

QUERY	M	V	D	I	I	I	A	E	H	A	G	F	C	F	G	V	K	R	A	V	K	L	A	E	S	L	K	E	S	Q	G	K	V	Y	T	L	G	P	I			
UniRef90_UPI0004101252	M	E	I	I	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	I	V	E	R	A	I	E	V	F	G	A	P	I	Y	V	R	H	E	V		
UniRef90_UPI000365108C	M	E	I	I	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	I	V	E	R	A	I	E	V	L	G	A	P	I	Y	V	R	H	E	V		
UniRef90_D5CU04	M	E	I	I	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	I	V	E	R	A	I	E	L	H	G	A	P	I	Y	V	R	H	E	V		
UniRef90_F5R776	M	E	V	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	A	I	V	E	R	A	I	E	Q	Y	G	A	P	I	Y	V	R	H	E	V		
UniRef90_UPI0003755F5E	M	Q	V	I	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	D	I	F	E	P	P	I	Y	V	R	H	E	V		
UniRef90_Q1N0B2	M	E	I	T	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	D	I	F	E	P	P	I	Y	V	R	H	E	V		
UniRef90_A3QBX5	L	Q	I	K	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	S	S	V	E	R	A	I	E	I	Y	G	A	P	I	Y	V	R	H	E	V		
UniRef90_D3SEY7	M	Q	V	Q	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	S	V	E	R	A	I	E	I	Y	G	A	P	I	Y	V	R	H	E	V		
UniRef90_B5Y232	M	Q	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	T	T	V	E	R	A	I	A	I	F	E	P	P	I	Y	V	R	H	E	V		
UniRef90_K2KT66	M	K	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	N	R	A	L	D	V	F	G	A	P	I	Y	V	R	H	E	V		
UniRef90_UPI0003B36351	M	E	I	V	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	A	A	V	N	R	A	L	D	V	F	G	A	P	I	Y	V	R	H	E	V		
UniRef90_N9Q7W9	M	E	I	V	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	N	R	A	L	E	C	F	N	P	P	I	Y	V	R	H	E	V		
UniRef90_K2GSJ8	M	D	I	R	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	N	R	A	L	E	V	F	G	P	P	I	Y	V	R	H	E	V		
UniRef90_BOLFR9	M	E	I	L	L	A	Q	P	R	G	F	C	C	A	G	V	D	R	A	I	E	I	V	E	R	A	I	K	Q	F	G	A	P	I	Y	V	R	H	E	I		
UniRef90_Q0AAC9	M	T	Q	V	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	E	L	F	G	A	P	I	Y	V	R	H	E	V		
UniRef90_UPI0000E11519	M	Q	V	Q	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	T	T	V	E	R	A	I	E	D	L	F	E	H	P	I	Y	V	R	H	E	V	
UniRef90_A3N2G8	M	N	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	S	S	V	E	R	A	I	E	I	H	G	A	P	I	Y	V	R	H	E	V		
UniRef90_C6XB71	M	D	V	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	T	T	V	E	R	A	I	E	E	K	F	G	A	P	I	Y	V	R	H	E	V	
UniRef90_Q2YCX3	M	I	K	V	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	E	R	A	I	S	V	H	G	A	P	I	Y	V	R	H	E	V	
UniRef90_M7NV9	M	A	K	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	E	E	L	F	G	A	P	I	Y	V	R	H	E	V	
UniRef90_A4BTU1	M	P	R	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	S	S	V	E	R	A	I	E	A	F	G	A	P	I	Y	V	R	H	E	V	
UniRef90_UPI000369D5C5	M	Q	I	R	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	E	D	V	F	G	A	P	I	Y	V	R	H	E	V	
UniRef90_UPI0003FEEC4F	M	D	V	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	E	R	A	I	E	E	Q	L	G	A	P	I	Y	V	R	H	E	V	
UniRef90_UPI0003619F2F	M	Q	V	K	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	N	R	A	L	D	V	Y	G	P	P	I	Y	V	R	H	E	V		
UniRef90_F3LGB5	M	D	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	A	A	V	E	R	A	I	E	E	S	Y	G	A	P	I	Y	V	R	H	E	V	
UniRef90_UPI00034C82D5	M	D	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	E	R	A	I	E	E	K	Y	G	A	P	I	Y	V	R	H	E	V	
UniRef90_E0WSB9	M	Q	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	N	N	V	E	R	A	I	E	E	A	M	Y	S	A	P	I	Y	V	R	H	E	V
UniRef90_UPI000393E8F6	M	K	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	T	T	V	E	R	A	I	E	E	Y	Q	P	P	I	Y	V	R	H	E	V		
UniRef90_A0Z9J1	M	D	V	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	E	E	V	F	G	R	P	I	Y	V	R	H	E	V	
UniRef90_UPI0003451A2D	M	E	I	L	L	A	Q	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	E	R	A	I	E	E	A	R	F	G	A	P	I	Y	V	R	H	E	V
UniRef90_B3PE11	M	T	Q	K	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	E	E	D	V	F	G	A	P	I	Y	V	R	H	E	V
UniRef90_G21YQ2	M	T	I	M	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	A	A	V	E	R	A	I	E	E	L	Y	G	A	P	I	Y	V	R	H	E	V	
UniRef90_V8G3Z4	M	E	I	L	L	A	A	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	E	E	K	Y	G	A	P	I	Y	V	R	H	E	V	
UniRef90_UPI0001DD689	M	L	T	I	L	L	A	A	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	E	R	A	I	E	E	K	Y	G	A	P	I	Y	V	R	H	E	V
UniRef90_D5VAC3	M	K	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	E	E	R	F	N	P	P	I	Y	V	R	H	E	V	
UniRef90_U5NEP2	M	V	Y	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	A	A	V	E	E	R	A	I	E	E	R	F	N	P	P	I	Y	V	R	H	E	V	
UniRef90_UPI0003685A57	M	L	D	V	L	L	A	S	P	R	G	F	C	C	A	G	V	D	R	A	I	D	D	V	E	R	A	I	E	E	L	F	G	A	P	I	Y	V	R	H	E	V
UniRef90_T0ZX76	M	V	V	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	E	R	A	I	E	E	Q	R	F	G	P	P	I	Y	V	R	H	E	V
UniRef90_E7RTU8	M	V	V	L	L	A	Q	P	R	G	F	C	C	A	G	V	D	R	A	I	T	T	V	E	R	A	I	E	E	A	W	F	G	T	P	I	Y	V	R	H	E	V
UniRef90_UPI00029A21F5	M	R	M	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	I	V	E	R	A	I	E	E	T	Q	G	A	P	I	Y	V	R	H	E	V	
UniRef90_F9ZT50	M	D	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	A	A	V	E	R	A	I	E	E	I	Y	G	A	P	I	Y	V	R	H	E	V	
UniRef90_A5FZK2	M	K	I	V	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	I	V	E	R	A	I	E	E	E	K	F	G	A	P	I	Y	V	R	H	E	V
UniRef90_UPI00047CC800	M	K	I	F	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	T	T	V	E	R	A	I	E	E	L	F	E	A	P	I	Y	V	R	H	E	V
UniRef90_Q47BK8	M	E	I	I	V	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	I	V	E	R	A	I	E	E	K	Y	G	A	P	I	Y	V	R	H	E	V	
UniRef90_UPI00046F34FE	M	M	N	I	V	L	A	Q	P	R	G	F	C	C	A	G	V	D	R	A	I	N	N	V	E	R	A	I	E	E	E	F	G	A	P	I	Y	V	R	H	E	V
UniRef90_C7RS07	M	Q	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	E	R	A	I	E	E	T	Y	G	A	P	I	Y	V	R	H	E	V	
UniRef90_F7QL39	M	K	I	L	L	A	N	P	R	G	F	C	C	A	G	V	D	R	A	I	E	E	V	E	R	A	I	E	E	E	K	Y	G	A	P	I	Y	V	R	H	E	V
UniRef90_D6Y7P9	M	R	V	L	L	A	K	P	R	G	F																															

QUERY		50	60	70	
UniRef90_UP10004101252	V	H N P Q E V N R L K N [L] G V F P S Q G E E F K E G D T V I I R S H G I P P E K			
UniRef90_UP1000365108C	V	H N R Y V V D G L R A R G V F V E S L S E V P E N A T V I F S A H G V S K A V			
UniRef90_D5CU04	V	H N R F V V E N L R A K G V F V E E V D E V P V G A T C I F S A H G V S Q A V			
UniRef90_F5R776	V	H N K F V V D S L I A K G I F I E D L K D V P A G A T L I F S A H G V P Q A V			
UniRef90_UP10003755F5E	V	H N R Y V V D D L R D K G V F V E E L D Q V P D D G A T V I F S A H G V A R S V			
UniRef90_Q1N0B2	V	H N K F V V D N L R D R G V F V D E L H E V P D D S I V I F S A H G V S K A V			
UniRef90_A3QBX5	V	H N R Y V V Q N L K D R G V F V D E L D Q V P D D S I V I F S A H G V S Q A V			
UniRef90_D3SEY7	V	H N R H V V G R L E A A G V F V E E L D E V P D G Q V V I F S A H G V P K R V			
UniRef90_B5Y232	V	H N R Y V V D S L R K R G I F I E Q I S E E V P D G A I L I F S A H G V S Q A V			
UniRef90_K2KT66	V	H N K Y V V D S L R N S G I F V D E L D E E V P D D N I V I F S A H G V S Q A V			
UniRef90_UP10003B36351	V	H N K F V V E D L R S K G I F I E D L D D V P A G N T L V F S A H G V S K A V			
UniRef90_N9Q7W9	V	H N K F V V D D L R Q R G I F V D E L D E E V P D D A I V I F S A H G V S K A V			
UniRef90_K2GSJ8	V	H N R F V V E D L R A R G V F V E E L H E V P D D G A T V I F S A H G V S R A V			
UniRef90_BOLFR9	V	H N A Y V V E D L R S K G I F I E D L D D V P A G N T L V F S A H G V S K A V			
UniRef90_Q0AAC9	V	H N R Y V V N N L R D K G V F V E E L D E V P D D G A T V I F S A H G V S Q A V			
UniRef90_UP10000E11519	V	H N K F V V D G L K E R G V F V E E L H Q V P D D S I V I F S A H G V S Q A V			
UniRef90_A3N2G8	V	H N R F V V D G L K A K G V F V E E L D E E V P D D G A I V I F S A H G V S Q E V			
UniRef90_C6XB71	V	H N K F V V D E L K R K G V F I E E L E E V P P G N T V I F S A H G V S R E V			
UniRef90_Q2YCX3	V	H N K F V V D D L E K K G V F V E E L D E E V P A G S I L I F S A H G V S H A V			
UniRef90_M7NVA9	V	H N R F V V D D L R N K G V F V E E L D E E V P D G N T V I F S A H G V S K E V			
UniRef90_A4BTU1	V	H N R S V V D D L R R K G R F V E E L S E E V P D G S T V I F S A H G V S K A V			
UniRef90_UP1000369D5C5	V	H N R Y V V D T L R D R G F V E E L D E I P D D N I V I F S A H G V S R A V			
UniRef90_UP10003FEEC4F	V	H N R F V V E D L R Q R G I F V E E L D E V P A G A T V I F S A H G V S Q A V			
UniRef90_UP10003619F2F	V	H N K F V V D G L R A R G I F V D E I S E E V P D G A T V I F S A H G V S Q K V			
UniRef90_F3LGB5	V	H N K F V V D S L R D R G I F V D E L D E E V P P D D K I V I F S A H G V A K A V			
UniRef90_UP100034C82D5	V	H N R Y V V D K L R A D G V F V E E L A E E V P D G A T V I F S A H G V S Q A V			
UniRef90_E0WSB9	V	H N R Y V V N D L S Q R G I F I E D I S E E V P E G S I L I F S A H G V S Q A V			
UniRef90_UP1000393E8F6	V	H N R F V V E D L K R R G I F V E E L H E V P D N Q I V I F S A H G V S Q A V			
UniRef90_A0Z9J1	V	H N R F V V D D L R S R G I F V E E L D E I P D D A I V I F S A H G V S K A V			
UniRef90_UP10003451A2D	V	H N A Y V V R D L R Q K G V F I E S L E Q V P A G S T V I F S A H G V A K E V			
UniRef90_B3PE11	V	H N K F V V E S L R E R G V F V D E V D Q V P D N V I L I F S A H G V S Q A V			
UniRef90_G2IYQ2	V	H N R F V V D N L R D K G I F I E D L A D V P R G A T L V Y S A H G V P L S V			
UniRef90_V8G3Z4	V	H N R F V V Q S L R D K G I F V A E L L D E E V P K G S I V V F S A H G V S L S V			
UniRef90_UP10001DD0689	V	H N R Y V V E G L K A K G I F V E E L D E E V P P D D A P V V F S A H G V P K S V			
UniRef90_D5VAC3	V	H N K F V V E D L A R R G V F V E E L D E E V P D G A I V I F S A H G V S K A V			
UniRef90_U5NEP2	V	H N T H V V Q R L Q T [L] G V F I E T L D A V P A G A T L V F S A H G V P Q A V			
UniRef90_UP10003685A57	V	H N T T V V Q S L R A K G V F V D E I I D D V P P G A T L V F S A H G V S Q A V			
UniRef90_T0ZX76	V	H N R F V V E N L R R Q G V F V D E L A Q V P T G S T V V F S A H G V S M A V			
UniRef90_E7RTU8	V	H N D Y V V S T L R E K G I F V D E L D E V P D G A T V I F S A H G V S R A V			
UniRef90_UP100029A21F5	V	H N K T V V E N L R Q K G V I F I E D L E P C V P C G A T L I F S A H G V S Q T V			
UniRef90_F9ZT50	V	H N R H V V D D L R A R G I F V E E L D E E V P D G A T V I F S A H G V P I S V			
UniRef90_A5FZK2	V	H N R H V V E D L R S R G V F V D E I S E E V P D G A I T I V F S A H G V A R K V			
UniRef90_UP100047CC800	V	H N K Y V V D T L K A G G I F V D E L D E V P D G K I V I F S A H G V S K A V			
UniRef90_Q47BK8	V	H N K F V V C D D L R A K G V F V E E L D E E V P A G S T V I F S A H G V S K A V			
UniRef90_UP100046F34FE	I	H N P Q V V E E L K A K G V V I A E D L E H I E E G T I I R S H G V P P H V			
UniRef90_C7RS07	V	H N Q F V V C D N L R A K G I F V S E L A E V P A G S T V I F S A H G V S K N V			
UniRef90_F6IN01	V	H N K F V V D G L K A K G I F V E T V D D V P D G V P V I F S A H G V P K S V			
UniRef90_UP100036D222D	V	H N R F V V E E L R Q R G V F V N E L D D E V P D D G A T V I F S A H G V S P A V			
UniRef90_E7H441	V	H N R T V V E G L R A R G I F V D Q L S D V P E G A T V V F S A H G V P K S V			
UniRef90_G4CP91	V	H N K F V V D N L R E K G I F V I E D L A E V P P E G A T L I Y S A H G V S K A V			
UniRef90_Q46XP2	V	H N A Y V V A D L R R K G V F V R E L D E E V P A G A T V I F S A H G V V S K D V			
UniRef90_A3YII4	V	H N K F V V E S L K A R G G V F V D E L E Q V P D D D N L V I F S A H G V S K A V			
UniRef90_F7QL39	V	H N K Y V V E S L K A R G G V F V E D L H E V P A N A I T V F S A H G V V A K S V			
UniRef90_D6Y7P9	V	H N T H V V K R L E E R G I F V D E L D E E V P D G A I V I F S A H G V A P T V			
UniRef90_UP10003B5F537	V	H N K F V V D S L K A K G I F V E E L T D E V P D G V P V V F S A H G V P K A V			
UniRef90_D7WDX0	V	H N K Y V V E T L S K R G V F V E E E T D E V P E D X G A H V F S A H G V S P A V			
UniRef90_F1Z7H6	V	H N K H V V D T L R A K G V F V D E L D D E V P A G A V T I F S A H G V A R S V			
UniRef90_W0DW58	V	H N R F V V E G L R A R G I F V E D L D D E V P D D A T L V F S A H G V P Q S V			
UniRef90_A8PQH6	V	H N R M I V A E L Q Q K Q G V F V E H I Q Q L P M G A T A I F S A H G V S L S V			
UniRef90_F7NGC3	I	H N P Q V V S R L S R Q G I A V A E N I D A I N Q G T V I R S H G V G P E V			
UniRef90_W5W0G6	V	H N R H V V E T L Q E R G I F V D E T D E V P E G A L V V F S A H G V S P A V			
UniRef90_C3X7N1	V	H N T H V V N R L K E M G I F I E E L D E V P S G S V L I F S A H G V S Q A I V			
UniRef90_A0LW20	V	H N K H V V A E L E A K G I F V E E A D E E V P E E G S I V V L S A H G V A P S V			
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QUERY

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R D A A R R G L	T I F D A T C C P L V T K V H I E V K R Y S R E G R E	G G		
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V R E A E R R G L	K V F D A T C C P L V T K V H M E V D R H A R R G E E	V I L I		
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Y R L M K D K G L	Q V F D A T C C P L V T K V H V E V A K M R K E G H H	V I M		
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QUERY				
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UniRef90_UPI000369D5C5	H A G H P E	V E G T M G R Y D S Y G G A I Y L V E D E E R Q L Q V K D P A N L S		
UniRef90_UPI0003FEEC4F	H A G H P E	V E G T M G Q W R R E H G H I H L V E D D V A G V A H L Q P T Q P L A		
UniRef90_UPI0003619F2F	H A G H P E	V E G T L G Q W D K A G G E I H L V E T P E D V A K L K P K N P I A		
UniRef90_F3LGB5	H Q G H P E	V E G T M G Q Y D H A N G G I Y L V E D E Q D V D N L V V K N P L S		
UniRef90_UPI00034C82D5	H A G H P E	V E G T M G Q W N P A N G E I I L L V E S V E Q V A G L R F P H Q L S		
UniRef90_E0WSB9	H A G H P E	V E G T M G Q Y N N P Q G G I Y L V G S P E D V E Q V K D A N N L C		
UniRef90_UPI000393E8F6	H A G H P E	V E G T M G Q Y A S S T Q G G M Y L V E K P A D K E R V K H P D N L H		
UniRef90_A0Z9J1	H G G H P E	V E G T M G Q Y D S S G G Q I Y L I E D E E Q V A H L M V K D P L A		
UniRef90_UPI0003451A2D	H I G H P E	V E G T M G Q V P N R M H L V E K V S D V E Q L Q V A D P Q K L A		
UniRef90_B3PE11	H E G H P E	V E G T M G Q Y D A S N G S N G I Y L V E D E A D V D A L Q V R N P L A		
UniRef90_G21YQ2	H A G H P E	V E G T M G Q V D G D M Y L V E S V A D V A T L A V K N P D K L A		
UniRef90_V8G3Z4	H K G H P E	V E G T L G Q A L G R M Y L V E T I E D V E N L Q V Q N P D N V A		
UniRef90_UPI0001DD0689	H A G H P E	V I G T M G Q V A K G E M T L V E T V E D V A N L P F T D D L A		
UniRef90_D5VAC3	H A G H P E	V E G T M G R F D T S S G G R I H L V E D V E D V A K L D F F E R D L A		
UniRef90_U5NEP2	H R G H P E	V E G T M G Q L D A G I H L I E Q I D D D V W R I K P A Q S Q R L A		
UniRef90_UPI0003685A57	H A G H P E	V E G T M G Q A D G V H L V Q S E A D V A H L P F P P Q E V A		
UniRef90_T0ZX76	H R G H P E	V E G T L G Q A P D H I Y L V E T P E D V E N L K V N H P E R L A		
UniRef90_E7RTU8	H A G H P E	V E G T M G Q A D D G I Y L V E T E A D V E Q V L Q V P E S L I A G		
UniRef90_UPI00029A21F5	H R C H P E	V E G T L G H Y D N P K G G I Y L I E T R E D V D H V K H P Q Q L G		
UniRef90_F9ZT50	H A G H P E	V E G T M G Q V E E G M M Y L V S N V R D V A A L R N P E R L A		
UniRef90_A5FZK2	H A G H A E	V E G T I G Q I D G R V Y L V Q T V E D V A S L Q V S D P D K L A		
UniRef90_UPI00047CC800	H E G H P E	V I G T M G Q F D T Q G G T I H L V E T V D D V A H V K D P Q K V A		
UniRef90_Q47BK8	H K G H P E	V E G T M G Q S Q G G M Y L V E T A D E V A Q L Q V S D P L H C		
UniRef90_UPI00046F34FE	E K E H P E	V I G I N G W C D N S A F V I N D P E Q V E S L P H M A K A C		
UniRef90_C7RS07	H R G H P E	V E G T M G Q S A E G M Y L V E T V A D A R H I I V R S P A R L A		
UniRef90_F6IN01	H A G H P E	V I G T F G Q V P E G N M T L V E T V D V A R L P F G P D L S		
UniRef90_UPI00036D222D	H E G H E E	V E G T M G Q A P H C T Y L V Q S V E D V E R L Q V P N P E K V A		
UniRef90_E7H441	H A G H P E	V E G T M G Q V E D G I R L I E K P A D V A N L S Y T D Q L A		
UniRef90_G4CP91	H A G H P E	V E G T M G Q L P E G S M I L V E T V D D V A K L Q V A D P E K L S		
UniRef90_Q46XP2	H R G H P E	V E G T M G Q A E G G M L V E S V A D V A V V A D P A R L A		
UniRef90_A3YII4	H D G H P E	V E G T M G Q Y D S K G G H I Y L V E S P E D V A K V K N P E K L A		
UniRef90_F7QL39	H E G H P E	V V G T M G Q V P G P V I L V Q S V E D V A A L D L P S D E P M A		
UniRef90_D6Y7P9	H A G H E E	V E G T T G E A P D H I R L V D G L D G V D K V Q V R N P D K V V		
UniRef90_UPI0003B5F537	H Q G H P E	V I G T F G Q V P E G A M T L I E T L E D A A A V Q P H N K L G		
UniRef90_D7WDX0	H E G H E E	V E G T A G E A P D V V H L V D G V E G V D A A P Q F P E D Q K L V		
UniRef90_F1Z7H6	H A G H A E	V I G T L G Q I D A P V H L V S T A E D V D S L D L P L D T P L A		
UniRef90_W0DW58	H R G H P E	V D G T L G Q C D P E G A P V H L V E R P D D V A E I I A D P E R I A		
UniRef90_A8PQH6	H A D H P E	V E G S L G H Y D N P R G G I Y L V E N L D D I A S L L N V K N P L S G		
UniRef90_F7NGC3	D A D H P E	V K S I I A W A G S D P I V I G S E E Q A A E L P V F P K L G		
UniRef90_W5W0G6	H E G H E E	V E G T A G E A P E H Q L V D T A E D V D K V V V R D P S K V I		
UniRef90_C3X7N1	H K G H P E	V E G T M G Q A D T G M Y L V D G Y S D I E Q L K L D N P D A L A		
UniRef90_A0LW20	H A N H E E E	V V G T T G E A P S S I L V D G P E E A E H V Q V K D P S R V A		
UniRef90_H8Z427	H R G H P E	V E G T M G Q C Q D G N G R V W L I E S V A D I D E V R D P D K V C		
UniRef90_B1XW17	H A G H P E	V E G T M G Q V K E G V F L I E R V G D V S A L P F P T D E K V A		
UniRef90_UPI000365C4B6	H E G H E E	V E G T A G E A P D I T Y I V D G L G G V D A P D F L E K E E K L I		
UniRef90_Q0EYTO	H A G H P E	V E G T M G Q A P A G A V L L V A T P A D V E Q V K D P A R L A		
UniRef90_UPI00041419AF	H A G H P E	V I G T M G Q L P P G A V R L V E S V E D V A E V E D P D N L A		
UniRef90_C0VZN5	H E G H E E	V E G T Y G E A P D H I Q I V G T P D E V D K V Q V R D P E K I V		
UniRef90_E8RQD1	H A G H P E	V I G T M G Q L P E G V V K L I E T V E D A R H F Q P A D P K N L A		
UniRef90_UPI0003163A07	H A G H P E	V V G T L D Q I P G P V V L V Q S V D E A E A L D F P E D A P L A		
UniRef90_UPI000370CDD9	H R G H P E	V E G T L G Q Y R S Q N A K I Y L I E N V E M N L Q V D N P E K L I		
UniRef90_L8XZ26	H A G H P E	V E G T M G Q F D A A H G G I Y L V E D V K D A D N V N N P D N V S S		
UniRef90_UPI0003B65D14	H A G H P E	V E G T L G Q I D G E V H L V G T P E E V A A L P I P L D V V S S		
UniRef90_UPI00037D7E6F	H A G H E E	V E G T L G E A P D S I V L V E T P K D V Q E L P D P R R V S S		
UniRef90_T0GG46	H K G H P E	V I G T L G Q V P E G T M T I L I E T V E D A E A F R P P E N L A		
UniRef90_A3DDC0	D R N H P E	V I G I N G W C N N Q A Y I L V D S V D D V E K F P T S D E K V C		
UniRef90_J3Z5X5	H N G H P E	V K G T M G Q Y N N L S A G I Y L V E S E K W E L K V K R V D K L S		
UniRef90_UPI0001FFE926	H A G H E E E	V E G T S G E A P E H I Q L V E S A A D V D K V T V R D P D K V V		
UniRef90_D0WPZ0	H T G H E E E	V E G T Q G E A P E H I Q V V N P E E V D G I E V R D P D K V V		
UniRef90_Q6AA89	H A G H E E E	V E G T T G E A P E N I L T V Q T P A D V D G L A L D R D R P V A		
UniRef90_W6MAR7	H A G H P E	V E G T M G Q Y Q E Q G G H M Y L V E T V E W R L P V R D P T E L A		
UniRef90_UPI000348B790	H A G H P E	V E G T I G Q I P G K V L L V Q S E A D V A N L P L D A P L A		
UniRef90_E11VX7	H E G H E E E	V E G T Y G E A P E V T T I V N N P E E A D T V Q V K N P D K L I		
UniRef90_D2PN99	H E G H E E E	V I G T S G E A P E H I L D G P G D V P N V E V R D P E K V V		
UniRef90_W2BTB9	H E G H E E E	V E G T Q G E A P E N I L T V Q H P D E V D G L D V P T D Q Q V A		
UniRef90_F3ZZM5	E A D H P E	V I G T N G W C N N T A I I V N D V D E A S R L P Q D K V C		
UniRef90_A0A022L0Z5	H V G H E E E	V E G T A G E A P D H V Q I V N S P D D A V N V T V R D P E K V V		
UniRef90_UPI00036DA14E	H K G H P E	V E G T L G Q S E G G M H L V E T V Q D V A Q L I R D P D N L A		
UniRef90_I6Y117	H A G H E E E	V E G T M G E A P D R T T L L E S P D D V D R L D L P T D K P L V		
UniRef90_S3DZH0	H S G H P E	V Q G T M G H Y T S H I G G I Y L I E V L S D I K K F K D P N N L C		

QUERY	170	180	190	200
UniRef90_UPI0004101252	I V A Q T T Q N E E F K E	V V G E I A L W V K E	V K V I N T I C N A T S L R Q	
UniRef90_UPI000365108C	Y V T Q T T L S I D D T Q A	V V D A L K K R F P N	I I G P D D I C Y A T Q N R Q	
UniRef90_D5CU04	F V T Q T T L S M D D T A K	V I D A L R A R F P Q	V H G P D D I C Y A T Q N R Q	
UniRef90_F5R776	Y V T Q T T L S V D D A S S	I A A L K T R F P F	V G P D D I C Y A T Q N R Q	
UniRef90_UPI0003755F5E	Y V T Q T T L S M D D T Q D	I G I L K R R F P N	H G Q D D I C Y A T Q N R Q	
UniRef90_Q1N0B2	Y V S Q T T L S M D D T A I	V D A L R A R F P T	G P D D I C Y A T Q N R Q	
UniRef90_A3QBX5	F V T Q T T L S M D D T A D	I V K A L R K K F P N	H G P D D I C Y A T Q N R Q	
UniRef90_D3SEY7	F V S Q T T L S M D D T A E	I D A L T A R F P S	Q G P D D I C Y A T Q N R Q	
UniRef90_B5Y232	F M T Q T T L S V D D T S D	V I D A L R A R F P K	E G P R D I C Y A T Q N R Q	
UniRef90_K2KT66	Y M S Q T T L S V D D T A D	V I D A L R A K F P D	V G P D D I C Y A T T N R Q	
UniRef90_UPI0003B36351	F V T Q T T L S M D D T A V	V I T A L R E K F P A	N G P D D I C Y A T Q N R Q	
UniRef90_N9Q7W9	F V T Q T T L S I D D T A K	V I D A L R Q K F P L	Q G P D D I C Y A T T N R Q	
UniRef90_K2GSJ8	F V T Q T T L S V D D T A R	V I D A L R E R F P S	H G P E D I C Y A T T N R Q	
UniRef90_BOLFR9	Y V S Q T T L S V D D T A D	I Q A I K G R Y P N	V P K K G D I C C Y A T T N R Q	
UniRef90_Q0AAC9	F V T Q T T L S M D D T A N	V I D A L R E R F P N	T G P N D I C C Y A T Q N R Q	
UniRef90_UPI0000E11519	Y C S Q T T L S V D D T A D	V I D A L R E T F P N	D G P D D I C C Y A T Q N R Q	
UniRef90_A3N2G8	F M T Q T T L S I D D T S S	V I E A L K E K Y P A	Q G P N D I C C Y A T T N R Q	
UniRef90_C6XB71	Y V T Q T T L S I V D D A A S	I V A A L K D K F P L	S A P D S I C C Y A T Q N R Q	
UniRef90_Q2YCX3	Y V T Q T T L S V D D A A R	V I Q A L K G R F P N	P K K D D I C C Y A T Q N R Q	
UniRef90_M7NVA9	F V T Q T T L S V D D T S R	V I Q A L R D R F P G	I G P D D I C C Y A T Q N R Q	
UniRef90_A4BTU1	Y V S Q T T L S M D D A A Q	V I A A L R Q R F P D	H G P D D I C C Y A T Q N R Q	
UniRef90_UPI000369D5C5	F V T Q T T L S M D D T S K	V I D A L R E T F P A	Q G P D D I C C Y A T Q N R Q	
UniRef90_UPI0003FEEC4F	Y T T Q T T L S V D D T R E	I V A A L Q A R F P N	Q G H D I C C Y A T Q N R Q	
UniRef90_UPI0003619F2F	Y V T Q T T L S V D D T K A	V I E A L R A H F P A	V I G H D I C C Y A T Q N R Q	
UniRef90_F3LGB5	Y V T Q T T L S M D D T A K	V I A A L R A K F P N	E G P D D I C C Y A T Q N R Q	
UniRef90_UPI00034C82D5	Y V T Q T T L S V D D T K A	I V A A L R A A F P D	E G P D D I C C Y A T Q N R Q	
UniRef90_E0WSB9	Y V T Q T T L S I D D T S V	I V D A L R Q R F P Q	T G P D D I C C Y A T T N R Q	
UniRef90_UPI000393E8F6	F M T Q T T L S V D D T A D	V I D E L R R I F P D	Q G P D D I C C Y A T Q N R Q	
UniRef90_A0Z9J1	Y V T Q T T L S V D D T A R	V I D A L R D R F P A	E G P D D I C C Y A T Q N R Q	
UniRef90_UPI0003451A2D	Y V T Q T T L S V D D A A Q	V I G A L K K R F P T	P K K Q D I C C Y A T T N R Q	
UniRef90_B3PE11	Y V T Q T T L S M D D T A R	V I E A L R N K F P K	Q G P D D I C C Y A T T N R Q	
UniRef90_G2IYQ2	Y V S Q T T L S V D D T R D	I I A A L R V R F P A	P K K D D I C C Y A T Q N R Q	
UniRef90_V8G3Z4	Y V T Q T T L S V D D A A V	V I T R A L H E R F P N	V A P K D I C C Y A T Q N R Q	
UniRef90_UPI0001DD0689	F L T Q T T L S V D D T A E	I I A A L Q A R F P S	A A P E D I C C Y A T S N R Q	
UniRef90_D5VAC3	F V T Q T T L S M D D T A N	V I D A L K D R F P A	N A P D D I C C Y A T Q N R Q	
UniRef90_U5NEP2	L V T Q T T L S V D D T M E	V I T Q A I R Q R F P G	P K K Q D I C C Y A T Q N R Q	
UniRef90_UPI0003685A57	Y V T Q T T L S V D D A A A	V V V A L R A R Y P R	P K R Q D I C C Y A T Q N R Q	
UniRef90_T0ZX76	Y V T Q T T L S V D D A A Q	R V I H A L R L R Y P A	Q G P D D I C C Y A T Q N R Q	
UniRef90_E7RTU8	Y V T Q T T L S V D D C	R T V I E A L R R R F P Q	N K K Q D I C C Y A T Q N R Q	
UniRef90_UPI00029A21F5	Y V T Q T T L S V D D T Q A	I I N A L Q Q R F P S	V A P E D I C C Y A T Q N R Q	
UniRef90_F9ZT50	Y I T Q T T L S M D D T A E	V I Q A L R E R F P A	Q G P D D I C C Y A T Q N R Q	
UniRef90_A5FZK2	Y I T Q T T L S V D D T R G	I I A A L V E R F P G	V G P D D I C C Y A T Q N R Q	
UniRef90_UPI00047CC800	F V T Q T T L S L D D T S Q	V I D A L R A R F P D	Q G P K D I C C Y A T Q N R Q	
UniRef90_Q47BK8	F V T Q T T L S V D D A T V	V I D A L K Q R F P E	Q G P D D I C C Y A T Q N R Q	
UniRef90_UPI00046F34FE	V V A Q T T T S H Q K W D A	I V E R L H S K V D Q	E V F N T I C C N T T A V R Q	
UniRef90_C7RS07	Y V T Q T T L S V D D A A Q	V V A A L K E R F P Q	I G P D D I C C Y A T Q N R Q	
UniRef90_F6IN01	Y L S Q T T L S V D D T A Q	I I D A I Q D R Y P Q	V V A P E D I C C Y A T S N R Q	
UniRef90_UPI00036D222D	Y L T Q T T L S V D D T A E	I I V A A L K R K F P K	V G P D D I C C Y A T Q N R Q	
UniRef90_E7H441	Y V T Q T T L S A D D S R S	V I V A A L K S R Y P H	H K R Q D I C C Y A T Q N R Q	
UniRef90_G4CP91	H V S Q T T L S V D E T K D	I I A A L K A R F P L	R S P E D I C C Y A T T N R Q	
UniRef90_Q46XP2	Y V T Q T T L S V D E T L E	V I V A A L K A R F P L	P K K Q D I C C Y A T Q N R Q	
UniRef90_A3YII4	F V T Q T T L S M D D A S V	V I V I D S L R E H F P L	R G P D D I C C Y A T Q N R Q	
UniRef90_F7QL39	Y I T Q T T L S V D D T R D	I I A A L E D R F S D L	E G P D D I C C Y A T Q N R Q	
UniRef90_D6Y7P9	W L S Q T T L S V D E T K E	T V I V A R L R E R F P N L	P P S D D I C C Y A T S N R Q	
UniRef90_UPI0003B5F537	F L T Q T T L S V D D T S D	M V A E L K R R F P D	E G P D D I C C Y A T S N R Q	
UniRef90_D7WDX0	W L S Q T T L S V D D E T T	M E V A L R K K Y P N L	P P S D D I C C Y A T Q N R Q	
UniRef90_F1Z7H6	Y V T Q T T L S V D D T R S	V I V Q A I H A R F P D	V I G P D E I C C Y A T Q N R Q	
UniRef90_W0DW58	Y V T Q T T L S M D D T T T	I I V A A L R E R F P A	Q G P K D I C C Y A T Q N R Q	
UniRef90_A8PQH6	Y V T Q T T L S I D D T Q V	I I V K A L K A R F P K	P K K E D I C C Y A T Q N R Q	
UniRef90_F7NGC3	V V A Q T T F S I E L F D C	I I A V L Q T K C Q E	I Q D R T I C C T A T D M R Q	
UniRef90_W5W0G6	W L S Q T T L S V D E T L E	R V D Q L K Q R F P Q	P P P S D D I C C Y A T Q N R Q	
UniRef90_C3X7N1	Y V S Q T T L S V D D T A E	I I R V D Q L K Q R F P S	P K Q A D I C C Y A T T N R Q	
UniRef90_A0LW20	W L S Q T T L S V D E T L Q	T V E V L R R R F P Q	P P S D D I C C Y A T Q N R Q	
UniRef90_H8Z427	Y V T Q T T L S V D D S A A	M I E A L R A R F P N	K G P K D I C C Y A T Q N R Q	
UniRef90_B1XW17	F V T Q T T L S V D E T K E	T V E V A L R K K F P N	T K R Q D I C C Y A T Q N R Q	
UniRef90_UPI000365C4B6	W L S Q T T L S V D E T M E	I R E L L H Q R F P Q	Q P S D D I C C Y A T Q N R Q	
UniRef90_Q0EYTO	Y V T Q T T L S V D D T A D	V I D A L R R R F P L	Q G P E D I C C Y A T S N R Q	
UniRef90_UPI00041419AF	F A T Q T T L S L D D T V	E L V I D A L K A K F P T	S A P N D I C C Y A T T N R Q	
UniRef90_C0VZN5	W L S Q T T L S V D E T K E	T V D R L R E R F P D	N P S D D I C C Y A T Q N R Q	
UniRef90_E8RQD1	F V T Q T T L S V D D T A D	I I V A E L K A R F P D	P H K E D I C C Y A T T N R Q	
UniRef90_UPI0003163A07	Y V S Q T T L S V D D T R R	I I I D V L R R R F T R	L S G P G D I C C Y A T Q N R Q	
UniRef90_UPI000370CDD9	Y A T Q T T L S V D E T R D	I I A A L K E K F P E	V A A P E D I C C Y A T Q N R Q	
UniRef90_L8XZ26	Y V T Q T T L S I D D T K E	I I D R L R A R F P V	A A P D D I C C Y A T Q N R Q	
UniRef90_UPI0003B65D14	Y I T Q T T L S V D D T R V	I I A A L E A R F S D L	T G P S T I C C Y A T Q N R Q	
UniRef90_UPI00037D7E6F	Y L T Q T T L S A V D E T A	E F V D A L R V Q F P M	H P S D D I C C Y A T T N R Q	
UniRef90_T0GG46	F L T Q T T L S V D D T A A	I I V A V L E R R F P P S I	L P P E D I C C Y A T S N R Q	
UniRef90_A3DDC0	V V A Q T T L T N E K W L E	V N T A L K K K F K N I	L P P E D I C C S A T S R R Q	
UniRef90_J3Z5X5	F M L Q T T L S L D D S A I	I I V D A L R L R F P S I	I G P E N I C C Y A T R N R Q	
UniRef90_UPI0001FFE926	W L S Q T T L S V D E T M E	T V R A L R E K F P K	Q P S D D I C C Y A T Q N R Q	
UniRef90_D0WPZ0	W I S Q T T L S V D E T L	K T V R R R L R E R F P N L	P P S D D I C C Y A T Q N R Q	
UniRef90_Q6AA89	W L S Q T T L S V D E T V	E T V D R I R D I R D H P Q	P P S D D I C C Y A T Q N R Q	
UniRef90_W6MAR7	Y V T Q T T L S V D D T A R	I I V T A L R E R F P L	Q G P D D I C C Y A T Q N R Q	
UniRef90_UPI000348B790	Y V T Q T T L S V D D T R G	I I D A L L N R F S D I	V G P D T C C Y A T T N R Q	
UniRef90_E1VX7	W L S Q T T L S V D E T M E	T V R R R L R K R F P N	Q P S D D I C C Y A T T N R Q	
UniRef90_D2PN99	W L S Q T T L S V D E T M E	T V R R R L R E R F P H	Q P S D D I C C Y A T Q N R Q	
UniRef90_W2BTB9	W L S Q T T L S V D E T S Q	T V Q K L R E K Y P Q L	P P S D D I C C Y A T S N R Q	
UniRef90_F3ZZM5	V V A Q T T L N G S K W E D	I I L K I L P K V N E	Q I F N T I C C Y A T S Q R Q	
UniRef90_A0A022L0Z5	W L S Q T T L S V D E T M E	T V D R L R E R F P T	Q S P D D I C C Y A T Q N R Q	
UniRef90_UPI00036DA14E	F V T Q T T L S V D D A A V	S A A L K T R F P Q	P K K S D I C C Y A T Q N R Q	
UniRef90_I6Y117	W L S Q T T L S V D E T M E	T V T R L R Q K F P L	P P T D D I C C Y A T Q N R Q	
UniRef90_S3DZH0	Y V T Q T T L S V N E T K E	I I I N E L N R F P N I	Q G P D D I C C Y A T Q N R Q	

QUERY	210	220	230	240
UniRef90_UPI0004101252	E S V K K L A P E V D	V M I I I G G K N S G N T R R L Y Y I S K E L N P N T Y H		
UniRef90_UPI000365108C	D A V K K L A A H C D	V I L V V G S P N S S S N R L R E I A E K L G R S A Y L		
UniRef90_D5CU04	D A V K D L A A R C C	V L L V V G S R N S S S N R L R E L A E S R G T P A Y L		
UniRef90_F5R776	D S V K L A G Q C C	D L V I V V G S P N S S S N R L R E V A E Q F G V P A Y L		
UniRef90_UPI0003755F5E	D A V K F M A P R S D	L V L V V G S P N S S S N R L R E I A G K L G V E A Y L		
UniRef90_Q1N0B2	D A V K A L A G G C C	D L F L V V G S P N S S S N R L R E I G E R M N A Q A Y L		
UniRef90_A3QBX5	D A V K D L A S Q C C	D L I L V V G S K N S S S N R L R E L G E R M N A Q A Y L		
UniRef90_D3SEY7	D A V K R N V A D D V	D L F I V V G S K N S S S N R L M E L A K K G T Q S Y L		
UniRef90_B5Y232	D A V K D L A K Q C C	D L L V V G S K N S S S N R L S E I I G A R L G V E S Y L		
UniRef90_K2KT66	E A V R A L A E Q A D	D V V L V V G S K N S S S N R L A E L A Q R M G K A A Y L		
UniRef90_UPI0003B36351	D A V R E L A A E S D	V D L V V G A R N S S S N R L R E L S E K I G T Q A F L		
UniRef90_N9Q7W9	D A V K N L A Q Q A D	D L V L V V G S P N S S S N R L R E L A A E R F G C E A H		
UniRef90_K2GSJ8	D A V R D L A A R C C	D L V L V V G S P N S S S N R L R E L A E R M G K A A Y L		
UniRef90_BOLFR9	D A V R Q L A L E C C	D L V L V V G S P N S S S N R L R E L A E R C G T P A Y M		
UniRef90_Q0AAC9	E A V K F M A P Q V E	V V I V V G S P N S S S N R L R E V A E K K G T P A Y M		
UniRef90_UPI0000E11519	D A V K Q L A E Q V D	M L V V G S P N S S S N R L R E L A E R K G V E A H L		
UniRef90_A3N2G8	D A V R E M A V S C D	L L V V G A T N S S S N S N R L S E L A V K L G T P S Y L		
UniRef90_C6XB71	Q A V R E L A K Q S Q L	V L V V G S K N S S S N S N R L A E L A S R M G V P S K L		
UniRef90_Q2YCX3	D A V K A M A K D C C	D L V I V V G S P N S S S N S N R L R E V A Q N Q G I E S Y M		
UniRef90_M7NVA9	D A V K T M V K Q C C	D L V I V V G S P N S S S N S N R L C E E V A R N A G V D A Y M		
UniRef90_A4BTU1	D A V K L L A A E C C	D L L V V G S V N S S S N S N R L R E L S E K I L G T P A Y L		
UniRef90_UPI000369D5C5	D A V M G L A R Q V D	M I V V G S G N S S N T R R L R E L A E R I G V P A Y Q		
UniRef90_UPI0003FEEC4F	D A V R I L A E Q C C	D V V L V V G S A N S S S N S N R L A E L S Q R M G T P A W L		
UniRef90_UPI0003619F2F	D A V R Q L A Q R C C	D V V L V V G S V N S S S N S N R L R D V A E K M G A R A Y L		
UniRef90_F3LGB5	D A V R K L Q G Q C C	D L V L V V G S P N S S S N S N R L R E L A Q K Q G V P A H		
UniRef90_UPI00034C82D5	D A V K Q L A L E C C	D L V L V V G S P N S S S N S N R L R E L A E R C G T E A Y L		
UniRef90_E0WSB9	D A V R R L A E S V D	L D V L V V G S V N S S S N S N R L R E L A E K Q G V P A H		
UniRef90_UPI000393E8F6	E A V R D L A Q R A D	C I V L V V G S K N S S S N S N R L A E L A Q R M G K Q A Y L		
UniRef90_A0Z9J1	D A V K R I L A Q Q V D	M I V V G S T N S S S N S N R L K E L S E K I L G T A A F L		
UniRef90_UPI0003451A2D	D A V K L M A P Q C C	D L V I V V G S P N S S S N S N R L R E V A A E R C G A K S Y L		
UniRef90_B3PE11	D A V R Q L A L E C C	D L V L V V G S P N S S S N S N R L R E L A E R C G T E A Y L		
UniRef90_G21YQ2	D A V K V L A E Q C C	D L V I V V G S P N S S S N S N R L R E V A A A L K G V E A Y M		
UniRef90_V8G3Z4	D A V K L I A P Q C C	F F V V G S V N S S S N S N R L R E V A A E R L S C P S Y L		
UniRef90_UPI0001DD0689	A A V K E L A P G S D	L V L V I G A P N S S S N S L R L V E V A A E R C G T T A K L		
UniRef90_D5VAC3	D A V K L L S R H C E	V E V L V V G S P N S S S N S N R L R E L A E R M G R R A Y L		
UniRef90_U5NEP2	D A V K T M C S Q V D	M I V V G S P N S S S N S N R L R E V A A R L S R R C G I P S Y R		
UniRef90_UPI0003685A57	D A V K F M A P Q V D	V V I V V G S P P S S S N S N R L R E V A A A R L G R P A Y M		
UniRef90_T0ZX76	D A V K V L T R S A D	L V I V V G S P T S S S N S N R L R E V V A A L H R G I E A Y M		
UniRef90_E7RTU8	D A V K F M A P Q C C	D L V I I I G S P S S S N S N R L R E V V A A E R H G C E A Y L		
UniRef90_UPI00029A21F5	Q A V K E L A L M Q C	D L V L V L G S Q N S S S N S N R L K E V V V D R L L G K K A Y L		
UniRef90_F9ZT50	D A V K R K L V P D V	D I L L V V G A P N S S S N S S R L A E L V G V R L L G T A T H		
UniRef90_A5FZK2	E A V R H L A E Q V D	V D I L V V G S R N S S S N S N R L C E I I G A E L L G R P S Y L		
UniRef90_UPI00047CC800	D A V K K E L A K V A D	L I L V V G S K N S S S N S N R L R E L A E K E G T E S Y L		
UniRef90_Q47BK8	D A V K E L A G K C C	D L V L V V G S P N S S S N S N R L R E V V A V G R N V M A F L		
UniRef90_UPI00046F34FE	A E A E A I I A K M V	D V M L V I G G K N S S S N T R K L V Y S I C K A H C K K T F A		
UniRef90_C7RS07	D A V K E L A R H S D	V V L V V G S Q S S S N S N R L R E V V A E L I G A R A Y L		
UniRef90_F6IN01	A A V K E V A P K C C	Q L M F V I G A P N S S S N S L R L V E V V A Q R A G A C A Q L		
UniRef90_UPI00036D222D	N A V K A L A K Q V D	V I L V I G S Q N S S S N S Q R L K E V V A O S N G C P A Y L		
UniRef90_E7H441	E A V K Q L A Q G V D	V D I L V I G S A T S T S S N S N R L R E V V A E R E G V V H A Y L		
UniRef90_G4CP91	E A V K N L A A E C C	D I V I V V G S P N S S S N S N R L R E V V A V K L R G V D A Y M		
UniRef90_Q46XP2	D A V K F M A P Q V D	V V I V V G S P N S S S N S N R L R E L A A R L G V P A Y M		
UniRef90_A3YII4	D A V K K L A E E S S	E S L V L V V G S V N S S S N S N R L K E L S E R M G T T A Y L		
UniRef90_F7QL39	S S V R D L S K L V D	V D I L V V G S T N S S S N S N R L R E I I G T E V G V P S Y L		
UniRef90_D6Y7P9	A A V K R I A P Q C E	L V I V V G S A N S S S N S N R L V E V V A K A Y G A K A H		
UniRef90_UPI0003B5F537	A A V K A M A P R C C	D L V I V V G A A N S S S N S N R L R E V V A E R E G A R S W L		
UniRef90_D7wdx0	V A V K A I A E K C C	M I V V G S Q N S S S N S N R L R E V V A L Q N G T R G H		
UniRef90_F1Z7H6	T A V R E L A E K G S	S D L L V V G S Q N S S S N S N R L K E I V E V A L Q E A G V P A H		
UniRef90_W0DW58	D A V K T L A E S C E	S E L L V V G S P N S S S N S N R L R E L A E K R G C H A H		
UniRef90_A8PQH6	Q A V K E L T Q Q C C	I V F V L G S V N S S S N S N R L K E L L A E R L G K P A Y L		
UniRef90_F7NGC3	Q T A R K L A G Q V D	M V V V G G K N S S S N S N R L R E V V A R D L C R Q T G V K T Y H		
UniRef90_W5W0G6	V A V K T M A P E C	D L V L V V G S T N S S S N S N R L V E V V A L Q A G A R S Y L		
UniRef90_C3X7N1	E A V K R L A E K K A S	L I I V V G S R N S S S N S N R L R E I I A E K N G A K A Y M		
UniRef90_A0LW20	A A V K R I A A I A D	L V I V V G S S R N S S S N S N R L V E V V A L D S G A K S Y L		
UniRef90_H8Z427	D A V R K L A A E A D	M L V V V G S V T S S S N S N R L R E L A E K Q G M P A Y L		
UniRef90_B1XW17	D A V K F M A P Q V E	V V I V V G S T T S S S N S N R L R E L A E K L G V P A Y M		
UniRef90_UPI000365C4B6	T A V K A I A P R C D	V V I V V G S Q N S S S N S N R L V E V V A L D A G P N S Y L		
UniRef90_Q0EYTO	A A T K E L A K A S D	V V L V I G S K N S S S N S N R L R E V V A E R S G S A A W L		
UniRef90_UPI00041419AF	E A I K L I A P H C D	A V V L V I G A P N S S S N S N R L V E V V A R R A G C C K A M		
UniRef90_C0VZN5	E A V K T I A P N A D	M I V V G S A N S S S N S N R L V E V V A L D A G A A A Y R		
UniRef90_E8RQD1	E A V K R V A E D C D	L F I V V G S K K S S S N S Q R L V E E V A L R T G A R S Y L		
UniRef90_UPI0003163A07	S A V R E L V G Q V D	V M L V V G S P N S S S N S N R R L Q E I I A E E L G T P G Y L		
UniRef90_UPI000370CDD9	N A V R N I A K K M A D	I L L V V G S K N S S S N S N R R L R E V V A E V S G I D S Y L		
UniRef90_L8XZ26	D A V R E L S K Q C S	I F V V V G S K N S S S N S N R R L R E I I G T E M G K P A F L		
UniRef90_UPI0003B65D14	S A V R E L C Q K Q A D	L L V V V G S P N S S S N S N R R L R E V V A L S R R Q G T P A E L		
UniRef90_UPI00037D7E6F	H A L N A I I E E S D	L V L V V G S T N S S S N S N R R L V E V V A E R E G T P A R L		
UniRef90_T0GG46	A A V K A I A P R C D	A L V Y I G A P N S S S N S N R R L V E V V A L Q A G A R S Y L		
UniRef90_A3DDC0	N E A E E I A K N V D	M M I I I G G K N S S S N T Q K L Y D I C K K H C N L T Y K		
UniRef90_J3Z5X5	E A V R I L A A K S D	V V L V V G S K N S S S N S N R R L T E I I V K R S G K P A Y L		
UniRef90_UPI0001FFE926	V A V K T M A P R C D	L V V V G S R N S S S N S N R R L V E V V A L G A G A S S Y L		
UniRef90_D0WPZ0	G A V K A M A P E C C	D A V V I V V G S A N S S S N S N R R L V E V V A L E A G A K A Y R		
UniRef90_Q6AA89	H A V K Q M A P Q C C	D L V I V V G S K N S S S N T G R L V E V V A L E S G A K S Y R		
UniRef90_W6MAR7	D A V K D L S G N C E	L L V V V G S R R S S S N S N R R L R E V V A L E A K A G T P A W L		
UniRef90_UPI000348B790	A A V R E L S T L V D	V V L L V V G A T N S S S N S N R R L R E I I G S E T G V P S Y L		
UniRef90_E1VX7	A A I K T I A P Q S D	L V V V G S A N S S S N S N R R L V E V V A L D H G A K S Y R		
UniRef90_D2PN99	A A V K K L A A D A D	M I V V G S A N S S S N S N R R L V E V V A V E H G A K G Y L		
UniRef90_W2BTB9	A A I K E I A A E S D	L V V V G S A N S S S N S N R R L V E V V A A E A G A R A E R		
UniRef90_F3ZZM5	E E A L Q I A K L S T	A V I V G G R N S S S N T R K L Y E I C C K V C D R A F L		
UniRef90_A0A022L0Z5	V A V K K I A P Q S D	L V V V G S P N S S S N S N R R L V E V V A M E V A K E A G A K S H R		
UniRef90_UPI00036DA14E	D A V K V M A P D C D	D L V V V G S V N S S S N S N R R L R E V V A E R K G A S A Y L		
UniRef90_I6Y117	Q A V K Q I A P H C C	M I V V G S R N S S S N S M R R L V E V V A L E A G A R S E R		
UniRef90_S3DZH0	D A V H K L A S Y T D	V I V V G S N N S S N S T R L K E I I A E N L G I P S Y L		

