

	1	10	20	30	40	
QUERY	A S S T N L	K D I L A D L I	P K E Q A R I	K T F R Q Q	H G N T V V	G Q I T V D
UniRef90_X1YBN5	S D S T D L	K A V L V E K I	P K E Q E R I	K N F R K Q	H G A T K V	G E V T V D
UniRef90_UPI000359FF7A	S S S T N L	K D V L E K I	P E K Q K E V	Q E F R K K	H G S T K V	G E V T V D
UniRef90_H2Y5U8	S A S S N L	K D V L A E K I	P E K Q K E I	I E F K K E	F G G A K V	G D V T V D
UniRef90_UPI00026573D6	A D S T D L	K G I L A D K I	A D E R V R V	K E F R Q K	F G S Q T V	G E V T V D
UniRef90_R7VHK1	S T N L	K D V L S D L I	P E H Q K I	V K D F R S	H G S T K V	G E V T V D
UniRef90_Q0V2M2	S K T T S L	K E T F A N K L	P G E I E K I	K K L R K E	H G N K V I	G E V T L D
UniRef90_D8RD53	T T D L	R S R L A E L I	P G E Q E R L	K K L K K E	H G S V P L	G Q T T V D
UniRef90_A7Rl62	S L K T T L	E K I L V	P E K Q Q E V	L S F R K K	H G N K K L	G E Y T I D
UniRef90_UPI00022CAC42	T D L K K I	L A E K I	P K E Q E R V	A A F R K K	Y G T T K V	G D V T V N
UniRef90_F5HE76	A Y A Q S L	K D R M A E L I	P Q E I E N V	K A T R A A	H G A K S L	G D V T V D
UniRef90_A0A024JNG3	A K E P T L	K E R F A E L L	P E K I E Q I	K K L R K E	H G N T V I	G E V L L D
UniRef90_U4L357	S T Q K D L	K E T L K E V I	P A K R E Q L	K K L K A E	H G N K V I	G E I K V E
UniRef90_L0PDR3	T T L K T K L	M D I I	P Q E Q E K V	R E L R K	H G K K S L	G E V T L D
UniRef90_A8JHC9	N T D L K	Q A L R E L I	P A Q Q E R L	K A L K K G	H G S K S L	G E V T V D
UniRef90_T0RFQ2	S T S S L	F E V L K E Q V	P L R Q E A M	K K L K A E	H G N K V L	G E V T V D
UniRef90_N0DTE0	E P T L	K E R L T Q I I	P A K I A Q V	K K L K E E	H G E K I I	G T C T V A
UniRef90_F0YCH1	A S S L	K E V L A E Q I	P A K Q A E I	K E I K T K	H G S K V L	G E V T L D
UniRef90_Q75ES5	E K S L	K E R F A E I F	P A K A E E I	K Q F K K Q	H G K V V I	G E V L L E
UniRef90_S7QGM5	A S T Q S L	K E V L Q D V V	P A K Q E Q L	K K L K A E	H A Q T V I	G D V K V E
UniRef90_K5X4S5	S L K E R L A E L I	P A E I E N V	K A T R A A	H G S K S F	G P V I V D	Q
UniRef90_K3VF07	A K T Q T L	K E R F A E L I	P E K I E Q V	K A L R K E	H G S K V I	D K V T L D
UniRef90_UPI000273CF37	A S S K N L	K D I L A D L I	V K E Q A R I	K T F R Q Q	H G K K V V	G Q I T A G
UniRef90_G8TH82	S L K D R F K	D V K S E A	H A A E V K E	L L K Q N G	S K K I	G E V Q L S
UniRef90_M5GEI6	A S T K S L	E D T L A D L I	P A K Q E Q L	K A L R L N	H G G D V I	G D I K V E
UniRef90_W8C3B4	D L R T V V A E Q V	K S E R A R V	K K F A V E	K A N T K I	G E V T V S	Q
UniRef90_I0AN18	S Q V L	K N K V L K E K I	E G W R P R T	A R L T K E	F G N V K I	D E V T I G
UniRef90_P24118	S Q T N L	K K V I A E I I	P Q K Q A E L	K E V K E Y	G D K V V	G Q Y T V K
UniRef90_X8JF07	A S T K T L	K E T L Q E I I	P A K Q A Q I	K E L R T N	H A G V K V	G D V K I E
UniRef90_G0QN84	G N S T N L	K Q V L K D L I	P A Q K E E L	R E I R E K	Y G S T K N I	G E F N V K
UniRef90_U7PMQ9	S A E P D L	K A T L K E V I	P A K R E L L	K K V K A	N G S K V I	G D V K V E
UniRef90_Q9M1D3	S S E L D L	K S Q M Q E I I	P E Q Q D R L	K K L K S E	Q G K V P V	G N I T V D
UniRef90_W9VDQ0	A A E P S L	K A T L Q S V I	P E K R E L L	K Q V K S	H A D K K I	G D I T I G
UniRef90_F4S4M1	S T K S I	H D E L A E I I	P E R L E L A	K K L K S E	H G D K K L	G D V Q V S
UniRef90_UPI0003A97C76	E S N I	K E G G E A K I	G G E N V T L	P V Y K G T	L G P D V V	D V R G L F
UniRef90_C0S9Y7	A E S E L	K T V F E K A L	P A K K E L F	Q E V K K R	G E D V I	G E V T V A
UniRef90_UPI00036329AC	S L K Q K F A E K A	L A L Y T E L	R A I N K E	H G N Q K V I	D E V T V L	S Q
UniRef90_UPI000373DC29	S D K K A T	L T I A G K D	P I E L P I Y S	G S L G P D	V V D V S G	M F T
UniRef90_UPI0002F087A7	T T L Q E T	L A A Q V	P E K Q K K M A E	L K K S Y G S	E V I G Q V T V	D Q
UniRef90_B7G9P5						
UniRef90_A0A059LS11						
UniRef90_D9QIX4						
UniRef90_J9I3V4	S F T S	C I N P L L S Q K I	S E S K E T F Q K L	K T E Y N K	V K I E D I R K L F	T
UniRef90_B4RBX9			I G G K D V E L	P V L K G T V I G	P D V V D E T D T F	T
UniRef90_X1RRJ0						
UniRef90_UPI0004726BEF	S T N T E L	P M V E G T L G	P K V I D I R K L Y A Q T G	H		F T
UniRef90_Q2R339						
UniRef90_A4XV98						
UniRef90_UPI00026257D1						
UniRef90_UPI0002557CA6						
UniRef90_UPI0003705DFC	G K E L E L	E T L S G S V G	P S V V D I R S L Y S D			
UniRef90_V5SEA2						
UniRef90_B0SZ03						
UniRef90_A0Z1T4						
UniRef90_Q0F001						
UniRef90_B8GQW7						
UniRef90_W8F7E0						
UniRef90_UPI00038145EE						
UniRef90_E0XT45						
UniRef90_Q43175	S S G L D L R S E L Q E L I	P E Q Q D R L K K I K S	D M K G S I G N I T V D M			
UniRef90_B2JMF3						
UniRef90_F4C788						
UniRef90_G7UT82						
UniRef90_M5EBI7	A S T K S L T E A V A E I V	P A K R E Q L A K L K S E	H G D A S L G D S K V S H			
UniRef90_S4RXU5	S S T T N L K D V L S E I I	P K E Q A R V R D F R Q E N G N A V I	G Q V T V D M			
UniRef90_F2IGT8						
UniRef90_K0C2T6	S S K N L	T L T D N T T G K S V E L	P L L E G T L G N S T I G E L G Y F T			
UniRef90_W4KL86						
UniRef90_E0TG23						
UniRef90_UPI0004560179	A S T K S L K D A V A E I V	P E K Q E Q K K L K A D Y A D A S L G E I K V S N				
UniRef90_W0SF54						
UniRef90_A8TUI2						
UniRef90_B8EK89						
UniRef90_Q6FKS4	S T A S S L K Q R L K E V I	P D K R E K F T K I K K N Y S D V K V G D I T I G S				
UniRef90_V8G954						
UniRef90_M5R9V9						
UniRef90_F8EL97						
UniRef90_A0A023D7L6						
UniRef90_A9HlI7						
UniRef90_K2LX45	S K T S H T V T L T D N A T	G K S I E L P V I E G S V G P S V I D E T G Y F T				
UniRef90_U2J0Z6						
UniRef90_U2XQC0						
UniRef90_Q0FAP0						
UniRef90_UPI0004134D17	T D L K S V A L A A G G K N V E L	P V H T G T L G A P C I	D E T G L F T			
UniRef90_UPI0002558683						
UniRef90_D3S905						
UniRef90_UPI000410F4C9						
UniRef90_UPI0001D2F4AD						
UniRef90_D6ZAD2						
UniRef90_F5YSI0	A A T D D T A T L	K Y P G G E L E L P I V H A T D G S D K T G Y T T F D N				
UniRef90_UPI0003FA67CC	K A T L Q	I D G Q S I E L P V L S G T A G Y D V I D V R T L F T				
UniRef90_UPI0003625695						

		50	60	70	80																																				
QUERY	MY	G	G	M	R	G	M	K	G	L	V	Y	E	T	S	V	L	D	P	D	E	E	G	I	R	F	R	G	Y	S	P	E	C	Q	K	M	L	P	K		
UniRef90_X1YBN5	MY	G	G	M	R	G	I	K	G	L	V	Y	E	T	S	V	L	D	P	D	E	E	G	I	R	F	R	G	Y	S	P	E	C	Q	K	M	L	P	K		
UniRef90_UPI000359FF7A	MY	G	G	M	R	G	I	K	G	L	V	Y	E	T	S	V	L	D	P	D	E	E	G	I	R	F	R	G	Y	S	P	E	C	Q	K	M	L	P	K		
UniRef90_H2Y5U8	MY	G	G	M	R	G	I	K	G	M	V	W	E	T	P	S	V	L	D	P	E	E	E	G	I	R	F	R	G	Y	S	P	E	C	Q	K	M	L	P	K	
UniRef90_UPI00026573D6	MY	G	G	M	R	G	I	K	G	L	V	T	E	T	S	H	L	D	P	E	E	E	G	I	A	F	R	G	Y	T	P	Q	L	R	E	K	L	P	K		
UniRef90_R7VHK1	MY	G	G	M	R	G	I	K	G	L	V	T	E	T	S	V	L	D	P	E	E	E	G	I	E	F	R	N	Y	T	P	Q	L	R	E	K	L	P	K		
UniRef90_Q0V2M2	V	Y	G	G	A	R	G	I	K	S	L	V	W	E	G	S	V	L	D	S	E	E	E	G	I	R	F	R	G	K	T	P	E	C	Q	Q	K	L	P	K	
UniRef90_D8RD53	A	I	G	G	M	R	G	I	K	G	M	L	W	E	T	S	V	L	D	P	E	E	E	G	I	R	F	R	G	L	S	P	E	C	Q	Q	E	K	L	P	A
UniRef90_A7R162	A	Y	G	G	M	R	G	I	K	G	L	V	T	E	T	S	V	L	D	P	E	E	E	G	I	E	F	R	G	K	T	P	Q	L	R	E	K	L	P	K	
UniRef90_UPI00022CAC42	I	Y	G	G	M	R	G	M	L	G	L	V	W	E	T	P	S	V	L	D	P	E	E	E	G	I	K	F	R	G	K	S	L	E	C	Q	C	K	L	P	K
UniRef90_F5HE76	A	Y	G	G	M	R	G	I	K	G	L	I	W	E	G	S	V	L	D	P	N	E	E	G	I	R	F	R	G	L	T	P	E	C	Q	Q	K	L	P	T	
UniRef90_A0A024JNG3	V	Y	G	G	Q	R	G	I	K	A	L	V	W	E	G	S	V	L	D	P	E	E	E	G	I	R	F	R	G	K	T	P	D	L	Q	K	E	L	P	K	
UniRef90_U4L357	V	I	G	G	M	R	G	L	K	A	M	L	W	E	G	S	V	L	D	A	N	E	E	G	I	R	F	H	G	K	T	K	D	L	Q	K	E	L	P	K	
UniRef90_L0PDR3	V	Y	G	G	M	R	G	I	K	G	L	V	W	E	G	S	V	L	D	P	E	E	E	G	I	R	F	R	G	L	T	S	E	C	Q	Q	D	K	L	P	K
UniRef90_A8JHC9	A	I	G	G	M	R	G	I	P	G	M	L	W	E	T	S	L	L	D	A	E	E	E	G	I	R	F	R	G	L	S	P	E	L	Q	K	E	L	P	A	
UniRef90_T0RFQ2	C	I	L	G	G	A	R	D	V	K	C	M	L	W	E	T	S	L	L	D	A	E	E	E	G	I	R	F	R	G	Y	T	P	E	L	Q	K	E	L	P	T
UniRef90_N0DTE0	A	Y	G	G	M	R	S	V	K	S	L	V	T	E	T	S	S	L	D	A	E	E	E	G	I	R	F	R	G	F	T	P	E	C	Q	A	K	L	P	K	
UniRef90_F0YCH1	C	I	L	G	G	R	G	V	K	C	M	L	W	E	T	S	V	L	D	A	A	E	E	G	I	R	F	R	G	Y	T	P	E	C	Q	P	T	F	K	G	
UniRef90_Q75ES5	A	Y	G	G	M	R	G	I	P	G	V	V	W	E	G	S	V	L	D	P	H	E	E	G	I	R	F	R	G	R	T	P	E	V	Q	K	E	L	P	K	
UniRef90_S7QGM5	V	V	I	G	G	M	R	G	L	K	A	M	L	W	E	A	S	V	L	D	P	N	E	E	G	I	R	F	H	G	M	T	P	E	C	Q	K	H	L	P	A
UniRef90_K5X4S5	L	Y	G	G	M	R	S	L	P	A	L	I	W	D	G	S	V	L	D	A	E	E	E	G	I	R	F	R	G	K	T	P	D	L	Q	K	A	L	P	K	
UniRef90_K3VF07	V	Y	G	G	A	R	G	I	K	A	L	V	W	E	G	S	V	L	D	S	E	E	E	G	I	R	F	R	G	K	T	P	E	C	Q	E	L	L	P	K	
UniRef90_UPI000273CF37	R	Y	G	G	M	R	G	I	K	G	L	V	Y	X	T	S	V	L	D	P	D	E	R	I	C	F	R	G	F	N	P	E	Y	Q	K	L	L	P	K		
UniRef90_G8TH82	I	Y	Q	G	M	R	G	I	T	G	L	V	S	E	T	S	V	L	D	A	K	E	E	G	I	R	F	R	G	Y	S	P	E	L	Q	K	E	L	P	K	
UniRef90_M5GEI6	V	I	G	G	M	R	G	L	K	A	M	L	W	H	C	S	A	L	D	P	N	T	G	I	R	F	H	G	L	T	P	D	C	Q	K	V	L	P	P		
UniRef90_W8C3B4	I	Y	G	G	M	R	G	I	P	A	L	L	C	E	T	S	S	L	D	P	E	E	G	I	R	F	R	G	L	T	Q	D	L	Y	D	K	L	P	K		
UniRef90_I0AN18	V	I	G	G	A	R	D	L	K	C	L	V	T	D	I	S	L	L	D	P	F	E	G	I	R	F	R	G	L	T	P	E	V	L	E	F	L	P	K		
UniRef90_P24118	V	I	G	G	M	R	G	M	K	G	L	M	S	D	L	S	R	C	D	P	Y	G	G	I	I	F	R	G	Y	T	P	Q	L	K	E	F	L	P	K		
UniRef90_X8JF07	I	V	G	G	M	R	G	L	K	A	M	L	W	E	G	S	V	L	D	P	N	E	G	I	R	F	H	G	L	S	P	D	C	Q	K	A	L	P	P		
UniRef90_G0QN84	L	I	G	G	M	R	G	I	K	C	L	M	S	D	L	S	R	C	D	P	Y	D	G	I	I	F	R	G	Y	S	P	Q	L	K	K	L	L	P	K		
UniRef90_U7PMQ9	T	L	G	G	M	R	G	L	K	A	M	L	W	E	A	S	V	V	L	D	P	E	E	G	I	R	F	H	G	R	T	K	D	C	Q	R	E	L	P	K	
UniRef90_Q9M1D3	V	L	G	G	M	R	G	M	T	G	L	L	W	E	T	S	L	L	D	A	D	E	E	G	I	R	F	R	G	M	S	P	E	C	Q	K	I	L	P	S	
UniRef90_W9VDQ0	V	I	G	G	M	R	T	M	K	S	M	V	W	E	G	S	V	L	D	A	N	E	E	G	I	R	F	H	G	R	T	A	D	C	Q	K	E	L	P	K	
UniRef90_F4S4M1	V	F	G	G	M	R	G	L	K	S	M	L	W	D	P	S	V	L	D	S	E	E	E	G	I	R	F	W	G	R	T	P	E	C	Q	Q	V	L	P	S	
UniRef90_UPI0003A97C76	F	D	P	G	F	A	S	T	A	S	C	E	S	K	I	T	F	I	D	G	D	E	G	L	L	Y	R	G	Y	P	D	Q	L	A							
UniRef90_C0S9Y7	T	I	G	G	M	R	G	L	K	S	M	V	W	E	G	S	V	L	D	A	N	E	E	G	I	R	F	H	G	K	T	K	D	C	Q	K	E	L	P	K	
UniRef90_UPI00036329AC	V	T	G	G	A	R	G	I	K	M	M	M	W	E	T	S	Q	L	D	A	I	K	G	I	L	R	F	R	G	Y	S	P	E	V	K	E	L	L	P	S	
UniRef90_UPI000373DC29	Y	D	P	G	F	V	S	T	A	A	C	E	S	K	I	T	Y	I	D	G	N	K	G	I	L	L	H	G	Y	P	D	E	L	A							
UniRef90_UPI0002F087A7	Y	D	P	G	F	M	S	T	A	A	C	N	S	I	T	Y	I	D	G	D	K	G	L	L	Y	R	G	Y	P	E	Q	L	A	V	N	C	D				
UniRef90_B7G9P5	C	I	L	G	A	R	G	V	K	C	M	L	W	E	T	S	N	L	D	P	D	E	G	I	R	F	R	G	L	T	P	E	C	Q	P	T	Y	S	G		
UniRef90_A0A059LS11	A	I	G	G	M	R	G	I	P	G	M	L	W	E	T	S	L	L	D	A	E	E	E	G	I	R	F	R	G	Y	S	P	E	L	Q	A	K	L	P	G	
UniRef90_D9QIX4	F	D	P	G	F	T	S	T	A	A	C	E	S	A	I	T	Y	I	D	G	D	A	G	L	L	H	R	G	Y	P	G	Q	L	A							
UniRef90_J9I3V4	V	I	G	G	M	R	G	L	T	G	L	L	Y	E	T	S	K	I	H	P	V	N	G	I	T	Y	R	G	K	D	L	N	E	I	I	A	K	S	P	K	
UniRef90_B4RBX9	Y	D	P	G	F	T	S	T	A	S	C	E	S	K	I	T	F	I	D	G	D	K	G	L	L	H	R	G	Y	P	D	Q	L	A							
UniRef90_X1RRJ0																																									
UniRef90_UPI0004726BEF	Y	D	P	G	F	T	S	T	A	S	C	D	S	A	I	T	Y	I	D	G	D	E	G	L	L	H	R	G	Y	K	P	E	E	L	A	A	Q				
UniRef90_Q2R339	V	L	G	G	M	R	G	M	I	G	M	L	W	E	T	S	L	L	D	P	E	E	E	G	I	R	F	R	G	L	S	P	E	C	Q	K	V	L	P	T	
UniRef90_A4XV98	P	G	F	M	S	T	A	S	C	E	S	K	I	T	Y	I	D	G	D	K	G	L	L	H	R	G	Y	P	I	E	Q	L	A								
UniRef90_UPI00026257D1	L	D	P	G	Y	V	N	T	G	A	C	T	S	A	I	T	F	L	D	G	E	E	G	L	L	R	Y	R	G	Y	S	P	E	E	L	A					
UniRef90_UPI0002557CA6	Y	D	P	G	F	V	S	T	A	A	C	E	S	K	I	T	Y	I	D	G	A	N	G	I	L	L	H	G	Y	P	E	Q	L	A							
UniRef90_UPI0003705DFC	P	G	Y	G	S	T	G	S	C	E	S	A	I	T	Y	I	D	G	E	K	G	L	L	H	R	G	Y	S	P	I	D	Q	L	A	N	K					
UniRef90_V5SEA2	Y	D	P	G	F	T	S	T	A	S	C	E	S	A	I	T	F	I	D	G	D	K	G	L	L	Y	R	G	Y	S	P	D	E	L	A						
UniRef90_B0SZ03	F	D	P	A	F	T	S	T	A	S	C	E	S	K	I	T	Y	I	D	G	D	A	G	L	L	H	R	G	Y	P	I	G	Q	L	A						
UniRef90_A0Z1T4	Y	D	P	G	F	T	S	T	A	A	C	E	S	K	I	T	F	I	D	G	E	K	G	L	L	H	R	G	Y	P	I	E	E	L	A						
UniRef90_Q0F001	Y	D	P	G	F	R	S	T	A	S	C	D	S	A	I	T	Y	I	D	G	D	A	G	L	L	Y	R	G	Y	A	P	E	E	L	A	T	H	C	D		
UniRef90_B8GQW7	Y	D	P	G	F	M	S	T	A	S	C	S	A	I	T	Y	I	D	G	D	E	G	L	M	Y	R	G	Y	P	I	E	Q	L	A							
UniRef90_W8F7E0																																									

QUERY	A	K	G	G	E	P	L	P	E	G	L	F	W	L	V	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L			
UniRef90_X1YBN5	A	P	G	G	Q	E	E	P	L	P	E	G	L	F	W	L	V	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_UPI000359FF7A	A	K	P	G	G	Q	E	E	P	L	P	E	G	L	F	W	L	V	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L
UniRef90_H2Y5U8	A	V	E	G	G	E	E	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_UPI00026573D6	A	P	G	G	E	E	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L		
UniRef90_R7VHK1	A	A	G	G	I	E	E	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_QQV2M2	A	P	G	G	Q	E	E	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_D8RD53	A	V	S	D	G	E	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L		
UniRef90_A7RI62	A	D	G	G	K	E	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L		
UniRef90_UPI00022CAC42	I	K			H					P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_F5HE76	A	P	G	G	S	E	E	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_A0A024JNG3	A	P	G	G	E	E	E	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_U4L357	G	K	S	G	G	E	E	M	L	P	E	G	M	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_L0PDR3	A	P	M	G	S	Q	P	L	P	E	G	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L		
UniRef90_A8JHC9	A	V	P	G	G	Q	P	L	P	E	G	L	L	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L		
UniRef90_T0RFE2	A	V	E	G	G	E	E	P	L	P	E	G	L	L	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_N0DTQ0	A	P	G	G	E	E	P	L	P	E	G	L	L	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L		
UniRef90_F0YCH1	A	P	A	G	D	G	E	P	L	P	E	A	L	T	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W	L	S	K	E	W	A	K	R	A	A	L	
UniRef90_Q75ES5	A	P	N	G	R	E				P	E	A	L	F	W	L	L	T	G	Q	I	P	T	E	Q	V	S	W												

QUERY	130	140	150	160
UniRef90_X1YBN5	P S H V V T M L D N F P T T N L H P M S Q L S A A I T A L N S E S N F A R A Y A E			
UniRef90_UPI000359FF7A	P N H V V I T M L N N M P T S K L H P M S Q L S A A I T A L N S E S K F A K A Y S E E			
UniRef90_H2Y5U8	P T H V V N L L D Q L P S S V H P M S Q L S A A I T A L N S E S V F A K A Y A E			
UniRef90_UPI00026573D6	P S H V V N L L N N F P A K V H P M S Q L S A A I T A L N S E S V F A K A Y A E			
UniRef90_R7VHK1	P G H V V T M L N N F P S N L H P M S Q L S A A I T A L N S E S K F A K A Y N N			
UniRef90_Q0V2M2	P K F V E E L I D R C P S D L H P M A Q F S A A I T A L N S E S N F A K A Y A K			
UniRef90_D8RD53	P G H V V Y D V V N A L P I N A H P M T Q F S A A I T A L N S E S E F A K A Y A K			
UniRef90_A7RI62	P Q H V V I Q M L N N F P D T L H P M S Q F S A A I T A L N S E S K F V Q A Y N K A			
UniRef90_UPI00022CAC42	P D Y I V K T L I D R F P K S V H P M H Q F S A A I T A L N S T D D S I F K K E Y E A			
UniRef90_F5HE76	P K F V E E L I D R C P S L H P M T Q F A A I T A L N S E S H F A K A Y E N			
UniRef90_A0A024JNG3	P K H V E K E L I D R S P S L H P M A Q L S I A I V N A L N S E S A F A K A Y E K			
UniRef90_U4L357	P E F V E E K L M D N L P K T L H P M T Q F A I A V T A L N Q H D S K F A K L Y E Q			
UniRef90_L0PDR3	P E F I V E E L I D R C P S N L H P M A Q F S L A I T A L N Q V S K F S A K A Y A K			
UniRef90_A8JHC9	P L H L R K V L D A L P T E A H P M T Q L S M G I M A L N Q S G S R F Q S A Y A R E			
UniRef90_T0RFQ2	P D H V K A V L C D L P K D M H P M S Q F S I A I M A M Q T N S I F F A R K Y Q E			
UniRef90_N0DTE0	P T F V V N M L K N F P K N M H P M S Q L G A I A I L A L Q M T D S K F A A S Y H K			
UniRef90_F0YCH1	P E H V T A L M K T L P K T M H P M T Q F S L G L Q A L C Q T E S K F A K A Y S D			
UniRef90_Q75ES5	P G H V E Q L L D S L P R D L H P M A Q F S V A V T A L N S E S K F A K A Y A Q			
UniRef90_S7QGM5	P S V E K L I D S L P N N L H P M T Q L G M G V T A A L N S E S V F A K A Y E K			
UniRef90_K5X4S5	P E F V E E L I D R C P T L H P M S Q F S L A V T A L N H D T S A F A K A Y Q E			
UniRef90_K3VF07	P K F V E E L I D H C P T D L H P M A Q F S L A V T A L N H T S A F A K A Y A K			
UniRef90_UPI000273CF37	P S H V V I T M L D N F P T N P H P X S E P S A A M A L L D N F A R A Y P E			
UniRef90_G8TH82	P N H V F A A I D A L P V I T A H P M T M F V T G I M A L Q T E S N F Q R R Y A E T			
UniRef90_M5GEI6	P K K I A D V V D S F T R D V H P M T Q L S M G V V T S L M N K D D S K F A H A Y E T			
UniRef90_W8C3B4	P D Y V K K L I D D M P K D M H P M S Q L S I A V T S L N K D S Q F M K A Y E K			
UniRef90_I0AN18	P Q Y V F D M L K A L P K D S H P M A M L S A A I V S M Q R K D S K F A K L Y D E			
UniRef90_P24118	N Q D C V A N F I L N L P K D L H P M T M L S M A L L Y L Q K K D S K F A K L Y D E			
UniRef90_X8JF07	P N H V A K L V D A F P K T L H P M T Q L A M G V A A L N H D S K F A A Y E K			
UniRef90_G0QN84	E D S I V Q F I L K L P K D L H S M T M L S M A I L Q C Q K Y T S K F A H L Y D K			
UniRef90_U7PMQ9	P A F V N K L L D D L P S T A H P M T Q F S M A V S A L N S K F A A G Y A A			
UniRef90_Q9M1D3	P A H V I S M L R S F D K N V H P M T Q L S C A V A A L N S E S T F A K K Y A E S			
UniRef90_W9VDQ0	P P H V I S M L R S F D K N V H P M T Q L S C A V A A L N S E S T F A K K Y A E S			
UniRef90_F4S4M1	P K F I E K L I D S F P R T A H P M T Q F V M A T A A L N H N S K F A A A Y S S			
UniRef90_UPI0003A97C76	H T Q F D Q F F N G F R K D A H P M A I M V G A V G A L N S A F Y H D S T D I T D			
UniRef90_C0S9Y7	P R H I L D L F K S F P K D M H P M T Q L S V A V A A L N T E S K F A K A Y A D E			
UniRef90_UPI00036329AC	S D Q V F K T L E S M P A D T H P M T Q F T I A I M A M Q P D S I F F D R D Y A E			
UniRef90_UPI000373DC29	H E Q L S A F F K G F R R D A H P M A I M C G V V G A L N S A F Y H D S L D I T S			
UniRef90_UPI0002F087A7	H E Q M Q F F F R G F R R D A H P M S V L V G T V G A L N S A F Y H D S L D I N D			
UniRef90_B7G9P5	P S H V V P L N L P K D M H P M T Q F T I G L A L C Q T E S V F A K A Y Q D E			
UniRef90_A0A059LS11	P E H V L A L L R S V P H G T H P M T Q L A Q A A L A L Q V I D S T F A R A Y A E			
UniRef90_D9QIX4	H A Q F D R F F E G F R R D A H P M A I M V G A V G A L N S A F Y H D S L D I H D E			
UniRef90_J9I3V4	S D E V Q S T I M N L P H H M H P M T K L S I G A L M C Q P E S I F F A K K Y H E			
UniRef90_B4RBX9	H E Q F D R F F Q G F R R D A H P M A I M V G A V G A L N S A F Y H D S T N Y D D			
UniRef90_X1RRJ0	P N H V F H T I D A L P L N T H P M T M F V T G V M A L Q T E S N F A K E Y A K			
UniRef90_UPI0004726BEF	H E Q L I Q F F R G F R R D A H P M A I M V G V V G A L N S A F Y H D S T D A D K			
UniRef90_Q2R339	P G H V Y K A I D A L P V I T A H P M T Q F T T G V M A L Q V I E S E F Q K A Y D K			
UniRef90_A4XV98	H E Q L K T F F N G F R R D A H P M A I M C G V V G A L N S A F Y H D S L D I N N			
UniRef90_UPI00026257D1	H E D L R H I Y E A F P K D A H P M A I L S C I V C A L S A F Y H D S D I N D			
UniRef90_UPI0002557CA6	H E Q L S Q F F K G F R R D A H P M A I M C G V V G A L N S A F Y H D S L D I N D			
UniRef90_UPI0003705DFC	H E Q L I N F Y R G F R R D A H P M A I M V G V V G A L N S A F Y H D S T D I N D			
UniRef90_V5SEA2	H E Q M T K F F F R D G H P M A I M V G V V G A L N S A F Y H D S T D I N D			
UniRef90_B0S203	H A Q F D S F F Q G F R R D A H P M A V M T G A V G A L N S A F Y S D S L N V D D			

