

QUERY 1 10 20 30 40
UniRef90_I1VYK1 P I V D T G S V A L P L S A A E K T K I R S A W A P V Y S T Y E T S G V D I L V K
UniRef90_UPI00033394CE M L T T A D D E R T T I V L Q Q T W D K K A S S T Q A D S I V G E E E A L T W R
UniRef90_B3RFA9 M S L T K T E E K G V V T G L W G K V V N V D E E T V G G E A L T L G R
UniRef90_P02101 M V H F T A E E K S Q L I T S L W G K V V N V E E E T C G A E A L V A R
UniRef90_P02128 M V H F T A E E K S Q L I T S L W G K V V N V E E E I G A E A L T L G R
UniRef90_UPI0003331BBB M V H F T A E E K S Q L I T S L W G K V V N V E E E I G A E A L T L G R
UniRef90_P13787 M S L T K A E R T M V T S I W G K I V S M Q A D A V L G G E A L T L G R
UniRef90_P69891 M G H F T A E E D K A T I T S I W G K I V N V E E E A L G G E A L T L G R
UniRef90_Q63067 M V H F T A E E K S Q L I T S L W G K V V D L E K I L G G E A L T L G R
UniRef90_UPI0001775CC5 M S L T K A E E R T I I A T L W S K I V S S Q T E A S I L G T E A L T L G R
UniRef90_Q533G8 M S L T K S D K T I I A T L W S K I V A T N Q A D S I L G T E A L T L G R
UniRef90_M4AD09 P L T D D K E R V M I Q D S W A K V Y Q N C E A G V A M L V J R
UniRef90_P02111 V H L T S G G E K S A V T N L W G K V V N N E L L G G E A L T L G R
UniRef90_S9YCX7 M S L T K A E R T I V V S M W G K I A T Q A D V I L G G E A L T L G R
UniRef90_F6YMJ4 M S L T K S D K A S I A N I W S K I A P N A E E L L G T E A L T L G R
UniRef90_P07412 L T A E E K G L V T N G L W G K V V N V D E E V L G G E A L T L G R
UniRef90_P02061 V H L T S G E E K G L V T G M W G K V V N V D E E L L G G E A L T L G R
UniRef90_B3EWD6 V H L T D A E K A L V T G L W G K V K P D N V E E L L G G E A L T L G R
UniRef90_Q62669 M V H L T D A E K A T V N G L W G K V V P V E L L G G E A L T L G R
UniRef90_P18971 M V L S P T D K S N V K A T W A K I L G N H G A E E Y G A E A L T L G R
UniRef90_UPI00042BD2B2 M T L T Q A E K A A V V A I W G K I A A Q K V D A L G T E T T L H R
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UniRef90_I1Y926 M V L T A E D K K L I Q Q T W G K L G G A E E E I V G A E S L L W R
UniRef90_C5HYH6 M V H L T A G E K S L V A S T W S K V V A N V D E E V L G G E A L T L G R
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UniRef90_I3IZ27 M V E W T D A E R S A I T S L W G K I S S Q D V G E I L G T Q A L T T R
UniRef90_G1LJX4 M S L T K A E R T I I T S M W D K I S S Q Q A D A I L G T Q A L T T R
UniRef90_UPI0003C299EB M V Q W S A E E K Q L I T S I W G K V K V E E E C G G E A L T L G R
UniRef90_F7GH03 M V N W T A E E K H A I S T I V W K I V D I E K L G A H T L L S R
UniRef90_I1VYJ8 M L T A E D K K A V V Q Q V W E K I S G R Q E D A G A E A L T L G R
UniRef90_E3TFT0 M S L S A K D K A V V K D L W A K V A P K A D D I G A E A L T L G R
UniRef90_P02000 L S E E D K S H V K A I W G K V A G H L S K I T S V L T E K
UniRef90_M7B321 V H A A W D K F V H A A W D K F V G G H A G E E Y A A E G L E R
UniRef90_P81043 M V L S A A D K K G H V K G I W G K V V G G H A G E E Y A A E G L E R
UniRef90_P84653 M S L T E K D K A A V R A L W G K I S K S A D A D I G A D A L T L S R
UniRef90_W5MM40 M S L S D K D K Q H V Q S I W S K A S G R L E D I L G N E A L T L S R
UniRef90_P02109 M V H L T S E E K N C I T T I W S K V V Q V D Q T G G E A L T L G R
UniRef90_I3N129 M V H F T A E E K A A I T S M W R K V N V E E A G G E A L T L G R
UniRef90_A4IGT0 M V H W T A E E K A A I T S V W Q K V N L E Q D G H E A L T T R
UniRef90_I1VYK2 M L T D G D K K L V T Q I W E K A T Q S P E D F G G E A L T L E R
UniRef90_A0EZW6 M T S L T A K D K D A V R A F W S K V A P K A E D I G S D A L T L S R
UniRef90_P06467 M S L M K N E R A I I M S M W E K M A A Q A E P I G T E T T L E R
UniRef90_V5N4L6 M S L T D I D K T L V K A F W G K V S G K A D A I I G H E A L T V R
UniRef90_M3YFH4 M V H L S A E E K A A V S S L Q G K V K V D V V G G E A L T L G R
UniRef90_G8G8X6 M G L N D K D K A A V K A L W A K I S K S A D T I G S N A L T T R
UniRef90_P86391 V H W T A E E K Q L I T C L W G K V V D V A T I I G G E A L T L G
UniRef90_UPI0003C16005 M V T W T A E E R K A I T S V W S K V N P E E V G H E A L T L G R
UniRef90_Q8UUV18 M S L S A D D K K T V K A F W A K A S S K A D D I G A D A L T L G R
UniRef90_C1BX42 M S L S A K D K A N V K S I W N K I L L P K S D D I L G D Q A L T L G R
UniRef90_P24291 L S A A D K A N V K A V W E K A G S N V G K Y G G E A L T L D R
UniRef90_G3PL33 M T T L S T K D K E V V K A F W A K V S G G G E E I G T D A V A R
UniRef90_Q575S8 P L T D V I E R G I I K D T W A R V Y A S C E D V G V T I L I J R
UniRef90_E3TCM4 M V S W S Q S E R S A I V D L W D K I V N V D E E I G P Q A L T L A R
UniRef90_P68087 M V H L T S G E E K A A V T G L W G K V V N V E E V L G G E A L T L G R
UniRef90_P14525 L S A A D K A H V K A F W T K I G G H A G E E Y G G E A L T L E R
UniRef90_UPI0003C8A12B M V H F T A E E K A A I A S L W A K V V N V E V A R G E S L T L G R
UniRef90_I3KUUY9 M S L T E E K D K A A V K A L W A K I S K S V D A I L G A E A L T L G R
UniRef90_P21871 M V L S A N D K S N V K A V F A K I G G Q A G E D L G G E A L T L E R
UniRef90_C1BIL2 M S L S S K D K A T V K A F W A K V A P K T E E V G S D A L T L S R
UniRef90_UPI0004441846 M S L S A K D K A T V K A F W A K I S S S G E A I L G A D A L T L S R
UniRef90_P02005 M L N H D E K Q L I K H A W E K V L G G H G A E D F G A E A L T L E R
UniRef90_G3HBR8 M V L S A D D K N N I K G A W G K I G G H H Q E E Y G A E A L T L E R
UniRef90_P11896 M V L S A E E K A L V V G L C G K I S G H C D A L L G G E A L T L D R
UniRef90_P02133 M V H W T A E E K A A I T S V W Q K V V N V E H D G H D A L T L G R
UniRef90_Q45X17 M V H L T A D E T A L V T S L W A K V V N V K E Y G G A E A L T L G R
UniRef90_P22743 V H W S A E E K Q L I T S L W A K V V D V P E E V G G A E A L T L G K
UniRef90_M4A8Z9 M V E W T D E E R K A I T T L W G Q I D V G E I L P Q A L T L T R
UniRef90_UPI0003D0BCC8 M G R W T A E E K R L I T N L W R K I D V A E C G A D A L T L A R
UniRef90_P83478 V Q W S S S E R S T I S T L W G K I N V A E I I G P Q A L T L A R
UniRef90_Q802S6 P L C D S E R E M I K D T W A K V Y Q N C D D V G V A L T L J R
UniRef90_H2QA68 M S L T K T E G T I I V S M W A K I S T Q A Q E T I G T E T T L E R
UniRef90_P10062 L T H E D C E L L Q Q T W E K V L G H Q A D D F G A E A L T L E R
UniRef90_D0VWV2 S L S S K D K D T V K A L W G K I A D K A E E I G S D A L T L S R
UniRef90_M1VEK6 M V H W T A E E K A A I N S V W Q K V V N I E Q D G H E A L T T R
UniRef90_I3IZ07 M T S L S A K D K N T V K A F W A K V A G K E E Q I G C D A V T L S R
UniRef90_I7A6X1 M V H L T G E E K A A V T S L W G K V V N V D V D V G G E A L T L G R
UniRef90_UPI00045D5A6F M V L S A D K A N V K A A W G K V G G K A G D Y G G E A L T L S R
UniRef90_Q90486 M V E W T D A E R T A I L G L W G K L N I D E I L G P Q A L T L S R
UniRef90_Q10732 L S S G D K A N V K S V W S K V V Q G H L E D Y Y G A E A L T L D R
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UniRef90_P83479 M S L T A K D K T L V K T F W G K V K G K A D A M G A E A L T L G R
UniRef90_P18973 M S L S A D K A N I K A T W D K I G G D G G E Y G A E A L T L E R
UniRef90_P24292 V H M T D A E K K L V T T M W G K L N D V D A A G A E A L T L G R
UniRef90_UPI00046BF426 L S D A E K K V I Q E T W S R V Y M N C E D V G V S I L T I R
UniRef90_UPI00032A08E0 P L S D T E R E I V Q D T W R P V Y K N C E N D V G V S V L I R
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QUERY	F	F	T	S	T	P	A	A	Q	E	F	F	P	K	F	K	G	L	T	T	A	D	E	L	K	K	S	A	D	V	R	W	H	A	E	R	I	N	A					
UniRef90_I1VYK1	L	F	I	T	T	Y	P	Q	T	K	T	Y	F	P	H	F						D	L	H	T	R	G	S	E	Q	V	L	R	S	H	G	K	K	V	I	N	A		
UniRef90_UPI00033394CE	L	F	I	T	S	Y	P	Q	T	K	T	Y	F	P	H	F						D	L	H	T	R	G	S	E	Q	V	L	R	S	H	G	K	K	V	I	N	A		
UniRef90_B3RFA9	L	L	V	V	Y	P	W	T	Q	R	F	F	D	S	F		G	D	L	S	S	A	S	A	I	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	S	A		
UniRef90_P02101	L	L	V	V	Y	P	W	T	Q	R	F	F	D	S	F		G	N	L	S	S	S	P	S	A	I	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	S	A	
UniRef90_P02128	L	L	I	V	Y	P	W	T	Q	R	F	F	D	S	F		G	N	L	S	S	S	P	S	A	I	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	S	A	
UniRef90_UPI0003331BBB	L	L	I	V	Y	P	W	T	Q	R	F	F	D	T	F		G	N	L	S	S	S	P	C	A	V	I	M	G	N	P	K	V	K	A	H	G	K	K	V	L	T	S	A
UniRef90_P13787	L	F	S	S	Y	P	Q	T	K	T	Y	F	P	H	F							D	L	H	E	H	G	S	P	Q	L	V	R	A	H	G	S	K	V	L	T	S	A	
UniRef90_P69891	L	L	V	V	Y	P	W	T	Q	R	F	F	D	S	F		G	N	L	S	S	S	A	S	A	I	M	G	N	P	K	V	K	A	H	G	S	K	V	L	T	S	A	
UniRef90_Q63067	L	L	I	V	Y	P	W	T	Q	R	F	F	D	K	F		G	N	L	S	S	S	A	P	A	I	M	G	N	P	Q	I	R	A	H	G	K	K	V	L	T	S	A	
UniRef90_UPI0001775CC5	L	F	S	S	Y	P	Q	T	K	T	Y	F	P	H	F							D	L	H	H	G	S	A	Q	L	R	A	H	A	H	G	S	K	V	L	T	S	A	
UniRef90_Q332G8	L	F	T	S	Y	P	Q	T	K	T	Y	F	P	H	F							D	L	H	H	G	S	A	Q	L	R	A	H	A	H	G	S	K	V	L	T	S	A	
UniRef90_M4AD09	L	F	V	N	F	P	S	S	K	L	Y	F	S	Q	F		K	H	I	E	D	T	E	E	L	H	E	S	P	Q	L	R	K	A	A	Q	R	V	M	N	A			
UniRef90_P02111	L	L	V	V	Y	P	W	T	Q	R	F	F	E	A	F		G	D	L	S	S	S	A	G	A	V	M	G	N	P	K	V	K	A	H	G	A	K	V	L	T	S	A	
UniRef90_S9YCX7	L	F	S	S	F	P	Q	T	K	T	Y	F	P	H	F							D	L	H	H	G	S	A	Q	L	R	A	H	A	H	G	S	K	V	L	T	S	A	
UniRef90_P67YMJ4	L	F	L	T	T	F	P	Q	T	K	T	Y	F	P	H	F						D	L	S	P	G	S	A	Q	L	R	A	H	A	H	G	S	K	V	L	T	S	A	
UniRef90_P07412	L	L	V	V	Y	P	W	T	Q	R	F	F	E	S	F		G	D	L	S	S	S	A	D	A	I	M	G	N	A	K	V	K	A	H	G	K	K	V	L	T	S	A	
UniRef90_P02061	L	L	V	V	Y	P	W	T	Q	R	F	F	D	S	F		G	D																										

