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      110      120      130      140      150
      . . . . | . . . . | . . . . | . . . . | . . . . |
Dmel\P-element  A P A K G Q T F K R R R L N A D A V E
Dbif\P-element  A L K - G K I Y K K R R L N N D A V P
Dhel\P-element  T P N K G E T N K R R R L N K D A I P
Dwil\P-element  A P A K G Q T F K R R R L N A D A V P
Spal\P-element  T P N K G Q A N K R R R L N T D A I P
Hsap\THAP9      - - - - E S Y G I R R K L K K G A V P S V S L Y K - - - -
Dana\Galileo    - - - - G - - - K S R L R S N A V P T L N L F D N S L L C P N S P V P C E K F D F D I - - - -
Dpse\Galileo    - - - - G - - - V R K L K A N A V P T L N L S E N T L L T A F N A D L C N D Y E F S E - - - -
Dper\Galileo    - - - - G - - - V C K L K A N A V P T L N L S E N T L L T A F N A D L C N D Y E F S E - - - -
Dwil\Galileo    - - - - G - - - T K F L K A G A I P T L L L T D E P N L N L I A T D A K I D L Y D F - - - -
Dvir\Galileo    - - - - G - - - K T R F K K N A V L S L R L F A S L N L N F N I T R A R G R I D A F T F F K Q D D
Dmoj\GalileoC   - - - - G - - - K R Y L R A N A V P T L H L G N S N L I S N N N A D V S D D I Y S L D I Q E E A I
Dmoj\GalileoD   - - - - G - - - K R F L R V N A V P T L N L G N S N L L S N N N A D V S D D I Y S I D F Q E E N I
Dbuz\Galileo    - - - - G - - - K R K L K A N A V P T L N L C D P N F F S - N S A D F N D D F R L V D - - - -
Dmel\1360       - - - - G - - - V K Y L K K G A I P D R N L I N Y K S C N N A D I N L - - - -
Dsim\1360       - - - - G - - - V K Y L K K G T I P D R N L I K Y K S C N S A Y I N L - - - -
Dsec\1360       - - - - G - - - V K Y L K Q G T I P D R N L T K Y D S C Q N D D I N L - - - -
Dere\1360       - - - - G - - - V K Y L R K G T I P D R N L I K Y E S C K N D D I D F - - - -
Dyak\1360       - - - - G - - - V R Y L R K G T I P D R N L M T Y N - - N N D E I N F - - - -
Dper\1360       - - - - G - - - K K K L K S E A I P T L N L E I E - - L E N N S V E F - - - -
Dpse\1360       - - - - G - - - K K K L K S E A I P T L N L E I E - - L E N N S V E F - - - -
Dvir\1360       - - - - G - - - C R Y L K R G T I P D R N M D P G N N C T S N A N Y L - - - -

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      160      170      180      190      200
      . . . . | . . . . | . . . . | . . . . | . . . . |
Dmel\P-element  - - - - - S K V I E P E P E K I K E G Y T - - - - -
Dbif\P-element  - - - - - Q R E K E D E S V K E G Y A - - - - -
Dhel\P-element  - - - - - T I E I E P E P E N V K E G Y A - - - - -
Dwil\P-element  - - - - - S K V I E P E P E K I K E G Y T - - - - -
Spal\P-element  - - - - - T K E K E P E P E H V K E G Y T - - - - -
Hsap\THAP9      - - - - - I P Q G V H L K G K A R - - - - -
Dana\Galileo    - - - - - N D E A E E P I G I Y V N P I R - T E Q F S N S L D S P S
Dpse\Galileo    - - - - - N K Q D N E P I G T F L Q A K R - I K L A D V H N I M S N
Dper\Galileo    - - - - - N K Q D N E P I G T F L Q A K R - I K L A D V H N I M S N
Dwil\Galileo    - - - - - C E E T H E E I S T F Q N I R K H G A E P T N I L E N I D
Dvir\Galileo    N I E T F S A F K N N N I T - - - - - I E T T R I D C E H V I E L S D - S G S L V K I S Q Y N N
Dmoj\GalileoC   T P Y S Y Q K K C L N K V V D D F M K P S D T E Q Q H Q S S N I Q T Q S D G E E N L E N F L S F D N
Dmoj\GalileoD   I P Y S Y T K K S L D K V V D G F V K P S D T E Q Q H P I S N I P N P S D E E D N L E N F L S F D N
Dbuz\Galileo    - - - - - N R G A E H Q N E N V P N E C D - D E L I E N L L I F D D
Dmel\1360       - - - - - N A V G S P P R K R H R S Q S P - - - - -
Dsim\1360       - - - - - N A V G S P P R K R H R S Q S P - - - - -
Dsec\1360       - - - - - N A V G S P P R K R H R S Q S P - - - - -
Dere\1360       - - - - - N A V R S P P Q K R C R S Q S P - - - - -
Dyak\1360       - - - - - N A V R S P A Q K R Y R S Q S P - - - - -
Dper\1360       - - - - - I E P E I D A E K E - - - - -
Dpse\1360       - - - - - I E P E I D A E K E - - - - -
Dvir\1360       - - - - - N V L I S P P R K R K R S Q S P - - - - -

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                210                220                230                240                250
                . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . | . . . . |
Dmel\P-element -----SGSTQTE-----
Dbif\P-element -----NASTETEDTV-----
Dhel\P-element -----SSSTQTE-----
Dwil\P-element -----SGSTQTE-----
Spal\P-element -----SSSTQTECECVC-----
Hsap\THAP9 -----QKILKQPLPDNSQEVATED-----
Dana\Galileo NLETPCAPQLED-----SPFCSNCQKREENEMFYRN
Dpse\Galileo ELEQQCVTEAPDKVS-----LENKESIDIKFCENCLKREQNEKYRN
Dper\Galileo ELEQHCVTEEPDKVS-----LENKESINIKFCENCLKREQNEKYRN
Dwil\Galileo NNTEKVEDISDISTDC-----MQFCSNCLKKEQNEAYYRK
Dvir\Galileo PEKTKCHLSNHVGFPELYDNISLSAEKDSQDIRFCPNCLKKEQNELYYQN
Dmoj\GalileoC SLQNQLWQDLSAGR-----SSFCSNCLKREQNEVYYRK
Dmoj\GalileoD SLKNQLWQDLSAGR-----SSFCSNCLKREQNELYYRN
Dbuz\Galileo NSKKEFWQNLAVDR-----TPYCLNCIKREQNEVYYRK
Dmel\1360 -----VEVCRQCHKNAKTLKVFQK-----
Dsim\1360 -----VEVCRQCHKNAKTLKVLKN-----
Dsec\1360 -----VEVCRQCHKNAKTLKVFQK-----
Dere\1360 -----GEVCRQCHKNTKTLKMFKK-----
Dyak\1360 -----VEICRQCHKNTKTLKVFQK-----
Dper\1360 -----VSICEKCKKNSKSNFYKK-----
Dpse\1360 -----VSICEKCKKNSKSNFYKK-----
Dvir\1360 -----AEICRQCHKNTTTLKYYQK-----