QUERY	G	I	H	R	T	K	Y	W	E	L	I	Y	E	D	C	M	D	L	I	A	K	L	P	C	V	A	A	K	I	Y	R	N	L	Y	R	E	G	S	S	I				
UniRef90_X1YBN5	G	V	H	K	S	K	Y	W	E	L	V	Y	E	D	S	M	D	L	I	A	K	L	P	V	I	A	A	T	I	Y	R	N	L	Y	R	E	G	S	S	I				
UniRef90_UPI000359FF7A	G	M	V	H	K	S	K	F	W	E	L	C	Y	E	D	S	M	D	L	I	A	K	L	P	T	V	A	A	S	I	Y	R	N	L	Y	R	E	G	S	S	I			
UniRef90_H2Y5U8	G	V	N	K	R	E	Y	W	H	L	V	Y	E	D	A	M	N	L	I	A	K	V	P	I	I	A	A	K	I	Y	R	N	L	Y	R	E	G	S	S	I				
UniRef90_UPI00026573D6	G	V	N	K	M	T	Y	W	E	H	T	F	D	D	S	M	N	L	I	A	K	L	P	T	I	I	A	A	T	I	Y	K	N	L	Y	R	N	G	E	S	S	I		
UniRef90_R7VHK1	G	V	K	K	N	L	Y	W	E	Y	H	T	F	E	D	S	M	D	L	I	A	K	L	P	T	I	I	A	A	T	I	Y	R	N	L	Y	R	N	G	E	S	S	I	
UniRef90_Q0V2M2	G	M	K	K	S	E	Y	W	E	H	T	F	E	D	A	M	D	L	I	A	K	L	P	T	I	I	A	A	K	I	Y	R	N	L	Y	K	D	G	K	V	A			
UniRef90_D8RD53	G	I	H	K	S	K	F	W	E	P	V	Y	E	D	S	M	N	L	I	A	R	L	P	T	I	I	A	S	Y	I	Y	Q	R	T	Y	H	G	G	K	L	V			
UniRef90_A7Rl62	G	V	N	K	K	E	Y	W	M	Y	C	F	D	D	A	M	E	L	I	A	K	L	P	T	I	I	A	A	Y	I	Y	R	N	L	Y	K	D	G	K	L	V			
UniRef90_UPI00022CAC42	G	I	H	K	S	K	Y	W	D	A	A	Y	E	D	S	M	N	L	I	A	R	L	P	T	I	I	A	C	A	M	I	Y	R	N	L	Y	K	D	G	K	L	P		
UniRef90_F5HE76	G	V	H	K	K	E	Y	W	K	T	T	F	D	D	S	M	D	L	I	A	K	L	P	N	I	I	A	G	R	I	F	R	N	L	Y	F	G	D	G	K	L	P		
UniRef90_A0A024JNG3	G	V	N	K	K	E	Y	W	Q	Y	T	T	F	E	D	S	I	D	L	L	A	K	L	P	T	I	I	A	S	R	I	Y	R	N	L	Y	F	K	D	G	K	L	G	
UniRef90_U4L357	G	L	S	K	K	A	D	Y	W	E	P	T	F	D	D	S	I	Q	L	L	A	K	L	P	T	I	I	A	A	K	I	Y	Q	N	T	Y	L	G	G	G	A	L	V	
UniRef90_L0PDR3	G	I	N	K	K	D	F	W	L	Y	C	F	D	D	C	M	D	L	I	A	K	L	P	N	I	I	A	G	R	I	Y	R	N	L	Y	K	D	G	K	L	V			
UniRef90_A8JHC9	G	V	H	K	S	R	Y	W	E	Y	A	T	Y	E	D	S	M	D	L	I	A	K	L	P	Q	L	I	A	A	T	I	Y	R	R	T	Y	R	R	G	E	Y	I		
UniRef90_T0RFQ2	G	I	H	K	S	T	Y	W	E	H	A	T	Y	E	D	M	L	N	V	I	A	R	I	P	E	I	I	A	A	T	I	Y	R	N	S	Y	F	D	E	G	E	C	L	D
UniRef90_N0DTE0	G	V	K	K	D	Q	Y	W	D	S	T	L	E	D	S	L	D	I	A	K	L	P	E	I	I	A	A	L	I	Y	R	C	T	Y	K	D	G	K	L	M				
UniRef90_F0YCH1	G	V	H	K	S	K	Y	W	D	S	T	Y	E	D	S	I	D	V	I	A	K	L	P	E	I	I	A	A	A	V	Y	R	N	T	Y	F	K	D	G	S				
UniRef90_Q75ES5	G	V	S	K	K	D	Y	W	N	Y	T	F	E	D	S	L	D	L	A	K	L	P	V	I	I	A	A	S	K	I	Y	R	N	L	Y	K	D	G	K	L	M			
UniRef90_S7QGM5	G	I	K	K	S	E	Y	W	H	Y	T	L	E	D	C	L	N	L	I	A	R	L	P	A	L	I	A	A	R	I	Y	R	N	V	Y	N	P	G	A	P	I	L		
UniRef90_K5X4S5	G	V	S	K	K	D	Y	W	G	P	V	F	E	D	S	M	D	L	I	A	K	L	P	N	I	I	A	A	G	R	I	Y	R	N	V	Y	G	G	G	K	L	V		
UniRef90_K3VF07	G	I	N	K	K	E	Y	W	G	Y	T	F	E	D	S	M	D	L	I	A	K	L	P	N	I	I	A	A	S	R	I	Y	Q	N	V	Y	F	K	G	K	L	V		
UniRef90_UPI000273CF37	G	A	S	Q	T	K	Y	W	E	L	I	Y	E	D	H	V	Y	L	I	T	K	L	P	C	I	I	A	A	E	K	V	Y	R	N	L	C	G	E	G	S	G	I	L	
UniRef90_G8TH82	G	M	N	K	K	D	Y	W	D	A	V	F	D	D	S	M	D	L	I	A	R	L	P	R	V	I	A	A	A	Y	I	Y	R	R	K	Y	H	N	N	Q	H	I		
UniRef90_M5GEI6	G	V	K	K	T	E	Y	W	R	Y	A	F	K	D	S	M	K	L	I	A	Q	L	P	A	L	I	A	A	R	I	Y	R	N	K	A	Y	P	D	V	P	L			
UniRef90_W8C3B4	G	L	K	K	L	D	F	W	K	Y	S	L	E	D	T	M	T	L	I	A	K	L	P	N	I	I	A	A	R	I	Y	R	N	M	Y	R	G	G	K	G	C			
UniRef90_I0AN18	K	L	H	K	N	D	Y	W	D	P	T	Y	E	D	S	L	N	L	I	A	K	L	P	R	I	I	A	A	S	F	I	Y	R	W	K	Y	K	N	G	D	I			
UniRef90_P24118	K	I	S	K	K	D	Y	W	E	P	F	Y	E	D	S	M	D	L	I	A	K	I	P	R	V	I	A	A	L	I	Y	R	H	K	Y	R	D	S	K	L	I			
UniRef90_X8JF07	G	L	K	K	S	E	Y	W	E	P	V	L	E	D	S	L	D	L	V	A	K	L	P	A	L	I	A	A	R	I	Y	R	N	A	Y	K	P	E	T	Q	L	I		
UniRef90_G0QN84	G	Q	V	S	K	K	D	W	P	F	Y	E	D	A	M	E	L	I	A	K	L	P	R	L	I	A	A	L	I	Y	R	H	K	F	N	N	S	I	L					
UniRef90_U7PMQ9	G	L	N	K	A	D	Y	W	E	P	T	F	E	D	C	L	S	L	A	K	L	P	T	I	I	A	A	K	I	Y	Q	N	A	Y	N	G	G	A	L	I				
UniRef90_Q9M1D3	G	D	S	K	S	K	Y	W	E	P	T	F	E	D	A	L	N	L	I	A	R	V	P	V	V	I	A	S	Y	V	Y	R	R	M	Y	K	D	G	S	I	L			
UniRef90_W9VDQ0	G	M	N	K	A	D	Y	W	E	S	T	F	E	D	S	I	G	L	L	A	K	L	P	R	V	I	A	A	A	I	F	D	K	S	A	L	D	M	S	P	L			
UniRef90_F4S4M1	G	I	K	K	A	D	Y	W	K	T	L	E	D	S	L	D	L	A	M	V	Y	P	I	I	A	A	A	R	L	I	Y	T	S	K	Y	K	D	S	M	K	L			
UniRef90_UPI0003A97C76	P	H	Q										R	M	V	A	S	H	R	M	I	A	K	M	P	T	I	A	A	R	A	Y		K	Y	H	I	G	Q	P	F			
UniRef90_C0S9Y7	G	L	S	K	A	S	Y	W	E	P	T	F	D	D	S	I	S	L	A	K	L	P	R	I	I	A	A	A	L	V	F	R	P	D	E	I	E	K	V	I	G	T		
UniRef90_UPI00036329AC	G	M	S	K	T	E	Y	W	D	A	V	Y	E	D	S	M	N	L	I	A	R	L	P	R	V	I	A	A	Y	I	Y	R	N	S	F	K	D	G	D	I	H			
UniRef90_UPI000373DC29	D	K	H	R	Q	K	S						A	I	R	L	I	A	K	M	P	T	I	I	A	A	A	M	A	Y	K	F		S	I	G	Q	P	F					
UniRef90_UPI0002F087A7	P	H	H	R	E	V	I	S					A	I	R	L	I	A	K	L	P	T	I	I	V	A	A	M	S	Y		K	Y	S	V	G	Q	P	F					
UniRef90_B7G9P5	G	V	P	K	N	L	Y	H	E	Y	A	L	E	D	I	L	S	V	V	A	K	L	P	E	I	I	A	A	T	I	Y	R	N	V	Y	H	D	G		V				
UniRef90_A0A059LS11	G	L	P	K	S	Q	Y	W	E	H	C	L	E	D	S	L	N	L	M	A	K	L	P	T	I	I	A	A	V	I	Y	R	N	T	Y	K	G	G	S	L				
UniRef90_D9QIX4	P	V	Q	R	D	I	S						A	I	R	L	I	A	K	M	P	T	I	I	A	A	R	A	Y		K	Y	H	I	G	Q	P	F						
UniRef90_J9I3V4	G	A	P	K	S	S	F	W	K	Y	T	L	E	D	S	L	N	V	C	A	K	V	P	R	L	A	S	I	V	Y	N	S	K	Y	N	R	D	Q	D	L				
UniRef90_B4RBX9	P	E	Q	R	I	I	S						A	H	R	M	I	A	K	M	P	T	I	I	A	A	R	A		F	K	Y	S	K	G	Q	P	F						
UniRef90_X1RRJ0	G	I	N	K	K	E	Y	W	N	P	I	Y	D	A	M	D	L	I	A	R	L	P	R	I	I	A	A	Y	I	Y	R	K	Y	S	K	N	N	E	H	I				
UniRef90_UPI0004726BEF									P	H	Q	R	M	I	A	S	Y	R	I	A	K	M	P	T	I	I	A	A	M	A	Y		K	Y	S	V	G	Q	P	F				
UniRef90_Q2R339	G	M	P	K	S	K	F	W	E	P	T	F	E	D	C	L	N	L	I	A	R	L	P	P	V	I	A	S	Y	V	Y	R	R	I	F	K	D	G	K	T	I			
UniRef90_A4XV98	P	Q	H	R	E	V	I	S					A	M	R	L	V	A	K	M	P	T	I	I	A	A	A	M	T	Y	K	Y		S	M	G	Q	P	M					
UniRef90_UPI00026257D1								R	D	Q	S	A	V	D	L	A	V	W	R	L	V	G	K	L	P	T	I	A	A	W	S	Y	K	K		N	S	G	Q	P	F			
UniRef90_UPI0002557CA6	P	H	H	R	E	V	C						A	Y	R	L	I	A	K	M	P	T	I	I	A	A	A	M	C	Y	K	Y		S	I	G	Q	P	F					
UniRef90_UPI0003705DFC	P	Y	E	R	L	V	I	S					S	R	R	L	I	A	K	L	P	T	I	I	A	A	A	M	A	Y		K	Y		S	I	L	G	Q	P	F			
UniRef90_V5SEA2	P	E	Q										R	Q	T	A	S	Y	R	M	I	A	K	M	P	T	I	A	A	M	A	Y		K	Y	S	I	L	G	Q	P	F		
UniRef90_B0SZ03	P	K	Q	R	E	I	S						A	H	R	L	I	A	K	M	P	T	I	I	A	A	R	A		F	Q	Y		S	Q	G	R	P	F					
UniRef90_A0Z1T4	P	Y	H										R	K	V	A	A	F	R	L	I	A	K	M	P	T	I	A	A	M	S	Y	K	F		S	I	G	R	P	F			
UniRef90_Q0F001	D	E	D										Q	H	K	A	A	R	L																									

QUERY	210	220	230	240
UniRef90_X1YBN5	G A I D S K L D W S H N F T N M L G Y T D A Q F T T E L M R L Y L T I H S D H E G			
UniRef90_UPI000359FF7A	D S I D D P K K D W S A N F T N M L G Y E D E Q E K F T E E L M R L Y L T I H S D H E G			
UniRef90_H2Y5U8	G A I D D E N A D W S L N F C N M L G Y K D P E F F I E L M R L Y L V I H S D H E G			
UniRef90_UPI00026573D6	A P I D D G K D K D W S A N F T N M L G Y N E D P Q F T T E L M R L Y L T I H S D H E G			
UniRef90_R7VHK1	G A I D D A K D W S H N F T S M L G Y E D P E F T E L M R L Y L T I H S D H E G			
UniRef90_QQV2M2	P I Q K K D K D Y S F N L A N Q L G F S E N K D F V E L M R L Y L T I H S D H E G			
UniRef90_D8RD53	I E S N K S K D Y G A N F A H M L G F E D D P K M Y E L M R L Y L T I H S D H E G			
UniRef90_A7RI62	A P V D P N K K D W S A N F T N M L G Y D D P Q F F A E L L R L Y L T I H S D H E G			
UniRef90_UPI00022CAC42	A S V D P G G D W S A N F A K M L G Y D D P Q F F A E L L R L Y L T I H S D H E G			
UniRef90_F5HE76	P I D P S K D Y S A N F A T L L G F G D N D P A Q F V E L M R L Y L T I H S D H E G			
UniRef90_A0A024JNG3	N T N A S A D Y S Q N F A S L L G F G A D N K E F V E L L R L Y L T I H S D H E G			
UniRef90_U4L357	P P V D L K S K D W S Y N Y A A M L G K A D S E F V D L L R L Y L A L H S D H E G			
UniRef90_L0PDR3	A S L C K S K D Y S W N L A N I L F S D N E F N E L L R L Y L T I H S D H E G			
UniRef90_A8JHC9	P P S Y N L D W A A N L A H M M G Y E D P G C L E M M R M Y Q T I H S D H E G			
UniRef90_T0RFQ2	M Q Y D S S V D W A A N F A R L L L G Y N D S P H F D E L M R L Y L V I H S D H E G			
UniRef90_NORDTE0	G A I D P S L D W S A N F A R L L L G Y N D S K E F D E L M R L Y L T I H S D H E G			
UniRef90_F0YCH1	I T R D H S L D Y S A N F C R M L G M E S P A F D E L M R L Y L C H S D H E G			
UniRef90_S75ES5	G K I D V D A D Y G K N L G H L L G F E N P E F V E L M R L Y L T V H S D H E G			
UniRef90_Q7QGM5	P E V S S D L D V G N Y A R M L G F A N E D L T E Y L R L Y L A I H S D H E G			
UniRef90_K5X4S5	P A I D A S K D Y S W N L A N L L F G E N A P A F V E L L R L Y L T I H S D H E G			
UniRef90_K3VF07	A A I Q K K D K D Y S F N F A N Q L G F D N A Q F V E L M R L Y L T I H S D H E G			
UniRef90_UPI000273CF37	G V T D S K L N W S H S F T N M L G Y T D A Q D F T E L M H X L T I H S D H E H			
UniRef90_G8TH82	Q P N G L L D W A G N L A H M L G F E D E S F K E L M R L Y M T I H S D H E G			
UniRef90_M5GEI6	P A V R K D L D V G N Y S N M L G Y D N E G M T E Y L R L Y I A H S D H E G			
UniRef90_W8C3B4	D E I D K K L D W S G N F A R M M D Y E D P I F H E Y L R L Y L S I H S D H S G			
UniRef90_I0AN18	I P S D P K L D W G N F A H M M G I P K P Y D D V S R M Y F I L H S D H E S G			
UniRef90_P24118	D S D S K L D W A G N Y A H M M G F E Q H V V K E C I R G Y L S I H S D H E G			
UniRef90_X8JF07	P I D K D L D V G N Y V N M L G Y G D N K S L T E Y L R L Y I A H S D H E G			
UniRef90_G0QN84	I E S D D K L D W A G N Y A H M M G F D N K I V Q E C I R G Y L S I H S D H E G			
UniRef90_U7PMQ9	P A V D P N Q D W S Y N F L G K G K E H E D F Q D L L R L Y L A L H S D H E G			
UniRef90_Q9M1D3	I P L D D S L D Y G A N F S H M L G F D S P Q M K E L M R L Y V T I H S D H E G			
UniRef90_W9VDQ0	D M D Q D W A Y N F A K L L G K P G K E N E G F Q D L L R L Y L A L H S D H E G			
UniRef90_F4S4M1	P A I N K S K D L S Y A N F A Q Q I G F G D S Q F I E A V R L Y N A L H S D H E G			
UniRef90_UPI0003A97C76	I T P S N D L S Y A E N F L R M C F A V P P T L V R A M D R I F T L H A D H E G			
UniRef90_C0S9Y7	Q E L D P T Q D W A Y N F L G K G S K V N E S F H D L L R L Y L A L H S D H E G			
UniRef90_UPI00036329AC	A P D N S L D W S A N F A H M L G F S D D K D F R S L M R L Y L T I H A D H E G			
UniRef90_UPI000373DC29	T Y P R N D L N Y A E N F L Y M M F S N P Q E E A D A M D K I F I L H A D H E			
UniRef90_UPI0002F087A7	V Y P R N D L S Y S A N F M R M M F S T P Q E E Y K V N D V L I L I L H A D H E			
UniRef90_B7G9P5	V S Q D T S L D F A G N F C S L R M M G Y N D S F G D E L M R L Y L C H T D H E G			
UniRef90_A0A059LS11	I K A D E T L D W A A S L S Q M M G Y S E E G P M E L M R L Y Q T I H T D H E G			
UniRef90_D9QIX4	V S P R N D L N Y A E N F L R M C F A V P P K M A R A M D R I F T L H A D H E G			
UniRef90_J9J3V4	P K F D D N L D M A G N F C N M L G Q N N K Q F W E L I R L Y L V L H A D H E G			
UniRef90_B4RBX9	I Y P R N E L S Y A E N F L R M C W K P N P V L T R A M D R I F I L H A D H E G			
UniRef90_X1RRJ0	H P N G L L D W A G N L A H M M G Y N D E S F K E L M R L Y M T I H A D H E G			
UniRef90_UPI0004726BEF	I Y P N N E L S Y A E N F L H M T F S V P T L A R A M D R I F T L H A D H E G			
UniRef90_Q2R339	A A D N A L D Y A A N F S H M L G F D D P K M L E L M R L Y V T I H T D H E G			
UniRef90_A4XV98	M Y P R N D L N Y A E N F L H M M F N T P Q E L A K A M D K I F I L H A D H E			
UniRef90_UPI00026257D1	V Y P K N H L D Y C A N F L R M M Y E V P E V F V A K A N V L F I L H A D H E			
UniRef90_UPI0002557CA6	M Y P Q N N L S Y A E N F L R M M F G T P Q C S E A R A M D R I F I L H A D H E			
UniRef90_UPI0003705DFC	N Y P Q N N L S Y A E N F L H M C Y N I N P I I A N A M D K I L I L H A D H E			
UniRef90_V5SEA2	I Y P R N D L D Y T S N F L Q M C F S V P C E I V A R A D R I F I L H A D H E			
UniRef90_B0S203	V T P R N E L S Y S E N F L R M C W V P N P I L T R A M D R I F I L H A D H E			
UniRef90_A0Z1T4	M Y P D N S M D Y A T N F			

QUERY	G	N	V	S	A	H	T	S	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E				
UniRef90_X1YBN5	G	N	V	S	A	H	T	V	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E				
UniRef90_UPI000359FF7A	G	N	V	S	A	H	A	T	S	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E			
UniRef90_H2Y5U8	G	N	V	S	A	H	T	S	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E				
UniRef90_UPI00026573D6	G	N	V	S	A	H	T	C	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E				
UniRef90_R7VHK1	G	N	V	S	A	H	T	C	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E				
UniRef90_Q0V2M2	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E				
UniRef90_D8RD53	G	N	V	S	A	H	T	V	R	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E				
UniRef90_A7Rl62	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	Q	E				
UniRef90_UPI00022CAC42	G	N	V	C	A	H	T	T	H	L	V	A	S	T	L	S	D	P	Y	S	A	F	G	C	G	M	S	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_F5HE76	G	N	V	S	A	H	T	G	H	L	V	G	S	A	L	S	D	P	F	L	A	F	G	A	S	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_A0A024JNG3	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	F	L	S	L	A	S	A	G	L	N	G	L	A	G	P	L	H	G	R	L	A	A	Q	E		
UniRef90_U4L357	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	F	L	S	Y	S	A	A	G	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_L0PDR3	G	N	V	S	A	H	T	T	H	L	V	A	S	A	L	S	D	P	M	L	S	F	S	A	A	G	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_A8JHC9	G	N	V	S	A	H	A	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_T0RFQ2	G	N	A	S	A	H	T	T	H	L	V	G	S	T	L	A	D	P	Y	L	S	F	A	A	A	G	L	N	A	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_N0DTE0	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	A	A	A	G	M	C	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_F0YCH1	G	N	A	S	A	H	A	T	T	H	L	V	G	S	T	L	S	D	P	Y	N	S	Y	V	A	A	G	L	N	A	L	A	G	P	L	H	G	L	A	N	S	Q	E	
UniRef90_Q75ES5	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	A	F	A	A	A	G	M	N	G	L	A	G	P	L	H	G	R	L	A	N	S	Q	E
UniRef90_S7QGM5	G	N	A	S	A	H	T	A	H	L	V	G	S	T	L	S	D	P	Y	L	S	Y	S	A	A	A	L	Y	A	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_K5X4S5	G	N	V	S	A	H	T	G	K	L	V	A	S	A	L	S	D	P	F	L	S	Y	G	A	A	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_K3VF07	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	F	L	S	L	A	S	A	A	G	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E	
UniRef90_UPI000273CF37	S	N	I	S	A	H	T	S	H	L	A	G	S	A	L	S	D	P	S	L	S	F	A	A	A	M	N	R	L	A	G	S	L	H	G	L	A	N	S	Q	E			
UniRef90_G8TH82	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	L	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_M5GEI6	G	N	V	S	A	H	T	A	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	A	A	A	L	C	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_W8C3B4	G	N	V	S	A	H	T	T	H	L	V	A	S	A	L	S	D	P	F	L	S	Y	A	A	A	G	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_I0AN18	G	N	V	S	A	H	T	G	H	L	I	A	S	A	L	S	D	P	Y	Y	S	S	G	M	V	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E				
UniRef90_P24118	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	S	A	A	G	V	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_X8JF07	G	N	V	S	A	H	T	A	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	S	A	A	A	L	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_G0QN84	G	N	V	S	A	H	T	T	H	L	I	G	S	A	L	S	D	P	F	L	S	Y	S	A	S	G	I	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_U7PMQ9	G	N	V	S	A	H	A	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	S	A	S	G	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E	
UniRef90_Q9M1D3	G	N	V	S	A	H	A	G	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_W9VDQ0	G	N	V	S	A	H	A	T	T	H	L	V	G	S	A	L	S	D	P	F	L	S	Y	S	A	A	G	L	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_F4S4M1	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	S	A	A	L	A	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_UPI0003A97C76	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	V	A	C	L	W	G	P	A	H	G	G	A	N	E	A				
UniRef90_C0S9Y7	G	N	V	S	A	H	A	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	S	A	A	G	L	L	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_UPI00036329AC	G	N	A	S	A	H	T	V	N	L	V	S	S	T	L	S	D	P	Y	R	S	F	A	A	A	G	M	N	A	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_UPI000373DC29	Q	N	A	S	T	S	T	V	R	L	A	G	S	T	G	A	N	P	F	A	C	I	S	A	G	I	A	A	L	W	G	P	S	H	G	G	A	N	E	A				
UniRef90_UPI0002F087A7	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	C	L	W	G	P	A	H	G	G	A	N	E	A				
UniRef90_B7G9P5	G	N	A	S	A	H	A	T	H	L	V	G	S	T	L	S	D	P	F	L	S	Y	A	A	A	G	L	N	A	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_A0A059LS11	G	N	V	S	A	H	A	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	A	A	A	G	M	T	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_D9QIX4	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	C	L	W	G	P	S	H	G	G	A	N	E	E				
UniRef90_J9I3V4	G	T	V	S	A	H	T	A	H	C	V	N	S	A	L	S	D	P	Y	L	S	F	A	A	A	M	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_B4RBX9	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	C	L	W	G	P	S	H	G	G	A	N	E	E				
UniRef90_X1RRJ0	G	N	V	S	A	H	T	T	H	L	V	G	S	A	L	S	D	P	Y	L	S	Y	A	A	A	G	M	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E		
UniRef90_UPI0004726BEF	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	C	L	W	G	P	A	H	G	G	A	N	E	A				
UniRef90_Q2R339	G	N	V	S	A	H	T	G	H	L	V	G	S	A	L	S	D	P	Y	L	S	F	A	A	A	L	N	G	L	A	G	P	L	H	G	L	A	N	S	Q	E			
UniRef90_A4XV98	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A				
UniRef90_UPI00026257D1	Q	N	C	A	S	T	S	T	V	R	L	V	G	S	S	G	A	N	P	F	A	C	I	S	S	G	I	A	A	L	W	G	P	L	H	G	G	A	N	Q	A			
UniRef90_UPI0002557CA6	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A				
UniRef90_UPI0003705DFC	Q	N	A	S	T	S	T	V	R	I	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	S	L	W	G	P	A	H	G	G	A	N	E	A				
UniRef90_V5SEA2	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	C	L	W	G	P	A	H	G	G	A	N	E	A				
UniRef90_B0SZ03	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	H	P	F	A	C	I	A	A	G	I	A	C	L	W	G	P	S	H	G	G	A	N	S	Q	E		
UniRef90_A0Z1T4	Q	N	A	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	A	A	G	I	A	A	L	W	G	P	S	H	G	G	A	N	E	A				
UniRef90_Q0F001	Q	N	A	S	T	S	T	V	R	M	A	A																																

