

SIAGO15
AtAGO6
MiAGO6
SIAGO6
AtAGO8
AtAGO9
SIAGO4c2
AtAGO4
MiAGO4b
MiAGO4a
SIAGO4a
SIAGO4b
SIAGO4c
AtAGO2
AtAGO3
MiAGO2b
MiAGO2a
SIAGO3
SIAGO2a
SIAGO2b
AtAGO7
SIAGO7
MiAGO7a
MiAGO7b
AtAGO1
SIAGO1a
SIAGO1b
MiAGO1a
MiAGO1b
AtAGO10
SIAGO10
SIAGO10a
MiAGOPNH1
SIAGO10b
MiAGOMEL1
SIAGO5
MiAGO5
AtAGO5

```

1      10      20      30      40      50      60      70      80      90      100     110     120     130
ME-----RGRGGRGDG-----RGRGGRGYGG-----GGGGG-----EQGRDRGYGGGEQGRGR-----
MD-----RGRGGRGDG-----RGRGGGGDRGRGYSGRGDGRGRGGDGRGYSGRGDGHGRGGGGDRGRGYSGRGDGRGRGGGGDRGR-----
ME-----RGRGGRGGG-----RGGGGGRRGGG-----GGGRGRGGGG-----SGRDGG--YGGGR-----S-----GGYGAGGRGG-----
ME-----RGRGGRGGGR-----GGGGVGRGGGG-----GGGGRRGGGG-----GGRNGGYGYGGGR-----S-----GGYRGGGRD-----
WD-----RGNNGRGGDR-----KRGRN-----SDR-VPGHNEQRQG-----PARG-----YYPD-----S-QYR-----AR-----
WD-----RGNYRRGGGHD-----NAGRGGNRGRGQGR-GGGRGEPQIG-----GGRG-GTHIGGGS-----QMGQP-----PQQWGNQPRGS-----
WD-----RGNYQRRGGD-----RGN-----NTGRGRGNRGR-----GGRGGTHVG-----GGRG-GPQMGS-----FHQP-----PQQWGNQPRGS-----
MEEKT-----HHHHHSTNKHIP-----S-----S-----SKSRTPLLHKPYHHHVQTNP-PPFL LHPSSHQNLNLVAS-----
MEHT-----EN-----S-----S-----NKCNKS-TTAKICPNNNNN-----
MEET-----EDP-----N-----N-----AT-----KKCTTKA-RSFRGRTNPHKH-----
MEET-----DDP-----N-----N-----AN-----KKCTTKT-TSFRGRTNPKH-----
WVRKR--RTDAPSEGGEGSREAGFVSGGGR-GSQR-----GGFQQGGGQHQG-----GRGYTPPQQGGRR-----GYGPPQQQQY-----GGPQ-YQGRGRG-----
WVRKR--RTDVPGGA-ESSESHETGGRG--G-VQRP-----PPQQQ-----QGG-----GRGSGP-----QRGGYGGRGGGGAPRGGIAPQQSY-----GGPPE-YYQGRGT-----
WARKR--RSELPGSG-ESSGSQETVCGQG--R-GQYP-----PQQQ-----EA-----S-----SAPPE-QQGRGRG-----
WVRKR--RTEIPSESSSQETSAGGG--R-GSQRATERSAPPNQSGG-----G-----GRGWGPQSQQGGRRGGYGGGGGGGRGRGSPQQQY-----GGPPE-QQGRGRG-----
MVTLLIYTV-VIIVRKR--RTELPSSGGESSSQEASASG--R-GSQRPTERSAPPQQGGGGFQGG-----GRGWGSQSQQGGRRGGYGG-----GRGRGPPQQQY-----SAPPE-QQGRGRG-----
MPTIRQMKDSSETHVIK---TQPL---KHHNP-KTQNGKI PPPSPSPVTVTTATVT-----QSQ-----ASSPS-PPSKNRSR-----
MPTIRQMKDSSEQHVIK---SHLQNTMSQAQKQP-KTQNGKPPHQEPQHS-----KP-----HSQTS-PPTKNRGR-----
MPTIRQMKESSEQHVIK---PHLQNTMNPVQKNP-KTQNGKPPHQEPNN-----KI-----HIQTS-PPSRNRGR-----
MPTIRQIRVP-EDYV---MSMNQKLFQ-AMF---RTGDNF-----E-----DVKD-SIGRKRGR-----
MKLELE-QKHVSR---TPLQESLNQNAQCQ-SS---GEHSRM-----E-----VKRHN-NAGKRGR-----
MSLFHY---TEIQLF FSL LFFSL LTM-----ERGRGR-----RGGSPYGG-----GRGGGRTPPYGGGR-----GDGRTPPYG---GGRGGRT-SPSDGRG-----
M-----NRGGGG-----HGGASR-----GRGGRRSDSRPAEPA-----P-VRDQSFQRGTGRSGGGR-----GRRPG-----
M-----NRGGGG-----HGGASR-----GRGGRRSDSRQDQSS-----GQVAVPGLQQSYGRRGGSV-----SAGR-----