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                260                270                280                290                300
                . . . . ▲ . . . . ▲ . . . . ▲ | . . . . | . . . . | . . . . | . . . . | . . . . |
Dmel\P-element -SCSLFNENKSLREKIRTLEYEMRRLEQQLR-----ES
Dbif\P-element INHSTSM EIKTLRQKIRALEDEVQSLRKLVE-----DA
Dhel\P-element -CCSLSNENKSLRQMIRAMEYDLQRLRNQLE-----ES
Dwil\P-element -SCSLFNENKSLREKIRTLEYEMRRLEQQLR-----ES
Spal\P-element RCCSLSTENKSLTETIQAMEYDLQRLRNQLE-----ES
Hsap\THAP9 HNYSLKTPLTIGAEKLAEVQOMLQVSKKRLISVKNYR---MIKKRKGRLRL
Dana\Galileo KNYEMFLELKKYKEKMQKMGRALVLMKNASRRRGK----RNSRKTTPNL
Dpse\Galileo KYYEIMADQKKRENGFIKLKDRFLALKRVVYRRNRRYR--IKTTNLKPNI
Dper\Galileo KYYEIMADQKKRENGFKKLKDRFLALKMVVYRRNRRYR--IKTTNLKPNI
Dwil\Galileo KCFEMSENKKETIQVKVLCNKKIRHLRIVLRNERARKLK-YLKEKKKIDI
Dvir\Galileo KYWKFFLKCTREYKQVQHYKRKLHRMQILLRSERIKEASYFKKSRKNINI
Dmoj\GalileoC KYYEIMKVALQNVQKENYNLKKRYSFLRNAHRQRNIYQR--ARKEKKHVNI
Dmoj\GalileoD KYYDMGVDLKKSQQEFLKLKKKYLALKNASRHRNIYYR--IRKVKKHVNV
Dbuz\Galileo KYYEIGLDLKKVQERYTKLKRRFISFKRVSNYRGVSEFR--VRRAKKTVNV
Dmel\1360 KCIAFKKLSDERQIRIKMLRKENSNLKRKLV-----RLESKTEKNI
Dsim\1360 KYLSFFKMSDERQTLIKNLRKENSNLKRKLV-----RLESKSKKNI
Dsec\1360 KYFASKKLSDERQTLIKNLRKENSNLKRKLV-----RLESKSKKNI
Dere\1360 KYLAFKKLSDERQIRIKMLRRENSNLKRKVI-----RLESKSEKNL
Dyak\1360 KYISYKKMSDERQIRIKMLRKENSNLKRKII-----RLESKSEKNL
Dper\1360 KCNRLLA EIKKLLKKEKLSKKYIPKNKKYVVS-----QKI
Dpse\1360 KCNRLLA EIKKLLKKEKLSKKYIPKNKKYVVS-----QKI
Dvir\1360 QYFTFKKIAEARKIRINLLKRENTNLKRRIK-----RLKVNAYESL

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	310	320	330	340	350				
Dmel\P-element	QQLEESLRKIFTD	TQIRILKNGGQR	---	ATFNSSDD	-----	ISTAICLH			
Dbif\P-element	SQLEKSLSTIFT	TQIKILKSGGKR	---	SEFNSSDD	-----	ISWAMCLH			
Dhel\P-element	RQLEESLGKFFTE	AQIKILKNGGKR	---	STFTSSDD	-----	LSAAICLH			
Dwil\P-element	QQLEESLRKIFTD	TQIRILKNGGQR	---	ATFNSSDD	-----	ISTAICLH			
Spal\P-element	RQLEESLAKIFTE	TQIKILKNGGKR	---	STFTSSDD	-----	ISAAICLH			
Hsap\THAP9	IDALVEEKLLSE	EETECLLRAQFSD	FKWELYNWRET	DEYSAEMKQF	ACTLY				
Dana\Galileo	FNIINKLPHVSD	EAKTLCKMLL	KKS	---	NSYNSAE	-----	KVIAQNIN		
Dpse\Galileo	IPIIAKMTHVSA	EAKTICIMIL	KKT	---	LSYSPA	-----	KVIAQNIN		
Dper\Galileo	IPIIAKMTHVSA	EAKMICIMIL	KKT	---	LSYSPA	-----	KVIAKNIN		
Dwil\Galileo	QGLIDKKC	-VSKNSNTV	CKMLLKNK	---	QSWEDEE	-----	KIIAQSIN		
Dvir\Galileo	FAILDSKPF	LSXNSNTV	CKMLLKNK	---	NSWEEEE	-----	KVVAQSIH		
Dmoj\GalileoC	FTTINNLP	PHVSDQSKV	LCKMLFKK	---	QVYNSAE	-----	RVISQNMH		
Dmoj\GalileoD	FTTINNLP	PHVSENSK	VLCRMLLK	---	HVYNSAE	-----	RAIAQNIN		
Dbuz\Galileo	FTTINSLAHV	SEQSKVL	CKMLLKNT	---	NFYNSAE	-----	RVLSQNIN		
Dmel\1360	YSEIDKIN	-LTGNEKIL	TKMLLKEK	KG	TNTRW	NDCE	-----	KLFAQSIY	
Dsim\1360	YSEIDKIN	-LTGNEKIL	AKMLIKEK	KG	TNTRW	NDCE	-----	KLFAQSIY	
Dsec\1360	YSEIEKIN	-LTGNEKIL	AKMLIKEK	KG	TNTRW	NDCE	-----	KLFAQSIY	
Dere\1360	LSQIDKIN	-LTGNEKIL	AKMLLKEK	KG	TNTRW	NDSE	-----	KLFAQSIY	
Dyak\1360	LSQIDKIN	-LTGNEKIL	VKMLLKEK	KG	TNTRW	NDSE	-----	KLFAQSIY	
Dper\1360	KDLIDNLE	-ISKESKIF	CKLFV	GTRP	---	QKYGEDV	-----	QFLAQNIY	
Dpse\1360	KDLIDNLE	-ISKESKIF	CKLFV	GTRP	---	QKYGEDV	-----	QFLAQNIY	
Dvir\1360	ISKVDKMD	-LTGNEQIL	IKMLLKEK	KG	TCLR	W	NDSE	-----	KLFAQGIF

