

QUERY	1	10	20	30	40
UniRef90_UPI0004265F26	G A	L T E S Q A A L V	K S T S W E E F N A N I P K H T	H R F F I L L V L E I A P A A	A
UniRef90_G4HG40		L S S E K K T I A D L	K S T T V P V L E E K H G T V T I	T T T R F F Y E R L R L M F E A N H P E L	L
UniRef90_UPI0002EA395B		L S S E K K T I D I V	K S T T V P V L E E K H G V T D I	T T T K H F Y K R M M F T S N H P E L	L
UniRef90_UPI00035D3C7B	A	L S S E K K T I D I V	K S T T V P V L E E K H G V T D I	T T T K H F Y K R M M F T S N H P E L	L
UniRef90_UPI00030E4F0A		L S S E Q K T R E I V	K Q T T V P V L E E Q H G T E I	T T K V F Y Y K R M M F E A N H P E L	L
UniRef90_UPI00047BCAEB	A	L D P K K L E I V	K A T T V P V L E E K H G E A I	T T K Q F Y Y K R M M F G N H P E L	L
UniRef90_UPI00047A5C06		L D Q K K T I D I V	K S T T V P V L E E K H G E Q I	T T T R F F Y Q L L M F G N H P E L	L
UniRef90_D3G0B8		L S S E K K T I S I V	K S T T V P V L E E V H G T K I	T T T R F F Y Q L L M F G N H P E L	L
UniRef90_J8Q8L3		L N S K K T I A I V	K S T T V P V L E E I H G E K I	T T T R F F Y K L L M F G N H P E L	L
UniRef90_V4S7H7	A	F T E E Q E A L V	K S W N V M K N A G E I L	G L R F F F L R I F E I A P S A	A
UniRef90_Q7WUM8		L T S Q K T K D I V	K A T A P V L A Q H G Y A I	I Q H F F Y K R M M F Q A N H P E L	L
UniRef90_UPI00045E9482		L S S Q K H R E L V	K A T A P V L A R E K H G V A I	T S H F F Y K R M M F S H N P E L	L
UniRef90_Q0CEI5	S	L T P Q Q K E I V	K A T I P A L A E R K H G V E I	T S R F F Y K R M M L A K A N P E L	L
UniRef90_ROJ510	A	L T T P A Q Q V Q I V	K S T T V P V L A E R H G T A I	T S R F F Y H D M L E A N P E L	L
UniRef90_UPI00047BAE7B		L S N K T I D I V	K S T A P I L A E R H G V E I	T S Y F F Y K S L F E A T H P E L	L
UniRef90_W2E2W1		L L K Q A T I D I V	K S T A P A L A E V H G T D I	T T K L F Y Y T R L L F E A T H P E L	L
UniRef90_A0A010R9F8	A	L T Q D Q I N I V	K S T A P V L K V H G E T I	T T T L F Y Y K D M I D T H P E L	L
UniRef90_UPI000360A237		L D A H T I K V I	K S T V P V L E T E G V H I	T T K R F F Y Q T M F E A H P E L	L
UniRef90_UPI00028834C5		L S S Q K T M D I V	K S T V P V L E T H G L A I	T T K T F F Y K N L F E A H P E L	L
UniRef90_A0A024PP82	G	L D K G T K D I V	K A T A P V L Q E H G A E I	T T K R F F Y E L M L G N H P E L	L
UniRef90_R4XTP3		L S P Q I R A L V	K A T A P V L K T H G V A I	T T R H F F Y A R M F Q H N P E L	L
UniRef90_N6W8E4		L L R Q D T V A I V	K Q T I P V L Q E H G E T L	T T R H F F Y Q R M F Q Q N P E V	L
UniRef90_F5SK06		L D P K T M E I V	R S T A P I L K E K G A M I	T T R Q F F Y K R L F S R N P E L	L
UniRef90_UPI00046F463D		M T S S D Q K E L I	K A T A P V L A R E H G V A I	T T T H F F Y S R M F T A H P E L	L
UniRef90_UPI0003F4CB53		L S S E D H A E T V	R A T L P A V A R H G V E I	T T G T F Y D A M F A H N P E L	L
UniRef90_W9VZS9	A	L S E Q Q K A I V	K S T A P V L Q E H G V A I	T S V F F Y K R L L S A N H P T	L
UniRef90_K0Y464		L D Q K H T R D I V	K A T I P V L A E Q Y G T T I	T T Q T F F Y H N M F T A H P E L	L
UniRef90_UPI00046ED6C9		L S K Q T R D I V	K S T A P V L A E H G T A I	T S V F F Y Q N L F A A H P E L	L
UniRef90_F0RQV1		M N A E Q I R L V	K A T V P A L R A H G E D I	T T R H F F Y A D M F R A N H P E L	L
UniRef90_B1KD10		L S A E K H I S I V	K S T I P L L V E S A G T A I	T T E H F F Y Q R M F S E F P E V	L
UniRef90_D0MR65	P	M S A E K T I A I V	K A T A P V V Q E H G T E I	T T S T M Y G T M F S E F P E V	L
UniRef90_I1H7V3	A	G S E E K E A L V	L K S W A I M K K D S A N L	G L R F F F L K I F E I A P S A	A
UniRef90_F4APZ0		L S A H T A T V	K S T I P L L E S A G V A I	T D H F F Y Q R M F R L N P E L	L
UniRef90_Q24520		F T E E Q E A L V	K S W S V M K N S A E A L	G L K L F I K I F E I A P T	L
UniRef90_UPI000289034B		L S Q E T I Q V I	K S T V P V L E I H G T A I	T K R F F Y E M M F N G H P E L	L
UniRef90_A9ARM9		L T Q Q T K D I V	K A T A P V L A Q H G Y D I	I Q C F F Y R R L F D A H P E L	L
UniRef90_N4WZP8		L D Q Q T I E T V	K S T V P V L E K Y G K D I	T S R F F Y Q R L F D A H P E L	L
UniRef90_U2HCD6		M T S D Q I Q L V	K G T V P V L R E H G V L L	T T T H F F Y K R M F E H N P E L	L
UniRef90_UPI00034DE702	P	L D K R T T E I V	K T T V P V L K E H G E T I	T T K F F Y K L L L E S A N H P E L	L
UniRef90_M1WCM2	A	L T A Q Q T A T V	K S T A P I V K Q Y G Q T I	T T T T F F Y R N M L S A H P E L	L
UniRef90_C4LFT3		M N E Q Q K A L V	K A T V P V L K T N G V A I	T T K H F F Y Q R M F T H N P E L	L
UniRef90_J9E103		L S T E T K S I I	L S T A P V L E K H G E A I	T T G R F F Y H I L F S E H P E L	L
UniRef90_U1XK72	A	V T P E Q Q S I V	K A T A P V L K E H G V T I	T T T V F F Y E N M L K E N P E L	L
UniRef90_D3E6G0		L T S Q R T I E V V	K S T A P V L E T H G T A I	T T S A F F Y Q K L F H H H P E L	L
UniRef90_UPI0003484303	A	L T A E Q M A R V	K A T A P V L A E H G T T I	T T K H F F Y K R M F A H H H P E L	L
UniRef90_G8X712		M T T T E K E L I	K A T I P V L R E N G V L L	T T K H F F Y N R M F A H N P E L	L
UniRef90_UPI0004573CF2	S	L S D R Q T Q L V	K E T W R L V Q E D I A K V	G L I M F V R L F E T H P E L	C
UniRef90_Z5XKQ5		L S E K T I Q V V	K S T L P S L A E A G L Q V	T E Y F Y D R M F S Y N N P E L	L
UniRef90_UPI00040464DA		L D Q Q T I N I V	K S T V P S L L K E A G L E V	T T T F F Y K N M F E N N P E V	L
UniRef90_UPI0003711A7B		M T R E Q K Q L V	K D T V P V L R E N G V L L	T T T H F F Y E R M L T H N P E L	L
UniRef90_G4WMV8		F T A E E E A L V	L K S W A M K K N A G E V	G L K F F F L K A F E I A P S A	A
UniRef90_U1XK72		L D S R T I E I V	K S T L P L L E N A G V E I	T D H F F Y K R M F S H N P E L	L
UniRef90_Q73B49		L L S E K T I E I V	K S T V P L L Q E K G V E I	T T T R F F Y E I L F S E H P E L	L
UniRef90_E0U2G4		L D N K T I E I V	K S T V P V L Q Q H G E T I	T T G R F F Y D L M F Q D H P E L	L
UniRef90_V7AEC3		F T E E Q E A L V	L K S W E A M K N N S G E L	G L K F F T K I L L E I A P E A	A
UniRef90_Q7UIY1		L S E K T I R I V	K E I T P L V A N A N A E T I	T T R R F F Y E R M F E A N P E V	L
UniRef90_W7CNW5		L T E E Q K Q I V	K S T A P V L K E H G K E I	T T S I F F Y K R M F E A H P E L	L
UniRef90_K2HBC4		L D E R T R E I V	K A T V P V L A E H G E A I	T T T F F Y K R M L T E R P E L	L
UniRef90_U1KXH3		L S N N T I A L V	K S T I P L L S Q A G T A V	T T A H F F Y D R M F T H N P E L	L
UniRef90_K9FBG0		M T P N Q I A L V	K A T V P V L A E H G N T I	T T T V F F Y R N M L E A H P E L	L
UniRef90_UPI000347738D	G	L S A Q T I A L V	K A T V P V L Q E H G E A I	T T R H F F Y P L M F R Q Y P E V	L
UniRef90_S4XEM3	A	L T P A H A E T V	K A T L P V V G A H I G E I	T T F F Y K G M F S A H P E L	L
UniRef90_UPI0004245EE8		L S D E H A E V	R A T L P A I G A H I N E I	T P T F F Y Q K M F A H P E L	L
UniRef90_M7BHW7	P	L V D A Q K E R I	Q E S W R L I H D N I A R V	G L I V F I R L F E T H P E L	C
UniRef90_W4XLX6		M S T T T Q K R L I	Q D T W K K L S K D P E R H	G S V M F A K L T T T S Y P E V	L
UniRef90_W4XLX6		M S T T T Q K R L I	Q D T W K K L S K D P E R H	G S V M F A K L T T T S Y P E V	L
UniRef90_W4XLX6		M S T T T Q K R L I	Q D T W K K L S K D P E R H	G S V M F A K L T T T S Y P E V	L
UniRef90_L0G369		S K S T I E I V	K S T A P V L K E Y G E Q I	T T K V F F Y K K L F E T H P D L	L
UniRef90_S7X5W1		M N N S Q R E I V	T A T V P I L R E H G V A I	T T T H F F Y K R M F S H H P D L	L
UniRef90_T5AGV5	A	L T V E Q I A L V	K S T A P V I K E H G K A I	T T T T F F Y R R L L G A H P E L	L
UniRef90_UPI0003779E48		L S P E H E E L V	K A T L P A V G E N I E K I	A H S F F Y G K M F S A H P E L	L
UniRef90_UPI000377B994		M T N K E K E L I	T A T V P I L R A G E T I	T N Y F F Y A R M L K A H P E L	L
UniRef90_Q2SM91		L D S N T I A I V	K A T I P V L E S G G V A I	T T E H F F Y R R L F S H N P E L	L
UniRef90_UPI000255EBC8	A	L S P E H A E T I	R A S L P A V G A N I Q E I	T T R L F F Y S T M F S K H N P E L	L
UniRef90_M5DQW7		L N T H Q I N I V	K T T A P V V G A H A R E I	T D Y F F Y P L M F E R Y P E V	L
UniRef90_D9Y601		L T K E Q I E L V	K T T V P V L R E H G V A I	I S H F F Y K R M L S Y H N P E L	L
UniRef90_H1H5N8		L T G E Q K Q L I	L A T V P L L A E A G T V V	T K H F F Y L R M F S H N P E L	L
UniRef90_E6RLK0		L S D K T I Q I V	K S T V P L L A E A G T V V	T D H F F Y K R M F S H N P E L	L
UniRef90_C9QUU2		L T Q Q D I T V I	K S T I P L L E A S G S A I	T T Q H F F Y Q R M F N H N P E L	L
UniRef90_R4YT2		L S N E H I Q L V	K S T V P L L E A S G S A I	T T D Y F F Y N R L F T H N P E A	L
UniRef90_E9EFU4		L T S E Q I K I V	Q S T I P A L E Q H G I A I	T T T L F F Y K R L L D S H P E L	L
UniRef90_W4YI83	G S	I T A E H K R M V	Q K T W T K L S S N P A K H	G A T M F S K L V T D Y P A V V	L
UniRef90_W4YI83	G S	I T A E H K R M V	Q K T W T K L S S N P A K H	G A T M F S K L V T D Y P A V V	L
UniRef90_C5DJ02		L S E Q T R N I V	K A T V P V L E Q H G T I	T T T V F F Y R N M L S E H K E I	L
UniRef90_B2JF30	P	L S P E T I A I V	K A T V P A L E A H G L D I	T T R E M Y A R L L Q N P A I	L
UniRef90_B3RYV6	S	L T E E Q K A I I	R E N W Q D V E E N M S E V	G L Y L F S K L F T I A N P E Y	L
UniRef90_P39676		L A E K T R S I V	K A T V P V L E Q Q G T V I	T T R T F F Y K N M L T E H T E V	L
UniRef90_G2KQM6		L D Q K T I D I V	K S T A P V L D Q H G E T L	T T R H F F Y Q R M F T H N P E L	L
UniRef90_E3E3M9		L S K Q T I N I V	K S T V P V L E T H G E E I	T T G R F F Y D L M F Q A H P E L	L