```

GRA1

SIAGO15
AtAGO6
MiAGO6
SIAGO6
AtAGO8
AtAGO9
SIAGO4c2
AtAGO4
MiAGO4b
MiAGO4a
SIAGO4a
SIAGO4b
SIAGO4c
AtAGO2
AtAGO3
MiAGO2b
MiAGO2a
SIAGO3
SIAGO2a
SIAGO2b
AtAGO7
SIAGO7
MiAGO7a
MiAGO7b
AtAGO1
SIAGO1a
SIAGO1b
MiAGO1a
MiAGO1b
AtAGO10
SIAGO10
MiAGOPNH1
SIAGO10b
MiAGOMEL1
SIAGO5
MiAGO5
AtAGO5

```

140     150     160     170     180     190     200     210     220     230     240     250     260
-----GSERGGGNGRQGRGEQQDFRS-----
-----GYSCRGDGHGRGGGGDRGRGYSGRGRGFVQDRDGGWVNPQSSGGHVRGRGTQLQPPPPQEVPPSSSSQAQVSQGVAPGDVGGGGVGDVGRDGVGDVGRDGVGDVGGGGVGDVGVGDVGGGGVGDV
-----GGGNVRGRGGDYVRS--YDRDHQWGSSEQTPWGSTSTSTST-----
-----SGGGRNARGRR-----
-----AYYE-----EEQGRARQ-----HEEQGRARVQHEQE-----
-----GQYC-----IRGGAPQNPQGNYPVNQNPGRGGTWNQP-----
-----GQYC-----FRGAP-----PGRGGTWNQP-----
NLPSSYYYYYCYF-----
NNNN--HYIAFG-----FH-----
QYQH--HLFCYS-----NH-----
QYQH--QLFCYS-----NH-----
-----PPHGG-----RGG-----
-----QQYCRG-----GGQ-----
-----QTQGG-----RGG-----
-----QAQGG-----RGG-----
-----R--RN-----RGG-----
-----R--RG-----RGG-----
-----R--RG-----RGG-----
-----R--RC-----RGA-----
-----R--KG-----KGI-----
-----S-----KAR-----
-----GYQSPG-----GRG-----
-----G-----GGR-----
-----G-----NVG-----

```

GRA1

	540	550	560	570	580	590	600	610	620	630	640	650	660	670							
SIAGO15	HTMVLDAATSR	RWKT-DGNLSGDGE	---LSEGDQRKQK	I	SRFKTFRQIN	FVSTIPFKT	MPDGKGVK	---SRNNEVL	IADTIL	HSNAKRC	ILHTDPQKNSL	LRQSYF	PNEMKN	----FMDITGGI							
AtAGO6	HLVIVEGSFSK	DCGCVSDGG-S	SSGTCRKRSK	S	FLPRS	YKVOIHYA	AEIPEK	TVLGTOR	GAYTP	DKSADQ	ALRVLDIVLR	Q0AA	---ERGL	LRQAF	HS5DGH	----MKVGGGV					
MiAGO6	HTVILEESRAK	HESG---	SPNGGSS	---VDTCRKRSK	C	FSKSTK	VEISYA	AKIPEK	SIDIT	TKGN	EVHNNADQ	ALRVLDIVLR	Q0AA	---NRGCL	LRQSF	HDDSRN	----FVDVGGGV				
SIAGO6	HTVVEEESAR	QASE---	SPSDNGS	---LNHSYIKRFK	S	LHSKAL	VEIDYA	AKIPEK	SRVDLAI	QGA	DP---ENVQD	ALRVLDIVLR	QKAA	---NRGCL	LRQSF	HDDSRN	----FTDVGEGV				
AtAGO8	HTSVLVEEAPSR	RNA-----	DKRLKL	PHQSK	ENVAEIL	FAPPEI	PMEAI	ANABQK	K---TKHL	LDALRV	MDILVLR	QNA	---RQGL	LRQSF	HNDAKY	----FANVGGGV					
AtAGO9	HTSVLVEEIPSS	RNHA-----	GNDTNDADRKR	SRFPNQTK	ENVAEISYA	AKIPEK	QAIASA	BQK	E---TENL	QDALRV	MDILVLR	QSA	---RQGL	LRQSF	HNDVKN	----FVPIGGGV					
SIAGO4c2	HTDVLVEDVSS	RTDR---	GSPDG---	SPSDVDRKR	SKQPWS	AKYKVIK	YA	AKIPEK	QAIANA	BQK	D---SEQV	QAVRVD	ILVLR	QHAA	---KRGL	LRQSF	HNEPRN	----FVDVGGGV			
AtAGO4	HTSVLVEEVSAT	RAN---	GNGSPNGNES	---PSDGRKRLRF	P	NRSK	FRVETISYA	AKIPEK	QAIANA	BQK	E---SENS	QAVRVD	ILVLR	QHAA	---RQGL	LRQSF	HNDPTN	----CEPVGGNI			
MiAGO4b	HTMVLVEEIS	RNYG---	NGSPDGHS	---PNSDRKRRLRF	P	YHSK	TKVEISFA	AKIPEK	QAIANA	BQK	E---SENS	QAVRVD	ILVLR	QHAA	---RQGL	LRQSF	HNDPKN	----FTDVGEGV			
MiAGO4a	HTMVLVDVINS	RNYG---	GNSPGGHS	---PNEADRKRRLRF	P	YHSK	TKVEISFA	AKIPEK	QAIANA	BQK	E---SENS	QAVRVD	ILVLR	QHAA	---RQGL	LRQSF	HNDPKN	----FVDVGGGV			
SIAGO4a	HTMVLVDITSN	RNYG---	RNGTNGNS	---SPGRHGSPPNETDRKR	RLFP	YQSK	TKVEISFA	AKIPEK	QAIANA	BQK	E---SENS	QAVRVD	ILVLR	QHAA	---KQGL	LRQSF	HNDPKN	----FADVGGGV			
SIAGO4c	HTMVLVDITSN	RNYGT	---SSPPNEADRKR	RLRF	P	YQSK	TKVKISLA	GKIPEK	QAIANAF	BQK	E---YENS	QAVRVD	ILVLR	QHAA	---KQGL	LRQSF	HNDNN	----FVDVGGGV			
AtAGO2	HTKVEYPKTEE	---	NYGDLREKQK	PKKI	ER	FRVNYKLV	SKFDGK	EQR---	KEG	EDWAP	LPPEYI	HA	DVILVLR	ANPME	---	KCT	SIGR	SYSSMG	----SKEITGGGA		
AtAGO3	HTMVFSETEEI	---	KSGEIVLKLQK	GGQ	IK	FRVNYKLV	SKFDGK	ELNSY	INK	EGDDG	SSPL	PODY	HA	DVILVLR	ESPTE	---	KCT	TAGR	SYSSCMG	----KQDITGGGA	
MiAGO2b	HTMVFSEADL	---	PYGFNDLKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	TPSE	---	KCT	PWGR	SILYSSMG	----TKEITGGGA
MiAGO2a	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO3	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO2a	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO2b	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
AtAGO7	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO7	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
MiAGO7a	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
MiAGO7b	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
AtAGO1	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO1a	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO1b	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
MiAGO1a	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
MiAGO1b	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
AtAGO10	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
MiAGO10	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO10a	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
MiAGOPNH1	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO10b	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
MiAGOMEL1	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
SIAGO5	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
MiAGO5	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV
AtAGO5	HTMVFSEMED	---	PYGFNDPKQK	OKQ	IK	FRVNYKLV	SKFDGK	ELNSY	SK	EGDD	WIP	LP	PODY	HA	DVILVLR	DSPE	---	KCT	PWGR	SILYSSMG	----TKDITGGGV