	360	370	380	390	400						
Dmel\P-element	TAGPRAYNHLY	KK-GFPLP	SRTTLYRW	LSDVDIKR	GCLDVVIDLMDS	--D					
Dbif\P-element	TAGPRAYNHLY	KK-GFPLP	CRATLYK	WLSNVEIQ	TGCLDVVIDLMDN	--M					
Dhel\P-element	TAGPRAYNHLY	KK-GFPLP	SRTTLYRW	LSDVEIKT	GCLDVAIDL	MEN--D					
Dwil\P-element	TAGPRAYNHLY	KK-GFPLP	SRTTLYRW	LSDVDIKR	GCLDVVIDLMDS	--D					
Spal\P-element	TAGPRAYTHLY	KK-GFPLP	SRTTLYRW	LSDVEIKP	GCLDVAIDL	MEN--D					
Hsap\THAP9	LCSSKVYDY	VRKI--LKL	PHSSIL	RTWLSK	QPSPGFNS	NIFSF	LQRRVE				
Dana\Galileo	FYSSRTYEY	LRDVLN	LKLP	PAKSTL	SRWALF	KNLTP	GFHPDF	LENLQKIVG			
Dpse\Galileo	FYSSRTYEY	LRDVLN	LKLP	PSKRTL	ARWAVL	KNMRP	VFNPD	LLSNLKTIFD			
Dper\Galileo	FYSSRTYEY	LRDVLN	LKLP	PSKRTL	ARWAVL	KNMRP	GFNPD	LLSNLKTIFD			
Dwil\Galileo	FYSSKAYNF	M	RDDLE	NLPC	NKSLQ	RWAPV	RNMV	PGLNENLLKHLKGIFL			
Dvir\Galileo	FYFAKAYD	FMRNDL	HLNLP	SKSSL	ARWAP	VKYL	VSGL	NECLSN	TLLKIFS		
Dmoj\GalileoC	FYSARAYD	YLRDVL	NLRLP	CKKQL	NRWAIL	KNLVP	GFNP	ELLENL	KDIVG		
Dmoj\GalileoD	FYSARTYD	YLRDVL	NLRLP	CKKSL	NRWAIL	KNLVP	GFNP	D	LLLENLQ	GIVE	
Dbuz\Galileo	FYSARAYEY	LRDVL	HLKLP	SKKSL	NRWAI	FKNLT	PGSN	PELLEN	LQ	GIVE	
Dmel\1360	YRSTSTYT	FLRDSL	KLNF	PS	PSSLQ	KWNSI	KKLQ	PGDNE	CLYSAL	KESIK	
Dsim\1360	YRSTSTYT	FLRDSL	KLNF	PS	PSSLQ	KWNSI	KKLQ	PGDNE	CLYSAL	KESIK	
Dsec\1360	YRSTSTYT	FLRDSL	KLNF	PS	PSSLQ	KWNSI	KKLQ	PGDNE	CLYSAL	KESIK	
Dere\1360	YRSTSTYT	FLRDSL	KLNF	PS	PSSLQ	KWNSI	KKLQ	PGDNE	CLYSAL	KETIK	
Dyak\1360	YRSTSTYT	FLRDSL	KLNF	PS	PSSLQ	KWNSI	KKLQ	PGDNE	CLYSAL	RETIK	
Dper\1360	YVSPSTY	AFMRN	RNL	LSL	PHVSTL	YRWD	PIKSL	QPGF	ENTA	IDA	-----
Dpse\1360	YVSPSTY	AFMRN	RNL	LSL	PHVSTL	YRWD	PIKSL	QPGF	ENTA	IDA	-----
Dvir\1360	YRSTSTY	KFLR	DSLQ	LNLP	PS	PSSLQ	KWNSI	KKLQ	PGDNE	CLYSAL	KDAIK

	410	420	430	440	450
				
Dmel\P-element	GVDDADKLCVLA	FDEMKVAAAFEYDSSADIV	-----	YEPSDY	-----
Dbif\P-element	DMDTADKLCVLA	FDEMKVAGTFEYDSSADLV	-----	YEPSEY	-----
Dhel\P-element	AMDEADKLCVLA	FDEMKVAAAFEYDSSADVI	-----	YEPSNY	-----
Dwil\P-element	GVDDADKLCVLA	FDEMKVAAAFEYDSSADIV	-----	YEPSDY	-----
Spal\P-element	AIDEADKLCVLA	FDEMKVAAAFEYDSSADV	-----	YVPSNY	-----
Hsap\THAP9	NGDQLYQYCSLLIKSMPLKQQLQWDPSSHSLQGFMDFGLGKLDADETPLA				
Dana\Galileo	EMSEKGEAVILCDEIKIKKGLQYNTALDEIQGFENDGEKRTRF	----	LG		
Dpse\Galileo	GMSSKGEAVILFDEIKIKRGLHYNIALDEIQGYENDGQNTKSL	----	LG		
Dper\Galileo	GMSSKGEAVILFDEIKIK	-----	IALDEIQGYKNDGQNTKSL	----	LG
Dwil\Galileo	KMHNKSKNSVLVLEISIRKGLQYNSHRGEVEGFVDDGYEKTDA	----	LC		
Dvir\Galileo	KMNEKSKQAVLLFDEMSIKRGLQYNSRRDEIEGFTDDGVEKTPE	----	LC		
Dmoj\GalileoC	KMSAKEKYTVLVCEIKVKRGLQYNSSLDEIQGFENDGIKRTKF	----	LG		
Dmoj\GalileoD	KMSAKEKYAVLVCELEKVKRGLQYNSSLDEIQGFENDGVKRSRF	----	LG		
Dbuz\Galileo	KMSDKGKYAVLVFDEVKIKKGLQYNSYLDEIQGFENDGEKRTKF	----	LG		
Dmel\1360	EMNASDKECILACDEVAIKKNLTYNVSVDIIDGIEHL-LDRSNK	----	IG		
Dsim\1360	EMNASDKECILACDEVAIKKNLAYNVSVDIIDGIEHL-LDRSNK	----	IG		
Dsec\1360	EMNASDKECILACDEVAIKKNLAYNVSVDIIDGIEHL-LDRSNK	----	IG		
Dere\1360	EMNESEKECILTCEVAIKKNLTYNVSVDIIDGLEHL-IDRSNK	----	MG		
Dyak\1360	EMNESDKECILTCEVAIKKNLTYNVSVDIIDGLEHL-IDRSNK	----	MG		
Dper\1360	-----	EMAIRRELRYNEKLDIIDGFEHNGFERTSR	----	IA	
Dpse\1360	-----	EMAIRRELRNNEKLDIIDGFEHNGFERTSR	----	IA	
Dvir\1360	GMSECDKECILTCEVAIEKNLTYNTSVDAIDGLEHL-LERSNK	----	MG		

	460	470	480	490	500
				
Dmel\P-element	--VQLAIVRGLKKS	WKQPV-FFD	FNTRMDPDTLNNILRKLHRK	----	GYL
Dbif\P-element	--VQLAMVRGLKKS	WKQPV-FFD	YDTRMDVPTLYELIKKLHRR	----	GYF
Dhel\P-element	--VQLAIVRGLKKS	WKQPI-FFD	FSTRMDADTLNNIIRKLHTK	----	GYP
Dwil\P-element	--IQLAIVRGLKKS	WKQPV-FFD	FNTRMDPDTLNNILRKLHRK	----	GYL
Spal\P-element	--VQLAIVRGLKKS	WKQPI-FFD	FSTRMDADTLNNIIRKLHTK	----	GYP
Hsap\THAP9	SETVLLMAVGI	FGHWRTPLGYF-FVNRASGYLQAQQLLRLTIGKLSDIGIT			
Dana\Galileo	QQVCVFMARGLFENWKYVISYTVSANGIKHDALMKKVEANIEVSQTLGLN				
Dpse\Galileo	QQVCVFMIRGLFENWKYVLSYTVTANGIKHEALLTKVTANIEQAQVLGLN				
Dper\Galileo	QQVCVFMIRGLFENWKYVLSYTVTLNGIKHEALLAKVTANIERAQVLGLN				
Dwil\Galileo	KQICVFMVRGLYANWKVLSYVATSTGLSSHKLTLQIDSNIRAARTLGLF				
Dvir\Galileo	KQISVFMVRGLYENWIFVLSYFATSTGLLTLKLRQIESFLRTGYSLGLN				
Dmoj\GalileoC	QQVCVFLVRGLFDNWKYVLSYTVSARGINHTDLKKKFEENIGLSQALGLN				
Dmoj\GalileoD	QQVCVFLVRGLFENWKYVLSYTVSARGINHTDLKKKFEENIGLSQALGLN				
Dbuz\Galileo	QQVCVFLIRGLFENWKYVLSYTVSANGIRHSDLKSKVEANIGLSQALGLN				
Dmel\1360	SHICVFVLRGILKKWKFILNYFVAETNIKGDCLKSLIYKNIIEAETIGFK				
Dsim\1360	SHICVFVVRGILKKWKFIINYFVAETNIKGDCLKSLIYKNIIEAEKIGFK				
Dsec\1360	SHICVFVVRGILKKWKFIINYFVAETNIKGDCLKSLIYKNIIEAEKIGFK				
Dere\1360	SHICVFVIRGILKKWKFILNYFVPEETNIKGDCLKKFIYKNINIVENIGFK				
Dyak\1360	SHICVFVIRGILKKWKFILNYFVPEETNIKGDCLKKLIYKNINIAENIGFK				
Dper\1360	KPVCVFMFKSIFSKTSSLLNYFASENGLTSDDLCEIVKRNISILHSLGVS				
Dpse\1360	KPVCVFMFKSIFSKTSSLLNYFASENGLTSDDLCEIVKRNISILHSLGVS				
Dvir\1360	SHICVFVLRVIFKKWKFILNYFVPKTNIKGECLKALILRNINIAENIGFT				

