

QUERY	V	D	V	S	P	T	S	Q	R	L	Q	L	L	E	P	F	D	K	W	D	G	K	D	L	E	D	L	Q	I	L	I	K	V	K	G	K	C	T	T	D	
UniRef90_C3Y932	V	D	V	D	P	K	S	D	R	L	Q	L	L	S	P	F	D	K	W	D	G	K	D	H	E	D	M	A	V	L	I	K	V	R	G	K	C	T	T	D	
UniRef90_M3ZX13	V	D	V	S	P	S	S	T	R	L	Q	L	L	E	P	F	D	K	W	N	G	S	D	L	E	D	M	R	V	L	I	K	V	K	G	K	C	T	T	D	
UniRef90_U6PQ83	V	A	V	D	P	K	S	E	R	L	Q	I	L	E	P	F	K	Q	W	D	G	Q	D	L	T	D	M	Q	V	L	I	K	V	K	G	K	C	T	T	D	
UniRef90_F4Q312	V	A	V	A	P	T	S	D	R	L	Q	L	L	E	P	F	K	Q	W	D	G	K	D	A	K	N	M	P	I	L	I	K	V	Q	G	K	C	T	T	D	
UniRef90_S6E8J0	V	K	I	S	P	T	S	E	R	L	Q	V	L	K	P	F	P	P	W	D	G	K	D	A	K	N	M	P	I	L	I	K	A	F	G	K	C	T	T	D	
UniRef90_A0A024NF41	V	V	V	N	E	N	S	E	R	L	Q	L	L	E	P	F	K	V	W	D	G	K	D	L	E	N	M	L	I	L	I	K	V	K	G	K	C	T	T	D	
UniRef90_S8F130	V	A	V	D	P	K	S	D	R	L	Q	L	L	E	P	F	K	V	W	D	G	K	D	L	E	G	L	T	I	L	I	K	A	K	G	K	C	T	T	D	
UniRef90_J9KAT0	V	V	V	D	P	K	S	N	R	L	Q	L	L	E	P	F	K	V	W	D	G	K	D	L	E	G	L	T	I	L	I	K	V	K	G	K	C	T	T	D	
UniRef90_F4R306	V	A	V	S	P	S	S	D	R	L	Q	L	L	K	P	F	K	P	W	N	G	K	N	P	S	N	M	P	V	L	I	K	A	S	G	K	C	T	T	D	
UniRef90_M7X6X3	V	A	V	D	P	K	S	D	R	L	Q	L	L	E	P	F	P	P	W	D	G	K	D	P	Q	G	L	P	V	L	I	K	A	K	G	K	C	T	T	D	
UniRef90_E5S932	V	V	V	Q	P	N	S	K	R	L	Q	L	L	K	A	D	K	W	D	G	N	D	F	E	D	M	L	V	I	I	K	G	K	C	T	T	D				
UniRef90_U9UI83	V	E	V	D	P	K	S	N	R	L	Q	L	L	Q	P	F	S	K	W	N	G	K	D	F	E	E	F	P	I	L	I	K	V	K	G	K	C	T	T	D	
UniRef90_E9C8Q7	V	D	V	D	P	K	S	A	R	L	Q	L	L	S	P	F	N	K	W	D	G	K	D	F	A	N	M	P	I	L	I	K	A	K	G	K	C	T	T	D	
UniRef90_C5DGA3	V	K	V	S	P	T	S	D	R	L	Q	L	L	T	P	F	D	A	W	D	G	K	D	P	V	D	L	P	I	L	I	K	S	L	G	K	T	T	D		
UniRef90_X5KH82	V	I	V	A	P	T	S	D	R	L	Q	L	L	E	A	F	T	P	W	D	G	K	N	I	T	G	A	K	L	I	I	K	A	F	G	K	C	T	T	D	
UniRef90_K0KK30	V	Q	I	S	P	E	S	D	R	L	Q	V	L	T	P	F	E	A	W	N	G	K	D	A	E	N	L	P	I	L	I	K	S	K	G	K	T	T	D		
UniRef90_L8H690	V	V	V	D	P	S	S	Q	R	L	Q	L	L	P	K	F	D	E	W	N	G	S	D	I	E	N	M	P	V	L	I	K	A	K	G	K	C	T	T	D	
UniRef90_R6ED24	V	V	I	A	P	D	S	N	R	L	Q	K	L	A	P	F	A	P	W	D	G	E	E	L	D	M	P	L	L	I	I	K	T	Q	G	K	C	T	T	D	
UniRef90_O94136	V	V	V	S	P	T	S	Q	R	L	Q	L	L	T	P	F	N	K	W	N	G	E	D	Y	E	N	L	T	I	I	K	V	K	G	K	C	T	T	D		
UniRef90_D2VAQ5	V	D	V	S	P	T	S	D	R	L	Q	L	L	S	P	F	S	A	W	D	G	K	D	Y	N	D	C	S	V	L	I	I	K	V	V	G	K	C	T	T	D
UniRef90_UP10002558782	V	V	V	S	P	D	S	E	R	L	Q	L	L	E	P	F	T	P	□	G	T	E	I	K	E	A	K	L	I	I	K	A	F	G	K	C	T	T	D		
UniRef90_UP100047EC4C6	V	Q	V	S	P	S	S	D	R	L	Q	L	L	D	P	F	K	A	W	E	G	T	D	L	T	G	L	K	L	L	I	K	A	K	G	K	C	T	T	D	
UniRef90_UP10003643C31	V	D	V	R	A	D	S	Q	R	L	Q	L	L	E	P	F	P	P	N	N	G	D	L	□	G	L	Y	L	L	I	I	K	T	K	G	K	C	T	T	D	
UniRef90_S7VIF2	V	K	V	A	S	D	R	R	L	Q	L	L	E	P	F	K	A	W	E	G	T	D	L	K	G	L	K	L	L	I	I	K	A	K	G	K	C	T	T	D	
UniRef90_K3W6K0	V	N	V	D	A	S	D	R	L	Q	L	L	S	P	F	D	E	W	H	R	G	K	D	F	E	S	L	P	V	L	I	I	K	A	Q	G	K	C	T	T	D
UniRef90_R6J95	V	R	V	K	P	D	S	Q	R	L	Q	L	L	T	P	F	P	A	W	D	G	Q	D	L	□	N	M	P	L	L	I	I	K	A	Q	G	K	C	T	T	D
UniRef90_K9LH07	V	I	K	N	P	N	S	Q	R	L	Q	L	L	E	P	F	P	A	W	D	G	K	E	F	N	L	K	V	L	I	I	K	V	R	G	K	C	T	T	D	
UniRef90_S3D1Q9	V	A	V	S	P	T	S	D	R	L	Q	L	L	Q	P	F	K	A	W	D	G	K	D	F	T	D	L	P	I	L	I	K	C	Q	G	K	C	T	T	D	
UniRef90_UP1000421CD72	I	A	V	S	E	T	S	D	R	L	Q	L	L	A	P	F	D	A	W	D	G	K	N	I	T	G	A	K	L	I	I	K	A	F	G	K	C	T	T	D	
UniRef90_G8R6W7	V	K	V	A	E	G	S	E	R	L	Q	L	L	T	P	F	E	P	W	D	G	K	N	Y	T	G	M	K	L	I	I	K	A	K	G	K	C	T	T	D	
UniRef90_L2FJQ5	V	Q	I	A	E	T	S	K	R	L	Q	L	L	A	P	F	P	W	H	R	G	K	D	F	E	N	C	A	I	I	K	V	Q	G	K	C	T	T	D		
UniRef90_UP1000477A65D	V	V	V	S	P	T	S	D	R	L	Q	L	L	K	P	F	P	□	K	N	E	Q	V	Q	N	M	R	I	I	K	A	K	G	K	C	T	T	D			
UniRef90_F0R4N2	V	S	I	H	P	D	S	E	R	L	Q	L	L	E	P	F	P	W	G	E	T	D	L	T	G	L	K	L	L	I	K	T	K	G	K	C	T	T	D		
UniRef90_A4CMX2	V	K	V	A	G	D	S	E	R	L	Q	L	L	D	P	F	E	P	W	G	E	T	D	L	G	P	M	L	L	I	K	A	F	G	K	C	T	T	D		
UniRef90_11CMQ1	I	I	I	D	P	Q	S	N	R	L	Q	L	L	E	A	F	P	W	H	R	G	D	E	F	K	D	I	I	K	V	Q	G	K	C	T	T	D				
UniRef90_G5H5D0	V	A	V	D	P	Q	S	N	R	L	Q	L	L	E	P	F	P	W	H	R	G	D	E	F	K	D	I	I	K	V	Q	G	K	C	T	T	D				
UniRef90_R5Q4H9	V	A	V	S	P	T	N	E	R	L	Q	L	L	S	P	F	K	A	W	D	G	K	D	F	A	A	L	P	L	L	I	K	V	K	G	K	C	T	T	D	
UniRef90_G7SQQ7	V	D	V	D	P	N	S	E	R	L	Q	L	L	S	P	F	S	A	W	N	G	Q	D	L	N	L	R	L	L	I	I	K	V	R	G	K	C	T	T	D	
UniRef90_A5FV08	V	W	W	S	D	S	T	Y	V	R	Q	N	P	Y	F	E	P	A	P	V	K	D	Y	V	D	L	P	L	L	I	I	K	V	Q	G	K	C	T	T	D	
UniRef90_H8MS02	V	K	W	D	E	K	S	T	Y	V	R	Q	N	P	Y	F	E	P	A	V	Q	T	G	C	A	I	I	K	V	Q	G	K	C	T	T	D					
UniRef90_A3VKZ6	V	D	W	P	P	Q	S	T	Y	V	R	Q	N	P	Y	F	D	P	Q	N	P	T	D	I	S	G	A	R	V	L	I	I	K	G	D	S	V	T	T	D	
UniRef90_B3T9Z8	V	L	K	I	S	S	S	R	R	L	Q	L	L	E	P	F	P	□	K	N	E	Q	V	Q	N	M	R	I	I	K	A	K	G	K	C	T	T	D			
UniRef90_H0J5A5	V	Q	W	P	E	S	T	Y	V	R	Q	N	P	Y	F	E	P	D	A	I	E	D	V	K	G	A	R	V	L	I	I	K	V	Q	G	K	C	T	T	D	
UniRef90_A9KC13	V	W	Q	T	N	T	S	T	Y	V	R	Q	N	P	Y	F	E	P	D	A	I	E	D	V	K	G	A	R	V	L	I	I	K	V	Q	G	K	C	T	T	D
UniRef90_U9T6I0	V	I	T	I	P	E	N	S	R	L	Q	L	L	E	P	F	S	W	H	G	N	E	F	K	L	K	V	L	I	I	K	V	Q	G	K	C	T	T	D		
UniRef90_A0A017SDR8	V	V	I	D	P	Q	S	D	R	L	Q	L	L	T	P	F	P	□	A	D	D	M	Q	L	L	I	I	K	V	Q	G	K	C	T	T	D					
UniRef90_K7CS55	V	W	Q	P	G	S	T	Y	V	R	Q	N	P	Y	F	E	P	D	P	Q	N	P	T	D	I	S	G	A	R	V	L	I	I	K	G	D	S	V	T	T	D
UniRef90_I6TUM4	V	K	W	D	E	K	S	T	Y	V	R	Q	N	P	Y	F	E	P	D	L	T	G	D	L	D	P	L	I	I	K	V	Q	G	K	C	T	T	D			
UniRef90_UP10003600686	V	W	P	P	K	S	T	Y	V	R	Q	N	P	Y	F	E	P	D	L	T	G	D	L																		

QUERY	50	60	70	80
UniRef90_C3Y932	S A A G P W L K F R G H L D N I S N N L L I G A I N S E N R K A N S V R N A			
UniRef90_M3ZX13	S A A G P W L K Y R G H L D N I S N N C F I G A I N I V N G E A N N V E N V			
UniRef90_U6PQ83	S A A G P W L K F R G H L D N I S N N M L I G A V N M E N D A V N R V K N Q			
UniRef90_F4Q312	S M A G P W L K Y R G H L D N I S N N M L I G A I N S E N G K A N A V L N Q			
UniRef90_S6E8J0	S M A G P W L K Y R G H L D N I S N N Y M I G A I N A E N K K A N S V R N V			
UniRef90_A0A024NF41	S A A G P W L K Y R G H L D N I S N N L F I T A V N A E N D E M N K V R N H			
UniRef90_S8F130	S A A G P W L K Y R G H L D N I S N N C L I G A L N S E N G E A N K I K N Q			
UniRef90_J9KAT0	S A A G P W L K Y R G H L D N I S N N M L I T A T N A E N N E M N K V K N Q			
UniRef90_F4R306	S A G G P W L K F R G H L E N I S Q N M L I G A I N E A N G K A N E V L N Q			
UniRef90_M7X6X3	S A G G P W L K Y R G H L E N I S N N C L I G A I N E A N G E A N K V Q N V			
UniRef90_E5S932	S A A G P W L K F R G H L D N I S N N M F I G A I N E E N G E M N K V K N Q			
UniRef90_U9UI83	S M A G P W L K F R G H L D N I S N N M L I G A I N A E N N T A N S V K N I			
UniRef90_E9C8Q7	S M A G P W L K Y R G H L D N I S N N Y M I G A I N A E N D K P N S V K N Q			
UniRef90_C5DGA3	S M A G P W L K Y R G H L D N I S N N Y M I G A I N A E N K K A N C C V K N F			
UniRef90_X5KH82	S M A G P W L K Y R G H L D N I S N N M L I G A V N A Y N M E T N N V K N E			
UniRef90_K0KK30	S M A G P W L K Y R G H L D N I S N N Y M I G A I N A Q N D K A N T V K N L			
UniRef90_L8H690	S M A G P W L K Y R G H I D N I S N N M F I G A I N A E N N N K A N C C V Q N Q			
UniRef90_R6ED24	S M A G P W L K F R G H L A N S D N L L M G A T N A F N G E T N K V K C Q			
UniRef90_O94136	S M A G P W L K Y R G H L D N I S S N M L I G A I N S E N G E A N K I R N I			
UniRef90_D2VAQ5	S M A G P W L K Y R G H L D N I S S N N L L I G A V N I E N A K A N S I K N Q			
UniRef90_UP10002558782	S M A G P W L R Y R G H L D N I S S N N C L I G A V N A Y N K E T D K V K N Q			
UniRef90_UP100047EC4C6	S M A G P W L K Y R G H L D N I S S N N L L I G A T N A F N G A T T N K V K N Q			
UniRef90_UP10003643C31	S P A G P W L K Y R G H L D N I S S N N C F M G A I N F Y N F N K S N S V K N L			
UniRef90_S7VIF2	S M A G P W L R Y R G H L D N I S S N N L L I G A I N F Y N E T S N K V K N Q			
UniRef90_K3W6K0	S M A G P W L K Y R G H L D N I S S N N L L I G A E N A E T G E T T N S V K N Q			
UniRef90_R6J995	S M A G P W L R F R G H L D N I S D N M L M G A V N A F T N G E T T N R V W N R			
UniRef90_K9LH07	S A A G K W L K Y K G H L S N I A T N T L M R A V N D F N G E T T N S V I N E			
UniRef90_S3D1Q9	S M A G P W L K Y R G H L D N I S S N N M L I G A T N A E N G E A N K V K N F			
UniRef90_UP1000421CD72	S M A G P W L R F R G H L D N I S S N N M L I G A V N A F T Q N T N S V K N Q			
UniRef90_G8R6W7	S M A G P W L R F R G H L D N I S S N N T L L T G A V N A F F N D K T D S V K N Q			
UniRef90_L2FJQ5	T P A G P W F A Y R G H L G D N I S S N N T L L I G A V N A E T G K V N Q V K N W			
UniRef90_UP1000477A65D	S M A G P W L K F R G H L Q D N I S S N N C L I G A I N A Y S E K T T N T V L N Y			
UniRef90_F0R4N2	S M A G P W L R F R G H L E N I S S N N L L M G A V N A F N G K T N W V L N T			
UniRef90_A4CMX2	S M A G P W L R F R G H L D N I A N N T L L I G A V N A F N K K T N F V K N Q			
UniRef90_I1CMQ1	S A A G P W L K Y K G H L Q D N I S S E N T L L I G A L N A D T G K V N S V L D I			
UniRef90_G5H5D0	S M A G P W L R F R G H L E N I S S D N N L L M G A V N R N F N G Q T N S V L N P			
UniRef90_R5Q4H9	S P G G K W L P Y R G N I D R I S S D N N L L E R G I N A F N G Q A G K V W N T			
UniRef90_G7SQQ7	S M A G P W L K Y R G H L E K I S S E N N L L I G A I N A F N N T I N R V R N I			
UniRef90_A5FV08	S P A G S F R K R R G N H E I M M R G T F I R N E M L D N V E G G Y S K H F			
UniRef90_H8MS02	S P A G K Y L M A E G V E P K D F N S Y G A R R G N H E V M E G G V T V H I			
UniRef90_A3VKZ6	S P A G S Y L T E R Q V A P R D F N S Y G S R R G N H E V M M R G T F A N G			
UniRef90_B3T9Z8	S P A G I W L Q F R G H L D N I S D N C Y I G A H N S F T S E Q G T A I N Q			
UniRef90_H0J5A5	S P A G R Y L Q E H G V K P V D F N S Y G S R R G N H E V M M G G E T R H V			
UniRef90_A9KC13	S P A G A Y L I E H G I D I K D F N S Y G S R R G N H E V L M G G F T K H F			
UniRef90_U9T6I0	S A A G P W L K Y K G H L E N I S S N N T L L I G A L N A D N E K I N V V K N D			
UniRef90_A0A017SDR8	S P A G P W Y K Y R G H L E N I S S N N M L T T A T N A Y P Q M L G H T R H P			
UniRef90_K7SCS5	S P A G S Y G S R R G N D R V M V M R G T F I R N E M A P G T E G G M T R H Q			
UniRef90_I6TUM4	D S P A G R Y L L S G V K P E E L H T Y G A R R G N H E V M M R G T F I Y W			
UniRef90_UP10003600686	S P A G A Y L Q E H G V E I M D F N S Y G S R R G N H E V M M G G V T I H H			
UniRef90_L2G1W1	S P A G P W Y N Y R G H L E N I S S N N L L L G A T N D F E L M I G K A K D P V			
UniRef90_W3RKH6	S P A G S Y L S E R Q V R P A D F N Q Y G T R R G N H E V M M G G L T K H W			
UniRef90_UP1000475EAF9	S P A G S I K T R R G N H E V M M R G T F I R I R N H M G K E G G Y T I H Y			
UniRef90_J9HSZ8	S P A G S Y L T K S H G V E P Y D F N S Y G S R R G N H E V M M G G Y T T Y F			
UniRef90_UP100036E6EB9	S P A G A Y L T E H Q V R P V D F N S Y G S R R G N H H V M M R G T F A N K			
UniRef90_UP100037369FF	S P A G S I K H R R G N H E V M M R G T F I K N Q M A P G T E G G V T K Y V			
UniRef90_G9Q170	S P A G A Y L R S K G V E P R N F N S Y G S R R G N H E V M M G G F T T Y W			
UniRef90_B2J160	S P A G S I K M M R G T F A N I R K N Y I L Q K E D G S V P E G G Q T K H W			
UniRef90_R7IN27	S P G G K W L P Y R G N I D R I S D N N L L E R A T N A F N G K S Q S V W N V			
UniRef90_W1DWK2	S P A G R Y L Q E H G V A R R D F N S Y G S R R G N H E V M M G G M T R H L			
UniRef90_D1BG13	S P A G A Y L L A G N G V E R D Y N S Y G S R R G N H E V N V E G G Y T F N F			
UniRef90_A0A031IA86	S P A G S W L M E R Q V S R A D F N S Y G S R R G N D H V M V R G T F A N K			
UniRef90_B9NPT1	S P A G S Y L T E R Q V P R E F N S Y G S R R G D H E V M M R G T F A N G			
UniRef90_W1K3M2	S P A G S I V M M R G T F A N I R K N F M L K G A D G N I P G G L T K H W			
UniRef90_A8FDR0	S P A G A Y L Q E R G V S P R D F N S Y G S R R G N H H V M M G G Y T T Y W			
UniRef90_A3WE42	S P A G A Y L K S N Q V Q K D F N S Y G S R R G N D H V M M R G T F A N I			
UniRef90_B6AUS8	S P A G S Y L T S H Q V P V R E F N S Y G S R R G N H E V M M R G T F A N G			
UniRef90_A0QX20	S P A G A Y L D A N G V E R K D Y N S L G S R R G N H E V M I R G T F A N G			
UniRef90_A0A031MB55	S P A G S Y G S R R G N H E V M M R G T F I R N R M L G G E E G G L T I H T			
UniRef90_R5ZUP5	S P A G P W L R Y R G H L Q D N I S R N M L L G A V N A F T G E T G C V K D L			
UniRef90_A1UU78	S P A G S I K T R R G N H E V M M R G T F I R I R N F M G R E G G Y T I H Y			
UniRef90_F5L6F1	S P A G K Y L L E R G V E R K D F N S Y G S R R G N H E V M M G G Y T R Y L			
UniRef90_L0IX71	S P A G S Y L D S H G V D K D Y N S Y G S R R G N H E V M I R G T F A N I			
UniRef90_E2CGZ9	S P A G T Y L L A E H Q V V Q K D F N S Y G S R R G N H Q V M M R G T F A N M			
UniRef90_A0A023X5P1	M P A G Q Y L L E K G V D S R D F N S Y G S R R G N H E V M V R G H F E N P			
UniRef90_A3WK89	S P A G R Y L L Q E N G V E V K D F N S Y G S R R G N H E V M M G G F T K Y I			
UniRef90_D1C8P3	S P A G S Y G S R R G N H E V M V R G T F L R N K L A D G R E G N W T T H L			
UniRef90_Q2GBA0	S P A G S W L M E H Q V A K A D F N S Y G S R R G H H E V M M R G T F A N R			
UniRef90_Q5P0Q2	S P A G S W L I A K G V A K Q D F N S Y G S R R G N H D V M V R G T F A N V			
UniRef90_A5V9X1	S P A G S I K V R R G N H E V M M R G T F I K N Q M I P G I E G G L T K H I			
UniRef90_UP1000370F123	S P A G S Y L Q E N G V E V R D F N S Y G S R R G N H E V M I R G T F A N D			
UniRef90_E7RWE0	S P A G S I K E R R G N H D V M M R G T F I R L Q N Q L V D V A G G Y T R D			
UniRef90_Q6F827	S P A G R Y L Q E H G I Q P K D F N S Y G S R R G N H E V M M G G N T I Y I			
UniRef90_UP10002EF9996	H S P A G A W L I E Q G Q V S P R D F N S Y G S R R G N H E V M M G G F T T Y W			
UniRef90_W5Y8L5	H S P A G S I K P R R G N H E V M M R G T F I R L Q N Q L V D V A G G Y T R D			
UniRef90_UP1000366AF35	H S P A G S Y G S R R G N H E V M M R G T F I R L Q N Q L V D V A G G Y T R D			
UniRef90_UP1000370C569	H S P A G S S Y L D E N G V E V R D F N S Y G S R R G N H E V M V R G T F A N D			
UniRef90_M3ARZ7	T S A A G P W L K Y K G H L T N I S E N T L L I G A V N A E T G E V N Q V S D V			
UniRef90_V8CYV7	H T P A A Q Y L D S K G V E V R D F N S L G A R R G N H Q N Q L L D G V S G G			
UniRef90_D3QD37	H S P A G A Y L L D H D V P I R D F N S Y G S R R G N H E V M E G G Y T T Y W			
UniRef90_UP100036A245D	H S P A G K Y L I K E H G V E K A D F N S Y G S R R G N D P G K E G G Y T T Y H			
UniRef90_E9UWG9	H S P A G K Y L I E H G V E Q R D F N S Y G S R R G N H K N Q V A P G T E G G			

QUERY	90	100	110	120
UniRef90_C3Y932	V T Q E F G P	V P D T A R Y Y K Q H G I R W V V I	G D E N Y G E G S S R E H S A	
UniRef90_M3ZX13	L T G N W G A	V P D A A R H Y K A H G L K W V V V	G D E N Y G E G S S R E H A A	
UniRef90_U6PQ83	L T G Y G G	V P D V A R F Y K A N G V N W V V V	G D E N Y G E G S S R E H A A	
UniRef90_F4Q312	I T N T Y G T	V P D T A R Y K A H K K Q W V V I	G D E N Y G E G S S R E H A A	
UniRef90_S6E8J0	F T G E T A P	V P P T V A R D Y K K R G V G W V V I	G D E N Y G E G S S R E H A A	
UniRef90_A0A024NF41	Y T G E Y K G	V P D T A R D Y R D N G I K W V V I	G D E N F G E G S S R E H A A	
UniRef90_S8F130	L T G K Y D T	V S Q T A R H Y K S E G V A W V A V	G D E N Y G E G S S R E H A A	
UniRef90_J9KAT0	I T G E Y G A	V P Q V A A Y Y R D H G I K W V V I	G D H D N Y G E G S S R E H A A	
UniRef90_F4R306	D T G E W G A	V P D T A R A Y K A K G I S W V V F	G D E N Y G E G S S R E H A A	
UniRef90_M7X6X3	E T G K W G G	V P E V A A Y Y R D H G I Q W C V I	G D Q N Y G E G S S R E H A A	
UniRef90_E5S932	F T G E W N T	V P E T A K E Y R K H H T G W V V I	G D E N Y G E G S S R E H A A	
UniRef90_U9UI83	L S G Q W S S	V P E A A R F Y K A G K K W I V F	G E E N Y G E G S S R E H A A	
UniRef90_E9C8Q7	F T G E Y D A	V P P N V A R D Y K S K N T P W V V I	G D D N Y G E G S S R E H A A	
UniRef90_C5DGA3	L T S E F G G	V P D V A R A Y K A K G V K W V V F	G D E N Y G E G S S R E H A A	
UniRef90_X5KH82	F T G E Y A G	V P D T A R E Y K K R G Q K W V V V	G G E N F G E G S S R E H A A	
UniRef90_K0KK30	L N G E H M E	V P A S A R A Y K K A A G V P T I V	G D E N Y G E G S S R E H A A	
UniRef90_L8H690	Y T G D V K G	V P E T A R D Y R D A G I K W V V I	G D E N F G E G S S R E H A A	
UniRef90_R6ED24	L T G E F G A	V P D V A R A Y K K A G V P W I V I	G D E N Y G E G S S R E H A A	
UniRef90_O94136	L T G E Y M A	V S A A A K A Y K A Q G I S S I V V	V A E D N Y G E G S S R E H A A	
UniRef90_D2VAQ5	L T G E Y D A	V P A V A R D Y K A H G M P W V V I	A D E N Y G E G S S R E H A A	
UniRef90UPI0002558782	L T G E F G T	V P D V A R H Y K A N G V N W V V I	G D E N Y G E G S S R E H A A	
UniRef90UPI00047EC4C6	L T G A Y G A	V P D T A R A Y K A A A G I P S I V V	G D H N Y G E G S S R E H A A	
UniRef90UPI0003643C31	L D G S Y G E	V P P A V Q R A Y K K A A G I G S V V V	G D E N Y G E G S S R E H A A	
UniRef90_S7VIF2	V T C E Y G T	V S Q V Q R F Y K Q K G I G T I V V	G D E N Y G E G S S R E H A A	
UniRef90_K3W6K0	L D G S Y G E	V P A V Q R Q Y K L H N I G T V V	G D E N Y G E G S S R E H A A	
UniRef90_R6J995	F T G V F D K	V P A V A R Q Y K A Q G V S W V V V	G D E N Y G E G S S R E H A A	
UniRef90_K9LH07	S T N T Y G T	V S G T A K M Y K S E G I P S L V V	V A E E N Y G E G S S R E H A A	
UniRef90_S3D1Q9	L T G K Y D T	I P N V G A A Y R A A N V P W M V I	T D T N Y G E G S A R E H A A	
UniRef90UPI000421CD72	L T G T Y D A	V P A V A R A Y K A A A G I P S I V V	G D W N Y G E G S S R E H A A	
UniRef90_G8R6W7	L T G E Y G P	V P V P K V Q R A Y K A E G I K T I V V	G D H N Y G E G S S R E H A A	
UniRef90_L2FJQ5	L T G E D G D	V P P G T A R A Y K E A S Q P W V V I	G D H N Y G E G S S R E H A A	
UniRef90UPI000477A65D	V T N D Y M A	V P E S G M A Y R D N G I Q G Q I V V	G E E N Y G E G S S R E H A A	
UniRef90_F0R4N2	L T G E Y E A	V S A V A K S Y K A K G I P S I V V	V A E E N Y G E G S S R E H A A	
UniRef90_A4CMX2	L T G E Y G G	V P D T Q R A Y K K A A G I K T L V V	G D H N Y G E G S S R E H A A	
UniRef90_11CMQ1	T T N K E D T	P I V E V A K S Y K S Q N I D W M V I	A D H N Y G E G S A R E H A A	
UniRef90_G5H5D0	L T G A Y E G	V S A V A K Q L A Q G I G S I V V	V A E E N Y G E G S S R E H A A	
UniRef90_R5Q4H9	E T K A Y D T	P A K V A R Y Y K N H H V A S V I	V G D D N Y G E G S S R E H A A	
UniRef90_G7SQQ7	V T G N Y G T	V P D N A K F Y K S K N I P T L I V	G E E N Y G E G S S R E H A A	
UniRef90_A5FV08	P S G E Q L S	I Y D A A M R Y K K E G V P L V V	F A G R E Y G T G S S R D W A A	
UniRef90_H8MS02	P T R E R R M S	I Y D A S M K Y Q A D G T P L V V	L A G A E Y G T G S S R D W A A	
UniRef90_A3VKZ6	P D G E Q T S	I Y D A S M A Y Q E D G T P L V V	V G G I E Y G A G S S R D W A A	
UniRef90_B3T9Z8	L D G T K G K L	P K V A R N Y H E N G Q G W A V I	A D V N Y G E G S S R E H A A	
UniRef90_H0J5A5	P S G E Q M A I	Y D A A M K Y K E E G V P L V V	A G K E Y G T G S S R D W A A	
UniRef90_A9KC13	P D G E Q L P	I Y D A A M K Y H S E N I P L V V	A G K E Y G T G S S R D W A A	
UniRef90_U9T6I0	L T G K D G N I	P E V A R Y Y K E N N V P W I I	V A D H N Y G E G S A R E H A A	
UniRef90_A0A017SDR8	L T S E V S V	V P E V A R D Q Q R G I H W C I I	G D H N Y G E G S S R E H A A	
UniRef90_K7SCS5	P D G T L M P I	I Y D A A T R Y A T E G T P L V V	F G G K E Y G M G S S R D W A A	
UniRef90_I6TUM4	P T G E E M S	V Y E A A M R Y K E R G I P L I I	I A G K Q Y G V G S S R D W A A	
UniRef90UPI0003600686	P S G D Q M P I	I Y D A A M K Y K E D D V Q L V V	F A G K E Y G T G S S R D W A A	
UniRef90_L2G1W1	D G D K K P	V P Q A A R S L K K A G I R W C I	G D S N Y G E G S S R E H A A	
UniRef90_W3RKH6	P D G E Q M T	I Y D A A M K Y Q E E K V P L V V	F A G A E Y G N G S S R D W A A	
UniRef90UPI000475EAF9	P S K E E M S I	I F D A A M E Y K K E G V P L V I	F A G G E Y G N G S S R D W A A	
UniRef90_J9HSZ8	P T N E V M P I	I Y D A A M Q Y Q Q N G Q P L V V	F A G K E Y G T G S S R D W A A	
UniRef90UPI00036E6EB9	Y K G E T T M P	V Y D A A M K Y M A D E T P L V V	F G G K E Y G M G S S R D W A A	
UniRef90UPI00037369FF	P T G D I M S I	I F D A A E K Y K K A S G K D L V V	F A G T L Y G N G S S R D W A A	
UniRef90_G9Q170	P T G E V M P I	I Y D A A C Y M Q Y Q D G T G L V V	F A G K D Y G M G S S R D W A A	
UniRef90_B2J160	P D G E E L S	I Y D A A M K Y Q A E N V P L V I	F A G A E Y G N G S S R D W A A	
UniRef90_R7IN27	V N K D Y E S	P A K T A R L Y K N K G I Q S I I	V G D D N Y G E G S S R E H A A	
UniRef90_W1DWK2	P D P E P M A	I Y D A A M L Y K A E G T P L A V I	I A G K E Y G S G S S R D W A A	
UniRef90_D1BG13	V T N E Q S F I	I Y D A A Q D Y A A Q G T P L V I	L G G K E Y G S G S S R D W A A	
UniRef90_A0A031IA86	F D G E V M P I	I F D A A M R H K E K G T P L V I	V A G K E Y G T G S S R D W A A	
UniRef90_B9NPT1	P D G E Q T S	I Y D A S M A H Q A N G T P L V V	F G G E Q Y G A G S S R D W A A	
UniRef90_W1K3M2	P D G E Q M S I	I Y D A A M K Y Q E E K V P L V V	F A G A E Y G N G S S R D W A A	
UniRef90_A8FDR0	P T G E V T S I	I Y D A A C M Y K E D D G T P L A I	L A G K D Y G M G S S R D W A A	
UniRef90_A3WE42	Y N G E Q M P I	I Y D A A M K H K A D G T Q L I V	V I V G G K E Y G T G S S R D W A A	
UniRef90_B6AUS8	V D G T Q T S	I F D A A M A H Q E T G T P L V V	F G G E Q Y G A G S S R D W A A	
UniRef90_A0QX20	Y T R D F T Q P	I Y D A S E N Y K K A G I P L V V	L G G K E Y G S G S S R D W A A	
UniRef90_A0A031MB55	P S G E R M S I	I Y D A A M R Y Q A E G T P L V L	L A G K E Y G T G S S R D W A A	
UniRef90_R5ZUP5	V T G Q D S V E	V W Q A A A H Y R D A K G G S V I	V A E D N Y G E G S S R E H A A	
UniRef90_A1UU78	P S K Q E T T I	I Y D A A V S Y R Q N G V P L V V	F A G I E Y G N G S S R D W A A	
UniRef90_F5L6F1	P T G E I M P I	I Y D A A M K Y Q Q D G T P L V V	F A G K E Y G T G S S R D W A A	
UniRef90_L0IX71	R L E R Q A F I	I Y D A A Q N Y A A Q D I P L V V	L G G K E Y G S G S S R D W A A	
UniRef90_E2CGZ9	K D G E K K W I	F D A C M E Y Q A E G T P L V V	F A G K E Y G T G S S R D W A A	
UniRef90_A0A023X5P1	E D T E G T T I	I Y E A A M Q Y A E D G V P L V V	L G G K E Y G S G S S R D W A A	
UniRef90_A3WPK89	P T G E E M S I	I Y D A A M K Y I E N D T P L V V	L A G K E Y G T G S S R D W A A	
UniRef90_D1C8P3	P T G E V M S I	I Y D A A M A R Y Q E E G T P L V V	L A G K E Y G S G S S R D W A A	
UniRef90_Q2GBA0	P T G E V M S I	V Y D A A M A R Y Q E E G T P L V V	L A G K E Y G S G S S R D W A A	
UniRef90_Q5P0Q2	Y G D E V G S I	V Y D V A M K H K A D G T P T V V	L A G K E Y G T G S S R D W A A	
UniRef90_A5V9X1	R D D R Q M T V	F D A A M A M Y M A T G T P T V I	F A G E E Y G T G S S R D W A A	
UniRef90UPI000370F123	P S G E V M A I	I Y D A A M K Y K A E G T P L V V	A G K E Y G T G S S R D W A A	
UniRef90_E7RWE0	F T Q D G A P Q	I Y D A A Q N Y A A Q G T P L V V	L A G K E Y G S G S S R D W A A	
UniRef90_Q6F827	P D G E R L A I	I Y D A A M K Y M A D G V P T V I	L A G E E Y G T G S S R D W A A	
UniRef90UPI0002EF9996	P T G E V M S I	I Y D A A M K Y Q Q D G T G P L V V	L A G K E Y G T G S S R D W A A	
UniRef90_W5Y8L5	F T Q E G G P Q F D A C	I Y D A A Q N Y K A A G I P L V V	L G G K E Y G S G S S R D W A A	
UniRef90UPI000366AF35	P T G E K M A I	I Y D A S M K Y Q A S G T P L V V	V Q E Y G T G S S R D W A A	
UniRef90UPI000370C569	F T Q E G A P Q	I Y D A A Q N Y R A E G T P L V V	L A G K E Y G T G S S R D W A A	
UniRef90_M3ARZ7	D G A Q Y T P E L	I Y D A A Q N Y A A G T P L V V	V A E H N Y G E G S A R E H A A	
UniRef90_V8CYV7	Y T R D F T Q P	I Y D A A Q N Y A A Q K T P L V V	L G G K E Y G S G S S R D W A A	
UniRef90_D3QD37	P T D E V M P I	I Y D A A M K Y K E D D G T G L A V I	A G N D Y G M G S S R D W A A	
UniRef90UPI00036A245D	P T G E V T T I	I Y D A S L K Y K E S G T P L V A L	A G T Q Y G T G S S R D W A A	
UniRef90_E9UWG9	Y T R D F T Q P	I Y D A A Q N Y A A A G T P L V V	L G G K E Y G S G S S R D W A A	

QUERY	130	140	150	160
UniRef90_C3Y932	L E P R F L G G R A I T K S F A R H E T N L K K Q G L L P L T F A D P A D Y			
UniRef90_M3ZX13	L E P R H L G G R A I I V K S F A R H E T N L K K Q G M L P L T F A N P A D Y			
UniRef90_U6PQ83	L E P R H L G G R A I T K S F A R H E T N L K K Q G M L P L T F T D P D D Y			
UniRef90_F4Q312	L E P R H L G A R A I V V K S F A R H E T N L K K Q G I L L P L T F F A N P A D Y			
UniRef90_S6E8J0	L E P R H L G G R A I I T K S F A R H E T N L K K Q G M L P L T F T D P D D Y			
UniRef90_A0A024NF41	L E P R H L G G R A I I V K S F A R H E T N L K K Q G M L P L T F F A N P A D Y			
UniRef90_S8FI30	L E P R F L G G L A V I T R S F A R H E T N L K K Q G M L P L T F F A D A D Y			
UniRef90_J9KAT0	L E P R H L G G R A I I V K S F A R H E T N L K K Q G L L P L T F F D A K D Y			
UniRef90_F4R306	L E P R H L G G I A I I T R S F A R H E T N L K K Q G L L P L T F F D A K D Y			
UniRef90_M7X6X3	L E P R F L G G G T A V I V V K S F A R H E T N L K K Q G M L P L T F F D A K D Y			
UniRef90_E5S932	L E P R H L G G R A I V V K S F A R H E T N L K K Q G M L P L T F F D A K D Y			
UniRef90_U9UI83	L E V R H L G G G A A V I V V K S F A R H E T N L K K Q G M L P L T F F D A K D Y			
UniRef90_E9C8Q7	L E P R H L G G V A I I V K S F A R H E T N L K K Q G M L P L T F F D A K D Y			
UniRef90_C5DGA3	L E P R Y L G G A Y A I I T K S F A R H E T N L K K Q G M L P L T F G K P E D Y			
UniRef90_X5KH82	M E P R H L G V R A V I V V K S F A R H E T N L K K Q G M L P L T F F A D K A D Y			
UniRef90_K0KK30	L E P R F L G G G F A I I V K S F A R H E T N L K K Q G M L P L T F F A N P A D Y			
UniRef90_L8H690	I I P R Y L G G K A V I V V R S F A R H E T N L K K Q G I L L P L T F F A N P A D Y			
UniRef90_R6ED24	M E P R F L N V K V I I A K S F A R H E T N L K K Q G M L P L T F V N K D D Y			
UniRef90_O94136	L E P R H L G G V A V I I V K S F A R H E T N L K K Q G V L L P L T F F A D P A D Y			
UniRef90_D2VAQ5	L E P R W L G G V A V I I T R S F A R H E T N L K K Q G M L P L T F F K D A K D Y			
UniRef90UPI000255782	M E P R H L G V A A V I V V K S F A R H E T N L K K Q G M L P L T F F A N E A D Y			
UniRef90UPI00047EC4C6	M E P R H L G V R A V I V V K S F A R H E T N L K K Q G M L P L T F F A N P A D Y			
UniRef90UPI0003643C31	M E P R Y L G V K A I I V V R S F A R H E T N L K K Q G I L L P L T F F A D P K D Y			
UniRef90_S7VIF2	M E P R F L G V R A I I V V K S F A R H E T N L K K Q G M L P L T F F A N P Q D Y			
UniRef90_K3W6K0	L E P R H L G R A V I V V K S F A R H E T N L K K Q G M L P L T F F A N P A D Y			
UniRef90_R6J995	M E P R F L N V R V I V V K S F A R H E T N L K K Q G M L P L T F F A N P A D Y			
UniRef90_K9LH07	M Q P R Y L G C K F I V V A R S F A R H E T N L K K Q G I L L P L T F F A N P A D Y			
UniRef90_S3D1Q9	L E P R H L G G I A I I T R S F A R H E T N L K K Q G M L P L T F F D P D D Y			
UniRef90UPI000421CD72	L E P R F L G V K A V V V K S F A R H E T N L K K Q G M L P L T F F A D E A D Y			
UniRef90G8R6W7	M Q P R H L G M A V I V V K S F A R H E T N L K K Q G M L P L T F F A D E A D Y			
UniRef90L2FJQ5	L L Q P R Y L G C V A I I M A K S F A R H E T N L K K Q G M L P L T F F V K E S D Y			
UniRef90UPI000477A65D	M E P R W L G V H A V V V K S F A R H E T N L K K Q G M L P L T F F A N P A D Y			
UniRef90FOR4N2	M E P R F L N V R V I V V L A K S F A R H E T N L K K Q G M L P L T F F I H K D D Y			
UniRef90A4CMX2	M Q P R H L G V A A V V V K S F A R H E T N L K K Q G M L P L T F F A D E S D Y			
UniRef90I1CMQ1	L L Q P R Y L G C P L I I S R S F A R H E T N L K K Q G V L L P L T F F V N E N D Y			
UniRef90G5H5D0	L L E P R F L N A K V V V V K S F A R H E T N L K K Q G M L P L T F F A D G A D D Y			
UniRef90R5Q4H9	M E P R Y L D V A V V I A K S L A R H E S N L K K Q G I L L P L T F F A D P A D Y			
UniRef90G7SQQ7	M E P R F L G V R A V V V K S F A R H E T N L K K Q G M L P L T F F L N P H D Y			
UniRef90A5FV08	K G T V L L G V K A V V A E S F E R H R S N L V G M G V L L P L T F F K D T R K T S			
UniRef90H8MS02	K G T Q L L G V K A V V A K S F E R H R S N L V G M G V L L P L T F F Q E Q D A Q S			
UniRef90A3VKZ6	K G T N L L G V K A V V A E S F E R H R S N L V G M G V L L P L T F F F E F T D T R K T S			
UniRef90B3T9Z8	M S P R F L G C K V V I A R S M A R H E T N L Q K Q G M L A L T F F D D E S S W			
UniRef90H0J5A5	K G T R L L G V R A V V A E S F E R H R S N L I I G M G V V L P L T F F Q P E G E S R S			
UniRef90A9KC13	K G P R L L G V K A V V A E S F E R H R S N L I V G M G V L P L T F F E F K D N R H S			
UniRef90U9T610	L L Q P R Y L G C P L I I S K S F A R H E T N L K K Q G V L L P L T F F V I K D E K D Y			
UniRef90A0A017SDR8	L L E P R Y L G G V A I I A R S F A R H E T N L K K Q G M L P L T F F D V A D Y			
UniRef90K7SCS5	K G T R L L G V K A V V A E S F E R H R S N L V G M G V L L P L T F F E E T R K T S			
UniRef90I6TUM4	K G P A L L G V K A V V A E S F E R H R S N L V G M G I V L P L T F F Q F K D P E V R			
UniRef90UPI0003600686	K G T T I L L G V Q A V V A E S F E R H R S N L I I G M G V V L P L T F F Q F K D G Q S W S			
UniRef90L2G1W1	L L E P R Y L G G A A I I T R G F A R H E T N L K K Q G M L P L T F F A D P A D Y			
UniRef90W3RKH6	K G T R L L G V R A V V C Q S F E R H E T N L K K Q G M L P L T F F E E D S W G K Y			
UniRef90UPI000475EAF9	K G T N L L G V R A V V A E S Y E R H R S N L V G M G V I L P L T F F F E D G A T W W			
UniRef90J9HSZ8	K G T Y L L G V R A V V A E S F E R H R S N L V G M G V L L P L T F F E F G E S A E S S			
UniRef90UPI00036E6EB9	K G T R L L G V I K A V V V E S F E R H R S N L V G M G V L L P L T F F Q F K D T R Q S W			
UniRef90UPI00037369FF	K G T I L L G V K A V V A G S F E R H R S N L I I G M G V V L P L T F F Q F E G D S W T N			
UniRef90G9QI70	K G T K L L G V I K T V V A E S Y E R H R S N L I V M M G V V L P L T F F Q F K E N A E V			
UniRef90B2IJ60	K G T K L L G V R A V V A E S F E R H R S N L V G M G V L L P L T F F T F E D S W G K Y			
UniRef90R7IN27	M E P R Y L G V V V V I A K S L A R H E S N L K K Q G V L L P L T F F V D P K D Y			
UniRef90W1DWK2	K G P R L L G I R V V I A E S F E R H R S N L I I G M G V V L P L T F F P Q T R K T S			
UniRef90D1BG13	K G T A L L G V K A V V T E S F E R H R S N L I V G M G V V L P L T F F Q F D S R K S S			
UniRef90A0A031IA86	K G T N L L G V R A V V T E S F E R H R S N L I V G M G V V L P L T F F Q F A E T R Q T T			
UniRef90B9NPT1	K G T A L L G V K A V V A E S F E R H R S N L V G M G V I L P L T F F F E T I D T R K T S			
UniRef90W1K3M2	K G T R L L G V R A V V C Q S F E R H R S N L V G M G V I L P L T F F F E T I D T R K T S			
UniRef90A8FDR0	K G T N L L G I K F V V A E S F E R H R S N L V F M G V V L P L T F F Q F K D G E S A T			
UniRef90A3WE42	K G T I L L G V R A V V V E S F E R H R S N L V G M G V V L P L T F F Q F E E T R E S T			
UniRef90B6AUS8	K G T A L L G V K A V V A E S F E R H R S N L V G M G V V L P L T F F Q F E S D S R K S S			
UniRef90A0QX20	K G T V L L G V K A V V T E S F E R H R S N L I I G M G V V L P L T F F Q F P E S A S T			
UniRef90A0A031MB55	K G T N L L G V K A V V A E S F E R H R S N L I V G M G V V L P L T F F Q F P E S A P A D Y			
UniRef90R5ZUP5	M E P R Y L G V K V V V K S F A R H E T N L K K Q G V L L P L T F F F A N P A D Y			
UniRef90A1UU78	K G A N L L G V K A V V A Q S F E R H R S N L V G M G V I V P L T F F F V E E G A S W			
UniRef90F5L6F1	K G T N L L G V K A V V A E S F E R H R T N L V C M G V V L P L T F F Q F P E S A A S			
UniRef90LOIX71	K G T S L L G V R A V V A Q S F E R H R S N L I I G M G V V L P L T F F Q F P E S A A S			
UniRef90E2CGZ9	K G T K L L G V R A V V A Q S F E R H R S N L V G M G V I V P L T F F T F K D G E S W S			
UniRef90A0A023X5P1	K G S F L L G I K A V V A E S Y E R H R S N L I I G M G V V L P L T F F Q Y A D D N A E S			
UniRef90A3WK89	K G T R L L G V K A V V A E S Y E R H R S N L I I G M G V V L P L T F F Q F E D G Q G G V			
UniRef90D1C8P3	K G T R L L G V R A V V A E G Y Y E R H R S N L I I G M G V V L P L T F F Q F G Q S A E G			
UniRef90Q2GBA0	K G T N L L G V R A V V V E S F E R H R S N L I I G M G V V L P L T F F Q F K E G Q Q N R S			
UniRef90Q5P0Q2	K G T Q L L G V R A V V A R S F E R H R S N L V G M G V V L P L T F F Q F K D S W E S T			
UniRef90A5V9X1	K G T N L L G V R A V V A E S F E R H R S N L I I G M G V V L P L T F F Q F K E A D R N T A W			
UniRef90UPI000370F123	K G T A L L G V R A V V A E S Y E R H R S N L I I G M G V V L P L T F F Q F K E S A D A W			
UniRef90E7RWE0	K G T Q L L G V K A V V A R S F E R H R S N L I I G M G V V L P L T F F Q F R N N D S W R			
UniRef90Q6F827	K G T N L L G V K A V V A E S F E R H R S N L I I G M G V V L P L T F F Q F I D G Q Q N R S			
UniRef90UPI0002EF9996	K G T N L L G V K A V V A A S Y E R H R S N L I I G M G V V L P L T F F Q F I D G Q Q N R S			
UniRef90W5Y8L5	K G T N L L G V K A V V A E S F E R H R S N L I I G M G V V L P L T F F Q F E S H A S S			
UniRef90UPI000366AF35	K G T N L L G V K A V V A E S F E R H R S N L I I G M G V V L P L T F F Q F K Q N R K S H			
UniRef90UPI000370C569	K G T N L L G V K A V V T E S F E R H R S N L I I G M G V V L P L T F F Q F P E E G E S H			
UniRef90M3ARZ7	L L Q P R F L G A R I I I T K S F A R H E T N L K K Q G V I V P L T F F E N E A D Y			
UniRef90V8CYV7	K G T S L L G V R A V V A Q S Y E R H R S N L I I G M G V V L P L T F F Q F P E E G E S H			
UniRef90D3QD37	K G T N L L G V K T V V A Q S Y E R H R S N L I I G M G V V L P L T F F Q F K D S A D S S			
UniRef90UPI00036A245D	K G T N L L G V K C V V A T S Y E R H R S N L I I Q M G V V L P L T F F Q F K D T A D S S			
UniRef90E5HJM2	K G T N L L G V K C V V A T S Y E R H R S N L I I Q M G V V L P L T F F Q F K D T A D S S			

QUERY	170	180	190	200
UniRef90_C3Y932	H P V D K L T I Q G L K D F A P G K P L T C I I K H P N G T Q E T I L L N			
UniRef90_M3ZX13	D K V Q P S D R I S L V G L N N L A P G S Q V E C I L K H A D G S Q D S I M L N			
UniRef90_U6PQ83	D R I R P D D K I S I T G L K S F A P G K P L T A V I K H C D G S Q E S V S L S			
UniRef90_F4Q312	D K I D S G D Q V S I V G L K K L A P G V P L K M I V K N A G K G N E F E V V L N			
UniRef90_S6E8J0	N K I T G D D I V S I V G L K K L A P G V P L K M I V K N A G K G N E F E V V L N			
UniRef90_A0A024NF41	N R I N P T D K I D I L V G L T T F A P G K D L T M R V H P V E G K P W D A P L T			
UniRef90_V8CY7	N K V K P D D K I V S I V G L N D F A P G K P L K C I L K H A D G K K E E I W L S			
UniRef90_D3QD37	D K V R P D D R V D I L V G L E S F A P G K N L T L V L K H S D G S K E E V P L S			
UniRef90_UPI000366AF35	D K V Q P S D K V S I L V G L N Q F T P G K P L K C I L S H A D G S S D E I L L N			
UniRef90_Q6F827	D K V K P D D R I D I L E G I T E L L A E G S K V T M V A K H K D G S V D R I P L S			
UniRef90_M3ARZ7	S K V K P D D R I D I L E G I T E L L A E G S K V T M V A K H K D G S V D R I P L S			
UniRef90_W5Y8L5	E K V R P D D K V D L I V G L K D L K E G S E V T L R L H H K R D G S T D E F L L N			
UniRef90_E5S932	D R I V L P T D S V S I V G L K D L K E G S E V T L R L H H K R D G S T D E F L L N			
UniRef90_U9UI83	D K I D P L D K V S I V G L T T F A P G K P L K C I L K H R D G S S Y N I L L N			
UniRef90_E9C8Q7	D K I A P S D R V T L K I S G D L A P G K P V T A V L T R A D G S S Y N I L L N			
UniRef90_C5DGA3	D R I N P D D L V D L V G V T E L A P G K P V T M R L K T K S G E T W E T P L N			
UniRef90_X5KH82	D K I Q E D D T I N F L D L D Q F A P G K P L T E F V H A D G S K D I I L A N			
UniRef90_K0KK30	D R I D P T D T V D I I G L T E L A P G K N V T L R L H P K N G E P W E T P L S			
UniRef90_L8H690	D R I S G N D R I T I V G L K D L A P G K P V T L R V T P K E G K P F D V V A N			
UniRef90_R6ED24	D K V R E D D R V S V T G L R E L A P G S K L A V T L R H A D G T Q E T I K A E			
UniRef90_O94136	D K I N P A D K I S I L G L K T L T P G V P L T A K F T K D G S T Y E I K L N			
UniRef90_D2VAQ5	D K V D P T D K L T L H I G G D F Q I G K P V T M T V K K Q N G Q S F D V E L L N			
UniRef90_UPI0002558782	D L I Q E D D V F T F T D L E K F A P N K T L T L E I K H A D G S K D E V T L N			
UniRef90_UPI00047EC4C6	D K V K E D D D N I D I V G L T T F A E G Q P L K M V L N H A D G S K D E V T L N			
UniRef90_UPI0003643C31	D K I Q E E D K I D I L G L D N F S P Q K P L T V V I H H T D G T K E T I L A N			
UniRef90_S7VIF2	D L V Q E D D S I D I V G L D S F A P G K P L T V V L N H K D G S V D K I T V N			
UniRef90_K3W6K0	D K I S G N D K I S I L G L N E F Q P G K Q L T L R V E P A S G A A F E I Q V N			
UniRef90_R6J995	D K I R E H D L L S V S G L V H F A P G R N L M I I L H H E D G T K E S F E V Q			
UniRef90_K9LH07	D K I K E C A S V S T K G V T T L A P G S E L T M H V V Q K D G S E I D I P L N			
UniRef90_S3D1Q9	D K I Q P F D K V D L L A T E I L A V G K P M T L K V H P A D G G A F D V K L S			
UniRef90_UPI000421CD72	D K I Q E D D T I S I I D L V D F A P G K P L T L E F A H H A D G S K D L I L A N			
UniRef90_G8R6W7	D L I Q E D D T F D T V D L D Q F A E D K P I H L K I T H H A D G S S T D D T I K C N			
UniRef90_L2FJQ5	E R I I S S S D R I D I V G I K D F Q P G K N V E A K I T T A G R E S F S I I Q L S			
UniRef90_UPI000477A65D	D L F R Q D D K I S I V D F N E F Q P G K Q L T L R L D H H A D G S S S D T V K T N			
UniRef90_F0R4N2	D K V Q E N D R I S V F G L R E F T P G K P L Q I K L R H A D G S S E D T F E A A			
UniRef90_A4CMX2	D K I Q E D D T F N F T D I R D F A P D K P P L T L E V V I H Q D G S K D T I I K A N K			
UniRef90_11CMQ1	E K I S G G D V I E T V G V K N I A P G K P V Q L I V T K P D G S K I T I I D A K			
UniRef90_G5H5D0	D R I R E D D D R I S V T G L K T F A P G S R M T I T L I H S D G T S E S F E A L			
UniRef90_R5Q4H9	D K I R E K D R I S V L G L S E I A P N K T V V V I E L T H E D G S K E R F E A R			
UniRef90_G7SQQ7	N K I Q E E D T F H F Y I K D F R P K K N I N V E L V H K N G S K E T I I I A Q			
UniRef90_A5FV08	LA L K G D E T I D I V G L E N L S P R M D L D M V I R R A N G T T D K V L L C			
UniRef90_H8MS02	L L G L T G H E T F E I T V G V A D L A P Q K Q K L T V K A T G E K G T I E F T A V C			
UniRef90_A3VKZ6	L N L L T G E E T F T I T V G L E D L L K P L A V L P C T I T Y P D G T T K D I E L C			
UniRef90_B3T9Z8	E L L R V D D R I S I I K G I A D L G P N S K I T V E A K H S D G S T D S F V C S			
UniRef90_H0J5A5	L G L L T G D E E V S I I A G L S D L S P P G G T V Q V V I K N G D G E R T V D A K C			
UniRef90_A9KC13	L K L L E G N E V I D I L T G L E D L Q P G G D V I M T V K R K D G T I E K I P L C			
UniRef90_U9T6I0	E L F F S G G D I I E T V G V V G L E P P G K D I I R V K K H E T D K E F E V V T K			
UniRef90_A0A017SDR8	D R I Q D G D R I R L I G V E E L L Q P G R Q I T T M R V T P R E G E A W E A R L N			
UniRef90_K7CS55	L G L L D G T E T I S I I A G I S D L T P R K T L I M T I T R Q D G T Q Q V P L C			
UniRef90_I6TUM4	K R I T G E E V Y D I I G L K D L Y P G K T I K V I A R K P N G E V I E F T I A			
UniRef90_UPI0003600686	L G L L D G S E Q V A I L S S G I G A I N P R Q D L I D V T I T K S D G S T E T I T L V			
UniRef90_L2G1W1	D K I R D G D K I V T L L D V E E L L Q P G K Q V T M E V V T K E G S R W K A K L			
UniRef90_W3RKH6	L G L L K G D E K V T I T R G L Q D L K P R Q T L S A E I V S S D G N L K R V P L C			
UniRef90_UPI000475EAF9	L G L L K G D E T V S I I E G L A D I K P R E K K I A K V T F A D G T V K D V P L C			
UniRef90_J9HSZ8	L G L L T G R E E T F S I I L G L T E L E P R S T V D V K V E R E D G S S F T F K A N			
UniRef90_UPI00036E6EB9	L K I I T G D E T I I D L S S G I A D I K P G M D V D C R I S R P D D G S V E N I K L C			
UniRef90_UPI00037369FF	L G M T G D E T V V T I T G L E E G L K P R G T L D V N I T L F P D D G K T K T I T A N			
UniRef90_G9Q170	L G L L T G K E T I I D V H I D D N V K P H D I K V T A T D E N G N K K E F E V V			
UniRef90_B2J160	L E L L K G N E E V I T I P G L A E L I K P R Q K M E A Q I K Y A D G S T K T V P L C			
UniRef90_R7IN27	D K I I R E K D R I S V L G L S Q I A P G K T V T I V C K H E D G T E D R F Q A Q			
UniRef90_W1DWK2	L R L L T G E E R I I D I S S N L Q S I I Q P G G A T V V P V T L T R A D G S S Q E A I P C C			
UniRef90_D1BG13	L G L L D G T E T F D I S S G V T V L N D G S T P S T V A T K T D G T S V E F A V V			
UniRef90_A0A031IA86	L G L L D G S E T T V T I T G V A N L R P R Q T V D V T L T R A D G T V E T F A T C			
UniRef90_B9NPT1	L S S L L K G D E T V V S I I H G L D T I Q P L Q E V P C T I V Y G D G T E K T I T L C			
UniRef90_W1K3M2	L G L L K G D E K V T I L R G L V D L K P R Q K Q L T A E I V S G D G S L Q R V L L C			
UniRef90_A8FDR0	E T Y T G T E T F E V H V D E T V P R D L V T V K A I D T D G N E K T F E V V			
UniRef90_A3WE42	L E L L D A D C T F S I I K G L A D L T P Q G T I T E I E A T R G N G T T F T F A L C			
UniRef90_B6AUS8	L G L L T G D E S V S I I S S G L D T I E P L Q E V P C T I T M A D G S V K E I T L C			
UniRef90_A0QX20	L L K L D G T E T Y D I I E G G I E E L I N S G K T P H V T A T K E D G S K V E F A V V			
UniRef90_A0A031MB55	L Q L L D G H E V L D I I P G I D D L R P Q G M L K V T A H H P S G R Q I E F E V C			
UniRef90_R5ZUP5	E K V V K E G D A F T V C S S L A V V G K Q V Q L I D H H A N G E T D T I I W A N			
UniRef90_A1UU78	Q G L L K G D E Q V T I I E G I I N D L I K P R Q K T K A T I T F M D G T V K I M P L C			
UniRef90_F5L6F1	L G I I T G N E T F D I I L G L I D N L I K P G Q T I T V R A T R E D G S S F E F V I V			
UniRef90_L0IX71	L K L L D G T E T F D I I T G I I E A D I N D G K T P K T V H V T A D N T V E F D A V V			
UniRef90_E2CGZ9	H G I I E G T E R V T I K G I I A D I Q P R Q I M N V E V T Y A D G S T K T I E L C			
UniRef90_A0A023X5P1	L G L L D G T E S F T I I R G L E D L I S P G K E L T V E V N G G E K E F K V V A			
UniRef90_A3WK89	E A H T G D E T I S I I K G L K D L K P G Q M L D V V A K G K D G K E V E F Q A C			
UniRef90_D1C8P3	L G L L T G R E V Y E I R G I I A D I K P Q G Q T L I P V R A T R E D G S T F E F V L V			
UniRef90_Q2GBA0	L A L L S G D D D T F T I I K G V A N L Q P R Q D V E V E V T R K D G T K L T F T L C			
UniRef90_Q5P0Q2	L G F V G D E T F D I I K G L I D T L K P Q Q D L S V L V A H R R N G E R I E V P V C			
UniRef90_A5V9X1	L K L L D G T E T F S I I D D V V A G G I R P R Q T V S V K L T R A D G S T E S F E T C			
UniRef90_UPI000370F123	L G L L T G T E T F D I I T G V E A L I N E G G V P S E V T V K A D G R E F T T A V V			
UniRef90_E7RWE0	L G I I K G D E V I D I V V P D E L V P Q Q E I I N M T V R A D G S S F E V L L S			
UniRef90_Q6F827	L K L L T G Q E E I L S I I T G L S D I I Q P H Q S L D I T V K R E D G S T D T F K V K			
UniRef90_UPI0002EF9996	L G L L D G S E T F D I I Q V D E S V K P G D L L D V A A T N D K G E K K E F K V K			
UniRef90_W5Y8L5	L G L L D G T E T F D I I T G I I E E L I N N G Q T V P K T V K V T A D G S S E K V E V C			
UniRef90_UPI000366AF35	L K L L T G K E K I D I I L G L T D I I R P R M N L T L V I T R E D G S S E K V E V C			
UniRef90_UPI000370C569	L G L L D G T E T F D I I T G I I E E L I N E S D T I I P E T V H K E D G N T V E F D A K			
UniRef90_M3ARZ7	D K M A G C D E V S T E G G L Y D V L Q G G G N G K I V K K K D S G E T F K V P V K			
UniRef90_V8CY7	L G L L D G T E V Y D I I S G I I E E L I N N G Q T V K V T A T K D D D G S T I E F D A K			
UniRef90_D3QD37	L G L L D G K E E I S I I D I N E D V K P Q D T V K V H A K K E N G E V V D F A T V			
UniRef90_UPI00036A245D	L G L L D G T E T F D I I H V V D D N V K A Q D E I K V T A T K D A D G E V I E F M T C			
UniRef90_E9UWG9	L G L L T G E E T F S I I S G I I T A L I N E G V T P K T V K V T T D T G I E F D A V V			

