ASCL1	334	LMDYGNASSNTIIVVMEYMEESLKMKE-----RGEK
Eugr_PKSB	336	LKDYGNASSNTIIVVLEMLEESMKMKK-----DDQS
Soly_PKSB	333	LADYGNASSNTIIVVLEYMLEE-----KKD
Hean_PKSB	332	LADYGNASSNTIIVVLEYLIEDSLKRN-----EGKDG
Soly_PKSA	304	LMDFGNVSSNTIFYVIENMREEMKNKKD-----A
Cagr_PKSC	342	LMDYGNVSSNTIFYIMEKVRDELEKKG-----G
Arly_PKSC	340	LMDYGNVSSNTIFYIMDKVRDELEKKG-----E
Arth_PKSC	333	LMDYGNVSSNTIFYIMDKVRDELEKKG-----E
Hype_PKS1	309	LMDFGNVSSNTIVLYVMEYLREELKRKGS-----
Eugr_PKSA	341	LMDYGNVSSNTIFYVIENMRDELKREG-----
Metr_PKSA	339	LMNFGNVSSNTIFYVMEYMRDYLKNDGT-----
Amtr_PKSA	332	LMDYGNVSSNTIFYVLDYMRREAKEDGG-----
Arly_PKSA	341	LVDYGNVSSNTIIVVMEYMRDELKKG-----E
Arth_PKSA	340	LVDYGNVSSNTIIVVMEYMRDELKKG-----A
Hean_PKSA	276	LMDFGNVSSNTIFYVMEYMRDELNRNKEN-----
Nyco_PKSA	337	LMDYGNVSSNTIFYVIDYMKELKREGA-----
Chse_ASCL	227	LMDYGNASSNTIFYVMDYMRREALKRG-----
Cika_ASCL	333	LMDYGNASSNTIFYVMDYMRKELKRDGG-----
Litu_ASCL2	339	LMDYGNVSSNTIFYVMDYMRDELKREG-----
Maof_ASCL	227	LMDYGNVSSNTIFYVMDYMRDELKREG-----
Gibi_ASCL	335	LADYGNVSSNTIIVVLDNMRQATSKEVA-----QD
Thpl_ASCL	336	LADFGNVSSNTIIVVLENMREQLKKG-----AEEK
pita_PKSA	338	LADYGNASSNTIIVVLDAMRQLKGGEKQ-----
Wemi_ASCL	347	LADYGNVSSNTIIVVLEYMRERFE-----

PKS_OUT	601	-----LALAFGPGLSAEVALDFDQ-----
Arth_CHS	370	GLEWGVLFVFGFGPGITVETVVLHSPVPL-----
Ledu_ASCL	388	DPEWGLITAFGPGITIEGILARNL-----
Anag_ASCL	435	DPEWGLLMAFGPGITMEGILIRNLI-----
Phca_ASCL	398	DLEWGLLMAFGPGITMEGILIRNLI-----
Zema_PKSA	361	SEEWGLILAFGPGITFEGLLVRGVKKTFTS-----
Orsa_PKSA	365	REEWGLILAFGPGITFEGMLVRGIN-----
Mapo_ASCL	392	DPEWGFMLAFGPGVTIEGMVARNLV-----
Rali_ASCL	314	DPEWGFVILAFGPGITMEGMVARNL-----
Lej_sp_ASCL	404	DPEWGFILAFGPGITMEGMVARNL-----
Spfa_ASCL	443	EPEWGFILAFGPGITIEGALARSL-----
Spma_ASCL	458	EPEWGFILAFGPGITIEGALARSL-----
Spfa_ASCL2	396	EPEWGVILAFGPGITIEGTLARSL-----
Spma_ASCL2	391	EPEWGVILAFGPGITIEGTLARSL-----
Anru_ASCL	392	EPEWGLILAFGPGVTMEGALARNL-----
Phpa_ASCL	394	EPEWGLILAFGPGVTIEGALLRNLC-----
Syca_ASCL	319	ESEWGLILAFGPGITIEGSLLRNL-----
Cepu_ASCL	402	EPEWGLILAFGPGVTIEGSLLRNL-----