QUERY	K	D	L	F	S	F	L	K	G	T	S	E	V	P	Q	N	N	P	E	L	Q	A	H	A	G	K	V	F	K	L	V	Y	E	A	A	I	Q	L	E	V	80							
UniRef90_UPI0004265F26	L	N	I	F	N	H	A	N	Q	K	K	G	R	Q	Q	Q	A	L	A	N	A	V	Y	A	A	A	A	L	A	N	T	V	Y	A	A	A	L	H	I	D	Q							
UniRef90_G4HG40	L	N	I	F	N	H	A	N	Q	R	R	G	R	Q	Q	T											A	L	A	N	T	V	Y	A	A	A	L	H	I	D	R							
UniRef90_UPI0002EA395B	K	N	V	F	N	Q	S	N	Q	R	E	G	R	Q	P	Q	A	L	A	A	S	V	Y	A	A	A												A	N	I	D	N						
UniRef90_UPI00035D3C7B	L	N	I	F	N	H	A	N	Q	S	Q	G	R	Q	Q	T											A	L	A	N	M	V	L	A	A	A	K	N	I	D	Q							
UniRef90_UPI00030E4F0A	L	N	I	F	N	K	S	A	N	Q	S	G	K	G	K	Q	T										A	L	A	Q	T	V	L	A	A	A	K	H	I	D	N							
UniRef90_UPI00047BCAEB	K	N	I	F	N	M	A	H	Q	I	T	G	H	Q	P	K											A	L	A	D	A	V	Y	G	A	A	K	N	I	E	D							
UniRef90_UPI00047A5C06	L	N	I	F	N	H	A	N	Q	K	K	G	R	Q	Q	R	A	L	A	G	A	V	Y	A	A	A												M	Y	I	D	N	L	E				
UniRef90_D3G0B8	L	N	I	F	N	H	A	N	Q	K	H	G	R	Q	Q	T											A	L	A	N	S	V	Y	A	A	A	L	H	I	D	R							
UniRef90_J8Q8L3	L	N	I	F	N	H	I	N	Q	K	K	G	R	Q	Q												A	L	A	N	V	V	Y	A	A	A	L	H	I	D	R							
UniRef90_V4S7H7	Q	K	L	F	S	F	L	R	D	S	N	V	P	L	E	Q	N	Q	K	L	K	T	H	A	M	S	V	F	V	M	T	C	E	S	A	V	Q	L	R	K	E							
UniRef90_Q7WUM8	K	N	I	F	N	M	A	H	Q	E	R	G	E	Q	Q	Q											A	L	A	R	A	V	Y	A	A	A	L	H	I	E	N							
UniRef90_UPI00045E9482	K	H	I	F	N	Q	A	K	Q	D	A	G	Q	Q	Q	Q											A	L	A	L	A	V	L	G	Y	A	E	H	I	D	D							
UniRef90_Q0CEI5	H	N	I	F	N	T	A	H	Q	A	T	G	E	Q	P												A	L	A	H	A	V	W	A	Y	A	S	N	I	D	D	H						
UniRef90_R0J510	K	H	I	F	N	N	T	H	Q	A	T	G	H	Q												A	Q	A	L	A	G	S	L	Y	A	Y	A	N	I	D	D	Q						
UniRef90_UPI00047BAE7B	L	N	I	F	N	H	A	N	Q	K	G	R	Q	Q	T												A	L	A	N	T	V	Y	A	A	A	T	Y	I	D	D	Q						
UniRef90_W2E2W1	L	N	I	F	N	H	A	N	Q	K	K	G	K	Q	Q	T											A	L	A	N	M	V	L	A	A	A	V	H	I	D	K							
UniRef90_A0A010R9F8	K	N	I	F	S	L	R	N	Q	A	S	G	E	Q	P	R											A	L	A	Q	S	V	L	A	Y	A	T	Y	I	D	D							
UniRef90_UPI000360A237	L	N	I	F	N	H	A	N	Q	K	G	R	Q	Q	T												A	L	A	N	A	V	Y	A	A	A	L	H	I	D	R							
UniRef90_UPI00028834C5	L	N	I	F	N	H	T	N	Q	S	K	G	R	Q	Q	G											A	L	A	N	T	V	Y	A	A	A	V	H	I	E	N							
UniRef90_A0A024PP82	K	N	I	F	N	Q	T	N	Q	R	K	G	D	Q	P	K											A	L	A	N	T	V	Y	A	A	A	A	N	I	D	D	H						
UniRef90_R4XTP3	K	H	V	F	N	Q	G	H	Q	A	G	G	E	Q	Q	Q	A	L	A	G	A	V	A	Y	A													E	H	I	D	D						
UniRef90_N6W8E4	K	P	F	F	N	P	A	H	Q	K	A	G	T	Q	R												A	L	A	G	A	I	C	A	Y	A	Q	H	I	D	N							
UniRef90_F5SK06	Y	N	I	F	N	R	S	N	Q	R	E	G	K	Q	P	Q											A	L	A	D	T	V	Y	A	A	A	H	I	D	R								
UniRef90_UPI00046F463D	K	N	L	F	N	M	G	N	Q	G	N	G	K	Q	Q	L	S	L	A	M	A	V	L	A													Y	A	E	N	I	E	D					
UniRef90_UPI0003F4CB53	R	N	L	F	N	Q	G	N	Q	A	N	G	E	Q	R											Q	A	L	A	G	S	V	A	A	F	A	E	H	L	V	T	P						
UniRef90_W9VZS9	R	N	I	F	N	T	A	H	Q	E	T	G	A	Q	P												A	A	L	A	H	A	V	W	A	Y	A	N	I	D	N							
UniRef90_K0Y464	L	N	V	F	N	K	T	N	Q	K	G	R	Q	P													M	A	L	A	S	T	V	L	A	A	K	H	I	D	N							
UniRef90_UPI00046ED6C9	L	N	V	F	N	H	A	N	Q	A	Q	G	R	Q	Q	A	A	L	A	N	A	V	Y	A	A	A												I	D	N	I	E	N					
UniRef90_F0RQV1	K	N	I	F	N	P	A	N	Q	A	T	G	R	Q	A	R	S											L	A	A	S	V	L	A	Y	A	K	H	I	D	N							
UniRef90_B1KD10	K	D	I	F	N	M	S	H	Q	K	T	G	G	P												A	A	L	A	N	A	V	I	G	F	A	A	N	C	D								
UniRef90_D0MR65	Q	N	L	F	N	M	S	H	H	R	A	G	A	T	K	G	G	A	P	P	G	V	Q	A	T	A	L	A	N	A	V	I	G	F	A	A	N	C	D									
UniRef90_I1H7V3	K	E	L	F	P	F	L	R	N	S	D	A	P	L	E	T	N	P	K	L	K	T	H	A	V	S	V	F	I	M	T	C	E	A	A	A	Q	L	R	K								
UniRef90_F4APZ0	K	N	I	F	N	M	A	N	A	N	G	R	Q	Q													F	A	L	F	N	A	I	A	A	K	N	I	D	N								
UniRef90_Q24520	K	K	M	F	S	F	L	R	D	S	P	I	P	A	E	Q	N	P	K	L	K	P	H	A	M	S	V	F	V	M	C	C	E	S	A	V	Q	L	R	K								
UniRef90_UPI000289034B	L	H	I	F	N	H	A	N	Q	K	Q	G	R	Q	Q												T	A	L	A	N	A	V	Y	A	A	A		A	N	I	E						
UniRef90_A9ARM9	K	N	V	F	N	M																						H	Q	E	Q	G	Q	Q	Q	A	L	A	R	A	V	Y	A	E	N	I	E	D
UniRef90_N4WZP8	K	N	I	F	N	Q	T	N	Q	R	I	G	N	Q	P	Q	A	L	A	N	A	V	Y	A	A	A														A	N	I	E	N				
UniRef90_U2HCD6	K	H	V	F	N	M	G	N	Q	Q	N	S	K	Q	Q	T											A	L	A	M	A	V	L	A	Y	A	E	H	I	E	N							
UniRef90_UPI00034DE702	R	N	V	F	N	Q	T	N	Q	R	K	G	A	Q														A	L	A	N	T	V	Y	A	A	A	A	N	I	E	K						
UniRef90_M1WCM2	K	N	Y	F	S	L	R	N	Q																	Q	L	G	A	Q	Q	A	A	L	A	N	A	V	F	A	Y	A	I	D	D			
UniRef90_C4LFT3	K	N	I	F	N	Q	G	H	Q	N	S	G	R	Q	Q	E	A	L	A	M	A	V	A	Y	A	A													E	N	I	D	D					
UniRef90_J9E103	L	N	L	F	N	Q	T	N	Q	R	Q	G	K	Q	T	A	L	A	N	A	V	Y	A	A	A															A	N	I	D	N				
UniRef90_U7Q638	K	N	V	F	S	L	T	S	Q	A	T	G	A	Q	P	R												A	L	A	A	A	V	L	G	Y	A	M	F	I	D	D						
UniRef90_D3E6G0	L	N	I	F	N	H	A	N	Q	R	E	G	K	Q	P													F	A	L	A	N	A	V	Y	A	A	A	A	H	I	E	N					
UniRef90_UPI0003484303	K	N	V	F	N	Q	T	H	Q	Q	S	G	S	Q	P	E	T											L	A	R	A	V	Y	A	Y	A	A	N	I	D	N							
UniRef90_G8X712	K	N	I	F	N	L	G	N	Q	A	S	G	K	Q	T													A	L	A	M	A	V	L	A	Y	A	E	H	I	E	N						
UniRef90_UPI0004573CF2	K	D	A	F	F	L	F	R	D	I	D	D	L	Q	K	S	K	G	L	R	A	H	G	L	R	V	M	S	F	I	E	K	T	V	A	R	L	D	Q	N								
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UniRef90_UPI00040464DA	K	P	L	F	N	M	D	R	Q	K	S	G	K	P	P	K												A	L	A	M	T	I	L	A	A	E	N	I	D	N							
UniRef90_UPI0003711A7B	K	H	V	F	N	M	G	N	Q	T	N	N	K	Q	R													A	L	A	M	A	V	L	A	Y	A	E	H	I	E	D						
UniRef90_G4WMV8	A	K	L	F	P	F	L	R	D	S	T	V	P	L	E	K	N	P	K	L	K	T	H	A	M	S	V	F	V	M	T	C	E	S	A	Q	L	R	K									
UniRef90_I1XK72	K	D	I	F	N	L	A	N	Q	A	T	G	R	Q	Q												F	A	L	F	S	A	V	A	M	A	K	H	I	E	D							
UniRef90_Q73B49	L	N	I	F	N	H	T	N	Q	K	K	G	R	Q	Q	Q	A	L	A	N	A	V	Y																A	A	A	T	Y	I	D	N	L	E
UniRef90_E0U2G4	L	N	I	F	N	Q	T	N	Q	K	K	T	Q	R	A	A	L	A	N	A	V	I	A	A	A																	A	N	I	E			
UniRef90_V7AEC3	K	Q	L	F	S	F	L	K																																								

QUERY	T	G	V	V	V	T	D	A	T	90	G	S	V	H	V	S	100	V	A	D	A	H	F	P	V	V	K	E	A	L	L	K	T	K	E	120									
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UniRef90_J8Q8L3	L	Q	E	N	I	L	P		V	V	K	Q	I	A	H	K	H	R	S	L	G	V	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	J	A	I	K	D			
UniRef90_V4S7H7	G	K	V	T	V	R	E	S	T	L	K	K	L	G	A	V	H	F	K	Y	G	V	V	N	E	H	F	E	V	T	K	F	S	L	L	L	E	T	I	K	E				
UniRef90_Q7WUM8	P	S	E	S	L	S	A		V	L	K	D	I	A	H	K	H	A	S	L	V	R	A	E	H	Q	Y	P	I	V	V	G	E	N	L	L	L	A	S	S	I	K	E		
UniRef90_UPI00045E9482	P	S	V	L	A	P			V	L	A	R	I	A	H	K	H	V	S	L	G	V	R	A	E	H	Y	P	I	V	V	G	E	N	L	L	L	A	S	S	I	K	E		
UniRef90_Q0CEI5	P	E	A	L	A		T		A	V	S	R	I	G	H	K	H	A	S	L	G	V	T	A	D	Q	Y	P	I	V	V	G	E	N	L	L	L	A	A	I	K	E			
UniRef90_R0J510	L	G	K	L	S	P			A	V	E	L	I	C	H	K	H	A	S	L	S	L	N	V	R	K	E	A	I	V	V	G	E	N	L	L	L	E	T	M	K	T			
UniRef90_UPI00047BAE7B	L	E	V	L	L	P			A	V	K	Q	I	A	H	K	H	R	S	L	G	V	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	K	A	I	K	D			
UniRef90_W2E2W1	L	E	A	I	L	P			A	V	Q	V		A	H	K	H	R	S	L	G	V	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	J	A	I	K	E		
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UniRef90_R4XTP3	P	S	V	L	A	P			V	V	T	R	I	V	H	K	H	V	S	L	G	V	R	A	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	A	S	I	R	E		
UniRef90_N6W8E4			P	A	A	L	G	D		A	V	E	Q	I	A	Q	K	H	V	S	L	G	V	R	A	E	H	Y	P	I	V	V	G	E	N	L	L	L	A	S	I	R	E		
UniRef90_F5SK06	L	E	E	I	L	P			V	V	E	R	I	A	H	K	H	R	A	L	G	V	R	A	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	W	A	S	I	R	D	
UniRef90_UPI00046F463D	P	S	V	L	V		S	A	V	T	K	I		A	H	K	H	M	S	L	D	G	V	R	A	E	H	Y	P	I	V	V	G	E	N	L	L	L	A	S	I	R	E		
UniRef90_UPI0003F4CB53	D	S	G	I	P	F	Q	I	M	S	R	I		A	H	K	H	A	S	L	D	G	V	R	A	E	H	Y	P	I	V	V	G	E	N	L	L	L	E	A	V	A	E		
UniRef90_W9VZS9			L	G	A	L	E	T		A	V	S	R	I	G	N	K	H	A	S	L	D	E	I	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	T	S	I	K	E	
UniRef90_K0Y464	L	G	A	I	L	P	H			V	T	Q	I	A	H	K	H	R	A	L	E	I	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	K	A	I	K	E		
UniRef90_UPI00046ED6C9	L	L	P						A	V	Q	I		A	H	K	H	V	S	L	G	V	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	K	A	I	K	E		
UniRef90_F0RQV1			G	A	Q	L	G	M	V	E	R	I		A	H	K	H	R	A	L	G	V	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	G	A	I	K	E		
UniRef90_B1KD10	L	G	A	L	S	G			A	V	E	R	I	A	H	K	H	T	S	F	N	I	V	L	Q	P	D	H	Y	P	I	V	V	G	E	N	L	L	L	E	T	L	A	R	E
UniRef90_D0MR65	Q	L	G	N	L	G	D	A	V	P	R	M	V	H	K	H	V	S	L	D	I	R	A	D	K	H	Y	P	I	V	V	G	E	N	L	L	L	L	R	A	I	K	T		
UniRef90_I1H7V3	A	G	K	T	V	R	E	T	L	K	R	L		G	G	T	H	V	K	Y	G	V	D	E	H	F	E	V	T	R	F	A	L	L	L	E	T	I	K	E					
UniRef90_F4APZ0	L	G	A	L	S		E	V	V		R	V	A		A	H	K	H	T	S	F	F	I	Q	P	D	H	Y	P	I	V	V	G	E	N	L	L	L	L	E	T	I	K	E	
UniRef90_Q24520	T	K	V	T	V	R	E	T	T	L	K	R	L		G	A	S	H	S	K	Y	G	V	D	E	H	F	E	V	A	K	Y	A	L	L	L	E	T	I	K	E				
UniRef90_UPI000289034B	D	Q	L	E	A	I	L	P		A	V	K	Q	I	A	H	K	H	R	S	L	G	V	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	A	A	I	K	D	
UniRef90_A9ARM9	P	G	S	L	A	A			V	L	K	N	I	A	N	K	H	A	S	L	G	V	R	A	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	A	A	I	K	E		
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UniRef90_U2HCD6			P	T	V	L	L	N	A	V	D	H	I		G	Q	K	H	T	S	L	D	N	I	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	A	S	I	K	E	
UniRef90_UPI00034DE702	L	E	E	I	L	P	H			V	K	Q	I		A	H	K	H	T	S	L	D	N	I	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	J	A	I	K	E	
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UniRef90_C4LFT3	P	S	V	L	L	P			V	V	E	R	I	A	H	K	H	V	S	L	G	V	R	A	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	A	S	I	K	E		
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UniRef90_U7Q638			L	P	R	L	H	H		A	V	E	R	I	A	H	K	H	A	S	L	Q	I	Q	P	D	Q	Y	P	I	V	V	G	E	N	L	L	L	L	Q	A	I	G	Q	
UniRef90_D3E6G0	D	R	L	E	A	I	V	P	V	V	K	Q	I		G	H	K	H	R	A	L	N	I	L	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	G	A	M	K	D	
UniRef90_UPI0003484303	L	G	A	L	G	S			A	V	S	R	I		A	H	K	H	A	S	L	N	I	R	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	G	A	I	V	D	
UniRef90_G8X712			P	S	V	L	I	N	T	L	K	S	I		G	N	K	H	V	S	L	N	I	T	K	E	Q	Y	P	I	V	V	G	E	N	L	L	L	L	A	S	I	K	E	
UniRef90_UPI0004573CF2	E	D	R	L	Q		Q	L	A	L	E	L		G	K	S	H	F	R	Y	S	A	A	P	E	K	Y	Y	P	I	V	V	G	E	N	L	L	L	L	C	A	V	P		
UniRef90_Z5XKQ5	L	E	V	L	K	S			A	L	A	R	I		N	H	K	H	T	S	Y	H	I	L	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	A	T	L	K	E	
UniRef90_UPI00040464DA	L	E	V	L	L	P			V	V	K	Q	I		G	E	K	H	C	N	A	N	I	K	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	A	T	L	K	D	
UniRef90_UPI0003711A7B	P	S	V	L	M	P			V	V	N	N	I		G	H	K	H	A	S	L	D	I	R	P	E	H	Y	P	I	V	V	G	E	N	L	L	L	L	A	S	I	K	E	
UniRef90_G4WMV8	G	K	V	T	V	R	D	T	L	R	R	L		G	A	V	H	A	K	Y	G	V	D	E	H	F	S	V	V	R	F	A	L	L	L	E	T	I	K	E					
UniRef90_I1XK72			L	G	A	L	G	E	L	V	E	R	V		A	H	K	H	V	S	F	D	I	Q	P	D	Q																		