QUERY

UniRef90_C3Y932
UniRef90_M3ZX13
UniRef90_U6PQ83
UniRef90_F4Q312
UniRef90_S6E8J0
UniRef90_A0A024NF41
UniRef90_S8F130
UniRef90_J9KAT0
UniRef90_F4R306
UniRef90_M7X6X3
UniRef90_E5S932
UniRef90_U9UI83
UniRef90_E9C8Q7
UniRef90_C5DGA3
UniRef90_X5KH82
UniRef90_K0KK30
UniRef90_L8H690
UniRef90_R6ED24
UniRef90_O94136
UniRef90_D2VAQ5
UniRef90UPI0002558782
UniRef90UPI00047EC4C6
UniRef90UPI0003643C31
UniRef90S7VIF2
UniRef90_K3W6K0
UniRef90_R6J995
UniRef90_K9LH07
UniRef90_S3D1Q9
UniRef90UPI000421CD72
UniRef90_G8R6W7
UniRef90_L2FJQ5
UniRef90UPI000477A65D
UniRef90_F0R4N2
UniRef90_A4CMX2
UniRef90_I1CMQ1
UniRef90_G5H5D0
UniRef90_R5Q4H9
UniRef90_G7SQQ7
UniRef90_A5FV08
UniRef90_H8MS02
UniRef90_A3VKZ6
UniRef90_B3T9Z8
UniRef90_H0J5A5
UniRef90_A9KC13
UniRef90_U9T6I0
UniRef90_A0A017SDR8
UniRef90_K7SCS5
UniRef90_I6TUM4
UniRef90UPI0003600686
UniRef90_L2G1W1
UniRef90_W3RKH6
UniRef90UPI000475EAF9
UniRef90_J9HSZ8
UniRef90UPI00036E6EB9
UniRef90UPI00037369FF
UniRef90_G9Q170
UniRef90_B2IJ60
UniRef90_R7IN27
UniRef90_W1DWK2
UniRef90_D1BG13
UniRef90_A0A031IA86
UniRef90_B9NPT1
UniRef90_W1K3M2
UniRef90_A8FDR0
UniRef90_A3WE42
UniRef90_B6AUS8
UniRef90_A0QX20
UniRef90_A0A031MB55
UniRef90_R5ZUP5
UniRef90_A1UU78
UniRef90_F5L6F1
UniRef90_L0IX71
UniRef90_E2CGZ9
UniRef90_A0A023X5P1
UniRef90_A3WK89
UniRef90_D1C8P3
UniRef90_Q2GBA0
UniRef90_Q5P0Q2
UniRef90_A5V9X1
UniRef90UPI000370F123
UniRef90_E7RWE0
UniRef90_Q6F827
UniRef90UPI0002EF9996
UniRef90_W5Y8L5
UniRef90UPI000366AF35
UniRef90UPI000370C569
UniRef90_M3ARZ7
UniRef90_V8CYV7
UniRef90_D3QD37
UniRef90UPI00036A245D
UniRef90_E9UWG9

	210	220	
H T F N E T Q I	E W F R A G S A L	N R M K E L Q Q K	
H T F N E G Q I	E W F K A G S A L	N R M K E L Q A	
H T F N E T Q I	E W F K A G S A L	N R M K E L Q	
H T F N E Y Q I	E W F K A G S A L	N Y I K K N K K Q	
H T F N E G Q I	E W F K N G S A L	N K I K Q D K A K	
H S F N A A Q I	E W F K A G S A L	N H M K A M K K K	
H S F N E G Q I	E W F K A G S A L	N □ M A A K A K K	
H T F N E Q Q I	Q W F K S G S A L	N R M K Q V A A	
H S F N A G Q I	E W F K A G S A L	N □ M G Q K K K	
H T F N A G Q I	T W H R A G S A L	N H M A K S K K	
H T Y N D □ Q I	E W F K A G S A L	N Y M A A K R K	
H T F N E N Q I	E W F K A G S A L	N R M A E K H Q	
H T F N E G Q I	T W F R A G S A L	N R M A E □ K	
H T F N S E Q I	G W F K A G S A L	N M I T T Q S K K	
H T Y N A G Q I	E W F K A G S A L	N □ I K Q Q G K	
H T Y N A E Q I	E W F K Y G S A L	N K M A A V A A E	
Q T □ N E G Q I	A W W K A G S A L	N □ M G K Q R A	
H T Y N E T Q I	A W F K A G S A L	N Y A K E K Q A	
H T L N E G Q I	E W F K A G S A L	N W I K N K □ N	
H T F S D □ Q I	E W F R A G S A L	N L I K T Q N K	
H S Y N A Q Q I	E W Y K A G S A L	N L I A A Q N A	
H T Y N T A Q I	E W F K A G S A L	N L I I R N Q F S K	
H S Y N A T Q I	E W Y K A G G A L	N L V K E	
H T Y N E G Q I	K W F K A G S A L	N L M K K V N A	
H T F N D E Q I	E W F K N G S A L	N □ M I A N □ Q	
H T Y N E Q Q I	A W F R A G S A L	N M I K E D N K K	
H T M S □ D Q I	E W F K A G S A L	N L M A K R K Q	
H T F N A P Q I	E W F K N G S A L	N K I R E	
H T Y N A G Q I	G W Y □ A G S A L	N □ I A	
H T Y N E G Q I	K W F K A G A A L	N V I K K E N A	
H T M S Q D Q I	G W F K K G S A L	N L I K S □ N	
H T Y N E Q Q I	G W F R A G S A L	N W V V A Q E K	
H S Y N A K Q I	A W W R A G S A L	H F V L R N M A K	
H S Y N Q K Q I	R W F M C G S F I	N F I R Q K	
R V D T R D E V □ Y Y Q N G G I	I L H F V L R N M A K	R V D T R D E V □ Y Y Q N G G I	I L H F V L R N M A K
R I D T P N E L D Y Y R N G G I	Q Y V L R Q L A K	R I D T P N E L D Y Y R N G G I	Q Y V L R Q L A K
R I D T E V E I D Y V A N G G V	H Y V L R N L A K	R I D T E V E I D Y V A N G G V	H Y V L R N L A K
H S M D D L L Q V E W F K A G S A L	N Y L R S K N	H S M D D L L Q V E W F K A G S A L	N Y L R S K N
R I D T V N E L A Y Y R H G G I	I L H Y V L R K M	R I D T V N E L A Y Y R H G G I	I L H Y V L R K M
R I D T Q N E L A Y Y Q H G G I	Q F V L R Q M	R I D T Q N E L A Y Y Q H G G I	Q F V L R Q M
H T M S K D Q I E W F K M G S A L	N L I A N Q R	H T M S K D Q I E W F K M G S A L	N L I A N Q R
H S Y H S G Q I Q W L K A G S A L	N Y I K	H S Y H S G Q I Q W L K A G S A L	N Y I K
R V D T V D E A D Y Y R H G G I	L P Y V	R V D T V D E A D Y Y R H G G I	L P Y V
R V E T P I E V E Y I R H G G I	L K Y A L E L L	R V E T P I E V E Y I R H G G I	L K Y A L E L L
R I D T E N E L D Y Y R N G G I	L H Y V R N L A R E	R I D T E N E L D Y Y R N G G I	L H Y V R N L A R E
H S Y E L N Q I E W L R A G S A L	N Y I K R V A	H S Y E L N Q I E W L R A G S A L	N Y I K R V A
R I D T L D E L E Y F R N G G G	L H Y V R Q L A A	R I D T L D E L E Y F R N G G G	L H Y V R Q L A A
R I D T L D E L T Y V N N G G G	L Q T V R D L A A	R I D T L D E L T Y V N N G G G	L Q T V R D L A A
R I D S D L I E V E Y Y R N G G G	L N F V R E E Q Q	R I D S D L I E V E Y Y R N G G G	L N F V R E E Q Q
R I D T A D E V E Y Y R H G G G	L H Y V R N L M N	R I D T A D E V E Y Y R H G G G	L H Y V R N L M N
R I D T D N E H E Y F K H G G G	L H Y V R N L A A E	R I D T D N E H E Y F K H G G G	L H Y V R N L A A E
R F D S E V E L D Y Y R H G G G	L Q M V L R R K	R F D S E V E L D Y Y R H G G G	L Q M V L R R K
R I A T L D E L E Y F N N G G G	L P Y V R Q L A A	R I A T L D E L E Y F N N G G G	L P Y V R Q L A A
H S Y N A K Q L T W F R A G S A M N A L		H S Y N A K Q L T W F R A G S A M N A L	
R I D T A T E T L T Y Y R N D G I	L H Y V	R I D T A T E T L T Y Y R N D G I	L H Y V
R I D T P G E A D Y Y R N G G I	L Q Y V R S L V Q K	R I D T P G E A D Y Y R N G G I	L Q Y V R S L V Q K
R I D T V N E L E Y Y F I N G G I	L Q Y V R N L A A	R I D T V N E L E Y Y F I N G G I	L Q Y V R N L A A
R I D T A P E I E Y I E N G G G	V L H Y V R N L A K	R I D T A P E I E Y I E N G G G	V L H Y V R N L A K
R I D T L D E L D Y Y R N G G G	L H Y V R K L A A	R I D T L D E L D Y Y R N G G G	L H Y V R K L A A
R F D S E V E D Y Y R H G G G	L Q M V R E K L A	R F D S E V E D Y Y R H G G G	L Q M V R E K L A
R I D T A N E M E Y Y R N G G G	L H Y V R K L A A	R I D T A N E M E Y Y R N G G G	L H Y V R K L A A
R I D T A I E I E Y I E H G G G	V L H Y V R D L A A	R I D T A I E I E Y I E H G G G	V L H Y V R D L A A
R I D T P G E A D Y Y R N G G G	L Q Y V R N M L K	R I D T P G E A D Y Y R N G G G	L Q Y V R N M L K
R I D T G N E V D Y F K A G G G	L H Y V R D L L A E	R I D T G N E V D Y F K A G G G	L H Y V R D L L A E
H T Y N N L Q I A W F K A G S A L		H T Y N N L Q I A W F K A G S A L	
R I D T E D E L D Y □ H H G G I	L Q Y V	R I D T E D E L D Y □ H H G G I	L Q Y V
R L D S V V D I E Y Y R N G G G	L Q K V L R Q M	R L D S V V D I E Y Y R N G G G	L Q K V L R Q M
R I D T P G E A D Y Y R N G G G	L Q Y V R N M L K	R I D T P G E A D Y Y R N G G G	L Q Y V R N M L K
R V D T E D E L E Y Y I K A G G G	L H Y V	R V D T E D E L E Y Y I K A G G G	L H Y V
R V D S P V E V E Y L R N G G G	L Q T V R E L L K E	R V D S P V E V E Y L R N G G G	L Q T V R E L L K E
R I D T S N E M K Y Y K N G G G	L H Y V R Q M L E K	R I D T S N E M K Y Y K N G G G	L H Y V R Q M L E K
R I D S P T E V E Y Y R H G G G	L P M V	R I D S P T E V E Y Y R H G G G	L P M V
R I D T A N E V E Y Y F M N G G G	L H Y V R K L A	R I D T A N E V E Y Y F M N G G G	L H Y V R K L A
R I D T P V E V D Y Y R H G G G	L S Y V R E I L G R	R I D T P V E V D Y Y R H G G G	L S Y V R E I L G R
R I D T V N E L E Y F □ N G G G	L Q Y V R K L A A	R I D T V N E L E Y F □ N G G G	L Q Y V R K L A A
R I D T P G E A D Y Y R N G G G	M Q Y V R N L L R K	R I D T P G E A D Y Y R N G G G	M Q Y V R N L L R K
R I D T A I E V D Y Y L H G G G	L P F V R E L M A	R I D T A I E V D Y Y L H G G G	L P F V R E L M A
R F D S E V E V D Y Y R H G G G	L Q L V R N K L K	R F D S E V E V D Y Y R H G G G	L Q L V R N K L K
R I D T P G E A D Y Y R H G G G	L Q Y V L R Q M A	R I D T P G E A D Y Y R H G G G	L Q Y V L R Q M A
R I D T L N E V E Y F K A G G G	L H Y V	R I D T L N E V E Y F K A G G G	L H Y V
R F D S E V E V D Y Y R H G G G	L Q L V R N M V K	R F D S E V E V D Y Y R H G G G	L Q L V R N M V K
H T F S P D Q K S F I L A G S A L	N L L A K K G Q	H T F S P D Q K S F I L A G S A L	N L L A K K G Q
R I D T P G E A E Y Y R N G G G	L Q Y V	R I D T P G E A E Y Y R N G G G	L Q Y V
R F D S L V E L D Y Y R H G G G	L Q M V R N K L A Q	R F D S L V E L D Y Y R H G G G	L Q M V R N K L A Q
R I D T P V E V D Y Y R N G G G	L H T V	R I D T P V E V D Y Y R N G G G	L H T V
R I D T P G E A N Y Y R N G G G	L Q Y V	R I D T P G E A N Y Y R N G G G	L Q Y V

		50	60	70	80
UniRef90_W6UTL5	H	S A A G P W L K F R G H L D N I S N N M F I G A V N S E N G E M N R V C H R			
UniRef90_A0RTP9	H	S P A G A W L A Y R G H L D H L S D N M L L G A V S A Y H N E V G K G K N L			
UniRef90_S2VW88	H	S P A G S Y L V D N G V E R R D F N S Y G S R R G N H E V M I R G T F A N G			
UniRef90_UPI0004096508	H	S P A G A Y L Q D K G V S P R N F N S Y G S R R G N H E V M M G G Y T T Y W			
UniRef90_UPI00037CA516	H	S P A G K Y L I E H G V K K E D F N S Y G S R R G N H E V M M R G T F A N I			
UniRef90_D6RJV2	H	S P A A G P W L K Y K G H L T N I S E N L L I T A I N D E G E M N V I A F D K			
UniRef90_W7Z5P6	H	S P A G N Y L K D H G V E R K D F N S Y G S R R G N H E V M M R G T F A N I			
UniRef90_UPI000380A816	H	S P A S S Y L D S M G V E R K D Y N S L G A R R G N H E V M V R G T F A N D			
UniRef90_H3SKE1	H	S P A G E Y L I A N G V Q R K D F N S Y G S R R G N H E V M M R G T F A N I			
UniRef90_D2TZE4	H	S P A G H Y L Q S H G V Q A K D F N S Y G S R R G N H E V M M G G F T R Y I			
UniRef90UPI00030C0F71	H	S P A G S I K C R R G N H E I M M R G T F A N I R I R N E M M M G G I E G G			
UniRef90UPI00047E5B1	H	S P A G S Y G S R R G N H E V M M R G T F I R N E M V P G T E G G Y T R H			
UniRef90UPI00037B77D4	H	S P A G S Y L Q A N G V E V K D F N S Y G S R R G N H E V N Q I A P G T E G G			
UniRef90_G4SWU4	H	S P A G Q Y L L E K G V E R K D W N S Y G S R R G N D Q V M C G N V T L H H			
UniRef90UPI000422A8BE	H	S P A G S Y L A D H G V E R K D F N S Y G S R R G N H E V M I R G T F A N G			
UniRef90_M1C0L7	H	S P A G S Y L M E H G V Q R R D F N S Y G S R R G N D N G E V G P K T I H			
UniRef90_V9D4Y3	T	S A A G P W L K Y K G H L P N I A E N T L I G A I N A A T G E T N V A Y D			
UniRef90_M2LSR4	T	S A A G P W L K Y K G H L P N I S E N T L I G A I S A D T E A V N T V T D			
UniRef90_A0A022LJZ1	H	T P A A Q Y L D A N G V A R Q D Y N S F G S R R G N H E V M I R G T F A N D			
UniRef90_F5SJ7D	H	S P A G A Y L K E H G V Q P R D F N S Y G S R R G N D R V M T G G F T K H V			
UniRef90_I3YA42	H	S P A G S I K P N R R G N H E V M M R G T F I L R N L M A P G T E G G V T L H Q			
UniRef90_X5MCU1	H	S P A G S I K S R R G N H E V M M R G T F I K N Q M V P G V E G G V T V H			
UniRef90UPI00047DA12D	H	S P A G A F L Q S K G V A P P D F N S Y G S R R G N D D V M V R G T F A N I			
UniRef90_D5AV98	H	S P A G S Y L T E R G V A P Q D F N S Y G S R R G N H E V M M R G T F A N G			
UniRef90_C3X7G3	H	S P A G S Y L V M M R G T F G N N K N Q M L P V G P D G S R R E G G Y T L Y Q			
UniRef90UPI0002FAE277	H	S P A G S Y G S R R G N H E V M M R G T F I R N Q L A P G T E G G Y T T Y W			
UniRef90UPI000225AC62	H	S P A G S I K K R R G N H E V M M R G T F I L A N E M V P E K T G G Y T R T G			
UniRef90UPI00037ED020	H	S P A S A Y L D A H G V D R R D Y N S L G S R R G N H E V M V R G T F A N D			
UniRef90_W9RLC6	H	S P A G S Y L L E R G V D R K D F N S Y G S R R G N D N G E V G P K T V H			
UniRef90_U4LV71	H	S A A G A W L K Y K G H L E N I A N N T L I G A M N A E T G E T N V A Y D			
UniRef90_G3NA55	H	S P A G R H L T N R G L S P R D Y N S Y G S R R G N F I N K Q A P Q T I Y L			
UniRef90_I8J4Y3	H	S P A G A Y L M D N G V E P R E F N S Y G S R R G N H E V M M G G W T T Y W			
UniRef90_C0HEA9	H	S P A G K Y L K E R G V E R K D F N S Y G S R R G N D K G E V G P K T I H V			
UniRef90_D0JA66	H	S M A G P W L K Y R G H L E K I S E N L L M G A V N A F N H K R N K I K N V			
UniRef90_A9QPH6	H	S P A G S Y L S S L G V P F K D F N S Y G S R R G N H H G K E G G Y T R H M			
UniRef90UPI00047A96CF	H	S P A G R F L I G K G V E P K D F N S Y G S R R G N D D V M E G G Y T L H V			
UniRef90_S4PXJ9	H	S P A G R F L A D R G L T P R E F N S Y G S R R G N D A V M P G P R T V H H			
UniRef90UPI0004084780	H	S P A G S Y G S R R G N H E V M M R G T F I K N Q L A P G T E G G Y T T Y W			
UniRef90UPI000401612F	H	S P A G R F L M E R G V Q P A D F N S Y G S R R G N D D V M V R G T F A N I			
UniRef90_F7RX73	H	S P A G A Y L L Q E Q G V A V E D F N S Y G S R R G N H E V M M G G V T R H M			
UniRef90_W1INT0	H	S P A G R Y L Q E H G V A P Q D F N S Y G S R R G N H E V M M G G Y T R H			
UniRef90_E6U1N8	H	S P A G S Y L T E N G V A R A D F N S Y G S R R G N H E V M I R G T F A N G			
UniRef90UPI0003716427	H	S P A G S Y L T E N G V A R A D F N Q F G T R R G N H K G R K G G Y T I H Y			
UniRef90_E4UCL2	H	S P A G H Y L L Q Q G I E E N D F N Q F G T R R G N H K G R K G G Y T I H Y			
UniRef90_G2QSM0	T	S A A G P W L A Y K G H L P N I S A N T L Q T A V N A E T G E V N A A Y H L			
UniRef90_Q8PWP8	H	S P A G R Y L M S W G V D Q K D F N S Y G S R R G N H E V M M R G T F A N I			
UniRef90_Q5K7P0	H	S A A G A W L K Y K G H L S N I S E N T L L M T A V N D E G G Q I N V A R D A			
UniRef90_G2J5A1	H	S P A G S Y L L A E G V T K C D F N S Y G S R R G N H E V M I R G T F A N V			
UniRef90_D5BSS1	H	S P A G S F L T E H Q V R P V D F N S Y G S R R G N H K V M M G G F A Q H V			
UniRef90_H3C189	H	S P A G R Y L T S R G L S P R D Y N S Y G S R R G N D A N K Q A P Q T L H			
UniRef90_D2EFL8	H	S P A G S Y L L K K G V K L E D F N T Y G S R R G N H E V M M G G Y T I Y M			
UniRef90_H2AWK1	H	S A A G V W L K Y K G H L E N I S Y N T L I G A Q N K E T G E V N K V Y D			
UniRef90_U2ZEK6	H	S P A G A Y L T E H G V D P L D F N S Y G A R R G N H E V M M G G V T K H F			
UniRef90UPI0004236283	H	S P A G S I K S R R G N H E V M V R G T F A N I R L R N Q L A P G T E G G			
UniRef90_A0A015M1J4	H	S P A G S Y G S R R G N H E V M M R G T F I R N Q V A P G T E G G V T K Y L			
UniRef90_A7AQ97	H	S P A G K F L M D A G V E P K D F N S Y G S R R G N D E I M V R G T F A N H			
UniRef90_E1AI5	H	S P A G S Y L I E R N V E T K D F N S Y G S R R G N H E V M I R G T F A N G			
UniRef90UPI000404EFCE0	H	S P A G S Y L L A N G V E R K D F N S Y G S R R G N H E V M I R G T F R T R H			
UniRef90_K1PUM5	H	S P A G R Y L G N R G L T P R E F N S Y G S R R G N D A V K A G P R T R H			
UniRef90_C7NI83	H	S P A G A Y L L Q E H G V E R K D F N S Y G S R R G N H E V M I R G T F G N I			
UniRef90UPI0004125BE4	H	S P A G A Y L T E H G V E R K D F N S Y G S R R G N H E V M I R G T F A N I			
UniRef90_L7VSL2	H	S P A G K Y L E E R G V D P K D F N T Y G A R R G N D E V M V G P Q T T Y L			
UniRef90_M4UH12	H	S P A G S Y L L A N G V L K A D F N S Y G S R R G N H E E V M M R G T F A N Q			
UniRef90_W9GDE2	H	S P A G A Y L L A E H G V E R K D F N S Y G S R R G N H E E V M I R G T F A N I			
UniRef90UPI00035D9521	H	S P A G S Y L R D N S V A D S D F N S Y G S R R G N H E E V M M R G T F G N I			
UniRef90UPI00037A4466	H	S P A G A Y L L Q E Q G V V P A D F N S Y G S R R G N H E E V M M R G W T T F F			
UniRef90UPI00036F2494	H	S P A G A Y L R S K G V E P R D F N S Y G S R R G N H E E V M M R G T F A N W			
UniRef90_D8PMR8	H	S A A G P W L K Y K G H L T N I S E N L L I T A T N D E L D A V N A A V D P			
UniRef90_U2JGH2	H	S P A G K Y L L Q E Q G V D Y K D F N S Y G S R R G N H H Q V M M R G T F W T K			
UniRef90_E8NEZ7	H	S P A G Q Y L L M E H G V A Q K D F N S Y G S R R G N H E V M I R G T F A N D			
UniRef90_B3R574	H	S P A G S Y L L S H G V L K A D F N S Y G S R R G N H E E V M M G G I T I H Q			
UniRef90_N0DPW6	H	S P A G K Y L L E E H G V D P K D F N T Y G A R R G N D E V L V G P Q T T H			
UniRef90_K7RSS6	H	S P A G A W L S E Q G V A R K D F N S Y G S R R G N H E E V M M R G T F A N G			
UniRef90UPI000363E649	H	S P A G A Y G S R R G N H E I M M R G T F A N V R N G T L Y E G G D T I H K			
UniRef90_E5ASP4	H	S P A G R W L K I E N G V Q K A D F N S Y G S R R G N H D V M M G G L T I H Q			
UniRef90_J6XX65	H	S P A G A Y L L A S Q G Q V G R R D F N S Y G S R R G N H R N Q V A P G T E G G			
UniRef90_B9UNL8	H	S P A G R Y L L A A R G L T P R E F N S Y G A R R G N D D D K P G P R T L H			
UniRef90_D8D3U3	H	S P A G S W L L E H G V Q K A D F N S Y G S R R G N H E E V M M R G T F A N V			
UniRef90_J4HWS9	H	S A A G P W L K Y K G H L T N I S E N L L I T A T N D E G D V N V I A F D H			
UniRef90_B3CMS5	H	S P A G N Y L L K G I V E P Q D F N S Y G S R R G N H N V M M G G Y T K H I			
UniRef90_W0P975	H	S P A G R W L N D H G I L M K A D F N S Y G S R R G N H E I M M G G E T L H Q			
UniRef90_L7VZH4	H	S P A G S I L K C R R G N H E V M V R G T F I R N R M T P E I E G G A T V H			
UniRef90_U6GZ96	H	S P A G K Y L Q S R G V V E R K D F N T Y G S R R G N D E V M V G P K T L H			
UniRef90_C1AS64	H	S P A G T Y L R E H G V E P P D F N S Y G S R R G N H E E V M I G G V T R H L			
UniRef90_J9I297	H	S P A G R F L K D K G V Q P V D F N T Y G A R R G N F M D N V G P Q T V H V			
UniRef90_W0P8N7	H	S P A G A Y L T E H G V V A P K D F N S Y G S R R G N H E E V M I R G T F A N V			
UniRef90UPI00036B488D	H	S P A G R Y L D E H G V V D Y A D F N S Y G S R R G N H E E V M M R G T F A N Y			
UniRef90_I1VH49	H	S P A G R Y L T S R G V V A A R E F N S Y G S R R G N D V G K P G P K A V H V			
UniRef90UPI0003608313	H	S P A G S W L L D N G V V A K A D F N S Y G S R R G N H E E V M M R G T F A N Q			
UniRef90_S5SUJ4	H	S P A G A Y L L D A N G V V E R K D Y N S F G S R R G N H E E V M V R G T F A N D			
UniRef90_R7UC16	H	S P A G R Y L L A A R G L T P R E F N S Y G S R R G N F I G K A A P K T A H			
UniRef90UPI00035E0C4D	H	S P A G K Y L L A E H G I E R G D F N S Y G S R R G N H E E V M I R G T F A N I			

	90	100	110	120
UniRef90_W6UTL5	P S G E W D T [V P A V A R R Y K A A G	[V P W V V V G D [V N Y G E G S S R E H A A		
UniRef90_A0RT9P	L] T G E M A P Y H K V A R A Y M K A G I R	W V I I G D G N Y G E G S S R E H A A		
UniRef90_S2VW88	Y T R D F T T [V Y E A A Q N Y R E A G V P	L V V L L G G K E Y G S G S S R D W A A		
UniRef90_UPI0004096508	P T G E [V M P I Y D A A M K Y Q E E G T G	L V V I I A G K E Y G T G S S R D W A A		
UniRef90_UPI00037CA516	D T G T T G T I P E V A K R F K A R N Q P	W A I I V D E N Y G E G S A R E H A A		
UniRef90_D6RJV2	R T D E [V M S I Y D A S M K Y Q Q S G T N	L I V I I A G K E Y G T G S S R D W A A		
UniRef90_W7Z5P6	R T D E [V M S I Y D A S M K Y Q Q S G T N	L I V I I A G K E Y G T G S S R D W A A		
UniRef90_UPI000380A816	F T Q E G A P Q Y D A A Q N Y K A A G T P	L V V L L G G K E Y G T G S S R D W A A		
UniRef90_H3SKE1	R I R N Q M S I Y D A S M K Y Q G E N T N	L V V I I A G K E Y G T G S S R D W A A		
UniRef90_D2TZE4	P T Q T Q L A I Y D A A M Q Y Q Q N K I P	L A I I I A G K E Y G S G S S R D W A A		
UniRef90_UPI00030C0F71	N T M E S L P I Y E A A M R H K A A G T P	L I I I M A G K E Y G T G S S R D W A A		
UniRef90_UPI00047E5B1	P S Q E I L A I Y D A A M A R Y Q R E V P	L A V I I A G K E Y G S G S S R D W A A		
UniRef90_UPI00037B77D4	Y T R D F T Q P Y D A S [V N Y A A G T P	L V V L L A G K E Y G S G S S R D W A A		
UniRef90_G4SWU4	P S G E R M T F F D A A M K Y K E S G M P	L C I I L A G K E Y Y G S G S S R D W A A		
UniRef90_UPI000422A8BE	H T R D F S Q D Y D A A Q N Y A E Q N T P	L V V L L A G K E Y Y G T G S S R D W A A		
UniRef90_M1C0L7	P T G E K [L Y V Y D A A M R Y K S E G H	D T I I V V A G A E Y G S G S S R D W A A		
UniRef90_V9D4Y3	T D G A A S S I I P E L A K K W K A K G Q H	W L V V A E D N Y G E G S A R E H A A		
UniRef90_M2LSR4	F D G S S S H T I P D L A K K W K S E S Q P	W I V V A E H N Y G E G S A R E H A A		
UniRef90_A0A022LJZ1	F T Q E G A P Q Y D A A Q N Y A A Q G T P	L V V L L G G K E Y Y G T G S S R D W A A		
UniRef90_F5SJ7	P S G E T M A I Y D A A M K Y K E E N T P	L V V L L A G K E Y Y G T G S S R D W A A		
UniRef90_I3YA42	P S G E P P M S I Y D A A M A R Y E S E G T P	V I V I I A G K E Y Y G S G S S R D W A A		
UniRef90_X5MCU1	P S G D G M P I Y D A A M K Y A E S G N K	L V V V F G G G K E Y Y G T G S S R D W A A		
UniRef90_UPI00047DA12D	N P P E K M S I Y D A A M K Y K A D G T P	L V V V L A G H E Y Y G T G S S R D W A A		
UniRef90_D5AV98	P D G V Q T S I Y D A S M A Y Q A A N I P	L V I I F G G G E Y Y G A G S S R D W A A		
UniRef90_C3X7G3	P G G E E T S F D A A M A R Y Q K E N V P	T I V V G G E E Y Y G T G S S R D W A A		
UniRef90_UPI0002FAE277	P T G E T M S I Y D A C [C M R Y K E D N T P	L I V V M G G K D Y G M G S S R D W A A		
UniRef90_UPI000225AC62	A N S E I V S I Y D A A M A Y Q N Q G T P	L V V I I A G K E Y Y G T G S S R D W A A		
UniRef90_UPI00037ED020	F T K E G G P Q Y D A A V N Y R E A G I P	L V V L L G G K E Y Y G S G S S R D W A A		
UniRef90_W9RLC6	P T G E K [L Y V F D A A T R Y K S A G H	D T I I I L A G A E Y Y G S G S S R D W A A		
UniRef90_U4LV71	F D G S S S M G I P E L A R K W Q K E G K E	W L V V A E N N Y G E G S A R E H A A		
UniRef90_G3NA55	P T G E T L D V F D A A D R Y Q Q A G I P	L M V L L A G K E Y Y G S G S S R D W A A		
UniRef90_I18J4Y3	P E D K A M S I Y D A A M K Y K E Q Q G T P	L M V I I A G K D Y G M G S S R D W A A		
UniRef90_C0HEA9	P S G E K [L A V F D A A M A M K Y K N E G	H D T I I I L A G A E Y Y G S G S S R D W A A		
UniRef90_D0JA66	I T G D Y G K V S D I A K F Y K S R N I S	T L I V G E E N Y G E G S S R E H A A		
UniRef90_A9QPH6	P D G K E M S I Y D A A M L Y Q E E K K V P	L I V L L A G K E Y Y G S G S S R D W A A		
UniRef90_UPI00047A96CF	P S G E Q L A I Y D A A M K Y K A E H T P	L P L V V L L A G K E Y Y G T G S S R D W A A		
UniRef90_S4PXJ9	P S Q V Q V M D I F D A A D R Y Q A E N V P	L I A I V G K D Y G S G S S R D W A A		
UniRef90_UPI0004084780	P T G E V M A I Y D A C [C M K Y K E Q D T G	L V V V L A G N D Y G M G S S R D W A A		
UniRef90_UPI000401612F	R Q P E K [L A I Y D A A M K Y K A A G V P	L V V V F A G K E Y Y G T G S S R D W A A		
UniRef90_F7RX73	P S G D E M S I Y D A A M R Y Q N D K T P	L V V V L A G K E Y Y G T G S S R D W A A		
UniRef90_W1INT0	P S Q T Q L A I Y D A A M R Y Q E E K K P	L A I I A G K E Y Y G S G S S R D W A A		
UniRef90_E6U1N8	P T G E T T M A I Y D A C [C M K Y K E E G T G	L V V V L A G N D Y G M G S S R D W A A		
UniRef90_UPI0003716427	F T R D F S P I Y D A S [V N Y Q A A G I P	L V V I L L A G K E Y Y G S G S S R D W A A		
UniRef90_E4UCL2	P S K E E V F I Y D A A M R Y K A D K I P	L V V V F A G S E Y Y G N G S S R D W A A		
UniRef90_G2QSM0	A G G A R T T I P E L A R R W R D R R V P	W L V V A E H N Y G E G S A R E H A A		
UniRef90_Q8PWP8	R C G E G M P I Y D A S L L Y A E N N V P	L I V I V A G K E Y Y G T G S S R D W A A		
UniRef90_Q5K7P0	G G E E D T I P K T M Q K Y K A R E E P	W M L V V D D N Y G E G S A R E H A A		
UniRef90_G2J5A1	F D G H Q T T V Y D A A M K Y C H R G T P	T M V F A G E E Y Y G T G S S R D W A A		
UniRef90_D5BSS1	P S G D D V A P L Y D V A M R Y A D E G T A	L I V I V G G K E Y Y G T G S S R D W A A		
UniRef90_H3C189	P S G E T L D V F D A A E R Y Q Q A G V P	L I V V L A G K E Y Y G S G S S R D W A A		
UniRef90_D2EFL8	P S K E K M F I Y D A A M K Y K E S K T P	L V V V F A G I E Y Y G S G S S R D W A A		
UniRef90_H2AWK1	I D G K P Y D I P G L M I K W K N E N R P	W T V L A E H N Y G E G S A R E H A A		
UniRef90_U2ZEK6	P S G D T M S I Y D A A M R Y Q A E G R P	L V V V F A G K E Y Y G T G S S R D W A A		
UniRef90_UPI0004236283	W T R D F T T I Y D A A Q H Y A E S G T P	L V V V F A G K E Y Y G T G S S R D W A A		
UniRef90_A0A015M1J4	P T D E V M S I Y D A S M K Y Q A Q G T N	L V V I I A G K E Y Y G M G S S R D W A A		
UniRef90_A7AQ97	P T G E V L S I F D A S E K Y K Q Q G T P	L V V V V A G K E Y Y G S G S S R D W A A		
UniRef90_E1AI15	P T G E V V M S I Y D A A M K Y K Q Q G T P	L I I I L A G N A Y Y G N G S S R D W A A		
UniRef90_UPI000404EFCE0	F T R D F T Y V Y D A S Q N Y Q Q A A G T A	L V V V L A G K E Y Y G S G S S R D W A A		
UniRef90_K1PUM5	L S G D E M D I F D A A E R Y Q K E G R Q	V I I I L A G K E Y Y G S G S S R D W A A		
UniRef90_C7NI83	R L K I E Q T T I F E A S E A Y Q E A G V P	L V V V L A G A E Y Y G T G S S R D W A A		
UniRef90_UPI0004125BE4	R L R E Q A F I Y D A A Q N Y A K A Q T P	L V V V L A G K E Y Y G S G S S R D W A A		
UniRef90_L7VSL2	P T G Q S S M F I S D A A E K Y K K E G H S	L I V I V A G A D Y Y G S G S S R D W A A		
UniRef90_M4UH12	P S G E Q Q M S I Y D A A M K Y I A A D T P	T V V F G G E E Y Y G T G S S R D W A A		
UniRef90_W9GDE2	R L K I E Q T T I Y D A S Q A Y Q A A G V P	L V I I L S G K E Y Y G S G S S R D W A A		
UniRef90_UPI00035D9521	R I R E P M F I Y D A A M D Y Q A K G V A	T V V V A G K E Y Y G T G S S R D W A A		
UniRef90_UPI00037A4466	P T D E R T S I Y D A A M R Y K E A D T P	L V V V L A G K E Y Y G S G S S R D W A A		
UniRef90_UPI00036F2494	P T G E V V M P I Y D A C [C M K Y Q E Q G T G	L V V V L A G K D Y G M G S S R D W A A		
UniRef90_D8PMR8	V S N T Q D T I P E T A K R L R D R G Q P	W A L I V D E N Y G E G S A R E H A A		
UniRef90_U2JGH2	Y Q G Q V I P I Y D A A M N Y Q Q A G I A S	L V I I L A G K E Y Y G E G S A R E H A A		
UniRef90_E8NEZ7	F T Q E G G P Q Y D A S Q N Y Q Q A Q G T P	S L V I I A G K D Y G M G S S R D W A A		
UniRef90_B3R574	P T G E Q Q M S I Y D A A M K Y V A E G T P	T I V V F G G E E Y Y G T G S S R D W A A		
UniRef90_N0DPW6	P S G E V L Y V S E A A Q K Y I L A N G S P	L I V V L A G A D Y Y G S G S S R D W A A		
UniRef90_K7RSS6	F T R D F T T V F D A S M H Y Q E A G V P	L V V V L L G G K E Y Y G S G S S R D W A A		
UniRef90_UPI000363E649	P S G A Q M P I Y N A A M R Y L S D G V P	T V V F G G K E Y Y G T G S S R D W A A		
UniRef90_E5ASP4	P S G E Q T S I Y D A A I K Y I A E G T P	T I V V F A G E E Y Y G T G S S R D W A A		
UniRef90_J6XX65	F T R D F T T V Y D A A Q N Y A A A G I P	L V I I L A G K E Y Y G S G S S R D W A A		
UniRef90_B9UNL8	P S G E E M D I F D A A E R Y R R E G V P	L V I I L A G K E Y Y G S G S S R D W A A		
UniRef90_D8D3U3	R I K E K K M A I Y D A A M K Y Q A A G R A	T V V L A G E E Y Y G T G S S R D W A A		
UniRef90_J4HWS9	D H T E T D T I P G V A K R F K A R K Q P	W A L I V D E N Y G E G S A R E H A A		
UniRef90_B3CMS5	P S Q E T M S I F D A A M Q Y K R E A V P	L V V V I I A G K E Y Y G T G S S R D W A A		
UniRef90_W0P975	P S G E Q Q M S I Y D A A M K Y I D D G V S	T I V V F G G E E Y Y G T G S S R D W A A		
UniRef90_L7VZH4	P D A T P M S I Y D A A E K Y A A E G V P	L V V V L A G K E Y Y G S G S S R D W A A		
UniRef90_U6GZ96	P S N E V L P V S D A A E R Y R A E G H Q M	I V M I V L A G K E Y Y G S G S S R D W A A		
UniRef90_C1AS64	P D G Q E E M S I F H A A N A Y A A E G T A	I L I I L A G A E Y Y G S G S S R D W A A		
UniRef90_J9I297	P S G Q K M A V W D A A E K Y M K E G K D T	I I I I L A G Q E Y Y G S G S S R D W A A		
UniRef90_W0P8N7	R D E P V T S I F E A S R A Y I E K G I P	L V I I L A G K E Y Y G S G S S R D W A A		
UniRef90_UPI00036B488D	Y K G E L M P I Y D A A M A R Y D E N G T L	V I I I L A G K D Y G M G S S R D W A A		
UniRef90_I1VH49	P S R E T M D V F D A A E K Y E A D G R Q	V I I I L A G K E Y Y G S G S S R D W A A		
UniRef90_UPI0003608313	P S G E K M F I Y D A A M R Y M A E G T P	L V I I F A G E E Y Y G T G S S R D W A A		
UniRef90_S5SUJ4	F T Q E G G P Q Y D A S Q N Y Q Q E A D I P	L V V V L L G G K E Y Y G S G S S R D W A A		
UniRef90_R7UC16	P S G E V V M D V F D A A Q R Y M D D D K T P	V I I I L A G K E Y Y G S G S S R D W A A		
UniRef90_UPI00035E0C4D	R N G R Q A T I Y D A S C A Y I K V G V P	L V I I L A G K E Y Y G S G S S R D W A A		

	130	140	150	160
UniRef90_W6UTL5	L E P R H L G G R A I I	V K S F A R I	H E T N L K K Q G M L	P L T F V N P E D Y
UniRef90_A0TRP9	M S P R H L G C A A V I	A R S F F A R I	H E T N L K K Q G I L	L A L V F S D P A D Y
UniRef90_S2VW88	K G T S L L G V K A V I	T E S F F E R I	H R S N L I G M G V M P	L Q F P E T A D S
UniRef90_UPI0004096508	K G T N L L G I K M V I	A E S F F E R I	H R S N L V G M G V L P	L E F F E Q S A E K
UniRef90_D6RJV2	K G T F L L G V K A V I	A E S F F E R I	H E T N L K K Q G V L P	L W F A D K N D Y
UniRef90_W7ZP6	L Q P R F Y G C A M I I	A R S F F A R I	H E T N L K K Q G V L P	L Q F F Q E E G H G W
UniRef90_UPI000380A816	K G T Y L L G V K A V I	A E S F F E R I	H R S N L I G M G V L P	L Q F F P E G E S W
UniRef90_H3SKE1	K G T Y L L G V K A V I	A E S F F E R I	H R S N L I V G M G V L P	L Q F F Q E E G H S W
UniRef90_D2TZE4	K G T L L L G I R V V I	A E S Y F E R I	H R S N L I V G M G V L P	L E F F P A N V N R
UniRef90_UPI00030C0F71	K G T A L L G I R A V I	A E S F F E R I	H R S N L V G M G V L P	L Q F F P E T A A S
UniRef90_UPI000478E5B1	K G P S L L G V R V V I	A E T F F E R I	H R S N L I G M G V L P	L Q F F P E G E S A Q S
UniRef90_UPI00037B77D4	K G T A L L G V R A V I	A E S Y F E R I	H R S N L I G M G V L P	L Q F F P E G E S H
UniRef90_G4SWU4	K G P F M Q G V K A V I	A E S Y F E R I	H R S N L I G M G V L P	L Q F F P E S A D S
UniRef90_UPI000422A8BE	K G T S L L G V K A V I	T E S F F E R I	H R S N L I V G M G V V P	L S F K E D A E T
UniRef90_M1C0L7	K G P M L L G V K A V I	A K S F F E R I	H R S N L V G M G V L P	L T F V D K A D Y
UniRef90_V9D4Y3	L Q P R Y L G G Q I I I	A K S F F A R I	H E T N L K K Q G V V P	L T F A D E A D Y
UniRef90_M2LSR4	L Q P R Y L G C R I V V	A K S F F A R I	H E T N L K K Q G V V P	L T F A D E A D Y
UniRef90_A0A022LJZ1	K G T S L L G V K A V I	T E S F F E R I	H R S N L I G M G V M P	L Q F F P E G E S H
UniRef90_F5SJ7D	K G T N L L G V K A V I	A E S Y F E R I	H R S N L V G M G V L P	L Q F F E E G D S S W
UniRef90_I3YA42	K G P R L L G V R A V I	A E S Y F E R I	H R S N L V G M G V L P	L E F F V E N A Q S
UniRef90_X5MCU1	K G T K L L G V E A V I	V E S F F E R I	H R S N L V G M G V L P	L Q F F D G M S S W
UniRef90_UPI00047DA12D	K G T N L L G V K A V I	A A S F F E R I	H R S N L I V G M G V L P	L Q F F H D D N A Q T
UniRef90_D5AV98	K G T N L L G V K A V I	A E S F F E R I	H R S N L I V G M G V L P	F E F T E G Q N R
UniRef90_C3X7G3	K G T Q L L G V K A V I	A R S F F E R I	H R S N L I V G M G V L P	L Q F T D S A E S
UniRef90_UPI0002FAE277	K G T N L L G I K T V I	A E S F F E R I	H R S N L L V L M G V L P	L Q F K D S A D K S
UniRef90_UPI000225AC62	K G T R L L G V K A V I	A E S F F E R I	H R S N L I V G M G V V P	L Q F P E D R K S
UniRef90_UPI00037ED020	K G T N L L G V R A V I	V E T F F E R I	H R S N L I V G M G V V P	L Q F P Q S H E T
UniRef90_W9RLC6	K G P M L L G V K A V I	T K S F F E R I	H R S N L I V G M G V I P	L C F K E D A E T
UniRef90_U4LV71	L Q P R Y L G G R V I L	A K S F F A R I	H E T N L K K Q G I V P	L T F A N E Q D Y
UniRef90_G3NA55	K G P F L L G I K A V V I	A E S Y F E R I	H R S N L I V G M G V I P	L E Y G D T A D S
UniRef90_I18J4Y3	K G T N L L G I Q T V L I	A E S F F E R I	H R S N L V L M G V L P	L Q F K E G E S A
UniRef90_C0HEA9	K G P M L L Q G V K A V I	A K S F F E R I	H R S N L V L M G V L P	L C Y K E D A D T
UniRef90_D0JA66	M E P R F L G I R V V I	A K S F F S R I	H E T N L K K Q G I L A	L T F I N R S D Y
UniRef90_A9QPH6	K G T R L L G V R A V I	A E S F F E R I	H R S N L I I G M G V L P	L E F E Q N V A T
UniRef90_UPI00047A96CF	K G T L L L G V K A V I	A E S F F E R I	H R S N L I V G M G V L P	C Q F F E D G Q Q T
UniRef90_S4PXJ9	K G P F L L G I K T V I	A E S F F E R I	H R S N L I V G M G V L P	L E F F L P N A D T
UniRef90_UPI0004084780	K G T N L L L G I K A V V I	A Q S F F E R I	H R S N L I V G M G V L P	L Q F K D S A E S
UniRef90_UPI000401612F	K G T N L L L G I K A V V I	A E S F F E R I	H R S N L I V G M G V L P	L Q F G E N A R V
UniRef90_F7RX73	K G T R L L L G V S A V I	A E S Y F E R I	H R S N L I V G M G V L P	L Q F K D S A Q N
UniRef90_W1INT0	K G T R L L L G V R V V I	A E S F F E R I	H R S N L I I G M G V L P	L E F F P Q S R K T
UniRef90_E6U1N8	K G T N L L L G I K T V I	A A S F F E R I	H R S N L I I G M G V L P	L Q F K E N A D T
UniRef90_UPI0003716427	K G T A L L L G V K A V I	A E S Y F E R I	H R S N L I I G M G V L P	P F S F E K D M S W
UniRef90_E4UCL2	K G T K L L L G V R A V I	A E S F F E R I	H R S N L I I G M G V L P	L T F A D Q A D Y
UniRef90_G2QSM0	L Q P R Y L G A R L V V	C A M I F	H E T N L K K Q G I V P	L Q F K E N A D S
UniRef90_Q8PWP8	K G T F L L G V K A V I	A E S F F E R I	H R S N L I I G M G V L P	L Q F K E N A D S
UniRef90_Q5K7P0	L Q P R F Y G C A L I I	A R S F F A R I	H E T N L K K Q G I L P	L W F V D K A D Y
UniRef90_G2J5A1	K G T L L L L G V K A V V I	A K S F F E R I	H R S N L I I V G M G V L P	L Q F Q N G D S W
UniRef90_D5BSS1	K G T R L L L G V K A V I	A E S F F E R I	H R S N L I I V G M G V L P	L Q F P E G R E S S
UniRef90_H3C189	K G P F L L L G I K A V I	A E S Y F E R I	H R S N L I I V G M G V V P	L E F G D T A Q S
UniRef90_D2EFL8	K G P M L L L G V K A V V I	A K S F F E R I	H R S N L I I V G M G V L P	L Q F K D D A F S
UniRef90_H2AWK1	L S P R F L G G Q M I L V K S F A R I	H E T N L K K Q G M I L P	V T F A D E A D Y	
UniRef90_U2ZEK6	K G T N L L L G V R A V I	A E S Y F E R I	H R S N L I I V G M G V V P	L Q F K D G W T R
UniRef90_UPI0004236283	K G T R L L L G V R A V I	A E S Y F E R I	H R S N L I I V G M G V V P	L Q F P E G E T H
UniRef90_A0A015M1J4	K G T F L L L G V K A V I	A E S Y F E R I	H R S N L I I V G M G V L P	L Q F Q Q G Q G W
UniRef90_A7AQ97	K G P A L L L G I R A I F A E S F F E R I	H R T N L V G F G I I L P	L Q F G E N A A S	
UniRef90_E1AI15	K G P Y L L Q G V K V I V A E S F F E R I	H R S N L I I V G M G V L P	L Q F G G E N V E S T	
UniRef90_UPI00040EFCE0	K G T A L L L G V K A V V I	A E S Y F E R I	H R S N L I I V G M G V L P	F Q Y P Q N A E T
UniRef90_K1PUM5	K G P W L L G I K A V I	A E S Y F E R I	H R S N L I I V G M G V I I P	L Q F P E T A E S S
UniRef90_C7NI83	K G T R M L L G V K A V I	A Q S F F E R I	H R S N L I I V G M G V L L P	L Q F P E G Q S S S
UniRef90_UPI0004125BE4	K G T S L L L G V R A V I	A E S F F E R I	H R S N L I I V G M G V L P	L Q F K D N A D S
UniRef90_L7VSL2	K G P Y L L Q G I K S V I A V S F F E R I	H R S N L I I V G M G V I V P	L Q F K D N A D S	
UniRef90_M4UH12	K G T Q L L L G V K A V I	A R S F F E R I	H R S N L I I V G M G V L P	L Q F K D S A Q S S
UniRef90_W9GDE2	K G T S L L L G V K A V I	A E S Y F E R I	H R S N L I I V G M G V I P	L Q Y P Q T A D S
UniRef90_UPI00035D9521	K G T L L L L G A K A V I	V E S F F E R I	H R S N L I I V G M G V L P	L Q F G G E G R K T
UniRef90_UPI00037A4466	K G T R L L L G V Q A V I	A E G Y Y F E R I	H R S N L I I V G F G V L P	L Q F K Q G D S A
UniRef90_UPI00036F2494	K G T N L L L G V K T V I	A E S Y F E R I	H R S N L I I V M M G V L P	L Q L G E N A T T
UniRef90_D8PMR8	L Q P R F Y G C A L V V A R S F F A R I	H E T N L K K Q G V L L P	L W F A D K A D Y	
UniRef90_U2JGH2	K G A G L L L G V K A V V I	A E S F F E R I	H R S N L I I V M M G I L P	L Q F G E N A E S S
UniRef90_E8NEZ7	K G T N L L L G V K A V I	T E S Y F E R I	H R S N L I I V M M G I V V P	L Q F P E S W K S
UniRef90_B3R574	K G T Q L L L G V K A V I	A R S F F E R I	H R S N L I I V M M G V L V P	L Q F K D S A Q T
UniRef90_N0DPW6	K G P Y L L Q G I K C V I A V S F F E R I	H R S N L I I V M M G I V V P	L Q F K E G G Q N A	
UniRef90_K7RSS6	K G T M L L L G V K V I V T E S Y F E R I	H R S N L I I V M M G V L P	L Q F F D S A N S	
UniRef90_UPI000363E649	K G T Y L L L G V K A V V I	T R S Y F E R I	H R S N L I I V M M G V L P	L Q F E D S V E S S
UniRef90_E5ASP4	K G T Y L L L G V K A V V I	A R S F F E R I	H R S N L I I V M M G V L P	L Q F F D S V Q S
UniRef90_J6XX65	K G T A L L L G V R A V V I	A E S Y Y F E R I	H R S N L I I V M M G V L P	L Q F P D S A D S
UniRef90_B9UNL8	K G P F L L L G V R V V L A E S Y F E R I	H R S N L I I V M M G I V V P	L Q Y G Q S A H S	
UniRef90_D8D3U3	K G T Q L L L G L K A V I V A R S F F E R I	H R S N L I I V M M G V L P	L Q F K G N D S W	
UniRef90_J4HWS9	L Q P R F Y G C A M I V A R S F F A R I	H E T N L K K Q G I L P	L W F A N K A D Y	
UniRef90_B3CMS5	K G T A L L L G I K A V I	A E S F F E R I	H R S N L I I V M M G V L P	L I F Q N G I T R
UniRef90_W0P975	K G T Q L L L G V K A V I	A R S F F E R I	H R S N L I I V M M G V L P	L Q F S D S V D T
UniRef90_L7VZH4	K G P A L L L Q G V R A V V A E S Y F E R I	H R S N L I I V M M G V I V P	L E F F P E S A A S	
UniRef90_U6GZ96	K G P Y L L Q G V K A V I	A E S F F E R I	H R S N L I I V M M G V L P	L Q F L D G Q S A
UniRef90_C1AS64	K G T L L L L G V K A V L I A T S F F E R I	H R S N L I I V M M G V L P	P Q F P G H T R	
UniRef90_J9I297	K G P Y L L Q G V K A V V I A E S Y F E R I	H R S N L I I V M M G I L P	L Q F K E N A D S	
UniRef90_W0P8N7	K G T A L L L G V R A V V I A E S Y F E R I	H R S N L I I V M M G V L P	L Q F P E G Q N T	
UniRef90_UPI00036B488D	K G S N L L L G V K A V L I A E S F F E R I	H R S N L I I V M M G V L L P	L Q F D D S W Q S	
UniRef90_I1VH49	K G P W M L G V R A V I	A E S Y F E R I	H R S N L I I V M M G V I I P	L Q Y K E S A E T
UniRef90_UPI0003608313	K G T Q L L L G V K A V V I A R S F F E R I	H R S N L I I V M M G V L P	L Q F P E G E S W	
UniRef90_S5SUJ4	K G T R L L L G V K A V I	A E S F F E R I	H R S N L I I V M M G V A P	L Q F P E G E S W
UniRef90_R7UC16	K G P Y L L M G I K A V I	A E S Y F E R I	H R S N L I I V M M G V L V P	Y Q A G Q N A E T
UniRef90_UPI00035E0C4D	K G T A L L L G V R A V I	A E S F F E R I	H R S N L I I V M M G V L P	L Q F L D N Q N V