ArgN

A1

A1

	680	690	700	710	720	730	740	750	760	770	780	790	800																																																																																																			
SIAGO15	L	G	R	G	H	S	F	R	T	A	G	G	L	S	N	I	D	V	S	T	T	---	T	L	I	P	G	P	L	V	N	F	M	A	N	Q	N	V	E	I	P	---	F	K	I	D	W	T	K	A	R	---	I	L	K	N	R	I	K	L	H	S	---	N	R	E	H	K	I	T	G	L	S	N	R	T	C	K	E	K	I	L	L	R	L	R	G	S	N	Q	N	D	N	G	O	T	V	E	I	T	V	Y	E	F	V	R	R	C	G	I	E	L
AtAGO6	I	G	I	R	G	L	H	S	F	R	P	H	G	L	S	N	I	D	V	S	T	T	---	M	I	L	E	P	G	P	V	I	D	F	L	K	A	N	Q	S	V	E	T	P	---	R	O	I	D	W	I	K	A	A	K	M	L	---	M	R	V	K	A	T	H	R	---	N	M	E	F	K	I	T	G	L	S	K	P	C	N	Q	F	P	M	K	V	K	N	A	---	N	E	G	O	T	V	E	I	T	V	Y	E	F	V	R	R	C	G	I	E	
MiAGO6	T	G	I	R	G	L	H	S	F	R	P	H	G	L	S	N	I	D	V	S	T	T	---	M	I	L	E	P	G	P	V	I	D	F	L	K	A	N	Q	S	V	E	T	P	---	R	O	I	D	W	A	R	A	K	M	L	---	N	M	E	F	K	I	T	G	L	S	K	P	C	N	Q	F	P	M	K	V	K	N	A	---	N	E	G	O	T	V	E	I	T	V	Y	E	F	V	R	R	C	G	I	E											
SIAGO6	M	S	C	R	G	L	H	S	F	R	P	H	G	L	S	N	I	D	V	S	T	T	---	M	I	L	E	P	G	P	V	I	D	F	L	K	A	N	Q	S	V	E	T	P	---	R	O	I	D	W	A	R	A	K	M	L	---	N	M	E	F	K	I	T	G	L	S	K	P	C	N	Q	F	P	M	K	V	K	N	A	---	N	E	G	O	T	V	E	I	T	V	Y	E	F	V	R	R	C	G	I	E											
AtAGO8	D	C	C	R	G	L	H	S	F	R	P	H	G	L	S	N	I	D	V	S	T	T	---	M	I	L	E	P	G	P	V	I	D	F	L	K	A	N	Q	S	V	E	T	P	---	R	O	I	D	W	A	R	A	K	M	L	---	N	M	E	F	K	I	T	G	L	S	K	P	C	N	Q	F	P	M	K	V	K	N	A	---	N	E	G	O	T	V	E	I	T	V	Y	E	F	V	R	R	C	G	I	E											
AtAGO9	S	G	C	R	G	H	S	F	R	T	A	G	G	L	S	N	I	D	V	S	T	T	---	M	I	L	E	P	G	P	V	I	D	F	L	K	A	N	Q	S	V	E	T	P	---	R	O	I	D	W	A	R	A	K	M	L	---	N	M	E	F	K	I	T	G	L	S	K	P	C	N	Q	F	P	M	K	V	K	N	A	---	N	E	G	O	T	V	E	I	T	V	Y	E	F	V	R	R	C	G	I	E											
SIAGO4c2	S	G	C	R	G	H	S	F	R	T	A	G	G	L	S	N	I	D	V	S	T	T	---	M	I	L	E	P	G	P	V	I	D	F	L	K	A	N	Q	S	V	E	T	P	---	R	O	I	D	W	A	R	A	K	M	L	---	N	M	E	F	K	I	T	G	L	S	K	P	C	N	Q	F	P	M	K	V	K	N	A	---	N	E	G	O	T	V	E	I	T	V	Y	E	F	V	R	R	C	G	I	E											
AtAGO4	L	G	R	G	H	S	F	R	T	A	G	G	L	S	N	I	D	V	S	T	T	---	M	I	L	E	P	G	P	V	I	D	F	L	K	A	N	Q	S	V	E	T	P	---	R	O	I	D	W	A	R	A	K	M	L																																																									

```
810          820          830          840          850          860          870          880          890          900          910          920          930
SIAGO15  GYSSNLPCINVGCSQKPKQFIPVELLCSLMP LQRFKKELSLHQRSLVNVNSSQKPIELMKHLNEELKANDY -----DKDPMLRACGLISLNKSYTVEGRVLPFPKLVV GKNKEYLASRF -----SRWSFNGK
AtAGO6  ISSAYFPCLDVGVKPDPRPNYLPLELFCNMLV LQRYTKPLSLSGQRVLVHSSRQKPLERIKTINDAMHTYCY -----NDKDPFLAGGLISLSEKEMTQVEGRVLPKPMKLF GKNEDFQPCN -----GRWNFNK
MiAGO6  TFSAYLPCLDVGVKPKRPNYLPLELFCNMLV LQRYTKPLSLSGQRASLVEKSRQKPKQEMQTLLTAAAMQYTCY -----DDDPVLGACGLISLSEKLTQDGRVLEAPKLVV GHNEDEVCPRN -----GRWNFNK