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UniRef90_C4LFT3
UniRef90_J9E103
UniRef90_U7Q638
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V V G A K W S E E L N S A W T I A Y D E L A I V I K K E M D D A A
V L G D Q A T D E I I E A W G E A Y G V I A D V F I Q E M Y Q E A
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V L G D A A T D E I I N A W A E A Y G V I A Q V I E T N M Y E S A
V L G D A A T D E I I M N A W E A Y G E I A S V M E K E M Y E K A
V L G D A A T D D I I M N A W A D A Y G V I A D V F I R M E D
V L G D A A T D E I I D A W A K A Y G I I A D A F I A A M Y D E A
V L G D A A T D E I L A A W G E A Y G V I A N A F I K E M Y E E A
V L G E A A T D E L L Q A W G E A Y G V I A D A I E A E M Y E E A
A V P E M W S P E M K S A W S E A Y D Q L V A A I K S E M K P S S
V L G D A A T D E I I S A W A Q A Y G N L A D I L A G M E S E
V L G E A A S D E L I E A W K L A Y G Q L A D L L I D A E Q Q
V L G D A V T P P V V D A W T A A Y Q Q L A E I F I N
V L G D A A T P E I L E A W G A A Y W Q L A N I M I
V L G D A A T P D I I E A W G E A Y G V I A Q V F I D V E E E
V L G N A A T D E I L H A W K E A Y G V I A D A I E A G M Y K E A
V L G D A L T P E I A E A W T L A Y G Q L A Q V F I K E M Y Q E A
V L G E A A T P E I L D A W A K A Y G V I A D V I E Q E M Y Q E A
V L G D A A T E E I L G A W G E A Y G V I A D A F I Q G L Y K E A
V L G D A A T D D I I N A W E K A Y G V I A D I F I K E M Y E E
V L G E A A T D E L V D A W A A Y G Q L A D M L I A E E
V L G E A A T D D I I D A W A E A Y G V L A D I F I Q
V L G E A A T D E V I N A W E K A Y H A I A G V F I Q G M Y E T A
V L G E G A T P T L I E A W A V A Y Q Q L A D L M I
V L G D A V T P E V H A A W S E V Y W L F A T L L I A E Y Q E A A
V L G E A V T E E I I D A W K A A Y G Q L A D I F I N F E Q D
V L G D A A T P E I I D A W G K A Y G V I A D V F I Q T M Y D K A
V L G D A A T D D I L Q A W E E A Y G V I A D A F I A N M Y K A A
V L G D A A T P E I L D A W A A Y G Q L A E L M I R
L A P D A F T P D V E E A W G A A Y G L L A G I F I K R E D E
V L G D A A T D E I I D A W K E A Y W F L A D L L I Q A E D N
A L P D M W S P E M K N A W G E A Y D Q L V A A I K Q E M K P S A
L A P D M F T P D V E Q A W N E A Y G A L A E V F I N
A V P E M W S P E M K V A W G Q A Y D H L V A A I K A E M
V L G E A A T E D I L R A W K E A Y D V I A D V F I Q E M Y E Q A
T L G D A A T D E I I S A W A Q A Y G N L A D L M E S G L Y E Q S
V L G D A A T D D I I D A W E K A Y Q Q I A Q V F I D V E E D
V L G E D A S P E L L E A W T L A Y N Q L A A I M S Q Q L Y D A
V L G D A A T D E I I E A W E K A Y F V I A D I F I S V I K E
V L G D A L T P E I A D A W I A A Y G Q L A D V F I N R E K Q
V L G D A A T D E L V S A W A A A Y T E L A D L F I N
V L G D A A T P E I M D A W A Q A Y G A I A D V F I S V I Q E
V L G D A A T P S I V D A W T A A Y G V L A D V F I R S L Y N E A
V L G D A A T P E I I E A W A A Y G V I A D V I E A D M Y Q Q A
V L G D A V D Q D T L T A W K V A Y G Q L A D I L I G A L Y E G A
V L Q E S A T A D L L S A W T K A Y G Q L A Q L M I Q I E E E
I L K E K W T A E V E E A W K G L F H Y L T S V M K K G Y Q D E
L L P E Q F T P E V E Y A W R E A Y A L L A D V I T E E M
V L G D T A T A E V L E A W G Q A Y G V I A K I F I D V I E K D
V L G D A A S P A L V D A W T V A Y N Q L A A L M S G H E Q
A V P E M W S P E M K D A W R V A Y D Q L A A A I K K E M
M A P N E F T D E V I A E A W V E A Y G L L A K V L I G R E Q D
V A G A P D E V L N A W G E A Y G V I A D A I E A E M Y E E A
V L G D A A T P D I I M Q A W E K A Y G V I A D A I E K E M Y E Q A
A V P E M W S P E M K N A W E E A H D Q L A D A I I S E M K P S S
V M G D A A T P E I V E A V S E A Y G F L A D I F I A I Y E E Q A
Y L G D A A T P E I L D A W G A A Y G I I A D I F I Q E M Y D A
V L G D A V D E E V I D A W E L A Y G E I A D L F I S I E D E
L A P N E F T P D I E Q A W R E A Y A L L A D V E I T Q E E
V L G A A L T P E I L D A W G T A Y W Q L A D I L I K Q L Y E Q A
V L G A A A T D E I I A A W G E A Y Q A L A D L L I A A E
V L G D A V T P E V A E A W D E V Y Q L M A D V L I T A E R D
V L G D A V T P E V A A A W D A V Y W I M A D V L I Q Y E K D
I L K E R W T P E V E E A W Q S L F K Y L T A A M K R G Y Y K E
G V G P S F T S D V R D A W A V L F K V V T D P M A E
G V G P S F T S D V R D A W A V L F K V V T D P M A E
G V G P S F T S D V R D A W A V L F K V V T D P M A E
G V G P S F T S D V R D A W A V L F K V V T D P M A E
V L G D A A T P D I I G A W A E A Y G E L A E I F I A K E D
V L G E A A S L E I L E A W E I A Y N Q L A D L M
V L G D G L T S D V A E A W V A A Y A Q L A D V F V R R E R E
V L G D A V T P E V G E A W S A V Y W L M A D V L I K H E K D
V V G E A A T P E I L E A W T V A Y Y Q L A D I M I N I E K E
L L G D T F T P E I R D A W K A Y Q F L A G V F I A
V L G D A V T P E V A E A W R V Y W I M A D V L E R G L Y D S A
I L G D V V T E E V A D A W G A A Y Q Q L A S L L I Q T E E E
V L G E A A T P E I I D A W T A A Y T R L A D I L I G A E K N
V L G E A A T D E I V Q A W A V A Y Q Q L A D I M I
L I P E Q F T A D V E Y A W R E A Y G V L A D I I T E E A A
L A P E A F T E Q V E E A W T A A Y F F L A Q V F I
L V P E Q F T A D V E E A W T V A Y Q A L A A I F I A
V L G P A A N D Q V I D A W G A A Y E K L A E Y F I Q
G L D S D Y N N D V E K S W L A V L Q V I V D T M S A E L P D G S
G L D S D Y N N D V E K S W L A V L Q V I V D T M S A E L P D G S
G L D S D Y N N D V E K S W L A V L Q V I V D T M S A E L P D G S
V L G D A A T E D I I N A W A E A Y G A I A Q I E I D V I E A D
V L G D A A T P E I I D A W G K A Y W F L A D L L I G R E K Q
K L Q E N F T P E V H E A W S K T F D M I T A A M K S G M
V L G D A A T P E I I N A W G E A Y Q A I A D I E I K K M Y E E A
V L G D A A T D D I I N A W A N A Y G F L A N L L I N
V L G D K A T P D I I M Q A W E T A Y G V I A D A F I G I E K D

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UniRef90_A4G2W3		L	S	A	E	S	R	P	Y	I	D	A	S	T	V	P	V	L	R	E	S	H	G	L	A	I	T	Q	V	F	Y	K	N	L	F	E	S	H	P	Q	L		
UniRef90_UPI0004723022		L	T	E	Q	R	D	I	V	K	S	T	V	P	V	L	L	R	E	S	G	G	E	T	I	L	A	R	H	F	Y	Q	I	M	L	F	S	D	H	P	E	L	
UniRef90_K4Z6M5		L	Q	A	A	S	R	P	Y	I	D	A	S	T	V	P	V	L	R	E	S	H	G	L	A	I	T	A	R	H	F	Y	Q	I	M	L	F	S	D	H	P	E	L
UniRef90_V5PPD6		L	S	A	A	S	R	P	Y	I	D	A	S	T	V	P	V	L	R	E	S	H	G	L	A	I	T	A	R	H	F	Y	Q	I	M	L	F	S	D	H	P	E	L
UniRef90_G1Y347	P	L	S	P	E	T	I	T	L	V	K	A	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	K	A	M	Y	R	R	L	F	Q	D	D	H	I	L		
UniRef90_Q54D73		L	S	P	E	T	I	T	L	V	K	A	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	T	S	V	F	Y	K	N	M	F	E	A	H	Q	P	E	F
UniRef90_S6E1S1		L	S	P	E	T	R	S	I	K	A	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	T	S	V	F	Y	K	N	M	L	N	E	H	A	Q	P	E	L
UniRef90_UPI00047CF7FA			Q	Q	H	K	D	L	V	K	A	T	I	P	A	V	Q	A	H	G	E	A	I	V	T	R	A	F	Y	E	T	L	F	E	E	H	H	P	E	A	L		
UniRef90_UPI000370B682		L	S	D	Q	S	A	A	V	T	A	T	L	P	A	V	Q	A	H	G	E	A	I	T	T	S	R	F	Y	Q	R	M	F	E	A	H	H	P	E	L			
UniRef90_V9HH89		L	S	D	Q	K	T	I	D	I	K	S	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	T	T	T	F	Y	K	N	M	F	E	K	N	P	E	L	
UniRef90_UPI0003798E7B		L	D	S	R	T	I	A	I	K	S	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	T	R	T	F	Y	Q	T	M	F	R	N	H	P	E	L		
UniRef90_W9QKN7		G	F	G	E	K	E	S	L	V	K	E	S	W	E	A	M	K	P	N	V	A	D	L	S	V	C	F	F	T	N	I	L	D	I	A	P	A	V	L			
UniRef90_S6AMN0		M	T	P	E	K	I	A	L	V	R	S	S	W	Q	V	V	P	I	Q	D	T	A	A	G	L	F	F	Y	N	R	L	F	E	L	D	P	E	L				
UniRef90_R7YY07	S	L	T	P	S	Q	A	A	T	I	K	A	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	T	K	V	F	Y	K	N	M	L	T	A	H	P	E	L	
UniRef90_UPI0003B5A03D																																											
UniRef90_UPI00040A6106																																											
UniRef90_F4QUX0	A	L	T	E	S	Q	R	A	I	V	K	A	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	T	K	V	F	Y	K	N	M	L	T	A	H	P	E	L	
UniRef90_B6H973	A	S	L	T	Q	G	Q	I	E	I	K	A	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	T	K	V	F	Y	Q	R	M	F	Q	H	N	P	E	L	
UniRef90_D5D9L5		M	K	Q	T	T	I	S	I	V	K	S	T	V	P	V	L	L	R	E	S	H	G	L	A	I	T	T	T	R	F	Y	K	N	M	F	E	A	H	P	E	L	
UniRef90_G3JHV7	A	L	T	P	S	Q	I	D	I	V	K	S	T	A	V	V	L	K	D	H	G	E	T	I	T	R	I	F	Y	A	N	M	L	J	A	E	H	P	E	L			
UniRef90_F8E207	A	L	S	D	E	T	A	E	I	R	Q	T	L	P	V	V	L	G	G	N	I	N	K	I	T	T	P	V	F	Y	R	T	M	F	A	N	H	P	E	L			
UniRef90_A0A031MJ73		L	S	Q	S	K	D	I	A	V	A	A	T	L	P	V	V	R	E	H	A	A	T	I	T	A	V	F	Y	P	N	M	F	A	A	H	P	E	L				
UniRef90_C7NIJ4		L	S	P	Q	S	A	E	I	V	A	A	T	A	G	V	V	A	E	H	A	V	Q	I	T	T	S	E	F	Y	P	N	M	F	A	A	H	P	E	L			
UniRef90_UPI000478B2A8		L	S	P	R	S	T	E	V	V	R	A	T	L	P	V	L	G	G	A	I	N	D	I	T	A	V	F	Y	P	N	M	F	A	A	H	P	E	L				
UniRef90_K9XUE4			S	Q	K	T	I	D	I	V	K	S	T	A	P	L	L	K	Q	H	G	E	K	I	T	T	K	K	M	Y	E	I	M	F	R	A	N	H	P	E	L		
UniRef90_Q93Y92	G	F	T	E	K	Q	E	G	L	V	K	E	S	W	E	V	L	K	Q	D	I	P	H	S	S	L	R	F	F	S	L	I	L	E	I	A	P	G	A				
UniRef90_F4NCQ6		L	S	V	K	T	K	N	I	V	K	A	T	V	P	A	L	L	Q	N	G	V	T	I	T	K	T	F	Y	K	N	M	L	G	E	H	H	P	E	L			
UniRef90_C5QR69		L	T	E	K	E	K	S	L	V	K	E	T	V	P	V	L	L	Q	D	K	G	V	E	I	T	T	S	H	F	Y	K	R	M	F	Q	H	H	P	E	L		
UniRef90_H2MRF9			N	E	E	Q	I	Q	M	I	K	D	S	W	K	V	I	R	D	D	I	A	K	V	G	I	I	M	F	V	R	L	F	E	T	H	P	E	L				
UniRef90_I3SX86	A	T	F	S	E	E	Q	E	A	L	V	N	S	W	E	A	F	S	Q	N	I	P	Q	L	S	I	L	I	F	Y	T	S	I	L	L	E	K	A	P	E	A		
UniRef90_K1K1W9		L	D	Q	A	T	I	A	V	I	K	S	T	I	P	L	L	S	A	G	P	A	L	T	T	Q	H	F	Y	Q	R	M	F	S	H	N	P	E	L				
UniRef90_B5H323		L	S	E	K	S	A	G	T	I	R	A	T	L	P	A	V	G	A	A	G	T	I	T	T	N	F	Y	D	R	L	F	T	A	H	P	E	L					
UniRef90_G8BNV9		L	S	E	E	T	R	T	I	V	K	A	T	L	P	V	L	E	A	Q	G	A	V	I	T	T	K	H	F	Y	A	K	M	L	G	S	N	E	E	L			
UniRef90_G9EGH1		L	T	H	E	Q	E	K	L	I	N	A	T	A	P	V	V	A	E	H	L	N	A	I	T	T	Q	R	F	Y	P	L	M	F	A	R	Y	P	E	L			
UniRef90_G0SCY1	A	L	T	Y	Q	Q	S	K	L	V	K	D	T	I	P	A	L	R	E	H	G	E	Q	I	T	T	I	F	Y	K	T	M	L	R	D	H	P	E	L				
UniRef90_M2QSV2		L	S	P	A	S	A	A	V	V	R	A	T	L	P	V	V	R	A	H	A	V	E	I	T	T	G	E	F	Y	S	S	M	F	T	A	H	P	E	L			
UniRef90_C5C8V0		L	S	E	K	S	R	P	V	I	E	A	T	A	A	V	V	A	E	H	M	P	E	I	T	T	P	K	F	Y	A	H	M	F	E	A	H	P	E	L			
UniRef90_UPI000372B9EC	A	A	L	S	A	D	T	I	A	R	V	K	A	T	V	P	A	L	A	E	H	G	E	K	I	T	T	L	A	M	A	R	L	F	Q	D	A	H	I				
UniRef90_N6V4P8		L	S	A	A	T	K	A	I	V	R	A	T	V	P	A	L	A	E	H	G	T	E	I	T	T	A	A	M	L	L	L	F	K	D	E	E	V					
UniRef90_UPI000463C9E2		L	T	P	A	D	Q	R	D	I	V	K	A	T	V	P	A	L	L	E	T	G	G	E	T	L	T	T	R	H	F	Y	E	M	L	L	R	E	H	P	E	L	
UniRef90_X0MWP3		L	S	E	Q	S	T	P	V	V	R	A	T	L	P	A	V	G	A	A	D	E	I	A	T	T	V	F	Y	R	K	L	F	A	A	H	P	D	L				
UniRef90_S6ATA0		L	S	Q	V	T	R	A	I	V	K	S	T	V	P	A	L	L	E	T	G	G	E	A	L	T	T	T	H	F	Y	K	M	M	L	S	E	Y	P	E	V		
UniRef90_D4W4H1		L	D	Q	Q	T	I	E	I	V	K	S	T	V	P	A	L	L	K	S	H	G	L	Q	L	T	T	T	T	F	Y	K	N	M	F	E	Q	N	P	E	V		
UniRef90_UPI000289948C	A	G	L	T	E	R	K	K	R	L	V	Q	S	S	F	T	K	V	A	P	I	A	D	K	A	A	E	I	F	Y	A	E	L	F	E	M	D	P	S	L			
UniRef90_Q488B8		L	T	D	K	H	I	D	I	V	K	S	T	I	P	L	L	E	N	A	G	P	A	L	T	T	G	H	F	Y	Q	R	M	F	S	H	A	N	P	E	L		
UniRef90_UPI00047AC008		L	S	D	K	S	L	P	V	I	Q	A	T	L	P	V	V	G	E	H	I	E	I	A	T	T	A	K	R	F	Y	K	H	M	F	E	A	Q	N	P	D	L	
UniRef90_A0A023VWP80		L	C	A	E	Q	T	A	L	I	K	A	T	V	P	L	L	E	S	G	G	E	A	L	T	T	T	H	F	Y	R	L	L	L	T	E	H	P	E	L			
UniRef90_C5AB71		L	T	A	E	Q	M	D	R	V	K	A	S	A	P	M	L	A	A	E	G	P	K	I	A	R	H	F	Y	Q	R	M	F	R	R	H	P	E	L				
UniRef90_Q9M3U9	S	F	S	E	E	Q	E	A	L	V	K	E	A	W	E	I	M	K	E	D	I	P	A	L	S	L	Y	F	T	Q	V	L	E	I	A	P	A	A					
UniRef90_R1FSQ6			P	D	T	I	P	E	L	R	S	S	W	S	A																												
UniRef90_Q07WT8		L	D	T	A	T	V	Q	I	I	K	A	T	V	P	A	L	L	Y	A	N	D	I	T	T	S	H	F	Y	P	L	L	F	A	Q	H	P	E	V				
UniRef90_K1RJ02	S	L	S	E	D	V	L	E	L	L	K	E	S	W	N	S	A	K	V	N	I	A	N	I	G	V	V	A	I	G	V	V	A	M	N	L	F	Q	T	H	P	E	V
UniRef90_K6XNN0		L	D	S	A	T	I	E	I	V	K	A	T	V	P	A	L	L	K	I	H	A	E	I	T	T	K	Q	F	Y	P	L	L	F	S	L	H	P	E	V			
UniRef90_B2AES1	A	I	T	P	E	Q	I	A	I	V	K	A	T	A	P	V	L	L	K	E	S	H	G	V	T	I	T	T	T	F	Y	N	N	L	I	G	D	V	P	A	L		
UniRef90_Q6BGQ1		L	T	P	R	E	K	E	L	I	K	A	S	A	P	V	L	L	K	E	S	G	D	V	L	T	T	S	K	F	Y	N	H	M	L	T	D	F	P	E	V		
UniRef90_A7SFV0	P	L	S	E	A	Q	K	Y	L	V	R	E	T	W	E	T	I																										