QUERY	90	100	110	120
UniRef90_I1VYK1	V D N A V A S M D T E K M S M K L R N L	S G K H A K S F Q V D P E Y F K V L A		
UniRef90_UPI00033394CE	L T N A V A S M D T E K M S M K L R N L	S D L H A Y N L R V D P V N F F K L L S		
UniRef90_B3RFA9	V G E A V K N L D N L K G T F A K L S E L	S E L H A Y N L R V D P V N F F K L L S		
UniRef90_P02101	F G D A V K N M D N L K G T F A K L S E L	H C C D K L H V D P E N F F R L L G		
UniRef90_P02128	F G E A V K N L D N L K G T F A K L S E L	H C C D K L H V D P E N F F R L L G		
UniRef90_UPI0003331BBB	F G E A V K N M D H L K G T F A K L S E L	S E L H A Y N L R V D P V N F F K L L S		
UniRef90_P13787	V G D A V K S I D N L K G T F A K L S E L	S E L H A Y N L R V D P V N F F K L L S		
UniRef90_P69891	L G D A I K H L D D D L K G T F A K L S E L	S E L H A Y N L R V D P V N F F K L L S		
UniRef90_Q63067	L G L A V E N M D N L K G T F A K L S E L	H C C D K L H V D P E N F F K L L G		
UniRef90_UPI0001775CC5	V G E A V R N V D N L P S A L S K L S E L	S E L H A Y V L R V D P V N F F K L L S		
UniRef90_Q533G8	I L N T L V E N I D D S E K V A S V L K L V	S E L H A Y L K K V D P V V Y F K L L S		
UniRef90_M4AD09	F G D A L K N L D D D L K G T F A K L S E L	H C C D K L H V D P E N F F N R L L G		
UniRef90_S9YCX7	L G D A V K S I D N L V A G S A L S K L S E L	S E L H A Y V L R V D P V N F F K L L S		
UniRef90_F6YMJ4	L G D A V K N I D N L V A G S A L S K L S E L	S E L H A Y N L R V D P V N F F K L L N		
UniRef90_P07412	F S D G L K N I D D L K G A F A K L S E L	H C C D K L H V D P E N F F R L L G		
UniRef90_P02061	I T D G V K N L D N L K G T F A K L S E L	H C C D K L H V D P E N F F R L L G		
UniRef90_B3EWD6	F S E G L K H L D N L K G T F G S L S E L	H C C D K L H V D P E N F F R L L G		
UniRef90_Q62669	F D D G L K H L D N L K G T F G S L S E L	H C C D K L H V D P E N F F R L L G		
UniRef90_P18971	L T K A V G N M D N L I T D A L S D L S E L	S D L H A Y H K L R V D P A N F K L L S		
UniRef90_UPI00042BD2B2	I G E A V K N I D N L I T G A L A T L S E L	S E L H A Y L R V D P V N F F K L L S		
UniRef90_UPI0004442C09	L G D A A K N I D N I V S G A L A R L S E L	S E M H A Y L R V D P V N F F K L L S		
UniRef90_I1Y926	L V E A A N H I D D I A G A F A Q L S E L	S D L H A A Q K L R V D P V N F F K L L G		
UniRef90_C5HYH6	F A E G L N H L D D L K G A F A Q L S E L	S E L H A C K L H V D P E N F F R L L G		
UniRef90_P13273	L G E A V N H I D D L A S A L S K L S E L	S D L H A Q T L R V D P V N F F K L L N		
UniRef90_UPI000332FBA8	V G D A V K N I D N M Q G A L T N L S E L	S D L H A Y L R V D P V N F F K L L S		
UniRef90_I3IZ27	L E N A V K N L D N L K N T Y A A L S E L	S E L H H S E K L H V D P D N F R V L A		
UniRef90_G1LJX4	L G D A V K S I D N I A G A L A K L S E L	S E L H A Y L R V D P V N F F K L L I		
UniRef90_UPI0003C299EB	F G D A V K N L D N V K G T F A K L S E L	H C C D K L H V D P E N F F R L L A		
UniRef90_F7GH03	F G E A V K N L D N V K T I T A N Y A S L S E L	S N L H A Y N L R V D P V N F F K L L A		
UniRef90_I1VYJ8	L G D A V K N V D N L T S Q A L S E L S E L	N L H A Y N L R V D P V N F F K L L S		
UniRef90_E3TFT0	I G E A V G H I D D L T G A L S E L S E L	S D L H A F K L R V D P V N F F K L L S		
UniRef90_P02000	H D A V N H I D D L A G A L C R L S E L	S D L H A F N L R V D P V N F F K L L S		
UniRef90_M7B321	L G E A V R Q I D D I S E A L S A L S E L	S N L H A Y N L R V D P V N F F K L L S		
UniRef90_P81043	L G Q A V E K I D D L T P G T S K L S E L	S D L H A H K L R V D P V N F F K L L S		
UniRef90_P84653	I A L A V S K I D D L T N G L M E L S E Q	H A Y Q L R V D P A N F F K L L S		
UniRef90_W5MM40	L D K A V Q D P E H I T A N Y A S L S E L	H S T K L H V D P D N F F R L L G		
UniRef90_P02109	F G E A V K H L D N L K G T Y A K L S E L	H C C D K L H V D P E N F F K L L G		
UniRef90_I3N129	L G N A L R D M D D L T K G A F S Q L S E L	E L H C C E R L H V D P E N F F R L L G		
UniRef90_A4IGT0	V G D A I T H L D N V K G T I S Q A L S E L	S E L H A F K L H V D P E N F F K L L G		
UniRef90_I1VYK2	L G N A V K N L D N I S Q A L S E L S E L	S N L H A Y N L R V D P V N F F K L L S		
UniRef90_A0EZW6	V A E A V A K I D D L K A G L L E L S E L	S E L H A F T L R V D P A N F F K L L S		
UniRef90_P06467	V G D A V K S I D D L S S A L T K L S E L	S E L H A Y L R V D P V N F F K L L S		
UniRef90_V5N4L6	L N D A V V I N I D D L V G G L S A L S E L	S D L H A Y K L R V D P G N F F K L L S		
UniRef90_M3YFH4	L I N G L K N L D N L K G A F A K L S E L	S D L H C D K L H V D P E N F F K L L G		
UniRef90_G8G8X6	I G L A V A K I D D L V C G L L E L S E Q	H A F Q L R V D P S N F F K L L G		
UniRef90_P86391	F G D A I R N L D N I K D T F A K L S E L	H C C D K L H V D P E N F F K L L G		
UniRef90_UPI0003C16005	L T E A I R N I D N I K D T F A K L S E L	S K L H F Q K L H V D P E N F F K L L G		
UniRef90_Q8UV18	V T E A I G K I D N L T T G L L N L S E L	S E L H A F N L R V D P G N F F K F F A		
UniRef90_C1BX42	I T D D C V N H M D D L V S Y L S L S E L	S E L H A T K L R V D P A N F F K L L A		
UniRef90_P24291	L T L A V G H M D D L P G A L S K L S E L	S D L H A Y K L R V D P V N F F K L L S		
UniRef90_G3PL33	V G D A V A K I D D L K G G L L N L S E L	S E L H A F T L R V D P A N F F K L L S		
UniRef90_Q575S8	I N T V V E N L H D P E K V S S V L V L V	G K A H A F K Y K V D P I Y F K L L S		
UniRef90_E3TCM4	L D N A V K N L D N L K E T Y S K L S Q L	H C C E L S V D P E N F F R L L F A		
UniRef90_P68087	F G E G L K N L D N L K G T F A K L S E L	H C C D K L H V D P E N F F R L L R		
UniRef90_P14525	L T L A V G H L D D L P G A L S D L S D L	S D L H A H K L R V D P V N F F K L L G		
UniRef90_UPI0003C8A12B	F G N A V K H M E D F K G T F A K L S E L	S D L H C D K L H V D P E N F F R L L G		
UniRef90_I3KUU9	V T E A M S K I D N L R G G L L E L S E L	S E L H A F K L R V D P S N F F K L L A		
UniRef90_P21871	L V E A A N H I D D I A G A L S K L S D L	S D L H A A Q K L R V D P V N F F K L L G		
UniRef90_C1BIL2	V G E A V S K I E D L T S N G L I N L S E L	S E L H A F Q L R V D P A N F F K I F C		
UniRef90_UPI0004441846	V A E A V A K I D D L T S G L L S L S E L	S E L H A F T L R V D P A N F F K I L S		
UniRef90_P02005	L G D A V R H M D N L S E A L S E L S N L	S D L H A Y N L R V D P V N F F K L L S		
UniRef90_G3HBR8	L A K A A S H I D D L P G T L S S L S D L	S D L H A H E L R V D P V N F F K L L S		
UniRef90_P11896	I G E A A K H I D S M D Q A L L S K L S D L	S D L H A Y N L R V D P G N F F Q L L S		
UniRef90_P02133	V G N A I S H I D S V K S G A F A Q L S K I	S K I H A T E L F V D P E N F F K R F G		
UniRef90_Q45X17	F G D G L K H L D D L K G A F A Q L S E L	S A L H C E K S H V D P Q N F F K L L G		
UniRef90_P22743	F G E A L K H L D N V K E T F A K L S E L	H H F D K L H V D P E N F F K L L G		
UniRef90_M4A8Z9	L E T A V K N M D N L K N A Y A K L S V M	S K L H S D K L H V D P D N F F R L L A		
UniRef90_UPI0003D0BCC8	L G E A V K N L D N V H A Q F S N L S K L	S K L H C D K L H V D P E S F F R L L G		
UniRef90_P83478	L G Q A V N M D N I K G T Y A K L S Q K	H S S E L N V D P D N F F R L L G		
UniRef90_Q802S6	I N T L V E N L H D G D K M V S V L K L V	G K A H A L R H N V E P V Y F K L L C		
UniRef90_H2QA68	E L N T V K S I D N I N G A Q S L L R G L	R S Y I L L A D R V N F F K L L S		
UniRef90_P10062	L G E A V K N M D H M S T A S G E L S N L	H A Y N L R V D P V N F F K L L S		
UniRef90_D0VWV2	I V D A V A S I D D L N A G L L A L S E L	S E L H A F T L R V D P A N F F K L L S		
UniRef90_M1VEK6	I D N A I H I D D N V K G T L T G A L L S L	S V E H A T Q L R V D P E N F F R L L G		
UniRef90_I3IZ07	V T D A V S K I D D L T G A L L S L S E L	S E L H A F T L R V D P A N F F K L L S		
UniRef90_I7A6X1	F S E G L H H L D D L K G T F A K L S E L	H C C D K L H V D P E N F F K L L G		
UniRef90_UPI00045D5A6F	L T H A V G H L D D L P G A L S E L S N L	H A R K L R V D P V N F F Q L L C		
UniRef90_Q90486	L E R A I K N M D N V K N T Y A A L S V M	S H S E K L H V D P D N F F R L L A		
UniRef90_Q10732	L G D A V N H I D D I A T A L S A L S D K	H A H L R V D P V N F F K L L S		
UniRef90_G3WE91	L S Q A V A N L D D L P G T L S K L S D L	S H A H K L R V D P V N F F K L L S		
UniRef90_P83479	M G A V G D A V G K I D N L L G G L S A L	S E V H A T K L A I D P G N F F K L L S		
UniRef90_P18973	L A L A A A H L D D L P S A L S A L S D L	S L H A Y K L R V D P V N F F K L L S		
UniRef90_P24292	L G D G L N H L D D L K H F Y A A L S E L	H C C D K L H V D P E N F F R L L G		
UniRef90_UPI00046BF426	V N T V V E N I D D S E K V S S V L A L V	G K A H A L K H K V E P V Y F F F T		
UniRef90_UPI00032A08E0	I N S V V E N L H D P E K V S S V L A L V	G K A H A I K H K V E P V Y F F K L L A		
UniRef90_M4QW49	L N T L V E N L R D G D K L N T I F Q Q M	G K S H A L K H K V E P L Y F F K I L A		
UniRef90_H2TTY0	I G D S V S K I D D L K G G L F N L S E L	S H A F T L R V D P A N F F K L F A		
UniRef90_P01977	L T T A A G H F N D M D S A L S A L S D L	S L H A H K L R V D P V N F F K L L A		
UniRef90_Q7T1B0	L D R A M K N M D D I K N T Y A A L S V L	S H S E K L H V D P D N F F R L L A		
UniRef90_Q6Y239	L D R A V Q N L D D I K N A Y T L S S Q K	H S E I H V D P D N F F R L L A		

QUERY	A	V	I	A	D	T	V	A	A	G	D	A	G	F	E	K	L	M	S	M	I	C	L	L	L	R	S	A	Y			
UniRef90_I1VYK1	H	C	F	Q	V	V	L	A	E	V	H	A	A	F	D	K	F	L	S	A	V	S	A	V	L	A	E	K	Y			
UniRef90_UPI00033394CE	Q	C	L	L	V	T	L	A	E	A	H	S	A	F	W	D	K	F	L	S	I	V	A	S	V	L	A	E	K	Y		
UniRef90_B3RFA9	N	V	L	V	C	V	L	A	P	S	V	Q	A	A	F	Q	K	M	V	A	G	V	A	A	A	L	A	H	K	Y		
UniRef90_P02101	N	M	I	V	E	F	T	A	P	E	V	Q	A	A	W	Q	K	L	V	A	G	V	A	T	A	L	A	R	K	Y		
UniRef90_P02128	D	I	L	I	V	V	L	A	S	H	F	A	A	W	Q	K	L	V	N	V	A	A	H	A	L	A	A	R	K	Y		
UniRef90_UPI0003331BBB	N	M	L	V	I	V	L	A	G	H	Q	A	A	W	Q	K	L	V	A	G	V	A	V	A	L	A	G	E	N	K	Y	
UniRef90_P13787	H	C	L	L	V	T	L	A	S	A	H	A	A	W	D	K	F	L	S	I	V	A	S	S	V	L	A	T	S	R	K	Y
UniRef90_P69891	N	V	L	V	T	V	L	A	E	V	Q	A	A	W	Q	K	M	V	T	A	V	A	S	S	A	L	T	S	E	R	K	Y
UniRef90_Q63067	N	V	L	V	I	V	L	A	E	V	Q	A	A	W	Q	K	L	V	A	G	V	A	T	A	L	T	S	E	H	K	Y	
UniRef90_UPI0001775CC5	H	C	L	L	D	F	T	A	E	T	H	A	A	W	D	K	F	L	C	Q	V	S	S	A	V	L	T	E	K	Y		
UniRef90_Q533G8	H	C	L	L	V	T	V	A	E	H	H	A	A	W	D	K	F	L	S	I	V	S	S	S	V	L	T	E	K	Y		
UniRef90_M4AD09	G	V	I	V	E	V	L	A	P	E	V	G	A	A	W	T	K	F	L	A	T	V	C	S	G	L	K	A	V	Y		
UniRef90_P02111	N	V	L	I	V	V	L	A	E	V	Q	A	A	W	Q	K	L	V	S	G	V	A	H	A	L	A	A	H	K	Y		
UniRef90_S9YCX7	H	C	L	L	V	T	V	A	S	H	H	A	A	W	D	K	F	L	S	I	V	A	S	S	V	L	T	E	K	Y		
UniRef90_F6YMJ4	H	C	M	L	V	T	L	A	E	T	H	A	A	W	D	K	F	L	A	L	V	T	A	A	L	T	T	E	K	Y		
UniRef90_P07412	N	V	L	V	C	V	L	A	E	H	H	Q	A	A	F	Q	K	V	V	A	G	V	A	N	A	L	A	A	H	K	Y	
UniRef90_P02061	N	V	L	V	C	V	L	A	Q	A	Q	A	A	F	Q	K	V	V	L	G	V	A	T	A	L	A	A	H	K	Y		
UniRef90_B3EWD6	N	M	L	V	E	V	L	A	A	A	Q	A	A	F	Q	K	V	V	A	G	V	A	T	A	L	A	A	H	K	Y		
UniRef90_Q62669	N	M	I	V	E	F	T	A	P	S	A	Q	A	A	F	Q	K	V	V	A	G	V	A	S	A	L	A	A	H	K	Y	
UniRef90_P18971	H	C	L	L	V	T	L	A	S	V	H	A	S	L	D	K	F	L	A	S	V	T	S	T	V	L	T	S	K	Y		
UniRef90_UPI00042BD2B2	H	C	L	L	D	F	T	A	P	E	V	H	A	A	W	D	K	F	L	S	K	L	T	S	S	V	L	T	E	K	Y	
UniRef90_UPI0004442C09	H	C	L	L	V	T	L	A	E	A	H	E	A	W	D	K	F	M	S	L	V	S	S	S	V	L	T	E	K	Y		
UniRef90_I1Y926	Q	C	F	L	V	V	V	A																								