SIAGO6  SSSVYMPCLDVGVKPKRPNYLPLELFCNMLV LQRYTKPLSLSVQRASLVEKSRQKPKRERIKVITDAWRDYSY -----DDDPVLLVACGLISLSEKQLIOMNGRVLVEAPKLVV ENGEEVTPCD -----GRWNFNK
AtAGO8  RYSGGLPCINVGCKPNRPTYFPLELFCNMLV LQRYTKALTKFQRSNLVEESRQKPKQRIIGVITRALTKTSNY -----NDPMLQCSQVRLISGSDFTQVEGRVLPKLVV GKEQDIYPIN -----GSWVFNK
AtAGO9  RYSGDFPCINVGCKPRPTYPFLELFCNMLV LQRYTKSLTNFQRASLVEKSRQKPKPRMASITKQKDSNY -----NADPVLQDSQVSIITNFTQVEGRVLPKLVV SKGENLSPIK -----GKWNFMK
SIAGO4c2 RYSGEILPCINVGCKPKHPTFPLELFCNMLV LQRYTKALSLSGQRASLVEKSRQKPKRMRALTDALTKTSNY -----KADPPLGAGGLISLSEKEMTQVEGRVLPKLVV GDDQDLFPRN -----GRWNFNK
AtGO4  QYSADLPCINVGCKPKRPTYPFLELFCNMLV LQRYTKALTTFQRASLVEKSRQKPKRMTVLSKALVSNY -----DAEPLLRSCGLISLTSNFTQVEGRVLPKLVV ECGSETFPRN -----GRWNFNK
MiAGO4b RYXSADLPCINVGCKPKRPTYPFLELFCNMLV LQRYTKALNTLQRASLVEKSRQKPKRMTVLSNVLKSNKY -----DAEPLLRSCGLISLTSNFAKQVEGRVLSAPRKLKVM ENGDEFPRN -----GRWNFNK
MiAGO4a RYXSADVPCINVGCKPKRPTYPFLELFCNMLV LQRYTKALSTLQRASLVEKSRQKPKRMTVLSNVLKSNKY -----DAEPLLRSCGLISLTSNFTQVEGRVLSAPRKLKVM ENGDEFPRN -----GRWNFNK
SIAGO4a RYXSADLPCINVGCKPKRPTYPFLELFCNMLV LQRYTKSLSTLQRSSLVEKSRQKPKRMOQLSNALKINQY -----DAEPLLRSCGLISLTSNFTQVEGRVLPKLVV G-GDDFPRN -----GRWNFNK
SIAGO4b RYXSADLPCINVGCKPKRPTYPFLELFCNMLV LQRYTKALSTLQRASLVEKSRQKPKRMOQLSNALKINNY -----DAEPLLRSCGLISLTSNFTQVEGRVLPKLVV NGEDLFTRN -----GRWNFNK
SIAGO4c RYXSADLPCINVGCKPKRPTYPFLELFCNMLV LQRYTKALSTLQRASLVEKSRQKPKRMOQLSHALKMNNY -----DAEPLLRSCGLISLTSNFTQVEGRVLPKLVV GNGVDLFAQS -----GRWNFNK
AtGO2  VHK-DIPLCLDLCKNGRQNFVPMFECVLMVE GQIYFPEKDLNLDKDSALMVKKLSLVNPPQQRQRMNIDKMLKARNG -----SSGGEIIGNFGLVVDNMTPTVEGRVLPKLVV LAERGRVVEEPNPRQNNQVNM LMK
AtGO3  DHK-DIPLCLDLCKNGRQNFVPMFECVLMVE GQIYFPEKDLNLDKDSALMVKKLSLVNPPQQRQRMNIDKMLKARNG -----RGGDIIGNFGLVVDNMTPTVEGRVLPKLVV LADRGRVNIHEKLMSESNOWLTTK
MiAGO2b MYL-DIPLCLDLCKNGRQNFVPMFECVLMVE GQIYFPEKDLNLDKDSALMVKKLSLVNPPQQRQRMNIDKMLKARNG -----CGGEIIGNFGLVVDNMTPTVEGRVLPKLVV FVGAGGVKVISIQVEKEKQVNVN LVGK
MiAGO2a MYP-DIPLCLDLCKNGRQNFVPMFECVLMVE GQIYFPEKDLNLDKDSALMVKKLSLVNPPQQRQRMNIDKMLKARNG -----CGGAIIGNFGLVVDNMTPTVEGRVLPKLVV FVGAGGVKVISIQVEKEKQVNVN LVGK
SIAGO3  KNR-HLPSLNLCKGDKDNVYPMFECVLMVE GQYFPEKEDLDKDTALFLKNSISLARPPQRQAICEMVBAEDG -----RM-TIPDNFKIRVDNMTPTVEGRVLPKLVV G5GON---PPNLYKTCQWLVGK
SIAGO2a QFK-DIPLCLDLCKNGRQNFVPMFECVLMVE GQYFPEKEDLDKDTALFLKNSISLARPPQRQAICEMVBAEDG -----CG-AVTRNFDIKVDRNMTPTVEGRVLPKLVV G5GON---RLPV--NDKQWLVGK
SIAGO2b QFK-DIPLCLDLCKNGRQNFVPMFECVLMVE GQYFPEKEDLDKDSAMFLKNSISLARPPQRQAICEMVBAEDG -----CG-AITDNFDIKVDRNMTPTVEGRVLPKLVV G5GON---PLRV--NDKQWLVGK
AtGO7  QFK-NLPLCQLTIS-RARPCYIPMELNLTICE GQKFLGKLSDDQATARLTK-MGCRPKPKERKAIIDRVMGTGLV -----SSGNTRFENLEVSREMTLTKGRILQPKLKD DARRGNP IHEKLMSESNOWLTTK