Phdr_ASCL	359	DPEWGLILAFGPGVTMEGLLARKLV-----
Dico_ASCL	410	DPEWGLILAFGPGVTMEGLLARNLV-----
Semo_ASCL	368	DPEWGVILAFGPGVTMEGMVARNLVA-----
Iso_sp_ASCL	373	EPEWGLILAFGPGVTMEGLLARNL-----
Muac_ASCL	368	DCEWGLILAFGPGITFEGILARNLMQKNTKRKRCPRKHSSLRRLPPSPSP
Gnmo_PKSA	363	-PEWGLMLAFGPGVTIEGILARSLV-----
Scdi_ASCL3	365	DPEWGLILAFGPGITFEGVVARKL-----
Scdi_ASCL	350	DPEWGLILAFGPGVTIEGLVARKL-----
Scdi_ASCL2	356	DPEWGLILAFGPGITFEGVVARKL-----
Lyja_ASCL	353	-DEWGLILAFGPGITFEGVVARKL-----
Azfi_ASCL	416	KDEWGLILAFGPGITFEGVVARKL-----
Ceri_ASCL	405	SDEWGLILAFGPGITFEGVVARKLS-----
Poac_ASCL	368	ADEWGLILAFGPGITFEGVVARKL-----
Adte_ASCL	373	DDEWGLILAFGPGITFEGVVARKL-----
Poac_ASCL2	261	QDEWGLILAFGPGITFEGVVARKL-----
Adte_ASCL2		-----
Zema_PKSB	384	DCEWGLILAFGPGITFEGILARNLQATARASAQL-----
Orsa_PKSB	398	DCEWGLILAFGPGITFEGILARNLQARARARD-----
Nyco_PKSB	368	DSEWGLILAFGPGITFEGILAKKIV-----
Metr_PKSB	365	YPEWGLILAFGPGITFEGILARNLCP-----
Arly_PKSB	368	EDEWGLILAFGPGVTFEGILARNLDV-----
Arth_PKSB	367	ENEWGLILAFGPGVTFEGILARNLDV-----
Amtr_PKSB	293	ENEWGLILAFGPGITFEGILARSLV-----
Litu_ASCL1	366	DSEWGLILAFGPGITFEGILARNLL-----
Eugr_PKSB	368	QDEWGLILAFGPGVTFEGILARNLTI-----
Soly_PKSB	358	ITDWGLILAFGPGITFEGILTKNLTI-----
Hean_PKSB	365	GPDLGLILAFGPGVTFEGILTRNLIV-----
Soly_PKSA	333	GEEWGLLAFGPGITFEGILLRSLLI-----
Cagr_PKSC	371	GEEWGLGLAFGPGITFEGFLMRSL-----
Arly_PKSC	369	GEEWGLGLAFGPGITFEGFLMRSL-----
Arth_PKSC	362	GEEWGLGLAFGPGITFEGFLMRNL-----
Hype_PKS1	337	-EEWGLLAFGPGITFEGVL-----
Eugr_PKSA	369	GEEWGLLAFGPGITFEGILVRSLS-----
Metr_PKSA	367	-EEWGLGLAFGPGITFEGVLLRSL-----
Amtr_PKSA	360	-EEWGLVILAFGPGITFEGILVRRLY-----
Arly_PKSA	370	AQEWGLGLAFGPGITFEGLLIRSLTSP-----
Arth_PKSA	369	AQEWGLGLAFGPGITFEGLLIRSLTSS-----
Hean_PKSA	304	REEWGLLAFGPGITFEGILLRSLG-----
Nyco_PKSA	365	-EEWGLLAFGPGITFEGMLVRSLD-----
Chse_ASCL	255	-EEWGLVILAFGPGITFEGILVRSLS-----
Cika_ASCL	361	-EEWGLLAFGPGITFEGILVARNLQ-----
Litu_ASCL2	367	-EEWGLVILAFGPGITFEGILVRSLQ-----
Maof_ASCL	255	-EEWGLVILAFGPGITFEGILVRSLS-----