170 180 190 200

UniRef90_W6UTL5	D K I Q P S D K V S L D L K N L T P G	
UniRef90_A0TRP9	E K I L E D D T I N I V G L K S M A P H T H V K C L V V H A D G S E D T L D L S	
UniRef90_S2VW88	L G L D G T E V F D I E G I E A L N E G V T P K T V K R A N G D T I E F A V V	
UniRef90_UPI0004096508	L G L S G K E S F N L E I G E D V V K P H D L V K V T A T D E K G K T T E F K V V	
UniRef90_UPI00037CA516	L G L T G R E T F D I V G L N D V Q P G Q K L T V N A V R E D G S S F S F E V V	
UniRef90_D6RJV2	S R I G A G D S L E T V G L A D L L E G K P D A Q I V T K P N G E T F Q I A T K	
UniRef90_W7ZP6	L G L N G R E T F D I N G L N D I K P G E N V K V T A T R E D G T K F E F T V T	
UniRef90_UPI000380A816	L G I D G S E T F D F E G I E E L L N N G S T P K T V A T K A D G S K I E F A V T	
UniRef90_H3SKE1	L G I D G T E M F S I N G L N D I Q P G Q T L Q V T A R Q D G T T F E F P V T	
UniRef90_D2TZE4	L K L T G D E I I D I A G L Q S I T L G E M I T V T I T D K N G Q I M T M A M C	
UniRef90_UPI00030C0F71	N R F R G D E R F T T T G L A G L Q P R Q I V T V E G E R A D G L R F S F T L C C	
UniRef90_UPI00047E5B1	L G L S G G E R I D I A G L T D L Q P G C H T V A V T M T S E E G N T Q T V T H C	
UniRef90_UPI00037B77D4	L G L T G E E T F D I T G V E E L L N K G G I P Q T V H V R A T A S V E F D A V V	
UniRef90_G4SWU4	L G L K G D E T V T V D I A D D T V P Q Q V V D V T A S A P D G S V T A F K V S	
UniRef90_UPI000422A8BE	L G L D G T E T F S I E G L T E L N E G R T P K T V K V T A T P T E F F D A V V	
UniRef90_M1C0L7	L G L T G H E C Y T I D L P Q K I S D I R P G Q D V A V T T D S G K S F I C T L	
UniRef90_V9D4Y3	D R I D A C D K V D T E G L W D V L K N D E I N L K V T K K D G T S F T I P V K	
UniRef90_M2LSR4	D R L A G C D E V R T E G L Y D V L Q G E V S L V V K K Q G S G E E V R V P V K	
UniRef90_A0A022LJZ1	L G L D G T E T F D I T G I E E L L N N G T P K T V A T K E D G V T V E F D A K	
UniRef90_F5SJ7D	L G L T G E E T F D I E G L N D V Q P F Q K V K V T A T K E D G S K V E F Q I V	
UniRef90_I3YA42	L G L T G A E T F E I E G L N N G E A K Q V E V R A T A A D G S V K S F T A K	
UniRef90_X5MCU1	L G L N G S E T V T I T G N E K I K P R M T L T E I T D T K G A T K K V P V C	
UniRef90_UPI00047DA12D	L G L D G T E V Y E I T G L E D G N A R T A T V V A R K V D G S Q V R F E V V	
UniRef90_D5AV98	L G L T G D E V V T I T G L E E I K P L S L V P C T I L R K D G T L T K I M I K	
UniRef90_C3X7G3	L G L K G D E T F D I T G L D D I T P L Q D V T L V V H R A D G T T Q N V P L L	
UniRef90_UPI0002FAE277	L G L T G K E T F N I V I D E N V K P R D F V K V T A T K E D G S K V E F Q I V	
UniRef90_UPI000225AC62	L M L T G F E T I S I K G L E E I S P R M V V S C E I T R P N G E K L T V Q L C	
UniRef90_UPI00037ED020	L G I D G T E T F D I S G L T A N D G D I P E T V A T K P D G S A I V F A V V	
UniRef90_W9RLC6	L G L T G H E R Y T I D N I S D I R P G Q D V T T D N G K S F T C T V	
UniRef90_U4LV71	D L I G S C D S V S T V G L L E M L N N G G N G E V V V I K K D G K K H T I P V K	
UniRef90_G3NA55	L G L S G R E R Y T I I M P E K L T P R M I V D V K L D T G K T F Q A R M	
UniRef90_I18J4Y3	E T H T G K E S F T V A V D E T V K P R D F V K V T A V A E D G T T K E F V L A	
UniRef90_C0HEA9	L G L T G H E R Y T V H L P T N V S E I K P G Q D V T V T T D N G K S F T C T L	
UniRef90_D0JA66	Q K I Q E E D F F H F Y I K N I S P K R N I N V E L I H Y N G E K E K I I V Q	
UniRef90_A9QPH6	L R I D G T E L F S I P Q T T D I R P G Q R V S L E I K R T D G S V E K F L L C	
UniRef90_UPI00047A96CF	L G L T G K E V F D I T G L N D G E S K V A K V T A T A P D G S R K E F I V K V	
UniRef90_S4PXJ9	L G L T G A E R Y S I S V P D T L V P Q H L L T V Q V D I N G K S F Q V K V	
UniRef90_UPI0004084780	L G L T G E E H F D V K V T N E I Q P R E M V T V V A K H P D T G K E T D V L A	
UniRef90_UPI000401612F	L G L E G S E T I D I E G L N D G A S K T A T V V V A R R G D G F E K R F E V R	
UniRef90_F7RX73	L G L D G S E T I S L S G L K D I K P Q G E I N A V A K D D N G E E V K F T L C	
UniRef90_W1INT0	L N L T G D E R I D T T G L S D I Q P Q G Q I I V V V K I T Y A S G E E T R I A R C	
UniRef90_E6U1N8	L G L T G K E H F E V K V T N D I K P R D Y V I V V A K D E E S G K E T T V L A	
UniRef90_UPI0003716427	L G L T G E E T F D I V V G V D T L N G G E I P S E V T V R A G N V E F A A K V	
UniRef90_E4UCL2	UniRef90_G2QSM0	E K I K G D E I I D I K G L K M I S P R Q Q S I L E I S Y S D G M S K R V P I C
UniRef90_Q8PWP8	D R I G A G D E V A T V G L Y D M L Q G E V S L R V T K R G S G E E I V P V R	
UniRef90_Q5K7P0	A K I S A H D K V T T K G L E D V M A G K I V K I V V E K P S G E K V E I E A R	
UniRef90_G2J5A1	E S L D L G D S F D I V G I E Q L K P Q Q E I T R I T R P D G R Q R D V I L R	
UniRef90_D5BSS1	L G L D G T E S V S L T G L A G I S A G M E V Q A S F T S A D D G K S Q S V T L A	
UniRef90_H3C189	L G L T G R E R Y S V L L P Q Q L A P R M L Q V Q L D D G R S F Q V R M	
UniRef90_D2EFL8	L K I D F S K P V S I E I P S S F K P R D K L K M V Y Y M Q D G S K K E A E L V	
UniRef90_H2AWK1	D K I S S G D L I E T L N L V D M V E G G T L D I K V T K R D G N S F V I K A K	
UniRef90_U2ZEK6	L G L T G E E I V T I R G L S D V N T G K L W V E L F R P S D D G K M A R F P V C	
UniRef90_UPI0004236283	L G L S G E E T V S I I S G M T A I D D G I P D T V T V T A P D G T E K T F E V V	
UniRef90_A0A015M1J4	L G I S G R E T F N I V G L N D V Q P G D K V K V I A T R E D D G S E F E F T V T	
UniRef90_A7AQ97	V G I T G R E K F T I D G L D K L S P G C Q V E V V A D T G I K F N M R C	
UniRef90_E1AI5	L G L S G T E V F D V F V G L A D F A N G R E L T V R A S S D A G V K E F T V R V	
UniRef90_UPI000404EFCE0	D K I T G T E V F F Q T I E L P P Q D Q I R T Q O T I K V T T N T G K S F E T T L	
UniRef90_K1PUM5	L G L T G T E T F S I D V P D D L K A G Q E L Q V K L S D G R T F Q V K T	
UniRef90_C7NI83	L G L D G T E T F D I E G I T A F F N D G E T P K K V T A R K D G G E T F D A V V	
UniRef90_UPI0004125BE4	L G L D G T E T F D I L F L I T G I A L N D G G T P R T V A G R S D G V T V D F A V V	
UniRef90_L7VSL2	L G L T G Q E T F D I E L P P Q D Q I R T Q O T I K V T T N T G K S F E T T L	
UniRef90_M4UH12	L G I T G D E T F D I E G L E E I K P Q Q D V T L V I K R A N G E T K R A K V L	
UniRef90_W9GDE2	L G L D G T E T F S I T G I T A L N E G T T P R T V K V V A T K T V E F D A V V	
UniRef90_UPI00035D9521	F A L T G D E R F D I L G L D Q V P S Q V V S A V I H Y A D G K Q R D I Q L L	
UniRef90_UPI00037A4466	D S L G L T G E E V F D I A S V E N E P E T V K V T A R G A D G K T T E F E V V V	
UniRef90_UPI00036F2494	L G L T G E E T I E V A I T D S V K P R E V V T V T A T N K E G K K T E F A L V	
UniRef90_D8PMR8	A K I G A G D T V E T F E G L E E I K P Q Q D V T L V I K R A N G E T K R A K V L	
UniRef90_U2JGH2	L G L T G Y E T Y D I D L D D Q V T V Q G I V T V T V K A K S D Q S K E F K A R L	
UniRef90_E8NEZ7	L G L D G T E I V S I E G L E Q L N E G V T P K T V K V T A E P S E F F D A V V	
UniRef90_B3R574	L G I T G N E T F D I E G I E D L K P Q Q D V V L V I K R A N G D V Q R V P V L	
UniRef90_N0DPW6	D K L K G T E Q F N I E I P A Q I T T Q G T I V V T A S N G T K F E T T L	
UniRef90_K7RSS6	L G L T G E E V F S F V A V G G H L E P G Q T V P V Q L D D G R S F Q A L L	
UniRef90_UPI000363E649	L G I T G E E V F S F T G V D A I N Q S I P E T V H V S R P D G S T V E F A A V	
UniRef90_E5ASP4	L G I T G N E R Y D I S G L E N I K P Q Q E V T L T I H R E D D G S S Q D V L L L	
UniRef90_J6XX65	L G I T G E E I Y D I E G L T D F K P Q Q E V T L V I R G K N V K K V P V L L	
UniRef90_B9UNL8	L G L T G E E I F T V S G I T E L L N S G I T P R T V A T R P D G T V T G F A I V	
UniRef90_D8D3U3	Q T L G L T G E E F I D V I A L D A P Q S D A Q L V I T R P D G S K K T V T V K	
UniRef90_J4HWS9	P R I G A G D S V E T S G L A D L L K G F P D A V I V T R R N G E V F E I L T K	
UniRef90_B3CMS5	K I F D G S E I I S I K G E I V S N G N L E C I I K R Q D N S K Q S I Q L C	
UniRef90_W0P975	L G I T G T E T F D I S G L E N I K A Q Q D V T L T I H R E D D G S T Q D V T V L L	
UniRef90_L7VZH4	L G L T G F E T F D I L R G L A A L E R E V V E A E R A E G G R V F A A R V V	
UniRef90_U6GZ96	E S L K L T G R E R F N I A L N G G R L V P G S L I R V S T D D C G K S F E T K C	
UniRef90_C1AS64	L G L T G E E E Y S I T G L E G G D P G A D F P T E V T H H H G Q V Q E F A T V	
UniRef90_J9I297	L G L N G H E T F S I L N G G N L K V G S E I E V T T N T G K K F N A V V	
UniRef90_W0P8N7	L G L T G K E S F D I T G I V A L N Q D T P A T V R V Q A N G V Q F D A I V	
UniRef90_UPI00036B488D	L G L T G F E T Y D I N L S E N P G I N D I V D I L A R D E A G E K H F Q A L V	
UniRef90_I1VH49	L S L T G S E T F S I E L P A D I Q I G Q E V D V K V N D G R S F R V K V	
UniRef90_UPI0003608313	L G I R G D E S F E V L V G E D I K P Q Q D A V L V I R R A G Q P D Q K V K L R	
UniRef90_S5SUJ4	L G L D G T E T F D I E G L S L S L N D S E I P P S T I K K E G G G D K V E F A V V	
UniRef90_R7UC16	L G L T G K E R F S I E L P Q D L T T G Q L V D V K T N D G K C F Q V V A	
UniRef90_UPI00035E0C4D	L G L N G S E V F S I T G V T E L N G G I T P K E V V I T A G D K S F K A K V	

210

220

UniRef90_W6UTL5
 UniRef90_A0RTP9
 UniRef90_S2VW88
 UniRef90_UPI0004096508
 UniRef90_UPI00037CA516
 UniRef90_D6RJV2
 UniRef90_W7ZP6
 UniRef90_UPI000380A816
 UniRef90_H3SKE1
 UniRef90_D2TZE4
 UniRef90_UPI00030C0F71
 UniRef90_UPI000478E5B1
 UniRef90_UPI00037B77D4
 UniRef90_G4SWU4
 UniRef90_UPI000422A8BE
 UniRef90_M1C0L7
 UniRef90_V9D4Y3
 UniRef90_M2LSR4
 UniRef90_A0A022LJZ1
 UniRef90_F5SJ7D
 UniRef90_I3YA42
 UniRef90_X5MCU1
 UniRef90_UPI00047DA12D
 UniRef90_D5AV98
 UniRef90_C3X7G3
 UniRef90_UPI0002FAE277
 UniRef90_UPI000225AC62
 UniRef90_UPI00037ED020
 UniRef90_W9RLC6
 UniRef90_U4LV71
 UniRef90_G3NA55
 UniRef90_I8J4Y3
 UniRef90_C0HEA9
 UniRef90_D0JA66
 UniRef90_A9QPH6
 UniRef90_UPI00047A96CF
 UniRef90_S4PXJ9
 UniRef90_UPI0004084780
 UniRef90_UPI000401612F
 UniRef90_F7RX73
 UniRef90_W1INT0
 UniRef90_E6U1N8
 UniRef90_UPI0003716427
 UniRef90_E4UCL2
 UniRef90_G2QSM0
 UniRef90_Q8PWP8
 UniRef90_Q5K7P0
 UniRef90_G2J5A1
 UniRef90_D5BSS1
 UniRef90_H3C189
 UniRef90_D2EFL8
 UniRef90_H2AWK1
 UniRef90_U2ZEK6
 UniRef90_UPI0004236283
 UniRef90_A0A015M1J4
 UniRef90_A7AQ97
 UniRef90_E1AI5
 UniRef90_UPI00040EFCE0
 UniRef90_K1PUM5
 UniRef90_C7NI83
 UniRef90_UPI0004125BE4
 UniRef90_L7VSL2
 UniRef90_M4UH12
 UniRef90_W9GDE2
 UniRef90_UPI00035D9521
 UniRef90_UPI00037A4466
 UniRef90_UPI00036F2494
 UniRef90_D8PMR8
 UniRef90_U2JGH2
 UniRef90_E8NEZ7
 UniRef90_B3R574
 UniRef90_N0DPW6
 UniRef90_K7RSS6
 UniRef90_UPI000363E649
 UniRef90_E5ASP4
 UniRef90_J6XX65
 UniRef90_B9UNL8
 UniRef90_D8D3U3
 UniRef90_J4HWS9
 UniRef90_B3CMS5
 UniRef90_W0P975
 UniRef90_L7VZH4
 UniRef90_U6GZ96
 UniRef90_C1AS64
 UniRef90_J9I297
 UniRef90_W0P8N7
 UniRef90_UPI00036B488D
 UniRef90_I1VH49
 UniRef90_UPI0003608313
 UniRef90_S5SUJ4
 UniRef90_R7UC16
 UniRef90_UPI00035E0C4D

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

	1	10	20	30	40
UniRef90_J3B540	D W P E S T Y I A E P P F F D G F A L K S V R G A R V L A L L G D S V T T D				
UniRef90_UP100041E579C	A W S E N S T Y I V R R P P Y F D P D P V T D I A G A R V L A K L G D S V T T D				
UniRef90_UP1000478999A	P A S T Y I A E P P F F A Q F A A S A V H G A R I M A L F G D S I T T D				
UniRef90_K01414	V V I S Q S S S R L A V L E P F P R F P N T E L T D L R V L V K V K G K C T T D				
UniRef90_W710T2	A W P T S T Y I A E P P F F S G F D P Q P V R D A R V M A L F G D S I T T D				
UniRef90_UP1000479C5C0	A W D E K S T Y I Q N P P F F N N L T S K N I S N A R A L A S L G D S I T T D				
UniRef90_R9T9Q4	D W D D A S T Y I K K A P F F D P P G I P T I T G A R C C L A K L G D S V T T D				
UniRef90_Q3IFL7	W V E D S T Y I V R R P P Y F D G M A A K D I V G A R V L A Y L G D S V T T D				
UniRef90_A8L043	V V V S P T S S R L A L L D P F P A F P D S D F T G L R V L Y K V K G Q C T T D				
UniRef90_E3RUG7	D W P P S S Y I A R P P F F P A L P A G D I T G A R A L L L L G D S V T T D				
UniRef90_A0A011QRR2	Q W Q D D S T Y I R L P T F F E N L K A P E V H N A R V I G L F G D S I T T D				
UniRef90_UP10003B35400	W D P K S T Y I Q N P P Y F T V P G I P V I R G A R V L A V L G D S I T T D				
UniRef90_UP10004782C71	W D L S S T Y I R R P P F F E A E P P A A I R D A R C L A L F G D S V T T D				
UniRef90_B4S6B5	W D K E S T Y I Q A P P F F E L P K I Q P I K D A F V L L N L G D S V T T D				
UniRef90_I1J0N8	W D P D S T Y I K N P P F F D N V S I E P P R D A S I F L W G D S V T T D				
UniRef90_I7J851	W N K D S T Y I K E I P F F E A P P L E D I Q N A R A L L V L G D S I T T D				
UniRef90_UP100040BE930	D W K A E S T Y I H N P P F F Q P K P V Q S I K S A Y C L L N L G D S I T T D				
UniRef90_Q22M72	V V I R K E S Q R L E L L Q P F F E S H F G P E L P T C K V L M R V R G K C T T D				
UniRef90_K5WAG2	V V V S P T S D R L A L L E P F F A P P F S S E L G L K V L M R V R G K C T T D				
UniRef90_K1XUS2	I L I S P T S T R L E K K L E P F F A S H F G P E L P T M Q V L M R V R G K C T T D				
UniRef90_M5FTU2	W S K E S T Y I K R V P F F D N P K K K P I D N A Y V L L N L G D S V T T D				
UniRef90_H3F941	W D E R S T Y I C R P P F L D P P I P A P V L G A R C C L V L F G D S I T T D				
UniRef90_A1BCP9	W D E S S T Y I H N P P F F S P S Q N K I E D A H V L L A G D F I T T D				
UniRef90_L8GE02	W N Q A S T Y I Q N P P Y F D D L E I Q P L K S L A V L A K F G D T I T T D				
UniRef90_S6C2A0	P D S T Y V K Q P P F F D G P K I M A I D N A R C L L K L G D S V T T D				
UniRef90_Q089H2	A W D E D S T Y V R H A P Y F E G H D V K P I E G A R V L V N V R D F I T T D				
UniRef90_K0ZBL0	K W Q E E S T Y I H S P P Y F F K G M T M E V I N D A A C C L A L F G D S I T T D				
UniRef90_G0U4E7	E W D D E S T Y I R E P P F F K D F P V S N V E D A R C L L T L G D T V T T D				
UniRef90_I3R1X8	D W P N S T Y I K H P P F F E P E A L S A I E N A R C L V K V G D S I T T D				
UniRef90_F5ZF40	W D P S S T Y I V E P P W F E S K P F Q E I R D A R I L M I L G D K I T T D				
UniRef90_H2C7M3	W A E D S T Y I A P P P Y F F R P R P L D D I R G A R V L A D L G D S V T T D				
UniRef90_D9XF46	E F D D S S T Y I Q C P N F V E F K F D D L D I K G A R T L L M L G D S V T T D				
UniRef90_Q2A1K3	D W N A E S T Y V R R P P Y F F E P D P V Q D I A G A R V L L R L G D S V T T D				
UniRef90_D7GE14	A W D P D S T Y V R R A P Y F F E P S A P A Q I K D A R A L L N L G D F I T T D				
UniRef90_R7ALR7	P S S S N Y I A N P P Y F F K K S E I K P I E N A R C L A L L G D S I T T D				
UniRef90_Q21J78	A W D E K S T Y I R K P P F F D N F N P S E I L D A R P L L V L G D S V T T D				
UniRef90_T0M4Q9	A W D E S T Y I A N P P Y F F E Q M P L A P L E N L A V L A K F G D S V T T D				
UniRef90_S0NNX0	E W D P N S T Y I A S P P F F F D G I A G Q H L S G L R V L A K L G D S I T T D				
UniRef90_X0QE58	Y I K N P P Y F F E G M T M Q D V H G A R I M G L F G D S I T T D				
UniRef90_Q93C71	D W R P M S T Y I R R P P Y W K K E G E G A L A G M R P L A V L G D N I T T D				
UniRef90_A7MW36	W D N Q S T Y I Q E A P Y F F L E E I S K D F K N M K T L L M L G D S I T T D				
UniRef90_UP10002885B87	V D V S P Q S Q R L Q L L E P F D R W D G R D L E D M Q V L I K V K G K C T T D				
UniRef90_W5N0W0	E W N A D S T Y V K K P P Y F F K P V I K N I S G A C A L A I L G D S V T T D				
UniRef90_V9TTL1	W E P D S T Y I R K A P Y F F D P S P V E D I A A A R V L A V L G D S V T T D				
UniRef90_UP10003B37C8C	E W R P M S T Y I R R P P Y W D K E G P R T L K G M R P L A V L P D N I T T D				
UniRef90_I8I221	I S P T S D R L E R R L E P F F E S L F G P E L P P L K V L R V R G K C T T D				
UniRef90_UP10004414B1C	D W R P E S T Y I R R P P Y W S G A L A G E L K N M R P L A V L G D N I T T D				
UniRef90_A1SVX8	G P N I K S L P T I E P L A D E I N V P V L L K M G D N I S T D				
UniRef90_D5FBF5	W D Y R S T Y I R N V P F F D Q L T I K S I E N A S V L L K F G D V V T T D				
UniRef90_T2MG57	D W R P T T T Y I R R P P Y W E G A G V R T L S G M R P L A V L G D N I T T D				
UniRef90_F1VYM9	A W D Q S S T Y I R K P P Y W S D E P Q R D L K G M R V L V M L S D N I T T D				
UniRef90_UP10003A9A32A	D W R P Q T T Y I R R P P Y W E G A G A R S L T G M R P L A L L G D N I T T D				
UniRef90_UP100036EA307	D W R P M S T Y I R R P P Y W E G N M A S Q L K G M P L P A V L P D N I T T D				
UniRef90_G0UYC1	E S T Y I H K P P Y F E N V T M E V I R D A A C C L A V F G D S I T T D				
UniRef90_A4BL05	G P N I R G L P A L E P L Q D E I G G P V L L K A G D D V S T D				
UniRef90_K0C3M3	D W R P Q T T Y I R R P P Y W E G A L A G E L K N L R P L A V L G D N I T T D				
UniRef90_V8NWM1	W D S K S T Y I R C P S F F D P P H L Q C I E N A H V L L H G D S V T T D				
UniRef90_F4AN17	D W R A Q S T Y I R R P P Y W E G A L A R S L S G M R P L A V L G D N I T T D				
UniRef90_B0U5T0	A W H P Q S T Y I R R P P Y W E G A S A R T L R G L R P L A V L G D N I T T D				
UniRef90_B6SRL2	W E D R S T Y I R K P T Y L P P A A P P T V T E A Y C L L N L G D S I T T D				
UniRef90_UP10003086926	W R P E S T Y I R R P Q Y L E P K A S L A I N G A R T L M V L G D N V T T D				
UniRef90_K2GZ4N	E W R P M S T Y I R R P P Y W E G N M A S Q L K G M P L P A V L P D N I T T D				
UniRef90_G9RXI1	V L R G P N I K P L P V A Q P L T D T M E L P C L K V G D N I T T D				
UniRef90_L5LMD3	W D S K S T Y I R C P S F F D P A A P R P I E N A H V L L H G D A V T T D				
UniRef90_F4WR39	W D I N S T Y I T S P P Y F D N N P P I K S I T K A R V L V N L G D S V T T D				
UniRef90_X5LV15	V I K G P N I S S L P E L T P L P D V I E A P V L L K V G D N I S T D				
UniRef90_E6U6V9	R G P N I K P F P N V A L P E S I E A K C L K V G D N I T T D				
UniRef90_UP1000369BD9F	D W R P Q S T Y I R R P P Y W E G A L A R S L S G M R P L A I L G D N I T T D				
UniRef90_C8VX78	V L R G P N I K P L P V N E A L P G E I K A S V L L K V G D N I T T D				
UniRef90_F4HCU0	A W N K Q S T Y I I Q K P P Y F W Q A E Q M P A I K G M R A L G V F P D N I T T D				
UniRef90_V9K944	W D S K S T Y I R C P S F F D P S P L Q S I E N A H V L L H G D S V T T D				
UniRef90_M5DT29	Q W D E K S S Y I Q E I S F F F D G F A L E N I S N A R M L V M C D D N T T T D				
UniRef90_A3DK74	R G P N I K P F P I N Q A D K V S G K A L I K V G D N I T T D				
UniRef90_W5ND04	W D P K S T Y I R C P S F F E P A A P Q S I E N A H A L L F L G D M V T T D				
UniRef90_N1UB33					
UniRef90_UP1000380669B	G P N I K T L P E I P E L G H T Y K V P I L L K M G D N I S T D				
UniRef90_M1QIA3	G P N I K P L P D F D P F G D N V K A K V A I K V T D N I T T D				
UniRef90_I3X5S5	W D E R S T Y I R R A P F A A F G N G T L L G A H P L L V V G D D I T T D				
UniRef90_D1ATU7	N W E P G S T Y V Q S P P Y F R S G A N S D M V G A R I L M L G N S I T T D				
UniRef90_D4JU89	N R G P N I K P F P V P L A E D I K A E V S L K V G D N I T T D				
UniRef90_S5ROP6	P I S T Y I S Q P P F F N N F F P K N I K G A R A L C L G D S I T T D				
UniRef90_R6CAH4	V L R G P N I K P F P E T S P L D E S I E C A V S L K V G D N I T T D				
UniRef90_V4XZV5	G P N I A S L P L F E P L P D A E F S G P V L L K V A D D I S T D				
UniRef90_S2L4I5	G P N I V K S L P E F D P I P A E F D K L E G E V L L K V E D D I T T D				
UniRef90_X1A3I9	I I R G P N I K P F P L N T P L S D I E K K V L I K V G D D I T T D				
UniRef90_Q8RCF8	V I K G P N I K P F P L N T P L D A E S G E A L L K M E D N I T T D				
UniRef90_D8J7K7	G P N I A D V P L K E P D A E I G G E A L L K M E D N I T T D				
UniRef90_R7F8P1	E I L R G P N I K P F P E A P L E A T I E A G C S L K V G D N I T T D				
UniRef90_UP10003C86AA7	W N P K S T Y I K S P P F F E D L P P K S I V D A Y V L L N L G D S V T T D				
UniRef90_G8M1Q3	I I R G P N I K P L P S F D K L P D V L E G T A L I K V G D N I T T D				
UniRef90_UP100045EA62E	G P N I K P L P Q L Q P L P E T L Q G Q L V L K V G D D I S T D				
UniRef90_M8ACV7	W D E T S T Y I R R P P F F G K G T K L G T Y E A H P I L V V G D D I T T D				

		50	60	70	80
UniRef90_J3B540	H	S P A G Q Y L R D K G V E P R D F N S Y G S R R G N H E V M M G G N T R Y I			
UniRef90UPI00041E579C	H	S P A G R W L K A H G V Q K Q D F N S Y G S R R G Q H E V M M R G T F A N V			
UniRef90_UPI000478999A	H	S P A G R Y L L E H G V N R K D F N S Y G S R R G N H E V M I R G T F A N G			
UniRef90_K0I414	H	S P A G S W L L Q H G V Q K A D F N S Y G A R R G N H D V M V R G T F A N V			
UniRef90_W710T2	H	S A A G K W L A Y K G H L E N I S N N T L I G A L N E E T N A I N A V V D			
UniRef90UPI000479C5C0	H	S P A G S W L L A H G V M K P D F N S Y G A R R G N H D V M M R G T F A N V			
UniRef90_R9T9Q4	H	S P A G E F S D R R G N H E I M M R G T F L R N K I A P G T E G G Y S R H M			
UniRef90_Q3IFL7	H	S P A G A I K S R R G N H E V M M R G T F L K N L A P G T E G G V T R T Q			
UniRef90_A8L043	H	S P A G R Y L L T E N G V A P G D F N S Y G S R R G N H E V M I G G V T R H L			
UniRef90_E3RUG7	T	S A A G P W L K Y K G H L P N I S E N T L I G A V N A Q T D E V N V A Y D V			
UniRef90_A0A011QRR2	H	T P A G S W L K A E G V E R R D F N S Y G A R R G H E V M M R G T F A N V			
UniRef90_UPI0003B35400	H	S P A G H Y L Q S L G V A P T D F N S Y G S R R G N H E V M E G G Y T L G P			
UniRef90_UPI0004782C71	H	S P A G K Y L E A H G V R K A D F N S F G S R R G N H E I M M R G T F A N G			
UniRef90_B4S6B5	H	S P A G A I L P T R G V N V S D F N S F G S R R G N H E V M I R G T F D N I			
UniRef90_T1J0N8	H	S P A G R Y L L M S R G L I S P R E F F N S Y G S R R G N H E V M I R G T F D N I			
UniRef90_I7J851	H	S P A G K Y L L E S R G I S P R D F N S Y G S R R G N H E I M R R G T F A N H			
UniRef90_UPI00040BE930	H	S P A G A Y L I S R G V K K E D F N S Y G S R R G N H E D E V K E G G Y T R Y L			
UniRef90_Q22M72	H	S P A G R Y L L N E R G I Q S K D F N T Y G A R R G N D M D K V G P E T V H L			
UniRef90_K5WAG2	H	S A A G P W L K Y K G H L T N I S E N L L I T A V N D E G G D V N V A F D H			
UniRef90_K1XUS2	T	S A A G P W L K Y K G H L P N I S A N T L L I T A V N D E G G E V N V A Y D			
UniRef90_M5FTU2	H	S A A G P W L K Y K G H L T N I A E N T L L I T A V N D E G G E V N V A Y D			
UniRef90_H3F941	H	S P A G R F L L A S R D I A Q R D F N T Y G A R R G N D E V K V G P R T L H V			
UniRef90_A1BCP9	H	S P A G S I V M T R G T F D N I R I R N R L A P G M E A G M T T W F S S D G			
UniRef90_L8GE02	H	S P A G R Y L L M E R G G V D R K K D F N S Y G A R R G N D Q D G K V G P Q T I H H			
UniRef90_S6C2A0	H	S P A G S Y L L E E H G V S Y Q D F N S Y G S R R G N H E V M M R G T F A N K			
UniRef90_Q089H2	H	S P A G S Y L L Q Q A G V A I K D F N S Y G S R R G N H E V M M M G C W T R L M			
UniRef90_K0ZBL0	H	S P A G A Y L L R E R G V E P E M F N T Y G S R R G N H E V G R N G G T R D F			
UniRef90_G0U4E7	H	S P A G S F L L Q E R G V E R K D F N T Y G S R R G N D E G Q T G P F T I H W			
UniRef90_I3R1X8	H	S P A G P W L L M D H G V D P V D F N T Y G S R R G N H E V V M M G G Y T I H H			
UniRef90_F5ZF40	H	S P A G A Y L L Q A E G V N T K D F N S Y G S R R G N H E V V M M R G T T T H Y			
UniRef90_H2C7M3	H	S P A G P I A P R R G N H E V M L R G G F K V K N N L M V Q R E G G F T I H Y			
UniRef90_D9XF46	H	S P A G V F L R E L G V P P G D F N S Y G A R R C H E G K T G G H T V N H			
UniRef90_Q2A1K3	H	S P A G Q Y L L K S H G V E K K D F N S Y G S R R G N H E V M M G G F T K Y			
UniRef90_D7GE14	H	S P A G A I K S R R G N H E V M V R G T F A N V R L R N Q L A P G T E G G			
UniRef90_E77ALR7	H	S P A G A Y L L E E H G V L P A D F N T Y G A R R G N H E V V M M G G W T K D L			
UniRef90_Q21J78	H	S P A G A Y L L Q E L G V K E E D F N S L G S R R G N H E V M I R G T F A N P			
UniRef90_T0M4Q9	H	S P A G S Y L L M E R G V M P A D F N S Y G S R R G N H E V M M R G T F V H F			
UniRef90_S0NNX0	H	V P A G R Y L L K S R G V T L L R E F F N S Y G S R R G N H E V M M G G Q T I Y A			
UniRef90_X0QE58	H	T P A G R Y L L K S K G V A I L K D F N S Y G S R R G N H E V M M G G F T K Y L			
UniRef90_Q93C71	H	S P A G R F L L Q E R G V Q P A D F N S Y G S R R G N H E V M V R G T F A N V			
UniRef90_A7MW36	H	S P A G E Y L L A K M G V P E E D F N F N E M V K E N G E V V Q Q S L A R V E			
UniRef90UPI0002885B87	H	S P A G I F L L M E K G I P V R Q F N A Y G S R R G N H H G K E G G Y T K Y L			
UniRef90_W5N0W0	H	S A A G P W L K F R G H L D N I S N N L L I G A I N I E N D K A N S V R N Q			
UniRef90_V9TTL1	H	S P A G S Y G S R R G N H E I M V R G T F A N I R L Q N D L S S G G I T K I I			
UniRef90UPI0003B37C8C	H	S P A G S Y L L T D N G V K P A D F N S Y G S R R G N H E V M V R G T F A N V			
UniRef90_I8I221	H	S P A G A Y L L H K M G V P E E D F N S Y E M A V V D G K V K K G S L A R V E			
UniRef90UPI0004414B1C	H	S A A G P W L K Y K G H L S N I S Q N L L I T A V N D E G G E A D P D H D T			
UniRef90_A1SVX8	H	S P A G A Y L L D K M G L P E V D F N S Y A T H R G D H L T A Q R A T F A N P			
UniRef90_D5BFB5	E	L K A G A E L P F R S N L P E I S K F S Y T V I D			
UniRef90_T2MG57	H	S P A G S Y G S R R G N V E V M A R G T F G N I R I F N G K V G P R T K H W			
UniRef90_F1VY9M	H	S P A G A Y L L A K M G L P E V D F N S Y A T H R E N G K V K A G S L A R I E			
UniRef90UPI0003A9A32A	H	S P A G S Y L L K G H G I A V V D D F N S Y G T R R G N H H D G R E G P W T L L			
UniRef90_UPI00036EA307	H	S P A G E Y L L A K M G L P E E D F N S Y A T H R G D H L T A Q R A T F A N P			
UniRef90_G0UYC1	H	S P A G Q F L L E G L G V T R K D F N T Y G S R R G N H E D E G Q T G P F T V H F			
UniRef90_A4BL05	E	M P A G V Q L A L R S N I E A I S R F A F S R L D			
UniRef90_K0C3M3	H	S P A G A Y L L H K M G L P E V D F N S Y E M V K E N G E V K Q G S L A R I E			
UniRef90_V8NWM1	H	S P A G R Y L L M N K G L T P R E F F N S Y G A R R G N F I G K P A P K T I H F			
UniRef90_F4AN17	H	S P A G A Y L L H K M G L P E E D F N S Y A T H R G D H K V K Q G S L T R L E			
UniRef90_B0U5T0	H	S P A G E Y L L A R M G V P P Q E D F N S Y A T R R R G D H K V R Q G S L T R L E			
UniRef90_B6SRL2	H	T P A A K Y L L E Y G V E P K N F S S Y G G R R G N N E V V M G P W T L H V			
UniRef90UPI0003086926	H	S P A G A W L L E R G E D P Q D L N Q Y S T R R S N H E V M L R G W A W N A			
UniRef90_K2GZN4	H	S P A G E Y L L H K M G L P E E D F N N E M V T D E D G K V V Q Q S L A R V E			
UniRef90_G9RXI1	H	M P A G S I L P Y R S N I P H L A N Y C F E V C D			
UniRef90_L5LMD3	H	S P A G S Y L L T N R G L T P R E F F N S Y G A R R G N F I G K P A P K T I H F			
UniRef90_F4WR39	H	S P A G R Y L L A N R G L T P K D F N S Y G S R R G N F I G K A G P R T I Y I			
UniRef90_X5LV15	H	S P A G A R L L P F R S N I P K I L A M F S T Q I D			
UniRef90_E6U6V9	H	M P A G S I L P Y R S N I P K I S T F C F V R C D			
UniRef90UPI000369BD9F	H	S P A G E Y L L A K M E V P E E D F N S Y A T H R G D H L T A Q R A T F A N P			
UniRef90_C8VX78	H	M P A G A I L L P R S N I P A I S E Y Y V F C T V D K C F P L R A			
UniRef90_F4HCU0	H	S P S N A I L P H R G D H N T A L R N E M V K N V A D G S V K Q G S L T K I M			
UniRef90_V9K944	H	S P A G R Y L L T S K G L T P R E F F N S Y G A R R G N F I G K T G P K T I Y F			
UniRef90_M5DT29	H	S P V G E Y L L S I G V D A N D L T S L G A R R G N H H V M L R N Y Y N T N			
UniRef90_A3DK74	H	M P S N A K L L P F R S N I V P Y L A E F C L T P C D P D F P K R A			
UniRef90_W5ND04	H	S P A G S Y G A R R G N D A V M T R G T F A S I K R F I G K T G P K T L H I			
UniRef90_N1UB33	H	M D N I S N N L L I G A V N A F N D K T N E V K N Q			
UniRef90UPI000380669B	E	L K A G A E L P F R S N L P E I S K F S Y T V I D			
UniRef90_M1QIA3	H	H M P A G A Q L L P L R S N I Y A I S E Y V Y Y L V D P E F V K R T			
UniRef90_I3X5S5	H	H S P A G A Y L L I E R G D S P V D L N V F A S R G N W E V M P A G S T I H A			
UniRef90_D1ATU7	H	H S P A G E F L L M C S G V R E R D F N S Y G A R R G N H E V M I G G F T Y Y Q			
UniRef90_D4JU89	H	H M P A G A I L L P L R S N I P A I S E Y C F T V C D			
UniRef90_S5R0P6	H	H S P A G K W L L N N G V L K D F N S Y G S R R G N H E V M I G G F T Y Y Q			
UniRef90_R6CAH4	H	H M P A G A I L L P L R S N I P K I S Q H C F T V C D E E F P R R A			
UniRef90_V4XZV5	E	M P P G R V L L P Y R S N I P K I L A E F S D R L D P S Y V A R A K Q V L			
UniRef90_S2L4I5	H	M P A G A E L L P L R S N I P A I A K H V F K A I D R D F N Q R A R D L			
UniRef90_X1A3I9	H	M P A G A I L L P L R S N I P E I S K F V F N L V D P			
UniRef90_Q8RCF8	H	M P S N A R L L P L R S N I P E L S K H C F E I I D E N F S K R A V			
UniRef90_D8J7K7	H	M P A G A I L L P L R S N I P K I S E F T L S R V D D T F P E R A Q A A D G G			
UniRef90_R7F8P1	H	M P A G A I L L P L R S N I P A I S Q H C F T V C D			
UniRef90UPI0003C86AA7	H	S P A G R Y L L T N R G L T P R E F F N S Y G S R R G N D A N K Q A P Q T I H L			
UniRef90_G8M1Q3	H	H M P A G A I L L P L R S N I P E I S K H V F E A V D E S F A K R A L			
UniRef90UPI00045EA62E	E	M P A G A K I L L P F R S N I P A I S R S F S Q I D			
UniRef90_M8ACV7	H	S P A G A F S S R R G N W E V M I R G L F T R N L L G H D I P P G S T I H A			

	90	100	110	120	
UniRef90_J3B540	P T G E K M P	Y D A A M R Y Q A S G T P	L V V I A G Q E Y G T G S S R	D W A A	
UniRef90_UP100041E579C	R I K N K M P	F D A A E L Y M A G K T P	T V I F A G E E Y G T G S S R	D W A A	
UniRef90_UP1000478999A	F T R D F T Q	Y D A A V N Y E A A G V P	L V V L A G K E Y G S G S S R	D W A A	
UniRef90_K0I414	R I K E K M F	F D A A M Q Y M A Q G T P	T V I F A G E E Y G T G S S R	D W A A	
UniRef90_W710T2	F D G S T T S	P D L A R R W K N K G L	G W L V A E W N Y G E G S A R E H A A		
UniRef90_UP1000479C5C0	R I K E K M F	F D A A M K Y M A E G R A T	V I F A G E E Y G T G S S R	D W A A	
UniRef90_R9T9Q4	P D G E N G T M F E	S Q K Y I S E N T P	L I V I A G K E Y G T G S S R	D W A A	
UniRef90_Q3IFL7	P D D E L A S	Y D A A M E Y Q K N D T P	L V I L A G K E Y G T G S S R	D W A A	
UniRef90_A8L043	P D G E Q V A	Y D A A Q K Y A A E S V P	L V V L A G K E Y G S G S S R	D W A A	
UniRef90_E3RUG7	D G K T S S I	P E L A K R W R D Q G V E	W L V V A E H N Y G E G S A R E H A A		
UniRef90_A0A011QR22	R D G Q Q T T	V F E A A M A Y L E R G T P	S I V I A G E E Y G T G S S R	D W A A	
UniRef90_UP10003B35400	N G T D I L S	Y D A A M K Y Q Q N Q T P	L V V L A G K Q Y G T G S S R	D W A A	
UniRef90_UP10004782C71	K A G E V E A	Y D V A M K Y Q A D G T P	L V V L A G K E Y G T G S S R	D W A A	
UniRef90_B4S6B5	R D A P V V T	Y D A S K R Y R E E G V P	L I V I A G S D Y G M G S S R	D W A A	
UniRef90_T1J0N8	P T G V E M D	V Y E A S E E Y R K E N H	L I A L A G K D Y G S G S S R	D W A A	
UniRef90_I7J851	P S G E V M S	V F D A A E K Y N Q S S T P	L V I I A G K D Y G S G S S R	D W A A	
UniRef90_UP100040BE930	P T K E E M S	V Y E A A Q N Y K A A K T P	L I V L T G K E Y G S G S S R	D W A A	
UniRef90_Q22M72	P S G Q K L A	V F D A A E K Y Q K E G H	L I V L A G Q E Y G S G S S R	D W A A	
UniRef90_K5WAG2	D H P E T D T	P G I A R R F K S R N Q P	W T L V V D D N Y G E G S A R E H A A		
UniRef90_K1XUS2	F D G S T S G I	P E L A Q K W K E Q N I	E W L V V A E D N Y G E G S A R E H A A		
UniRef90_M5FTU2	Q D P V Q E T	P H V G Q R L K A R N Q P	W A L V V D D N Y G E G S A R E H A A		
UniRef90_H3F941	P S G E E L D	V Y D A A E R Y A N A A Q P	V I I I A G K E Y G C G S S R	D W A A	
UniRef90_A1BCP9	S R R E A M P I	F D A A M R Y L A E N V P	L V V I I A G R D Y G M G S S R	D W A A	
UniRef90_L8GE02	P T G E V L D	W D A A E R Y I N A G T P	L T V L A G E Q Y G S G S S R	D W A A	
UniRef90_S6C2A0	Y K G E L M P	I Y E A A M C Y K K E K V	D T I I I A G R D Y G M G S S R	D W A A	
UniRef90_Q089H2	P N C E S M T	V F D A A M Q Y Q Q Q G T P	C I V L A G K E Y G T G S S R	D W A A	
UniRef90_K0ZBL0	E T G Q V T S	I F E A A R D Y E K A G L	S S V V L A G K M Y G S G S S R	D W A A	
UniRef90_G0U4E7	P S N E K V S	I F D A A V R Y A K E N I P	L V V I I A G K E Y G S G S S R	D W A A	
UniRef90_I3R1X8	P T D E E T T	V F E A S E R Y R E E G T P	L V V L S G V E F G T G S S R	D W A A	
UniRef90_F5ZF40	P S G D A M S	I Y H A A M R Y Q D E G V A	A V V V G G K E Y G T G S S R	D W A A	
UniRef90_H2C7M3	P D G K I D T	I F N V A A M Y K K E G V P	L V I I F A G K Q Y G T G S S R	D W A A	
UniRef90_D9XF46	L T G E L T T M	Y E A A V A Y Q E A G V P	P L V V L A G R E Y G T G S S R	D W A A	
UniRef90_Q2A1K3	L D G S Q Q Y V	F D A A M A M Y K K E G V P	L V I I I A G K E Y G T G S S R	D W A A	
UniRef90_D7GE14	F T R D F E T	V Y D A S L N Y R A A G T P	L V V L A G K E Y G S G S S R	D W A A	
UniRef90_R7ALR7	L D D Q I K A V	W D A A A E D Y Q N N E T P	L V V L A G K M Y G S G S S R	D W A A	
UniRef90_Q21J78	P S E E E K T	I Y D A A Q R Y K K H D T P	P L V V I I A G K E Y G S G S S R	D W A A	
UniRef90_T0M4Q9	P D G K E G S	V F D V A M Q Y M K E N V P	E I V L A G D Q Y G T G S S R	D W A A	
UniRef90_S0NNX0	K T G E V L S	I Y D A A M R Y K E E Q T G	L I I I I A G K D Y G M G S S R	D W A A	
UniRef90_X0QE58	P T G E E T T	I F E A A Q R Y Q A D Q T G	L V V I I I A G K D Y G M G S S R	D W A A	
UniRef90_Q93C71	G Q P E K L A	I Y D A A M K Y K S D G V P	L V V L A G K E Y G T G S S R	D W A A	
UniRef90_A7MW36	P E G K V T R M W E A	I E T Y M N R K Q P	L I V V A G A D Y G Q G S S R	D W A A	
UniRef90_UP10002885B87	P T G E I L M S	V Y D A A M K Y K E D N Q S	L L I I I I A G K E Y G T G S S R	D W A A	
UniRef90_W5N0W0	L T G E Y G G V P	D V A R H Y K K N G L	R W V V V G D E N Y G E G S S R E H A A		
UniRef90_V9TTL1	T T G E Q T S I	I F D A S V E Y G K L N I P	L V V I I I I A G K E Y G S G S S R	D W A A	
UniRef90_UP10003B37C8C	P D D I P M S	I Y D A S V Y A Q R S T P	L A I I I I A G K E Y G S G S S R	D W A A	
UniRef90_I8I221	P E G T V T V M R M W E A	I E T Y M D R G Q P	L I I I I I A G A D Y G Q G S S R	D W A A	
UniRef90_UP10004414B1C	N E S A T D T	I P R I A Q R F K A R G E P	W A L I V D E N Y G E G S A R E H A A		
UniRef90_A1SVX8	K L F N V M R M W E A	I E I Y M A R K Q P	L I I I V A G A D Y G Q G S S R	D W A A	
UniRef90_D5FBF5	E S F Y D R A M D A K E K G H	I V V V A K D N Y A Q G S S R E H A A			
UniRef90_T2MG57	P S G D E M D	I Y E A A E R Y K R E N K D	L V V L A G K E Y G C G S S R	D W A A	
UniRef90_F1VYM9	P E G Q V T R M W E A	I E T Y M E R K Q P	L I I I I I A G A D Y G Q G S S R	D W A A	
UniRef90_UP10003A9A32A	P E N R V I S T V	F E A A Q A Y A K R K Q P	L I V V A G K E Y G S G S S R	D W A A	
UniRef90_UP100036EA307	T L K N E M R M W E A	I E T Y M E R K Q P	L I V V A G A D Y G Q G S S R	D W A A	
UniRef90_G0UYC1	P T N E K V F	F D A A M A M R Y A A E N I P	L V I I I I I L S G K E Y G S G S S R	D W A A	
UniRef90_A4BL05	E S Y Y E R A M E Y Q R H	G S L I I V A G N N Y G Q G S S R E H A A			
UniRef90_K0C3M3	P E G T I S R M W E A	I E T Y M D R K Q P	L I I I I I I A G A D Y G Q G S S R	D W A A	
UniRef90_V8NWMM1	P T G Q T L D	V F D A A E L Y R K E N I P	P L I I I I I I A G K K Y G G S S R	D W A A	
UniRef90_F4AN17	P Q G T E M R M W E A	I E T Y M Q R K Q P	L I I I I I I V A G A D Y G Q G S S R	D W A A	
UniRef90_B0U5T0	P D G T V M R M W E A	I E I Y M Q R S Q P	L I I I I I I A G A D Y G Q G S S R	D W A A	
UniRef90_B6SR2L2	P T G E K L Y V	Y D A A M A M K Y K S E G H	D M V I I I I I A G S E Y G S G S S R D S A A		
UniRef90_UP10003086926	D H S E C L P	I Y E A A K S Y A L Q K T P	M V V F A G I N Y G A G S S R	D W A A	
UniRef90_K2GZ4N	P E G K V M R M W E A	I E T Y M E R K Q P	L I I I I I I A G A D Y G Q G S S R	D W A A	
UniRef90_G9RXI1	P E F P A R A M A A E G G F	I V V V G G G A N Y G Q G S S S R E H A A			
UniRef90_L5LMD3	P S G Q T L D	V F E A A E L Y Q K E G I P	L I I I I I I V A G K K Y G S G S S R	D W A A	
UniRef90_F4WR39	P T N E E M D	V F D A A E K Y A K D K T P	L I I I I I I A L V G K E Y G S G S S R	D W A A	
UniRef90_X5LV15	E T Y P E R A	Q S A R S G H	L I I I I I I V G G E N Y G Q G S S S R E H A A		
UniRef90_E6U6V9	P D F P E R A Q K E	G K G I	I V V G G G A N Y G Q G S S S R E H A A		
UniRef90_UP1000369BD9F	K L F N E M R M W E A	I E T Y M N R K Q P	L I I V V A G A D Y G Q G S S S R	D W A A	
UniRef90_C8VX78	U F D A A E K Y Q R E G I P	V I I I I I I A G K K Y G S G S S S R	D W A A		
UniRef90_F4HCU0	P E G K E S R M W E A	I E H Y M A K K Q P	L I I I I I I I G G S N Y G Q G S S S R E H A A		
UniRef90_V9K944	P S G Q T L D	V F D A A E R Y H R E G F P	L I I I I I I I A G I N Y G Q G S S S R	D W A A	
UniRef90_M5DT29	G D A E K M S I	Y D A A S R Y Q Q E G T P	S V V F G G K I Y G T G S S S R	D W A A	
UniRef90_A3DK74	K E N G G G F I	I G G S N Y G Q G S S S R E H A A			
UniRef90_W5ND04	P S E Q I L D	V F D A A E K Y Q R E G I P	V I I I I I I I I G G S N Y G Q G S S S R	D W A A	
UniRef90_N1UB33	L S G T Y E P	V P Q T A R A Y K A K G I	G I G S I V V V G D E N Y G E G S S S R E H A A		
UniRef90_UP1000380669B	K T F Y D R A M E S K D S H	G G G H H V V V V A A H	G H V V V A G E R Y G M G S S S R	D W A A	
UniRef90_M1QIA3	P S G E V L P	L W D A A A R R Y R A N G Q S	V V V F A G E R Y G M G S S S R	D W A A	
UniRef90_I3X5S5	P T E R I M T	V F E A A M L Y R K D S V P	L V I I I I I I V G G A N Y G Q G S S S R	D W A A	
UniRef90_D1ATU7	E T F P T R A K E	L G K S I	I V V G G A N Y G Q G S S S R E H A A		
UniRef90_D4JU89	P S G E K M S I	Y D A A M K Y I S N N I S T I I	F A G K E Y G T G S S S R	D W A A	
UniRef90_S5ROP6	K N M G K S I	V V V G G S N Y G Q G S S S R E H A A			
UniRef90_R6CAH4	G H V V V G G G S N Y G Q G S S S R E H A A				
UniRef90_V4XZV5	T F P D R S L	D S D G F F I	V A G R N Y G Q G S S S R E H A A		
UniRef90_S2L4I5	E A F P K R A K E	E K G G G F I	V V G G D N Y G Q G S S S R E H A A		
UniRef90_X1A3I9	UniRef90_Q8RCF8	E F G P K R A K E	E W G G G F I	V V G G H N Y G Q G S S S R E H A A	
UniRef90_D8J7K7	UniRef90_R7F8P1	V V V V A G E R Y	V V V V A G E N Y G Q G S S S R E H A A		
UniRef90_UP10003C86AA7	P S G E I L D	V F D A A E R Y Q Q A G L	P L I I I I I I I I A G K E Y G S G S S S R	D W A A	
UniRef90_G8M1Q3	E T Y Y E R A M G H Q Q	E S S G G F I	I G G E N Y G Q G S S S R E H A A		
UniRef90_UP100045EA62E	G S G D V L S	L W D A A Q R Y Q A E G R S	Q G S F V V V V G G G A N Y G Q G S S S R E H A A		
UniRef90_M8ACV7	G S G D V L S	L W D A A Q R Y Q A E G R S	V V V V A G E R Y G M G S S S R	D W A A	

	130	140	150	160
UniRef90_J3B540	K G T N L L G V K A V I A E S F E R	H R S N L V G M G V L P	L Q F K Q N R K S	
UniRef90_UP100041E579C	K G T Q L L G I Q A V I A R S F F E R	H R S N L I G M G V L P	L Q F K D S W E T	
UniRef90_UP1000478999A	K G T A L L G V R A V I A E S Y E R	H R S N L I G M G V L P	L Q F P M S A A T	
UniRef90_K0I414	K G T Q L L G V R A V I A E S Y E R	H E T N L K K Q G L V P	L Q F K D S W E T	
UniRef90_W710T2	[L] Q P R Y L G G S I V L A K S F F A R	H E T N L K K Q G I I P	L T F V D E A D Y	
UniRef90_UP1000479C5C0	K G T Q L L G I K A V I A R S F F E R	H R S N L V G M G V L P	L Q F K G D D S W	
UniRef90_R9T9Q4	K G P F M L G I K A V I A E S Y E R	H R S N L I G M G V L P	L Q F G E N A E S	
UniRef90_Q3IFL7	K G S L L L G V K A V I A Q S Y E R	H R S N L I G M G V L P	L Q F K D G E S H	
UniRef90_A8L043	K G T A L L G V R A V I A E S Y E R	H R S N L I G M G V L P	L Q F P E S A E S	
UniRef90_E3RUG7	[L] Q P R Y L G G R I I I L A K S F F A R	H E T N L K K Q G I I P	L T F A N E A D Y	
UniRef90_A0A011QR22	K G T R L L G V R A V I A R S F F E R	H R A N L V G M G V L P	L Q F D D S A T V	
UniRef90_UP10003B35400	K G T L L L G I K A V I A E S F F E R	H R S N L I G M G V L P	E L D P R M T M	
UniRef90_UP10004782C71	K G T I L L G V K A V I A S E S F F E R	H R S N L I G M G V L P	L N F V D G Q Q S	
UniRef90_B4S6B5	K G T S L L L G V R A V I A E S F F E R	H R S N L V G M G V L P	L Q F G E S A A S	
UniRef90_T1J0N8	K G P F L L G I K A V I A E S Y E R	H R S N L V G M G I I P	L Q Y E Q T A S T	
UniRef90_I7J851	K G T A L L L G V K C I I A E S Y E R	H R T N L V G M G V L P	P Y Q S K T S L K N	
UniRef90_UP100040BE930	K G T F L L G I K T V L A E S Y E R	H R S N L V G M G V L P	L Q Y K D S A A K	
UniRef90_Q22M72	K G P Y L Q G I K A V I A Q S Y E R	H R S N L V G M G I I P	C E F G Q N A D S	
UniRef90_K5WAG2	[L] Q P R F Y G A A M I I A R S F F A R	H E T N L K K Q G I I P	L W F V D K T D Y	
UniRef90_K1XUS2	L L Q P R F Y G L G G R V I I A R S F F A R	H E T N L K K Q G Q V V P	L T F A N G D D Y	
UniRef90_M5FTU2	[L] Q P R F Y G C A M I V A R S F F A R	H E T N L K K Q G Q V L P	W F V D K D D Y	
UniRef90_H3F941	K G P Y L Q G V R A V I A E S F F E R	H R S N L I G M G I V P	L Q F E D N A D S	
UniRef90_A1BCP9	K G T L L L G V R A V I A R S F F E R	H R A N L V R M G V L P	E F A D A G S P	
UniRef90_L8GE02	K G V W M Q N V K F V I I A K S F F E R	H R S N L V L M G I I P	L E F V E D A D K	
UniRef90_S6C2A0	K G A N L L L G V K V I I A E S F F E R	H R S N L V M M G I I P	L Q Y G E N A Q N	
UniRef90_Q089H2	K G P A L L L G V K A V I A Q S Y E R	H R S N L V G M G I I P	L Q F M P D D S A	
UniRef90_K0ZBL0	K A P P L L L G V R A V F A E S F F E R	H R S N L I G M G I I P	L Q F E E G Q E S S	
UniRef90_G0U4E7	K G P F M Q G I K V I I A E S F F E R	H R S N L I G M G I I P	L Q F G E T A K S W	
UniRef90_I3R1X8	K G T D L L L G V R A T I I A E S Y E R	Y R T N L V G M G V L P	L Q F A E G D S W S S	
UniRef90_F5ZF40	K G P S L M G V K A V M V E S Y E R	H R S N L I I G M G I I P	L Q F K D S A S S S	
UniRef90_H2C7M3	K V T S L L L G I R V V V A E S F F E R	H R S N L V A M G V L P	P V E A N W S G A	
UniRef90_D9XF46	K G P A L I I G V R A V I A E S F F E R	H R S N L V G M G I I P	P L E F P Q N A R T T	
UniRef90_Q2A1K3	K G T F L L L G V K A V I A E S Y E R	H R S N L V G M G V L P	E Y V N N A K T T	
UniRef90_D7GE14	K G T M L L L G I R A V I I A E S F F E R	H R S N L I I G M G V L P	L Q F P Q S A D T T	
UniRef90_R7ALR7	K G P M L Q G V R A A F A E S F F E R	H R S N L I I G M G I I P	L Q F E E G Q E S S	
UniRef90_Q21J78	K G V K L L L G V R A V I A E S Y E R	H R A N L V G F G V L P	L Q F L E G Q S A	
UniRef90_T0M4Q9	K G P F L L L G V K A V I V A T G Y Y E R	H R S N L V G M G I V P	L Q F R Q G E I Y	
UniRef90_S0NNX0	K G T Y L L L G V K A V I A E S Y E R	H R S N L V M M G V L P	L E F G Q T A E T	
UniRef90_X0QE58	K G V K L L L G V K A I I I A E S F F E R	H R A N L A M M G V V P	L Q Y R D T A E T	
UniRef90_Q93C71	K G T N L L L G V K A V I I A E S F F E R	H R S N L V G M G V L P	L Q F G E N A Q T	
UniRef90_A7MW36	K G V R L L L G V K E A I V A E G F E R	H R T N L V G M G V L P	L Q F K D G V N R	
UniRef90_UP10002885B87	K G T A L L L G V K V I I L A E S F F E R	H R S N L V G M G V L P	L Q F C D N A G N	
UniRef90_W5N0W0	[L] E P R H L G G Q A I I I T K S F F A R	H R S N L V G M G V L P	L Q F P E N R K S	
UniRef90_V9TTL1	K G T Y M L G I K A V I I A E S F F E R	H R S N L I I G M G V L P	L Q F G Q N V E S	
UniRef90_UP10003B37C8C	K G P R L L L G I R F V V I A E S Y E R	H R S N L V G M G V L P	L E F K P G Q N R	
UniRef90_I8I221	K G V R L L L G A G V E A I V A E G F E R	H R T N L I I G M G V L P	L W F E D K A D Y	
UniRef90_UP10004414B1C	[L] Q P R F Y G C A L I V V G R S F F A R	H E T N L K K Q G I I P	V E F I I N A E N R	
UniRef90_A1SVX8	K G V R L L L G A G V E V I V A E G F E R	H R T N L V G M G V L P	L E E F I D E S D Y	
UniRef90_D5FBF5	I A P K Y L Q G H A V I I A N S Y E R	A W Q N L V N F G I L P	L E E F I L E G Q E T	
UniRef90_T2MG57	K G P W M Q Q G K A V I I A E S F D P T	H T K S N L I I G M G I A P	L Q F R P E T R K T	
UniRef90_F1VYM9	K G V R L L L G A G V E A I A A E G F E R	H R T N L V G M G V L P	L E F K A G V N R	
UniRef90_UP10003A9A32A	K G P R L L L G V R V V V I A E S F F E R	H R T N L A G L G I L P	L Q F P E T R K T	
UniRef90_UP100036EA307	K G V R L L L G A G V E A I A A E G F E R	H R T N L V G M G V L P	L E F T P G V N R	
UniRef90_G0UYC1	K G P F L L L G Q G V K V I I A E S F F E R	H R S N L V G M G I V P	L Q F R D G E E S W	
UniRef90_A4BL05	V C P A Y L G V R A V L A K S F F A R	H R T N L V N F G V L P	V E F K A G E N R	
UniRef90_K0C3M3	K G V R L L L G A G V E V I V A E G F E R	H R T N L V G M G V L P	L Q F R N P E D W	
UniRef90_V8NWMM1	K G P F L L L G M Q V K A V I I A E S F F E R	H R T N L V G M G V L P	V E F K A G E N R	
UniRef90_F4AN17	K G V R L L L G A G V E V I V A E G F E R	H R T N L V G M G V L P	V E F K A G E N R	
UniRef90_B0U5T0	K G V R L L L G A G V E A I V A E G F E R	H R T N L V G M G V L P	T F H P G T T R	
UniRef90_B6SRL2	K G P M L L L G V K S V I I A K S F F E R	H R S N L V G M G I I P	L C F K E D A D S	
UniRef90_UP10003086926	K A Q A L L L G V K A V V V A Q S I F E R	H R S N L I I G M G V L P	L V F K P G Q D D	
UniRef90_K2GZ4N	K G V A L L L G A G V E A I V A E G F E R	H R T N L V G M G V L P	L Q F E E G T T R	
UniRef90_G9RXI1	L V P L Y L G I R A V V T V S F F A R	H K A N L V N A G I I L P	L E F F E N A A D Y	
UniRef90_L5LMD3	K G P Y L L L G V R A V L A E S Y E K I	H K A H V G I I A P	L Q F G E N A E S	
UniRef90_F4WR39	K G P Y L L L G I R A V I I A E S Y E R	H K A H V G I I A P	L Q Y G E T A E T	
UniRef90_X5LV15	I A P R Y L L G Q M V I I A K S F F A R	H W Q N L V A N F G V L P	L A V E F A D P T D Y	
UniRef90_E6U6V9	L A P P L Y L G V K A V V V A K S F F A R	H W Q N L V A N F G V L P	L I F F Q N P D D Y	
UniRef90_UP1000369BD9F	K G V R L L L G A G V E V I V A E G F E R	H R T N L V G M G V L P	L Q F K V G T D R	
UniRef90_C8VX78	L A P M F L L G V K A V L V K S F F A R	H R T N L V N F G I L P	L T F V D E K D Y	
UniRef90_F4HCU0	K G V R L L L G A G V E V I V A E S I E R	H R T N L V G M G V L P	L Q F K A G D S R	
UniRef90_V9K944	K G P Y L L L G V K A I I I A E S Y E K I	H K N H V G M G V I P	L Q F G E N A E V	
UniRef90_M5DT29	K G P A L L L G V K A I I I A E S F F E R	H K S N L V G M G V L P	L Q P L E E G V T S	
UniRef90_A3DK74	L A P L Q L G V K A V I I A K S F F A R	H M A N L I I N S G I I P	M T F E N E A D Y	
UniRef90_W5ND04	K G P Y L L L G V K A V I I A E S F F E R	H M A N L I I N S G I I P	L Q F G E S A D V	
UniRef90_N1UB33	M E P R H L G V R A V L V K S F F A R	H E T N L K K Q G M I L A P	L T F A D K S D Y	
UniRef90_UP1000380669B	L A P P K Y L G Q V A V L A K S Y E R	A W Q N L V N F G I L P	L E F I E E A D Y	
UniRef90_M1QIA3	L A P R F L G V R A V I I A K S F F A R	H H A N L V N F G I A P	L E F I N K S D Y	
UniRef90_I3X5S5	K G V S L L L G G A R A V V A L S F F E R	H R S N L I I G M G V L P	L R L P A E F G P	
UniRef90_D1ATU7	K G T L L L G V R V V I A E D F F E R	H R S N L I I G M G V L P	L V F K R A S D	
UniRef90_D4JU89	L A P L Y L G V K A I I I C K S F F A R	H R Q N L I I N N G I I P	L C F V D E A D Y	
UniRef90_S5ROP6	K G T K L L L G V K M V I I A R S F F E R	H R A N L I I N N G I I P	L Q F N D S I Q S	
UniRef90_R6CAH4	L A P L Y L G V K A V L V K S F F A R	H R A N L I I N N G I I P	L T F V N E A D Y	
UniRef90_V4XZV5	L G P Q S L G L R V V L A K S F F A R	H Q Q N L I I N F G V L P	L T F V N P S D Y	
UniRef90_S2L4I5	I A P R Y L G L R A V V C A I S Y G R	H W Q N L I I A N F G V V P	L T F A D P D D L	
UniRef90_X1A3I9	I A P K Y L G L K A V I V K S F F A R	H L A N L V N F G I V P	L T F A N K E D Y	
UniRef90_Q8RCF8	L V P L Y L G V K A V V I A K S F F A R	H K A N L I I N S G I I P	L T F V K E E D Y	
UniRef90_D8J7K7	L C P M Y L G I E A V V F A E S F F A R	H K A N L I I F N F G I V P	Y T I D E E T Y E	
UniRef90_R7F8P1	L A P L Y L G V K A V L V K S F F A R	H R A N L I I N A G I I P	L T F V N E A D Y	
UniRef90_UP10003C86AA7	K G P F L L L G I K A V L A E S Y E R	H R S N L V G M G V I P	L E Y G E N A D A	
UniRef90_G8M1Q3	L A P K Y L G V K A V I V K S F F A R	H L A N L V N F G I V P	L T F K N P E D Y	
UniRef90_UP100045EA62E	L G P R Y L G V K M V I I A K S F F A R	H L Q N L I S N F G I V P	L I F T N P E D W	
UniRef90_M8ACV7	K G V A L L L G V R A V L A A S F F E R	H R W N L I G M G V L P	R L P Q G V K P	