SIAGO7  LYR-NLPLCQLTIS-RSKPCYIPMELNLTICE GQKFLGKLSDDQATARLTK-MGCRPKPKERKAIIDRVMGTGLV -----TSGNHASDFKLEQVSKEMTKVYGRILQPKLKD GDRGQVRNLI-PSRHDROWNFLDS
MiAGO7a QFR-NLPLCQLTIS-RSKPCYIPMELNLTICE GQKFLGKLSDDQATARLTK-MGCRPKPKERKAIIDRVMGQPGV -----S-DNRASEFKLQVSKEMTKVYGRILQPKLKD GDDGGIRDLV-PSRHDROWNFLDS
MiAGO7b QFR-NLPLCQLTIS-RSKPCYIPMELNLTICE GQKFLGKLSDDQATARLTK-MGCRPKPKERKAIIDRVMGQPGV -----S-GNRGKFEKLVHVSREMTLNGRILQPKLKD GDDGGIRDLI-PSYDROWNFLDS
AtGO1  QHT-QLPLCQLVQNSNRPNYLPMFVCKLIVE GQRYSKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----AKDNYAQEFGLKISTSLASVEARLPAVALKY HESGREGTCDL-PQV--GQWVMMNK
SIAGO1a QHT-QLPLCQLVQNTQRPNYLPMFVCKLIVE GQRYSKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----SDDPYAREFGLKISTEKLASVEARLPAVALKY HDTGREKDCD-PQV--GQWVMMNK
SIAGO1b QHT-QWPLCQLVQNQQRPNYLPMFVCKLIVE GQRYSKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----AEDFYAREFGLKISTEKLASVEARLPAVALKY HDNGREKDCD-PQV--GQWVMMNK
MiAGO1a RHT-QWPLCQLVQNQQRPNYLPMFVCKLIVE GQRYSKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----YDKPYAREFGLKISTEKLASVEARLPAVALKY HDTGREKDCD-PQV--GQWVMMNK
MiAGO1b KHT-QWPLCQLVQNQQRPNYLPMFVCKLIVE GQRYSKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----HEDPYAREFGLKISTEKLASVEARLPAVALKY HDTGREKDCD-PQV--GQWVMMNK
AtGO10 QHT-HLPLCQLVQNKQKASYPMEACKLIVE GQRYTKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----DDDPYAKEFGMLNISTEKLASVEARLPAVALKY HENGTKEKDCD-PQV--GQWVMMNK
MiAGO10 QHT-HLPLCQLVQNKQKASYPMEACKLIVE GQRYTKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----DDDPYAKEFGMLNISTEKLASVEARLPAVALKY HENGTKEKDCD-PQV--GQWVMMNK
SIAGO10a KNT-HLPLCQLVQNKQKASYPMEACKLIVE GQRYTKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----NDDPYAKEFGMLNISTEKLASVEARLPAVALKY HETGKEDCDL-PQV--GQWVMMNK
MiAGOPNH1 RYT-HLPLCQLVQNQ--KYIPMEACKLIVE GQRYTKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----GDEPYAREFGLKIVASKLASVEARLPAVALKY NDAGKEKEYL-PQV--GQWVMMNK
SIAGO10b QYP-HLPLCQLVQNSQKPNYLPMFVCKLIVE GQRYTKRINERGIITALLK-VICORPPIREKDLTQTVQHNDY -----KODPIAKEFGMLNISTEKLASVEARLPAVALKY HDAGKEKECH-PQL--GQWVMMNK
MiAGOMEL1 RYV-SWPLSLSQSDKPIIFPMELNLTICE GQRYSKRINERGIITALLK-EACRPPREEMECTLRITASFNDG -----FVDDLKVEFGVYKCKELVCDARTLPPVALKY SDSGKDRITIR-PQV--GQWVINNA
SIAGO5  AYP-RLPALTQQCSAKPVIIPMEICKLIVE GQRYTKKINERQVTEMLR-ATCRPPKRLNGLNQTIVSNKY -----ADDLVHEFGILGV DARLTLVEARLPAVALKY HASGKSRVD-PRV--GQWVINNA
SIAGO5  KYT-FLPALAQCSAKPVIIPMEICKLIVE GQRYTKKINERQVTEMLR-ATCRPPKRLNGLNQTIVSNKY -----NGDKFAKEFGILQVGAELACDARLTLPPVALKY HESGKREKMN-PRL--GQWVINNA
AtAGO5  KYQ-ALPALTQTCSSTRPVYIPMELNLTICE GQRYTKRINEKQVTEMLR-ATCRPPKRLNGLNQTIVSNKY -----ND-DLSKEFGMLNISTEKLASVEARLPAVALKY HDGKKEKMN-PRL--GQWVINNA
```