	510	520	530	540	550
Dmel\P-element	VVAIVSDL	LG	TGNQKLWTE	ELGISE	-----SKTWF
Dbif\P-element	VVSIIVSD	MGAGN	QRLWREL	GISE	-----EKTWF
Dhel\P-element	VVAIVSDL	GS	GNQKLWSEL	GVSE	-----SKSWF
Dwil\P-element	VVAIVSDL	GTGNQKLWTE	ELGISE	-----SKTWS	
Spal\P-element	VVAIVSDL	GS	GNQRLWSEL	GVSE	ECKFFTSIKIKNNLSLIFCNCFLAKIWF
Hsap\THAP9	VLAVTSD	ATAHSVQMAKALGIHI	-----DGDDMKCTF		
Dana\Galileo	VRAAICD	QGSNNRAAYKKW	GVNI	-----NKPSF	
Dpse\Galileo	VRAAICD	QGSNNRAVFRRL	GVDI	-----KNPSF	
Dper\Galileo	VRAAICD	QGSNNRAVFRRL	GVDI	-----KNPSF	
Dwil\Galileo	IRAVVCD	QGPNNRGAFNKL	GIVN	-----EAPYF	
Dvir\Galileo	IKAIVCD	QGSINRGAF	TKYGVNK	-----EVPYF	
Dmoj\GalileoC	VKAVVCD	QGSNNRAVFN	RWGIDL	-----NNHSF	
Dmoj\GalileoD	VKAVVCD	QGSNNRAVFN	RWGIDF	-----NNHSF	
Dbuz\Galileo	VKAVVCD	QGSNNRAV	FRWGIDI	-----NKPSF	
Dmel\1360	VRGVVYD	QGGNNRKCTS	LLEVTN	-----EKPYF	
Dsim\1360	VRGVVYD	QGGNNRKCTS	LLEVTN	-----EKPYF	
Dsec\1360	VRGVVYD	QGGNNRKCTS	LLEVTN	-----EKPYF	
Dere\1360	VRGVVYD	QGGNNRKCTS	LLEVTN	-----EKPYF	
Dyak\1360	VRGVVYD	QGGNNRKCTS	LLEVTN	-----EKPYF	
Dper\1360	VCVLVXD	QGSTNRKCF	NNLGATI	-----ENPFF	
Dpse\1360	VKVLVXD	QGSTNRKCF	NNLGATI	-----ENPFF	
Dvir\1360	LRGVVYD	QGGNNRKRTS	LFKVTK	-----EKPYF	

	560	570	580	590	600	
Dmel\P-element	SHPADDHLKI	FVFS	DPHLIKLVRN	HYVD-SGLTINGK	KKLT	KKTIQEALH
Dbif\P-element	GHPEDEDLKI	FVFS	DAPHLIKLVRN	HYLA-TGLHINGQ	TLTKSTVE	QTIT
Dhel\P-element	SHPTDEHLKI	SVFP	DPHLIKLVRN	HYVD-SGLTLYG	KKLT	TKTTVQQTLN
Dwil\P-element	SHPADDHLKI	FVFS	DPHLIKLVRN	HYVD-SGLTINGK	KKLT	KKTIQEALH
Spal\P-element	SHPTDENSKI	FVFS	DPHLIKLVRN	HYVD-SGFTLNG	KKLT	TKTTVQQTLN
Hsap\THAP9	QHPSSSSQQI	AYFF	DSCHLLRLIR	NAFQNFQSIQ	FINGIAHW	QHLV
Dana\Galileo	NV---NDKEI	FVIF	DAPHLIKSLRN	LLLK-NNLNTP	DGEVSW	DIKKLYQ
Dpse\Galileo	KV---QDKEI	FAIYN	VPHLIKSLRN	IVRN-INLYTP	DGVVSW	KIVEEELYE
Dper\Galileo	KV---QDKEI	FAIYD	VPHLIKSLRN	IVRN-RNLYTP	DGVVSW	KIVEEELYE
Dwil\Galileo	SL---DDQKI	YGIYD	VPHLTKSIR	NILMR-DSIETP	DGTVSW	HVVVRLLE
Dvir\Galileo	TI---DDKKI	YGIYD	DPHLFKSLRN	IILMR-NSLET	PDVRSW	QILVKLFQ
Dmoj\GalileoC	EV---NGEKI	FAIF	DAPHLVKS	LRNILLK-NNILAP	EGTVSW	GIIRRLYE
Dmoj\GalileoD	EV---NGEKI	FAIF	DAPHLVKS	LRNILLK-KNISTP	EGTVSW	GIIKRLYE
Dbuz\Galileo	HV---NDKEI	FAVFD	DAPHLVKS	LRNILLR-HNISTT	QGTVSW	XNIIRKLYE
Dmel\1360	TL---NNKK-	YMFYD	IPHLFKSV	RNNFLR-ANFETP	DGLVDF	FDVIREVYE
Dsim\1360	TL---NNKKY	YMFYD	IPHLFKSI	RNNFLK-ANFETP	DGLVDF	FDVIRDITK
Dsec\1360	TL---NNKKY	YMFYD	IPHLFKSI	RNNFLK-ANFETP	DGLVDF	FDVIREVYE
Dere\1360	TF---NNKKY	YMFYD	IPHLFKSI	RNNFLK-ANFETP	DGLVDF	FDVIREVYE
Dyak\1360	TL---NSKKY	YMFYD	IPHLFKSI	RNNFLK-ANFETP	DGRVDF	FDVIREVYE
Dper\1360	EY---ENQKV	FCMYD	FPHLIKSLK	NGLLT-CDLSSP	DSIVSF	FKVVOELWE
Dpse\1360	XY---ENQKV	FCMYD	FPHLIKSLK	NGLLT-CDLSSP	DSIVSF	FKVVOELWE
Dvir\1360	YN---NNKRY	YLFYD	IPHLFKSI	RNNLLK-AKFETP	DGLVDF	FDVIREVYE