QUERY	250	260	270	280
UniRef90_UPI0004101252	Q P E W F R G V K R V G I S A G A S T P D W I I Q V K S R I Q E			
UniRef90_UPI000365108C	I D D A N Q L Q R E W I E G A Q K I G V T S A G A S A P E I L V T K V V A K L K E			
UniRef90_D5CU04	I D G A Q D I R S E W L A G K A R V G V T S A G A S A P E I L V R E V I E R L K G			
UniRef90_F5R776	V D N A S E L K P E W L Q G K Q R V G I T S A G A S A P E I L V Q E V I A R L K E			
UniRef90_UPI0003755F5E	V D S V D Q I R D G W L A G K T R I V G V T S A G A S A P E I L V R D V I E H R Q E			
UniRef90_Q1N0B2	I D N A E Q I D A A W F N D E T K V G V T S A G A S A P E I L V Q Q V I D A I A K			
UniRef90_A3QBX5	V D N A D D I K P E W F N D E T K V A V T S A G A S A P E I L V Q Q V I D F L R A E			
UniRef90_D3SEY7	V D G A A D V D P A W L K G K Q R I V G V T S A G A S A P E I L V N E V I D F L Q E			
UniRef90_B5Y232	I D D A S D I Q E A W V K D A A C Y V G V T S A G A S A P E I L V Q N V I T R L Q D			
UniRef90_K2KT66	I D D A D G I Q R D W L N D A N T V G V T S A G A S A P E I L V Q A V I K R L Q D			
UniRef90_UPI0003B36351	I D S E N D I Q P S W L K E G L R I G I T S A G A S A P E I L V R A V I D R L G D			
UniRef90_N9Q7W9	V D N A D E L K H E W F T D I S K V G V T S A G A S A P E I L I K Q V I Q R L Q D			
UniRef90_K2GSJ8	I D E P G Q I D P V W L E G K R S V G V T S A G A S A P E E L V K R V V S H Q S E			
UniRef90_BOLFR9	V D N A S Q I D P Q W L V G K L R I G V T S A G A S A P E V L V Q A V I D R L K E			
UniRef90_Q0AAC9	V D G P E Q I Q R A W L E G R H A I G V T S A G A S A P E V L V R Q V L D Q L Q A E			
UniRef90_UPI0000E11519	I D D A S M I Q P Q W L E G K Q A G V T S A G A S A P E I L V Q G V I D A L H E			
UniRef90_A3N2G8	I D G P Q D I D P S W L D G V E T I G I T S A G A S A P E V L V Q S V V E H K T E			
UniRef90_C6XB71	V D N A S Y L N A E W L A G K K R I G V S A G A S A P E I L V K E V I Q R L Q E			
UniRef90_Q2YCX3	L D R A E Q L Q E A W L K G K M R I G I T S A G A S A P E V L V Q Q V V S R L R Q			
UniRef90_M7NVA9	I D N A E Q I D P A W L T G K Q V I G I T S A G A S A P E I L L Q Q V V D R L I			
UniRef90_A4BTU1	I D T A A D L D R R W L E G R E V I G I T S A G A S A P E I L V Q Q V V D R L I			
UniRef90_UPI000369D5C5	I D N A E T M Q A E W F E N C A T T V G V T S A G A S A P E V L V E G V I A R L R E			
UniRef90_UPI0003FEEC4F	V D G A E H I D P T W V A G A Q R V G V T S A G A S A P E V L V E G V I S R L R E			
UniRef90_UPI0003619F2F	I D G A D D I D R A W L V G K S H V G V T S A G A S A P E S L V Q Q V V S R L R E			
UniRef90_F3LGB5	I D T A D D I N P A W L N A K Q S I I G V T S A G A S A P D I L I Q Q V I A A L E			
UniRef90_UPI00034C82D5	I D G A E H I A R E W L D G V T S I I G V T S A G A S A P D K L V K E V I A R L Q S			
UniRef90_E0WSB9	I D S A T D Q P E W L I N A H T I I G V T S A G A S A P D I L V Q Q V I K R L R E			
UniRef90_UPI000393E8F6	T D R P E D I Q P E W L S D V Q L V G V T S A G A S A P E A L V N Q I L D R I K E			
UniRef90_A0Z9J1	I D N A E Q I S G E W L K G V T G V G V T S A G A S A P E V L V A E V I D R I L Q E			
UniRef90_UPI0003451A2D	V D E P A Q I D P A W L V G K R R I G V T S A G A S A P E A L A Q S V I E R L R E			
UniRef90_B3PE11	I D G P E D I S P E W L A G R T A I G I T S A G A S A P E V L V Q Q V I T R I L Q A			
UniRef90_G21YQ2	V D N A T L L E P Q W F E G K R S V G V T S A G A S A P E V L V Q A V I T R I L Q			
UniRef90_V8G3Z4	V D D P A M I K P E W I E G K R S I G I T S A G A S A P E V L V Q N V V N R L K E			
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UniRef90G9ZZK0	UniRef90T0DY06	M K I I I K A E S A G F C F G V	D R A I V I V T Y K C O T E T T G D E K I Y T Y G P I		
UniRef90V8BXC7	M K I I I K A E S A G F C F G V	D R A I V I D S L D L T L Q K F G P P V Y Y V H E I			
UniRef90M5RT95	UniRef90UPI0003B78F96	M K I I I L A A P R G F C A G V	D R A I V I N L V Y S Q L E N E G A I T Y T G P I		
UniRef90UPI00041EED75	M Q V T L L A E P R G Y C A G V	D R A I V I E T V E R A L I E K H G A P V Y Y V R H E I			
UniRef90UPI0003B303C9	R V L L A E P R G Y C A G V	D R A I V I E T V E H A L L D H Y G A P P V Y Y V R K Q I			
UniRef90UPI0003B4B7EE	R V L L L A K P R G Y C A G V	D R A I V I Q T V E H A L L D H Y G A P P V Y Y V R K Q I			
UniRef90UPI00037648CC	M K V V M A K K A G F C M G V	D R A I V I Q T V E K A L E L H G A P P V Y Y V R K Q I			
UniRef90C7JD89	M K V V M A K K A G F C M G V	D R A I V I Q T V E K A L E L H G A P P V Y Y V R K Q I			
UniRef90F8L8B0	M K V V M A K K A G F C M G V	D R A I V I Q T V E K A L E L H G A P P V Y Y V R K Q I			
UniRef90F0S0G5	M E T R V A K S A G F C W G V	D R A I V I I R V V E E A I R R Y G A P P V Y Y V R K Q I			
UniRef90E2CB9	L T L K L C A P R G F C A G V	D R A I V I Q I V E L A L E K F G R P V Y Y V R H E I			
UniRef90J6LEQ0	L T V L L A S P R G F C A G V	D R A I V I D T V E R A L A V Y V G P P V Y Y V R H E I			
UniRef90Q0FD82	L E L Y L I A A P R G F C A G V	D R A I V I K I V E M A I I E K W G A P I F V R H E I			
UniRef90B0ND29	M K I E L A K T A G F C F G V	D R A I V I E T V Y E Q V K H H Q G K I I Y T Y G P I			
UniRef90UPI000288F9FD	I N L V L L A S P R G F C A G V	D R A I V I T I V E K A L L E M Y Q G A P V Y Y V R H E I			
UniRef90F7XVG2	I K V V L L A S P R G F C A G V	D R A I V I E I V E R A L L K K Y Y G A P V Y Y V R H E I			
UniRef90B3CM01	M E I I I L A E P R G F C A G V	D R A I V I D I L A I T L Y K N E R Q V Y Y V L H E I			
UniRef90A4AJF7	R V V L L A A P R G Y C A G V	D R A I V I D Q V Y E Q V K H H Q G K I I Y T Y G P I			
UniRef90R5FIW3	K V T V A K S A G F C F G V	D R A I V I D Q V Y E Q V K H H Q G K I I Y T Y G P I			
UniRef90UPI00036900BF	M Q I T R A D K A G F C F G V	D R A I V I E L A T G A Q R N S G P V Y Y T Y G P I			
UniRef90I0IQ88	M D I F L P E Y A G V C V G V	D R A I V I K L A I V K L A N K S A E E S V G P V F I L H E I			
UniRef90R5SXZ6	M E V I V A K T A G F C F G V	D R A I V I D K V Y E Q I R H A G K P I Y Y T Y G P I			
UniRef90Q1QW0	T L L L L K P R G F C A G V	D R A I V I D T A Y K H H A D E L A E F G A P I Y V R K E I			
UniRef90R5VPV5	M E I I L L A K S A G F C F G V	D R A I V I K R A T Q M A F E A A G K D Q K T F T L G P I			
UniRef90E0NWZ0	M K V I L A K R A G F C F G V	D R A I V I K R A T Q M A F E A A G K D Q K T F T L G P I			
UniRef90B3E441	M K V I L A K R A G F C F G V	D R A I V I K R A T Q M A F E A A G K D Q K T F T L G P I			
UniRef90R7APJ6	M K I K I A K K A G F C M G V	D R A I V I V N L V L K A L N E K S Y I Y T Y G P I			
UniRef90UPI0003B39C56	L L A S P R S F C A G V	D R A I V I E V V E R L L A Q R G S P V Y Y V R K Q I			
UniRef90UPI0003468160	L L A S P R S F C A G V	D R A I V I E V V E R L L A Q R G S P V Y Y V R K Q I			

		50	60	70	80
UniRef90_Q21TE6	V	H N T Y V V	N D L K A K G I F I E A L D D V P A G A T L I F S A H G V S R A V		
UniRef90_L0K9A8	I	H N P Q A V	D K L K K A D I K V I D Q I D K V D D G T I I I R S H G V R P S I V		
UniRef90_G7Z6I0	V	H N R F V V	E S L E A K G V F F V D E L T E V P D G R P V V F S A H G V P K S V		
UniRef90_UP100037926E5	V	H N K Y V V	E T L S N K G V F F V N E A D E V P E G S N M V F S A H G V S P A A		
UniRef90_E1VGG8	V	H N R F V V	D D L R A R G V F F V E E L D Q V P D G A T V I F S A H G V S K A V		
UniRef90_UP100031E2B42	V	H N R H V V	D S L K A K G I F F V V E E L D E E V P V D A V T V F S A H G V A P T V		
UniRef90_UP100037B056B	V	H N R H V V	E T F E E Q G V F F V D E A D E V P E G S N L V F S A H G V I A P T V		
UniRef90_K0K915	V	H N T H V V	A D L E A R G V F F V D E L D A V P D G S T V V F S A H G V S P A V		
UniRef90_A7HQX6	V	H N R Y V V	E E L E R K G I F F V E E L D E V P S G A K V I F S A H G V P K A V		
UniRef90_R5HLN3	I	H N E E V V	A D L E K K G V Q V I H S T D E L K G G T V I I R S H G V E R K I		
UniRef90_UP100030AA71B	V	H N R H V V	D T L R G K G V F F V E D L D E V P E G A M T V F S A H G V A R T V		
UniRef90_Q2RYD1	V	H N K H V V	D S L R A R G V F F V D E L D E V P P H G A V T V F S A H G V S K A V		
UniRef90_D7B715	V	H N T H V V	R T L E E R G I F F V E E T E E V P E G A I V V F S A H G V S P A V		
UniRef90_Q3JAD0	V	H N Q H V V	E D L Q R R G V F F T E D L A S I P A G S V T I F S A H G V S T A V		
UniRef90_F4D0Z9	V	H N A H V V	R R L T D R G V F F V Q E V D P P G A H V V L A A H G V S P A V		
UniRef90_D1BKR9	V	H N K Y V V	E T L S D R G I F F V D E T D E V P E G A R V V F S A H G V S P A V		
UniRef90_K8E0D4	I	H N P Q V V	Q D L A R Q G V K E I N D L A E V T E G S I I I R S H G V G P Q I		
UniRef90_UP100037C534D	V	H N K Y V V	D T L A K A G I F F V D D T D E V P P P N A H L V F S A H G V S P A V		
UniRef90_F8AWC7	V	H N A H V V	K T L E A K G I F F V E E T Y E V P T G A T V V F S A H G V A P T V		
UniRef90_D4J8B5	I	H N E T V V	E D L E A K G V K V V H S I E E A A G G T M I I R S H G V S K E E		
UniRef90_UP1000380DD00	V	H N S Y V V	T D L A K K G I F F V N E L D E V P E G A R V I Y S A H G V S P A V		
UniRef90_F2R1B7	V	H N K Y V V	Q T L E R K G I F F V D Q A T E V P P P G N I V M F S A H G V A P T V		
UniRef90_T0JTT1	I	H N P Q M I S H L	K K L G I S T V N K L E E I T A G K V I I R S H G V G P D I		
UniRef90_UP10003707DF7	I	H N P Q M V	E R L A S E G I G M V D T L Q E M T G D T I I I R S H G V G P Q V		
UniRef90_D3D913	V	H N T H V V	A D L A G R G V F F V E E L D E V P A G A T V V F S A H G V A P A V		
UniRef90_W5WQR6	V	H N K H V V	K T F E D Q G V F F V D E T T E V P R G A N V V F S A H G V S P M V		
UniRef90_D3F288	V	H N K H V V	E Q L R S R G I F F V E D E T E V P E G S T V V F S A H G V A P S V		
UniRef90_UP1000376E5EE	I	H N P Q A V	K K L L E E V D V V R V E S D I E K I T E G T V I I R S H G V S P E I		
UniRef90_A0A059DZK7	V	H N A H V V	S R L L E E V D L G I F F V E E L D E V P E D R P V I F S A H G V P K S V		
UniRef90_H0R6M4	V	H N R H V V	D T L T E R G V F F V G E T D E V P E G A L V V F S A H G V S P E V		
UniRef90_E8R5U7	V	H N K W V V	E R F Q R R G V F F V E D L N D V P E G S P L L F S A H G V S P A I		
UniRef90_H6Q525	V	H N K Y V V	D C L K Q K G I F F V E N I K N V P K N S I L I F S A H G V S K R V		
UniRef90_G1XXX5	V	H N R F V V	Q G L L E A K G I F F V E E L D E V P D G R P V V F S A H G V P K S I V		
UniRef90_I4B8V3	V	H N K H V V	A G L L R E K G V F F V D T I I D E I P A A Q T V I F S A H G V S P A V		
UniRef90_B2V9Y7	I	H N K Q V V	N Y L L K S I G V E E M Q Y S Q L K P G D T V I I R S H G V P P K T		
UniRef90_X1A8E6	I	H N P Q V V	K L L K D N G I K I I E N E N V D I G T I I R A H G I D P K K		
UniRef90_Q029M3	V	H N K H V V	E E L L R E A G V F F V E E L D E V P S G A R A I F S A H G V S P A V		
UniRef90_D9S3E0	V	H N Q Q V V	E K M E N L G V K A V D L L D D I S E G N L V I R T H G V P P D V		
UniRef90_M2NVD4	V	H N A T V I	A D L L E Q Q L G V F F V D E L L D E V P P D G A T V V F S A H G V A P A V		
UniRef90_UP10003A30499	V	H N R H V V	E R L L E R M G V F F V D E L L D E C P E D R P V V F S A H G V P K S V		
UniRef90_R7YOF2	V	H N K H V V	A N L L E S R G I F F V E E L D E V P E G Q T V V F S A H G V S P A V		
UniRef90_E3I0A0	V	H N K H V V	D D L L K A K G R F V D E I D E I P P E G A V T I F S A H G V A K D V		
UniRef90_G2LP23	V	H N E Y V V	N Q L R L K G V F V E N I S Q I P D Y S I V I F S A H G V S K K T		
UniRef90_UP100037DA5AE	I	H N E E V V	E D L L E K R G V S V L N S E E L T E G T V I I R S H G V P K K I		
UniRef90_A3ZR62	V	H N K Y V V	T T F K K G I F F I D D L N E A P E G S T L L F S A H G V S P E I		
UniRef90_UP1000255F402	V	H N R H V V	E T L L E Q Q G V F F V E E L D E V P P E G S L T V T F S A H G V S P A V		
UniRef90_UP100041A6E21	V	H N K Y V V	E T L L S K R G I F F V N E T D E V P P E G A R V V F S A H G V S P Q V		
UniRef90_UP100036B70A6	V	H N R F V V	D S L L K A K G V F F V E E L S E I P E D A P V V F S A H G V P K A V		
UniRef90_G5HY8	I	H N E E V V	R D L L E E K G V S V L H T E E E L S N G T V V I R S H G V G K H		
UniRef90_B0U064	V	H N K V V V	D S L L K K G G V F V K E V D E V P P D D A V C I F S A H G V S L Q V		
UniRef90_Q1LFP0	V	H N R H V V	E S S L R Q K Q G R F V E E L D E V P P G N A V T I F S A H G V S R D V		
UniRef90_B0T021	V	H N R H V V	D R L R K A L G V F F V E E L D E V P E D R P V V F S A H G V P K T V		
UniRef90_H8FQJ7	V	H N R F V V	E E L L A R K G V F F V E E L N E V P D G A A V V F S A H G V P K T V		
UniRef90_F9Y8J6	V	H N K Y V V	D A L L R A K G V F F V E E L D E C P E D R P V I F S A H G V P K S V		
UniRef90_A0P575	V	H N R F V I	D D L L K S K G I F F V D N I I A D I P P E G S H V I F S A H G V S K V		
UniRef90_A3JYE5	V	H N K F V V	D D L L R A K G V F F V E E L E E C P D D R P V I F S A H G V P K A V		
UniRef90_E2CY57	V	H N R H V V	E D L L A R R G V F F V E E L D E V P E G E P V V F S A H G V S P A V		
UniRef90_UP1000478F8E7	V	H N R H V V	A D L L E A R G V F F V D E L D A V P D S S T V V F S A H G V P K R I		
UniRef90_A7IHV5	V	H N K Y V V	E D L L K R K G I F F V E E L D E V P P D S A P V I F S A H G V P K S V		
UniRef90_A3TW60	V	H N K F V V	D A L L R D Q G V F F V E E L D E C P G D R P V I F S A H G V P K A V		
UniRef90_S2Z7Y1	I	H N E E V V	K D L L R S R G V E V I H S E E L A E G I V I I R S H G V P K R I		
UniRef90_G9ZZK0	V	H N K F V V	E T L L E T Q G I F F V E E L D E V P P D A P V V F S A H G V P K S V		
UniRef90_T0DY06	I	H N K Q A V	L K Y E E N G L K T I N E D D V P E Y K S M I I R S H G V V G E N V		
UniRef90_V8BX7C	I	H N E E V V	K D M E K K R G V R V I R S E E D L K E G T V I I R S H G V S P Q V		
UniRef90_M5RT95	V	H N Q Y V V	K T F R E K G V F V N T I E E V P E G S V V L F S A H G V S S D E		
UniRef90_UP10003B78F96	V	H N E E V V	K D L L E N K G G V K V I N D L D E L K D G T I V I R S H G V A P T V		
UniRef90_UP100041EED75	V	H N K H V V	D T L L T N K G G V F F H E T D E V P V G S V V V F S A H G V P P E D		
UniRef90_UP10003B303C9	V	H N Q H V V	R T L L E A R G I F F V E E T D E V P V G S V V V F S A H G V A P E V		
UniRef90_UP10003B4B7EE	I	H N E Q A L S	T L L E M L G V K P L K E I P E K A K G T I I I R A H G V P P E D		
UniRef90_UP100037648CC	V	H N Q H V V	A T L L R E R G I F F V D E T D E V P V E G S L V V F S A H G V A P V V		
UniRef90_C7JD89	V	H N R T V V	E E L L E A A Q G I F F V E E L D E V P V D G H V V F S A H G V P K T V		
UniRef90_F8L8B0	V	H N R H V V	E D L L E K K G G I F I E D D L D E V P P E G E R I I Y S A H G I S P A V V		
UniRef90_F0S0G5	I	H N K R E I	E R L L K L G V F I E D I D V K K G N T V I I R S H G V S P K V		
UniRef90_E2CBB9	V	H N K F V V	D G L L R A K G V F F V E E L D E I P T A D P V I F S A H G V P K S V		
UniRef90_J6LEQ0	V	H N R Y V V	E S L L K A K G G I F F V E E L S E I P P D T A P V V F S A H G V P K S V		
UniRef90_Q0FD82	V	H N K Y V V	D E E L R S K G G I F F V E T L L E E C P S D R P V I F S A H G V P K S I		
UniRef90_B0ND29	I	H N E E V I	K D L L R R Q G V F F V E V I N E L E K L E E G V V I I R S H G V P K A I		
UniRef90_UP1000288F9FD	V	H N K H V V	Q R L L R N E G V F F V E N I D K I P E G S H A I F S A H G V S P E V		
UniRef90_F7XVG2	V	H N R Y V V	N S L L K D K G G I F T D D I E S I P P N G A V V I F S A H G V S K K V		
UniRef90_B3CM01	V	H N K Y I V	E G F K K K Q G G I V F V F V S S I E D I K I K D G I L I I F S A H G V S K S I V		
UniRef90_A4AJF7	V	H N E E V V	T T L L E A A Q G I F F V D D V D E I P E G S T V V F S A H G V S P A V		
UniRef90_R5FIW3	I	H N I H V V	R D L L S D K G G I M V L E T E E R N Q G T V I I R S H G V S R H V		
UniRef90_UP100036900BF	V	H N Q Q E V	A R L L A G Q G G I H V D S L D Q V P E G S L L I I R S H G V V G P E V		
UniRef90_10IQ88	V	H N T H V V	K D L L A N R G V Q S V D A V S E V D R G T L I I S A H G V A P D V		
UniRef90_R5SXZ6	I	H N E E V V	K D L L E E K G V R V I L E S E E L H E G I V I I R S H G V V G K H V		
UniRef90_Q1IQW0	V	H N R Y V V	D D L L A S K G G I F F V D E I D E V P V N G Q R V I Y S A H G V S P E V		
UniRef90_R5VPA5	I	H N E E V V	G D L L A K H G V K I L E D D E L I K D S K V I I R S H G A E K R V		
UniRef90_E0NWZ0	I	H N P Q M V	E R L L K E E G V T V S T L D E M Q D G T T V I I R S H G V V G P S V		
UniRef90_B3E441	V	H S P Q V V	N K L L E E M G V G V V K D L S G V S N S G T V I I R S H G V L A S E		
UniRef90_R7AJP6	I	H N E E V V	Q D L L E E K G V Q V I H S K E E L E E G V V V I R S H G V G R E I		
UniRef90_UP10003B39C56	V	H N P Q T L K	D L D I F G V Q V L K D P N E N P S G V V I I R A H G V V P P K E		
UniRef90_UP10003468160	V	H N A H V V	R G L L E Q R G G V F F V N E L D Q V P E G S L V V F S A H G V S P A V		

	90	100	110	120
UniRef90_Q21TE6	Q L E A A A R G F Q V F D A T C P L V S K V H V E V A K L H K E G Y E F I M I G			
UniRef90_L0K9A8	I E E A E D K D L D I I N A T C P F V Q R V Q E K A K Q L Y K D G Y Q V L I S G			
UniRef90_G7Z610	P Q A A E A R G L F Y D A T C P L V S K V H R E A K R F D R D G H Y I L L V G			
UniRef90_UPI00037926E5	R E L A D S R N L M T I D A T C P L V T K V H K E A T R F D R D G H Y I L L V G			
UniRef90_E1VGG8	Q A E A Q R R K L K V F D A T C P L V T K V H I E V A R Y A R E G R E C V L I G			
UniRef90UPI00031E2B42	E D A A R Q R Q L R V L D A T C P L V S K V H N Q G R Q Y A A K G H Q V I L I G			
UniRef90UPI00037B056B	R E Q S K Q L N S T F D A T C P L V T K V H G E V K R F A R D G F Q I L L V G			
UniRef90_K0K915	R E E A A A R R D L D V V D A T C P L V T K V H A E A R R Y A A R G D T V V L I G			
UniRef90_A7HQX6	P A D A Q S R E L F Y D A T C P L V S K V H V E A E R L Y S R G H E I L L I G			
UniRef90_R5HLN3	Y D E I K A G F E I V D A T C P F V L K H R L V E Q Y S R E G G Y H I I I I G			
UniRef90UPI00030AA71B	E E E A K A R R N L P V F D A T C P L V T K V H L Q G R Y A K A G R S I V M I G			
UniRef90Q2RYD1	I N D A K Q R P V V D A T C P L V S K V H K E G Q N H A A R G D E V V L I G			
UniRef90_D7B715	H E E A H R R S L K T D A T C P L V T K V H K E A K R F A E D R D I I I I G			
UniRef90_Q3JAD0	V E T A K K N D L Q V I D A T C P L V T K V H L Q A K K Y Y R Q G D E L I I I G			
UniRef90_F4D0Z9	R A D A D A R G L S V D A T C P L V A K V H T E V R R H A R R G E S V V L I G			
UniRef90_D1BKR9	V A A A E E R S L Q T D A T C P L V T K V H K E A V R F A S E D Y D I I I I G			
UniRef90_K8E0D4	F Q Q A G E K G L E I I D A T C P F V A R A Q R A A H A M A E Q G L P V F I L G			
UniRef90UPI00037C534D	H A A A A A E R N H D T I D A T C P L V T K V H N E V K R F A K S G G Y H I I I I G			
UniRef90F8AWC7	H E E A R S R E L R T I D A T C P L V T K V H G E A R R F A K E D F D I I I I G			
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130 140 150 160

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UniRef90_D1BKR9	H D G H E E V E G T A G E A P D R T V L V A T V E D V A R L E V P D P T R V A
UniRef90_K8E0D4	D P G H P E V Q G I L G W A M G M G V V I E N A D Q L S R V D H P K V G
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UniRef90_E8R5U7	H E G H D E V V V G T M G E A P D R M V L V E S V E D V E R L E V P D P N K L A
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UniRef90_G1XXX5	H A G H P E V V V G T M G Q L P P G A V V L L V I S E E D V R T V Q V V D D P L N L A
UniRef90_I4B8V3	H K D H P E V A R G T Y G E A P D Q M T I V E T L A D I D L L A F S P T E K L A
UniRef90_B2V9Y7	E E G H P E V I G T L G H L E E V V G G K G V V V E N E D L V K K V P K R N R I G
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UniRef90_J6LEQ0	H A G H P E V E G T M G Q L P P G A I T L I E T V E D V A T F R D P T K L L A
UniRef90_Q0FD82	H E G H P E T I I G T M G Q L P K G E V L L V I E T P D D V T K I T P R N K L A
UniRef90_B0ND29	N S E H P E V E G I K G W A G D D V T V I Q T A E E A Q H F R P P D T A R R I C
UniRef90_UPI000288F9FD	H H N H V E V I K G T V G E A P E H I F V V G T V E E V S D L I P D E K K V G
UniRef90_F7XVG2	H K N H P E I E G T S G R V V A A D Q V V L V V E D L E Q I E N L P F D E K L A
UniRef90_B3CM01	H E N H P E V K G I I G R V S N P I S L V Q T M Q D V Y N L Q I K D P D N L S
UniRef90_A4AJF7	H E G H E E V E G T M G H A P E R T I L V N S P A D V P N I H V E N T D N L L V
UniRef90_R5FIW3	S P D H P E V E G I K G W G N E H T T V I M D G E G A D N Y R I P E G R K L C
UniRef90_UPI00036900BF	N A S H P E V Q G I V A W T G H Q A L V V A D A E Q I R A I Q P A A R V G
UniRef90_I0IQ88	E E S H D E V M G V Q G W A K E H I H I F H K P E E I D R L P V V S G P V A
UniRef90_R5SXZ6	N E S H P E V Q G I K G W G N E H T T V I M D G E G A D N Y R I P E G R K L C
UniRef90_Q1IQW0	H H D H D E V V G T L G E A P D V T V I S T P E E V Q T L E I P D P N R V A
UniRef90_R5VPA5	D G K H P E V K G I M G W C M S E P V V G I T E E E A E K F V Q S C P S E N I S
UniRef90_E0NWZ0	E K N H P E V K S I F E W T A Q R A H I I E S E E E A A A L P T F G K L G
UniRef90_B3E441	D A D H P E V Q G I V S Y G K E K V Y V V A S G D Q V K Q L P K M G K M G
UniRef90_R7AJP6	N E H H P E V E G I K G W G N E Y T L A V E S L E E F E H L A L R P D E K L C
UniRef90_UPI0003B39C56	D K D H A E V K G I L G Y C E G K G Y V V V S S E E D V V N P P F K D Y V
UniRef90_UPI0003468160	H [V] G H E E V E G T F G E A P E S T V V V E T A M D V A E L E V A D P A R V S

	170	180	190	200
UniRef90_Q21TE6	V V T Q T T L S V D D A A D I A A A I K A R F P K V P K Q Q D C Y A T Q N R Q			
UniRef90_L0K9A8	V V A Q T T Q S L N K L K K L V D Y L P Q I S D L K V H N T C C Y A T T G Q R Q			
UniRef90_G7Z6I0	Y A T Q T T L S V D E T T E I L A A L Q A R F P A I P K K E D I C C Y A T T N R Q			
UniRef90_UPI00037926E5	W L S Q T T L S V D E T M V I V D E L K K R F S H Q P S D D C C Y A T T Q N R Q			
UniRef90_E1VGG8	Y I T Q T T L S V D D T I A I I A A L R K R F P K I I G P D D I C C Y A T Q N R Q			
UniRef90_UPI00031E2B42	Y I T Q T T L S V D D T K A V V Q A L R L R Y P Q I V G P D T I C C Y A T V Q N R Q			
UniRef90_UPI00037B056B	W L S Q T T L S V D E T Y E I V K L L R E K F P H Q P S D D C C Y A T T N R Q			
UniRef90_K0K915	Y L T Q T T L A V D E T T E V V A A L R A K F P A I R G P D D C C Y A T T N R Q			
UniRef90_A7HQX6	F V T Q T T L S V D D T A A I V A I L R R R F P A I A G P E D I C C Y A T T N R Q			
UniRef90_R5HLN3	I V S Q T T F N Y N K F Q E L V E I V N E K G Y D I I V L N T C C N A T E E R Q			
UniRef90_UPI00030AA71B	Y I T Q T T L S V D D T R G V I A A L G N R F T D L I G P D E I C C Y A T Q N R Q			
UniRef90_Q2RYD1	Y V T Q T T L S V D D T R E V I E A L K L R F P A I V G P D D I C C Y A T T S N R Q			
UniRef90_D7B715	W L S Q T T L S V D E T T Q T V D A L R E R F P N L P P S D D C C Y A T T Q N R Q			
UniRef90_Q3JAD0	Y V T Q T T L S I D D T R D V V D A L K K R F P K I H G P D D I C C Y A T T Q N R Q			
UniRef90_F4D0Z9	Y A M Q T T L A V D E A E R I A A I L R E R F P S I A A Q D D C C Y A T T N R Q			
UniRef90_D1BKR9	W I S Q T T L S V D E T T M E I V D K L H E V Y D N P P S D D C C Y A T T Q N R Q			
UniRef90_K8E0D4	V V A Q T T Q P L A N Y L K L V E A L E K Q G V E V D A R N T C C H A T G E R Q			
UniRef90_UPI00037C534D	W L S Q T T L S V D E T T M E I V D K L H E V Y D N P P S D D C C Y A T T Q N R Q			
UniRef90_F8AWC7	Y L S Q T T L S V D E T E V T V R A L R E R F P L L Q G P P C C Y A T T Q N R Q			
UniRef90_D4J8B5	L V S Q T T F N Y N K F Q L V E I S K K G Y D I R C L N T C C N A T E E R Q			
UniRef90_UPI000380DD00	Y L T Q T T L S L D E A R Y M I E A L K N K F P N I I G P H D I C C Y A T E N R Q			
UniRef90_F2R1B7	W L S Q T T L S V D E T T M E T V D A L K E K F P Q L P P S D D C C Y A T T Q N R Q			
UniRef90_T0JTT1	V V A Q T T F A A E R F Q A I V T I L Q T K C Q E L K I E R T C C T A T D L R Q			
UniRef90_UPI0003707DF7	I V A Q T T F S G E E K K I V N L K I D K S N D I K I A T T C C T A T D Q R Q			
UniRef90_D3D913	Y L M Q T T L A V D E A E E V V D A L R V R F P A V V G P G D C C Y A T S N R Q			
UniRef90_W5WQR6	W L S Q T T L S V D E T M A T V K L L R E K F P E I Q P S D D C C Y A T T Q N R Q			
UniRef90_D3F288	Y I S Q T T L S V D E T R A I L A R L R E K F P N I T G P D D C C Y A T T N R Q			
UniRef90_UPI000376E5EE	V V A Q T T Q S L E R L Q K L T Y L K N V S E L K V Y N T C C T T T G Q R Q			
UniRef90_A0A059DZK7	F V T Q T T L S V D D T A D V A A L Q A R F P G I P H K E D I C C Y A T T N R Q			
UniRef90_H0R6M4	W L S Q T T L S V D E T M E T V K R L R E K F P Q L P P S D D C C Y A T T Q N R Q			
UniRef90_E8R5U7	Y L T Q T T L S V D D D A N I V I A A L K R K F P A I H P K D D C C Y A T T Q N R Q			
UniRef90_H6Q525	F T T Q T T L S I E E T S K I I L K L K K R F P K I H G P H D I C C F A T E N R Q			
UniRef90_G1XXX5	F V T Q T T L S V D D T V Q I V A A L K A R F P A I A G P E D C C Y A T T N R Q			
UniRef90_I4B8V3	Y L T Q T T L S V R D T R G L I E R L R E R F P Q I E G P S D C C Y A T T N R Q			
UniRef90_B2V9Y7	V V A Q T T Q S E D F F R E A V G Y L A E N T E E L K V F N T C C D A T S V R Q			
UniRef90_X1A8E6	V I T Q T T Q S M E N F I S V V S Y L E K H K E I K I F N T C C D E T I E R Q			
UniRef90_Q029M3	Y I L T Q T T L S L D E T R D I V D R L K Q R F P M I E G P H D I C C Y A T E N R Q			
UniRef90_D9S3E0	V V V Q T T Q T E E N V K K I M D I L K E K L D L A F F Y N T R C N A T H Q R Q			
UniRef90_M2NVD4	Y L T Q T T L A A D E T A E V V D A L R Q R F P A L P P S D D C C Y A S T N R Q			
UniRef90_UPI0003A30499	L V T Q T T L S V D D T A D G I A V L Q D R F P A I P Y K E D I C C Y A T T N R Q			
UniRef90_R7YOF2	W L S Q T T L S V D E T L E T V V A A L R E K F P L L P P S D D C C Y A T T Q N R Q			
UniRef90_E3I0A0	Y I T Q T T L S I D D T R G I I L A I K D R F K D I V I G P N D I C C Y A T T Q N R Q			
UniRef90_G2LP23	F F T Q T T L S I K N T K K I I T A L K K N K F P H I P H K E D I C C Y A T T N R Q			
UniRef90_UPI00037DA5AE	I V S Q T T F N Y K F Q E L V E L L A K K R Y D R L V L N T C C N A T N E R Q			
UniRef90_A3ZR62	Y L T Q T T L S V D D A N R I I I G A L K Q R F P Q V P P K D D C C Y A T T Q N R Q			
UniRef90_UPI000255F402	W L S Q T T L S V D E T L E I V S I L R E R F P N L Q P S D D C C Y A T S N R Q			
UniRef90_UPI00041A6E21	W L S Q T T L S V D D T I Q T V D R L R Q R F P N N P P S D D C C Y A T T Q N R Q			
UniRef90_UPI00036B70A6	W V S Q T T L S V D D T H A I V E A L T A R F P E I P H K D D C C Y A T T T N R Q			
UniRef90_G5IHY8	I V S Q T T F N Y N K F Q E L V E L L A K K R Y D R L V L N T C C N A T Q E R Q			
UniRef90_B0U064	Y A T Q T T L S V D E T T Q G I I E S L K N R F P N I K G P E D C C Y A T T Q N R Q			
UniRef90_Q1LFP0	Y I T Q T T L S V D D T R N I I I A A L G A R F T N L V G P S T I C C Y A T T Q N R Q			
UniRef90_B0T021	F L T Q T T L S V D D T D A E M V D L L K Q R F P G I P H K E D I C C Y A T T N R Q			
UniRef90_H8FQJ7	Y I T Q T T L S V D D A A E V I K V L Q S R F P K I P K R E D I C C Y A T T N R Q			
UniRef90_F9Y8J6	M I T Q T T L S V D D T A E I I A A A L K A R F P A I N V P E D C C Y A T T N R Q			
UniRef90_A0P575	Y V S Q T T L S V D D T Q E I I I E A L K Y K Y P N Q G P K D I C C Y A T T Q N R Q			
UniRef90_A3JYE5	F V T Q T T L S V D D T A E I V A A L K A R F P A I P H K E D I C C Y A T T N R Q			
UniRef90_E2CYS7	F L M Q T T L A M S E A T E V A Q A L Q A R F P S I R A P E D C C Y A S T N R Q			
UniRef90_UPI000478F8E7	Y L T Q T T L S L D D T E T E V A A A L Q A R F P A L R G P D D C C Y A T T N R Q			
UniRef90_A7IHV5	Y V T Q T T L S L D D T A E M I A I L R E R F P A L P H K E D I C C Y A T T T N R Q			
UniRef90_A3TW60	F V T Q T T L S V D D T K G I V A T L Q D R F P A I I G P E D C C Y A T T T N R Q			
UniRef90_S2Z7Y1	I V S Q T T F N Y N K F K D L V E I I S K K R Y D S V L N T C C N A T K E R Q			
UniRef90_G9ZZK0	F T T Q T T L S V D D T A E I V A T L Q R R F P H P G K E D I C C Y A T T N R Q			
UniRef90_T0DY06	V V S Q T T I N V D L Y N Q I I G E L S N R L D D V L F N N T C C S A T K V R Q			
UniRef90_V8BX7C	I V A Q T T F N Y N K F K E L V E I I E K K S Y D V S V L N T C C N A T K E R Q			
UniRef90_M5RT95	Y L T Q T T L S V D D A N R I V I R L R E R F P Q I P P K D D C C Y A T T Q N R Q			
UniRef90_UPI0003B78F96	I V S Q T T L S V D D T K F Q D L V E I I E K K G Y D I I V L N T C C S A T E K R Q			
UniRef90_UPI00041EED75	W L S Q T T L S V D E T M Q T V L K L R E R F P N L Q P S D D C C Y A T T Q N R Q			
UniRef90_UPI0003B303C9	W L S Q T T L S V D E T L H T V D A L K V K F P N L P P S D D C C Y A T T Q N R Q			
UniRef90_UPI0003B4B7EE	I L S Q T T Q D E E F F K L I V E E L L T R F P G K V Y N T I C C N A T H D R Q			
UniRef90_UPI00037648CC	W L S Q T T L S V D E T V A T V G K L R E R F P A L P V P S D D C C Y A T T Q N R Q			
UniRef90_C7JD89	F I T Q T T L S V D D T A E I V D I L R A R F P L I E G P E D C C Y A T T T N R Q			
UniRef90_F8L8B0	Y V T Q T T L S L D D V K E I L T E A L A K K Y P H E P S S S C C Y A T T T N R Q			
UniRef90_F0S0G5	V V C Q T T L N M D F F R E A V F R A L K V K E L K V Y N T C C S A T S I R Q			
UniRef90_E2CBB9	Y I T Q T T L S V D D T D N G I V S I L K D R F P D I V A P E D C C Y A T T T N R Q			
UniRef90_J6LEQ0	Y V T Q T T L S I D D C T G I I A A L M Q R F P E I T A P E D C C Y A T T T N R Q			
UniRef90_Q0FD82	Y I T Q T T L S V D D T I E I V K K L K A R F P S I P H K E D I C C Y A T T T N R Q			
UniRef90_B0ND29	V V S Q T T F N Y N K F K E L V E I I T K K E Y D I I V L N T C C N A T K E R Q			
UniRef90_UPI000288F9FD	Y I T Q T T L S L D D T A G I I I A L K E R F P E I P A K D D C C Y A T T Q N R Q			
UniRef90_F7XVG2	Y V T Q T T L S I D D D T K N L V I N T L Y E R Y T D I D G P K D D C C Y A T T Q N R Q			
UniRef90_B3CM01	Y V T Q T T L S I D D D T K E I I A T L K L R F P S I T G P D D C C Y A T T Q N R Q			
UniRef90_A4AJF7	W L S Q T T L S V D E T M E T V R L L R E R F P T Q P S D D C C Y A T Q N R Q			
UniRef90_R5FIW3	I V S Q T T F N Y N K F K E L V E K F L K K G Y D S S V L N T C C N A T Q E R Q			
UniRef90_UPI00036900BF	V V A Q T T I A Q Q N L A A V V A A L V P V V R E L K L A N T V Q A T R E R Q			
UniRef90_I0IQ88	L V S Q T T Q S I K Y F D E I L A L L T V K Y P Q L E V H N T C C D A T E K R Q			
UniRef90_R5SXZ6	I V S Q T T F N Y K F Q D L V E K F S K T R Y D I L V L N T C C N A T Q E R Q			
UniRef90_Q1IQW0	Y L T Q T T L S D E T V H V I A A L K Q K F P N I K G P H D I C C Y A T E N R Q			
UniRef90_R5VPA5	I V S Q T T F N Y R K H N V D I I R N K L Y N V T A Y K T C C N A T S V R Q			
UniRef90_E0NWZ0	V V C Q T T F S S D R F R R I A S V L L E K S R D I K I L R T C C D A T A D M R Q			
UniRef90_B3E441	V V A Q T T Q S F D N L K S V V T E C L R R G G E V R V Y N T C C D A T A V R Q			
UniRef90_R7AJP6	I V A Q T T F N Y N K F Q D L V E K I S K T Y Y D I L V L N T C C N A T Q E R Q			
UniRef90_UPI0003B39C56	I L S Q T T Q D E K L F H L S K R I T S L Y P N G K I I N T C C N A T A V R Q			
UniRef90_UPI0003468160	Y L T Q T T L A V Q E T R D V I E A L R A R F P A L P P S E D I C C Y A T T N R Q			