PAZ

A2

A2

```
940          950          960          970          980          990          1,000        1,010        1,020        1,030        1,040        1,050        1,060        1,070
SIAGO15  KFADPKSIEFWAVVNFSTGHD -----I RAFCIEMAKLGAMRGVHIHPPSF-VFEENAKHKKKPGSVRVNKMFEQL -----IPKFR -----KDPPRF
AtAGO6  MLEPRATKSWAIVNFSFPCD -----SSHISRELIISCGMRKGIIDRPFALV-EEDQYQYKAGPVRVEMKIATM -----KLFKFP -----D-PHPH
MiAGO6  SFUDDPKIDHWIIVNFSARCD -----TSHLSRELIINCGMRKGVHIERPFT-LIEEDQYSRRTSPVVRVEMKMFDDI -----TAKLFP -----E-PPQL
SIAGO6  HIFNPARIERWAVVNFNSAND -----TSHLSRELIISCGRSKGIHFERPHT-LIEEDQYRAGPVVRVEMFEEI -----IARLP -----G-HDPD
AtAGO8  ---PATVTRWAVVNFNSARCD -----PQKIIDDITRCGKMKGINVDSPHYVVFENPQFKDATGSVRYDKMFQHL -----QSLIG -----EVPKFE
AtAGO9  TIAEPTITVTRWAVVNFNSARCD -----TNTLIRDILIKGREKGINVEPFPKDYINENPQFRNAPATVRVEMFEEI -----KSKLP -----K-PPLE
SIAGO4c2 RIVPEVKIERWAVVNFNSARCD -----VRKLCMDLIRKCGKMKGIIFISPPFOHIFEENQYRNPAPVRVEMKLEEI -----KSKLP -----A-PPQF
AtGO4  E FVEPTIKRIVVNFNSARCN -----VRQVDDLIKIGGSKGIIFIASPFQ-VFEENQFRRAPPRIIVEMKFDI -----QSKLP -----G-VPOF
MiAGO4b KIVEPTIKERWAVVNFNSARCD -----IRGLVRDLIKCGGDMKGIKIDDPFD-VFEENPQLRRAPLVRVEMFDDI -----QSKLP -----G-APQF
MiAGO4a K-----IDDPF-DVFEENPQLRRAPPMVRVEMFEDI -----QSKLP -----G-APQF
SIAGO4a RIVVDPDKIERWAVVNFNSARCN -----VQGLVSDLIKCGKQKGINVEDPFD-VFEESQVRRAPLVRVEMFQV -----QSKLP -----G-APK
SIAGO4b RFFEPAPKIERWAVVNFNSARCD -----VRGLVRDLIRLGETKGISVEAPFE-VFEESQLRRAPPVVRVEMFEEI -----QSKLP -----G-APK
SIAGO4c RFFESAIVEKAVVNFNSARCD -----IGKLVCLITGLGETKGISVEAPLK-VFEESHRRAPPVGRVDMFEEI -----QSKLP -----D-APK
AtAGO2  GVTGTSIVKHWAVDIFIASERFN---KMPNDFVDNLDRCWRLQMEAPIVYK-TSR-METLSNGNATELLRSVIDEASRHG -----GARPTL
AtGO3  GVTGTSIVKHWAVDIFIASESLK---KMPGYFVNKLIIRKCLGWOMEAPIVCK-TS5-METLYDGNALTELLRSVIDEASHNHG -----GACPTL
MiAGO2a AVVEGRRVIERWALIDFSAYDRKN---KLDHRAFIGDIIRFENLGLFMNEPAAYQ-PTS-MNKFNVVDGRLQLLGVTSQASKICK -----GHL-QI
MiAGO2b AVELEGRKIERWALIDFSSSDRYN---KLDHGVFISDIIDRFVSLGILMNEPAIYH-PTS-MNQFNSVDGRLHLLQGVISRAKICK -----GHL-QI
SIAGO3  SVVEGKALQRWALIDFSKGRDLSLKLQVDFVVKIKDRCTQLSNIMDIPAVHV-LTD-MNELSVGKVLKLLVDAEAKKLQ -----GKL-QM