170 180 190 200

UniRef90_J3B540	L N L N G S E T [D] I L G L T E L T P R M N [S] L V I T R E D G S R E K I E V [C]		
UniRef90_UP100041E579C	L G L K G D E Q V D V V V D K Q L K P Q S K A R L V I R F A N G S T K E V Q L T		
UniRef90_UP1000478999A	L G L K G K T E T F A V [H] G V T A L N A G T T P A T [T] P E D G D G D V I T F E V L		
UniRef90_K0I414	L G L T G N E V I D V P D A A L T P Q S D A R L V I H R A D G T R Q E V T V T		
UniRef90_W710T2	D L I A P R D Q I T T V G L R D M L Q G R V D L Q V T K E T T G E K I V I E T A		
UniRef90_UP1000479C5C0	Q S M R L D G S E L V D V V P D L R P Q S D A K V I I R R A D G S Q E E I T A T		
UniRef90_R9T9Q4	L G L D G T E T F D I E L E N M T P K S I V T V T A S K N G K K K Q F K A M S		
UniRef90_Q3IFL7	L G L T G Q E Q F D I E G L F D K T K E V S V I A T N S E G K K V S F S A V		
UniRef90_A8L043	L G L T G E E T F T I T G L A D V D E K T P T I T V Q A G D S S F E A V V		
UniRef90_E3RUG7	D L F A A C [C] D E V A T R G L L D V L R K G E V E L V L K K K D G S E K V I K T K		
UniRef90_A0A011QR22	L Q L C G D E S F D I L G L G E L V P M Q N L T L A I V R A D G E R R P L L [C]		
UniRef90_UP10003B35400	L E L D G S E E V D I V P C [C] D D L T P K Q T L R I I L S R H D G S R H E V L R S		
UniRef90_UP10004782C71	L G L D G T E V F D F D G L V N G A R E V S V S A R K A D G S T V K F K A R		
UniRef90_B4S6B5	L G L C G E E [C] Y E I V S R E P P C P R E E I S V I A R H P D T G N E T V V I [C]		
UniRef90_I1J0N8	L G L S G K E R F N I T L P E D L K P G Q K L T V E V N D G R N F D V V V		
UniRef90_I7J851	I I C P S T E K L T I E L P E N I V P G Q M I K I T T S G G K Y F Q A K [C]		
UniRef90_UP100040BE930	L G I N G T E T F T I T G I K D I T P M K E V K V M A R N E K G E E L K F A I A		
UniRef90_Q22M72	L G L N G H E T F N I D L K G G N L K V N E V L T V T S T G K S F Q V K T		
UniRef90_K5WAG2	A R I G S G D V L E T Y G L E D D L N G K G Q A Q I T I R R N G D I F E I Q T R		
UniRef90_K1XUS2	A R I E A C D E V E T V G L L Y E V L V N G Q G E V V T K R D S G E V L Q I P T K		
UniRef90_M5FTU2	S K I I G A G D R I N T I G L D K I I A C D P S A Q V T K R D S G E V L Q I P T K		
UniRef90_H3F941	L G L T G K E Q F T I E I P D D L K P G Q K V T V K V S N G T S F S V L S S		
UniRef90_A1BCP9	E G L K G D E F F E I P L G G T I T P R E R I T V T A T D P L E K K Q F S V I S		
UniRef90_L8GE02	L G L T G K E T T F S I D I T G A A P R S T V T V K V N G A A S E F K A T L		
UniRef90_S6C2A0	L G L T G K E T T F S I D Q L P K E P Q V G Q V I T V I A K E G D R I T R F K A R L		
UniRef90_Q089H2	E S L N I T G E E Q F S I P A V S A E Q K T V K V S V T D K A G K Q H S F E A K		
UniRef90_K0ZBL0	L G L D G T E T T F S I L E A I D F G D G E P C M P T P S K Q D G S A K E F A I V		
UniRef90_G0U4E7	L G I T G R E R F S F D T N G L H P R Q E V T V R K S T S F N A I L		
UniRef90_I3R1X8	L G L D G S E H F D I L G L D D L E V N D E L T V V A E K D D G S T V E F P V T		
UniRef90_F5ZF40	L G I K G N E T F S I G A V S R D Q K D V D V T V T S D A G E S Q T F S M D		
UniRef90_H2C7M3	N L R G D E L V D V I L S D L K P R A E V T V R I K G G K G E R E R I R G I A		
UniRef90_D9XF46	L G L T G A E E F D I S G V R E F S E S V P R T V R V T A G A V S F D A V V		
UniRef90_Q2A1K3	L G L D G T E M F N I K N L N N I K P R Q I V I V E A V I H P K T T T F E A L A		
UniRef90_D7GE14	L G L S G A E S F D I T G L D A L N H G D T V H V T A T S A D G K V T Q F D A V		
UniRef90_R7ALR7	L G L D G T E T F T I L A P I D F S K G L P E P A H V V K P S G E K I A F M I V		
UniRef90_Q21J78	E K L E I T G K E Q F T I E N F A V G D T H A N M K I I S P V G D T R N V K L A		
UniRef90_T0M4Q9	D F S K P M D I I F D Q G I K P L G K A T F R Y Y P T G S N D R K T T E V T L		
UniRef90_S0NNX0	L G L D G S E R F T V Q V L T E G T G V H D V I D V T A T K D D R E I T F Q V T V		
UniRef90_X0QE58	L G L D G T E T F S I D L D G P I A H V T A E K S S G R Q I K F D T I V		
UniRef90_Q93C71	L G L D G S E V L D I T G L Q D G A S R R A T V D A K K S D G S V K Q F Q V K		
UniRef90_A7MW36	K T L E L D G T E L Y D V I G D I T P G A D L A L V I T R A N G D K V D V P V [C]		
UniRef90_UP10002885B87	L N L D G T E D F E L K G L E Q I T P G Q K I H V I A M K P N Q L K E F T A I V		
UniRef90_W5N0W0			
UniRef90_V9TTL1	L S L T G N E T F N I D V I S S I I P R M R A S L T V I Y T N G E N R T V L L [C]		
UniRef90_UP10003B37C8C	L L L T G E E V F R V G Q P G E L K A G K V I N V F A E D D L G K T K E F A T V		
UniRef90_I8I221	N T Y G I D G T E T Y D V I G K L T P R A T L T V V F T R K N G E K V E I P V [C]		
UniRef90_UP10004414B1C	A R I I G S S D I V E T V N L Q D V F I G P V W L R V T K R D S G E V F E V R T R		
UniRef90_A1SVX8	H T Y A I D G T E T F D V I G K P T P G A L L T L T L I N R P S G E T I N V E V [C]		
UniRef90_D5FBF5	D K I E Q G D R V S F K N L E D V E K R N N I K V H V K K E N G D S V T F E T K		
UniRef90_T2MG57	L G L T G K E N F N I E I T E E V K P N S I V N V K L D N G R T F Q V K S		
UniRef90_F1VYM9	L T L L A I D G T E T F D V I G D R T P R S T I L T L V I T R K N G E C V E V P V [C]		
UniRef90_UP10003A9A32A	L G L T G H E K F S V E G I N D F A P G D T L Q L V I E R E D G S I E N V S V T		
UniRef90_UP100036EA307	L T L L A I D G T E T Y D V V G E R T P R A M L T L V I H R R G E R V E T P V [C]		
UniRef90_G0UYC1	L G L T G R E R I L S F D F S G G L C P G Q E V T V Q K D D G T T F S A I L		
UniRef90_A4BL05	Q R I I G Q G D V L E I K G I H E A L R Q G D E L R A N N R T R D E V Y L L R		
UniRef90_K0C3M3	H T Y N I D G T E T Y T V T G D I T P R A T L T L T I T R K N G E T I D V P V [C]		
UniRef90_V8NWPM1	L G L T G K E Q F S I F F P Q E L L S P G I T L R V K T S T G K A F H V A A S		
UniRef90_F4AN17	H T Y H I D G S E T Y D V L G E R K P G A K M T L N I T R K N G E Q V S V P V [C]		
UniRef90_B0U5T0	I T L R I D G T E L F D V C G V P S V G A V L I L R I Q R R D G S V A E V P V [C]		
UniRef90_B6SR2L	L G L T G R E R Y T I H L P T E L L S P G Q D V T V T T H D G R S F T C T L		
UniRef90_UP10003086926	L R M D G S E Q F D F L G L D E L A V G E N I K L I V H R A D G R R D E A E V A		
UniRef90_K2GZ4N	K T L L S I D G T E D F V E G E P A P R A T L T L V I H R R N G E V Q R V P V [C]		
UniRef90_G9RXI1	E K I I S L G D T L E L S G V I A G I E N G A V T L T N K T T G C V I P L R		
UniRef90_L5LMD3	L G L T G R E T F S L A F P E E L L S P G V T L T M K T S T G K A F R V I A		
UniRef90_F4WR39	L G L T G Y E Q Y D I M I P T N C Q P E E I I T V N T D N G K K F K V I A		
UniRef90_X5LV15	D S V V A Q G D D V L T L A D L R R A L A D G D P I T V T N A T R G T S F V V R		
UniRef90_E6U6V9	D K I I H F E D E L A L Y V H K E V E A G A Q T V T L L N K T T G D A I L T R		
UniRef90_UP1000369BD9F	N T L L E L D G T E L Y D V Y G D I E A G S D L A L V I T R K N G E K L D V P V [C]		
UniRef90_C8VX78	D G I I D Q E D L L L L S D T S A Q M S A E H M V V R N L T K G T E F K V V		
UniRef90_F4HCU0	H T Y A I D G S E V F V D I E G E I S P R C D L T V V M T R S N G E V V K F P V [C]		
UniRef90_V9K944	L G L T G K E Q Y T I K L P Q D L S P G T I I D V M T S A G K T F K V A V A		
UniRef90_M5DT29	L N L L N G S E T F D L A G I D T M A P R G S V T L T I K R T D G S T E Q V L L S		
UniRef90_A3DK74	D E I I D M D D E L V I N E A R Q I K N G N S S I V V K N V T K G K D I K V N		
UniRef90_W5ND04	D K I I Q G E E D S I D I L G L T S F Q E G T P L T L V L H H K D G S S Q E M K V N		
UniRef90_N1UB33	D K F D Q G G D E V E L L D V V N S V K S K E D I K V V I H K P D G S T H S I K A K		
UniRef90_M1QIA3	D K F S L N D E I E L L D I R K S I E E N K P V K V R N L T T G E E I E V T		
UniRef90_I3X5S5	D R L E P G D V V V V I S S D P K T I A P C A I P V T I R R K D G S S V S F E A S		
UniRef90_D1ATU7	N V F S G N E V I A L S S G N V G I G E E I T C K I R D A D G S E R E I I L L [C]		
UniRef90_D4JU89	D K I I D R D D V L E L L P G I I R N A I E N G T E I T V K N I T K G T E Y K V T		
UniRef90_S5ROP6	L N I I T G N E Y F D L L K G I K K I P L E K I D F I I Y R K N G I K K I K L L L		
UniRef90_R6CAH4	D K I I Q G Q D E L A I E N V K E V L A D K S E L T L V N K T T G A E I P V L		
UniRef90_V4XZV5	D N I I Q A G D D V L R L T D L K R A L A D R D Q L F T D N I T Q G T K L Q V S		
UniRef90_S2L4I5	D A I I E Q G D E L A L D D I V D A L E S S S E E I I T L Y N K T K D R H Y T M R		
UniRef90_X1A3I9	A T I I E Q G D D K F E I I D L T T L E S E G S V P L K N I T K G T E I K L V		
UniRef90_Q8RCF8	E D I I D M G D V L K I I E N T V E Q V R S G K N I I V K N L T K G K S F E V R L		
UniRef90_D8J7K7	K I I E Q G D D I E V V D D V Q D G I A S G K N E F T I R V N D D W E A T A R		
UniRef90_R7F8P1	E K I I S Q Q G D V L E L L D V R K H I E D G E T T L T L V N K T T G A E I P V L		
UniRef90_UP10003C86AA7	L G L T G R E R Y T I S I P E T L K P R M		
UniRef90_G8M1Q3	D R I I D L G D K I E I D I G D L K G D V K L K N I T K G F E I E L T		
UniRef90_UP100045EA62E	K K I I S Q S D R L S I P N A R N A I R M G N R V Q V N N I T K D E T Y E T E		
UniRef90_M8ACV7	L G I I S A D D V V M I D D P Q T M T P R C D V T V T I R K V D G T S T T L A V A		

210 220

UniRef90_J3B540	R D T [L] N E [V] E Y F K S G G L H Y V
UniRef90_UP100041E579C	R D T P [I] E [V] D Y Y R A G G L P Y V
UniRef90_UP1000478999A	R D T P G E A D Y Y R N G G L H F V
UniRef90_K0I414	R D T P [I] E [V] D Y Y Q A G G L P F V R Q L L E
UniRef90_W710T2	H T F S K D Q A N W [V] A G S A L N L L
UniRef90_UP1000479C5C0	R D T A [I] E [V] Q Y Y R H G G L P Y V R Q L L A
UniRef90_R9T9Q4	R D V P A E [L] E Y I K N G G L Q T V L R K M
UniRef90_Q3IFL7	R D T P K E W D Y Y K H G G L Q Y V
UniRef90_A8L043	R D T P G E A E Y Y R H G G L L Y V
UniRef90_E3RUG7	H T L S H D Q C G F V L A G S A L N L L A R Q G R E
UniRef90_A0A011QRR2	R D T P [I] E [V] Q Y Y W S G G L P Y V
UniRef90_UP10003B35400	R D T R Q E A E Y Y R H G G L Q Y V L A Q L Q K
UniRef90_UP10004782C71	R I N T P K E W E Y Y E N G G V L Q Y M L R Q M A
UniRef90_B4S6B5	R D S P [V] E [V] D Y Y R H G G L P M V
UniRef90_T1J0N8	R F D T E V E L T Y F K N G G L N Y M R K M L Q
UniRef90_I7J851	R D T A [I] E [V] E Y Y K S G G L Q Y V L M N M S K
UniRef90_UP100040BE930	R L D S L I D I E Y Y R H G G L Q Y V
UniRef90_Q22M72	R L D T D V E I A Y F Q N G G L Q Y V V L R K L V K
UniRef90_K5WAG2	H T M S K D Q L N W L R A G S A L N H I R S K I Q Q
UniRef90_K1XUS2	H T L S K D Q C G F I L A G S A L N L A G M S K
UniRef90_M5FTU2	H T L S E D Q I A W L K A G S A L N F I R E Q K
UniRef90_H3F941	R F D T E V E L T Y N H H G G L H Y M R K L I A E
UniRef90_A1BCP9	R D T P [V] E A D Y F R N G G L P A V R K I L K
UniRef90_L8GE02	R D T E T E V N Y F K H G G V L P T V
UniRef90_S6C2A0	R F D A D A D I R Y Y E N G G L P M V R K K L Q E
UniRef90_Q089H2	R D T P N E F S Y Y R H G G L H Y V L R N L A R
UniRef90_K0ZBL0	R V D T P T E G A Y M A H G G L Q Y V
UniRef90_G0U4E7	R D T D M E A K Y I E N G G L Q Y V L R Q K
UniRef90_I3R1X8	A Q V T P A A V K Y V E N G G L H Y V
UniRef90_F5ZF40	R D T S N E F T Y F E N G G L H Y V R Q Y L K K
UniRef90_H2C7M3	R V E T K A E V E Y L R H G G L N Y V
UniRef90_D9XF46	R V D T A M E A E F I R H G G M P F
UniRef90_Q2A1K3	R L D A D V D V D Y L K N G G L Q T V K D I M
UniRef90_D7GE14	R I D T Q G E S H Y Y I N G G M Q Y V L R N L A R
UniRef90_R7ALR7	R I D T P T E G E Y Y F N G G L Q Y V
UniRef90_Q21J78	R I D T P V E W E Y Y Q H G G L H Y V L R Q M
UniRef90_T0M4Q9	R V D T P V E A E Y L A S G G L Q F V
UniRef90_S0NNX0	R F D S Q A D I R Y Y Q N Q G L P M V K K I A E
UniRef90_X0QE58	R F D T P V D W T Y Y K D G G M P M I
UniRef90_Q93C71	L L L T P K E V E Y F K H G G L Q Y V R Q L A A R
UniRef90_A7MW36	R L D T E D E V N V Y K A G G V L Q R F A Q
UniRef90_UP10002885B87	R L D S V V E I E Y Y Q N G G L Q T V L E
UniRef90_W5N0W0	
UniRef90_V9TTL1	C D T A N E L K Y Y R H G G I L Y Y V
UniRef90_UP10003B37C8C	R D T P Q E I L Y Y Q N G G I L Q Y V R Q L A A K
UniRef90_I8I221	R L D S D E E V S V Y E A G G V L Q R F A
UniRef90_UP10004414B1C	H T L S A D Q V R W L E A G S A L N A I R A Q K A
UniRef90_A1SVX8	R L D T E E E V S I Y E A G G I L Q R F A Q
UniRef90_D5FBF5	H T L S D R Q I N I L L K G G I I N E F K Q R L K
UniRef90_T2MG57	R F D S D L D I L Y Y R H G G L N Y F
UniRef90_F1VYM9	R L D T F E E V A I Y E A G G V L Q R F A Q
UniRef90_UP10003A9A32A	R L D T H E D V R Y F R R G G L L P
UniRef90_UP100036EA307	R L D T Q E E V S I Y E A G G V L Q R F A Q
UniRef90_G0UYC1	R D T A M E V K Y V E H G G I L Q Y V
UniRef90_A4BL05	H S L S E R Q I E V L M H G S I I N Y V R H K H A
UniRef90_K0C3M3	R L D T A D E V L V Y E A G G V L Q R F A Q
UniRef90_V8NWM1	F D N D V E I T L Y K H G G V L N Y M
UniRef90_F4AN17	R I D T Q E E S S I Y E A G G V L Q R F A Q
UniRef90_B0U5T0	R L D T A E E L S I Y A A G G V L Q R V A Q Q M
UniRef90_B6SRL2	R L D T Q L E V T Y F N H G G I L P Y V V R N L A A Q
UniRef90_UP10003086926	R V D S Q Q E V R Y L A N G G V L P F V
UniRef90_K2GZN4	R L D T A E E V S V Y A A G G I L Q K F A K
UniRef90_G9RXI1	C D I S A R Q A Q I I R A G G L L N Y T R E K N R
UniRef90_L5LMD3	S F E N D V E I T L Y Q H G G L L N F V A R K
UniRef90_F4WR39	R F D T D V D L T Y F K H G G I L N Y M I R K M
UniRef90_X5LV15	H R L S P R Q I R H V L A G G I I P W L A A Q Q K
UniRef90_E6U6V9	C D I S D R Q R D M L L A G G I I N Y T K Q Q N A
UniRef90_UP1000369BD9F	R L D T A D E V N V Y S A G G V L Q R F A K
UniRef90_C8VX78	H N L S E R Q K I I I K A G G L L N Y T K N R
UniRef90_F4HCU0	R L D T S A E V D V Y K N G G I L Q K F A K
UniRef90_V9K944	M F E N N M E V T F Y K H S G I I N Y V A R K M
UniRef90_M5DT29	R V D T S S E L E Q I R H K G I L P M V
UniRef90_A3DK74	V A L S Q R Q V E I I I A G G L L N Y T R Q Q N Q
UniRef90_W5ND04	L F E S E M D I V F Y K H G G L L K Y V A R K M
UniRef90_N1UB33	H T F N P Q Q I A W F K A G S A L N L I S E E Q K K
UniRef90_UP1000380669B	H S L S D R Q I N V L V K G G I I N D F K E K L
UniRef90_M1QIA3	Y N L T P K Q K E I I L L G G G L L R Y I K S K N R R
UniRef90_I3X5S5	A A M T N V E I R T L K A G G I I P F I L D K
UniRef90_D1ATU7	A I N T A I E E E Y L A S G G V L H Y V L K
UniRef90_D4JU89	C E L S E R G K G M M I A G G L L N Y T K
UniRef90_S5ROP6	R I D T P M E I K Y Y Q N D G I L P F V
UniRef90_R6CAH4	C E L T G R T K D I I L A G G L L D Y T R E S L A E
UniRef90_V4XZV5	C D M T P R Q V E F F L R G G V I N W M K E Q
UniRef90_S2L4I5	H G L S P R Q I G M I R H G S I I N L V R
UniRef90_X1A3I9	H S L S E T E I A V L K A G G K I I P F I K Q K H
UniRef90_Q8RCF8	E V S D R N R E I I L I A G G M I I N Y V K S K N K
UniRef90_D8J7K7	L D A S E R E R E I V T A T G G K I I P Y T K Q Q A E E
UniRef90_R7F8P1	C E L T G R T K D I I L A G G L L D Y T R D K L S K
UniRef90_UP10003C86AA7	H T L S E L D A E I L K I G G K I I P W I K E H F S K
UniRef90_G8M1Q3	H T L T P Y Q V E M V L A G S I I N L V K Q K
UniRef90_UP100045EA62E	A I E T S A E V G I L R A G G V L P L I K Q L L N R
UniRef90_M8ACV7	

UniRef90_UPI00046582CA
 UniRef90_UPI00046D11C9
 UniRef90_R6FZ41
 UniRef90_A6U6E2
 UniRef90_UPI000477CDB1
 UniRef90_A5N6T5
 UniRef90_UPI00037FF9B2
 UniRef90_L0DR21
 UniRef90_X0WPB0
 UniRef90_UPI0003B436D4
 UniRef90_D4L7L8
 UniRef90_L5NBX8
 UniRef90_G7LXG8
 UniRef90_UPI00047C1AF0
 UniRef90_UPI0002FED01F
 UniRef90_F5SKY0
 UniRef90_W0B8F9
 UniRef90_U2NHJ8
 UniRef90_M7YX44
 UniRef90_UPI0003A4ED9B
 UniRef90_UPI00042B12AB
 UniRef90_S7W3A1
 UniRef90_X8J9C2
 UniRef90_G7WKT5
 UniRef90_W2BVE5
 UniRef90_F3YU96
 UniRef90_M9RWK3
 UniRef90_D6Z4D0
 UniRef90_J9RTK4
 UniRef90_C6H5J6
 UniRef90_M4DF93
 UniRef90_H0UMQ9
 UniRef90_A0A016USL5
 UniRef90_W7DLX4
 UniRef90_G2DDZ0
 UniRef90_H1RZZ0
 UniRef90_UPI00050F7DF
 UniRef90_C3WVS7
 UniRef90_UPI000365FAE2
 UniRef90_B5S9W9
 UniRef90_UPI00046D164D
 UniRef90_A0A024IZA5
 UniRef90_R5I64
 UniRef90_UPI0004714E61
 UniRef90_V4Y091
 UniRef90_R5Q4F4
 UniRef90_B9LQV2
 UniRef90_G3NWN3
 UniRef90_M0MFD8
 UniRef90_T0IUS3
 UniRef90_E7QUA8
 UniRef90_UPI0003FD83F1
 UniRef90_C4S5E7
 UniRef90_E1QJ13
 UniRef90_Q9NQJ8
 UniRef90_I3R681
 UniRef90_W0JVS9
 UniRef90_UPI000255A0FC
 UniRef90_C7H0I8
 UniRef90_W0JH54
 UniRef90_A4XVW1
 UniRef90_K9DIH0
 UniRef90_L0JU04
 UniRef90_C8PU88
 UniRef90_Y0KGG2
 UniRef90_UPI0003955E32
 UniRef90_UPI000366FB47
 UniRef90_UPI0003B37111
 UniRef90_UPI000287E9C1
 UniRef90_B5EMG0
 UniRef90_UPI0003FF2403
 UniRef90_B1XY42
 UniRef90_H0IYW4
 UniRef90_UPI00037FD091
 UniRef90_B8GQD7
 UniRef90_Q0VP11
 UniRef90_M7NXE9
 UniRef90_L0H168
 UniRef90_H2ZQT3
 UniRef90_B7VIE9
 UniRef90_UPI00047B61F5
 UniRef90_UPI00037D4511
 UniRef90_UPI0004689E5B
 UniRef90_Q47HR2
 UniRef90_I1XKU6
 UniRef90_UPI000479483F
 UniRef90_A3YGW1
 UniRef90_UPI0003F7F285
 UniRef90_B3PFN3
 UniRef90_UPI000380C452
 UniRef90_F0T2P3
 UniRef90_Q0AGY1

1 10 20 30 40
 G P N I S A L P D L P P L P D G I E A P V L L K V G D N I S T D
 A W Q P D S T Y I R H P P F F E P E A I K D I H Q A S I L A I L G D S V T T D
 K R G P N I K P F P N K E L G D K I E G K I L I K V E D N I T T D
 W D E T S T Y I R R P P F A G F G K G S L L G A H P L I V V G D D I T T D
 G P N I S A L P E L D P L P E W D G P V L L K V G D D I V S T D
 R G P N I K P F P K A K A G E V V E G K I L T K V G D N I T T D
 G P N I S S L P D F P E L P D R I E A P V L L K L G D D V S T D
 G P N I K T L P D L E P I A R D F R A P V L I K L G D N V S T D
 D S V T T D
 I I R G P N I A P L P P F D P I P E T L E G V F V L K V G D N I T T D
 G P N I K S Y P E T H P L T D S I E A S C S L K V G D N I T T D
 G P N V A S I P E M G E L P D E M E L P V L L K M G D D I S T D
 R G P N I K P F P S A A L A E E L D G K V L I K V E D N I T T D
 I E S L P E F D P L P D S L E L P V L L K V D D N I S T D
 V V R G P N I R P M P I N D P L P E T L N A K V S A V R G D N I T T D
 G P N I K S I P K M D A L P D E L E V P I L L K M G N N I S T D
 G P N I V S I P E L S A L P E Q F K L P V L L K V G D N V S T D
 E I L R G P N I K P F P N K P L G E A L E G K A I L K V E D N I T T D
 S E N I T T L P D L G K L G A D I R V P V M L K T G D D I S T D
 G P N I S A L P D L S A L P D T V T C P V L L R A G D N V S T D
 F K S A Y V A I R K G N P I T T D
 I S S L P D F D P A N H I E A P V L L K V G D N I S T D
 R G P N I K P F P E G P L D D R I E A A V I L K V G D N I T T D
 P P T N D P M P E D L C G K I A I K V E D Y T T D
 E I L R G P N I K E F P K G D T R D S F K S K V S L K V S D N I T T D
 G P N I A P L P P F E S M P A R I E A P V A I K V G D D I T T D
 V V K G P N I K S L P V F D P M P D T L K L P A I L K M G D D I S T D
 E I V R G P N I A P F P A F P P A D W Q G E V L L K V E D N I T T D
 W D P S S T A L R R P P F A D D D F A H S M L G A H P L L V L A D D I T T D
 C T T D
 W D P K S T Y I H E P P Y F D T P G P H S V K D A Y C L L N F S D S I T T D
 G P N I A P L P E M G P M E E V I S G T A L L K V G D D I T T D

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

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

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

UniRef90_UPI00046582CA
UniRef90_UPI00046D11C9
UniRef90_R6FZ41
UniRef90_A6U6E2
UniRef90_UPI000477CDB1
UniRef90_A5N6T5
UniRef90_UPI00037FF9B2
UniRef90_L0DR21
UniRef90_X0WPB0
UniRef90_UPI0003B436D4
UniRef90_D4L7L8
UniRef90_L5NBX8
UniRef90_G7LXG8
UniRef90_UPI00047C1AF0
UniRef90_UPI0002FED01F
UniRef90_F5SKY0
UniRef90_W0B8F9
UniRef90_U2NHJ8
UniRef90_M7YX44
UniRef90_UPI0003A4ED9B
UniRef90_UPI00042B12AB
UniRef90_S7W3A1
UniRef90_X8J9C2
UniRef90_G7WKT5
UniRef90_W2BVE5
UniRef90_F3YU96
UniRef90_M9RWK3
UniRef90_D6Z4D0
UniRef90_J9RTK4
UniRef90_C6H5J6
UniRef90_M4DF93
UniRef90_H0UMQ9
UniRef90_A0A016USL5
UniRef90_W7DLX4
UniRef90_G2DDZ0
UniRef90_H1RZZ0
UniRef90_UPI00050F7DF
UniRef90_C3WVS7
UniRef90_UPI000365FAE2
UniRef90_B5S9W9
UniRef90_UPI00046D164D
UniRef90_A0A024IZA5
UniRef90_R5I64
UniRef90_UPI0004714E61
UniRef90_V4Y091
UniRef90_R5Q4F4
UniRef90_B9LQV2
UniRef90_G3NW33
UniRef90_M0MFD8
UniRef90_T0IUS3
UniRef90_E7QUA8
UniRef90_UPI0003FD83F1
UniRef90_C4S5E7
UniRef90_E1QJ13
UniRef90_Q9NJQ8
UniRef90_I3R681
UniRef90_W0JVS9
UniRef90_UPI000255A0FC
UniRef90_C7H0I8
UniRef90_W0JH54
UniRef90_A4XVW1
UniRef90_K9DIH0
UniRef90_L0JU04
UniRef90_C8PU88
UniRef90_Y0KGK2
UniRef90_UPI0003955E32
UniRef90_UPI000366FB47
UniRef90_UPI0003B37111
UniRef90_UPI000287E9C1
UniRef90_B5EMG0
UniRef90_UPI0003FF2403
UniRef90_B1XY42
UniRef90_H0IYW4
UniRef90_UPI00037FD091
UniRef90_B8GQD7
UniRef90_Q0VP11
UniRef90_M7NXE9
UniRef90_L0H168
UniRef90_H2ZQT3
UniRef90_B7VIE9
UniRef90_UPI00047B61F5
UniRef90_UPI00037D4511
UniRef90_UPI0004689E5B
UniRef90_Q47HR2
UniRef90_I1XKU6
UniRef90_UPI000479483F
UniRef90_A3YGW1
UniRef90_UPI0003F7F285
UniRef90_B3PFN3
UniRef90_UPI000380C452
UniRef90_F0T2P3
UniRef90_Q0AGY1

50 60 70 80

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

	90	100	110	120
UniRef90_UPI00046582CA	P T G E T □ A □ Y D A A M R Y Q Q E N T P □ A I I	T G H V V V G G D N Y G Q G S S R E H A A		
UniRef90_UPI00046D11C9	P S G E L L P □ W S A A N R Y A E S K Q S V V I	K N □ G G F I I A G N E Y G S G S S R D W A A		
UniRef90_R6FZ41		R R A G P H L I V A G D N Y G Q G S S R E H A A		
UniRef90_A6U6E2		K E N Q G G F I V G G S N Y G Q G S S R E H A A		
UniRef90_UPI000477CDB1	S	G H V L V A G E N Y G Q G S S R E H A A		
UniRef90_A5N6T5	F T Q E G G P □ Y N A C M N Y Q K A G I P L V V	D □ D A F V I V A G K N Y G Q G S S R E H A A		
UniRef90_UPI00037FF9B2	P D F A K K □ K E K G L A V G I V G G E N Y G Q G S S R E H A A			
UniRef90_L0DR21	T Y Y D R A M D □ V K E S G G H A V V A G A N Y G Q G S S R E H A A	K T L G K S I I V G G E N Y G Q G S S R E H A A		
UniRef90_X0WPB0		K E F N G G F I I A G G N Y G Q G S S R E H A A		
UniRef90_UPI0003B436D4	A S R A K D T E G G H L I V A G E N Y G Q G S S R E H A V			
UniRef90_D4L7L8	M R □ R E S G G H A I V A G F N Y G Q G S S R E H A A	K T L G Q S I I V G G E N Y G Q G S S R E H A A		
UniRef90_L5NBX8	K Q G K G G H V I I V G G E N Y G Q G S S R E H A A			
UniRef90_G7LXG8	Y A K E N N G F I V G G S N Y G Q G S S R E H A A			
UniRef90_UPI00047C1AF0	T Y P K R A K Q G G R E R A G H A I V G G L N Y G Q G S S R E H A A			
UniRef90_UPI0002FED01F	P D Y P A R A A R T E G E H I V V A G A N Y G Q G S S R E H A A			
UniRef90_F5SKY0	P T G D K □ N V Y D A A T R Y K A T G Q D T I I L A G E D Y G S G S S R D W A A			
UniRef90_W0B8F9	R D S G G H L I V G G G A N Y G Q G S S R E H A A			
UniRef90_U2NHJ8	E T F A S R A K A A G K G F I V G G G S N Y G Q G S S R E H A A			
UniRef90_M7YX44	A A □ V R R D R G I □ A N L V A G V S Y G Q G S S R E H A A			
UniRef90_UPI0003A4ED9B	K A E G K S I I V G G E N Y G Q G S S R E H A A			
UniRef90_UPI00042B12AB	G K G V I I L G G E N Y G Q G S S R E H A A			
UniRef90_S7W3A1	R S T T G H S V M A G D N Y G Q G S S R E H A A			
UniRef90_X8J9C2	R E R G P G L V V G G D N Y G Q G S S R E H A A			
UniRef90_G7WKT5	P T G T V L S □ P D A A R R Y A D D G D A V V I V A G E R Y G M G S S R D W A A			
UniRef90_W2BVE5	T D S S T Y S □ P E □ L A A K W K A A G T E W L V V A E E N Y G E G S A R E H A A			
UniRef90_F3YU96	P S G E K □ Y V F D A S M R Y K S S G E D T I I I L A G A E Y G R G S S R D W A A			
UniRef90_M9RWK3	F I V G G G A N Y G Q G S S R E H A A			
UniRef90_D6Z4D0	P S G E E M D V Y D A A T K Y S K E G H P V I V I A G K E Y G C G S S R D W A A			
UniRef90_J9RTK4	P T E E □ M P I Y D A S M K Y Q A E G T G L V V L T T G D D Y G M G S S R D W A A			
UniRef90_C6H5J6	V D P S F S T R A C E H R D A G G H G I I V G G E N Y G Q G S S R E H A A			
UniRef90_M4DF93	P D G D V V P V H E A A Q V Y A K R G V P T I V I A G A R Y G G G S A R D W A A			
UniRef90_H0UMQ9	V H E A A Q V Y A K R G V P T I V I A G A R Y G G G S A R D W A A			
UniRef90_A0A016USL5	A T R A A A H D G G H A I V G G E N Y G Q G S S R E H A V			
UniRef90_W7DLX4	Y P D F V T R A K E Y G K S V I I V G G E N Y G Q G S S R E H A A			
UniRef90_G2DDZ0	P G E E P V P V H E A A E Y H R R Q G T P V V V V A G E □ Y G A G S A R D W A A			
UniRef90_H1RZZ0	P S G Q A M P V F E A A Q R Y R D D G A S V V L L A G A R Y G T G S S R D W A A			
UniRef90_UPI00050F7DF	M A I Y D A A M L Y Q E E N R P L A I I A G K E Y G S G S S R D W A A			
UniRef90_C3WVS7	P S G D I V P L M E A A A R Y E R D G I S T V I I L A G K R Y G T G S S R D W A A			
UniRef90_UPI000365FAE2	R E M G S S I I I V G G E N Y G Q G S S R E H A A			
UniRef90_B5S9W9	R K K A G G G F L V A G H N Y G Q G S S R E H A A			
UniRef90_UPI00046D164D	E A F A D R A L E A D G G F L V A G E N Y G Q G S S R E H A A			
UniRef90_A0A024IZA5	D Q F Y N R C I E N G G F I V G G D N Y G Q G S S R E H A A			
UniRef90_R51H64	P S G Q T □ D V F E A A D R Y Q R D G V P L I I I L A G K D Y G S G N S S R D W V A			
UniRef90_UPI0004714E61	D F A Q R A □ D A D G G F L V I A G E N Y G Q G S S R E H A A			
UniRef90_V4Y091	F I V A G N N Y G Q G S S R E H A A			
UniRef90_R5Q4F4	F L V A G E N Y G Q G S S R E H A A			
UniRef90_B9LQV2	Q D N S K R P N P D F S □ N Q P R Y Q G A Q I I L L T R K N F G C G S S R E H A P			
UniRef90_G3NW3N3	M A □ Y D A A M R Y Q Q E S V P □ L A V I I A G K E Y G S G S S R D W A A			
UniRef90_M0MFD8	P T N E K V Y □ F D A A M R Y A E E N T P L V I I L A G K E Y G S G S S R D W A A			
UniRef90_T0IUS3	E T F A Q R A K E A G S G V I V A G E N Y G Q G S S R E H A A			
UniRef90_E7QUA8	D T F A E R A K A A G S G V I V A G E N Y G Q G S S R E H A A			
UniRef90_UPI0003FD83F1	Q D C A G R P N P D F V L N Q S R Y Q G T S V I I L A R E N F G C G S S R E H A P			
UniRef90_C4S5E7	K Q E A K S C V I I I G G E N Y G Q G S S S R E H A A			
UniRef90_E1QJ13	K K M G I H N I I V G G D S Y G Q G S S S R E H A A			
UniRef90_Q9NQJ8	Q D C S T R P N P D F V L N Q P R Y A G A S I I L A R E N F G C G S S S R E H A A			
UniRef90_I3R681	Q D C S T R P N P D F V L N Q A R Y Q D A R V V L L A R Q N F G C G S S S R E H A A			
UniRef90_W0JVS9	Q D C S T R P N P D F V L N Q P R Y A G A S I I L A R K N F G C G S S S R E H A A			
UniRef90_UPI000255A0FC	Q D C A G R P N P D F V L N Q S R Y Q G T S V I I L A R E N F G C G S S S R E H A P			
UniRef90_C7H0I8	K L N Q P R Y Q G A N I I L L A R K N F G C G S S S R E H A A			
UniRef90_W0JH54	M D N S R K R P N K D F V L N F P R Y Q G A S V L L A R E N F G C G S S S R E H A A			
UniRef90_A4XVW1	N K F □ G K P A P K T I H F P S G Q T V G I Y L F A Q V X N S L K I S R D W A A			
UniRef90_K9DIH0	Q D P S R K R P N P D F V L N Q P R Y A G A S I I L A R K N F G C G S S S R E H A A			
UniRef90_L0JU04	Q D C S T R P N P D F V L N Q P R Y A G A S I I L A R K N F G C G S S S R E H A A			
UniRef90_C8PU88	Q D N S K R P N P D F I L N Q P R Y Q G A N I I L L A R K N F G C G S S S R E H A A			
UniRef90_Y0KGG2	M D N S R K R P N P D F V L N Q A R Y Q G A S I I L L T R E N F G C G S S S R E H A A			
UniRef90_UPI0003955E32	N K F □ G K P A P K T I H F P S G Q T V G I Y L F A Q V X N S L K I S R D W A A			
UniRef90_UPI000366FB47	Q D P S R K R P N P D F V L N Q P R Y A G A S I I L L A R K N F G C G S S S R E H A A			
UniRef90_UPI0003B37111	Q D C S T R P N P D F V L N Q A R Y Q D A R V V L L A R Q N F G C G S S S R E H A A			
UniRef90_UPI000287E9C1	Q D C S T R P N P D F V L N Q P R Y A G A S I I L L A R K N F G C G S S S R E H A A			
UniRef90_B5EMG0	Q D C A A R P N P A F V L N Q P R Y Q G S S I I L L A R A N F G C G S S S R E H A A			
UniRef90_UPI0003FF2403	E T F P A R A K A A G G G F I V A G H N Y G Q G S S S R E H A A			
UniRef90_B1XY42	Q E S V V R P N P D F V L N Q P R Y Q G A S I I L L T R E N F G C G S S S R E H A P			
UniRef90_H0IYW4	Q D C Q S Q R P N P D F V L N Q P R Y Q G A E V V L L A R E N F G C G S S S R E H A P			
UniRef90_UPI00037FD091	M D T N T K R P N P D F V L N Q D R Y Q G A S I I L L A R E N F G C G S S S R E H A P			
UniRef90_B8GQD7	M D H S A R P N P D F V L N A P R Y Q G A E I I L L A R K N F G C G S S S R E H A V			
UniRef90_Q0VP11	Q D N A A A R V N N D F V L N Q P D Y Q G A S I I L L T R R N F G C G S S S R E H A P			
UniRef90_M7NXE9	Q D C S G R P N P D F V L N Q P R Y Q G G T I I L L A R E N F G C G S S S R E H A V			
UniRef90_L0H168	Q D C S K R P N P D F V L N Q P R Y A G A N I I L L A R E N F G C G S S S R E H A P			
UniRef90_H2ZQT3	Q D C S K R P N P D F V L N Q P R Y A G A N I I L L A R E N F G C G S S S R E H A P			
UniRef90_B7VIE9	P T G E E V M F F D A A M R Y K D E G T Q I V V A G K D Y G S G S S R D W A A			
UniRef90_UPI00047B61F5	D A G Q Q P N P E F V M N A P R Y K G A S I I L L A R E N F G C G S S S R E H A P			
UniRef90_UPI00037D4511	Q D P T T R P N P D F V L N Q P R F P K G A S I I L L A R K N F G C G S S S R E H A P			
UniRef90_UPI0004689E5B	Y D E Q G G E N P N E F V L N K P A Y R Q A E I I L V T G D N F G C G S S S R E H A P			
UniRef90_Q47HR2	D D D R N E □ P D F V L N K P Q Y R E A Q I I L V A G D N F G C G S S S R E H A P			
UniRef90_I1XKU6	Q D N T G R P N P N F V L N Q P R Y K D G T I I L L A R E N F G C G S S S R E H A P			
UniRef90_UPI000479483F	Q D C K D R P N P D F E L N Q P R Y K D G T I I L L A R E N F G C G S S S R E H A V			
UniRef90_A3YGW1	P T G E E V M F F D A A M R Y K D E G T Q I V V A G K D Y G S G S S R D W A A			
UniRef90_UPI0003F7285	Q D C T G R P R E D F V L N Q P F Q A N A S V L L A R E N F G C G S S S R E H A P			
UniRef90_B3PFN3	M D N S K R P N M E F S L N Q P Q Y K E A T I I L L A R E N F G C G S S S R E H A P			
UniRef90_UPI000380C452	Q S C E G R P N T E F P L N F P R Y Q D A S V L L A R E N F G C G S S S R E H A P			
UniRef90_F0T2P3	Y K E D G S D N P D F V L N K P A Y K G A Q I I I L A G D N F G C G S S S R E H A P			
UniRef90_Q0AGY1	P D F A R E V K T G D N F G C G S S S R E H A P			

130 140 150 160

UniRef90_UPI00046582CA	I T P R Y L G L R A V V A K S F A R I	H W Q N L A N F G I L A L E F T D P A D Y	
UniRef90_UPI00046D11C9	K G T R L L G V R V V I A G S F E R I	H R S N L I G M G V I L P L E F P N	
UniRef90_R6FZ41	L A P L Y L G V R G V I A K S F A R I	H K A N L I N N G I V P L E F K N E A D Y	
UniRef90_A6U6E2	K G A S L L G A R A V V L A V S F E R I	H R S N L I G M G V I L P M R L P E G L G P	
UniRef90_UPI000477CDB1	I T P R L L G L R A V V I A K S Y A R I	H W Q N L A N F G V I L A L E F T D P A D Y	
UniRef90_A5N6T5	L A P L Y L G V K A V F A K S F A R I	H K A N L I N N G I V P L E F T D P A D Y	
UniRef90_UPI00037FF9B2	I T P R Y L G L R A V V I A K S F A R I	H W Q N L A N F G V I P L E F T D P A D Y	
UniRef90_L0DR21	L A P R F L G L R L V C A Q S Y G R I	H W Q N L V N F G V I P L L S F A D P D D Y	
UniRef90_X0WPB0	K G T T L L G V K A V V I T E S F E R I	H R S N L I G M G V I P L Q F P E S A K S	
UniRef90_UPI0003B436D4	L A P R Y L G V R V K L A K T F F A R I	H R S N L I N F G I L P L T F E N P A D Y	
UniRef90_D4L7L8	L A P L F L G V K A V V L V K S F A R I	H K S N L I N A G I L P L T F V N A E D Y	
UniRef90_L5NBX8	L A P K Y L G L Q V A I V E D F F A R I	H W Q N L A N F G V I P L T F T N A D D D	
UniRef90_G7LXG8	L A P L Y L G V K A V V I A K S F A R I	H K A N L I N N G I I P M E F K N E E D Y	
UniRef90_UPI00047C1AF0	I A P R Y L G L R V V I A K S F A R I	H W Q N L A N F G V I L A L E F S D P A D Y	
UniRef90_UPI0002FED01F	L A P M Y L G V K A I I A K S M A R I	H K N N L V N Y G V I L P L L F E N Q E D Y	
UniRef90_F5SKY0	L A P R Y L G L R V A M A K N F A R I	H W Q N L A N F G I L P L T F S M E S D Y	
UniRef90_W0B8F9	L A P R Y L G L R L V I A K S F A R I	H W Q N L I N F G I L P L V F E N S K D Y	
UniRef90_U2NHJ8	L A P L Y L G V K G V L V K S F A R I	H K A N L I N N G I V P M T F I N E E D Y	
UniRef90_M7YX44	L A P R Y L G L E T V L A K S F A R I	H W Q N L V N F G V I L P L T F Q D P S D Y	
UniRef90_UPI0003A4ED9B	I T P R Y L G L R V V I A I S F F A R I	H W Q N L V N F G I L P L E F D Q E R D D	
UniRef90_UPI00042B12AB	K G S M L L G V K A V V I A K S F E R I	H R S N L I G M G V I I P L C F K E D A D F	
UniRef90_S7W3A1	I T P R F L G L R A V V I A V S F F A R I	H W Q N L A N F G V I L A L E F A D A A D H	
UniRef90_X8J9C2	L A P L H L G I K A V V I A K S F A R I	H A A N L V N A G I L P L I F E K P E D Y	
UniRef90_G7WKT5	L C P M Y L G V K A V V I M A K S M E R I	H A A N L V N F G I I P F T F V S E S D Y	
UniRef90_W2BVE5	L V P L Y L G V R V V I A K S F A R I	H E A N L I N A G I I M P L T F E N P K G Y	
UniRef90_F3YU96	L G P R Y L G V K A V V I V K S L A R I	H R A N L V N F G I L P L L L T N K D D Y	
UniRef90_M9RWK3	V A P R N L G L R L V L A K G F A R I	H R Q N L V N Y G V I L P L V F A E P K D Y	
UniRef90_D6Z4D0	L A P R Y L G V E V K L V K S F A R I	H K A N L I N F G I I P L T F A D P A D Y	
UniRef90_J9RTK4	K L V R L L G V R A V V L A R S F E R I	H R S N L I G V G V L L P L L I P A D V D G	
UniRef90_C6H5J6	L Q P R Y L G G R I I I A A K S F A R I	H E T N L K K Q G V V P P L T F K D K A D Y	
UniRef90_M4DF93	K G P M L Q G A K V V I A K N F F E R I	H R S N L V G M G I I I P L C F K	
UniRef90_H0UMQ9	L A P R Y L G V K G V L A K S F A R I	H L A N L V N F G I L P L V F E D P S D Y	
UniRef90_A0A016USL5	K G P Y L Q G A K V V I A E S F F E R I	H R S N L I G M G V V P L Q F K Q N A E L	
UniRef90_W7DLX4	K G T N L L G I K T V I A K S Y E R I	H R S N L I A M M G V L P L Q F K E G A D S	
UniRef90_G2DDZ0	L C P R W L G V R A V V V S Q F A R I	H V A N L V N F G I V P L T F A N E A D Y	
UniRef90_H1RZZ0	K V T R L L G V R A V V V A N S F E R I	H R A N L L A F G I I P L E T E E D L G G	
UniRef90_UPI000050F7DF	I A P R Y L G L R I V I A K S I L A R I	H W Q N L A N F G V I L P L E F A T E E D D Y	
UniRef90_C3WVS7	I A P M Y L G V K A V V I V K S I A R I	H K K N L I N H G V V P M T F R N P D D Y	
UniRef90_UPI000365FAE2	K V T R L L G I R A V V L A R S F E R I	H R T N L V A M G V L P Q W Q G G P A P	
UniRef90_B5S9W9	K G Q R L L G V R A V V I A V S F F E R I	H R S N L I G M G I I P L R F P E C P Q A	
UniRef90_UPI00046D164D	K G T N L L G V R V V I A E S Y E R I	H R S N L I G M G V I I P L E F P Q T R K T	
UniRef90_A0A024IZA5	K G V A L L G V R A V V L A S S F E R I	H R S N L I G M G V I I P V L L P P D L T S	
UniRef90_R5I1H4	I N P M Y L G V K C V I A K S I L A R I	H K G N L V N H G I V P M L F E D P A D Y	
UniRef90_UPI0004714E61	L V P L Y L G I K G V I A K S F F A R I	H M A N L I N S G I L P L T F V D E R D Y	
UniRef90_V4Y091	L C P M Y L G V E G V L V A R S F A R I	H K A N L I F N F G I I P L T I G E E T Y E	
UniRef90_R5Q4F4	L V P N Y L G I K A I F A I S F A R I	H R S A N L I N N G I I P L V I N Q K D Y D	
UniRef90_B9LQV2	L C P M Y L G I K E A V F A Q S F A R I	H K A N L I F N F G I I P L V P L A I D A E T Y	
UniRef90_G3WN3	K G P Y L L G V R A V V I A E S F E K L I	H K K Q L V G M G I I M P L Q F G D S A D S	
UniRef90_M0MFD8	L C P M Y L G V E G V L V A Q S F A R I	H K A N L I F N F G I I P L E I D E D T Y A	
UniRef90_T0IUS3	L A P L Y L G I K G V V I A K S F A R I	H R A N L I N F G I I P P F T F N D I S D Y	
UniRef90_E7QUA8	L C P M Y L G V E G V L V A Q S F A R I	H K A N L I F N F G I I P L E I S E E D Y E	
UniRef90_UPI0003FD83F1	W A L L D D Y G F R A V V I A P S F F A D I	F F N N C Y K N G L L P V L S E E A V D	
UniRef90_C4S5E7	K G P R L L G V R V V I A E S F F E R I	H R S N L I G M G V I I P L E F P V N R K T	
UniRef90_E1QJ13	L A P R Y L G V Q V K L A K S F F A R I	H K A N L I N F G V I L P L V F A D P A D Y	
UniRef90_Q9NQJ8	K G P F L Q G V K V V I A E S F F E R I	H R S N L I V G M G V I V P L Q F G E S V E S	
UniRef90_I3R681	M C P M Y L L G I E T V V L A Q S F F A R I	H K A N L I F N F G I I V P L A I D E E T Y E	
UniRef90_W0JVS9	M C P M F L L G V E A V V L A Q S F F A R I	H K A N L I F N F G I I V P L A I D E E T Y D	
UniRef90_UPI000255A0FC	W A L L D D F G I R V V I A P S F F A D I	F Y N N C F K N G L L P V L P E E A Q V D	
UniRef90_C7H0I8	L A P L Y L G V R F V I A K S F F A R I	H R S N L I N S G I L P L V F E N P N D Y	
UniRef90_W0JH54	L C P M Y L L G V K A V V I A K A I L E R I	H R A N L I N F G I L P L T F K N P D D Y	
UniRef90_A4XVW1	W A L L D E Y G F R T V I A P S F F A D I	F Y N N S F K N G L L P V L K D E E E V D	
UniRef90_K9DIH0	W A L L Q Q Y G F R A V V I A P S F F A D I	F F N N C F K I G L L P I A L S E E E V E	
UniRef90_L0JU04	L C P M Y L G I E T V V L A Q S F F A R I	H K A N L I F N F G I I V P L E I D E E D T Y	
UniRef90_C8PU88	W A L L E E Y G F R T V I A P S F F A D I	F Y N N C F K N G M L L P V I L S E E D A V S	
UniRef90_Y0KGG2	W A L L E D Y G F R A I V I A P S F F A D I	F F N N C F K N G L L P I V L A D D I V N	
UniRef90_UPI0003955E32	W A L L L Q Y G F R A I V I A P S F F A D I	H K A N L I F N F G I I V P I V L S E E D A V N	
UniRef90_UPI000366FB47	K G P F L L L G V K A V V I A E S Y E K V I	H R S Q L I G I G I A P L Q F G E N P S T	
UniRef90_UPI0003B37111	W A L L D E Y G F R A V V I A S S Y A D I	F F N N S F K N G L L P V I L P E E A Q V D	
UniRef90_UPI000287E9C1	L V P P R Y L G L Q V V L A K S F F A R I	H W Q N L I C F K N G A I P L T F V D E R D G	
UniRef90_B5EMG0	L A P R Y L G V R A V V I A V K S F F A R I	H L A N L I N F G I L P L T F V D A A D Y	
UniRef90_UPI0003FF2403	W A L L H D Y G I R A L I A P S F F A D I	F Y G N C C L K N G M L P V I L P E E V E V Q	
UniRef90_B1XY42	W A L L G Q Y G F R V V I A P S F F A D I	F F N N C F K N G M L P V I L P E E S V V A	
UniRef90_H0IYW4	W A L L E D F G F K V V I A P S F F A D I	F Y N N A F K N G I L P V I L T L A E E E V D	
UniRef90_UPI00037FD091	W A L L M Q Y G F K A I I A P S F F A D I	F F N N S F K N G L L P I I L S E E A E V D	
UniRef90_B8GQD7	W A L L T D Y G I R V V I A P S F F A D I	F F G N S F K N G L L P I V L D E A V V D	
UniRef90_Q0VP11	W A L L M D F G F K A I I A P S F F A D I	F Y N N C F K N G L L P I V L S E E D N V E	
UniRef90_M7NXE9	W A L L A D F G I R V V I A P T F F A D I	F F S N T S K F N G I L P I V L D E A I V D	
UniRef90_L0H168	W A L L M G Q G F R V V I A P S F F A D I	F Y S N C F K N G I L P I R L P A	
UniRef90_H2ZQT3	K G P W M L G V R A V V I A E S Y E K V I	H R S N L I G M G I I V P L Q F G E N A D T	
UniRef90_B7VIE9	W A L L A D Y G I Q V M I A P S F F A D I	F Y G N S I L N N Q M V P V R L T E Q E V D	
UniRef90_UPI00047B61F5	W A L L V Q Y G F R A I V I A P S F F A D I	F F N N S F K N G L L P I V L P E E A T V S	
UniRef90_UPI00037D4511	W A L L L D F G I R C V I A P S F F A D I	F Y N N C F K N G V I L P I A L P Q E E Q I D	
UniRef90_UPI0004689E5B	W A L L A D F G I T C V I A P S F F A D I	F Y N N C F K N G I L P I V L S E E Q V D	
UniRef90_Q47HR2	W A L L L D F G F K A I I A E S F F A D I	F F N N C F K N G I L P I V L P A A E E V D	
UniRef90_I1XKU6	W A L L E D Y G I R V V I I A P S F F A D I	F F S N S S K N G I L T I Q L D E Q L V E	
UniRef90_UPI000479483F	L V P Q H L G V R A V V I A P S F F A D I	F Y R R N L I A V G I V P L V L G D E E E Y	
UniRef90_A3YGW1	W A L L D D Y G F R V V I A P S F F A D I	F F N N C F K N G I L P I Q L S E E Q V E	
UniRef90_UPI0003F7F285	W A L L T D Y G F R A V V I S S S Y S D I	F Y N N C F K N G F L P I R L T P E Q V I E	
UniRef90_B3PFN3	W A L L D D Y G F R S V I A P S F F A D I	F F N N C F K N G L L P I M L D E K I V D	
UniRef90_UPI000380C452	W A L L L D F G I R C V I S T S F F A D I	F Y N N C F K N G I L P I R V T P E Q V I A	
UniRef90_F0T2P3	L S I K A A G V K A V I A N S F F A D I	F Y R N S L N I A M P I E C P E A V V	
UniRef90_Q0AGY1	W A L L Q D Y G F A V I I A P S F F A D I	F Y N N C F K I G L L P I V L E S P V V D	

170 180 190 200

D	R	I	E	Q	G	D	V	L	A	L	R	D	R	L	G	R	D	R	D	L	T	V		R	N	A	T	R	H	E	N	Y	R	L	C
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---

UniRef90_UPI00046582CA
UniRef90_UPI00046D11C9
UniRef90_R6FZ41
UniRef90_A6U6E2
UniRef90_UPI000477CDB1
UniRef90_A5N6T5
UniRef90_UPI00037FF9B2
UniRef90_L0DR21
UniRef90_X0WPB0
UniRef90_UPI0003B436D4
UniRef90_D4L7L8
UniRef90_L5NBX8
UniRef90_G7LXG8
UniRef90_UPI00047C1AF0
UniRef90_UPI0002FED01F
UniRef90_F5SKY0
UniRef90_W0B8F9
UniRef90_U2NHJ8
UniRef90_M7YX44
UniRef90_UPI0003A4ED9B
UniRef90_UPI00042B12AB
UniRef90_S7W3A1
UniRef90_X8J9C2
UniRef90_G7WKT5
UniRef90_W2BVE5
UniRef90_F3YU96
UniRef90_M9RWK3
UniRef90_D6Z4D0
UniRef90_J9RTK4
UniRef90_C6H5J6
UniRef90_M4DF93
UniRef90_H0UMQ9
UniRef90_A0A016USL5
UniRef90_W7DLX4
UniRef90_G2DDZ0
UniRef90_H1RZZ0
UniRef90_UPI00050F7DF
UniRef90_C3WVS7
UniRef90_UPI000365FAE2
UniRef90_B5S9W9
UniRef90_UPI00046D164D
UniRef90_A0A0241ZA5
UniRef90_R5I1H64
UniRef90_UPI0004714E61
UniRef90_V4Y091
UniRef90_R5Q4F4
UniRef90_B9LQV2
UniRef90_G3NW33
UniRef90_M0MFD8
UniRef90_T0IUS3
UniRef90_E7QUA8
UniRef90_UPI0003FD83F1
UniRef90_C4S5E7
UniRef90_E1QJ13
UniRef90_Q9NQJ8
UniRef90_I3R681
UniRef90_W0JVS9
UniRef90_UPI000255A0FC
UniRef90_C7H0I8
UniRef90_W0JH54
UniRef90_A4XVW1
UniRef90_K9DIH0
UniRef90_L0JU04
UniRef90_C8PU88
UniRef90_Y0KGG2
UniRef90_UPI0003955E32
UniRef90_UPI000366FB47
UniRef90_UPI0003B37111
UniRef90_UPI000287E9C1
UniRef90_B5EMG0
UniRef90_UPI0003FF2403
UniRef90_B1XY42
UniRef90_H0IYW4
UniRef90_UPI00037FD091
UniRef90_B8GQD7
UniRef90_Q0VP11
UniRef90_M7NXE9
UniRef90_L0H168
UniRef90_H2ZQT3
UniRef90_B7VIE9
UniRef90_UPI00047B61F5
UniRef90_UPI00037D4511
UniRef90_UPI0004689E5B
UniRef90_Q47HR2
UniRef90_I1XKU6
UniRef90_UPI000479483F
UniRef90_A3YGW1
UniRef90_UPI0003F7F285
UniRef90_B3PFN3
UniRef90_UPI000380C452
UniRef90_F0T2P3
UniRef90_Q0AGY1