QUERY	290	300	310	320
UniRef90_X1YBN5	V L V W L T Q K L Q K K E L V G K D V S D E K V L R D Y I F W N T T L N S S G R V V P G Y G H			
UniRef90_UPI000359FF7A	A L V W L T Q K V L R K K Q L G G D N A V S S E D E V L K K F I W K T L L K S G Q Q V V P G Y G H			
UniRef90_H2Y5U8	V L V W L T T G V H K E G G K E V T D D E V L H K Y I W D T L L K S G R V V P G Y G H			
UniRef90_UPI00026573D6	V L V W L T T K L V Q Q Q L G K D V S D E Q L K E F Y V W K T L L K S G Q Q V V P G Y G H			
UniRef90_R7VHK1	V L L F L T T K V S G D V G K D Y S Q A E A L K E F Y V W K T H L K S G Q Q V V P G Y G H			
UniRef90_Q0V2M2	V L V W L T Q K M K K A V G N D L S D Q A I L K D Y L W S T L L K A G K V V P G Y G H			
UniRef90_D8RD53	V L R W I W K N E A V E A I G A D A S K E K V L T K Y V V K D T L L N S G Q V V P G Y G H			
UniRef90_A7RI62	V L V W L T K L S E E L G P D P S D K K V L R D F I W N T L L N S G Q V V P G Y G H			
UniRef90_UPI00022CAC42	V L L W L K K A C A E I G D S P T D D E V L K D F I W K T L L K N G Q V V P G Y G H			
UniRef90_F5HE76	V L R W V Q K M R S Q I G E D A S D D E K V A E Y L W S T L L K S G Q Q V V P G Y G H			
UniRef90_A0A024JNG3	V L E W I L E V K R S K I G S N V S K E D V I E K Y L W D T L L N A G R V V P G Y G H			
UniRef90_U4L357	V L R F I Q K M Q K Q I G T S Y T K A D V I E G Y L W S T L L K S G R V V P G Y G H			
UniRef90_L0PDR3	V L N W I L D M K E K I G E D V T K D E K I K Q Y L W S T L L N A G K V I P G Y G H			
UniRef90_A8JHC9	V L R W L K D L V A K L G P S P G R D A V R K Y V E D T L L N A S G K V I P G Y G H			
UniRef90_T0RFQ2	V I M D L D E E F K K S G N L D V N K E T I L T Q F A W D T L L N A G K V I P G Y G H			
UniRef90_N0DTE0	V L T W L D L K K K I G E G E V S N K E T I A E L V W E G L L N A G R V V P G Y G H			
UniRef90_F0YCH1	V L A W I Q D L K K A K F D K A V S N E E T I T A F A W D T L L N N G Q V I P G Y G H			
UniRef90_Q75ES5	V L E W L F K L R E E V K G D Y S P E T I R Q Y L W D T L L K S G R V V P G Y G H			
UniRef90_S7QGM5	V L R W Q L A M Q K E L G D N V T D D Q I K D Y L W K T L L K S G Q Q V V P G Y G H			
UniRef90_K5X4S5	V L L W L R K M Q A K I G E E P L S T D E A V K E Y L W S T L L K A S G R V V P G Y G H			
UniRef90_K3VF07	V L N W L T E F K K S V G D D L S D D K A I T D Y L W S T L L N A G R V V P G Y G H			
UniRef90_UPI000273CF37	V L V W L T Q L Q K E V G K D V S H E K L R D F I X N S R W V V P G Y G H			
UniRef90_G8TH82	V V K W M E M Q Q E L K T E V P T K G Q I E T Y V V K N T L L A S G K V V P G Y G H			
UniRef90_M5GEI6	V L R W M L A M Q N D I G P D V T P E Q I V R D Y V Q K T L L K A G K V I P G Y G H			
UniRef90_W8C3B4	V L V W I E K M R K E G S E P D Q K V R D Y V Q K T L L K A G Q V I P G Y G H			
UniRef90_I0AN18	V L K W I Q E I Y K K G G N V P T E E E M K Q F V W D T L L K S G Q V I P G Y G H			
UniRef90_P24118	V L K W L L Q F I E K K G D V S D D K D I E D Y V D H V I V S G R V V P G Y G H			
UniRef90_X8JF07	V L R W M L E M Q K A V G E D P S H D Q I R E Y L W K T L L K G Q V V P G Y G H			
UniRef90_G0QN84	V L R W M L D F V A E K G T T V S N K D I E D Y V D K I V S G R V V P G Y G H			
UniRef90_U7PMQ9	V L R W V L Q M K D A I P A N Y T P Q D V K D Y L W K T L L N S G R V V P G Y G H			
UniRef90_Q9M1D3	V L L W I K L V V I E C G E S I S K E Q L K D Y V W K T L L N S G K V V P G Y G H			
UniRef90_W9VDQ0	V L R W I L K M Q S Q I G E N F S D Q D V K D Y L W S T L L R S G Q V V P G Y G H			
UniRef90_F4S4M1	A L R F V L E M K A A I G S N A G P E Q V K E H V W K V L K S G R V V P G Y G H			
UniRef90_UPI0003A97C76	A L K M L A E I G S V D R I P A Y I D K A K D K N D P F R L M G F G H			
UniRef90_C0S9Y7	V L R W L L K M Q S T I G N K F T D A D V K N Y L W S T L L K S G Q V V P G Y G H			
UniRef90_UPI00036329AC	V I K W F E M I E N L G T K T P T K E Q I Q Q Y V Q E T L L D A R K V P G Y G H			
UniRef90_UPI000373DC29	V L T M L E E I G D V S R I D E F V A R A K D K N D P F R L M G F G H			
UniRef90_UPI0002F087A7	A L N M L E D I Q R Q G G V E R I G E F I A K V K D K N S N V K L M G F G H			
UniRef90_B7G9P5	V L K W I Q E L K D K F E S E G K P E T I T E F A W D T L L N A K K V I P G Y G H			
UniRef90_A0A059LS11	V L R W I V D V Q R E L G A E P S A E Q L A D F V R A T L L K S G K V V P G Y G H			
UniRef90_D9QIX4	A L T M L K E I G T P D K I P E F I E G V K A K K Y K L M G F G H			
UniRef90_J9I3V4	A L N F L I E F E K I Y G D K W T E T D L M P E Y Y T R D T L L K G R V I P G Y G H			
UniRef90_B4RBX9	A L N M L A E I G S V D R I P E Y V Q G V K D R Y R L M G F G H			
UniRef90_X1RRJ0	V I K W F E M Q E Q L G T D D P S K E Q I A D Y V Q K T L L A S G K V V P G Y G H			
UniRef90_UPI0004726BEF	V L T M L E E I G S V E R V P E F I K K A K D K N D P F R L M G F G H			
UniRef90_Q2R339	V L L W I K S V I G E T G S D V T T D K L K E Y V W K T L L K S G K V V P G Y G H			
UniRef90_A4XV98	V L T M L D E I G S V D N I D K F V A K A K D K N D P F K L M G F G H			
UniRef90_UPI00026257D1	V L E M L M Q I Q N D G G D V Q K F V N L A K D K N D P F R L M G F G H			
UniRef90_UPI0002557CA6	V L N M L D E I G D E A N I P E F I E K A K D K N D P F R L M G F G H			
UniRef90_UPI0003705DFC	V L K M L S E I G T V D R I G E F V G K A K D K N D P F R L F G F G H			
UniRef90_V5SEA2	A L N M L E E I G T V D R I P E Y I E K A K D K S S G F R L M G F G H			
UniRef90_B0S203	A L E M L E E I G T V E N I P A Y V Q G V K D R K Y K L M G F G H			
UniRef90_A0Z1T4	V V K M			

QUERY	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	H	D	P	M	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_X1YBN5	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	H	D	P	M	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_UPI000359FF7A	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	N	D	P	L	F	G	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_H2Y5U8	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	D	D	Q	M	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_UPI00026573D6	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	N	D	P	M	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_R7VHK1	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	K	K	W	L	P	N	D	P	M	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_Q0V2M2	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	Q	K	H	L	P	D	D	P	M	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_D8RD53	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	D	D	P	I	F	K	M	V	S	N	L	Y	K	V	P	N	I	360		
UniRef90_A7RI62	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	N	D	P	L	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_UPI00022CAC42	A	I	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	M	K	H	M	P	N	D	D	K	L	I	K	L	V	A	Q	L	Y	K	V	P	N	I	360	
UniRef90_F5HE76	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	N	D	P	L	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_A0A024JNG3	A	V	L	R	K	T	D	P	R	Y	T	A	Q	R	E	F	A	L	K	H	M	P	N	D	Y	D	L	F	H	L	V	S	T	I	Y	E	V	A	P	K	V	360
UniRef90_U4L357	A	V	L	R	K	P	D	P	R	F	D	A	L	I			A	K	T	R	P	E	V	A	D	V	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_L0PDR3	A	V	L	R	K	T	D	P	R	Y	M	V	Q	R	E	F	A	L	K	Y	L	P	D	D	P	M	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_A8JHC9	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	Y	M	P	N	D	P	L	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_N0RFG2	A	V	L	R	K	T	D	P	R	Y	S	C	Q	R	E	F	A	L	K	H	M	P	N	D	R	L	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_T0TFE0	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	L	K	H	L	P	N	D	P	L	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_F0YCH1	A	V	L	R	K	T	D	P	R	Y	T	C	Q	R	E	F	A	F	K	H	L	P	D	D	D	L	F	K	L	V	A	Q	L	Y	K	V	P	N	I	360		
UniRef90_Q75ES																																										

QUERY	L	L	E	Q	G	K	A	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	G	M	T	E	M	N	Y	Y	T	V	L	F	G	V	S		
UniRef90_X1YBN5	L	T	E	Q	G	K	V	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	G	M	T	E	M	N	Y	Y	T	V	L	F	G	V	S		
UniRef90_UPI000359FF7A	L	T	E	Q	G	K	A	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	R	Y	Y	G	M	T	E	M	N	Y	Y	T	V	L	F	G	V	S	
UniRef90_H2Y5U8	L	L	K	Q	G	K	A	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	Y	K	M	T	E	E	M	Q	Y	Y	T	V	L	F	G	V	S
UniRef90_UPI00026573D6	L	L	Q	Q	G	K	V	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	Y	G	M	T	E	E	M	Q	Y	Y	T	V	L	F	G	V	S
UniRef90_R7VHK1	L	L	E	Q	G	K	A	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	Y	G	M	T	E	M	S	Y	Y	T	V	L	F	G	V	S	
UniRef90_Q0V2M2	L	T	E	H	G	K	T	K	N	P	Y	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	Y	G	L	T	E	E	Q	N	Y	Y	T	V	L	F	G	V	S
UniRef90_D8RD53	L	L	E	T	G	K	V	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	F	G	L	T	E	E	N	Y	Y	T	V	L	F	G	V	S	
UniRef90_A7RI62	L	L	E	Q	G	K	A	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	Y	G	L	T	E	E	M	N	Y	Y	T	V	L	F	G	V	S
UniRef90_UPI00022CAC42	L	M	E	Q	G	K	V	A	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	Y	G	M	T	E	Q	Q	F	Y	T	V	L	F	G	V	S
UniRef90_F5HE76	L	L	E	A	G	K	A	K	N	P	W	P	N	V	D	A	H	S	G	V	L	L	T	Y	Y	Y	G	L	H	Q	Q	D	F	Y	T	V	L	F	G	V	S	
UniRef90_A0A024JNG3	L	T	K	H	G	K	T	K	N	P	W	P	N	V	D	S	A	H	S	G	V	L	L	Q	Y	Y	G	L	L	T	N	Q	S	Y	Y	T	V	L	F	G	V	S
UniRef90_U4L357	L	T	T	H	G	K	T	K	N	P	H	P	N	V	D	S	A	S	G	Q	L	F	H	H	Y	Y	G	L	I	N	Q	D	L	Y	Y	T	V	T	F	G	V	S
UniRef90_L0PDR3	L	L	E	H	G	K	T	K	N	P	Y	P	N	V	D	A	H	S	G	I	L	L	R	Y	Y	Y	G	L	V	I	Q	Q	F	Y	T	V	L	F	G	V	S	
UniRef90_A8JHC9	L	G	K	T	G	K	I	K	N	P	Y	P	N	V	D	A	H	S	G	V	L	L	Q	Y	Y	Y	G	L	T	E	E	K	N	Y	Y	T	V	L	F	G	V	S
UniRef90_T0RFQ2	L	T	E	H	G	K	T	K	N	P	Y	P	N	V	D	S	A	H	S	G	V	L	L	H	H	Y	Y	G	L	T	Q	K	N	Y	Y	T	V	L	F	G	V	S
UniRef90_N0DTE0	L	T	K	Q	G	K	T	K	N	P	W	P	N	V	D	A	H	S	G	I	L	L	Q	Y	Y	Y	G	M	K	E	H	S	Q	Y	Y	T	V	L	F	G	V	S
UniRef90_F0YCH1	L	T	E	H	G	K	T	K	N	P	Y	P	N	V	D	S	A	H	S	G																						

QUERY	410										420										430																		
UniRef90_X1YBN5	R	A	L	G	V	L	A	Q	L	I	W	S	R	A	L	G	F	P	L	E	R	P	K	S	M	S	T	D	G	L	I	K	L	V	D	S	K		
UniRef90_UPI000359FF7A	R	A	L	G	V	L	A	S	S	L	V	W	D	R	A	L	G	L	P	L	E	R	P	K	S	F	M	D	T	D	G	L	I	K	M	V	G	A	K
UniRef90_H2Y5U8	R	V	L	G	C	L	S	Q	L	I	W	S	R	A	L	G	L	P	L	E	R	P	K	S	M	S	T	T	E	G	L	K	K	F	V	S	K		
UniRef90_UPI00026573D6	R	A	L	G	V	L	A	S	S	L	V	W	D	R	A	L	G	L	P	L	E	R	P	K	S	M	S	T	T	E	G	L	K	M	V	G	A	K	
UniRef90_R7VHK1	R	A	L	G	C	M	A	S	S	L	V	W	D	R	A	L	G	L	P	L	E	R	P	K	S	M	S	T	T	E	G	L	I	K	A	L	D		
UniRef90_Q0V2M2	R	A	L	G	V	L	P	Q	L	I	I	D	R	A	V	G	A	P	L	E	R	P	K	S	F	S	T	E	A	Y	A	K	L	V	N	G	A	K	
UniRef90_D8RD53	R	A	L	G	V	L	A	Q	L	V	W	D	R	A	L	G	L	P	L	E	R	P	K	S	M	T	M	G	W	L	E	N	Y	C	K	K	Q		
UniRef90_A7RI62	R	A	L	G	V	L	A	S	L	V	W	D	R	A	L	G	L	P	L	E	R	P	K	S	V	T	T	E	L	I	K	Q	F	N	A	K			
UniRef90_UPI00022CAC42	R	A	L	G	V	L	A	S	L	V	W	S	R	A	L	G	L	P	L	E	R	P	K	S	Y	S	T	E	D	K	L	M	E	L	V	K	A	K	
UniRef90_F5HE76	R	A	F	G	V	L	S	Q	L	I	W	D	R	A	L	G	M	P	L	E	R	P	K	S	Y	S	T	E	A	I	K	M	K	F	E	G	K		
UniRef90_A0A024JNG3	R	A	F	G	V	L	P	Q	L	I	I	D	R	A	V	G	A	P	L	E	R	P	K	S	F	S	T	E	K	Y	A	Q	L	V	G	C	K		
UniRef90_U4L357	R	G	L	G	P	L	A	Q	L	I	W	D	R	A	L	G	L	P	L	E	R	P	K	S	F	S	T	E	M	A	I	E	K	L	V	K	A		
UniRef90_L0PDR3	R	A	L	G	V	L	S	Q	L	V	W	D	R	A	L	G	L	P	L	E	R	P	K	S	F	S	T	N	A	F	I	K	M	F					
UniRef90_A8JHC9	R	A	L	G	V	L	S	Q	G	V	W	S	R	A	L	G	L	P	L	E	R	P	K	S	L	T	M	A	A	F	I	Q	R	V	A	G			
UniRef90_T0RFQ2	R	A	M	G	V	L	S	Q	L	F	W	D	R	A	L	G	L	P	L	E	R	P	K	S	V	T	T	E	W	I	N	N	F	K	K	Q			
UniRef90_NODTE0	R	A	I	G	V	L	S	S	L	V	W	D	R	A	L	G	H	P	L	E	R	P	K	S	V	T	T	E	W	I	A	N	H	V	N	Q	Q		
UniRef90_F0YCH1	R	G	I	G	A	L	S	Q	V	F	W	D	R	A	L	G	L	P	L	E	R	P	K	S	L	T	T	T	G	W	I	K	D	F	C	E	K	Q	
UniRef90_Q75ES5	R	A	F	G	V	L	P	Q	L	I	I	D	R	A	V	G	A	P	L	E	R	P	K	S	F	S	T	E	K	F	K	E	L	V	A	S	K		
UniRef90_S7QGM5	R	A	L	G	A	L	T	Q	L	V	W	A	R	A	L	G	L	P	L	E	R	P	K	S	L	S	M	D	A	I	E	K	L	I	G	A	K		
UniRef90_K5X4S5	R	A	F	G	V	A	A	Q	L	I																													

	1	10	20	30	40
UniRef90_UPI00029ABE50		V I T G T E D E K A L	D I S K L R D		T G F V T L D T
UniRef90_K2IRJ1			P D V T D I R K L Y G Q A	G V F T Y D	
UniRef90_UPI00036186B0	T D K K	V T L K Q E D Q D R V I E L P V T P	G T M G P S V I	D Q T G H F T	
UniRef90_A4BDM3		S G T L G P D V I D V R S L T S E		G F F T Y D	
UniRef90_F9UC85			A A D I S S L Y K E S G		I F T
UniRef90_Q482S8	K A T L S	I D G K E I G E F P V L K G T A G T D	V I D I R T L F T		
UniRef90_UPI00047A07FF			E T A I D I K T L R S	V S G L I T L D	
UniRef90_UPI0004096869			E S A I E I G K L R D		L F T
UniRef90_L0GS19		T I T N N E N G K T F D F P L R R G T L G P A A V D I	L S T L F T		
UniRef90_Q1QMM3		V L S G T V G P D V I D I A K L Y A Q A G			L F T
UniRef90_R9NJW8		D V L S G T L G Q Q E I D V R A L		G S K G Y F T F D	
UniRef90_UPI00036734FB	S G K S T	I L P V T S G T I G R S A E F P I M K G T M G P D V V D E T G M F S		T G M F T Y D	
UniRef90_V8A7M3					
UniRef90_G5ZYJ2	A T T S N T K S T	L T D N Q S G E S L P V L S G S V G P D V I D I R K L F T			
UniRef90_D7DKA5		K A T L T F D N G A T P I E L P I L T S T L G N D V I G K H G V F T			
UniRef90_UPI00036AA147			K T I E F P V Y S G T T G P D V I D V R G L F T		
UniRef90_I0ICJ7			D E K S V D I S K L R A Q T G Y I T L D E		
UniRef90_Q22GZ1		I L K G T L G Q S M L D I R N L		N Q Q T G M F T Y D	
UniRef90_Q0K8G2			P D V I D I R K L Y G Q T	G K F T Y D	
UniRef90_F9YQ47			E R G I D I D K L R A L		T G L I T L D S
UniRef90_UPI0004781AFA				K M L S E T G Y V T	
UniRef90_W0RGY2			V R G A D L R Q M K V N P	G D F G L L S	
UniRef90_H2CC72		I L V G T E K E T G V D I S K L R G Q S G		I I T M D E	
UniRef90_I3ZY68		I I E G T M G D K G I D I S S L R N D S G		L I T L D	
UniRef90_UPI00037CF664		T I G E E S W D F P I H S G S V G P D V V D Q T G R F T			
UniRef90_D0LX44		D I I E G S E G E K A L D I R K L R A D		T G Y I T M D S	
UniRef90_E4NI89				Q T G L V T L D N	
UniRef90_F6FPT7	A A S A D G T A T	V E L T V D G T S R Q L P V V R A T E G N K D T G L V T V D			
UniRef90_Q1NIZ1			G E K A I D I R T L R A Q	T G Y I T L D	
UniRef90_F4CTR7				S K L L A K T G L T T	
UniRef90_UPI0003B6EE5C			F P G G T A E F P V R R A V A G N S S L D L S T L T R		
UniRef90_D1BKM6				T G M V T V D	
UniRef90_A0A010NSD9				K T T G A V T Y D	
UniRef90_T1ADE0	G S S T E L P A V	A G S V G P A A L D I G K L Y R D T G			C F T
UniRef90_K2Q0P8			A I D I K A L R A	S T G I I T L D	
UniRef90_F0VJQ3		K I E D A A G P K R E L L K E L R K E H G N F V V S E A T L N S			
UniRef90_I6WZU4	K T S E K K A	V L S I E G D R N V E L P I Y D G S V G P S V I D Q T G M F T			
UniRef90_UPI0003664A59		I L Q G T C G P N V I D I R K L Y S E S G			C F T
UniRef90_UPI0003647988			E Y A I D I S K L R G S T	E G L I T L D R	
UniRef90_UPI00036C4B5E	T D R K A T I	L I D G E N P D L P I H K G T L G Q D V I D V G T L F T			
UniRef90_E0WR37				L G E K G Y F T	
UniRef90_B0XKG1					
UniRef90_W9G8E5				K E T G L V T Y D	
UniRef90_V4J2X2				D V G L L T	
UniRef90_C6X1X0		T I G D R G I D I S K L R D Q		T G L I T L D L	
UniRef90_C6WI44				K T G L V T L D S	
UniRef90_R5Q1W3	G K S I E L P V K T A T T	G E K S I D I S R L R S E T G Y T V L D			
UniRef90_D2W3U4				T D G E D K N G I M	C
UniRef90_P83372			A I D I N K L R D	H G K V Q L G T I T V D M	
UniRef90_G2Z3S5			K V G D K E I E L P I L T G T A G H P V I G G N G Y F T		
UniRef90_G4QLN7					I Y S
UniRef90_A0P4S8	G A S T K L	P V L D G V M G P P V I D I R K L Y D E T S H			F T
UniRef90_M4VY20			E G I D T S K L L A T T G Q V A L D I		
UniRef90_I4ESY8	S K I T E K N N V I N P L L Y K K Y H V K R G L R N E N G T G V L V G L T G V G				
UniRef90_F4A531			K T L D L P V L E V T E G N K G Y G E T G N V S		
UniRef90_B2GKP4		K I D Q N L Y V N Y D V K R G L R D S T G K G V L T G L T E I S			
UniRef90_R5WP40			E S I E L P V Y K G S L G N D V L G A H G L F T		
UniRef90_R8ANH1		L M D K V E R L V N V K R E K L A E L H N K Y A D R R L G E V T L S M			
UniRef90_Q4UF22					
UniRef90_I3RL2					
UniRef90_R7Y1T5	A A N S T D S L T V R D N R T G Q E Y D I P I T D G T I N A K D L G Q I G L A T				
UniRef90_G8S5J3			I D V S A L L K E T G Y V T L D Q		
UniRef90_W0JJY8				H G D V K V G D I T A Q	
UniRef90_A0A059G4S4			G K S Y D L P V L S G T H G P N V V D E S N H F T		
UniRef90_E1QH16			G E K A I D I S V L R Q K	T G V I T L D	
UniRef90_R6EHV3	D R L E P Q M F D E Y G V Q R G L R D K N G N G V V A G L T N I S				
UniRef90_UPI00037D587B		L V N N A N G E K I D L P A V G G T L G P K V Y D K A G V F T			
UniRef90_W0E0Z0			G E R A L D I Q T L R A R T G	L I A	
UniRef90_J9IRK1		E L P S G D K V E L N I L E G S E G P K S I D G T G L Y T			
UniRef90_R6NQ55	S A S S I I P S E L Y T		K Y N V N R G L R D L N G K G V L V G L T H I S		
UniRef90_R6F757			Q Y E V K R G L R D L N G K G V L A G L T N I S		
UniRef90_C9RNMN8			E H G L D V S K L R K D	T G L V T L D Y	
UniRef90_U4TEP3		S G T L G Q D V I D I K A L		G K T G H F T Y D	
UniRef90_G8A512			V K A A R A E H G K K S F G P V V V D Q		
UniRef90_K1YNP5	K Q T A Q L T I D G K V Y D L P I V E S T T G E K A L D I R S L M R				
UniRef90_Q3SEX3			A I E L P I E E G T Y G K P V I D I R G Y F T		
UniRef90_F5XNU5			I R A A D L K Q I K	T G D E D D P G I A T	
UniRef90_F4P4G1					
UniRef90_A0A023BS88			I D I K T L R	G V T G G I T T I	
UniRef90_K9PBL3					
UniRef90_R7HUN1		D S I N K E L Y S E Y G V K K G L R D E Q G Q G V L T G L T N I S			
UniRef90_A4BQU1		T I T D N A T G K S V D F P I R E A T H G P A V I D E M G Y F T			
UniRef90_G7QM03			K E K A I D I S K L R Q Q	T G Y V T L D N	
UniRef90_R7C8N7		A I N Q D L Y N E Y D V K R G L R D S N G K G V L T G L T E I S			
UniRef90_R6RU61		V I D S N L Y I E Y D V K R G L R D S N G K G V L T G L T E I S			
UniRef90_F1KWZ6	S S T N L K D	V L A D K I P Q H L K K V A E F R K A H G S T V L Q N I T V D M			
UniRef90_R6K2V1		I D Q N L Y I D Y D V K R G L R D S N G N G V L T G L T E I S			
UniRef90_D4M2G6		R I D P N L Y E E Y D V K R G L R D S T G R G V L T G L T E V S			
UniRef90_D6XSS9					
UniRef90_Q1GUX5		V L S G T V G P D V V D I R K F Y A Q T G A			F T
UniRef90_B3EG62			V P I E N G S I N T M E L R K I K V S E E D F G L L G		
UniRef90_F5SLF6					

[illegible]

		90	100	110	120
UniRef90_UPI00029ABE50		E K S S F L E V S Y I V Y G E L P T Q T Q L D S F Q A E I S K H T L			
UniRef90_K2IRJ1		E K S H F L E V C Y L L L Y G A L P T A K E M E D F F E A L V T R H T M V			
UniRef90_UPI00036186B0		E K C D F L E V C Y L L L L N G D L P N G A E M K K G F V T T I S Q H H V M V			
UniRef90_A4BDM3					
UniRef90_F9UC85		A S F L E V V A Y L L L Y G E L P V E T E L V G F E K L I T R H T M L			
UniRef90_Q482S8		K Q A D F L E V V A Y L L L N G D A P T Q S E Y E E F K S D T T T H T M V			
UniRef90_UPI00047A07FF		E K A D F L E V V A Y L L L Y G E L P D A E R L A K F H S D L T K K N S V L			
UniRef90_UPI0004096869	S	K K S T F L E V A Y L L L Y G E L P T Q A E Y D A F S E K E L T Q H T L V			
UniRef90_L0GS19		A S F L E V A Y L L L Y G E L P D E R Q L L A F E E A M A R H S M I			
UniRef90_Q1QMM3		E K G D F L E T C Y L L L Y G E L P T K S Q K F D F D Q R V I H H T M V			
UniRef90_R9NJW8		S N Y L E V C Y L L L N G E A P T K E Q F D E F K T A I V T R H T M I			
UniRef90_UPI00036734FB		E K A D F L E T A Y L L L E G E L P K P D E K E A F D T A I T R H T M V			
UniRef90_V8A7M3		E A S F T E T A Y L L L V Y G E L P N R A D Y D R F Q H D L T K E Q A L L			
UniRef90_G5ZYJ2		D Q S S F L E V A Y L L L N G E L P N Q A E S D E F V D A I T R H T M V			
UniRef90_D7DKA5		E H C N F M E V S Y L L L H G E L P N A T Q T K E F T D T I S G S T M L			
UniRef90_UPI00036AA147		S N Y V E M S Y L L L F G E L P T D E Q Y K E F E K T I R Y H T M V			
UniRef90_I0ICJ7		E N S S F I E T A L L L I H G E K P S K E S L S R F S E R L T H H Q M I			
UniRef90_Q22GZ1		E H S T F L E V C Y L M I Y G V L P S A K E L N A F E E L V S E M M V			
UniRef90_Q0K8G2					
UniRef90_F9YQ47		E K A D F L E V A Y L L L V F G E L P T K A E Y D K F I K T I H K Y T L V			
UniRef90_UPI0004781AFA		E N A T F N E V S Y L L L K G E L P T T E E L R K F N D E I R H T L L			
UniRef90_W0RGY2		E G A T F N E V A Y L L L R N G E L P S Q G E Y E Q W V H D I T Y H T Y V			
UniRef90_H2CC72		R S S F L E V A Y L L L Y G E L P S Q G Q F G E F R N R V T R Y H T M I			
UniRef90_I3ZY68		E K S T F V E T M Y L L L Y G E L P N R E E L T R F K T S N Q Y N F V			
UniRef90_UPI00037CF664		E H G D F L E T C Y L L L Y G E L P T T A E K N D F V Q R V T Y H T M I			
UniRef90_D0LX44		E N S S F T E V A Y L V I Y G K L P N K T E L S E F R E L L T Y H S M I			
UniRef90_E4NI89		G E A N F I E T A Y L L L N G E L P T N E G Q L A A F S N E I T Q H T L L			
UniRef90_F6FPT7		S T F L E T A Y L L L R G E L P T A E Q L D A F S T R I N R H T L V			
UniRef90_Q1NIZ1		E N C T F V E V A Y L L L D H G C L P N R E Q L N D F S Q M L N D F A M V			
UniRef90_F4CTR7		E R S S F L E V S Y L L L Y G E L P T S A D Q L D T F T S N I S R R H T L L			
UniRef90_UPI0003B6EE5C		E H S T F L E V A W L L L Y G V L P S A D Q L A D F D E K I R R H T L L			
UniRef90_D1BKM6		E K S T F L E V A Y L L L H G E L P S K S E G E A F V E R V N R H T L V			
UniRef90_A0A010NSD9		E K S S F L E V S Y L L L Y G E L P T Q Q Q L S D F D T V T R H T L L			
UniRef90_T1ADE0		K Q S S F L E V A Y L L L H G E L P N Q A Q F D A F D N E V T H H S M M			
UniRef90_K2Q0P8		E K A D F L E V A Y L L L F G E L P T K E Q L N K F H N D L K E H L E V			
UniRef90_I6VJQ3	L D K E	E Y P A V E G L I W L L M T G S I P S V Q E V Q L L S A S S A P S P F I			
UniRef90_I6WZU4					
UniRef90_UPI0003664A59		S D F M E V C Y L L L N G E L P N Q A Q R E D F S Y R V L H H N L V			
UniRef90_UPI0003647988		E N A S F L E V A F L L L F G E L P N Q E E L D N F H A D I K K E S H V			
UniRef90_UPI00036C4B5E		E Q S D Y I L E V C Y L L L F G A L P D A K Q K K K F E H D I R Y H T M V			
UniRef90_E0WR37		E K S T Y L E V C Y L L L Y G E P T E E A L K T F K T T V T M H T M I			
UniRef90_B0XKG1	C G G Q E	P L P E G L F W L L I T G T V P T S D E L A G N F E D L I R R H T M L			
UniRef90_W9G8E5		S T F L E V A Y L L L Y G T L P T S D E L A G N F E D L I R R H T M L			
UniRef90_V4J2X2		A S F L E V A Y L L L Y G D L P N E T A L A D F E R V I T T H T M M			
UniRef90_C6X1X0		E K S N F T E V M Y L L L H G E L P T K D Q F S G F E G G I K K Y N F V			
UniRef90_C6WI44		E K S N F L E V S Y L L L N G E L P T E A Q L A D F S S K I S R H T L L			
UniRef90_R5Q1W3		E K M T F V E T A W L L L Y G R L P T M S E L K Q F S T L T E N E L L			
UniRef90_D2W3U4		E K S S F L E V A Y L L L Y G E L P T S Q S Q Y N D W C Q K L T T H T F I			
UniRef90_P83372	A T P G E	P L P E G L W L L L T G K V P T S R S K N M H Y P V N N G V V P K F			
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UniRef90_R5WP40		G S K F G F E E T I Y L L L F G G E L P N E Q Q F R S F V E L M E C Y R E L			
UniRef90_R8ANH1		S D Y L E V C Y L L L Y G E V P T K A Q Y E R F I H T V K R H T M V			
UniRef90_Q4UF22	G K N P D C P Y T E S V L W F L L T G E V P S P V D V D D L S Y E L Y K R S V V				
UniRef90_I3RL22	A S G G E E P L P E G L F W L L I T G Q V P T E E Q V S W L S K E W A K R A A P				
UniRef90_R7Y1T5		E S S F L E V A Y L L L H G E L P T K A E F D A W V H E I T Y H T F V			
UniRef90_G8S5J3		E K S T F L E V S Y L L L M N G E L P T E A Q L R D F A D K I R V H T L L			
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UniRef90_G7QM03		E N S T F T E V A Y L L L Y G K I P S D S E L K K W N D E L T M H T L I			
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[illegible]