		50	60	70	80																																				
UniRef90_A4G2W3	H	H	I	F	N	A	G	N	Q	A	N	G	S	Q	Q	Q	S	L	A	S	A	V	F	A	Y	A	A	N	I	D	N										
UniRef90_UPI0004723022	R	P	L	F	N	Q	T	N	Q	A	T	G	R	Q	P	R			A	L	A	N	S	V	L	Q	Y	A	K	N	I	D	H								
UniRef90_K4Z6M5	L	N	V	F	N	H	A	N	Q	R	S	G	G	K	Q			S	M	A	L	A	N	A	V	Y	A	A	A	N	I										
UniRef90_V5PPD6	R	N	L	F	N	M	G	N	Q	A	S	G	A	Q	Q	S			L	A	S	A	V	F	A	Y	A	A	N	I	D	N									
UniRef90_G1Y347	R	A	L	F	N	H	A	N	Q	G	E	D							G	A	Q	V	H	A	L	A	G	A	I	L	A	Y	A	R	N	I	E	N			
UniRef90_Q54D73	L	N	I	F	N	H	S	N	Q	R	N	Q	K	Q	P				V	A	L	A	N	T	I	L	Q	S	A	I	H	I	E	K							
UniRef90_S6E1S1	R	N	V	F	N	R	I	N	Q	V	I	Q	G	A	Q	P			A	A	L	A	T	T	V	L	A	A													
UniRef90_UPI00047CF7FA	L	N	I	F	N	P	A	N	Q	R	S	G	G	Q	A	R	S			L	A	A	S	I	L	A	Y	A	A	K	H	I	D								
UniRef90_UPI000370B682	L	N	I	F	N	K	G	N	Q	A	T	G	E	Q	P				A	A	L	A	A	S	V	V	Y	A	E	H	L	V	D								
UniRef90_V9HH89	K	P	L	F	N	M	D	R	Q	A	S	G	E	Q	P	K			A	L	A	M	A	I	L	S	S	A	Q	N	I	D	N								
UniRef90_UPI0003798E7B	L	N	I	F	N	H	A	N	Q	R	Q	G	K	Q	P	T	A		L	A	N	A	V	Y	A	A	A														
UniRef90_W9QKN7	K	D	M	F	S	F	L	R	D	S	D	E	V	P	Q	N	N	A	K	L	K	A	H	A	I	K	V	F	K	M	T	C	E	S	A	I	Q	L	E	K	
UniRef90_S6AMN0	R	N	L	F	N														G	D	M	V	E	Q	G	R	K	L	M	I	M	I	N	M	V	N	S	L	D		
UniRef90_R7YY07	N	D	I	F	N	T	A	N	Q	I	N	G	H	Q	P	R																									
UniRef90_UPI0003B5A03D	L	Q	I	F	N	R	S	H	N	A	T	G	K	Q	P																										
UniRef90_UPI00040A6106	R	P	L	F	N	Q	A	H	Q	A	S	G	A	Q	P	R																									
UniRef90_F4QUX0	R	D	L	F	N	Q	A	H	Q	G	D																														
UniRef90_B6H973	N	E	V	F	N	T	A	N	Q	A	S	G	H	Q																											
UniRef90_D5D9L5	K	N	V	F	N	Q	T	N	Q	K	T	G	R	Q	Q																										
UniRef90_G3JHV7	K	N	L	F	S	L	R	N	Q	A	T	G	A	Q	Q																										
UniRef90_F8E207	A	D	T	F	N	R	G	A	N	Q	R	S	G	E	Q	K																									
UniRef90_A0A031MJ73	K	G	F	F	N	E	A	H	Q	G	Q	G	T	Q	P	Q	A	L	A	N	A	V	V	A	Y	A															
UniRef90_C7NIJ4	M	R	V	F	N	K	A	N	Q	A	V	G	E	Q	P																										
UniRef90_UPI000478B2A8	R	D	L	F	N	R	G	A	N	Q	A	A	G	T	Q	K	Q																								
UniRef90_K9XUE4	K	E	Q	F	D	M	S	A	Q	A	N	G	S	Q	P																										
UniRef90_Q93Y92	K	N	M	F	S	F	L	R	E	S	E	E	I	P	Q	N	N	P	K	L	K	A	H	A	V	K	V	F	K	M	T	C	E	S	A	I	Q	L	R	E	
UniRef90_F4NCQ6	L	N	T	F	N	K	V	N	Q	K	G	K	Q	P	T																										
UniRef90_C5QR69	K	N	M	F	N	Q	T	N	Q	K	G	L	Q																												
UniRef90_H2MRF9	K	D	V	F	F	L	F	R	D	V	E	D	L	L	R	T	N	R	E	L	R	A	H	G	L	R	V	M	S	F	I	E	K	S	V	A	R	L	D	Q	
UniRef90_I3SX86	K	A	M	F	S	F	L	K	D	S	D	G	V	P	K	D	N	L	D	L	E	A	H	C	E	K	V	F	E	L	T	R	N	S	A	I	Q	L	R	K	
UniRef90_K1K1W9	K	D	I	F	N	L	A	H	Q	R	S	G	G	Q	P																										
UniRef90_B5H323	R	D	L	F	N	R	G	N	Q	A	T	G	E	Q	Q	R																									
UniRef90_G8BNV9	L	N	I	F	N	M	V	N	Q	K	K	G	A	Q	P	T	A	L	A	T	T	I	L	A	A																
UniRef90_G9EGH1	K	P	L	F	N	E	V	H	Q	A	S	G	G	Q	P																										
UniRef90_G0SCY1	H	N	M	F	N	S	V	N	Q	K	N	G	R	Q	P	R																									
UniRef90_M2QSV2	L	D	L	F	N	Q	G	N	Q	A	D	G	R	Q	K																										
UniRef90_C5C8V0	L	D	G	F	S	R	A	N	Q	R	N	E	Q																												
UniRef90_UPI000372B9EC	K	A	L	F	N	H	A	N	Q	S	T	G	A	Q	P	K																									
UniRef90_N6V4P8	R	N	L	F	N	Q	S	H	Q	G	E	G																													
UniRef90_UPI000463C9E2	R	P	F	F	N	Q	A	N	Q	V	D	G	A	Q	R																										
UniRef90_X0MWP3	R	D	L	F	N	R	G	N	Q	A	N	G	Q	Q	R	Q																									
UniRef90_S6ATA0	R	P	L	F	N	Q	A	H	Q	A	S	G	D	Q																											
UniRef90_D4W4H1	A	P	L	F	N	M	E	R	Q	K	S	G	E	Q	P	K	A	L	A	L	T	V	L	A	A																
UniRef90_UPI000289948C	K	P	L	F	K																																				
UniRef90_Q488B8	Q	D	I	F	N	M	A	N	Q	H	S	G	R	Q	Q																										
UniRef90_UPI00047AC008	L	D	L	F	N	R	G	N	Q	A	D	G	R	Q	Q																										
UniRef90_A0A023VWP80	Q	D	L	F	N	Q	A	H	Q	A	S	G	E	Q	P	R																									
UniRef90_C5AB71	R	N	L	F	N	Q	S	H	Q	K	A	G																													
UniRef90_Q9M3U9	K	G	L	F	S	F	L	K	D	A	E	E	I	P	Q	D	N	P	K	L	K	S	H	A	V	K	V	F	K	M	T	C	E	S	A	I	Q	L	R	E	K
UniRef90_R1FSQ6	L	E	L	F	S	F	R	D	V	P	A	P	E	L	Y	E	S	A	K	L	K	S	H	A	L	K	V	M	N	T	V	G	V	A	V	S	M	L	D	D	
UniRef90_Q07WT8	L	P	Y	F	N	Q	T	N	Q	K	G	T	Q																												
UniRef90_K1RJ02	K	D	A	F	P	F	Q	Q	L	A	E	D	D	M	E	H	S	A	I	L	R	S	H	A	L	R	V	M	G	T	V	D	K	C	L	T	R	I	R	T	
UniRef90_K6XNN0	I	P	Y	F	N	Q	T	N	Q	K	G	T	Q	P	K																										
UniRef90_B2AES1	H	N	F	F	S	T	S	Q	T	T	G	R	Q	P	R																										
UniRef90_Q6BGQ1	K	P	F	F	N	E	S	N	Q	K	T	M	K	Q	P	K																									
UniRef90_A7SFV0	Q	N	L	F	P	E	F	K	S	L	S	E	E	L	Q	K	A	N	A	L	H	G	H	A	K	R	V	M	K	A	V	E	N	A	V	M	S	I	D	D	
UniRef90_H0JB43	R	P	L	F	N	G	A	H	Q	A	S																														
UniRef90_I4EVV1	L	D	G	F	N	R	G	N	Q	A	E	G	T	Q	Q																										
UniRef90_D7I3E2	R	P	L	F	N	Q	A	N	Q	A	N	G	S	Q	P	R																									
UniRef90_UPI0002E1B4A9	M	N	I	F	N	M	S	N	Q	F	T	G	A	Q	R	E																									
UniRef90_V9XKM6	R	D	L	F	N	R	G	N	Q	K	G	E	Q	K																											
UniRef90_UPI000344B12C	K	P	L	F	E	H	T	D	M	A	S	Q	K	K																											
UniRef90_K9WVS1	R	P	L	F	K																																				
UniRef90_A5IPA8	L	N	M	F	N	Q	T	N	Q	K	R	G	M	Q	S	S	A	L	G	A	Q	V	M	A	A	V															