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

210 220

UniRef90_UPI00046582CA	H R L S A R Q V E A V L A G G R I P L L A R Q
UniRef90_UPI00046D11C9	I D L T E K E I Q V I K A G G R L N Y V K N L
UniRef90_R6FZ41	A I E T V A E V E M L K A G G I L P L M L K
UniRef90_A6U6E2	H R L S A R Q R E N V P A G G V I P A L A A R R
UniRef90_UPI000477CDB1	F D A T D R Q R N M I R Y G G L L N L V K R I N N
UniRef90_A5N6T5	H R L S E R Q V E A V L A G G R I P L L A R R A
UniRef90_UPI00037FF9B2	H E L S Q R Q I D V I R A G S L I N R L R E
UniRef90_L0DR21	R I D T P G E A D Y Y R N G G I L Q Y V
UniRef90_X0WPB0	E L T T E R E R E C I L K G S L L N L A K
UniRef90_UPI0003B436D4	C E L S D R T R N I I I A G G L L D Y T K E
UniRef90_D4L7L8	H A L S E R Q I E I M K A G G L I N W V K E R L D K
UniRef90_L5NBX8	V D L T E K E I A V I K A G G R L N Y V K
UniRef90_G7LXG8	H R L S P R Q A E M V V K G G R V A S V A E K Q E
UniRef90_UPI00047C1AF0	V D L T D R E S I I I I A G G Q L R Y V A N K N K
UniRef90_UPI0002FED01F	H V L S K R Q I D M M L K G G L I N W V R D R R A
UniRef90_F5SKY0	Q N L S K R Q K D I I T L G G L I N W I K K
UniRef90_W0B8F9	V E L T P K E I E V I E A G G R L N Y V K
UniRef90_U2NHJ8	H D L S P R Q I E I I L L A G G V I N W L R
UniRef90_M7YX44	H R L S P R Q V H T V L A G G I P A L A E
UniRef90_UPI0003A4ED9B	W F D T K V E L E Y F D H G G I P Y V R N L N K
UniRef90_UPI00042B12AB	H R L S P R Q V Q M V L D G G L I P W L R
UniRef90_S7W3A1	M D L A E R Q K A V L L A G G L L D Y T A
UniRef90_X8J9C2	M V L S R R Q R E M V A A G G L P Y V R K R
UniRef90_G7WKT5	C N F T H R Q R A I L K A G G L L S Y V A
UniRef90_W2BVE5	N D L T A Q E L A I I I K A G G L L N T V
UniRef90_F3YU96	H G L T E K Q I A V I I E G G L I N W R R K
UniRef90_M9RWK3	L E V S P R H R E I I L L A G G L L N W
UniRef90_D6Z4D0	A V E T D L D R R L L R R G G V I P S I L D E Q
UniRef90_J9RTK4	H T L S K D Q C G F I L A G S A L N L L A K K A N K
UniRef90_C6H5J6	
UniRef90_M4DF93	
UniRef90_H0UMQ9	T P V G E G D L E I I R A G G K L N H V R S K
UniRef90_A0A016USL5	R F D T E V E L T Y Y R H G G I L Q Y V R K L I Q
UniRef90_W7DLX4	R F D S D V E I D Y Y R H G G I L P M V R G K L K K
UniRef90_G2DDZ0	P A F E P G D V G P L K A G G A L P L F K
UniRef90_H1RZZ0	R I D T V V E A E W L T S G G M L G R V L D K L
UniRef90_UPI000050F7DF	H T L S P R Q I D M V L A G G I R I A Q R A Q Q
UniRef90_C3WVS7	I E L S E E E K E I I I K A G G G L L P F I K E T F K E
UniRef90_UPI000365FAE2	R I D T P L E W E W L R A G G G L F G H
UniRef90_B5S9W9	A A V T Q L E T T L L R C G G V I P A I
UniRef90_UPI00046D164D	R I D T V T E M E Y Y R H G G I L H Y V I R Q M
UniRef90_A0A024IZA5	A I E T E L E I I A T L R A G G I L P S I
UniRef90_R51H64	L D L T D N E L E V V L C G G Q L R Y L K R E L V K
UniRef90_UPI0004714E61	L N L S P R L K E V I I L A G G G L L N Y T R K N S G K
UniRef90_V4Y091	L D A N S R E R E L L A A G G K L P H T R Q Q
UniRef90_R5Q4F4	L K L S P R E K T M I Q Y G G L L N A I K E L
UniRef90_B9LQV2	L D A S E R E R E I I L S A G G K L S W V K Q Q H
UniRef90_G3NWN3	L L D T E M D V T L F R H G G H R Y V A
UniRef90_M0MFD8	A S A R E R E I I L A D G G K L P H T K A Q Q
UniRef90_T0IUS3	V D L T S R E Q S I I L L A G G G L L N H T R E R
UniRef90_E7QUA8	L D A S E R E R Q I I L A D G G K L S H T K K Q A E
UniRef90_UPI0003FD83F1	A A F E I T E H R K H C L L N G L D E I
UniRef90_C4S5E7	R I D T G N E L V Y F E N G G I L H Y V I R K M
UniRef90_E1QJ13	L E A S P R D R Q I I L A A G G R L N H I K N
UniRef90_Q9NQJ8	R I D T E M E V K Y V E H G G I L Q Y V R E K I K
UniRef90_I3R681	L H A S E R E R R I L T A G G K L P L T K Q Q A E
UniRef90_W0JVS9	L D A S E R E R R T L A A G G K L S L T K Q R H
UniRef90_UPI000255A0FC	A F D V D G F R K H C L L N G L D D I
UniRef90_C7H0I8	A E Y S D Y E K M L L K A G G K I N S M K K
UniRef90_W0JH54	Y H L T D R E I K T I I L A G G T M K L A K D
UniRef90_A4XVW1	E V D A F R K H C L L N G L D D I
UniRef90_K9DIH0	L D A S E R E R E I I L A A G G K L S H T K
UniRef90_L0JU04	A F A I D E F R K Y C L L N G L D D I
UniRef90_C8PU88	A F D V D E F R K H C L L N G L D D I
UniRef90_Y0KGG2	E V D A V R K H N L L N G L D D I
UniRef90_UPI0003955E32	L F E N S M E I T L Y K N G G S I N F V A R R
UniRef90_UPI000366FB47	P F E V N A F R K Y C L L N G L D D I
UniRef90_UPI0003B37111	F E V D A F R R H C L L N G L D D I
UniRef90_UPI000287E9C1	H G L T A R Q R E Q L A S G G V I N H I R
UniRef90_B5EMG0	Q L A S A R D L E L I L K G G A L S W A R E Q L E K
UniRef90_UPI0003FF2403	F E F D P F R K R C L L N G L D D I
UniRef90_B1XY42	P F E V Q A F R K Y C L L V N G F D D I
UniRef90_H0IYW4	G E I L E F E V D E F R K H C L L N G L D D I
UniRef90_UPI00037FD091	D I D S F R K Y C L L N G L D D I
UniRef90_B8GQD7	P F E V G E F H K Y C L L N G L D D I
UniRef90_Q0VP11	G E P L P F E I D E F R K H C L L N G L D E I
UniRef90_M7NXE9	E V D A F K K H C L I E G I L D D I
UniRef90_L0H168	R T I P F E V D A F R K H C L L E G I L D D I
UniRef90_H2ZQT3	
UniRef90_B7VIE9	E I D E F F R R H C L L N G L D N I
UniRef90_UPI00047B61F5	P F D V E A F R K Y C L L N G F D D I
UniRef90_UPI00037D4511	A F D V D A F R R H C L L N G L D D I
UniRef90_UPI0004689E5B	E V D A F K K H C L L M N G L D D I
UniRef90_Q47HR2	P F Q I D A F R K E C L L N G W D D I
UniRef90_I1XKU6	E I D S F K K H C L I E G I L D D I
UniRef90_UPI000479483F	L T S G E R A V L S A G G L I A H I R
UniRef90_A3YGW1	D V D A F R K H C L L N G L D D I
UniRef90_UPI0003F7F285	F E I D E F R K H C L I Q G F D D I
UniRef90_B3PFN3	E I D A F R K H C L L N G L D D I
UniRef90_UPI000380C452	E V D A F R K H C L L N G L D D I
UniRef90_F0T2P3	R P F P P F M Q E L I K A G G L V P Y V K E K K K
UniRef90_Q0AGY1	E V D H F R K H C L L N G L D E I

UniRef90_L8XV96
 UniRef90_A0A059KGX1
 UniRef90_F4HDP5
 UniRef90_X1FYC6
 UniRef90_G4E6Z6
 UniRef90_UP10003686EF1
 UniRef90_G4KVE0
 UniRef90_I0I610
 UniRef90_O67399
 UniRef90_UP10003B568CD
 UniRef90_D9PKN9
 UniRef90_R6QP22
 UniRef90_Q67MJ3
 UniRef90_UP10003A37D87
 UniRef90_S2YVP6
 UniRef90_UP100037319FC
 UniRef90_UP10004287D9D
 UniRef90_R7IBE8
 UniRef90_L1JUB8
 UniRef90_O54122
 UniRef90_UP10003600E75
 UniRef90_UP1000329A5A5
 UniRef90_E3I6W7
 UniRef90_R7LZ48
 UniRef90_A5WA11
 UniRef90_UP100036F3B6D
 UniRef90_K2IVAO
 UniRef90_UP100036AC0B6
 UniRef90_E0MMN5
 UniRef90_T0Z806
 UniRef90_A7FM87
 UniRef90_F8A9Q9
 UniRef90_UP1000478DCC6
 UniRef90_UP1000464AB0C
 UniRef90_R6PVK7
 UniRef90_C7RRS8
 UniRef90_UP100047C9B14
 UniRef90_A0A059IUVT
 UniRef90_R6WHD8
 UniRef90_UP1000364B057
 UniRef90_UP10003B471C8
 UniRef90_UP100047A0118
 UniRef90_D5BMM2
 UniRef90_A0LML0
 UniRef90_UP100022CAD45
 UniRef90_B8G7X5
 UniRef90_UP10003B601F5
 UniRef90_UP1000287A368
 UniRef90_X2GVM9
 UniRef90_R6Q297
 UniRef90_G8BBG9
 UniRef90_W6NJ08
 UniRef90_E8UXL8
 UniRef90_R6VDW8
 UniRef90_UP10002D7B8AA
 UniRef90_D4IXV7
 UniRef90_G2FY14
 UniRef90_O14289
 UniRef90_G2KPM7
 UniRef90_UP100046385C9
 UniRef90_X1SLN5
 UniRef90_K6DZ67
 UniRef90_A4WMJ1
 UniRef90_Q01CM0
 UniRef90_F4S099
 UniRef90_R6KJ44
 UniRef90_S3VT08
 UniRef90_R7LEW9
 UniRef90_F9XCNO
 UniRef90_D5HH24
 UniRef90_Q1Q105
 UniRef90_F6BB17
 UniRef90_K7SNQ9
 UniRef90_U2PZM4
 UniRef90_G8MIH2
 UniRef90_F4LSK6
 UniRef90_S3XS00
 UniRef90_A6NZ16
 UniRef90_UP100046F138E
 UniRef90_UP1000428D42E
 UniRef90_F8C2A9
 UniRef90_D0CRP4
 UniRef90_D8MN28
 UniRef90_UP100036A3634
 UniRef90_U7VCD4
 UniRef90_Q0BRH5
 UniRef90_D6XXJ3
 UniRef90_V5FYZ9
 UniRef90_UP10002DA7F17
 UniRef90_E6MG99
 UniRef90_UP10003B51CB2
 UniRef90_UP10003B53137

1 10 20 30 40
 M K P F T T H Q G I A V A I D R P N I D T D
 A Q P L V L G D D V T T D
 V V P L D V A N V D T D
 L T A K V M P L A R S N V D T D
 R I A P L P I D N V D T D
 A A V L R D E V T T D
 N V D T D
 K F G D N V D T D
 D K F T T L
 I Q F G P N I K D W P A M S A L P E N L V L K V V S E I H D P V T T D
 M R P F T R E T G L A V P L D R V N V D T D
 D T H T G L V A P L D R A N V D T D
 D P S V K I K L G P N I K D W P E M P L L P E H L L L K V V S E I T T D
 M E P F K T L T G L V F P L N R K N V D T D
 N V D T D
 V C P L D R S N V D T D
 N V D T D
 V L D G L V V P L D R A D V D T D
 V V P L D A A N V D T D
 N I D T D
 F K F G D N I S T D
 M Q P F T F I K S K V V P L D R A N V D T D
 L I S P Q L P P P V P D D L P V R V L I C I G D D V S T G
 N I D T D
 M D P F V V H T G V V V P L D R P N V D T D
 N I D T D
 M E P F A T L T A V V A P L D R A N V D T D
 V A P L D A A N V D T D
 K F G D N I D T D
 R T A V L A D E N I D T D
 V F K Y G D N V D T D
 F G P N I K D W P E M P A L T D D L L V K V C S Y I T D P V T T D
 M K P F T T L Q G L V A P L D R A N V D T D
 N V D T D
 N W D A N S T Y I Q N P P H F D N L S L K D I K G A Q I L A M F G D S V T T D
 D P N T E I Q F G P N I K D W P E M C A L T D N L V L K V V S E I T T D
 M E P F K Q L N G I V A P V D R V N V D T D
 V A P L D R P N V D T D
 M Q P F K Q L N G L V A P V D R V N V D T D
 N V D T D
 F G D D V D T D
 E P I S T I T G K V V V L P V E N I D T D
 V V P L D R I N V D T D
 M Q P F N T F E G L V C P I D R I N V D T D
 V V P L D A A N V D T D
 N G R V H K Y G D N I D T D
 K D I P E P T Q P K P K P T S D S A G G T V L P L F K A N V D T D
 V I K Y K D N V D T D
 N I D T D
 V Y P L N R A N V D T D
 G R A L I Y G D K I D T D
 L P N F T I W K G I A A V L D A A N V D T D
 V F K Y G D N V D T D
 A A V L I D R P N I D T D
 H D G L A V I I D R P N I D T D
 R S N V D T D
 G P N I K D W P E M F A M K D N Q L L E L A A V I H D P V T T D
 D N L V L K V V S E I H D P V T T D
 I K F G P N I K D W P E M V P L T D N L L L K V A S V I H D P V T T D
 K F G D N I N T D
 F G D D V D T D
 N I D T D
 G P N I K D W P E M P A L T E N L V D A V A A P I V A I D C D T D
 D L L L K V V S Y I T D P V T T D
 K F G D N I D T D
 L K F G P N I K D W P T I P S L T N V A P L D R S N V D T D
 D A V A A P I V A I D C D T D
 L V F G P N I A D W P E Q I P M P E N L L L T A A A A Y D P V T T D
 T Q I Q F G P N I K D W P K M V A L T N N L L L K V V S E I T T D
 K F G D N I D T D
 N I D T D
 V V P M D A A N V D T D
 L K V V S E I H D P V T T D
 L K V C A V I N D P V T T D
 N V D T D
 M E P I R Q H T G K T Y P L Y R A N I D T D
 M D R A N V D T D
 M T G F K K L D G K A V A L D R A N V D T D
 V F R Y G D N V D T D
 V F K Y G D N V D T D
 L Q F G P N I K D W P K M T A L P E N L V L R V V S E I H D P V T T D

50 60 70 80

UniRef90_L8XV96	A I P K Q F L K S I K R S G F G V N L F D E W R Y L D V G T P G
UniRef90_A0A059KGX1	H S P A S A F L V A R G E R R D D L N V F A S R R G N W E V M P V A H T L H V
UniRef90_F4HDP5	A I P K Q F L Q A I T R V G F G K H L F H E W R Y L D A A G T Q
UniRef90_X1FYC6	
UniRef90_G4E6Z6	A I P K Q Y L K S V Q R A G F G P N L F D D W R Y L D P G E P G
UniRef90_UPI0003686EF1	Q I P P A R F L K T I S K V G L G D Q L F C D W R
UniRef90_G4KVE0	E L P S G E T T S S Y R S N P L R L A E F T L S R R E P Q Y D R L S G K A P E R
UniRef90_I0I610	Q I P P A Q L T A V T K E G M G K G L F S W I R
UniRef90_O67399	Q I P P A R Y L N T S D P Y E L A K
UniRef90_UPI0003B568CD	T G I A A P M P L V N I D T D M I P K Q F L K T I K R S G L G I N L F D E M R D H G E P G
UniRef90_D9PKN9	
UniRef90_R6QP22	E L P S G E T T S S Y R S N P L G L A E F A L S R K D P A Y V G R A N Q C P L E
UniRef90_Q67MJ3	Q I P P K Q F L K R I E R T G F G Q F L F H D W R
UniRef90_UPI0003A37D87	A I P P K Q F L K S I K R T G Y G P F L F D E W R Y E D V G E P E
UniRef90_S2YVP6	E L P S G E T T S S Y R S N P L G L A E F A L S R K D P A Y V G R A K E V Q K Q
UniRef90_UPI00037319FC	Q I P P K Q F L K R I E R Q G F G E C L F Y H W R
UniRef90_UPI0004287D9D	Q I P P K Q F L K R V E R S G F G Q F L F Y D W R
UniRef90_R7IBE8	A I P P K Q F L K S I Y K T G Y G P N L F D G W R Y L D K G E P G
UniRef90_L1JUB8	M I P P K Q F L K T I K R T G L G V S A F Y E M R
UniRef90_O54122	
UniRef90_UPI0003600E75	A L I P K Q F M K S I A R T G F G D N L F D S W R Y L D P G E P G
UniRef90_UPI000329A5A5	A I I P K Q F L Q K V T R T G F G V H L F N D W R Y L D
UniRef90_E3I6W7	M I I P K Q F L K T I K R T G L G K S L F Y E M R
UniRef90_R7LZ48	H A P G R L Y H L R S N L P E F A K H V L E D A D E T
UniRef90_A5WA11	A L L P K Q F L M I E R S G F G Q H L F D E W R Y L D H G V P Y
UniRef90_UPI00036F3B6D	D M A P D G A I A M S V W S N I A L C A R F M F N R F D A G F H D R
UniRef90_K2IVAO	M I P P K N F L K T I K R S G L G V N L F D E M R
UniRef90_UPI00036AC0B6	A I P P K Q Y L K S I K R T G F G P T L F D D W R Y N E P G E P G
UniRef90_E0MMN5	M I P P K D Y L K T I K R T G L A E G L F A E M R
UniRef90_T0Z806	A I P P K Q F L K T I R R T G L G V S L F Y D W R Y Q D A P S D G
UniRef90_A7FM87	A I P P K Q F L Q K V T R T G F G Q H L F N D W R F L D
UniRef90_F8A9Q9	I L P A R Y L N T S D P Q E L A K H C M E D A R
UniRef90_UPI000478DCC6	R I P A R F L T T T E R A G L G K L C F N D W R
UniRef90_UPI000464AB0C	V I P A R Y L N S F D P Q E L A S H A M A D I D P E F V G K V Q P
UniRef90_R6PVK7	E L P S G E T T S S Y R S N P E R L S E F A L S R R D P Q Y V S R S K E V R Q I
UniRef90_C7RRS8	A I P P K Q F L K S I K R S G F G P N A F D E W R Y L D R G E P D
UniRef90_UPI00047C9B14	E L P S G E T T S S Y R S N P L G L A E F T L S R K D P A Y V G K A K E V Q F A
UniRef90_A0A059IU7	H C P A G N Y L K N L G I E P Q D F N S Y G S R S N H N V M M G D Y T K Y I
UniRef90_R6WHD8	E L P S G E T S S F R S N P L K L A E F A L S R K D P D Y V R E E G N C P L E
UniRef90_UPI000364B057	A I P P K Q F L K R I E R T G F G Q F L F Y E W R
UniRef90_UPI0003B471C8	A I P P K Q F L K R V E R S G F G Q F L F Y D W R
UniRef90_UPI00047A0118	A I P P K Q F L K R I E R S G F G Q F L F F E W R
UniRef90_D5BMM2	M I P P K Q F L K T I K R S G L G V N L F D E M R Y
UniRef90_A0LML0	A I P A R Y L I S S D P K F L A G H C M E D A D
UniRef90_UPI00022CAD45	A I P P K Q F L Q K V T R S G F G K H V F H E W R F V D D A G S Q
UniRef90_B8G7X5	Q I P A R Y L N T T D P Q E L A K H C M E D A D P E F S K K V N P
UniRef90_UPI0003B601F5	V I P A R Y L N T T D P Q E L A K H C M E D A D P E F S K K V N P
UniRef90_UPI000287A368	Q I P P K Q F L K R V E R Q G F G Q F L F Y N W R
UniRef90_X2GVM9	A I P P K Q F L Q K V T R T G F G K H F H E W R F L D
UniRef90_R6Q297	V I P A R H L N T A N H K E L A S H C M E D I D T E F V H K V
UniRef90_G8BBG9	A I P P K Q F L K T I K R T G L K D G L F Y E A R F V K E N G K D V E T
UniRef90_W6N08	V I P A R Y L N T S D P K E L A S H C M E D A D L D S Q F N E
UniRef90_E8UXL8	Q I P P K Q F L K R I E R T G Y G D F L F D W R Y N L D T P D H
UniRef90_R6VDW8	E L P S G E T S S F R S N P L G L A E F T L S R K D P A Y V G R A K E V Q E V
UniRef90_UPI0002D7B8AA	Q I P P K Q F L K R I E R S Q G F G Q Y L F Y N W R
UniRef90_D4IXV7	E L P S G E T S S Y R S N P L G L A E F T L S R K D P E Y V G R A K N I Q K A
UniRef90_G2FY14	Q I P P K Q F L S L S T I Q Q I A P H T F E F H G N F A N D F K P
UniRef90_O14289	K I P P K Q F L K T I K R T G L G Q F A F Y E I R
UniRef90_G2KPM7	M I P P K Q F L R T I L R T G L G K S L F N D M R
UniRef90_UPI00046385C9	V I P A R Y L N M T D G Y E L A K H C M E D I D K D F V S N V K K G D
UniRef90_X1SLN5	
UniRef90_K6DZ67	Q I P P K Q F L K R I E R S G F G Q F L F Y N W R
UniRef90_A4WMJ1	V I P A K Y L V Y T D P A V L G Q H A M E P L D
UniRef90_Q01CM0	
UniRef90_F4S099	K I P A R Y L N A T Q G V Y L K T I K R T G L G Q F L F R A M R F Q T
UniRef90_R6KJ44	V I P A R Y L N A T Q G D E L A K H C M E D I D R E F F V
UniRef90_S3VT08	Q I P P K Q F L R K I E R T G F G V H L F H D W R Y L D
UniRef90_R7LEW9	E L P S G E T S S Y R S N P L K L S E F A L S R R V P E Y V G H S K R H Q D D
UniRef90_F9XCN0	A I P P K Q F L K R I E R T G Y G D F L F D W R Y N L D T P D H
UniRef90_D5HH24	E L P S G E T S S Y R S N P L G L A E F T L S R K D P E Y V R E A G C M G K
UniRef90_Q1Q105	E L P A R Y L N T T D P N E L A K H C M E D A D
UniRef90_F6BB17	A I P P G P Y L F L K T I Q R T G L G K N A F A Q R Y
UniRef90_K7SNQ9	Q I P P K P A R F L Q K P R S D D F G Q F L F Y E R F R F L D T E F V H K V
UniRef90_U2PZM4	A I P P K P A R F L Q K P R S D D F G Q F L F Y E F R
UniRef90_G8MIH2	Q I P P K P A R F L Q K P R S D D F G Q F L F Y E F R S A R
UniRef90_F4LSK6	E L P S G E T S S Y R S N P M R L A E F T L S R K D P A Y V N K A K E V Q R Y
UniRef90_S3XS00	I I P A A R Y L N T S D P K I L A T H I M E D K D K D F S
UniRef90_A6NZ16	E L P S G E T S S Y R S N P L K L S Q F A L S R K D P Q Y V P R A K A V Q E V
UniRef90_UPI00046F138E	V I P A R Y L R Y L N T A D P K E L A A H C M E D
UniRef90_UPI000428D42E	E L P S G E T S S Y R S N P L G L A E F T L S R K D P E Y V G R A K E V Y A Q
UniRef90_F8C2A9	V I P A R Y L N T T D P E E L A K H C M E D A D P E F P K K V N
UniRef90_D0CRP4	M I P P K V H L K T I K R S G L V L F D E M R Y
UniRef90_D8MN28	A I P P K Q F L Q M V T R T G E G R N L F Y D W R Y S D A E G
UniRef90_UPI00036A3634	E L P S G E T S S F R S N P L G L A E F T L S R K D P E Y V R E A G N C P L E
UniRef90_U7VCD4	E L P S G E T S S Y R S N P M R L A E F T L S R R V P D Y T K K A K E I H K A
UniRef90_Q0BRH5	K I P P K P A R F L K T I K R T G L G T H L F D A M R Y I R K A K E I H K A
UniRef90_D6XXJ3	Q I P P K Q F L K T I K R T G L G T H L F D A M R Y K Q F L K R I E R Q G F G Q F L F Y N W R
UniRef90_V5FYZ9	A I P P K Q F L K T I K R T G L G T H L F D A M R Y K Q F L K T I K R T G L G S A L F Y E L R
UniRef90_UPI0002DA7F17	Q I P P K Q F L K T I K R T G L G T H L F D A M R Y K Q F L K T I K R T G L G S A L F Y E L R
UniRef90_E6MG99	V I P A R Y L N T S D P L E E H C M E D I D K D F V N N V
UniRef90_UPI0003B51CB2	V I P A R Y L N S T E G S E L A K H C M E D I D K
UniRef90_UPI0003B53137	E L P S G E T S S Y R S N P L G L A E F T L S R K D P A Y V G L A K E I R E A

90 100 110 120

UniRef90_L8XV96	M D N S T R P N P D F S L N Q A R Y Q G A S I L V A R E N F C G S S R E H A V		
UniRef90_A0A059KGX1	P S G K V Q P I H A V A Q R Y R D E G T P V V L V A G E R Y G T G S S R D W A A		
UniRef90_F4HDP5	P N P D F V L N Y P Q Y Q G A S I L L A R K N L G C G S S R E H A P		
UniRef90_X1FYC6	P L I V L A G K D Y G M G S S R D W A A		
UniRef90_G4E6Z6	D D H S Q R R N P D F V L N D A R F A G A K I L L A Q E N F G C G S S R E H A V		
UniRef90_UPI0003686EF1	Y D E Q G N P K P E F I L N K P E G K A A Q I L L A G D N F G C G S S R E H A P		
UniRef90_G4KVE0	L I S L L N R V G D G E A L L K T T Q F G S A V Y A N R P G D G S A R E Q A A		
UniRef90_I0I610	Y N P D G T P K P D F V L N R P E Y Q G A Q I L I A G R N F G S G S S R E H A V		
UniRef90_O67399	H V I M E D S E H P E F A K E H K E G D I I V A G K N F G S G S S R E H A P		
UniRef90_UPI0003B568CD	Y D R D G N E L P D F V L N Q P A Y R D S Q I L L V A G D N F G C G S S R E H A P		
UniRef90_D9PKN9	M D N S K R P N P D F V L N Q P R Y Q G A Q I L L A R E N F G C G S S R E H A P		
UniRef90_R6QP22	V L E E L K P V M E T I R A S Y P E V G E G N I G V G S T I L G D G S A R E Q A A		
UniRef90_Q67MJ3	Y L P D G S P N P E F V L N R P Q Y A G A T I L I I A G R N F G S G S S R E H A P		
UniRef90_UPI0003A37D87	M D C S N R P L K D F V L N Q A C Y Q G A S I L L T R D N F G C G S S R E H A P		
UniRef90_S2YVP6	K A I E Q G Q C P V V R R R P Q A G E G T L G I G S T I F G D G S A R E Q A A		
UniRef90_UPI00037319FC	F D N N G Q K R A D F P L N D P K Y A G A S I L V A G E N F G C G S S R E H A P		
UniRef90_UPI0004287D9D	F L S D G S P N P E F E L N Q P Q Y S G A S I L V A G A N F G C G S S R E H A P		
UniRef90_R7IBE8	M D C S K R P P N P D F V L N K P Q Y R D S T I L L L A R K N F G C G S S R E H A P		
UniRef90_L1JUB8	Y D A N G K E N P E F V L N K A P Y K Q A K I L V A G N N F G C G S S R E H A P		
UniRef90_O54122	G P V H E A A A T Y R A A G H D L V V V A G R N Y G A G S S R D W A A		
UniRef90_UPI0003600E75	K P R E R R L N P D F V L N Q P R Y R G A Q I L L G R D N F G C G S S R E H A L		
UniRef90_UPI000329A5A5	D K G E Q P N P D F V L N F P E Y K G A S I L L A R E N F G C G S S R E H A P		
UniRef90_E3I6W7	F D E Q G N E N P D F V L N K P A Y R A S K I L L V A G D N F G C G S S R E H A P		
UniRef90_R7LZ48	M F A S R M K K G D F V F V A G S N F G C G S S R E H A P		
UniRef90_A5WA11	Q D C S N R P N L S F P L N Q P R F E G A G V L L T R G N F G C G S S R E H A P		
UniRef90_UPI00036F3B6D	A L E W W G G G I I V A G D N Y G Q G S S R E H A A		
UniRef90_K2IVA0	Y D D D R N E L P D F V L N K P Q Y R E A Q V I I V A G D N F G C G S S R E H A P		
UniRef90_UPI00036AC0B6	M D H S K R Q N S A F V L N Q P R Y N H A S I I L L G R E N F G C G S S R E H A V		
UniRef90_E0MMN5	L N E D G S E K P E F V L N K P A Y R E A Q I I L V A G D N F G C G S S R E H A P		
UniRef90_T0Z806	R V D G L V P D P S F V L N N P R Y H G A R I I L L T R E N F G C G S S R E H A P		
UniRef90_A7FM87	D A G K V P N P D F V L N L P R Y Q G A T I I L L A R E N F G C G S S R E H A P		
UniRef90_F8A9Q9	Y P E F A K E V K P G D I I V A G K N F G C G S S R E H A P		
UniRef90_UPI000478DCC6	Y L P D G S D N P A F P L N Q P Q A K G C A L L V A G R N F G C G S S R E H A P		
UniRef90_UPI000464AB0C	U N P D F V L N K P Q R Y G A S I I L L G D M I V A R K N F G C G S S R E H A P		
UniRef90_R6PVK7	E R D E V L N V Y A A V K N D P A H T D I G S T I F A N M P G D G S A R E Q A A		
UniRef90_C7RRS8	R D C A T R P N P D F V L N Q P R Y Q G A S I I L L T R E N F G C G S S R E H A P		
UniRef90_UPI00047C9B14	V P D P L E S V Y K A I L N E K P E E T E I G S V I F A V K P G D G S A R E Q A A		
UniRef90_A0A059IUVT	P C Q E T M P I F D A A M R Y K E K A L I I V A G K E Y G T G S S R E Q R V		
UniRef90_R6WHD8	A V A E L K P V W D F P D M N S E N T G I G S T I F A V K P G D G S A R E Q A A		
UniRef90_UPI000364B057	W D E E G V N V E N F D M N K P R Y Q G A S V L V S R A N F G C G S S R E H A P		
UniRef90_UPI0003B471C8	F L P N G E P D P T F V L N Q P R Y Q G A S I I L L S R A N F G C G S S R E H A P		
UniRef90_UPI00047A0118	W D E Q G N V I P E F N L N K P R Y Q G A E V V L L S R A N F G C G S S R E H A P		
UniRef90_D5BMM2	T L D G D E I L S D F V L N K A P Y R N A E I I L V A G D N F G C G S S R E H A P		
UniRef90_AoLMLO	P E F V K K A K A G D I I V A G K N F G C G S S R E H A P		
UniRef90_UPI00022CAD45	Y L P D G T L N P D F P L N R P E A A G A T I I L I S G R N F G C G S S R E H A P		
UniRef90_B8G7X5	P N P Q F I L N Q P C Y R G A S I I L L T R E N F G C G S S R E H A P		
UniRef90_UPI0003B601F5	F D Q D G K K N P D F I I L N Q P K Y K G A S I I L V A R D N F G C G S S R E H A P		
UniRef90_UPI000287A368	D A G Q Q P N P D F V L N K P R Y K G A S I I L L A R E N F G C G S S R E H A P		
UniRef90_X2GVM9	K D G D I M V G G W N F G C G S S R E H A P		
UniRef90_R6Q297	D F V L N R E P Y R K A E I V V T G D N F G C G S S R E H A P		
UniRef90_G8BBG9	V E P N S D F V L N K P E Y N G S K I I L I A E K N F G C G S S R E H A P		
UniRef90_W6NJ08	E D I F K T I N E T F A A A P Q D T Q I G S T I F A V K P G D G S A R E Q A A		
UniRef90_E8UXL8	Y D D K D R P R D F S L N H P K Y Q N A S I I L V G G E N F G C G S S R E H A P		
UniRef90_R6VDW8	Q E C A G D A V P E V K E T Y P H I N H D N F G V G S T I F G D G S A R E Q A A		
UniRef90_UPI0002D7B8AA	Y D A D G K E I P D F V L N R E P Y R H A T V L V I A H D N F G C G S S R E H A P		
UniRef90_D4IXV7	Y N E D G S P K P D F V L N K A P Y D K A E I I L V A G D N F G C G S S R E H A P		
UniRef90_G2FY14	F D D E G N L R E D F S L N D P K Y K D A S I I I V A G E N F G C G S S R E H A P		
UniRef90_O14289	Q G K E R P D F V L N N E P Y R N A S I I I I A G N N F G C G S S R E H A P		
UniRef90_G2KPM7	I D G Q E Q P R P E F V L N Q K P F D Q A I I I I T V G P N F G C G S S R E H A P		
UniRef90_UPI00046385C9	D A G T Q P N P E F T I L N L E R Y K G A S I I L V T R D N F G C G S S R E H A P		
UniRef90_X1SLN5	L D C R A G K C P E P I Q K V L N Q V I G A S C V F A N R P G D G S A R E Q A A		
UniRef90_K6DZ67	Y N D D G S D N P D F V L N Q P E W N K A I I I I L V L V S G P N F G C G S S R E H A P		
UniRef90_A4WMJ1	A F P E V K E V M H A I K E K F E D V C G S N T G V G S T I I G D G S A R E Q A A		
UniRef90_Q01CM0	I D E D F P K K V K E G D V I V A G E N F G C G S S R E H A P		
UniRef90_F4S099	D D N G E N N P D F V L N K P E Y R H A E I I I I T Y D N L G C G S S R E H A P		
UniRef90_R6KJ44	F D E E G K D I E D F V L N L P K Y K G A S I I I I L S R A N F G C G S S R E H A P		
UniRef90_S3VT08	F G P D G A P R P D F V L N R P A Y R E A R I I V V A N H N F G C G S S R E H A V		
UniRef90_R7LEW9	I S E E I K K A Y D F E N I D P K N I G I G S T I F A N K P G D G S A R E Q A A		
UniRef90_F9XCN0	E L L R R K N P E D A A V V E A L G G K D G H T T G L K P G D G S A R E Q A A		
UniRef90_D5HH24	L D P E F K N K V Q P G D I I V A G T N F G C G S S R E H A P		
UniRef90_Q1Q105	E I K R R E N T P D T A L K Y P D V N C A N T G I G S T I F G D G S A R E Q A A		
UniRef90_F6BB17	N E D G T E N E D F V L N K P A Y R N A E I I I I L V A G D N F G C G S S R E H A P		
UniRef90_K7SNQ9	I D I R E N G E N P D K G A K P L E I G I G S T I F Y A N K P G D G S A R E Q A A		
UniRef90_U2PZM4	Q I P N P D F V L N K P A F R G A S I I I I M L T R E N F G C G S S R E H A P		
UniRef90_G8MIH2	A V P E I K A V W D K L I K K C P D M D S S N T G I G S T I F G D G S A R E Q A A		
UniRef90_F4LSK6	D G Q E N P D F V L N R P E Y R Q A Q I I L V T H E N F G C G S S R E H A P		
UniRef90_S3XS00	F D E N D E P R K D F S M N E E R Y Q D A S I I I I I A G E N F G C G S S R E H A P		
UniRef90_A6NZ16	Y H P D G K E I S E F V L N Q G I Y R Q K I I L V V T G P N F G C G S S R E H A P		
UniRef90_UPI00046F138E	K A E G G V L N E D F E L N K P E N Q G A T F L I I A N D N F G C G S S R E H A P		
UniRef90_UPI000428D42E	E F A S K V K E H K G D I I V A D D N F G C G S S R E H A P		
UniRef90_F8C2A9	Q T A M E G S D P E A A W P E L K E V M A S I V I F A V K P G D G S A R E Q A A		
UniRef90_D0CRP4	N E D G T E N E D F V L N K P A Y R N A E I I I I L V A G D N F G C G S S R E H A P		
UniRef90_D8MN28	I D I R E N G E N P D K G A K P L E I G I G S T I F Y A N K P G D G S A R E Q A A		
UniRef90_UPI00036A3634	D G Q E N P D F V L N R P E Y R Q A Q I I L V T H E N F G C G S S R E H A P		
UniRef90_U7VCD4	F D E N D E P R K D F S M N E E R Y Q D A S I I I I I A G E N F G C G S S R E H A P		
UniRef90_Q0BRH5	Y H P D G K E I S E F V L N Q G I Y R Q K I I L V V T G P N F G C G S S R E H A P		
UniRef90_D6XXJ3	K A E G G V L N E D F E L N K P E N Q G A T F L I I A N D N F G C G S S R E H A P		
UniRef90_V5FYZ9	E F A S K V K E H K G D I I V A D D N F G C G S S R E H A P		
UniRef90_UPI0002DA7F17	Q T A M E G S D P E A A W P E L K E V M A S I V I F A V K P G D G S A R E Q A A		
UniRef90_E6MG99			
UniRef90_UPI0003B51CB2			
UniRef90_UPI0003B53137			

	130	140	150	160
UniRef90_L8XV96	W A L D Y G F R A V I	A P S Y S D F F N N C F K N G	V L P I V L S A E D V D	
UniRef90_A0A059KGX1	K G Q R L L G R A V L	A M S F E R H R S N L V G M G I	P L R L P A G A S P	
UniRef90_F4HDP5	W A L A D Y G F K V M I	A P S F A D F Y N N S L N H M L	P I R L S E E D T P	
UniRef90_X1FYC6	K G T Q L L G V K A V I	A E S F E R H R N N L V G M G V	P L Q F K E G D T P	
UniRef90_G4E6Z6	W A L T D Y G F R V V I	A P S F A D F F S N S F K N G	P I V L G H E A V D	
UniRef90_UP10003686EF1	W A L T Q Y G F R A V I	S T S F A D F R G N A V K N S	P V E V P R D A Q E G	
UniRef90_I0I610	S C Q R V L G G C A N F	C R S F A K R Y R S N C V N W G I	P F T L E E D F S G	
UniRef90_O67399	I A I K Y S G V P V V I	S P G F A D F Y N N S L K N G	P I V L S E E V V N	
UniRef90_UP10003B568CD	W A L L D Y G F R C V I	S T S F A D F F N N C F K N G	P V V L P Q D A V D	
UniRef90_D9PKN9	W A L E D Y G L R V I I	A T S F A D F F N N C F K N G	P I R L A A E Q V D	
UniRef90_R6QP22	S C Q K V L G G W A N	A N E Y A K R Y R S N L I N W G M	P F I T E E K D T E	
UniRef90_Q67MJ3	W A L S D Y G F R A I I	A P S F A D F Y N N C F Q N G	P V V L P E E A V A	
UniRef90_UP10003A37D87	W A L L D Y G F R V I I	A P S F A D F Y N N C F K N G	P I R L P A V D V S	
UniRef90_S2YVP6	S C Q K V L G G W A N	A E E Y A K R Y R S N L I N W G M	P L L T D E K E E E Q	
UniRef90_UP100037319FC	W A L Q D Y G F K V I	A P S F A D F H N N C L K N G	T I E L P E E N V A	
UniRef90_UP10004287D9D	W A L L D Y G F Q V I I	A P S Y A D F Y N N C C F K N G	P T L P Q A A V D	
UniRef90_R7IBE8	W A L I Q Y G F K A V I	A P S F A D F Y S N S L K N G	V L T L D E A T I D	
UniRef90_L1JUB8	W A L S D F G R C I I	A S G F A D F F N N C F K N G	P I V L P E A Q V R	
UniRef90_O54122	K A Q A L L G V R A V I	A E S F E R H R N N L I G M G	P L E F E D T A S A	
UniRef90_UP10003600E75	W A L V D Y G I R V I I	A P G F A D F F N N C F K N G	P V R L P A D E V D	
UniRef90_UP1000329A5A5	W A L T D Y G I K T V I	A P S F A D F Y G N S F N N Q	P V T L S D E Q V D	
UniRef90_E3I6W7	W A L L D F G V R C V I	S T S F A D F Y N N C F K N G	P I T V S P E D L A	
UniRef90_R7LZ48	L I M K A G V G A V L	A K S F A R F Y R N A I N I G	A I E C	
UniRef90_A5WA11	W A L H D W G I R A I I	A P S F A E F Y G N C F K N G	P I L D E A T V E	
UniRef90_UP100036F3B6D	L I P V H L G V R A I I	A A T S Y A R H R N N L I A A G	P L V R T A D	
UniRef90_K2IVA0	W A L A D F G I K C I I	I S T S F A D F Y N N S F K N G	P I V M P Q E V V D	
UniRef90_UP100036AC0B6	W A L T D Y G I R S V I	A P S F A D F F N N S F K N G	P I A L D S A V I E	
UniRef90_E0MMN5	W A L L D R G I R C I I	I S T S F A D F Y N N C F K N G	P V V V S E D D L E	
UniRef90_T0Z806	W A L L D Y G F R A I I	A P S F A D F Y N N C F K N G	P V V L A A R E V D	
UniRef90_A7FM87	W A L T D F G F K V V I	A P S F A D F Y G N A F F N N Q	P V T L S E A D V D	
UniRef90_F8A9Q9	I A I K A A G V A C V I	A E N F A R F Y R N A F N T G	G L L I L E	
UniRef90_UP1000478DCC6	W A L L D F G I Q A V L I	C S E I A D F R R N A L K N G	L A V V S D A E H W	
UniRef90_UP1000464AB0C	L C L K T A G V S C I I	A E T F A R F F R N A I N I G	P I I E C K E A A	
UniRef90_R6PVK7	S C Q R V M G A A A N F	A K Q Y A K R Y R S N C I L N W G M	T P F L V E N P E V F	
UniRef90_C7RRS8	W A L E D Y G F R A I I	A P S F A D F F N N C F K N G	P I V L A A T T V D	
UniRef90_UP100047C9B14	S C Q R V L G G M A N I	A R E Y A K R Y R S N L I N W G M	P F V F D G E	
UniRef90_A0A059IU7				
UniRef90_R6WHD8	S C Q K V L G G W A N I	A N E Y A K R Y R S N L I N W G M	P I P F L I P P D G E L P	
UniRef90_UP1000364B057	W A I M D Y G F R C V I	A P S F A D I F Y N N C F K N G	P I K K L S E E Q V Q	
UniRef90_UP10003B471C8	W A L A D Y G F K V I I	A P S F A D F H N N C F K N G	P I V L P E E K D V D	
UniRef90_UP100047A0118	W A I L D Y G F R C V I	A P S F A D F Y N N C F K N G	P I K K L S E E Q V D	
UniRef90_D5BMM2	W A L L D F G I R C V I	S T S F A D F Y N N C F K N G	P I V V A D Q R D A	
UniRef90_AOLMLO	V S I I K A A G L S C V I	A H S F A R F Y R N A F N M G	L L L I L E S P D A A A A	
UniRef90_UP100022CAD45	W A L D Y G F K V I I	G C S F A D F Y N N S F N N Q	L L V T L S E A E D D	
UniRef90_B8G7X5	W A L Q D Y G F Q A V I	A P S F A D F R R N A L K I G	P I P V M V E Q S V Y D	
UniRef90_UP10003B601F5	I A I K A C G S C V I	A E S F A R F Y R N A F N T G	L L I L E C P E	
UniRef90_UP1000287A368	W A L Q D Y G F K V I I	A P S F A D F Y N N C Q K N G	V L T I L D P R K V D	
UniRef90_X2GVM9	W A L A D Y G F K T I I	G S S F A D F Y N N S F N N Q	L L L V N L S E D D I D	
UniRef90_R6Q297	I A I K E S G S C V I	A K T F F A R F Y R N A I N I G	L A L E C E E A S	
UniRef90_G8BBG9	W A L K D F G I K S I I	A P S F G D F Y N N S F K N F	P I R L P Q D V I E	
UniRef90_W6NJ08	I A I K A A G V G C V I	A E S F A R F F R N S I N I G	P I M E C E E A A K D	
UniRef90_E8UXL8	W A I N Q Y G F L A V I	A P S F A D F F R N S I N I G	I L V R L S D E D V E	
UniRef90_R6VDW8	S C Q K V L G G F A N I	A N E Y A K R Y R S N L I N W G M	P F L Y Q G E E	
UniRef90_UP10002D7B8AA	W A L E D F G F K I I I	A P S F A D F F N N C T K N G	P V V L K E A E T Q	
UniRef90_D4IXV7	S C Q K V L G G W A N I	A N E Y A K R Y R S N L I N W G M	P F V P E G E L P	
UniRef90_G2FY14	S C Q K V L G G F A N I	A N E Y A K R Y R S N L I N W G M	L V E C E K A	
UniRef90_O14289	A V L Q O R G V S A V I	A R S F A R F Y R N A I N I G	P I P T P E Q V N	
UniRef90_G2KPM7	W A L N D F G I R V I I	A P S F A D F F N N C F K N G	P I V T L P S E T V D	
UniRef90_UP100046385C9	L V I K C A G V S C V I	A E T F F A R F Y R N A I N I G	P I I E C P E A A G	
UniRef90_X1SLN5	L A P R Y L G V R L K I	A K S F A R H K A N L I N F G	P I L T F E Q A E D Y	
UniRef90_K6DZ67	W A I Q D F G F K V V I	A P S F A D F K N N C A K T G	T V Q A S E E Q V Q	
UniRef90_A4WMJ1	W A L K G A G G V L A V V I	A E S F A R F F R N A V N V G	P V L Q V	
UniRef90_Q01CM0	W A I N D F G I R C I I	I S T A F A D F F N N C F K N A M	P I V L D E K T V N	
UniRef90_F4S099	W A L L D F G I R C V I	A T S F A D F Y N N T F K N G	P I I L P Q E H V	
UniRef90_R6KJ44	I A I K C A G V S C V I	A E T F F A R F Y R N S I N I G	P I I E C L E A A R	
UniRef90_S3VT08	W A L E D Y G F R A I I	A P S Y A D F Y N N C F K N G	P I V L T S S E V D	
UniRef90_R7LEW9	S C Q K V L G G D A N I	C Y E E Y A K R Y R S N C I L N W G I	P Y T I D A E T P	
UniRef90_F9XCN0	W A L L D F G I R C V I	A S S F G D F F F N N T F K N G	P L K I D D E K A L	
UniRef90_D5HH24	S C Q K V L G G W A N I	A K E Y A K R Y R S N L I N W G M	P F V I D K D F D F	
UniRef90_Q1Q105	I A I K A A G I S C V I	A K S F A R F F R N A I N I G	P L L I F E C P E A A A	
UniRef90_F6BB17	I A I K Y C G I K A V I	A E S F A R F Y R N A I N I G	P I V C K G I T K H	
UniRef90_K7SNQ1	W A L L D F G I R C V I	A P S F A D F F N N C F K N G	P I R L P R E V C D	
UniRef90_U2PZM4	W A L E D Y G F K A I I	A S S F F A D F Y N N C F N N G	P V K L S P E E E	
UniRef90_G8MIH2	W A L Y D Y G I R A A I	A P S F G D F F N C L K N G	P I V L S E H V V L	
UniRef90_F4LSK6	S C Q R V L G G W A N I	A R E Y A K R Y R S N L I N W G M	P F L I K E E P P F	
UniRef90_S3XS00	I A L K A A G G G A V I	A K S F A R F Y R N S F T G	L L I L E C K Q S D K	
UniRef90_A6NZ16	S C Q R V L G G C A N I	A A E Y A K R Y R S N V V N W G M	P F V A D G V K D	
UniRef90_UP100046F138E	I A I K A S G S C V I	A E T F F A R F Y R N A I N I G	P I M E C P E A A R	
UniRef90_UP1000428D42E	S C Q K V L G G W A N I	A N D Y A K R Y R S N L I N W G M	P L I I K E G E L P	
UniRef90_F8C2A9	I A I K A C G A C V I	A E S F A R F Y R N A F T G	L L I L E C P E A A V	
UniRef90_D0CRP4	W A I Q D Y G F R I V I	S T S F A D F Y N N C F K N G	P I V V E D E H H A	
UniRef90_D8MN28	W A L T D Y G I Q A V I	V G S D F A D F A N N S F N N Q	L L V S L S E E	
UniRef90_UP100036A3634	S C Q K V L G G W A N I	A N E Y A K R Y R S N L I N W G M	P L L M E A A D M P	
UniRef90_U7VCD4	S C Q K V L G G W A N I	A K E Y A K R Y R S N L I N W G M	P F I V K Q D I N F	
UniRef90_Q0BRH5	W A L L D F G I R C V I	A P D F A D F Y N N S F K N G	P I R L P R D I C D	
UniRef90_D6XXJ3	W A I Q D Y G F R I V I	A P S F A D F I S F N C V K N G	P I E L P E E T V S	
UniRef90_V5FYZ9	W A L L D F G I K C V I	A P S F A D F F N N T F K N G	P I K I E D Q A T I	
UniRef90_UP10002DA7F17	W A L L D Y G F K A V I	A P S F A D F K Q N C L K N G	P V L K E E E V K	
UniRef90_E6MG99	I A I K A S G V S C V I	A N S F A R F Y R N A F T G	P I L E S P E A V A	
UniRef90_UP10003B51CB2	I A I K C A G V S C V I	A K S F A R F Y R N S I N I G	P I E C E E A A A	
UniRef90_UP10003B53137	S C Q K V L G G W A N I	A N E Y A K R Y R S N L I N W G M	P L V I D K G E L P	

170 180 190 200

UniRef90_L8XV96	I I I E L I H Q H E G L E I I D L P S Q Q L I C Q L D G K G L H S P F T		
UniRef90_A0A059KGX1	E A L Q P G D R L E V D Q P E R L R P R A P V A V R I L L R A D G R I E T L A V A		
UniRef90_F4HDP5	E V E I F Q W V W A N P G K A I D V D L E K M T V T V G		
UniRef90_X1FYC6	L G L D G T E T Y S I L G I Q E I T P F S E L K I I A I S K N G R E I F T I A		
UniRef90_G4E6Z6	H V F A Q T Q A D P Q A L V K I D L E E Q T V T S Q A G E V F F F		
UniRef90_UPI0003686EF1	R L F K A V A E N E V T V T V D L A Q Q K L I L P D G S A V E F P		
UniRef90_I0I610	D N G D C V F I P G V R E L A A G K E A L P A T T L R S G R E E T L I L		
UniRef90_O67399	L L W D L V E E P A T L L H V D L R S Q T V T L P D G Q Q H R F T		
UniRef90_UPI0003B568CD	D E I E H G D E I E V D L E K G V I K N L R T G K E Y Q A T K		
UniRef90_D9PKN9	A L M E D A K K G A N A R M T V D L E S Q T V T T S D G E V F G F		
UniRef90_R6QP22	A L F K A V E A M P G Y R L K V D L E R Q T I T A P D G T V Y		
UniRef90_Q67MJ3	L S F K N G D Y I F V P D V R K A V E D K T D A V K A Y V V G D S L K E I T L K		
UniRef90_UPI0003A37D87	E L M R R A Q E P G Y R L T V D L E R C V V E D D A G F R V D F A I D		
UniRef90_S2YVP6	R L F E E Q Q A G N E G F S L S I D L M A Q T I T T P D G A A L		
UniRef90_UPI00037319FC	L S F H N G D Y I F F D I L E K I K Q K E N K I T A Y I V K D D L V E V T F R L		
UniRef90_UPI0004287D9D	A L L K E A E A D S L Y V T V D L E K Q T V S N G N A E F		
UniRef90_R7IBE8	V L L Q K A L E P G Y E L E V D L E N Q V I S D D T G W S H		
UniRef90_L1JUB8	R L F A G A E G T E G Y K L T V D L E K K V V I E P D G R E		
UniRef90_O54122	V L M K D A E E A K E L E V D L P N Q K I V R A N G E S I S F		
UniRef90_UPI0003600E75	H A F T G E E E F T F D G L A D L C V G T N P V A L L V R P D A P R A T V R L R		
UniRef90_UPI000329A5A5	A L F F A A V D A D E G Y R M T V D L H A Q R I A L P D G		
UniRef90_E3I6W7	E L F A L V K A N P G M T F E V D L E A E V V K A G		
UniRef90_R7LZ48	K L M D D A E R G S N A T L T V D L E A Q E I R G P D G G V V R F		
UniRef90_A5WA1	D T D A D D G D E L E L D I E K G I T D L T N G S I I Q I E		
UniRef90_UPI00036F3B6D	K L F L A V E H P G Y Q L S L D L K K Q E I V D E Q		
UniRef90_K2IVA0	T E P E I G Q T W Q L H G L R T A L R T G E S A V T A N T G H A D I T F T		
UniRef90_UPI00036AC0B6	V L M S D A E K G A N A R M T V D L E A Q T V T T S D G Q E F		
UniRef90_E0MMN5	Q L F R E T E A Q Q G Y Q L T V D L P N Q Q V V T P S G Q T F D F K V		
UniRef90_T0Z806	K L M D D A S R G A N A V L T V D L E T Q S I T G P D G G T I T F		
UniRef90_A7FM87	T L L F A E V G R T P G Y R L T L D L P G Q K V R T P S G N S F A F A		
UniRef90_F8A9Q9	T L L F Q L V K E N E I E F V V D L E Q Q T V N A G G K S Y		
UniRef90_UPI000478DCC6	A P G A A K E I E E G H E V E V D P E S G T K D L T T G K T Y T F Q		
UniRef90_UPI000464AB0C	L L D H P G T E L S I D V E G Q Y I A L P D G G R I		
UniRef90_R6PVK7	E E I E A G D E V E I D F N S G K I Y D R T K G T E Y Q G		
UniRef90_C7RRS8	U n i t e d S t a t e s o f A m e r i c a P u b l i c S e c u r i t y I n s t i t u t e		
UniRef90_UPI00047C9B14	A L G D Y I F L P G L R Q L E N K A S F S A Y V V K A D G T V T E F P V T		
UniRef90_A0A059IU7	R L F Q E T A A H A G Y S L S D L A A Q T V T T P I P F V V D G E C K H R L F N		
UniRef90_R6WHD8	L E F D K D D Y F V K D I K K A I E N K E D T I K A Y V A N K G M K E M E L H		
UniRef90_UPI000364B057	F K N K D Y I F V P Q I R Q A V E E K W D E I K A Y A V G D E L K E F T L K		
UniRef90_UPI0003B471C8	D L F E R T A E H E G Y R L N V D L E N K Q L T H I N F D L D E H R R Q F L L Q		
UniRef90_UPI00047A0118	Y L F F Q Q A G Q G Q C R L E V D L E D Q V V R D D E G T T W K F		
UniRef90_D5BMM2	D L F K R T E A N E G Y K L N V D L E N K T I L D G N G L S I		
UniRef90_A0LML0	L M A D A S D V E N P E L S V D L V E Q T I K R P N G V T I		
UniRef90_UPI00022CAD45	A V R T G D E L E V D V D R G I H H Q G I K F T V D L E K Q H V L A D		
UniRef90_B8G7X5	E L F Q L A D T I N L T G E Q Y H T		
UniRef90_UPI0003B601F5	U n i t e d S t a t e s o f A m e r i c a P u b l i c S e c u r i t y I n s t i t u t e		
UniRef90_UPI000287A368	U n i t e d S t a t e s o f A m e r i c a P u b l i c S e c u r i t y I n s t i t u t e		
UniRef90_X2GVM9	R L I R A S Q E K S L K L T V S L E N Q V I T G G F E E E H F		
UniRef90_R6Q297	E L F K I V E A N E I E F T I D L V N E V V I A G E K Q Y S F K		
UniRef90_G8BBG9	D K I Q D G D E V A L D F D T G I T N V T K N E T Y Q A		
UniRef90_W6NJ08	S K L I P V I E E G G H K L T D L P N Q Q I R D G E T D D V L V E		
UniRef90_E8UXL8	I E D K D E V S I D V A T G I T K N I T K G K T Y K A A		
UniRef90_R6VDW8	T L M Q R S T A N P K H V I T I N L E E Q T V T D D Q G F K A G		
UniRef90_UPI0002D7B8AA	L P F E N G D Y L F K D I R K A L E E K N D T I K A Y V V N K G M K E F E L H		
UniRef90_D4IXV7	Q L I K N A E A D Q Y H L T V D L E T K K V Y D N V G F E A S F E I A D Y P R Q		
UniRef90_G2FY14	F K N L D F L F I P G I K D A V I N K T E K I Y V V K E D G L K E F E M T L		
UniRef90_O14289	D E I R H G D V L E I D P Q K G V I R N I T T D C N L E I T		
UniRef90_G2KPM7	D M M K A A E N Q V K F S V D L V N Q T I T Y G		
UniRef90_UPI00046385C9	A L M E R M T A H P G E T I T V D L E N C V V T S G N I R A T F T		
UniRef90_X1SLN5	A I Q A G D H V S V N F D T G I I T N E S T G E S Y Q G E A		
UniRef90_K6DZ67	D L I N V G D S L K I K G M D L L F S G E E R I K I T I G S R V I F T R L		
UniRef90_A4WMJ1	E I I R K A E S S E Y T L T V D L E E Q V V Y D N		
UniRef90_Q01CM0	P G V R Q K V T E G E E I V D I E A G T V T K V A T G E V I V G K P L		
UniRef90_F4S099	T L M A D A N A K Q E L E I D L P N Q V I I R S N G E K I		
UniRef90_R6KJ44	D T L A A E A S K G V E I E V D L P H Q K I R S K S Q D G K T T E I		
UniRef90_S3VT08	D S I F E A G D E V E V D F D S G I I T N K T K G E T Y Q G		
UniRef90_R7LEW9	E L F Q A I E A A P G S R I K I D L D K Q N V I G P T G K V Y Q F		
UniRef90_F9XCN0	F N Y E P G D Y V F V P G I R Q M L D G K E E I D A K V I S S Q G I T D I K L H		
UniRef90_D5HH24	Q T I F E E A K A G H E I E V D L Q A N V V K D A S G K E		
UniRef90_Q1Q105	D N D D Y V F I P G I K D A V K N K T E V I K A Y V V N K N F A E I E L R		
UniRef90_F6BB17	D N I K E G D E I E V D L T K S E I F D H T L N R R F T F E		
UniRef90_K7SNQ9	V K D G D V I E V D L E N E K I I I N D K I T L N C E T P K G		
UniRef90_U2PZM4	E L I M G D A R Q G A N S R L T V D L E K Q I I R P D G N V V		
UniRef90_G8MIH2	V L F Q K T E T I E G Y K I E I D L E E K K V V K D N T G L E F		
UniRef90_F4LSK6	P L L D G L R E S P G S R I A I D L P A Q T V T L P D G S V H		
UniRef90_S3XS00	K K D D Y I F I P D L R N A I E G K A E I K A Y V V S D E I T E F T V S V		
UniRef90_A6NZ16	W N V Q P G D K L W L P G I R K V L E S M E E T V E V L I Q N G Q E R T V T L R		
UniRef90_UPI00046F138E	D I K D G D Q V A V D L T T G E I T T N L I T T G R T Y K A		
UniRef90_UPI000428D42E	F T N L D Y V F L P D I R K E V E D K A D I K A V A V T K D G L K E F T M T L		
UniRef90_F8C2A9	K E I D T G D E L I I P E E G K I I N L T K N K V F F T		
UniRef90_D0CRP4	I L M E D A H K G E N A R M T V D L E E Q K I I T S D G V E I T F		
UniRef90_D8MN28	F V D T L F Q L V A A Q P G V A I D K V Y V A G D S C S E F T V K		
UniRef90_UPI00036A3634	F K K G D Y I F L P G I R K A V E E K A E E I K V Y V A G D S C S E F T V K		
UniRef90_U7VCD4	E N D D Y I Y I K D I K S A I E N K D D S I K G Y V I S T K N E D I K E I E L R		
UniRef90_Q0BRH5	R L M D D A G N G A N S R L T V D L E R Q V V V R P N G E E I		
UniRef90_D6XXJ3	V W A N Q A K T G T F E L N V D L E A K S V T A P G E E P V		
UniRef90_V5FYZ9	Q K I I A D E A R A G K E I E V D L P N Q V I K D A D G N K		
UniRef90_UPI0002DA7F17	Y L L E R G K E K A F A L E I D L V E Q		
UniRef90_E6MG99	A I E A G D T V E V D F D S G K I T D V T K G K S F Q G		
UniRef90_UPI0003B51CB2	U n i t e d S t a t e s o f A m e r i c a P u b l i c S e c u r i t y I n s t i t u t e		
UniRef90_UPI0003B53137	F K N K D Y I F L P G I R T A V E N K A D T I K A V A V S G G K E F T M T L		