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UniRef90_D2W3U4 G L P K S R Y W E P T Y E D S L I A Q L P V V A S Y V Y R R I Y K G G R M I
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UniRef90_R6K2V1 D I S V E N A L R Q A L L I A K L P L I A V Y S Y H A Y R H F R K D I
UniRef90_D4M2G6 D A N R R K A L K L Q A Q L P T I V A A F A R V R Q G K D P
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UniRef90_UPI00036186B0	I	Y	P	R
UniRef90_A4BDM3	I	V	P	R
UniRef90_F9UC85	M	Y	P	R
UniRef90_Q482S8	V	Y	P	R
UniRef90_UPI00047A07FF	D	Y	G	K
UniRef90_UPI0004096869	N	Y	P	D
UniRef90_L0GS19	N	Y	P	R
UniRef90_Q1QMM3	M	Y	P	K
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UniRef90_V8A7M3	V	Y	P	R
UniRef90_G5ZYJ2	N	Y	P	R
UniRef90_D7DKA5	M	Y	P	Q
UniRef90_UPI00036AA147	N	Y	P	R
UniRef90_I0ICJ7	M	Y	P	D
UniRef90_Q22GZ1	V	R	P	K
UniRef90_Q0K8G2	I	Y	P	Q
UniRef90_F9YQ47	N	Y	Y	N
UniRef90_UPI0004781AFA	M	Y	P	D
UniRef90_WCCGY2	V	Y	P	R
UniRef90_H2CC72	V	Y	P	R
UniRef90_I3ZY68	N	E	P	D
UniRef90_UPI00037CF664	M	Y	P	R
UniRef90_D0LX44	M	Y	P	R
UniRef90_E4NI89	V	Y	P	R
UniRef90_F6FPT7	L	Y	P	D
UniRef90_Q1NI21	V	Y	P	R
UniRef90_F4CTR7	L	Y	P	D
UniRef90_UPI0003B6EE5C	L	Y	P	D
UniRef90_D1BKM6	L	Y	P	D
UniRef90_A0A010NSD9	L	Y	P	D
UniRef90_T1ADE0	R	F	P	R
UniRef90_K2Q0P8	D	Y	G	D
UniRef90_F0VJQ3	D	Y	Q	R
UniRef90_I6WZU4	M	H	P	Q
UniRef90_UPI0003664A59	V	Y	P	Q
UniRef90_UPI0003647988	D	Y	G	D
UniRef90_UPI00036C4B5E	I	Y	P	R
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UniRef90_B0XKG1	G	A	I	D
UniRef90_W9G8E5	L	Y	P	D
UniRef90_V4J2X2	M	Y	P	D
UniRef90_C6X1X0	N	H	G	D
UniRef90_C6WI44	L	Y	P	D
UniRef90_R5Q1W3	V	Y	P	D
UniRef90_D2W3U4	N	T	P	V
UniRef90_P83372	P	V	D	D
UniRef90_G2Z3S5	N	Y	Y	D
UniRef90_G4QLN7	V	Y	P	T
UniRef90_A0P4S8	V	Y	P	T
UniRef90_M4VY20	M	Y	P	R
UniRef90_I4ESY8	L	Y	P	D
UniRef90_F4A531	H	S	P	R
UniRef90_B2GKP3	L	Y	P	H
UniRef90_R5WP40	H	N	K	P
UniRef90_R8ANH1	I	Y	P	R
UniRef90_Q4UF22	V	Q	Y	N
UniRef90_I3RLL2	G	A	I	D
UniRef90_R7Y1T5	I	Y	P	D
UniRef90_G8S5J3	P	Y	P	D
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UniRef90_UPI00037D587B	M	Y	P	Q
UniRef90_W0EOZ0	I	Y	P	H
UniRef90_J9IRK1	V	Y	P	D
UniRef90_R6NQ55	H	T	P	Q
UniRef90_R6F757	Y	A	P	D
UniRef90_C9RMN8	V	Y	P	E
UniRef90_U4TEP3	I	A	P	R
UniRef90_G8A512	P	I	D	L
UniRef90_K1YNP5	V	Y	P	R
UniRef90_Q3SEX3	V	Y	P	Q
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UniRef90_A0A023BS88	D	Y	G	D
UniRef90_K9PBL3	I	Q	P	R
UniRef90_R7HUN1	H	R	P	D
UniRef90_A4BQU1	V	Y	P	Q
UniRef90_G7QM03	I	H	P	L
UniRef90_R7C8N7	R	T	P	D
UniRef90_R6RU61	R	N	P	D
UniRef90_F1KWZ6	G	A	I	D
UniRef90_R6K2V1	K	N	P	K
UniRef90_D4M2G6	R	N	P	K
UniRef90_D6XSS9	V	A	P	K
UniRef90_Q1GUX5	I	Y	P	D
UniRef90_B3EG62	V	M	P	D
UniRef90_F5SLF6	V	A	P	N

UniRef90_UPI00029ABE50	Q	N	A	C	S	A	S	T	V	R	I	V	G	S	S	D	C	N	L	Y	A	S	V	A	A	G	I	A	A	L	W	G	P	L	H	G	G	A	N	Q	A				
UniRef90_K2IRJ1	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	Q	A		
UniRef90_UPI00036186B0	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	C	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A		
UniRef90_A4BDM3	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	C	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A		
UniRef90_F9UC85	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A		
UniRef90_Q482S8	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A		
UniRef90_UPI00047A07FF	Q	N	C	S	T	S	T	S	T	V	R	M	V	G	S	S	H	A	G	L	F	A	S	L	S	A	G	I	A	S	A	L	W	G	P	L	L	H	G	G	A	N	Q	S	
UniRef90_UPI0004096869	Q	N	C	S	T	S	T	S	T	V	R	M	V	G	S	S	Q	A	S	L	I	Y	A	A	I	S	A	G	I	A	S	A	L	W	G	P	L	L	H	G	G	A	N	Q	S
UniRef90_L0GSI9	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A		
UniRef90_Q1QMM3	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A	
UniRef90_R9NJW8	Q	N	A	S	T	S	T	S	T	V	R	T	A	G	S	S	G	A	N	P	F	A	C	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A	
UniRef90_UPI00036734FB	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	C	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A		
UniRef90_V8A7M3	Q	N	A	S	T	S	T	S	T	V	R	L	V	G	S	T	G	S	N	P	F	A	C	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A	
UniRef90_G5ZYJ2	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	S	G	A	N	P	F	A	C	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A	
UniRef90_D7DKA5	Q	N	A	S	T	S	T	S	T	V	R	L	V	G	S	S	G	A	N	P	F	A	C	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A	
UniRef90_UPI00036AA147	Q	N	A	S	T	S	T	S	T	V	R	L	A	G	S	T	G	A	N	P	F	A	C	C	I	V	A	A	G	I	A	A	L	W	G	P	A	H	G	G	A	N	E	A	
UniRef90_I0ICJ7	Q	N	C	S	T	A	T	V	R	M	V	G	S	S	G	A	N	L	F	A	S	C	I	V	A	A	G	I	A	A	L	W	G	P	L	H	G	G	A	N	V	A			
UniRef90_Q22GZ1	Q																																												

[illegible]

UniRef90_UPI00029ABE50	R	V	Y	K	N	F	D	P	R	A	K	I	I	T	K	K	A	C	D	E	I	L	E	N	L	G	I	N	D	P	L	I	L	E	I	A	K	K	L	E	E	A			
UniRef90_K2IRJ21	R	V	Y	K	N	F	D	P	R	A	T	V	M	R	K	Q	S	T	C	H	E	L	L	G	V	D	N	N	D	R	D	T	F	L	K	L	A	K	E	L	E	K	A	L	
UniRef90_UPI00036186B0	R	V	Y	K	N	F	D	P	R	A	K	I	V	M	K	E	T	A	D	E	L	A	E	E	L	G	I	H	D	T	N	N	P	L	I	L	K	I	A	A	R	L	E	K	I
UniRef90_A4BDM3	R	V	Y	K	N	F	D	P	R	A	K	I	I	R	E	V	C	H	E	V	L	E	E	L	G	I	S	D	P	L	L	F	E	L	A	M	K	L	E	E	E				
UniRef90_F9UC85	R	V	Y	K	N	F	D	P	R	A	T	V	M	R	E	T	C	H	E	V	L	E	E	L	G	I	S	D	P	L	L	D	V	A	M	A	L	E	K	E	V				
UniRef90_Q482S8	R	V	Y	K	N	F	D	P	R	A	K	I	I	K	K	A	A	D	D	V	L	G	E	L	G	I	E	D	P	L	L	I	E	I	A	K	G	L	E	K	E				
UniRef90_UPI00047A07FF	R	V	Y	K	N	F	D	P	R	A	K	I	I	K	Q	A	A	D	E	V	L	S	R	L	G	V	T	P	V	L	E	I	A	K	E	L	E	A	L						
UniRef90_UPI0004096869	R	V	Y	K	N	F	D	P	R	A	K	I	I	R	E	V	C	H	E	V	L	E	E	L	A	D	S	N	N	P	L	F	E	L	A	L	R	L	E	E					
UniRef90_L0GSI9	R	V	Y	K	N	F	D	P	R	A	K	I	I	M	R	E	T	C	H	E	V	L	E	E	L	G	I	S	D	P	L	L	K	V	A	L	E	L	E	K	I	A	L		
UniRef90_Q1QMM3	R	V	Y	K	N	F	D	P	R	A	T	V	M	R	E	T	C	H	E	V	L	E	E	L	G	I	S	D	P	L	L	D	E	M	E	L	E	Y	I	A	L				
UniRef90_R9NJW8	R	V	Y	K	N	F	D	P	R	A	K	I	V	L	R	K	A	C	H	E	V	L	G	K	E	L	G	I	N	D	P	L	L	E	L	A	M	G	L	E	E	L			
UniRef90_UPI00036734FB	R	V	Y	K	N	F	D	P	R	A	K	I	V	M	E	K	T	Y	H	E	V	L	G	A	E	K	H	D	P	M	F	D	J	L	A	A	E	L	E	R	T	A	V		
UniRef90_V8A7M3	R	V	Y	K	N	F	D	P	R	A	K	I	I	M	E	K	T	Y	H	E	V	L	G	A	E	K	H	D	P	M	F	D	J	L	A	A	E	L	E	R	T	A	V		
UniRef90_G5ZYJ2	R	V	Y	K	N	F	D	P	R	A	K	I	V	L	R	K	S	C	H	E	V	L	G	A	E	K	M	G	I	N	D	P	L	L	E	L	A	M	E	L	E	E	L		
UniRef90_D7DKA5	R	V	Y	R	N	M	D	P	R	A	K	I	V	M	R	T	T	C	H	E	V	L	E	E	L	D	E	H	D	D	P	M	F	K	L	A	M	E	L	E	K	I	A	L	
UniRef90_UPI00036AA147	R	V	Y	R	N	F	D	P	R	A	K	I	V	M	K	E	T	C	H	E	V	L	E	E	L	G	I	S	D	P	L	L	K	I	A	A	R	L	E	E	Q	L			
UniRef90_I0ICJ7	G	V	Y	K	S	Y	D	P	R	A	M	V	L	M	K	S	A	D	K	V	L	A	K	L	G	V	D	D	P	L	L	K	I	A	I	A	R	E	L	E	E	T			
UniRef90_Q22GZ1	R	V	Y	K	N	F	D	P	R	S	R	V	M	Q	K	M	C	Y	K	V	L	E	V																						

	370	380	390	400																								
UniRef90_UPI00029ABE50	A	D	Q	Y	F	I	D	R	K	L	F	P	N	V	D	F	Y	S	G	I	I	L	R	A	L	G		
UniRef90_K2IRJ21	A	D	Q	Y	F	H	D	R	K	L	F	P	N	V	D	F	Y	S	G	I	I	L	R	A	L	G		
UniRef90_UPI00036186B0	A	E	D	P	Y	F	V	E	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	V	L	R	A	L	
UniRef90_A4BDM3	A	L	E	Y	F	V	E	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	I	F	K	A	L	G	
UniRef90_F9UC85	I	D	D	Y	F	V	E	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	I	Q	A	L	G	
UniRef90_Q482S8	A	L	E	Y	F	V	E	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	I	L	K	A	L	
UniRef90_UPI00047A07FF	A	L	E	Y	F	V	D	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	I	Y	R	G	M	
UniRef90_UPI0004096869	N	D	Q	Y	F	I	D	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	I	Y	R	A	L	
UniRef90_L0GSI9	I	D	E	Y	F	V	E	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	I	Y	R	A	L	
UniRef90_Q1QMM3	N	D	Q	Y	F	I	D	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	T	L	K	A	M	
UniRef90_R9NJW8	N	D	P	Y	F	I	E	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	L	K	A	M	G	
UniRef90_UPI00036734FB	A	D	N	Y	F	I	E	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	L	L	K	A	M	G	
UniRef90_V8A7M3	N	D	P	Y	F	I	Q	R	R	L	F	P	N	V	D	F	Y	S	G	I	I	L	L	K	A	M	G	
UniRef90_G5ZYJ2	A	L	K	Y	F	I	D	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	L	L	K	A	M	N	
UniRef90_D7DKA5	E	D	E	Y	F	V	I	S	R	K	L	F	P	N	V	D	F	Y	S	G	I	I	V	M	R	A	M	
UniRef90_UPI00036AA147	E	D	E	Y	F	I	E	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	L	K	A	I		
UniRef90_I0ICJ7	A	D	E	Y	F	V	I	S	R	N	L	F	P	N	V	D	F	Y	S	G	I	I	L	M	R	A	M	
UniRef90_Q22GZ1	Q	D	P	Y	F	I	D	R	K	K	L	F	P	N	V	D	F	Y	T	G	L	V	Y	K	A	L	D	
UniRef90_Q0K8G2	E	D	E	Y	F	V	S	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	V	Q	R	A	L	
UniRef90_F9YQ47	A	L	E	Y	F	K	S	R	N	L	F	P	N	V	D	F	Y	S	G	I	I	I	Y	R	A	L	G	
UniRef90_UPI0004781AFA	L	D	D	Y	F	I	S	R	K	K	L	F	P	N	V	D	F	Y	T	G	L	I	I	Y	R	A	M	
UniRef90_WORGY2	L	D	D	Y	F	V	S	R	K	K	L	F	P	N	V	D	F	Y	T	G	L	I	I	Y	R	S	M	A
UniRef90_H2CC72	A	D	E	Y	F	V	E	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	I	Y	K	A	M	
UniRef90_I3ZY68	A	D	E	Y	F	I	E	R	K	K	L	F	P	N	V	D	F	Y	S	G	I	I	I	Y	Q	A	L	
UniRef90_UPI00037CF664	H	D	D	Y	F	V	E	K	K	L	F	P	N	I	D	F	Y	S	G	I	I	T	L	R	A	L	G	
UniRef90_D0LX44	A	D	E	Y	F	I	E	R	K	K	L	F																

				410				420			430																											
UniRef90_UPI00029ABE50	R	L	P	G	W	I	A	Q	W	K	E	M	H	E	N	K	E	P	I	G	R	P	R	Q	I	Y	V	G	E	T	D	R	A	F				
UniRef90_K2IRJ1	R	T	V	G	W	I	S	Q	W	K	E	M	I	E	D	P	M	K	I	G	R	P	R	Q	L	Y	T	G	A	T	T	E	R					
UniRef90_UPI00036186B0	R	S	V	G	W	I	A	Q	W	D	E	M	I	S	D	E	L	K	I	G	R	P	R	Q	L	Y	T	G	V	T	T	R	D	V	K	S		
UniRef90_A4BDM3	R	T	P	G	W	I	A	H	W	K	E	M	I	S	G	P	Y	R	I	G	R	P	R	Q	L	Y	T	G	H	E	Q	R	D	L	K	K		
UniRef90_F9UC85	R	T	V	G	W	V	S	H	W	M	E	M	M	S	D	N	N	R	I	G	R	P	R	Q	L	Y	T	G	H	G	P	T	Q	R	D			
UniRef90_Q482S8	R	T	V	G	W	I	A	H	W	D	E	M	L	S	Q	G	Q	K	I	G	R	P	R	Q	K	Y	T	G	E	T	N	R	E	F				
UniRef90_UPI00047A07FF	R	L	P	G	W	I	A	Q	W	R	E	M	R	L	R	K	E	P	I	G	R	P	R	Q	I	Y	T	G	E	T	H	R	E	F	K			
UniRef90_UPI0004096869	R	L	P	G	W	I	A	Q	W	K	E	M	R	E	N	K	E	P	I	G	R	P	R	Q	V	Y	T	G	V	G	A	T	E	R				
UniRef90_L0GS19	R	T	V	G	W	V	S	H	W	M	E	M	M	A	D	N	N	R	I	G	R	P	R	Q	I	Y	T	G	P	T	H	R	D					
UniRef90_Q1QMM3	R	T	V	G	W	I	S	Q	W	S	E	M	I	E	D	Q	Q	K	I	G	R	P	R	Q	L	Y	T	G	A	A	R	R	Y	V	D			
UniRef90_R9NJW8	R	T	V	G	W	I	A	H	W	K	E	M	H	D	D	G	V	K	I	A	R	P	R	Q	L	Y	T	G	Y	D	K	R	D	F	K	S		
UniRef90_UPI00036734FB	R	T	T	G	W	I	A	Q	W	N	E	M	I	T	D	T	Q	R	I	G	R	P	R	Q	L	Y	T	G	P	S	E	R	P	Y	K			
UniRef90_V8A7M3	R	T	V	G	W	V	S	Q	W	R	E	M	E	E	P	G	Q	R	I	G	R	P	R	Q	L	Y	T	G	V	G	A	R	R	D				
UniRef90_G5ZYJ2	R	T	V	G	W	I	S	Q	W	K	E	M	I	E	D	D	Q	R	I	G	R	P	R	Q	L	Y	T	G	P	A	H	R	E	F				
UniRef90_D7DKA5	R	T	A	G	W	I	A	Q	W	S	E	M	I	S	D	E	H	K	I	G	R	P	R	Q	L	Y	T	G	K	G	N	L	R	R	D			
UniRef90_UPI00036AA147	R	T	I	G	W	I	S	H	W	H	E	M	I	S	G	S	Y	R	I	G	R	P	R	Q	L	Y	T	G	Y	T	E	R	D	Y	P	T	K	
UniRef90_I0ICJ7	R	M	P	G	W	I	A	Q	W	W	E	V	N	Q	Q	K	S	R	I	Y	R	P	R	Q	V	Y	T	G	A	R	E	R						
UniRef90_Q22GZ1	R	S	I	G	W	I	T	Q	W	S	E	M	M	A	E	G	N	K	I	G	R	P	R	Q	L	Y	T	G	V	G	P	P	V	R	E	F		
UniRef90_Q0K8G2	R	T	P	G	W	I	S	Q	W	S	E	M	I	E	D	E	Y	K	I	G	R	P	R	Q	L	F	V	G	A	A	T	R	D	V	P			
UniRef90_F9YQ47	R	L	P	G	W	I	A	Q	W	K	E	M	R	Q	G	N	E	P	I	G	R	P	R	Q	I	Y	T	G	V	G	Q	T	Q	R	K	F		
UniRef90_UPI0004781AFA	R	L	P	G	W	I	A	H	Y	R	E	Q	L	E	M	N	T	K	I	N	R	P	R	Q	V	Y	T	G	E	T	L	R	K	V				
UniRef90_W0RGY2	R	T	A	G	W	L	A	Q	W	E	M	L	E	D	Q	Q	K	I	A	R	P	R	Q	I	Y	T	G	P	A	E	R							
UniRef90_H2CC72	R	M	P	G	W	I	A	Q	W	K	E	M	I	E	D	T	T	K	I	G	R	P	R	Q	I	Y	T	G	A	A	H	R	Y	V	P			
UniRef90_I3ZY68	R	L	P	G	W	I	S	Q	W	K	E	M	R	E	T	H	Q	P	I	G	R	P	R	Q	V	Y	T	G	A	T	T	R	D					
UniRef90_UPI00037CF664	R	T	V	G	W	I	A	Q	W	K	E	M	E	D	P	H	Q	K	I	G	R	P	R	Q	L	Y	T	G	A	A	D	H	R	D				
UniRef90_D0LX44	R	L	P	G	W	I	A	H	W	R	E	M	H	N	D	G	R	R	I	G	R	P	R	Q	V	Y	T	G	V	G	E	Q	K	R	D			
UniRef90_E4NI89	R	L	P	G	W	I	A	H	W	H	E	M	K	D	P	T	S	R	I	G	R	P	R	Q	I	Y	T	G	V	E	I	L	R	D				
UniRef90_F6FPT7	R	M	P	G	W	I	A	Q	W	R	E	M	M	K	D	P	Q	K	I	G	R	P	R	Q	I	Y	T	G	P	T	E	R	D					
UniRef90_Q1NIZ1	R	L	P	G	W	I	A	Q	W	K	E	M	W	D	D	P	A	R	I	S	R	P	R	Q	V	Y	T	G	V	G	P	L	G	R	P	F		
UniRef90_F4CTR7	R	L	P	G	W	I	A	H	W	R	E	M	I	S	D	P	Q	K	I	G	R	P	R	Q	L	Y	T	G	P	T	E	R	Y	V	D			
UniRef90_UPI0003B6EE5C	R	L	P	G	W	I	A	H	W	R	E	M	N	L	D	T	Q	K	I	G	R	P	R	Q	L	Y	T	G	E	P	E	R	H	Y	P			
UniRef90_D1BKM6	R	M	P	G	W	I	A	Q	W	R	E	M	M	K	D	P	Q	K	I	G	R	P	R	Q	I	Y	T	G	A	T	E	R	D					
UniRef90_A0A010NSD9	R	L	P	G	W	I	A	Q	W	R	E	M	I	E	D	S	T	K	I	G	R	P	R	Q	I	Y	T	G	E	P	E	R	N	Y	P			
UniRef90_T1ADE0	R	T	A	G	W	I	A	H	W	I	E	Q	H	E	T	A	D	K	I	G	R	P	R	Q	V	Y	T	G	A	T	K	R	D					
UniRef90_K2Q0P8	R	L	P	G	W	I	A	Q	W	R	E	M	R	L	K	Q	E	P	I	G	R	P	R	Q	I	Y	T	G	V	G	E	N	Q	R	E	F		
UniRef90_F0VJQ3	R	A	I	G	I	A	S	Q	Y	V	W	S	R	V	L	G	L	P	I	E	R	P	K	S	T	T	L	E	R	L	K	A	A	C	L	K	K	
UniRef90_I6WZU4	R	V	V	G	W	I	S	Q	W	S	E	M	I	S	D	D	Y	R	I	G	R	P	R	Q	L	Y	T	G	V	G	E	T	R	S	V	P		
UniRef90_UPI0003664A59	R	T	V	G	W	V	A	Q	W	K	E	M	I	E	D	N	H	K	I	S	R	P	R	Q	L	Y	T	G	A	D	A	R	E	F				
UniRef90_UPI0003647988	R	L	P	G	W	I	A	Q	W	R	E	M	R	L	M	K	E	P	I	G	R	P	R	Q	V	Y	T	G	E	T	H	R	E	L	K			
UniRef90_UPI00036C4B5E	R	T	V	G	W	I	S	H	W	N	E	M	I	T	N	P	Y	R	I	G	R	P	R	Q	L	Y	T	G	K	D	K	R	K	F				
UniRef90_E0WR37	R	T	I	G	W	V	A	H	W	K	E	M	H	D	Q	G	I	K	I	A	R	P	R	Q	L	Y	T	G	Y	S	K	R	D	F				
UniRef90_B0XKG1	R	A	L	G	V	L	A	S	L	V	W	D	R	A	L	G	L	P	I	E	R	P	K	S	M	S	T	D	G	L	I	K						
UniRef90_W9G8E5	R	L	P	G	W	I	A	Q	W	R	E	M	M	N	D	P	I			G	R	P	R	Q	I	Y	T	G	E	P	E	R	D	Y	P	A		
UniRef90_V4J2X2	R	T	V	G	W	I	T	H	W	M	E	M	M	S	D	N	N	R	I	G	R	P	R	Q	I	Y	T	G	Q	G	P	V	A	R	D			
UniRef90_C6X1X0	R	L	P	G	W	I	S	Q	W	K	E	M	R	L	H	N	D	P	I	G	R	P	R	Q	V	Y	T	G	Q	G	A	Q	K	R	D			
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UniRef90_R5Q1W3	R	I	P	G	W	I	A	H	W	K	E	G	K	D	D	A	G	K	L	V	R	P	R	Q	V	Y	T	G	A									
UniRef90_D2W3U4	R	V	A	G	W	L	A	H	W	R	E	M	V	M	D	N	L	K	I	F	R	P	R	Q	K	Y	T	G	H	G	L	R	Y	V	D			
UniRef90_P83372	R	S	I	G	I	G	S	Q	L	I	W	D	R	A	L	G	L	P	I	E	R	P	K	S	V	T	M	E	S	L	E	S	F	C	K	K		
UniRef90_G2Z3S5	R	L	P	G	W	I	A	Q	W	K	E	M	R	V	N	K	E	P	I	G	R	P	R	Q	V	Y	T	G	Y	A	L	R	D	F	K			
UniRef90_G4QLN7	R	T	V	G	W	I	S	H	W	H	E	M	L	S	Q	G	Q	K	I	G	R	P	R	Q	L	Y	T	G	E	T	Q	R	K					
UniRef90_A0P4S8	R	T	A	G	W	I	A	H	W	D	E	M	M	S	T	E	N	K	I	G	R	P	R	Q	I	Y	T	G	N	G	K	T	R	R	D	V	P	
UniRef90_M4VY20	R	T	V	G	W	I	S	Q	W	K	E	M	E	E	P	S	L	K	I	G	R	P	R	Q	L	Y	T	G	P	A	Q	R	Y	V	P			
UniRef90_I4ESY8	R	L	P	G	W	I	A	Q	W	R	E	M	I	E	D	P	A	K	I	G	R	P	R	Q	V	Y	T	G	E	T	E	R	A	F				
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UniRef90_B2GKP4	R	L	P	G	W	I	A	Q	W	R	E	M	I	E	D	E	T	K	I	G	R	P	R	Q	L	Y	T	G	V	G	E	G	E	R	H	Y	P	T
UniRef90_R5WP40	R	I	A	G	W	S	A	H	R	I	E	E	L	V	N	A	G	K	I	I	R	P	A	Y	K	Y	V	G	T	H	R	E	Y	L	P	M	E	
UniRef90_R8ANH1	R	T	V	G	W	I	A	H	W	N	E	M	H	S	E	G	L	R	I	A	R	P	R	Q	L	Y	T	G	E	T	Q	R	E	F				
UniRef90_Q4UF22	R	S	M	G	I	L	S	Q	L	V	W	A	R	A	L	R	Y	P	I	E	R	P	K	S	L	S	L	E	T	V	E	K	L	C	N	S		
UniRef90_I3RL2	R	A	L	G	V	L	A																															
UniRef90_R7Y1T5	R	T	P	G	W	L	A	Q	W	S	E	L	I	Q	D	D																						