	210	220	230	240
UniRef90_Q21TE6	D A V K V M S P L V D V V I V V G S P T S S N S R R L R E V A R K L G T E S H M			
UniRef90_L0K9A8	D E A A R L A Q D M D L M I V I G G Y N S A N T N R R L A E I C R E N G A I T H H			
UniRef90_G7Z6I0	A A V K A I A P K V D A L L V L G A P N S S N S K R L V E V A K I H G C P A Q L			
UniRef90_UPI00037926E5	H V V R E I A D K C D L V V V G S Q N S S N S K R L V E V A L D Y G A K T Y L			
UniRef90_E1VGG8	D A V K T L A L E N E V V F V V G S P N S S N S N R R L V E V A A E R C G A R A Y L			
UniRef90_UPI00031E2B42	T A L R V L S Q C V D L V L V V G A A N S A N S L T L R A I V A A E T G V P A Y R			
UniRef90_UPI00037B056B	V A V K E I A P Q C D L M I V V G S Q N S S N S S K R L V E V A L Q A G A K D H L			
UniRef90_K0K915	D A V R E V A R R D A D L V L V V G S A N S S N S V R L V E V A L A R R Q G T P A H L			
UniRef90_A7HQX6	E A V K A I A P L V D A M L V I G A P N S S N S M R L V E V A A E R A G C R Y A A			
UniRef90_R5HLN3	T E A E R I I A K E V D A M I V I G G R A S S N T Q K L F E I V C K K E C E N T Y Y			
UniRef90_UPI00030AA71B	S A V R D L C V K V A D L I L V V G S E N S S N S S R L R D L G A D E G L P S Y L			
UniRef90_Q2RYD1	S A V R E I A R E A D L D L L V V G S R N S S N S N R L R E I V A L D A G A D A H L			
UniRef90_D7B715	D A V K A M A P E C E L V I V V G S D N S S N S V R L V E V A L D Q N G I T A H L			
UniRef90_Q3JAD0	N A V R E M S K K V D I L L V V G A R N S S N S N R L R E V A G E Q N G I T A H L			
UniRef90_F4D0Z9	R A I R A V S A D V D L V I V V G S P N S S N S R R L A E V A A R Q G V P A H L			
UniRef90_D1BKR9	V A V K K L A P E C D L V I V V G S T N S S N S V R L V E V A L N A G A R S Y L			
UniRef90_K8E0D4	R A A L E L A Q K V D V M V V G G K N S A N T K K L A R I C Q E T G T P T Y H			
UniRef90_UPI00037C534D	V A V K K V A E Q A E L I I V V G S Q N S S N S S K R L V E V A L D A G A A H Y L			
UniRef90_F8AWC7	V A V K E I I A S Q V E L L I L V V G S P N S S N S V R L V E V A L D H G V P A H L			
UniRef90_D4J8B5	S E A R E I V A G R V D A M I V I G G R Q S S N T Q K L Y D I C K N E C K N T Y Y			
UniRef90_UPI000380DD00	T A V K N V A H G A D L V L V V G S R N S S N S N R L V E V A S K N L D T N S Y L			
UniRef90_F2R1B7	T A I K E L A G Q A E L V I V V G S K N S S N S S R L R M V E V A V A K Q A G V P A Y L			
UniRef90_T0JTT1	Q A A L D L A K K V D I M I V V G G K N S A N T A R L A S V C Q D T G T A A Y H			
UniRef90_UPI0003707DF7	K A A I E L S Q E V D L M L V V G G K N S A N T T R L A Q L C S N V G C K T Y H			
UniRef90_D3D913	N A V R R V A A E A D L V L V V G S E N S S N S S K R L V E V A L Q H G T N A Y L			
UniRef90_W5WQR6	V A V K A I A P K V E L M I V V G S Q N S S N S S K R L V E V A L Q H G T N A Y L			
UniRef90_D3F288	L A V K Q L A R A C D L V L V I G G Y T S S N S N Q R L V D V T R E L G T D S Y L			
UniRef90_UPI000376E5EE	R E A A H L S K K V D M M I V I G G Y T S S N S N Q R L V D V T R E L G T D S Y L			
UniRef90_A0A059DZK7	D A V K V L A P G T D L V L V I G A T T S S S N S V R L N A R E I V C S E S G V Q T H H			
UniRef90_H0R6M4	V A V K A M A P H C E L V I V V G S Q N S S N S S Q R L V E V A V A K R A G A R A E L			
UniRef90_E8R5U7	E A I R E L A P Q A D L V L V I G S Q N S S N S S L R L A E I I V A N L L G T P A H L			
UniRef90_H6Q525	N A V K L L I K F V D I M L V V G S K N S S N S S N R L L E L A K K S K K P A Y L			
UniRef90_G1XXX5	T A V K A I A E K A D A I L V L V I G A P N S S N S M R L V E V A A K H G C N S M L			
UniRef90_I4B8V3	E A V S A I A P K V K V M F V I G S R N S S N S N R L K E L A E S E G T R A F L			
UniRef90_B2V9Y7	E E V K K I A P E V D V M I I I G G K H S G N T Q R L Y Q I S K A L N P N T Y H			
UniRef90_X1A8E6	K S A R N I A N K V D L M L V V G G K N S A N T K R L A E I G K S I N E N T Y H			
UniRef90_Q029M3	M A V K A I S T N V D L L L V V G S E N S S N S S K R L V E V G D N F G V R S H L			
UniRef90_D9S3E0	K A A K K V A E S V E V M L V V G G K N S S N T K K L A Q V C Q N V G A K V Y H			
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UniRef90_UPI000255F402	E A V R I L A T E A D L V L V I G S A N S S S N S S Q R L K E V A R E S G T K G Y L			
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UniRef90_UPI00036B70A6	V A V K T I A P H V D V M V V G S A P N S S S N S S Q R L R E I V A E R V G C P S V L			
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UniRef90_G9ZZK0	A A V K E I A A R S E L V V V G A P N S S N S S V R L V E V A R E A R G C C P R V M			
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UniRef90_E0NWZ0	R E A Q E I I A S K V D A M I V I G G R N S S N T Q K L Y E I V C R R E C K H T Y Y			
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250 260 270 280

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UniRef90_A7IHV5	V V Q R A A D D W T V F S S I A S L G V T A G A S A P E V L V E E I I D A F V E
UniRef90_A3TW60	V V Q R A T D D W R A L E G I S A I G I T A G A S A P E V L V N E V I D A L R A
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UniRef90_F8AWC7	
UniRef90_D4J8B5	M
UniRef90_UP1000380DD00	M
UniRef90_F2R1B7	
UniRef90_T0JTT1	L
UniRef90_UP10003707DF7	M
UniRef90_D3D913	L
UniRef90_W5WQR6	
UniRef90_D3F288	
UniRef90_UP1000376E5EE	I
UniRef90_A0A059DZK7	
UniRef90_H0R6M4	
UniRef90_E8R5U7	
UniRef90_H6Q525	
UniRef90_G1XXX5	
UniRef90_I4B8V3	
UniRef90_B2V9Y7	
UniRef90_X1A8E6	I
UniRef90_Q029M3	
UniRef90_D9S3E0	
UniRef90_M2NVD4	L
UniRef90_UP10003A30499	
UniRef90_R7YOF2	
UniRef90_E3I0A0	
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UniRef90_B0U064	
UniRef90_Q1LFP0	L
UniRef90_B0T021	
UniRef90_H8FQJ7	
UniRef90_F9Y8J6	
UniRef90_A0P575	F
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UniRef90_UP10003B303C9	
UniRef90_UP10003B4B7EE	I
UniRef90_UP100037648CC	
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UniRef90_E0NWZ0	M
UniRef90_B3E441	
UniRef90_R7AJP6	
UniRef90_UP10003B39C56	
UniRef90_UP10003468160	F

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UniRef90_D5ASQ6	L T L F L A A P R G F C C A G	G V D R A V K I V E M S L E E K W G A P V Y V R H E			
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UniRef90_UP100036BAD69	T V L L A A P R G F C C A G	G V E R A I E I V E R A L E L Y G P P V Y V R K Q			
UniRef90_D2ASA9	T V L L A A S P R S L C C A G	G V E R A I E T V E R A L A D R G A P V Y V R K Q			
UniRef90_X2D9N1	I K L I M L A A P R G F C C A G	G V T R A I E D T V E A A I K I W G A P V Y V K H E			
UniRef90_D0RPP9	L D I L L C A P R G F C C A G	G V D R A V E I V E K S L Q K F G T P V Y V R H E			
UniRef90_N1ZFU5	M A E I I I V A K S A G F G C C A G	G V S R A I N M A C C D E I V N K N K N I Y T Y G P			
UniRef90_I4D4T4	M I V K V R A D K A G F G C C A G	G V K R A L D M A E R T V E T S S A V S F G P			
UniRef90_A6DLL0	I M K L I I M A A P R G F C C A G	G V E R A L K I V D E A L E L L P H P I Y V N H E			
UniRef90_G8LU66	M E I I I L A K S A G F G C C A G	G V S N A V V K L V N E L T E K E K S G I Y T Y G P			
UniRef90_UP10003B6F736	M I I E I A E N A G F G C C A G	G V M R A I E I V D E A L K K Y K T I Y S F G P			
UniRef90_UP1000479A681	M P K V T L A K T A G F G C C A G	G V K R A V D I V Y Q E L E K G N K V C T L G P			
UniRef90_UP100026CCB4D	L D I I I A A P R G F C C A G	G V D R A I Q L V E L T I E K Y G A P V Y V R H E			
UniRef90_UP1000477E85	M M K I I I L A V P H G F C C A G	G V S R A I E T V E K V L E K F P E T V Y V L H E			
UniRef90_L0F9R1	M K K I I I R A E K A G F G C C A G	G V K R A L D M A E R T V L S S S T A S L G P			
UniRef90_R9MED1	M D V E L A R T A G F G C C A G	G V K R A V E T T V Y E I E N K A G G R I Y T Y G P			
UniRef90_R6PHY9	M E V R L A K T A G F G C C A G	G V K R A V E T V Y E Q A Q K R S D K I Y T Y G P			
UniRef90_UP10003B4EA4A	M E V I L A E H A G F G C C A G	G V K R A V E T V Y E Q V E H K D D K K I Y T Y G P			
UniRef90_A0Q0L7	M K K I I L L A E K A G F G C C A G	G V K R A V E D T A I N F S N E Y K K P I Y T L G P			
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UniRef90_UP10003792C4D	L E I I L L C A P R G F C C A G	G V D R A I Q L V E L A L E R F G A P V Y V R H E			
UniRef90_B5E9S9	M Q V I L L A K H A G F G C C A G	G V K R A T Q L A F Q A A N I G S E T Y T L G P			
UniRef90_R6WHX0	M E V T V A K S A G F G C C A G	G V K R A I I D T V Y Q E I E K G E Q V F T L G P			
UniRef90_I0IH52	M K V L L A N P R G F C C A G	G V E M A I I D T V Q E L V D L I G T P L Y V F H A			
UniRef90_B8IKB2	V R L V L A Q P R G F C C A G	G V V R A V E T V E A L Q S G S P V Y V R H E			
UniRef90_S6F9L7	M R K V L L A N E A N G F G C C A G	G V Q R A V E E A L K I K K H Y N K K I Y T T L G P			
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UniRef90_D1B5G9	M K V L V A S P T G L C F G	G V R R A I E A L E A T L E E R G R R V Y S L G S P			
UniRef90_B3SF22	L E I F M A N P R G F C C A G	G V E R A V E I V E L T L A K Y G A P V Y V R H E			
UniRef90_Q0AM16	L T I L R A A P R G F C C A G	G V D R A I Q I V E R A I E R F G A P V Y V R H E			
UniRef90_J4UZE9	L Q I K L A N P R G F C C A G	G V D R A I I D I V N K A L D I Y G A P V Y V K H E			
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UniRef90_A1ANP9	M R V I L A K R A G F F C F G	G V K R A T Q M A F E A A G M D K K T Y T L G P			
UniRef90_C9RDD7	M E V K R A K N A G F F C F G	G V V R A I L E I T L K A R E E K E G P L Y T L G P			
UniRef90_D0U4K6	M K V L L A N P R G F C C A G	G V D R A I E M V E R A L E L H G A P I Y V R H E			
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UniRef90_R6FKB4	M E I L V A K S A G F F C C A G	G V E K A I E S V Y K E I E T G K K P I Y T F G P			
UniRef90_U6ZZJ8	M Q V I K L A N P R G F C C A G	G V D R A I L E V V S Q A V R S E A A G L Y V R H E			
UniRef90_K0B1C2	M K V L I A K N S G F F C C A G	G V V K N A I I D T T M N I F Q N T N K N V Y S L G P			
UniRef90_J9DHK1	L K L L L A T P R G F C C A G	G V V D R A V L I V E R A L E I Y G P P V Y V R H E			
UniRef90_L1Q7U7	M R K V T L A K N A G F F C C A G	G V V K R A V D E A I K T Q R E Y N K K I Y T L G P			
UniRef90_S5XP22	L T L Y L L A A P R G F C C A G	G V V D R A I K I V E L A L S K W G A P V Y V R H E			
UniRef90_I2MXV7	T V L L V A S P R S F C C A G	G V V E R A I E V V E R Q Q T S G G R P V F V R K Q			
UniRef90_UP100037E034F	M E V I L L A D Y L G F F C C A G	G V V K R A I K I A R E N A A P D G S A C T L G P			
UniRef90_I5BTH5	L T V R L C G P R G F C C A G	G V V D R A I Q I V V L A L K K Y G A P V Y V R H E			
UniRef90_E4TIQ4	M E I V Y V A Q H A G F F C C A G	G V V E R A V K I V R N A A G E Y K N L Y T L G P			
UniRef90_A6LWH1	M S K V I L L A K S A G F F C C A G	G V V Q R A V V N E A I R I Q K H N S K I Y T L G P			
UniRef90_R5WGR4	M K I E L A K S A G F F C C A G	G V V K R A V D T V Y D V L K K K E G P V H T L G P			
UniRef90_Q5FFL5	V E V I L A T P R G F C C A G	G V V K R A V E K A R E A P K P V A S L G M			
UniRef90_Q2RIU7	M E V I V A D Y A G F F C C A G	G V V K R A V E K A R E A P K P V A S L G M			
UniRef90_R717L6	M E V T L A K S A G F F C C A G	G V V K R A V D M V Y E E A Q K K E Q V Y T F G P			
UniRef90_U2CHV4	M E V I L A E S A G F F C C A G	G V V K R A V D M V Y E Q I E T G K K I Y T T Y G P			
UniRef90_R6NNX0	M K N V R V A K S A G F F C C A G	G V V K R A V D M V Y A Q L E T N D E P I Y T Y G P			
UniRef90_U2CU13	M N V V K V A E T A G F F C C A G	G V V Q R A V D R V Y E L I G S D A A P I Y T L G P			
UniRef90_R6QGU6	M S N I V R V A E S A G F F C C A G	G V V K R A V D M V Y E Q V E T G K T V H T Y G P			
UniRef90_R9KH02	M Q V V V V A K T A G F F C C A G	G V V K R A V D M V Y E Q V E T G K T V H T Y G P			
UniRef90_C9LUH8	M E V F L A E S L G F F C C A G	G V V K R A I K L A R E Q A A P D G T S C T L G P			
UniRef90_R6FZ92	M K K I T L A A N E A N G F F C C A G	G V V Q R A V E E A I K I Q K Q Y S K K I Y T L G P			
UniRef90_UP1000478AF3B	M K I M V A N A S A G Y F F C C A G	G V V K R A I E S I D K L E Q R I G W I C T Y G P			
UniRef90_UP1000367862A	I V I N I F L A S P R G F C C A G	G V V N R A I V E I V K K T I N K F G A P V Y V R H E			
UniRef90_F1T689	M H I R I A T E A G A C C Y G	G V V N R A I L D M V E A L S H K I H G R I H T L G P			
UniRef90_Q6AL80	L E I R L A S P R G F C C A G	G V V E R A I E T V K L A L K E H G E P V Y V L H E			
UniRef90_A8ZT29	M K V V S I A K T S G F F C C A G	G V V D M V L L D A S N R Y T E P I Y T F G P			
UniRef90_M1M8U0	I T L L A A P R G F C C A G	G V V K R A I A I V E K A I S L Y E S I Y V N H E			
UniRef90_W9GP77	R V L L A A P R S F F C C A G	G V V V R A I E V V V D R A L L D Q R G A P V Y V V R R Q			
UniRef90_J7QLR6	L K I L L C S P R G F C C A G	G V V V R A I D A V E R A L A K F G P P V Y V R H E			
UniRef90_R6LFV3	M E V I I R A K S A G F F C C A G	G V V V K R A V D T V Y E Q V E K Q M G Q I Y T Y G P			
UniRef90_A0A011TER4	L T L R L C Q P R G F C C A G	G V V D R A I Q I V V L A I K K Y G A P V Y V R H E			
UniRef90_A512S9	M N V I L L A D K A G F F C C A G	G V V K R A L D T T I N T K E N L K G K I Y T L G P			
UniRef90_V2Y9R4	M E I V K V A K N A G F F C C A G	G V V V N K L S S E G K P V Y T Y G E			
UniRef90_G5F552	M P K I L V A D E A G A C C Y G	G V V V N R A I L Q M V R D A R G P I H T L G P			
UniRef90_H1D1W0	M E I Y K S K V M G F F C C A G	G V V R R A I L K I A E K A A D S G I K A V T F G P			
UniRef90_U2PW14	M R R I L L A E N A G F F C C A G	G V V V K R A V D E A I K N K E K Y N K K I Y T L G P			
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UniRef90_A5Z6G7	M E I T V A K S A G F F C C A G	G V V V Q R A V D S V Y K E L E E N S G K I Y T T F G P			
UniRef90_UP1000408D5A0	M E V I L L A E H A G F F C C A G	G V V V T R A V D V V Y D Q I K K N N D K K I Y T Y G P			
UniRef90_UP10003608B39	M K I I T A E H C G F F C C A G	G V V R R A I V E L A E K C H Y G A P V Y V A T L G P			
UniRef90_UP10003C7E477	L K I I L L S A P R G F C C A G	G V V E R A I E I V E K S I Q K Y G A P V Y V R H E			
UniRef90_B8I2T6	M E L V I V A N S A G F F C C A G	G V V V N R A I V K I V F E L A T K S D H K I Y T L G P			
UniRef90_R7M367	M K I I Y V A D P C G F F C C A G	G V V K R A I H V A E L Q A K G Y N D S I A T L G E			
UniRef90_I5AQI4	M E V I V A R S A G F F C C A G	G V V V K R A V E E V N R Q I E E G Q K P V Y T Y G P			
UniRef90_B6GBX2	L T I E V V A R H A G G V C Y G	G V V V E R A I L T L A A E A A R E S R G P V R T L G P			
UniRef90_D3PA04	M K I L V A V E H A G F F C C A G	G V V V E R A G V I V E D T A N K K S N V I T L G P			
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UniRef90_UP1000379759C	L T V L L A A P R S F C C A G	G V V V E R A I R A V E E A A L D R T G R P V Y V R H E			
UniRef90_X5M9V4	E V V M A M P R S F C C A G	G V V H R A I D I V V D R A L L D R F G S P V Y V R R Q			
UniRef90_A6Q2R7	M E I R L S I R L A A P R G F C C A G	G V V V D R A I L M V E R A I E K Y G A P V Y V R H E			
UniRef90_UP100047899EB	M K I T L A A N S A G F F C C A G	G V V V R L A E E A A N E P T H C V M L G P V			

		50	60	70	80
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UniRef90_Q07J28	V	H N K Y V V D S L R A K G I F V E E L S E I P E D A P V V F S A H G V P K D V			
UniRef90_F8KY31	V	H N R A V D G L K A K G I F I E E I E V P I G A R L I Y S A H G V S P A V			
UniRef90_D5ASQ6	V	H N K F V V D T L A A K G V V E E L D E C P V D R P V I F S A H G V P K A V			
UniRef90_R6RL53	I	H N E E V V R D L L E E R G V R V L E S E E D L E S G T V I I R S H G V P A S I V			
UniRef90_UP100036BAD69	V	H N Q H V V A Q L A G R G V F V D E L D E C P D G A T V I F S A H G V S P A V			
UniRef90_D2ASA9	V	H N V H V V A D L R R G G V F V E E L D E V P D G E T V V F S A H G V S P A V			
UniRef90_X2D9N1	V	H N Q I V V C D R L R E K G I F I E D L A D V P E G A K V I Y S A H G I P P E V			
UniRef90_D0RPP9	V	H N K H V V Q N L E N K G G I F V D E L D E I E D K T V I F S A H G V S K K V			
UniRef90_N1ZFU5	I	H N K E V I A D L E K K G G I H V I E N L E Q V K Q G T V M I R S H G V A P R V			
UniRef90_I4D4T4	I	H N Q V V Q R L E K Q G G I R V V N G E E A K A D Q A L I I R S H G V A P R V			
UniRef90_A6DLL0	V	H N S H V V E F Y K K G G V F V E E I D D V P D G S F I F N A H G V P P S L			
UniRef90_G8LU66	I	H N D Q V V E E Q L R E K G G V E I I D N I D D A I P G R H I V I R A H G V A P Q I V			
UniRef90_UP10003B6F736	I	H N P Q V V E E Y E K K G G L K V I E S L D E A D G P V L I R S H G V P P H V			
UniRef90_UP1000479A681	I	H N D E V V N D M I S K G G V K V I A E E D I A K G Y T V I I R S H G V S K E V			
UniRef90_UP100026CCB4D	V	H N R F V V D M L R G K G V F V E E L D E V P A G V P V V F S A H G V P K A V			
UniRef90_UP10004778E85	V	H N Q H V V D D L R Q K G V F T D C L A D I P E N S I V V F S A H G V S A D V			
UniRef90_L0F9R1	I	H N K Q V V E K M E K Q G G V R V V E V K E T E A G D T L I I R S H G V P P D I V			
UniRef90_R9MED1	I	H N D E V I R D L K Q Q G G V E V L N T L E E L E E G T V I I R S H G V P E S V			
UniRef90_R6PHY9	I	H N E E V V K D M R S K G G V E V I V T Q E E L Q S G V V I R S H G V A K E I			
UniRef90_UP10003B4EA4A	I	H N E E V V K D L L E S K G G V E V V N N S N V S E D G T I V I R A H G V P R E T			
UniRef90_A0Q0L7	I	H N N D V V E F L L K S K N I T S I E L D E L K E G D V I I I R S H G V T P N V			
UniRef90_A0A017RWS7	I	H N E Q V V K D L L K S K S I I D V I N D D E I K N G N D K I I I R S H G V S K E I V			
UniRef90_UP10003792C4D	V	H N R Y V V D G L R D K G V F V E E L D E I P D D G P V V F S A H G V P K S V			
UniRef90_B5E9S9	I	H S P Q V V Q R L E E M G V P V D N V S V E V E T G G T I I I R S H G V A A E E			
UniRef90_R6WHX0	I	H N E Q V V Q E L A D K G G V R V I H S L E E I K E G T V V I I R S H G V S E K V			
UniRef90_I0IH52	V	H N K H V V E R F V E Q G G V F V E R I D E V P E G E T V V F S A H G V P R A V			
UniRef90_B8IKB2	V	H N G R V V A D L K A K G R F V E S L D E V P D G A L T I F S A H G V P K S L			
UniRef90_S6F9L7	I	H N N D V V N Y L E E N N I F F E N I D E L T E G D V I V I I R S H G V T K Q M			
UniRef90_R6DUV3	I	H N E Q V V Q D L L E S K G G V Q V L H S I D E E K D A V V I I I R S H G V I			
UniRef90_D1B5G9	I	H N P Q E V E R L L K A K G G V V V D E I D Q V P P G V T L F I I R S H G V S P Q V			
UniRef90_B3SF22	V	H N R Y V V E N L L K N K G I F V E E I A E I P D N A V T I Y S A H G V S E K V			
UniRef90_Q0AM16	V	H N R H V V E R L L E A L G V F V E E I D E C P T D R P V V F S A H G V A K A V			
UniRef90_J4UZE9	V	H N K V V V E D L L K S R G I F V E E I I N E I P P D D S L V I F S A H G V S S K V			
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UniRef90_A1ANP9	I	H S P Q V V K D L L E E M G V R A L K D L D S M D S G T I I I R S H G V A S H E			
UniRef90_C9RDD7	I	H N P Q V V E F L L A A K G I K L A E S L E I P E G T V I I R S H G V D P A V			
UniRef90_D0U4K6	V	H N K F V V N E L L K S K G I F V E E I D E V P P R G K V V I F S A H G V S Q A V			
UniRef90_A0A023HW45	V	H N A Y V V V E S F R K R R N V F V A S L D E V P T G A V L V F S A H G V A K Q V			
UniRef90_R6FKB4	I	H N E Q V V V E D L L E K K G G V S V I D T V E E L E N G S V V I I R S H G V P K K I			
UniRef90_U6ZZJ8	V	H N K F V V V E D L L R K R G I F V E E I D Q V P D D V V I V I F S A H G V S Q A V			
UniRef90_K0B1C2	I	H N N Q A I E E L L K K T G L E V I D S I Y D V G K G K V I I R S H G V P L D I V			
UniRef90_J9DHK1	V	H N K R V V D D L L A A K G V F V E E L S D L P E K T P V I F S A H G V P K A V			
UniRef90_L1Q7U7	I	H N N D V V N Y L E D N D I Y A I D I E N L N S G D V I L I R S H G V S K E V			
UniRef90_S5XPZ2	V	H N K F V V V D S L L R K R G I F V E E L S E C P D D R P V I F S A H G V P K S V			
UniRef90_I2MXV7	V	H N T H V V I A G L L A R R G V F V E E L D E I P A G S L V V F S A H G V S P Q V			
UniRef90_UP100037E034F	V	H N P Q M V E R L L K E E G V G T I S S L D D M K R G R V I I R S H G V G P E T			
UniRef90_I5BTH5	V	H N R Y V V V E G G L Q E R G V F I I E L S E I P E D C P V V F S A H G V P K S V			
UniRef90_E4TIQ4	I	H N P Q L V V N E L L K S Q G V D V E S T D D L S E G S T V V L R S H G V E K Q E			
UniRef90_A6LWH1	V	H N N D V V V K Y L E E E N N I F S I E F E E I N K G D T I V I I R S H G V S E T V			
UniRef90_R5WGR4	I	H N E Q V V V S E L L E E R G V T A V N G I E E L E G A T L I I I R S H G V P R E V			
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UniRef90_R717L6	I	H N E Q V V V T D L L Q K K G V A V L N S I D E L L T D G T V I I I R S H G V V S K D V			
UniRef90_U2CHV4	I	H N E F V V V Q D L L E E K K G G V E V I E S E E A L L E E G T I V I I R S H G V P K S I			
UniRef90_R6NNX0	I	H N E E V V V K D L L E A A K G V T V I H D E E S E K G T I V I I R S H G V V G E K I V			
UniRef90_R2CU13	I	H N E E V V V S D L L E E K K G G V A V I C E K D L G K G G T V V I I R S H G V V G R R V			
UniRef90_R6QGU6	V	H N R T V T D D L L A S K G L E I V N L D G L T E G T L L I I R S H G V V G K A L			
UniRef90_R9KH02	V	H N E E V V V K D L L E E E K G G V K V I V G N R Q D P R E G T V I I R A H G V P K E I V			
UniRef90_C9LUH8	V	H N P Q M V S R R L L A E E G V G M V N A L P D M E K G T V I I R S H G V V G P L V			
UniRef90_R6FZ92	V	H N N D V V V K F L L E E N N I Y F E N I D M L K E G D V I V I R S H G V G I E V			
UniRef90_UP1000478AF3B	V	H N P Q V V V E H Y E N N M G V K V A N I I D I P P G S N V I I R T H G I S S K E			
UniRef90_UP1000367862A	V	H N Q F V V V E N L L R S Q G I F V E E L S E I K D K S P V I I F S A H G V P K E V			
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UniRef90_W9GP77	V	H N S H V V V R R L L E A R G V F V D E L L A D V P S G A T V V F S A H G V A P D V			
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UniRef90_U2PW14	I	H N N D V V V S M L L E D N N N V Y A I S M D D I K N D D V V L I I R S H G V S K K V			
UniRef90_R5P410	I	H N E E V V V S D L L E R K G V H V L S E E D I D D A K E I V I I R S H G V P K R I V			
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UniRef90_UP10003608B39	V	H N P Q V V V E R L L Q K Q G V G V A A S L N E F S M G T V V I I R S H G V V P S V			
UniRef90_UP10003C7E477	V	H N K F V V V D D L L R K K G I F V E E L D E I K D K S P V I I F S A H G V V P K T V			
UniRef90_B8I2T6	V	H N D Q V V V Q K L L T K H G V T T I I P E A V A P K V V I I R A H G V V G P K I V			
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UniRef90_X5M9V4	V	H N R H V V V E G G L E T K G A V F V E E L S E I E D S T V I I F S A H G V V P K A V			
UniRef90_A6Q2R7	I	H N K N E I D R L L K E K Y N V V E E I D E I Q E N S R V V I I R T H G I P K E K			
UniRef90_UP100047899EB	I	H N D L L I E R L L E S R G L C V H S P E E I P S G T S V I I I R S H G E E K K E V			

	90	100	110	120
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UniRef90_D5ASQ6	P A E A E R R N M I Y V	D A T C P L V S K V	L E A E R H A E E G L Q	V [M] V
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UniRef90_X2D9N1	R Q Q A A D R Q L Y E V	D A T C C P L V T K V	H V Y V K K A A K G E N	V L I I G
UniRef90_D0RPP9	Y E D A E I K N I Q F I	D A T C C P L V S K V	R E A E L L N K Q G Y Q	I I I I G
UniRef90_N1ZFU5	Y D A I K Q K G L L Q M I	D G T C C P F V K R I	H D I V K Q A Y E Q K K Q	I I I I G
UniRef90_I4D4T4	Y E E A E K E G I K V V	D A T C C P F V Q K A Q H	L A A E S A Q K G H	V I V V G
UniRef90_A6DLL0	V K A S K E R G M K I V	D A T C C P L V S K V	H F E A I R Y A K Q G Y K	I I I I G
UniRef90_G8LU66	Y E D I K K N K G L I L N D	D A T C C P F V K I	H N L V N K K C	V I V V G
UniRef90_UP10003B6F736	Y E E I K K K G L T Y I	D A T C C P F V K E A Q K F A K Q L Y	E D G Y K	V V I F
UniRef90_UP1000479A681	Q D E L E A S G C N V V	D A T C C P F V K I H N T V S K Y A	E D Y D	V I V F
UniRef90_UP100026CCB4D	P D K A T E R G L V F L	D A T C C P L V S R V H R Q A E R L V	E A G R H	V F I
UniRef90_UP1000477E85	E E L L A R M R N L R V V	D A T C C P L V D R V H R K V R R L	S S Q G E E V	V I M
UniRef90_L0F9R1	Y Q E A Q R L Q V E V V	D A T C C P F V Q K A Q R L	A A E A S K T S Q	V I V V
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UniRef90_B8IKB2	E A E A E A R G L P T I	D A T C C P L V A K V H A E A R R Y A A Q G R V	L V	V L I
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UniRef90_R6DUV3	Q D A L E K K D S I V	D A T C C P F V K K I H N V H E K W N E G Y E	I V V V	
UniRef90_D1B5G9	F R E A L R R C G E V I	D G T C C P F V R K A Q E R A M V L S	D E G Y P	V L I V
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UniRef90_C9RDD7	I I Q E A A E A R G L E V I	D A T C C P Y V R R A Q E L A C E	L A K Q G Y Q	V V V V
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UniRef90_R6FKB4	Y D A I E K Q N L E I V	D A T C C P F V K K I H N I V K K E S E E G G K R	V I I I G	
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UniRef90_J9DHK1	T S E A D R L E L N W L	D A T C C P L V S K V H I E A Q Q H F S K G Y E	I L M I	
UniRef90_L1Q7U7	F D L L T D K G L I V I	N A T C C P F V T N I Q K K V N K F S L	E T G Y G	V V I I G
UniRef90_S5XPZ2	P A E A R A R E M V F	D A T C C P L V S K V H V E A E R H H Q A G L Q	M V M I	
UniRef90_I2MXV7	R A E A E R R N L E V V	D A T C C P L V T K V H A E A R R F A E R G S S	I V L I	
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UniRef90_I5BTH5	P A D A Q N R N L F Y I	D A T C C P L V S K V H K Q A M R H H R	V L L I	
UniRef90_E4TIQ4	L N I L A K K N I H I V	D A T C C P Y V N K A H S E A V N L S	K D G Y F	V V I I G
UniRef90_A6LWH1	L D T L E Q K E L K V I	N A T C C P F V A N I Q K K V V K Y S	E K G Y H	I V I L
UniRef90_R5WGR4	L Q K L E E Q E I H Y V	D A T C C P F V K K I H D T V Q K F S	S E E G Y E	I L I I G
UniRef90_Q5FFL5	K Q L A E L R D L L E V I	D A T C C P L V N K V H E V Q L Y D K S G Y Q	V I I I G	
UniRef90_Q2RIU7	L V R A R D K G L L E I I	D A T C C P Y V K R A Q H L A Q K M A E G Y Q	V I V I V	
UniRef90_R717L6	Y D I L Q K E N E I R I V	D A T C C P F V K K I H N I V K K H T E E N E N	V I V I I G	
UniRef90_U2CHV4	C E K I E K Q G L E C	D A T C C P F V K R I H K I V E K E S A A G R Q	I V I I G	
UniRef90_R6NNX0	Y Q T L E N A G Y H V	D A T C C P F V K R I H R H V R E Y G D A G Y	H V V I I G	
UniRef90_R2CU13	Y N T I L K K Y G L G Y	D V T C C P F V K L I H K I V E R E S S R G A H	I V I I V	
UniRef90_R6RQGU6	Y D E A E A G K G L K L	D G T C C P F V K K I H N V H E K L P N G M G	I V I V	
UniRef90_R9KH02	Y D L M E E K Q L E R I	D A T C C P F V K H H R I V Q K R S E E G R Q	I V I V	
UniRef90_C9LUH8	Y D E A K E R G G L S L V	D A T C C P H V K K A Q S T A H E L F Q E G Y S	V V I V	
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UniRef90_J7QLR6	S A A A E G R G L L A I	D A T C C P L V T K V H R E A E I H R R R G R R	V L L V	
UniRef90_R6LFV3	C D L M D E K G I E Y V	D A T C C P F V K R I H K I V A E E S K K K G S R I	I I I I G	
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UniRef90_A5I2S9	I N Y L K D K G L L N V I	N T T C C P P H V A N I Q I K A K K Y Y E E G Y K	I V I V	
UniRef90_V2Y9R4	Y D K L L S E Q G T K Y E	D A T C C P F V K K I H K L A R E Y S E D D N N K	I V I I G	
UniRef90_G5F552	E D A A R A R S H D E V L	D A T C C P F V I R A H N A A E R L A R E G Y Q	V L I L	
UniRef90_H1D1W0	Y N M L K C K N L A L M D	D A T C C P F V R R N Q E M A H R L V E D G K Q	V I I I G	
UniRef90_U2PW14	I Q E L L E A H G V T T V	N A T C C P Y V T N I Q K K A D K Y N K E G Y K	M V V	
UniRef90_R5P410	Y K K L E Q L G F E I V	D A T C C P F V K K I H R I V Q E E T E Q G H C	V V I V	
UniRef90_A5Z6G7	Y D I L E Q K Q K L K M V	D A T C C P F V K K I H N I V L D E S N N G K T	I I I I G	
UniRef90_UP1000408D5A0	Y E I M K E R G I E Y I	D A T C C P F V K K I H N I V L E K E S A E G K T	V V V V	
UniRef90_UP10003608B39	Y Q E A E S K G L T V V	D A T C C P P H V Q K A Q Q A A R F F H E G R Q	V I I I G	
UniRef90_UP10003C7E477	P D D A R N Y N M T Y V	D A T C C P L V S K V H R E A E N L N K A G Y H	I I I I G	
UniRef90_B8I2T6	I E G L K N R G L E V V	D A T C C P R Y V E K I H S L V N K K Y K E G Y Q	A V	
UniRef90_R7M367	Y E E A R Q R E L K V I	D A T C C P P H V R K A Q K T A A E L A D E G R F	V I I I G	
UniRef90_I5AQI4	Y E R M Q A T G A H I V	D A T C C P F V K K I H E I A R K A G E E D A A	L L I A G	
UniRef90_B6GBX2	V D R A E R L G L T V L	D A T C C P F V K V H M A A E K L V R E G Y Q	L I V V G	
UniRef90_D3PA04	Y E L L K N K G V E I I	D A T C C P F V I K A H N S A M K L S K E G Y S	V I V F G	
UniRef90_I4YME7	H K K L E E S G L D I I	D A T C C P F V K R I H K I V D E E S N K G K S	V I V V G	
UniRef90_UP1000379759C	R A E A D A R R R L S V I	D A T C C P L V A K V H A E V R R F A G D H T	V F L I G	
UniRef90_X5M9V4	P A D A E S R G M F Y L	D A T C C P L V S K V H V E A N R H H D E G R H	I L M I G	
UniRef90_A6Q2R7	L A L L K E K N V E V I	D A T C C P F V T K P Q E I V S K M S E E G Y S	V I F G	
UniRef90_UP100047899EB	W D T L S Q K G C T V L	D A T C C P F V K V S K I H A I V V A K A S Q Q G R Q	V V I I G	

		130	140	150	160
UniRef90_R6SBL8	N R E H P E	V M G I E G W A Q G P A T I I I Q T E E E A R A F E L I S E S E K V			
UniRef90_Q07J28	H S H H P E	V V G T L G Q L P D G A V S L I E T A A D A S A Y Q P K D P D N L	A		
UniRef90_F8KY31	H R N H V E	I I G T A G E A P D V T T I V E S P A D V E K L S Y D E K L	F		
UniRef90_D5ASQ6	H K G H P E	V I G T M G Q L P E G E V L L I E T A A D V A E V R D P E K L	A		
UniRef90_R6RL53	N A D H P E	V A G I R G W C K G P Y T V I K N Q E E A R A F L S E C P E K V	C		
UniRef90_UP100036BAD69	H A G H E E	V D G T V G E A P A S T R V F D P A A D P A S L P D L E G R S P	V		
UniRef90_D2ASA9	H A G H E E	V E G T L G E A P R Q S V L V Q T P A E A A A L E V D D P T R V	S		
UniRef90_X2D9N1	H K K H V E	I Q G V V A E A P E Q T T V L E T P E D V D K L P F G P D D K	K I	F	
UniRef90_D0RPP9	H K N H P E	V I G T M G Q L P A G E V T L I E N I E D I K D I K N K E K I	A		
UniRef90_N1ZFU5	D G K H P E	V Q G I N G W C E Y S A I I L A E V E Q T E Q T Q F C N N K N Y	T		
UniRef90_I4D4T4	D K L H P E	V Q G I N G L G W A G V Q A I P I Q T V E E A R E L P A Y S N L	A		
UniRef90_A6DLL0	H E G H P E	V I G V M G E A P D A I Y L V E K P E D V D D L E F T Q D D K	K I	A	
UniRef90_G8LU66	D K N H P E	V I G I S G W C E N K S S V V D S I A D V D K L D I K N D K	I	C	
UniRef90_UP10003B6F736	D K K H P E	V K A H L G Y T N Y K A D V I D S P E L A R S I K A T R V	G		
UniRef90_UP1000479A681	S K D H P E	V Q G I L G W C K N K G K A L E S A E D I E V I F E P R N E K	K K V	C	
UniRef90_UP100026CCB4D	H A G H P E	V V G T F G Q V P E G S M S L I E T V A D A E A Y A P A D P	D R L		
UniRef90_UP1000477E85	H A G H Q E	V V G T L G Q Y N S E A G G I Y L V V N H H D I E N V K N P A	K L S		
UniRef90_L0F9R1	D R Q H P E	V Q G I L G W A G V H S I A I L E K L E E A S E L P F Y E K	L S		
UniRef90_R9MED1	N G S H P E	V M G I R G W A K G P V D I I Q N A R E A E D F S L E N K G Q	K V	C	
UniRef90_R6PHY9	D E S H P E	V Q G I K G W A E N D V T V I K T V E D A Q K F H V S S D	V K	C	
UniRef90_UP10003B4EA4A	N A K H P E	V E G I V S V W A N G P V Y V I E S L E D A Q K F A L P V	E T E	L	T
UniRef90_A0Q0L7	D K S H P E	V V G I N G Y C N N T A I I S K D G L N I E S L P D	K V	C	
UniRef90_A0A017RWS7	D A S H P E	V Q G I N G W C E N K G I I I N G E E D I P S V E E K Y G K	I	C	
UniRef90_UP10003792C4D	H A G H P E	V I G T M G Q L P E G T V T L I E T V A D A L A Y T P R N P	L A		
UniRef90_B5E9S9	D A V H P E	V Q G I V S Y A A G R V Y V V S S H K D V E R L P R M S K	I G		
UniRef90_R6WHX0	S R T H P E	V E G I N G W C E D S A A V L E T V D E A E N F R P D P Q K	K L	C	
UniRef90_I0IH52	H A D H Q E	V K G T L G E A P A D T T V V E S A A D V A E L D F P P D Q	E L	I	S
UniRef90_B8IKB2	H A G H V E	V E G T L G Q V D G P V H L V G S V A E V A A L L S P E T	P V	A	
UniRef90_S6F9L7	D K K H P E	V V G I N G W C E N K A I I T K N G D F K E S L P N K V	C		
UniRef90_R6DUV3	S A K H P E	V Q G I C G W C D N C C S V I E T L E E A Q K Y T Q K E P	K K I	C	
UniRef90_D1B5G9	D G E H P E	V K G I L I G F V N G F A A V V P H R G R R L E E V L D G	H R F Q K	V G	
UniRef90_B3SF22	H K N H P E	V I E G T S G R V K R E V F V I E N I Q D V E K I L P F S K	D E S I	S	
UniRef90_Q0AM16	H A G H P E	V V G T M G Q L P D G A I S L V E T V A D A E R F E P	N D R I	I A	
UniRef90_J4UZE9	H E G H P E	V E G T M G R H N N D N S S I Y N E N D A N S I K L N K K N	E L	A	
UniRef90_UP10002626717	H A E H V E	V Q G T M G E A P E R M I V I E T I Q D A E K V Q L T D S N	Q I	A G	
UniRef90_A1ANP9	D A D H P E	V Q G I V S Y G G D K V F V V G S G E E V R K L P I M N	K I	G	
UniRef90_C9RDD7	D R D H P E	V K G I L G W A G P Q A T V V G S G A E E V A G L L P E A S	A Y G		
UniRef90_D0U4K6	H E G H P E	V E G T L G Q S S G D Q T V Q L V E T V S D V E N L E I T	D D K I	S	
UniRef90_A0A023HW45	H K G H R E	V E G S M G Q I Q S E V L L V Q N V D D V Y N L P V D A E	T K L	A	
UniRef90_R6FKB4	N D N H P E	V E G I K G W V G E A I V I K D E E D I E K I D S F R N E S	I C		
UniRef90_U6ZZJ8	H A G H P E	V E G T M G Q Y D A S N G G I Y L V U D E D D V I A Q V Q	N P E R	L	A
UniRef90_K0B1C2	D R N H P E	V I G I N G W C N N K N K A Y I V N V S E E D D V N K I P S	D Q I	C	
UniRef90_J9DHK1	H A G H P E	V I G T M G Q L P A G T I R L I E N T E D A E T I E V S D P	S R L	A	
UniRef90_L1Q7U7	D K N H P E	V I G I N G W C N N K N E A V I T K D G K I I E D L P R D	P E R L		
UniRef90_S5XPZ2	H I G H P E	V L G T M G Q L P E G E V I L V E T V D E V A T L R D P	S N I	T	
UniRef90_I2MXV7	H A G H E	V E G T Y G E A P D A T V V V G G P Q D I A A L D P D P S	N I		
UniRef90_UP100037E034F	E K E H P E	V Q S I V Q W A G G S V A V V E T V A E A A A V L S V P K	L G		
UniRef90_I5BTH5	H A G H P E	V I G T M G Q L P E G T V T L V E T V A E G A N T L E R P	D E L G		
UniRef90_E4TIQ4	E K D H P E	V K G I A S Y I E G E Y T I V S S P E E A Y N I D F R E	K I G		
UniRef90_A6LWH1	D K N H P E	V V G I N G W C D D K A I I T K D G T F D E E N M P H	K V C		
UniRef90_R5WGR4	N R T H P E	V K G I L G W T K D S G T V I E N E Q E A R Q Y V S R Y P	E K K K	C	
UniRef90_Q5FFL5	H K G H R E	V E G T V G Q I S T P V I V Q N L N D I D K I E I F D P D	K L A		
UniRef90_Q2RIU7	D A A H P E	V Q G M L G W A G P G A V V V P D K K C A A A L P F H P	R R A		
UniRef90_R717L6	N A K H P E	V E G I K G W G G D N V T V I E T I E E A E A Y V P S Q E	K T C		
UniRef90_U2CHV4	N A G H P E	V E G I Q G W S V T P A I V I E S E K E A Q E F V P E A G	K K L		
UniRef90_R6NNX0	N A S H P E	V E G I Q G W G N E E I T V I G T R E A A E N F R V S A G	K K V	C	
UniRef90_U2CU13	D P D H P E	V Q G I C G W C Q P Y T V V R N A E D A E K F N I S P E	K E V		
UniRef90_R6RQGU6	D G T H P E	V I G I N G W C E N A A V I L E D E E A A K T K E I P E	K D R Y A		
UniRef90_R9KH02	N E T H P E	V E G I K G W S K T P V T V V E T Q E Q A Q N F S A N E G	Q K L	C	
UniRef90_C9LUH8	E K L H P E	V R S I F E W A G G D A V I V D S V E G A E A V A P C	A R L	G	
UniRef90_R6FZ92	D K K H P E	V V G I N G W C N N D A I V T N G E F D E E L P K K V	C		
UniRef90_UP1000478AF3B	D P Q H P E	V K G V I N G W C E G T A I L L D S V E R A R E L P C L E	K G C		
UniRef90_UP1000367862A	H K N H P E	V I G T M G Q I D N N Y I T I E N K D D I K N Y F P K V	Q N N K F A		
UniRef90_F1T689	E K G H A E	V E G T L G H A P G A V I C V E T P E D I E A L S I K R R	R V G		
UniRef90_Q6AL80	H R H H P E	V E G T A G R V T G E V Y V V A T A A E A E K L Q V N N S E	K I A		
UniRef90_A8ZT29	D K D H P E	V V G L L G Y A G D R G V V A D S L E A L K A L P A F E	K A I		
UniRef90_M1M8U0	H K G H P E	I D G T L G Q D F S G I H V V E N V R D V Y L L D I N D N	E L I G		
UniRef90_W9GP77	H R D H E E	A I I G T M G E R P D S T R L V Q D A A E E A A R V E I	P D P G R	V R	
UniRef90_J7QLR6	H S G H P E	V V G T M G Q L P D G A V V L V E S V E D I K L D D D E	S N L A		
UniRef90_R6LFV3	N P D H P E	V E G I R G W A G E N V T V I K N A E E A E K F E N T T	S E R I	I C	
UniRef90_A0A011TER4	H A G H P E	V I G T M G Q L P E G A V T L V E T E D D A R N L Q P A D	P E A L	G	
UniRef90_A51S29	D E N H P E	V I G I N G W C N N S A I I S K D G A N I N N L D K K V	C		
UniRef90_V2Y9R4	S K H P E	V I G I R G W C Q L T E P V I F E T V E E V L N Y S E N S	D K K H I		
UniRef90_G5F552	E E G H P E	V E G T L G H A P Q A L I V V G G P E D L E G V R L A R R	V G		
UniRef90_H1D1W0	E K R H P E	M K S V A E W A V G H S Y Q V E T M E D V D A L P P L D E	A Y		
UniRef90_U2PW14	D K N H P E	V I G I N G W A D D N A I V T K D G N I I E P I P D	K V C		
UniRef90_R5P410	D E N H P E	V C G I R G W C V R E P I I V N S V E Q A K K K L D F L D	K N V Y		
UniRef90_A5Z6G7	N D N H P E	V E G I K G W V N G E V I V I N K E E Q L E K L P E Q T K	A C		
UniRef90_UP1000408D5A0	S A K H P E	V D G I V V S Y A S G P V Y V V E T P E E A T K L G I P	T D I C		
UniRef90_UP10003608B39	E H R H P E	V Q S I L E W A Q R Q A K V V V E N K E E A E S L P E Y E	K I G		
UniRef90_UP10003C7E477	H K N H P E	V I G T M G Q L P E G S I D L I Q S E E E A K N Y Y N K D	D K K I A		
UniRef90_B8I2T6	D K T H P E	I I G I N G W C D N S A F A I I E D E Y N V D K L P D I	K K K I C		
UniRef90_R7M367	E K R H P E	V Q S I L K A W A G S D S V S L I E T P D D L G S L P E	K D K F G		
UniRef90_I5AQI4	D P D H P E	V Q G I M G W T D G E V H V V K S T E Q L E K I E K S L	G K T E I		
UniRef90_B6GBX2	E S G H P E	V E G I M G H A D E R A R V V S T P A D L D A I E L S	R K V G		
UniRef90_D3PA04	D K N H P E	V K G I V V S Y V E G E Y F L V S N S E E A K N L P F	R K K Y G		
UniRef90_UP100047A8BCD	S A N H P E	V E G I V V S Y A T G K V Y V I D S P Q R A Q E F N V	D E E Y T		
UniRef90_I4YME7	H R G H V E	I E G T T G Q I D G T V H V I E S V A E A T V R V L N P	E R I A		
UniRef90_UP1000379759C	H A E H E E	V E G T Y G E A P A N I V V V N D A E Q A R T V E A R D	P A K V S		
UniRef90_X5M9V4	H E G H P E	V E G T L G Q L P D G A I T L V E T V E D A N T V P D P	A K L A		
UniRef90_A6Q2R7	D I N H P E	I K G V V M S Y A T D P I V V L S V E E L E G K P L K E	K V A		
UniRef90_UP100047899EB	Q A D H P E	V M A I A G W C Q E A F V F S S T Q E L E S W L D E A A R	E S P L T		