SIAGO2a SVVEGKALQRWALIDFSQDRKPFRLRVDFVFRKDRKLSLIMNEPAVHV-FTD-MHVLSEVGVKHLKLLVDAAAKREIN -----GKL-QM
SIAGO2b SVVEGKALQRWALIDFSKERN---WLRVDFEVIIRDRCSKLSLIMNEGPAEVH-LTD-MHLSVGVKVLKLLNFVDAAKRKIN -----GKL-QM
AtAGO7  KVYFKGTRIERWALISIGGSDQK---STIKPEINELTQCEHLGVFSLKNTLSSTFFEP-SHILNLIISLSEKLEIQRAS -----NNLQI
SIAGO7  HWFESTRIVERWALISHGGSQK---SHVPKFINQLCQREQLGIFLNKNTVLPNQFEP-LHLNNVNLSLSEKLNKHRAFSE -----NNLQI
MiAGO7a HWFEGTTRIERWALISHGPTDQK---ACIKPFINQLSQRCEQLGIFLNKNTICCPQFEP-TQVLLNNVLSLSEKLNKHHEATAS -----NNLQI
MiAGO7b HWFEGTTRIERWALISHGPTDQK---ACIKPFINQLSQRCEQLGIFLNKNTICSPQFES-TQVLLNNVLSLSEKLNKHEAL -----NNLQI
AtGO1  KVIINGGTIVNWIICINFSRNV-QD---NLARTCOELIAQMCYVSGVAFNPEVLPVPSAR -----PQVQKVLKTRYHDAMTSLKLS-Q -----GKEIDL
SIAGO1a KVIINGGTIVNWIICINFSRNV-QD---SVARGFCSEIAQMCISGVIFNPNPVLVPSAR -----PDQVRLKTRFHDAMTKLQPN -----GRELDL
SIAGO1b KVIINGGTIVANWICINFSRNV-QD---TVAHGFCSEIAQMCISGVIFNPNPVLVPSAR -----PDQVRLKTRFHDAMTKLQPL -----SKELD
MiAGO1a KVIINGGTIVHWLICINFSRTV-QD---QVARGFCYELIAQMCYISGVAFPEPEVLPVMTAR -----PEQVRLKTRVHDAMTKLPL -----GKELD
MiAGO1b KVIINGGTIVHWLICINFSRV-QD---QVARGFCYELIAQMCYISGVAFPEPEVLPVISAR -----PEQVRLKTRFHDAMTKLGS -----GKELD
AtGO10 KVIINGMTVSRWAVNFSRV-QE---NVARGFCNELIQMCYISGVAFENPEVPIIYSAR -----PDQVQKALKHYVHTSMNKT-K -----GKELEL
MiAGO10 KVIINGMTVSRWAVNFSRV-QE---SVARGFCNELIAQMCISGVAFENPDVPIIYNAR -----PEQVQKALKHYVHASMNKT-K -----GKELEL
SIAGO10a KVIINGMTVNRWAVNFSRV-QE---SVARGFCNELIQMCYISGVAFENPDVPIIYMAR -----PDQVQKALKHYVHASCNKLT-K -----GKELEL
MiAGOPNH1 KVIINGSTVNRWAVNFSRV-QE---NTEAFQCLIVQCTIRISGVAFENQPEVPIVPSAR -----PDQVQKALKHYVYFASANKL-Q -----GDELEL
SIAGO10b KVIINGSTVNRWAVNFSRV-QE---NAARGFCHQIAQMCYISGVAFENQPEVPIVPSAR -----PDQAKKALNYVYNAVNKL-G -----GKELEL
MiAGOMEL1 KVIYDGAALFKWTCINFSLSL-NI---QVASSFCKDLITMCRSKSGVDMNCPVLPVWTR5 -----SNTSSTLDDVHRACQDE -----QKPLQ
SIAGO5  KVIINPAHWYVYVTCVFSQQI-I-----PDRLVDGLHRCMISKGVTFD-APLVPFRQAR -----PDHTEFLRDIHRESMQADRLGLDCLKIHLQ -----LVLVLP
MiAGO5  KVIINGGQVFWTCVFSSTR-TR-NR---DLPFQFCEELVNMCRSKGVFNPTVPIIHPAN -----PNTLENALRDIHRKSTAEIARKGPQ-----GKKLQ
AtAGO5  KVIINGAKVTSWTCVFSSTR-I-DR---GLPQEFCKQLIGMCRSKGVFEKPPQAIPIFISCP -----PEHTEFLALDIIHKRA -----PGLQ
```