1 10 20 30 40

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UniRef90_UPI00047DE9E6

		50	60	70	80																																										
UniRef90_R6H0G6	D	V	V	G	Y	T	Y	E	D	G	R	K	I	P	A	D	G	Q	L	F	F	Q	G	Y	N	V	A	D	M	V	A	S	L	E	K												
UniRef90_UPI000344E305	Y	K	P	G	L	E	G	V	P	A	T	L	S	S	I	S	S	V	D	G	Q	K	G	L	E	T	Y	R	G	I	P	E	Q	L	A	Q	N										
UniRef90_UPI000289B674				K	G	L	E	G	V	V	A	T	T	S	A	I	S	S	I	H	Q	E	D	V	L	T	Y	R	G	I	P	E	Q	D	L	A											
UniRef90_D4MW69	M	I	N	A	Y	T	M	L						D	R	E	L	V	P	C	E	G	K	L	I	Y	Y	R	G	I	D	E	D	I	V	K	G	F	I	E							
UniRef90_UPI000477E741	Y	D	P	G	Y	V	S	T	G	S	T	A	S	D	I	T	F	I	D	G	A	E	G	L	R	Y	R	G	Y	A	I	E	D	L	A	A	K										
UniRef90_X4ZYA1	V	T	K	G	L	E	G	V	A	T	T	S	S	S	I	S	S	I	V	V	D	G	V	L	T	Y	R	G	Y	D	I	E	D	D	L	A											
UniRef90_G0W640	V	T	T	G	M	R	G	N	K	S	I	F	W	E	G	S	T	V	D	P	N	K	G	I	T	F	H	G	K	T	I	G	E	C	Q	Q	Q	L	P	G							
UniRef90_A0A022KZR1	Y	D	P	G	F	M	N	T	A	N	T	T	S	E	I	T	Y	I	D	G	D	E	G	L	R	Y	R	G	Y	P	I	E	Q	L	A												
UniRef90_P49299	Y	D	P	G	Y	L	N	T	A	P	V	R	S	S	I	S	S	I	D	G	D	L	G	L	R	Y	R	G	Y	P	I	E	E	E	L	A											
UniRef90_S2XXB8	D	V	R	A	K	K	I	V	N	G								E	E	V	P	C	E	G	N	L	Y	Y	R	G	Y	N	V	K	D	L	V	N	G	F	L	K					
UniRef90_W0Z7Y8	Q	T	G	G	F	V	N	T	A	A	T	K	S	A	I	T	F	I	D	G	D	K	G	L	R	Y	R	G	Y	P	I	E	Q	L	A	T	H										
UniRef90_T0RKb2	I	D	N	G	F	M	N	T	G	S								A	I	T	F	L	D	G	E	K	G	L	R	Y	R	G	Y	P	I	E	Q	L	A								
UniRef90_K9Z1P9	Y	Q	P	G	L	E	G	I	P	V	A	Q	S	S	I	S	F	V	D	G	K	N	G	I	L	Y	R	G	I	N	I	E	E	L	A	Q	K										
UniRef90_E9UY23	Y	D	P	G	F	V	N	T	A	S								Y	D	G	D	K	G	I	L	Y	R	G	Y	P	I	E	Q	L	A												
UniRef90_UPI00040567FD				G	L	E	D	V	V	A	N	T	S	E	I			C	F	V	D	G	R	E	G	L	V	Y	Q	G	Y	D	I	H	D	L	I										
UniRef90_F7Z043				G	L	E	G	V	V	A	S	E	T	S	S	I	S	S	I	V	D	D	T	L	T	Y	V	G	Y	G	I	E	D	D	L	A											
UniRef90_R6MDL6	E	I	H	A	Y	D	T	L										S	D	G	S	K	P	C	D	G	K	L	Y	H	G	Y	D	V	E	D	L	I	K	G	F	I	R				
UniRef90_D3ECL8				K	G	L	E	G	I	V	A	T	T	S	A	I	S	S	I	V	D	G	V	L	T	Y	R	G	Y	D	I	E	D	D	L	A											
UniRef90_UPI0003699AB1	F	S	P	G	L	A	G	I	P	V	A	E	S	S	V	S	F	V	D	G	K	K	G	L	E	Y	R	G	I	D	I	E	Q	L	A												
UniRef90_E3BDY4				V	G	F	N	T	A	S								Y	D	G	D	Q	Q	L	R	Y	R	G	Y	P	I	D	Q	V	A												
UniRef90_K9SLF0	Y	M	P	G	L	E	G	V	P	A	T	R	S	N	I	S	Y	I	D	G	K	Q	G	I	L	Y	R	G	I	S	I	D	E	L	C	K	H										
UniRef90_I4B4L5				G	F	V	N	T	G	S	T	L	S	N	I	T	Y	I	D	G	A	N	G	L	R	Y	R	G	Y	P	I	A	E	E	L	A											
UniRef90_C4LHB6				P	G	Y	V	N	T	G	S	T	L	S	N	I	T	Y	I	D	G	A	N	G	L	R	Y	R	G	Y	P	I	A	E	E	L	A										
UniRef90_U2CNA3	D	V	R	A	T	K	M	V	D	G								K	S	V					P	C	D	G	H	L	F	Y	R	G	Y	E	N	D	L	V	E	G	F	H	K		
UniRef90_C1E756	Y	D	P	G	Y	M	N	T	A	P	C	K	S	K	I	S	Y	I	D	G	D	K	G	L	R	Y	R	G	Y	P	I	E	E	L	A												
UniRef90_UPI00035DCB5C	F	D	P	A	F	T	A	T	A	S								Y	D	G	D	A	G	L	R	Y	R	G	Y	P	I	D	T	L	A												
UniRef90_R6KMN5	D	V	T	G	Y	D	L	I	N	G								R	K	I	P	A	H	G	R	L	I	Y	Q	G	Y	N	V	N	D	I	V	D	G								
UniRef90_R7AHA8							N	V	H	G	Y	V	V	N	E	G	E	I	D	G	A	A	G	L	R	Y	R	G	Y	P	I	E	Q	L	A												
UniRef90_UPI0003B784C1				G	F	V	N	T	A	S								Y	D	G	A	A	G	L	R	Y	R	G	Y	P	I	E	Q	L	A												
UniRef90_V9R7U4	D	D	P	G	F	M	S	T	A	S								C	E	S	K	I	T	F	I	D	G	N	K	G	I	L	Y	R	G	H	N	I	V	D	L	V	N	G	N	K	
UniRef90_L1NUJ4	F	D	P	G	F	V	S	T	A	S								C	E	S	K	I	T	F	I	D	G	D	K	G	L	I	Y	R	G	Y	P	I	E	Q	L	A					
UniRef90_E0S1X6	E	I	A	K	K	N	V	D	G									K	E	T	P	A	D	G	E	I	Y	F	R	G	Y	D	V	H	Q	L	I					D	A				
UniRef90_Q2RJF3	E	V	H	G	Y													L	D	E	G	E	R	T	P	D	H	G	R	L	I	Y	R	G	I	E	I	W	D	I	V	R	G	F	Q	Q	K
UniRef90_R5T645	D	V	V	G	Y	E												L	L	D	E	G	K	K	V	N	V	P	G	K	L	F	Y	R	G	I	E	I	G	D	L	V					
UniRef90_U4WLL6				K	G	L	E	G	V	V	A	A	Q	S	A	V	C	S	I	I	D	G	V	L																							
UniRef90_C9ZZW4	M	Y	G	M	R	G	V	T	G	F	V	I	D	E	P	S	Y	I	D	K	E	V	G	I	R	F	R	G	I	S	I	S	E	L	C	C	E	K	L	P	K						
UniRef90_E0RSW6	E	V	H	G	Y													V	I	D	E	G	E	A	V	P	V	P	G	R	L	I	Y	R	G	I	S	V	E	D	L	V	A	G	F	Q	A
UniRef90_A6DFU9				P	G	Y	G	N	T									C	P	S	K	S	I	T	F	I	N	G	E	A	G	L	R	Y	R	G	Y	T	A	E	L	C					
UniRef90_B3PDN9	F	D	P	G	F	M	S	T	A	S								C	E	S	K	I	T	F	I	D	G	D	E	G	L	L	H	R	G	Y	P	I	E	Q	L	A	V	S			
UniRef90_A4BVD6				P	G	L	A	N	T	A	S							C	R	S	A	I	T	Y	I	D	G	K	N	S	L	L	R	Y	R	G	Y	P	I	E	S	Q	L	A	T	N	C
UniRef90_E6VT08	Y	D	P	G	F	G	N	T	G	A								C	S	A	I	T	F	V	D	G	E	N	G	L	R	Y	R	G	Y	S	I	E	E	L	A	N					
UniRef90_E6UG83	N	V	H	G	Y													V	V	N	E	G	E	K	M	P	I	E	G	Q	L	I	Y	R	G	Y	N	I	N	D	L	V	G	N			
UniRef90_R5ENG6				P	G	F	V	S	T	A	S							C	M	S	R	I	T	F	I	D	G	K	K	G	L	L	Y	R	G	Y	P	I	D	Q	L	A	T	K	C	D	
UniRef90_C4ZHC5	E	I	V	S	F	K	T	G	E									D	G	S	S	V				P	C	D	G	Q	L	W	Y	R	G	Y	N	V	K	T	L	T	N	N	L	R	P
UniRef90_U7JQG0	N	V	P	G	F	V	N	T	A	S								C	E	S	E	I	T	Y	I	D	G	N	N	G	L	R	Y	R	G	Y	P	I	E	Q	L	A					
UniRef90_S2VTZ0	Y	D	P	G	F	T	N	T	A	S	A	S	A	I	T	Y	I	D	G	G	A	G	L	R	Y	R	G	Y	P	I	E	Q	L	A	K	G											
UniRef90_U2PQQ6				G	Y	R	N	T	G	S								C	S	A	I	T	F	I	D	G	E	K	G	L	R	Y	R	G	I	P	I	E	T	L	A						
UniRef90_F3P5H2	L	D	P	G	F	T	N	T	A	S								C	S	Q	I	T	Y	I	D	G	A	A	G	L	R	Y	R	G	Y	P	I	E	E	L	A						
UniRef90_C7P016	L	K	Q	G	L	E	G	V	L	V	I	T	E	S	E	L	S	K	I	D	G	D	A	G	L	V	Y	R	G	Y	T	I	E	E	D	L	A	T	G								
UniRef90_V5WKD7	Y	S	K	G	L	E	G	V	V	A	A	E	S	A	I			C	R	I	D	G	Q	A	G	L	Y	Y	R	G	Y	P	I	S	E	L	A	R	K								
UniRef90_S2XPH0				K	G	L	E	G	V	V	A	T	Q	S	A	I	S	S	I	V	D	D	T	L	T	Y	V	G	Y	D	I	E	D	D	L	A	D	H									
UniRef90_R3WBS1	M	I	Q	S	Q	H	Y	E	N	G	V	L						V	P	C	E	G	V	L	H	Y	R	G	I	N	I	K	Q	L	V	Q	G	F	L	Q							
UniRef90_C5M0P5	Y	D	P	G	Y	M	N	T	T	C	C	V	S	R	I	S	F	I	D	G	N	R	G	L	R	Y	R	G	Y	P	I	E	Q	L	A												
UniRef90_Q8I6U7	V	I	G	G	L	R	N	T	I	T	L	I	T	D	T	S	Y	I	E	K	K	K	G	I	L	F	R	G	I	P	V	E	K	I	L	R	E	F	P	K							
UniRef90_K1YVX7				P	A	F	M	N	T	A	S							C	V	S	N	I	T	Y	I	D	G	D	K	G	L	R	Y	R	G	I	P	I	E	Q	L	A					
UniRef90_X0R623				T	R	G	L	E	G	I	V	A	T	T	S	S	V	S	I	D	N	V	L	T	Y	Q	G	Y	E	I	D	D	L	A													
UniRef90_A8ZRR9	F	D	P	G	F	S	N	S	G	S								C	T	S	I	T	Y	M	D	G	A	K	G	L	R	Y	R	G	Y	P	I	E	Q	L							

		90	100	110	120
UniRef90_R6H0G6	R K K G	F E E V I Y T L L F G R I	P N A R Q S A M F N D L L	S E M M N L	
UniRef90_UPI000344E305		S N F L E E T A Y L L L W G T L	P S T E D Q L K T S F E Q E I L	Y Q H R R L	
UniRef90_UPI000289B674	E H S	N F F E E E T A Y L L L W N G D L	P S T E D Q L K T S F E Q E I L	Y Q H R R L	
UniRef90_D4MW69	E D R F	G F F E E T A Y L L L F G E L	P K K E D Q L K T S F E Q E I L	A G E Y R Q L	
UniRef90_UPI000477E741		A T F N E E V S Y L L L H G E L	P T T R E Q L K A K F N D D L	R H H T L L	
UniRef90_X4ZYA1	E H A S F	E E T A F L L W F G S L	P T T A E Q L K E K L K R D L	S D F G A A L	
UniRef90_G0W640	D E F G	Y F H P E A L L W Y L M T K Q I	P T S Q Q V Q K H L T E E L	L A E R G S P	
UniRef90_A0A022KZR1		H S T Y L E V A Y L L L H G E L	P T S Q Q L D N F S A Q V	E R R T L L	
UniRef90_P49299		E S S Y V E V A Y L L L M Y G N L	P S Q S Q L A D W E F A I	S Q H S S A V	
UniRef90_S2XVB8	K	E H Y G F E E I A Y L L L F G E L	P N E S E L R E F H D V L	V E R R T L	
UniRef90_W0Z7Y8		S S Y L E V A W L L L Y G E L	P S A D E L A A F D D R I	R H H T L L	
UniRef90_T0RKB2		E S S N F V E T S Y L L L F N G E L	P T K A E H D A N F Y S K I	S S F S S L	
UniRef90_K9Z1P9		S T F L E T A Y L L L W G K L	P T K A E L A N F Q D E I	T R H R R V	
UniRef90_E9UY23		E N S N F L E V S Y L L L V H G A L	P T K E E Y D A W V H E I	T Y H T F V	
UniRef90_UPI00040567FD	G G N A S	F F E E V I Y L L L W H G D L	P N V S Q L E K A F T Q E I	A E Q R E L	
UniRef90_F7Z043		E K A S F E E V V Y L L L W H L K L	P T K S E L E T F K Q E L	A D H M D L	
UniRef90_R6MDL6	D K R F	G F E E V T Y L L L F G E L	P N K N E L D I F T K T L	S H M R T I	
UniRef90_D3ECL8		H A S F E E V A Y L L L W F G K L	P N V E E L K A L Q Q D L	N S Y A A I	
UniRef90_UPI0003699AB1		E N A S F E E T A W L L L Y G E L	P T A A E L S G F K H E L	N H H R R I	
UniRef90_E3BDY4		E N A S F L E V A A L L L D G E L	P S Q A R L D E I T Q A V	A K A S V L	
UniRef90_K9SLF0		S S F L E T A F L L L F G N L	P T E D E L K E F D H S V L	H H R R R I	
UniRef90_I4B4L5		E K S T F L E V A Y L L L Y G N L	P R K P E F D A F R E S I	T R H T M I	
UniRef90_C4LHB6		E K A T F N E V S Y L L L I N G E L	P N Q E Q L D E F F N R N I	R R H T L V	
UniRef90_U2CNA3	D H	R F G F E E V T Y L L L F N K L	P T R E E L A E F E K L L I	Y R S S L	
UniRef90_C1E756		E R S T Y L E S A F A L V Y G D L	P D A R Q L R E W E T V M	R H S S L	
UniRef90_UPI00035DCB5C		E N S G F L E V A Y L L L M N G D L	P N A D Q L S E F E H T I	T H H T F V	
UniRef90_R6KMN5	L K G	R K F G F E E T I Y L L L F G R L	P S D K D M E V F K N I	M A N F E T L	
UniRef90_R7AHA8	A E Q E	G R F G F E E T V Y L L L L G G L	P N R Q E L D A F T R H L	S A C P L	
UniRef90_UPI0003B784C1		E K S S F L E V A Y L L L I K G E L	P T A E Q L S A F T E R I	E R H T L	
UniRef90_V9R7U4		S F V E T I Y L L L F Y G V F	P S S E D L Q N F T L Q I	S Q E Y T P	
UniRef90_L1NUJ4		E H G D Y L E T C Y L L L I Y G E L	P N A E Q K K Q F V D T V	M H H T M V	
UniRef90_E0S1X6	A V K E	N R F A F E E C A Y L L L F D K L	P T G K E L F E F E K L L G	V Y K S L	
UniRef90_Q2RJF3		E G R F G F E E V C Y L L L F G E L	P D K K R L N E E F T H L	A E H R S S L	
UniRef90_R5T645	G K G N	A R Y G F E E T A F L L L F G Y L	P S K K E L N E F A G I L	R H F Y P L	
UniRef90_U4WLL6		E N A T F E E V V Y L L L W H G A L	P K R D Q L E A F Q K E L	G A N A Q I	
UniRef90_C9ZZW4	S W S G S	P L P E G M L W L L V T G T I	P N E R Q V K E M H E E R	G A D E R A	
UniRef90_E0RSW6		D G R F G F E E T A F L L L F G Y L	P T K S E L E F Q A V L	G E N R D L	
UniRef90_A6DFU9		E K H T F E E A S Y L L L Y G E L	P T A E Q L A E F K S G V	N A Y S K M	
UniRef90_B3PDN9		S D Y L E T C Y L L L I N G E L	P T P A Q K E E F T A E V	K K H S T V	
UniRef90_A4BVD6		T F P E V C Y L L L Y G E L	P N R G K Q Q F S V D L	T Y H T L L	
UniRef90_E6VT08		S S F L E T A Y M L L F G A L	P T R E E R Q Q F R D L	S D Q E L L	
UniRef90_E6UG83	A V K E N R F	G F E E I V Y L L L L G E L	P N K D E L K A F R H M I	A E H N R P L	
UniRef90_R5ENG6		Y L Q V C Y L L L F G E L	P N K E Q Y Q T F V H R I	K H H T L V	
UniRef90_C4ZHC5	G E F G	F E K I A Y L L L F G Q L	P S E S E L A E F T E V L	G R S R T L	
UniRef90_U7JQG0		E H A S F L E T A F L L L Y G E L	P T A S E L N S F E E A I	R R K T L I	
UniRef90_S2VTZ0		S S F L E V A Y L L L Y G E L	P D A V T L E A F I R R V	R K H R L L	
UniRef90_U2PQQ6		E K S D F L E V A Q L L L I F G H L	P T E A Q T Q S F S D L L	T E N A A L	
UniRef90_F3P5H2	K S	T S T F L E V A Y L L L I N G E L	P D R E S F E R M E R R I	S R H R L L	
UniRef90_C7P016		A S F E E V A Y L L L W H G H L	P N A A E L D E F T D A M V	E E R H V	
UniRef90_V5WKD7		A S F E E V I Y L L L Y G D L	P T K S E Y E G F H L R V	R T Q R D I	
UniRef90_S2XPH0		A S F E E V I Y L L L W H K R L	P K V E E L A E L K Q Q L	A D N M A V	
UniRef90_R3WBS1	D H	R L G Y E E V S Y L L L F G E L	P S S S E L S A F K K I L	A E K Q T L	
UniRef90_C5M0P5		E K S Y F T E V A F L L L Q Y G E L	P T R N Q L R R W E Q D L	M R H S M L	
UniRef90_Q8I6U7	W D N C	E K S Y P M A E A M L W F L L T K E V	P A V D D L K L S R E Y C	R A K K I	
UniRef90_K1YVX7		E K S N Y L E T S Y L L L I F G E L	P T P K Q L A S F T N K I	T M H T M I	
UniRef90_X0R623		E H A S F E E V V F L L L W N G R L	P K E S E L E N L K A K L A	M H S D I	
UniRef90_A8ZRR9		E T S C F V E V C Y L L L N G D L	P S R A E Y Q R M S V M L	N D H S L V	
UniRef90_R7HFL3		D K R F G F E E V T Y L L L F G E L	P D K K Q L A D F N E L L	G N Y R C I	
UniRef90_R4Z1T7		E R S S Y L E V A Y L L L V N G E L	P T A E E F E T W R Y E I	T H H T F I	
UniRef90_R5T5H3		D K R Y G F E E I A F L L L F G E L	P N K Q E L Q E F Q Q V L	V K N R R L	
UniRef90_L0IE77		E A S F E E V L F L L W R G H L	P T R D E L D E F T A A M A	D E R T I	
UniRef90_R6QK25	N E G R F	G F E E V V W L L L F G D L	P T E S Q L E G L R E V I	G E E C R E L	
UniRef90_E4NTX0		A S Y E E V V Y L L L W H G E L	P T R E Q L D E F S T A M A	E E R E L	
UniRef90_UPI0004730772		T F E E V A Y L L I W N G Q L	P N H E Q L N E F K E E M K A	H R V L	
UniRef90_R5A6I2		E D R F G F E E V V W L L L F G Q L	P N R R Q Y D R I C Q I L	Y E N R E L	
UniRef90_C8WR61		G A S F E E V V Y L L L W H G E L	P N Q S E L K A F T E E L	A S E R A L	
UniRef90_A0A015P6K4		H A T F E E T A Y L L L W Y G K L	P T S S E L K G L I D Q L	S A N A A V	
UniRef90_A5CT16		S S Y L E V A W L L L H G E L	P T S D Q L K G G F E E D I	R R H T L L	
UniRef90_R5JWH9	S Y A S R R Y	A F E E V T Y L L L F G D L	P N R Q Q L N S F I N I L	K S L Q E L	
UniRef90_UPI00037EE018		S T F L E V A Y L L L I Y G E L	P S E S E Y D D F E R R V	T R H T L L	
UniRef90_UPI000310DE9C		A L F E E V I Y L L L W N K K L	P N Q T E L K E F T H Q L	T K E M T L	
UniRef90_R6UM56	E T I	C G Y E E A C F L L L F G Y L	P K K E Q L Q E F C G Y L	R A H Y E L	
UniRef90_UPI0003603C3B		E K S T F L E V S Y L L L H G E L	P N K K Q N T E F T N Y I	T Q H T M L	
UniRef90_R7GIY2	G K G	R R F L Y E E V C F L L L F G Y L	P N R E E L E H F K K T I	S N H Y T L	
UniRef90_Q0A5E3		E G A T F E E V A Y L L L K G D L	P T K A E L A A Y T E K L	K G M R D L	
UniRef90_U1LSM3		F E A V A H L L W H G D L	P T D E Q L A A Y R A K E	R E H R A L	
UniRef90_B0PHJ2		E K R F G F E E A T Y L L L F G Q L	P T E V Q L K N F T D L L	A R Y R T L	
UniRef90_X2HBM4	A Q E	E Q R T G F E E T I Y L L L S G R L	P D A E E L S D F S R L L	G E S M A L	
UniRef90_R5R6S1		D D R F G F E E V A Y L L L F G D L	P D A E E L S D F S R L L	G E S M A L	
UniRef90_G7WFT7		D D R F G F E E T A Y L L L F G N L	P S Q N A Q K E F E L L L	A Q Y Q R L	
UniRef90_D4MVE4	R	G E F G F E E T Y L L L F G K L	P D E K Q L K E F R E I L	A Q S M T L	
UniRef90_UPI0004756B17		S D Y L E V C Y L L L I N G E L	P T A E E R K V F E R G I	M R H N M L	
UniRef90_S1MUD7		S Q N R Y G F E E I A Y L L L F G N L	P N E Q E L A R F T H E L	T Q R R T L	
UniRef90_F5Y7B1		D K R F G F E E T A F L L L F G H L	P S K G E H S A F C E L L	A N Y A A L	
UniRef90_K0ZDV9		K R S S F L E V A Y L L L I Y G E L	P D A S T E L S F I R A V	L H R H R L	
UniRef90_R2RTQ0	S E E R L	G F E E V S Y L L L F G S L	P S T E L L A E F R A L I	G K R S T L	
UniRef90_E1PND2		E N K L Y L D V V H L L L Y K E L	P D A T R L E A F R Y E M	K K R S F I	
UniRef90_R6TWJ8	S E S R G R F	A F E E A A Y L L L F G E L	P T E D Q L R D F C V Q L	A S Y R T L	
UniRef90_UPI00044173E1		S S F L E T A Y L L L I Y G S L	P S K R Q L H T F E T E V	M H H S G A	
UniRef90_R5Q9B1	P K N R F	L F E E A C F L L L F G Y L	P N K D E L D A F K K E L	A S R Y D L	
UniRef90_J7KWS1		S N F L E V A Y L L L Y G E L	P E P A Q L K E F S D K L	A R D N A D I	
UniRef90_UPI00047DE9E6		E N A S F E E V V Y L L L W H R K L	P N S E Q L A E L K K Q L	A E N A K I	

	130	140	150	160
UniRef90_R6H0G6	N N R F I R D V V M K A S N E N I M N A M Q R C V L T L Y T Y D D N P D			
UniRef90_UPI000344E305	K Y R I R D M M K C F P S E S V H P M D A V L Q S T A A A T L G L F Y A R R D			
UniRef90_UPI000289B674	P D Q L F E S M K A F P Q S G H P M D A V L Q S T A A A T L G L F Y A R R D			
UniRef90_D4MW69	P T N F V R D I I M K A P S Y C D M M N T L A R S V L T L F S Y D D N A			
UniRef90_UPI000477E741	D E D F K A Q F N V F P R N A H P M A V L A S S V L N I L T S T Y Y Q D E L D P L N			
UniRef90_X4ZYA1	P E L I E Q M K L Y P K D A N T M A A L R S A V S S L A L F D E E A D D M S R			
UniRef90_GOW640	P E L I T S K I I D M L P P D D T H P M T Q L A I G L A S S L S R N S K F A S N Y Q R			
UniRef90_A0A022KZR1	D E R F R R L I F D G Y P R D A H P M A V L Q A G V S A L S T F Y Q D S L D P F D			
UniRef90_P4299Z	P Q G L V D I I Q A M P H D A H P M G V L V S A M S A L S V F H P D A N P A L R			
UniRef90_S2XXB8	P E T F V R D V I M K A P S K D M M N S L S R S I L N L Y S Y D E K A D			
UniRef90_W0Z7Y8	H E D L K R F F S A L P H T A H P M S V L S S A V S S L S T Y Y D E K A D			
UniRef90_T0RKB2	P S G V K N I L N Q F P A T A H P M G V L S A T I S A L S G F Y P E			
UniRef90_K9Z1P9	K Y H I R D M M K C F P S E S G H P M D A L Q T S A A A L G L F Y S R R A L A K E			
UniRef90_E9UY23	H E N I K E F M Q G F R Y D A H P M G M L M A S V G A M S T F Y P D A N I S D			
UniRef90_UPI00040567FD	H P D V L K F L K S I P K D A N A M E V L R T A V S L A L G L Y D P D A			
UniRef90_F7Z043	P N E I L D S F K T Y P I G A H P M A A L R T A V S A L A L Y D D E A D A M D R			
UniRef90_R6MDL6	P P S F V R D I I M K A P S K D M M N L S R G V L T L Y A Y D D K A D			
UniRef90_D3ECL8	P D E L I Q Q I K L Y P K D G N T M A A L R S A V S A L A L Y D A E G D D M S R			
UniRef90_UPI0003699AB1	K F R I R D M M K C F P S E S A H P M D S L Q S T I A A L G M F Y P F P K S L I G			
UniRef90_E3BDY4	P E G L E K I F D A F P K G A H P M L L A S A V V P A L G T Y Y A D A L S V K D			
UniRef90_K9SLF0	K Y R I R D M I K S F P D N G H P M D A L Q T C V S A M G L F Y P I A			
UniRef90_I4B4L5	H E D L K R L I Y D G F P K D S H P M A T L G S M I N T L S G F			
UniRef90_C4LHB6	D E D F K D H F S I F P R S S H P M A V I A S A L N V L S T Y Y Q D S L D P L D			
UniRef90_U2CNA3	P T S F V R D I I M K A P S K D M M N T L A R S I L T L Y S Y D D R A D			
UniRef90_C1E756	P V P V I A A I E A L P H D A H P M G V I L A G L N A L S T F Y H P E Q N P A L Q			
UniRef90_UPI00035DCB5C	H Q N V K K F M E G F H H D A H P M G M L V G T L G A L S T F Y P E A K N F R E			
UniRef90_R6KMN5	S G R F V R D V V M K A S N G D I M N A M Q R C I L T L Y T Y D S K P E			
UniRef90_R7AHA8	P E N F V D M I L K A P S N N I M N K M A R S V L A L Y S Y D A E C			
UniRef90_UPI0003B784C1	H D N F K A L I G A F P E S A H P M A V L T S A V S A I G Y Y P E S T D P F D			
UniRef90_V9R7U4	P Q V V Y D V I K A F S Q D S H P M A I L M A C F S A L A A Y Y H D R E A D K D			
UniRef90_L1NUJ4	H E Q L T W F R G F R D A H P M M V G V V G A L S A F Y Q D S L E I A D			
UniRef90_E0S1X6	P T S F V R D V I M K A P S R D M M N T L A R S V L T L Y S Y D D H A D			
UniRef90_Q2RJF3	P D G F V E D M I L K A P S N D I M N K L A R S V L A A Y S Y D P N P D			
UniRef90_R5T645	P D E F L E S K N L R S P S R N L M N S L Q Q S I L S Y N Y D E D P D			
UniRef90_U4WLL6	P Q E L I E S I R N F P E G V H S M A L R T A V S S L A L Y D D K E A			
UniRef90_C9ZZW4	I S A A V K T I A S L P D N S H P M T Q F G A G L M A L Q T Y S K F A T A Y S Q			
UniRef90_E0RSW6	P G D F T E S T I L K N P S D I M N K I A R S V L T L Y S F D P N P E			
UniRef90_A6DFU9	P K Q L E K I F E A Y P D T I H P M V M I N V L T S S L S A Y F P E V T S I S D			
UniRef90_B3PDN9	D A S V A N L V K T F K R E S H P M A I L C S A V A A L S A Y I N D E I D I T N			
UniRef90_A4BVD6	H E D M K K F F E G F P A S A H P M A I L S S M I S S A Y Y P E T G E R N E			
UniRef90_E6VT08	H E G L R H H F D G F P S A G H P M A I L S A V I N A M G C Y H P D L L E I E T			
UniRef90_E6UG83	P A D F F S D M I L K A P S K D I M N K M S R S I L A L Y S Y D D N P E			
UniRef90_R5ENG6	H T Q M E S L F Q A F R D S H P M A V L C G V A G A L S A F Y H D S L D I Y D			
UniRef90_C4ZHC5	P T N F T R D V I M K A P S K D I M N S M T R S I L T L A S Y			
UniRef90_U7JQG0	D E R M R D L F R C F P R R S H P M P V L S A G I M A L S T F S G S T			
UniRef90_S2VTZ0	H E D F Q A F F G A F P S N G H P M A I L Q A G V A G L A T Y Y Q H T L N P D D			
UniRef90_U2PQZ6	H T S M A K H Y E A F P E H T N P M A I L S A M I N A L S A H Y D R P K I D S G D			
UniRef90_F3P5H2	H E D F R G F F T S F P S S G H P M A I L Q A G I A G L A T Y Y E D T L N P H D			
UniRef90_C7P016	D D D V M Q T V E Q L A D D E N P M A A L R T A V S M L S S Y D P D A E T D P T			
UniRef90_V5WKD7	K P E I L E M V K G F P R D T H P M E L Q Q S I A Y L S S Y I D H K H H G P			
UniRef90_S2XPH0	P Q E V L N H F K T Y P I D K H P M T A L R T A V S M L G L Y D E K A E D M S E			
UniRef90_R3WBS1	P T N F V R D I I M K A P S K D I M N T L A R S C V L T L A S Y D T H A D			
UniRef90_C5M0P5	H Q D V A T L T S A F R Y D A H P M G M F V S S M A A L G T L H P E T N P A L T			
UniRef90_Q8I6U7	P Q F V F D F I D N I P P F T H P M S Q L V S T V S F L E S L S L F K Y K Y S E			
UniRef90_K1YVX7	H E K M K D F M D G F L H			