Gibi_ASCL	365	SDQWGLILAFGPGITFEGILARKLV-----
Thpl_ASCL	368	ENEWGLILAFGPGITFEGILSRNVMD-----
pita_PKSA	366	SPEWGLILAFGPGITFEGILARSLV-----
Wemi_ASCL	372	EEEWGLILAFGPGVTFEGILARSLV-----

PKS_OUT	-----
Arth_CHS	-----
Ledu_ASCL	-----
Anag_ASCL	-----
Phca_ASCL	-----
Zema_PKSA	-----
Orsa_PKSA	-----
Mapo_ASCL	-----
Rali_ASCL	-----
Lej_sp_ASCL	-----
Spfa_ASCL	-----
Spma_ASCL	-----
Spfa_ASCL2	-----
Spma_ASCL2	-----
Anru_ASCL	-----
Phpa_ASCL	-----
Syca_ASCL	-----
Cepu_ASCL	-----
Phdr_ASCL	-----
Dico_ASCL	-----
Semo_ASCL	-----
Iso_sp_ASCL	-----
Muac_ASCL	418 SAIAYVGIVPSPFSSVMADFTGSDFQVEENDTDIVDEGGFNVSVPDEIE
Gnmo_PKSA	-----
Scdi_ASCL3	-----
Scdi_ASCL	-----
Scdi_ASCL2	-----
Lyja_ASCL	-----
Azfi_ASCL	-----
Ceri_ASCL	-----
Poac_ASCL	-----
Adte_ASCL	-----
Poac_ASCL2	-----
Adte_ASCL2	-----
Zema_PKSB	-----
Orsa_PKSB	-----
Nyco_PKSB	-----
Metr_PKSB	-----
Arly_PKSB	-----
Arth_PKSB	-----
Amtr_PKSB	-----
Litu_ASCL1	-----
Eugr_PKSB	-----
Soly_PKSB	-----
Hean_PKSB	-----
Soly_PKSA	-----
Cagr_PKSC	-----
Arly_PKSC	-----
Arth_PKSC	-----
Hype_PKS1	-----
Eugr_PKSA	-----
Metr_PKSA	-----
Amtr_PKSA	-----
Arly_PKSA	-----
Arth_PKSA	-----
Hean_PKSA	-----
Nyco_PKSA	-----
Chse_ASCL	-----
Cika_ASCL	-----
Litu_ASCL2	-----
Maof_ASCL	-----
Gibi_ASCL	-----
Thpl_ASCL	-----
pita_PKSA	-----
Wemi_ASCL	-----

PKS_OUT	-----
Arth_CHS	-----
Ledu_ASCL	-----
Anag_ASCL	-----
Phca_ASCL	-----
Zema_PKSA	-----
Orsa_PKSA	-----
Mapo_ASCL	-----
Rali_ASCL	-----
Lej_sp_ASCL	-----
Spfa_ASCL	-----
Spma_ASCL	-----
Spfa_ASCL2	-----
Spma_ASCL2	-----
Anru_ASCL	-----
Phpa_ASCL	-----
Syca_ASCL	-----
Cepu_ASCL	-----
Phdr_ASCL	-----
Dico_ASCL	-----
Semo_ASCL	-----
Iso_sp_ASCL	-----
Muac_ASCL	468 ERFIYIMEAEVKNKGNRTSTTFSKPAWRAIEETLNTQTKRNYTYTQLRNKF
Gnmo_PKSA	-----
Scdi_ASCL3	-----
Scdi_ASCL	-----
Scdi_ASCL2	-----
Lyja_ASCL	-----
Azfi_ASCL	-----
Ceri_ASCL	-----
Poac_ASCL	-----
Adte_ASCL	-----
Poac_ASCL2	-----
Adte_ASCL2	-----
Zema_PKSB	-----
Orsa_PKSB	-----
Nyco_PKSB	-----
Metr_PKSB	-----
Arly_PKSB	-----
Arth_PKSB	-----