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          610          620          630          640          650
    . . . | . . . | . . . | . . . | . . . | . . . | . . . | . . . |
Dmel\P-element LCNKSDLS--ILFKINENHINVRSLAKQKVKLATQLESNNTTASSIRRCYS
Dbif\P-element HCKTDVT--ILFKVNEHSLNVRSLAKQKVKLATQLESNNTTASAIRRCYS
Dhel\P-element YCAKSDVS--ILFKISENHLNVRSLDKQKVNLATQLESNNTTASSIRRCYS
Dwil\P-element LCNKSDLS--ILFKINENHINVRSLAKQKVKLATQLESNNTTASSIRRCYS
Spal\P-element HCAKSDVS--ILYKISENHLNVRSLAKQKVKLATQLESNNTTASSIRRCYS
Hsap\THAP9     LEEQELSN--MERIPSTLANLKNH-VLKVNSATQLESESVASALEYLLS
Dana\Galileo   IESRNSTR--LCPKVTAKHINPNSFEKMKVKYATQIFSHTVAAAIRTVVD
Dpse\Galileo   IDSRNSTR--LCPKLTTKHIYPNSFEKMKVKYATQVFSHSVAAALRTMIS
Dper\Galileo   IDSRNSTR--LCPKLTTKHIYPNSFEKMKVKYATQVFSHSVAAALRTMIS
Dwil\Galileo   IDTSNTSTR-MCPQLTRKHIFQNSFEKMKVKYATQVFSQTVSSAIKTLIQ
Dvir\Galileo   IDTDITSTLFLCPKLSRKHIYPNYFKNMKVKYATQILSHAVASATKTLIQ
Dmoj\GalileoC  TETKNLTR--LCPKLTCLKHVSPNCFEKMVKKEATQIFSHSVAAAIRTVVE
Dmoj\GalileoD  TETKNLTR--LCPKLTCLKHVSPNCFEKMVKKLATQIFSHSVAAAIRTVVE
Dbuz\Galileo   IESKNLTR--LCPKLTCLKHVSPNCFEKMVKYATQVFSHSVAAAIRTVID
Dmel\1360      LDHGSVTR---MTKLTRSHVNPTRFELMRVCLATQTLSHTVAAAIKTCNQ
Dsim\1360      LDHGSVTR---MTKLTRSHVNPTRFELMRVCLATQTLSHTVAGAIKTCNQ
Dsec\1360      LDHGSVTR---MTKLTRSHVNPTRFELMRVCLATQTLSHTVAAAIKTSNQ
Dere\1360      LDQRSVTR---MTKLTRSHVNPTRFELMRVCLATQTLSHTVAAAIKTCNQ
Dyak\1360      LDQGSVTR---MTKLTRSHVNPTRFELMRVCLATQTLSHTVAAAIKACNQ
Dper\1360      MEEHAGTK--MCPKLSRHHIYPNSFEKMRVKEATQIFSRTVQAAIKTVCE
Dpse\1360      MEEHAGTK--MCPKLSRHHIYPNSFEKMRVREATQIFSRTVQAAITTVCE
Dvir\1360      LEOGSVTR---MTKLTKSHVNPTRFELMRVCLATQIFSHTVAAAIRTCNK

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          660          670          680          690          700
    . . . | . . . | . . . | . . . | . . . | . . . | . . . | . . . |
Dmel\P-element LG---YDIENATEADFFKLMNDWFDIFNSKLSTSNCI ECSQPYGKQLD
Dbif\P-element LG---YQVENAVETSDFLKLLNDWFDVFN SKLSTSNCIETTQPYGKQLE
Dhel\P-element LG---YDVENACETSDFLKLLNDWFDLFN SKLSTANCIQSTQPYGKQLP
Dwil\P-element LG---YDIENATEADFFKLMNDWFDIFNSKLSTSNCI ECSQPYGKQLD
Spal\P-element LG---YDVENACETSDFLKLLNDWFDVFN SKLSTANCIQSTQPYGKQLE
Hsap\THAP9     LDL---PPFQNCIGTIHFLRLINLFDIFNSRN-----CYGKGLKGPLL P
Dana\Galileo   SGGFV-DCRNSAEATANFIENVNKLFDCLNSHV-----LYEKNPDRCALQ
Dpse\Galileo   SGGFL-KCKENAEATATFIEKMNRLFDCLNSHV-----LYDKNPFERSALQ
Dper\Galileo   SGGFL-KCKENAEATATFIEKINRLFDCLNNHV-----LYDKNPFERSALQ
Dwil\Galileo   HGKFI-DCEDVAIATSKFIEKVNRLFDCLNSSN-----IYDRNPNKSAIQ
Dvir\Galileo   NGNFA-DCRDIALSTAKFIERVNKLLDCLKSNV-----LKDKNLFESALQ
Dmoj\GalileoC  TGGFA-DCKDSAVATAIFIDKINLFDCLNSHV-----LFDSPYRCALR
Dmoj\GalileoD  TGGFA-DCKDSAVATAIFIDKINLFDCLNSHV-----LFDSPYRCALR
Dbuz\Galileo   SGGFS-DCKDSAVATAIFIEKINRLFDCLNSHV-----LFDSPYRCALT
Dmel\1360      NKQLHRNSSEVAASTAAFVQKNDYFDCLNSRV-----LTDKNPMKCALQ
Dsim\1360      NKQLHRNSSEVAASTAAFVQKVNDYFDCLNSRV-----LTDKNPMKCALQ
Dsec\1360      NKQLHRNSSEVAASTAAFVQKVNDYFDCLNSRV-----LTDKNPMKCALQ
Dere\1360      NKQFHRNSPEVAASTAAFVQKVNDYFDCLNSRV-----LTDKNPMKCALQ
Dyak\1360      NKQFNHRNSPEVAASTAAFVQKVNDYFDCLNSRV-----LTDKNPMKCALQ
Dper\1360      TVGFKNSTYQVALSTAEFINKIDQIFDCMNSGS-----LYADNVYRSAIQ
Dpse\1360      TVGFKNSTYQVSLSTAEFINKVDQIFDCMNSGS-----LYADNVYRSAIQ
Dvir\1360      NKQLQRSSSEVADATATFVEKVNDFYFDCLNSRV-----INDNPNMKCALQ

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	710	720	730	740	750
				
Dmel\P-element	IQ-NDILNRMSEI	---MRT---	GILDKPKRLPFQKG	IIVNNASLDG	
Dbif\P-element	LQ-RDILKQMSHI	---MSN---	RICGQTHRLPFQKG	ILINNASLDG	
Dhel\P-element	FQ-RDVLEKMSKI	---MSS---	EILGKSRKLPFQKG	ILVNNASLDG	
Dwil\P-element	IQ-NDILNRMSEI	---MRT---	GILDKPKRLPFQKG	IIVNNASLDG	
Spal\P-element	FQ-RDVLEKMTQL	---MCS---	DILGRSQKLPFQKG	IIVNNASLDG	
Hsap\THAP9	ETYSKINHVLIEAKTIFVTLSDTSNNQIIKKGQKLGFL		G	FLLNAESLKW	
Dana\Galileo	KN-NNVHNYLVEMRKYFAEF	-----KY---	PQVVCIDG	MMLTISSVLA	
Dpse\Galileo	DK-NLVNETLSDMRKYFEEF	-----KY---	PQEVYCIK	MILTINSILS	
Dper\Galileo	DK-NLVNETLSDMRKYFEEF	-----KY---	PQEVYCIK	MILTINSILS	
Dwil\Galileo	KD-SDNEQYIEMRDYFKKC	-----LY---	RRKVYCLD	GIVLSINAILM	
Dvir\Galileo	NN-NIKEKYITEMPNYFMKC	-----RY---	LKTVYCING	LILTINSVLK	
Dmoj\GalileoC	EN-NNVHEYLQEMRDYFLNL	-----HY---	PHKVYCIDG	MMLTISSVIA	
Dmoj\GalileoD	EK-NNIHEYLLEMRDYFKNL	-----HY---	PHKVYCIDG	MIIITISSVIA	
Dbuz\Galileo	RN-NNVHEYLQEMRDYFHDL	-----QY---	PQKVYCIDG	MIIITISSVIA	
Dmel\1360	VN-NGVWNKLEMQEYLKSV	-----KY--	HGNKIYCVD	GLIQTTEAIFG	
Dsim\1360	VN-NAVWNKQKEMQEYLKSV	-----KY--	HGNKIYCVD	GLIQTTEAIFG	
Dsec\1360	VN-NAVWNKLEMQEYLKSV	-----KY--	HGNKIYCVD	GLIQTTEAIFG	
Dere\1360	FN-NTVWNKLEMQEYLRNV	-----KY--	HGNSIYCLD	GLIQTTEAIFG	
Dyak\1360	VN-NTVWHKLEMQEYLRNV	-----KY--	HGNNIYCLD	GLIQTTEAIFG	
Dper\1360	LN-NVPHKFIQFFLSYIKDV	-----NFVDS	SKKRVYFLD	GIQITLKSLLL	
Dpse\1360	LN-NVPHKFIQFFLSYIKDV	-----NFVDS	SKKRVYFLD	GIQITLKSLLL	
Dvir\1360	KE-NVVWKKLEMQVYLRNI	-----RY--	QGNLTYCIDG	SLOTTEAIFG	