UniRef90_R6H0G6 NT S V E I N A L R Q S M Q L T A K M P L I A V Y S Y H S Y R H F R Q D P
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UniRef90_X4ZYA1 G L S K D H Y W E D T L E D S L N L S F L P L L T A K I Y S K L V N G G K P L
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UniRef90_T0RK B2 E Y I R D A V V R L L A K I P T M V A A F A Q M R M G E D L F I
UniRef90_K9Z1P9 P D N R R L Q I I R L I A K M P T L G A W A F R H A Q G K P Y
UniRef90_E9UY23 G D D S M E A N V R K A T R L V A Q I P T M V T S F E R I R N G Q E P
UniRef90_UPI00040567FD E A N L R D V S L P N V L R Q C L Q L I A Q F P L L S V Y G Y Q A F K Y Y H E I V
UniRef90_R6MDL6 E A N E K K A V K L Q A Q L P T I I A A I A R V R K G K D P
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UniRef90_I4B4L5 D V S L P N V L R Q C L Q L I S L C P M L S I Y G Y Q A Y S H Y H D G T P
UniRef90_C4LHB6 G G G I Y R S H D V Q D K Q I V R I G K M T T L A A H A Y H R N T G R T P
UniRef90_U2CNA3 P L N R R L Q M A R L I A K I P T L A A Y A S R H A R G L P Y
UniRef90_C1E756 D N S A E N V L R S I E M I A K L P L I A V Y S Y H S Y R H F R K D P
UniRef90_UPI00035DCB5C T K S I E N E L R T A I S L V A K L P V I M A S A Y Q V K R S H M H P I
UniRef90_R6KMN5 T D A V E I A T A L L L A K L P T M T A Y A F R H S R G Q E M
UniRef90_R7AHA8 E L K C P E H A K L A V A K I A S I V A L I Y R Y I T N Q D F
UniRef90_UPI0003B784C1 R K V A I Y R L V S K I P T I A A M C Y R Y S N G L P F
UniRef90_V9R7U4 D V S L P N V L R Q S L Q L I S M F P L L S I Y G Y H A Y N H Y H L I I
UniRef90_L1NUJ4 D I S I R N V L R Q C I E L I A R F P I M V A Y G Y H Y E N K S L Y I
UniRef90_E0S1X6 N V D P Y Q T L L K G V S I L A K L P S M A A Y A Y H Y Y D R E S L I I
UniRef90_Q2RJF3 Q E M S K E A N Y R K S I R L T A Q T P T I V A A Y D R L R K G L E P
UniRef90_R5T645 K A N K T N Y W E Y A L D D S L D I A R S S H V A A I V Y N R L A T G K A Q L
UniRef90_U4WLL6 D L S I V N V L R Q S I E L I S R F P V L V A Y G Y H Y H G E S L Y I
UniRef90_C9ZZW4 P A Q V I E K A T Q V A I G Q M L T F V A F A Y R K S I G A S F
UniRef90_E0RSW6 A E S R K I T A Y R L I G Q I P T L S A M V Y K H S K G E E F
UniRef90_A6DFU9 A E L N T R R L L A K A K T I A A F A Y K K S I G Q P F
UniRef90_B3PDN9 D E E F L R A T A K I I S K V R T I A T W S F R K G Q G L P F
UniRef90_A4BVD6 N R A P E Y E M A T A I S I S K L P Y I M T L A Y Q V K K R Q T M F L
UniRef90_E6VT08 P E H R E L T A I R L A K M P T L A A M S Y K K S I G H P F
UniRef90_E6UG83 P L V A K A G I D N N I R Q C L S L V A I F P M L A V Y G Y H A Y N H Y E N D I
UniRef90_R5ENG6 A E K D L D S L N K A T L S L L A K V P T L A A F A Y K N S M G Q P T
UniRef90_C4ZHC5 D E A M D K A S V L L L A K V P T M I A T I A K R A A G L P P
UniRef90_U7JQG0 D A M L E R Y A A N L M S K V R T I A A G S Y K T S V I G E P I
UniRef90_S2VTZ0 P Y E R E L A T V L L L A K M P T M I S Y I A R R A I G Q D L P
UniRef90_U2PQQ6 D L D A N L R K G R R I T A K I P T V L A A F A R F R D G Q D A
UniRef90_F3P5H2 N C H C T S T L H Q V T Q L A T V V A A F H R I K N G K D Y
UniRef90_C7P016 E A N Y L D I S L P N V L N Q S L M L I S V F P M L A V Y A Y H A Y N H Y G N D I
UniRef90_V5WKD7 S Q N I Y K D K A V R N K E I A R I L G S A T T L A A M A Y R H R M G R P F
UniRef90_S2XPH0 G I L K T D Y W K Y I L L E D A T S L I S Q I Q V I G A Y I F K R T F I N N D I R
UniRef90_R3WBS1 E T E V S R N K Q T Y R M I G K M I T L A A Y A Y R H N K G L P Y
UniRef90_C5M0P5 E A N Q L K A I K L Q A K I P T I V T T F S R L R E G K E P
UniRef90_Q8I6U7 A I E T T F L R L I S K V R T M A A M S H R I S R G H K I
UniRef90_K1YVX7 D T S V P N V V R Q S L Q L I S E L P L L A V Y S Y Q A Y R H F H L I I
UniRef90_X0R623 D N V T D N S I D N V M R Q C L M L I S V F P M L A A G A Y R F S R G M P F
UniRef90_A8ZRR9 A D A P A D D R E A A R R K A R R I V A K T P T I L A A Y D R V R Q G E S P
UniRef90_R7HFL3 A N V L R Q S L Q L I S Q M P T I M N G A Y Q I K R R T F Y N K T M F L
UniRef90_R4Z1T7 E D V T D L K T N I K K G C R I T A K I P T A L A A F N R L R N G E D V
UniRef90_R5T5H3 G D P S Y S W P T K N Q A V A I T A I A P T I I A Y W Y R K M N G L E V
UniRef90_L0IE77 D Q S L E N N M R Q S L S I A R M P S I M S Y A Y Q V K R R H S M F F
UniRef90_R6QK25 D G D E S L E A N Y R K A A R L V A K I P T I V T S Y E R I R Q G L D P
UniRef90_E4NTX0 E A N V L K A I K L Q A Q I P T I I A A F A R I R E G K E P
UniRef90_UPI0004730772 P E Q V E I S T L R L L A K L P V I A A Y A H K K S I G Q A F
UniRef90_R5A6I2 D I A V P N V L R Q S L Q M I G K L P L I S V Y S Y H A Y R H F H L V I
UniRef90_C8WR61 P E A I E L N T I R L L A K L P V I A A Y A H K K S I G Q A F
UniRef90_A0A015P6K4 E A N R R K A I R I Q A R I A T A I A V F S R L R Q G K A P
UniRef90_A5CT16 S V E N T L E Q G L N I L A K L P S I I C Y A Y Q S K M H S R L V I
UniRef90_R5JWH9 D T H T T V D D A R N V A M H R L I A K I P T I A A R A Y K Y S I G Q P H
UniRef90_UPI000310DE9C N L E T E Q S F D E Q Q E A T D R L L A V L P G I I T Y W Y R Y S H D G V R I
UniRef90_U1LSM3 D L E D I S L P N V L R Q C L Q L I A L F P M L S V Y G Y Q A Y N H Y H E G I
UniRef90_B0PHJ2 D T S R D N L M R Q S I D L I A K F P A I I A Y A Y N M L S H S A K H I
UniRef90_X2HBM4 D T S L E N V L R Q S I Q L I S L F P M L A I Y G Y A H Y H D G K S I
UniRef90_R5R6S1 D T S M Q N V L K Q C L K L I A C F P S L A V Y G Y Q A F S H Y H L Y I
UniRef90_G7WFT7 S D T I S M E N V L R Q C L M L I S V L P M M A V Y G Y H G Y N H Y V N D I
UniRef90_D4MVE4 P E H R K I S A H R L I A K L P N I A A Q A Y R Y N K Y G L P F
UniRef90_UPI0004756B17 D I S L A N V L D Q S L M L I S V F P M I A I Y A Y H A Y N H Y D Q G I
UniRef90_S1MUD7 N T S I P N V I R Q S L Q L I A Q F P L L S V Y G Y Q S Y A H F H Q K I
UniRef90_F5Y7B1 R T Q L D T A L V L L L A K V P T M I S Y I A K R A A G L P L
UniRef90_K0ZDV9 R K T D D I S I E N V L D Q S L S L I A T F P M I A V Y S Y H A Y N H Y T K G I
UniRef90_R2RTQ0 K E E Y M E M A A R I V A K I P T I V A T A Y R Y K H G F P M
UniRef90_E1PND2 D K P N D I S L E N V L R Q C L Q L M S N M P V L A I Y A Y Q A W Q G N S L F I
UniRef90_R6TWJ8 G Q R D P A S I S N M D K Q I Y R L I G K A T T F A A M A Y R V R Q G R D F
UniRef90_UPI00044173E1 D I S P E A T L N K G L D L I A K I P E I V C Y A Y R T K V H Y F D S I
UniRef90_R5Q9B1 D A Q V I E L A T I R L I M A K L P T I A A R I Y R N S I G E A P
UniRef90_J7KWS1 S A N Y R K A I R L Q A Q L P I V V T T F A R I R K G L E P
UniRef90_UPI00047DE9E6

	210	220	230	240
UniRef90_R6H0G6	K	N	P	K
UniRef90_UPI000344E305	V	Q	A	P
UniRef90_UPI000289B674	I	A	P	R
UniRef90_D4MW69	H	L	P	D
UniRef90_UPI000477E741	M	Y	P	D
UniRef90_X4ZYA1	I	A	P	K
UniRef90_G0W640	G	E	F	S
UniRef90_A0A022KZR1	L	Y	P	D
UniRef90_P49299	V	L	P	S
UniRef90_S2XXB8	Y	A	P	D
UniRef90_W0Z7Y8	L	Y	P	D
UniRef90_T0RKB2	V	D	S	N
UniRef90_K9Z1P9	V	Q	P	D
UniRef90_E9UY23	V	Y	P	D
UniRef90_UPI00040567FD	I	T	P	D
UniRef90_F7Z043	V	A	P	R
UniRef90_R6MDL6	H	A	P	K
UniRef90_D3ECL8	V	A	P	K
UniRef90_UPI0003699AB1	I	A	P	R
UniRef90_E3BDY4	I	A	P	D
UniRef90_K9SLF0	V	L	P	R
UniRef90_I4B4L5	M	Y	P	N
UniRef90_C4LHB6	M	Y	P	D
UniRef90_U2CNA3	H	Q	P	M
UniRef90_C1E756	A	H	P	N
UniRef90_UPI00035DCB5C	V	Y	P	D
UniRef90_R6KMN5	R	N	P	Q
UniRef90_R7AHA8	R	P	E	N
UniRef90_UPI0003B784C1	I	G	P	D
UniRef90_V9R7U4	I	T	A	D
UniRef90_L1NUJ4	K	Y	P	K
UniRef90_E0S1X6	H	P	P	K
UniRef90_Q2RJF3	H	L	P	Q
UniRef90_R5T645	H	Y	P	K
UniRef90_U4WLL6	I	A	P	R
UniRef90_C9ZZW4	T	N	P	S
UniRef90_E0RSW6	H	P	P	D
UniRef90_A6DFU9	E	Y	P	T
UniRef90_B3PDN9	I	A	P	D
UniRef90_A4BVD6	V	Y	P	R
UniRef90_E6VT08	M	Y	P	D
UniRef90_E6UG83	H	P	L	D
UniRef90_R5ENG6	V	Y	P	R
UniRef90_C4ZHC5	H	R	P	D
UniRef90_U7JQG0	L	Y	P	D
UniRef90_S2VTZ0	L	Y	P	D
UniRef90_U2PQQ6	V	Y	P	R
UniRef90_F3P5H2	L	Y	P	D
UniRef90_C7P016	V	E	P	R
UniRef90_V5WKD7	V	P	P	R
UniRef90_S2XPH0	I	A	P	K
UniRef90_R3WBS1	H	P	P	Q
UniRef90_C5M0P5	N	I	P	N
UniRef90_Q8I6U7	M	N	L	D
UniRef90_K1YVX7	V	Y	P	R
UniRef90_X0R623	V	S	P	R
UniRef90_A8ZRR9	V	Y	P	R
UniRef90_R7HFL3	H	E	P	D
UniRef90_R4Z1T7	V	Y	P	D
UniRef90_R5T5H3	H	R	P	D
UniRef90_L0IE77	I	D	P	D
UniRef90_R6QK25	H	P	L	K
UniRef90_E4NTX0	V	H	P	R
UniRef90_UPI0004730772	V	E	P	R
UniRef90_R5A6I2	H	P	Y	E
UniRef90_C8WR61	V	Q	P	D
UniRef90_A0A015P6K4	I	A	P	Q
UniRef90_A5CT16	L	Y	P	D
UniRef90_R5JWH9	R	T	P	D
UniRef90_UPI00037EE018	M	Y	P	D
UniRef90_UPI000310DE9C	I	M	P	N
UniRef90_R6UM56	H	P	A	Q
UniRef90_UPI0003603C3B	V	F	P	D
UniRef90_R7GIY2	H	H	Q	N
UniRef90_Q0A5E3	D	T	A	T
UniRef90_U1LSM3	V	E	P	R
UniRef90_B0PHJ2	H	A	P	D
UniRef90_X2HBM4	R	H	P	H
UniRef90_R5R6S1	H	P	P	I
UniRef90_G7WFT7	H	S	P	R
UniRef90_D4MVE4	H	R	P	D
UniRef90_UPI0004756B17	S	Y	P	K
UniRef90_S1MUD7	H	N	P	Q
UniRef90_F5Y7B1	H	A	P	Q
UniRef90_K0ZDV9	L	Y	P	D
UniRef90_R2RTQ0	H	R	P	D
UniRef90_E1PND2	A	Y	P	N
UniRef90_R6TWJ8	H	V	P	K
UniRef90_UPI00044173E1	V	T	P	P
UniRef90_R5Q9B1	H	P	V	N
UniRef90_J7KWS1	I	G	P	D
UniRef90_UPI00047DE9E6	I	E	P	R

[illegible]

	290	300	310	320
UniRef90_R6H0G6	V Q D M F E N I	M E N C P D W E N	E A S L R D Y L K K V F D H A G L I	Y G M G H
UniRef90_UPI000344E305	V L D M L E N I	G T	V D R V D A N Y V D E N A L A T E K S R I	M G F G H
UniRef90_UPI000289B674	V M K M L E E I	G S	I D R V D V D Y V D E N A L A T E K S R I	M G F G H
UniRef90_D4MW69	V V Q M F D D L	K A N V K D W S N	E E E I R E Y L K E A F D K A G L I	Y G M G H
UniRef90_UPI000477E741	V L E M L D D I	K E N N G G D A T	D E N V E P Y I R G K L A R R E K V I	M G F G H
UniRef90_X4ZYA1	V M R M L E E I	G S F	E N V E P Y I R G K L A R R E K V I	M G F G H
UniRef90_G0W640	V V R F L V E M	S R I S S P Q N T	G E I E E Y L W N I L N S K K V I	P G Y G H
UniRef90_A0A022KZR1	V M E M L N L I	R D E G I D P R D	E N V E Y M E K V K N K E D G V R L	M G F G H
UniRef90_P49299	V L K M L S E I	G T V N N I P E F	I E G V Y M E K V K N R K R K M S	S G F G H
UniRef90_S2XXB8	V T Q M F E D M	K H L T D W E D R D E V	K A Y L K A F D Q K G L I	Y G M G H
UniRef90_W0Z7Y8	V L D M L G K I	R D S G E S V A R F	V E R V K K E D G V K L	M G F G H
UniRef90_T0RKB2	V L E M L D E I	K N D G G D Y K K	E S V A R F V E R V K K E D G V K L	M G F G H
UniRef90_K9Z1P9	V L V M L E E I	G S	V E N V R P Y I E D C I E N K K K I	M G F G H
UniRef90_E9UY23	V L R M L R R I	G K	V E N I P A F I E G V K A G N E R K I	M G F G H
UniRef90_UPI00040567FD	V M R M L L E I	G E L S K A E S Y	I E N A L A N K K K I	M G F G H
UniRef90_F7Z043	V M K M L T E I	G S	V D K E I E D Y L H E K F M K K E K I	M G F G H
UniRef90_R6MDL6	V T Q M F E D M	K N I K N W N D	D K E I E Q Y L K K A F D K S G L I	Y G M G H
UniRef90_D3ECL8	V M K M L N E I	V G S	I D R A Q A Y I Q E K L D N R E K I	M G F G H
UniRef90_UPI0003699AB1	V L K M L D E I	G S	V E A A E A Y L Y G K L D R K E K I	P G L G H
UniRef90_E3BDY4	V L E M L E K I	Q S T G D S A E D	F M D K V K N K V D G V K L	M G F G H
UniRef90_K9SLF0	V M V M L E E I	G S	A E N V E A Y L E G K L T R K E K I	M G F G H
UniRef90_I4B4L5	V I E M L G H I	Q S E G G N I K K	F V E M A K D K N S F R L	M G F G H
UniRef90_C4LHB6	V L E M L Q E I	K D N G	G D A T E F E M K V K N K E D G V K L	M G F G H
UniRef90_U2CNA3	V M Q M F E D M	K K E V K D W A D	E E E V S R Y L E R A F D H A G L I	Y G V G H
UniRef90_C1E756	V L K M L A R I	G N	K E A I P A F L K R V K K K E K M	F G F G H
UniRef90_UPI00035DCB5C	V L K M L R E I	G D	V K Q I P D Y D R V K K G E F R L	M G F G H
UniRef90_R6KMN5	V Q N M F E D I	K A N V K D W T	D E K E V E A S Y L R K I I F D H S G L I	Y G M G H
UniRef90_R7AHA8	V M Q M L D S F	K E N V K N W E D	E G Q V A D H M R K I I G D G S	V R L I
UniRef90_UPI0003B784C1	V L A M L N D I	H A S D	D D V D T F M N R V K N K E K G V	G R L I
UniRef90_V9R7U4	V I N M L M T I	E K P S N V K Q F I	I Q K V K D G S K T	T R L M
UniRef90_L1NUJ4	V L N M L D E I	G D V S N V A A F M E G V		K A K K Y R L M
UniRef90_E0S1X6	V V H M F D D I	E A N V S N W E D	E D E V R A Y L D K I F D K A G L I	Y G I G H
UniRef90_Q2RJF3	V M K M I E D I	K N N V K D W H	D E E E L R N Y L K E A F Y D R S	A G L I
UniRef90_R5T645	C S E M I S A I	E K E I G L K A S	D A Q I K Q Y I K R F Y D H T G L I	Y G L G H
UniRef90_U4WLL6	V A T M L E K I	G S	V D R V V P Y I R Q A L D N K E K I	M G F G H
UniRef90_C9ZZW4	V L T Y L F E M	R D K C K A A G V D L H	D R K R L W D V L N A K R V V	P G Y G H
UniRef90_A0RSW6	V M A M M E D I	K A H V K D W S D E Q E V	R D Y L K E A F D R S G L I	Y G M G H
UniRef90_A6DFU9	V V E M L Q F I	H E N N I D P Q E Y L	E K V K R K E D G I R L	M G F G H
UniRef90_B3PDN9	V L N M L E E I	G S V E N I E S C V A R A		K D K T S G F R L
UniRef90_A4BVD6	V V E M L E Q I	H A D G G H H	Q K Y V D K A K D R D D P F R L	M G F G H
UniRef90_E6TV08	V V T M L E Q I	R	D G E A S I S E Y I E R V K K K E I	L K L M
UniRef90_E6UG83	V S A M Q E C V	K Q H V A N W D D E G E V A D F L	K E A F D Q S G L I	Y G M G H
UniRef90_R5ENG6	C L R M L E I E	G S V D R I P Q Y I A R A		K D K N D P F R L
UniRef90_C4ZHC5	V M E M M R D I	R S H V K H W D D E D E	V R A Y L R K M M D H K G L I	Y G M G H
UniRef90_U7JQG0	V V E M L Q F I	R D N D L T T K Q	F V E K V K N R E D G V K L	Y M G F G H
UniRef90_S2VTZ0	V L R M L A E I	R D S D M T V K D	F V A K A K D K T S G V R L	M G F G H
UniRef90_U2PQZ6	V V Q M L Q R L	R R D G V A P R Q	F L D D V K D R R N S V R L	M G F G H
UniRef90_F3P5H2	V L R M L D T I	Q S S G M S T A E	F V R K V K D K E D G V R L	M G F G H
UniRef90_C7P016	V M E M L K E V		D D A Q Q D P I K D W V K T A L D E G R V	S G F G H
UniRef90_V5W0K6	V M N M	V H E V I G T	P D N A K A W V E N A L K E K K I	M G M G H
UniRef90_S2XPH0	V M K M L M E I	G S	V E N V D S Y I N E K L A N K E K I	M G F G H
UniRef90_R3WBS1	V T E M I K H I	K E S I T D L T D	E R Q I R E Y L K E T F D K K G L I	Y G M G H
UniRef90_C5M0P5	V L R M L E I	G S L	E N V P N F V E K V K R K E L I	M G F G H
UniRef90_Q8I6U7	C L K F L L D I	K K Q G D N Q L T	Y E F I E K Y A K N L L K S G R V I	P G Y G H
UniRef90_K1YVX7	V V R M L K E I	G S	K D N I P E Y I K K I K T G E F R L	M G F G H
UniRef90_X0R623	V M K M L N E I	G S	V E N V E P Y I R K A I D N K E	

[illegible]

	370	380	390	400
UniRef90_R6H0G6	M H K R K L F K P V C A N V D F Y Y S G F L V Y T M L L	G I P R E L F T T P I F A I S		
UniRef90_UPI000344E305	V S D R L G H K K G I Y L P N V D F Y Y S A T L Y R H K L L	G I P E K D L F T T P V F A V S		
UniRef90_UPI000289B674	E E L M K E R K H L Y P N V D F Y Y S G F L Y Y S M L G L P H Q	G I D R E L F T T P V F A I S		
UniRef90_D4MW69	I G E K R K I Y K V S A N I D F Y Y T G F L I Y R A M G L P H Q	G I D R E L F T T P V F A I S		
UniRef90_UPI000477E741	N D D Y F I S R K L Y P N V D F Y Y T G F L I Y R A M G L P H Q	G I D R E L F T T P V F A I S		
UniRef90_X4ZYA1	E E L I T G I K G L K P N V D F Y Y S A S I V Y T Q L L	G I D R E L F T T P V F A I S		
UniRef90_G0W640	L K E H G K C A N P F P N V D S A S G I L F H F H G L K D L L F F T V I F A I S	G I D R E L F T T P V F A I S		
UniRef90_A0A022KZR1	A D D Y F V E R K K L Y P N V D F Y Y S G I I Y K A M G L P H Q	G I D R E L F T T P V F A I S		
UniRef90_P49299	S D E Y F V K R K L Y P N V D F Y Y S G L I Y K A M G L P H Q	G I D R E L F T T P V F A I S		
UniRef90_S2XXB8	I G E K R K I Y K V N A N V D F Y Y T G L V Y K A M G L P H Q	G I D R E L F T T P V F A I S		
UniRef90_W0Z7Y8	A D D Y F K E R R L Y P N V D F Y Y T G L V I Y K A M G L P H Q	G I D R E L F T T P V F A I S		
UniRef90_T0RKB2	A D E Y F V Q R N L Y P N V D F Y Y S G L I Y K A L L G I P T N M F T A M F A I S	G I D R E L F T T P V F A I S		
UniRef90_K9Z1P9	V T E K L G H K G I Y A N V D F Y Y S G L V Y K A L L G I P T N M F T A M F A I S	G I D R E L F T T P V F A I S		
UniRef90_E9UY23	E D E Y F V K R K L Y P N V D F Y Y S G L L Y E A L L E F P P E M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_UPI00040567FD	E R I V K E K K G L N P N V D F Y Y S A S M Y Y S M G L P T H D L F T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_F7Z043	E Q I V T S E K G I P A N V D F Y Y S A S V Y H C L L G I D H D L F T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_R6MDL6	A S E R K M Y K G L K P N V D F Y Y S A S V Y Y T Q L L G I P T H D L F T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_D3ECL8	T N Q K G L K P N V D F Y Y S A S V Y Y T Q L L G I P T H D L F T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_UPI0003699AB1	S R Q T L G K K G I C A N V D F Y Y S G I V Y R K K L G I P T H D L F T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_E3BDY4	K D D Y F V Q R K K L Y P N V D F Y Y T G L I Y K S M G F P T N M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_K9SLF0	A L E K L A H R K N L Y P N V D F Y Y S G L I Y K K L I G I P V D L F T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_I4B4L5	A D E Y F V E R K K L Y P N V D F Y Y S G L I Y R A I G I P T E M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_C4LHB6	A D D Y F I L D R K L Y P N V D F Y Y T G L I Y R A M G F P T N F F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_U2CNA3	A P E R Q M Y K G V S V N V D F Y Y S G F V Y N M L G L P T E L Y T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_C1E756	Q D E Y F V N R K K L Y P N V D F Y Y T G L V Y R A L G F P P E F F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_UPI00035DCB5C	E D E Y F I K K K L Y P N V D F Y Y T G L I Y E A M G F P A E M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_R6KMN5	M E Q R R L F K K N V C A N V D F Y Y S G F V Y T M L G I P K E L F T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_R7AHA8	T P E I F R D F K I C A N V D M Y S G L V Y K A M G I P A D L Y T T P M F A I S	G I D R E L F T T P V F A I S		
UniRef90_UPI0003B784C1	A D D Y F I E R K K L Y P N V D F Y Y T G L I Y K A M G F P T N M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_V9R7U4	A L Q Y F I E R N K L Y P N V D F Y Y S G I V L K A I L G I P V K M F T T L F A I S	G I D R E L F T T P V F A I S		
UniRef90_L1NUJ4	S D P Y F I E K K L Y P N V D F Y Y S G I V L S A L L G I P V S M F T V I F A I S	G I D R E L F T T P V F A I S		
UniRef90_E0S1X6	A P E R T M Y K G V S A N V D F Y Y S G F V Y R M L G I P V E E L Y T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_Q2RJF3	V A E K K V D K V V A P N V D F Y Y S G F V Y K M L N I P I E L Y T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_R5T645	E T L A G N G K T L S N N V D F Y Y S G F A Y N M L Q I P E D M Y T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_U4WLL6	E E M V T G E K G L K P N V D F Y Y S A S V Y V S L G L A I D L F T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_C9ZZW4	L K K H G K V R N P F P N V D A Q S G V L L Q H Y G M K E Q L F Y T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_E0RSW6	F A E I K K S N K V I P N V D F Y Y S G F V Y K M L G I P T E L Y T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_A6DFU9	E D E Y F T S R K L Y P N V D F Y Y S G I V Y R A I K I P T E M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_B3PDN9	E D E Y F I S K K L Y P N V D F Y Y S G I I M K A I V G I P T E M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_A4BVD6	A D D F F T E R G L Y P N V D F Y Y S G V M Y R A L G I P V V M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_E6VT08	N D E Y F T E R K L Y P N V D F Y Y S G I V L R A L G I P V V M F T V L F A I S	G I D R E L F T T P V F A I S		
UniRef90_E6UG83	T P E L F L K I K M C A N V D M Y S G F V Y R M L G I P V Q D L F T T P M F A I S	G I D R E L F T T P V F A I S		
UniRef90_R5ENG6	S D E Y F I E R N K L Y P N V D F Y Y S G I I L N A I G I P T S M F T V I F A I S	G I D R E L F T T P V F A I S		
UniRef90_C4ZHC5	I A E K R H I L K V S P N V D F Y Y S G F V Y E M L G I P M E L Y T T P I F A I S	G I D R E L F T T P V F A I S		
UniRef90_U7JQG0	A D D Y F K E R K L Y P N V D F Y Y S G L I Y E A M G F P T N M F T V L F A I S	G I D R E L F T T P		