UniRef90_L8XV96
 UniRef90_A0A059KGX1
 UniRef90_F4HDP5
 UniRef90_X1FYC6
 UniRef90_G4E6Z6
 UniRef90_UPI0003686EF1
 UniRef90_I0I610
 UniRef90_O67399
 UniRef90_UPI0003B568CD
 UniRef90_D9PKN9
 UniRef90_R6QP22
 UniRef90_Q67MJ3
 UniRef90_UPI0003A37D87
 UniRef90_S2YVP6
 UniRef90_UPI00037319FC
 UniRef90_UPI0004287D9D
 UniRef90_R7IBE8
 UniRef90_L1JUB8
 UniRef90_O54122
 UniRef90_UPI0003600E75
 UniRef90_UPI000329A5A5
 UniRef90_E3I6W7
 UniRef90_R7LZ48
 UniRef90_A5WA11
 UniRef90_UPI00036F3B6D
 UniRef90_K2IVAO
 UniRef90_UPI00036AC0B6
 UniRef90_E0MMN5
 UniRef90_T0Z806
 UniRef90_A7FM87
 UniRef90_F8A9Q9
 UniRef90_UPI000478DCC6
 UniRef90_UPI000464AB0C
 UniRef90_R6PVK7
 UniRef90_C7RRS8
 UniRef90_UPI00047C9B14
 UniRef90_A0A059IU7
 UniRef90_R6WHD8
 UniRef90_UPI000364B057
 UniRef90_UPI0003B471C8
 UniRef90_UPI00047A0118
 UniRef90_D5BMM2
 UniRef90_A0LML0
 UniRef90_UPI00022CAD45
 UniRef90_B8G7X5
 UniRef90_UPI0003B601F5
 UniRef90_UPI000287A368
 UniRef90_X2GVM9
 UniRef90_R6Q297
 UniRef90_G8BBG9
 UniRef90_W6NJ08
 UniRef90_E8UXL8
 UniRef90_R6VDW8
 UniRef90_UPI0002D7B8AA
 UniRef90_D4IXV7
 UniRef90_G2FY14
 UniRef90_O14289
 UniRef90_G2KPM7
 UniRef90_UPI00046385C9
 UniRef90_X1SLN5
 UniRef90_K6DZ67
 UniRef90_A4WMJ1
 UniRef90_Q01CM0
 UniRef90_F4S099
 UniRef90_R6KJ44
 UniRef90_S3VT08
 UniRef90_R7LEW9
 UniRef90_F9XCN0
 UniRef90_D5HH24
 UniRef90_Q1Q105
 UniRef90_F6BB17
 UniRef90_K7SNQ9
 UniRef90_U2PZM4
 UniRef90_G8MIH2
 UniRef90_F4LSK6
 UniRef90_S3XS00
 UniRef90_A6NZ16
 UniRef90_UPI00046F138E
 UniRef90_UPI000428D42E
 UniRef90_F8C2A9
 UniRef90_D0CRP4
 UniRef90_D8MN28
 UniRef90_UPI00036A3634
 UniRef90_U7VCD4
 UniRef90_Q0BRH5
 UniRef90_D6XXJ3
 UniRef90_V5FYZ9
 UniRef90_UPI0002DA7F17
 UniRef90_E6MG99
 UniRef90_UPI0003B51CB2
 UniRef90_UPI0003B53137