	90	100	110	120
UniRef90_A4G2W3	Q A A L L A P	V I V S R I I V H K H V S L G I V T A A H Y P I	V I G E H L L L G A I I K Q	
UniRef90_UPI0004723022	L D Q L L D A H	V L V G T Q I V A Q K H R A L Q N V L K P E H Y P I	V I G T C H L L Q A I I R D	
UniRef90_K4Z6M5	D Q L E T I L P	V L V Q Q I I A H K H V S V G I T P S H Y P I	V I G R H L L L G A I I K D	
UniRef90_V5PPD6	A A A L L G P	V L V E R I V A H K H V S V G I T P S H Y P I	V I G R H L L L G A I I K D	
UniRef90_G1Y347	L G A L T P P	V L V E R I V A H K H V S V G I T P S H Y P I	V I G R H L L L G A I I K D	
UniRef90_Q54D73	L N E I L N L M P	V L V E R I V A H K H V S V G I T P S H Y P I	V I G R H L L L G A I I K D	
UniRef90_S6E1S1	L S V L A P	V L V E R I V A H K H V S V G I T P S H Y P I	V I G R H L L L G A I I K D	
UniRef90_UPI00047CF7FA	H L D Q L G G M V	N R I A H K H A S L G V I T A T H Y P I	V I G D H L L L R A I I R S	
UniRef90_UPI000370B682	G D E K S W E	N R I A H K H A S L G V I T A T H Y P I	V I G D H L L L R A I I R S	
UniRef90_V9HH89	L P A I M P	V L V N R I A E H C H A G V I T A T H Y P I	V I G S N L L F A I I K Q	
UniRef90_UPI0003798E7B	L G Q I L P	V L V N R I A E H C H A G V I T A T H Y P I	V I G S N L L F A I I K Q	
UniRef90_W9QKN7	G E V V V P D S	S L K H L G S V H L K N R V L S V H F E D V	V I G E A L L R T I I K E	
UniRef90_S6AMN0	R L E S I I G M V	K E S G R R H V G Y G V K A E H F K D T V	V I G T Y L L W T I G Q	
UniRef90_R7Y07	L G K L S P	A V E L I C N K H A S L G V I T A T H Y P I	V I G T Y L L W T I G Q	
UniRef90_UPI0003B5A03D	P S V L A P V V N L	A H K H A S L G V I T A T H Y P I	V I G T H L L A S I R E	
UniRef90_UPI000040A6106	R L E A L G D L	A V E L I C N K H A S L G V I T A T H Y P I	V I G T H L L A S I R E	
UniRef90_F4QUX0	L S A L A A	P A Q I I N K H V A L Q V I Q P E H Y P I	V I G T H L L A S I R E	
UniRef90_B6H973	L A A L G P	A V E L I C N K H A S L G V I T A T H Y P I	V I G T H L L A S I R E	
UniRef90_D5D9L5	R L E T L L P	V L V K Q I A H K H R S L G V I T A T H Y P I	V I G E F L L K A I K D	
UniRef90_G3JHV7	L L R L T H	V L V E R I A H K H A S L F V R K A E Q Y A I	V I G E H L L G A F A Q	
UniRef90_F8E207	E K A S D P V E M L	S R I G H K H V S L G I T A D Q Y Q I	V I H D N L L F A I I R E	
UniRef90_A0A031MJ73	D R L E V L G D A V	S L I V Q K H V S L N I Q Q A T H Y P I	V I G E C H L L A A I R E	
UniRef90_C2NIJ4	P E A P D F S P V M E R I	A H K H V S L G I Q Q T D Y I T V	V I G H Y L L E A V I G T	
UniRef90_UPI000478B2A8	H P D V R P D A M L	G R I A H K H A S L G V I T A T H Y P I	V I H E H L L F A A I R E	
UniRef90_K9XUE4	L S A L Q S M V E K I	A H R H V A T Y V V Q D P E Q Y A I	V I G E S L L Q A I I K D	
UniRef90_Q93Y92	K E V V V A D T T L	K Y I G T V H V K S G V V K D P H F E V V	V I K E A L L R T I E E	
UniRef90_F4NCQ6	L S V L M P	A V N Q I G H K H R A L Q V V Q P A Q Y D I	V I G K Y L L L A I I K E	
UniRef90_C5QR69	H L E N I M P	V V K E V A Y K H C H A L Q V P P A G Y D I	V I G E N L L A A I K E	
UniRef90_H2MRF9	P E R L E A L A V	E L G Y K S H Y H Y N A P P K Y N Y V	V I G A E F I C A V K P	
UniRef90_I3SX86	G K V E V E R I A L	K F L G Y V H A Q R R V L D P H F L V L	V I K E A L L K T L K E	
UniRef90_K1K1W9	L G A L A G	A V E R I A H K H T G F L I Q P E Q Y H I	V I G S H L L A T I K E	
UniRef90_B5H323	H P G T R P D T L	L S R I A H K H A S L G V I T A T H Y P I	V I H T H L L F A A I A D	
UniRef90_G8BNV9	L S P L I G H	V L K Q I G H K H R A L Q I M P E H Y P I	V I G K N L L L A I I K D	
UniRef90_G9EGH1	S E P A Q A R A T	L D I V S K H C H A S L G I P E Q Y P I	V I G E C H L L A A I R E	
UniRef90_G0SCY1	I S E L I P K F	E R M C N K H V S L G V Q P E H Y E I	V I G K Y L L R A F S E	
UniRef90_M2QSV2	G E A V R F E Q V A	E R I A H K H V S L G I R A D Q Y P I	V I G H H L L A A V I G T	
UniRef90_C5C8V0	N P G T L P E A V	L A R I A H K H T A L G I T E D Q Y Q I	V I Y E N L L F W A I A D	
UniRef90_UPI000372B9EC	L G A V L P	V L V E R I A Q K H V G Y H I L A E H F V	V I A E A L L G A I K D	
UniRef90_N6V4P8	L A V L G P	A V E R I A Q K H V G L Q I Q E H H Y P I	V I A N A L L G A I K Q	
UniRef90_UPI000463C9E2	L E A L G P	L M S Q V I N K H V S L Q I L P A H Y P I	V I G A C H L L R A I R E	
UniRef90_X0MWP3	H P D T R P D A M L	A R I A H K H A S L G I T A D Q Y K I	V I N E H L L A A I S D	
UniRef90_S6ATA0	Q L E V L G P	V L V N R I A V A K H V A L Q I L P E H Y P I	V I G T C H L L R A I R E	
UniRef90_D4W4H1	D N L G A I M P	V L V N K I A V K H C D C G G V L E E H Y P I	V I G A H L L G A I K E	
UniRef90_UPI000289948C	L E A I V P	A V N K I G K G H A K Y G V K D S H Y D T V	V I G G A L L Y T L E T	
UniRef90_Q488B8	L A A L T T A V E R I	A Q K H T S F N I K A D H Y A I	V I G H H L L I E T L R E	
UniRef90_UPI00047AC008	K P D Q V P D H L L	S R V A H K H V S L G L S P D D Q Y Q I	V I H D H L L M W A I V D	
UniRef90_A0A023WP80	R L E A L G P L V A	Q I N K H V A L Q V L P E H Y P I	V I G S C H L L R A I R E	
UniRef90_C5AB71	L G A L G G A V S R I	A H K H V S L S V R P E H Y P I	V I G D N L L R A I V E	
UniRef90_Q9M3U9	G E V V V S T L K Y L	G S V H L Q K G V I D A H F A V V	V I K E G V L R T V E K	
UniRef90_R1FSQ6	V I P A L L P	V L E G L G K K H V D Y G V V P A H F A V V	V I G Q A L L D T L A L	
UniRef90_Q07WT8	A V S K I V Q K H V A L	G I L P E Q Y D A V	V I G S C L I Q A I K A	
UniRef90_K1RJ02	P E K L Q S L M H E L	G E R		

	130	140	150
UniRef90_A4G2W3	V L G D A A T P A L I E A A W A E A Y G L L A Q A L I D E L Y Q A A		
UniRef90_UPI0004723022	V L G E E A T D D E V I I E A W K A A Y G Q V I A D I L L I Q V M Y K E A		
UniRef90_K4Z6M5	V L G D A A T D D E I I Q A W A E A Y G Q V I A D I V F I Q V M Y K E A		
UniRef90_V5PPD6	V L G E A A T P E L I A A W D E A Y W L L A G E L L I A A E		
UniRef90_G1Y347	V L G D A A S D A V L N A W G E A Y W F L A E V L L K A		
UniRef90_Q54D73	V M Q D E A T P E I L M A A W T E A Y R A V A Q A F M D A E E D		
UniRef90_S6E1S1	V L G D A A K P E I L E A W R Q A Y G E I A D V F I N V Y K E A S		
UniRef90_UPI00047CF7FA	V L G E A A T P E I L E A W G A A Y Q Q L A T I M		
UniRef90_UPI000370B682	V L G A A V T D E V A A W D E V Y W L L A E L I A R E A R		
UniRef90_V9HH89	V L G D A A T D E I L M D A W S K T Y G V L A G F I S D V E A K		
UniRef90_UPI0003798E7B	V L G E A A T D D I L E A W S R A Y G V I A D A F I S V E A D		
UniRef90_W9QKN7	A V G E K W S D D M A S A W G Q A Y D E L A A A I K N E M N Q		
UniRef90_S6AMN0	G L G A G F T P E V K E G W V E A Y G V L A S T M K Q A A Y G S A		
UniRef90_R7Y07	V L G S A H T S E I H D A W A A Y W Q L A N I M T Q R E E Q		
UniRef90_UPI0003B5A03D	V L G D A A S P E I L E A W G I A Y Q K L A D I F I Q A Y Y D A		
UniRef90_UPI00040A6106	V L G A E A T D E V I A A W G A A Y W Q L A D L L I A A E G E A		
UniRef90_F4QUX0	V L G S A A T E E I M T A W G E A Y W F L A D I L I T R E A A		
UniRef90_B6H973	V L G S A F T K D I H D A W E T A Y G A L A N V L I S R E A A		
UniRef90_D5D9L5	V L K E A A T D E I M E A W K E A Y G A I A D V F I S A		
UniRef90_G3JHV7	V L G D A L T P D V A A W K A A Y A Q L A A V F I A		
UniRef90_F8E207	V L G D A I T P E I A A A W D E V Y W L M A E V L I N		
UniRef90_A0A031MJ73	V L G E A A S D A V L G A W G E A Y G Q L A D I L I G A E E Q		
UniRef90_C7NIJ4	V L G D A V T P E V A S A W D E V Y W L F A T Q L I A E E		
UniRef90_UPI000478B2A8	V L G D A V T E E V A A A W D E V Y W L M A N A L I E		
UniRef90_K9XUE4	V L G D A A T K E V M T A W T E A Y Q V L A E V F I N R E Q Q		
UniRef90_Q93Y92	A I G E E W N E E M K N A W G E A Y D Q L A E A I K A E M K N		
UniRef90_F4NCQ6	V L G N A A T P D I I M T A W A E A Y K A I A D I F I S V E K Q		
UniRef90_C5QR69	V V G L D D S H I I K T W K K A Y Q E I A D V F I S V E K D		
UniRef90_H2MRF9	I L K E Q W T T E L E K A W Q T L F Q E V T A L M K Q G Y Q E E S		
UniRef90_I3SX86	A M G D K W S E E V S N A W G I A Y D E L A G V I K K G M		
UniRef90_K1K1W9	L L G S A V T D E M L D A W G K A Y G V L A S I F I		
UniRef90_B5H323	V L G E A V T E E V A A A W D E V Y W L M A N A L I A		
UniRef90_G8BNV9	V L G D A A T P E I I S A W G E A Y E E I A N V F I T V Y K E A A		
UniRef90_G9EGH1	V L G D A V T P E I L A D A W G A L Y N E L A L L I D L E D Q		
UniRef90_G0SCY1	V L G P A M T P Q T F A A W E K A Y W L L A K M L I G R E Q Q		
UniRef90_M2QSV2	V L G S A V T P D V F A A W H E V Y W L L A C R L I A A E		
UniRef90_C5C8V0	V L G D A V T P E V A E A W T E V Y W L M A D A L I K		
UniRef90_UPI000372B9EC	V L G E A A T D E I L A A W G E A Y W F L A D I L I		
UniRef90_N6V4P8	V L G D A A T D E V L A A W G E A Y W F L A D I L I G R E K Q		
UniRef90_UPI000463C9E2	V L G A E A T D A V L D A W R V A Y G Q L A D V L I Q A E E		
UniRef90_X0MWP3	V L G E A V T P Q V A A W D E V Y W L M A N A L I A		
UniRef90_S6ATA0	V L G E E A T D E V I N A W G E A Y N L L A G L L M G A E E E		
UniRef90_D4W4H1	V L G E A A T D E I E A W A K T Y D V I A T V F I N V E K E		
UniRef90_UPI000289948C	G L G A D F T P D V K D A W T E V Y T V L A T T M K D A A N E		
UniRef90_Q488B8	L A S D V F T A D V E E A W T V A Y Q F L A Q I F I N R E A E		
UniRef90_UPI00047AC008	V L G D A V T P E V A A A W D E V Y W L M A N L I R G L Y N A		
UniRef90_A0A023WBP0	V L G E E A T D A V I D A W G A A Y Q Q L A D I L I Q E E Q		
UniRef90_C5AB71	V L G E A V D A P T L D A W R A A Y A Q L A Q L L		
UniRef90_Q9M3U9	G V G E K W S E E M K G A W S E A Y D Q L A A A I I T E M K K E A		
UniRef90_R1FSQ6	G L G D A F T P E L K A A W A E I Y G V L S S T M I K G A		
UniRef90_Q07WT8	V L G D A A T D E V I D A W T K A Y G Q L A N L I A A E E		
UniRef90_K1RJ02	H L Q D S W S E E L G E A W V Q L F R V L C Y Y M K K G M R D		
UniRef90_K6XNN0	V L K D A A S D E V L N A W G K A Y G Q L A E I L I N A E E Q		
UniRef90_B2AES1	V L G D A A T A D I V D A W I A A Y G V L A Q V F I L I N A E A E		
UniRef90_Q6BQG1	L L G P E A T E E F L T A W A T A Y G N L A Q I L I N A E A E		
UniRef90_A7SFV0	L L Q S Q W T E E T A A W N K L F S G F I S T T M V R G L Q		
UniRef90_H0JB43	V L G A E A T D A V I D A W A A A Y G Q L A N L I G A E E Q		
UniRef90_I4EVV1	V L G D A V T P A V A A W D E V Y W L M A Y A L I N		
UniRef90_D713E2	V L G A E A T D E V I A A W A A A Y Q Q L A D I L I A G E R S A		
UniRef90_UPI0002E1B4A9	M F N P G K E V I D A W A E A Y G L L A D V F I T R E E E		
UniRef90_V9XKM6	I L G E A V T P E V A K A W D E L Y W L M A N T M E A D L Y R A A		
UniRef90_UPI000344B12C	Y L G E K W T P E V K Q A W T D A Y G A I S E I M D G A D		
UniRef90_K9WVS1	G L G E D F T P V V R K A W E A Y T F L S E I M K E A A A E		
UniRef90_A5IPA8	V T G L E E H D V I Q A W A K A Y G V I A D V F I Q I E K E		
UniRef90_V3Z7S3	V		

[illegible]