	760	770	780	790	800
				
Dmel\P-element	LYK-YL-QENFSMQYILTSRLNQD	I	VEHFFGSMRSRGGQFDH	PTPLQFKY	
Dbif\P-element	LHA-YC-NEKYGMEYILTSRLNQD	I	VENFFGAMRAKGGQHDH	PSPLQFKY	
Dhel\P-element	LYI-YL-KDKYKMEYLLTSRLNQD	I	VDNFFGAMRSRGGQFDH	PTPLQFKY	
Dwil\P-element	LYK-YL-QENFSMQYILTSRLNQD	I	VEHFFGSMRSRGGQFDH	PTPLQFKY	
Spal\P-element	LFI-YL-KDKYNMEYLLTSRLNQD	I	VENFFGAMRSRGGQYDH	PTPLQFKY	
Hsap\THAP9	LYQNYVFPKVMPPPYLLTYKFS	H	HLELFLKMLRQVLVTSSSP	CTMAFQK	
Dana\Galileo	LSE-RVWS--SEIFYISTAKLNQD	P	LENLFYLLIRARGATNNN	PLMSEFNN	
Dpse\Galileo	LAQ-NVWSESAEVFYIATSCLNQD	P	LENLFYLLIRSRGVTNNN	PTMYEFNV	
Dper\Galileo	LAQ-NVWSESAEVFYIATSCLNQD	P	LENLFYLLIRSRGVTNNN	PTMYEFNV	
Dwil\Galileo	LTS-DIWNEGHGVFFLMLSRLNQD	A	LEHVFYLLIRSRGGTNNN	PMLFEFNA	
Dvir\Galileo	LSQ-DIWREDSNVFFLILSRLNQD	A	LENLFYLLIRDRGITYSN	PKLFEFNA	
Dmoj\GalileoC	LAE-DIWNNNTDIFVATSCLNQD	P	LENLFYLLIRCRGGTNSN	PTVFEFNT	
Dmoj\GalileoD	LAE-NIWSDNNDLFFVATSCLNQD	P	LENLFYLLIRSRGATNTN	PTIFEFNS	
Dbuz\Galileo	LAE-NIWSDNNDLFFVATSCLNQD	P	LENLFYLLIRSRGATNTN	PTIFEFNS	
Dmel\1360	LVE-DLFKDHTDHFFFLTSRVNQD	P	LENIFACVRAKGGNCRN	PSVNEFNI	
Dsim\1360	LVE-DLFKDHADHFFFLTSRVNQD	P	LENIFACVRAKGSNCRN	PSVNEFNI	
Dsec\1360	LVE-DLFKDHADHFFFLTSRVNQD	P	LENIFACVRAKGGNCRN	PSVNEFNI	
Dere\1360	LVK-DIFRDHTDHFFFLTSRVNQD	P	LENIFACVRAKGGKCRN	PSVNEFNI	
Dyak\1360	LVK-DIFKDHTDHFFFLTSRVNQD	P	LENIFACVRAKGGNCRN	PSVNEFNV	
Dper\1360	LAD-ELLT-NSDKIFIMTKSLNQD	K	LENTFAVVRQKGGNNTN	PSVAEINN	
Dpse\1360	LAD-ELLT-NSDKIFIMTKTLNQD	K	LENTFAVVRQKGGNNTN	PSVAELKN	
Dvir\1360	LVD-DLFKDHPDNFFFLTSRINQD	P	LENIFASVRAKGGNCRN	PSVYEFNI	

	810	820	830	840	850
Dmel\P-element	RLRKYII	-----	-----	-----	GMTNLKE-CV
Dbif\P-element	RLRKYIV	-----	-----	-----	AKNTELLAG
Dhel\P-element	RLKKYLI	-----	-----	-----	AKNTELLRN
Dwil\P-element	RLRKYII	-----	-----	-----	ARNTEMLRN
Spal\P-element	RLRKYLI	GMSNLEEL	CGVLCVLS	FMCFQFY	LIIFILYPAKNT
Hsap\THAP9	AYYNLET	-----	-----	-----	RYKFDDEVFLSKVS
Dana\Galileo	IMSKMLS	-----	-----	-----	MKILTSKSV
Dpse\Galileo	IISKMLS	-----	-----	-----	MKVLTSTTV
Dper\Galileo	IISKMLS	-----	-----	-----	MKVLTSTTV
Dwil\Galileo	IISKMLS	-----	-----	-----	MKLITSKTT
Dvir\Galileo	IISKMLS	-----	-----	-----	MKIIFTAKIS
Dmoj\GalileoC	IISKMLS	-----	-----	-----	MKMLTSASV
Dmoj\GalileoD	IISRMLS	-----	-----	-----	MKILTSASV
Dbuz\Galileo	IISKMLS	-----	-----	-----	MKVLTASAI
Dmel\1360	IIAKLIS	-----	-----	-----	LHIFKF-SQ
Dsim\1360	IIAKLIS	-----	-----	-----	LHIFKF-SQ
Dsec\1360	IIAKLIS	-----	-----	-----	LHIFKF-SQ
Dere\1360	IIAKLIS	-----	-----	-----	LHIFKF-SQ
Dyak\1360	IIAKLIS	-----	-----	-----	LHIFKF-SQ
Dper\1360	IFARILN	-----	-----	-----	IKIVCS-SD
Dpse\1360	IFAKILN	-----	-----	-----	KLKIVRS-SD
Dvir\1360	IIAKLIS	-----	-----	-----	LHIFHF-TK