UniRef90_R6H0G6	R	M	A	G	W	S	A	H	R	L	E	E	L	V	N	A	G	K	I	R	P	A	Y	R	Y	V	G	H	H	R	P	Y	L	E		
UniRef90_UPI000344E305	R	V	A	G	W	L	A	H	W	K	E	Q	L	A	N	A	N	R	I	F	R	P	T	R	A	E	I	Y	T	G	P	S	Q	R	A	F
UniRef90_UPI000289B674	R	I	V	G	W	S	A	H	R	M	E	E	L	M	N	G	S	N	R	I	I	R	P	A	Y	K	A	V	A	P	H	R	E	Y	T	
UniRef90_D4MW69	R	L	P	G	W	L	A	Q	Y	R	E	L	V	E	N	G	S	N	R	I	Y	R	P	R	Q	V	I	T	G	P	L	R	E	F	T	
UniRef90_UPI000477E741	R	L	P	G	W	T	A	H	I	L	E	Q	Y	E	D	N	R	I	I	R	P	R	A	E	Y	T	G	Q	V	L	E	K	Y	V	P	
UniRef90_X4ZYA1	R	S	I	G	P	L	T	Q	L	W	D	R	I	Y	G	L	P	I	E	R	P	K	S	I	S											
UniRef90_G0W640	R	L	P	G	W	I	A	Q	W	Q	E	M	H	D	P	D	T	K	I	G	R	P	R	Q	I	Y	T	G	H	P	E	R				
UniRef90_A0A022KZR1	R	M	A	G	Y	L	A	H	W	R	E	S	L	D	D	P	D	K	I	I	R	P	Q	Q	V	I	T	G	P	N	E	R	L	V	P	
UniRef90_A49299	R	I	V	G	W	S	A	H	R	L	E	E	L	K	N	V	D	K	I	I	R	P	A	Y	K	S	L	A	P	H	R	A	Y	V		
UniRef90_S2XXB8	R	L	P	G	W	L	A	H	W	R	E	M	Q	L	D	P	Q	K	I	I	G	R	P	Q	Q	L	Y	T	G	A	P	E	R	N	Y	
UniRef90_W0Z7Y8	R	L	P	G	W	L	S	Q	W	K	E	R	E	D	T	T	G	K	I	I	G	A	R	P	R	Q	I	Y	T	V	G	E	N	E	R	
UniRef90_TORKB2	R	V	A	G	W	L	A	H	W	K	E	Q	L	A	V	N	A	G	K	I	I	F	R	P	T	Q	V	I	T	G						
UniRef90_K9Z1P9	R	T	P	G	W	L	S	Q	W	L	E	L	V	Q	D	E	Q	K	I	I	A	R	P	K	Q	I	Y	T	G	E	R	L	E	F	V	
UniRef90_E9UY23	R	I	S	G	W	T	A	H	V	L	E	Q	L	R					N	N	R	I	I	R	P	R	A	E	Y	T	G	P	T	H	R	
UniRef90_UPI00040567FD	R	I	S	G	W	I	A	H	I	L	E	E	Q	Y	A				N	N	R	I	I	R	P	R	A	E	Y	T	G	P	G	M	R	
UniRef90_F7Z043	R	I	A	G	W	S	A	H	R	I	E	E	L	V	N				P	G	K	I	I	R	P	A	Y	K	S	L	A	A	H	K	E	
UniRef90_R6MDL6	R	V	S	G	W	T	A	H	I	L	E	Q	Y	E	G	N	R	I	I	I	R	P	R	A	E	Y	T	G	M	T	Q	K	Y	V	P	
UniRef90_D3ECL8	R	V	A	G	W	L	A	H	W	K	E	Q	L	H	G				R	I	Y	R	P	Q	Q	I	Y	T	G	Q						
UniRef90_UPI0003699AB1	R	M	P	G	W	I	A	Q	W	R	E	Q	K	D	A	A	K	K	I	I	G	R	P	R	Q	V	I	T	G	A	T	E	R	D	Y	
UniRef90_E3BDY4	R	V	T	G	W	L	A	H	W	K	E	Q	L	V	D	N	R	L	I	F	R	P	P	T	Q	V	I	T	G	K						
UniRef90_K9SLF0	R	M	P	G	W	I	A	Q	W	K	E	M	I	E	N	S	A	K	I	I	G	R	P	R	Q	I	Y	T								

UniRef90_B9YBJ0
UniRef90_R6WDF3
UniRef90_I3S1I0
UniRef90_B9XII2
UniRef90_R6FWP6
UniRef90_S7X9K4
UniRef90_R9KDH6
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UniRef90_I2FD16
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UniRef90_E1YKL4
UniRef90_C9CWP7
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UniRef90_UPI00035FDD70
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UniRef90_R5VM38
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UniRef90_I7IR70
UniRef90_W5WSA1
UniRef90_R6NNU7
UniRef90_K0EXK3
UniRef90_E2ZPA3
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V S V
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D E
D E
M T E P D
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UniRef90_B4WM53					S	T	F	L	E	S	S	Y	L	L	L	W	G	G	L	L	L	P	T	Q	A	E	L	L	D	V	F	K	H	E	L	V	Q	Y	R	R	L					
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UniRef90_R6WDF3	H	L	P	E	K	Q	K	L	S	T	S	E	N	L	L	R	L	L	R	K	Y	N	S	S	L	E	A	T	V	L	D	L	L	A	L	V	L	H	A	E	H	G	G
UniRef90_I3S110	V	L	P	E	K	Q	K	L	S	T	S	E	N	L	L	R	Y	M	L	Y	K	P	N	S	R	L	E	T	R	A	L	D	I	I	F	I	L	H	A	E	H	E	
UniRef90_B9XII2	V	E	P	D	S	K	L	G	E	A	A	N	F	L	L	Y	M	I	D	G	E	R	P	S	E	E	K	E	K	D	L	L	C	Y	V	L	L	H	A	D	H	G	
UniRef90_R6FWP6	I	N	P	D	N	S	L	S	T	A	E	N	L	L	R	K	E	D	Y	E	V	N	P	V	L	S	E	A	L	D	R	L	L	I	L	L	H	A	E	H	E		
UniRef90_S7X9K4	L	Y	P	D	N	S	L	S	F	V	D	N	F	L	R	K	E	D	Y	E	V	N	P	V	L	S	E	A	L	D	R	L	L	I	L	L	H	A	E	H	E		
UniRef90_R9KDH6	H	R	P	E	P	E	L	S	T	A	E	N	L	L	M	M	L	R	D	D	S	K	Y	E	A	K	V	L	D	V	A	L	L	L	L	H	A	M	E	H	G		
UniRef90_UPI00036BF367	I	A	P	L	K	G	V	S	I	A	S	N	F	L	L	Y	M	L	E	Q	P	D	E	V	A	V	R	A	L	D	Q	A	L	V	L	L	H	A	D	H	E		
UniRef90_I2FD16	S	T	E	S	S	Q	D	S	I	A	G	Y	F	L	L	E	S	L	H	Q	K	E	P	A	V	K	A	M	H	A	S	L	I	L	L	Y	A	E	H	E			
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UniRef90_B4WM53	V	Q	P	R	D	D	L	D	Y	A	S	N	F	L	L	Y	M	L	N	E	R	V	P	D	A	A	R	I	F	D	V	C	L	I	L	L	H	A	E	H	T	G	
UniRef90_C4GAH2	H	N	P	R	N	P	A	L	S	T	A	E	N	L	L	H	C	L	R	A	D	S	S	F	E	A	K	L	D	V	C	L	I	L	L	H	A	E	H	T	G		
UniRef90_C0QFJ7	V	Y	P	R	P	D	Y	S	Y	A	A	N	F	L	L	H	M	M	Y	E	M	D	Y	D	M	V	Q	A	L	N	V	F	W	I	L	L	H	A	D	H	E		
UniRef90_A0A059LMN7	A	Q	P	N	T	H	L	G	Y	V	E	N	F	L	L	F	M	L	Y	R	P	N	P	R	L	A	R	A	L	E	V	L	F	I	A	H	A	E	H	E			
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UniRef90_R5L0S5	N	K	D	E	S	L	A	E	S	I	L	S	T	L	L	R	D	D	R	S	Y	T	T	E	E	A	H	L	L	D	L	C	L	M	L	L	H	A	E	H	G		

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UniRef90_I3S110	S D E Y F V K K H L H A N V D F Y Y S A T V Y Y S L G V P P I D L F T P L F A I S			
UniRef90_B9XII2	L A R K K H L H A N V D F Y Y S A T V Y Y S L G V P P I D L F T P L F A I S			
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UniRef90_M8D550	L D E Y K K A G R K L H T N V D F F A A A V M R A V G L D D F L F T P T F A V S			
UniRef90_UPI000479CA37	E Q F V K P A E K K L N A N V D F Y S A A S T Y T M G I D I D L F T P I F A V S			
UniRef90_U1INGH7	E E Y I S D E K G L A P N V D F Y S A T T Y Y Q M G I P I D L F T P I F A V A			
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UniRef90_C4GAH2	A D R R K I Y K G V S P N V D F Y S G F A Y Q M L G I P V E L F T P I F A I A			
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UniRef90_R5L0S5	A D E R G D I K N I C A N V D M Y S G L V Y K M L K I P V E M Y T G L F A C A			
UniRef90_Q8EPE0	E D Y I K E N K G L V S P N V D F Y S A S V Y H S L G L D H D I F T P L F A V S			
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UniRef90_E1YKL4	K D D Y F L E H N L Y P N I D F Y S G I M L R A L G I P T N M F T T V M F A I G			
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UniRef90_UPI00035FDD70	I F R R S K G R D I Y P N V D L Y S A S I Y H A M G I H H D F F P P V F A M S			
UniRef90_UPI000362B24C	E T A M V E R K G I H P N L D Y P A G P A Y H L M G F E V I P T F T P L F V M A			
UniRef90_R5K8A1	A P E R K I F K G V S P N V D F Y S G F V Y D M L G I P M E L Y T T A M F A V A			
UniRef90_I6Z5B1	D E T M W E Q K K L F P N A D F Y H A S A Y H F M G I P T P L F T P I F C S			
UniRef90_UPI000361D08B	E N A M V S A K N I K P N L D Y P A G P A Y H L I G F D T N I F T P I F V A S			
UniRef90_W6EFI8	M W D E K K L F P N L D F Y S A S T Y H F M G I P T A Y F T P I F V M S			
UniRef90_G0LHX6	Y I D D H K G L A P N V D F Y S A S T Y Y Q M G I P I D I Y T P I F A M A			
UniRef90_C6D8B4	E D M V T G Q K G L K P N V D F Y S A S V Y T T L G I P R D L F T P I F A I S			
UniRef90_M0JMJ3	R E E G L I E K G I A P N V D F Y S G S V Y H Q L G I P M D M Y T P I F A M S			
UniRef90_J0JFP8	E S V M W E V K K M F P N L D W F S A V S Y H T M G V P T A M F T P I F V I A			
UniRef90_N0BN60	E E A V Y K Y K G L L P N V D F Y S A S V Y A N L G I P D D L F V N I F A I G			
UniRef90_UPI00036CE725	M Y E N T S I K I R P N L D F P A G P A Y I M G F D I P F F T P L F V M S			
UniRef90_U1Z1T9	M T E R K N I L P N L D F P A G P A Y H L M G F D T P M F T P L F V I A S			
UniRef90_UPI0003B393E0	M W E V K K M F P N L D W F S A V S Y H M M G V P T A M F T P L F V I A			
UniRef90_R7FFU1	A G E R K I Y K G V C A N V D F Y S G F V Y R M L G L P V D L F T P I F A I A			
UniRef90_R5VM38	M K E V R G V D K M C A N V D M Y S G L V Y R M L G I P D E L F T P L F A S A			
UniRef90_R8VSZ2	F A E S R G M D S M C A N V D L Y S G L V Y K M L G I P Q E M F T P L F A T A			
UniRef90_I7IR0	L M D T N K V K C P H P N V D C S T G V V L N H F G L N H P E F Y T V L F G L S			
UniRef90_W5WSA1	M S E R T G I L P N L D F P A G P T Y Y M L G I D I P F F T P I F V M S			
UniRef90_R6NNU7	F A E F K G E R N I C A N V D L Y S G L V Y K M L R I P P D L F T P I F T V A			
UniRef90_K0EXK3	M N E A T G I K P N L D F P T G P A Y H L L G F D I E V F T P I F V M S			
UniRef90_E2ZPA3	M W E Q K K L F P N A D F Y H A S A Y H F M G I P T K L F T P I F V C S			
UniRef90_UPI00047E3773	A S V R K I Y K G V S A N V D F Y S G F V Y R M L D I P A E M F T P I F A I S			
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UniRef90_R6WDF3	R	V	V	G	W	S	A	H	R	N	I	L	E	E	I	Q	N	A	G	K	I	V	R	P	S	Y	I	S	V	K	P	G	R	E	Y	V	P
UniRef90_I3S1I0	R	M	A	G	Y	L	A	H	W	W	E	S	L	D	D	D	P	D	K	I	M	R	P	Q	Q	S	L	Y	T	G	P						
UniRef90_B9XI12	R	T	S	G	W	T	A	H	V	L	E	Q	L	M	D	N	R	L	I	R	P	Q	S	L	Y	T	G	P									
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UniRef90_R9KDH6	R	L	I	V	G	W	S	A	H	R	M	E	E	L	I	G	M	N	K	I	V	R	P	A	Y	M	S	V	M	E	K	E					
UniRef90_UPI00036BF367	R	L	S	G	W	T	A	H	I	L	E	Q	L	I	D	D	N	R	I	V	R	P	R	A	D	Y	T	G	P	T	Q	R	Y	I	P		
UniRef90_I2FD16	R	T	A	G	W	L	A	H	I	F	E	Q	R	G	N	N	K	L	I	R	P	S	S	Q	Y	I	G	S	P	E	N	K					
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UniRef90_U1NGH7	R	S	G	G	W	L	A	H	V	L	E	Q	W	E	D	N	R	L	I	R	P	R	A	Q	Y	T	G										
UniRef90_B4WM53	R	V	A	G	W	L	A	H	W	K	E	Q	I	S	T	N	R	I	V	R	F	R	T	Q	I	Y	E	G									
UniRef90_C4GAH2	R	I	A	G	W	S	A	H	R	M	E	E	I	S	S	D	S	K	I	M	R	P	A	Y	M	T	V	Q	P	H	R	D	F	V	P	M	E
UniRef90_C0QFJ7	R	L	P	G	W	L	A	H	W	R	E	D	A	L	D	P	L	R	I	S	R	P	R	Q	V	Y	T	G	E	T							
UniRef90_A0A059LMN7	R	M	A	G	Y	L	A	H	W	R	E	S	L	T	D	P	D	K	I	V	R	P	Q	Q	D	Y	R	G	V	W	L	R	D	F			
UniRef90_UPI00047DDC1F	R	L	T	G	W	A	H	V	M	E	Q	R	A	D	N	R	I	V	R	P	S	A	E	Y	T	G	P	E	L	R	T	V					
UniRef90_R5L0S5	R	L	S	G	W	A	H	R	M	E	E	M	I	N	G	K	R	L	I	R	P	A	Y	K	A	I	N	L	N	K	N	Y	I	P			
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UniRef90_R5H2Y2	R	V	V	G	W	S	A	H	R	I	L	E	E	L	V	G	M	G	K	I	V	R	P	A	Y	K	S	V	M	E	E	I	E				
UniRef90_E1YKL4	R	L	P	G	W	L	A	H	W	K	E	S	A	D	D	P	K	K	L	S	R	P	R	Q	I	Y	N	G	P	L							
UniRef90_C9CWP7	R	T	A	G	W	G	A	H	V	I	E	Q	R	E	D	N	K	I	V	R	P	S	A	H	Y	T	G	P	D	N	R	A	F				
UniRef90_D2RYT5	R	A	G	G	W	V	G	H	V	L	E	Y	Q	E	D	N	R	L	I	R	P	L	S	R	Y	T	G	P	T	Q	E	F	V	P			
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UniRef90_R7FFU1	R	I	A	G	W	S	A	H	R	M	E	E	L	I	N	C	R	K	I	V	R	P	E	Y	L	S	V	S	E	R	Q	N	Y	V	P		
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G M T D V I A C E T S I C S I E D G I L R Y Q G Y T I D D L T
K G L A G V V V D Y T A I S K V P E T N S L L Y Q G Y P V Q E L A A Q K
G L A G V A V D T T A I S K V P E T N S L T Y R G Y P V Q D L A A
S V L G Y S I D K D G K K V P S E G K L Y Y R G I P I E K L V A Q F R K
A G N T G I C T V G R T G N D L H Y R G Y D I L D F A
P G F L S T A S C N S S I T Y I D G D K G L L Y R G Y P I E Q L A Q N C D
P G L E G V V A A E T A I S L Y D G Q Q G L I Y R G H W A K D L A V
V A K G L E G V L F T E T K L T F I N G A E G I L H L G I P I Q E W A
Y S P G L E G V P A G I S S I S E I D S D R S L Q Y R G Y D V H D L A
N V H G Y N K V D G W V V P D E G R L T L R G Y D I A D L V H G
A G N T A I C T V G K S G N D L H Y R G Y D I L E F A
S I Q A Y E E I D G K K V C D G R L L Y R G Y D I I D L T R N F V Q
D V V G Y E R N E D G S L K A I P G K L M Y R G I S L E E I V R G
R G L E G V V V G S T L L S N V E G L T Y R G Y D I D D L A P N
I V H G L E D V L I K N T T I S D I D G E K G I L Y R G Y R I E D L A
I I H G L E D V L I K N T T I S D I D G D R G I L W R G Y R V E E L A A H G
G L A D V A A S T S I S D I D G R E G L S Y R G Y D I H D I A
V G P G L E G V A C E S R V G

[illegible]

	130	140	150	160
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UniRef90_S0IYD1	P T N F V R D V I M K A P D P E S I M N S L R S R S I L T L A S Y D D K A D			
UniRef90_Q2YAQ2	P A R V K T L L E T I P A S A H P M D V L R T G V S A L G T V L P E A E I H T V			
UniRef90_D3BAD3	P G A L K D C L E R I P A S A H P M D V L R T G C S I L G T L E P E S P T			
UniRef90_A6EHE3	P N S V K N I L Q Q I P A A A H P M D V M R S T G V S A I G S I L Q P E R D D H N V			
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UniRef90_D4JWJ5	P P Y F A E D V L M R C P S S N I M N K M A Q S V L A L Y T Y D K E P E N K S M			
UniRef90_UPI000361347A	S K V L I R A I E S F P R K A H P M D A T R T A V S F L G L E D P E A			
UniRef90_A0JY47	D P V V K Q V I D A L P I T S H P M D V C R T A A S V M G A R H E L A E D S S R			
UniRef90_B6G9F5	S S E F V C Q F P I T T V S P S I M N A L Q R A V L L Y A F A D S D P D S I T P			
UniRef90_G2KRF4	P Q S L K N V L E H I P A T A H P M D V M R T A T S F L G N I E M E			
UniRef90_D6D8N1	E Q K T K M N I E L E G N N I M N I L S R S V L E M Y R F D A N A D			
UniRef90_H1HQ84	D H R T I V H I I D L E G S D I M N I L A R C Y L E M Y T F D H N P D			
UniRef90_D7UYX1	S E T I I T S L R M Q H Q N L H P M S V L R T T V S M L G V I F D T E S E			
UniRef90_R5GTQ5	D P K T I L N I E L E G T N V M N I L A R S V L E L Y T F D S T P D			
UniRef90_E8RB14	P V E T V M I L R M F P H A A T P M E V L R T A V S M G H W D P D S			
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[illegible]

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UniRef90_F6FR13	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	Q		
UniRef90_U1P1A4	L	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A		
UniRef90_Q2L8W5	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A		
UniRef90_G0HCU0	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A		
UniRef90_S01YD1	F	N	N	S	T	F	T	T	G	R	V	I	T	A	S	T	G	S	D	T	Y	S	A	I	T	A	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	I	K	
UniRef90_Q2YAQ2	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	V		
UniRef90_D3BAD3	L	A	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	V		
UniRef90_A6EHE3	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	V		
UniRef90_A4BP52	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A		
UniRef90_U2XM56	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A		
UniRef90_UPI0003749CDD	G	N	N	S	T	F	T	S	V	R	V	I	T	A	S	T	G	T	D	T	Y	S	A	I	A	A	G	A	A	G	A	L	K	G	S	L	H	G	G	S	N	I	Q	
UniRef90_D4JWJ5	G	N	N	S	T	F	T	C	R	V	I	T	A	S	T	G	T	D	A	Y	S	A	A	Y	A	A	G	A	A	S	A	L	K	G	S	L	H	G	G	A	N	E	I	K
UniRef90_UPI000361347A	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A		
UniRef90_A0JY47	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A		
UniRef90_B6G9F5	G	N	N	S	T	F	T	A	C	R	V	I	T	A	S	T	S	K	S	D	A	Y	S	A	Y	A	A	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A
UniRef90_G2KRF4	F	N	A	S	T	F	T	A	R	M	V	I	G	S	T	L	S	M	A	D	L	V	A	V	V	G	A	A	G	A	L	K	G	S	L	H	G	G	A	N	E	A		
UniRef90_D6D8N1	G	N	N	S	T	F	T	V	R	V	I	T	A	S	T	S	T	G	T	D	T	Y	S	A	I	A	A	G	A															

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UniRef90_C0QRJ9
UniRef90_J8TKX6
UniRef90_W2UZJ1

	330	340	350	360
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UniRef90_F6FRI3	R V Y Y K H G D S	R V P T M K A A L D	L V E N H G D D T	Y G R F R D L S A L Y G A L
UniRef90_U1P1A4	R V Y Y K V T D S	R A G I L M K E R L	E A L L E A I V E N A G	D T W L E Y T S A I R G S L
UniRef90_Q2L8W5	R L Y Y K E G D P	R S H I L M M K A L	D L A Q N A P K K D	P N L V Q I J A Q H I E E
UniRef90_G0HCU0	R V Y Y K R G D S	R V P S M E A A M R	R T A A N H D G E	Q K W V D M Y E N M
UniRef90_S01YD1	A I Y S D N D P	R A A I F K R Y V S	K L A A E K G E Y N	L Y T L V E R V A P E I
UniRef90_Q2YAQ2	P V Y T A G D P	R N R V I R E V A K	R L S A E A G G D M	Q M F F V I A E R L
UniRef90_D3BAD3	R V Y Y R N G D P	R N P I I K E W S A	R K L S A E A Q G G	N M K L F E I S E R V
UniRef90_A6EHE3	P V Y T I S D P	R N I V I K K V A G	H L S E E A G D M	M L Y T I A D R L E S L
UniRef90_A4BP52	A I Y Y R S Q D P	R N A I L K A W S A	R K L A E E V G D	S R L Y I S E R V
UniRef90_U2XM56	R V Y Y K R G D S	R V P T M K A A L D	D A L V A H Y D R	P D V A E L Y D A L
UniRef90_UPI0003749CDD	A V Y T I S D P	R A V I L K D V A R	D L A R E K G K E F	K E F A F I L E L E D R G
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UniRef90_A0JY47	R V Y Y K H G D S	R V P T M K A A L D	K M I A H Y G R	P E L L G L Y N G L E S A
UniRef90_B6G9F5	A V Y T L S D P	R A V L I C K R Y A	R G L K G M G A E	F D E L I E R I E K L A P Q V
UniRef90_G2KRF4	R V Y T E A D P	R N V V I K S W A K	R L K G M A E F	D A G N T V L Y P V S E A
UniRef90_D6D8N1	A V Y T I S D P	R A L L L K E L A R	D L A R E K G R E	S E F A F L E L L E E R A
UniRef90_H1HQ84	A V Y T M S D P	R A V E L K R L A R	E K K R S D E Y E	F L C R L E E E S I K C V
UniRef90_D7UYX1	R V Y Y R N G D P	R A K Y L Q E M S Q	K V T A E S G E	E K W Y L I S K E V
UniRef90_R5GTQ5	A V Y T L S D P	R A V L L K K L A R	D L K G R D R E T	F A F M E R L E K C A I E T
UniRef90_E8RB14	R V Y Y R C E D P	R A T I L K R E V N	K I T A L T G E T	Q L Y E T A Q A V
UniRef90_R9PG01	A I Y R T S D P	R N A L I K A W S K	K L S E A T G D Q	H L Y A V S E R V
UniRef90_I7LX18	R V Y Y K N G D P	R S D I I K E Y S K	L L A E K Q P K F	G K K L Y Q I S E R I
UniRef90_E1U862	A I Y R E S D P	R N A I I K H W S	S R L A E D V G D T	V L Y P V S E R V
UniRef90_UPI00035E74DF	A V Y T E S D P	R N E V I K Q W S	K L S I E V N D K	H L Y D V S E R V
UniRef90_M1P4T2	R V Y Y K S G D S	R V P T M E A E L R	S L A E R H D G	G K W V I E M Y D I M
UniRef90_W0Z948	R V Y Y K K G D S	R V P T M K T A L E	D T L I E H Y D A	A D L G Y P V S V R C
UniRef90_K0C3S6	A V Y T V S D P	R N A V I K K W S E	K L A A D V G D T T	L L Y S L V S V R C
UniRef90_R5L4W5	A V Y T I S D P	R A V I L K N S A R	E L A G Y E K E F	K T L E N V E K V T P D L
UniRef90_UPI0003B31508	R V Y Y K S G D S	R V P S M K E A L D	K M I E Y Y D R	G E I L G L Y D G L E K A
UniRef90_UPI000382A3DD	P V Y T I A D P	R N K V I K E V A R	Q L S I D A R D T	K M F A I A D R L
UniRef90_G5F673	A V Y T V S D P	R A E V V K E Q A R	K L A E E K G E L	D K L E R V E R L G P E L
UniRef90_F8NAS6	A V Y T M S D P	R A V E L K R L A G	E L A K E K G R L	K E Y E F L K I L E E G
UniRef90_B2VA40	R I Y K T Y D P	R A K L I K R I L E	N L E K D E E L R	N L Y S I A Q E V E K Y
UniRef90_C2CF50	A V Y T L S D P	R A V L L K E K A K	E L K K R D K D F	I F I E N V E K L G Q K I
UniRef90_UPI000407D6F7	R V Y Y R T G D S	R V P T M E E S M R	I A A S H G G E T	W V Q M Y D A M A E A M
UniRef90_V9HU7	P V Y T I S D P	R N V V I K E V A R	Q L S E E A D D M	H L F D I A E R L
UniRef90_T1DVT0	R I Y Y G L G G D	P R N A L I K V W S	K R L G G D T L L	F E V S E A I E N L
UniRef90_D5U739	A V Y T L S D P	R A V I L K D L A R	Q L A K E K K C E	L Q F L E L I E E R
UniRef90_U2J1Q7	P V Y T I S D P	R N E V I K R V A R	E L S E E A G D M	N L Y Y I A E R L
UniRef90_V4ZGD0	R V Y Y K S Y D P	R A N I L R Q V A E	L V F K V G D S	P L I E V A R E L E R V I A M
UniRef90_W3WNT1	R V Y Y K N V D P	R S T A I R A L A E	E V F M G V T G R	N Q L L D T A L A L A E A Q
UniRef90_A2SHT2	R V Y Y K N Y D P	R A K L M R E T C H	E V M G L Q N D	P L F K L A M E L E K I A L
UniRef90_UPI0001745917	R V Y Y K V L D P	R A P H L K E M A I	I K L V M S N Q L	G E F P K W I Q M S E R I
UniRef90_W4D5G1	R I Y Y T T K D P	R A E A L Q A T L T	M V G K D A S F	D L A L H V E A T A I A L
UniRef90_H2FUP1	A V Y T T K D P	R N A I I K Q W A K	K L A E A V G D R	V L Y P V S E R V
UniRef90_W5YG43	P V Y T R A D P	R S D I I K D V A R	T L S S R R N G S	M R L Y N V A E R I E R I
UniRef90_J9HKR1	P V Y T I A D P	R N P I I K S I A K	S I S A E N N D L	K L F D V A E R I
UniRef90_S6B7Z8	R V Y Y K T Q D P	R E K Y L R E M A E	E L T K G T E K E	L W Y Q I S E E I
UniRef90_L7K196	R V Y Y K N G D P	R V P T M K D A L V	E V S E E H L G E D	R W V R I Y G E L
UniRef90_B4CZ08	R V Y Y K V L D P	R A P H L K E M A I	I K L S E E L G D	A K W I Q M S E R I
UniRef90_F211N8	R V Y Y R D G D S	R V P T M T E Y Y	Y Y K T A E F	F Y Q N K E L P K S K I L
UniRef90_I3RCK0	R V Y Y K T Y D P	R A R I F K K Y A K	M	