	170	180	190	200
UniRef90_R6SBL8	V V A Q T T F N Y N K F K D L V E I S E K R Y D I V L N T C N A T K E R Q			
UniRef90_Q07J28	F V T Q T T L S I D D T S G I V S I L R K R F P N P H K E D C Y A T T T N R Q			
UniRef90_F8KY31	Y I T Q T T L S L S L D D V K E I T E A L Q K Y P H V P S S S C C Y A T T T N R Q			
UniRef90_D5ASQ6	W I T Q T T L S V D D T A E V V A A L Q A R F P S P G K D D C C Y A T T T N R Q			
UniRef90_R6RL53	I V S Q T T F N Y N N F Q E I V E A A V A G L R S R Y P D H P S E D C C N A T Q D R Q			
UniRef90_UP100036BAD69	W L S Q T T L A V E E V I E A A V A G L R S R Y P D H P S E D C C Y A S S N R Q			
UniRef90_D2ASA9	Y L T Q T T L S M D D C A E I L G A L L K K F P Q T P S G S C C Y A T T T N R Q			
UniRef90_X2D9N1	Y A T Q T T L S V D D T K D I I D A L K I E F P N P I K S D C C Y A T T T N R Q			
UniRef90_D0RPP9	Y I T Q T T L S V D D T K D I I D A L K I E F P N P I K S D C C Y A T T T N R Q			
UniRef90_N1ZFU5	V V V Q T T F R K N K F D A I I E I L K Q K G L Q L D I F D T C C S A T A E R Q			
UniRef90_I4D4T4	V L A Q T T L S A A S F A E I V V E E K Q H A E H T V H D T C C N A T A E R Q			
UniRef90_A6DLL0	Y I T Q T T L S V D D D C A V I V E E K Q R Y P G V S E P K D C C Y A T T T N R Q			
UniRef90_G8LU66	V V S Q T T L S R K K W E E I V E Y I E K K Y G N V V K Y D T C C S A T S K R Q			
UniRef90_UP10003B6F736	V I S Q T T Q S V E R F G L T I G E L A K R I R E L K V F N T C C D A T E K R Q			
UniRef90_UP1000479A681	V V V A Q T T F N Q K F K E L V E I S K S G Y D I A V N T C C N A T A E R Q			
UniRef90_UP100026CCB4D	F L T Q T T L S I D D T A A V V A T Q R R F P T M L S P E D C C Y A T T S N R Q			
UniRef90_UP1000477E85	F V T Q T T L S V D E T A A T I R E L Q S C F P G I Q G P N D C C Y A T Q N R Q			
UniRef90_L0F9R1	V L A Q T T Q P A A N F H S I V D E L R K H T K E L K V I H N T C C N A T E E R Q			
UniRef90_R9MED1	V V V S Q T T F N Y N K F Q E L V E I I T K G G Y D I I V L N T C C S A T K E R Q			
UniRef90_R6PHY9	V V V S Q T T F N Y N K F K Y L V E I I S K S Y D I S V L N T C C S A T K E R Q			
UniRef90_UP10003B4EA4A	L V S Q T T F N Y K K F K D V V E I F N G K G Y N I N V N T C C N A T Q E R Q			
UniRef90_A0Q0L7	I V S Q T T E K Q E N F N K V I D K I T P L C K S L A N F N T C C N A T K T R Q			
UniRef90_A0A017RWS7	V V V A Q T T F N Q S K W N S I I C G L L N A K E I L I F N T C C S A T E L R Q			
UniRef90_UP10003792C4D	F I T Q T T L S V D D T S A I V K V L T E R F P A I T A P E D C C Y A T T N R Q			
UniRef90_B5E9S9	V V V A Q T T Q S F V E H L H E V V A A C L A R G G E A R V E C C D A T A V R Q			
UniRef90_R6WHX0	I V S Q T T F N Y K K F K D M V A F E K K S Y D I L V M N T C C N A T E E R Q			
UniRef90_I0IH52	Y L T Q T T L S V D D D A Q T V I R A I E A R F P R A P P K E D C C Y A T T T N R Q			
UniRef90_B8IKB2	Y V T Q T T L S V D D D T R A I I A A L A A R F P D L V G P D C C Y A T Q N R Q			
UniRef90_S6F9L7	A V S Q T T E K E E N W E N T L D N L S K N C K E L L P F N T C C S A T E V R Q			
UniRef90_R6DUV3	I V A Q T T F N Y K K F E D I V D L L K K S Y D I L V M N T C C S A T E V R Q			
UniRef90_D1B5G9	V L S Q T T Q K L E V F F D V V K A L V G I V P E V R V Y N T C C S A T L E R Q			
UniRef90_B3SF22	Y V T Q T T L S V D D D T K N I I D A L K N A F P N I K G P E N C C F A T Q N R Q			
UniRef90_Q0AM16	F V T Q T T L S V D D D T S A I V Q A L Q A R F P D M K A P E D C C Y A T T N R Q			
UniRef90_J4UZE9	V V T Q T T L S V D E T K S I I S I L R D R F P K I I T P D D C C Y A T Q N R Q			
UniRef90_UP10002626717	Y L T Q T T L S L D D T F E I I K I L K K R F P G I I P P K D D C C Y A T Q N R Q			
UniRef90_A1ANP9	V V V A Q T T Q S F E N L K N V V S E C L Q R G G E I R V F N T C C D A T A V R Q			
UniRef90_C9RDD7	V V V A Q T T Q P V N R L Q E V V Q A L P R T K E V R V Y N T C C S A V A S R I			
UniRef90_D0U4K6	Y T T Q T T L S V D D D T Q K I V Q A L L K E K I I P N Q A P D D C C Y A T Q N R Q			
UniRef90_A0A023HW45	Y V T Q T T L S V D D D T R V I V E A L K T R F P D I V G P D D C C Y A T T Q N R Q			
UniRef90_R6FKB4	I V S Q T T F N Y N K F K Y L V E I T K G G Y D I N V V N T C C N A T H L R Q			
UniRef90_U6ZZJ8	F V T Q T T L S M D D T S R V I D A R A R F P A I G G P D D C C Y A T Q N R Q			
UniRef90_K0B1C2	I V A Q T T I T N E K F E T L S E L V S K K S T D V E I C N T C C N A T T H I R Q			
UniRef90_J9DHK1	Y I S Q T T L S V D D T A A I V A T L K S S R F P D I P H K Q D C C Y A T T T N R Q			
UniRef90_L1Q7U7	V V S Q T T E K E E N W N I T I N N L N N K V V S E L Q K F N T C C C A A T E E R Q			
UniRef90_S5XPZ2	F I T Q T T L S V D D D T A A L V A A L Q A R F P A I P A K E D C C Y A T T N R Q			
UniRef90_I2MXV7	Y L T Q T T L S L D D T E T R E T I A A L K E R F P Q A R G P E D C C Y A T T N R Q			
UniRef90_UP100037E034F	I V S Q T T F S G G R F R E I V S A L L D K S R D I R V M R T C C C T A T D Q R Q			
UniRef90_I5BTH5	F V S Q T T L S V I E D T A D I L K A L E D R F P D L H A P E S C C C Y A T T N R Q			
UniRef90_E4TIQ4	V V A Q T T Q E K A V F D K I V D I L R N R C R E L K I S N T C C C N A T T L R Q			
UniRef90_A6LWH1	V V S Q T T E K M K N W E E T L K N L S Y A R E I L A F N T C C C A A T D V R Q			
UniRef90_R5WGR4	V V A Q T T F N Y K K F Q Y L V E I L E E K G Y S I Y D V N T C C C N A T A V R Q			
UniRef90_Q5FFL5	Y V T Q T T L S V D D D T K V I D K L K K K F P N I K G P D D C C C Y A T Q N R Q			
UniRef90_Q2RIU7	V L A Q T T Q P E S R L E E V A A A L R S N T D T L V V H N T C C C V Q A T T H Q R Q			
UniRef90_R717L6	I V S Q T T F N Y K K F Q D I V E I L S K K R Y D I I A L N T C C C C N A T E E V R Q			
UniRef90_U2CHV4	I V S Q T T F N Y N K F Q E L V E I I F L K K G Y D I S V V N T C C C C N A T E E R Q			
UniRef90_R6NNX0	I V S Q T T F N Y N K F Q E L V E I I I N K K G Y D I I V L N T C C C C N A T E E R Q			
UniRef90_U2CU13	V V S Q T T F N Y N K F Q E L V E I I L R K K S Y D I D N I L E C C C C N A T E E R Q			
UniRef90_R6QGU6	V V V Q T T F R Q A K D F K I L E I I L Q D R G V N M E I H N T C C C C S A T E K R Q			
UniRef90_R9KH02	I V A Q T T F N Y K K F Q D L V E I F Q K K G Y D I I V A N T C C C C N A T K E R Q			
UniRef90_C9LUH8	I V A Q T T F S G A K F K E L V L H L D K S N D V R I V R T C C C C T A T D Q R Q			
UniRef90_R6FZ92	A V S Q T T E K E A N W Q N T I N N L T P H V K E L L S F N T C C C C S A T E V R Q			
UniRef90_UP1000478AF3B	V V S Q T T T M A Y E K W E N I N Q V L R T L K L D M V A F N T C C C C D A T Y Q R Q			
UniRef90_UP1000367862A	Y I T Q T T L S V D D D T L E I I I S L L K K K Y P S I P I K S D C C C C Y A T T N R Q			
UniRef90_F1T689	I V V Q T T Q S R R R L K E I I V A A L V G K A E E I R L F D T C C C C C E A T S L R Q			
UniRef90_Q6AL80	F V T Q T T L A E D I E Q V L V V L R R F P L L Q G P K S C C C C C C F A T Q N R Q			
UniRef90_A8ZT29	I V A Q T T Q S T R L F D E V G A W A A A H H P H Y Q V F N T C C C C C P S T K N R Q			
UniRef90_M1M8U0	Y V T Q T T L S L D D V V C I E E A L K N R F P K I V G P K D C C C C Y A T T Q N R Q			
UniRef90_W9GP77	Y L V Q T T L A A D E V D G I V D V L H A R R F P Q L Q A P D D C C C C Y A T T N R Q			
UniRef90_J7QLR6	Y V T Q T T L S L D D S Q E I V S A L M R R F P K I I G P E D C C C C Y A T T N R Q			
UniRef90_R6LFV3	I V S Q T T F N Y N K F K D L V E I I S E K K G Y D I S V L N T C C C C C N A T R E R Q			
UniRef90_A0A011TER4	F V T Q T T L S V E D T A H I L E A L Q E R F P Q A P A E S C C C C Y A T T N R Q			
UniRef90_A512S9	V L C Q T T E K Q E N W E K V L T I L I K N S R E I L A F N T C C C C C N A T Q V R Q			
UniRef90_V2Y9R4	I L A Q T T F N L N K N F Q D I V E I F E K K R Y Y S I V L N T C C C C C N A T S A R Q			
UniRef90_G5F552	L V V Q T T Q S R S R L Q R A L V G A L I G R V D E L R V V D T C C C C E A T T L R Q			
UniRef90_H1D1W0	I V T Q T T F S A V L A D R V E A L G K K V K N L H V N K S C C C C C D A T M Q R Q			
UniRef90_U2PW14	L L S Q T T E K Q E T W E K T L S Y V S E H S K D V L A F N T C C C C C S A T E V R Q			
UniRef90_R5P410	I V A Q T T F N D V K F K D I V E F F R N K G Y N V I V Y N T C C C C C N A T E E R Q			
UniRef90_A5Z6G7	I V S Q T T F N H N K F K Y L V E I I R K K G Y D I T V V N T C C C C C N A T H V R Q			
UniRef90_UP1000408D5A0	I V S Q T T F N T N K F Q E T V D K F S D S R Y N V T V V N T C C C C C S A T E E R Q			
UniRef90_UP10003608B39	V V S Q T T F A T D L F T E L V A I V S A K S T D A V V D R T C C C C C A A T E Q R Q			
UniRef90_UP10003C7E477	F V T Q T T L S V D D D T K E I I K I L K S S R F E N I P Q K E D C C C C C Y A T T N R Q			
UniRef90_B8I2T6	V V A Q T T F I R E K W E K I I L R L N K R F E N I V L K F D T C C C C C N A T D K R Q			
UniRef90_R7M367	V V S Q T T F E A E K F N L L R M A Q E K R P D Y K V V R T C C C C C T A T A E R Q			
UniRef90_I5AQI4	L V A Q T T F N K K R F E D I V E I F T K K K Y S G F V V N T C C C C C N A T D E R Q			
UniRef90_B6GBX2	V V V Q T T Q T V G A L I S S I V S A L L S R T S E L R V I N T C C C C C A A T Q E R Q			
UniRef90_D3PA04	V V A Q T T Q N S Q S F E E V V S V V Q D K C D E L K V K I N T C C C C C N A T T H R Q			
UniRef90_I4YME7	V V S Q T T F N K K F Q E T V E I L R M A Q E K R P A V Q G P D T C C C C C Y A T T Q N R Q			
UniRef90_UP1000379759C	Y V M Q T T L A V D E A E R T A A V L R E R F P A L S A P D D C C C C C Y A T T N R Q			
UniRef90_X5M9V4	Y V T Q T T L S L D D T V E I V N A L T R R F P A I R G P N D C C C C C Y A T T N R Q			
UniRef90_A6Q2R7	T V A Q T T T R K F E E Y Q K I V N Y L M E H K K E V R V F N T C C C C C N A T F E N Q Q			
UniRef90_UP100047899EB	V V S Q T T M S Q S I W V P C R E K L K K E C T N C E I F D T C C C C C E A T C K R Q			

	210	220	230	240
UniRef90_R6SBL8	E E A Y D I A K R V D A M I V I	G D K R S S N T Q K L F E I C S N A C A D T Y Y		
UniRef90_Q07J28	A A V K K V A P I V D A M I V V	G A P N S S S N S Q R L R E V A E R E G C K I V L		
UniRef90_F8KY31	L A L R E I T D Q T D L V L V V	G D P T S S S N S N R L R E V A S K R G L P S Y L		
UniRef90_D5ASQ6	A A V K A L E K I L E A L L V I	G A P N S S S N S N R L R E V A G R N A G C A S H L		
UniRef90_R6RL53	S E A E E I A K Q A D A M I V I	G R K S S N T Q K L Y E I C K R E C E N T Y Y		
UniRef90_UP100036BAD69	R A V K A I A P R C D L L L V V	G S A N S S S N S V R L V E V A Q H G T P A Y L		
UniRef90_D2ASA9	H A V A G I A A A A D L L V L V V	G H T T S S S N S V R L V E V A T R R Q G T P A H L		
UniRef90_X2D9N1	N A L K A F V E D T D L T I V V	G S Q Q S S S N S K R L V E V A T N R G V N A H L		
UniRef90_D0RPP9	A A V K N I A A K C D V F F V V	G S Q Q S S S N S K R L V E V A K K N G K E S Y L		
UniRef90_N1ZFU5	Q E A V A L S K N V N K M I V I	G D K S S S N T Q K L F E I C K K H C K K T Y Y		
UniRef90_I4D4T4	K A A R E L A G I V D I M V V V	G R N S A N T R K L A S I V C A E S T K T Y L		
UniRef90_A6DLL0	E A V K Q I A E K C D V F L I V	G S P N S S N S N R L R E V A K A K G D A Y M		
UniRef90_G8LU66	D E V D E I S K I V D M M I I I	G G K H S S S N T Q K L Y E I S K R N C P L T Y K		
UniRef90_UP10003B6F736	K A A R E L A R R S D V M I I I	G G K N S A N T R K L Y E I C L T E T K N A Y H		
UniRef90_UP1000479A681	N E A Q K L A S E S D A M V V I	G G K N S S N T R K L Y E I C K S Q C O N T H F		
UniRef90_UP100026CCB4D	S A V K A I A H A C D A V L V I	G A P N S S S N S V R L V E V A E R E G T P A R L		
UniRef90_UP1000477E85	R A V K E L A K K A D V V L V V	G G G K N S A N T R K L A G I C S E H T Q T Y L		
UniRef90_L0F9R1	T V A R E L A G K V D V M I V V	G G G K N S S N T Q K L F E I C D K K A C C N N T Y Y		
UniRef90_R6PHM1	E E A S G I A S R R V G A M I V I	G D K K S S N T Q K L F E I C S G K C K H T Y F		
UniRef90_UP10003B4EA4A	E E A D Q I A A E A D A M I V I	G G T S S S N T R K L Y E I C S K K N C K N T I F		
UniRef90_A0Q0L7	E S A E K L S Q K V D S M V V I	G G Y H S S S N T T K L Y E I C S K K N C K N T I F		
UniRef90_A0A017RWS7	K E A F E L S K Q V E A M I V V V	G G K N S S S N T R K L F E I A E R E G C P S V L		
UniRef90_UP10003792C4D	E A V K R I A G D V D A M I V V V	G A P N S S N S Q R L R E V A C S K E C L P R T H H		
UniRef90_B5E9S9	E E A K K L A G A V D C M V V I	G F G N S A N T M R L A Q I C L E L L P R T H H		
UniRef90_R6WHX0	T E A G T I A R Q S D A M L V I	G G K H S S S N T Q K L Y E I C S K E C P N T Y F		
UniRef90_I0IH52	H A V M E L A S Q A D L T V V V	G G G R N S A N T R K L Y Q I A L E S G A Q A V W		
UniRef90_B8IKB2	U A V R A L E I A D L I L V V	G G G R N S S N S V R L T E I S E N R G T P G R L		
UniRef90_S6F9L7	K S A K E L S K N V D A M I V I	G G G K N S S N T T K L A G I C S E H T Q T Y L		
UniRef90_R6DUV3	T E A G T I A R N S D A M I V I	G G G K H S S S N T Q K L Y E I C S K E C L N T H F		
UniRef90_D1B5G9	R A V C E L A S S V Q G I V V	G M G R N S A N T R K L Y Q I A L E S G A Q A V W		
UniRef90_B3SF22	D A V K Q L A S L V D T I F V I	G A K N S S S N S N R L R D I A E N C G T K A F L		
UniRef90_Q0AM16	A A V K A M A P R S D I V F V I	G S P N S S S N S V R L V E V Q R A G A R A A A L		
UniRef90_J4UZE9	D A V K Q L A L E S D F M I V V	G S K N S S S N S N R L K E L G E N C G C K S V L		
UniRef90_UP10002626717	N A V K E L L A S Q V E R E L V V	G A S N S S S N T L R L V E V V A K A Q G T E A R R		
UniRef90_A1ANP9	E E A K E L L A R Q V D C M L V V	G G F N S A N T R T R L A E V C A E L Q P R T H H		
UniRef90_C9RDD7	E S A L E L A R E V E V M V V V	G G G R S S A N T R T R L H V E R L K L S G V P T Y H		
UniRef90_D0U4K6	D A V K A L M G S C D V L L V L	G S N N S S S N S N R L K E I I A K K M N K P A Y L		
UniRef90_A0A023HW45	T A V K E L A S M V D V M L I V I	G G G K N S S S N T N R L L D L A K V R N P R S F L		
UniRef90_R6FKB4	V E A K E I I A S K V D A M I V I	G G G K N S S S N T Q K L Y D I C K N E C K D T Y Y		
UniRef90_U6ZZJ8	D A V K Q L A D E C D V V L V V	G G P N S S S N R L R E L A E R M S T P A Y L		
UniRef90_K0B1C2	N S C K D V S Q E V D A M I V I	G G Y H S S S N T Q K L V E I I S K M Y C K N V Y H		
UniRef90_J9DHK1	A A V K D I A P L S D M V L V I	G A P N S S S N S M R L V E V S C T S G C P A Y L		
UniRef90_L1Q7U7	S S V L E L S K T V D F M I I V	G G K N S S S N T T K L Y E I I A K E N C K N T I H		
UniRef90_S5XPZ2	A A V K A I A P K I L E A L L V I	G A P N S S S N S R R L V E V G K A S G C A Y S Q		
UniRef90_I2MXV7	H A L E A V T A E A D L V L V L	G S D N S S S N S V R L V E V L A R K A G T P A H L		
UniRef90_UP100037E034F	H A A R E L A S K V D V M I V I	G G K N S A N T T R R L A Q I C A K T C R T Y H		
UniRef90_I5BTH5	E A V K K A A P G S D L F L V V	G G K N S S S N S R R L V E V A E R A G A R S L L		
UniRef90_E4TIQ4	N A A R K V A E M V E V M F V V	G G K N S A N T R T R L Y K I C S E I C E K T F H		
UniRef90_A6LWH1	R S T N K I S K K T D A M I V I	G G K N S S S N T T K L Y Q I I A K E N C E N T I H		
UniRef90_R5WGR4	K E A E E L L A V R S E A M I V I	G G G T N S S S N S R R L F D I I C K N Q C E N T Y F		
UniRef90_Q5FFL5	T T T K R L A E L V D I V F I L	G G S K N S S S N S N R L K E I I A A Q T Q A F L		
UniRef90_Q2RIU7	E A A V R L A R Q V D V M V V V	G G G K E S A N T R T R L H A E L C R A T G T P T Y H		
UniRef90_R717L6	S E A M Q L A K V S D A M I V I	G G G Q S S S S N T Q K L Y E I I C K R E C E N T Y Y		
UniRef90_U2CHV4	T E A K D I A A K V D A M I V I	G G G K H S S S N T R K L Y E I I C C K E E C A H T C L		
UniRef90_R6NNX0	T Q S R A L A K E V E A M I V V V	G G G K S S S S N T Q K L F D I I C K N E C C A N T Y Y		
UniRef90_U2CU13	K E A K A I I A G E V D T M L V V	G G G R H S S S N T Q K L F E I I C K K E E C G N T Y Y		
UniRef90_R6RQGU6	T E A E E L L A S K T V D K M I V I	G G G K N S S S N T Q K L V E I I C A K N C G N T V H		
UniRef90_R9KH02	E E A L E L L A A K A D V M I V I	G G T H S S S N T R K L Y E I I C K S R C C E S T Y Y		
UniRef90_C9LUH8	E A A I K L L A R Q V D D L M V I	G G G K N S A N T T R R L A Q I C A K E C C Q T Y H		
UniRef90_R6FZ92	K S I D E L L S K V S D A V V V	G G G K N S S S N T T K L Y E I I A K N N C C I N T H		
UniRef90_UP1000478AF3B	K E A E D L L A K R V D V M I V I	G G G G L N S S N T K K L A D L C R K H C E R T Y H		
UniRef90_UP1000367862A	E A V K K I I A K K C D L F L V V	G G S K S S S N S Q R L V E V V A K R F G C K S I L		
UniRef90_F1T689	N A A T D L L A K S V D C M I V I	G G G K I S A N T T R R L A E I C R T Y C D H V Y H		
UniRef90_Q6AL80	N A V R T L L A R C T D L L I L V V	G S K N S S S N S N R R L R E V G T E T G T P A Y L		
UniRef90_A8ZT29	A A T E A L L A R Q T D A M V V V	G G G Y N S G N T Q R L A Q V I S K K S G H P V F H		
UniRef90_M1M8U0	N A L K Y I I V K D C D L I L V V	G S I N S S N S N R R L V E L A R Q S S V V E S Y L		
UniRef90_W9GP77	L A L R E V S R D A E L V L V V	G S E N S S S N S R R L V E T A Q R L G P A H L		
UniRef90_J7QLR6	A A V K C I V A P H V A A V I V V	G S P N S S N S N Q R L R E V V A E R A G A P A Q L		
UniRef90_R6LFV3	A A V K S I L A R Q T D L L I L V V	G G G K H S S S N T Q K L Y E I I C K R E C A H T C L		
UniRef90_A0A011TER4	T E A R S I L A K E V D A M I V I	G G G K N S S S N T Q K L F E I I C C K E E C A H T C L		
UniRef90_A512S9	D A V K E T A P G V D L Y L V V	G G G P N S S S N S R R L V E V V A E R A G A R S I L		
UniRef90_V2Y9R4	Q S A K K L L S E K V D S M I V I	G G G K N S S S N T T K L Y E I I C K S N C C K N T I H		
UniRef90_G5F552	T E T E K L L A G E A D A M I V V V	G G G K H S S S N T Q K L Y N I C O K K C V D T Y Y		
UniRef90_H1D1W0	A S A A K L L A A Q A D T M V V V	G G G R M S A N T R R R L A Q I C E A S C P R T H H		
UniRef90_U2PW14	Q A A R E I I A D R V D V M I V I	G G G R N S A N T T R R L A E I C G E E G A R T Y H		
UniRef90_R5P410	K S A M E I I S K E V Q V M I V I	G G G K N S S S N T T K L F E I I C K S N C S Q T Y H		
UniRef90_A5Z6G7	R E A R A L L A A D V D T M I V I	G G G K S S S N T Q K L Y E I I C R R E C E N T Y Y		
UniRef90_UP1000408D5A0	V E A Q K I I S S K V D G M I V I	G G G K N S S S N T Q K L Y E I I C R N E C E N T T F Y		
UniRef90_UP10003608B39	T E A E R I I A G Q V D A M I V I	G G G A H S S S N S R R L Y E I I C S K K C A N T Y F		
UniRef90_UP10003C7E477	Q A A L Q I I A A Q A Q V I V V V	G G G K N S A N T N R L A D L C T R A G T K V Y H		
UniRef90_B8I2T6	M A V K N I I A K N C C D M F F I I	G S R N S S S N S V R L V E V V A K K S G C N S M L		
UniRef90_R7M367	T E A E K I I S K I V D M V L V I	G G G N N S S N T N K L Y Q I C K T N C D N T F K		
UniRef90_I5AQI4	A A A R Q L L A G K T D A F F V F	G G G K N S S S N T Q K L Y D I C R N E C E N T T F Y		
UniRef90_B6GBX2	T E A C C E I I A Q K V D A M V V I	G G R H S S S N T Q K L Y E I I C S G K C C K N T Y F		
UniRef90_D3PA04	D S A A E L L A A R V D V M I V V V	G G G K N S S S N T R R R L A Q I C Q M G C A H T H H		
UniRef90_UP100047A8BCD	E A A K E V I A K Q V D M M I V I	G G G K N S S S N T R R R L F E I I C S E L C C K N T V H		
UniRef90_I4YME7	T E A E Q I I A K K A D V M I V I	G G G A H S S S N S R R L Y E I I C S K E C E N T Y F		
UniRef90_UP1000379759C	M A V R V I I A R R A E R I I V C	G G G A R N S S S N T N R L C E V V A V N E G R Q A L L		
UniRef90_X5M9V4	Q A V R A V V A R E V V G L V I V L	G S R N S S S N S L R L A E V V A R A A E G T P A Y L		
UniRef90_A6Q2R7	A A V K A I I A E G C D M M F F V V	G G P N S S S N S V R L V E V V A E K A G C P Q Q L		
UniRef90_UP100047899EB	S E A L C I I A E Q C D A M L I I	G D R K S S S N T N R L A E I C R A H C P L V L H		

	250	260	270	280
UniRef90_R6SBL8	I Q T L G D L	N M N Q L R S V E T V G I T A G A S T P N K I I E E V Q N N V R		
UniRef90_Q07J28	A Q R A S D I	D L K Q F E G V T S L G L T A G A S A P E V I V E E I M G A F A E		
UniRef90_F8KY31	I N N E S E I	Q L E W M A G V S T I G L T A G A S T P E G I V Q N C I Q K L I E		
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 M K I K K A E H L G F C C F G V N N A I S L A E N A L S D G K L M C Y G E I
 M E V I V A K T A G F C C F G V K R A V E K V Y A N A D N E H V Y T Y G P
 M E V R K I T P R G F Y C C Y G V V D A M V L A Q Q T A R D L P R P I Y I L G M I
 M E V I L A E H A G F C C F G V T K A V D T V Y E Q I K N N P G M I Y T Y G P
 K I I L A A P R G F C C F G V D R A V R I V E V A L E K Y G A P V Y V R H E
 M K V I L L A D N A G F C C F G V K R A V D E V L N A K N K Y N N N I Y T L G P
 M E V R L A K K H G F C C F G V K R A I K I A E K N K N S F T L G P
 M E I I K I T P R G Y G C C Y G V V D A M V I A R N A S L D K P R P I Y I L G M I
 M D V L R I T P R G Y G C C Y G V V D A M V I A R E A A K D L P R P I Y I L G M I
 M K I I R A K H S G F C C F G V K R A I Q K T L E S I E N N E N N I F T C G Q L
 M E I I L V A K G A G F C C F G V N R A L D K T I Q A V Q T D T S Q V F T L G P
 M R K I I L A D N A G F C C F G V K R A V D I A I S T K R E Q Y K N I Y T L G Q L
 M K V M K I S P R G Y G C C Y G V V D A M V I A K N A A M D E P R P I Y I L G M I
 M D V I K I S P R G Y G C C Y G V V D A M V I A K N A S L D K P R P I Y I L G M I
 M K E V I L L A K S A G F C C F G V Q R A M D T V Y A E A D K K N V Y T Y G P
 M R V H I A E A C G F C C Y G V V R R A V E L A S T A E K G T H T L G P
 M K I E L A S N Y G F C C F G V K R A I N I A Q K Y T N S A T M G P
 M P E I R I A R E A G A C C Y G V G R A L D M V R K A A F A A P G H V R T L G P
 L T V K R A K H A G F C C Y G V Q R A L D M T Y N V A H E G G R V W T L G P
 M K I Q L A S S Y G F C C F G V K R A I E A A H R G S V T Y G P
 M K I I R A D N S G F C C F G V K K A L E T T Q D Q I K E S K G S L F T C G P
 M K V I L L A R T A G F C C F G V K R A M E L V L Q Q A I N R K S G S I Y T Y G P
 L R V L L C A P R G F C C F G V V R R A I D A V E E A L R I H G A P V Y V R H E I
 M K I T I A K T A G F C C F G V M G V R R A V D M V L D A A N T S D T P I Y T Y G P
 M K I T I A K T A G F C C F G V M G V R R A V D M V L D A A N T S D T P I Y T Y G P
 M K I V M L A E K A G F C C F G V K R A V D M A L L T Q K E Y N K K I Y T L G E L
 M K K V I L A D P I G F C C F G V E R A V N L L E E A L K V H G K V Y C I G S P
 M E V I K I S P R G Y G C C Y G V V D A M V I A R N A A Q D L P R P I Y I L G M I
 M K I T I A K T A G F C C F G V M G V R R A V D M V L D A S N T F D G P I Y T Y G P
 M Q I K L A K K Y G F C C F G V K R A I K L A E K S P G A I T F G P
 M K V I R A K T A G F C C F G V D R A V K L T Y D L L G Q G R R V A T L G P
 M K I E L A E N Y G F C C F G V K R A I K I A E E N T N A A T Y G P
 M R I I L V G K H S G F C F G V K R A V D M A L K E A E A G E S A V Y S Y G N I
 M E V K L A K N Y G F C C F G V K R A I E A E K K P N G I T L G P
 M N V K I A K E A G F C C F G V K R A M K M A W N E L E A N D D I Y A L G P
 M R K I Q L A D K A G F C C F G V N R A V D T A L N C R K K Y N K P I Y T L G P
 M N V K K I S P R G Y G C C Y G V V D A M V I A R Q A A A D L P R P I Y I L G M I
 M E I I I A E N S G F C C F G V K R S V E L A E K A L D S N K T V Y C L G P
 K L Y L V N P R G F C C F G V S R A I R T V E E T V R I F G P P I Y V K H E I
 M K I I L A D P I G F C C F G V D R A I A T V Q T I V K T A H P H V Y V R R Q I
 M K N F I V A K S A G F C C F G V S R S V E M A Q K L L E S G S A Y S L G Q L
 M E V M K I S P R G Y G C C Y G V V D A M V I A R N A A L D E P R P I Y I L G M I
 M E V I V A K N S G F C C F G V K R A V D M V Y S Q I G Y G N I Y T F G P
 M S K V T V A K S A G F C C F G V D R A V K M V Y G E L E K N T K V A T L G P
 M K I V K I S P R G Y G C C Y G V V D A M V I A R N A A L D T P R P I Y I L G M I
 M E I I R A S V L G F C C F G V R R A V E L A E K A L A E N P G K V Y S L G P
 M K I E L A K Q H G F C C F G V K R A I K I A E E Y Q N S Y T F G P
 M K I C V A K S A G F C C F G V D R A V K I V Y N K L D N R N N V V T L G P
 L K Y L V A A P R G F C C F G V D R A V R I V E M A I E K W G A P V Y V R H E I
 M K V I E L A S E Y G F C C F G V K R A I K I A E D N K N S S T Y G P
 M K V T V A R P T G L C F G V V R A L L E L E N A L K E H G R I F G L G S P
 M K V I E L A A D P R G F C C F G V K R A I K I A E N T Q N A S E N S A T I G E L
 M E I I Y L A R T Q G F C C F G V D R A V K I V D Q A L V K Y G P P I Y V Y H E I
 M E V L K I S P R G Y G C C Y G V V D A M V I A M Q T A K D L P R P I Y I L G M I
 M N V K I S P R G Y G C C Y G V V D A M V I A R K T A E N Y P R P I Y I L G M I
 M E V I K I A P R G Y G C C Y G V V D A M V I A Q N A I K D P N R P I Y I L G M I
 M K I K L A T S Y G F C C F G V K R A I K I A E N T Q N A S T I G P
 M K V Y I A T P Y G F C C F G V S K K I S L A E K I L S L K G E V Y T L G A L
 M K V Y I A T P Y G F C C F G V V M A I Q A V E K A A A R E A N P V T V Y H S I
 R I V L A D P R G F C C F G V D R A I V T V Q T I L K T G L P P V Y V R R Q I
 L Y L V S P R G F C K G V S R A I D T V E E C L R M F K P P I Y V K H K I
 M Q V K M A K N Y G F C F G V K R A I E I A Q K N K N S V T L G S L M R H E V

		50	60	70	80
UniRef90_C0QLG6	I	H N P Q V L E M L E K K G I P S I N T I P E K G E G T V L I R A H G V P P Q D			
UniRef90_K1Y8Y4	V	H N K H V I A E L E Q A G V F V E H L R D I P Q G G V C I F S A H G V S L T I			
UniRef90_K7Z2M7	V	H N Q C V V E N L E A Q G V F V K E L D Q C P V D R P V M F S A H G V P Q S V			
UniRef90_E6W1T8	I	H N P Q V V E K L D S L G V R E V S D L E P S E S A V I R S H G V G P Q V			
UniRef90_E0TC91	V	H N E T V V R R L R A L G V F V D E L S E V P D D A P V L F S A H G V P K T V			
UniRef90_N6VVM3	V	H N R Y V V E E G L Q K R G V F V E E L D E I P E N Q P V V F S A H G V T P D E			
UniRef90_E1R064	I	H N P T V V A E L E R E G G V G V V V E E A D D E P G G G T L L R T H G I T P D E			
UniRef90_R4K765	I	H N N D V V K Y L E E N N I Y A I D I E D I K E S D V V I I R S H G I S P D I			
UniRef90_M8DUA0	V	H N A H V V E S F E K M G V K T L D G E D Q I D E G T V I F T A H G I S P E V			
UniRef90_E4U299	I	H N A N E I D R R L K N D F N V A E N L D S F R A G D T A V I R T H G I P K Q E			
UniRef90_R6ZY58	V	H N E E V V K D L L A Q R G V D V I D G E E E L A L A V V I R S H G I S K H I			
UniRef90_UP1000288F61C	V	H N K F V V E D L K S R G I F V E E I D E V P D N S L V I F S A H G V S P E V			
UniRef90_UP100040DF0DB	V	H N K H V T E A F N E E G I I T L D G E S R I D S G T V I Y T A H G I S P E V			
UniRef90_A0RQC4	I	H N S L E I D R R L K N N F N V K T L K D E L K N E K K A I I R T H G I T K E G			
UniRef90_R5YWY3	I	H N E Q V V E D L E Q K G G V V N S L E E K E I G T V I I R S H G I V S K D V			
UniRef90_UP100036F3A70	V	H N R Y V V E E G L E A R G V F V E E L D E I P A E H P V F S A H G V P K S V			
UniRef90_D8GJN1	I	H N S D V V N K L L K E K G I Y P I E I D N L D E D D V V I I R S H G I V P E K I			
UniRef90_R5RB91	I	H N E E V V Q D L L E S R R G V T V L A G R E E L E E G T V V I I R S H G I V S R K I			
UniRef90_R7PNP4	I	H N P Q A V K R L L M N R G G V R V N N L E E V K N K E I V I I R S H G I V G P S C			
UniRef90_Q1Q304	I	H N P Q V L E Y E L L K E K R D L H I V N D V T D L S N S T V V I R A H G I V T P S R			
UniRef90_Q5L5D3	V	H N R H V V D D L L K R R G I F I E D L K D V P C G E K V I Y S A H G I V P P E V			
UniRef90_Q0G170	V	H N K Y V V D G L L R D M G V F V K E L H E V P P D D G P V V F S A H G I V P K S V			
UniRef90_A7GXB5	I	H N N E E I N R R L A T N F N V K T L H N E L K D E K K A I I R T H G I T K S D			
UniRef90_Q1LSS7	V	H N S Y V V N T L R N Q G V F I E Q I H E V P D G A V I I F S A H G I V S K A I			
UniRef90_H1HS63	I	H N E E V V R D L L T E K H G V V V F E D E D A E E A G T I I L R S H G I V G P E V			
UniRef90_U2L3Z9	V	H N P Q E N E R L K K M G L L I E N M N E L S H Q N R I L V R A H G I L R E E			
UniRef90_R7BJQ4	I	H N E Q V V A D L L E R H G I R V R V E E D T V L P K G T V V V R A H G A S R D E			
UniRef90_H3SEF6	V	H N R H V T D A F E D E G I I T L D I L D Q I D S G T V I F T A H G I V S P E V			
UniRef90_UP1000402C76B	V	H N E I V V K D M E E K G V K V I E S V D E L E G G I I V I R S H G I V T R E V			
UniRef90_D5BSV2	V	H N K T V V D D L L A N K G G V F V Q E L D E V P T G A P V V F S A H G I V A K A V			
UniRef90_W6N3K8	I	H N N D V V N K L L K G K N I Y P I K L E D I N K N D V L I I R S H G I V P K D I			
UniRef90_T1DW09	I	H N Y Q E I N R R L Q Y Q N F N V E E D Y T Q I K E G S T L I I R T H G I V P K G D			
UniRef90_A0A033V2S9	V	H N K H V T D A F E S D G I I T L D I L E Q I D K G T V I F T A H G I V S P E V			
UniRef90_F5SG90	V	H N R H V V E A F E E D G I I T L D G L E D V D E G T V I F T A H G I V S P E V			
UniRef90_W2BZ08	I	H N A S V T D E L L A R K G G V N I I P P D E A G I L N D T I I V R S H G E P K A F			
UniRef90_B2A4N7	V	H N K E V I Q N L T E T K G I G I I K C L S E E T N N Y V V I R S H G I V G P E T			
UniRef90_L7ENN6	I	H N N D V V N K Y L E S K G N I H I K D I D K L S S N D I I I R S H G I V S Q D I			
UniRef90_I4X1J7	V	H N K H V T D A F E A D G I I T L D I L E K V E T G T V I F T A H G I V S P Q V			
UniRef90_P54473	V	H N K H V T D A F E E E E G I I F T L D G S S N Q V D K G T V I F T A H G I V S P E V			
UniRef90_C4Z5S1	I	H N T E V V N E L L E S K G V N D I S E I P E P E K S T V I I R S H G I V S K A V			
UniRef90_E2ZDB5	V	H N P Q L V N S L S A R G V P V D S L Q D V A D G S S K V L I R S H G I V G P H V			
UniRef90_UP100047BC170	I	H N Q D E I N R R L K N D F N V Y S N L N D V K C D N D T V I I R T H G I V P K D D			
UniRef90_U2VH62	V	H N P T V V A D L D A S G V E V V E Q P C E A E G N T L V L R T H G I V T P E V			
UniRef90_R7BN48	I	H N P R V V S E L L E E E G I I A A N S V D D I T E G S V V I R S H G I V P I P E T			
UniRef90_I2K9F2	I	H N K D E I N R R L K E G F N I A E R L E D I E T N D A V V I R T H G I P K N E			
UniRef90_X8K6J0	I	H N K I V T S Q L E N D G V R I I K P D E A K E G D T I I V R S H G E P K A F			
UniRef90_F2NCE0	I	H N P Q V L E L L E E R G I G I L K N A T P D S G S V V V I R A H G I V P P Q E			
UniRef90_UP100041B9222	V	H N K Y V V E G L R A K G I F V E E L D E V P D T S K V I F S A H G I V P P E D			
UniRef90_S0FYM6	I	H N P Q V L E M L E T K G I F R L D T I P E K G T G L V L I R A H G I V P Q N V			
UniRef90_Q97I09	I	H N N D V V D K L L D K D N N V Y I I E D I D N L K E N D V I I R S H G I S E E I			
UniRef90_G7V9R0	I	H N P Q E T A R L E N K G G V V V D S G E E I P N G S A V F V R A H G I L P E G D			
UniRef90_W4EAB7	V	H N S H V T N S F E D D G I I T L D I L D K I D K G T V I F T A H G I V S P E V			
UniRef90_UP10003B79233	I	H N P Q V L E M L E G K K I F Q L D S I P E K G E G L V L I R A H G I V P P E D			
UniRef90_D3UFQ0	I	H N P R E I K R L L E D F G G V R I E N K E N V F E G Q S V I I R T H G I T K Q D			
UniRef90_D1PP74	I	H N P Q V V Q D L L E A K G L T C D G V E D V P D G Y E V I I R S H G I V P Q N V			
UniRef90_E0URM3	I	H N S K E I A R L L D N K V S L I I E D F K A F Q P G D K A I V R T H G I V K E E			
UniRef90_K8DIW4	V	H N R Y V V D S L R E R G I F I E Q I S E E V P D G A L I I F S A H G I V S Q A V			
UniRef90_R5AV29	V	H N E T V V E A L K E E K G V P V E T T E G L R A G D T L I I R A H G A P P R L			
UniRef90_C3XMB0	I	H N D K E I N R R L K E E K F N V V E N I Q E I P K K A E V I I R T H G I V P K Q D			
UniRef90_UP100047E8938	I	H N K Q A V S K Y E E E K G I K V E V I D S I P N F K N M I I R S H G I V S E K V			
UniRef90_F4A8Q4	I	H N N D V V K F L N S K D I N S I D L D S L K E N D V I I R S H G I V T P K V			
UniRef90_W4QGB2	V	H N K H V T D A F S E E G I I N R R L D I L Q K V D K G T V I F T A H G I V S P E V			
UniRef90_C2BDN4	I	H N P Q L V E S F S K R G L T V I D H D E A I K D S L I V I R A H G E D K N F			
UniRef90_J4CDD2	V	H N E A V V C N R R L R A K G V V F V I E D L N V P E N S I I I I Y S A H G I S P E I			
UniRef90_M4RFH7	V	H N R H V V D D L L A A Q G V F V E E L S E I P D D A V V V F S A H G I V S P Q V			
UniRef90_R6J2B0	I	H N D D V V R R F E G R G L K V I N P D E L P A G A R V M I R S H G I V V S K A V			
UniRef90_UP10004708581	V	H N K H V T D A F E E D G I I T L E I L N Q V E T G T V I F T A H G I V S P E V			
UniRef90_R5LLY9	I	H N E E V I K D L L E N N G V K V I N S V E E A A D G T V I I R A H G I V P P E H I			
UniRef90_W7UU18	I	H N Q D V V N D M K A K G A R I I D T D E L R P D E T V V I R S H G I V V G R E I			
UniRef90_B7JN13	V	H N K H V T D A F E E D G I I T L D I L D K I D S G T V I F T A H G I V S P E V			
UniRef90_UP10003B67970	I	H N E N A L R A L E A K G H I L E E T E I K E G S V V I I R A H G I V A P S V			
UniRef90_J0L7L4	I	H N N L E I E R L K K S F N V K E N I K N F S T G D K L I I R T H G I E K N N			
UniRef90_R6CAX6	I	H N R N V V A D L L E A R G G C K A I E L D E V Q P G Q T V I I R S H G I V S R A V			
UniRef90_UP1000360C6B8	V	H N K F V V D G L L R A K G I F V E E L E E C P P D D R P V V F S A H G I V P K S V			
UniRef90_UP1000381DB15	V	H N R F V V E R L L E A L G V F V E E L S E I P P D D G P V V F S A H G I V P K S V			
UniRef90_B8CWY2	I	H N P Q V V V K R L L K E M G I E S L D S L D I I D N G V I I I R S H G I V P P D I			
UniRef90_Q30S81	I	H N S K E I E R L L E K D F K V T D D H K S F A S G D K A V I R T H G I P K N E			
UniRef90_UP10003B6F837	I	H N P Q E I E R L L Q N L G I V V D P K P G E V P P G Q P A F I R A H G I S P E I			
UniRef90_M3CAE7	V	H N K Y V V K T L L E K K G I F V D E T F E V P E G N I V I F S A H G I V A P V V			
UniRef90_A710N0	I	H N N E E I D R R L H K K G V K T L L N D I E I T D E K R L I I R T H G I T K D D			
UniRef90_D9PJE5	V	H N T H V V R D F I K R G V F V E D I A V P E G Q H V I I L S A H G I V S P S V			
UniRef90_UP100039E08C1	V	H N R H V T E S F D T E G I I T L D G E E Q V E K G T V I F T A H G I V S P E V			
UniRef90_D6XW89	V	H N A H V T E A F E E D G I I T L D L D Q V F D Q G T V I I Y T A H G I V S P E V			
UniRef90_N4WWP6	V	H N S H V T E A F E E Q G V Y T L L D G L D D I D D G T V I F T A H G I V S P E V			
UniRef90_D1B031	I	H N N E E I D R R L R E N F N V K T L L H D I S E A S G V A I I R T H G I P K N D			
UniRef90_B8E2T7	V	H N P K V I E E L S K K G I K V L G K D E I V E V E G K A L I V R A H G I P Q R D			
UniRef90_E8UAU8	V	H N H T V V V E R L L E H H V F V E D L D L T E T G D T V V V F S A H G I V S P V V			
UniRef90_D1NSY9	V	H N K H V V Q E L T D Q G V F V E E L D E I P P D G I P V F S A H G I V S P D V			
UniRef90_A5K9W7	V	H N D I V C K Q L L E E K G I F I E D V N E V P D G N I L I I Y S A H G I S P Q I			
UniRef90_A0A017UHU6	V	H N R T V V V D S L R A K G V F V E E V H E A P D R P I V F S A H G I V A R S V			
UniRef90_E7G1B5	I	H N P K E I K R L L E Q N F N V K E N V S A I E S N S H V I I R T H G I P K N D			
UniRef90_K2F4S7	V	H N K F V C D D L R T K G V F I E E L R E V P A G S T V I F S A H G I V S K A V			