	860	870	880	890	900
Dmel\P-element	NKNVIPD	NSESWLN	LDFFSSKEN	ENKSKDDEP	VDDEPVDEMLS
Dbif\P-element	NGNVDED	NCDSWLN	LNITPNGNKE	NEPDEGKWK	GWSKEFEE
Dhel\P-element	TGNVEED	NFDSWLN	LDFFSSK	SLRNKPEDDE	PEDEQOG
Dwil\P-element	SGNIEED	NSESWLN	LDFFSSKEN	ENKSKDDEP	VDDEPVDEMLS
Spal\P-element	TGNVAED	NCDSWLN	LDFNKSLEK	KNKPED	VEPEDVEPEDEADE
Hsap\THAP9	IFDISIARRK	DALWTVQR	QYGVSVTK	TVFHEEGICQ	DWSHCSLSE
Dana\Galileo	SGNFGPD	DDTMLIN	VIQDCSTN	KICNNLKT	DEEESTDFDMFS
Dpse\Galileo	SGNCSPD	EDTMLIN	I IKDNV	SSSESASESKT	FDDDILISTN
Dper\Galileo	SGNCSPD	EDTMLIS	I IKDNV	SSSESASESKT	FDDDILISTN
Dwil\Galileo	TGNCEPD	EDMLIN	VI EETKHE	LAIENVNDQD	QVYEDFNII
Dvir\Galileo	SGNCQPN	GEFMLV	NVIELANE	KCKAFVLR	T---KNICPIT
Dmoj\GalileoC	SGNCIPD	EDLMLAN	I IKDSGS	QLSVFHEQC	NSCHTPTEI
Dmoj\GalileoD	SGNCIPD	EDLMLAN	I IEDSGS	QLSVFHDQC	NSRHATDIE
Dbuz\Galileo	SGNCILD	EDSMLAN	I IKDSGS	TLSVVFHSQC	EIHSSVYEE
Dmel\1360	KSNCESD	DDVMLP	IEFDSII	YQPFVEKKEI	QQQEYSV
Dsim\1360	KSNCESD	DDVMLP	IEFDSII	YQPFIEKKEI	QQQEYSV
Dsec\1360	KSNCESD	DDVMLP	IEFASII	YQPFIEKKEI	QQQEYSV
Dere\1360	KSNCESN	DDVMLP	IEFDSII	YQPCVEKKEI	QQEYSV
Dyak\1360	NSNCESD	DDVMLP	IEFDSII	YQPCIEKKEI	QQQEYSV
Dper\1360	FGNCEAD	FEEGA	AVQACIE	GVFNESNNL	KVEH-PNDHDELLS
Dpse\1360	FGNCEAD	FEEGIA	VQACIE	GVFNESNNL	KDEH-PNHDELLS
Dvir\1360	KSNCESD	DDVMLP	VEFDSII	YEPYENNESK	VVPDNEFSV

	910	920	930	940	950
				
Dmel\P-element	-----EMDELTED--AMEYIAGYVIKK-----L				
Dbif\P-element	FEIEMDNNIAAEYIMDELTED--AMEYLAGYVVRK-----L				
Dhel\P-element	IANNIPAVI---EIDELTED--GMD-VAGYVIKR-----R				
Dwil\P-element	-----EMDELTED--AMEYIAGYVIKK-----L				
Spal\P-element	DDDCIANNIPADIEMDELTED--AIEYVAGYVIKR-----L				
Hsap\THAP9	-----ALLDLSDHRRNLICYAGYVANKLSALLTCEDCITALY				
Dana\Galileo	IEQIFDIA----TGNEFGSN--ALRYFAGYILFKFLQKND CGACAD-LL				
Dpse\Galileo	LELSIEATDLS--IQAAFNEN--ALRYYAGYLLHKLLKKYDCNK CSE-LL				
Dper\Galileo	LELSIEATDLS--IQAAFNEN--ALRYYAGYLLHKLLNKYDCNK CSE-LL				
Dwil\Galileo	DEVSEADKEQPT-EISIATEN--SLKYFVGFVMHKAQQKFNC DTCKE-LL				
Dvir\Galileo	TNVVCDNDDLPSVAISASSDN--ALRYFAGFVLDKSQQEFNC DTCKS-FL				
Dmoj\GalileoC	IELSLD TTIAN--IQNDFNEN--ALRYFAGYLLHKLLQNTDCEV CTN-LL				
Dmoj\GalileoD	IELSLD ATIAN--IQNAFNEN--ALRYFAGYLLHKLLQRTDCEV CTN-LL				
Dbuz\Galileo	IELSLD STIVN--IQNAFNEN--ALRYFAGYLLHKLLQRTDCEV CTN-LL				
Dmel\1360	NERYFDQNI DN F-LCNDVPIELTSSRYFVG YIAKG----SSCDKCRSVIL				
Dsim\1360	NERYFDQNI DN F-LCNDVPIELTFSRYFVG YIAKG----SSCDKCRSVIL				
Dsec\1360	NERYFDQNI DN F-LCNDVPIELTSSRYFVG YIAKG----SSCDKCRSVIL				
Dere\1360	NERYFDQNI DN F-LCNDVPIELTSSRYFVG YIAKG----SSCDKCRSLIL				
Dyak\1360	NERYFDQNI DN F-LCNDIPIELTSSRYFVG YIAKG----SSCDKCRSVIL				
Dper\1360	FENYFEKDSEFK--TSKEINIEVASMRYFVG YVAFKTI PRLNFETCSKCMR				
Dpse\1360	FENYFEKDSEFK--TSKEINIEVASMRYFXXXXAFKTI PRLNFETCSKCMR				
Dvir\1360	NETYFDEHMDNM-LTNDLPIELTSSRYFVG YIAKG----SNCEK CQTYLI				

	960	970	980	990	1000
				
Dmel\P-element	RISDKVKENLTF-----TYVDEVSHGG L IKPSEKFQEK LKELECI FLHYT				
Dbif\P-element	RLSNESTQS-GF-----TYVDEVSHGG L IKPSDQFTATLKHLESIFINNI				
Dhel\P-element	RMSDCKQSPTF-----TYVDEVSHGG L IKPSDQFKNKLKELKII FSHYT				
Dwil\P-element	RISDKVKENLTF-----TYVDEVSHGG L IKPSEKFQEK LKELECI FLHYT				
Spal\P-element	RLSDCLKQSSTF-----SYVDEVSTGG L LNRSDEFK NKLKELEII FSHFA				
Hsap\THAP9	ASDLKASKIGSLLFVKKK-----NGLHFPSESLCRVINICERVV RTHS				
Dana\Galileo	KKNIDAQSC TETFIINKNYDCADKTLK LKAPSDSFFSLIEIHFNVFKKIF				
Dpse\Galileo	KSSDEVRC SSEYLILNKNFGYVSSSLK LKAPSEDFCTLVKIYFDIFNRHF				
Dper\Galileo	KSSDEVRC SSEYLILNKNFGYVSSSLK LKAPSEDFCTLVKIYFDIFNRHF				
Dwil\Galileo	KEEIANYE ESEFFIINKNFKTINNNLKL KAPQNH LFNLMKQHYKFFKNF-				
Dvir\Galileo	KEENAKCEDSEYFLCNKNFKSINNRLKL KDPQDDFFCLIKHCYSIFQTIF				
Dmoj\GalileoC	KSSDEMQC SSEYLILNKNFHYINRYLKL KAPSDHFY NLIKLHFESFRKIF				
Dmoj\GalileoD	KSSDEMQC SSEYLILNKNYHYINKYLKL KAPSDLFY NMIKLHFETFKTIF				
Dbuz\Galileo	KGSDEMQC SSEYLILNKNYNIHQYLKL KAPSDNFY NI IKIHFDFIQKIF				
Dmel\1360	KETEHLTAPSELFIHEKNYSIESDFGKL KAPSDLFFNIYKIH IKA FENIF				
Dsim\1360	KETEHLTAPSELFIHEKNYSIDSDFGKL KAPSDLFFNICKIHIKVFENIF				
Dsec\1360	KETEHLTAPSELFIHEKNYSIDSDFGKL KAPSDLFFNICKIHIKVFENIF				
Dere\1360	KESEHLTAPSELFIHEKNYWI ESDFGKL KAPSDLFFNICKIHIKVFENIF				
Dyak\1360	KETEHLTAPSELFIHEKNYSTESDFGKL KAPSDLFFNICKIHIKVFENIF				
Dper\1360	KEDEVITVPSELFI FYKNYQKFTDFGSL IAPSDCLMEISKKHILIFCKFF				
Dpse\1360	KEDKVITVPSELFI FYKNYQKFTDFGSL IAPSDCLMEISKKHILIFCKFF				
Dvir\1360	KNSEFLTAPSEQFISEKNYSKDTDFGNL KAPSDLFFNNSKIHIKVF DNIF				