		50	60	70	80																														
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UniRef90_Q3SGG8	Q	H	I	F	N	M	A	N	Q	A	Q	G	E	Q	Q	R	S	R	S	A	L	A	E	S	V	F	M	Y	A	T	H	L	D	A	
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UniRef90_UPI0004663FAC	K	E	V	F	N	M	G	H	Q	R	S																								
UniRef90_Q6WZ20	L	P	L	F	Q	Y	N	C	H	Q	R	S	P	E	D	C	L	S	S	P	E	F	L	D	H	I	R	K							
UniRef90_UPI0004654DE8	K	N	I	F	N	M	A	N	Q	A	Q	G	E	Q																					
UniRef90_UPI000474CFBA	R	D	L	F	N	Q	S	H																											
UniRef90_S9RC72	R	P	Y	F	N	K	A	H	Q	T	S	L	S	Q	P	R																			
UniRef90_I4BF95	R	N	L	F	N	R	G	N	Q	A	Q	G	A	Q	Q	R																			
UniRef90_UPI000382B6E6	R	D	L	F	P	V	A																												
UniRef90_K6VMS7	R	D	L	F	N	R	T	H	Q	K	T	G	E	Q	P	Q																			
UniRef90_J9ZAU4	R	P	M	F	P																														
UniRef90_Q1R0E4	K	T	L	F	N	A	T	H	Q	H	T	G	G	Q	P	P																			
UniRef90_W3WSE3	N	N	Y	F	N	A	V	N	M	K	N	G	S	Q	P	R																			
UniRef90_UPI00047C30DC	Q	R	L	F																															
UniRef90_A5EFK6	R	A	M	F	P																														
UniRef90_M4AD09	K	L	Y	F	S	Q	F	K	H	D	T	E	E	L	E	H	S	P	Q	L	R	K	H	A	Q	R	V	M	N	A	L	N	T	L	
UniRef90_W5MYS7	L	G	L	F	H	Y	N	T	P	Y	S	S	P	Q	E	S	S	P	E	F	V	D	H	I	N	K	V	M	L	V	D	A	V	T	
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UniRef90_K5W0S2	R	N	N	F	N	H	S	K	Q	Q	R	G	D	Q	A	E	A	L	A	R	A	V	Y	A	Y	A									
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UniRef90_N2IVi4	K	A	L	F	D	E	A	A	F	K	S	G	E	Q	P	K																			
UniRef90_UPI00037D2DC1	R	P	L	F	K																														
UniRef90_B6EMQ0	K	D	I	F	N	M	S	N	Q	R	N	G	D	Q	R	E																			
UniRef90_F2P5D9	K	D	V	F	N	M	S	N	Q	H	A	S																							
UniRef90_R7URJ5	K	E	S	F	P	L	S	M	V	P	E	D	H	R	Y	R	K	E	I	S	E	H	G	V	R	V	L	N	T	V	D	T	L	R	
UniRef90_F7VG60	S	A	L	F	N	R	S	H	Q	K	N	G	E	P	T																				
UniRef90_UPI0004015458	R	N	M	F	N	Q	P	N	H	K	Q	G	L	Q	S	T	A	L	A	T	A	V	L	A	A	A									
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UniRef90_G2PFF3	R	N	L	F	N	R	A	H	Q	A	A	G	T	Q	R	Q	A	L	A	G	A	I	A	A	C	A									
UniRef90_M5E7R5	R	N	V	F	N	R	G	N	Q	K	Q	G	A	Q	Q	K																			
UniRef90_UPI0003FE0E77	Q	A	L	F	N	M	S	H	Q	R	N	G	A	Q	R	E																			
UniRef90_G4QHE2	K	P	M	F	K																														
UniRef90_Q9M630	K	A	M	Y	S	F	L	R	D	S	T	I	P	F	E	E	N	P	K	V	K	N	H	A	R	Y	V	F	M	M	T	G	D	A	
UniRef90_A7RZB2	K	D	L	F	P	F	R	N	I	S	N	E	K	I	A	E	S	P	A	L	Y	G	H	A	R	R	V	M	K	S	V	D	N	A	
UniRef90_A0A058ZPU3	K	P	M	F	K																														
UniRef90_UPI0004775DCC	R	D	V	F	N	R	G	N	Q	A	N	G	E	Q	R	Q																			
UniRef90_I3SPJ6	K	N	M	F	S	F	L	K	D	S	N	E	V	I	Q	G	N	P	S	A	N	A	H	A	K	M	V	F	G	M	V	R	G	A	
UniRef90_UPI00034D7B38	K	R	L	F	A	K	T	D	M	K	N	E	Q	E	K	K																			
UniRef90_V4BDN7	Q	D	V	F	P	F	K	G	K	S	K	E	D	L	K	Q	S	T	Q	L	R	S	H	A	L	R	V	M	G	T	V	E	K	C	
UniRef90_UPI00036530AA	R	D	L	F	N	R	G	N	Q	A	N	G	S	Q	Q	K																			
UniRef90_UPI00026C6E69	R	D	T	F	N	R	G	N	Q	A	Q	G	A	Q	Q	K																			
UniRef90_P02004	K	T	Y	F	P	H	F																												
UniRef90_J2L084	K	A	L	F	N	Q	A	N																											
UniRef90_UPI000474C436	K	E	K	F	N	M	S	A	Q	T	D	G	S	Q	P																				
UniRef90_K9VX73	Q	P	L	F																															
UniRef90_B0C7N8	K	P	L	F	S																														
UniRef90_Q0VR92	K	P	L	F	K	G	N																												
UniRef90_K0RES8	K	P	M	F	S	D	P	D	D																										
UniRef90_D9XN99	R	S	L	F	N	R	A	N	Q	A	S	G	A	Q	R	E	A	L	A	G	A	V	A	A	F	A									
UniRef90_UPI00039BD3CD	R	A	M	F	P																														
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UniRef90_UPI0004226736	L	N	V	F	N	Q	S	N	Q	A	G	G	R	Q	S	A	A	L	A	S	A	V	V	A	F	A									
UniRef90_N9KY63	K	E	T	F	N	L	G	H	Q	A	G	S	G	A	Q	A	A	L	A	G	A	V	L	A											
UniRef90_E0VN13	Q	E	S	F	M	S	F	S	G	V	D	E	D	L	K	H	S	K	Q	L	R	A	H	A	L	R	V	M	A	F	V	Q	K	A	
UniRef90_I0JWE7	R	S	L	F																															
UniRef90_UPI00037S8R2	L	D	L	F	N	R	G	N	Q	A	N	G	D	Q	Q																				
UniRef90_UPI00036F3778	R	D	F	F	P																														
UniRef90_A9U5F4	K	G	F	F	S	F	M	Q	D	T	S	I	P	F	E	D	N	P	K	V	K	F	H	A	L	Q	V	F	K	L	T	G	D	A	
UniRef90_M7B321	K	T	Y	F	P	H	F																												
UniRef90_I3TM66	A	A	M	F	D	P	A	H	Q	R	D	G	S	Q	P	R	A	L	A	A	A	V	L	A											
UniRef90_UPI000349A681	L	D	L	F	N	R	A	G	N	Q	A	S	G	E	Q	R	R																		
UniRef90_L8G042	R	N	V	F	N	A	A	H	Q	E	S	G	E	Q	Q	S																			
UniRef90_E6WF30	K	D	V	F	N	M	N	Q	R	S	G	N	Q	R	E																				
UniRef90_Q7NKA6	Q	A	L	F	A	H																													
UniRef90_I1VYK1	K	T	Y	F	P	H	F																												
UniRef90_UPI0003F065FF	K	Q	L	F	P	C	R	D	K	T	G	E	E	L	L	K	D	L	N	F	K	G													

	90	100	110	120
UniRef90_H0R4L5	P A L K P H P A E L	S R I I G H K H A S L	G I V T A D Q Y D I V	H E Y L F A A I V
UniRef90_Q3SGG8	L Q K L G P M	V S R I V A H K H A S L	L Q V I Q P D H Y P I	V G K Y L L E A I R
UniRef90_E1V3U8	K N P A Q A R H A L	V S R V A H K H A S L	D I V Q P D H Y P I	G K Y L L M A I R
UniRef90_UPI00031FBD7	H P D S Y P D E V L	S R V A H K H A S L	G L K P E E Y P T V	H E H L F K A I A
UniRef90_A0A017T2A5	L G A V L L P	V V K Q I I A H K H A S L	G L N I K A P S D Y N I	V G K N L L R A I K E
UniRef90_UPI0004663FAC	P G V L A P V I E L	A H K H A S L	L N I K A P S D Y N I	V G K N L L R A I K E
UniRef90_Q6WZ20	L S S L E E Y L	A S L G R K H A S L	G V K L S S F S T V	G E S L L Y S M L K E
UniRef90_UPI0004654DE8	L D Y L T P M	V K R I A H K H A S L	H I L P E H Y P I V	G K Y L L E S I K E
UniRef90_UPI000474CFBA	L G V L G H A V	V E R I A Q K H A S L	G L N I K A P E H Y P I	H V A T S L L G A L Q
UniRef90_S9RC72	L A P L S G F I	D Q I V M K H A S L	G L Q I K A P E H Y P I	V G N C H L A T M Q
UniRef90_I4BF95	P D L P H P A E L	S R I I G H K H A S L	G V T A D Q Y P I V	Q E H L L F A A V
UniRef90_UPI000382B6E6	V G D V V P	Y I E D L G R D H R K F	G T V A G H Y P A V	G G S H L L A T L K
UniRef90_K6VMS7	P D V R R Q R F	L E R I A H K H A S L	G V T A D Q Y A V V	H E H L L F A A I
UniRef90_J9ZAU4	L D K L V L P	Y L E R L G A G T K Y N T	R P E H Y P A V	G D A L L A T L S
UniRef90_Q1R0E4	P Q R L D E V L	G I I V D K H V S L	G I R P E H Y P I V	G E C H L M A A L
UniRef90_W3WSE3	S E L T P K F	E R V A N K H V S L	G I G T P D H Y P I	V C K Y L M R A F
UniRef90_UPI00047C30DC	P E L L V P	I L K D L G A R H K G Y G I	V A E Y Y P L V	G D L L L Q T F A
UniRef90_A5EFK6	L D T V L P	A A S A L A K R H V N Y	G A K P E H Y P V	V G A A L L W T L
UniRef90_M4AD09	S E K V A	S V L K V L G K A H A K	H V K P V Y F K I	L S G V I V E V L
UniRef90_W5MY57	L H S L E	E Y L V N L G R K H Q A V	G V Q T Q S F A A V	S G S L L Y M L E
UniRef90_UPI00034B10F6	L T P I V P	A I M P V V Y K H C A	L Q V K P E H Y P I	V G E N L L W A I E
UniRef90_UPI00036DA9C1	L D T M V P	I L Q D M G R H V A Y G	K P D A H Y P I V	V G A A L L W T L E
UniRef90_K5W0S2	L T P I L P	V V E R I C N K H A S L	H I L P E Q Y P I V	V G A N L L N A I T
UniRef90_UPI0004221702	L A A L L P	A V E K I A Q K H T S F	Q I K P E Q Y N I	V G S H L L A T L D
UniRef90_E1VSY0	Y P E T T P E T	M L A R V A H K H T S L	G V P E E Q Y P I	V Y K H L F D A I
UniRef90_N2IV4	R V E A I Q	G A V D K C A R H V A T	H I K P E H Y P A	V A N A L L P A I R
UniRef90_UPI00037D2DC1	P Q A I I	K A V Q Q L G K R H A D Y	G V M A Q Y Y D V	V G E A L L W T L E
UniRef90_B6EMQ0	L A V L L P	A V E K I A H K H T S F	L I T A E Q Y N I	V G T H L L A T L D
UniRef90_F2P5D9	L A V L L P	A V E K I A H K H T S F	L I T A E Q Y N I	V G T H L L A T L D
UniRef90_R7URJ5	P D K T I L	E T L H D L G G K H I S F	N A K V D Y I D L	L G Q H F L F A M E
UniRef90_F7VG60	L G K L G G M	V E R I A E K H V G L	N I L P E H Y P H	V G T A L L G A I K
UniRef90_UPI0004015458	L S P I V P	V V I P I A H K H C G	L Q V M P E H Y P I	V G E N L L A A I Q
UniRef90_H8Z1I5	L T S L N R V I I M M	G A R H S G Y G V E	D E D Y P K M	R R N A L L V A T I
UniRef90_G2PFF3	R P G V R P D T L L	S R I I G H K H A S L	G V S A A Q Y P V	V H R H L S A A I A
UniRef90_M5E7R5	K D A P L P D H	L L S R I I G H K H A S L	G V T A D Q Y Q I V	H D N L L F A I V
UniRef90_UPI0003FE0E77	H P A T L S T	A V E R I A H K H A S F	A I Q P E Q Y A I	V G H H L L K T L E
UniRef90_G4QH2	P D K L I P	A V Q K L G E R H V S Y	G V K P E H Y S T	V G A A L L K T V E
UniRef90_Q9M630	K G A Q V L E S K L	Q K L A A T H V N A	G V T D D Q F E I	V K E A L L Y A I E
UniRef90_A7RZB2	V Q V Y S A Y L	Y E L G T R H Q T R	Q L S E E Q L K F M	G G A F L F A M R
UniRef90_A0A058ZPU3	L D K I V P	V A Q Q L A V K H V D Y	G V K A E H Y Q P	V G E A L L F T L E
UniRef90_UPI0004775DCC	R D A R P	D A M L A R I A N K H A A L	G I T P D Q Y K I	V H D H L L F A A V
UniRef90_I3SPJ6	K G E V V L E D N V	L G V V H T Q K G V	A D R H F M V V	K E A L L K T M K E
UniRef90_UPI00034D7B38	Q K I I L K Q I L	A D L G A R H K Q Y G	N A K P Q Y Y P L	V G E I L L K T F A
UniRef90_V4BDN7	P Q K M	D E M L H Q G S R H V M Y	N A K V D Y I D L	I G E P Q F L W A I
UniRef90_UPI00036530AA	P D A R G A D V I	E R I G H K H A S L	G V A P E Q Y P I	V Y E H L L M A A I
UniRef90_UPI00026C6E69	P D G P S A Q L	S R I I G H K H A S L	G I T P D Q Y E I	H E H L L F A A I
UniRef90_P02004	L S Q A I L S	S E L S N L H Y N L	R V D P V N F K F L	S Q C H L Q V I T
UniRef90_J2L084	L A P L L P	V I E R I A H K H I G F	H I L S E H Y P Y	V A K S L L A A I A
UniRef90_UPI000474C436	L S A L K S M V	E V I A L R H V G V	G I L P Q E Y P I	V G E S L L Q A M K
UniRef90_K9VX73	P E A L V P	I L N A L G G R H I Q Y	G V I L P K Y Y P	V G S A L L M A F E
UniRef90_B0C7N8	P D A L S	S A L K G L G T R H V K Y	G V L P E H Y P L	V G S T L L K S M A
UniRef90_Q0VR92	L D T I V P	A V Q K L G A R H K D Y	G V K P A D Y D T	V A Q A L L W T L
UniRef90_K0RES8	I A T L V P	I L Q D L G K K H A K W N	V K Q R N D A V	A G E C H L W T L
UniRef90_D9XN99	R P G E R P	D A V L G R I A H K H A S L		

[illegible]

[illegible]

	50	60	70	80
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UniRef90_F2Q9X4	K S L F F R L M D D V P G E F E F E K S V A L A R A H M V R F M N S F A T F M D N L D E			
UniRef90_M3ZVD1	K Q Y F S Q F Q D M E D E M E K S V Q L R Q H A Y G V M N A I N T F M D N L D N D S			
UniRef90_W2F108	R G M F P P P A M E V Q R D R L F G A L T R I V W M L D N D S			
UniRef90_Q9GJS7	Q R F F D S F G S L S S A I M G N P K V K A H G V K V L T S L G E A I K N L D D			
UniRef90_V5AXX1	K E I F N M S N Q R N G D Q R E A L F N A I A A Y A A N I			
UniRef90_H8G9K5	R D F F P V S M Q A E N G R V V R A L L R V L R L V H R			
UniRef90_I7D426	R D L F P V T M A T Q R S R L L M A L L H A A V S S L N A			
UniRef90_UPI00031999E4	K P L F K G D M K Q Q G R K L M A L L H A A V S S L N A			
UniRef90_X0NDY2	R A L F P A S M D A Q R D R L F K A L L T A A Q N I V D N			
UniRef90_C4QXP8	K P Y F N E T N Q K S L M K Q P R I L F A F A L T K Y A E N I D D			
UniRef90_D0VWV2	K T Y F S H W K D L S P G S A P V N K H G K T I M G G I V D A V A S I D D			
UniRef90_A0A037ZE85	K P Y F A N S D M K E Q G T K L M A T L G V V V N G L R D			
UniRef90_I0L4J9	R Q M F P T N M A G Q R D R L V T A L G H I V S H V D Q			
UniRef90_U9VVN9	R P L F E H T D M V K Q K Q M L K G G L V M V V E N L R K			
UniRef90_T0T531	K P L F E N V N M S S Q K K Q L M G G L S K I V D L D D			
UniRef90_P01955	K T Y F P H F D L G H G S G Q V K A H G K K V G E A L T Q A V G H L			
UniRef90_H3D213	K Q F F K D F K H M P E E M Q Q S V Q L R K H A H R V M T A L N T L V E S L N N			
UniRef90_A1ZN75	K R L F Q S N T H I Q N Q K L M S S I T L I V T K L N D			
UniRef90_C6WR47	R E M F P A N M E V Q R S R L R A L V H V V Q M V D R			
UniRef90_F6WII6	Q R F F D S F G N L S S A I M G N P K V K T H G K K V L T S L G D A V K N L D N S			
UniRef90_D9VZ36	R E L F P S S A E D M E R Q R D R L F M A A L T H V V T H L E S			
UniRef90_UPI0001CB9E5C	Q D L F P E F K G M S E E L R N S I N F E T H V G I F M N V I D E C I S L E D			
UniRef90_UPI0003747928	R D F F P I N M E V Q R G R L V R A L V H V V Q M V D R			
UniRef90_UPI00047DF8A	L K G L F S F L K D T A G V E D S P K L Q A H A E Q V F G L V R D S A Q L R T			
UniRef90_P02233	R P L F K Q D I R S Q G R K L M A M L K A A V E G L T D			
UniRef90_A3QIV0	K T Y F S H W K D L S P G S A P V K K H G K T V M S G V A E A V S K I D D			
UniRef90_A1YZP4	L N I F S N R T N Q A T G L Q P K A L A A T V L A A A K N I D N			
UniRef90_I2K374	R A L F P I N M A T Q R N R L L R A L V V Y V V Q M V D R			
UniRef90_R4TIK9	K N L F K K F E Q Y S E E L P S T D A F H Y H I S L V M N R F S S I G K V I D D			
UniRef90_O97382	K N L F K K F E Q Y S E E L P S T D A F H Y H I S L V M N R F S S I G K V I D D			
UniRef90_O97382	K N L F K K F E Q Y S E E L P S T D A F H Y H I S L V M N R F S S I G K V I D D			
UniRef90_Q03331	R S Y F N M T N Q K T G R Q P K V L A F S L Y Q Y I L H L N D			
UniRef90_P10061	Q R F F S S F G N L S S A I M G N P R V K A H G K K V F T S F G E A V K N L D N			
UniRef90_E9GW66	Q L K F K K F A D P A D Q L A D N K S F L V H A M S V M N A V T M V V D S N L D D			
UniRef90_P86882	K T Y F S H W S D L S P N S A P V K N H G K T V M T G V A L A V S N I D D			
UniRef90_T1F484	K N L F P F K T V W G D K L I K H P L F L T H S K R E V K V I G Y V D R L D Y			
UniRef90_A8LNC0	K P L F A G N I D L Q G R K L V Q T L G F I V D H L E D			
UniRef90_B4V9M5	R S M F P P A V M D M Q R D R L K A L L T A A E H I D D			
UniRef90_UPI000273A1EE	K T Y F P H F D L S P G S Q D V K G H G Q K V A D A L S Q A V A N L D D			
UniRef90_G3SBL4	Q R F F D S F G N L S S A S M G N P K V K A H G K K V L G A F S D G L A H L D N			
UniRef90_C4Y773	K V F F N E K N Q A D L R Q P K L L A F A L L A Y A K N I D D			
UniRef90_Q9NG75	K N L F K K F E Q H S E V L P S T D D F D H H I S L V M N R F T S I G K A I D D			
UniRef90_Q9NG75	K N L F K K F E Q H S E V L P S T D D F D H H I S L V M N R F T S I G K A I D D			
UniRef90_G4NDV3	H N V F S T T S Q A T G A Q P R A L A S A V L A Y A T H I D D			
UniRef90_W7ZSA4	R D F F P A A L D A Q R D R L V L K A I A Y V V D R L E E			
UniRef90_UPI0002DA83D1	R S L F G G A D M K A Q G Q K L M A A L G F V V G G L R K			
UniRef90_C3KID2	K T Y F T H W K D L S P G S E P V Q K H G K S V M G V A D A V A K I D D			
UniRef90_UPI000367596D	R P L F P P A M D T Q R D R L R A L L T A A E H I D D			
UniRef90_A0A013XQU1	R A L F N Q A A Q R S G E Q P K R L A D A I L A F A K N V D K			
UniRef90_K0T1L2	V P M F G D A D M D K Q A E K L L K T V S L A V E Y N I D N			
UniRef90_V5N4L6	K I Y F S H W P D L S P G S E S V K K H G R T V I G A L N D A V V N I D D			
UniRef90_K8GH78	K R G F E T T W M Q H L D G G G Q A Q K L A A A V Y A Y A T H I D R			
UniRef90_UPI0001D37DC1	K G Y F P H L S A C Q D A T Q L L S H G Q R M L A A V G A A V Q H M D D			
UniRef90_W8KAI2	K P M F N M E K Q I S G K Q P K A L A M G I L M A A K N I E N			
UniRef90_P81043	K T Y F P H F D L S H G S A Q I Q A H G K K I A D A L G Q A V E H I D D			
UniRef90_P11748	K T Y F S H W P D M S P G S G P V K A H G K K V M G G V A L A V T K I D D			
UniRef90_Q9YGF7	K T Y F S H W K			