Piw_i_ago like

1,350 1,360 1,370 1,380 1,390 1,400 1,410 1,420 1,430 1,440 1,450 1,460 1,470

SIAGO15 QPNS-----SNIPIPGTIVVDTKIICHPLYNNFYLC AHAARVGTSRP THYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

AtAGO6 QAKG-----PENVPAAGTIVVDTKIIVHPR-NYDFYMGCAHAGKIGTSRPAHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

MiAGO6 QASA-----PENVPAAGTIVVDTKIIVHPR-NYDFYMGCAHAGKIGTSRPAHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

SIAGO6 QANA-----VENVPAAGTIVVDTKIIVHPR-NYDFYMGCAHAGKIGTSRPAHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

AtAGO8 QTES-----PENVPIGTITIDSNIIICHQH-NNDFFYMGCAHAGKIGTSRPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

AtAGO9 QSRG-----PENVPIGTITIDSNIIICHPR-NDFYMGCAHAGKIGTSRPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

SIAGO4c2 QTN5-----PENVPIGTIVVDNAVCHPK-TNDFYMGCAHAGKIGTSRPTHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

AtAGO4 QPTS-----PENVPIGTITIDNKIICHPK-NNDFFYMGCAHAGKIGTSRPTHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

MiAGO4b QSGS-----PENVPIGTIVVDNRVCHPK-NYDFYMGCAHAGKIGTSRPTHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGM-----

MiAGO4a QSGS-----PENVPIGTIVVDNRVCHPK-NYDFYMGCAHAGKIGTSRPTHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

SIAGO4a QPND-----PENVPIGTITIDNKVCHPR-NYDFYMGCAHAGKIGTSRPTHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHNGV-----

SIAGO4b QSGS-----PENVPIGTITIDNKVCHPR-NNDFFYMGCAHAGKIGTSRPTHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

SIAGO4c PYGS-----ANVPIGTITIDNKVCHPR-NNDFFYMGCAHAGKIGTSRPTHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

AtAGO2 PATN-NDGSD---KENVPSGTIVVDTKVIHPY-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

AtAGO3 PATTSKDGRA---KENVPSGTIVVDTKVIHPY-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

MiAGO2b PASK-RDGC---TENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

MiAGO2a PESK-RDGGI---TENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

SIAGO3 PKEG-----VENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

SIAGO2a PEGG-----PENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

SIAGO2b PREG-----VENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

AtAGO7 RCDP-D-----HENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

SIAGO7 PCEL-DPSTTKNTLNF---HENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

MiAGO7a PYET-DPSTQIQLSN---HENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

MiAGO7b PYN5-YPSSTQNQLSN---HENVPIGTIVVDTKIIVHPF-EYDFYLCGSHHCGIGTSKPTHYHVLDEI GFSDDTVOELVHCLCYVSRCTISALISEVAPIRYARLVSAQMLEIMKTE-----

AtAGO1 AQNH-NDRHS---VDRS---HENVPIGTIVVDTSKIIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

SIAGO1a ANNH-RDRNA---VDRS---HENVPIGTIVVDTSKIIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

SIAGO1b ANNH-RDRNA---VDRS---HENVPIGTIVVDTSKIIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

MiAGO1a ANNH-RDRST---VDRS---HENVPIGTIVVDTSKIIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

MiAGO1b ANNH-HDRNT---VDRS---HENVPIGTIVVDTSKIIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

AtAGO1a ANNH-RDKNS---TDRS---HENVPIGTIVVDTKIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

MiAGO10 ASNH-RDRS---TDRS---HENVPIGTIVVDTSKIIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

SIAGO10a ANNH-KDRS---IDRS---HENVPIGTIVVDTKIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

MiAGOPNH1 SSNH-KDRNS---TDRS---HENVPIGTIVVDTKIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

SIAGO10b PNNH-NDRNH---TDRS---HENVPIGTIVVDTKIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

MiAGOMEL1 P5NH-DDRTL---TDRS---HENVPIGTIVVDTKIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

SIAGO5 PADH-RNRDL---TDRS---HENVPIGTIVVDTKIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----

AtAGO5 PEQH-GNRDM---TDRS---HENVPIGTIVVDTKIICHPT-EYDFYLCGSHHCGIGTSRPAHYHVLDEI GFSADDMQLVHSLSYVYQRTTALISVVAPICYAHLAAAGVAQFIRKDEISETSSSHGGV-----