	1010	1020	1030	1040	1050
Dmel\P-element	NNN-----	NFEITNNVKEKLILAARNVDVDKQVKSF			YFKIR--
Dbif\P-element	HNT-----	IEITKDIKKKLLIAAKHVQIDNNVKQF			YFKTR--
Dhel\P-element	KEK-----	FEITNNLKEKL--AAQNVELDKLVISF			YFKMR--
Dwil\P-element	NNN-----	NFEITNNVKEKLILAARNVDVDKQVKSF			YFKIR--
Spal\P-element	KDNFQVTNNNFKVTNNLKEKLVVAAQNVELDKLVISF				YFKIR--
Hsap\THAP9	RMA-----	IFELVSKQRELYLQOKILCELSGHINLFVDVNKHLFDGEVC			
Dana\Galileo	DKK-----	PYINRIKKTIIQSCISSTEKSSIIYSD			WFSVTHP
Dpse\Galileo	ETK-----	SHKFNLKRSIVQKCIILTSKIDKYAD			WFKFSDP
Dper\Galileo	ETK-----	SHKFNLKRSIVQKCIILTSKIDKYAD			WFKFSDP
Dwil\Galileo	-----	PHARKIKEKIINECLSNIEKDPNYLD			WYSESHE
Dvir\Galileo	QKS-----	QHVRQKKRRELTIIYECISRNKAFEKFNAN			WFSESHS
Dmoj\GalileoC	EKK-----	PYIARIKEKIVLYCMHATAKSSLDNE			WFSPTHP
Dmoj\GalileoD	EKK-----	PYMPRIKEKIVLYCMHATAKSSLDTE			WFSPTHP
Dbuz\Galileo	DKK-----	PFIAKLKEKIILHCMRATAKSTLHSD			WFSPSHP
Dmel\1360	KNN-----	KKQMCIKKFIVEQCIKCTNESSAFPL			WFYENNE
Dsim\1360	KNN-----	KKQMCIKKFIVEQCIKCTNESSAFSL			WFYENNE
Dsec\1360	KNN-----	KKQMCIKKFIVEQCIKCTNESSAFSL			WFYENNE
Dere\1360	KNN-----	KKRRCIKQFIVEQCIKCTNKSSDFSL			WFHSNND
Dyak\1360	KNN-----	KKQMCIQKFIVDQCIKCTNESSDFSL			WFHVENE
Dper\1360	EIG-----	PQKVGIKNLILKACQDETPL			WFTGE--
Dpse\1360	EIG-----	PQKVGIKNLILKACQDETPL			WFTGE--
Dvir\1360	STN-----	KMQLNIKKCIIEQCIKCT-KESVYSS			WFDENDS

	1060	1070	1080	1090	1100
Dmel\P-element	-IYFRIKYFNKKIEIKNQKQ				
Dbif\P-element	-IYFRLKYLNKKLAIKNQKQ				
Dhel\P-element	-IYLRVKYLNKKMYIKNQKR				
Dwil\P-element	-IYFRIKYFNKKIEIKNQKQ				
Spal\P-element	-IYFRVKYLNKKICIKNQKQ				
Hsap\THAP9	AINHFVKLLKDIICFLNIRAKNVAQNPLKHHSERTDMKTLSRKHWSSVQ				
Dana\Galileo	CYEHRMKMLNGFILILLRKNKSK				WLTEK
Dpse\Galileo	CFVHRNHLLNQFVLILIRKNFK				WLTDR
Dper\Galileo	CFVHRNHLLNQFVLILIRKNCK				WLTDR
Dwil\Galileo	CSEHRKFILNYFLLVLLKKNKSK				WLMES
Dvir\Galileo	CSHHRKYILNYVLQVLFRDNSI				WLIK
Dmoj\GalileoC	CFEHRKSILNQFVLILIRKNCK				WQTEK
Dmoj\GalileoD	CFEHRKFILNQFVLILIRKNCK				WQTEK
Dbuz\Galileo	CFDHRKFMLNQFVLILIRKNCK				WLTDS
Dmel\1360	CYAHRTDLLNKLIKVLLFKHCK				WTVIA
Dsim\1360	CYAHRTDLLNKLIKVLLFKHCK				WTVMI
Dsec\1360	CYAHRTDLLNKLIKVLLFKHCK				WTVMI
Dere\1360	CYVHKIDILNKLIKVLLFKHCK				WTVTA
Dyak\1360	CYEHKIDLLKLIKVLLFKHCK				WTVIA
Dper\1360	CREHKLALLDFVILVLLRKHSL				WAIRR
Dpse\1360	CREHKLALLDFVILVLLRKHSL				WAIRR
Dvir\1360	CFTHKISLLDKLIKVLLFKHCK				WTVMT

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          1110          1120
    . . . . | . . . . | . . . . | . . . . | . . . . | .
Dmel\P-element  -----KLIGNSKLLKIKL-----
Dbif\P-element  -----RLVGNSKLLKIKL-----
Dhel\P-element  -----RLIGNSKLLKIKL-----
Dwil\P-element  -----KLIGNSKLLKIKL-----
Spal\P-element  -----RLIGNSKLLKIKL-----
Hsap\THAP9      DYKCSSFANTSSKFRHLLSNDGYPFK
Dana\Galileo    MSKEKAVSTASSRKLKILKE-----
Dpse\Galileo    MIGNQN-AKSYEKKLIKILRQ-----
Dper\Galileo    MIGNQN-AKSYEKKLIKILRQ-----
Dwil\Galileo    LCGASE-KHKSNRKIEILQS-----
Dvir\Galileo    LCGLSE-NPSSARKEKIVQS-----
Dmoj\GalileoC   IVGK---TSISKRKLKIIHQ-----
Dmoj\GalileoD   IVGK---TSISKRKLKIIHQ-----
Dbuz\Galileo    IVSKS--SNLSKSKLKMIRE-----
Dmel\1360       D-----RQKKQAKLSILSHE-----
Dsim\1360       AD-----RQKKQAKLSILSHK-----
Dsec\1360       AD-----KQKKQAKLSILSHK-----
Dere\1360       D-----KQKKQAKLSILSHK-----
Dyak\1360       N-----RQKSQAKLSILSHK-----
Dper\1360       G-----KKNASKKLIKIMAQ-----
Dpse\1360       G-----KKNASKKLIKIMAQ-----
Dvir\1360       D-----SYKKKAKLNILSHK-----

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