	90	100	110	120
UniRef90_C0QLG6	K R Q L E L A G F K V I	D A T C P R V I R V Q T I I K K H T D Q G Y A S I I I L G		
UniRef90_K1Y8Y4	E K K A R E L G L R T V	D A T C P L V T S V H G M V E K Y H A M G Y D V V I I I G		
UniRef90_K7Z2M7	I S E A R R Q I T Y I	D A T C P L V S K V H L K A K R Y Y R L G S H V I I I G		
UniRef90_E6W1T8	Y D R A L A M G V A V E	D A T C P Y V K R I H S I V T D L V A Q E Y Q V L I V		
UniRef90_E0TC91	P A E A E R R Q L L Y L	D A T C P L V S K V H I E S D R H H R N G C H V I L I I G		
UniRef90_N6VVM3	P E E A R R Y N L F Y L	D A T C P L V S K V H K Q V I R H K R H G R H V I I I G		
UniRef90_E1R064	E A A A R R S H D S V L	D A T C P F V V R A H N A A E R L V A E G Y Q V I V F G		
UniRef90_R4K765	L K L K D K N L N V V	D A T C P F V V A K I H E K V K E Y S E N G Y E L I I I G		
UniRef90_M8DUA0	R K K A R D K G L T V V	D A T C P D V T K T H D L I R E K V A E G Y H V L Y I G		
UniRef90_E4U299	L S T L N E R N V N V I	D A T C P Y V T K P Q Q I C E E M S A Q G Y Y D I V I I F G		
UniRef90_R6ZY58	Y E L I E Q K G L E C I	D A T C P F V V K R I H R I V E R E S K E G K Q I V I I G		
UniRef90_UPI000288F61C	E E T T K S K R M L E Y E I	D A T C P L V T K V H M E V I R N G R A N N D I I I I G		
UniRef90_UPI00040DF0DB	R R I A H E K G L Y E I	D A T C P D V T K T H D L I R E K E R E G G Y E V I Y I G		
UniRef90_A0RQC4	L A N L K S R D V E I I	D A T C P F V T K P Q Q I V E K M S S E G G Y E I V I F F G		
UniRef90_R5YWY3	Y T K I E E I G M N I V	D A T C P F V K K I H K V E E E S S N G K I V I V G		
UniRef90_UPI00036F3A70	P A D A E S R N L F Y L	D A T C P L V S K V H K Q A M R H L G R H V V L I V G		
UniRef90_D8GJN1	F F T L K N K K K I N I V	D A T C P Y V L N I I Q R K V I Q E Y Y K L G Y S I I I I V G		
UniRef90_R5RB91	C Q L I E E K H E C V	D A T C P F V K K I H R I V E R E G K N G R H I I I I V G		
UniRef90_R7PNU4	Y N D I K C K N L T L V	D A T C P F V K R N Q D I A K K L S H E G H Q I I I I V G		
UniRef90_Q1Q304	R A E L E S K S G A K V C	D A T C P H M R V Q S L I I K K Y A A Q G Y S T I I I I V G		
UniRef90_Q5L5D3	R E E A K A R N L F D I	D A T C P L V S K V H K Q G L R H V K L G R H V L I I F G		
UniRef90_Q0G170	P A R A E A R D M F Y L	D A T C P Y V L T K P Q Q I C E D M S N A G Y D V V I I F G		
UniRef90_A7GXB5	L A E L K K T D I K V I	D A T C P F V T K P Q Q I C E D M S N A G Y D V V I I F G		
UniRef90_Q1LSS7	R K E V Q S R N L T I F	D A T C P L V T K V H M E V A R A S H K G I E T I I I I V G		
UniRef90_H1Hs63	Y R L L C E E K K L R L V	D A T C P F V N K I H R I V Q T E N R K G R R V L I I V G		
UniRef90_U2L3Z9	K D F F D E H G V E M L	D A T C P P L V K N I H K I V A Q K E K N G Y N I V I V G		
UniRef90_R7BQJ4	F D R L R K S G M E I E D	D A T C P D V T R T H D L I R E K T A E G Y E I Y I I V G		
UniRef90_H3SEF6	R K K A R G L T T V	D A T C P P L V K R I H K I V S E E S G K G K S I I I I V G		
UniRef90_UPI000402C76B	H E K I A A T G L E I I	D A T C P L V T K V H I E A Q R H A A Q K R H I I I I V G		
UniRef90_D5BSV2	V A E A K E H N M I A V	D A T C P L V T K V H I E A Q R H A A Q K R H I I I I V G		
UniRef90_W6N3K8	F D S L C K K G I T V V I	D A T C P Y V L N I Q Q K V Q K Y S K L G Y S I I I I V G		
UniRef90_T1DW09	L E K I K A K Q F H V	D A T C P F V T K P Q Q I V E K I S Q E G Y Y Q I I I I F G		
UniRef90_A0A033V2S9	K R R A K E K G L V C I	D A T C P D V D N T H Q L I R D V K S N G Y Y H V I Y I I G		
UniRef90_F5SG90	R Q R A R E K G L T V V	D A T C P D V T R T H D L I R E K V A E G Y E V A Y I I G		
UniRef90_W2BZ08	Y K A A E K N G V K I V	D A T C P F V S K I H Q L V S D A H N Q G K N I I I I V G		
UniRef90_B2A4N7	F K M L N N L N T D V I	D A T C P F V R K V Q Q K A S K I L Y Q D G Y Y Q I I I I F G		
UniRef90_L7ENN6	I E L L K S K S N L N I V	D A T C P Y V A N I I H K K V I K E Y S N R G Y Y Q I I I I V G		
UniRef90_I4X1J7	R E L L A R R K G L V S I	D A T C P D V T V T H D L I R E K T A D G Y Y Q I V Y I I G		
UniRef90_P54473	R R I A E E K G L V A I	D A T C P D V T K T H N L I L E M K E E K G Y H V I Y I I G		
UniRef90_C4Z5S1	Y E S I K N S K G A K I V	D A T C P F V L K I H K I V K D A S A E G D Q I I I I V G		
UniRef90_E2ZDB5	Y E E A A K H D V V	D A T C P H K K A Q Q D A R K V I N D K K A L I I I I V G		
UniRef90_UPI00047BC170	L K N L K A M N T K V I	D A T C P F V T T P Q N I V K D M S K D G Y S I I I I F G		
UniRef90_U2VH62	E S A A R K A C T K V I	D A T C P F V K R A H N A A E L L S R E G G Y Q L I V V G		
UniRef90_R7BN48	I E E L K R R G Y S V	D A T C P P H V M R A Q Q A A K L A R E G G Y Y V L V I I G		
UniRef90_I2K9F2	L A V L K S Q D H K V I	D A T C P Y V T T P Q N I V K C M S V E G G Y S I V I F G		
UniRef90_X8K6J0	Y D R M D E L N L N Y V	D T T C P F V S K I H T I V N S A C K E G K K I I I I V G		
UniRef90_F2NCE0	L E L L K A A G C Q I I	D A T C P K V A K V H A I L R R W A Q R G Y D A I I I V G		
UniRef90_UPI00041B9222	P E E A V I A R N I F A I	D A T C P L V T K V H R E A E L H F R Q G R Q V I L V G		
UniRef90_S0FYM6	U T A L K Q A G F S V I	D A T C P R V V R V Q M I I R K F A Q K G Y A T I I I V G		
UniRef90_Q97109	Y K I L L I S K G L T V I	D A T C P F V T K I Q E K V K K Y N E L G Y D I V I I V G		
UniRef90_G7V9R0	R R E L L N R G H S L I	D G T C P F V F K A Q K K A S F L I S Q G Y R V L I I L G		
UniRef90_W4EAB7	R K V A R A K G L T T V	D A T C P D V T K T H D L I K E K V D E G G C E I I Y I G		
UniRef90_UPI0003B79233	E I A L N R A G F R V M N A T C	D A T C P R V I V Q V I I D K H A K K G Y S T I I V G		
UniRef90_D3UFQ0	L E L L K S K N T K I L D	D A T C P F V I K P Q Q I A E S M S K E G G Y C I V I F G		
UniRef90_D1PP74	Y E K I S T R G L A Y H	D A T C P F V A K I H K L A A E A G K K G A L L L V A G		
UniRef90_E0URM3	L E D L E Q S G V E V V D	D A T C P F V T K P Q E L A Q E M S E E G G Y D V V I F G		
UniRef90_K8DIW4	R N E A K S R D L T V F	D A T C P L V T K V H M E V A R S S R R G E E A I L I I G		
UniRef90_R5AV29	Y A E C A A R D L I R T V	D A T C P F V R R I H K L V S S A A E T G M T V Y I A G G		
UniRef90_C3XMB0	L Q K L E K T N N I T D	D A T C P Y V T K P Q K I C E D M S A K G Y Q I V I F G		
UniRef90_UPI00047E8938	Y K D A N E K R I N V D	D T T C P F V V K K I H R L V K T Y H D K G Y E I I I V G		
UniRef90_F4A8Q4	L D I L K E K K F I I A D	D A T C P Y V A H R V K K Y Y E L G Y K I V I V G		
UniRef90_W4QGB2	R K L A K E K G L T I V	D A T C P D V T R T H D L I K D K Q A E G G Y E F I Y V G		
UniRef90_C2BDN4	K D K L I E N G N E L Y	D A T C P V L N S I Y K K I I Q K E K D G Y Y Q I V I I V G		
UniRef90_J4CDD2	R E L L A K S R N L V E I	D A T C P R V N K V H V Y V K N K A K E G G Y K I V I L I V G		
UniRef90_M4RFH7	Q A E A K R R G M F V I	D A T C P L V S K V H R E V L R F V R E G G Y E I V Y I G		
UniRef90_R6J2B0	Y A Q L E K R G A D I T	D A T C P K V K R I H E L V R K A Q E D G R F V V I I I G		
UniRef90_UPI0004708581	R E L A R K K G L V S I	D A T C P D V T V T H D L I R E K T A E G G Y D I I Y I G		
UniRef90_R5LLY9	Y R E I I L S L G H K V V	D A T C P F V L K I H N I V K E A A A K G E F F V V I I I G		
UniRef90_W7UU18	Y Q Q I E A K G N K M L	D A T C P F V S R I H K I V A E K T A E G G Y F I L I A G G		
UniRef90_B7JN13	K Q R A K E K G L T T I	D A T C P D V T K T H D L I R E A K K A E G G Y H V I Y I G		
UniRef90_UPI0003B67970	T D A L E K R S C Q I I	D A T C P R V K A S Q K M V E R Y S S E N D Y V V V L I T G		
UniRef90_J0L7L4	L Q Y L K D N E I E Y V	D A T C P F V V T K P Q E I V R D M S R N G Y E I V I V I F G		
UniRef90_R6CAX6	Y H E L E K R G A Q Y V	D A T C P F V S R I Q K I A L E K S V E G K T V L I I A G G		
UniRef90_UPI000360C6B8	Y H E L E K R G A Q Y V	D A T C P F V S R I Q K I A L E K S V E G K T V L I I A G G		
UniRef90_UPI000381DB15	P A E A A R R E M F F L	D A T C P L V S K V H I E M T R H H A E G R H I L L I I G		
UniRef90_B8CWY2	P A E A Q R R E M F F L	D A T C P L V S K V H R E V E R H S A T G R H I L L I I G		
UniRef90_Q30S81	I E K A R Q K G L H I I	D A T C P Y V K K N A Q K Y A R E L V D K G Y Q T I I F G		
UniRef90_UPI0003B6F837	L A E L K A N N V D V V	D A T C P Y V T K P Q Q I C Q E M S E Q G Y E I I I F G		
UniRef90_M3CAE7	R D S L A C T R S L I V	D A T C P F V R N V Q E K A A I L K R E G G Y R V F V V G		
UniRef90_A710N0	H E E A A R G K L A T I	D A T C P L V T K V H K E A V R Y A R E D Y D I I L L I I G		
UniRef90_D9PJE5	L D V L K S K N K E L I	D A T C P P F V K K P Q Q I V E K M S S E G G Y D I V I I F G		
UniRef90_UPI00039E08C1	A K M A K Q R R L L K C I	D A T C P L V K K I H R L A T D F S K K G I Q V I I L Y L G		
UniRef90_D6XW89	R Q R A R E K G L T V V	D A T C P D V T R T H D L I R E K T A E G G Y E I I Y I V G		
UniRef90_N4WWP6	R R K A K E K G L T T V	D A T C P D V T R T H D L I R E K T A E G G Y E I I Y I V G		
UniRef90_D1B031	K Q K A E A K G L T V L	D A T C P P D V T R T H D L I R E K V K N G Y E I I Y I V G		
UniRef90_B8E2T7	L E T L V Q S N V E V I	D A T C P P Y V T K P Q E I C E K M S K E G G Y E I I Y I F G		
UniRef90_E8UAU8	I D F Y K S L G N E I Y	D A T C P L V K V Q V L A E Y L K N N K Y K V I I I I G		
UniRef90_D1NSY9	R A R A R A M G L G V I	D A T C P L V T K V H T E A K K Y A R E G G Y T I I I I G		
UniRef90_A5K9W7	Q R V A K E R G L M I V	D A T C P L V G K V H R E V Q R Y V G Q G Y E I V Y I G		
UniRef90_UPI00036C6B8	R E L A Q K K K L I E I	D A T C P P L V N K V H V Y V Q V K A K E G G Y K I I I I G		
UniRef90_E0A017UHU6	P A E A A R N M I Q V	D A T C P L V T K V H I E A A R H H E N G L Q V M I I G		
UniRef90_E7G1B5	L T L L K E K G A H I I	D A T C P Y V T K P Q Q I V E K M S A K G Y Q V I I F G		
UniRef90_K2F4S7	R D E A A R G L K V F D	D A T C P L V T K V H V E V A K M R N Q A R E V V V M I G		

130 140 150 160

D R D H P E	V K G L L G Y A	G K G G V A V S S L A A L E K L P S F D R A I	
H H G H P E	V E G T A G R V Q G R V H I V A D E A E A E T I T V A D A G K V A		
UniRef90_K1Y8Y4			
UniRef90_K7Z2M7			
UniRef90_E6W1T8			
UniRef90_E0TC91			
UniRef90_N6VVM3			
UniRef90_E1R064			
UniRef90_R4K765			
UniRef90_M8DUA0			
UniRef90_E4U299			
UniRef90_R6ZY58			
UniRef90_UPI000288F61C			
UniRef90_UPI00040DF0DB			
UniRef90_A0RQC4			
UniRef90_R5YWY3			
UniRef90_UPI00036F3A70			
N D I H P E	V E G I K G W V N	N G K S Y V V N S E E D I N K L N I P K E I C	
H A G H P E	V I G T M G Q L P E	G A V S L V E D E T Q A E K F T Q P K S L A	
UniRef90_D8GJN1			
UniRef90_R5RB91			
UniRef90_R7PNU4			
UniRef90_Q1Q304			
UniRef90_Q5L5D3			
UniRef90_Q0G170			
UniRef90_A7GXB5			
UniRef90_Q1LSS7			
UniRef90_H1HS63			
UniRef90_U2L3Z9			
UniRef90_R7BQJ4			
UniRef90_H3SEF6			
UniRef90_UPI000402C76B			
UniRef90_D5BSV2			
UniRef90_W6N3K8			
UniRef90_T1DW09			
UniRef90_A0A033V2S9			
UniRef90_F5SG90			
UniRef90_W2BZ08			
UniRef90_B2A4N7			
UniRef90_L7ENN6			
UniRef90_I4X1J7			
UniRef90_P54473			
UniRef90_C4Z5S1			
UniRef90_E2ZDB5			
UniRef90_UPI00047BC170			
UniRef90_U2VH62			
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UniRef90_B7JN13			
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UniRef90_M3CAE7			
UniRef90_A710N0			
UniRef90_D9PJ5			
UniRef90_UPI00039E08C1			
UniRef90_D6XW89			
UniRef90_N4WWP6			
UniRef90_D1B031			
UniRef90_B8E2T7			
UniRef90_E8UAU8			
UniRef90_D1NSY9			
UniRef90_A5K9W7			
UniRef90_A0A017UHU6			
UniRef90_E7G1B5			
UniRef90_K2F4S7			

	170	180	190	200
UniRef90_C0QLG6	I V A Q T T Q D T H L F E Q	V K V W A Q E N H P E Y K V F D T	I C D S T E K R Q	
UniRef90_K1Y8Y4	Y V T Q T T L N K N D I L G I L E I L Q R R F P R I K P P S N	C C F A T Q N R Q		
UniRef90_K7Z2M7	L I T Q T T L S I D H T A R L V A I L Q R R F P A I F A N E D I	C C Y A T T T N R Q		
UniRef90_E6W1T8	V V A Q T T Q S Q E K L Q V V S A L L K R N S E V R I F N T I	C C D A T D V R Q		
UniRef90_E0TC91	Y V T Q T T L S V D D T A R I V E I L K A R F P D I Q I K D D I	C C Y A T T T N R Q		
UniRef90_N6VVM3	F V T Q T T L S V E D T A E I L D V L Q Q R F P E A P A A E S	C C E A T S S R Q		
UniRef90_E1R064	V V V Q T T Q S R A Q L R E V V A A L V G R T E E L R V F D T	C C S A T E I R Q		
UniRef90_R4K765	V V A Q T T T E K Q E N W E K V L S A V S E K A K D A V S F N T I	C C C L A T Q V R Q		
UniRef90_M8DUA0	V T N Q T T M S Q W D V K H L M D A I I K R Y P Q V E V H N E I	C C C C N A T F D N Q		
UniRef90_E4U299	T V A Q T T R K I E E Y Q Q I V G K L M A D H K E V V R V F N T I	C C C C N A T E E R Q		
UniRef90_R6ZY58	I V S Q T T F N Y N K F Q E L V E I F R K R G Y N V N V V I N T I	C C C C Y A T T Q N R Q		
UniRef90_UPI000288F61C	I V T Q T T L S V D D T K S I I D I L K T R F P K I N I P D D I	C C C C Y A T T Q V R Q		
UniRef90_UPI00040DF0DB	I T N Q T T M S Q W D V A E I I K Q L L K K Y P H A E V H K E I	C C C C S A T E E R Q		
UniRef90_A0RQC4	V V S Q T T K K I E K F T K I V S Y L M Q R V K E V R V F N T I	C C C C C N A T L E N Q		
UniRef90_R5YWy3	I V S Q T T F N Y N K F Q Y L V E I I E K K G Y Y I V N V N T I	C C C C C N A T H L R Q		
UniRef90_UPI00036F3A70	Y V T Q T T L S V Q D T A D V I A K L R E R F P N L T A P D S I	C C C C C Y A T T T N R Q		
UniRef90_D8GJN1	I V S Q T T T E K Q S N W E K V L S I V T K N C K E F I A F N T I	C C C C C S A T E F R Q		
UniRef90_R5RB91	I V S Q T T F N Y N K F Q D I V E I I L S K K R Y D R L V I N T I	C C C C C S A T E E R Q		
UniRef90_R7PNPU4	I V I Q T T F S M V L A E E I I A S I Q K K V G T L G V H K T I	C C C C C Q A T S E R Q		
UniRef90_Q1Q304	I V A Q T T Q D R H L F K R A I D E I K R Y P N S E F E T I	C C C C C S S T Y K R Q		
UniRef90_Q5L5D3	F V T Q T T L S L D D V I A E V T Q A L K A R Y P H I P S S S V	C C C C C Y A T T Q N R Q		
UniRef90_Q0G170	F I T Q T T L S V D D T A G V V K A L Q A K F P E M Q A P E S I	C C C C C Y A T T T N R Q		
UniRef90_A7GXB5	L V S Q T T T R K V E K F M Q I A N Y L M L R V K E V R V F N T I	C C C C C N A T F E N Q		
UniRef90_Q1LSS7	F I T Q T T F S V D K K S S A I I D A L R Q R F P I K G P H D I	C C C C C Y A T T T N R Q		
UniRef90_H1HS63	V V A Q T T T F R L P K F K M L V D K I R E L G Y D I A C F N I	C C C C C N A T Q E R Q		
UniRef90_U2L3Z9	V I S Q T T N R F E K F E A I S K T I Y K N N S H V E I Q N T I	C C C C C N A T R L R Q		
UniRef90_R7BJQ4	I V S Q T T F N L K K F Q E I V E I F D K K D Y D L K C L N T I	C C C C C N A T E V R Q		
UniRef90_H3SEF6	I T N Q T T M S Q W D I K H I M N R L I A R F P T A E I H N E I	C C C C C M A T Q E R Q		
UniRef90_UPI000402C76B	I V S Q T T F N K N K F Q E T V E I F G N G N Y N I N I V N T I	C C C C C N A T D E R Q		
UniRef90_D5BSV2	F A T Q T T L S V D D T A A I I S V L Q F R P D I T G P E D I	C C C C C Y A T T T N R Q		
UniRef90_W6N3K8	V V S Q T T E K Q M M N F E K V L N V V I K N C K E F I A F N T I	C C C C C S A T E A R Q		
UniRef90_T1DW09	L I S Q T T K Q I E K F N E I A S Y L I T K C H E V R I F N T I	C C C C C N A T F D N Q		
UniRef90_A0A033V2S9	V T N Q T T T M S Q W D V K H L I D E L K V K P H I E V H E E I	C C C C C L A T Q V R Q		
UniRef90_F5SG90	I T N Q T T M S Q W D T R H L M K K I K E K Y A H A E I V N E I	C C C C C L A T Q E R Q		
UniRef90_W2BZ08	L V S Q T T L K K E T L I E E V I A A L T K E G V I L E V Q N T I	C C C C C N A T H Q R Q		
UniRef90_B2A4N7	V V A Q T T L R E E K F N E I V E K I L D R N P N T I V H N T I	C C C C C D A T Q K R Q		
UniRef90_L7ENN6	L V A Q T T T E K Q E N W Q K V L K I V S E R A E E I I P F N T I	C C C C C N A T E V R Q		
UniRef90_I4X1J7	V T N Q T T T M S Q W D V V D M M E R L K E K F P H S E V H K E I	C C C C C L A T Q V R Q		
UniRef90_P54473	V T N Q T T T M S Q W D V I H D I M E L V K E K Y P H V E Y H Q E I	C C C C C L A T Q V R Q		
UniRef90_C4Z5S1	V V S Q T T F N Y K K F Q D I L V E I I K K E Y N I C I S N T I	C C C C C N A T E E R Q		
UniRef90_E2ZDB5	V V V Q T T T F S Q S R F K Q I E S V L A E K T D D L D V Y M T I	C C C C C T A T R Q R Q		
UniRef90_UPI00047BC170	C V A Q T T K K K E T Y L E I V N Y L I L R N K E V R V F N T I	C C C C C C D A T F E N Q		
UniRef90_U2VH62	M V V Q T T M T Q D R V Q G I M D A L L P I T D E L R V V N T I	C C C C C C E A T S S R Q		
UniRef90_R7BN48	V V V Q T T T Q S R K A L I N A V L G A L E E R G I E P L V K D T I	C C C C C C F A T T Q R Q		
UniRef90_I2K9F2	V V S Q T T T K K P E D F A K I V T A L L E T R K E V R V F N T I	C C C C C T A T F E N Q		
UniRef90_X8K6J0	V V C Q T T I I R K E L F F E S I I D A L E A K G C K L E I K N T I	C C C C C C N A T S L R Q		
UniRef90_F2NCE0	V V A Q T T Q S E D V F T R R V A E I I K A R F A E V V Q V Y N T I	C C C C C C D A T A N R Q		
UniRef90_UPI00041B9222	Y V T Q T T L S I D D T R S M V D A L L R R F P R M I G P E D I	C C C C C C Y A T T T N R Q		
UniRef90_S0FYM6	V V A Q T T Q N T A L Y D E I K A F C A K H R P H Y Q V F D T I	C C C C C C G S T E R R Q		
UniRef90_Q97109	V V A Q T T T E K L E N W E K V L K E V I K N R A I E V I S F N T I	C C C C C C N A T S E R Q		
UniRef90_G7V9R0	I I S Q T T Q R L E D I A N L V Q L V V P K A S E L R V Y N T I	C C C C C C G A T E A R Q		
UniRef90_W4EAB7	I T N Q T T T M S Q W D I K H M R K L L E T F P G A E V H N E I	C C C C C C M A T Q V R Q		
UniRef90_UPI0003B79233	L V A Q T T Q N T A L Y E E I K E W C T E N A P H Y M L F D T I	C C C C C C G S T E K R Q		
UniRef90_D3UFQ0	L I S Q T T T K Q M K K F L E I A N Y L I M Q N C Y E T R I F N T I	C C C C C C N A T F D N Q		
UniRef90_D1PP74	V V A Q T T F R V E S W E S C K A F L K K E C T K A E I F D T I	C C C C C C N A T T W A R Q		
UniRef90_E0URM3	L I A Q T T R K V E E Y Y M Q I A N Y L I P R H K E V R V F N T I	C C C C C C N A T F E N Q		
UniRef90_K8DIW4	F M T Q T T L S V D D T D S E V I D A L R S R F P K I V G P D I	C C C C C C Y A T T T N R Q		
UniRef90_R5AV29	I V A Q T T T S R E Q Y E G I V H A L E R R V S D L T V Y D T I	C C C C C C D T T T R Q R Q		
UniRef90_C3XMB0	L V S Q T T T K N I N L F L E I A N Y L I S R C S E C R V F N T I	C C C C C C N A T F D N Q		
UniRef90_UPI00047E8938	V V A Q T T T I N L E L Y N E I I S S K L E K K L D N I I F N N T I	C C C C C C S A T K V R Q		
UniRef90_F4A8Q4	I V A Q T T E K Q E N F E K V T K K I P L C D E L I T F N T I	C C C C C C S A T K I R Q		
UniRef90_W4QGB2	I T N Q T T T M S Q W D V S D I M K K A M E L Y P H A E V H N E I	C C C C C C L A T Q V R Q		
UniRef90_C2BDN4	V V S Q T T T N R L E F F R N I A N K L E E N N D S V V I E N T I	C C C C C C C N A T K L R Q		
UniRef90_J4CDD2	Y V T Q T T T S L D D C K H I K D A L V A K Y P H I I P S G S I	C C C C C C C Y A T T T N R Q		
UniRef90_M4RFH7	L L T Q T T L S V D E T A G V V A A L K K R F D W I P P S S D I	C C C C C C C Y A T T Q V R Q		
UniRef90_R6J2B0	M V V Q T T T Q T R S N F T E C A S F L K K R C T N L Q I F D T I	C C C C C C C G A T S S M R Q		
UniRef90_UPI0004708581	V T N Q T T T M S Q W D V I H L M E D L K K K Y P H I E V H K E I	C C C C C C C M A T Q V R Q		
UniRef90_R5LLY9	I V S Q T T T F N Y N K F K Y L V E I F Q K N S Y D V G I L N T I	C C C C C C C N A T E V R Q		
UniRef90_W7UU18	I V A Q T T Y N I V V W G E C L N V I P K D D P D I V I Y D T I	C C C C C C C N A T D A R Q		
UniRef90_B7JN13	V T N Q T T T M S Q W D V Q H L M E D I Q K K F P T A E F H K E I	C C C C C C C L A T Q V R Q		
UniRef90_UPI0003B67970	L L S Q T T T Y S P K E F E K I E G L F R Q K F H N L A V M N T I	C C C C C C C P A T N E R Q		
UniRef90_J0L7L4	L V A Q T T T R K F S S F L N I A S Y L I G R V K E V R V F N T I	C C C C C C C N A T F E N Q		
UniRef90_R6CAK6	V L S Q T T Y N K R L W E Q C R E Y I A Q A M P D A E I F D T I	C C C C C C C S A T A T R Q		
UniRef90_UPI000360C6B8	F A T Q T T T S V D D A A T I D A L R A R F P E I P H R E D V	C C C C C C C Y A T T T N R Q		
UniRef90_UPI000381DB15	F T T Q T T T S V D D T V E I V A I L Q D R F P D I P T R E D I	C C C C C C C Y A T T T N R Q		
UniRef90_B8CWY2	L I A Q T T T K S P A S F Q K I V S Y I L P E V K E L R I Y N T I	C C C C C C C R T T E T R Q		
UniRef90_Q30S81	L V A Q T T T R K V E D Y L E I A N Y L I P R Y K E V R V F N T I	C C C C C C C N A T F E N Q		
UniRef90_UPI0003B6F837	I V C Q T T T Q K V S V S V L Q D I A G V L A A Q A G E L V R Y N T I	C C C C C C C S A T L E R Q		
UniRef90_M3CAE7	W L S Q T T T S V D E T M E T V G A L K N K F P N L P P S D I	C C C C C C C Y A T Q N R Q		
UniRef90_A710N0	U N S Q T T T K R I E N F T K I A E F L M T T T K E L R I F N T I	C C C C C C C N A T F Q N Q		
UniRef90_D9PJE5	Y L T Q T T T S V D E T R E L V M H L K A K F P Q I M P E D N I	C C C C C C C F A T Q T R Q		
UniRef90_UPI00039E08C1	I T N Q T T T M S Q W D V Y D V M Q K V K E K Y P Q T E M E Q E I	C C C C C C C M A T Q V R Q		
UniRef90_D6XW89	I T N Q T T T M S Q W D V Y D V M Q K V K E K Y P Q T E M E Q E I	C C C C C C C M A T Q V R Q		
UniRef90_N4WWP6	V T N Q T T T M S Q W D V Y D V M Q K V K E K Y P Q T E M E Q E I	C C C C C C C M A T Q V R Q		
UniRef90_D1B031	V V S Q T T T K V S E F L E I T S Y L I T H Y K E V R V F N T I	C C C C C C C C N A T F E N Q		
UniRef90_B8E2T7	I V F Q T T T Q S F D N A L Q K V N L I M N K G K E I R I F N T I	C C C C C C C P E T I E R Q		
UniRef90_E8UAU8	V L T Q T T T L S V D E T R R T V D L L R A R F P N L H V P E D I	C C C C C C C Y A T K N R Q		
UniRef90_D1NSY9	L L T Q T T T L S V D E T A D T I A A L K E R F P E M P P S S D I	C C C C C C C Y A T S N R Q		
UniRef90_A5K9W7	Y V T Q T T T L S I D D C S L V K R L K E K F P H I P S S G S I	C C C C C C C Y A T T N R Q		
UniRef90_A0A017UHU6	F V T Q T T T S V D V D T A G I I A A L R D R F P S I P G R E D I	C C C C C C C Y A T T N R Q		
UniRef90_E7G1B5	L V S Q T T T K Q T P Q L L E I A S F L I V R C A E R F P L F N T I	C C C C C C C Y A T F E N Q		
UniRef90_K2F4S7	F V T Q T T T S V D D A S L V I A A L K E H F P E V Q G P D I	C C C C C C C Y A T Q N R Q		

	210	220	230	240
UniRef90_C0QLG6	A E T R K M A Q C D A V V V V	G G R E S G N T R R L A Q V A R D T G K P A F H		
UniRef90_K1Y8Y4	D A V K Q L A G I S D L L F V V	G S K N S S N S N R R L R E V A R Q C G V I E A H L		
UniRef90_K7Z2M7	N A V K A I A S N C D A I L V I	G A Q N S S N S N R R L V E V A K A C G C K S R L		
UniRef90_E6W1T8	K E A V E I A S G S D V V L V I	G G R K S G N T N R R L A E I C Q P D T Y H		
UniRef90_E0TC91	E A V K I L A A D A D A L F V V	G S E T S S N S K R L V E V G K A A G C P Y V L		
UniRef90_N6VVM3	A A V K A A A L G S D L F L I V	G A P N S S N S R R L V E V A E R F G A R A V L		
UniRef90_E1R064	A A A A R L A S S V D V M I V I	G G R I S A N T T R R L A E I C Q P D T Y H		
UniRef90_R4K765	K K A E E L S K N S D V V V V I	G A H S S N T T K L Y E I C T R C K G T H H		
UniRef90_M8DUA0	E A V A E Q A G E A D L T I V V	G D P R S N N S N R R L A Q V C K S N C E N T I H		
UniRef90_E4U299	D A V R D L A Q K A D V M I V I	G G K N S S N T K Q L H S I I C R E K C A A T F F		
UniRef90_R6ZY58	T E A G E I A A K V D A M I V I	G G K H S S N T Q K L Y E I C G C K S V L		
UniRef90_UPI000288F61C	D A V K Q L A L E S D F L I V V	G D P R S N N S N R R L A Q V S E E I G T K A Y R		
UniRef90_UPI00040DF0DB	E A V A E Q A K D C D L V I V V	G G K N S S N T K Q L Y E I C G C K S V L		
UniRef90_A0RQC4	E A V R E L S S R A D V M V I I	G G K N S S N T K Q L Y E I C G C K S V L		
UniRef90_R5YWY3	V E A K K V V S S V D A M I V I	G G K H S S N T Q K L Y E I C G C K S V L		
UniRef90_UPI00036F3A70	E S V S A A A P G C D F I I V	G A P N S S N S R R L V E V A K R A G A K A I L		
UniRef90_D8GJN1	K A A A D I S K E V F D M M V I	G G K N S S N T T K L Y E I C C K D N C N N T Y		
UniRef90_R5RB91	L E A R Q I A C E V D T M I V I	G G R H S S N T Q K L Y E I C C R K E C N N T Y		
UniRef90_R7PNU4	K A A K E L A G K V N V M I V I	G G R N S A N T G R L A E V C R A A G A R T H H		
UniRef90_Q1Q304	D E V V N L Q K S V D A M I V V	G G R G S A N T T R R L V T V C S Q G T P T F H		
UniRef90_Q5L5D3	E A A L R A V L P R V N F V Y V I	G D V Q S S N S N R R L R E V A E K R N P A R L		
UniRef90_Q0G170	D A V K V A A P E T D L F V V V	G A P N S S N S N R R L V E V A K R F G A R D A M		
UniRef90_A7GXB5	E A V K N L A K R A D V M I V I	G G K N S S N T K Q L Y L I S K N F C E D S Y L		
UniRef90_Q1LSS7	E A V R N L T M A T D I V L V V	G S K N S S N S N R R L V E L A Q Q T G K P A Y L		
UniRef90_H1HS63	A A E A K K I A S E V D A M I V I	G G K N S S N T R R L V E I C S A V C P H T F Y		
UniRef90_U2L3Z9	E S C K R L A K A E V D A V I I L	G G Y H S S N T Q K L V E V A N K Y C E N F F		
UniRef90_R7BJQ4	T E A R Q I A S Q V D A M I V I	G G K N S S N T Q K L F E I C K E E C S N T Y Y		
UniRef90_H3SEF6	A A V A E Q A K S C D L V I V V	G D P R S N N S N R R L A Q V S E E I G V R A F R		
UniRef90_UPI000402C76B	S E A E D I L A K S A D V M I V I	G G A H S S N S N S R R L Y E I C C N Q K C A K T Y F		
UniRef90_D5BSV2	N A V K D M A K G L D L M L V I	G A E N S S N S N S Q R L V E V A L R S G A K Q A R		
UniRef90_W6N3K8	K S V E L L S K K V D M M M V I	G G K N S S N T T K L Y E I C K I N C N N T I H		
UniRef90_T1DW09	Q S A R E L S E V D V M V I V	G G K T S S N T K Q L F M I A K E N C K D S Y L		
UniRef90_A0A033V2S9	E A V A T Q A D K A D L L I V I	G D P K S S N N S N R R L A Q V S K E I H T N A Y R		
UniRef90_F5SG90	E A V A E Q A K K T E M V I V V	G D P R S N N S N R R L A Q V A R E V G V E A H R		
UniRef90_W2BZ08	K S A A D D L A E K V D A M I V I	G G R N S S N T Q K L Y E I C C K K K Q N N C F F		
UniRef90_B2A4N7	T A T K E L L A G Q V D V M I V V	G G Y N S S N T T K K L K E I L A V K E G V P T Y H		
UniRef90_L7ENN6	K K A D E L S K E A Q V D V M I V V	G G H H S S N T T K K L F E I L C K R N C E N T I H		
UniRef90_I4X1J7	E A V A Q Q A G E T D L L I V I	G D P M S N N S N R R L A Q V S S Q D I G T P A Y R		
UniRef90_P54473	E A V S E Q A K K A D L T I V V	G D P K S S N N S N R R L A Q V S E E I G T K A Y R		
UniRef90_C4Z5S1	N E A R R I A R R A D A M I V I	G D S S S S N T R R L Y E I C C K T E C Q E T F Y		
UniRef90_E2ZDB5	E A A V E L L A K K V D A M I V I	G G K N S S A N T G R L A Q V C A E Q Q G C P T Y H		
UniRef90_UPI00047BC170	D A A R D I S K A D V M I V I	G G K N S S S N T K Q L H S I I C L E N C T D S Y L		
UniRef90_U2VH62	R A A A E L L A T E A S V M I V I	G G R N S S A N T T H A E I L C A E H C K K T H H		
UniRef90_R7BN48	E A A V Q L L A Q D A Q V M I V I	G G R N S S S N T T R R L F E I L C E Q H C A A H Y H		
UniRef90_I2K9F2	D A A A E L L A K K A D V M I V I	G G K H S S N T K Q L H S I I C C E R H C K D S Y L		
UniRef90_X8K6J0	D A C Q R L L A K E V D A M I V I	G D K Q S S N T K K K L Y E I C A K K H C C N N S F F		
UniRef90_F2NCE0	A E V Q K L L A R E V E A V V V V	G G R S S S G N T Q R R L V E I A R A T G T P T Y H		
UniRef90_UPI00041B9222	E A V K H I A A P V V D A L L V V	G G S S N S S N S Q R R L K E V A E R S G C K A R L		
UniRef90_S0FY6M	Q E V R H L A A A T H D A V I V V	G G R Q S S G N T R R L A Q V A A E T R A F T T H		
UniRef90_Q97109	K A K D L S N K V D F M V V I	G G K Q S S S N T T K K L F E I V A L E R N N Q A I W		
UniRef90_G7V9R0	K A V A E L L A G I T D G V V V I	G G K N S S A N T R R L F E I V A L E R N N Q A I W		
UniRef90_W4EAB7	E A V A E Q A G Q C E L V I V V	G D P R S N N S N R R L A Q V S E E I G V T A Y R		
UniRef90_UPI0003B79233	A E A R D L A G K N D A L I V V	G G K Q S S S N T T K K L A Q V A A A E T Q I P A V H		
UniRef90_D3UFQ0	E A V K E L L S Q E V D V I M V V	G G K T S S N T K Q L L T I A Q M Y C K D S Y L		
UniRef90_D1PP74	Q E A E D L L S Q K K C D R M V V I	G G H H S S N T Q K L L Q V A A R H T T A I N		
UniRef90_E0URM3	D A V R K L L S K K A D I I V I	G G K N S S S N T K Q L F S I L A K E N C P N S H H		
UniRef90_K8DIW4	E A V A R A L L E Q A D V V L V V	G S K N S S S N S N R R L A Q V A Q R M G K T A Y L		
UniRef90_R5AV29	N E A A L L L A E K C T K I F V I	G S K N S S S A N T V E E I C K K K C E H T K T		
UniRef90_C3XMB0	D S A R N L A K E V D V M V V I	G G K N S S S N T K Q L Y N I S K E Y C K D C Y L		
UniRef90_UPI00047E8938	L A A K E L L S Q E V D C M V V V	G G K H S S S N T Q K L V N I C K E A V I E T F A		
UniRef90_F4A8Q4	E A A S I L S Q N V D T M V V I	G D P K S S N N S N R R L A Q V C K K N C K N T V H		
UniRef90_W4QGB2	E A V A E Q A K E C D L V I V V	G D P K S S N N S N R R L A Q V S E Q I G T K A Y R		
UniRef90_C2BDN4	D S A K K L L A S Q V D C M I V V	G G F N S S N T N K L Y Q V A S M F C K N V F R		
UniRef90_J4CDD2	T A I H K V T K L V D M V L I V	G S K L S S N A K R L V E A L N R D V K S Y L		
UniRef90_M4RFH7	T A V K T V A E R A Q C V V I V	G S A N S S N S V R M E V A Q E E R G R A H R		
UniRef90_R6J2B0	E E A A K L L A A E C D A M V V I	G G K H S A N S S V H S V I C S E V C P N V Q F		
UniRef90_UPI0004708581	E A V A E Q A G E A D L L I V V	G D P K S N N S N R R L T Q V S V E I N T P S Y R		
UniRef90_R5LLY9	T E A G E L L A S M V D A M I V I	G G R T S S N T Q K L Y D I C K K K V C K H T F Y		
UniRef90_W7UU18	S D A A E L A K D S D I M L V V V	G G R H S S N T V K L Y E V C S R F C K T Y H		
UniRef90_B7JN13	E E A A K L L A A E C D A M V V I	G G K H S A N S S V H A Q V S Q E I G T K A Y R		
UniRef90_UPI0003B67970	Q A L L E L L C S K V D G V L V V	G G K N S S A N T K R L Y Q T A V A N C K Q A A H		
UniRef90_J0L7L4	I S A K E L L S Q K A D I M I I I	G G K N S S S N T K Q L V A I C R E E C Q T C F H		
UniRef90_R6CAX6	E E A E K L L S Q A D L M I I I	G G K N S S S N T K Q L V A I C R E E C Q T C F H		
UniRef90_UPI000360C6B8	A A V K A V A P K I Q A L I V I	G G P N S S N S L R L V E V G R R A G C A Y A Q		
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250 260 270 280

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1 10 20 30 40

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M K I I L A K S A G Y C C F G V R D A V N A A Y D A S K E H G E V Y M L G D I
M Q I K L A K N Y G F C C F G V K R A I K I A E N S K N A S T I L G P L
M K I R I A K K A G F C C M G V R R A V N L V L S A L N Q G K Y P I Y T Y G P L
M E V I R A E K M G F C C F G V R E A V E L S E A L S R K E N K R I F M L G M L
M S K I I L A N P R G F C C A G V D R A I E I V Q R A L D M L G A P I Y V R H E V
M D V K I A K T A G F C C W G V R R T V D K V M E V A D Q H R A P V V T L G P I
M K V L L A K S A G Y C C Y G V K R A V E L A A K T G E E T G G C W M L G D L
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M E V I K I A P R G Y C C H G V V D A M V I A Q N A A L D K P R P I Y I L G M I
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R V Y L A R P R G F C C A G V V M A I E A V E R W A E K E K G E L V V Y H E I
M D V I K I S P R G Y C C Y G V V D A M A L A M Q T V K D L P R P I Y I L G M I
V L L A A P R S F C C A G V E R A I R T V E R A L A E H G P P V Y V R K Q I
R V Y L A K P R G F C C A G V V M A I G A V E R A A R E E A K P V T V Y H S I
M E I I I R A K H S G F C C F G V K Q G V E R A R E V E K N S G G I Y S Y G N I
M E I I V A D V Y G F C C G G V K R A V K M A F D N A D K G V Y S Y G D L
UniRef90_S6ENZ0
UniRef90_E0QK79
UniRef90_U6M118
UniRef90_I4BVW6
UniRef90_R5B2R4
UniRef90_C0EH04
UniRef90_R7L4D4
UniRef90_V2QH7
UniRef90_UP1000289A39C
UniRef90_H0UIM9
UniRef90_UP100040ABF22
UniRef90_I4CE44
UniRef90_B0SHI6
UniRef90_C6XU16
UniRef90_R5IC74
UniRef90_K2FII4
UniRef90_R6Y565
UniRef90_L0R7L1
UniRef90_I3DGP1
UniRef90_I4EDU1
UniRef90_D319G2
UniRef90_I7L5U6
UniRef90_D3PTQ6
UniRef90_R5DQY7
UniRef90_R7LQS5
UniRef90_D4CU14
UniRef90_E9YHN5
UniRef90_S3A776
UniRef90_C1KV98
UniRef90_R5BBY3
UniRef90_R5CDG1
UniRef90_S0ES35
UniRef90_U2F3V5
UniRef90_UP100046EA99
UniRef90_UP100035E11A1
UniRef90_E6MLU0
UniRef90_D5EW04
UniRef90_Q7JV5
UniRef90_R5FMY8
UniRef90_K2EKV3
UniRef90_H8KND1
UniRef90_R5NEV8
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UniRef90_C9MN69
UniRef90_R6H1W7
UniRef90_D1AGH3
UniRef90_R5XQF4
UniRef90_UP10003B3EC1E
UniRef90_M1WVS2
UniRef90_F2NRL2
UniRef90_D6TGK6
UniRef90_R5TJC8
UniRef90_E4TPF7
UniRef90_UP10002D34FB0
UniRef90_R7BX43
UniRef90_M5A382
UniRef90_F0JJX6
UniRef90_K5YL06
UniRef90_E9SG53
UniRef90_UP100040F0AC5
UniRef90_E0NRZ2
UniRef90_M1E6Z0
UniRef90_F2N9J0
UniRef90_K2FY22
UniRef90_B9L0U3
UniRef90_S7V8D9