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UniRef90_UPI0002B493D5
UniRef90_I1Y928
UniRef90_P02209
UniRef90_K7FMT4
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UniRef90_Q7ZYZ4	T L F V V Y P Q T K T Y F S H W	A D L S P N S P Q V K K H G T T V I N G		
UniRef90_F6YXK6	F F V N F P S A K Q Y F S Q F Q H L E E A	D L E M K R S P Q Q V R K K H A G R V M G A		
UniRef90_Q5QRU6	M F T E H P D T K S Y F T H F K G M D S A E E	L E M K R S P Q Q V R K K H A G R V M G A		
UniRef90_E2JF88	L F A A H P D T K T Y S T H F K D F T	Y N S P Q Q V K E H G K L V M K G		
UniRef90_S4RN97	F L T E N A D A K K F F P K F Q A L K T A	D E M K S S P V L R D H A K R I V M N S		
UniRef90_Q9PRL9	M F A A H P T T K T Y F P H F	D L S P G S N N L R A H A G K K V I D A S		
UniRef90_P02075	L L V V Y P W T Q R F F S H F G D L S N A	D A V M N S P K V K A H G K K V I D S		
UniRef90_V5N6Q4	F F V N F P S A K Q Y F S Q F R E M D D P	E E M R S S Q L R K H A G R V M N A		
UniRef90_H9GGM8	M F M C F P S T K T Y F P H F	D L S P G S K D I Q V H G Q K V A R A		
UniRef90_P02016	M L T V Y P Q T K T Y F A H W	A D L S P G S G P V R K K H G K K V I M G A		
UniRef90_P02137	L L V V F P W T Q R Y F S S F G N L S N	V A I S G N A K V R A H G K K V I L S A		
UniRef90_Q9PVM3	M L V A Y P Q T K A Y F S H W G S	D L N P Q H P M V K K H G A I I M G G		
UniRef90_Q8JIM9	C L I V Y P W T Q R Y F A S F G N L Y N A	E A I K T N P N I A A H G T K V L H G		
UniRef90_Q7LZC2	V L I V Y P W T Q R Y F A S F G D L S N A	E A I S G N P K V A A H G K V V L D G		
UniRef90_H3B2L7	L F E K Y P E T K V Y F K N F K N I S S T	M E E M Q K N E Q I R I H G L R V M N S		
UniRef90_L7MTZ5	L L C V Y P W T Q R F F P D F G N L S N A A			
UniRef90_Q1AGS7	C L I V Y P W T Q R Y F G S F G D L S T D	A A I V G N P K V A N H G V V A L T G		
UniRef90_UPI000333DF0A	T F A A F P S T K T Y F P H F	N L R P G S A Q V K A H G K K V A A A		
UniRef90_P02074	L L V V Y P W T Q R F F H F G D L S S A	G A V M G N P K V K A H G K R V I D A		
UniRef90_P56250	M L V S F P Q T K I Y F S E W G	Q D L G P Q T P Q V R N H G A V I M A A		
UniRef90_G3PL38	C L V V Y P W T Q R Y F G N F G N L Y N A	A A I M G N P L V A K H G T T I L Y G		
UniRef90_UPI000333E286	M F V S F P S T K T Y F P S F	A I A P G S Q I Q A H G K K V A N A		
UniRef90_A1A4Q3	L F T V Y P S T K V Y F R H L G D H P D E	V Q L L S H G Q R M L Q A V G V A V I Q		
UniRef90_A0EZW7	C L I V Y P W T L R Y F S S F G N L Y N S	E A I K N N K K I A D H G I K V L H G		
UniRef90_Q6GPP8	L F L S Y P Q T K T Y F	L S S G S Q D L Q V H G G K V I L G A		
UniRef90_P02019	M L T A Y P Q T K T Y F S H W	A D L S P G S G P V R K K H G G I I M G A		
UniRef90_S9XCL6	L F A V Y P N T K T Y F K H L G D C P D E	V L L L N		
UniRef90_C1BY22	C L I V F P W T Q R Y F S S F G N L S T	P A A I M G N S P N V A K H G R T V I H G		
UniRef90_P80726	M L V V F P A T K V Y F S H W	P D L G P G S P S V K K H G K V I M A A		
UniRef90_H3B4U9	F F V N F P S A K Q Y F S Q F R H L E D	P L D M E R S V Q L R K K H A R R V M G A		
UniRef90_Q9CY10	M F A S F P T T K T Y F P H F	D V S H G S A Q V K G H G K K V A A D A		
UniRef90_L8J2H0	M F L S F P T T K T Y F P H F	D L S Q G S A Q V K G H G A K V A A A		
UniRef90_P83613	M L V V Y P Q T K T Y F S H W	K E L T P G S A P V R K H G M T V M K G		
UniRef90_W5LAN4	M L T V Y P Q T K T Y F A H W	A D L S P G S A P V R K H G K T I M G A		
UniRef90_G5BXY5	L F S S Y P Q T K T Y F P H F	D L H P G S P Q L R A H G S K V M A A		
UniRef90_P55267	M F L C H P Q T K T Y F P N F	D F H A N S A H L K N H G K K V M N A		
UniRef90_P11749	C L I V Y P W T Q R Y F G A Y G D L S T	P D A I K G N A K I A A H G V K V I H G		
UniRef90_M4A902	M L T A Y P Q T K T Y F S H W	S D L S P E S A Q V K K H G A T I M S A		
UniRef90_G8DP13	M L V S Y P Q T K T Y F A E W G	T D L T P Q S Q K V G H H G G V I M G A		
UniRef90_Q7ZT83	L F I V F P Q S K T Y F S H Y	N L S P G S K D I I H G Q E K V I G K A		
UniRef90_M4ASG7	M F A S Y P G T K T Y F S H L	D I S P G S A H L S S H G K K V I L A		
UniRef90_F6VE37	L L I V Y P W T Q R F F D S F G H L T T S A	A A V T G N P R V K A H G K K V L H S		
UniRef90_P83114	L L I V Y P W T Q R Y F S T F G N L A S A	D A I I S H N K V I A H G E K V L R S		
UniRef90_UPI0003F06888	L L I V Y P W T Q R F F D S F G D L S S A	D A I I K N P K V A A H G K K V V N S		
UniRef90_P07428	M F M C A P K T K T Y F P D F	D F S E H S K H I L A H G K K V S D A		
UniRef90_O13077	C L I V Y P W T Q R Y F G F G N L Y N A	E T I L C N P L I A A H G T K I L H G		
UniRef90_P02197	L F H D H P E T L D R F D K F K G L K T P	D Q M K G S E D L K K H G A T V I L T Q		
UniRef90_P83272	C L I V Y P W T Q R Y F G S F G N L S T	P A A I M G N P K I A A H G I K V L H G		
UniRef90_L5KGV2	L F T S Y P Q T K T Y F P H F	D L H P G S A Q L R L H G S K V A A		
UniRef90_B3RYV6	L F T I A P E Y R E V F	E T T T D N V R L R V H A T G V M K T		
UniRef90_A0EZW4	C L V V Y P W T Q R Y F G N F G N L Y N A	E A I T S N E N V I N H G K V V L H G		
UniRef90_R7TFF7	I F N A L H P E V K Q L F P S L K N D N E	D Q L L K N P C F R G H A S R F M Q S		
UniRef90_P02010	M F A A H P T T K T Y F P H F	D L S S G S P N L K A H G K K V I D A		
UniRef90_M7BHW7	L F E T H P E C K D V F F L F R D I D D L	Q Q L K M N K E L R A H G L R V M S F		
UniRef90_P86919	M L I V Y P W K R Y F E N F G D I S N A	Q A I I H N E K V Q A H G K K V I A S		
UniRef90_P80271	T V I V Y P W T L R Y F			

	90	100	110	120
UniRef90_Q7ZYZ4	V L T A V V	G L M D D L	K S G L L T L V	S E L H A F M L R V
UniRef90_F6YXK6	L N T M V V	E N L H D P D K V	E A S G L V L L L V	G K Q H A T K L K I
UniRef90_Q5QRU6	I N D M V V	Q E N L D N T E	A F L G L L N L P L	G K Q H A T K L K I
UniRef90_E2JF88	I K Q A Y E	N I L D D D	M V T G L L D L	S S E K H A F T L R V
UniRef90_S4RN97	I N D M V V	A L D D T N A	Q N A G M N G L	S S D L H A N D F K V
UniRef90_Q9PRL9	I T E A V N	V L D D D V	A G T L S K L S	S S K L H A N Q K L R
UniRef90_P02075	F S N G M K	H L D D L K G T	F A Q L S E L	G K A H A V K L H K
UniRef90_V5N6Q4	I N T V V E	N L H D D P E K	V S S V L E V V	G K A H A V K L H K
UniRef90_H9GGM8	L D M A L H	H L D N D N	V R G V L A D L	S S D L H A Y N L R V
UniRef90_P02016	V G D A V S	K I D D L V G G	L A A L S	S S E L H A F K L R V
UniRef90_P02137	V D E S I H	H L D D I K N F	L S V L S	S S T K H A F K L R V
UniRef90_Q9PVM3	I G K A V K	N I D D L V R G	L S A L S	S S E L H A F K L R V
UniRef90_Q8JIM9	I L D R A V	K N M D N I	K A T Y T K L S	Q L S V L H S E K L R
UniRef90_Q7LZC2	I V E K A V	K N L D S I	K A T Y T K L S	Q L S V L H S E K L R
UniRef90_H3B2L7	L N Q V I Q	N I D N L K N E	V Y S I L T H L	A K R H Q Y V H R
UniRef90_L7M2W5	L R G E A V	K N L D N I	K D T F A K L S	E L H S D K L R V
UniRef90_Q1AGS7	F T R T A L	D H M D D I	K A T Y A T L S	V L H S D K L R V
UniRef90_UPI000333DF0A	L T Q A V A	H L D N V P G A	L S A L S	S D L H A H K L R V
UniRef90_P02074	F S E G L K	H L D D L K G A	F A E L S	S S E L H A H K L R V
UniRef90_P56250	V G K A V K	S I D D L V G G	L S Q L S	S S E L H A F K L R V
UniRef90_G3PL38	L E R A V K	D M D N I K T	T Y A E L S	S V L H S E K L R V
UniRef90_UPI000333E286	L N K A V E	N V D D M P T A	L S D L S	S D L H A H K L R V
UniRef90_A1A4Q3	Y			
UniRef90_A0EZW7	L D R A V K	N M D N I K A	T Y A E L S	I L H S D T L R V
UniRef90_Q6GPP8	I G E A T K	H L D N L D T A	E L S K L	S D L H A Y N L S V
UniRef90_P02019	I G K A V		G L M D D L V G	G M S A L S
UniRef90_S9XCL6	I V G V A V	R H V D N L	L R A A L S	P L A D L H A H V L R V
UniRef90_C1BY22	L D K A I Q	N L D D I K N T	Y A A L S	S V K H S E K L R V
UniRef90_P80726	L V G D A V		G K M N D L V G	A L S A L S
UniRef90_H3B4U9	I N T V V E	N V E D Q D K	I A S V L A S P	V G K A H A L K H K
UniRef90_Q9CY10	L A N A A G	H L D D L P G A	L S A L S	S D L H A H K L R V
UniRef90_L8J2H0	L T K A V E	H L D D L P G A	L S A L S	S D L H A H K L R V
UniRef90_P83613	V G D A V S		K I E D L T A G	L M E L S E L H A F T L R V
UniRef90_W5LAN4	V S A A V A	S I D N V E	E D L P G A	M S Q L S E L H A Y K L R V
UniRef90_G5BXY5	L G D A V K	N I D N V E	E V A S L T	K L S D L H A F T L R V
UniRef90_P55267	L T D A V K	H L D H P E		A S L S S L S D L H A F T L R V
UniRef90_P11749	L D R A V K	N M D N I N E	A Y S S L S	S V L H S D K L R V
UniRef90_M4A902	I G D A V A	K I D D M P S A	M S S K L S	S E L H A F T L R V
UniRef90_G8DP13	V G M G V K		Y I V T L T E A	M S S L S E L H A F T L R V
UniRef90_Q7ZT83	L D S A L K	H L D D I R T G	T L A P L Q	T L H A Y N L R V
UniRef90_M4ASG7	I A E G A K		D L S Q T I	T V T L A P L Q
UniRef90_F6VE37	F G E G V H	H L D N L K	D T F A Q L S	E L H S D K L R V
UniRef90_P83114	I G E A L K	H L D N L K	G Y A Q L S	K I N V S Y L S P Q
UniRef90_UPI0003F06888	F S E G M K	H L D L S N	L D H S A S	K I N V S Y L S P Q
UniRef90_P07428	L N E A C N	H L D N L I A G	C L S K L	S D L H A Y D L R V
UniRef90_O13077	L D R A L K	N M D D I K N T	Y A E L S K L	S D L H S D K L R V
UniRef90_P02197	L G K I L K	K Q K G N H E		S E L K P L A Q T H A T K H K I
UniRef90_P83272	L D R G V K	N M D N I K		S E L K P L A Q T H A T K H K I
UniRef90_L5KGV2	V G D A V K	S I D N I A	G A L S F K L	S E L H A Y V V R V
UniRef90_B3RYV6	V G K A V Q	N L D F S E	L Q S A L S T L	G Q F H H R K A I K F
UniRef90_A0EZW4	L D R A V K	N M D N I K	D T Y A E L S L	L H S E K L R V
UniRef90_P7TFF7	V G A V E N	L D T P G D	L S P L L I D L	G R K H V L F G G F
UniRef90_P02010	L D N A V E	G L D D A V A T	L I S K L	S D L H A Q K L R V
UniRef90_M7BHW7	I L E K S V	A R L D Q E	D K I E Q L A F	E L G R S H Y R Y N A P
UniRef90_P86919	F G E A V K	H L D S I R	A H F A N L	S K L H H S E K F H V
UniRef90_P80271	L D R G V K	N M D D I K N T	A E L S K L	H S E K L R V
UniRef90_UPI0003955C04	F G E A I K	N L D N I K G T	Y S K L S E L	H S E K L R V
UniRef90_P80946	L D R A I Q	N M D D I K N		A Y R Q L S V M H S E K L R V
UniRef90_Q5EEZ5	V G K A I K	S I D D L P G A	L S A L S	S E L H A F Q L R V
UniRef90_P02017	M G A I G D	A V T K F D D	L L G L A S L	S E L H A S K L R V
UniRef90_G5BXY2	L N K A V E	H I D D M P A A	L S D L S	S D L H S S Q E L R V
UniRef90_UPI0003447372	L T L A V A	H L D D L P G A	L S A L S	S D L H A L Q L R V
UniRef90_Q4RHD				