210 220

```

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

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

UniRef90_F3BC30
 UniRef90_P18250
 UniRef90_R5J4W9
 UniRef90_R6TYP1
 UniRef90_UPI0003616DF4
 UniRef90_B7KZ04
 UniRef90_R7QX52
 UniRef90_W1SS70
 UniRef90_E6UKE8
 UniRef90_A8NY17
 UniRef90_UPI0004724289
 UniRef90_UPI000255D7FB
 UniRef90_F3SCW7
 UniRef90_D3TBK5
 UniRef90_K0IJG6
 UniRef90_R6VAI0
 UniRef90_I4BYI8
 UniRef90_A6L1V9
 UniRef90_W4F217
 UniRef90_R5YSF7
 UniRef90_A7GXZ0
 UniRef90_E6SHZ7
 UniRef90_R5KJ43
 UniRef90_S6EYP7
 UniRef90_A6URB9
 UniRef90_UPI00037923F8
 UniRef90_UPI00047D7F1A
 UniRef90_D8SLS4
 UniRef90_F8NC03
 UniRef90_R5QT25
 UniRef90_A6EQF1
 UniRef90_H1H465
 UniRef90_W9ACH4
 UniRef90_UPI00036E3705
 UniRef90_R7AV90
 UniRef90_UPI000255ABB2
 UniRef90_G0VQP1
 UniRef90_B1KKZ1
 UniRef90_R5H9K1
 UniRef90_Q9LCR5
 UniRef90_B9WKN6
 UniRef90_C8WM15
 UniRef90_UPI0002B4D74B
 UniRef90_UPI00047C0427
 UniRef90_W8YS51
 UniRef90_S0JJF5
 UniRef90_R7M2D0
 UniRef90_G7E028
 UniRef90_R8W584
 UniRef90_UPI0002F63490
 UniRef90_D4KGT8
 UniRef90_F2NE90
 UniRef90_E6LCN5
 UniRef90_R5HR48
 UniRef90_R5F337
 UniRef90_A7GMU4
 UniRef90_R9J3K9
 UniRef90_W0PMD8
 UniRef90_UPI00046A329E
 UniRef90_V4TJD9
 UniRef90_H0UNG0
 UniRef90_A5VF10
 UniRef90_UPI0003FC4080
 UniRef90_A0A015NMN6
 UniRef90_F2NRD9
 UniRef90_C9LTJ1
 UniRef90_X0XF7
 UniRef90_B8GY65
 UniRef90_K0NMY3
 UniRef90_W0AD16
 UniRef90_Q3APC6
 UniRef90_R5N1R0
 UniRef90_UPI00041FED76
 UniRef90_F7V239
 UniRef90_H5SCZ8
 UniRef90_C9RDA0
 UniRef90_B2UYT4
 UniRef90_B4S6M9
 UniRef90_UPI00047A42EC
 UniRef90_A0A059EA11
 UniRef90_E5WME5
 UniRef90_A3ZQJ3
 UniRef90_K5ZUU8
 UniRef90_C0B8N4
 UniRef90_UPI0003B6A78B
 UniRef90_D2RIX3
 UniRef90_UPI000287B7F0
 UniRef90_UPI00037A8F99
 UniRef90_UPI00041D943A
 UniRef90_W6MWC6
 UniRef90_A1HLS1
 UniRef90_G7WM99

1 10 20 30 40
 I K F G P N I K D W P E M S A L P E N L I | V K V V S E I H D P V T T D
 L V Y G P N I K D W P E M S P L T D N I L L K V C S K I T T D
 F G P N I A D W P A M E P L G D D I I M K V C S K I T T D
 F H S G Q V L P L D R N N V D T D
 I Q F G P N I K D W P A M S A L P E H M V L K V V S E I H D P V T T D
 K Y G D N V D T D
 P A V P L P I E N V D T D
 K Y G D D V N T D
 M E P F T V L K S K A T P L D R V K Y G D N V D T D
 K Y G D N V D T D
 N I I T S T C V P L P L E N V D T D
 K Y G D D V N T D
 V F K Y G D N V D T D
 K F G D N I D T D
 K Y G D D V N T D
 D P S V E I K F G P N I K D W P E M I A L T D N L L L K V A S V I T T D
 L P P F L T L E G I A A P L D K A N V D T D
 F G D D V D T D
 F G D D V D T D
 V H T G K A A A M N R V N V D T D
 F V V R D N I D T D
 N I I T S T C V P L P L E N V D T D
 K Y K D N V D T D
 W R S D D S Y F K R P D V L N A L P T I S F S P M K P L L V L G D N I T T D
 V F K Y G D N V D T D
 N V D T D
 I K F G P N I A E W P P I P A L A D N L L M Q V A S V L R D P V T T D
 Y G D N I D T D
 I K F G P N I K D W P A M S E L P Q N M V L K V V S E I H D P V T T D
 L A V M I D N V D T D
 Y G D N I D T D
 K F G D N I D T D
 I Q F G P N I K D W P A M S A L P E H M V I A A P M D I S N I D T D
 V F K Y G D N V D T D
 V A P L D R N N I D T D
 Y G D N I D T D
 K F G D N I D T D
 M E P F K V Y K G R A V P F M N D N I D T D
 I Q F G P N I K D W P A M S A L P E H M V L K V V S E I H D P V T T D
 D I I T S T C I P L P Q E N V D T D
 M E P F R T H K G T V A V L M N D N I D T D
 I Q F G P N I K D W P K M C E L P E N L V S E I H D P V T T D
 N V V P L D R A N V D T D
 I I V L G N N I D T D
 V G D N I D T D
 F G D H V D T D
 P I R E V E G R A L P L G L K N V D T D
 H S G K V Y P L N R S N V D T D
 N V D T D
 I Q F G P N I K D W P E M Q P L S D D I L L K V V S E I H D P V T T D
 Y G D N I D T D
 K L G D N I D T D
 L D G R A A P L E L A N I D T D
 A V A L P L V R D N I D T D
 L G K N I D T D
 K Y G D H V D T D
 V K F G P N I K D W P E M V A L T D N L I L K V V S E I H D P V T T D
 L E N V R G L V L G D N I D T D
 K F G D D I N T D
 V F K Y G D N V D T D
 L G K N I D T D
 V L R Y G D N I D T D
 K P M S N V D T D
 V A P L D A A N V D T D
 V A T M D R A N V D T D
 N V D T D
 N I L L K V C S K I T T D
 G P N I K D W P E M P A L G D N V L L Q V C S K I T T D
 K V G D H I D T D
 N V D T D
 R A N V D T D
 I L E G K V W R Y G D N V D T D
 K F K D D V D T D

50 60 70 80

UniRef90_F3BC30	E P S G E T S S Y R S N P L G A E F A L S R K D P A Y V G R A K E V Q K Q
UniRef90_P18250	M P S G E T S S Y R S N P L G K Q F L K T I K R T G L G S A L F Y G L R Y D P A T
UniRef90_R5J4W9	E P S G E T S S Y R S N P L G A E F A L S R K D P E Y V R T A G Q K P S E
UniRef90_R6TYP1	E P S G E T S S Y R S N P L G A E F A L S R K D P E Y V A R A K E T V T E
UniRef90_UPI0003616DF4	Q P S G E T S S Y R S N P L G K Q F L T S V D R D G F A E A L F F D W R
UniRef90_B7KZ04	R P S G E T S S F R S N P L G A E F A L S R K D P E Y V G R A K E V Q K A
UniRef90_R7QX52	E P S G E T S S F R S N P L G K Q F L K T I K R T G L G Q G F S E M R
UniRef90_W1SS70	Q P S G E T S S F R S N P L G A E F A L S R K D P A Y V G R A K E V Q K A
UniRef90_E6UKE8	V P A R Y L N T S N M E E L A Q H C M E D I D
UniRef90_A8NY17	M P K Q F L K T L K R T G A D A L F F T L R K D P H T G K D T D F I L N R
UniRef90_UPI0004724289	Q P A R F A V E R K G F G D N L F R D W R Y K K D N
UniRef90_UPI000255D7FB	Q P A R F L K A T T R E G F G G N N L F A D W R
UniRef90_F3SCW7	K P A R F L K A T T K R S G L G V H A F D N M R
UniRef90_D3TBK5	V E P G K Y T Y K I M S D E E M A S H A I E D L
UniRef90_KOIJG6	Q V P A R K Q F L K L V N R T G F G K Y L F Y D W R
UniRef90_R6VAI0	V P A R Y L N S S D P A E L A K S C M E D I D
UniRef90_I4BY18	V P A G A Y L S L T D P K E L A K H C M E G I D
UniRef90_A6L1V9	Q P A R F L K A T T R E E K F F G D N L F R D
UniRef90_W4F217	Q P A S K E F L K R I E R T G F G Q F V F Y H W R
UniRef90_R5YSF7	V V P A R Y L N V P D A K E L A K H C M E D
UniRef90_A7GXZ0	I A A R Y L N T S D E N E L A K H I M E D
UniRef90_E6SHZ7	V P A R Y L F T T D P A E L A A H C M
UniRef90_R5KJ43	E L P S G E T S S Y R S N P L G A E F T L S R K D P E Y V G R A C F C K A D
UniRef90_S6EYP7	A A P A R Y Q F L K T I K R T G L S A G F Y E W R F T K D S Q G
UniRef90_A6URB9	A L P A R Y L I Y T T E Q L A K Y A M T G
UniRef90_UPI00037923F8	A P A G A Y L K T T D V Y E L A S H C M A G I D E D F P K R V N E
UniRef90_UPI00047D7F1A	Q P A K Q F L K R V E R T G F G Q F L F F D W R
UniRef90_D8SLS4	Q P A E Y L T L V P S K P D E Y E K L G S Y A M A G L P F H Y G
UniRef90_F8NC03	Q P A R Y L K L T Q K D G F G P Y L F H D W R F
UniRef90_R5QT25	V P A R Y L N S F D A K E L A S H A M A D
UniRef90_A6EQF1	Q P A R F L K A T D K Q G F G N N V F R D W R
UniRef90_H1H465	Q P A R F L K A T D K Q G F G N N V F R D W R
UniRef90_W9ACH4	Q P A R F L K A T D K Q G F G N N V F R D W R
UniRef90_UPI00036E3705	H S P V G R I R E R R G N A G V M I R G T F D N S R L D N G L P G P F T R I G
UniRef90_R7AV90	V P A R Y L N S S P S E L A A H C M E D I D R
UniRef90_UPI000255ABB2	Q P A R Y L N S F D P K E L A T H C M V D I D E T F A G N V K E
UniRef90_G0VQP1	V P A R Y L N S F D P K E L A T H C M V D I D E T F A G N V K E
UniRef90_B1KKZ1	Q P A R Y L N S F D P K E L A T H C M V D I D E T F A G N V K E
UniRef90_R5H9K1	E L P S G E T S S Y R S N P L G A E F T L S R K D P E Y V G R A C F C K A D
UniRef90_Q9LCR5	E P A R Y L N S F D P K E L A T H C M V D I D E T F A G N V K E
UniRef90_B9WNK6	A P K Q F L K T I K R T G L K D G F Y E L R F V K G E N G K D V E T D F V
UniRef90_C8WM15	V P A R Y L T T S D P A E L A K H C L E D L D T S F V E R V Q P
UniRef90_UPI0002B4D74B	Q P A E Y L T L V P S N P S E Y E K L G S Y A L I G
UniRef90_UPI00047C0427	L A A R Y L N T S D T A I L A S H L M E D A R A G F V H S I
UniRef90_W8YS51	A P K Q F L K T I K R T G L K D G F Y E W R
UniRef90_S0JJF5	E L P S G E T S S Y R S N P L G A E F T L S R K D P E Y V G R A C F C K A D
UniRef90_R7M2D0	Q Y P G R Y L D I V D P K E I G S H C L C G V D E S I A A N F P
UniRef90_G7E028	A I P A R Y L K Q F L K T I K R T G L K D G F Y E W R
UniRef90_R8W584	V P A K Q F L K A I V R T G F G R H L F D E L R F L D A G E L G
UniRef90_UPI0002F63490	A V P A R Y L N T S D S Q E L A K H A M E D A P E F V K Q A
UniRef90_D4KGT8	V P A R Y L N T S D S Q E L A K H A M E D A P E F V K Q A
UniRef90_F2NE90	A P A R Y L N T S D S Q E L A K H A M E D A P E F V K Q A
UniRef90_E6LCN5	Q P A R Y L N T S D S Q E L A K H A M E D A P E F V K Q A
UniRef90_R5HR48	E L P S G E T S S F R S N P L G A E F T L S R K D P E Y V G R A C F C K A D
UniRef90_R5F337	Q P A R Y L N T S D S Q E L A K H A M E D A P E F V K Q A
UniRef90_A7GMU4	Q P A R Y L N T S D S Q E L A K H A M E D A P E F V K Q A
UniRef90_R9J3K9	E L P S G E T S S Y R S N P L G A E F T L S R K D P E Y V G R A C F C K A D
UniRef90_W0PMD8	A L P A R Y L N T S D S Q E L A K H A M E D A P E F V K Q A
UniRef90_UPI00046A329E	Q Y P A P Y L A T D P E E I L G S H C L E G L D K N I S K N F P
UniRef90_V4TJD9	Q Q P A E Y L T L V P S N P D E Y E K L G S Y A L I G L P A T Y T T R F
UniRef90_H0UNG0	V P A P A R Y L T T H D P V E L G R H C M E D A S P N F P G E V K R
UniRef90_A5VFI0	V P A Q Y L K T I T R K G L G R G
UniRef90_UPI0003FC4080	Q P A K Q F L K R I E R T G F G E F V F H N W R
UniRef90_A0A015NMN6	A P A K Q F L K R I E R S G F G Q F L F Y E W R
UniRef90_F2NRD9	E L P S G E T S S F R S N P L G A E F T L S R K D P E Y V G R A C F C K A D
UniRef90_C9LTJ1	V P A R Y L N T S D S Q E L A K H C M V D I D E S
UniRef90_X0X5F7	V Y P G K Y L P I I D A P E M A L H A L E G
UniRef90_B8GY65	Q P A R Y L N T S D S Q E L A K H C M V D I D E S
UniRef90_K0NMY3	V P A K Y A N L P T P E D L G K H C L E N L D D Q F V Q N V K P
UniRef90_W0AD16	A P S R E M K S V S S K G G L A D G L F A G W R Y T A V G G
UniRef90_Q3APC6	Q P A E H L V Y S L S D P K E V V L Y G K Y A L S G V P E Q G G L P Q G N
UniRef90_R5N1R0	V P A R Y L N T S D S D P K D L A A H C M E D I D K E F V V N V K E
UniRef90_UPI00041FED76	Q P A R F L K S T I R E G F G E N L F R D W R
UniRef90_F7V239	E L P S G E T S S Y R S N P L G A E F T L S R K D P E Y V G R A C F C K A D
UniRef90_H5SCZ8	Q P A Q Y L M Y N P A I P E E Y R M F G K Y A L S G V P A A Q A G L P H G
UniRef90_C9RDA0	Y P A S G K Y K F K T L D M E E L A R H V M E D L D P
UniRef90_B2UYT4	V P A P A R Y L N T S N H K E L A S H C M E D I D K D F V N N V
UniRef90_B4S6M9	Q P A P A E H L V Y S L S D P E E V K L Y G K Y A L S G V P V A E A G L
UniRef90_UPI00047A42EC	V P A R Y L N T S D S D P K E L A K H C M E D I D K D F V N N V
UniRef90_A0A059EA11	M P A K Q F L K R I E R T G F G E F L F Y E W R Y
UniRef90_E5WME5	A P K Q F L K R I E R T G F G E F L F Y E W R Y
UniRef90_A3ZQJ3	Q P A K Q F L K R I E R T G F G E F L F Y E W R Y
UniRef90_K5ZUU8	Q P A R F L K S T I R E G F G E N L F R D W R
UniRef90_C0B8N4	E L P S G E T S S Y R S N P L G A E F T L S R R D P E Y V G R S K A V D G E
UniRef90_UPI0003B6A78B	E L P S G E T S S Y R S N P L G A E F T L S R R D P E Y V G R T K A V K E L
UniRef90_D2RIX3	Q P A S K E F L K R I E R T G F G E F L F Y E W R Y
UniRef90_UPI000287B7F0	A P A R F L V T T D A E E L G R N C M S G L E E G W V D R V K E N D
UniRef90_UPI00037A8F99	Q P A S G K Y K F K T L D M E E L A R H V M E D L D P
UniRef90_UPI00041D943A	Q P A S G K Y K F K T L D M E E L A R H V M E D L D P
UniRef90_W6MWC6	A P A S G K Y K F K T L D M E E L A R H V M E D L D P
UniRef90_A1HLS1	V P A R Y L N T S D P K E L A K H C M E D I D K D F V N N V
UniRef90_G7WM99	A P G R Y L N T S D P K E L A K H C M E D I D K D F V N N V

90 100 110 120

UniRef90_F3BC30	K A I E E G R C P K N P Q L D K K T L G I G S T I F A V K P G D G S A R E Q A A		
UniRef90_P18250	G A E K P D F V L N Q P A Y R S K I L V C T G P N F G C G S S R E H A P		
UniRef90_R5J4W9	L D A D L N G V F D A I H T I M E T E I G S M I Y A V K P G D G S A R E Q A A		
UniRef90_R6TYP1	T L P E V R T V V S A L A G E D S A P Q I G S V I Y A R K P G D G S A R E Q A A		
UniRef90_UPI0003616DF4	Y H D D G S E N T D F I L N H P D Y Q R A S I L L T Q E N F G C G S S R E H A P		
UniRef90_B7KZ04	Y N D D G S E N P D F V L N Q P A Y R H A K T L V V G D N F G C G S S R E H A P		
UniRef90_R7QX52	Q F A E I A P V I E T I K K E Y T D V T K E N L G V G S T I G D G S A R E Q A A		
UniRef90_W1SS70	F D D N G K P R P N F P L N D S K Y K N A S I L V A G K N F G C G S S R E H A P		
UniRef90_E6UKE8	D F A K N V K K G D I M V A K A N F G C G S S R E H A P		
UniRef90_A8NY17	E P Y N R A K I L V C T G K N F G C G S S R E H A P		
UniRef90_UPI0004724289	T P N P D F V L N N Q S R Y S G K I L V A G K N F G S G S S R E H A A		
UniRef90_UPI000255D7FB	Y D K S G N P K E D F V L N N Q P R Y S G K I L V A G Q N F G S G S S R E H A A		
UniRef90_F3SCW7	Y R P D G S E N P D F V L N Q E P Y R K A G I L I T Y D N L G C G S S R E H A P		
UniRef90_D3TBK5	D P E F A K N V K P G D V I V A G K N W G Y G S S R E Q A V		
UniRef90_KOIJG6	F D R D G R P R S D F V L N N P K Y S G R Q I L L A R D N F G S G S S R E H A A		
UniRef90_R6VAI0	P D F V N R V K K G D I M V A N K N F G C G S S R E H A P		
UniRef90_I4BY18	P D F P K K V K V E G D I V V G G V N F G C G S S R E H A P		
UniRef90_A6L1V9	Y N P D G S L N K D F V L N N P T Y G G Q I L V A G K N F G S G S S R E H A A		
UniRef90_W4F217	F D Q N D Q P E D F V L N Q P Q Y Q G S K I L V A H E N F G C G S S R E H A P		
UniRef90_R5YSF7	I D V D F V K N V K E G D I V V A D K N F G C G S S R E H A P		
UniRef90_A7GXZ0	A D P K F S S K I A K G D I V A G E N F G C G S S R E H A P		
UniRef90_E6SHZ7	E D D L D P S F A A N V R P G D V I V A G R N F G C G S S R E H A P		
UniRef90_R5KJ43	E S M K P M M K E I K A K F A D R E I T G S N T G Y G S T I G D G S A R E Q A A		
UniRef90_S6EYP7	K D Q P T D F V L N Q E P Y K N A K I L V V T G D N F G C G S S R E H A P		
UniRef90_A6URB9	T D P E F P E K A L F G D I V V G G K N F G C G S S R E H A P		
UniRef90_UPI00037923F8	F N D D G S D N P E F E L N Q P Q N E G V T I L V A G H N F G C G S S R E Q A P		
UniRef90_UPI00047D7F1A	Q F M E P G K S K T K Y S I I I A G S N F G C G S S R E H A P		
UniRef90_D8SLS4	N A D G S E K K D F V L N K P D F K D A V I L V A G K N F G S G S S R E H A A		
UniRef90_F8NC03	I D P T F A S T V E K G D I V V A G Q N F G C G S S R E H A P		
UniRef90_R5QT25	Y D N L G N V N P E F I F F N N P S Y K G K I L V A G N N F G C G S S R E H A A		
UniRef90_A6EQF1	D G S E K K D F S L N N P K Y T G E I L I L V A G N N F G C G S S R E H A A		
UniRef90_H1H465	Y D D D G L K R Q D F S L N D P A Y D G A S I L V A G E N F G C G S S R E H A P		
UniRef90_W9ACH4	G N Q E P I S I Y Q A S A A I S A D G Y A A V I I G G K N Y G T G S A R D W A A		
UniRef90_UPI00036E3705	Y D N D G T P K E S F V L N N A Q Y G G K I L V V G G K N F G S G S S R E H A A		
UniRef90_R7AV90	E F I H Q V K K G D I V V A E K N F G C G S S R E H A P		
UniRef90_UPI000255ABB2	Y N N D G T P K E S F V L N N A Q Y G G K I L V V G G K N F G S G S S R E H A A		
UniRef90_G0VQP1	G D I M V G H H N F G C G S S R E H A P		
UniRef90_B1KKZ1	D A G D E P N P E F T L N Q S R Y K G A S I L I S K E N F G C G S S R E H A P		
UniRef90_R5H9K1	E T A R Q A G S I P A Q V Q A P A A F Q I G S V I F A N K P G D G S A R E Q A A		
UniRef90_Q9LCR5	F D E A G N I N P E F E P N K P R Y K G A S V L I S R A N F G C G S S R E H A P		
UniRef90_B9WNK6	L N V E P Y R K A E I L L V T G D N F G C G S S R E H A P		
UniRef90_C8WM15	G D I I V V A D E N F G C G S S R E H A P		
UniRef90_UPI0002B4D74B	L P S S Y S T R Y V E S E E M K T K Y S I I I I V A G E N F G C G S S R E H A P		
UniRef90_UPI00047C0427	N K G D E P S F V L N Q E P Y R Q A I L V V S G V N F G C G S S R E H A P		
UniRef90_W8YS51	F D E E G N V N P N F E P N K P R Y K G A S V L I S R A N F G C G S S R E H A P		
UniRef90_S0JJF5	A V I E E L R P V M E A V N Q A F P E K G G S T I F A V K P G D G S A R E Q A A		
UniRef90_R7M2D0	Q G G M V V A G R N F G C G S S R E H A P		
UniRef90_G7E028	E E I P S F V L N Q E P Y R Q A I L V V S G V N F G C G S S R E H A P		
UniRef90_R8W584	I D T E F V K V Q V P G D I I V A N R N F G C G S S R E H A P		
UniRef90_UPI0002F63490	Q D P A T R Q Q P R F S L N Q P R Y Q G A I L L A R E N F G C G S S R E H A P		
UniRef90_D4KGT8	I D E T F A Q N V I E G D I M V G G K N F G C G S S R E H A P		
UniRef90_F2NE90	Q V G D F I I A G K N F G C G S S R E H A P		
UniRef90_E6LCN5	Y L R N R Q P N P E F V L N E P R Y Q G A T I L L S G D N F G S G S S R E H A A		
UniRef90_R5HR48	I D T I K T V Y P D F A R K E K G Y A G F G S T I F A V K P G D G S A R E Q A A		
UniRef90_R5F337	F D K T G Q P I R D F I L N N P L Y S G S I L V A G K N F G S G S S R E H A A		
UniRef90_A7GMU4	Y E E D R K E N P H F P L N D P E R K G A S I L I T G E N F G C G S S R E H A P		
UniRef90_R9J3K9	Q T P E I K P V M E S I Q K L Y P E V G R G N V G F G S T I G D G S A R E Q A A		
UniRef90_W0PMD8	Q R T E D R K N Q N F C L N Q Q Q Y A G A K I L L T R E N F G C G S S R E H A V		
UniRef90_UPI00046A329E	K G G I V V A G T N F G C G S S R E H A A		
UniRef90_V4TJD9	I D E N E T K T K Y K I I I I V A G G N F G C G S S R E H A P		
UniRef90_H0UNG0	G D I I V V A G E N F G C G S S R E H A P		
UniRef90_A5VF10	A F E T I R A Q P G N V F D D P E Y K G A N I L I I A G D N F G C G S S R E H A A		
UniRef90_UPI0003FC4080	F H D D G T K R T D F N M D D P E F D G A S V L I I A G D N F G C G S S R E H A P		
UniRef90_A0A015NMN6	F D E A G N V N P E F E P N K P R Y E G A S V L I I S R A N F G C G S S R E H A P		
UniRef90_F2NRD9	S E E V K E K Y P E F F K G R I E K A G L G S T I V A G K N F G S G S S R E Q A A		
UniRef90_C9LTJ1	F A K N V Q E G D I M V G G K N F G C G S S R E H A P		
UniRef90_X0XF57	I D P E F P K K I Q K G D I I V A G F N F G C G S S R E Q A A		
UniRef90_B8GY65	F D A D G N E I S D F V L N K P E Y K S A S I V L I I A G D N F G C G S S R E H A P		
UniRef90_K0NMY3	R D P D P D F A M N Q P C Y R D A I I L L I G G A N F G C G S S R E H A A		
UniRef90_W0AD16	I P F V R E G E V T S D Y T I I V A G A N F G C G S S R E H A P		
UniRef90_Q3APC6	G D I I V V A G V V N F G C G S S R E H A P		
UniRef90_R5N1R0	F T E T G E M R E E F P L N N P L Y K G K I L V A G K N F G C G S S R E H A A		
UniRef90_UPI00041FED76	E R E E G A E P Y Q A P E I R E E N T G I G S T I F A V K P G D G S A R E Q A A		
UniRef90_F7V239	H V P F H G P E D E F V S P Y R I I V A G R N F G C G S S R E H A P		
UniRef90_H5SCZ8	E F Y H K I R P G D F I V A G W N F G C G S S R E Q A P		
UniRef90_C9RDA0	K D G D I I V A N K N F G C G S S R E H A P		
UniRef90_B2UYT4	K E G N T P F V A D S S F E S E Y V I I I I V A G P N F G C G S S R E H A P		
UniRef90_B4S6M9	T L S D G S P K A D F V L N R P E Y A K A S I L I I A G E N F G C G S S R E H A P		
UniRef90_UPI00047A42EC	E D G R E K P D F I L N R P E Y R N A P I L L A R K N F G C G S S R E H A P		
UniRef90_A0A059EA11	F N D D G S P N R D F E L N Q P G L A S A S I L V A R R N F G S G S S R E H A V		
UniRef90_E5WME5	Y D K A G N P N P N F V L N Q D T Y K G Q I L V A G K N F G S G S S R E H A A		
UniRef90_A3ZQJ3	N I L T E V Y P I P G F G E I R P E E T E T G S M I Y A V K P G D G S A R E Q A A		
UniRef90_K5ZUU8	Y S F E Y Y P G K E K F A K E A K P G D F V V A G R N F G T G S S R E H A V		
UniRef90_C0B8N4	I D E P E F T I L N Q P Q Y Q G A S I L I I A R E N F G C G S S R E H A P		
UniRef90_UPI0003B6A78B	E R E A G K D L P E L A E V L E R T E I G S L V Y A T R P G D G S A R E Q A A		
UniRef90_D2RIX3	F D A L G N P V E N F V L N Q P E Y K G S S I L V A H D N F G C G S S R E H A P		
UniRef90_UPI000287B7F0	M V K T H E S V P N P E F T I L N Q P Q Y Q G A S I L I I A R E N F G C G S S R E H A P		
UniRef90_UPI00037A8F99	I D P A F A G Q V I A V G D I V V A G K N F G C G S S R E H A P		
UniRef90_UPI00041D943A	V R P E F A G G A E P G D F V V A G R N F G C G S S R E H A P		
UniRef90_W6MW6C6			
UniRef90_A1HLS1			
UniRef90_G7WM99			

130 140 150 160

UniRef90_F3BC30	S C Q K V L G G W A N	A N E Y A K R Y R S N	L I N W G M	P L L T E E K D T E
UniRef90_P18250	W A F N D F G I R C I	A T S F A D I F F F N N	C F K N G M	P I I L S Q
UniRef90_R5J4W9	S C Q R V I G G L A N	T K E Y A K R Y R S N	V M N W G M	P F Q M V E E P
UniRef90_R6TYP1	S C Q R V L G G S A N	A L E Y A K R Y R S N	L I N W G M	P F T T P S E P D F
UniRef90_UPI0003616DF4	W A L L Q W G F E V I	A P S F A D I F F F N N	C V N N N M	P I T L P K K T I N
UniRef90_B7KZ04	W A L L A D F G I R C V	S T S F A D I F F F N N	C A K N G I	A I V V S P E D L E
UniRef90_R7QX52	S C Q K V L G G W A N	A N E Y A K R Y R S N	L I N W G M	P F L I P E E G E
UniRef90_W1SS70	W A V Q D F G F K V I	A P S Y A D I F K N N N	C V K N G I	A I Q V S E E Q V Q
UniRef90_E6UKE8	A S I K A S G I S C V	A K S F A R I F Y R N A I	N I G L	P I I E C E E D C I
UniRef90_A8NY17	W S L N D F G I R C I	A P S F A D I F R N N A	M Q N G M	P V Q I P Q E Y L E
UniRef90_UPI0004724289	W S I Y D Y G F R V V	S S F F A D I F K N N A	L N N G	P V V V S P E Y L E
UniRef90_UPI000255D7FB	W A I V G Y G F R V V	S S F F A D I F K N N A	L N N G	P V Q V S K E F L Q
UniRef90_F3SCW7	W A L L D F G I R C V	A P S F A D I F N N N	C F K N G I	P I A L P R A V C T
UniRef90_D3TBK5	K C L K A A G I K A I	A E S F A R I Y Y R N C	I N L G L	P A I T L K R E E I
UniRef90_KOIJG6	W A I F D Y G F R A V	A P S F A D I F Y N N C	C F K N G I	P V R L K S S E V D
UniRef90_R6VAI0	I A I K A S G I S C V	A E T F A R I F Y R N A I	N I G L	P I I E C P E E A A
UniRef90_I4BYI8	M A L K G C G V G A V	A K S F A A I F Y R N A I	N I G L	P I E C P E A V
UniRef90_A6L1V9	W A I A G Y G F R V V	S S F F A D I H K N N E	L N N F	V L P V V V S E G F L K
UniRef90_W4F217	W A I L D Y G F N V V	A P S F A D I F H N N C	C F K N G I	P K L S V Y E V E
UniRef90_R5YSF7	I A I K A S G V S C V	A E T F A R I F Y R N A I	N I G L	P I I E C P E E A A K
UniRef90_A7GXZ0	L A L L K A A G I G A V	A K S Y A R I F Y R N S F	T G L	L E I S Q
UniRef90_E6SHZ7	V A I I R A A G V A C V	A A S F A R I F Y R N A I	N V G L	P I L E C P E A V A A
UniRef90_R5KJ43	S C Q K V L G G W A N	A K E Y A K R Y R S N	L I N W G M	P F I M E E D F A F
UniRef90_S6EYP7	W A L N D F G I R C I	A P S F G D I F Y N N S	F K N G M	P I R I N Q Q V I V
UniRef90_A6URB9	M G L K G L S V I	A E S F A R I F Y R N S	N I G F P	E C K D I S K Y
UniRef90_UPI00037923F8	I S I K Y C G I K A I	V A E S F A R I F Y R N C	I N G L	P I V C K G I K K H
UniRef90_UPI00047D7F1A	W A L K D Y G F Q V I	A P S F A D I F Y N N C	C V K N G I	P L R L D E N K V N C
UniRef90_D8SL84	V A L G A S G I Q V V	V A E S Y A R I F F R N S	S V A T G E M	P V E C E A R I C
UniRef90_F8NC03	W A I A G Y G F R V V	S S F F A D I H K N N E	L N N F	V L P V V V T E S F L K
UniRef90_R5QT25	L C L K T A G I K C V	A K S F A R I F Y R N S I	N I G F P	I M E C E E A A
UniRef90_A6EQF1	W A L V D Y G F K V I	V S S Y F A D I F K G N S	L L N N G	P I Q V S E T F L K
UniRef90_H1H465	W A L L S D Y G F K V I	V S S Y F A D I F K T N A L	N N G V L	P I M V S K E Y Y L S
UniRef90_W9ACH4	W A L L L D Y G F Q V V	A P S F A D I F Y N N A L	K N G I	P I Q M E K D Q V D
UniRef90_UPI00036E3705	K G Q R L L G V R A V	V A E S F E R I H R S N	L V M F G	V A P L L L D Q K R S M
UniRef90_R7AV90	I A I K A A G V S C V	A E T F A R I F Y R N A I	N I G L	P I V E C A Q A A K
UniRef90_UPI000255ABB2	W A V Y D Y G F R C V	S S F F A D I F R N N C	I N V G L	P V Q V S P E F L E
UniRef90_G0VQP1	I A I K A S G V P V V	V A A S F A R I F Y R N A I	N V G L	P A L E I G D D V
UniRef90_B1KKZ1	W A L L A D F G L R A I	A P S F A D I F Y G N S	I N N G L	P V R L S D V E V Q
UniRef90_R5H9K1	S C Q R V L G G C A N	C Y E F E A K R Y R S N	C V N W G M	P F T L A E E G D A F
UniRef90_Q9LCR5	W A I I M D Y G F R C V	A P S F A D I F Y N N C	F K N G M	I L P I K L S E E E Q V E
UniRef90_B9WNK6	W A L L D F G I K S I	A P S F A D I F Y N N S	F K N G I	P I R I P Q E I I E
UniRef90_C8WM15	I A I K A A G V D V V	A K S F A R I F Y R N S	I N T G L	A I M E C P E A V
UniRef90_UPI0002B4D74B	V A L L G A S G A V A V	V A E S Y A R I F F R N S	S V A T G E	E I Y P L E S E E T R I C
UniRef90_UPI00047C0427	V A I I K G A G I S A V I	A K S Y A R I F Y R N A F	N T G L	P I L E I K E A
UniRef90_W8YS51	W A I I Q D Y G Y K V V	A P S Y A D I F Y N N C	F K N G I	P I K L S E E E Q V E
UniRef90_S0JJF5	S C Q K V L G G W A N	A N E Y A K R Y R S N	L I N W G M	P F L I S E E G E L P
UniRef90_R7M2D0	I A I L L N M G A K A V L	A D S F A R I F F R N A	I N L G L	P I I C K G I R
UniRef90_G7E028	W A I L V D F G I R A L I	G I S F F A E I F S N N	L T K N G M	P V V L P E K D V
UniRef90_R8W584	L V L K E N K V S C V	A A S F A R I F Y R N A I	N I G L	P I L E C E A A A N
UniRef90_UPI0002F63490	W A I I L D Y G F R A I	V A V S F A D I F Y D N C	C F K N G I	P I A L D A A L I D
UniRef90_D4KGT8	I A I K A S G V P V V	V A S S F A R I F Y R N A I	N T G L	P I L E I
UniRef90_F2NE90	I A L L K A A G L S G V	A G S F A R I F Y R N A F	N M G L	P I F E S A A A A Q E
UniRef90_E6LCN5	W A L L L D Y G F R V V	A G S F S D I F Y M N A	T K N G L	P V V L P I A A R T
UniRef90_R5HR48	S C Q K V L G G W A N	A N E Y A K R Y R S N	L I N W G M	P F I I G K G D
UniRef90_R5F337	W A I I A G Y G F Q V V V	S S F F A D I F F K N N A	L N N G V L	P V I V S E Q F L T
UniRef90_A7GMU4	W A L L A D Y G F R V V	A G G F A D I F Y M N C	F M K N G M	P I V M D K E T R E
UniRef90_R9J3K9	S C Q K V L G G W A N	A S E Y A K R Y R S N	L I N W G M	P F I I D G D D K Q
UniRef90_W0PMD8	W A L L H D F G I R V L	A P S F A D I F Y G N C	F K N G V L	P I V V N P T I V D
UniRef90_UPI00046A329E	I T L I H M G A S A V I	A D S F A R I F Y R N A V N	L S L T	P V I C K G I S Q H
UniRef90_V4TJD9	V A L L G A A G C S A V V	V A E S Y A R I F F R N S	S V A T G E	E I Y P L D S E A R L C
UniRef90_H0UNG0	L A I I M G C G I S C V	A A S F A R I F Y R N A I	N L G L	P I L E I P D P
UniRef90_A5VFI0	W A L L G D L G D A V I	A P S F S D I F S G N A F	K N G I	T V V L P Q E A V D
UniRef90_UPI0003FC4080	W A L L L D Y G Y K V V	A P S F A D I F Y S N A F	K N G M	M I L I K L G E E K V N
UniRef90_A0A015NMN6	W A I I L D Y G F K V V	A P S F A D I F Y N N C	C F K N G I	P I Q L S E E E Q V E
UniRef90_F2NRD9	S C Q R V L G A A A N	A S D Y A K R Y R S N	L I N W G M	P F L Y K Q G E S Q
UniRef90_C9LTJ1	V A I I K A S G V P V V	V A A D F A R I F Y R N G I	N I G L	P L L E I
UniRef90_X0XF57	T S L I K H A G I A C I	V A K S F S R I F F R N A	I N Q G L	A L V Q S G E A P
UniRef90_B8GY65	W A L L M D F G I I M C V	S T S F F A D I F N N N	C F N N G L	P V V V S P E D L A
UniRef90_K0NMY3	W S I I K G A G V S C V	A K S F S A R I F F R N A	I N A I L	P L M E C P E A V
UniRef90_W0AD16	W A L L A E Q G F R A I	A P S F N P I F R G N C	I R N G I	V P V E L P
UniRef90_Q3APC6	F A L L Q V A G A K A I	V A E S Y A R I F Y R N C	V D G G F V I	P I C E S T E S L A
UniRef90_R5N1R0	L A I I K A A G V S C V	A K N F A R I F Y R N A L	N I G L	P I L E C P E A G D
UniRef90_UPI00041FED76	W A L L A D Y G F E V V V	S S F F A D I F K G N A	I N N G L	P I Q V S E E D F L Q
UniRef90_F7V239	S C Q K V L G G W A N	A N E Y A K R Y R S N	L I N W G M	P F L I D E G D L L P
UniRef90_H5SCZ8	I A I L N A A G I R V V	A E F F F A R I F Y R N A V N	G G Y L	P V F E S V E R L V
UniRef90_C9RDA0	L V I I K H A R I I G A V L	A K S F S A R I F F R N A I	N T G L	P V V E C D T
UniRef90_B2UYT4	I A I I K A S G V S C V	A S T S F A R I F Y R N S	N I G L	P I L E C D E A V K N
UniRef90_B4S6M9	F A L L Q V A G V K A V	V A E S Y A R I F Y R N C	D G G F V I	P Y E T S E Q L N
UniRef90_UPI00047A42EC	I C I K A A G V S C V	A K S F A R I F Y R N S	I N G F P	L E C D E A V N
UniRef90_A0A059EA11	W A L L L D Q G I T C V	A P S F A D I F H N C	C Y K N G I	L P V R L P V D C Q
UniRef90_E5WME5	W A I I A E Y G I R V I	A S S F F A D I F Y N N C	C F K N G I	P I V V L P E K D I E
UniRef90_A3ZQJ3	W S L L D D Y G F R A V L	A P S F F A D I F Y S N S F	K N G L	P V R L S E E Q I E
UniRef90_K5ZUU8	W A L L A G Y G F R A V V	S S F F A D I F K N N S	M N N G L	V P V V V S P E E F L A
UniRef90_C0B8N4	S C Q R V I G G L A N	T K E Y A K R Y R S N	V M N W G M	P F Q M K E E P
UniRef90_UPI0003B6A78B	Y C L K E L G I P V V L	A E S Y A R I F Y Y R N A I	N N G Y P	V L F V K
UniRef90_D2RIX3	S C Q R V I G G L A N	T Q D Y A K R Y R S N	V I N W G M	P L H L K G E P
UniRef90_UPI000287B7F0	W A I I L D Y G F N V I I	A P S Y A D I F H N C	C F K N G I	L P E I E L S
UniRef90_UPI00037A8F99	I S I L G A G G I P V V V	A T S L A D I F Y G N C	I N N Q I L	P S L P S E Q M D
UniRef90_UPI00041D943A	W A L L G D F G F K V I I	A P S F A R I F F R N A I	N S F K N G L	R I S Q D V I E
UniRef90_W6MWC6	W A L L K D F G F R I S I	A P S F G D I F Y N N C	I N G L	P V R L S E E Q I E
UniRef90_A1HLS1	L A I I K G C G V A C V	V A K S F A R I F Y R N A I	N I G L	P V I E L G D A V
UniRef90_G7WM99	L G L K G A G V K A V V	V A R S F A R I F F R N A I	N I G L	P L F I S P D V

170 180 190 200

UniRef90_F3BC30	[L S F K N G D Y I F F P E I L R K A I I E K R S A I K A Y V V G D E W K E L T L T		
UniRef90_P18250	E Q V D T L L A K Y A T Q K A E I E V D L V H Q K I R Y P G G E I P F		
UniRef90_R5J4W9	E F E V G D Y I Y V P G A K A L D G D I K A Y V I N A D T K A V K E I S L V		
UniRef90_R6TYP1	A I G D Y I L V R G I R K A V T S A A E Q I T A E V I K P D G T H S T L A L S		
UniRef90_UPI0003616DF4	D L F A L T A N I T S V Q L D I D L A N Q M I H C G G F A P I A F D I D P E V K		
UniRef90_B7KZ04	K L F Q D A E R G A N A T L T I D L A A Q T I K G P D G G T L H F		
UniRef90_R7QX52	L P F R N G D Y L F V P E I R E I E Q K K T E I D A F V V K D G K L V P F T L Q		
UniRef90_W1SS70	A I M K K A E S E K Y T L T V N L E E Q I V F D H E G F E I K		
UniRef90_E6UKE8	E K I E A G D E V E I D F D S G V I T N K T K G E T Y Q G		
UniRef90_A8NY17	E L A K D A E A G L E L E V D L E K E E I R R P N G I T I P F V T		
UniRef90_UPI0004724289	K L F Q A I E K E P A T E V E V D L E N Q T I R I L Q E		
UniRef90_UPI000255D7FB	Q L M E D A R M G M G N A R L T I D L P R Q V V V R P D G S E V		
UniRef90_F3SCW7	E K F E A G D K V E V D I E N G I I I N K T K G F E V H F P		
UniRef90_D3TBK5	Y L F K N E D L D I E D L A E Q L V V V A G S G R K M H F		
UniRef90_KOIJG6	K E I E A G D T V E I D F D S G V I V D K T K G T Q Y Q G		
UniRef90_R6VAI0	D E T D E G D V L E I D M D L G V L Q N I T K G R S Y Q I P		
UniRef90_I4BY18	E L I F D S I H A D P K M E V E V N L P E Q T I T N K A T G K S E H F		
UniRef90_A6L1V9	E L L A A G E A S P L E T E V D L E A Q T V T A N G		
UniRef90_W4F217	G I E A G D V V R V N F D T G M I Y N E T K G T E F K G		
UniRef90_R5YSF7	T D E L N E G D E L K I D V D N G T I I N L I S T Q K E Y K F		
UniRef90_A7GXZ0	L E N G E E V E V D V A A G T I R R V A T G E T F Q A		
UniRef90_E6SHZ7	D N D D Y V F I P P G I R E A V Q N K N E I I K A Y V V N K D F K E L D L K		
UniRef90_R5KJ43	D K L L P L A K A G K H L V V D L P K Q Q I R S S D G T V L V D		
UniRef90_S6EYP7	V K E G D D L R V D L D K G L I K N V T T N V E L T G Q N		
UniRef90_A6URB9	V E D G Y T I E I D L E N E E I K I E D T E G T I I K K I K C S A P K G L A C		
UniRef90_UPI00037923F8	E L L E N A N A A G Y E L T D L P N Q K I T D T I S F E A N		
UniRef90_UPI00047D7F1A	D E F H N G D D V T V D M E R D V V V N H S T G K E Y A L K		
UniRef90_D8SL84	E L F D S I A H N H Q T Q V R V D L P N Q T V T N L A T G R S E H F		
UniRef90_F8NC03	D K I E K G D E V E V D F S T G V I T N K T K N E T Y Q S		
UniRef90_R5QT25	K L M E I I A E P T V Q L E V D L E K Q H I S V I E K N I S E F		
UniRef90_A6EQF1	Y L F N E V Q N N P N V Q I D V D V E Q Q S I T V N		
UniRef90_H1H465	A W I A Q A Q Q S E L V L K V V L E E Q S I T D R T G K K I S F		
UniRef90_W9ACH4	U T P A S V V T A Y L Q P P A E K R V R P H I R I E V D D L S S S H V F H A V L G		
UniRef90_UPI00036E3705	E L E N G D Q V E V D F D S G V I K D L T K G T E Y Q G		
UniRef90_R7AV90	U H I F R A I E K N P H E L K V D L P S Q T I T L S E T G E S E S F		
UniRef90_UPI000255ABB2	E K I K A G D I L S I D L S T G K I I D K T T G D T F Q A P		
UniRef90_G0VQP1	Q L M D E V Q A N E G A E I T V D L E G L T V T S P S G A V F S F E I A		
UniRef90_B1KKZ1	T C Q P G D F I Y V P D V K A K V L A G D D T F P A L A L S G G A V T P L T L Y		
UniRef90_R5H9K1	D L F Q R T A K H D N Y Q L N V D L N E K T I T D D Y G L R I E F D L D		
UniRef90_Q9LCR5	S K L V P V V T S G H R L T I D L P N Q Q I R D G E T D E V L I E		
UniRef90_B9WKN6	D A I S Q G D V V V S V D A D T G V I V D E T T G Q T Y Q A		
UniRef90_C8WM15	E E C K T G D V V T I E I L A E S R L I N H T T G K E Y K L K		
UniRef90_UPI0002B4D74B	D S I C E G D D I L E I D L Q S G G V V K N H T Q N C S Y A F A		
UniRef90_UPI00047C0427	E L F K R T A A T E G Y E L T V D L E N K T I A D N Q G L R I		
UniRef90_W8YS51	F S N E D Y I F I P D I R K A V E E R K T E I S A Y V V K D G K L Q E F T L M		
UniRef90_S0JJF5	E K V K D G M T L T L D L E K Y Q V T V Q E T G E T Y P C		
UniRef90_R7M2D0	E L I A E D A R Q G I E V E V D L P K Q V V R R S N G K E Y		
UniRef90_G7E028	U N V T K G E T Y Q A		
UniRef90_R8W584	R L F K C E V E A A E G Y R L S I D L A A Q T I T T P S		
UniRef90_UPI0002F63490	G D D V E K I H A N D K L R V D L S T G T I E N L T T G D T F H A V S		
UniRef90_D4KGT8	I Q A G H D V S V D L D I T D L T T G K T Y P		
UniRef90_F2NE90	A I A E L P A E Q E I T D I D L P H Q K V K A G D Q S Y S F D I D S T W K Y K L V		
UniRef90_E6LCN5	L P F E N L D Y L F I P E I R K A V E D K Q S E Q A Y V K D G A L K P F S L H		
UniRef90_R5HR48	S L F K H I F S N P Q S T T V T V N L K E Q T I T D D T S G E S E H F		
UniRef90_R5F337	K L A A I E A R T I V E V D L E N E V I M T T Q H Q F H F S I E K M W R E K L L		
UniRef90_A7GMU4	L P F K N M D Y L F L P D I R K A V E E K A D H R A Y V E E G M K E F E L S L		
UniRef90_R9J3K9	S L F C E F E L S A Q Q L A L Y I S L E D Q L I T A N G E T V F		
UniRef90_W0PMD8	V K N G E T L K I D D L E K G I I I S D K D T G E E F K S E		
UniRef90_UPI00046A329E	E E C S T G D V V T I E I L A E S R L I N H T T G K E Y K L K P I		
UniRef90_V4TJD9	E F T S Q G D L L S V N L D H G R V S N L T K G T E R K F P P I		
UniRef90_H0UNG0	R L L E V A R T H P I G I D L E N Q T V T T P F Q D R F R		
UniRef90_A5VF10	E W Q G K A L D G T F T L D V D L E N Q T I K T S D S E V I E F		
UniRef90_UPI0003FC4080	E L F Q R T A A N Q G Y Q L T I D L E N K T		
UniRef90_A0A015NMN6	L P F A N G D Y I F V P G I A E K L P G V K A Y A V R A D G T T A E F D L T		
UniRef90_F2NRD9	G D D V E K I S A G D E L R V D T E T G K I E N L T T G D V F Q A		
UniRef90_C9LTJ1	D Q I T Q P G E S V T I N F A S G E I T T S R N Q K F S F P		
UniRef90_X0XF57	L L M D E A K G G N H M V S V D L E A Q T R E K V F K A		
UniRef90_B8GY65	D G S E S G D V L K I D L S A G I I E N I		
UniRef90_K0NMY3	Q A V S T G D E L K I D V M A N T L E N L T T K K S Y K L N		
UniRef90_W0AD16	E L E Q G D E V S V D F D S G V I T D N T T G K S Y R A E		
UniRef90_Q3APC6	T I F S L I D Q N P E T L L E A D D E T Q T V K I E K L		
UniRef90_R5N1R0	F A N G D Y I F V P G I R Q I Q D K A S D I P A Y V V K D G R L S P F T L H		
UniRef90_UPI00041FED76	E K I R T G D E V E I D V A N A R L I N H T T G Q I		
UniRef90_F7V239	D Q I E A G D E L E V D L A R G V V E N L T K G I S I P I K		
UniRef90_H5SCZ8	K S V L T G D E L K I D V Q N N T I T N L T Q N I T Y		
UniRef90_C9RDA0	D A K N G H E L Q V D F K T G I I K N I T L G K E Y K A		
UniRef90_B2UYT4	K L A D Q A G G A N H V F T V D L E A E I V T A P D G E T F		
UniRef90_B4S6M9	V L F Q K S N E S P G Y Q L S V D L E N Q R I E D S F G Y		
UniRef90_UPI00047A42EC	E I F Q K A K T V G P G F E L T I N L D A Q T V A D N D G		
UniRef90_A0A059EA11	E L F A S V E A D P K A T L T L D L P A Q T I T N N A T G K S E S F		
UniRef90_E5WME5	G F E V G D Y I F V P N I R Q A L D G D M K E I K A Y V R Q G K A E E I S L V		
UniRef90_A3ZQJ3	G L S D A I K E G K I Q D G D E L E V N I S T G E I K D L T N G H T F H G D A V		
UniRef90_K5ZUU8	T A F E V G D W I Y L P E I R K A L E G D N I R G Y V V K K E G P V A I D L Y C		
UniRef90_C0B8N4	L P G D G H E L T V D T E N G E I T N N T T G D V V V K C		
UniRef90_UPI0003B6A78B	V L F A A V E S K P D T V I E V D L P A Q T V S V D G Q S F S F		
UniRef90_D2RIX3	K V L Y P L A V A Q K E L T I D L P Q Q K I F G P D G E V L V D		
UniRef90_UPI000287B7F0	A G I A A G H R L R L D L A A G R V I E N V T T G E V F N A		
UniRef90_UPI00037A8F99	E R I R D G D E I E I D A D A G V I F N R S R G E N Y P T T		
UniRef90_UPI00041D943A			
UniRef90_W6MW6			
UniRef90_A1HLS1			
UniRef90_G7WM99			

210 220

UniRef90_F3BC30	M E L T D N E R E I I L K G C L I N Y Y R
UniRef90_P18250	D E M I E E F R K H C L V N G L D D I M Q K
UniRef90_R5J4W9	A D M T A D E R K I V K A G C L I N Y N R A R K
UniRef90_R6TYP1	I P M T A E E R Q L I D G C L I N H Y R N E M K
UniRef90_UPI0003616DF4	R R L
UniRef90_B7KZ04	D I D E G R K H N L N G L D E I
UniRef90_R7QX52	M E L T E D E R T I I L K G C L I N Y Y R
UniRef90_W1SS70	F E I A P Y S K Q M L L N G W D E I
UniRef90_E6UKE8	Q S F P E F L I K I I N S N G L L N S L K
UniRef90_A8NY17	D P F R R H C L L N G L D D I A
UniRef90_UPI0004724289	T D Y E I N A Y K K K C L L N G Y D D I
UniRef90_UPI000255D7FB	G I A E S F D I N P Y K C L L N G F D D I
UniRef90_F3SCW7	P F E V D P L R K K L L E G G L D D I G Q
UniRef90_D3TBK5	P F E M D I I K A G G I I E Y I R K N R E
UniRef90_KOIJG6	E D E F R K K L L E G G L D S I
UniRef90_R6VAI0	Q A F P P F M Q K I I K A E G L V N Y I
UniRef90_I4BYI8	S L P E S I K D I I L S L G G L I E Y V K N M K G R
UniRef90_A6L1V9	E I N A Y K K H C L M N G L D D I
UniRef90_W4F217	G K V Y N F E I D P Y Y K Q M L L N G W D E I
UniRef90_R5YSF7	Q A F P E F M Q K I I K A E G L I N Y I N N K
UniRef90_A7GXZ0	N P I P P F M Q E I L L K S G G L I E Y A K A K A K
UniRef90_E6SHZ7	A P F P P F M Q E I L R C G G L V E Y A R R K L
UniRef90_R5KJ43	G S L T D D E R Q I I M D G C L I N Y Y K N
UniRef90_S6EYP7	H F D V E E F R K H C L V N G L D D I
UniRef90_A6URB9	L P D F M M E I L N N G G L M P H L K K K L
UniRef90_UPI00037923F8	D I L S A G G L V N Y A K Q K E L K
UniRef90_UPI00047D7F1A	F D I D P Y W K E M L I N G G L L R Y E D K I K E
UniRef90_D8SLS4	P L G D A A P V I E A G G I F A Y A R Q
UniRef90_F8NC03	E I N G Y K K H C L E N G L D D
UniRef90_R5QT25	Q P F P E F L Q K M I D A D G L V N Y V N S K K
UniRef90_A6EQF1	F E I D T F K K K N C L I N G Y D D I
UniRef90_H1H465	N Q T E H Y E L D P Y K K I C L L N G Y D D I
UniRef90_W9ACH4	E I P S Y H K K K L L N G W D D I A
UniRef90_UPI00036E3705	Q V E T A Y E Y T L L A A G G L L A S M R
UniRef90_R7AV90	Q A F P E F M Q K I I A A E G L V N Y I N Q K
UniRef90_UPI000255ABB2	D I N E Y K K G N L N G F D D I
UniRef90_G0VQP1	P L P G F I Q D I A Q A G G L I N Y V K E
UniRef90_B1KKZ1	G S A R H N M L N G L D A I G L
UniRef90_R5H9K1	L K N T T E E R E L L L T G C L M N H Y A A Q N Q
UniRef90_Q9LCR5	E H R R Q F L L Q G L D D I G I L A Y E Q K R A A K
UniRef90_B9WNK6	H F D V E E F R K H C L V N G L D D I
UniRef90_C8WM15	Q P F P P F I R E I I E A G G I I N R T K A K L G E
UniRef90_UPI0002B4D74B	P I G D A G P V I E A G G I F A Y A R K
UniRef90_UPI00047C0427	P I P P F M L E I L L T S G G L I P Y A K N K L
UniRef90_W8YS51	P F E L D E H R R Q F L L Q G L D D I
UniRef90_S0JJF5	G E L T T E D E R T I I L K G C L I N Y Y K
UniRef90_R7M2D0	E K L G D Q A L K I L E A G G I K P L M R Q R F A K
UniRef90_G7E028	P F E V N S F T K H C L I N G L D D I
UniRef90_R8W584	A A F P P F I Q S I I H A G G G L K S L K E R
UniRef90_UPI0002F63490	R E T L D F E I D A S R K R S L L E G L D D I A
UniRef90_D4KGT8	P L P G F I Q D I A K A G G G L I N Y I K Q K
UniRef90_F2NE90	Q P L P P F M Q Q L I T A D G G L I S H I M K K L K K
UniRef90_E6LCN5	N G L D E I S I T M Q E D E A I L A Y E K T I
UniRef90_R5HR48	M D L T D D E R E I I L K G C L I N Y Y R
UniRef90_R5F337	E I N P Y K K N C L L N G Y D D I
UniRef90_A7GMU4	K G L D E I E I T M
UniRef90_R9J3K9	G E L T D E E R Q I I L K G C L I N Y N R
UniRef90_W0PMD8	Q F D I D A S R K R H R L L N G L D D I
UniRef90_UPI00046A329E	K I T G Q P L K I I L A A G G G I K K Y M I N K L A K
UniRef90_V4TJD9	G D L G P V I D A G G G I F A Y A R K
UniRef90_H0UNG0	R G M A E K I V S A G G G L V N Y V K
UniRef90_A5VF10	F E I D P F R K H C L L N G L D E
UniRef90_UPI0003FC4080	D I P A Y H K E K L I N G C
UniRef90_A0A015NMN6	G D M T D D E R K I I Q A G C L I N F Y R
UniRef90_F2NRD9	H P L P G F V Q E I A E A G G G I F A Y A K K E N
UniRef90_C9LTJ1	P L P E F L M G I L E D G G G L I P H V K K S L K
UniRef90_X0X5F7	T P Y P D F I S E L I N A G G L V S Y T K K R
UniRef90_B8GY65	P L G S V F S I V E A G G G I F A Y A K K E N
UniRef90_K0NMY3	P F P P F I Q D I I K K G G L L S S L K
UniRef90_W0AD16	G L T E K F E I D P Y K K T C L L N G Y D D I
UniRef90_Q3APC6	M S L T D D E R T I I L K G C L I N Y Y R
UniRef90_R5N1R0	
UniRef90_UPI00041FED76	
UniRef90_F7V239	
UniRef90_H5SCZ8	
UniRef90_C9RDA0	
UniRef90_B2UYT4	
UniRef90_B4S6M9	
UniRef90_UPI00047A42EC	
UniRef90_A0A059EA11	
UniRef90_E5WME5	
UniRef90_A3ZQJ3	
UniRef90_K5ZUU8	
UniRef90_C0B8N4	
UniRef90_UPI0003B6A78B	
UniRef90_D2RIX3	
UniRef90_UPI000287B7F0	
UniRef90_UPI00037A8F99	
UniRef90_UPI00041D943A	
UniRef90_W6MWC6	
UniRef90_A1HLS1	
UniRef90_G7WM99	

UniRef90_UPI0002ED968C
 UniRef90_A0A021W655
 UniRef90_E3CWE9
 UniRef90_C7MMM1
 UniRef90_K6U8X1
 UniRef90_F5NS15
 UniRef90_B9M5E3
 UniRef90_K2KDV4
 UniRef90_K0X5K5
 UniRef90_D5DLM8
 UniRef90_R5DQ75
 UniRef90_E1ZHA9
 UniRef90_C9KJM8
 UniRef90_UP100030DE2C6
 UniRef90_R4K9B2
 UniRef90_R2SC40
 UniRef90_V2JGI9
 UniRef90_Q4SLU0
 UniRef90_S6CLC2
 UniRef90_UP10003765549
 UniRef90_G0WA61
 UniRef90_E3CUE2
 UniRef90_A4SFC9
 UniRef90_Q12SE4
 UniRef90_K4LGC4
 UniRef90_UP10003B6524C
 UniRef90_W7BIF2
 UniRef90_UP10003EDAAC2
 UniRef90_R6EQX2
 UniRef90_B5H063
 UniRef90_B3E9Z7
 UniRef90_I1DXE5
 UniRef90_C0D8U2
 UniRef90_R5WGS8
 UniRef90_D1B741
 UniRef90_A9BGP3
 UniRef90_C9A798
 UniRef90_X1ABC7
 UniRef90_F4GH80
 UniRef90_T0ZC53
 UniRef90_UP100026249BA
 UniRef90_F2GBT3
 UniRef90_D3UIE9
 UniRef90_UP10003B55C4E
 UniRef90_H2BZW4
 UniRef90_R7BGV2
 UniRef90_UP10003B4251A
 UniRef90_H9ULI4
 UniRef90_R5XTX4
 UniRef90_L0HAR8
 UniRef90_J9Z011
 UniRef90_C6VV55
 UniRef90_W8TXX1
 UniRef90_UP10003704957
 UniRef90_B4WA20
 UniRef90_UP1000364387C
 UniRef90_Q8TW31
 UniRef90_A0LVA2
 UniRef90_A3I2D7
 UniRef90_A0RXP2
 UniRef90_O26917
 UniRef90_J5GWE2
 UniRef90_T0IUL5
 UniRef90_M5ITV6
 UniRef90_UP1000374D1FF
 UniRef90_A8PWL7
 UniRef90_UP100029A6339
 UniRef90_W5G709
 UniRef90_A3YXJ4
 UniRef90_T1CGH3
 UniRef90_UP100047B87A9
 UniRef90_UP10004643689
 UniRef90_UP100047C9DB5
 UniRef90_V4QFC7
 UniRef90_R5RKD9
 UniRef90_D1BVQ3
 UniRef90_I3YLC7
 UniRef90_V6ARA4
 UniRef90_M1Q3R4
 UniRef90_D1B6F7
 UniRef90_UP1000225E025
 UniRef90_L8MVC5
 UniRef90_E3JZ59
 UniRef90_PKF
 UniRef90_D4XBS0
 UniRef90_C0C2K1
 UniRef90_UP100036750EC
 UniRef90_G4RMH5
 UniRef90_A0A052J301
 UniRef90_F6DPK6
 UniRef90_A3WHZ8
 UniRef90_UP100037169AA
 UniRef90_X1SGU7

1 10 20 30 40

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

Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 50, 60, and 70. The y-axis lists UniProt IDs. Colored boxes indicate the presence of specific amino acids: blue for P, red for A, green for G, yellow for C, orange for S, purple for T, pink for D, grey for E, and black for F, I, L, V, M, H, N, K, R, W, Y, and Q.

90 100 110 120

UniRef90_UPI0002ED968C	E D G S D N P D F N P N K P E Y Q D A T I L V T G D N F C G S S R E H A A		
UniRef90_A0A021W655	Y L A D G S P N P E F E L N K P H N A G A A I L V A G R N F G C G S S R E H A P		
UniRef90_E3CWE9	L D P E F N K N A A A G D I I V G G K N W G C G S S R E Q A V		
UniRef90_C7MMM1		Q S G D I L V A Q Q E N F G C G S S R E H A P	
UniRef90_K6U8X1	H D P D F A K N V E E G D I I V A G K N F G C G S S R E H A P		
UniRef90_F5NS15	I D S L Q T E I G S M V Y A V K P G D G S A R E Q A A		
UniRef90_B9M5E3	Y I L E D L K P G F D P K G E K T A K A R V V V S R A N F G C G S S R E H A P		
UniRef90_K2KDV4	Q D G Q K T D S I L N T D H G C T V L V A G E N F G C G S S R E H A P		
UniRef90_K0X5K5	F L A D G T P N P E F V L N Q P A W Q G A N F L V V G P N F G C G S S R E H A V		
UniRef90_D5DLM8	Y N E D E T L N E T F E L N Q P Q N Q G A T I L V A D E N F G C G S S R E H A P		
UniRef90_R5DQ75	Y D K Q G N K I E S F V L N D P T Y S G Q I L V A G K N F G S G S S R E H A A		
UniRef90_E1ZHA9	V D S M K T E Y P V I I G Q Q N F G C G S S R E H A P		
UniRef90_C9KJM8	I D E S F A P N V K E G D I M V G G R N F G C G S S R E H A P		
UniRef90_UPI00030DE2C6	Y D A E G R P I A A F P L N D P R Y E G R I L V A G R N F G C G S S R E H A A		
UniRef90_R4K9B2		K G D I V I A D K N F G C G S S R E H A P	
UniRef90_R2SC40	Y L A D R T A N P D F V L N E P Q Y K E A T I L I S G D N F G S G S S R E H A A		
UniRef90_V2JGI9	P E F F P A T V R P G D L V V G G R H F G V G S S S R E Q A P		
UniRef90_Q4SLL0	P S G Q T V D V F E A A E R Y Q K E G I P L I I M A G K D Y G S G N S R D W V A		
UniRef90_S6CLC2		G D I I V A D E N F G C G S S R E H A P	
UniRef90_UPI0003765549	E N E K I E N F P L N D S K Y V G K I L V V G K N F G C G S S R E H A A		
UniRef90_G0WA61	K D K E T D F V L N V N P W R K A E V L V V T G D N F G C G S S R E H A P		
UniRef90_E3CUE2	G N I P F V Q E G S F A S D Y T I I I I A G Q N F G C G S S R E H A P		
UniRef90_A4SFC9	D A G E K P N P E F V L N Q S R Y K G A S I L L A Q E N F G C G S S R E H A P		
UniRef90_Q12SE4	Q H V M E D I D P D F A R K V Q P G D F V V A G R N F G C G S S R E Q A P		
UniRef90_K4LGC4	E K A E A G E D P V A A Y P N E K N I G I G S T I F A V K P G D G S A R E Q A A		
UniRef90_W7BIF2	Y L S G E K I N P N F P L N D P M R K G A T V L V T G E N F G Y G S S R E H A A		
UniRef90_UPI0003EDAA2	M D C S R A N P E F E L N K P R Y E M A S V L L S R R N F G C G S S R E H A V		
UniRef90_R6EQX2	H P C Q A V P M G E V K K Q Y S E A D R K N T G F G S T I F G D G S A R E Q A A		
UniRef90_B5H063	L F E A W R K D P G F V F N R P E R Q G A T V L V A G P D F G T G S S R E H A V		
UniRef90_B3E9Z7		E K T L K A R V V V S R E N F G C G S S R E H A P	
UniRef90_I1DXE5	Y L A D G K P N P D F V V N K P E Y Q G A S I L L T R E N F G C G S S R E H A P		
UniRef90_C0D8U2	E R L R R E K G L A A V T C E E D E I A L G S I I L T G P Q I G D G S S R E Q A A		
UniRef90_R5WGS8	M E Q Q R V N G E D L Y R G Y P Q T E I G S M V Y A V K P G D G S A R E Q A A		
UniRef90_D1B741	P D F P S K V Q R G D M L V I A G E N F G C G S S R E H A P		
UniRef90_A9BGP3	U H I P Q R K P N P A F I L N D P A Y Q T A Q V L I I T G D N F G S G S S R E H A A		
UniRef90_C9A798	Y D S E F V K K I N Q G D I I V A G R N F G C G S S R E H A P		
UniRef90_X1ABC7		K G D I M V A D K N F G C G S S R E H A P	
UniRef90_F4GH80			
UniRef90_T0ZC53			
UniRef90_UPI00026249BA	M P P S D T G R E Y P L L V L A G T S Y G Q G S S R D W A A		
UniRef90_F2GBT3	Q D G R Q V E N P E F I L N Q P I Y A D A K I L L A R E N F G C G S S R E H A P		
UniRef90_D3UIE9	E E K E P N P E F S I L N K A E H K G A S I L L A R E N F G C G S S R E H A P		
UniRef90_UPI0003B55C4E	Y N K D R S I N K N F V L N A P E N Q G A S I L V T G E N F G S G S S R E H A V		
UniRef90_H2BZW4	Y D D E G A P K P D S Q L N S L D T A T H Q A L V A G R N F G C G S S R E H A A		
UniRef90_R7BGV2	F D K N G N P N E E F S L N D K K Y T G S I L L V A G D N F G C G S S R E H A A		
UniRef90_UPI0003B4251A	E N A E V A R A F K V I K Y P E L N A A E T E I G S T I F G D G S A R E Q A A		
UniRef90_H9UL14	A F E T L R A D P D N L F D S E T F K G A P I L I A G D N F G C G S S R E H A A		
UniRef90_R5XTX4	N E P K H Q G A R I L L A N V N F G C G S S R E H A P		
UniRef90_L0LHAR8			
UniRef90_J9Z011	I D K D F V N K V K P G D I M V A E A N F G C G S S R E H A P		
UniRef90_C6VV55		G D V I V G G R N F G C G S S R E H A P	
UniRef90_W8TXX1	Y D T E G K I I E D F V L N T K P Y D Q S K I L V A G D N F G C G S S R E H A A		
UniRef90_UPI0003704957	D D T P K Q D F V L N N P I Y S G K I L V V G G H N F G S G S S R E H A A		
UniRef90_B4WA20	S H C L E T L R P E F A S Q V Q P G D I I V A G K N F G C G S S R E M A A		
UniRef90_UPI000364387C	Y E T D G S E K P E A I L N R I D P A E H R I L L A G K N F A C G S S R E H A P		
UniRef90_Q8TW31	W R Q D P D F V L N Q P E Y A D P R V L V V G P D F G T G S S R E H A V		
UniRef90_A0LVA2	P E F P E K V R E G D V I V A G K N F G C G S S R E Q A V		
UniRef90_A3I2D7	L F A A W R Q D P G F V L N R P E F A G A D I L V A G P D F G T G S S R E H A V		
UniRef90_A0RXP2	Y D V E G N P K K D F V L N D P T Y T G K I L V A G K N F G S G S S R E H A V		
UniRef90_O26917	R E P D P E F V L N D P A Y A G S R I L A A G E N F G C G S S R E H A V		
UniRef90_J5GWE2	A R P E F A S Q V R K G D I I V A G R N F G C G S S R E Q A P		
UniRef90_T0IUL5	I F D K I K T I P G F A D I I A N E T E I G S M I Y A K K P G D G S A R E Q A A		
UniRef90_M5ITV6	K P D E R E P I N S F C L H Q P H A Q G A R I L L G R E N F G C G S S R E H A V		
UniRef90_UPI000374D1FF	E D G E M D S K Y P I V V G G R N F G C G S S R E H A P		
UniRef90_A8PWL7	E P V A D F V L N K E P Y T Q A I L V V A G S N F G C G S S R E H A P		
UniRef90_UPI00029A6339	A N E P D F V L N R E P Y D R A S V L V A G P D F G T G S S R E H A V		
UniRef90_W5G709	L P S A A Y P I P F V A X X X X X X X X X V I I I G G A N F G C G S S R E H A P		
UniRef90_A3YXJ4	L E L E G S H P F D R P E H Q G A T I L V V N R N F G C G S S R E H A P		
UniRef90_T1CGH3	Y R G D G T P D P E F V L N R P E A S G A S I L V A G R N F G C G S S R E H A P		
UniRef90_UPI00047B87A9	D N T I K E D F V L N Q D K F S G K I L V G G K N F G S G S S R E H A A		
UniRef90_UPI0004643689	A D S E L E K A F H A L R L Y A S E T E I G S V L Y A V K P G D G S A R E Q A A		
UniRef90_UPI00047C9DB5	Y D E N G E D N P D F V L N E P Q Y A G A S V I V A R A N Y G C G S S R E H A V		
UniRef90_V4QFC7	Y N A D G S K K P D F I L N T I D A S E H R V L V G G D N F G C G S S R E H A P		
UniRef90_R5RKD9	P E L A A Q I K E G D I I V A G K N F G C G S S R E Q A P		
UniRef90_D1BVQ3	A W R G D P A F V L N Q D A Y K G G S V L V A G P D F G T G S S R E H A V		
UniRef90_I3YLC7	E G R K V A S F P L N D S R Y G G R I L V A G R N F G C G S S R E H A A		
UniRef90_V6ARA4	I D P T F H S K V K P G D Y I V A G K N F G C G S S R E H A P		
UniRef90_M1Q3R4	P D F A K N V H E N D I V V A G S N F G C G S S R E H A P		
UniRef90_D1B6F7		Q R G D I I V A G K N F G C G S S R E Q A V	
UniRef90_UPI000225E025	Y T E D D Q P K N A S P F P V A G A G D R Q V L V A G A N F G C G S S R E H A P		
UniRef90_L8MVC5	F I A E G E S K T I Y A I I V A G E N F G C G S S R E H A P		
UniRef90_E3JZ59	E G K D E I P E F V L N R E P F N K A I L I V T G P N F G C G S S R E H A P		
UniRef90_D4XBS0	P E F A F G Q V Q P G D V L V A G P N F G C G S S R E Q A A		
UniRef90_C0C2K1	P D F Y R K V R K G D I F V A G S N L G S G S S R E T S P		
UniRef90_UPI00036750EC	L F A A W R N D P E F I L N Q D V Y K A G T V L V A G P D F G T G S S R E H A V		
UniRef90_G4RMH5	L D P E F P K K A G A V I V A G R A F G M G S S R E Q A A		
UniRef90_A0A052J301	F D A Q G R P R P D C V L N Q P G Y A G A R F L V A G P N F G C G S S R E H A V		
UniRef90_F6DPK6	L D P D F Y S K V T P G D F I V A G S N F G C G S S R E Q A P		
UniRef90_A3WHZ8	A F E S I R A S E D N V F D D P A Y K G A P I I L I A G D N F G C G S S R E H A A		
UniRef90_UPI00037169AA		G D I I V A T T N F G C G S S R E H A V	
UniRef90_X1SGU7			

130 140 150 160

UniRef90_UPI0002ED968C	WAI K D Y G F D I I I A G S Y S D F Y M N C T K N A M L P V L A D E R Q Y
UniRef90_A0A021W655	WAL T D L G L R A V I S S E I A D I F R S N A L K K N G L L L P V V A Q D
UniRef90_E3CWE9	T C L V E R G I G A I I A K G F A R I Y Y R N C L N E G L L P I L V S P E A V
UniRef90_C7MMM1	V A L K A A G I D C V F A R I F Y R N S I N V G L L L I E A K
UniRef90_K6U8X1	I A I K G A G I S A V V A E S F A R I F Y R N S I N V G L L L I E A K
UniRef90_F5NS15	S C Q R V I G G L A N I A E E Y A K R Y R S N V I N W G M L P Q M A E V P T F
UniRef90_B9M5E3	W V F E V N D I N V V I A E S F A R I F R Q N M F N C G M A I E L P D Q S L D
UniRef90_K2KDV4	W A M T D Y G F K A V I S S Q I A D I F R G N A L K N G L V P E V P E Q H Q Y
UniRef90_K0X5K5	W G L L Q M G I R A L I G S S F A G I F Y D N C Q R N G V L L I T L D E A Q V Q
UniRef90_D5DLM8	W A L L D Y G F R A I I A P S F A D I F K Q N C L K N G I L P I V L P K E D V S
UniRef90_R5DQ75	W A I I A D Y G F R V V V S S F F A D I H K N N E L L N F V L P V V V S E P F L A
UniRef90_E1ZHA9	V A L L G A S G A T V V V A E S Y A R I F F R N C V S T G E L Y P V E T D A R L C
UniRef90_C9KJM8	V A I I K A S G I P V V I A A S F A R I F Y R N G I N I G L P L E I G S D V
UniRef90_UPI00030DE2C6	W A L L A D Y G F R V V V S S F F A D I F R N N A L L N N G L L P L R V S S D D F L A
UniRef90_R4K9B2	I A L L K A A G V S C Y V I A K S F A R I F Y R N S I N I G F P I E C D D A V D D
UniRef90_R2SC40	W A L L M D Y G F K A V I A G S F S D I F Y M N A T K N G L L P I A L P K D A R D
UniRef90_V2JGI9	Q A L L R H L G V A A V I A P S F A G L F Y R N A L N L G L P A L V C T H T
UniRef90_Q4SLU0	K G P Y
UniRef90_S6CLC2	I A I I K A A G V D V V I A K S F A R I F Y R N A I N T G L A I M E C P E
UniRef90_UPI0003765549	W A I I K D Y G F D V V I S S Y F A D I F K G N A L N N G I L P I V V S D E I L N
UniRef90_G0WA61	W A L L K D F G I K S I I A P S F G D I F Y N N S F K N G L L P R I E Q S V I L
UniRef90_E3CUE2	L A I I Q G T Q V S C Y V V A A S F A R I F F R N A L N V G L P I E C P E G A A
UniRef90_A4SFC9	F A L L Q V A G V K A I I A E S Y A R I F Y R N C V D G G F V I P Y E T A I Q Q L A
UniRef90_Q12SE4	W A L L A D F G L R V V I A P S F A D I F Y G N A I N N G L L P V V V L T Q A Q V Q
UniRef90_K4LGC4	L A L L L N A G V G A V L I A Q S F A R I F Y R N A I N T G L P P V V V C
UniRef90_UPI0003B6524C	S C Q K V L G G W A N I A N E Y A K R Y R S N L I N W G M L P F V I K E G A L P
UniRef90_W7BIF2	W A L L L D Y G F R V I I I A G G Y S D I F Y M N C T K N G I L P I I L S K K E R A
UniRef90_UPI0003EDAAC2	W G L L M E H U P R A I V A E T F A D I F R T N C I R N G L V P I Q L E
UniRef90_R6EQX2	S C Q K V L G G W A N I A N E Y A K R Y R S N L I N W G M L P F L I Q P G D L P
UniRef90_B5H063	W A L L Q N Y G F K T V I S A R F A D I F R G N S L K N G L L T V V L P Q E T V D
UniRef90_B3E9Z7	W V F E V N N I T A V V A E S F A R I F R Q N M F N C G M A I E L P D R I F S
UniRef90_I1DXE5	W A I K Q Y G F N V I I A E S F A D I F F N N S V N A M L I Q L S K T N I E
UniRef90_C0D8U2	S S Q K V L G G L A D I A G E Y A K R Y R S N L I N W G M L P L I T A E S L
UniRef90_R5WGS8	S C Q R V L G G L A N I C Q E Y A K R Y R S N V I I N W G M L P Q M K Q I P D F
UniRef90_D1B741	L A I L L G C G V S C V V A S S F A R I F Y R N A I N V G L P I V E I A D A R S F
UniRef90_A9BGP3	L S I I K A A G V S C V V A E S F A R I F Y R N A I N V G L P I L I S K E A S H N
UniRef90_C9A798	W A L L L D Y G F K A V I A G S F G D I F Y M N A T K N G L L P I E L P
UniRef90_X1ABC7	I A L L K A A G V S C C I I A Q S F A R I F F R N A I N I G L P I F E S E E I A
UniRef90_F4GH80	I A I I K A S G I S C V I A R T F A R I F Y R N A L N I G L P I L E C P D A C A
UniRef90_T0ZC53	K G P R L L G V G A V I A E S F E R I H R S N L V D M G V L P L F E A G T G W
UniRef90_UPI00026249BA	W A L L A D Y G F R A I V I A P S F A D I F A N N C V Q N G I L L I R L S A E E V D
UniRef90_F2GBT3	W A L L A D F G F K T V I A T S F A D I F Y G N C I V P V A L S S E Q M D
UniRef90_D3UIE9	W A L L M D Y G F A V I I I A G S F S D I F Y N N A I K N A L L P I S L P E V R K H
UniRef90_UPI0003B55C4E	W A L L A D Y G F R A V I I S S D I A D I F K S N A L K N G L L P V E T A E A H Q W
UniRef90_H2BZW4	W A L L K A F G F K V V I V S S Y F A D I F K G N A L N N G L L P V Q V S K E F L D
UniRef90_R7BGV2	S C Q R V L G G L A N I A N E Y A K R Y R S N L I N W G L I P F I I D E G E L P
UniRef90_UPI0003B4251A	W A L L L D L G I K A V I I A P S F S D I F S G N A F K N G I L T V V M P Q
UniRef90_H9ULI4	Q S L I H R W G I D A V V A E S F A E I F A G N C V M L G V P A V V A A K A D V A
UniRef90_R5XTX4	I A I I K A S G I S C V I A S T F A R I F Y R N A I N I G L P I L E C D E A A K
UniRef90_L0LHAR8	L A L L V G G G V K V V V A Q S F F A R I F F R N S V N V G V L P V V C P D A
UniRef90_J9Z011	W S L L K D F G I R C V I S T S F A D I F Y N N C C F Q N G I L P I V V K A K E L D
UniRef90_C6VV55	W A I I Y D Y G F R C V I V S S F F A D I F K G N S L N I G L P V Q V S P E F L N
UniRef90_W8TXX1	E A I I N V H G V Y C I I A K S F A R I F F R N A I N N G M L L I E N A E I P E H
UniRef90_UPI0003704957	W A L L Q N Y G F K A V I I S S R F A D I F R G N S L K N G L L T V V L P Q A T V D
UniRef90_B4WA20	W A L L Y D Y G F R A V I I S T E I A D I F T S N A L K N G L V P I V V S D V W D D
UniRef90_UPI000364387C	W A L L R D F G F R A V I I G P R F G D I F R G N A G K Q G L L V G V V S D D E V E
UniRef90_Q8TW31	M A L L Q Q A G V A C V I V A R S F A R I F Y R N A I N R G L P T V E A E E D P T
UniRef90_A0LVA2	W A L L Q D Y G F R V V I I S P R F G D I F R N N A L K G G L L A V V L P E S D V E
UniRef90_A3I2D7	W A I I Y D Y G F R C V V I S S F F A D I F K N N C L N I G V L P V T V T P E F A D
UniRef90_A0RXP2	W A L L R D Y G F A A V V I I A P S F A D I F Y S N C C F K N G V L P V V L G E E A I S
UniRef90_O26917	V A L L K H A G V V A I I A E S F A R I F Y R N A I N I G L P V I M A K V D A
UniRef90_J5GWE2	S C Q R V I G G L A N I I A K E Y A K R Y R S N V I M N W G M L P F L I D S E P D F
UniRef90_T0IUL5	L V L K A L G V S A V V A K S F A R I I F F R N A I N I G L P V L I C K E I Y
UniRef90_M5TV6	W A L L K D L G I S V L I I A T S F A D I F R N N C C F K N G L L P Q L N T D Q V D
UniRef90_UPI000374D1FF	I A M G A A E C Q L V L I A E S F A R I F F R N C C V A T G E L Y P C E S Q D R L C
UniRef90_A8PWL7	W S L L L D F G I R A V I I A E S F A D I F R N N M T K N G Q L P V V L P D E I Q R
UniRef90_UPI00029A6339	W A L L M D F G F R V V I I S P R F A D I F R G N S G K S G L V A A Q V E Q G D V E
UniRef90_W5G709	V A L L G A A G A R A V V V A E G Y A R I I F F R N S V A T G V Y P L E L L A D S G A S
UniRef90_A3YXJ4	Q A L L M R W G I R A V V V G E S F A E I F F G N C C L A G I G I P C
UniRef90_T1CGH3	W A L L L D A G I R A V I V S S E I A D I F R S N A L K N G L L A I T V D A A A H Y
UniRef90_UPI00047B87A9	W A V Y D Y G F R C V V I S S F F A D I F R G N C C L N I G V L P V Q V S A D F L Q
UniRef90_UPI0004643689	S C Q R V L G G L A N I A N E Y A K R Y R S N V I M N W G M L P F L I D E E P A F
UniRef90_UPI00047C9DB5	W A H L L D Y G I R A I V V A A S Y G P I F Y E N C L K N G L L P V V L P D R H D
UniRef90_V4QFC7	W A L L T D F G F K A V I I S T N I A D I F K S N S L K N G L L P V V P E I H E K
UniRef90_R5RKD9	E I I I K A L G I K C V I I A K S F A R I F F R N S I N N G L L L I I E N D K L H
UniRef90_D1BVQ3	W A L L K D Y G F R V V L I A S R F A D I F R G N S G K Q G L L V A G V V A Q E D I E
UniRef90_I3YLC7	W A I I A D Y G F R V V V I S S F F A D I F R N N A L N N G L L P I T V S D D F L A
UniRef90_V6ARA4	I A L L K S H C G V I K G V L I A I S F A R I F Y R N A I V D G A F L L P I E I D E Q T Y
UniRef90_M1Q3R4	L A L L K G S K V S C V I I A K S F A R I F F R N A I N I G V P V L I C P D T D K I
UniRef90_D1B6F7	T C L V E R G I G A I I I A K G F A R I Y Y R N A L N E G L P I I V C P Q A V D A
UniRef90_UPI000225E025	W A L L L D Y G F R A V I I S S D I A D I F K S N A L K N G L L P V E V D Q R T H A
UniRef90_L8MVC5	I A L L K G A G L E A V V V A Q S Y V A R I F F R N C C T A G E L Y P W E S V E R L I I
UniRef90_E3JZ59	W A L L L D E G I K C V I I A T S F A D I F F N M F K N G M I L P L L P Q K E V D
UniRef90_D4XBS0	A A L L V R L G V A A V I I A P S F F N G L Y F F R N A F N V G L L L L T C P Q S
UniRef90_C0C2K1	L T L K Y L G V S V V A A K S F A R I F Y R N L I N V G I P A L E C R D T
UniRef90_UPI00036750EC	W A L L Q N Y G F K V V L I S A R F A D I F R G N S G K A G L L T G Q V D E K V V Q
UniRef90_G4RMH5	T A L L K G A G G V L A V V I A E S F A R I F F R N A I N V G L P V L Q A P A R G R
UniRef90_A0A052J301	W G L L Q Q F G G I R A V I I A P S F G E I F F S N A M N N G L L V T L P E K Q V Q
UniRef90_F6DPK6	I A L L K H A N I I G A V L I A K S F A R I F Y R N A I N T G L P I E C D T
UniRef90_A3WHZ8	W A I I L D L G I R A V I I A P S Y S D I F S G N A V K N G I L P V V L P Q E V I D
UniRef90_UPI00037169AA	W A L L R G A G V A A V I I A P N F F A R I F Y Y R N S I I N N G F L A L E C E N V V
UniRef90_X1SGU7	L A I I K A A G V S C V V I A R S F A R I F F R N A I N I G L P L L E C D D A V A Q

UniRef90_UPI0002ED968C 170 180 190 200
 UniRef90_A0A021W655 L D E L L D Q P G I E L R I D V R T R S F D A G Q I R T A S G K S F S F P
 UniRef90_E3CWE9 D A I Q A G E Q V E I D
 UniRef90_C7MMM1 J K E G D V V S I D A D T G L I V
 UniRef90_K6U8X1 G I S R N V E E G D E I Q I D M D K G V I K N L N N S K E F E I K
 UniRef90_F5NS15 E V G D Y I Y I P G I K A A L P G T T F K G Y V I H E D A P V T E I T L M
 UniRef90_B9M5E3 V L F G Y S G Y G D T V I A V D I E A E K I S V R T I T L D N G L V W S F
 UniRef90_K2KDV4 L F D H P D T T V S I D V A A A R I G R L V S Q P D T A Q I N V D L E A Q Q T I R L A D G E V I