UniRef90_R6A508	I H N P I V V R E L S E A G V G I L A D T L N D A A S G T V I I R A H G I V V P Q V
UniRef90_U7D9E4	I H N T Q A I T M L E Q N N I K S L T D D T S P E D K S I L I R A H G I V P P E K
UniRef90_UP100040A476A	V H N K H V T D A F D E E G I V T L D G P N Q V D K G T V I F T A H G V S P E V
UniRef90_UP100039CF203	V H N K H V M E D M K N K G F N V I S E D E I K E G D I V V V R A H G T T K K I
UniRef90_UP10003A5A589	V H N E N V V E D L L E K K G V K V E K L E E I P E D K P V L F R A H G T S K D V
UniRef90_UP100046AE860	I H N N E E I K R L K I N F N V D T L N D V S E V N G V A I I R T H G I I T K D D
UniRef90_F8C435	I H N P Q T L E L L N K L G V K I I R D L D D F P S G V C I R A H G I I P P Q E
UniRef90_E3HAA1	V H N E H V I E D L R N K G I E I L N E D D L K E G D I V I I R A H G T I K E I
UniRef90_G2FFN9	V H N R F V V E S L R Q R G I F V D E L S D I P D G N T V I F S A H G V S Q T V
UniRef90_B4UEK4	I H N P Q A V A R F S E K G V G T V N G I E V T D G T T V V V R T H G A V R E E
UniRef90_U2Q316	V H N S H V V E D L L A R R G V R T E D P A G L A A G D T V V V I R S H G E L K S V
UniRef90_UP10004665275	I I H N P Q E V D R L V R K G L L V V V D S P E V P P S Q V F V R A H G I S P T L V
UniRef90_UP10002E1D65E	V H N K H V T D A F E K E G I I T L D A L E E I T V G T I I F T A H G I I S P E V
UniRef90_D2Z411	I I H N P Q E V Q R L V D K G V V V E D D D R I P P D E P V F V R A H G I S P D V
UniRef90_A8FLU3	I H N N E E I S R L L Q K N F N V K E N I Q A L S N E K K A I I R T H G I I T K Q D
UniRef90_Q7M8Y6	I H N K K E I E R L R K N F G V T V E E V E N L P R G S E V I I R T H G I I P K D D
UniRef90_C7RHT6	I H N P Q L V E K L L E N E G L E V V D K K E A I K D S T V L I I R A H G E S A D F
UniRef90_D8F3P1	I H N K Q V L D L L E T K G V K A T D N T T G L T R G R I L I I R A H G I I P P S Q
UniRef90_Q72G65	V H N R V V V E R I L Q A K G V H F V E D L A E R L A D T V V V F S A H G H P P A V
UniRef90_F8FCF1	V H N A H V T D F F K K E G V I T L D I L E S V D K G T V I F T A H G V S P E V
UniRef90_UP10002627D5D	V H N T H V I D D L L A A R G V F V D E L D E V P R G Q L V I V F S A H G V S P P S V
UniRef90_UP1000360B456	V H N H T V V E R L L E K K Q G V H F V N I D A L P A G S T V V V F S A H G I S P L V
UniRef90_V1CFA7	I H N R M V I S E L L E N K G L Q V I D I L E D L T D Q D K V I I R C H G V G E K F
UniRef90_UP1000288C62E	V H N E F V V D E L Q R K G V E E I D D T N I E N S K V I I R S H G V H K N I
UniRef90_S6ENZ0	V H N R F V V N G L R E R G V F V E E L D E V P D G A L V I F S A H G V S Q A V
UniRef90_E0QK79	I H N K R A V E K L K N K G L Q V D K L K E K N K N I I F R S H G V V E K K Y
UniRef90_U6M118	V H N E F V C Q K Q L E E R G I F V E N L S E V P L N S V V V F S A H G V S P H V
UniRef90_14BVW6	I I H N E E V K R L I S M G L K I E K V E C L P P P N A V V F I R S H G V S R A E
UniRef90_R5B2R4	I H N D D V V V Q H R S S E G L L T V D P E Q L P Q G A S V I R S H G V V A Q S V
UniRef90_C0EH04	I H N P Q L V S D L L A S K G G V R T I R P D Q A D A Q D T V V I R S H G V V A Q S V
UniRef90_R7L4D4	I H N R Q M M E R L T N K G I L E I I D Q K T K E N S V L V F R A H G V S P E R
UniRef90_V2QHD7	I H N P Q V V G E L K D A G V T V K S L D E V S K D M S V V I V F S A H G I V E R K E
UniRef90_UP1000289A39C	V V H N H V V V R E F Q R R G V F V V D S E E V P R G A V C V F S A H G V S P Q V
UniRef90_H0UIM9	I I H N P Q E I A R L A Q K Q G L R V V S P Q D V P S G S T V F I R A H G I I A P D L
UniRef90_UP100040ABF22	V H N D D E V K R L L A Q K Q G L K I I D H G D L L R D E K V L I I R A H G E I P P S T
UniRef90_I4CE44	I H N P Q T L N L Q S R G I Q E V K S L D E I T G T V V V F S A H G V S P Q E
UniRef90_B0SHI6	V H N Q R V V V E E M M K K K G I Q E V K S L D E I T G T V V V F S A H G V S P E V
UniRef90_C6XU16	V H N D D E V K R L L T D K G L R I I D H E Q L K Y K E K V L I I R A H G E A P A T
UniRef90_R5IC74	I H N R H V V V A R F E L L G L R E I S A D E A Q P G Q T V V I I R A H G I I P V G E
UniRef90_K2FII4	V H N N D V I K K I E K L L G V K K I D F N G S I E I G T L V I I T A H G I I G P K I
UniRef90_R6Y565	I H N P Q V T G D L L A R G V T V S R P Q E T P A G Y T L V I R S H G V V A Q A V
UniRef90_L0R7L1	I H N P Q V L L E D Y E K K Q G V I T E H P E E I P E N A Y V V I I R A H G V V P Q N A
UniRef90_I3DGP1	V H N D F V V V Q S F E K K K G F I L T I E E S E I K K G D I V V I I R A H G I I T K E I
UniRef90_I4EDU1	I H N P Q V V V Q R L L K A Q G V E T A D D D A V S R G S R V A I I T A H G A G P E R
UniRef90_D319G2	V H N G M E V N R L L A K S G L L T I D H D K L K E N A K V L L I R A H G E I P P S T
UniRef90_I7L5U6	V H N H V T E S F E K I I G V Q T I D G E E N I D H G T V I I F T A H G I I S D A V
UniRef90_D3PTQ6	V H N D V V I I Q R L L Q D R G V H F V E D L S E V D N E T V V F S A H G I I P P W L
UniRef90_R5DQY7	I H N M E M V H E L L E R G C P V K A V D E L T D D T T L V I I R S H G V I E K S V
UniRef90_R7LQS5	V H N K Q V I I E E L K K Q G I I F V E D I N E V N G K T I I R S H G V V P P K V
UniRef90_D4CU14	V H N K Q V V V E D M E R K G F K L E D I D D L K E N D I V V V I I R A H G T S K K V
UniRef90_E9YHN5	V H N R Y V V V D S L R E R G I F I E Q I S E V P D G A I L I I F S A H G V S Q A V
UniRef90_S3A776	I H N P R V V V N S L K H Q G G V S V V D S A S D A A G A A L L L I R T H G V V T P E E
UniRef90_C1KV98	V H N K H V T D A F E S I G I Y T V D G A N R E E T G T V I I F T A H G V S P S V
UniRef90_R5BBY3	V H N A S V I I Q R L L E A L G V T V N S I E E V P T G E T V V I I R S H G V V P P K V
UniRef90_R5CDG1	V H N S R E V E R L K A M G L V T I I N H D E F N H D A K V L L I R A H G E I P P E T
UniRef90_S0ES35	V H N K R V I T D E L L E S K G L R K V E D Y T Q S R G G T M V I I R A H G L P K A K
UniRef90_U2F3V5	I H N T H L V I A D L L E R R G V R V T S P A E V G E G E T L V I I R S H G V V P A S V
UniRef90_UP100046EA99	V H N Q P V L V Q R L L A E I G V R V A K S V D D I R G D T V A I I S S H G V V S P Q L
UniRef90_UP100035E11A1	V H N D D E V V K R L V A K G L K I I N H E E L A K D A K V L I I R A H G E I P P S T
UniRef90_E6MLU0	V H N S M E V V E R L L H E N G L I T I I N H E Q L R E N V K V L L I R A H G E I P P E T
UniRef90_D5EW04	V H N G M E C E R L L R E M G I T I I N H D Q M R E N A K V L L I R A H G E I P P E T
UniRef90_Q7JV5	I H N S R E I I E R L L Q K D F D V S L S R E E A Q K F K S V I V R T H G I I T K D D
UniRef90_R5FMY8	V H N G M E V E R L L S R Q G L V T I D H E Q M S H D C K V L L I R A H G E I P P A T
UniRef90_K2KEK3	V H N E D V V V K K V V Q M G V Q K V H V E G P L E D E G T L V I I T S H G I I G P K L
UniRef90_H8KND1	V H N D D E V V A R L K A K G L R I I D H E A L K N D E K V L I I R A H G E A P E T
UniRef90_R5NEV8	V H N G K E C D R L L K K L G L I T I D H A T F S H H A K V L L I R A H G E I P P A T
UniRef90_B9L0G7	I H N P Q V V V E R L L K V Q G I P V S S V S E A R E R G R V A I I T A H G A G P Q R
UniRef90_F8X4E3	V H N N L E V V D R L L E K L G M K T I I N H E E F A K N A R V L L I R A H G E I P P S T
UniRef90_W8WEW37	V H N D D E V V V E R L L E R R G L R I I D Y E Q L A E E A V L I I R A H G E I P P S T
UniRef90_C9MN69	V H N S M E V V E R L L T R K G L M T I I N H E Q M R D D V K V L L I R A H G E I P P E T
UniRef90_R6H1W7	V H N K Q V I I E K K L L E K A G M N I I D K I E Q A T N K V I I R A H G V V P K E T
UniRef90_D1AGH3	V H N E F V V I I E K K L L K K G V I F V S E E D V K S G D I V I I R A H G T T Q N V
UniRef90_R5XQF4	V H N G E V I V K Q G I P V S S V S E A R E R G R V A I I R A H G I I S K D I
UniRef90_UP10003B3EC1E	V H N R M E V V E R L L Y E R G L R I I D R E Q L E H D C K V L I I R A H G E I P P E T
UniRef90_M1WVS2	I H N P Q V L V K K Y A E I G V I I E K P E E V P D G T Y L V I I R A H G I I T R Q V
UniRef90_F2NRL2	I H N P L V M D S L L E K K G A Q I I L E P E K A K S G S V V V I I R A H G T T P Q V
UniRef90_D6TCK6	I H N R H A I E E L L S S M G V V T V D I L E N I Q E G T A I F T A H G V V S P D V
UniRef90_R5TJC8	V H N G Q E C E R L L R K L G L I T I D H E K F G K E V K V L L I R A H G E I P P S T
UniRef90_E4TPF7	V H N D M E V V K R L L Y K K G L R V I I N H D E L K H D C K V L L I R A H G E I P P E T
UniRef90_UP10002D34FB0	I H N K D V I I D K L L K E M G L T V V D E V P E K S D A K L L I I R A H G V V G K Y V
UniRef90_R7BX43	V H N E N V T T D F I L N R K G I K I E D A C N L K K G D I A L I I R A H G L T K Q L
UniRef90_M5A382	V H N K L V V V R R F E D Q G V F V W D D I S E V P V G S P I M L S A H G S A P E V
UniRef90_F0JJX6	I H N P Q V L V K G Y A D K G V M V H D P V E V P A G A H V V I I R A H G E I T R Q V
UniRef90_K5YL06	V H N S L E V V E R L L Q A Q G L R T I I D H H G F S K G K K V L L I R A H G E I P P S T
UniRef90_E9SG53	I H N Q N V V V D D L K S K G V Y P V E L S E V R E G Q T V I I R S H G V V G K A V
UniRef90_UP100040F0AC5	V H N G M E V V Q R L Y Q K G L R I I D R E Q L K E D C K V L I I R A H G E I P P E T
UniRef90_E0NRZ2	V H N G M E V V N R R G L I T I I N R D D L K H H V K V L L I R A H G E I P P E T
UniRef90_M1E6Z0	I H N E R E V V K R L L S Q L G A I A I N S L D E V S A P A I V L I R T H G V V R R D V
UniRef90_F2N9J0	I H N P L V V D E L L A R E G V S V A Q S V S T A D A G T L I I R T H G V V P R L
UniRef90_K2FY22	V H N S D V V V R R I T E E L G V M K I D M E E T L E E R T L V I I T A H G M G P K I
UniRef90_B9L0U3	I H N P I V V E Q L T R E G V L P V T D P V E A K R D R V A I I T A H G A P P T R
UniRef90_S7V8D9	V H N A M E V V N R L L S S K G L V V I I D R D Q L E D D C K V L I I R A H G E I P P E T

	90	100	110	120
UniRef90_R6A508	E A A R E R G L N V V D A T C P Y V K K V H V A A E R L V R E G Y R V L V V G			
UniRef90_U7D9E4	E A E F A R Q G C T I I D G T C P M V K K V H R V I Q K Y I D R D F T I V I T G			
UniRef90_UPI00040A476A	R T L A K E K G L T T V D A T C P D V T R T H D L I R E K K Q E G Y Y H V I Y V G G			
UniRef90_UPI00039CF203	H E E L K K K K V T I Y D A T C I F V K K I K D E V D L A N K K G Y R V I F A G			
UniRef90_UPI0003A5A589	W E K A E D K K M N F I D A T C C P L V H D I H R E V K E L H A E G R K I I I I G G			
UniRef90_UPI00046AE860	L E M L L Q Q S G T D I I D A T C C P F V T K P Q Q I C E E M S E A G G Y D V V I I F G			
UniRef90_F8C435	K E E L S K K K H E I I D A T C C P R V L K V Q A L A K K A I S E G K E V V I I G G			
UniRef90_E3HAA1	Y D R L E E K K V E V H D A A C S F V T E I R N T L V E M E K K G Y D I I F I			
UniRef90_G2FFN9	R Q E A Q R R D L L R I F D A T C P L V T K V H L E V A R R C R D G Y E V I I I G G			
UniRef90_B4UEK4	L E R A E A R G G L E V V D G T C C P Y V K Y P Q A M A Q R L S R E G G Y H I V I I V			
UniRef90_U2Q316	L D D L E A R G V R C T C V I N A T C C P F V K K A Q E R A K H L A E S G G Y L V C I V			
UniRef90_UPI0004665275	F S V L K Q K R S T C V I D G T C C P F V K K A Q E R A K H L A E S G G Y L V C I V			
UniRef90_UPI0002E1D65E	K S I I A K E R G L T T V L D A T C C P D V T R T H D L I R N V K E K G Y Y H V I Y I G G			
UniRef90_D2Z411	H Q R L L Q D K G A R I I D G T C C P F V R K A Q E M A G R L S R E G G Y Y L V V L I G G			
UniRef90_A8FLU3	L E E L R R K K D I E I F D A T C C P F V K P Q Q I C E Q M S K E G G Y E V V I I F G			
UniRef90_Q7M8Y6	L A K L L T Q S A E K I I D A T C C P F V T K P Q K I C I M S Q E G G Y Q V V I I F G			
UniRef90_C7RHT6	K E R L L L A N G N E V V D A T C C P F V L V N N I Y K K I I L E K E N N D G Y Y Q V V I I V			
UniRef90_D8F3P1	R E M L L Q N S G L K V I D A T C C P K V T R V Q A I I Q H Q S N K D R P T I I V			
UniRef90_Q72G65	R R Q A A E M G L T V L D A T C C P L V T K V H T E A K R Y A K E G G Y W I L L I I G G			
UniRef90_T8FCF1	R R R T T R E K G L T V V D A T C C P D V T K T H D L I R E K T A E E G Y Y H V I Y I G G			
UniRef90_UPI0002627D5D	R A H A R E R A L R R V V D A T C C P L V S K V H A E A R R F A G R G D T T V V L I I G G			
UniRef90_UPI000360B456	R E R A R Q G L A T I D A T C C P L V T K V H T E A K K Y A R E G G Y T I L L I I G G			
UniRef90_V1CFA7	Y R E A K G K G V E I I I D A T C C P P Y V A K I I H K F V K D A Y E E E G R E I V I I V			
UniRef90_UPI000288C62E	L D D L K K R N N E I I N C V C P K V E N I Y N V D N F Y V D K G Y N I V V I I G G			
UniRef90_S6ENZO	R Q E A K K R E L K V F D A T C C P L V T K V H M Q V A R A S R K G T K A I V L I I G G			
UniRef90_E0QK79	Y D Y A S K H N L N V I D T T C C I Y V K K I H Q I V E E K Y R E G G Y E I I I I V			
UniRef90_U6M118	R K K A K E R N L T T I D A T C C P L V Q K V H V Y V H Q K A Q E G G Y H I I I V			
UniRef90_I4BVW6	F D M V R V K K G S I V I D G T C C P S V K N A A Q E K A R L L S K E G G Y N V V V V			
UniRef90_R5B2R4	F E A V Q H T G A T V Y D A T C C P K V K R I I H E I V A E A S E G R Q P V I I I G G			
UniRef90_C0EH04	Y D E L L A R E G V A Y A D A T C C P F V S K I I H R I V S E Q S R A G A V I L I A G G			
UniRef90_R7L4D4	R E Y Y L R S L G L R Y K D A T C C P D V G K I I A G I I K M H A N K G Y T S V I V			
UniRef90_V2QHD7	A E F L I N E A G N V V D A A C P F V K K A Q R A A R L S K S C D Y I I I I L G G			
UniRef90_UPI000289A39C	R D N A A A R E L D V D A T C C P L V A K V H Q E A A R L F R A D G R T T L L I I G G			
UniRef90_H0UIM9	R N A L L K Q R N V R I I D G T C C P F V R V A Q A R A K A L E D E G Y S V V V V A G			
UniRef90_UPI00040ABF22	Y K K L A I Q N N N L T L I D A S C C P V V L K L Q N R I K N S F D K Q E P I Y I Y G			
UniRef90_I4CE44	K Q I L L A S K G V G V G I D A T C C P R V A R V Q A F I R K H A R G H F C V I V			
UniRef90_B0SHI6	V K E A T E R K M K I I G D A T C C P L V T R V H K K A R N I R D T H Q I I Y I G			
UniRef90_C6XU16	Y E L A L Q N G L T L I D A S C C P V V L K L Q N R I K N S H D E E E Q I I L I F G			
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UniRef90_R6Y565	E E E I Q A G L P Y D A T C C P F V K K I H Q L I A E A G E Q G K V F E L L A G G			
UniRef90_L0R7L1	E T E L L R K R G V K V I D A T C C P K V K K A Q L L I K K N T E D D R V L L L Y G G			
UniRef90_I3DGP1	Q R K K L E E K D L E L Y D A T C C V F V S Q I K W K I I L W A M E Q G G Y E I L F L G			
UniRef90_I4EDU1	T E S A K Q R G L E M V D T T C C P L V T K V Q R L G E K L V R Q G Y F L V V Y G G			
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UniRef90_I7L5U6	R Q R A A E K G L T V V D A S C C P D V L I T H E I V K K R L A D G Y E V I Y I G			
UniRef90_D3PTQ6	R T E A A R R R N L H Q I D A T C C P L V T K V H S E A K R Y A R E G G Y W I L L I I G G			
UniRef90_R5DQY7	I D S L V L K R G I N F E D A T C C P F V K K I H K I V S N T N P E N D V V L I I A G G			
UniRef90_R7LQS5	Y E K A K Q K N I I E L K D Y T C C P V N V K I H K I A E E Y A E K G Y N I L L F M G G			
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UniRef90_S3A776	E R I A R D Q C A K V M D A T C C P F V K K A H A A A E L L A K E G G Y A V Y V V G			
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UniRef90_R5FMY8	Y T V A Q Q N N I E I I D A T C C P V V L A L Q R R I K H Q S D A N A Q I V I F G			
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130 140 150 160

170 180 190 200

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I V S Q T T F S [] V A D F D A I V E E I F Q T F P E I A V E K E T I C K A T S E R Q
I T N Q T T M S Q W D [] V K N I I N Q A L A R Y P H A E V H N E C C M A T Q V R Q
L S T Q T T [] N K K N F E E I K K F F Q N K Y E N V R I F D K I C G A T A V R Q
I V S Q S T Q A I E N V Q D I I N I L M T K V V D L R F I N T I C C F P T K R N H
I V S Q T T R K V D E F L K I V N Y L T I N Y K E V R V F N T I C C N A T F E N Q
I L S Q T T Q D E K L F K T L S Q A I L E K Y P Q G E I I N T I C C K A T E V V R Q
V L T Q T T [] L N K N F E K V R E Y I N N Y F P N A E I F N K I C C G A T F V R Q
F V T Q T T L S I D D T A L V I A A L Q Q R F P N I E G P N D I C C Y A T Q N R Q
V I A Q T T C O I G A E F E R V V G V L A L R H K E V R A V N T I C C N D T E E R Q
V V A Q T T C O I G A E F E R V V G V L A L R H K E V R A V N T I C C C N A T H E R Q
V I S Q T T C O I G A E F E R V V G V L A L R H K E V R A V N T I C C C N A T R A R Q
I T N Q T T Q D E K D F S S V A E L T L H T K D M R I V Y N T I C C C R A T V E R Q
L V S Q T T K P E H F M E V N F L I L K T K E V R V F N T I C C C D A T F K N Q
L V S Q T T K P E H F M E V N F L I L K T K E V R V F N T I C C C N A T F D N Q
V V S Q T T N R L D Y F Y D I A N K L K E N N D S V V I E N T I C C C K A T E N R Q
V V A Q T T Q D A E D F K E I V S T L K I R F P D I Q V F D T I C C C D A T H E R Q
V L T Q T T L S V D D T L A T I A I L K K R F P K L V V P K D L I C C C Y A T Q N R Q
I T N Q T T M S Q W D L K H I M K R L L D R Y P G A E I H E I C C C L A T Q V R Q
Y L T Q T T L A V D E T A E V V D T L R E R F P A L R G P D I C C C Y A T T N R Q
V L T Q T T L S V D D T R R T V D I L K A R F P A I P P S E D I C C C Y A T T K N R Q
I V A Q T T I R K E V F E Q V V E R I Q G R D I E I K N T I C C C S A T S K R Q
V V S Q T T S N V D F F E N A I N V I K D S K E V L V Y N T I C C C N A T F K R Q
F M T Q T T L S I D D T S E V I S A L K A K Y P A I Q G P N D I C C C Y A T T N R Q
V V F Q T T F N I E K Y T K I V E I L K E K I K N I E I F N T I C C C S A T K K R Q
Y V T Q T T L S I L D C L H I E T E L K K R Y P N I E T I K S V C C C K A T L H R Q
V V S Q T T Q T Q E E G M M L A I V S A L V P K S R E R V Y N T I C C C G A T F T R Q
V V I Q T T T Q T Q E K K L L E C Q K I K K Q C T N A K L F D T I C C C N A T S E R Q
L V A Q T T F K V G L W Q K C A E F A K K L C T N E I F D T I C C C G A T K E R Q
M V S Q S T M F T D D Y R E I S D Y F K K R F P N T K V I D I C C C S A T E K R Q
F L A Q T T Q S I S I F E K S A E K L K Q K C S E L S I A R T I C C C Y A S Q N R Q
Y L T Q T T L S V D E T K D I A V L R S R F R D L R G P D I C C C R A T F E R Q
F V S Q T T L P E D L F A S I V S A A V R I S P D V L K A H N T I C C C R Q V S N R D
L Y S Q T T K S T G K F Y E I H Q T L R D N G I E V N V N D T I C C C D S T K R R Q
L V A Q T T Q T Q E I E V F E S V G E L L R N R C S E L H E Y N T I C C C Y A T T E R Q
Y L M Q T T L S V E D T K N I V K K I E E V P F V P F V H P D I C C C R Q V S N R Y
L Y S Q T T K S T D K F Y S I K E E L I G R G Y D V K A N D T I C C C R A T E M R Q
L V S Q T T G T Q K L W E S C R E I A K K V C T N C E I F D T I C C C C L T T K N R Q
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L A A Q T T Q D R T V Y E E S I K Y L E S K G K L D F V V L N T I C C C C D A T R Q R Q
L S T Q T T L H Q K K F L E I K R Y L E E F H P N V Y I F N K I C C C G A T Q E R Q
I V S Q T T K N V D E F L A F V T E L T A M G G E I R V C N T I C C C E P T S E R Q
F Y S Q T T T K S L D E F L R I K Y I K E H V S K F D S F D T I C C C R Q V A N R M
M T N Q T T M S M W D V S D I M A A V H E K F P Q V V E H S D I C C C Q A T S E R Q
V L T Q T T L S V D D T L A T I E I L K R R F P R L V V P H D I C C C Y A T T K N R Q
I V A Q T T F D T Q E W K K C V K K I K K L C T N A K I F D T I C C C C N A T Q V R Q
V I S Q T T T Y S L E K F Y I K E I I E N E L P E L V I K N T I C C C S S T E Q R Q
Y L T Q T T L N K K K F F E E V K Y F K E N Y Q V N I I F D K I C C C G A T A V R Q
F M T Q T T L S V D D T S D V I D A L R K R F P K I V G P D I C C C Y A T T N R Q
L I V Q T T T M S A S R L N E V V S A T L P A E E V R V M N T I C C C C E A T A G H Q
U n i R e f 9 0 _ C 1 K V 9 8 V T N Q T T T M S K W D V A D L M D Y I K E K F P K A I Q H Q E I C C C M A T Q V R Q
U n i R e f 9 0 _ R 5 B B Y 3 L V I S Q T T T A E V E G F K V A E A V R E H F D A V I E K T L I C C C C P T T A A R Q
U n i R e f 9 0 _ R 5 C D G 1 L Y S Q T T T K S L D E F Q R I V E Y I K E H I S P F E Y Y D T I C C C R Q V A N R I
U n i R e f 9 0 _ S 0 E S 3 5 V I F Q T T H A L E L C H K I N E M L M M C K E I R I I N T I C C C C R P V Q N R Q
U n i R e f 9 0 _ U 2 F 3 V 5 M V S Q T T F N V A L W K E A V A E A E A P G L S V F S T I C C C S A T A S R Q
U n i R e f 9 0 _ U P I 0 0 0 4 6 E A F 9 9 V L S Q T T T Q V P A H F T E F V K V K I D S A S E L R I I D T I C C C C H D I R Q R Q
U n i R e f 9 0 _ U P I 0 0 0 3 5 E 1 1 A 1 L F S Q T T T K S T D H F Y E I N R L K E N G I E V N T H D T I C C C R Q V S N R D
U n i R e f 9 0 _ E 6 M L U 0 L Y S Q T T T K S L D E F H H I I D Y I Q S H I S E F K S F D T I C C C R Q V A N R M
U n i R e f 9 0 _ D 5 E W 0 4 L Y S Q T T T K S L D E F R R I I D Y I Q T H I S P F K S F D T I C C C R S V A N R M
U n i R e f 9 0 _ Q 7 J V 5 L V I S Q T T T K Q P E H F G K I A A L V S V N E C R F N T I C C C C S A T F E N Q
U n i R e f 9 0 _ R 5 F M Y 8 L Y S Q T T T K S L D G F H Q I D Y I Q S H I S P F K S F D T I C C C R Q V A N R L
U n i R e f 9 0 _ K 2 E K V 3 I L S Q T T T Q D Q E F V I T R A A A N I A K K Y P H A E I I D S I C C C C L T T H H R Q
U n i R e f 9 0 _ H 8 K N D 1 L Y S Q T T T K S T A N F Y K I K D E L L A R G Y D V K A N D T I C C C R Q V S N R D
U n i R e f 9 0 _ R 5 N E V 8 L Y S Q T T T K P L E G F R K I V E Y I G A H I S P F K S F D T I C C C R Q V A N R M
U n i R e f 9 0 _ B 9 L 0 G 7 V V I S Q T T T K Q T D E F L A L A N W V A R H G G E I R I V N T I C C C C Q P T W E R Q
U n i R e f 9 0 _ F 8 X 4 E 3 L F S Q T T T K P L D G F Q E I I D I Q G R M T K F E F F D T I C C C R Q V S N R I
U n i R e f 9 0 _ W 8 E W 3 7 L Y S Q T T T K S T D S F Y R I K G E L E Q R G Y Q V S A N D T I C C C R Q V S N R D
U n i R e f 9 0 _ C 9 M N 6 9 L Y S Q T T T K S L D E F H K I I D Y I Q S H I S P F Q S F D T I C C C R Q V A N R M
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U n i R e f 9 0 _ M 1 W V S 2 L A A Q T T T Q D R A L F D A M T Q E L A D P T L D I V V L N T I C C C C D A T K L R Q
U n i R e f 9 0 _ F 2 N R L 2 L I A Q T T T F S P V E F E K I A S A L K Q K N P S V Q I F N S I C C C C S A T M E R Q
U n i R e f 9 0 _ D 6 T G K 6 V S T Q T T L S L W D T H R V I Q H K T K Y P Q T E V Y V D I C C C C R A T Q T R Q
U n i R e f 9 0 _ R 5 T U C 8 L Y S Q T T T K S L D E F R E I V A Y I Q A H I P H F Q Y D T I C C C R Q V A N R M
U n i R e f 9 0 _ E 4 T P F 7 L F S Q T T T K S T T G F Y D I K Q K I E S R L K K L S A N D S I C C C C R Q V S N R E
U n i R e f 9 0 _ U P I 0 0 0 2 D 3 4 F B 0 L V I S Q T T T F N S K T F D E I T D Y I E K K Y T N V V A E N T I C C C C D A T R K R Q
U n i R e f 9 0 _ R 7 T B X 4 3 I I L F Q T T T L P E K F E K I E N A K N F E K K V G I F N T I C C C C C Y T T K V K Q
U n i R e f 9 0 _ M 5 A 3 8 2 L L A Q T T T L S H R D W E G V A V R V K E R F P E V P G R S I C C C C F A T T N R Q
U n i R e f 9 0 _ F O Q J X 6 L A A Q T T T Q D R V H F E S I A A D L T G R A D E V T V L I E I C C C C D A T K L R Q
U n i R e f 9 0 _ K 5 Y L U 6 L F S Q T T T K S L D G F R K I V E E I Y K R K T E F E Y H D T I C C C C R Q V A N R L
U n i R e f 9 0 _ E 9 S G 5 3 I I L A Q T T T Y N K N M W K D C V P L F R K Y L P Q A E I C E I C C C C C N A T N I R Q
U n i R e f 9 0 _ U P I 0 0 0 4 F 0 A C 5 L F S Q T T T K S T K G F Y H I K A L I E E R I F E D A N D S I C C C C R Q V S N R E
U n i R e f 9 0 _ E 0 N R Z 2 L Y S Q T T T K S L D E F H R I T Y I Q E H M A E F E S F D T I C C C C R Q V A N R M
U n i R e f 9 0 _ M 1 E 6 Z 0 L L S Q T T T Q P I E K L K I A S R M V E L S Q E L V V A N T V C C C C F A T R K R Q
U n i R e f 9 0 _ F 2 N 9 J 0 V V V Q T T T Q T I E R L Q Q T D A L L A R A R E V C V V N T C C C C A A T T D R Q Q
U n i R e f 9 0 _ K 2 F Y 2 2 V L S Q T T T Q D Q E F V E Y Y A A Q K I K E K Y P K V E V I D S I C C C C L T T H H R Q
U n i R e f 9 0 _ B 9 L 0 U 3 L I A Q T T T K R T D E F T A F A Q A L I A A W G G E L R V V N T C C C C C Q P T W E R Q
U n i R e f 9 0 _ S 7 V 8 D 9 L F S Q T T T K S T K G F Y E L K A K I E E K I K E F N A N D S I C C C C R Q V S N R E

210 220 230 240

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UniRef90_Q7M8Y6	E A A R H L S Q E V D I M I I A G G G K N S S N T K Q L L S I C L E H C Q D S Y L		
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UniRef90_I4EDU1	N A L R R L L A T Q V D D L I L A I V G G K K S S N T A K L A E V V G R S Y G V P S Y H		
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UniRef90_D3PTQ6	D A V K Q I A P H V D L F L V L T S S A S S N G M R L L E L A R S L V G R A E R		
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UniRef90_R7LQS5	I E T K E L L S K K V D F M M I I V G G D T K S S N T K K L Y E V S L E N C P K A V C		
UniRef90_D4CU14	K A V E E L L A V K A D I V I I V G D T K S S N T K K L Y E I L S K K L L N S E S Y L		
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UniRef90_UPI00035E11A1	K E L L R N F A K N Y D I V I I F V S G S K S S N G K A L Y E V V C K R E N P H T H F		
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UniRef90_D5EW04	P N I I S Q F A T K H D L V L F V C G R K S S N G K V L Y N E C L R V N P N T H L		
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UniRef90_M1WVS2	P A L A R F A T E H D V V V F V S G R K S S N G K A L F S V V N K T N P R S Y F		
UniRef90_F2NRL2	R E A K S L S S E V V D F M V V V G G F N S S N G N T R R L A Q V V A M D N G T P C K H		
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UniRef90_M1E6Z0	P N I A V F A T K H D V V L F V C G K K S S N G K V L F Q Q C R Q V N P H A H L		
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UniRef90_S7V8D9	E A A K E L L A R T V D L V L V I V G G R K S S N S A R L V E V V S R S L G T P S V L		
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250 260 270 280

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UniRef90_UPI00040A476A	I A N V N E I D L N W L K G I S Q V A V T T A G A S T P T P I T K E V I R F L E Q
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UniRef90_S6ENZ0	I D D A N D I E E A W L N N V S T I G I T A G A S A
UniRef90_E0QK79	I E D V A E L E E T M F D G V Q K L G V T A G A S T P D F V I D E V I D Y L K K
UniRef90_U6M118	V G N A D D V D P Q W L A G V K R V V V S A S A S T P E E L T K Q I M N R L K A
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UniRef90_R5B2R4	I E N A A Q L D T S A F V H A D T V G L T A G A S V P A W I I K E V K Q K M S D
UniRef90_C0EH04	I E T G D E L D P S L I M P H R K I G I T A G A S T P T A Y I I K E V L E T M S E
UniRef90_R7L4D4	I E T T I K E L N L D E I K K Y E V V G V T A G A S T P D F I D E V C Y R L E S
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UniRef90_H0UIM9	I E E A G E L D G K W F T G K T H V G I A A G A S T P D W L I E E F I Q A A R Q
UniRef90_UPI00040ABF22	V S S P S E I Q S D W F T L G D R V G I C G A T S T P M W L M E E V K E R I
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UniRef90_C6XU16	I S N T E E I D K E W F S P G D K V G I C G A T S T P M W L M E Q V K A E L
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UniRef90_R6Y565	I E R A D E L P V F S A G L S V G I T A G A S T P A S I V E L A T M A E
UniRef90_L0R7L1	V E E V A D E L P L E E L K S I K K I G L T A G A S T P K R L V D G I Q Q I L E N G
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UniRef90_R5DQY7	I E T A A E L D L N K V S V A E S I G V T A G A S T P A R I I K E V L D T M S E
UniRef90_R7LQS5	I E S Y E E L E N M Q I K N A R K I G V M A G A S T P Q K S I E E V I K Y L
UniRef90_D4CU14	V E N E E Q V D L T I F R G K V V G I T A G A S T P E E T I M N I E K K I R
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UniRef90_S3A776	I E G P D E L L A N W F E G A E N G T A G A S T P E S H K S V Y Q A I A T
UniRef90_C1KV98	I A D I T E L D I E W I K D A K V A V T A G A S T P T Q L V R E V L L F L E Q
UniRef90_R5BBY3	V S K E S E I S L E K I A H N D I G V S G A S A P D W K I R E V I T R M S E
UniRef90_R5CDG1	I D S P E E I D T S L L A K A S S I G I C G A T S T P K W L M E K I S A T I E E
UniRef90_S0ES35	V Q N A E E L P I E A L A D C K T G I A S G L S T P E D L V E A V R Q K V
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UniRef90_Q7JV5	I E D E N E I D N T W F V G K E L C G I T A G A S T P D W I I S R V Q E K I E Q
UniRef90_R5FMY8	I E S A S E I L P E W L H G I E T V G I C G A T S T P K W L M E E C R D A L L K
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UniRef90_C9MN69	V E S S A D E I D M T W F D G V Q T V G I C G A T S T P K W L M E E C R D E I
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UniRef90_H6VLE6	V	T V K L A E S Y G F C C W G V E R A I Q I A F E A R R Q F P D N M W L T N E M			
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UniRef90_R6GNA0	M	K M I I F A Q N Y G F C S G I K R A V M L A I K N A P C S I G T L			
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UniRef90_F7TL10					
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UniRef90_Q3M8X6	V	E I D S Q S G F G C F G V V G A I R C A E K H L K E G Q P L F C L G D I			
UniRef90_R7EVW8					
UniRef90_T2I3R9					
UniRef90_R7QBX7	V	T V K L A K A Y G F C C W G V E R A I A I A Y E A R A K F P D R I W I T N E I			
UniRef90_T2RFE4	M	E I V L G K M A G F C C G G V R N A V N K T Y K E A E S N N K T I Y C L G D I			
UniRef90_R7L1J4	V	E I D A G S G F C H G V V S A I R K A E E E L A R S G Q L A C L G D I			
UniRef90_R5AKD0	T	I R L A Q A F G F C C W G V E R A V A M A Y E T R Q H F P E R I W I T N E I			
UniRef90_A0ZU9	M	K I I K I T P R G F C K G V V I R A V A M A Y E T H C K I A K L Y P N H K Y L G W L			
UniRef90_Q8EWUR9	V	T V K L A E A F G F C C W G V E R A V A M A Y E T R R Q F P G R I W I T N E I			
UniRef90_Q7NG74	T	V T V K L A K A Y G F C C W G V E R A V A M A Y E T R R Q F P G R I W I T N E I			
UniRef90_B6DXA1	V	L Q V E I E R H S G F C C G G V I R A V A M A Y E T R Q H F P E R I W I T N E I			
UniRef90_R5B9B8	L	Q V E I E R H S G F C C G G V I R A V A M A Y E T R Q H F P E R I W I T N E I			
UniRef90_B1WTZ2	V	T I K L A E A F G F C C W G V E R A V A M A Y E T R Q H F P E R I W I T N E I			
UniRef90UPI00047724BB	T	V T I R L A E A F G F C C W G V E R A V A L A T Y E T R K Q F P D D Q L W I T N E I			
UniRef90_V5TDH9	V	M N V I K V T P R G F C L G V V K S I I K M A K D A L K M Y P K K V Y M I G L L			
UniRef90_V5RJ17	N	I E I D P R S G F C P G V V T A I R Q A E A E L E Q S S P L Y C L G D I			
UniRef90_R5B468	L	K I Q L A K A S A L G T C F G V K D A I N L A M E P Q F K S D L T I V G Q L			
UniRef90UPI0002DDCC8B	M	K V S L A S A L G T C F G V K D A I N L A M E P Q F K S D L T I V G Q L			
UniRef90_M1YUM3					

	50	60	70	80
UniRef90_R5DSC8	H N T Q V I H E L E K [L] G I K T L T E I P E H G D G I C V I R S H G E S P E V			
UniRef90_K2EV69	H N T Q V I E H L S S L G I Q T I E T I P E E L N G I C I I R T H G V T P Q T			
UniRef90_B1ZXD4	H N R Q M M E K L S E E G I R E V G D Y Q S R E N P V M V V R A H G I S P E R			
UniRef90_E1JW10	H N P Q V L A E Y A A K G V G V V N D P D I P A G A T V V I R A H G I P E P V			
UniRef90_H6VLE6	H N P T V N K M L E D M E V Q T I P V N E V S E G D V V V L P A F G A A V D E			
UniRef90_R6XDJ4	V H N G M E V E R L H A A G L T T I N H E E M E H G V K V L L R A H G E P P E T			
UniRef90_R6AAF4	V H N G S E C E R L R K A G L Q T I D H E H L P Q G T K V L L R A H G E P P A T			
UniRef90_C8X243	V H N P Q V L A H Y A A R G V T E E S P S T I P A Q S R A V I R A H G I P R L L			
UniRef90_J3LS18	V H N P T V N K R L E D M G V Q N I P F D V V E Q G D V V V L P A F G A A V E E			
UniRef90_G1UTY5	V H N P Q V L A F Y E A K G V C V R D A A E L L P D D R V I I R A H G I P R Q E			
UniRef90_D1Y0F8	V H N S M E V E R L E T N G L V T I D H E Q M K H N V K V L L R A H G E P P E T			
UniRef90_A0A059CLU5	V H N P T V N K R M E E M E V T I Q F D V V N K G D V V I F P A F G A P V Q E			
UniRef90_R7G660	V H N R Y V M Q A L K A L N I H A V D D D E L P K D C I V I F T A H G I A P Q V			
UniRef90_UP100046A7644	V H N G Q E C E R L K E M G L I T I D H N M F E H D A K V L L R A H G E P P S T			
UniRef90_G8UPY4	V H N S L E M E R L K A [L] G L H T I G H A D L A H N R T V L L R A H G E P P S T			
UniRef90_K9T0P7	I H N P S V N Q R L Q E M E V G F I S V V D V E S G D V V I I P A F G A S V A E			
UniRef90_C7LQM8	I H N P Q V L A R Y K G L G V Q T D G T K P L Q T G D V V V I I R A H G I P R H I			
UniRef90_A9TDQ1	I H N P T V N Q R M T D M E I K E L S V T E V E K G D V V I I P A F G A S L Q E			
UniRef90_U2TXU1	I H N P T V V S Q L E A S G V G V I E D P A D E P G G T L L L R T H G V T P A E			
UniRef90_UP100030FC42E	I H N P E V N E R L R Q M N V G F I P V E Q V Q E G D V V I I P A F G A S V S E			
UniRef90_Q11YY5	V H N S M E V E R L L A K K G L K I I D R E E L K K D C K V I I R A H G E P P E T			
UniRef90_U4KP66	V H N K K I T E A F K H Y G V I S L E D S D E I N E G T V I I F T A H G I V S E Q V			
UniRef90_R5WT62	V H N R L E V I Q R L L E A M G L R T V R H E E L E A G G R V L L I I R A H G E P P S T			
UniRef90_E6K3J0	V H N G M E V E R L H S K G L V T I N H E D L K H D V K V L L R A H G E P P E T			
UniRef90_I6TT54	I H N P S V N Q R I D E M E V K F I I F N D V V S K G D V V I I P A F G A S V Q E			
UniRef90_F9Z4U7	V H N D L E V E R L R L R G L K T I E H E Q F A Q H C R V L F R A H G E P P V S			
UniRef90_K9XTJ5	I H N P S V N Q R L L E R M K V G F I I D V I D V Q S G D V V I I L P A F G A S V T E			
UniRef90_Q2I6K1	I H N P T V N K R L L E E M E V K D I I Q F D V I D K G D V V I I L P A F G A A V N E			
UniRef90_UP1000363897F	V H N H D A M E M F R A R G R I L V E N P E E I P S G A V V V T R S H G I P K D V			
UniRef90_R5EMS4	V H N R H V V D D L R K A G H H F V E T L S E V P H G C V L I I F S A H G V G I K T			
UniRef90_R5PPH4	V H N N L E M E R L L E K K G L K T I G H E E F A K N C R V L F R A H G E P P S S			
UniRef90_UP100037AE6DF	I H N P S V N Q R L L R E M N V L F T P F S E V A K G D V V I I L P A F G A S V Q E			
UniRef90_K9W5B6	I H N P S V N Q R L L E E M L I R Y V P V D V V V N S G D V V I I L P A F G A T V Q E			
UniRef90_R5D7Y8	I H N V H V V A E L L E A L G R Q V D S V E E V R P G E T V I I I R S H G E R K E V			
UniRef90_B9XIS3	V H N E T V L S S N L L R A H G I K F E Q E I E A V T T D S V M I I T A H G A S E K S			
UniRef90_W6A9P8	V H N D K I V Q E F R D L G V I I L L D D S E V E A N Q V V I I F S A H G T D P K V			
UniRef90_C7LZW7	V H N R L L V V E A F E A A G V F V D D V E S V P P G R P V M L S A H G T A P E V			
UniRef90_UP100029A3EC3	V H N D L E V E R L L N N K G M Q T I D H L E N N M K E G T V F F R A H G E P P E S			
UniRef90_UP100036FB9F7	A H N P S I K N R L L E Q G I I E F T E Q H Q H A R T D T L I I V T A H G T S D R M			
UniRef90_R6GNA0	L H N E G V I E K L K E K G V Y C V G G I D E V F T D K V L L I R S H G M G K A D			
UniRef90_C0JZX4	V H N E A E L D R L G A E G L R V A S I P D V P E G E T V L I I R A H G E P P S T			
UniRef90_R6BSD5	I H N P Q V V E E L N T L G V A V E Q L P E L T E K V P V I I R S H G I V P H S V			
UniRef90_G2IH15	I H N K Q I I N Y F S R Q N V K I V N K E N L L D D R D I L V I I R A H G I P R D V			
UniRef90_Q4ED61	V H N P S V N Q R L L R E M S V G F I I A V E D V G A G D V V I I L P A F G A S V Q E			
UniRef90_F4XTK6	V H N S R E C E R L L R E R G L V M I D H A T F E H D V R V L L R A H G E P P S S			
UniRef90_L1MFJ3	V H N S E E V A R L L S R E G L H A V G Y D Q L P K G E R V L F R A H G E A P K I			
UniRef90_R5G2M7	V H N P S V N D H L L R E M D V L F I S V E G V A T G D V V I I L P A F G A T V Q E			
UniRef90_Q0IDE5	I H N P S V N D H L L R E M D V L F I S V E G V A T G D V V I I L P A F G A T V Q E			
UniRef90_F7YVB2	V H N N N V M M N H L L K Q K G A E T I I S L S D V P H D A V L V V R A H G V P P E D			
UniRef90_A9CBE6	I H N P T V N K R I I E M K V Q Y P V D E V D K G D V V I I L P A F G A A V H E			
UniRef90_R7K883	I H N E T V I I A D L K S K G V C V N D V L S L D K N K T V L I I R T H G A K K E T			
UniRef90_X5DZP2	V H N G M E V E R L E E K M G L K S I S K E K F F S N C K V L I I R A H G E P P E T			
UniRef90_B4WK0	I H N P E V N Q Q L K A M D V H F I D F S G V G R G D V V I I L P A F G A S V Q E			
UniRef90_S3KDM6	I H N K T A L K P L L Y E R G I C G E P S D A G H H K K R V A I I R A H G V P P A I			
UniRef90_UP10003687FFC	V H N G D E V K R L L K Q R G L H S I T Y E R L P E G K R V L F R A H G E A P K V			
UniRef90_B1X4S8	I H N P S V N D H L L H E M N V L F I P F S E V A V A S G D V V I I L P A F G A T V Q E			
UniRef90_K9EFZ1	I H N P G V N E R L L Q E M N V Q F I I P Q V I D V E Q G D V V I I L P A F G A S V D E			
UniRef90_G5GAW0	V H N D R E V E R L R L J A G L E T I E H N S F S H D A K V L L R A H G E P P A T			
UniRef90_U2K4N4	I H N K T A L E R L E K Q G L R V K H I D E F C K M P V V I I R A H G T P P A V			
UniRef90_UP1000377607E	V H N D W I V V Q K F K E K N V F I I E D P K E L P A D S I V M L S A H G T A P K V			
UniRef90_X5JFH7	I H N P S V N Q H L L R E M E V A F I Q I K D V E F G D V V I I L P A F G A S V Q E			
UniRef90_F7TL10	V H N R Q V V E Q L R R Q G V E M I T D P A E A E G R P V A I T A H G I V G R E V			
UniRef90_X0WLU2	V H N Q Y V V D A L K C L N I I D T I E D L D Q I D E G I V L I F T A H G I A S Q V			
UniRef90_UP10002DD476E	V H N P Q V V D A L K C L N I I D T I E D L D Q I D E G I V L I F T A H G I A S Q V			
UniRef90_A0A059LS72	I H N P V V N E R L L G G M G V H F I I V T D G V Q A G D V V L L P A F G A S V D E			
UniRef90_C1MT01	I H N P T V N K R L L G D M G V I I F D S G V V G N G E V V I I L P A F G A T V Q E			
UniRef90_UP100047231F7	I H N P S V N R H L L R Q M G V I F P V I M E V E Q G D V V I I L P A F G A T V Q E			
UniRef90_UP10003FAAB7C	I H N P S V N Q H L L K D M K V E F I I P V E N V N S G D D V V I I L P A F G A S I Q E			
UniRef90_E5Y8M8	I H N P Q V M N T Y M Q G Q V V V L A H S L D V Q P G D T V I I R A H G V P R E D			
UniRef90_S5MHQ4	V H N K I I V K E L L E E L G I K V I I D D K T I I P K G S V V I I F S A H G T D P K V			
UniRef90_Q3B080	I H N P S V N D H L L R E M D V L F I I P V E E V T S G D D V V I I L P A F G A T V Q E			
UniRef90_R6UT85	V H N S Y V V M Q A L K E L H I Y P V D D L D E I E E G I V I I F T A H G I S P A V			
UniRef90_B8HWD3	I H N P S V N Q N Q L L R E M Q V E F I I P V D E V A G E D V V I I L P A F G A S V Q E			
UniRef90_Q3M8X6	I H N P S V N Q R M Q E M Q V G F I I P V E V V G N G N D D V V I I L P A F G A S V Q E			
UniRef90_R7EVW8	V H N A D E V E R L R R C G L H T I E H K D L P K G K R V L L R A H G E P P S T			
UniRef90_T2I3R9	M H N K H H V V E D L A G Q G V F V Q E L A E I P D G I P V V F S A H G I V S P V V			
UniRef90_R7QBX7	I H N P I V N Q R M K E I G I Y S V P Q E G I E Q G D D V V V L P A F G A T L E E			
UniRef90_T2RFE4	V H N P V V L S N L E A L G V K I I N S L E E V P G K T V I I R A H G I V G E N V			
UniRef90_R7L1J4	V H N P V V L S N L E A L G V K I I N S L E E V P G K T V I I R A H G I V T K E I			
UniRef90_R5AKD0	V H N S D E V E R L R Q K G L D T I I T H D D L M S H C K V L L R A H G E P P S T			
UniRef90_A0ZJU9	I H N P S V N Q R M Q E M N I G F I I P V E V V E T G D V V I I L P A F G A S V Q E			
UniRef90_Q8EWR9	V H N K E I I K E L L E E L G I Q T I I E I K D K N N P P I V I I F S A H G T D Q K T			
UniRef90_Q7NG74	I H N P L V N Q H L L R A M G V R F L D E D E V S E K D V V I I L P A F G A S T Q E			
UniRef90_B6DXA1	I H N P S V N T R L L R E M G V M V K D L S G V A A G D D V V I I L P A F G A T L E E			
UniRef90_R5B9B8	I H N E A E L R R R L L G E K G L V T I I G K K D L P S S E T L L I I R A H G E P P E T			
UniRef90_B1WTZ2	I H N P S V N Q R L L R E M N V G F I I E V I N V E A G D D V V I I L P A F G A S V T E			
UniRef90_UP100047724BB	I H N P Q V N Q Q L L S N M G V R F V V I Q Q D I S P G D V I L W P A F G A S L Q E			
UniRef90_V5TDH9	I H N P T V N Q N L L T E M Q I I E F I I P M N E I T E Q D D V V I I L P A F G A T I Q E			
UniRef90_V5RJ17	V H N K I I V N E L L S E E L G I I A I D D W N I P S G S G V V V F S A H G T N A K V			
UniRef90_R5B468	V H N S A E V K R L L G Q K G L V T V T H D D L P Q G V K M L L R A H G E P P S T			
UniRef90_UP10002DDCC8B	I H N P S V N N H L L S R M N V K I I S A N N V S H G D V V I I L P A F G A T V Q E			
UniRef90_M1YUM3	V H N R Q V N E S L L K R N G V D L I I D D L D K I K T K K V M I I T A H G A A E K M			