UniRef90_Q7ZYZ4	H	N	L	L	V	S	L	A	E	V	H	V	S	V	D	K	F	L	A	Q	V	S	L	A	S	E	K	Y			
UniRef90_F6YXK6	G	V	I	L	E	V	V	A	E	T	Q	R	A	S	W	S	K	F	L	R	S	I	I	Y	S	Q	V	A	N	I	Y
UniRef90_Q5QRU6	D	I	L	L	Q	L	M	E	E	K	K	A	S	F	E	K	F	L	T	N	E	I	C	T	H	L	A	N	I	Y	
UniRef90_E2JF88	S	C	F	H	V	V	L	S	E	A	H	L	S	F	D	K	F	L	A	N	T	V	A	L	A	L	S	E	K	Y	
UniRef90_S4RN97	N	V	I	L	S	V	I	A	E	G	L	G	A	W	S	K	F	L	L	T	T	C	I	G	L	K	S	A	F	Y	
UniRef90_Q9PRL9	H	C	L	L	V	T	I	A	A	H	N	V	S	L	D	K	F	L	G	D	L	S	K	D	L	S	K	Y			
UniRef90_P02075	H	H	G	N	E	F	T	P	V	L	Q	A	D	F	Q	K	V	V	A	G	V	A	N	A	L	A	H	K	Y		
UniRef90_V5N6Q4	G	V	I	L	E	V	L	S	E	V	Q	M	A	W	T	K	L	M	A	L	L	Y	W	H	I	L	G	A	Y		
UniRef90_H9GGM8	K	C	F	H	V	V	L	A	T	H	H	R	A	V	D	K	F	L	F	A	V	A	E	I	L	G	E	K	Y		
UniRef90_P02016	H	N	V	I	V	I	P	E	V	H	M	S	V	D	K	F	F	Q	N	L	A	L	A	L	A	L	S	E	K	Y	
UniRef90_P02137	D	V	L	V	I	V	L	A	Q	V	Q	A	A	W	E	K	F	S	A	G	L	V	A	A	L	S	E	H	G	Y	
UniRef90_Q9PVM3	H	N	V	I	D	F	T	P	E	V	H	V	S	V	D	K	F	L	Q	R	V	A	L	A	L	A	L	E	R	Y	
UniRef90_Q8JIM9	D	C	L	T	I	V	I	A	A	K	Q	A	T	F	Q	K	F	L	A	V	V	V	S	A	L	L	G	R	Q	Y	
UniRef90_Q7LZC2	D	C	L	T	I	V	L	P	A	V	Q	A	V	W	Q	K	F	L	S	C	V	I	S	A	L	S	R	Q	Y		
UniRef90_H3B2L7	G	V	I	L	K	I	L	K	E	A	L	G	A	W	Q	K	M	L	S	F	T	Y	D	Y	L	V	S	C	Y		
UniRef90_L7MZW5	D	V	L	I	V	C	L	A	A	H	A	A	Y	Q	K	L	V	N	S	V	A	H	G	L	S	R	R	Q	Y		
UniRef90_Q1AGS7	D	C	L	T	I	V	V	A	E	M	Q	A	A	W	Q	K	Y	L	S	A	V	V	S	A	L	L	G	R	Q	Y	
UniRef90_UPI000333DF0A	H	C	L	L	V	T	L	A	R	H	H	A	S	L	D	K	F	L	S	H	V	N	S	V	L	V	S	K	Y		
UniRef90_P02074	N	V	L	V	E	F	T	P	L	V	Q	A	D	F	Q	K	V	V	A	G	V	A	N	A	L	A	S	H	R	Y	
UniRef90_P56250	H	N	I	L	D	F	T	P	E	V	H	L	S	V	D	K	F	L	A	C	L	A	L	A	L	A	L	S	E	K	Y
UniRef90_G3PL38	D	C	L	T	I	V	V	A	E	V	Q	A	A	F	Q	K	F	L	A	V	V	S	S	L	L	G	R	Q	Y		
UniRef90_UPI000333E286	H	S	M	L	V	T	M	A	E	V	H	A	T	M	D	K	F	M	S	A	V	G	T	V	L	T	S	K	Y		
UniRef90_A1A4Q3	C	F	Q	V	V	L	A	S	H	Q	A	A	W	D	K	F	L	T	G	V	A	V	V	L	T	E	K	Y			
UniRef90_A0EZW7	D	C	L	T	I	V	I	A	E	K	Q	A	T	W	Q	K	F	L	A	V	V	V	S	A	L	L	G	R	Q	Y	
UniRef90_Q6GPP8	H	T	I																												

1 10 20 30 40

UniRef90_W4YI83 G S I T A E H K R M V Q K T W T K L S S N P A K H G A T M F S K

UniRef90_W4YI83 G S I T A E H K R M V Q K T W T K L S S N P A K H G A T M F S K

UniRef90_D6WV71 D P D P L T T L T S R E V F L V Q S S W D P I K K G D L T G Y G V Q L L L F

UniRef90_Q8AYQ4 M S L T A K D K D A V R T F W A K I S G K A D D V G T D A L S R

UniRef90_UPI00046C266D M A S L T D A D K K N I Q H I W A K L F E N P E E N G K T I V I K

UniRef90_L7LXU0 D P K T G L T P R E K K G L V R D T W A L V R K D I K A N A I A I F L T

UniRef90_UPI00021A6F7E D E A T G L T E K Q K K L V Q N T W A V I R K D E V A S G I A V M T T

UniRef90_G3MZ21 M L S A E E K A A V T S L F A K V K V D E V G G E A L G R

UniRef90_E2C8N8 D E K T G M S E K Q K K L V Q N T W A L V R K D D V S G L A I M N A

UniRef90_UPI0005EC261F M V H F T A E E K A A V S L W A K V N V E V A G G E V L G R

UniRef90_I3N507 M V H L S D G E K N A I S T V W G K V D V D A V G A E A L G R

UniRef90_W5N545 T E E E A L P H L S D G H H I E Q I K D S W K V I Q E D I A K V G I T M F V R

UniRef90_P02187 M G L S D G E W E L V L K T W G K V E A D I P G H G E F V L V R

UniRef90_P0C227 D V D V L K S L S A D Q K A A I K S S W A F A A D I T G N G S N V L V Q

UniRef90_G1PSU3

UniRef90_J9P9H8 M V L S P A D K T N I K S T W D K I G G H A G D Y G G E A L D R

UniRef90_G5CB64 I M S L T N S E R A I I T T I W D K M S M Q A D V I G T E T L E R

UniRef90_V5GLC7 D P D P V T G L T S R D R Y I K S S W A G P R Q K P T E S G V A L F L L

UniRef90_UPI000394614B Q G K M V A W T D F E R A T I K D I F S K I D Y E V V G P A A I S R

UniRef90_M1VNS7 E L I A P F W G K V D L H K I G G E A L G R

UniRef90_B6DMG8 E V G P A A L S R

UniRef90_UPI000258F143 D Q A T G L T E K Q K K L V Q N T W S I I R K D E V G A G V L V M C A

UniRef90_A7RGQ4 E N T L T S V P L S T R R K K L V R E S W E L I E P V K I T I G K R L F T R

UniRef90_UPI000273DA7A V H F T E A D K K A A A N S L X S K V K X E K A G G E T L G S

UniRef90_UPI00029D92B9 M G H F T E A D K K A T I R E S L W G K V N V E D A G G E T L G R

UniRef90_H2LKV1 M V K W T E E E R C T I R E V W E K V D V D E I G P Q I F K R

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UniRef90_C8YNP6 M L S K Q K E K L I E I W T R L T P L A D R I G A E A L L R

UniRef90_A7RZB2 T S R I P L D A K E T Q L V R K T W A L L G D R Q V E V G K S L F L R

UniRef90_L8HVQ9 A E R K A V Q A T W A R L Y A N C E D V G S V A I L V R

UniRef90_K4FYM0 M V L S K T D K A L L S S S V G K I Q A Q A T G S D V L A R

UniRef90_B7QHN5 P D S R T G L S K R D T K L I R N S W S M L C K Q H P K A D Q L I F K A

UniRef90_UPI00044239CA G L S S A D Q K L I R E S W Q K V G V S P L E H G I V L F T R

UniRef90_N6TIP6 D P D P V T G L T S K E K L V R T S W A K I M K N P A D S G V A L L C L

UniRef90_O97382 L T A L E K Q S I Q D I W S N L R S T G Q D L A V K I F T R

UniRef90_O97382 L T A L E K Q S I Q D I W S N L R S T G Q D L A V K I F T R

UniRef90_O97382 L T A L E K Q S I Q D I W S N L R S T G Q D L A V K I F T R

UniRef90_Q1AGS5 M S L S S K D K A T V K E F F G K M S T R S D D I G A E A L S R

UniRef90_P02022 G L S D S E K S A V A S L W E K I A P Q T N K L G A E S M E R

UniRef90_K4FU84 M V Q W S Q A E L D V I Q G K W A A L D P E K F G G K A L A R

UniRef90_D4A021 M A L S Q T D H R L V L A L W K K M G S N V G I Y T T E A L I E R

UniRef90_W5K4Z1 M E K L T G K D K E L I R D S W E S L G K N K V P H G I V M F T R

UniRef90_E2AZW6 D E K I G M T E K Q K R L V Q N T W A L A R K D E V S A G V A I M I A

UniRef90_O97381 L T A L E K Q S I Q D I W T S L R P T G E E L A V K M F T R

UniRef90_O97381 L T A L E K Q S I Q D I W T S L R P T G E E L A V K M F T R

UniRef90_O97381 L T A L E K Q S I Q D I W T S L R P T G E E L A V K M F T R

UniRef90_V5H2Z2 P D P V T G L T S K D I A L I K N S W A G P R Q K P T D S G I A L F N V

UniRef90_P84216 M V L S D E A N K K E I H H V A E L I K P H A E A V G A D A L A R

UniRef90_P20244 L S E G A N K K A I K N L L Q K I H S Q T E V L G A E A L A R

UniRef90_Q9NG75 L T A L E K Q S I L D I W T N L R S V G E E L A V K M F T K

UniRef90_Q9NG75 L T A L E K Q S I L D I W T N L R S V G E E L A V K M F T K

UniRef90_Q9NG75 L T A L E K Q S I L D I W T N L R S V G E E L A V K M F T K

UniRef90_F2Z286 F T G V I E R S T I G A I A K I L A S T P E A Y G A E A L A R

UniRef90_UPI000393ED6D V S L S A E S R E A I R S S W K E I Q E D I S R V G V I M F V R

UniRef90_R4V4K7 P D P D T G L T P R E K T A V R R I W D I V K A D T K Q N G V D L L V M

UniRef90_UPI0002740914 M V L S P T D K S N V K A A W E K V G G H A G D Y G A E A L I E R

UniRef90_UPI00027F7E11 P D T V V H F T A D E R A A V T S L W S K V D S P K K K D Y G V E L F M S

UniRef90_V4C2N0 C A I T G L T A E A K S L V A E A W K N I E E N I A K V G V I T F V S

UniRef90_E0VN13 P V L E E Q R P P E L T T R E K E L I E T W K E L E E N I A K V G V I T F V S

UniRef90_P59742 M E K L T E K E K E L I R V S W E S L G K D K V P H G V I M F S R

UniRef90_UPI0002655C3E T L V H F T A D E R A A A T S L W S K V D X E K A G G E I L G S

UniRef90_X1XX44 T D S R L P L T A K Q K Y T M V A S W K G I S R A M E T T G I T M F I K

UniRef90_P02020 M R F S Q D D E V L I K E A W G L L H Q I P N A G G E A L A R

UniRef90_P02204 H D A E L V L K C W G V E A D F E G T G G E V L T R

UniRef90_UPI00038C3EF8 M V H L S D G E K N A I S T A W G K V N A A E V G A E S L G R

UniRef90_UPI0002B4B1EC P L S E R E I E A L K D S W E K V R T K W V D I C G I A F S R

UniRef90_A8QDR7 D P R I P L T Q K Q K Y V L T K N W K G I D R E V S A A G V E M F L K

UniRef90_UPI0002652140 P R V D T S S T A G L D E R Q K T L V E N T W K T L E K N T E L Y G S I M F A K

UniRef90_UPI00035A19D6 P I T T R E A Y K I K Q S W K A I R R N M E S T G V E M F L R

UniRef90_Q93101 M A G L S G A D I A V I R S T W A K V S G S A T D I G R S I F I K

UniRef90_P06640 V K A V W E H V K G H E E V Y G A E A L Y R

UniRef90_M1T4W5 D F D T V L A S W G K V E S N I S G L G G E V L T R

UniRef90_P56691 M V L S S Q N K K A I E E L G N L I K A N A E A W G A D A L A R

UniRef90_A0EM53 V V R S F W D K V P K S G E I G A E A L A R

UniRef90_UPI0002C64E9A A L W K K L G G N V G V Y T T E A L I E R

UniRef90_M5RKZ4 M L S E K T V Q I V K A I T P L V A N A E T I T R R F Y M R

UniRef90_C5BMV1 M L T P S Q M A I V K A T A P L V G E K A G D I T A H F Y P M

UniRef90_Q90WH9 L V L K C W G P V E A D Y A A Y G S L V L T R

UniRef90_M3WU4

UniRef90_UPI00039448BF P P L S A R E M E L I R A S V S V V A P V A A E M T V Y F Y A L

UniRef90_UPI000379EFE3 M T S L S E K D K N I V Q T F W A K V A G R E E D I G C D A V S R

UniRef90_UPI0003AF8497 M L S A Q T I A L V Q A T V P V L Q E H G E A I T R H F Y P L

UniRef90_UPI000347738D V S A F L A K V D K R A V G G E A L A R

UniRef90_P02135 L R R A D K P N V K P V W S K L Q G H L E D Y G S E T L E R

UniRef90_UPI00042BFA97 M S L T Q Q Q I T I L Q T S F S K V E P I S L K A A E I F Y D T

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A D E G D E G I L S S H D R S V I R K T W D Q A K K D S D V A P Q V L Y R
M G F T E K Q E F L V N S W S F K Q N L P G Y S V L F Y T I
P S T G P K P M S A N T I A I L K A T A P V V K H G T E I T S N M Y R I
M S L T S Q Q V A I I Q A T V P V L K Q H G E H I T T T F Y R H
M L S E K T I E L V K S T V P L L Q E K G V E I T T R F Y E I
E D V A A I K E T W E A V Y K D K E N S G V F L F Q V
P V Q Q E P R A P E P S P D A V L I R R T M A E V G P V A D K V T S Y F Y A L
M A L T E Q K Q I Q L V Q S F S L V E P I A E K A A E I F Y D A
M G A L T E S Q A A L V K S S W E E F N A N I P K H T H R F F L
M A L T A Q Q T A T V K S T A P I V K Q Y G Q T I T T T F Y R N
P P A D E G L K R S D I I N I Q D S W N T L K G G Y E T V G M L V L H R
M N S D E V Y E I K R T W E I P A T T P T E S G V A I L I R
M S L T T E E V I T L R T T W A E I S K L G A T V G L A V L H R
M A L S A G D E A L V R A L W R K M G S N V G V Y T T E A L E R
V I S L T P E E K A I I L E T W K L I E P Y Q R I V G K T L F L R
M P L T D K Q K E I I T A S I P F L E S N G V E L T A N F Y A Y
M P L T Q Q Q I R L V Q E S F A K V E P I A D E A A K L F Y D K
M L S E Q T R S L V K S T V P V L E E H G V A I T T R F Y E N
M L A Q Q T I D T I K S T V P V L E V H G L A I T K T F Y S N
M T T E Q K E I K A T I P I L Q A G G E A L T A H F Y N R
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T	F	L	A	F	P	A	T	K	T	Y	F	S	H							D	L	S	P	G	S	A	Q	V	R	A	H	G	Q	K	L	V	A	D																																																						
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T C L L E V L A A W G A A Y Q Q L A D L L I A A E G E A Y
N A L L Y T L K E L R Q A W I D V F K V V A T V M K
E D I L V V L G A V Q S I D K F L H V T M R L C I S K Y
E V I I K V M P A G Q Q A M R N V M A V V I A D I E A N Y
G I I V K M L A S W G K A V D F L Y K H I F V T L K
E N L L A A I K D V L G D A A T D E I I N A W A E A Y
E V I V K
E N L L R A I K E V D A A T E D I L Q A W A A A
A E F I C A V A E L E E A W K T M F Q Y I T S P M K Q G Y
E H L I E V L K E A E A W T K A Y G V I A D A
S V L V D I L I E V K A A W T K L L D I F F H V M F E
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D A L L E A M N S K R T L W A A G Y R V I S D A L
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P V M L A V I G A I L Q A W V K A Y G V L R N G I
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S A F F E T I K E A E S A W G E A F D Q L A A A I K A
N V L V C V L A Q A Q A A Y Q K V
E H L L E A I K A V D A A T D E I I E A W G E A Y
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E S I F V T L T A A Q E V W D K F L N
C V G N K C H Q A A L T
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E C L I W T L K D V A D A W S W V Y G V I A K T M G D A
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UniRef90_E9GQN2 S A N D K S N V K A V W S K V G G N A G T X A N E A L L R