	90	100	110	120
UniRef90_G3WEX2	V	K	A	T
UniRef90_F2Q9X4	P	A	E	L
UniRef90_M3ZVD1	P	E	K	V
UniRef90_W2F108	P	G	G	L
UniRef90_Q9GJS7		L	K	G
UniRef90_V5AXX1	D	N	L	A
UniRef90_H8G9K5	P	D	D	L
UniRef90_I7D426	P	D	E	L
UniRef90_UPI00031999E4	P	E	Q	L
UniRef90_X0NDY2	G	K	V	L
UniRef90_C4QXP8	L	S	P	L
UniRef90_D0VWV2		L	N	A
UniRef90_A0A037ZE85	L	D	A	I
UniRef90_I0L4J9	V	D	R	L
UniRef90_U9VVN9	P	D	V	L
UniRef90_T0T531	P	E	A	L
UniRef90_P01955		L	P	S
UniRef90_H3D213	A	D	R	V
UniRef90_A1ZN75		L	D	N
UniRef90_C6WR47	P	D	D	L
UniRef90_F6WII6		L	K	G
UniRef90_D9VZ36	G	T	L	V
UniRef90_UPI0001CB9E5C		A	D	H
UniRef90_UPI0003747928	P	D	D	L
UniRef90_UPI00047DFF8A	P	E	A	P
UniRef90_P02233	K	G	E	V
UniRef90_A3QIV0	L	D	A	L
UniRef90_A1YZP4		L	T	N
UniRef90_I2K374	L	G	V	L
UniRef90_R4TIK9	P	D	E	L
UniRef90_O97382	N	N	V	S
UniRef90_O97382	N	N	V	S
UniRef90_Q03331		L	T	P
UniRef90_P10061	I	K	A	T
UniRef90_E9GW66	I	P	K	L
UniRef90_P86882	M	T		
UniRef90_T1F484	L	Q	E	E
UniRef90_A8LNC0	P	D	R	L
UniRef90_B4V9M5	P	D	V	L
UniRef90_UPI000273A1EE		L	P	G
UniRef90_G3SBL4		L	K	G
UniRef90_C4Y773	I	T	P	L
UniRef90_Q9NG75	N	N	A	S
UniRef90_Q9NG75	N	N	A	S
UniRef90_G4NDV3		L	A	R
UniRef90_W7ZSA4	P	E	R	L
UniRef90_UPI0002DA83D1	P	A	T	V
UniRef90_C3KID2		L	N	A
UniRef90_UPI000367596D	P	P	V	L
UniRef90_A0A013XQU1		L	D	V
UniRef90_K0T1L2	M	G	E	L
UniRef90_V5N4L6		L	V	G
UniRef90_K8GH78	L	D	E	L
UniRef90_UPI0001D37DC1		L	R	A
UniRef90_W8KAI2		L	E	N
UniRef90_P81043		L	P	G
UniRef90_P11748		L	T	S
UniRef90_Q9YGF7		L	T	S
UniRef90_O97381	N	N	V	S
UniRef90_O97381	N	N	V	S
UniRef90_O97381	N	N	V	S
UniRef90_L8F4D9	T	A	Y	L
UniRef90_Q4RHD1		L	K	T
UniRef90_P19789	I	A		
UniRef90_UPI00044436D5		L	S	G
UniRef90_UPI0003F058A3		L	P	G
UniRef90_U3JDDW8	S	E	K	V
UniRef90_T1J121		V	E	C
UniRef90_P10781		L	R	Q
UniRef90_P01947		L	P	T
UniRef90_UPI0003771303	V	V	P	
UniRef90_K7INA7	P	A	L	L
UniRef90_Q9QVMN1	P	A	A	L
UniRef90_J9NVU7	P	E	R	I
UniRef90_V4PJ00		L	T	P
UniRef90_I4YK27	L	E	N	I
UniRef90_X4ZCT4	I	P	A	L
UniRef90_UPI0002557E95	I	P	A	L
UniRef90_P11896	M	D		
UniRef90_M3K5K5	L	D	A	L
UniRef90_I0L6A4	P	E	G	F
UniRef90_UPI00037E95AB	P	E	A	P
UniRef90_A7EZW3	D	N	L	T
UniRef90_I3N5Z8		L	P	G
UniRef90_D6YB43	P	D	G	L
UniRef90_P83131	I	P		
UniRef90_E9IBK1	P	E	L	M
UniRef90_F6YXK6	P	D	K	V
UniRef90_P06638	I	P		
UniRef90_Q2GC26		L	E	N
UniRef90_F0SL04	P	E	K	L

		130	140	150
UniRef90_G3WEX2	T M G K D F T	P E A Q A A W Q K	L V G V V A S A L S R K Y	
UniRef90_F2Q9X4	V L D G K F T T	P E V K T A W L K	T A Y T F M S T H L K E G V	E E
UniRef90_M3ZVD1	D F P D F F T	A E V Q L V W T K	L M G A L Y W H V T G A Y T D	
UniRef90_W2F108	F A A E I W N E	E I E A A W V A A	Y G M A S E I M L E A A E A E A	
UniRef90_Q9GJS7	L Y G K E F T	P E V Q A A W Q K M V	A G V A S A L A S R Y	
UniRef90_V5AXX1	M F Q P G Q E V	L D A W K K A Y G	V A S A G V F I N R E A E E	
UniRef90_H8G9K5	S L G P A W T	P E V E A W A E A Y T	L V A R A M Q E A A E E E A	
UniRef90_I7D426	F L G K E K W T	A E V E S A W T S A Y G	L I A K A M R E A A Q A E	
UniRef90_UPI00031999E4	G L G D D F T	R E T R D A W V E L I H	F V A D T M K A E M	
UniRef90_X0NDY2	Y A T S S W S	P E A E G A W V R A Y T	A I S Q I M I	
UniRef90_C4QXP8	L L G P E A T	P A F L K A W A T A Y G	N L A Q L L I N A E	
UniRef90_D0VWV2	K F P K D F T	P E V H I S Y D K F F S	A L A R A L L A E K Y R	
UniRef90_A0A037ZE85	G L G D A W T	P E V K E A W V A Y T	T L A G V M K D A A Y P S	
UniRef90_IOL4J9	F L A D Q W T	D E L A Q D W A A A Y G	L I A Q V	
UniRef90_U9VVN9	Y A G D A W T	A D V K D A W V G A Y D	A I T Q L M L T G A D	
UniRef90_T0T531	F F G D A W T	P E L Q Q Q L M A Y E F	I A N T M L Q G A K E	
UniRef90_P01955	H Q P T E F T	P E V H A S L D K F L S N V	S T V L T S K Y R	
UniRef90_H3D213	A F T E I I T	A E V A S A W T K L L A N M	C G I A A V Y K E A G	
UniRef90_A1ZN75	V L G N A W T	H E M K T A W K K V Y Q	L I S Q A M E G L T D	
UniRef90_C6WR47	Y A G E A W T	P Q V E M A W A E A Y	T I M A M R Q E A A	
UniRef90_F6WI6	E F G K E F T	P E V Q A A S Q K L V S	G V A S A L A H K Y	
UniRef90_D9VZ36	T S G D A W T	P A V E E K A W Y E A Y Q	V I A D A M T A G A	
UniRef90_UPI0001CB9E5C	L L E D R Y S	E K I E E I Y K L T I K F I	L E H F I N G L K E S	
UniRef90_UPI0003747928	H L G P E W T	P E V E R A W A E A Y T I	I A R S M Q E A A	
UniRef90_UPI00047DFF8A	V L G E V F S	G A V R D A W D A V Y L E M	Q R V L	
UniRef90_P02233	A S G N N W S	E E L N T A W E V A Y D	G L A T A I K K A M K T A	
UniRef90_A3QIV0	G L G E A Y T	R E V R E A W V A V I H	L V A D T M K	
UniRef90_A1YZP4	Q F P N D F T	P E V H V S M D K F L S A L	A L A L S E K Y R	
UniRef90_I2K374	T L N P	P E V L E A W K E A Y G V I	A K T F L D V E A E	
UniRef90_R4TIK9	F L K D D W T	P E V E D A W V T A Y G V I	S K S M R E A A	
UniRef90_O97382	E L	S D T G R N G L E K V L T F A T	G V I E Q G L	
UniRef90_O97382	E L	S D T G R N G L E K V L T F A T	G V I E Q G L	
UniRef90_O97382	E L	S D T G R N G L E K V L T F A T	G V I E Q G L	
UniRef90_Q03331	V L G E A A D E	H F V E V F K K A Y G N L	A Q T L I D A E	
UniRef90_P10061	H F G K D F T	P A Q A A W Q K L V R V V A	H A L	
UniRef90_E9GW66	A L G S Q F P	E D V K Q S W I K A L D V V V	G V V A T G L	
UniRef90_P86882	M Y P K D F T	P E A H V S M D K F F C	G L S L A L A E K Y R	
UniRef90_T1F484	E L K D V I T	N E L S E A W H K K V L V Y I	V S K L K E G Y E T E	
UniRef90_A8LNC0	L L G T A F S	P E D E A A W A E V Y G G L	S A A M I A A A Y P	
UniRef90_B4V9M5	Y A Q L T W G	P E Q A A W V R A Y T A I	S Q I M I D A A A E E	
UniRef90_UPI000273A1EE	H L S K D L T	P E A H A S M D K F F A S V	A T V L T S K Y R	
UniRef90_G3SBL4	N F G K E F T	P Q A Q A A Y Q K V V A G V A	N A	
UniRef90_C4Y773	F L G E E A T	P F I E A G L T A A Y G N L	A Q F L I N A E	
UniRef90_Q9NG75		P E L S E T A R S G L R K V L D F A N G	V I E Q G L	
UniRef90_Q9NG75		P E L S E T A R S G L R K V L D F A N G	V I E Q G L	
UniRef90_G4NDV3	V L G D A A T	P		
UniRef90_W7ZSA4	Y A G T E W T	D E I G R A W D E G L G V I	A N T M T A A D Q E S	
UniRef90_UPI0002DA83D1	S F G A R F T	D E L R K A W T E A Y D L V	S T I M R E A A	
UniRef90_C3KID2	M F P K E F T	P E V H V A M D K F F C	G L S L A L S E K Y R	
UniRef90_UPI000367596D	Y A V I R T W T	P Q T E A A W S R V Y A T L	S Q V M I A A A K D A	
UniRef90_A0A013XQU1	V L G D A I D E	Q V L A A W G E A Y W F L	A D V L I A R E A A	
UniRef90_K0T1L2	G L G E A W T E	D T A D A W T W V Y G V I	A D T M A D A G D K A	
UniRef90_V5N4L6	N F P A D F T	P E V H I A M D K F L A A V S	A A L A D K Y R	
UniRef90_K8GH78	V L Q D A A T D	D V I A A W A E A Y E A L	A A I F I Q R E K	
UniRef90_UPI0001D37DC1	H L Q D E F T	V E M Q A A W D K F L T G V	A V L T E K Y R	
UniRef90_W8KA12	V L N A D E T	T L K A W E E A Y K A I	A Q F Y I D I E K E	
UniRef90_P81043	H L G D A F T	P E V H A S L D K F L A A V	S T V L T S K Y R	
UniRef90_P11748	M F P K E F T	P D A H V S L D K F L A S V	A L A L A E K Y R	
UniRef90_Q9YGF7	M F P D D F T	P E V H V A T D K F L A Q L	A L A L S E K Y R	
UniRef90_O97381		P E L S E T G R S G L E K V L T F A T	G V I E Q G L	
UniRef90_O97381		P E L S E T G R S G L E K V L T F A T	G V I E Q G	