	370	380	390	400
UniRef90_B5JVY6	C	E	A	R
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UniRef90_U1P1A4	E	Q	E	G
UniRef90_Q2L8W5	R	M	E	
UniRef90_G0HCU0	Q	A	A	M
UniRef90_S01YD1	I	G	E	R
UniRef90_Q2YAQ2	E	T	V	M
UniRef90_D3BAD3	E	Q	V	V
UniRef90_A6EHE3	M	W	E	E
UniRef90_A4BP52	E	A	V	M
UniRef90_U2XM56	E	R	E	F
UniRef90_UPI0003749CDD	I	L	T	F
UniRef90_D4JWJ5	F	A	K	N
UniRef90_UPI000361347A	A	E	E	M
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UniRef90_B6G9F5	M	A	D	V
UniRef90_G2KRF4	E	K	L	M
UniRef90_D6D8N1	I	A	T	F
UniRef90_H1HQ84	T	A	F	R
UniRef90_D7UYX1	E	Q	V	V
UniRef90_R5GTQ5	V	Y	E	I
UniRef90_E8RB14	E	E	L	M
UniRef90_R9PG01	E	A	V	M
UniRef90_I7LX18	E	T	R	V
UniRef90_E1V862	E	E	V	M
UniRef90_UPI00035E74DF	E	A	V	M
UniRef90_M1P4T2	A	G	V	M
UniRef90_W0Z948	E	S	E	F
UniRef90_K0C3S6	E	E	V	M
UniRef90_R5L4W5	L	H	E	I
UniRef90_UPI0003B31508	M	A	E	A
UniRef90_UPI0003824DD	E	A	V	M
UniRef90_G5F673	M	R	E	V
UniRef90_F8NAS6	V	K	C	R
UniRef90_B2VA40	V	L	E	K
UniRef90_C2CF50	M	Q	R	Q
UniRef90_UPI000407D6F7	E	E	R	T
UniRef90_V9HU7	E	T	V	M
UniRef90_T1DVT0	M	K	E	
UniRef90_D5U739	A	V	E	C
UniRef90_U2J1Q7	E	K	V	M
UniRef90_V4ZGD0	K	D	P	Y
UniRef90_W3WNT1	K	S	E	F
UniRef90_A2SHT2	E	D	D	Y
UniRef90_UPI0001745917	A	T	I	M
UniRef90_W4D5G1	L	E	E	Y
UniRef90_H2FUP1	E	A	V	M
UniRef90_W5YG43	M	A	E	Q
UniRef90_J9HKR1	E	S	V	M
UniRef90_S6B7Z8	E	R	Y	M
UniRef90_L7K196	E	H	L	M
UniRef90_B4CZ08	A	T	I	M
UniRef90_F211N8	E	N	T	M
UniRef90_I3RCK0	V	Q	E	H
UniRef90_A4WJP6	V	T	A	K
UniRef90_J3Q338	E	Y	F	Q
UniRef90_F9RQ79	E	A	V	M
UniRef90_R6M047	I	R	R	R
UniRef90_U7LLY6	M	E	E	N
UniRef90_M4R626	A	D	P	Y
UniRef90_UPI00035FE086	L	D	Q	Y
UniRef90_E1R4A9	I	G	R	L
UniRef90_B7VND1	E	A	V	M
UniRef90_G1XDH6	N	D	P	W
UniRef90_UPI0004638CF6	A	E	F	T
UniRef90_UPI00041750CC	L	E	Q	Y
UniRef90_UPI00036637FB	E	E	V	M
UniRef90_T0K2J0	E	T	I	V
UniRef90_UPI0003644256	M	A	E	A
UniRef90_UPI000370F58B	R	H	A	M
UniRef90_U2RKG8	K	E	L	K
UniRef90_G4E2L5	M	W	E	Q
UniRef90_A6GNA2	E	D	E	Y
UniRef90_E01WV6	L	E	E	Y
UniRef90_Q1IY63	V	V	D	R
UniRef90_W5XAK2	M	A	E	R
UniRef90_U1WNM0	M	K	E	V
UniRef90_A8ERH8	E	T	V	M
UniRef90_R6QRN5	A	E	R	K
UniRef90_UPI0004792932	F	M	E	F
UniRef90_E6Q848	L	K	E	T
UniRef90_A4WN13	N	N	P	Y
UniRef90_A3MTM3	V	S	P	Y
UniRef90_UPI00047CFB2A	E	Q	V	V
UniRef90_UPI00046CE1F0	L	N	R	F
UniRef90_UPI0003B5DC3C	A	F	M	D
UniRef90_F7V8L4	A	P	E	R
UniRef90_L0E156	E	S	V	M
UniRef90_C7RD64	L	I	S	Q
UniRef90_C0QRJ9	V	L	D	E
UniRef90_J8TKX6	L	E	E	F
UniRef90_W2UZJ1	Q	D	E	Y

	410	420	430
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UniRef90_U1P1A4	R A G G W I A H T L E Y Q A A N D N R L I R P R A K Y V G P E E R T V P R		
UniRef90_Q2L8W5	R T A G G W T A H I M E Q Q R A N N R L I R P V L S H Y V G P P V R P F P S		
UniRef90_G0HCU0	R V V G W T A H I A E Q Q N E N N A L I R P V L S A Y N G E A Q R S V E A		
UniRef90_S0IYD1	R I V G W S A H R I E E L I N A Q K I M R P A Y		
UniRef90_Q2Y AQ2	R T S G W A A H I I E Q R M D G K I I R P S A N Y I G P E E R E F E		
UniRef90_D3BAD3	R T T G W A S H I I E Q R S D N K I I R P S A N Y T T G P E E R Y V P I K		
UniRef90_A6EHE3	R V T G W S A H I I E Q R Q D G K I I R P S A N Y T T G P E N R D F		
UniRef90_A4BP52	R I T G W C A H V M E Q R Q A N P R I R P S A T Y T G P G P R		
UniRef90_U2XM56	R V V G W T A H I M E Q Q Y A A N A L I R P L S A Y D G P A E R H V D		
UniRef90_UPI0003749CDD	R I V G W C A H R N E E L N Q G K R I I R P A Y R S I F D E V S Y V P		
UniRef90_D4JWJ5	R M P G W C A H R M E E I E N G K R I M R P A Y R T L I K A N R D Y I I P		
UniRef90_UPI000361347A	R I T G W S A H V L E Q I A A D N R L I R P L S H Y V G V A Q R E I P		
UniRef90_A0JV47	R I T G W T A H I M E Q L E S A N S L I R P L S E Y N G V I E E R H V P		
UniRef90_B6G9F5	R T A G W A A H R M E E L I C A H R I R P A Y R S V L E S G D Y V P		
UniRef90_Q2KRF4	R V S G W A A H I M E Q R A N N K L I R P S A D Y T G P T T R N F		
UniRef90_D6D8N1	R I V G W C A H R N E E L T D G K R I I R P A Y K N V L D D L A Y I P I K		
UniRef90_H1HQ84	R I V G W T A H R I E E L N D G R R I R P A Y K T I		
UniRef90_D7UYX1	R V S G W L A H I Y E Q Y R D N R L I R P R A Y I V G P E N R		
UniRef90_R5GTQ5	R I V G W C A H R N E E L N E G K R I I R P A Y R S V S E E C T Y V P		
UniRef90_E8RB14	R V V G W T A H I L E Q W K N N R L I R P T A H Y T G P		
UniRef90_R9PG01	R V S G W A A H I M E Q R A N N R I R P S A D Y T G S E P R		
UniRef90_I7LX18	R V T G W A A H I F E Q R A N N K L I R P T S N Y T T G P Q K		
UniRef90_E1V862	R V T G W C A H V F E Q R E N N R I R P S A D Y T G P E I K		
UniRef90_UPI00035E74DF	R I T G W C A H I F E Q R H N N R I R P N A D Y I G P L K K K V		
UniRef90_M1P4T2	R V T G W T A H I V E Q Y E N N S L I R P L S A Y N G A E Q R S V E P A K		
UniRef90_W0Z948	R V T G W T A H I M E Q T A S A N L I R P L S A Y N G P D E R H I E		
UniRef90_K0C3S6	R V T G W T A H I M E Q R S N N R I R P N A D Y V G P D R P V P		
UniRef90_R5L4W5	R V V G W C A H R L E E L T S S K R I I R P A Y K S V S Q R R E Y T P		
UniRef90_UPI0003B31508	R I T G W T A H I I E Q R A D N A L I R P L S L Y H G P D Q R		
UniRef90_UPI000382A3DD	R T T G W A A H I I E Q R I D N K I R P S A N Y V G P E L R F V P		
UniRef90_G5F673	C A G W A A H R M E E L Y G A A R I I R P A Y R S V M G D S A Y V P		
UniRef90_F8NAS6	R I V G W T A H R I E E L N E G R R I R P A Y K N V I G I Q K T Y V P		
UniRef90_B2VA40	R V S G W L A H W K E Y I T D N K L I R P T E I Y I G E I K Y N D R K		
UniRef90_C2CF50	R T V G W S A H R L E Q I E D S K I I R P A Y K S L N Q V K D Y I N		
UniRef90_UPI000407D6F7	R T V G W T A H I A E Q Y A D N S L I R P L S N Y V G P G R R E I N		
UniRef90_V9H9U7	R T T G W S A H V L E Q R K D G K I I R P S A N Y T G P E		
UniRef90_T1DVT0	R V S G W C A H I K E Q R A N N K L I R P S S T Y I G P E P R E F		
UniRef90_D5U739	R I V G W C A H R I E E Q N F D D R I R P A Y K N V I G P Q E F I		
UniRef90_U2J1Q7	R I T G W S A H V F E Q R D G K I I R P S A N Y V G P E N R A F		
UniRef90_V4ZGD0	R T A G W T A H F N E F I N D E N R I A R P F Q V Y L G H G L R		
UniRef90_W3WN71	C V G W L A H W R Q M I L Q G V K I W R P R Q L Y L G E G E R Y I E T K		
UniRef90_A2SHT2	R T V G W I A Q L N E M I L G D E Y K I G R P R Q L F V G A T A R D V		
UniRef90_UPI0001745917	R M S G W T A H V L E Q W S E N R L F R P L S E Y V G K		
UniRef90_W4D5G1	R I V G W T A H L L E Q S A H N R I F R P Q S T Y I G P M P E		
UniRef90_H2FUP1	R V T G W S A H I M E Q R A H N R I R P G A D Y V G P G H R D		
UniRef90_W5YG43	R V T G W C A H V M E Q R R D G K I I R P S A N Y T G P D A R P F		
UniRef90_J9HKR1	R L T G W S G H V M E Q R V D N K I I R P A A N Y T G E P N R A F		
UniRef90_S6B7Z8	R V S G W I A H I Q E Q R K N N K L I R P R S H Y V G A		
UniRef90_L7K196	R I T G W T A H I M E Q A A S N A L I R P L S G Y T G P S Q R		
UniRef90_B4CZ08	R M S G W T A H V L E Q Y G D N R L F R P L S E Y A G A P M P E V G K K		
UniRef90_F2I1N8	R I T G W C A H I M E Q L S S N K L I R P L S K Y A G S P H R K I N		
UniRef90_I3RCK0	R I A G W T A H L A E Y I S H N R L I R P R L Q Y V G E V K K Y I V P		
UniRef90_A4WJP6	R A A G W V A H V L E Y R Q A N R L I R P T E K Y V G P I L K Y I P		
UniRef90_J3Q338	R V V G W L A H W M Q H Q Q G G V K I W R P R Q V Y V G A A K R D		
UniRef90_F9RQ79	R L T G W A A H I Y E Q R E N N R I I R P S A D Y T G P		
UniRef90_R6M047	R I S G W C A H R I E E L T G K R I M R P A Y R A V T I R G E Y V P		
UniRef90_U7LLY6	R I T G W T A H I V E Q N E N N S L I R P L S A Y A G E D Q R S V P P K		
UniRef90_M4R626	R T V G W I A N W R E M Y E E S L K I V R P R Q I Y T G H K E R H I E		
UniRef90_UPI00035FE086	R V V G W T A H A I E Q A K H N T I F R P D A E Y T G E F P		
UniRef90_E1R4A9	R I A G W C A H R I E E I I N G G R I M R P A Y K H I R T V Q R		

	1	10	20	30	40
UniRef90_UPI000305D391					M S D Q N
UniRef90_UPI0003770B74	S D S	V A F T S N	I D K D L F T K M G V K R G L R N E D	H S G V L A G L T R V G	
UniRef90_B9L3Y9					
UniRef90_K5YKH4					
UniRef90_F7XK67					M D N
UniRef90_T0N5F2					
UniRef90_UPI0002E55EAF	S E N Q S	L M D K	N I E K Q N T N I V K D K S E N N Y K V N A Q Q I V I N		
UniRef90_F8KRZ6					
UniRef90_K2BKU6					M
UniRef90_L8IDC4					
UniRef90_V8C965			G P K A I N F S K L F E T T G		I F S
UniRef90_UPI0003808309					M S D
UniRef90_UPI0003B6B10E					
UniRef90_F4DAG5					
UniRef90_UPI000370AF44					
UniRef90_I3TNB4					
UniRef90_E4RK78	S S T	V E E V N K I D K R Y Y K K Y D I K Q G L R N A D G T G V V V G F T K I G			
UniRef90_G7QL96			K V G E K S Y Q F P L I S G T D G K K G I D I T G L I S		
UniRef90_UPI0002490E36					
UniRef90_UPI0003B3F4C4					
UniRef90_Q7VG31					T N I F S
UniRef90_C0QCE5					
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UniRef90_W3AI09					M
UniRef90_A0A023CYR1					
UniRef90_G2J8G4				S T T A S E I T D D V	
UniRef90_D8UMX3					
UniRef90_K7ITZ0	A G A T D	L K E A L C E K I P L H H D L L R K F R Q Q H G L D V V S Q I T V N D			
UniRef90_UPI000375C64A					
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UniRef90_UPI0004241BBE					
UniRef90_W5EVA4					
UniRef90_A2QSJ2					
UniRef90_Q8TU25					
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UniRef90_UPI0003671787					
UniRef90_UPI0004560C00					L R V
UniRef90_B5I2E8					
UniRef90_Q9YB84					Y I I
UniRef90_A9AWL9					T E T Q
UniRef90_K6W8W6					
UniRef90_A0A022Q9P1					
UniRef90_V4JT64					
UniRef90_L8DAN1					I V
UniRef90_UPI000258F1EA	S T S T N	L K E A L C E K I P I Y Y D L L R N F R Q Q H G S S V I G N I T V E N			M T V L E
UniRef90_G2NQY5					
UniRef90_I0XUB9			K F G D Q V H R L P V I T G T D G N K G I D I R D L H T		
UniRef90_F4P469					V P L R L
UniRef90_M1V9U2					
UniRef90_H5TTW2					
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UniRef90_UPI00036A4A7D					T I T V
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T E V F M G V G G V L G L W F Q R R L P R Y A C Q F I E M C L M V T A D H G P
V D P E G T V A E R L W P H L T T E P S P E R T S L N A A L V L L A D H D
I E G D Y G V G D V I S L L W F K R A L P K Y A T R F I D M C V M L C A D H G P
F K E D M G I G G V L S L L W F Q R R L P R Y A A K F I E M C L M V T A D H G P
T E V F M G I G G V L G L W F Q R R L P K Y S C Q F I E M C L M V T A D H G P
P I A H R L W Q Q L S G Q P A D E A A L R L D T A L A L L V D H D
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F K E E M G I G G V I G L W F Q R R L P R Y A T R F I E M C L I L T A D H G P
V E Q G L G V G D V I S L L W F K R S L P R Y C T R F I E I C V M L C A D H G P
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P Y S H V V Y L L L K G D L P S K E H G R M I D A I L T A C I D H G V
F E E K W G L G G V I G L L W F K K N L P S W A R E F I E R V V L L T A D H G P
V E Q G Y G V G D V S L L W F K R T L P R Y C S R F I K I I M M C A D H G P
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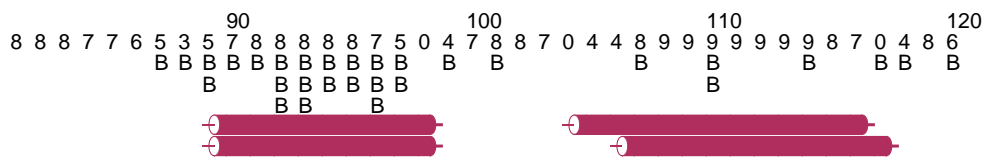
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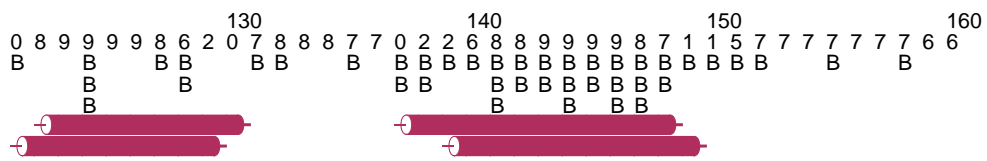
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L S K G R V R I P M N V D G A T A V I H C E L G L A P E L A R G V F I L S
K A N N L I L N I D G A I G S L F L D L E I V Q I G Y L N G L F L L A
L E R A K G K K I T M N I D G V A A A I Q C E L S I P A E A A K G I F A L S
L A G R S S K P V P M N I D G A T A V I Y G E L G F D A A L A R G L F L L S
A P L H A N V D L A I A V L S V S C G M P A D A G E T V F A V A
T R E T A A R E N M F A N V D L A L A A L T H A L D M R P D A G E A I F A I A
K K E N L I L N V D G T I G V L L V D M F L I N A G A F N A F V L G
L G I H P R I E L A Y A A L A L N L K L T N E Q F Q A L V A L A
E V A R R K K G K K I P L N I D G A T A V I Y G E L G F P P L T R G L F V L S
K K P N L I L N I D G F I G V A F V D L L R T C G G F L N G I F V L G
R E E H H G F I T S D L A I A A M A L S F G M N D N A A E T I F A L A
L T K A A N L V L N V D G G I G A L F L D L D I V K I G Y L N G L F V L A
K K P N L I L N V D G M I G V A F V D L L R N C G C F T R L F V L G
K K P N L I L N V D G L I G V A F V D M L R N C G S F L N G I F V L G
T P L R A N V D L A L A V F T A S S G M S A T A G E A I F A V A
K R S N L I L N V D G C I A V C F V D L R N C H G C L N G L F V L G
K K G N L I L N V D G C I G I L F I D L M G S C Y G Y L N G L F A L G
K R P N L I L N V D G C I G V F V D L R N C G A F T T E I F V L G
E T Y T L K A N N L V L N V D G A I G S L F L D L E I V G I G Y L N G L F V L A
K K P N L I L N V D G V I A V S F V D L L R H E M G A I N S L F V L G
K S P H L V L N I D G C I G A L F A D L L R G V S D I L N A L F V L A
H G R K L P I N V D G A I A I T S D M F D W R L G K A F F L L G
K R N N L I L N V D G C I G V L C C D M E F V Q L G L N A F F V L G
K A N N L I F N I D G V I G S L F L D L E I V E I G Y L N G L F V L A
V V R E R T G A H P N V D L A L G A L T L A T G M R D A G E V V F A T A
L N V D G C I A V C F V D L R D C G A F S A E E A D E Y I K I G T G L F V L G
L P E V I G K D L R L N V S A A I P A V L L G V G F P L N A L K G V P M L A
V N K P D M V I N E V G M L A A I L G Q M G F T P D E M T G L A L T S

	410	420	430
UniRef90_T0ZKH8	R T A G W S A H I L E Q K R T G	R L I R P S A R Y V G K A S R K P E	
UniRef90_UPI00036F3636	R T A G L S A H V I E Q H Q N	R L F R P R V N Y I G	
UniRef90_W9BDL5			
UniRef90_W4V6J3			
UniRef90_UPI0003B5FCAF	R T V G W L A H A R E Q L L E G R L I R P K S V Y V G P F P		
UniRef90_F0VG46	R T A G W T A H I L E Q R A N N R L I R P L S H Y V G P P V R S F P S		
UniRef90_A0A059G7K2	R T A G W L A H A R E Q R L T G R L I R P Q S V Y V G P E P		
UniRef90_Q6N768	R T A G W S A H I L E Q R Q D N K I I R P T A N Y V G P E N R L F		
UniRef90_W5Z6S7	R T L G W V A H W N E M H E A P L N I Y R P R Q I Y T G E K R R D Y V S R		
UniRef90_M5F0Z3	R V A G W L A H A R E Q Q T T G R L I R P Q S R Y I G P M P E L V		
UniRef90_I7CVC5	R A G G W T A H L E Q L E E N Q L V R P T A R Y V G		
UniRef90_UPI00037175C4	R T S G W S A H I L E Q R I D N K I I R P S A N Y T G P E M K F V P		
UniRef90_A5ETC1	R V A G W T A H A R E Q Q R T G R L I R P S S A Y I G P		
UniRef90_UPI000376D47B	R S V G W A H Y F E Q R E D D T L I R P A A N Y I G V E E R D		
UniRef90_Q4X909			
UniRef90_L9TQ07			
UniRef90_D9UUR5	R T A G W S A H I L E Q K R T G R L V R P S A R Y T G P G S R		
UniRef90_D5Z228			
UniRef90_J4H1P0	R V V G W L A H W R Q M Q E G G V K I W R P R Q V Y V G A G Q R D V D K R		
UniRef90_T1B4N0			
UniRef90_M5DH85	R I A G W S A H I A E Q R K Q Q K S V M H P R S V Y I G K		
UniRef90_U2RBS2	R V V G W S A H V L E Q A A D G K I L R P S A R Y V G P E P		
UniRef90_Q0SGB3	R I T G W T A H I L E Q G A S N S S I R P L S E Y S G V P Q R S V		
UniRef90_U6M6D3			
UniRef90_B3STI5			
UniRef90_X1E6V9	R S A G W V A H A L E Q L K D N K L I R P R L Y I G Q L G K K		
UniRef90_X8FMD7	R T V G W C A H I L E Q K R L R K L V R P S A I Y V G P A P R T P E S		
UniRef90_U1GAW0			
UniRef90_R6WWL0			
UniRef90_Q5AVT7	R I M G I M A H W R E Y M H P I A C P R K S Y V L P M R		
UniRef90_E9IW04			
UniRef90_UPI00036E77AE			
UniRef90_A0A026VZV7			
UniRef90_A0A024KIU4	R T G G W L A H A K E Q A A T G R L I R P Q S R Y V G P A P		
UniRef90_H5UTB4	R S A G W S A H I L E Q K Q R G T V I R P Y A H Y D G R P P R A V		
UniRef90_B2T6L2	R V V G W L A H A M E Q T R D G R L I R P R A R Y I G E Y E		
UniRef90_K6GFH9			
UniRef90_B2AQG4	R I P G G L A H W R E T L D K P I K I W R P R Q I Y T G D R T D D V D A		
UniRef90_L7U0P2	R A A G W V A H I L E Q R E Q G H L L R P R A R Y V E P P		
UniRef90_UPI00029B513D			
UniRef90_UPI000375EF4E			
UniRef90_W5VKN4			
UniRef90_C6BHD2	R T A G W L A H A L E Q R A A G Q L I R P R A A Y V G P M P		
UniRef90_K1TQX3	R I		
UniRef90_A7E4M0	R S S G V M A H W R E		
UniRef90_Q397U9	R S I G W I A H G L E Q R E Q S D L I R P R A V Y T G T W P		
UniRef90_J1ES68	R S L G W L A H A L E Q R S S A G L I R P R A A Y T G P R P		
UniRef90_T1AHF4			
UniRef90_K2M5Q5	R S V G I L A H A W E Q T Q Q G G P I P P R R M Y T G P D R R P V P		
UniRef90_F5XIJ4	R A A G V L A H A W E E M Q G G R R I K G P L P V Y D G P M P R H V P T		
UniRef90_V2IRW2	R S V G I L A H A W E Q T E Q G G R N K G P M P R Y D G H P P R D V P		
UniRef90_UPI00047D7EDB	R S V G V L A H A W E Q T E Q G G R I K M P R Q F Y E G H P A R P V P		
UniRef90_UPI00047B6ABC	R S V G I L A H A W E Q K Q Q G G R I K G P M Y T Y N G P A P R Q L D R E		
UniRef90_UPI000365BD11	R S V G L L A H A R E Q Q L D P T R I K G P L P R S I P A		
UniRef90_M9TZQ8	R T A G W I A H A M E E Y A E R P L R M R P S G Q Y V G		
UniRef90_M1QK81	R V P G L V A H V Y E E L T K E K P F E K E E T E Y T G I E P R E L P		
UniRef90_A9FIW2	R A A G W I A H A F E Q R E A G Y M L R P R A R Y T G P		
UniRef90_I6XXV1	R S V G I L A H A W E Q M Q G G R I K G P Q A K Y D G P P R R D		
UniRef90_UPI00032A60A5	R S I G L I G H T F D Q K R L K Q P L Y R		
UniRef90_UPI0003140847	R G M G I V A H A F E E L Q N G V L I K G P L V R Y S G P A K R H L E K		
UniRef90_UPI0002FA26B8	R S V G I L A H A W E Q K Q G G R I K G P M Y T Y T G P		
UniRef90_G2NQY4	R T A G W I A H A L E E Y A E R P L R M R P S G Q Y E G		
UniRef90_UPI00036E0448	R S I G W L A H A L E E Y Q Q P G L R Y R A V G V Y T G P R P		
UniRef90_C0QS32	R T I G F I G H Y L D E K R L D M P L Y R		
UniRef90_D6U803	R C V G W I G H A L E Q A W S P Q G I R P R A R Y T G		
UniRef90_X5UJB5	R S V G I L A H A W E Q E R N K G P L P R E W Y T G T P L R P F P A E		
UniRef90_R4GEU0	R S I G F I G H Y L D Q K R L K Q G L Y R		
UniRef90_G7GTN0	R T A G W T A H A L E E Y Q E R R L R F R P E G V Y T G		
UniRef90_I0YXK3	R S I G L T G H A L D Q K R L K Q P L Y R		
UniRef90_UPI000359DCBE	R S M G F I G H F L D Q K R L K Q G L Y R		
UniRef90_UPI000273DEFB	R S M G F I G H Y L D Q K R L K Q G L Y R		
UniRef90_L8PLH9	R T A G W I A H V L E E Y G E R P L R M R P S G H Y T G P		
UniRef90_K3WVP6	R S M G F I G H F L D Q K R L K Q P L Y R		
UniRef90_G7WP47	R S I G I I G H I L D Q K R L D S R L Y R		
UniRef90_B3RQH9	R S M G F I G H F L D Q K R L K Q G L Y R		
UniRef90_S8E8B1	R S I G F I G H T F D Q K R L K Q P L Y R		
UniRef90_T1HR11	R S I G F I G H Y M D Q K R L K Q G L Y R		
UniRef90_M1VA42	R S I G I L G H I I D Q R M K Q P L Y R		
UniRef90_M7TDW7	R V A G L T A H V Y E Q T Q E K P M R K M F S I Y N G P K E R K L P		
UniRef90_N6VV84	R S I G F M G H I M D Q K R L K S R L Y R		
UniRef90_UPI0003D24361	R S I G L T G H T F D Q K R M K Q S L Y R		
UniRef90_UPI000360D783	R T V G W I V H A L D E Y A Q R P L R L R P V G R Y V G P		
UniRef90_S7RH28	R S I G F I G H H L D Q K R L R A P L Y R		
UniRef90_A0A024ICG6	R C A G L I A H M S E E L E Q P I G F A L Q R Y T G H V P		
UniRef90_UPI00046E8204	A M P G V V A H V S E E L R S A V R I		

conf
sol25
sol5
sol0
jhmm
jpssm



conf
sol25
sol5
sol0
jhmm
jpssm



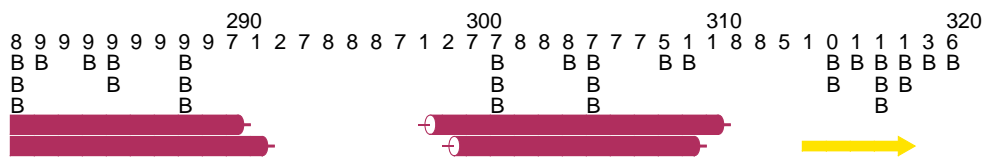
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conf
sol25
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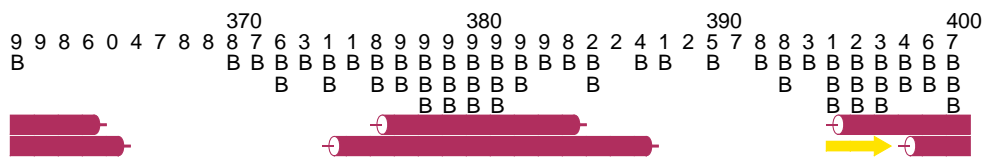
Detailed description: This figure displays six sequence logos stacked vertically. The top three logos are labeled 'conf', 'sol25', and 'sol5'. Above them, numerical values indicate the maximum information content at specific positions: 250 for 'conf' and 'sol5', and 260 for 'sol25'. The bottom three logos are labeled 'sol0', 'jhmm', and 'jpssm'. Above them, numerical values indicate the maximum information content at specific positions: 270 for 'sol0', and 280 for 'jhmm' and 'jpssm'. The 'sol0' logo shows a single prominent peak at position 270. The 'jhmm' and 'jpssm' logos show broader peaks centered around position 260. Each logo consists of horizontal bars representing the frequency of nucleotides (A, C, G, T) at each position, with the height of the bar indicating the information content.

conf
sol25
sol5
sol0
jhmm
jpssm



[illegible]

conf
sol25
sol5
sol0
jhmm
jpssm



[illegible]