UniRef90_UPI000273A1EF

UniRef90_S4RRY3 M M T A D Q I A T I R S T W N L M G A T T D A V A P L F Y D R

UniRef90_C1AE78 G P L T S Q Q K L V K A T A P I L L E E N G T T I T K R F Y K Q

UniRef90_UPI000455FD4D MT P D Q V R L V Q D S F A K V R P I A G T A A D L F Y G R

UniRef90_I9CP50 A V S R G A A R F T E E Q E A L V K S W N I M K D D S A N I H R F F L K

UniRef90_J3LIR2 F T E E Q E A L V K S W T V M K K K T A E L G L K F F L K

UniRef90_Q947C5 M S P Q Q K D L V K A T V P V L K E G V L L T T H F Y N R

UniRef90_UPI00036B765A A A S A A I N P L S E A Q A G L V Q A A W G K V K T S E V D I L A A

UniRef90_V5YM35 T A T T M P L T E D Q I N I K A T V P V V Q E H G T T I T T V F Y K N

UniRef90_B8MAY8 MT A L T A D Q I A R V K A T V P V L A E H G T T I T R H F Y K R

UniRef90_E1T7R6 V A I R S S F E A V A P R A D E L T Q L F Y G W

UniRef90_UPI000476541D MT H I T A D Q M A R V K A T A P V L A E H G A T I T K H F Y Q R

UniRef90_B4EE07 L V L E S W N I V Q Q D I S K V G V V M F M N

UniRef90_V4BDN7 M S T L T K S Q I Q T I K A T V P V L A Q H G E T I T T K F Y A D

UniRef90_S3D2U5 ML S S D H A E T V R A T L P A V A A H G V E I T G T F Y D A

UniRef90_UPI0003F4CB53 P L D E K T V R T I K A T V P V L A E H G G T I A G V F Y R N

UniRef90_L5N6T1 T S E D A A L I V R S M E A V A P F A D K V V S Y F Y A T

UniRef90_UPI0003611FF6 M L D Q Q T I N I K S T V P S L K E H G L E I T T T F Y K N

UniRef90_UPI00040464DA D A I L V R R T M E E V G P V A D Q V T S Y F Y A L

UniRef90_UPI00037E471D M I K P N T I N V I K A T V P V L Q Q H G E A L T T L F Y E R

UniRef90_CON9G3 D P T L I K S S F A A V E P H G S A V T A Y E Y T H

UniRef90_E4NEA9 M G L T T A Q Q A I I K S N N W A T V S A N M Q E F G D A L F M R

UniRef90_R7TME4 M A L T A Q Q V K L V R D T I P A L T E H G E L I A S T F Y G N

UniRef90_G9P2E9 M L T S T Q R D I I K A T V P L L E T G G E A L T I Y F Y Q L

UniRef90_K2S0P0 L D E R Q V A L I K K S W E I V F A R P L D S G E K I L Y A

UniRef90_V5YLS0 M G F T Q Q Q E A L V N S S W E S F K Q N P S Y S V L F Y T I

UniRef90_P93849 M L S E S S A A T V R A T L P A V G A A I G E I T E R F Y A R

UniRef90_V6JX35 G F T E E Q E A L V V K S W N E M K N S Q E L G L K F F K K

UniRef90_I1LJ11 M L D Q K T I D I I K S T V P V L K S N G L E I T K T F Y K N

UniRef90_H7CXY0 P G P D S P F A V P E T A S D A L L L R R T M A E V E P I S D K V T S Y F Y A L

UniRef90_G2NXR9 P A D A T A T G V F G E E Q E A L V L G A W N A M K G D S A S L A L K F F L R

UniRef90_K3ZA32 T V K A L D P K K L E I I K A T L P V I K E H G E A I T K Q F Y K R

UniRef90_UPI00047BCAEB A A T P L T A D Q A A L V Q G A W S K V K T S E V E I L L A A

UniRef90_S6CDG3 D P R L K L D A K E K F F L E K S W K T V A R N E D V A A M A M F I N

UniRef90_C3YEA7 A P L T P S Q L A I V K S T A P V L K E K G E E I T T L F Y K N

UniRef90_W3X6Y2 L S V E Q A E T L R E T W N K I K H N E V D I L L Y S

UniRef90_S6BTL8 M S L T A R E A A L V R A S F R S V R D R V E P A S R D F Y A A

UniRef90_A0A059ITZ4 MT Q E Q T K L I Q K S W L Y V I D K A D E A G R L F Y K R

UniRef90_I0JWE7 L D A K D L E I V K A T L P A V K E H G E E I T K R F Y R R

UniRef90_UPI0004721B6C E Q P Q S Q P R I S Q Q T I D I V K S T A P L I K Q H G Q Q I T T R M Y E I

UniRef90_E0UK53 T V V H L S K E Q K G L I K D S W S K I Q Q D V T K A G I I M F V R

UniRef90_H2T5Q8 W K S L L S A P T E H G L V L F S R

UniRef90_W5KPG1 M L T S R E I K I V K A T S P V L D S A G V D I T K Y F Y N R

UniRef90_U3J239 D I P A M R A S F S K A A A H G D Q V P L W F Y S H

UniRef90_UPI00035E4E8A S V P R R A L T A Q Q K Q I V K S T I P A L E E Y G V T I T T L F Y K R

UniRef90_UPI00047BB5FF ML D K Q T I E I V K S T I P V L R T H G E T I T K E F Y R I

UniRef90_B6H584 M V L S P E D K A N T K A V W E K V G D H G T A D Y A T E A L

UniRef90_C3XHE5 V E L D E Q T K D I I K A T V P V L Q Q Q G S E I T K R F Y Q L

UniRef90_UPI00029DD19B L L K E S W S L V E E H Q D K V A G Y F Y A R

UniRef90_UPI0003FE224E S K S N A E L V K D S W R V L K R D A G T H A T A F F L K

UniRef90_G8SE21 K L V S E S W K D I A V T I E G F G E L L F K S

UniRef90_D8QX12 MT P T Q I D L V Q A S F A K V A P I A D T A A G L F Y G R

UniRef90_C1E0S6 E T I R R S W A A M E D Q A D A L G R H F Y A T

UniRef90_A7IIA0 F S E F E Q D V L I S T W P L I A S D L Y T H G C M V F K N

UniRef90_F4CV93 M L T Q K E I S I I K D T V P L L K E E G Q T I T S K F Y K R

UniRef90_G7YFM1 V A A V Q S T W A I V K A D L N T H A P K F Y V A

UniRef90_U1EBY4 G F S E E Q E A L V K E A W E L M K P N V Q E L G L K M F

UniRef90_E9G8S0 M G A F T E K Q E A L V S S S F E A F K A N I P Q Y S V V F Y T S

UniRef90_Q6WKX1 M G H F T E E D K A T I T S L W G K V N V E D A G G E T L G R

UniRef90_P02236 V E I L Q E S F N K V K P Y A G E L G D R F Y E N

UniRef90_G3QIW6 T T Q T V G L D K G T K D I I K A T V P V L Q E H G A E I T K R F Y E L

UniRef90_K9SL27 M T E R Q I E L V Q T S W N K C I P I A D T A A S I F Y A K

UniRef90_A0A024PP82 F S P E E K D I I R R S W K V L D K N L N N T A Y N I F E M

UniRef90_B5JNZ7 S P G P L T E E Q R K L V K A T V P V L V E H G T T I T R K F Y G N

UniRef90_A8XBD5 M L S A K H I E L V K S T I P L L E S A G T G I T E Y F Y Q R

UniRef90_UPI0004412F50 T S A P P A L T P Q E T A I V K S T A P V L E Q H G N A I T S H F Y K R

UniRef90_D4ZG53 M A L T Y K Q S Q L V K G T I P A L R E H G E T I T S F Y A N

UniRef90_L8G042

UniRef90_H1V620

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UniRef90_W7CNW5	M F E A	H P E L L A N Y F	N L T N Q E	L G T Q Q	P L A L A N T	
UniRef90_UPI0003B3BA7E	M F E	H N P E L L E R D I F	N M S	H Q K T G G Q	P V A L F N A	
UniRef90_A0A059MV11	M F A A	H P E L L E R D L F	N R G N Q K Q G E Q	K M S	A L A G S I A	
UniRef90_UPI000359AD70	L F E M E K D	L K K L F R R L M S Q T S G E F	I F D T	I R L E	H H A T L V M K N	
UniRef90_O04986	I F E V A	P S A S Q M F S F L R N S D V	P L E K N	P K L K T	H A M S V F V M	
UniRef90_UPI000365F6B4	I F	C Q S P D T K Q L F	P F M K I K A I G D T K R S R E M E F	H A L R F M Q V		
UniRef90_A0A016SWK5	M F T	H N P E L K N I F N Q G	H Q N S G R Q Q E A	L A M A V A A		
UniRef90_C4LFT3	L F A G T	P R L Q K A F S K F A K	V A A A D L	S A N A D F N K	Q V A L V A D R	
UniRef90_Q95NK8	L F E F D	P S L K P L F K S		G M K E	Q G R K L M A I	
UniRef90_F9SX37	L F A E	H P D T L K L F	P K F A G I A A G D L	S G N A A V A A	H G A T V L K K	
UniRef90_D0FZZ1	L F V Q	H P D L R A L F	P A S M D A		Q R D R L F K A	
UniRef90_X0NDY2	L Y S L	H P A T I E K F	P L F K G K T L E E I	S K H P K L P A	H A M S V M Y A	
UniRef90_K1PSK3	L F T	H Y P D L K T V F D		M A N Q E S G R Q	P I A L A S A	
UniRef90_UPI0003675E6A	L F E	L D P S L Q P L F K S		D I K S Q G R K L	M T M	
UniRef90_UPI00035CA314	L F A D Y	P A A K P L F S		G T D M E A Q S K K L	L S S	
UniRef90_U5DJ61	L F Q R A	P D S K I D F K R L G D V S	A E N I	P Y N R K L N G	H G I T L W Y A	
UniRef90_Q7M455	I F E I A	P T A K K M F S F V R D S D V	P L E Q N Q K L K G	H A M S V F V M		
UniRef90_V5QR23	I F E I A	P T A K K M F S F L R D S N V	P L E Q N	P K L K A	H A M S V F V M	
UniRef90_L7ZC15	M F R D Y	P Q V R A L F N Q T	H Q S D G A Q Q		R A L A G A	
UniRef90_A4BSQ2	I L E I A	P E A R G L F S F L K D	T N V I	P Q N N P K L K S	H A V K V F K M	
UniRef90_Q86QI8				A I M G N A K V K A	H G K K V I T A	
UniRef90_E9GQN2	L F K E T	P R I Q K Y F A K F	G K V A V D S L T G D A E F N K	Q V A L V A D R		
UniRef90_UPI000273A1EF	T F L S S	P T T K T Y F L M	N T A R L X R	H S A P W S E G A L S		
UniRef90_S4RRY3	L F E T	H P C D V F Y Q F R D	C E D L Q K L K M	N K Q L Q A H G L R	V M S F	
UniRef90_C1AE78	L F Q R D	P E L R A L F		T S T D M	P A Q G E K L A Q T	
UniRef90_UPI000455FD4D	M L D G N	P E L K N V F	N H S K		Q Q R G D Q A E A L A R A	
UniRef90_I9CP50	L F E I A	P E V R Q L F	P D		D M A E Q K K K L M A M	
UniRef90_J3LIR2	I F E I A	P S V R Q L F S F L	C N S D V S	L E N N P K L R A	H A M S V F V M	
UniRef90_Q947C5	I F E I A	P S A K K L F S F L R D S N	V P L E Q N T K K	P H A M S V F V M		
UniRef90_UPI00036B765A	M F T	H N P E L K K L F		N M G N Q K N K R	Q Q T A L A M A	
UniRef90_V5YM35	V F A A Y	P D I Q A K F	P A F V G Q	D L A A V R G S	A A F A L H A T R I V I S F	
UniRef90_B8MAY8	M L T E N	P D L N D Y F		N T T N Q L N G	H Q Q R A L A G S	
UniRef90_E1T7R6	M F A	H N P E L K N L F		N Q T H Q Q S G N Q	P E T L A R A	
UniRef90_UPI000476541D	L F R I A	P E T R E L F	P		V T M E L Q R T R L L R A	
UniRef90_B4EE07	M F A R	H P E L K N L F		N Q T H Q K T G S	Q P E T L A K A V Y A	
UniRef90_V4BDN7	L F E T	H P D V Q D V F M	P F K G K S K E D L	K Q S T Q L R S	H A L R V M G T	
UniRef90_S3D2U5	L L V A	H P E L K N V F N S		T H Q A T G R Q A R A L	L G A S	
UniRef90_UPI0003F4CB53	M F A A	H P E L R N L F		N Q G N Q A N G E Q	Q R Q A L A G S V A A F	
UniRef90_L5N6T1	L F Q E	H P E L R N V F		N Q T H Q K V G E Q	K A L A N A	
UniRef90_UPI0003611FF6	L F L	H N P H L R E L F	P		A A M D H Q R D R L F R A	
UniRef90_UPI00040464DA	M F E N N	P E L V K P L F		N M D R	Q K S G K Q P K A L A M T	
UniRef90_UPI00037E471D	L F V R	H P E L R Q L F	P		A A M D T Q R D R L L R A	
UniRef90_CON9G3	M F K N N	P E V K P F F N Q A	H Q H S G G Q Q		R A L A G A	
UniRef90_E4NEA9	L F E	H N P D V R K L F A E	H L N E		Q Q D R L V A A	
UniRef90_R7TME4	Y L L A N	P G D I Q F F	P K F Q S A G V G A Q	L R S N E A F Q E	Q Q T L T V F Q F	
UniRef90_G9P2E9	M L R A	H P E L N D Y F		N T V N M A N G R Q	P R A L I A I	
UniRef90_K2S0P0	M L D T	H P E V R P L F		N Q A N Q A N G S Q	P R A L A N G	
UniRef90_V5YLS0	Y L E K F	H P N Q E K F	A A F R N T P	L I M L K G T	P G F R S H A S K I M G L	
UniRef90_P93849	I L E K A	P A A K	G M F S F L K D S A G V V D S	P K L Q A	H A E Q V F G M	
UniRef90_V6JX35	L F A A	H P E L L R D L F N R G N Q A S G		A Q K Q A L A G S I	A A F	
UniRef90_I1LJ11	L L E I A	P A A Q Q L F S F L K D S T V	P L E E N	P K L K P	H A M A V F V M	
UniRef90_H7CXY0	M F E Q N	P E V K	P L F N M N K Q E S E E		Q P K A L A M A	
UniRef90_G2NXR9	L F V Q	H P E L R P L F	P		A A M D A Q R D R L F K A	
UniRef90_K3ZA32	L F E I A	P G A K Q M F S F L R D A V D A	P L E N	H P K L K A	H A V S V F V M	
UniRef90_UPI00047BCAEB	M F K Q	H P E L K N I F		N M A H Q I T G	H Q P K A L A D A	
UniRef90_S6CDG3	V F S A Y	P D I Q A K F	P K F A G K E L S A I	K G S A D F A L	H A T R I V I S F	
UniRef90_C3YEA7	L F R S S	P E I K D K W	P Q L R K L S E D E M R D S	P Y L Q K L S	S V R I L G A	
UniRef90_W3X6Y2	M I G A	H P E	L H N I F N Q T G Q T T G A	Q P R A L A G A	V F S	
UniRef90_S6BTL8	I F K A Y	P D I Q A K F	P K F A G K D L D S I	K G S A D F A L	H A T R I V I S F	
UniRef90_A0A059ITZ4	L F R R R	P D L R G L F		R G D L E G Q G M K F M S T		
UniRef90_I0JWE7	L F E V E	P N V R S L F		R E N I E K Q G R K L	I D V	
UniRef90_UPI0004721B6C	L F D S	H P E L K N I F		N Q T H Q I T G	H Q P R A L A N A	
UniRef90_E0UK53	M F R N	H P E I K A Q F D M		S A Q A N G F Q	P A K L A R A V S	
UniRef90_H2T5Q8	F F V N F	P S A K R Y F S Q F Q D M E D	P E E M E R S S Q L R	H H A C R V M N A		
UniRef90_W5KPG1	L L L R	H P G T K L A Y	C A F G H T T		P S R T L L H T V Y V M S F	
UniRef90_U3J239	L F D L D	P D L L P L F Q N	C K Q F A S P Q E	C L S A P E F L D	H V R K V M L V	
UniRef90_UPI00035E4E8A	M F S	C N P E L K N I F		N M S N Q E S G K Q	P F A L F S A	
UniRef90_UPI00047BB5FF	L F L T	H P E T R D M F	P		V S M A H Q R D R L F A A	
UniRef90_B6H584	M L E K N	P E L K N M F		N T V H Q T T G E Q	P A A L A H A V W A	
UniRef90_C3XHE5	L F D E Y	P Q V R T M F D		M T K Q Q N G K Q	P K A L A M A	
UniRef90_UPI00029DD19B				E S Y G P A Q I K K Q	C K X V A D M	
UniRef90_UPI0003FE224E	M L T N	H P E L K N L F		N Q T N Q R R G A Q	P K A L A N T	
UniRef90_G8SE21	M F L S Y	P D L R D L F	P		V Q M D V I Q R T R L L H A	
UniRef90_D8QX12	I F E I A	P T A K Q L F	S F M R D S T V	P A E A N	P H L K S H A L V V F T M	
UniRef90_C1EO56	L F R H D	W D L V R L F	P F R D C E S W E E	V R A H	P K F Q S H A V N V A G A	
UniRef90_A7IIA0	L F E I A	P E V K	P L F K G		D M T T Q G Q K L M A T	
UniRef90_F4CV93	L F H I A	P E T R D L F	P		V N M E V I Q R S R L L R A	
UniRef90_G7YFM1	A L H L F	P D L A K F I	P		F T K L S N E E I A A D T R S K Q	H I L A F M D V
UniRef90_U1EBY4	L F E T	H P E L K N V F		N Q T N Q K K G L Q S S A	L A M A	
UniRef90_E9G8S0	L L T A	H P E Y Q P M F	P T I A N V P A G E L	L N N A A L K T L S V N V L S K		
UniRef90_Q6WKX1	F L S W A D	V A G G A G M F Y F L K D Q N E	P R N N	P Q L R S	H V V K V F T M	
UniRef90_P02236	I L E K A	P A A K D L F S F L S N G V D	P S		N P K L T G H A E K L F G L	
UniRef90_G3QIW6	L L V V Y	P W T Q R F F D S F G N L S S A S A	I M G N	P K		
UniRef90_K9SL27	L F T M Y	P E A K P L F A	H		T A M G K Q K Q M L V G S	
UniRef90_A0A024PP82	M L G N	H P E L K N I F		N Q T N Q R K G D Q	P K A L A N T	
UniRef90_B5JNZ7	L F E I D	P S L R P L F T S		D I K E Q G R K L	M T M	
UniRef90_A8XBD5	I F N Q S	P D T K Q L F	P F M K F Q Q S G		K S K E I E F H G L R F M Q V	
UniRef90_UPI0004412F50	M I G E N	P E L K N I F	S H S K		Q M Q G H Q A D A L A R S	
UniRef90_D4ZG53	M F K	H N P E L K H I F		N M T N Q R T G G Q	P A A L F G A	
UniRef90_L8G042	I L A A V	P E L R N V F		N A A H Q E S G E Q Q S A	L A R A V W G	
UniRef90_H1V620	M L R A	H P E L H D H F		N K V N Q A N G R Q	P R A L T G V	