Amtr_PKSB	-----
Litu_ASCL1	-----
Eugr_PKSB	-----
Soly_PKSB	-----
Hean_PKSB	-----
Soly_PKSA	-----
Cagr_PKSC	-----
Arly_PKSC	-----
Arth_PKSC	-----
Hype_PKS1	-----
Eugr_PKSA	-----
Metr_PKSA	-----
Amtr_PKSA	-----
Arly_PKSA	-----
Arth_PKSA	-----
Hean_PKSA	-----
Nyco_PKSA	-----
Chse_ASCL	-----
Cika_ASCL	-----
Litu_ASCL2	-----
Maof_ASCL	-----
Gibi_ASCL	-----
Thpl_ASCL	-----
pita_PKSA	-----
Wemi_ASCL	-----

PKS_OUT	-----
Arth_CHS	-----
Ledu_ASCL	-----
Anag_ASCL	-----
Phca_ASCL	-----
Zema_PKSA	-----
Orsa_PKSA	-----
Mapo_ASCL	-----
Rali_ASCL	-----
Lej_sp_ASCL	-----
Spfa_ASCL	-----
Spma_ASCL	-----
Spfa_ASCL2	-----
Spma_ASCL2	-----
Anru_ASCL	-----
Phpa_ASCL	-----
Syca_ASCL	-----
Cepu_ASCL	-----
Phdr_ASCL	-----
Dico_ASCL	-----
Semo_ASCL	-----
Iso_sp_ASCL	-----
Muac_ASCL	518 NQLRTRQKDFANLMKETGVRWNPVTDVSATDEVWERLYKVYKSAKRFRK
Gnmo_PKSA	-----
Scdi_ASCL3	-----
Scdi_ASCL	-----
Scdi_ASCL2	-----
Lyja_ASCL	-----
Azfi_ASCL	-----
Ceri_ASCL	-----
Poac_ASCL	-----
Adte_ASCL	-----
Poac_ASCL2	-----
Adte_ASCL2	-----
Zema_PKSB	-----
Orsa_PKSB	-----
Nyco_PKSB	-----
Metr_PKSB	-----
Arly_PKSB	-----
Arth_PKSB	-----
Amtr_PKSB	-----
Litu_ASCL1	-----
Eugr_PKSB	-----
Soly_PKSB	-----
Hean_PKSB	-----
Soly_PKSA	-----
Cagr_PKSC	-----
Arly_PKSC	-----
Arth_PKSC	-----
Hype_PKS1	-----
Eugr_PKSA	-----
Metr_PKSA	-----
Amtr_PKSA	-----
Arly_PKSA	-----
Arth_PKSA	-----
Hean_PKSA	-----
Nyco_PKSA	-----
Chse_ASCL	-----
Cika_ASCL	-----
Litu_ASCL2	-----
Maof_ASCL	-----
Gibi_ASCL	-----
Thpl_ASCL	-----
pita_PKSA	-----
Wemi_ASCL	-----



PKS_OUT	-----
Arth_CHS	-----
Ledu_ASCL	-----
Anag_ASCL	-----
Phca_ASCL	-----
Zema_PKSA	-----
Orsa_PKSA	-----
Mapo_ASCL	-----
Rali_ASCL	-----
Lej_sp_ASCL	-----
Spfa_ASCL	-----
Spma_ASCL	-----
Spfa_ASCL2	-----
Spma_ASCL2	-----
Anru_ASCL	-----
Phpa_ASCL	-----
Syca_ASCL	-----
Cepu_ASCL	-----
Phdr_ASCL	-----
Dico_ASCL	-----
Semo_ASCL	-----
Iso_sp_ASCL	-----
Muac_ASCL	568 KGCPLFNKLCVIYGDTTASDFCQHISNNNPLDTDDREEIDGMSLEASFNE
Gnmo_PKSA	-----
Scdi_ASCL3	-----