	90	100	110	120
UniRef90_R5DSC8	I E K I K Q A G F E P V	D L T C L D V K K V Q Q K A I E	L A K E D Y F V V V V G	
UniRef90_K2EV69	I Q E L E E Q K G C Q I V	D A T C P D V K R V Q D K A R S L A E E G Y K V I I I G		
UniRef90_B1ZXD4	R N Y L K S L G M D F K D	C P D V G I I A G K I R L H A K K G Y A T I I F G		
UniRef90_E1JW10	R R E I A S R G A R I V	D A T C P K V K K A Q T L I S A Q A T Q S K V L L	F G	
UniRef90_H6VLE6	M R I L S E K N V Q I V	D T T C P W V S K V W N T V D K H K K D Y T S I I H	G G	
UniRef90_R6XDJ4	Y A L A E R N Q I E I I	D A T C C P V V L Q L Q K R I K K Q Y A N N A Q I V I F G		
UniRef90_R6AAF4	Y E L A R E R G I C I I	D A T C C P V V L Q L Q R R I K K V Y T E N P Q I V I Y G		
UniRef90_C8X243	E D Q L R S K G V T L V	D A T C C P K V K K A Q L L I E K Q T K Q G R R H L L	F G	
UniRef90_J3LS18	M Y T L N E K K V Q I V	D T T C C P W V S K V W N M V E K H K G D Y T S I I H		
UniRef90_G1UTY5	E E R V R A S G A R V V	D A T C C P K V K K A Q L A I A R A T R A G A T L L L	F G	
UniRef90_D1Y0F8	Y E L A K R N N I I E I I	D A T C C P V V L A L Q R R I K K Q Y E S G S Q I V I F G		
UniRef90_A0A059CLU5	M L T L E E K N V Q I V	D T T C C P W V S K V W N T V E K H E K G D C T S I I H		
UniRef90_R7G660	I E K A K Q M G L I C I	D A S C C P D V V K T Q Q L V Y E K L N E G Y D V F Y I G		
UniRef90_UP100046A7644	Y Q I A K K N N I K L I	D A T C C P V V L R L Q K R I K K Q F D K D V Q I V I Y G		
UniRef90_G8UPY4	Y A L A Q K N Q I K I	D A T C C P V V L Q L Q K R I H R C Y Q E G T Q I V I Y G		
UniRef90_K9T0P7	M Q L L N D K G C T I V	D T T C C P W V S K V W N S V E K H K K R D Y T S I I H		
UniRef90_C7LQM8	Q T S L E G Q N I T V	D A T C C P K V K K A Q I L I I Q R Q A D Q N K H L L	F G	
UniRef90_A9TDQ1	M Q I L L D E K K V Q I V	D T T C C P W V S K V W N T V E K H R K N I Y T S V I H		
UniRef90_U2TXU1	E Q V A R R A H D V L V	D A T C C P F V V R A H K A A E R L T E E G Y Q V I V F G		
UniRef90_UP100030FC42E	M Q L L N D K G C T I V	D T T C C P W V A K V W N S V E K H K K R D Y T S I I H		
UniRef90_Q11YY5	Y Q L A L E N N I E L V	D A S C C P V V L K L Q N R V K A S F D K D G Q I V I Y G		
UniRef90_U4KP66	I D K A K H K N L T Y	N A T C C P D V D K V H V A V K E K L G E G Y E V T Y I		
UniRef90_R5WT62	Y E K A A R G I E V I	D A T C C P V V A G L Q R T V A A A Y A E G G Q V V I L G		
UniRef90_E6K3J0	Y A L A R R N N I E I I	D A T C C P V V L A L Q R R I K R Q Y K Q G T Q I V I F G		
UniRef90_I6TT54	M Q I L L D E K K V Q I V	D T T C C P W V S K V W N T V E K H K K A T Y T S V I H		
UniRef90_F9Z4U7	Y E I A Q K N E V E V I	D A S C C P V V L N L Q K R I R K A Y E Q G G Q V V I Y G		
UniRef90_K9XTJ5	M Q L L N D R R G C T I V	D T T C C P W V S K V W N S V E K H K K R D Y T S I I H		
UniRef90_Q2I6K1	M L T L L S D K Q V Q I V	D T T C C P W V S K V W T S V E K H K K G A Y T S I I H		
UniRef90_UP1000363897F	Q E E L L R K N A T I V	D A T C C P K V K R V Q V L A R R L E E G Y R L V V F G		
UniRef90_R5EMS4	E N E A K A L G V K V I	D A T C C P V V T A I H K K M N R A G N N N Q D V V V		
UniRef90_R5PPH4	Y Q R A L A N G V E V I	D A S C C P V V L N L Q K R I R E A Y E K G G Q V V I Y G		
UniRef90_UP100037AE6DF	M Q L L N D R R G C T I V	D T T C C P W V S K V W N T V E K H K K G D Y T S I I H		
UniRef90_K9W5B6	M Q L L N D K G C K I I	D T T C C P W V S K V W N T V E K H K K K N Y T S I I H		
UniRef90_R5D7Y8	F D R L E Q L G A V C I	N A T C C P N V L R I Q Q L V A Q A D R E G R I P L I		
UniRef90_B9XIS3	I N E I L K A R G L K V L	E A T C C P L V H F A H R S V A E L A R D G Y H P V I I G		
UniRef90_W6A9P8	I I E E A K A N K N L I I	I D T K C C P E W L K T E D L I N E F L S K N W K I I F I		
UniRef90_C7LZW7	I L E E A R Q R C P I V V	D A V C C P L V T K V H H E I R T R A Q R G Y Q I V Y V		
UniRef90_UP100029A3EC3	Y Q K I K E K G L K L I	D A T C C P V V L K L Q Q R V R V A Y E E M G Q I A I Y G		
UniRef90_UP100036FB9F7	R Q E I I N E A G F D V K	D A T C C P L V H F A H R S L K K L V S D G Y Y P V I I V		
UniRef90_R6GNA0	I E I I K Q S G K T I I	D A T C C P S V K R I H E I V A K A Y S D G F H H V V I V		
UniRef90_C0JZX4	Y A D A R R R G L V V I	D C T C C P V V L K L Q E H R E A Y A R H G T L L I F G		
UniRef90_R6BSD5	Y E A F E Q N G I P Y V	D A T C C P Y V R Q I Q K I V A D Q P Q D T L V L V A G		
UniRef90_G2IH15	E D V L I T N F I E Y V	D A T C C P G R V K V I H K K V R D Y Y E K G Y D I V I V		
UniRef90_Q4ED61	E D E A K R K G I Q V I	D A T C C P L V N K V H K E A K R Y E N S G K E I I L I		
UniRef90_F4XTK6	M Q L L I H E K D C K I	D T T C C P W V S K V W N T V E K H K K K E Y T S I I H		
UniRef90_L1MFJ3	Y E T A R R N N I T L V	D A T C C P V V L N L Q K R I R R R V Y H E D P Q I V I Y G		
UniRef90_R5G2M7	Y E E A R K Q G I E V I	D A T C C P V V L T L Q K R I R T K Y E E G Q Q I V I F G		
UniRef90_Q0ID5E	M Q L L I N E R G C H I V	D T T C C P W V S K V W T T V E K H K K Q S F T S I I H		
UniRef90_F7YVB2	L Q F A K M H F G Q V V	D T T C C P V V L K L Q Q R V R V A Y E E M G Q I A I Y G		
UniRef90_A9CBE6	M Q Y L L S E K N V Q I V	D T T C C P W V S K V W N T V V K H K Q G D Y T S I I H		
UniRef90_R7K883	I Q H L S A L G F K I E	D C T C C P F V K K I H E I L N E K T S N G Y F A L I I G		
UniRef90_X5DZP2	Y E Y A K A N N V E L I	D A T C C P V V L T L Q E K V K K H S Q M E G Q V V I Y G		
UniRef90_B4WKR0	M K L L I H D K G C T I V	D T T C C P W V S K V W N T V E K H K K A F T S I I H		
UniRef90_S3KDM6	R K K L L Q N A A I R I E	D A T C C P R V L V N Q K R V S D Y A A Q K Y T I I A G		
UniRef90_UP10003687FFC	Y A E V E R L G I E V V	D A T C C P V V L A L Q K R I R R R K Y E N G T Q I V I Y G		
UniRef90_B1X4S8	M Q L L I N E R G C H I V	D T T C C P W V S K V W N T V E K H K K H E F T S I I H		
UniRef90_K9EZF1	M K L L I N E R D C T I V	D T T C C P W V S K V W T S V E K H K K Q A F T S I I H		
UniRef90_G5GAW0	Y A L A E Q N R I T L V	D A T C C P V V L Q L Q K R V K N V Y A Q M A Q I V I F G		
UniRef90_U2K4N4	R R T L L Q K A G V L I V	D A T C C P R V L V N Q K R A A D Y T A Q G Y M L V I A G		
UniRef90_UP1000377607E	E M E F K N I S M T S V	N S V C C P L V T K V H H E A K K F S E N G K K I I Y V G		
UniRef90_X5JFH7	M Q L L I N D K G C T I V	D T T C C P W V S K V W N T V E K H K K R E Y T S I I H		
UniRef90_F7TL10	M Q L L I N L K V F D	T A T C C P L V T K V H M Q V A R A S R K G T K A I I G		
UniRef90_X0WLU2	M E E M R R R G I R V	D T T C C P I V S R S Q Q W A K R L T E E G F A V I V F G		
UniRef90_UP10002DD476E	K E K A A A K G L I C I	D A S C C P D V L S T Q A I I K N A L A D G K H V A Y I G		
UniRef90_A0A059LS72	M R L L I H E R G A E L V	D T T C C P W V S K V W N A V D N Q A R R R G H T S V I H		
UniRef90_C1MT01	M K L L I A E K G A S I V	D T T C C P W V S K V W N A V D A H T R K E F T S I I H		
UniRef90_UP100047231F7	M Q L L I N E R Q C T I V	D T T C C P W V S K V W S T V E R H K K R D F T S I I H		
UniRef90_UP10003FAAB7C	M Q T L I N E K G G C K I V	D T T C C P W V S K V W N S I E K H K K R D Y T S I I H		
UniRef90_E5Y8M8	E A R L L D L G A H V L	D A T C C P K V K Q A Q L A I D E A T R Q G T S L Y L F G		
UniRef90_S5MHQ4	I K L K A E D L G L I V	D T T C C P E W V L E T E N L I N K Y I N L G F D I I F I		
UniRef90_Q3B080	M Q L L I N E R G C H I V	D T T C C P W V S K V W N T V E K H K K H T F T S V I H		
UniRef90_R6UT85	K E K A L R K G L Q C I	D A S C C P D V V K T Q D L V M E Q L K N G C D V L Y I G		
UniRef90_B8HWD3	M Q L L I N D K G C K I M	D T T C C P W V S K V W N S V E K H K K G S Y T S I I H		
UniRef90_Q3M8X6	M Q L L I S E K G G C K I V	D T T C C P W V S K V W N T V E K H K K G D H T S I I H		
UniRef90_R7EVW8	Y Q T A R E N N I E I I	D A T C C P V V L Q L Q R R I K E A Y E R P S A I I I Y G		
UniRef90_T2I3R9	K A E A E R R G M H V V	D A T C C P L V G K V H R E V L R F V R E G G Y E I I V Y I G		
UniRef90_R7QBX7	M K Y I I N D L G V E I V	D T T C C P W V S K V W H A L D R H Q K K E C T S I I H		
UniRef90_T2RFE4	Y K D S Q T K N L D I	D T T C C P F V K K I H E I A K N H Y K N G Y K I V I O		
UniRef90_R7L1J4	Y N K A K Q M E I T L K D L T C C P K V L K I H D F V I E Y G K N E D Y I F L I G			
UniRef90_R5AKD0	Y K T A R E R D I E I V	D A T C C P V V L Q L Q R R I K E A Y E R P S A I I I Y G		
UniRef90_A0ZJU9	M Q L L I H N Q G C K I V	D T T C C P W V S K V W N T V E K H K K L A Y T S I I H		
UniRef90_Q8EWR9	I D K A R E K G L V V	D T T C C P I Y V T K T H D L I K E K I E Q G Y Q I F Y I G		
UniRef90_Q7NG74	M Q L L I D E K N C V I V	D T T C C P W V S A V W N R V G K Y D R A E F T S I I H		
UniRef90_B6DXA1	M Q F L I T E T G C Q I V	D T T C C P W V S K V W G T L D K H K R V A C T S I V H		
UniRef90_R5B9B8	Y S I L A S R L G L T V	D C T C C P V V L R L Q K S I R E A Y E R G G Q I I F G		
UniRef90_B1WZT2	M Q L L I N D K G C T I V	D T T C C P W V S K V W N S V E K H K K D Y T S I I H		
UniRef90_UP100047724BB	M E F F Q Q N Q G N E I V	D T T C C P W V S R V W N Q V D K H R T R E F T S I I H		
UniRef90_V5TDH9	I Q L L N T I G C T I V	D T T C C P W V S K V W N S V E K H K H S Y T S I I H		
UniRef90_V5RJ17	I K L A E D L G L I T I	D T K C C E W V L E T E I L I N E Y L G K G Y D V I F I G		
UniRef90_R5B468	Y E L A K R N D I V V	D T T C C P V V L Q L Q R R I K A Y E R P S A I I I Y G		
UniRef90_UP10002DDCC8B	M Q L L I H E K E C H I I	D T T C C P W V S K V W H T V E K H K K H T F T S I I H		
UniRef90_M1YUM3	K E A L V E A G H I V Y	D A S C C P L V M R V H K T V K S M V E Q N Y F P V V I G		

UniRef90_R5DSC8
 UniRef90_K2EV69
 UniRef90_B1ZXD4
 UniRef90_E1JW10
 UniRef90_H6VLE6
 UniRef90_R6XDJ4
 UniRef90_R6AAF4
 UniRef90_C8X243
 UniRef90_J3LS18
 UniRef90_G1UTY5
 UniRef90_D1Y0F8
 UniRef90_A0A059CLU5
 UniRef90_R7G660
 UniRef90_UP100046A7644
 UniRef90_G8UPY4
 UniRef90_K9T0P7
 UniRef90_C7LQM8
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 UniRef90_U2TXU1
 UniRef90_UP100030FC42E
 UniRef90_Q11YY5
 UniRef90_U4KP66
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 UniRef90_E6K3J0
 UniRef90_I6TT54
 UniRef90_F9Z4U7
 UniRef90_K9XTJ5
 UniRef90_Q2I6K1
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 UniRef90_W6A9P8
 UniRef90_C7LZW7
 UniRef90_UP100029A3EC3
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 UniRef90_A9CBE6
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 UniRef90_X5DZP2
 UniRef90_B4WKR0
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 UniRef90_K9EZF1
 UniRef90_G5GAW0
 UniRef90_U2K4N4
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 UniRef90_R7EVW8
 UniRef90_T2I3R9
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 UniRef90_V5RJ17
 UniRef90_R5B468
 UniRef90_UP10002DDCC8B
 UniRef90_M1YUM3

		130	140	150	160																																																																																					
K S E H P E V I A I K A N A K L Y S D N V V A A S V E Q L K Q I K A H K R V G	K P D H P E V I A I K A H A D S V D E A I V I S S E Q E V Y K Y L K K A K K I V G	D K N H P E A I G L L G Y T E G R G Y C I T S K A D I D A L P A L E R V C	E A D H P E V K G L L S Y A T A G A H V F D S M E E L E R M D L G E G P T Y F	K Y N H E E T V A T A S F A R K Y I I V K N I K E A T Y V C D Y I K V G	K K G H A E V L G L V G Q T E S H A I V V E K F E D V V H L R E L D F T K D I Y	K R G H A E V L G L V G Q T N G E A L V I E S V E E A A Q I D F S R P V A	E S D H P E V K G L L S Y A D A E A L V F D S L L Q L Q G K D L A P E E K R Y F	K Y S H E E T V A T A S F A G T Y I I V K N I A E A N Y V C D Y V K V G	E A D H P E V R G L V S Y A H G P A H V F G S P K E L L A E L R L D P G H N H V	K N G H A E V L G L V G Q T K S E A L I I K F E D V K K L N F T K D I Y	K Y A H E E T I A T A S F A R E Y I I V K N M K E A M Y V C D Y I N D L N K V G	K R F H P E A E A V L S L S S H V H L I T S K E D I D T M I D V T N V F	K S G H A E V L G L V G Q T K G E A I V I E S L K E A E S L D F T T R D I R	K K G H A E V N G L V G Q T E G T A I V I E K L D D I E K L L D F H H R D I	K Y N H E E T I A T S S F A G T Y L V V L N L E Q A N Y V C D Y I Q G	E R D H P E V Q G L V S Y A P K H T I F E S L E Q A Y E V D P A Q T Y F	K Y A H E E T V A T A S F A G K Y I I A K N I K E A T Y I C D Y I K V G	E A G H P E V E G T L G H A P G A L T I S S P A D L E G V G V A R R V G	K Y K H E E T V A T A S F A G K Y L V V L N L E Q A E Y V S H Y D Q I G	K Y K H E E T V A T A S F A G K Y K I V K N M Q E A S Y L C D Y V K V G	K Y K H E E T V A T A S F A G K Y L V V L N L Q Q A E Y V V N Y I R I G	K Y S H E E T I A T S S F A D K Y L V V L N L Q Q A E Y V C D Y I K T G	K A S H P E V Q A L L S V L K K Q A Q V V A T P E E W Q K A F A V D H Q G P F A	H N G H Q E V V G T I G Q Y T G S P D K V H V V N S I Q G I E A L N D G E N A	K R G H A E V S G L V G Q T N G E A I V V V E T E A D L V Q V D F F S K P V V	K Y N H E E T V A T S S F A E A Q Y V A D Y I L N G G D R E E F L T K F K K I G	K Y K H E E T V A T S S F A G T Y L I V F N M A E A E Y V C N Y I R V G	E P R H P E V M G V A S W S D R S V I F P G P E E L E K W Q E P S R Q S L S L T	K R D H V E V R G L T G D L K A F D V V V L S E A D I E N L Q E R A R F G	K Q N H P E T I A L T S L S K K I S L V T C D E D I D N L P T T S L K I M	H R G H E E A I G A T A E A P E A V T F V E T P E E A R A I T G D G P V A	K I G H A E V K G L L S G Q T N H E A I I L E K E E D V R L I D P G R P V V	K E D H I E V R G L T G D L D A Y T V L S Q A S D I D Q L P P A K R M G	D A A H P E V L G I N G W C E N S A T I V D E N S D L D G L C D Y E K L C	K I G H A E V L G L L G Q V D G D A I V V E N E D A L P A I D F S Q P V E	D A K H P E V K G I I G H C N A T F V T F E S A E E L L Q K I T E N S P N M N S V	N K N H P E I I G A N S Y C D Y N A K F F F E D K L D G E I L S D K V C	H E N H P E V K G I R G R V N N P I T L V Q T L Q D V Y D L K V K D P D N L S G	K Y K H E E T V A T S S F A G K Y L V V L N L Q E A E Y V V A N Y I R I G	K H G H A E V L G L V G Q T N S E A I V I A D I S E V D K V D L T R N T Y	K R G H A E V N G L V G Q T D D G T A I V V Q S V E E A R E L I D P S R A V A G	K V K H E E T I A T S S F A D Y I L G K G N R E S F M E R F D P D R D L E H L G	K K E H P E M I A L K G Y V K D A F I E Q N P I E L S G K V C	K Y A H E E T V A T A S F A G T Y I I V K T I D E A A Y V C D Y I K V G	Y S G H D E T E A S L S Y C N G K G V I L S D F S D I E K F L N T A A F D K L L A	N K N H P E I I G A N S Y C D Y N A K F F F E D K L D G E I L S D K V C	K K G H A E I E G L N G Q T K H N A I I I E S I A D V D K I D K S R P V S	K Y K H E E T V A T T S F A E A E Y V A N Y I L E G G D R E E F L T K F T N V G	D K S H G E V A A L V G E A E L Q G A E C V I V Q N E A D A K L L F A D S K A I	K H G H A E V N G L V G Q T N G E A I V V V Q S I E E A K R L I D P Q R I A	K V K H E E T L I A T S S F A D T Y L V V L D L E E N H E G F D P D H D L L R V G	K Y Q H E E T V A T K S F A N T Y L V L V N L D E S P E E F D P D Q D L D A V G Y	D K N H G E V A A V A G V A S D K G I N Y A V V Q N R R E A Q K L F C R A K A V	K H K H E E D E A I G S L G V A P N N M I L V E T V D D L D N N S L R N E N V A G	K Y K H E E T I A T S S F A G K Y L I L L N L E E A E Y V I N Y I R V G	H E G H P E V E G T M G Q Y D N P E G G I F L V E S V E D I A K L R Q E D D L T	D P N H R E V R G V L G W T G G K G L A I P D E A C L D S L P R P S R M A	K K G H P E A E A V L S I S P T I Q L I E L H Q P L P P L A T P I F	K K G H A E E A V L S I S P T I Q L I E L H Q P L P P L A T P I F	K W E H E E T I A T A S F A G S Y V V V C D L K Q A R W L S D F M C I	K W A H E E T V A T A S F A K E E F M A K F V N A H S E G F D P D V D L D G L G	K V K H E E T I A T S S F A G T Y L V V L N L E E A R V V C D Y I R L G	K Y K H E E T I A T S S F A D K Y L V I I L N Y K E A E E G F D P D Q D L L K Q I G	E A E H P E V Q G L V S Y A N G P C L V F G S L K E L K E K Q T F K D T H N V V	K H F H P E T I A L T S L H L S K I H L V T N T D E V E K L N V L N S D I F	K V K H E E T I A T S S F A R E A F M Q R F A K A C C S E G F D P D R D L L E R L G	K Y K H E E T I A T S S F A D K Y L V I I L N Y K E A E E G F D P D Q D L L K Q I G	K Y Q H E E T I A T S S F A G K Y L I V L N L Q D R E E F L H K F R R V G G	K R G H A E V N G L V G Q T N G E A V V V E E S E L D A L D L N R D V E	K Y Q H E E T I A T S S F A G K Y L I V L N L Q D R E E F L H K F R R V G G	K R G H A E V N G L V G Q T N G E A V V V E E S E L D A L D L N R D V E	K Y Q H E E T I A T S S F A A T Y L I V N Y I L N G Q D R E E F L H K F R R V G G	K R G H A E V N G L V G Q T N G E A V V V E E S E L D A L D L N R D V E	K Y Q H E E T I A T S S F A G K Y L I V L N L Q D R E E F L H K F R R V G G	H K G H D E A V G V V G E S P E H V H L I E H E S D V D S L D F A P D T K L V	K W K H E E T I A T A S F A K Y L V V L V N M D E A E E G F D P D T D L N A V G	D S K H P E V I G L N G W C O N N E A L I I K T I E D L E N I E F D K S K K Y C	E K K H P E V I G T A S F C G R N S T I I E N E E E L D E A L K I I K K R K L V	K N G H A E V N G L V G Q T E G T A I V V E D V S G L G A I D F N R D I E	K Y K H E E T I A T S S F A E A H Y V A D Y I L N G G D R Q F E L Q K F A K V G	V N N H P E T I S T L S I D K S I I L I E T V N D I E N I R T E K P I	K Y Q H E E T V A T S A R A R R Y L V V L N L E E A Q Q V C D Y I R V G	K W A H E E T I A T S F A D A Q Y V A D Y I L N G G D R D E F L A K F S N V G	K V G H A E V L G L L G Q V G G D A V V I E D L R M L R S I R T G R P L E	K Y K H E E T V A T S S F A D K Y I L N G G N K D E F L E K F K N A H S E I R L G	K Y K H E E T I A T S S F A D K Y I L N L Q Q A K Y V C D Y I R V G	K H N H P E T I A L T I N K E K I H V T T V E E V K N L N I E N E N I F	K A G H A E V N G L V G Q T K G E A I V V Q Y P E D L D K I D Y S R P V M	K Y K H E E T I A T S S F A D K Y I L N L Q Q A K Y V C D Y I R V G	K Y K H E E T I A T S S F A D K Y I L N L Q Q A K Y V C D Y I R V G

	170	180	190	200
UniRef90_R5DSC8	V V V Q T T Q R I S T L T S I	V D Y L I S V A K E V H V A N T I	C K S T S M R Q	
UniRef90_K2EV69	I V T Q T T Q T H E N F K K I	L P I I A E H S T E L K V Y N T I	C S A T C K R Q	
UniRef90_B1ZXD4	M V S Q T M F M H E F A E L	S E Y A R Q K F K E V L V F D T I	C C Q A T K D R Q	
UniRef90_E1JW10	L A A Q T T Q D E M E F M R I	R D F L K K R P G L T V L S T I	C C N A T M N R Q	
UniRef90_H6VLE6	I A N Q T T M L K S E T E E I	G Q L I E R T T M M H F M S F N T I	C C D A T Q E R Q	
UniRef90_R6XDJ4	L Y S Q T T K S L D E F H R I	I E Y I C Q E H I V G F K S F D T I	C C R Q V A N R M	
UniRef90_R6AAF4	L F S Q T T K P L E V F R Q I	V D Y I T A H M E E F R Y F D T I	C C C R Q V A N R L	
UniRef90_C8X243	L A S Q T T Q D R E E F R T I	R D Y L L E H V D S M P I F D T I	C C D A T T R E R Q	
UniRef90_J3LS18	I A N Q T T M L K G E T E E I	G K L V E K T M M H F I A F N T I	C C C D A T Q E R Q	
UniRef90_G1UTY5	L A S Q T T Q D R E T F T A L I	E A G L R A R F P G L T V L S T I	C C C D A T T R E R Q	
UniRef90_D1Y0F8	L Y S Q T T K S L N E F H Q I	I E Y I Q S H I D P F Q S F D T I	C C C R Q V A N R M	
UniRef90_A0A059CLU5	I A N Q T T M L K G E T E E I	G K L L E R T T M M H F M S F N T I	C C C N A T Q E R Q	
UniRef90_R7G660	V T N Q T T T M S I F D T Q A L I	F N Y I K Q K Y P N A V L C E E I	C C C C N A T R I R Q	
UniRef90_UP100046A7644	L Y S Q T T K S L N E F W L I I	I E Y I K K N I I P F E Y Y D T I	C C C C R Q V A N R M	
UniRef90_G8UPY4	L F S Q T T K P L D G F G K V V E G I	R A R I I S S F Q Y F D T I	C C C C R Q V A N R L	
UniRef90_K9T0P7	I A N Q T T M L K S E T E Q I	G K L L K K Y G P H F M S F N T I	C C C C D A T Q E R Q	
UniRef90_C7LQM8	L A A Q T T Q D R E S F D T I	R E Y L R A N V D A A M I L D T I	C C C C M A T K D R Q	
UniRef90_A9TDQ1	I A N Q T T M L K G E T E E I	G K L L E R T T M M H F M S F N T I	C C C C D A T Q E R Q	
UniRef90_U2TXU1	V V V Q T T Q A R A A L R E L A S A L I	G R V E E L R I I D T I	C C C C E A T T L R Q	
UniRef90_UP100030FC42E	I A N Q T T M L K S E T E S I	G K L L K K Y G P H F M S F N T I	C C C C D A T Q E R Q	
UniRef90_Q11YY5	L Y S Q T T T K S T Q G F Y K M K D L I	K N V D E N F E Y N D S I	C C C C R Q V S N R E	
UniRef90_U4KP66	V T N Q T T L S R Y D I N E V L N V L L	V K Y P N L L F D D I	C C C C D A T T L R Q	
UniRef90_R5WT62	F L I A Q T T Q S L A L F H R M A D L I	R T R C C P E V T I R D T I	C C C C C R Q V I S S R E	
UniRef90_E6K3J0	L Y S Q T T K S L D E F H R I I D Y I	Q R H I A P F R S F D T I	C C C C R Q V A N R M	
UniRef90_I6TT54	I A N Q T T M L K G E T E A I	G K L L E K T T M M H F M S F N T I	C C C C D A T Q E R Q	
UniRef90_F9Z4U7	L F S Q T T K S L E G F Q A I A A L L	K E K G A Q V V V N D T I	C C C C R K V A N R I	
UniRef90_K9XTJ5	I A N Q T T M L K S E T E Q I	G K L L K K Y G P H F M S F N T I	C C C C D A T Q E R Q	
UniRef90_Q2I6K1	V A N Q T T M L K G E T E E I	G K L V E R T T M M H F I S F N T I	C C C C D A T Q E R Q	
UniRef90_UP1000363897F	V L A Q T T F P S V V L L Q Q F E N W V	R E Q G L G V R I V H T	C C C C D E T E K R Q	
UniRef90_R5EMS4	F F T Q T T L S V D E T R H V V E A L	K K K Y P K I I G P D T	C C C C C C R A T Q V R Q	
UniRef90_R5PPH4	L F S Q T T K S L D G F R N I I A G I I	Q E K G D E V V V Y D T I	C C C C C C R K V A N R I	
UniRef90_UP100037AE6DF	I A N Q T T M L K G E T E Q I	G K L L F E H T M Q H F L S F N T I	C C C C C C D A T Q E R Q	
UniRef90_K9W5B6	I A N Q T T M L K T E T E Q I	G K L L F E T T M M H F Q N F N T I	C C C C C C D A T Q E R Q	
UniRef90_R5D7Y8	A V A Q T T C I R T I W E T S K E I	L K K L C T N A K I F D T I	C C C C C C S A T H R R Q	
UniRef90_B9XIS3	I A A Q T T Q P I E K V I Q R I	V G L L V R K K F P E V R F V D T V	C C C C C C C R P T K Q R Q	
UniRef90_W6A9P8	U N T Q T T L S K I D T K K L Y D K I	K S K F P E A V F K N D L	C C C C C C C D A T T L E R Q	
UniRef90_C7LZW7	V T N Q T T L A V P E W E A I	A A L V A S Q T P N L P G R S D L	C C C C C C C C Y A T T N R Q	
UniRef90_UP100029A3EC3	L F S Q T T K S P E V F K N I I A A A L	R R N N V E V Q I N D T I	C C C C C C C R Q V S N R A	
UniRef90_UP100036FB9F7	I I S Q T T Q P I D H V E S I	V E C I K A A F P E I R F T D T V	C C C C C C C C H P T K Q R Q	
UniRef90_R6GNA0	F V S Q T T F R A K K Y A E I I K K I	K D R L K T V E I F D T I	C C C C C C C C Y T T T V R Q	
UniRef90_C0JZX4	I F S Q T T K S P A E Y A E I	C D R V R S L G D R V T V H D T I	C C C C C C C A Q V A N R H	
UniRef90_R6BSD5	M V A Q T T F N T S E W Q K C V E T A K K	Y T K P K I F D T I	C C C C C C C C K A T L M R Q	
UniRef90_G2I1H15	V L S Q T T E K Y E N F E N A I	K L V S E K C K D V V S L N T I	C C C C C C C C D A T Y L R Q	
UniRef90_Q4ED61	Y V T Q T T L S I D D T R D I I A A L K L R F P G I	T G P D D I	C C C C C C C C Y A T Q N R Q	
UniRef90_F4XTK6	I A N Q T T M L K T E T E Q I	G M G K L F E R T T M M H F Q S F N T I	C C C C C C C C D A T Q E R Q	
UniRef90_L1MFJ3	L F S Q T T K P L E G F Q T L I N Y L T E	H I K E F K P C F D T I	C C C C C C C C R S V S N R L	
UniRef90_R5G2M7	L F S Q T T M D Q N Q F E A L H T A L	R E W V H E V E W Y D T T	C C C C C C C C R Q V S N R V	
UniRef90_Q0IDE5	U V A Q T T M L K S E T E E I	G R L F E R T M E H F L A F N T I	C C C C C C C C D A T Q E R Q	
UniRef90_F7YVB2	L L S Q T T T M S I E E Y K Q F A S K V	M E N V N E F R M F N T I	C C C C C C C C R V S A E R E	
UniRef90_A9CBE6	I A N Q T T M L K G E T E D I	G K L V E K T T M M H F I S F N T I	C C C C C C C C D A T Q E R Q	
UniRef90_R7K883	V V A Q T T F D N I K F E N I	V E K I K N W V K T V E F F N T I	C C C C C C C C C Y T T T F D R Q	
UniRef90_X5DZP2	L Y S Q T T K R I E D F H A I	A Q K V K I E P G V P V E I K D T I	C C C C C C C C C R Q V S N R V	
UniRef90_B4WK0	I A N Q T T M L K G E T E Q I	G K L F E R F N H H F S F N T I	C C C C C C C C D A T Q E R Q	
UniRef90_S3KDM6	L I S Q T T T A G L E E E Y E A I	R R L L C A A N P S I K V F D T I	C C C C C C C C C P A T K E R Q	
UniRef90_UP10003687FFC	L F S Q T T M D M D S F A Q L	G D F L K E Y G V E V E T F D T I	C C C C C C C C C R Q V S N R V	
UniRef90_B1X4S8	V A N Q T T M L K R E T E E I	G R L F E Q T M E H F L S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_K9EFZ1	V A N Q T T M L K G E T E Q I	G K L L E R T T M E H F S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_G5GAW0	L F S Q T T T M S L D G F H Q V	D Y I T T H I A H F H Y A D T I	C C C C C C C C C R Q V A N R L	
UniRef90_U2K4N4	L I S Q T T F S E T E Y K T I	Q K I L C R T N A Q L T V F D T I	C C C C C C C C C P A T R E R Q	
UniRef90_UP1000377607E	L L A Q T T L A M S E W E P I	L D K A K K E F E N I L P R K S D I	C C C C C C C C C Y A T T N R Q	
UniRef90_X5JF7	I A N Q T T M L K S E T E Q I	G K L F E R T T M M H F Q S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_F7TL10	F M T Q T T L S L D D T S E V I	E A L K Q K Y P A I Q G P N D I	C C C C C C C C C Y A T T N R Q	
UniRef90_X0WLU2	V L S Q T T E T G P R F A S F I	V K R L I D R V S E L R V I N T L	C C C C C C C C C N A T T S S Q Q	
UniRef90_UP10002DD476E	V T C Q T T M S T S D V L A	V F Q E I K Q A Y P Q A E I G E E I	C C C C C C C C C N A T R I R Q	
UniRef90_A0A059LS72	M A N Q T T M L K G E T E Q I	G R L L Q L A Q H F M I M D T I	C C C C C C C C C D A T Q E R Q	
UniRef90_C1MT01	I A N Q T T M L K G E T E Q I	G K L L E R T T M M H F Y M V M D T I	C C C C C C C C C D A T Q E R Q	
UniRef90_UP100047231F7	V A N Q T T M L K T E T E Q I	Q T L L R R Y G P H F L A F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_UP10003FAAB7C	I A N Q T T M L K S E T E Q I	G K L L E H T M T M H F Q S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_E5Y8M8	L A A Q T T Q E R E E F E A I	K K T L A E G H S L S V L E T I	C C C C C C C C C D A T R R R Q	
UniRef90_S5MHQ4	I T N Q T T L S I I D T D L I	Y K K I K E K Y P N A F F K N D I	C C C C C C C C C E A T L V R Q	
UniRef90_Q3B080	V A N Q T T M L K S E T E E I	G R M F E R T M E H F F L A Y N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_R6UT85	V T N Q T T T M S I F D I E A L	F E A I R E R Y P K A V F C E E I	C C C C C C C C C N A T R I R Q	
UniRef90_B8HWD3	I A N Q T T M L K G E T E Q I	G K L F E Q N Q H F L S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_Q3M8X6	I A N Q T T M L K G E T E Q I	G K L F E H T M Q H F Q S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_R7EVW8	L Y S Q T T K S L S G F Q R M I	H A I Q E R K T S F K Y F D T I	C C C C C C C C C R Q V A N R M	
UniRef90_T2I3R9	L L S Q T T L S V D E T A D T I	A A L K A K F P W I Q P S S D I	C C C C C C C C C Y A T T S N R Q	
UniRef90_R7QBX7	V A N Q T T M L K S E T T A V A K L L	R K F G P H F V A Y D T I	C C C C C C C C C N A T Q E R Q	
UniRef90_T2RFE4	V V S Q T T I N V D L Y N Q I	G E L S N R D D V L F N D I	C C C C C C C C C S A T K V R Q	
UniRef90_R7L1J4	V V A Q T T F N L E R F K K F E S K I	R E E L K E I I I N N T I	C C C C C C C C C D A T R L R Q	
UniRef90_R5AKD0	L Y S Q T T K S V E G F R E	I D E I R D P R C R F H F Y D T I	C C C C C C C C C R Q V A N R V	
UniRef90_A0ZJU9	I A N Q T T M L K D E T E Q I	G K L F E R T T M M H F Q S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_Q8EWR9	V T N Q T T I S I Y E F E E I	T E T L K S K Y K N I E F K N D I	C C C C C C C C C N A A K D R Q	
UniRef90_Q7NG74	I A N Q T T M L K G E T E R I	G K L F E R T T M M H F M S H D T I	C C C C C C C C C D A T Q E R Q	
UniRef90_B6DXA1	V A N Q T T M L K S E T T A A I	G K L F E K T M T R F V A Y D T I	C C C C C C C C C D A T Q E R Q	
UniRef90_R5B9B8	I F S Q T T K S P V E Y S E I	C K E L I S A A L R Q L K V H D T I	C C C C C C C C C S Q V A S R H	
UniRef90_B1WTZ2	I A N Q T T M L K S E T E Q I	G K L L K K Y G P H F I S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_V5TDH9	I A N Q T T M L K R E T E Q I	G K L F E Q I N N H F L S F N T I	C C C C C C C C C D A T Q E R Q	
UniRef90_V5RJ17	V T N Q T T L S I I D T E E I	Y K E I K S K Y D K C L Y K N D I	C C C C C C C C C E A T L V R Q	
UniRef90_R5B468	L F S Q T T T M S I S G F N D M A D A I	R A R M K E M Y A D T I	C C C C C C C C C R Q V S N R V	
UniRef90_UP10002DDCC8B	V A N Q T T M L K S E T E E I	G K L L K K Y G P H F L A F N T I	C C C C C C C C C D A T T E R Q	
UniRef90_M1YUM3	I V S Q T T Q Q M E K V E N L V R K I	R D C V E D V A F V N T I	C C C C C C C C C Q P T R D R Q	

	210	220	230	240
UniRef90_R5DSC8	S E A K E L A K E S D L V I V V	G S K K S A N T T H L A E I L K D I T K T	I H I	
UniRef90_K2EV69	Q E A M T L A N E V E L M L V V	G S K K S S A N T T H L A E I V S P I K K T L	H I	
UniRef90_B1ZXD4	T D V V A L A R Q A Q A I V V I	G H H S A N T T V K L A S L A R L Q N L P T Y H		
UniRef90_E1JW10	Q E A M D L A A A V D F M V V	G G R E S G N T R R L A Q V A R T A G T P C V H		
UniRef90_H6VLE6	D A M Y K L V E D V D L I L V V	G G F N S S N T S H L Q E I A E F R G I P S Y W		
UniRef90_R6XDJ4	P N I I A A F A S K H D V I L F V	S G R K S S N G K V L F K E C K S V N P N S Y Q		
UniRef90_R6AAF4	P N I R A F A S R H D V I V F V	C G L K S S N G R V L H E A C R K V N P R T Y L		
UniRef90_C8X243	V E A K R I A K Q V D Y M I V V	G G L T S G N T R R L A Q V I T A Q G T P C A H		
UniRef90_J3LS18	D A M Y Q L V K K V D L I L V I	G G W N S S N T S H L Q E I G E L S G I I P S Y W		
UniRef90_G1UTY5	E E A R S I I A S S V D V M V I V	G G R Q S G N T R R L A D V A A L S G I I D T F H		
UniRef90_D1Y0F8	P N I S T F A T R H D V I I F V	A G G K S S N G K V L F H E C L D V N P R S Y Q		
UniRef90_A0A059CLU5	D A M Y K L V E K V D L L V V	G G W N S S N T S H L Q E I A E E R G I P S Y W		
UniRef90_R7G660	E A V A N K N Q A I D V L Y V V	G D K H S N N S N R L A Q I A Q E N K A N V Y L		
UniRef90_UP100046A7644	P N I R D F A A S H E L I F F V C	C G K K S S N G K I L F N E C K K I N K N S Y L		
UniRef90_G8UPY4	P N I R D F A L Q H D C I Y F V	A G G K S S N G Q M L F E Q C L Q A N P H S V F		
UniRef90_K9T0P7	D A M F N L V E E N T L M L V I	G G Y N S S N T T H L Q E I A L E R G I P S Y H		
UniRef90_C7LQM8	E E V R E L S R K V Q A I V I V	G G K N S S G N T R R L A Q I A Q E S G I F A I		
UniRef90_A9TDQ1	D A M Y K L V D D V D L V L V V	G G W N S S N T S H L Q E I A E L K S I P S Y W		
UniRef90_U2TXU1	A A A A R L A R D S D V M V V I	G G R N S A N T G R L A S I C E G F C P Q T H H		
UniRef90_UP100030FC42E	D A M F G L V E P L N L M V I	G G Y N S S N T T H L Q E I A L E K N I P S Y H		
UniRef90_Q11YY5	P Q L R K F S K E F D V V I	F V S G K K S S N G K A L Y G V C K Q E N E R S Y F		
UniRef90_U4KP66	K A V I D Q E D S D L L I V V	G D Q L S S N S N K L A F V S H S R N I K S I R		
UniRef90_R5WT62	A K L I R E F A G R F D A V I	F V S G Q K S S N G K V L Y G V C R E A N P N S Y S		
UniRef90_E6K3J0	P N I A N F A S K H D L I L F V	S G R K S S N G K V L Y E N C K S V N P N S Y Q		
UniRef90_I6TT54	D A I H K L V K E L D L I L V V	G G W N S S N T S H L Q E I A E I N G I P S Y W		
UniRef90_F9Z4U7	P Q L R E F A Q K H D V V I F V	S G E K S S N G K Q L F A T C C E V N P R T Y L		
UniRef90_K9XTJ5	D A M L N L V K D L A L M V V I	G G F N S S N T T H L Q E I A I E H G I P S Y H		
UniRef90_Q2I6K1	D A M Y K L V E K M D L M L V V	G G W N S S N T S H L Q E I P E E R G I P S Y W		
UniRef90_UP1000363897F	R E L E Q N L E Q N D V V V I V	G G G K H S A N T R S L F V L A E R R G V P V F W		
UniRef90_R5EMS4	N A V R D L A K V C D L V L I A	G G S S N S S N S N R L K E V A S E G T N A Y L		
UniRef90_R5PPH4	P Q L I I N F A K M H D V I I F V	S G K K S S N G R Q L F A V C K E V N E R T Y F		
UniRef90_UP100037A6EDF	D A M F D L V K K L D M M I V I	G G Y N S S N T T H L Q E I A I D Y K I P S Y H		
UniRef90_K9W5B6	D A M F E L V K D L D L M V V I	G G F N S S N T T Q L Q Q I P I D R N I P S Y H		
UniRef90_R5D7Y8	L E A A E L A A Q A D V M V V V	G D R K S A N T K H L A E I C R K A C P V V Y Q		
UniRef90_B9XIS3	F A A V E L L A Q K S D V V V V V	G G A H S N N T H E L L V K T C G R Y C P R V H H		
UniRef90_W6A9P8	E A V L R L N P V E L L F V V	G D K S S N S N K L V E I A K T I G I D A I L		
UniRef90_C7LZW7	A A V R A L A E R V D A M V V V	E R V A T S A G V G H V R		
UniRef90_UP100029A3EC3	P H L Q R F A R K H D V V I F V	G G A K S S N A Q S L Y K S C L D V N P Q T H F		
UniRef90_UP100036FB9F7	K S A I E L G Q Q S D V V I V I	G G R T S N N T R Q L S R T V S R F C D R V Y Q		
UniRef90_R6GNA0	S E A E S I A N K S D E M I V I	G S R S S K N T R M L C D I C S G R C G S V T L		
UniRef90_C0JZX4	E H L A A F A R A H D L I F V	G A E S S S N G R V L F D L C H R L N P R S Y R		
UniRef90_R6BSD5	T E A A H L A E V S D I M I V I	G G R H S S N T R K L S D I C S R Y C K T I W		
UniRef90_G2I1H15	D A M F S L V E T V D L M V V I	G G Y N S S N T T H L Q E I I A V S R G L R S F H		
UniRef90_Q4ED61	A E T R Q I A Q Q S D V V I V V	G G K H S S N T K L V A I A E K Y A K V I H		
UniRef90_F4XTK6	D A M H Q L V K D L D L I L V I	G G W N S S N T S H L Q E I A E L N G I P S Y W		
UniRef90_L1MFJ3	K E A V S L A T Q C G A V A V V	G G R S S A N T T A L Y R L A K Q V N P N T F F		
UniRef90_R5G2M7	P A V Q D F A R K H D V V L F V	P N L K K F A E R F D M I L F V A G R K S S N G Q Y L Y T I C K E V N D G S Y F		
UniRef90_Q0IDE5	P E I T Q F A K E K D W V Y F I	D A M F S L V E D I D L M V V I G G F N S S N T T H L Q E I I A V S R G L R S F H		
UniRef90_F7YVB2	D A M F S L V E D I D L M V V I	D A M F S L V E D I D L M V V I G G F N S S N T T H L Q E I I A V S R G L R S F H		
UniRef90_A9CBE6	A E T R Q I A Q Q S D V V I V V	D A L K E L C D K V D G V I V V G G K N S S A N T K R L F Q T A Q E L C P H A A H		
UniRef90_R7K883	D A M H Q L V K D L D L I L V I	N A V K K L L A E I V D M V L V V G G W N S S N T S H L Q E I I A E L N G I P S Y W		
UniRef90_X5DZP2	K E A V S L A T Q C G A V A V V	K E A V S L A T Q C G A V A V V G G F N S S N T T H L Q E I I A E L N G I P S Y W		
UniRef90_B4WKR0	P N I L K K F A E R F D M I L F V	K E A V S L A T Q C G A V A V V G G F N S S N T T H L Q E I I A E L N G I P S Y W		
UniRef90_S3KDM6	D A M F S L V E D I D L M V V I	D A M F S L V E D I D L M V V I G G F N S S N T T H L Q E I I A E L N G I P S Y W		
UniRef90_UP10003687FFC	P E I T E F S R R M D W V Y F I	P E I T E F S R R M D W V Y F I A G A H S N N T H E L L V K T C G R Y C P R V H H		
UniRef90_B1X4S8	K A L I N I S H K V D I V L V V	N A V K K L L A E I V D M V L V V G G F N S S N T T H L Q E I I A E L N G I P S Y W		
UniRef90_K9EZF1	D A M F E L V D M M D L M V V I	D A M F E L V D M M D L M V V I G G F N S S N T T H L Q E I I A E L N G I P S Y W		
UniRef90_G5GAW0	P N I R S F A A R H D V I I F V	K A L I N I S H K V D I V L V V G G K N S S A N T K C L F Q T A Q K L S P R A A Y		
UniRef90_U2K4N4	K A L I N I S H K V D I V L V V	K A L I N I S H K V D I V L V V G G K N S S A N T K C L F Q T A Q K L S P R A A Y		
UniRef90_UP1000377607E	K A L I N I S H K V D I V L V V	K A L I N I S H K V D I V L V V G G K N S S A N T K C L F Q T A Q K L S P R A A Y		
UniRef90_X5JFH7	D A M F E L V D N Q D L L I L V I	D A M F E L V D N Q D L L I L V I G G F N S S N T S H L Q E I I A E E Y Q I P S Y H		
UniRef90_F7TL10	Q A V R E L L A Q Q S D L V I V V	Q A V R E L L A Q Q S D L V I V V G G S K N S S N S N R L V T T I N N L G K D A Y R		
UniRef90_X0WLU2	T A A Q E L L A R R R V D L M I V I	T A A Q E L L A R R R V D L M I V I G G R D S A N T R H L A D V G R Q E E V E T Y H		
UniRef90_UP10002DD476E	Q A V H E L Q D V D V L I V V	Q A V H E L Q D V D V L I V V G G D K Q S S N N T R H L A D V G R Q E E V E T Y H		
UniRef90_A0A059LS72	D A M F K L A A A L D M M I V V	D A M F K L A A A L D M M I V V G G F N S S N T S H L Q E I I A E E Y Q I P S Y H		
UniRef90_C1MT01	D A M Y Q L V E D P D L M M L V V	D A M Y Q L V E D P D L M M L V V G G Y N S S N T T H L Q E I I A E E Y Q I P S Y H		
UniRef90_UP100047231F7	D A M F S L V E K L D L M V V I	D A M F S L V E K L D L M V V I G G Y N S S N T T H L Q E I I A E E Y Q I P S Y H		
UniRef90_UP10003FAAB7C	D A M I G I L D Q P D L M V V I	D A M I G I L D Q P D L M V V I G G F N S S N T T H L Q E I I A E E Y Q I P S Y H		
UniRef90_E5Y8M8	Q E A L M I S Q Q A E A M I V V	Q E A L M I S Q Q A E A M I V V G G K T S S N T R R L A D V A E S C G A V W H		
UniRef90_S5MHQ4	Q A I L D L P K E I D L L Y V V	Q A I L D L P K E I D L L Y V V G G D S R S N N T L K L L E L A S D K G K I K T K R		
UniRef90_Q3B080	D A M F S L V E P L D L L V V I	D A M F S L V E P L D L L V V I G G F N S S N T T H L Q E I I A E V S R G R I R S F H		
UniRef90_R6UT85	Q A V A D K D K Q I D V L Y V V	Q A V A D K D K Q I D V L Y V V G G D R Y S S N N S N R L L A K I I A R D Q G H Q Y L		
UniRef90_B8HWD3	D A M F K L V E Y P D L M V V I	D A M F K L V E Y P D L M V V I G G F N S S N T T H L Q E I I S E R E I P S Y H		
UniRef90_Q3M8X6	D A M L E V Q E N L D L M I V I	D A M L E V Q E N L D L M I V I G G F N S S N T T H L Q E I I S E R E I P S Y H		
UniRef90_R7EVW8	A H I R E F A R T H E V I I F V	A H I R E F A R T H E V I I F V C G A K S S S N G K A L Y E A C R N V N P S S Y L		
UniRef90_T2I3R9	A A V K L V A Q Q S D C V V I V V	A A V K L V A Q Q S D C V V I V V G G S A N S S N S N S V R L M E V A Q E E R G K A Y R		
UniRef90_R7QBX7	D A M Y D L L E S L D L M L V V	D A M Y D L L E S L D L M L V V G G F N S S N T S H L Q E I I A E H A G V P S F W		
UniRef90_T2RFE4	E S A R K I S Q E V D M M I V V	E S A R K I S Q E V D M M I V V G G K H S S N T Q K L V Q I C K E Y V P T L A		
UniRef90_R7L1J4	E E T E K L L S K E V D G M I V I	E E T E K L L S K E V D G M I V I G G K K S S N T N K L Y Q I S L N N C S N V I M		
UniRef90_R5AKD0	G H L R E F A A A H D V I L F V	G H L R E F A A A H D V I L F V S G A K S S S N G R V L F G H C L Q V N P D T H L		
UniRef90_A0ZJU9	D A M L E L V V Q H D L D L M V V I	D A M L E L V V Q H D L D L M V V I G G F N S S N T A Q L Q Q I I A A E R E I I P S Y H		
UniRef90_Q8EWR9	D A V I N M P S E V D D L L V V	D A V I N M P S E V D D L L V V I G G D I S K S N N S K K L V E I G K I K T K R		
UniRef90_Q7NG74	D A M F K L V E E P D L L V V I	D A M F K L V E E P D L L V V I G G Y N S S N T T H L Q E I I A V E R G L I P S F W		
UniRef90_B6DXA1	D A M I E L A G D V D L L V V V I	D A M I E L A G D V D L L V V V I G G F N S S N T S H L Q E M A E H A G V T S Y W		
UniRef90_R5B9B8	E E L L A E F A A R H D V I V F V	E E L L A E F A A R H D V I V F V S G V V S S S N G K V L C E I L C Q S R N P R T H H		
UniRef90_B1WTZ2	D A M L N L E E E V D P D L M V V I	D A M L N L E E E V D P D L M V V I G G F N S S N T T H L Q E I I A T A K G L L K S F F		
UniRef90_V5TDH9	D A M F K L V E K I D L M V V V I	D A M F K L V E K I D L M V V V I G G F N S S N T T H L Q E I I A L K Y G I P S Y H		
UniRef90_V5RJ17	Q A V L D L S N L V D D L L Y V V	Q A V L D L S N L V D D L L Y V V G G D E R S N N T L K L V E I G L S K G I K T L R		
UniRef90_R5B468	T H L R N F A T A H D V I L F V	T H L R N F A T A H D V I L F V G G F N S S N T T H L Q E I I A V T V N N I Q S F H		
UniRef90_UP10002DDCC8B	D A M F S L V E D P D L M D L M V V I	D A M F S L V E D P D L M D L M V V I G G F N S S N T T H L Q E I I A V T V N N I Q S F H		
UniRef90_M1YUM3	I A V R D L A D Q V D L M I V I	I A V R D L A D Q V D L M I V I G G Y N S S N T K K L V Q V I C D E K D V E A H H		