	90	100	110	120
UniRef90_UPI000365F6B4	V V A Y A S N I	D R Q L E L L G D A V Q A L I	V Q K H H V	S S L N T I L P E H Y P I V G
UniRef90_U7CNW5	I Y A L A A S N I E	E Q T L V L L P A V K T I	A Q K K H R	T S S F N I K A E H Y S P I V G
UniRef90_UPI00033BA7E	I A A Y A K H I E T	P Q V L L M D A V E R I	A Q K K H A	R S S F N I K P A E H Y S P I V G
UniRef90_A0A059MV11	A F A T L Q L D P D	P A R V E A L L S R I	A G K H A	S S L G I K P A D E Y W H L F
UniRef90_UPI000359AD70	L G Q A V D N L D D	S E V F S E M L V L L	A G K K H S	S S Y N V G R P A M L J F L W
UniRef90_O04986	T C E A A A Q A G Q	V I T V F R D T L K R L	G A T H S L	S K Y G V G D A M J F E V L K
UniRef90_A0A016SWK5	L E S V V K A I D N	P A S L L P L C	D N L G R V H T	D S S R G F K P H H Y W G V F
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UniRef90_Q95NK8	L D V I I S A M D D	K L Q L L G N I	N Y M R Y S H E	P R G I V R A Q T F T D F A
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UniRef90_D0XZ71	L G E L L K A K G D	H A I S A I K L	A T T H A T K K	I A L N N D F M L I T
UniRef90_X0NDY2	L L T A A Q H V	D N G K V L T E Y L	S Q L G R G H R	R K Y G T Q A D E H Y P A I V G
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UniRef90_U5DJ61	L D Y V V A H L	K Y P V A L S E A L	K G L G A R H V	Q Y G A L L P E H Y P I V G
UniRef90_Q7M455	L M N F V D Q L	S K K D L E D V C	R K F A V N H V	I R G V L D V K G W L K
UniRef90_V5QR23	T C K S A A Q L	R K A G K V E S	S L K H M G S V H V	L K Y G V V D E H F E V T R
UniRef90_L7ZC15	T C K S L R K S	G K I T V G E S	S S L H M G S V H V	L K Y G V V D E H F E V T R
UniRef90_A4BSQ2	I L A Y A R H I	E Q P E L L N D A I	E L K I V N K H V	S S L N I L P E H Y P I V G
UniRef90_O81941	V C E S A I Q L	I R E K G E V V S T	L K Y L G S V H L L	E K G I V D P Q F E R V V K
UniRef90_Q86Q18	F N D G L N H L	D S L K G T F A S	L S E V H C	D A R K L H V P E K F R L L G
UniRef90_E9GQN2	L D T I V S A M D D	K L Q L L G N V	N Y M R Y T H T	A R S I P R S A W E D F G
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UniRef90_J3LIR2	T C E A A A Q T	G K V T V R D T T L	R R L G R T T H	F K K G V S D G H F E V A K
UniRef90_Q947C5	T C E S L R K A G K	V T V R E S N L	K K L G A T H H	F K K Y G V D E H F E V T K
UniRef90_UPI00036B765A	V L A Y A E H I	D E P S V L L P V V	D T I G K H A	S L H I R P E H Y A I V G
UniRef90_V5YM35	I S E V V A L A G N	Q A A L P A L V	N E I G Q N H A	K N R G I T E A Q F N E F R
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UniRef90_S6BEI9 M L D H D E V E V V K K T W N E V K N K E T E I L L A A
UniRef90_W5LAU5 M S T K T L D S R T E E I I K S T V P V L A E H G T A I T T H F Y K T
UniRef90_W4Q2J8 P [V] R E A T H K A H L S P A H E E T V K A T L P V I G E N I G D I A K T F Y A G
UniRef90_G0HBZ0 D I P A M R A N F A K A A A T G D E A P L Y F Y S H
UniRef90_H6RLL7 P D T K Q H L E S P A S H E I V K A T L P L V G E K I G E I A P V I F Y N K
UniRef90_UPI00035C8477 D T [V] A E L E P E H E T D T V R A T L P V I A A R I D D I T A E F Y R R
UniRef90_W5TEG7 M L D Q Q T I A T I K S T I P A I A A T G P K L T A H F Y D R
UniRef90_B6XEC5 M G F T D K Q E A L V N S S E F K Q N L P G Y S I L F Y T I
UniRef90_P02233 M L S E K T I Q V V K S T L P L L A E A G P Q V T E Y F Y D R
UniRef90_Z5XKQ5 T E E [V] K R L S R E Q R [C] I Q E T F K H L Y G N R G E N G Q K I F V L
UniRef90_A0A044VD66 M S L S A A E A D L L S K S W A P V F A N K D A N G D N F L V A
UniRef90_UPI000359ECD9 M L D S Q T I A V V R S T L P L L A E T G P K L T A Y F Y D R
UniRef90_UPI000378D344 D A L V I R R T M A E I A P V A D E V T S Y F Y A L
UniRef90_S5UTU6 M T R E D I N L T K E L W A K L M N D P E T L E S S A A Y G
UniRef90_Q6CHJ2 R P A L S Q E H M D I V K S T A P V L A E H G V T I T S H F Y K R
UniRef90_H6BVZ2 M L T E Q E K D I K Q T V P L L K D K G T E I T S I F Y P K
UniRef90_G5JH26 H I T A D E A H T I G G I W K D L D K Q A T T A L A P E R
UniRef90_Q4JDG1 M L D S R T E I A I I K S T V P V L E I H G E T I T R T F Y Q T
UniRef90_UPI0003798E7B M A L L S P S Q V Q I K S T V P V L A Q H G E A I T A K F Y T D
UniRef90_Q0UPY5 M L D S Q V I K T I K S T I P L I V S T G P K L T A H F Y E R
UniRef90_W1IVC8 M L T P S Q I D I V K S T A V V L K D H G E T I T R I F Y A N
UniRef90_G3JHV7 M L S S A T L S V V R S T A P A L A E H A Q S I T K Q F Y Q L
UniRef90_D5SWN2 M L D Q H T I Q V V K S T I P L L V A A G P E L T K H F Y Q R
UniRef90_UPI00046972F1 M L D Q A T I A V I K S T I P L L E S A G P A L T Q H F Y Q R
UniRef90_A4SIV2 M L S E Q S A A T V R A T L P V V G A A I G E I T E R F Y A R
UniRef90_S5V1T2 L D A H E V E Q V Q A T W K A V S H D E V E I L Y T
UniRef90_P02228 G L S D S D K Q A L T S S W S L I A E G K D T A G E K L V L W
UniRef90_Q14SM8 G L S D S D K Q A L T S S W S L I A E G K D T A G E K L V L W
UniRef90_Q14SM8 G L S D S D K Q A L T S S W S L I A E G K D T A G E K L V L W
UniRef90_Q220F3 G L S D V D R K A L E S S W K K L A G G S E N A G T N L V F W
UniRef90_Q220F3 G L S D V D R K A L E S S W K K L A G G S E N A G T N L V F W
UniRef90_B0CEY8 Q [V] E L L E T S F A Q V K [V] A N E F A D R F Y E N
UniRef90_UPI0001D53D30 M L S E Q T R S L V K A T V P V L Q Q H G V A L T S H F Y R R
UniRef90_Q7NSD8