Scdi_ASCL	-----
Scdi_ASCL2	-----
Lyja_ASCL	-----
Azfi_ASCL	-----
Ceri_ASCL	-----
Poac_ASCL	-----
Adte_ASCL	-----
Poac_ASCL2	-----
Adte_ASCL2	-----
Zema_PKSB	-----
Orsa_PKSB	-----
Nyco_PKSB	-----
Metr_PKSB	-----
Arly_PKSB	-----
Arth_PKSB	-----
Amtr_PKSB	-----
Litu_ASCL1	-----
Eugr_PKSB	-----
Soly_PKSB	-----
Hean_PKSB	-----
Soly_PKSA	-----
Cagr_PKSC	-----
Arly_PKSC	-----
Arth_PKSC	-----
Hype_PKS1	-----
Eugr_PKSA	-----
Metr_PKSA	-----
Amtr_PKSA	-----
Arly_PKSA	-----
Arth_PKSA	-----
Hean_PKSA	-----
Nyco_PKSA	-----
Chse_ASCL	-----
Cika_ASCL	-----
Litu_ASCL2	-----
Maof_ASCL	-----
Gibi_ASCL	-----
Thpl_ASCL	-----
pita_PKSA	-----
Wemi_ASCL	-----

PKS_OUT	-----
Arth_CHS	-----
Ledu_ASCL	-----
Anag_ASCL	-----
Phca_ASCL	-----
Zema_PKSA	-----
Orsa_PKSA	-----
Mapo_ASCL	-----
Rali_ASCL	-----
Lej_sp_ASCL	-----
Spfa_ASCL	-----
Spma_ASCL	-----
Spfa_ASCL2	-----
Spma_ASCL2	-----
Anru_ASCL	-----
Phpa_ASCL	-----
Syca_ASCL	-----
Cepu_ASCL	-----
Phdr_ASCL	-----
Dico_ASCL	-----
Semo_ASCL	-----
Iso_sp_ASCL	-----
Muac_ASCL	618 QSGGTGVLSAVPIRSQSFNPSSRRGKRNSFSTLQTSSTLSPGENSKKKS
Gnmo_PKSA	-----
Scdi_ASCL3	-----
Scdi_ASCL	-----
Scdi_ASCL2	-----
Lyja_ASCL	-----
Azfi_ASCL	-----
Ceri_ASCL	-----
Poac_ASCL	-----
Adte_ASCL	-----
Poac_ASCL2	-----
Adte_ASCL2	-----
Zema_PKSB	-----
Orsa_PKSB	-----
Nyco_PKSB	-----
Metr_PKSB	-----
Arly_PKSB	-----
Arth_PKSB	-----
Amtr_PKSB	-----
Litu_ASCL1	-----
Eugr_PKSB	-----
Soly_PKSB	-----
Hean_PKSB	-----
Soly_PKSA	-----
Cagr_PKSC	-----
Arly_PKSC	-----
Arth_PKSC	-----
Hype_PKS1	-----
Eugr_PKSA	-----
Metr_PKSA	-----
Amtr_PKSA	-----
Arly_PKSA	-----
Arth_PKSA	-----
Hean_PKSA	-----
Nyco_PKSA	-----
Chse_ASCL	-----
Cika_ASCL	-----
Litu_ASCL2	-----
Maof_ASCL	-----
Gibi_ASCL	-----
Thpl_ASCL	-----
pita_PKSA	-----
Wemi_ASCL	-----

PKS_OUT	-----
Arth_CHS	-----
Ledu_ASCL	-----
Anag_ASCL	-----
Phca_ASCL	-----
Zema_PKSA	-----
Orsa_PKSA	-----
Mapo_ASCL	-----
Rali_ASCL	-----
Lej_sp_ASCL	-----
Spfa_ASCL	-----
Spma_ASCL	-----
Spfa_ASCL2	-----
Spma_ASCL2	-----