	250	260	270	280
UniRef90_R5DSC8	N D D E L D L Y K D L I E K S K N I S I T A G A S T P Q N V I E R V E K R I I R			
UniRef90_K2EV69	T E K E L D E Y K D L L E K A N K I G I T A G A S T P P G Y V I E K V I E K I I G E			
UniRef90_B1ZXD4	I E T A A E L S P E E M K K F T V I G V T A G A S T P P E F L I S E V C A K L E A			
UniRef90_E1JW10	V E T A D E L S P D M V A G K R I I G L T A G A S T P P K K I I D S V Q Q A L E E A			
UniRef90_H6VLE6	V D S E K E K V N F L P D G P I T I G V T S G A S T P D N V V E D I L K K V F A			
UniRef90_R6XDJ4	I E S A E E I N M D W F D G V N T V G I C G A T S T P P K W L M E E C R E F I			
UniRef90_R6AAF4	V D T P E A I R P E W F E G A R S V G I C G A T S T P P K W L M E R C A E V L K			
UniRef90_C8X243	I E Q A D E L P L P A L T G V Q R I I G L T A G A S T P P K Y I I D A V E N R L R E			
UniRef90_J3LS18	I D S E Q E K E N W L P E G P I T I G V T S G A S T P D K V V E D A L Q K V F F E			
UniRef90_G1UTY5	V E S A D E L D A K R F A Q K T R A G L T A G A S T P K S L I D A A E N W L T S			
UniRef90_D1Y0F8	V E C A D E L D M S W F E G V N T V G I C G A T S T P P K W L M E E C R D E I			
UniRef90_A0A059CLU5	V D S E Q E K E N W L P E G P I K I G V T S G A S T P D K V V G D V L S K I I F D			
UniRef90_R7G660	I D D V N D I E E A Q F A K A K R I G I T S G A S T P T Y I L T S Q V I H Y I L E			
UniRef90_UP100046A7644	I D G P E E I D R S S L L E G V K S V G I C G A T S T P P K W L M E R C K E A I L E			
UniRef90_G8UPY4	I T S A A D I A E P L P E D I R S V G I C G A T S T P P K W L M E E V A E R V K M			
UniRef90_K9T0P7	I D S A A R I I G P W L P D G S I V V G V T S G A S T P D K I V E E A I E K I F E			
UniRef90_C7LQM8	V E T A E E L P L L E E L A A F T R I G L T A G A S T P P P W I I Q N V A Q T L R			
UniRef90_A9TDQ1	I D T P E E K D N W L P E G P I T V G I T S G A S T P D K V V E D V L K R L F Q			
UniRef90_U2TXU1	I E L S S E L D A S W F A A T E H I G V T A G A S T P P Q E Q I D E V V S A I			
UniRef90_UP100030FC42E	D C G A D R I I K E W L P E G E I V V G V T S G A S T P P D K V V E A V I E K I F A			
UniRef90_Q11YY5	V E N E T E I I E P S W I I R A T D N V G I C G A T S T P P M W L M E K V Q N Y I L Q A			
UniRef90_U4KP66	I E S S V E D I I D D W L K D I K K I S V T A G A S T P T K V T Q E V I N F L K Q			
UniRef90_R5WT62	I E D A G E L I Q F R W L E G C R S V G I C G A T S T P P G W L M R R R V A E R V G E			
UniRef90_E6K3J0	I E S A K E I I D L G W L P E G V S T I G I C G A T S T P P K W L M E E C R D Y I V			
UniRef90_I6TT54	I D T E K E K E D W L P Q G P V T I G V T S G A S T P D K V V E D V L N T V F Q			
UniRef90_F9Z4U7	V Q R A E D V K P E M L E N A Q S V G I S G A T S T P A W V M E E I R H K I E			
UniRef90_K9XTJ5	I D S V A E I I K E N W L E G K I T I I G V T S G A S T P D K V V A D V I E K I F D			
UniRef90_Q2I6K1	I D T V E E K E N W L P K G P L T I G V T S G A S T P D K A V E D V L K R V F			
UniRef90_UP1000363897F	V E N A A E L R S L S L P K R A S F F I T S G T S T P D W V V Q E V V V T Y L Q S			
UniRef90_R5EMS4	I D D S S M I I D L K W F E N V S S V G I S A G A S A P E Y V V S E I V E F L			
UniRef90_R5PPH4	V Q D V R D L K K E M F L G A E S V G I S G A T S T P L W V M E E I Q N V I K K			
UniRef90_UP100037AE6DF	I D S V E E I I A E H W L E G E I V V G I T S G A S T P D K V V A D I I E R I F E			
UniRef90_K9W5B6	I D S A V R I I H P W L P E G K V V V G I T S G A S T P D K V V E E V I E K I F F			
UniRef90_R5D7Y8	I E Q A G E L I T T G F L S G C T M A G L T A G A S T P A G I I K E V Y T T M S E			
UniRef90_B9XIS3	V Q F A N D L R S E W F E N A G I V G I T A G T S T P D S T I N E V E Q A L R Q			
UniRef90_W6A9P8	I Q S K E D I I N K D I L K K Y K S V A V T A G A S T P S I L Q L S V I K F L E E			
UniRef90_C7LZW7	V V R P S E L V G P F E G I V V G V T A G A S A A E S I V V K D V V A A L			
UniRef90_UP100029A3EC3	I S S P E D I I Q S L W F A S P Q S T G V C G A T S T P A W L M K I V A E K I R T			
UniRef90_UP100036FB9F7	I E K V E D L I N R T W F E S A D A V G I T A G T S T P D E V I Q P V I E Q L R			
UniRef90_R6GNA0	V E S L A Q I I K N I K L S P V S T G V V V A G A S A P E E I L I M E V K V Y M S Q			
UniRef90_C0JZX4	I G A P A D I I D P A W V R D G D H V G I C G A T S T P Q W L L E M V A E A V R E			
UniRef90_R6BSD5	V E T A Q E D V V C Q I I A A G S R V G V T A G A S T P P V R I I K E V Q K T M S E			
UniRef90_G2I1H15	I E R A S D L I K S D I L N E I I T V G I T S G A S T P D W I I M K E V I L M I E N			
UniRef90_Q4ED61	I D N Y R C V N K S W F Q G V E K I G I T A G A S A P D I L V D E L M D Y L K			
UniRef90_F4XTK6	I D S V N R I I I S W L P S G S I V V G V T S G A S T P D K V V E D V I N K I F E			
UniRef90_L1MFJ3	V D D P T M L I D A A W F D G A Q S V G I C G A T S T P P K W L M E K C A E R V R E			
UniRef90_R5G2M7	I T S P D E I I T T P L P S W V H T V G I C G A T S T P R W Q M E A V K Q K I F E E			
UniRef90_Q0IDE5	I D T P E R I I H T F L P S G P V T V G I T S G A S T P D R I V V E H V I Q R L I A			
UniRef90_F7YVB2	V E G A D E V I D Q N D L I S N Y K T I G V V T S G A S T P D K V V E D V L K R V F Q			
UniRef90_A9CBE6	I D S L V I E K E N W L P E G P I T G V T S G A S T P D K V V E D V L K R V F Q			
UniRef90_R7K883	I S G G L N D L I S F D I I N Q F R S I I A V L A G A S T P T G L L E V I N A M S E			
UniRef90_X5DZP2	I T R I D E I I K K E W F E G V K S V G I C G A T S T P N W L M E D V E K W I H S			
UniRef90_B4WKR0	I D S A E R V I G P W L P A G K I S V G V T S G A S T P D K A V Q E V I E K I F A			
UniRef90_S3KDM6	I E T P D E I I A E F F R I I M K V V G I T A G A S T P D D V I S G V E N R L T K			
UniRef90_UP10003687FFC	V S S S P D E I I T K P L P S W V R S V G V C G A T S T P M W Q M E A V K Q R I F E E			
UniRef90_B1X4S8	I D T P E R I I G P F L P D G L L R V G I T S G A S T P D R I V V E D V I H R L I A			
UniRef90_K9EZF1	I D G P Q R I I G P W L P T G K I V I G V T S G A S T P D K S V A Q V I Q R I F F Q			
UniRef90_G5GAW0	V D N P A A I I E R E W F T N A E T V G I C G A T S T P T W L M E S C K E V I S K K			
UniRef90_U2K4N4	I E N T T E I I P Q E F L H L K K V G I T A G A S T P D E L I A D A E R F L Q K Q			
UniRef90_UP1000377607E	I E T T L D D L I R N L N L D G T D V A I T A G A S A P D D H I V K E I T E H L			
UniRef90_X5JFH7	I D C V E R I I K S W L P S N E L L V G V T S G A S T P D K V V E D I I E A V L A			
UniRef90_F7TL10	I D D A N D I I D P T W L I E N V T T I G V T A G A S A P E V L Q S V V K R L Q E			
UniRef90_X0WLU2	V E S A T E I I E P E W V N G R R S I G V T A G			
UniRef90_UP10002DD476E	I D D A A Q L I D L T A F H D D D V V A V T S G A S T P S Q L T A Q V I D K L F E			
UniRef90_A0A059LS72	V D S A A R I I D R D W L L G K P I R V G V T S G A S T P D R S V E R V L D C I F E			
UniRef90_C1MT01	V D T P E E T I K D D W L P E G D V V I G V T S G A S T P D K V V E D V V D M I F F K			
UniRef90_UP100047231F7	I D N L E Q L I S P F L P E G E V T V G V T S G A S T P D R V V G E T I R A L F F E			
UniRef90_UP10003FAAB7C	I D C A E E I I Q E N W L I D G E I I L V G I T S G A S T P D K V V V E E V I E R I F F S T			
UniRef90_E5Y8M8	I E V P E E I I P L E A L K P Y G F I G L T A G A S T P R S I I D A V V Q E V I E K I F A			
UniRef90_S5MHQ4	I D N F K D I I N D N D L K G I E T V A V T S G A S T P S S L I Q N E V I K F L E Q			
UniRef90_Q3B080	I D T P D R I I D E F L P A G P V T V G I T S G A S T P D R A V E A V I E K L L M R D			
UniRef90_R6UT85	I D D V N D I I Q D E Q I I C N A G R V A V T S G A S T P T Y L T A Q V I A Y L L E D A			
UniRef90_B8HWD3	I D S A D R I I G P W L P E G P I V V G I T S G A S T P D K V V V S D V L E K I F F A			
UniRef90_Q3M8X6	I D V V E R I I K S W L P A G K I V V G I T S G A S T P D K V V E D V I E K I F F A			
UniRef90_R7EVW8	T V I N E T G L I Q S D W F K D A D T V G I C G A T S T P S W L M N K V K D R I I F E E			
UniRef90_T2I3R9	V D D A S E L I D P A W F E G L E S V G I S S G A S T V P D E L V S G V I D A L Q N M			
UniRef90_R7QBX7	V D R P E R V I G P W L P E R E I T V G I T S G A S T P D N V V E D V L E R V F M S			
UniRef90_T2RFE4	I E T V D E L I T D E D F K N F N N I G L T A G A S T P D W I I K E V I N Y L K S S			
UniRef90_R7L1J4	N E E E L V K E L E L E K F K K C N K V G V M A G A S T P P E E T I N K V I S I L K N			
UniRef90_R5AKD0	I S N A S E V I D P A W I E G K D S I G I C G A T S T P R W L M D Q I I F A			
UniRef90_A0ZJU9	I I D C V E R I I K S W L P N G K I V V G I T S G A S T P D K V V A D V M E K I F A			
UniRef90_Q8EWR9	I W N T K N I I K D E W F I N K K C L A I T S C G S T P T W L A N Y V I I F L E K			
UniRef90_Q7NG74	I D G A D R L I V S A Q F L E H R T V G I T A G A S T P D R V V A E V I A R I I F E			
UniRef90_B6DXA1	V D S A E E C V A P F L P T G P V T I G V T S G A S T P D K V V E D V L E R I I F F M			
UniRef90_R5B9B8	I S G P S E L I S A E W F S A G D K V G I C G A T S T P G W L L R Q V A D A I I S			
UniRef90_B1WTZ2	I D S D K R I I L P W L P D G K I I V V G I T S G A S T P D K V V E A V I E R I I F F E			
UniRef90_UP100047724BB	I D G P A C I I R D W L P A G A I A V G V T S G A S T P D R M V S D A I E R I I F F Q			
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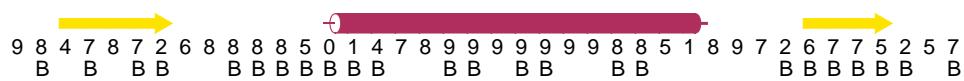
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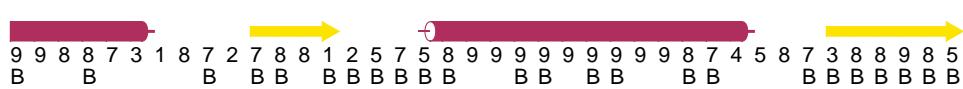
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 | Y R A A A D R | L G L | D V M D | C T | C P | V V L K | L Q K S | R E A Y A | A G G R | L I | F G
 | R A A A S T R D L | Q V I | D A T C | C P | L V A K | V H Q Q A R | R M V | R D G R | V | L L | V G
 | Y K E A K D K K | L K I | V D T T C | C P | F V K K I | H T V V S E | Y H | N K G Y | E | I | V V | G
 | M Q L L D S K G | C R I | V D T T C | C P | W V S K | V W N A | V D T H | R R K | K D M T S | V I | H | G
 | M Q L L D K K G | V Q I | V D T T C | C P | W V A K | V W T A | V E K | H | R K | L E S T S | V I | H | G
 | L E Y | L K N K G | V K I | T D A T C | C P | Y V I K | P Q Q | V E S M S | K E G Y | Q | I | V L | F G
 | L F E E L Q K V | F K K | V I | V D T T C | C P | L V H | N | L F Q T A S R | I | H | Q E G Y | R | I | V V | F G
 | F S E I E E K R A S K | V Y D F T C | C P | Y V K K I | H E I | V R E N S E | E N G | L D | V I | V V G
 | L D D L L K K R | Y K V | V E D | L T | C S | L V K N | L F K T | V A E | I | E K K G Y | K | I | V V | F G
 | I D K I E S Q G A | I | D T T C | C G | D V M K | V W R R | V R G Y | A | K Q G Y | T | S I I | H | G
 | L E K L R K I | Y P | E | V V | D | L | T | C | P | V F Q | L F R T | A R E | Y S | S R G | K | I | V F G
 | R H K A Q K M G L | T I I | D A T C | C P | Y V K | L T | F N K M Q K | A | I | D N G Y | E | I | L | F V G
 | K E K A I | N K | C L | N | V | D A T C | C P | Y V E | K M F | K A M E D | K | I | K D N Y | H | I | F | G
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 | K D L L K K R | F S K | V I | D M T C | C P | V T N | L V K Y | V E K K | Q | K D G F F | V V V | Y G
 | L A A V E E R G F S | V V | D A T C | C P | H | V S R A Q | A A A A E | J | A R E G | C | R | V V V | L G
 | M T L M N N K N | V E | V V | D T T C | C P | W V S K | V W N T | V D Q | H | Q R K | G L | T | S | V I | H | G
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 | R S E F L D A G Y | H | V V | D A T C | C P | V V K R N | L | H | I | A R Y A | P | N | H | S | I | L | V G
 | E A M L R E K G | I E | H | Y N T T C | C P | F V E K | V W N R | S E Q | I | A K K G Y | S | I | V V | H | G
 | E A K L S N | G | P | V Y N | T T C | C P | F V E K | V W N R | S E Q | I | A Q K G Y | T | I | V I | H | G
 | F E R | L R A | I | G | C | V | L | V | D T T C | C G | S V | L | N | V W K R | V E S | Y | A | R | D | G | F | T | S | I | H | G
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 | F Q T L R D | L | G | C | V | I | V | D T T C | C C | P | F | V | E | K | V | W | K | R | V | E | V | Y | A | R | D | G | Y | T | S | I | H | G
 | H E I A Q A K | N | C | L | T | I | D | V | T | C | Q | L | V | T | R | Q | H | T | L | V | K | C | A | A | D | G | L | D | V | I | Y | A | G
 | Y T Y A A E | H | G | I | E | V | V | D A T C | C P | V | V | L | R | L | Q | Q | K | V | R | Q | A | Y | K | D | D | T | Q | I | V | I | F G
 | V M K L L R E | R | G | C | I | V | V | D T T C | C G | S | V | L | S | V | W | K | R | V | T | R | Y | A | Q | K | G | F | T | S | V | I | H | G
 | E A L L L K A K | G | I | A | I | Y | N | T | T C | C P | F | V | E | K | V | W | N | R | S | E | Q | I | A | A | K | G | Y | S | I | V | V | H | G
 | Q S Q L L S E | S | G | L | D | V | Y | D | T T C | C P | F | V | E | K | V | W | K | S | E | I | G | Q | G | N | Y | T | I | V | V | H | G
 | Q S E L L N A R | G | I | N | A | Y | N | T | T C | C P | F | V | E | K | V | W | K | S | E | I | G | Q | G | N | Y | T | I | V | V | H | G
 | Y R L L A R E | H | R | I | R | I | D | A T C | C P | V | V | L | Q | L | Q | R | R | I | H | R | C | Y | N | E | P | A | Q | L | V | I | Y | G
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 | Q E E L Q K V | G | I | D | P | Y | N | T | T C | C P | F | V | E | K | V | W | K | R | G | K | Q | L | G | K | K | E | Y | S | L | V | V | H | G
 | R E K A E K R | K | L | K | V | I | D | A T C | C P | L | V | Q | K | V | H | V | Y | V | H | Q | K | A | K | E | G | H | K | I | V | I | H | G
 | V A E | L | K | N | K | G | C | H | I | V | D | A | V | C | P | L | V | L | F | V | H | K | K | A | K | E | T | V | I | S | A | G | K | V | N | I | V | G
 | E A E | I | K | A | R | H | I | D | I | D | T T C | C P | F | V | E | H | R | A | Q | V | T | A | R | I | Q | S | G | F | F | V | V | V | F G
 | Y A E | A E | A | R | G | L | K | V | I | D | A T C | C P | L | V | T | K | V | H | R | E | A | K | R | F | A | D | Q | G | Y | D | I | L | I | G
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 | F V | T | R | V | Q | R | A | A | Q | F | V | D | E | G | Y | Q | V | L | V | L | G
 | R A E | A A A | A R | G | L | T | I | I | D | A T C | C P | L | V | A | A | H | A | E | V | A | R | F | T | E | R | G | D | L | T | V | V | I | G
 | W R | L | A | E | A | K | D | L | R | V | I | D | A T C | C P | L | V | T | K | V | H | L | E | V | R | Y | A | K | R | D | F | T | I | V | L | G
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 | M | I | G
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 | I | D | D | I | E | Q | R | G | F | T | V | I | D | A | T | C | C | P | H | V | M | R | A | Q | R | A | A | K | I | A | K | D | G | R | H | V | L | V | G

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



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UniRef90_B9XZK0	D I N H P E V K G V I S Y A T N Q A L V I N S L E E Q E K K Q R K V A			
UniRef90_A8F7S0	K E S H P E M S A L K G Y V K D A T T O T L K P P E L S G R I C			
UniRef90_A4XKP1	D I N H P E V K G I I G H V E K D R K C I V I D S L E K A K D A I S Q R N A V			
UniRef90_A6LNG6	K K E H P E M K A L K S Y C E N A T I T D I P L P I N A K R I A			
UniRef90_UPI0003664CF5	K A G H E E T R A T A S R A D A K D G H Y I V I L T D D T D F L C H L Q K V G			
UniRef90_B9K8E2	K R D H P E M V A L M G Y A P A I V T K K P F K T E E K N V			
UniRef90_R6T6Q5	K P N H P E T E T A L S S E N V Y L V N H D I T Q L T F K K P L			
UniRef90_R6XCR7	K K S H P E S E V A M S F Y P N V T L Y D E N N L P D I T G K I A			
UniRef90_L0DLJ3	A R G H V E V Q G I I E D L E R F D V V S T E D E V K R Y P A D R L I G			
UniRef90_A9BGS3	K P D H P E I I L G L K G N V D E S K L L I T L S P V T I P Q K K V L			
UniRef90_R9L0W6	E A G H P E V E G L T A W A R Q A G G K V D V V A G P G E I P A G L Y D P V G			
UniRef90_B8C2Y3	K Y G H E E T V A T V S F C E D Y I C V K D I K E A E K G F D P D T M L D K V G			
UniRef90_Q3AT23	K R V H P E E V I G L N G Q C D N C I A I K H A D L S D P K E L E G F E P S A K T A			
UniRef90_H9UEJ1	N T L H A E M I A L K G H V E D A I I T K M S V R V E P G R W A			
UniRef90_I2F493	K K N H A E E V T A L S G R L N R Y L I V E P G E N Y E E V L K K L E G L D Q I A			
UniRef90_Q4JIR7	K Y Y H E E T R A T A S Q T K H A G G R F L V V L N M D E A R V L C D F I R I G			
UniRef90_F0RS97	H A K H P E E S T A M Q G V C D Q K V I A S R L I T G Q D V G E P E E G V S Y A			
UniRef90_UPI00041EE862	K P Q H E E T R A T F S H A S H A S H T P T V V V N D M T E A V E L S K Y M Q R I G			
UniRef90_G8TPA4	K P K H E E T R A T F S H A A S N A P S V I V N D M Q E A E N L Q H L Q R I G			
UniRef90_G5MD19	H A G H P E V E G T M G Q Y S N P E G G G M Y L V E S P E W T L N V K N E G K L S			
UniRef90_W0RNP8	K H Y H E E T R A T A S Q A L K Y P G G A Y L V T S S D G F D P D V H L A R V			
UniRef90_UPI000289FC6B	D K N H P E V I G I N G W C D N T A I I S K G D D L L E N L P R K I C			
UniRef90_G2LJM5	K Y D H E E T E A T R S R T T Y P N G K F L V V R D R V Q A Q D V C Y Q R V G			
UniRef90_X0TEL3	D K N H P E V Q A V A G C M S E A I V I A D E S D L H K I A E N A K L G			
UniRef90_UPI000374051F	K P T H E E T R A T F S H A A F N A P S V V V K N M A Q T I E L A K Y D R L G			
UniRef90_UPI00047BEE3B	K Y Y H E E T R A T A S Q V E Y P N G Q Y L V V R D M A E A D M V M D Y D R I G			
UniRef90_K2CYN9	V D G H P E T M G V M G E I P D D K L T L V Q N I E E A R K V I V P D T Q Q A V			
UniRef90_F4KL11	K P G H A E V N G L V G Q T D G K A I V V R E P K D L D I I D F S H A V E			
UniRef90_A0A023X4L9	K Y Y H E E T K A T A S Q T E G G N G K F L V V R N L K E T A F V T D F I R V G			
UniRef90_UPI0003FAF990	K P K H E E T R A T F S H S A S A N T P T V I V N D M A E T I E L A K F I Q K I G			
UniRef90_UPI0003781EC6	K P S H E E T R A T F S H S K E A A P T V V V V R D M A Q T F D P T R D L K R I G			
UniRef90_UPI00036BFEB4	K R Y H E E T R A T F S H A K S G A P V V V V V L N L V E G F E L D R D D L K R I G			
UniRef90_W2D228	K K G H A E V N G L V G Q T D G T A I V I E H P E E A L T R L D F S R D I G			
UniRef90_I2GR37	K P S H E E T R A T F S H S K E S A P T V V V K N M A D G F D P D R D L Q R I G			
UniRef90_UPI000374A117	K K R H E E T R A T F S Q S A Q H S A V V V V L N P E E G F N P L E D L K R F G			
UniRef90_U6LIJ1	H R N H V E V Q G V K G E A P P E S V S V V E T V E E V W S L N F K K E D K I			
UniRef90_UPI00035FB352	D P K H Q E V V A L L S D L P N D S Y L L A G E N G K A D D P R F P T			
UniRef90_X0X512	D P K H R E V V R G V L V A W A G G N A L A L G D G D G I P D L P T R L A			
UniRef90_X1I1E7	D A D H P E V K S V L G W A D G N G V A T L D E K F V I A N F D R L P H R L G			
UniRef90_E1MBJ8	H Q G H E E V E G T Q G V A P D R I R V I D T N Q D V			
UniRef90_UPI0003D74A02	K Y S H E E T V A T A S F A G K Y I I V K D M K E A E Y V C D Y I K V G			
UniRef90_X1BY81	E P E H E A R A I M E H A G G R A L I V E D A S A L E G G M E V A D R V A			
UniRef90_D2ASB2	R S G D A A V S A V L G Q A P E S T V L V E S A A D V E R L R P A D P L S			
UniRef90_W4LTJ1	H E D H D E V I G T R G E A P D H I Q V I S T V E D I			
UniRef90_J9G5E7	T P S H P E V E G I L A G W C S H C F E N L E A L K N W A S T Q D N P C N S S I C			
UniRef90_L1KJL4	G R C Y R C W S G T R T T R R S R A P A G T L P T R R S S S R H W T F P P D A P V A			
UniRef90_J6B0W3	K H E H E E T K A T F A N T R R H A P A V I V R K H T E D F D V A R H L D R V			
UniRef90_X1FTL4	N R N H P E V M G I K D H V L N K N C A V I K N E T D A E K I S S K K K I G			
UniRef90_UPI000473AA50	K F K H E E T L A T S S F A G K Y L V V L D E E A N Y V S E Y D R V G			
UniRef90_F9MXD5	M K N H P E V E G I L S R A Q E G Y Y V S C P E D L E K I P K N Y M			
UniRef90_UPI00047ACFC7	M K W H E E T K A T S S Q A T A S N G H Y L V T F D E E T D R I C Y I A I G			
UniRef90_U7UBH5	S K N H P E V I G I N S Y A D D K A I I I E T L E D I K Y I K N K P T F			
UniRef90_J9G7J0	D K N H P E V Q G I V G H T D G E C C Y V F A D L D E L N A W K P K N S Q S E I Y			
UniRef90_K0JSJ0	D P A H H A V A P T L T G Q A P E Q V V V L V N V E M A Q A D R V G D P G P I G			
UniRef90_R7FQ41	D E K H P E T E S L L S L K Q G I V C L N P N K I I L E K D D L S K V L			
UniRef90_M5VJQ1	K Y A H E E T V A T A S F A G K Y V I V K N M D E A T Y V C D Y I K V G			
UniRef90_Q4PKF9	H E G H P E V E G T A G Q L Q D I S K L T L V Q E N D V E K U Y F P S D Q K I A			
UniRef90_Q89AV1	N S Q H P K I Q G T L E R Y Q N L K N S I Y I V K S K K Y A K L K N T R N S I			
UniRef90_X1D1Q7	D T I Q N N A L V I N S I L D A G K I T T K K K I			
UniRef90_C5LPX6	K S K H E E T I A T S S F A D			
UniRef90_U6KUW3	H R N H V E V Q G V L G E C P E S A A A V V E T A A E A A S V D L G A A A K V F			
UniRef90_L8GBV5	H A G H P E V E G T T Q G L P P G S V T L I Q T A A E A E A F E P E D A S R L A			
UniRef90_D3PZM1	Q R G H A S T E A L S G Q A P D A T L V V E T T A D V E Q M R G G D G V S			
UniRef90_X0V1N5	D S E H D E T I G I V G H P A P N R V K V I A D A S E L E K I S V Y N			
UniRef90_Q0PH57	H K N H V E V I G T Q G E A P G A V T V V E S V E D V E Q L S F S D S Q K L F			
UniRef90_X1RC63	D E N H P E V R A V V G C T E D A V V I A D E S D L H K L P E N A K L G			
UniRef90_J9FY25	K K G H P E A E G A T F R Q E N V Y L I E T I A D P S G I D K P I			
UniRef90_J3LS91	K Y A H E E T V A T A T F A D R Y I I V K D I D E A K Y V C D Y			
UniRef90_K1U7H3	D K S H P E V I G I R S Y C N G R S F V F N S E K E L D Q I I E			
UniRef90_R6HIZ4	X X X W W A K P V I L K W R E S R L M P V S L V A S A P L S V L P K I F P P I C			
UniRef90_D2SSP9			A N K T T P Y R L V G	
UniRef90_X1A8X7				
UniRef90_C5KI36	K S K H E E T I A T S S F A D E Y V C K F L L S K N K E R F D P L K D L E K V G			

A horizontal number line with integers from 1 to 8. Two yellow arrows point to the right, one starting at index 3 and another starting at index 8.

The figure displays a grid-based sequence alignment of various protein sequences. The columns represent the positions in the sequence, and the rows represent different proteins. The color of each cell indicates the amino acid at that position, following a standard color scheme: hydrophobic residues (I, L, V, F, C, Y, W) are in light blue; polar uncharged residues (G, A, S, T, D, E, N, Q, H, P, B, M, K, R) are in white or black. Yellow boxes highlight specific residues or motifs across the alignments.



UniRef90_R7GMU4
UniRef90_UPI0003B74419
UniRef90_M1V838
UniRef90_UPI00047DFE0F
UniRef90_F4GKP1
UniRef90_R5SJ2P
UniRef90_UPI000383193B
UniRef90_T3QKR1
UniRef90_L1JFG8
UniRef90_W7TLS9
UniRef90_B9XZK0
UniRef90_A8F7S0
UniRef90_A4XKP1
UniRef90_A6LNG6
UniRef90_UPI0003664CF5
UniRef90_B9K8E2
UniRef90_R6T6Q5
UniRef90_R6XCR7
UniRef90_L0DLJ3
UniRef90_A9BGS3
UniRef90_R9L0W6
UniRef90_B8C2Y3
UniRef90_Q3AT23
UniRef90_H9UEJ1
UniRef90_I2F493
UniRef90_Q4JIR7
UniRef90_F0RS97
UniRef90_UPI00041EE862
UniRef90_G8TPA4
UniRef90_G5MD19
UniRef90_W0RNP8
UniRef90_UPI000289FC6B
UniRef90_G2LJM5
UniRef90_XOTEL3
UniRef90_UPI000374051F
UniRef90_UPI00047BEE3B
UniRef90_K2CYN9
UniRef90_F4KL11
UniRef90_A0A023X4L9
UniRef90_UPI0003FAF990
UniRef90_UPI0003781EC6
UniRef90_UPI00036BFEB4
UniRef90_W2D228
UniRef90_I2GR37
UniRef90_UPI000374A117
UniRef90_U6LIJ1
UniRef90_UPI00035FB352
UniRef90_X0X5I2
UniRef90_X111E7
UniRef90_E1MBJ8
UniRef90_UPI0003D74A02
UniRef90_X1BY81
UniRef90_D2ASB2
UniRef90_W4LTJ1
UniRef90_J9G5E7
UniRef90_L1KJ4L
UniRef90_J6B0W3
UniRef90_X1FTL4
UniRef90_UPI000473AA50
UniRef90_F9MXD5
UniRef90_UPI00047ACFC7
UniRef90_U7UBH5
UniRef90_J9G7J0
UniRef90_K0JSJ0
UniRef90_R7FQ41
UniRef90_M5VQJ1
UniRef90_Q4PK9
UniRef90_Q89AV1
UniRef90_X1D1Q7
UniRef90_C5LPX6
UniRef90_U6KWWU3
UniRef90_L8GBV5
UniRef90_D3PZM1
UniRef90_X0V1N5
UniRef90_Q0PH57
UniRef90_X1RC63
UniRef90_J9FY25
UniRef90_J3LSI9
UniRef90_K1U7H3
UniRef90_R6HIZ4
UniRef90_D2SSP9
UniRef90_X1A8X7
UniRef90_C5K36
210
E A I A K M D E D I D L V I I V G D P H S N N T K K L A S I S M E K H K D T K M
Q A I L D K D S D V D T L I V V G D P T S N N T Q K L A A I G K T A G I Q T V Q
D A M L E L V E Q L D L I L V V G G F N S S N T S H V E I A H Q R G P V Y V Q
P H L K V F A A N Y D V I F F V G G E H S S N G K V L F T V C E K V N P R T F Y
K A V E E L C D S C D A V V I G G R H S S N T V A L T E I V A E R K L P V F H
K R L S E F A L S H D I I I F V S G G K D S S N G K V L C D L C R S V N R T Y N
N G I K S L A Q Q A D L V L V V G S E N S S N S Q R M V D V A R D A G T P A H
E S A K E L A K E V D C M I V I G G K H S S N T Q K L V K V C E D L V P T F A
D A I N D L I R D V D F Y L I V V G G W D S S N T G H L L E I I V H M N G K V G Y H
D A I T D M E E K L D F I L I V V G G F D S S N T A H L K E I P H M Q H P P S F H
K A A L D L S K E V D I M I V V G G K T S N T Q K L L S I A K Q H C K D S Y L
K E A Q K I A K Q V D L M I I I G G K N S S N T S K L T K I A S K F T R A I Q
E E A K V L A L D V D V M L V I G D K K S S N T N K L Y Q A V K D I K P T F F
K E A E K I S K I V D L M V V V G G K H S S N T T K L Y K I S S K Y T K S M H
D A L F D M L K H M D V L L V V G G Y G N S S N T S H L V E I G Q E E L P T H F D
R E V K E L L S K I C D L S V V V G G K H S S N T G K L F R L A S R N S R A I W
K S L L E L K H H C A L I I V I G D K S S N N S N K L Y E M A K R I N K D V L F
Q E L L K K N N N V P T L I I V V G D S I S N N S N T K L Y E M A K R N N V D T I
R S L E R L L D Q V E A M V V V G G R N S S N T R E L A K L C Q E R G I L P S I H
K E T L E L S Q K S T L M L V L G G K N S S N T Q K L Y R I S K K Y C K R T Y H
E A A A D L A A A V D A M V V I G G R N S S N T T R L A E V I C A L T C P R T F H
D A I S D L V E N S D F I L V V V G G W D S S N T A H L L E I I P E K A G V R S F
Q K L H D F S L A N D V V V F V A G G K S S N G Q V L F N I C K A A N P R T F F
D V A K H G E M C D L T I V I G G K N S S N T K L Y E L A L E K R G N A I
S E A E R L A K I S D T V I V I G G K N S S N T K K L V E I V Q R L G K R A L H
D A V I Q L L E N M D L M I V V V G G Y N S S N T T H L A A L L C R D R G V T A Y H
T A L I E L A S Q C D G V V V G G K D S A N T R A L Y S V L E M G K K A W
T A V Q G M L E P A D I L A I V V G G Y N S S N T S H L V E L C E A V L P T Y F
T A V T G M L Q P A D I A I V V G G Y N S S N T T H L A E L C E Q E L P T Y F
E A V V R A L A E Q A D V V V L V V G S K N S S N S N R L A E L L A Q R M G R T A F L
D A V K K A L E E P L D V M L V V G G Y N S S N T T M S L A A L C A E H V P T Y H
K S A E D I S K K V E A M V V I G G Y N S S N T T K L Y E I C K K Y N K Q T F H
D A I L K I E E P L D L V I V V G G Y N S S N T E H L C E I A A E R L P T Y H
E S A V E L C R R V D I M F V L G S L E S A N T R K L A E L C K K Y N K Q T F H
T S V S Q M L H T A D F A I V V G G Y N S S N T S H L V E L C E E K L P T H Y N
D A V M E M R E P M D E M V V V G G Y N S S N T I L S A A L C A E Q V P T Y H
A A V D E L L P F V D F V I V V V G G S R K S H N S Q M L K E R A S Q K V K A Y S
P N I I R A F A K S H D R I F F V S D Q K S S N G R V L Y Q N C L E V N P N T T F
D A L F E L L E H L D V M V I I G G Y N S S N T N N L A I I A A E K V P R S Y H
S A V K G M L D T A D L A I V I G G H N S S N S H L V E L C E A R Y P T Y F
D A T Y A L L K H A D F A L V A G G Y N S S N T S H L V E L C E E K L P T Y F
D A T T L A I E D R D L A L V V G G Y N S S N T S H L V E L C E A K M P T Y F
S T I R D F A A R H D Y V Y F V A G K K S S N G Q M L Y D Q C R L A N P R S V F
D A T Y A L L T Y A D F A V V A G G Y N S S N T S H I V E L C E E K L P T Y F
S A T T L A L A E M A D I A L V V G G Y N S S N T M H L V E I L E H S F P T Y H
220
K A L D E L I E N C D A L V V L G S S T S A N T K H L A I K A Q E A H K K V L L
T A A R H L A Q E V D V T L V V V G G R S S A N T R H L L E V C R E E G T P A Y Q
A A A L E M A G R A D L M F V I G G R T S A N T H R L A E L C S A V T E T Y L
D A V Y K L V E K I D I L I L V V G G W N S S N T S S L Q V I A E D R G P S Y W
E A S V H L A A E V D L M I V I G G Y H S A N T T R L A Q I C A A T G T L T K H
S A V A S I T G A S D L L L I A A G S H C P D A R H V V R L A E P A G V P A Q V
S E A A S L S E V C Q A M V V V G D P S S S N T G R L A M I C R E H C G K V F L
D G I R A I M D R C D L V L V V G S T N S S N S I R M V E V A R R L G G R A E L
D A L L R A L Q K P L D A A I V I G G K N S S N T W Q L Y R L C E Q Q G P R A F F
N
D A M F S L V E D L D I L V V I G G F N S S N T T H L Q E I A I N K N S S F H
E E T E E L L A K K V D C M I V I G G K N S S N T K K L V Q V A E K H C N K V I F
D A L E K L T E P M D L L V V V G G
D E A V E L S K
N A L R L L A E A D V V L V V G K A A A D D S E E V V A R F A A L G V P A F V
N N L D K I A N Q N D L I I I V G D K T S A N T T S L F E K A K T D S K R V L F
T S V R E M A K N V D A F F V I G A F N S S N S I R L V E T A K K F G C D S E L
T A I K H I S K
K S V L E L A N E V D V M L V I G G K E S A N T T R L A E I S K N Q G V K T Y H
F A A A A V A A A A A A Q L L L V V G S S S S S N L E A A A A A N P S A K A Y L
A A V K A I A A K V G L T I V V G A P N S S S N S L R L V E
A T V R E L A G T A D V V F V L G P P E S P E T V R L L D V A A S N
230
E S A V Q L C K Q V D I M F V L G S L E S A N T R K L A E L C K K Y N S E T F H
K A V F D L A K Q I D L L I V V G D P A S N N T R K L A Q I G K N A G I N V I Q



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 UniRef90_UP10003B74419
 UniRef90_M1V838
 UniRef90_UP100047DFE0F
 UniRef90_F4GKP1
 UniRef90_R5SJP2
 UniRef90_UP1000383193B
 UniRef90_T3QKR1
 UniRef90_L1JFG8
 UniRef90_W7TLS9
 UniRef90_B9XZX0
 UniRef90_A8F7S0
 UniRef90_A4XKP1
 UniRef90_A6LNG6
 UniRef90_UP10003664CF5
 UniRef90_B9K8E2
 UniRef90_R6T6Q5
 UniRef90_R6XCR7
 UniRef90_L0DLJ3
 UniRef90_A9BGS3
 UniRef90_R9L0W6
 UniRef90_B8C2Y3
 UniRef90_Q3AT23
 UniRef90_H9UEJ1
 UniRef90_I2F493
 UniRef90_Q4JIR7
 UniRef90_FORS97
 UniRef90_UP100041EE862
 UniRef90_G8TPA4
 UniRef90_G5MD19
 UniRef90_W0RNP8
 UniRef90_UP1000289FC6B
 UniRef90_G2LJM5
 UniRef90_X0TEL3
 UniRef90_UP1000374051F
 UniRef90_UP100047BEE3B
 UniRef90_K2CYN9
 UniRef90_F4KL11
 UniRef90_A0A023X4L9
 UniRef90_UP10003FAF990
 UniRef90_UP10003781EC6
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 UniRef90_U6LIJ1
 UniRef90_UP100035FB352
 UniRef90_X0X5I2
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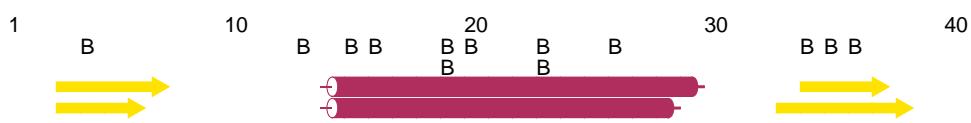
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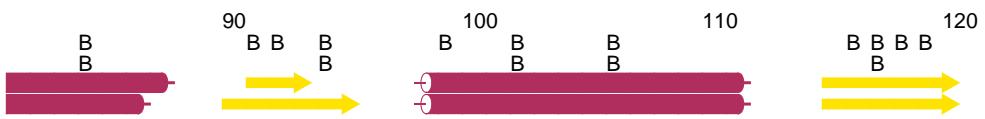
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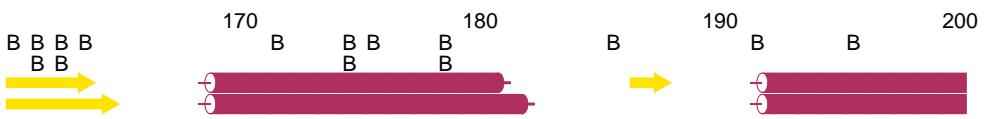
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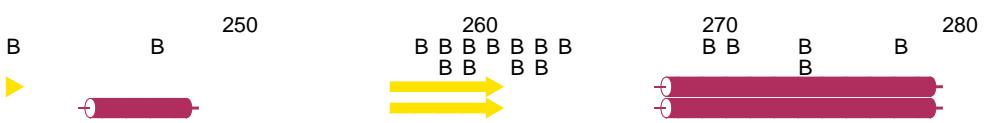
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