	50	60	70	80
UniRef90_Q2HDG2	M L Q N H P E L N D Y F N S		V N Q K N G R Q P R A L T S V	
UniRef90_G1X3W8	M H G D I P A L H E I F		N Q T N Q N G N G H Q A R A L T A M S	
UniRef90_V5YMC6	V F S A H P D I Q A R F P A F V G K D L N D I K G S A A F A L H A T R I V S S F			
UniRef90_W1S966	M F Q N P E I R D L F N Q S H H G D A G S Q P R			
UniRef90_UPI00034F65C9	L F E E N E D L L H L F E K F Q E L R T T E D L S Q S E E L A E H A N K V M A H T			
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UniRef90_Q488B8	M F S H N P E L Q D I F			
UniRef90_Q7M424	L F K S H P D T K K H F K H F D D A T F A			
UniRef90_D9V9Q0	L F T L A P A T R D F F P			
UniRef90_UPI000370C764	L F V N H P Y L R E M F P			
UniRef90_UPI0003803F17	M F A N R P E L R N L F N Q T H Q A S G S			
UniRef90_UPI0002DEA47E	L F L R H P G L R D L F P			
UniRef90_E3E3M9	M F Q A H P E L R N M F			
UniRef90_A0A024EGD5	M L S E Y P E V R P L F N Q A H Q A S G D			
UniRef90_K0T1L2	L F E Q Y P D V V P M F G D			
UniRef90_V6KZR8	L F V Q H P D L R E L F P A S M D S			
UniRef90_H8Z1I5	M F N D H P E L R R L F K G E M D E			
UniRef90_UPI00031999E4	L F S Y D P T L F P L F K G			
UniRef90_A0YNP8	M F E N H P E L V K E Q F			
UniRef90_F9F5L9	L I G T Y P D L R N I F N L S H Q H D G A			
UniRef90_C5AB71	M F R S H P E L R N L F N Q S H			
UniRef90_UPI0001FFF3D6	L F S R A H P E T R D L F P			
UniRef90_M9LPM0	M F S N H P E L L N I F N H			
UniRef90_D2BU70	M F Q H N P E L K D I F			
UniRef90_P02213	L F A D N Q E T I G Y F K R L G D V S Q			
UniRef90_A0A016Q645	M L R D H P E L N D Y F			
UniRef90_UPI0003592FCB	L L E D P E I R G T F M T F R D K T V E E			
UniRef90_G2XJ88	M L G A H P E L H N I F			
UniRef90_F2Q9X8	M L Q D N P G L R Q K W P R I S L L T E E E I P T S P Y I K F L G E R I F D C			
UniRef90_E9EFU4	L L D S H P E L K N I F			
UniRef90_E7FIH1	F I K A H P E Y Q K M F K S F A N V P Q A E L L S N G R F L A Q A Y T I L A G			
UniRef90_Q9XTM2	L F K E T P R V Q K H F A K F S S V A V D S L A G H A D Y E K Q V A L V A D R			
UniRef90_Q071M5	M I V V Y P Q T K T Y F A H W P D L T P G S T H I K A H G K K V M G G			
UniRef90_F3NBD7	L F A A H P E L L R D L F N R G N Q A A G T Q K K A L G A S I A A F			
UniRef90_I2K200	D F S S Y L F C I Q F Y N N F I S M D E K V V E M I P S I R H Q A S S F A D V			
UniRef90_P13578	L F A L D P N A K G V F G R V N V D K P S E			
UniRef90_UPI00029B0822	M F G A H P E L R D T F N			
UniRef90_S3BRK2	L F V Q Y P H L R E M F P			
UniRef90_UPI00032ACC7B	I L E K A P A K D L F S F L K N G			
UniRef90_A0A024HJQ1	M L S E Y P E V R P L F N Q A H Q A S G D			
UniRef90_G7Y3I3	L F E E H S D F R D A F A R F R Q K Q L S N L T R D P A F Q A H G L R V L N V			
UniRef90_G8YKA8	M L S T Y D E V K P Y F			
UniRef90_E1X5F5	L F E K N P E V M P Y F			
UniRef90_S6BEK1	V F S A Y P D I Q A K F P A F A G K D L A S V K G S A A F A L H A T R I V S F			
UniRef90_UPI00023B2AAF	I F E I A P L T Q K L F S F L K D S K V P L D			
UniRef90_UPI000344B12C	L F T A N P E A K P L F E H			
UniRef90_U1KRK6	M F A H N P E L L D I F			
UniRef90_A4INU4	M F S N H P E L L N V F N H			
UniRef90_UPI0003F0E673	I F A L N E N I K L L F P F R Y V P V D I L S Q N E V F R G H S R R F M Q A			
UniRef90_Q2BYM9	M F N H N P E L K N V F N M S H Q K N G A N N G P S S Q Q			
UniRef90_UPI0003608058	L F D N H P A L S R N L F N R G N Q A Q G A Q Q R A L A A S I A T F A T H L			
UniRef90_E0IEV8	L F Q Q H P E L L N V F			
UniRef90_M2V0F0	M L E A N P E L K N I F N N			
UniRef90_H2AQS4	M L S E H K E L L N I F N K I			
UniRef90_UPI00040E3AFA	L F Q A H P E L L N I F			
UniRef90_F2Z287	M F V V F P W T N A Y F A K X X X F S			
UniRef90_S6BEU9	I F K E H P D I Q N K F P M F A G K S L D Q L K S S Q P F S L H A T R I V S F			
UniRef90_W5LAU5				
UniRef90_W4QZJ8	L F N N H P E L L H I F N H			
UniRef90_Q0HBZ0	M F A E N P D L L A			
UniRef90_H6RLZ7	L F L S H P E T R Q M F P			
UniRef90_UPI00035C8477	M F A A H P E L I R D T F N R G N Q K S G E Q Q K A			
UniRef90_W5TEG7	L F A A H P E L R D T F N R G N Q A Q G E Q Q R A L A A S I A T F A T H L			
UniRef90_B6XEC5	M F K Q H P E L K D I F			
UniRef90_P02233	V L E K A P A K G L F S F L K D T A G V E D S P K L Q A H A E Q V F G L			
UniRef90_Z5XKQ5	M F S Y N P E L K N I F			
UniRef90_A0A044VD66	L I K D F P E Y K L I W P Q F R A I P D S S I I T A D A I K Q H G L V Y M A G			
UniRef90_UPI000359ECD9	L F E K F P D S A N F F A D F K G K S I A D I I K A S P K L R D V S S R I F A R			

	90	100	110	120	
UniRef90_Q2HDG2	I L N F A S N I	N H T S E I L	P K L	E R M C N K H C	S L S L G I Q P E H Y G I V G
UniRef90_Q1X3W8	I V L A Y A K Y I	D N L A V L	G E T V L	E L I C Q Q K H A	S L S L G I Q P E H Y G I V G
UniRef90_V5YMC6	I L S E V I N L S	D N L H A A L	P A L V N	E L I C Q Q K H A	S L S L G I Q P E H Y G I V G
UniRef90_W1S966	I L A Y A N N I	D N L G A L	A A V I V	E L I C Q Q K H A	S L S L G I Q P E H Y G I V G
UniRef90_UPI00034F65C9	I L D E G I K G L	D N L D G A L	A A V I V	E L I C Q Q K H A	S L S L G I Q P E H Y G I V G
UniRef90_E4N280	A T A L V I E H P	D R R P	D A M L A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_A0A014MS30	V L M Y A K H I	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_Q488B8	I A A Y A K N I	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_Q7M424	I L G A F V S N I	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_D9V9Q0	I L A R V V Q M V	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_UPI000370C764	L L T S A R H I	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_UPI0003803F17	V Y A Y A A N I	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_UPI0002DEA47E	L L T A A A T H A	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_E3E3M9	V Y A Y A A N I	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_A0A024EGD5	V L M Y A R H I	D D L S G L	G D L P A	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_K0T1L2	V S L A V E Y L	K D V P A L	I P L I L	E D L G A K H A	T R K Y G T L P E H Y G I V G
UniRef90_V6KZR2	L L T A A R L I	K D V P A L	I P L I L	E D L G A K H A	T R K Y G T L P E H Y G I V G
UniRef90_H8Z1I5	V N R T V D T L	D D L T S L	N R V I I	M M G A R H S	E G Y G V V K A H F T P V G
UniRef90_UPI00031999E4	L H A A V S T S	L N A P E Q L	P V L V L	Q Q L A K H A	E G Y G V V K A H F T P V G
UniRef90_A0YNP8	I Y S Y A T H I	D L D L E A L	K S M I E	R I A H K H A	Q T H V T P E Q Y S M V G
UniRef90_F9F5L9	V L A Y A T Y I	D K P E F L	A S T I E	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_C5AB71	V L A Y A T Y I	D K P E F L	A S T I E	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_UPI0001FFF3D6	L V H V I Q M V	D D L V P L	F L V L	Q Q L A K H A	R A L H I Q P E H Y G I V G
UniRef90_M9LPM0	I Y A A A A N I	D R L E D I	M P V V K	Q I A H K H A	R A L H I Q P E H Y G I V G
UniRef90_D2BU70	I C A Y A T H I	E N L P D L	P A V E R	I A Q K H A	S F T I R P E Q Y G I V G
UniRef90_P02213	L Q N F I D Q L	D N P D L	V C V L	E K F A V N H I	T R K I S A A E F G K I N
UniRef90_A0A016Q645	I L S Y A N N I	N H I T E L I	P K M E	R M C H K H C	S L S L G I Q P E H Y G I V G
UniRef90_UPI0003592FCB	V E K V V A R I	D N K E K M V A	L L H D L	G Q R H S Y	N A T G I S R W F P Q F N
UniRef90_G2XJ88	L L A Y A T H I	D L D L E A L	K S M I E	R I A H K H A	S L S L G I Q P E H Y G I V G
UniRef90_F2Q9X8	L D Y I I D N L	G D L D H V I	S E L T K L	G R Q H S D	M N V M T P E D V W A I E
UniRef90_E9EFU4	V L A Y A N N I	E N P A L I	Q T T I S	R I G K H A	S L S L G I Q P E H Y G I V G
UniRef90_E7FIH1	L N V V I Q S L	S S Q E L I	A N Q I N	A L G G A H	K P R G A T P E I M Y P Q F G
UniRef90_Q9XTM2	L D T I I S A M	D D K L Q L	L G N I Y	Y M K Y T H L	E F G I S R D T F E D F G
UniRef90_Q071M5	I A L A V S K I	D D L K A G L	S D L S E	Q K H A F	K L R V D P A N F K I L N
UniRef90_F3NBD7	A T H L V K D I	P E R R P D L	M L R R I A	K H A	S L S L G I Q P E Q Y P V V H
UniRef90_I2K200	L N Q A I G T L	E D L S K M Q E	L L T N L	G K L H A R	I L S L G I E R S Y F K T M G
UniRef90_P13578	L D L A V N L I	D G K A L Q E	E I L K R I	A R Q H R E	S R S G V K A V I Y F D E M E
UniRef90_UPI00029B0822	I A T F A A M L	V D G N S P V D	L L S R I A	R Q K H A	S L S L G I T P D Q Y Q L V H
UniRef90_S3BRK2	L L T A V R L Y	D D G K L L G D	Y L S G L	G R G H A	R K Y G T L P T H Y P A V G
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UniRef90_A0A024HJQ1	V L M Y A R H I	D E L E Q L	V L V L A T	Q I V N K H V	A L Q I L P E H Y P I V G
UniRef90_G7Y3I3	V D K I I S R L	R R I D T I	Q D F V L	F S L G S K H C	R Y V V P N I E L V P A V G
UniRef90_G8YKA8	L N Y A K N I	D N L S A L	P L Q A F V	S K I V V K H V	G L R V R P E H Y P I V G
UniRef90_E1X5F5	I C A Y A K N I	D N L S A L	S G A V S L	I A N K H S	S L S L G I Q P E H Y P I V G
UniRef90_S6BEK1	I S E V I S L S	G N P A T A	P A I V T E L	A N N H S	K N R G V T Q A Q F N E F R
UniRef90_UPI00023B2AAF	F E L A V I Q H R	G I V T A R	N S T L K K L	S V V I Y	K Y D V L D E H Y E V I I
UniRef90_UPI000344B12C	L V L V I D N L	R S P D M L	D K A L R G L	G A R H V	K Y G A L P E H Y P I V G
UniRef90_U1KRK6	L A A Y A T Y L	D Q P E V L	T E A I R A R I	N H K H A	S L S L G I Q P E H Y P I V G
UniRef90_A4INU4	V Y A A A R Y I	D N L D A I	L V V V R I	G K H A	R F F E G I K P E Q Y P I V G
UniRef90_UPI0003F0E					

UniRef90_Q2HDG2 K Y L L G A F G E 130 V I G P A M T P 140 A V L A A W E R A Y
UniRef90_G1X3W8 K Y L L E A I K E V L G D A A T P A I I D A W G A C Y
UniRef90_V5YMC6 S A I T N Y A A S H A T W D N V A A A W N H A I D N V Y
UniRef90_W1S966 E A L L G A I K A V N A A T D E I L A A W G E A Y
UniRef90_UPI00034F65C9 Q P F L Q A
UniRef90_E4N280 A A I V E V L P E V A A A W D E V Y W L M A N A L
UniRef90_A0A014MS30 G F L L R A I R E V L G A E I A T D E V I A A W A A A Y
UniRef90_Q488B8 H H L L I R E L A S D V F T A D V E A W T V A Y
UniRef90_Q7M424 G V F K T F L D E H K A A W D A L L T M L I K A
UniRef90_D9V9Q0 T A L L A A L P E V I E R A W A E A F T I V
UniRef90_UPI000370C764 E C L M T A L P E A E A A W V R A Y T A I S Q I M I D A
UniRef90_UPI0003803F17 E N L L E V L G E A L E A A W R A A Y A Q L A Q I M
UniRef90_UPI0002DEA47E E A L L G A L A R H E A A W V G A Y T T I S Q I M I D A
UniRef90_E3E3M9 T Y L L K A I K D V M Q A W E T A Y G V I A D A
UniRef90_A0A024EGD5 T C L L E V M S A W G A A Y G Q L A D I L I G A E T S I Y
UniRef90_K0T1L2 E C L L W T L G D V A E A W T W V Y G V I G S T M S
UniRef90_V6KZR8 E C L L G A L D E A E A A W V R A Y T A I S Q T M I D A
UniRef90_H8Z1I5 N A L V A T L P E T R S A W I S V Y G E L A E L M
UniRef90_UPI00031999E4 N A L L H T L K E T R D A W V E L I H F V A D T M K A
UniRef90_A0YNP8 E S L L Q A M K D G E V A T D E V M A A W K E A Y
UniRef90_F9F5L9 E Q L I K A I G E V L G D A V T D D I A D A W T A A Y
UniRef90_C5AB71 D N L L A A I V E V L D A W R A A Y A Q L A Q I L T
UniRef90_UPI0001FFF3D6 D A L I S A I A D V I E K A W T G A Y G I V
UniRef90_M9LPM0 K N L L L A I K D V D A A T D D I L E A W V K A
UniRef90_D2BU70 T H L L A T L E E G Q A A W G K A Y N V L A D V
UniRef90_P02213 G P I K K V L A S K N N A W A K L V A V V Q A A L
UniRef90_A0A016Q645 K Y L A A F A E V R E A W T K A Y W M L A K M L
UniRef90_UPI0003592FCB N A I Q P A L P E V E Q A W D L F R Y I T H V M K E
UniRef90_G2XJ88 E H L I K A I A T V L G D G L T P E V A D A W V A A Y
UniRef90_F2Q9X8 A A F L A G V Q E
UniRef90_E9EFU4 E G L L A A I K T V L A A N D Q V I D A W G A A Y
UniRef90_E7FIH1 A V T E E V L A E A R Q A W K N G M R A L V T G I T K
UniRef90_Q9XTM2 R L L L D V L G A S G V S W K G V L A V F V N G V S P K
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UniRef90_I2K200 E A L L K T F R D W E E A W I K L Y C F L A N S I
UniRef90_P13578 K A L L K V L P Q V S S A W D R C F T R I A D V I K A
UniRef90_UPI00029B0822 D A I V D V L P E V A A A W D E V Y W I M A S V L
UniRef90_S3BRK2 E C L M A A L A R T E A A A W V R A Y T A I S Q T M I D A
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UniRef90_A0A024HJQ1 A C L L R A I R E V L G A Y Q Q L A D I L I G A E E S A Y
UniRef90_G7Y3I3 E Q L L E A I E D T A V G W E A V L A Y L N C A M R
UniRef90_G8YKA8 K C V L H A L K E G S A A T D D L L D A W A T A
UniRef90_E1X5F5 V N L L E S I K E V L G D G A T D D I I S A W K K A Y
UniRef90_S6BEK1 T A L T N Y V A A F N Q A F D N V Y E I I F A N L
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UniRef90_U1KRK6 E H L L A T L R E M F P H Q F T A E V E Q A W A E A Y
UniRef90_A4INU4 K H L L A I K D V L G D A A T D E V I A A W A E A Y
UniRef90_UPI0003F0E673 T S M Q T V L T G H H Q S W T Q I F E F V I T R M A E G Y
UniRef90_Q2BYM9 S H L I A T I D E L L A P G Q D V L D A W T E A Y
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UniRef90_M2V0F0 K H L L S T M A S V L D A W G A A Y W Q L A N L M I S K
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UniRef90_S5UTU6 E A M I K T F A E M E T A W I K I Y S Y L A N K L
UniRef90_Q6CHJ2 E H L L A S I K E V D A V N Q P V L D A W A A
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UniRef90_Q0UPY5 T H L L A T I D E V L S A W E K A Y N V L A N V
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1 10 20 30 40