Anru_ASCL	-----
Phpa_ASCL	-----
Syca_ASCL	-----
Cepu_ASCL	-----
Phdr_ASCL	-----
Dico_ASCL	-----
Semo_ASCL	-----
Iso_sp_ASCL	-----
Muac_ASCL	668 DTTERKMTVTPSPSKSTSETGSTLKKLIVESMQALNALEGIDGVAYSKAV
Gnmo_PKSA	-----
Scdi_ASCL3	-----
Scdi_ASCL	-----
Scdi_ASCL2	-----
Lyja_ASCL	-----
Azfi_ASCL	-----
Ceri_ASCL	-----
Poac_ASCL	-----
Adte_ASCL	-----
Poac_ASCL2	-----
Adte_ASCL2	-----
Zema_PKSB	-----
Orsa_PKSB	-----
Nyco_PKSB	-----
Metr_PKSB	-----
Arly_PKSB	-----
Arth_PKSB	-----
Amtr_PKSB	-----
Litu_ASCL1	-----
Eugr_PKSB	-----
Soly_PKSB	-----
Hean_PKSB	-----
Soly_PKSA	-----
Cagr_PKSC	-----
Arly_PKSC	-----
Arth_PKSC	-----
Hype_PKS1	-----
Eugr_PKSA	-----
Metr_PKSA	-----
Amtr_PKSA	-----
Arly_PKSA	-----
Arth_PKSA	-----
Hean_PKSA	-----
Nyco_PKSA	-----
Chse_ASCL	-----
Cika_ASCL	-----
Litu_ASCL2	-----
Maof_ASCL	-----
Gibi_ASCL	-----
Thpl_ASCL	-----
pita_PKSA	-----
Wemi_ASCL	-----

PKS_OUT	-----
Arth_CHS	-----
Ledu_ASCL	-----
Anag_ASCL	-----
Phca_ASCL	-----
Zema_PKSA	-----
Orsa_PKSA	-----
Mapo_ASCL	-----
Rali_ASCL	-----
Lej_sp_ASCL	-----
Spfa_ASCL	-----
Spma_ASCL	-----
Spfa_ASCL2	-----
Spma_ASCL2	-----
Anru_ASCL	-----
Phpa_ASCL	-----
Syca_ASCL	-----
Cepu_ASCL	-----
Phdr_ASCL	-----
Dico_ASCL	-----
Semo_ASCL	-----
Iso_sp_ASCL	-----
Muac_ASCL	718 ERFHEDYMWMEFLQMTEDRKKDWIYIENVTKNNL
Gnmo_PKSA	-----
Scdi_ASCL3	-----
Scdi_ASCL	-----
Scdi_ASCL2	-----
Lyja_ASCL	-----
Azfi_ASCL	-----
Ceri_ASCL	-----
Poac_ASCL	-----
Adte_ASCL	-----
Poac_ASCL2	-----
Adte_ASCL2	-----
Zema_PKSB	-----
Orsa_PKSB	-----
Nyco_PKSB	-----
Metr_PKSB	-----
Arly_PKSB	-----
Arth_PKSB	-----
Amtr_PKSB	-----
Litu_ASCL1	-----
Eugr_PKSB	-----
Soly_PKSB	-----
Hean_PKSB	-----
Soly_PKSA	-----
Cagr_PKSC	-----
Arly_PKSC	-----
Arth_PKSC	-----
Hype_PKS1	-----
Eugr_PKSA	-----
Metr_PKSA	-----
Amtr_PKSA	-----
Arly_PKSA	-----
Arth_PKSA	-----
Hean_PKSA	-----
Nyco_PKSA	-----
Chse_ASCL	-----
Cika_ASCL	-----
Litu_ASCL2	-----
Maof_ASCL	-----
Gibi_ASCL	-----
Thpl_ASCL	-----
pita_PKSA	-----
Wemi_ASCL	-----