 UniRef90_D5DLM8 Y L M K E S Q S A S Y A C T I D L H Q Q K I T D E A G F E R T F D I N
 UniRef90_R5DQ75 E L F D S I F A D P K T E V E V N L P A Q T I T N K A T G K S E H F
 UniRef90_E1ZHA9 D E L E T G R E V E V D M V A D V L T D L A T G K K Y S L K P L
 UniRef90_C9KJM8 E K I K A G D K L R V D T A T G T I E D L T T G D V F H A
 UniRef90_UP100030DE2C6 A I F D D L R R D P A S R F T V D L E A Q T I T A L S D G R S E R F
 UniRef90_R4K9B2 A K D G H E L E V D F T T G I I K N T I L G K E Y K A Q A
 UniRef90_R2SC40 T L A A L P A E A V I E D L P A Q A V R A G E A V W P F E I D S T W K E K L V K
 UniRef90_V2JGI9 D G L V D G A R A T L D L D G A A I V L A D G S R V P C
 UniRef90_Q4SLU0
 UniRef90_S6CLC2 A V D A I S N G D V V S V D A D A G T I T D E T T G E T F T A
 UniRef90_UP10003765549 Q I F E I I D Q N P S T E F E V D L E N Q T L G I Q S Q S I N
 UniRef90_G0WA61 E K L I P L A Q K G G N L V I D L P N Q N I S D S E G T V L V E
 UniRef90_E3CUE2 R I R K G D R L R V D P Q G G T I E N Q T R G E S Y P V
 UniRef90_A4SFC9 E T V K T G D E L K I D I K A N T V E N L T S G E T Y Q L N
 UniRef90_Q12SE4 Q L M D E
 UniRef90_K4LGC4 D T S S I R S G D E L V V N L E R G V L K N L T Q G T E T P I K
 UniRef90_UP10003B6524C F K N L D Y I F L P G I R T E V K D K A E K I K A Y A K D G K M T E F E L T
 UniRef90_W7BIF2 E L A E P D E T V Q I D L P N Q T V A A R A K T Y S F A I D P T W K N K L V E G
 UniRef90_UP10003EDAAC2 F K N D Y L F V P G I K K A V E D K A E E I K A Y V V T P G E G M K E F S L K L
 UniRef90_B5H063 R L W E L T E A D P T A E I T V D L E A R E V R A E
 UniRef90_B3E9Z7 H A Q D A D A T M S I D I L E A Q T L T L S A G G T Q L A F N
 UniRef90_I1DXE5 L L F N R C A Q G P Q W Q I D L Q S Q
 UniRef90_C0D8U2 E D I R V G D Y L L V P G I R R A L K E G R S D L R V R R V T G V Q R E I S C T
 UniRef90_R5WGS8 E V G D F I Y I P A I K S A L A G D L N D I T A F V L S D K K P I Q Q I S
 UniRef90_D1B741 A S T G D L L E V D L P S G T L R N L T T G Q V R H A
 UniRef90_A9BGP3 I Q D G S E I E V D L D N I K D L K N K K E Y Y S E K Y
 UniRef90_C9A798
 UniRef90_X1ABC7 E Q C S E G D F L K V D T A R G I I E N I N K D R A Y K L
 UniRef90_F4GH80 G I T A G D D V E V D F D K G T I T N L T T G A S W N A E
 UniRef90_T0ZC53 K K L G L T G R E E F E L P G S L K P S A S V E I V A T R D G E P P V R F T T S
 UniRef90_UP10002649BA H L F H E V A A N P G Y R L R I D L P A Q E V Q T M Y C F P M D A G H K H K L L
 UniRef90_F2GBT3 A L F A A V K A D P T T E I T V D L P A Q T
 UniRef90_D3UIE9 F A K G E V E V D L R D Q V V R A G D F R V K F E I D P K W K Q R L L L
 UniRef90_UP10003B55C4E L L D N P G A K I A I D V E A Q E L R L P N G R A E P F A L
 UniRef90_H2BZW4 S L F Q S I L E N P K S E L S I D L G N Q K I E I P G K
 UniRef90_R7BGV2 F K N G D F I F I P D A V K A I R D K A S E V K A Y V V K D K L C E F K L K I
 UniRef90_UP10003B4251A A L Q Q L A D E H P E Q V D R I L L E V A Q T D P I A I D D L D A Q T V T T P F Q
 UniRef90_H9ULI4 D K I A D G A A I R L D I K E G F I E A D N K K Y A I E
 UniRef90_R5XTX4 R L M S A A G S Q L E F N I D L P N Q S I Q V G N H S I N
 UniRef90_L0LHAR8 K I F E A I E A D P N A E L E V N L P D Q K I T T I L A T
 UniRef90_J9Z011 C E E G D I L T V E V N Q S V T V N G K S F S I P K V
 UniRef90_C6VV55 R L W E L T E A D P D A D I T V D L Q A R E V R A E G I T A G F E L D E N A R W
 UniRef90_W8TXX1 L A S Q P D Q P V T I D L Q A S Q I R R G N A Q P V S F T V E S F A R E C L L N
 UniRef90_UP10003704957 Q L W D A L E A E P G R D A T V D L E S Q K V R V G G S E E V P L
 UniRef90_Q8TW31 E V V E D G N R V T V D L D E L V L R A
 UniRef90_A0LVA2 A L W D V V E S D P A T P V T V D L K L L N A I T E D P S T E I E V S I P A Q T I T L L S T G E S E S F
 UniRef90_A3I2D7 A L A G S E A T V D L D S Q E V R S A K G T F H F D V
 UniRef90_A0RXP2 D D G D E V S I D Q I R N L T A G S E Y R M K
 UniRef90_O26917 E V G D Y I F V P N I K K H L R G D M S K I P A Y I I G E N I K E I S S
 UniRef90_J5GWE2 D N V D N Q D T V E I D L Q Q G S I R N Q K T N D K F T S T K
 UniRef90_T0IUL5 A L F H P W A E W M V D L E A G M L I G P D Q H I H F Q I E P E R R R R L L L A
 UniRef90_M5TV6 D I L K T G D I V S V D L D S L T V T V E A T G K T Y S I N P L
 UniRef90_UP1000374D1FF V L K D A Y A G K P I T V D L E Q Q K V I C E D G T A F G F
 UniRef90_A8PWL7 L L W K I M D E R P G I E L T V D L K E C K T G D V V T V D L D N S V L I N H T S G K Q Y K L K
 UniRef90_UP100029A6339
 UniRef90_W5G709
 UniRef90_A3YXJ4
 UniRef90_T1CGH3
 UniRef90_UP100047B87A9
 UniRef90_UP10004643689
 UniRef90_UP100047C9DB5
 UniRef90_V4QFC7
 UniRef90_R5RKD9
 UniRef90_D1BVQ3
 UniRef90_I3YLC7
 UniRef90_V6ARA4
 UniRef90_M1Q3R4
 UniRef90_D1B6F7
 UniRef90_UP1000225E025
 UniRef90_L8MVC5
 UniRef90_E3JZ59
 UniRef90_D4XBS0
 UniRef90_C0C2K1
 UniRef90_UP100036750EC
 UniRef90_G4RMH5
 UniRef90_A0A052J301
 UniRef90_F6DPK6
 UniRef90_A3WHZ8
 UniRef90_UP100037169AA
 UniRef90_X1SGU7

210 220

UniRef90_UPI0002ED968C	G L D D E D E Q A Y E
UniRef90_A0A021W655	D A F A Q T C L I E G V D Q L
UniRef90_E3CWE9	P Y P E F V R G L I E D G G L I P H V K K
UniRef90_C7MMM1	Q P F P T F I R D I I E D G G L V E H T K
UniRef90_K6U8X1	P L P E F M M G I M N E G G L I S Y L K N H L A E
UniRef90_F5NS15	E S L T A E E R E I I K A G S L I N F N K N R Q
UniRef90_B9M5E3	F Q I S P F D K A L V L A G G W V D Y A D S K
UniRef90_K2KDV4	D L D P F S R H C L V Q G V D Q L
UniRef90_K0X5K5	D F Q I D G L R K T A L L L G L D A I
UniRef90_D5DLM8	
UniRef90_R5DQ75	D I N A Y K K D C L V N G L D D I
UniRef90_E1ZHA9	G D A G P V I D A G G I F E Y A R
UniRef90_C9KJM8	H P L P G F V Q D I A K A G G L I N Y I K
UniRef90_UPI00030DE2C6	E I D A Y K K K C L L N G Y D D
UniRef90_R4K9B2	Y P Q F M I D I M E N E G L I N C V K N
UniRef90_R2SC40	G L D
UniRef90_V2JGI9	E P I P P F L L D M L R A G G L I P H L K R R L A Q
UniRef90_Q4SLU0	Q P F P P F L M E I I N A G G L V P R W Q K K L G K
UniRef90_S6CLC2	F E V D S Y K K I C L L N G Y D D I
UniRef90_UPI0003765549	H F D I E P F R K H C L V N G L D D I
UniRef90_G0WA61	R P F P P F L A D L V E A G G L V P Y V R R R L A E
UniRef90_E3CUE2	A L G D V F N I V E A G G L F A Y A R K E N
UniRef90_A4SFC9	
UniRef90_Q12SE4	P L P P F M L K I L A D G G L V E H F R K
UniRef90_K4LGC4	G Q L T D T E T E I I L D G C L I N Y N R
UniRef90_UPI0003B6524C	V D D I A I T L H Y L D D I V Q Y E K K Q N K K
UniRef90_W7BIF2	
UniRef90_UPI0003EDAAC2	
UniRef90_R6EQX2	G E L T D E E R Q I I L K G C L I N Y N R
UniRef90_B5H063	G I T A P F E L D E N A R W R L L N G L D D I
UniRef90_B3E9Z7	F E L S P F D K A L V L A G G W V D Y A D
UniRef90_I1DXE5	
UniRef90_C0D8U2	G Q L T G E E Q K I I L L S G C L I N Y Y A Q
UniRef90_R5WGS8	L T L T A A E Q E I I I K A G G L I N Y N K N Q L
UniRef90_D1B741	P P L S G I A G E I V S S G G L V N Y V R R Q L
UniRef90_A9BGP3	P K F L Q E I I I S S G G L I E K I K K E V A Q
UniRef90_C9A798	
UniRef90_X1ABC7	N P L P A F I Q N I I I S L G G L R K Y V K E E V K R
UniRef90_F4GH80	P F P P F M Q N I I I A A G G L A A Y M K E Q K
UniRef90_T0ZC53	A I H S A T E L R Y Y E A G G V L P Y V
UniRef90_UPI0002649BA	N G L D D I Q L T L Q H E G A I R A Y E A A R R Q
UniRef90_F2GBT3	
UniRef90_D3UIE9	G L D E I A I T L K H
UniRef90_UPI0003B55C4E	E A F G R H C L L E G V D
UniRef90_H2BZW4	N L S E K F E I D P Y K K T C M I N G Y D D I
UniRef90_R7BGV2	G E L T D D E R Q I I L D G C L I N Y Y R
UniRef90_UPI0003B4251A	D R F T F E I D A F R K H C L I N G L D E
UniRef90_H9ULI4	I E M P E S R R S A L R E G
UniRef90_R5XTX4	Q P F P D F I Q N I I I A K G G L L N S I
UniRef90_L0LHAR8	P V P E F M Q G I I D A G G L V E Y A K G L K E
UniRef90_J9Z011	F E I E D H R K E R L L Q G L D D I
UniRef90_C6VV55	G E S E S F D I N G Y K K H N L T N G F D D I
UniRef90_W8TXX1	S N N L F E I I I Q D G G L I P N I I K R M E K
UniRef90_UPI0003704957	R L L N
UniRef90_B4WA20	G V D T
UniRef90_UPI000364387C	E L E F D F E I D P Y I R W R L L E G L D D I
UniRef90_Q8TW31	R E P P E F A L Q A W R E G G L L E L V K K
UniRef90_A0LVA2	
UniRef90_A3I2D7	D I N S Y K K D N M Q N G F D D I
UniRef90_A0RXP2	P F N D Y M L S I L E D G G L V N Y L K T I
UniRef90_O26917	A E M T D A E K S I V E A G S L I N Y N K S K I K
UniRef90_J5GWE2	L P A H V M K I L E A G G L I E F L N K K
UniRef90_T0IUL5	L D D T E Q K L E T I R A Y E Q Q R K K Q
UniRef90_M5ITV6	G D V R N V I D E G G L F N F A R K
UniRef90_UPI000374D1FF	E V A P F T R H C L L H G L D D I A
UniRef90_A8PWL7	
UniRef90_UPI00029A6339	P I G D A G P V I E A G G I F A Y A R K
UniRef90_W5G709	D A F A R H C L I E G I D Q L
UniRef90_A3YXJ4	D I N D Y K K N N M L N G F D D I
UniRef90_T1CGH3	H I M T P E E R A I V K S G C L I N Y N R D K K E
UniRef90_UPI00047B87A9	S L P D N L V E I I D A G G G L V K A M R K L N
UniRef90_UPI0004643689	P F Q I I D D Y T R W R L M E G L D D I
UniRef90_UPI00047C9DB5	E I D A Y K K R C L Q N G Y D D
UniRef90_V4QFC7	K P F S E I V A K I I E A G G L F K Y
UniRef90_R5RKD9	
UniRef90_D1BVQ3	P Y P E F V K G L I E D G G L I P H V K K
UniRef90_I3YLC7	C L L D G V D
UniRef90_V6ARA4	G D V R P V I D A G G G L F D Y A R Q
UniRef90_M1Q3R4	E F S I D P F R K K C L V E G I D D I R
UniRef90_D1B6F7	E P V P A F L M D M V R A G G G L N L L K Q R Q
UniRef90_UPI000225E025	Q K L P E H L M K I I E A G G G L F Q Y I L K E
UniRef90_L8MVC5	D S F D V D P Y T K W R L L N G L D D I
UniRef90_E3JZ59	P L S G L A L E I L K A G G L T E Y L K I R G S K
UniRef90_D4XBS0	
UniRef90_C0C2K1	P L P K V M I T I I N D G G L A P H F R K
UniRef90_UPI00036750EC	D R F T F E I D P F R K H C L L G G L D D E
UniRef90_G4RMH5	P Q F A L D I Q K A G G W L E Y M K A R E E
UniRef90_A0A052J301	P Y P D F M A E L I S V S G L I E Y T K K R L A
UniRef90_F6DPK6	
UniRef90_A3WHZ8	
UniRef90_UPI00037169AA	
UniRef90_X1SGU7	

UniRef90_C5MCG0
 UniRef90_A0A031JP92
 UniRef90_I4B920
 UniRef90_B2AHK5
 UniRef90_Q8TRF7
 UniRef90_UP10004216819
 UniRef90_M0UMU8
 UniRef90_L0KXE6
 UniRef90_UP1000479FB4B
 UniRef90_Q1NC89
 UniRef90_UP10003B34529
 UniRef90_V7IAM8
 UniRef90_G0SHD0
 UniRef90_U2TAF2
 UniRef90_UP1000288AFE0
 UniRef90_Q3B598
 UniRef90_A4FMP1
 UniRef90_U3QPR4
 UniRef90_L1PGQ0
 UniRef90_UP10004132F9E
 UniRef90_J9H6N2
 UniRef90_S7PZ14
 UniRef90_R6WVU1
 UniRef90_R7ACQ2
 UniRef90_UP10003716E50
 UniRef90_C5EE70
 UniRef90_UP10002F4F315
 UniRef90_M2XAL4
 UniRef90_F5XDS6
 UniRef90_F8A1C1
 UniRef90_UP10004026136
 UniRef90_C3WDJ9
 UniRef90_UP1000419472C
 UniRef90_B4E7P2
 UniRef90_UP10003FF3EB5
 UniRef90_UP10003B2E95D
 UniRef90_H4GKE0
 UniRef90_UP10003B3A43A
 UniRef90_W5Y172
 UniRef90_C1CVE0
 UniRef90_A6FCI9
 UniRef90_A0A031HTM3
 UniRef90_KONST7
 UniRef90_UP1000474360B
 UniRef90_UP1000411E36F
 UniRef90_UP1000412B8BD
 UniRef90_M4CKK9
 UniRef90_J4SFT9
 UniRef90_UP10003B31482
 UniRef90_E5XT11
 UniRef90_I4YJ00
 UniRef90_A0A022FYM3
 UniRef90_A0A031JS13
 UniRef90_S3KF19
 UniRef90_UP100036C0552
 UniRef90_C2GFW6
 UniRef90_D9CJ47
 UniRef90_B8MSQ2
 UniRef90_G9NNQ3
 UniRef90_Q493R3
 UniRef90_S9S3J7
 UniRef90_A1R7J9
 UniRef90_R0H952
 UniRef90_A0B7G8
 UniRef90_J3D2X3
 UniRef90_UP10003816023
 UniRef90_UP100024908A2
 UniRef90_Q05QR5
 UniRef90_G0CZM6
 UniRef90_UP1000395B6A1
 UniRef90_U1V0Y7
 UniRef90_E1VVJ6
 UniRef90_W7INJ8
 UniRef90_U1RIE3
 UniRef90_C2D0W4
 UniRef90_UP10003B39C55
 UniRef90_G0LLP0
 UniRef90_D3V034
 UniRef90_C0ZXN2
 UniRef90_D9SQV4
 UniRef90_R9AG46
 UniRef90_U2XX02
 UniRef90_E1QDT1
 UniRef90_R7CPN8
 UniRef90_UP1000348EC8D
 UniRef90_I3UGD4
 UniRef90_R5S255
 UniRef90_A6Q2Y1
 UniRef90_E8Q5P1
 UniRef90_F5YM14
 UniRef90_M7TB93
 UniRef90_C1AV91

1 10 20 30 40
 S G S **V** E **I** L P G F P Q S **I** E G E **L** I L C D A D N I N T D
 M P G F T P F T A P A F V L A E D D V D T D
L W R F G D N I N V D T D
 K F G D D I N T D D V D T D
 F G D D I D T D
 S N V D T D
 D K L T T G
 G K **V** L C D R S D I N T D
 F K F G D N I D T D
I E G E **I** V F C D A D N I N T D
 Y G R D I D T D
 H R G Q A L S **L** P W E N I D T D
 F V L G K N I D T D
 M E P F K T H T G V G V **P** L R R S N V D T D
 I T G K A A I R F E N L D T D
 V P L R R S N V D T D
 A G K A V P L R R S N V D T D
 A L P L R R S N V D T D
 Q R E P **L** L P G F P P T F A G A L L F A P Q D N L N T D
 N T D T D
 D T **E** G K A Y P L G R P N I D T D
 V F K F H D D L D T D
 L R Q S N V D T D
 L P L R R S N V D T D
 V P L R R S N V D T D
 T T
 L K Y G D N I N T D
 V P L R R S N V D T D
 G N L D T D
 K F G N D I D T D
 Q G N V D T D
 M E P **I** V V H T G T T **I** P I M N D D I D T D
 I S T I T G V A V P L K R A N V D T D
 V P L T R S N V D T D
 R V H V F A R D H I N T D
 M P L V K N N L D T D
 G N V L F D R S D I N T D
 F R P P **I** G K S N V N G Q C I S L I G N D I D T D
 N L D T D
 N I D T D
 F V L K D N I D T D
 D P V N I V E G R V S D L P R D D V D T D
 V A P L L R D N I D T D
 P L R R F Q V D T D
 M E P F T T H T G V G V **D** P V N I V E G R V S D L P R D D V D T D
 L L P G F P A S F E G P L I F A P Q D N L T T D
 P D P D A D L I A A L G A P L P I G N L D T D
 R A V P L L R D N I D T D
 Q E G K V L F D R S D I N T D
 A L P A A N V D T D
 F V T R D N I D T D
 P G F P E R I S G E I V F C D A D N I N T D
 L G D F V D T D
 V L P L D I S D I D T D
 N L D T D
 V P L R Q S N V D T D
 F V L K D N I D T D
 F G D D V D T D
 V I P L R R S N V D T D
 L M R E N I D T D
 V P L T R S N V D T D
 Q H I L S G K M A A L A I E N L D T D
 I T G K L A P L P A A N I D T D
 V P L R Q S N V D T D
 P L R R S A V D T D
 M R D N I D T D
 P I K V I K G Q A V P V P G D D I D T D
 G N D V D T D
 L T D N I D T D
 V P L R R S N V D T D
 G K V L F D R S D I N T D
 Q D N L T T D
 I I R A P A I S L L I P N I N T D
 V A P L D V A N V D T D
 N V N Q N I P K E P L L P G F P A M F E G P L L F A P Q D N L T T D
 M E K F E T F T G V Q I K N I S G R G I P L A G D D I D T D
 N L D T D
 I F K F N Q D V D T D
 K F G D N I D T D
 G P N I K D W P P L P E L T E D L L L R I V S Y I D D P V T T D
 D E T S K A V Q I L P G F P E K I T G E I I F C D A D N L N T D

UniRef90_C5MCG0
 UniRef90_A0A031JP92
 UniRef90_I4B920
 UniRef90_B2AHK5
 UniRef90_Q8TRF7
 UniRef90_UP10004216819
 UniRef90_M0UMU8
 UniRef90_L0KXE6
 UniRef90_UP1000479FB4B
 UniRef90_Q1NC89
 UniRef90_UP10003B34529
 UniRef90_V7IAM8
 UniRef90_G0SHD0
 UniRef90_U2TAF2
 UniRef90_UP1000288AFE0
 UniRef90_Q3B598
 UniRef90_A4FMP1
 UniRef90_U3QPR4
 UniRef90_L1PGQ0
 UniRef90_UP10004132F9E
 UniRef90_J9H6N2
 UniRef90_S7PZ14
 UniRef90_R6WVU1
 UniRef90_R7ACQ2
 UniRef90_UP10003716E50
 UniRef90_C5EE70
 UniRef90_UP10002F4F315
 UniRef90_M2XAL4
 UniRef90_F5XDS6
 UniRef90_F8A1C1
 UniRef90_UP10004026136
 UniRef90_C3WDJ9
 UniRef90_UP1000419472C
 UniRef90_B4E7P2
 UniRef90_UP10003FF3EB5
 UniRef90_UP10003B2E95D
 UniRef90_H4GKE0
 UniRef90_UP10003B3A43A
 UniRef90_W5Y172
 UniRef90_C1CVE0
 UniRef90_A6FC19
 UniRef90_A0A031HTM3
 UniRef90_KONST7
 UniRef90_UP1000474360B
 UniRef90_UP1000411E36F
 UniRef90_UP1000412B8BD
 UniRef90_M4CKK9
 UniRef90_J4SFT9
 UniRef90_UP10003B31482
 UniRef90_E5XT11
 UniRef90_I4YJ00
 UniRef90_A0A022FYM3
 UniRef90_A0A031JS13
 UniRef90_S3KF19
 UniRef90_UP100036C0552
 UniRef90_C2GFW6
 UniRef90_D9CJ47
 UniRef90_B8MSQ2
 UniRef90_G9NNQ3
 UniRef90_Q49R3
 UniRef90_S9S3J7
 UniRef90_A1R7J9
 UniRef90_R0H952
 UniRef90_A0B7G8
 UniRef90_J3D2X3
 UniRef90_UP10003816023
 UniRef90_UP100024908A2
 UniRef90_Q05QR5
 UniRef90_G0CZM6
 UniRef90_UP1000395B6A1
 UniRef90_U1V0Y7
 UniRef90_E1VVJ6
 UniRef90_W7INJ8
 UniRef90_U1RIE3
 UniRef90_C2DOW4
 UniRef90_UP10003B39C55
 UniRef90_GOLLP0
 UniRef90_D3V034
 UniRef90_C0ZXN2
 UniRef90_D9SQV4
 UniRef90_R9AG46
 UniRef90_U2XX02
 UniRef90_E1QDT1
 UniRef90_R7CPN8
 UniRef90_UP1000348EC8D
 UniRef90_I3UGD4
 UniRef90_R5S255
 UniRef90_A6Q2Y1
 UniRef90_E8Q5P1
 UniRef90_F5YM14
 UniRef90_M7TB93
 UniRef90_C1AV91

50 60 70 80

90 100 110 120

Y D P E F K T	K T K E G D I I I S G F N F G T G S S R E Q A A		
P A L L E A Y E A A G K P P V L L A G A N F G C G S S R E H A V			
F K D D G S E N A D F V L N K P A H K G A E I I L L A R D N F G C G S S R E H A P			
I D P E F T K K A K P G D I I I V A G T N F G C G S S R E Q A P			
E P D F I L N Q E A Y K R A S V L V A G P D F G T G S S R E H A V			
W P S T D E V S E R Y K T N G Q D T I V L A G S E Y G T G S S R D W D A			
I D P D F S K K I K P G D I I V V G G N N F G C G S S R E Q A A			
S W R K D P E F I L N K E P F D R G S V L V A G P D F G T G S S R E H A V			
A F E F V L R K E P G N V F D D P D Y A G S P I L I I A G D N F G C G S S R E H A A			
D L K E K A V V L T R E N F G C G S S R E H A P			
E H G D V F V A G K N F G S G S S R E H A P			
G D I I L V A G F N F G C G S S R E Q A A			
A T F T S R V R P G D I I V A D E N F G C G S S R E H A P			
F T P D G K P K V G F P L N D P T Q A E S T I L I I A G R N F G C G S S R E H A V			
V P P A Q S G L P E F V R E G S F K S D Y T I I I A A E N F G C G S S R E H A P			
D F I I L N N P H F R N G S V L V A G P D F G T G S S R E H A V			
F D A T G A L R P D F V L N R P E Y A G T S I L V G G G A N F G C G S S R E H A V			
L F Y A W R R D P E F I I L N R E P Y N Q G S V L V A G P D F G T G S S R E H A V			
L F Y N W R Q D P E F I I L N Q P R Y A N P R I L V A G H D F G T G S S R E H A V			
L F Y A A W R N D P S F V L N Q P Q F K N A T I L V A G P D F G T G S S R E H A V			
S Q S D P G R K E G A V L V A G Y N F G T G S S R E Q A A			
F D A E G R P I A S F P L N D P R Y D G R I I M A G R N F G C G S S R E H A A			
UniRef90_G0SHD0			
UniRef90_U2TAF2			
UniRef90UPI000288AFE0			
UniRef90_Q3B598			
UniRef90_A4FMP1			
UniRef90_U3QPR4			
UniRef90_L1PGQ0			
UniRef90UPI0004132F9E			
UniRef90_J9H6N2			
UniRef90_S7PZ14			
UniRef90_R6WVU1			
UniRef90_R7ACQ2			
UniRef90UPI0003716E50			
UniRef90_C5EE70			
UniRef90UPI0002F4F315			
UniRef90_M2XAL4			
UniRef90_F5XDS6			
UniRef90_F8A1C1			
UniRef90UPI0004026136			
UniRef90_C3WDJ9			
UniRef90UPI000419472C			
UniRef90_B4E7P2			
UniRef90UPI0003FF3EB5			
UniRef90UPI0003B2E95D			
UniRef90_H4GKE0			
UniRef90UPI0003B3A43A			
UniRef90_W5Y172			
UniRef90_C1CVE0			
UniRef90_A6FC91			
UniRef90_A0A031HTM3			
UniRef90_KONST7			
UniRef90UPI000474360B			
UniRef90UPI000411E36F			
UniRef90UPI000412B8BD			
UniRef90_M4CKK9			
UniRef90_J4SFT9			
UniRef90UPI0003B31482			
UniRef90_E5XT11			
UniRef90_I4YJ00			
UniRef90_A0A022FYM3			
UniRef90_A0A031JS13			
UniRef90_S3KF19			
UniRef90UPI00036C0552			
UniRef90_C2GF6			
UniRef90_D9CJ47			
UniRef90_B8MSQ2			
UniRef90_G9NNQ3			
UniRef90_Q493R3			
UniRef90_S9S3J7			
UniRef90_A1R7J9			
UniRef90_R0H952			
UniRef90_A0B7G8			
UniRef90_J3D2X3			
UniRef90UPI0003816023			
UniRef90UPI00024908A2			
UniRef90_Q05QR5			
UniRef90_G0CZM6			
UniRef90UPI000395B6A1			
UniRef90_U1V0Y7			
UniRef90_E1VVJ6			
UniRef90_W7INJ8			
UniRef90_U1RIE3			
UniRef90_C2DOW4			
UniRef90UPI0003B39C55			
UniRef90_G0LLP0			
UniRef90_D3V034			
UniRef90_C0ZXN2			
UniRef90_D9SQV4			
UniRef90_R9AG46			
UniRef90_U2XX02			
UniRef90_E1QDT1			
UniRef90_R7CPN8			
UniRef90UPI000348EC8D			
UniRef90_I3UGD4			
UniRef90_R5S255			
UniRef90_A6Q2Y1			
UniRef90_E8Q5P1			
UniRef90_F5YM14			
UniRef90_M7TB93			
UniRef90_C1AV91			

UniRef90_C5MCG0
UniRef90_A0A031JP92
UniRef90_I4B920
UniRef90_B2AHK5
UniRef90_Q8TRF7
UniRef90_UPI0004216819
UniRef90_M0UMU8
UniRef90_L0KXE6
UniRef90_UPI000479FB4B
UniRef90_Q1NC89
UniRef90_UPI0003B34529
UniRef90_V7IAM8
UniRef90_G0SHD0
UniRef90_U2TAF2
UniRef90_UPI000288AFE0
UniRef90_Q3B598
UniRef90_A4FMP1
UniRef90_U3QPR4
UniRef90_L1PGQ0
UniRef90_UPI0004132F9E
UniRef90_J9H6N2
UniRef90_S7PZ14
UniRef90_R6WVU1
UniRef90_R7ACQ2
UniRef90_UPI0003716E50
UniRef90_C5EE70
UniRef90_UPI0002F4F315
UniRef90_M2XAL4
UniRef90_F5XDS6
UniRef90_F8A1C1
UniRef90_UPI0004026136
UniRef90_C3WDJ9
UniRef90_UPI000419472C
UniRef90_B4E7P2
UniRef90_UPI0003FF3EB5
UniRef90_UPI0003B2E95D
UniRef90_H4GKE0
UniRef90_UPI0003B3A43A
UniRef90_W5Y172
UniRef90_C1CVE0
UniRef90_A6FC19
UniRef90_A0A031HTM3
UniRef90_KONST7
UniRef90_UPI000474360B
UniRef90_UPI000411E36F
UniRef90_UPI000412B8BD
UniRef90_M4CKK9
UniRef90_J4SFT9
UniRef90_UPI0003B31482
UniRef90_E5XT11
UniRef90_I4YJ00
UniRef90_A0A022FYM3
UniRef90_A0A031JS13
UniRef90_S3KF19
UniRef90_UPI00036C0552
UniRef90_C2GFW6
UniRef90_D9CJ47
UniRef90_B8MSQ2
UniRef90_G9NNQ3
UniRef90_Q493R3
UniRef90_S9S3J7
UniRef90_A1R7J9
UniRef90_R0H952
UniRef90_A0B7G8
UniRef90_J3D2X3
UniRef90_UPI0003816023
UniRef90_UPI00024908A2
UniRef90_Q05QR5
UniRef90_G0CZM6
UniRef90_UPI000395B6A1
UniRef90_U1V0Y7
UniRef90_E1VVJ6
UniRef90_W7INJ8
UniRef90_U1RIE3
UniRef90_C2DOW4
UniRef90_UPI0003B39C55
UniRef90_G0LLP0
UniRef90_D3V034
UniRef90_C0ZXN2
UniRef90_D9SQV4
UniRef90_R9AG46
UniRef90_U2XX02
UniRef90_E1QDT1
UniRef90_R7CPN8
UniRef90_UPI000348EC8D
UniRef90_I3UGD4
UniRef90_R5S255
UniRef90_A6Q2Y1
UniRef90_E8Q5P1
UniRef90_F5YM14
UniRef90_M7TB93
UniRef90_C1AV91

	130	140	150	160
T C I	L A R G M K L V A G S F G N	F G R N A I N N A L L T E P D L N K		
W S L	D G M G L T A V F A P S F F G E	F R G N C A N N G M V A G M M E P A T L		
W A L	A D Y G F K V I V A P S F F A D	F Y N N C F Q N G I L P L K L D S A E V E		
Q A L	R E L G L V G A V V A Q S F F G G L	F Y R N A I N N G L P L V L V C A D T S R L		
Q A L	L A L K H S G I A C I V A K S F F A R	F F R N A I N N G L P L M E A D		
W A L	K D Y G F K V V L A P R F F A D	F R G N A G K Q G G L V A G V I T Q E D A E		
K G T	M L L G I K A V I V A K S F F G R	H R S N L V G M G V I P L C F K E D M D S D		
L A L	K F A G V A C V A R S F F G R	F F R N A I N N G L P L M E A D		
W A L	K D Y G F K A V I V A R S F F G R	F R G N S G K Q G G L V T A E V		
W A L	A D L G I K V V I A P S F F S D	F S G N A F K N G I L T V V L P Q E A V D		
W A L	E V N G I N V I V A R S F F A R	F R Q N M F N C G M L A I E L P P E E D L Q		
I S I	K A S G V Q C V A E T F F A R	F Y R N A I N N G L P V L E S P E A S R S R		
T A I	L A K K I P V L V V A G S F F G N	F S R N S I N N A M G V E V P R I L V K R		
V A I	K A A G V S V V I V A K S F F A R	F Y R N A I N N G L P I L E C P E A V		
W A L	L D Y G F R V V I A P D F G D	F F N N S L K N G L V I R L D E Q S I Q		
F A L	Q V A G V K A I V A E S Y A R	F F R N C V D G G F V I P Y E T T A E H L A		
W A L	K D Y G F R V V I V I S S R F F A D	F R G N S G K Q G G L L A A R C E Q S D V E		
W G L	Q Q F G I R A V I A P S F F G E	F Y S N A M M N R L L L V M L P R D V L E		
W A L	R D Y G F K V V L A P K F F A D	F R G N A G K Q G G L V T G I I S E A D C E		
W A L	R D Y G F R V V V V I S S F F A D	F R G N A G K Q G G L L V G V L E E D E V E		
S V L	K A L G I K A V Y V A K S F F A R	F R G N A G K Q G G L L V G V L E E D E V E		
W A M	A D M G I R V A I A P G F S D	H A G N A F K N G L T V V L P Q E Q V D		
S V L	K A L G V K A V I V A K S F F A R	F Y R N S I N N G L P V I V C K E L P		
W A M	M D L D G I R V V I A P S F F S D	H S G N A V K N G I L P V L P Q E A V D		
W A L	R D Y G F K V V I V S P R F F A D	F R G N S G K Q G G L L A A Q V E Q S D V E		
W A L	Q N Y G F R V V I V G S R F G D	F R S N S G K Q G G L L V A L V D Q K I E		
W A L	K D Y G F K V V L S A R F F A D	F R G N S G K Q G G L L A A Q V A Q E D I E		
W A L	K D Y G F K A V I A P R F F G D	F R G N S L K N G L L T V E L P A E A V E		
L M L	K E L G I K T I V A K S Y A R	F Y R N C V N L G I L Q C D L T E K I		
W A L	R D Y G F R V V I A P R F F A D	F Y G N T A K N G V L A A I M P Q E S V E		
W G L	Q Q A G F D A V V A P S Y Y G E	F Y F N A M M N R L L L V T L P P E Q V Q		
T V L	S Y N G V R C I V A K S F F A R	F F R N A F N S G I L L Q C D G I Q		
W A L	R D Y G F K V V I V S S R F F A D	F Y G N A A K N G V L A A K V A Q P D V E		
W A L	K D W G I R V V I V A G S F F S D	F Y M N C T E N G V P K L P Q T A R D		
W A L	R D Y G F Q A V V V A S A R F F A D	F R G N S G K Q G G L L T G Q V D E A E I E		
W A L	M D Y G F K A V F V S S R F F A D	F R G N S G K A G G L T G L M E Q S D I E		
W A L	R G A G V G A V I A P N F A R	Y Y R N S I N N G F L A L E C D G I V		
W G L	K D W G F K V V I V A P S F F G D	F Y K N A S I N N D L P V I L S E D D V E		
W A L	A D M G V R A V I A P S F F S D	F S G N A F K N G I V P V V L P Q E A V D		
W A L	E E N S I N V V I V A A S F F A R	F R Q N M Y N C G M L A I E L P R D T I N E		
Q A L	M R W G I K A I I V A G E S F F A D	F Y S N C C I A I G I P C F T L P K K S I E		
W G M	M Q Q Y G F K A V V V A S S F F G E	F Y S N A L N N R L L L A M V P E A D V Q		
W A L	A D F G I R C V A P S F F A D	F R N N C M K M G V S L L P E E A D C L		
V C	G A A G A K A V V A Q T Y A R	F F R N S V A T G E V F P L E S E V R V C		
W A L	H G F G I K A I I A P S F F G S	F A N C Y H N T I L P L A L P P D E H A		
W A L	E D A G F R C V I A T S L A D	F Y S N S T K G L P V E L P E D Q V R		
W A L	W D F G F R V V V V A E F G D	F R G N A G K S G L L T A Q V T Q A D V E		
T A I	K N A G I P L V L V G G S F F G D	F Y R N A I N N G L I V I E C P E K D L T		
W G L	Q Q F G I R A V I A P S F F G E	F Y S N A I N N R L L L V M L R Q S E V D		
W A L	A E Y G F R V V I A P S F F S P	F Q G N C I R N G I A P I V L P		
W A F	E V N G I R A I I A V N F F A R	F R Q N M F N R G M L A V E D K V I D		
Y A L	L V D Y G F R C V I A P S F F G D	F A S N A V N N G L L P A V V E E D D A E		
W A L	M D Y G F K A V F V S S R F F A D	F R G N S G K A G G L V A G L M S Q D D I E		
W A L	Q Q F G I R A V I A P S F F G E	F R G N S G K A G G L V A G L M S Q D D I E		
V A L	G A A G A K V C V A E S Y Y A R	F F R N S V A T G E I Y P L E S E V R C		
T A I	L A K K I P L V V S G S F F G N	F F R N S I N N A N N A L M G L E V P R L V E R		
S A L	G C D I K C V I A E S F F A F	F Y G R N Q P S L G L L G F T M D D P A F Y		
W A L	M D Y G F K V V I I A P S F F A D	F H K N S F N N R L L L T L S E L K I N		
W G L	Q Q F G I R A V I A P S F F G E	F Y S N A M M N R L L V M L D A A V V E		
W A L	K D Y G F K A V V V S S R F F A D	F R G N S G K Q G G L L A A Q V A Q D D I E		
V C	G A A G A K A V V A E S Y Y A R	F F R N S V A T G E I Y P L E S E V R C		
L A L	K L A G I S C I V A R S F F A R	F Y R N A I N N G L I P L I E A D		
W A L	L D F G I R C V I A P S F F A D	F Y N N C C F K N G I L P V V L P R D Q V D		
W A L	Q N Y G F R V V I V G S R F F G D	F R G N S G K Q G G L L I A T V E Q D V V E		
Q A L	M R W G I R A V V V G V S F F A E	F H G N C C L A L G I P C A T A S P E Q I L		
W A L	M D Y G F R V V V V S S R F F A D	F R G N A G K S G L L L A A K M E Q S D I E		
W G L	Q Q Y G I Q A I I A P S F F G E	F Y S N A M N N Q L L L V M L P E A D I A		
W G L	N Q L G I R A I I G T S F F A G	F D D N C C Q R N G V L T L S S E		
W A L	S D Y G F R V V V V S A R F F A D	F R G N S G K Q G G L V A A E V A Q S D I E		
W A L	K D Y G F R V V V V A G G Y S D	F Y M N S T K N G F L A K L P K D Q R E		
Q S I	K R A G F D V V V V A E S F F A E	F Y G N S T T L G I V C A K M P K D E I A		
Q G L	M R W G I R G V I V G S F F A E	F A D N C C K S T N H L Q S F V E S D P E A G		
A A L	G A S G V K A V V V A Q S Y Y A R	F F R N C C V S T G E L P V A A Q E R L C		
W A L	S D F G F R V V V V A S R F F A D	F R G N A G K A G L V A A Q V E Q S D V E		
W A L	E V N G I N V V I V A E N F F A R	F R Q N M Y N C G M F A E L P S D T I Q		
T A L	L N A G I P L V L V G G S F F G D	F Y R R N A I N N G L I V V E C P E E D M T		
W G L	Y E Y G F R V V I I A P S F F G D	F Y K N C C I V N G I L P A I E		
W A L	A Q Y G Q G G V V I I A P S F F A D	F T N N A F N N G M I L L I S L P A A T I D		
G V L	K A L G V Q A V V V A K S F F A R	F Y R N S I N N G L I P V V C K D L P		
Q A I	R R R W G I E A L V G E S F F A E	F F G N C C V A M G V P C V T A D A E S V E		
W G L	S Q F G I Q A V I V A S S F F A E	F Y S N A M M N R L L L V V L T E D E V K		
S V L	K A L G V K A V I V A K S F F A R	F Y R N S I N N G L I P V V C K D L H		
I A L	K A A G V A A V V V A K S F F A R	F Y R N A F N M G L P I F E L S E T		
W A L	I D Y G F R V V I I A P S F F S D	F Y E N S F F N N R L L T I L S E L E V N		
UniRef90_I3UGD4	Q A I R R R W G I E A L V G E S F F A E	F F G N C C V A M G V P C V T A D A E S V E		
UniRef90_R5S255	W G L S Q F G I Q A V I V A S S F F A E	F Y S N A M M N R L L L V V L T E D E V K		
UniRef90_A6Q2Y1	S V L K A L G V K A V I V A K S F F A R	F Y R N S I N N G L I P V V C K D L H		
UniRef90_E8Q5P1	W A L I D Y G F R V V I I A P S F F S D	F Y E N S F F N N R L L T I L S E L E V N		
UniRef90_F5YM14	S C Q R V L G A S A N F A R E Y A K R Y R S N L I N W G I L P F L V Q D P S			
UniRef90_M7TB93	T A L L A K E I P L V V I V A S F F G N F F S R N C C I N N A L L G L E S P R L V E R			
UniRef90_C1AV91	W A L Q N Y G F R A V I I A P R F F G D	F R G N A L T N G L L T V T L P S D I E		

UniRef90_C5MCG0
 UniRef90_A0A031JP92
 UniRef90_I4B920
 UniRef90_B2AHK5
 UniRef90_Q8TRF7
 UniRef90_UP10004216819
 UniRef90_M0UMU8
 UniRef90_L0KXE6
 UniRef90_UP1000479FB4B
 UniRef90_Q1NC89
 UniRef90_UP10003B34529
 UniRef90_V7IAM8
 UniRef90_G0SHD0
 UniRef90_U2TAF2
 UniRef90_UP1000288AFE0
 UniRef90_Q3B598
 UniRef90_A4FMP1
 UniRef90_U3QPR4
 UniRef90_L1PGQ0
 UniRef90_UP10004132F9E
 UniRef90_J9H6N2
 UniRef90_S7PZ14
 UniRef90_R6WVU1
 UniRef90_R7ACQ2
 UniRef90_UP10003716E50
 UniRef90_C5EE70
 UniRef90_UP10002F4F315
 UniRef90_M2XAL4
 UniRef90_F5XDS6
 UniRef90_F8A1C1
 UniRef90_UP10004026136
 UniRef90_C3WDJ9
 UniRef90_UP1000419472C
 UniRef90_B4E7P2
 UniRef90_UP10003FF3EB5
 UniRef90_UP10003B2E95D
 UniRef90_H4GKE0
 UniRef90_UP10003B3A43A
 UniRef90_W5Y172
 UniRef90_C1CVE0
 UniRef90_A6FC19
 UniRef90_A0A031HTM3
 UniRef90_KONST7
 UniRef90_UP1000474360B
 UniRef90_UP1000411E36F
 UniRef90_UP1000412B8BD
 UniRef90_M4CKK9
 UniRef90_J4SFT9
 UniRef90_UP10003B31482
 UniRef90_E5XT11
 UniRef90_I4YJ00
 UniRef90_A0A022FYM3
 UniRef90_A0A031JS13
 UniRef90_S3KF19
 UniRef90_UP100036C0552
 UniRef90_C2GFW6
 UniRef90_D9CJ47
 UniRef90_B8MSQ2
 UniRef90_G9NNQ3
 UniRef90_Q49R33
 UniRef90_S9S3J7
 UniRef90_A1R7J9
 UniRef90_R0H952
 UniRef90_A0B7G8
 UniRef90_J3D2X3
 UniRef90_UP10003816023
 UniRef90_UP100024908A2
 UniRef90_Q05QR5
 UniRef90_G0CZM6
 UniRef90_UP1000395B6A1
 UniRef90_U1V0Y7
 UniRef90_E1VVJ6
 UniRef90_W7INJ8
 UniRef90_U1RIE3
 UniRef90_C2D0W4
 UniRef90_UP10003B39C55
 UniRef90_G0LLP0
 UniRef90_D3V034
 UniRef90_C0ZXN2
 UniRef90_D9SQV4
 UniRef90_R9AG46
 UniRef90_U2XX02
 UniRef90_E1QDT1
 UniRef90_R7CPN8
 UniRef90_UP1000348EC8D
 UniRef90_I3UGD4
 UniRef90_R5S255
 UniRef90_A6Q2Y1
 UniRef90_E8Q5P1
 UniRef90_F5YM14
 UniRef90_M7TB93
 UniRef90_C1AV91

170 180 190 200

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

UniRef90_C5MCG0
 UniRef90_A0A031JP92
 UniRef90_I4B920
 UniRef90_B2AHK5
 UniRef90_Q8TRF7
 UniRef90_UPI0004216819
 UniRef90_M0UMU8
 UniRef90_L0KXE6
 UniRef90_UPI000479FB4B
 UniRef90_Q1NC89
 UniRef90_UPI0003B34529
 UniRef90_V7IAM8
 UniRef90_G0SHD0
 UniRef90_U2TAF2
 UniRef90_UPI000288AFE0
 UniRef90_Q3B598
 UniRef90_A4FMP1
 UniRef90_U3QPR4
 UniRef90_L1PGQ0
 UniRef90_UPI0004132F9E
 UniRef90_J9H6N2
 UniRef90_S7PZ14
 UniRef90_R6WVU1
 UniRef90_R7ACQ2
 UniRef90_UPI0003716E50
 UniRef90_C5EE70
 UniRef90_UPI0002F4F315
 UniRef90_M2XAL4
 UniRef90_F5XDS6
 UniRef90_F8A1C1
 UniRef90_UPI0004026136
 UniRef90_C3WDJ9
 UniRef90_UPI000419472C
 UniRef90_B4E7P2
 UniRef90_UPI0003FF3EB5
 UniRef90_UPI0003B2E95D
 UniRef90_H4GKE0
 UniRef90_UPI0003B3A43A
 UniRef90_W5Y172
 UniRef90_C1CVE0
 UniRef90_A6FC91
 UniRef90_A0A031HTM3
 UniRef90_KONST7
 UniRef90_UPI000474360B
 UniRef90_UPI000411E36F
 UniRef90_UPI000412B8BD
 UniRef90_M4CKK9
 UniRef90_J4SFT9
 UniRef90_UPI0003B31482
 UniRef90_E5XT11
 UniRef90_I4YJ00
 UniRef90_A0A022FYM3
 UniRef90_A0A031JS13
 UniRef90_S3KF19
 UniRef90_UPI00036C0552
 UniRef90_C2GFW6
 UniRef90_D9CJ47
 UniRef90_B8MSQ2
 UniRef90_G9NNQ3
 UniRef90_Q493R3
 UniRef90_S9S3J7
 UniRef90_A1R7J9
 UniRef90_R0H952
 UniRef90_A0B7G8
 UniRef90_J3D2X3
 UniRef90_UPI0003816023
 UniRef90_UPI00024908A2
 UniRef90_Q05QR5
 UniRef90_G0CZM6
 UniRef90_UPI000395B6A1
 UniRef90_U1V0Y7
 UniRef90_E1VVJ6
 UniRef90_W7INJ8
 UniRef90_U1RIE3
 UniRef90_C2D0W4
 UniRef90_UPI0003B39C55
 UniRef90_G0LLP0
 UniRef90_D3V034
 UniRef90_C0ZXN2
 UniRef90_D9SQV4
 UniRef90_R9AG46
 UniRef90_U2XX02
 UniRef90_E1QDT1
 UniRef90_R7CPN8
 UniRef90_UPI000348EC8D
 UniRef90_I3UGD4
 UniRef90_R5S255
 UniRef90_A6Q2Y1
 UniRef90_E8Q5P1
 UniRef90_5YM14
 UniRef90_M7TB93
 UniRef90_C1AV91

UniRef90_A3CT68
 UniRef90_UP1000376830A
 UniRef90_G7WRK5
 UniRef90_F5YYD7
 UniRef90_UP100036AA408
 UniRef90_U3Q500
 UniRef90_G6EGJ5
 UniRef90_K9HPT2
 UniRef90_M0L9L1
 UniRef90_UP100036A30FA
 UniRef90_UP100034A254F
 UniRef90_B6H7G0
 UniRef90_L0K0F1
 UniRef90_UP10003B33376
 UniRef90_UP10002554E70
 UniRef90_B8HNH3
 UniRef90_A0A014LCW3
 UniRef90_F8EZR2
 UniRef90_V4HFX9
 UniRef90_E1YDT0
 UniRef90_B8ID4
 UniRef90_W3XA79
 UniRef90_Q08N42
 UniRef90_UP100037BA13A
 UniRef90_F2NSN9
 UniRef90_UP1000465013F
 UniRef90_G9N089
 UniRef90_A0A017SJV9
 UniRef90_H6RWP5
 UniRef90_M2Q9G4
 UniRef90_UP10002DC13AD
 UniRef90_U1QHS3
 UniRef90_C7LK13
 UniRef90_G2XEF5
 UniRef90_U7UHF7
 UniRef90_E9FAR2
 UniRef90_B9QY08
 UniRef90_UP100026274C5
 UniRef90_W4LUV4
 UniRef90_A0A016QP50
 UniRef90_H5U8M9
 UniRef90_I4WIM2
 UniRef90_M0CXK9
 UniRef90_J3ANC4
 UniRef90_P0CM03
 UniRef90_T5A7C2
 UniRef90_E4NM98
 UniRef90_W3AS07
 UniRef90_W3XG41
 UniRef90_E7QX13
 UniRef90_B6HE25
 UniRef90_J3PZK7
 UniRef90_C7Z416
 UniRef90_G7W6P0
 UniRef90_UP100036C7977
 UniRef90_B7A7R2
 UniRef90_N9VYP6
 UniRef90_D5HB89
 UniRef90_G8Y724
 UniRef90_A3Z8I7
 UniRef90_Q3IRQ5
 UniRef90_G4NIJ9
 UniRef90_UP1000408C4E9
 UniRef90_Q28KT5
 UniRef90_A3SZL0
 UniRef90_C7ZFG6
 UniRef90_D5RMG1
 UniRef90_I3U9H5
 UniRef90_M9MIZ4
 UniRef90_F2ULJ3
 UniRef90_K9V5S1
 UniRef90_R0KGD0
 UniRef90_W9RQ13
 UniRef90_V5I3S1
 UniRef90_H1S105
 UniRef90_A0A017S0E5
 UniRef90_D0DCD0
 UniRef90_I2JZ43
 UniRef90_U5WLD3
 UniRef90_A0A024M1P4
 UniRef90_C5DQB1
 UniRef90_I4F6C5
 UniRef90_W6XB70
 UniRef90_UP1000348700E
 UniRef90_UP10002E7CFC5
 UniRef90_UP1000313BBC8

1 10 20 30 40

G A G P A I C L G N D I D T D
 V P L R Q S N V D T D
 V P L R R S N V D T D

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

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

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

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

P G F P E K V E G G I I F C D A D N I N T D
 I V F C D G D N I N T D
 V D T D

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

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

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

M E P F T V H S G V A M P L R R T D V D T D
 V I P F D R A N I D T D
 F G D D I D T D

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

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

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

G P A V S V R G N D I D T D
 P T S I E G E L I L C N A D N I N T D
 F P Q G E I R Q I S G S A F T L R G D D I D T D
 G N D I D T D

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

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

L E T R A I S L P E T N T D T D
 I T G E I V F L D S D N I N T D
 L F G D D L N T D
 F G D S L N T D
 A D N V N T D

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

50 60 70 80

D R

UniRef90_A3CT68	L I A G R Y L R T K	Y L K R V S K T G F D D A L F A	
UniRef90_UPI000376830A	Q I P A V	D V R E L A C H A M E G	
UniRef90_G7WRK5	V I P G P Y L R T K	D G	
UniRef90_F5YYD7	Q I P A V	Y L K R I T R T G F E	
UniRef90_UPI00036AA408		N V D T D Q I I P A P A V Y L K R V S R T G F E D G	
UniRef90_U3Q500	Q I P A R	F L K E I K R E T C G K N L F M D W R Y K K	
UniRef90_G6EGJ5	V I R I E R L A A L K A E E M G D Y A F E V L R Y R D		
UniRef90_K9HPT2	G I Y P G K Y T Y Q D D I T L E R Q A E V V M	E N Y D P E F A S L V A S M	
UniRef90_M0L9L1	Q I I P A	R F M K V V T F D G L G E F A F F D Q	
UniRef90_UPI00036A30FA		N V D T D Q I I P A P A V F L K R V T R T G F D D G	
UniRef90_UPI00034A254F	Q I L P S	K Y L K R V T R T G F E D A L F A	
UniRef90_B6H7G0	N I Y P G	K L T Y Q D N V S K D D M A A A C M Q N Y D	
UniRef90_L0K0F1	Q I I P A	R F M K V V T F D G L G E F A F F D Q	
UniRef90_UPI0003B33376	Q I I A S Q Y L L F P T I E E M K S H T F E S L D		
UniRef90_UPI0002554E70	E I I P S G E T T S S Y R S N P L A L A E F T L S R R D P E Y V G K A K A V K E G		
UniRef90_B8HNH3	R I I P A R F L R C	V T F D G L G Q Q V F A D D R	
UniRef90_A0A014LCW3	Q I I A A R H C L	R T T R T G F A E H L F A A	
UniRef90_F8EZR2	R I I P A	R F L R C V T F D G L G E Q A F R D E	
UniRef90_V4HF9X	Q I I P A	R F M K V V T F D G L G Q F S F F D Q	
UniRef90_E1YDT0	E I I P A R Y L T E N T K E A L K P Y L L E D I N L E G F D N K		
UniRef90_B8ID4	V I M P	K Q F L K G I D R S G L A Q G V L H D L R	
UniRef90_W3XA79	N I Y P G K Y T Y Q D D I T K E G M A E V C M S N Y D P K F K D I A K P N D		
UniRef90_Q08N42	A I I P	G E F C H L M D M E E I G R H A F H H V	
UniRef90_UPI00037BA13A	R I I P A	R F L K C V T F D D L A E G M F Y D E	
UniRef90_F2NSN9	E I I P A	K Y L T E N T K Q A L Q P Y L L E D L K L E G	
UniRef90_UPI000465013F			
UniRef90_G9N089	G I Y P G K Y T Y Q D N V P V E K M A E V C M		
UniRef90_A0A017SV9	G I Y P G K Y T Y Q D N V S E E T M A Q V C M E N Y D E Q F A S I A K A		
UniRef90_H6RWP5	Q I I P A E	Y L K R I T R T G F E D G L F V A W R	
UniRef90_M2Q9G4	A I I Y P G K Y T Y Q D D I T L E K Q A E V V M E N Y D P S F A G L V		
UniRef90_UPI0002DC13AD	R I I P A	R F L K C V T F D G L G E Q V F A D D R	
UniRef90_U1QHS3	Q I I L P A Q F M K E V	T F D N M A D Y L F Y N A R R D D G E F N D H P L N R	
UniRef90_C7LK13	Q I I P A R F L K L T K K	I N F G K N L F K D	W R
UniRef90_G2XEF5	N I Y A G K Y T Y Q D D I T P E R Q A E V V M E N Y D P T F A A T A		
UniRef90_U7UHF7	L I I P T	Q W L T L D T M D E I K T H A F E P L R	
UniRef90_E9FAR2	G I Y P G K Y T Y Q D N L P K E K M A A V C M E N Y D T E F T K L T K P		
UniRef90_B9QY08	Q I I P A R F M S T P R S E G Y G Q F L L H D L R R L D		
UniRef90_UPI00026274C5	V I I P G	R Y L V S I D P E E L G E H A F E P L G P	
UniRef90_W4LUV4	D I I P A	S F L Q Q S T D R K F F A E	
UniRef90_A0A016QP50	D I I L P	G K F A P F M A G E A V F Q	
UniRef90_H5U8M9	Q I I P	V R F L T H S S R T G F A D K	
UniRef90_I4WIM2	M I I L P	K Q Y L K S L D A Y G F G D F L F D D E R Y L D H G I D T	
UniRef90_M0CXK9	Q I I T P S R F I V S S D P D E L A T H A F E D L R P E F S E N V D S G D F		
UniRef90_J3ANC4	I I I F P A	R F L L I T A R A D L G E Y A F H D R R	
UniRef90_P0CM03	G M Y P G K Y T Y Q D D I T P E R Q A E V V M E N Y D P T F A A T A		
UniRef90_T5A7C2	N I Y A G K Y T Y	E D D M T R E D M A R V C M E N Y	
UniRef90_E4NM98	Q I I P A	R F M K V V T F D G L G Q F A F F D Q	
UniRef90_W3AS07	Q I I I A S Q Y L L Y P T I E E M K V H A F E S L D S E F I K C V E P G D F		
UniRef90_W3XG41	A I I L P A Q F L V T A K	D D E E F G	
UniRef90_E7QX13	Q I I P A	R F M K V V T F D G L G Q F A F F D Q	
UniRef90_B6HE25	A I I A P A E F L I G M K N N	M D A G L R C L V I H T H P	
UniRef90_J3PZK7	G I Y P G K Y T Y Q D D I S P E G Q A G V V M E N Y D R S F A E T V R D L Y P S		
UniRef90_C7Z416		F C D A D N I N R W H L S G E Q M S	
UniRef90_G7W6P0	E I I P A	K Y L T E I T K E A L K P Y L L E D L S L S G F N N K E	
UniRef90_UPI00036C7977	M I I P A R F M K S I T G L G S N V F R D I R E G A D G A I K E A R V F D D		
UniRef90_B7A7R2	R I I P A	R F M K S I T F E G L G Q Y L F Y D E R	
UniRef90_N9VYP6	M I I V P A R F M K A	L S R T G L G R H L F Q E L R Y A P	
UniRef90_D5HB89	Q I I V P A R F L K E V	T F D N M G E Y A F Y D V R R D D G S L N D H P	
UniRef90_G8Y724	G I Y P G K Y T Y Q D D I V P R S K M A E V C M E N Y D		
UniRef90_A3Z8I7	R I I P A R F L K C	V S F E A L G D Q V F A D D R S E L G G S H P	
UniRef90_Q3IRQ5	Q I I P A	R F M K V V T F D G L G E F A F F D Q	
UniRef90_G4NIJ9	A I I A P A Q F L L T S K D N K E L G S H C M E R N E P G F R D A V K D		
UniRef90_UPI000408C4E9	R I I P A R F L R C	V T F D G L G E Q V F A D D R	
UniRef90_Q28KT5	Q I I P A R F M S T P R R E G Y G R F L L H D L R F D A G G K E V L		
UniRef90_A3SZL0	Q I I P A R F M S A P R A	D G Y G K F L L H D L R Q D A V D H V	
UniRef90_C7ZFG6	T S P P A T E G E A L T D V L P G F P E K V E G E I V F C I Y P G R Y T Y Q D G		
UniRef90_D5RMG1	Q I I P A R F M K R P R S	E G Y G Q F L L Y D L R	
UniRef90_I3U9H5	E I I T P V A I I M S	H Y D D K L G G F A Y T	
UniRef90_M9MIZ4	G I Y P G K Y T Y Q D D I T P D K Q A E V V M	E N Y D A T F A S	
UniRef90_F2ULJ3	G I Y A G K Y T Y	R E D I D P Q Q Q A Q V V M E N	
UniRef90_K9V5S1	R I I P A R	Y L R S I T F D G L G Q H A F A D D R I G G Q H P F D	
UniRef90_R0KG0	G I Y P G K Y T Y Q D D I V T R E K M A E V C M E N Y D P S F G Q V A K A		
UniRef90_W9RQ13	Q I I P A E Y L T L V P S N P A E Y E K L G S Y A L C G L P S S Y A A R		
UniRef90_V51S31	G I Y P G K Y T Y Q D N V P E E T M A Q V C M S N Y D		
UniRef90_H1S105	Y I I A S S R K K D S L D P Q V L R R Y L L E D V D		
UniRef90_A0A017S0E5	A I I A P A	E Y L V I E C E T D E A L G Q H C M E H	
UniRef90_D0DCD0	I I I F P A R F L L	K I D R D G M D E C L F R D R R V G P A	
UniRef90_I2ZJ43	G I Y P G K Y T Y Q D D I V P R E T M	A K V C M Q N	
UniRef90_U5WLD3	A M Y P A F A M K M D R P E A A R H V F H Q L R P G W A D G V S P G D		
UniRef90_A0A024M1P4	A M Y P P D A M K L D P D A A K M V F Y D V R P G W T D Q V T R G D		
UniRef90_C5DQB1	G I Y P G K Y T Y Q D D I V P R E T M A K V C M E N Y D S A F G D I A K P	T N D D	
UniRef90_I4F6C5	D I I P A K R G		
UniRef90_W6XB70	E I I T P M S V L T R F D E R L G R F P Y V G F R T G D R N P I G		
UniRef90_UPI000348700E	R I I P A R F L K S L S	F D N L G E N V F H D D R K Y Y R S I K G N I H P F	
UniRef90_UPI0002E7CFC5	E I I T P V	H I L S H Y D N T L G E F A H T	
UniRef90_UPI000313BBC8	V I Y P A R F L T I T		

	90	100	110	120
UniRef90_A3CT68	S V W A E H A F E D L D P A L A P R L S G S V I V A G K N M G C G S S R E Q A V			
UniRef90_UPI000376830A	S W R K Q E D F V L N Q E P Y A R G S V L V A G P D F G T G S S R E H A V			
UniRef90_G7WRK5	L D P E F A K Q V R P G D V I V A G K N F G C G S S R E Q A P			
UniRef90_F5YYD7	L F A T W R T D P S F I L N L K P F D Q G S V L V A G P D F G T G S S R E H A V			
UniRef90_UPI00036AA408	L F A N W R R S D D F V L N Q E P F R N G S V L V T G P D F G T G S S R E H A V			
UniRef90_U3Q500	D G S L N K N F I L N N P F N F H G K I L L S G R N F G C G S S R E H A A			
UniRef90_G6EGJ5	D G S P N P D F V F N R E P F R G A P I L I A G T N F G C G S S R E A A V			
UniRef90_K9HPT2	T T K E V E S Q V V G G L K N G V V L V A G Y N F G T G S S R E Q A A			
UniRef90_M0L9L1	R F T E D D D L K D H P M N E D R F Q D S S V M V V N S N F G C G S S R E H A P			
UniRef90_UPI00036A30FA	L F A S W R S D P S F V L N Q E P Y D R G S V L V A G S D F G T G S S R E H A V			
UniRef90_UPI00034A254F	A W R T D P D F V L N R P F R D A S V L V A G P D F G T G S S R E M A V			
UniRef90_B6H7G0	P E F K G I A K P S D I L V A G F N F G C G S S R E Q A A			
UniRef90_L0K0F1	R F D E D D D Q K D H P F N E E R F Q D S S V M V V N S N F G C G S S R E H A P			
UniRef90_UPI0003B33376	P S F A S Q V Q P G D F V V A A E N F G C G S S R E Q A P			
UniRef90_UPI0002554E70	R R K A T G P V P A E I E A L Y A M K T P G C G N N K P G D G S A R E Q A A			
UniRef90_B8HNH3	A Q T E G Q H P F D L P Q Y Q G A R I L I V N A N F G C G S S R E H A P			
UniRef90_A0A014LCW3	W R A E P G F P L A D P A H A G A T I L L A G A D F G S G S S R E H A V			
UniRef90_F8EZR2	R F D E Q G K E K P H P F N D V R Y R G A E I I L V V N R N F G C G S S R E H A P			
UniRef90_V4HF9X	R F T D D D E E K D H P F N E E R F Q G A S V L A V N A N F G C G S S R E H A P			
UniRef90_E1YDT0	K D L K G K A V I I T T R E N F G C G S S R E H A P			
UniRef90_B8ID4	F D K D G V P R P D F V L N R P E W Q N A R F L V V G P N F G C G S S R E H A V			
UniRef90_W3XA79	R P E F Y A R A Q A Q G Q T L V V A G E G W G S G S S R E H A V			
UniRef90_Q08N42	R F E Q D G S G K N H P I D Q S E Y Q G A S V M V G P N F G C G S S R E H A P			
UniRef90_UPI00037BA13A	F N P K T D V L G K K V I I T T R E N F G C G S S R E H A P			
UniRef90_F2NSN9	P D F A S S V K P G D V I V A G K N F G M G S S R E Q A A			
UniRef90_UPI000465013F	E N Y D A A F K D I A Q P G D V L V G G F N F G T G S S R E Q A A			
UniRef90_G9N089	G D I L V T G F N F G C G S S R E Q A A			
UniRef90_A0A017SV9	T N E P D F V L N K S E Y A D A S V L V A G P D F G T G S S R E H A V			
UniRef90_H6RWP5	A S L R K E Q A A G T E A P E T K R G V V L V S G Y N F G T G S S R E Q A A			
UniRef90_M2Q9G4	A A L K G R H P F D Q P Q Y Q G A T I V L V V N R N F G C G S S R E H A P			
UniRef90_UPI0002DC13AD	F D Q K G N L I K N F I L N H E K F Y G E I L I T G K N F G C G S S R E H A A			
UniRef90_U1QHS3	F D Q K G N L I K N F I L N H E K F Y G E I L I T G K N F G C G S S R E H A A			
UniRef90_C7LK13	P E F R T I I K P N D I L V S G F N F G C G S S R E Q A A			
UniRef90_G2XF5	P E L A G Q I Q P G D I L V T G G S N F G C G S S R E Q A P			
UniRef90_U7UHF7	G D V L V T G F N F G C G S S R E Q A A			
UniRef90_E9FAR2	G D V L V T G F N F G C G S S R E Q A A			
UniRef90_B9QY08	D G L E C P D F P L N Q F P Q A S I L I A G R N F G S G S S R E A A V			
UniRef90_UPI00026274C5	D V Q E H L R R S D V V V A G R N F G C G S S R E Q A A			
UniRef90_W4LUV4	Y A F D R H D S A F R D R C K E T D T N I V I G G E N F A C C G S S R E Q A V			
UniRef90_A0A016QP50	T F A F H Y I R P E F A Q M R P G D V L I G G R N W G L G S S S R E Y A P			
UniRef90_H5U8M9	L F H D W R E E S D F V E N D P A Y A G A T V L V A G R D F G T G S S R E Y A V			
UniRef90_I4WIM2	P V A N R R I N P G F V L N R A P Y R H G T V V L A Q A N F G C G S S R E H A V			
UniRef90_M0CXK9	F D A D G N E V Q G F V L N S E Q F R E A P V L V A G A N F G S G S S R E Q A V			
UniRef90_J3ANC4	R E L R T A L P T A S S P S T L P G A I L L S G Y N F G T G S S R E Q A A			
UniRef90_P0CM03	D P D F R T V A K P H D I L V S G F N L G C G S S R E Q S A			
UniRef90_T5A7C2	R F D D D D E P K D H P M N E D R F K D S S V M V V N A N F G C G S S R E H A P			
UniRef90_E4NM98	S H C L E Y T H P D F R Q R V K E G S K I V V A G K A F G C G S S R M E A V			
UniRef90_W3AS07	F D S N D D P Q P H P F N D D A H N G A S I L V V N A N F G C G S S R E H A P			
UniRef90_W3XG41	K F R E R A Q Q G F N I V V G G K G F G C G S S R E Q A V			
UniRef90_E7QX13	P S T G T L P A P A R A Q Q S R I L T G T G V V L V V G Q N F G T G S S R E Q A A			
UniRef90_B6HE25	E V C M E N Y D P E F R N T A R A G D I L V A G F N F G C G S S R E H A P			
UniRef90_J3PZK7	D I K D K A V I V T R A N F G C G S S R E H A P			
UniRef90_C7Z416	F D E A G N P K P H P L N D P R Y G G A T I L L V E S G F G S G S S R E H A P			
UniRef90_G7W6P0	D G V E R E D F V L N R G A T R G A Q I L I A D R N F G C G S S R E H A P			
UniRef90_UPI00036C7977	M T T E Q M E N Y D T E F R N I R P N D V L V A G Y S F G S G S S R E Q A A			
UniRef90_B7A7R2	A D F G K K T K S S D I I V S G Y N F G T G S S R E Q A A			
UniRef90_N9VYP6	F D Q P A H A G A S I L V V N G N F G C G S S R E H A P			
UniRef90_D5HB89	R F D E E D N E K D H P F N E D Q Y Q D A N V M V V N A N F G C G S S R E H A P			
UniRef90_G8Y724	G H E V I V G G K A F G C G S S R Q E A V			
UniRef90_A3Z8I7	Q Q M Q G K H T F D L P E Y Q G A N L L V V N A N F G C G S S R E H A P			
UniRef90_Q3IRQ5	K V E Q G A K I L I S R R N F G S G S S R E A A V			
UniRef90_G4NIJ9	L D R H A G A D V L I T R R N F G S G S S R E A A V			
UniRef90_UPI000408C4E9	Y D T S F V S N P Q Y Q E A K I L I V N R N F G C G S S R E H A P			
UniRef90_Q28KT5	Q P Q Y Q E A K I L I V N R N F G C G S S R E H A P			
UniRef90_A3SZL0	G D V L V S G F N F G C G S S R E Q A A			
UniRef90_C7ZFG6	F N R Y P N A T I L V V N E N F G C G S S R E H A P			
UniRef90_D5RMG1	T V A S L R S N S S A A E S D G V K L G P V L L G G Y N F G T G S S R E Q A A			
UniRef90_I3U9H5	Y D T S F V S N V R R G D V L V T G F G F G T G S S R E Q A A			
UniRef90_M9MIZ4	Q P Q Y Q E A K I L I V N R N F G C G S S R E H A P			
UniRef90_F2ULJ3	G D V L V S G F N F G C G S S R E Q A A			
UniRef90_K9V5S1	I L V V A G K N F G C G S S R E H A P			
UniRef90_R0KGD0	I L V V A G K N F G C G S S R E Q A A			
UniRef90_W9RQ13	F L E P G E T K S K Y S I V I V G G A N F G C G S S R E H A P			
UniRef90_V513S1	P N F S S I A K E G D I L V S G Y N F G C G S S R E Q A A			
UniRef90_H1S105	P A F A A S V A D G D I L V A G H N F G C G S S R M E V A V			
UniRef90_A0A017S0E5	T F P E F R G A V Q A G R Q V I V A G E S F G C G S S R E E A P			
UniRef90_D0DCD0	G E A L D H P F D D P A L R D A Q V L V A G P G F G C G S S R E Q A V			
UniRef90_I2JZ43	Y D P E F G S K T K A G D I L V A G K N F G C G S S R E Q X A			
UniRef90_U5WLD3	I L V V A G K N F G C G S S R P V A A			
UniRef90_A0A024M1P4	UniRef90_A5DQB1	P D H L K Q Y A L E H I G V G E L L K Y D E I E A G D N F G C G S S R E I A P		
UniRef90_I4F6C5	P D A L R A G F Q V L V A G R R Y G K G S S R E H S P			
UniRef90_W6XB70	D D S D R R N A N I L F V A Q N F G C G S S R E H A A			
UniRef90_UPI000348700E	G L S C Q G E N P I A R Q A L R Q A G F Q V L V A G R R Y G K G S S R E H S P			
UniRef90_UPI0002E7CFC5	A R D G L G A Y A F A D R A F R I K D V P V L V A G A N F G C G S S R E Q A V			
UniRef90_UPI000313BBC8				

130 140 150 160

UniRef90_A3CT68	V A L R E A G V V A V V A E S F A R I	F F R N A V N V G L P V I	
UniRef90_UPI000376830A	W A L K D Y G F R A V L S A R F G D I	F R G N S G K Q G L L L A A Q L A	
UniRef90_G7WRK5	L A L R E A G V A C V I A K S F A R I	F Y R N A I N V G L P V V E A A V V A	
UniRef90_F5YYD7	W A L L D Y G F R V V I I S S R F A D I	F R G N A G K A G L L L A A Q V A	
UniRef90_UPI00036AA408	W A L M D Y G F R V V L S P R F A D I	F R G N S G K A G L L V A G I M E E S D V E	
UniRef90_U3Q500	W A L F Y Y G F R V V I I S S S F F A D I	F K E N A L N N G L L L I I E V S E F F L K	
UniRef90_G6EGJ5	W A L K G L G L R V V I I A D S F G D I	F A A N C F Q N G I L P I T L P P A Q V E	
UniRef90_K9HPT2	T A L K A A G I P L V I A G S F G D I	F K R N A I N N G L V C L E S P E L V K D	
UniRef90_M0L9L1	Q A L M R W G I D A L I G E S F A E I	F A G N C L A L G I P A E T I E E L Q A W	
UniRef90_UPI00036A30FA	W A L M D Y G F R V V V S S R F G E I	F K G N S S K A G L L L A A T V D Q S D V E	
UniRef90_UPI00034A254F	W A L Q D Y G F R V V I I A P R F G D I	F F S N A G K A G L L A V R L D E D V V E	
UniRef90_B6H7G0	T A I L A K Q I P L V I A G S F G N I	F S R N S I N N A L M G L E V P R L I E R	
UniRef90_L0K0F1	Q A L M R W G I D A I I G E S F A E I	F A G N C L A L G I P T V T A D G E T I E	
UniRef90_UPI0003B33376	S V L K A L G V K A V V I A K S F A R I	F Y R N A I N I G L P V I V C K E L Y D H	
UniRef90_UPI0002554E70	S C Q R V L G A S A N F A L E Y A K R Y	R S N L I N W G I L P F L V K D G A A F	
UniRef90_B8HNH3	Q A I T A K W G I Q A I V G E S F A E I	F L G N C V A I G L P C L V A D P V T V R	
UniRef90_A0A014LCW3	W A L Q D H G F A V V I I A T R F G D I	F A D N A V R S G L V P A V L A D D E V S R	
UniRef90_F8EZR2	Q A L A R W G I R A L L G I S F F A D I	F A G N C C A A I G L P V V T A P D E P V R	
UniRef90_V4HF9X	Q A L M R W G I D A I V G E S F A E I	F A G N C L A L G V P T V T A D H Q Q W	
UniRef90_E1YDT0	W A F E V N D I N L V I A P G F A R I	Y K R N M F N C G M M A V E L P A E T I D	
UniRef90_B8ID4	W G L L Q L G I R A I V I G T T F A G I	F A D N A A N N G L L L V T L D P E Q A S R	
UniRef90_W3XA79	T A I L A K Q I P L V V S G S F G N I	F S R N S I V N N G L L G L E V P R L I E R	
UniRef90_Q08N42	W A L Q G A G I Q A V I A R S Y G F I	H K R N L V N E G L P Y L V V S A P A F H	
UniRef90_UPI00037BA13A	Q S I R R F G F R A I V G V S F A E I	F F G N S V N L G M P C V S L S L K D N E	
UniRef90_F2NSN9	W A L E V N G I Y C V I A V N F A R I	F R Q N M Y N C G L L D M S K K D D	
UniRef90_UPI000465013F	Q A L K H L G V A G I V A R S F A G I	F Q R N A I N N G L P V F V	
UniRef90_G9N089	T A L L A K K I P L V V A G S F G N I	F S R N S I N N A L L T V E V P R L V Q R	
UniRef90_A0A017SV9	T A L L A K R I P L V V S G S F G N I	F S R N S I N N A L M G L E V P R L I S R	
UniRef90_H6RWP5	W A L L D G G F R V V I I S S R F A D I	F K N N S T K S G L L T V V M A Q A E V E	
UniRef90_M2Q9G4	T A L K S A G I P L V I A G S F G D I	F K R N A I N N G L V C I E S P E L V A D	
UniRef90_UPI0002DC13AD	Q A I L A R W G I Q A V L I G E S F A E I	F F G N C V A I G I P C L V I A Q V Q G L	
UniRef90_U1QHS3	Q A M M R W G I D A G I V G E S Y A E I	F R D N C K S L G I P H E T V V E L Q E W	
UniRef90_C7LK13	W A I T R D Y G F K V V I I S N Y F A D I	F K Q N A L I N N G L L I I E L K N T F L K	
UniRef90_G2XEF5	T A L L A K H I P L V L A G S F S N I	F V R N G I N N A L P C L E L P R L V E R	
UniRef90_U7UHF7	E C I S A L Q V P C I I A K S F A R I	F F R N A I I N N G L L L L E S R E L P	
UniRef90_E9FAR2	T A I L L A R D I P L V I A G S L G N I	F S R N S I N N A L V C L E M P R L V E H	
UniRef90_B9QY08	Y A L V D A G F R A V V V A P S F G D I	F A S N A V N N G L L P A L I S E A D L E	
UniRef90_UPI00026274C5	S C L I G A G I I K A V V V A A S F S R V	F F R N A I N T G L I A V E C	
UniRef90_W4LUV4	Y A I K E N N V V C V I A Q S Y P D I	F Y R N S L S N G L V L I A V P D T S	
UniRef90_A0A016QP50	Q A L K L Q I G G I I A P S F A R I	H Y R N L L N G L I P A F E E A D L T	
UniRef90_H5U8M9	W A L Q N Y G F R A V V V A P R F G D I	F R G N A L T N G L V A V T L P A P D I E	
UniRef90_I4WIM2	W A L R D F G V R V L V V A P S Y G D I	F R D N C F N N G L L L A I V V E Q P V V D	
UniRef90_M0CXK9	L S L V G A G V V A G V V V A Q S F A R I	P V L I C P E A G I	
UniRef90_J3ANC4	W A L L G R G T R A V V V S S F G E I	F F R N A I N N G L V P L L P K E D I A	
UniRef90_P0CM03	T A I K N A G I P L V I C G S F G D I	F K R N S I N N G L L I I E S P	
UniRef90_T5A7C2	T A I L A K D I P L V I A G S L G N I	F S R N S I N N A L L G L E S P R L I K R	
UniRef90_E4NM98	Q A L M R W G I D A I I I G E S F A E I	F A G N C C L A L G I P T V T A D H E T I A	
UniRef90_W3AS07	A V L K A C G I K A V L I A K S F A R I	F Y R N S I N N L G I P V I I C S D I Y D H	
UniRef90_W3XG41	Q A L L G V G V Q C V I A R S F A F I	Y A R N Q P S L G I L G I T I T D E A F Y	
UniRef90_E7QX13	Q A L L A R W G I D A I V G E S F A E I	F A G N C C L A L G I P T V T A D A E T V E	
UniRef90_B6HE25	M A L L G C G V Q C V I A K S F S F I	F Q R N M P S L G L L G I T I M E D E S F F	
UniRef90_J3PZK7	T A I L R N A G I P L V I A A S F G E I	F K R N A I N N G L V C L E S R E	
UniRef90_C7Z416	T A I L L A K E I I P L V V S G S F G N I	F S R N S I N N A L L G V E V P R L V	
UniRef90_G7W6P0	W A I L E V N G I N V V I A E N F A R I	F R Q N M Y N C G M F A I E L S K E K I D	
UniRef90_UPI00036C7977	W A I L A G Y G F R C I I A E S F A E I	F Q G N C H K N G I L T I S L P A S E I D	
UniRef90_B7A7R2	Q A I K R A G F R A I I I G E S F A E I	F F G N A I A I G L P A V T M A P E D L A	
UniRef90_N9VYP6	W A L R D F G I R C V I A P S F G D I	F S N N A R K N G L L R L P A A I C D	
UniRef90_D5HB89	Q A L M R W G I D G L I V G E S F A E I	F A G N C C Q A L G L P T A T A D H E T V	
UniRef90_G8Y724	T A I L L A R G M K I V A G S F G N I	F S R N S I N N A L L T L E I P A L I D K	
UniRef90_A3Z8I7	Q A L M R W G I R A L I I G V S F A E I	F H G N C C L A L G I P C A T A T P Q Q V L	
UniRef90_Q3IRQ5	Q A L V R W G I D A I I G E S F A E I	F A G N C C L A L G I P T V T A D T E T I E	
UniRef90_G4NIJ9	Q A L L G V G A K C V I A K S F A F I	F A R N M P S L G L L G F T I A D E R F Y	
UniRef90_UPI000408C4E9	Q A I N K W G I Q G I I I G E S F A E I	F L G N C V S I G I P C V T A E P E D I	
UniRef90_Q28KT5	Y A L V D F G I R A V V V A P S F G D I	F A S N A V N N G L L P A R I T A S D C	
UniRef90_A0A3SZL0	Y A L V D F G I R A V V V A P S F G D I	F Q S N A V N N G L L P A R V S D A E I E	
UniRef90_C7ZFG6	T S I L A N R I P L V I V A G S F S N I	F S R N S I V N N G L L G I E I P K L V E R	
UniRef90_D5RMG1	Y A L V D G G F R C V I A P S F G D I	F S S N A V N N G L L P A R L A E G E I E	
UniRef90_I3U9H5	A A E K H A G V R V L V F A R S F E R I	I Y R Q N A D N I G L L L T S T	
UniRef90_M9MIZ4	T A L L K Y A G V P L V L V A G S F G D I	F K R N A I N N G L L I C L E S H E T A L Y	
UniRef90_F2ULJ3	T A L L K H A G V S L V L V S G S F V S E T Y	K Y R N A L N N G L L V L E V P A L V T D	
UniRef90_K9V5S1	Q A I L A K W G I K A L I I G E S F A E I	I F F G N C V A I G I P P	C
UniRef90_R0KG0	T A I L A K G I I P L V V I A G S F G N I	F S R N S I N N A L M G V E V P K L A N R	
UniRef90_W9RQ13	V A L G A A G T A A V V A E S Y A R I I	F F R N S I V A T G E V Y P L E S E	
UniRef90_V51S31	T A I L A K K I P L V V V S G S F G N I	F S R N S I N N A L M G L E V P R L I S R	
UniRef90_H1S105	T V V L L A A G I R V V V V A R S F S R T Y	W R N A I N N G L L L V T	
UniRef90_A0A017S0E5	R A L I G L G V Q C V I I A K S F A F I	I Y G R N Q P T L G L L G I T I R D E S F Y	
UniRef90_D0DCD0	W A L V D W G I R V V I I A P D F G D I	F A G N A A K N G L L C V R L P A D T C R	
UniRef90_I2JZ43	T A I L L A R D M P M V V A G S F S N T Y	F G R N A I N N A L L T L Q I P E L L A K	
UniRef90_U5WLD3	L F V E L G I A G L V A E E F N S L	L F F R N A V N A G L P A M T V P H A T T I	
UniRef90_A0A024M1P4	L F N Q L G V A A L I A E E F N S L	L F F R N A V N A G L P A M T V P E A T T	
UniRef90_C5DQB1	T A L L L A K G I P L V V V S G S F G N I	F F R N S I V N N A L L T L E I P E L I S L	
UniRef90_I4F6C5	I A L K A A G I K K V K A R S F A E I	F Y R N S I N I G L P L E I I	
UniRef90_W6XB70	V A E Y R A G I R L V I I A K S F E R I	I Y R Q N A D N I G L F T S T D F G L I	
UniRef90_UPI000348700E	Q A L L R R G I E V I V V G E S F G E I	F L G N C S V I G L P C V V V V D	
UniRef90_UPI0002E7CF5C	T A E K L A G V Q L V I I A E S F E R I	I Y R Q N A D N I G L F T S T D F G L L	
UniRef90_UPI000313BBC8	W A L L L G C G V R C I I I A P G F G E I	F A G N C C I R N G V L P V T L D A A D V A	

UniRef90_A3CT68
 UniRef90_UPI000376830A
 UniRef90_G7WRK5
 UniRef90_F5YYD7
 UniRef90_UPI00036AA408
 UniRef90_U3Q500
 UniRef90_G6EGJ5
 UniRef90_K9HPT2
 UniRef90_M0L9L1
 UniRef90_UPI00036A30FA
 UniRef90_UPI00034A254F
 UniRef90_B6H7G0
 UniRef90_L0K0F1
 UniRef90_UPI0003B33376
 UniRef90_UPI0002554E70
 UniRef90_B8HNH3
 UniRef90_A0A014LCW3
 UniRef90_F8EZR2
 UniRef90_V4HF9X
 UniRef90_E1YDT0
 UniRef90_B8ID4
 UniRef90_W3XA79
 UniRef90_Q08N42
 UniRef90_UPI00037BA13A
 UniRef90_F2NSN9
 UniRef90_UPI000465013F
 UniRef90_G9N089
 UniRef90_A0A017SV9
 UniRef90_H6RWP5
 UniRef90_M2Q9G4
 UniRef90_UPI0002DC13AD
 UniRef90_U1QHS3
 UniRef90_C7LK13
 UniRef90_G2XF5
 UniRef90_U7UHF7
 UniRef90_E9FAR2
 UniRef90_B9QY08
 UniRef90_UPI00026274C5
 UniRef90_W4LUV4
 UniRef90_A0A016QP50
 UniRef90_H5U8M9
 UniRef90_I4WIM2
 UniRef90_M0CXK9
 UniRef90_J3ANC4
 UniRef90_P0CM03
 UniRef90_T5A7C2
 UniRef90_E4NM98
 UniRef90_W3AS07
 UniRef90_W3XG41
 UniRef90_E7QX13
 UniRef90_B6HE25
 UniRef90_J3PZK7
 UniRef90_C7Z416
 UniRef90_G7W6P0
 UniRef90_UPI00036C7977
 UniRef90_B7A7R2
 UniRef90_N9VYP6
 UniRef90_D5HB89
 UniRef90_G8Y724
 UniRef90_A3Z8I7
 UniRef90_Q3IRQ5
 UniRef90_G4NIJ9
 UniRef90_UPI000408C4E9
 UniRef90_Q28KT5
 UniRef90_A3SZL0
 UniRef90_C7ZFG6
 UniRef90_D5RMG1
 UniRef90_I3U9H5
 UniRef90_M9MIZ4
 UniRef90_F2ULJ3
 UniRef90_K9V5S1
 UniRef90_R0KGD0
 UniRef90_W9RQ13
 UniRef90_V51S1
 UniRef90_H1S105
 UniRef90_A0A017S0E5
 UniRef90_D0DCD0
 UniRef90_I2JZ43
 UniRef90_U5WLD3
 UniRef90_A0A024M1P4
 UniRef90_C5DQB1
 UniRef90_I4F6C5
 UniRef90_W6XB70
 UniRef90_UPI000348700E
 UniRef90_UPI0002E7CF5C5
 UniRef90_UPI000313BBC8

170 180 190 200

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

I D D G D E I C M N L G E G V V Y N H T T G E T Y N A E A
 V L M D A A E S G A V

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

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

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

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

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

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

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

P V P

210 220

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

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

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

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

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

L P E F L Q T L V E Q G G L K A Y T K A K L A

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

S Q M E T E I F Q F G G I

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

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

G E M P P N V Q E I I A K G G I V

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

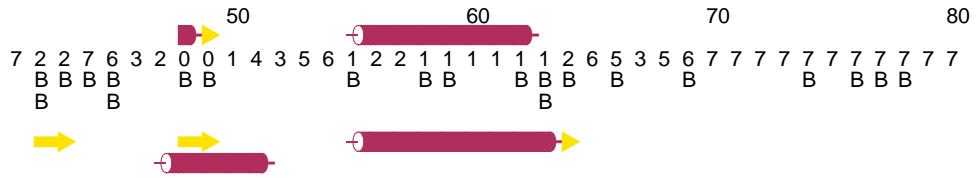
G E L P P N V Q E I I A K G G L E K W V K N
E P V P D I V L A I R A A G G L V A Y L R E H R K
F E L D N L E I K M L Q N K G L A E A Y K K F E K

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

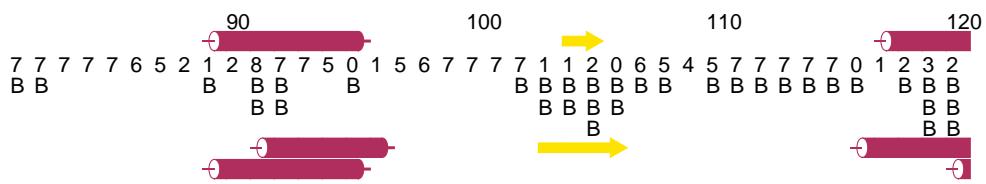
F A I P E P Q R Q A L L N G

jnet
conf
sol25
sol5
sol0
jhmm
ipssm

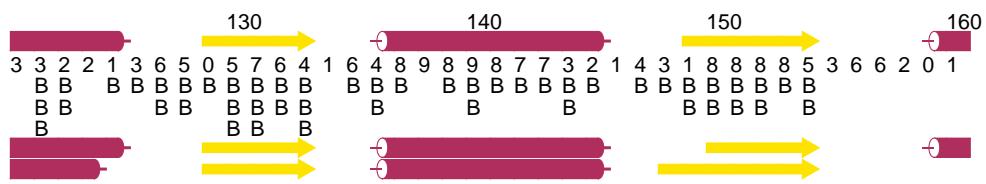
jnet
conf
sol25
sol5
sol0
sol0
jhmm
jpssm



jnet
conf
sol25
sol5
sol0
jhmm
jpssm



jnet
conf
sol25
sol5
sol0
jhmm
jpssm



jnet
conf
sol25
sol5
sol0
jhmm
ipssm

jnet
conf
sol25
sol5
sol0
jhmm
ipssm