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UniRef90_AA0A44UKA7 E D D Q K N L L R E S W L I Y R N L Q K I G V N I F N M

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UniRef90_S6BEJ5 P L S A D Q A N L V K G A W D K V K H S E V D I L L A A

UniRef90_E7BQB5 M V T A A Q K A A I K D S W A G V D L Q V A G N A F Y N Q

UniRef90_W0ABT2 M S L T P A T I A I V K A T V P A L A E Y G Y A V I Q R F Y Q R

UniRef90_W6WXD1 M L E A R T I E I V K S T V P V L E S A N T A L T E H F Y Q R

UniRef90_UPI000371B894 M T S T Q K D L I K A T I P I L L K S N G E D L V K Y F Y N R

UniRef90_A6H0P9 M L D N Q T I A T V K S T I P L L S A T G P K L T A H F Y E R

UniRef90_Q7N215 Q V E L V Q S S F A K V K P I A G Q A A E L F Y N R

UniRef90_K9PTJ5 L S P E Q V N I V K A S V P I L K A S G Q E L T K N F Y Q K

UniRef90_A5DQY8 M T P S Q I E L V Q D S F A K V A P I S D Q A A T I F Y D R

UniRef90_M4ZB93 A M L D Q N T I A I V Q S T L P I L Q Q Y G P G L T T G H F Y Q R

UniRef90_D4F968 M T R E Q K Q L V K D T V P V L R E N G V L L T T H F Y E R

UniRef90_UPI0003711A7B M L S E Q S A A T V R A T L P V V G A A I G D I T E R F Y A R

UniRef90_C7PVF6 M L T H N T I E L V K Q S A P I L A Q V G P E I T A K F Y H R

UniRef90_U1LJZ1 M V S Q K T I E I V K A T A P I L K E R G E E I T Q R M Y Q I

UniRef90_K8GH78 M L S Q K T I E I V K S T A P V L A E T G P K L T T H F Y Q R

UniRef90_UPI000395B25B V E E K P E L T K E Q K D T L I Q T W Q N L H A D L E R I G M L M F M G

UniRef90_UPI0003F0B014 L L K E S W T L V E E D R E R L S G H F Y A R

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UniRef90_E5S1Z7 M L S I E H R N I V S A T V P V L E Q G G E T L T R H F Y K N

UniRef90_W0V651 M T S D Q I Q L V K G T V P V L R E H G V L L T T H F Y K R

UniRef90_U2HCD6 Q E S I A I V Q S T W S Q A V Q R E R L G Q V F Y D R

UniRef90_M1VB93 M S L D I N M I R S S F E K A K P I A G D V A N K F Y E F

UniRef90_T0RU19 M V A T P A M P T F T D A Q V A T L K G D W N I K D K G V D I L F H F L T K

UniRef90_S6BEL0 I M S L S A A E A D L A G K S W A V V A N K D A N G D A F L V A

UniRef90_UPI0003596543 P A A E P G P P A S P D A V L V R R T L Q E I A P V A D Q V T S Y F Y A L

UniRef90_UPI00047789D8 I K D T W P F L K K D M V A N G I S L M I K

UniRef90_Q26269 M L S E E S A A V V R A T L P V V A A Q L D T I T A R F Y D T

UniRef90_UPI000380F77D T P L S S D Q Y S L V K S T W D Q V S H N E V D I L L Y A

UniRef90_V5YME9 M S L N I E L L E E S F N R I K P N A P E F A T S F Y D N

UniRef90_D8FWM6 M L S E Q S V P V R A T L P A V G G A L G D I T T L F Y R K

UniRef90_A3KJ00 M L T H E Q E K L I N A T A P V V A E H L N A I T T Q R F Y P L

UniRef90_T2LEB6 L T P G Q V E I V K S T I P V L Q D H G V A I T T L F Y E R

UniRef90_R7Z646 S E V L P D R D I D L V R R S C A D V P E G S T R L A K C F Y D N

UniRef90_UPI000380CA2F M V D L T E Q Q K T L I A N G W A V I K K N L K Q N G A D A F I L

UniRef90_R7T5E2 M L T Q A Q E Q I E T T A P V V A E H L D A I T T Q R F Y P L

UniRef90_UPI0003496A77 V Q N T W A L V A P I S D Q V G D L F Y A N

UniRef90_A8LNC0 M L D Q Q T I A T I K S T I P L L E S A G P A M T K H F Y Q R

UniRef90_N9VQK2 P R E A P P A V V E M V E H I R R T W R L A R R H E A D I A R D F Y T L

UniRef90_UPI00036F3778 P R E A P P A V T D L V E N I E R S W Q Y A A P Y R D Q V E Q E F Y R L

UniRef90_H8G9K5 M T I Q E I N I V K R T W K L L R D D P Q L L G D V F Y R R

UniRef90_I2GB73 M L S E T T I N I V K A C V P A L K D K G L E I T R R M Y E I

UniRef90_W9H8K3 D I N L L R Q S W S V I N R N L E K T G V N I F K M

UniRef90_E1GBK5 I L V T A A K M S M S K V D L V Q S T F A K V Q P I A D T V A E L F Y Q R

UniRef90_UPI00037D2DC1 I E L V E T S F E K I K P R A V E F V S S F Y Q N

UniRef90_UPI00047C30DC M A S L Q T L A I V K A T V P V L E E H G T A I T T V F Y K N

UniRef90_Q1QCV6 V E L L V N S S F E K V K P H A N E F A S F Y D N

UniRef90_UPI0003458DAD M L D S Q T I A T I K S T I P A I A A T G P A L T A H F Y D R

UniRef90_UPI000345CDB6 P L S A D E A S L V R G S W A Q V K H S E V D I L L Y Y

UniRef90_P02222 L S E E H A A L V K A T L P A V G E N I E T I A R N F Y E R

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UniRef90_H5V2L5 F S D D Q K A D I K S T W E T L Y G N K F Q L G V E L M A N

UniRef90_W6FSH9 L T R R E R I L L E Q S W R K T K T G A D H I G S K I F F M

UniRef90_A8WMD3 M L S V Q S A A T V R A T L P A V G A N L D A I T E R F Y A G

UniRef90_K4RAU4 M T I Q K Q D L V K A T V P V L K E N G V V L T T H F Y N R

UniRef90_UPI000378DF50 Q I E L V E Q S F A K I E P Q G S A F A S F Y Q N

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UniRef90_D1A3X5 P R P T A V A H A E L E P Q H A E L V A A T L P L V G A H I D E I T A E F Y R R

UniRef90_G7CKL1 M L S A E T L A T I K S T A P L L A E Q G R A I T D L F Y S K

UniRef90_Q3SGG8 M S L S P E Q I Q L I K A T V P V L Q E H G T I T K V F Y D N

UniRef90_Q5AX11 V A T P A M P S M T D A Q V A V K G D W E K I K G S G V E I L Y F F L N K

UniRef90_P02231 M G L S D G E W Q L V L N V W G K V E A D L A G H G Q A V L I S

UniRef90_M3YM80 M L S V T V R E Q V K S T A P V L K T H G E A L T R H F Y A R

UniRef90_AA0A52JFQ0 M S A P T A I P P L S T S E T A L L K S S F A V V E R R A E H A V K Y F Y S H

UniRef90_R7WQA6 M T T T E K E L I K A T I P V L R E N G V L L T K H F Y N R

UniRef90_D9VZ36 M S L S S K Q K A T V K D F F S K M S T R S D D I G A E A L S W

UniRef90_G8X712 V V T Q G N M P H L T T Y E Q K Y L I R E T V D N R E C V N E K Y V C E L A I

UniRef90_B3F9V4 M T P G D I E L V K T S F Q A L V P M K E A A A A L F Y K R

UniRef90_A7RWR5 L C K R E R M L E H S W R K T R K T G S E H G S K I F L M

UniRef90_V4R4D1 M L S E K S R P V I E A T A A V V A E H M P E I T P L F Y A H

UniRef90_W2TDJ5 M L K E S W S L V E E R Q D K V A G Y F Y A R

UniRef90_D3LRY7 M L D Q Q T M D I V K A T A P V L K D H G V A I T S H F Y K R

UniRef90_R4LQ95 A P L S A D E A S L V R A S W N Q V K H N E I D I L L Y Y

UniRef90_U1N418 M S L S Y Q E A K L V K G T I P A L K E D H G E H I A T V F Y K T

UniRef90_Q45V70 M T N T Q Q I Q L V K Q T W K L R E D P A V L G D V F Y G R

UniRef90_M77XL9 L N V D Q Q I G L I K S S W G L I V A K A Q T L G E H F Y S E

UniRef90_UPI000477A4C2 M L T N D Q E R L I E A T A P V V A D H L D A I T Q R F Y P L

UniRef90_UPI00041ACC89 M I T A E S L A L V Q A T V G V V R E Y G A D I T R K F Y S T

UniRef90_S2KG16 M L S E S S T A T V R A T L P A V G A A I G D I A D L F Y R K

UniRef90_UPI00037A7EB7 M K L S T E S E A V V R A T A G V V A Q H A D E I T T L F Y R E

UniRef90_UPI000378132A L D K Q T I E T V K V T V P V L A E H G Q A I T S R F Y Q L

UniRef90_T5KE60 G S N P G M T P D Q I A L I K A T V P V L V E H G N T I T T V F Y R N

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UniRef90_B6H132

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UniRef90_S3CB17	M L N E H P E L K N Y F N S		A N Q A N G R Q R K A L M A T	
UniRef90_A0A044UKA7	I F E Q Q P E A K F L F P	F T D T S R K D	S D F I K F H S L R F L Q A	
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UniRef90_Q7S074	L I T E N P S L K N I F S		L T S Q A T G A Q P R A V L H A	
UniRef90_UPI00037CAF05	M F A A H P E L K N V F		N Q A H Q A A G E Q Q P A A R A V L M A	
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UniRef90_UPI000349F54F	L F G D Y P E V K P L F A H		T N M K E Q R K H L F S S	
UniRef90_S6BEJ5	I F S A H P D I Q A K F P	K F A G K E L S A I K G S	A D F A L H A T R I V S F	
UniRef90_E7BQB5	L Q A N A P D A Y A V F		N L G S D S G K I A A Q G L K V M T F	
UniRef90_W0ABT2	L F Q D A H I K A L V F	N H A N Q G E S G A Q V H		A L A A
UniRef90_W6WXD1	L F E T H P E L K N V F		N M A H Q E Q Q Q Q Q A L A R A V L Y A	
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UniRef90_C7PVF6	L F Q A H P E L L R		D L F N R G N Q A A G T Q R L A L A G S I A A F	
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UniRef90_E5S1Z7	L L E L F T V K Q E I Q S N P E S F D T E		I L E Y	H A Q R A L M S V
UniRef90_W0V651	L F R D Y P E V A Y F		N Q A H Q H H G D Q Q R A L N A	
UniRef90_U2HCD6	M F E H N P E L K H V F		N M G N Q Q N S K Q Q T A L A M A	
UniRef90_M1VB93	L F A L Y P E L Q	P M F R S D P A L		Q R I R L V D M
UniRef90_T0RU19	L F Q D Y P A S K G L F		T D V N M A A Q K K A L I N S	
UniRef90_S6BEL0	F P G N Y P M F K K F A G		K D L A T V K G T P E F A D Q A K A I I N L	
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UniRef90_Q26269	M F E K T P E S L E F F K R M G D L S N P K A N R K L R G		H G S S L M Y G	
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UniRef90_V5YME9	I F K A Y P D I Q A K F P Q F N G K D L D S V K G T		P D F A L H A T R I V S F	
UniRef90_D8FWM6	L F A D Y P H V K P L F		A N A N M A E Q K K K L I A S	
UniRef90_A3KJ00	L F D A H P E L R D L F N R N Q A G G E Q Q R A			L A G S I A G F
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E H L F A A I A A D L A A W T E V Y W L M A D A L
E C M I A A M P A M T Q A W D R A L G A I A T I M L D G Y
D C M K Q T V S L W D K
N A L M E F A P S A K D A W S C F D V I A N G I K
G A L V T T M A E M T A A W T E A L G A V A G L M L D A Y
R H L L G A I A E V L A A W D E A Y W L L A
E H L F A A I A Q V L G E A V T P E V A S A W T E L Y
A H L L E A T P E I M A A W T E A Y R A V A Q A
E A L L G A I K D V E A A T D E I L A A W G E A Y
K H L F D A I E V R D A W D A V Y L E M Q R V L
E N L F A A I V A V L G A D T V T D D V A A A W D R V Y
Q A F L V F T P E L H E A A Y K F F L A V A G G L S S Q Y
D A I V E V L G A V A E A W D A V Y W L M A D A L
A E F I C A V P E L E K A W K L F R Y I T R L M R Q G Y
E S L L Q A I T E V K V G K G T V T Q D I A D A W F A A Y
A A L L W T L P E L A A A W R D A Y A M L S T M L A A A Y
E H L L A T L R E L G G E A V T D E V I E A W G K A Y
A P L A E F L R E H V E S W G K L I D V I R A A L T E A
T C L I E T M P E F I E A W S I A Y G N L A A L L
E H L M A A I V E V L G A D V I T G D V A A A W D A V Y
S H L L A T L K E L G G D A V T E E V L E A W A Q A Y
E P V L E V V K E T R Q A W T V L Y Q V I A N L I E
R Y L M A V T P E V A A A W D E V Y W L F A
G A L L A T L P E V E L A W R E V Y S T L V R T M T
I A L V A A L E E V G A A W R A T L V T D V M
H H L I E T M R E L L G D R F S C E V E Q A W R A A Y
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1 10 20 30 40

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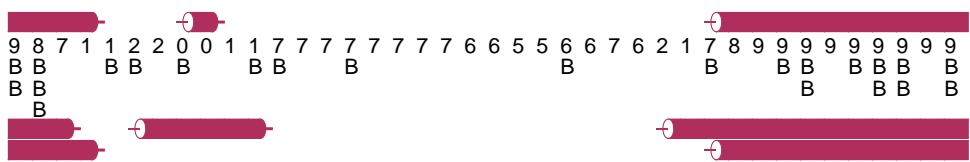
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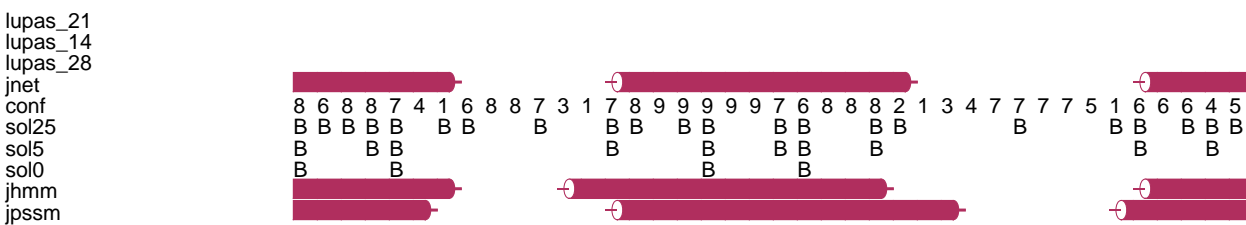
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UniRef90_Q17DQ3	L D E G I R G L D D L D T F F E F I H Q V G A S H R R L P G F K Q E Y F W R I E			
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