	1		10		20		30		40
UniRef90_C7QCW0			A L I	R E S F A L V	G G K P D K I V S Y F Y A L V F T E C P A L				
UniRef90_D3Q2U1			D A D R L	K A N W E L V	A S H G G Q V P L F F Y S T L F L T H P E T				
UniRef90_UPI0002C687E3		F T A E E	K A T V	A S L W A K V	A S D V E T V G G E I L G R L L V V Y P W T				
UniRef90_E9HNB1			V A A V	Q S T W A V I	K S D I N T F A P Q F Y V A L L T A H P E Y				
UniRef90_D2AV35			L V	K E S F A V V	E P V A D K A A A Y F Y G R L F A E S P H L				
UniRef90_UPI00037DED22		M T K Q Q	Q L	K Q T W I F L	R E D P A L L G D V F Y G Q L F I K Y P S L				
UniRef90_P04443			F T A E E K A A I	T S I W D K V	D L E K V G G E T L G R L L I V Y P W T				
UniRef90_Q8JH84		S L T	A R D K A V V	K A L W S K I	S S K A D E I G A E A L G R M L T V Y P Q T				
UniRef90_Q2KPA4		M S	A E E K G I V	T S M W G K V	N V D D I L G A E A L G R L L V V Y P W T				
UniRef90_UPI000316497E		A L H P	Q D A A L L	R R S L D E L	A P V A S E A T G Y F Y S L L F V R N P E L				
UniRef90_Q45XJ0			L T A A E K T Q V	T N L W G K V	N V K E L G G E A L S R L L V V Y P W T				
UniRef90_V5GLC7		G L T	S R D R Y L I	K S S W A G P	R Q K P T E S G V A L F L F F K H P E Y				
UniRef90_UPI00045412ED			L T D A E K K E V	T A L W G K A	A G H G E E Y G A E A L E R L F L S F P T				
UniRef90_E9DZ97		A L T	Y S Q C Q K I	R A T V P A L	N A R G E E I T A S F Y Q S L L R G H P E L				
UniRef90_A4FQN9			V R L I	R E S W A E V	P Q A D D V A R F F Y G M L F S L S P A T				
UniRef90_W1RUG2		S L S	A Q T I A I V	K S T G P A L	R K H G V A I T T A M Y A R L F Q D E S V				
UniRef90_K1PR28		A H L	S T R Q R L L V	Q D T L E L M K	D D L S D L G I I V F K R F F E T E P S V				
UniRef90_W5MMA8			T A A E R Q A I	A S V W E K I	S L E S V G S Q A L A R L L I V Y P W T				
UniRef90_UPI0004660275			Q L I	R S T F A V V	E R R A E H A V I T F F Y S H L F W N N P G V				
UniRef90_P0C237		S L S	D K D K A A V	K A L W S K I	A K S A D V I G N D A V S R M I V V Y P Q T				
UniRef90_I6ZW92			L S G E E K A A V	I S L W G K V	N V D E V G G E T L G R L L V V Y P W T				
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UniRef90_H2QA68		S L T	K T E G T L I	V S M W A K I	S T Q A D T I G T E T L E R L F L S H P Q T				
UniRef90_Q3Y9L5		S L S	A A D K A R V	K G L W A K I	E A K S A D E I G G E A L G R M F V A Y P Q T				
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UniRef90_A4ZQ34		A L S	Q S D R A L V	L A L W K K M	S S N V G I Y A T E A L E R T F V A F P S T				
UniRef90_B1ZVJ7			M T S R E I V L V	Q E S F S K L A	P I A D Q A A A L F F V R L F E L D S S L				
UniRef90_UPI00035943AF		P F N	K Q Q I F K L	L Q S W R G I	K R N M S E A G V E M F A Q L F K E T S H L				
UniRef90_UPI000368FE1D			E L I	G A S M A E L	E R S A D S A T A Y F Y A L L F V Q Y P H L				
UniRef90_UPI0003592FCB			L P A	Q S R E I V V	Q S W E I I K R D I E R V G V V M F M G L L E D P E I				
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UniRef90_UPI0003835450									
UniRef90_V5H2Z2		G L T	S K D I A L I	K N S W A G P	R Q K P T D S G I A L F N V F F K N H P E Y				
UniRef90_O17824			S D R Q R D V L	Q K T F A P L	I Q D C V R N G L K I F V R L F S E Y P R Y				
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UniRef90_P83479		S L T	A K D K T L V	K T F W G K V	K G K A D A M G A E A L G R M L V V Y P Q T				
UniRef90_V5N6P1			S L S E N D K Q M V	K T L W A K I	S P A A D Q L G C E A L G R M L V F P Q T				
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UniRef90_M3YFH4			L S A E E K A A V	S S L Q G K V	K V D V V G G E T L G R L L V V Y P W T				
UniRef90_V9ZVV7			M T S E Q I E L V	Q R A W G K V	T A L N N T Y V I Q E V Y A E L F R L S P E L				
UniRef90_UPI00035A227A			L T D A E K A L V	T G L W G K V	D V P V I G A E S L A R M L I V Y P W T				
UniRef90_W5LAN4		S L T	V D D M A A V	K A L W G K I	G A K A D E I G A E A L G R M L T V Y P Q T				
UniRef90_P18436			F T A E E K A I I	T S L W A K V	N V E E T G G E A L G R L L V V Y P W T				
UniRef90_Q7LZM6			L N A E D C K L L	H A T W A K V	A G A A D E I G Y K V L E R L F K V F P Q T				
UniRef90_P18973			L S S A D K A N I	K A T W D K I	G G H G G E Y G A E A L E R T F L C P T T				
UniRef90_UPI0003F134CF			L S E A E R A L V	R A L W N K M	G D N V G V Y T T E A L E R T F A S F P S T				
UniRef90_P18993			T A E E K Q L I	C S L W G K I	D V G L I G G E T L A G L L V I Y P W T				
UniRef90_Q95NK8		G L L	S A S D R A I	E K T W E Q A	R K D G D V A P Q I L F R F V K A H P E Y				
UniRef90_A7ICZ3			M H D D Q I G L L	E T S F A E L	S T D R D A A A A L F Y E R L F V L D P A L				
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UniRef90_Q7LZC2			S S N E R S T I	T S L W G K I	N N A E I L G Q V A L A R V L I V Y P W T				
UniRef90_P0C227		S L S	A D Q K A A I	K S S W A F A	A D I T G N G S N V L V Q F F K D Y P G D				
UniRef90_R1EGH0		S G M	S A E T I A T V	D A T A G A V A	P F A L D I T K D F Y G D M I A S L P S V				
UniRef90_P84203			L A P G D K T V	K K F W E K V	G G Q A D E I G G E A L S R M I A V Y P T				
UniRef90_B6DMG4			L T A K D K E T V	K A F W A K M	S K A Q D V G A D A L N R M L I V Y P Q T				
UniRef90_E9FXJ7		G L L	S H D R S V I	R K T W D Q A	K K D G D V A P Q V L Y R F V T A H P E Y				
UniRef90_W8A583			S P V N I E A L	Q S S W Q Q V	D A I G P Q A V E Y F Y D H L F E A H P E V				
UniRef90_Q7ZT83			L T A E D R R L L	Q A S V G K L G	C R L E D I G A D R L N R L F L V F P Q S				
UniRef90_W8S4A2				R A T W A L A	G D A D R T A R V F Y S N L F R L D P T T				
UniRef90_I3CEH7			L S T D V K A V I	K S S A P L L	R E Y G E A I A K R T Y E L L F E K Y P Q V				
UniRef90_F7EB40			L S G P Q K E L I	R E S W Q T V	S Q D Q L H H G T V L F S S D I				
UniRef90_W5JRH5		G L T	K A Q K V A L	T A A W S I	V K K D L V T H G R N I F V M F F E E Y P K Y				
UniRef90_G7K1Y9		S F T	E K E Q A L V	N S S W E S L	K Q N P G Y S V L F Y T I F E K A P A T				
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UniRef90_D6R731			S A S E R S T I	A N V W G Q I	N I D E I G P Q A L A R V L I V Y P W T				
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UniRef90_Q1AGS5			S L S S K D K A T V	K E F F G K M	S T R S D D I G A E A L S R L V A V Y P Q T				
UniRef90_V8D265				D K V L L	E R S L M L V A D D D V G L T T D F Y D R L F A E Y P S A				
UniRef90_UPI0003D0BCC8			T A E E K R L I	T N L W R K I	D V A E C G A D A L A R L L I V Y P W T				
UniRef90_B5FX70			T A E E K Q L V	T T L W G R V	N V D E C G A E A L A R L L V A Y P W T				
UniRef90_UPI0002C58F48			L S A A D Q A A V	R A L W R K I	G N N V G I Y A T E A L E R T F T A F P T T				
UniRef90_K6WGP8				D K Q L L	E E S L T L V D L P D S G L T V R F Y D I L F E R Y P A V				
UniRef90_H2LCU1			L S K K E K Q L I	R E I T W E R L	T V A E D I G A D A L L R M F A S Y P G T				
UniRef90_B6ZIV8		S G L	T R R E I H A V I	Q K S W A P V	N A N S F A T G S E L L R L R L F N T Y P D T				
UniRef90_D5ZX55			E A D R R T I	M R D L D L V	A P F D E L I T H L Y R A L F A R H P S L				
UniRef90_UPI00041ACC89			L N V D Q I G L I	K S S W G L I	V A K A Q T L G E H F Y S E L F R I H P E Y				
UniRef90_G5BXY2			S L S N E D K A C I	R S V W K E I	G P S W P E H C P D A I Y R M F L S F P S T				
UniRef90_UPI000441B56A			L S D E D K T R I	R A W A P V	S K N A E V Y G C E A L Y R M F L S Y P T T				
UniRef90_B3EWC8			L T A E E K S A V	A A L W G K V	N T D E V G G E A L G R L L V V Y P W T				
UniRef90_Q6DET0			L S A D E K S A I	N A V W Q K V	D I E K D G H E A L T R L L V V Y P W T				
UniRef90_UPI00032ADC07			L S P E E K A A V	T A L W N K V	D V E D V G G E A L R L L I V Y T W T				
UniRef90_UPI00038C1CD5				E L I	R Q S W R A V S R S P L E H G T V L F A R				
UniRef90_C5MIG9			L T Q A Q K I V	T D C V P V L	E D L N I K L G E K F Y K R T M K R Y S Q L				
UniRef90_U6PGL3			L T E R Q H A V I	I R T F A K M	G S N P V K N A L Q V L L R L F A E Y P Q Y				
UniRef90_P02142			T D A E K S T I	S A V W G K V	N I D E I G P L A L A R V L I V Y P W T				
UniRef90_P01946			L S A D D K T N I	K N C W G K I	G G H G G E Y G E E A L Q R M F A A F P T T				
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UniRef90_S6B7W8		A T L	T A D E A N L V	K S T W S Q V	K D K E D E I L Y D I F K Q N P D I				

		50		60		70		80																																				
UniRef90_C7QCW0	R	D	M	F	P		P	M	M	D	A	Q	R	D	R	L	F	Q	A	L	V	R	I	V	G	Q	A	E	H															
UniRef90_D3Q2U1	R	Q	L	F	P			V	S	M	A	G	Q	R	D	K	L	V	R	A	L	G	A	V	V	S	S	V	D	D														
UniRef90_UPI0002C687E3	Q	R	F	F	D	N	F	G	N	L	S	S	E	S	M	G	N	P	R	V	K	A	H	G	K	K	V	L	T	S	F	G	N	A	V	K	S	H	M	D	D			
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UniRef90_D2AV35	R	G	L	F	P													P	A	M	D	V	Q	R	D	R	L	F	T	A	L	S	T	R	I	V	W			S	L			
UniRef90_UPI00037DED22	R	S	M	F	K													G	P	M	E	R	Q	Y	Q	K	F	V	D	M	L	S	I	I	V	A	R	L	D	Q				
UniRef90_P04443	Q	R	F	F	D	K	F	G	N	L	S	S	A	Q	M	G	N	P	R	I	K	A	H	G	K	K	V	L	T	S	L	G	L	A	V	K	N	M	D					
UniRef90_Q8JH84	K	T	Y	F	S	H	W	A	D	L	S							P	G	S	G	P	V	K	K	H	G	K	V	I	V	A	S	V	G	D	A	V	S	K	I	D	D	
UniRef90_Q2KPA4	Q	R	F	F	D	S	F	G	D	L	S	S	A	L	M	G	N	P	K	V	K	A	H	G	K	K	V	A	H	S	I	S	D	G	I	K	N	L	D	N				
UniRef90_UPI000316497E	R	S	L	F	P	L	A	M	D	V	Q	R	D	R	L	F	H	A	L	L	T	A	A	G	L															A				
UniRef90_Q45XJ0	R	R	F	F	E	H	F	G	D	L	S	E	A	V	L	H	N	A	K	V	L	A	H	G	E	K	V	L	T	S	F	G	E	G	L	K	H	L	D	N				
UniRef90_V5GLC7	K	L	T	F	P	F	R	D	I	S	D	E	D	L	P	T	N	K	R	F	H	A	H	A	N	S	V	I	Y	A	F	S	S	V	V	D	A	L	D	D				
UniRef90_UPI00045412ED	K	T	Y	F	P	H	F					E	L	S	Q	G	S	A	Q	V	K	A	H	G	K	K	V	A	D	A	L	T	T	A	V	A	H	L	D	D				
UniRef90_E9DZ97	R	S	Y	F	N	T	A	N	Q	L	N	K	L	Q	P	K	A	M	S																				H					
UniRef90_A4FQN9	R	D	L	F	A	V	I	N										M	E	V	Q	R	S	R	L	L	R	A	L	V	H	V	I	Q	F	A	N	N	V	S	D	R		
UniRef90_W1RUG2	K	A	M	F	D	Q	A	A	Q	D	S	G	E	Q	P	R																							D	K				
UniRef90_K1PR28	K	K	V	F	P	K	I	V	K	I	N	D	S	N	E	D	M	E	V	L	S	R	H	A	S	N	V	M	H	S	L	G	A	A	V	E	S	L	D					
UniRef90_W5MMA8	Q	R	Y	F	S	S	F	G	N	L	S	S	A	L	L	G	N	P	K	V	K	H	H	G	K	T	V	L	T	A	L	G	Q	A	V	K	N	M	D	N				
UniRef90_UPI0004660275	R	A	L	F	P													E	D	M	V	P	Q	R	D	R	L	F	A	L	T	H	V	V	T	H	L	E	D					
UniRef90_P0C237	K	T	Y	F	A	H	W	P				D	L	T	P	G	S	T	N	T	K	A	H	G	K	K	V	M	G	G	I	A	L	A	V	S	K	I	D	D				
UniRef90_I6ZW92	Q	R	F	F	E	S	F	G	D	L	S	F	A	I	M	G	N	P	K	V	S	A	H	G	K	K	V	L	N	S	F	S	D	G	L	K	H	L	D	N				
UniRef90_F8TUD8	A	A	L	F	N	H	A	N	O	G	G	D	N																										D	D				
UniRef90_P23740	K	V	I	F	D	H	F	T	D	L	S							P	S	S	Q	K	L	H	A	H	A	K	V	V	L	G	A	L	T	K	A	V	N	H	L	D	N	
UniRef90_H2QA68	R	T	Y	F	S	R	F					D	L	H	N	G	S	A	R	L	R	T	H	G	Y	K	V	M	A	S	E	L	N	T	V	K	S	I	D	N				
UniRef90_Q3Y9L5	K	I	Y	F	S	D	W	G	Q	D	L	G	P					K	T	Q	K	V	Q	N	H	G	A	T	I	M	A	S	V	G	K	A	V	K	N	I	D	N		
UniRef90_UPI000329B181	K	I	Y	F	S	H	W					S	D	L	S	P	S	S	A	Q	V	K	K	H	G	A	T	I	M	A	I	G	D	A	V	S	K	I	D	D				
UniRef90_C0H805	K	T	Y	F	S	H	W	A	D	L	S							P	G	S	A	P	V	K	K	H	G	A	V	I	M	G	A	I	G	N	A	V	G	L	M	D	N	
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UniRef90_A4ZQ34	K	T	Y	F	P	H	M					D	L	S	P	G	S	Q	V	K	A	H	G	Q	K	V	A	D	A	L	T	L	A	A	H	H	L	D	D					
UniRef90_B1ZVJ7	R					R	C	Y	Q	G	E	R	E	Q	Q	G	R	G	L	V	R	L	A	S	S	I	H	R	L															
UniRef90_UPI00035943AF	Q	T	M	F	Q	G	F	K	D	S	D	D	E	L	R	S	N	E	A	L	E	Y	H	A	T	L	V	M	T	T	L	D	D	A	I	T	H	I	D	N				
UniRef90_UPI000368FE1D	R	E	M	F	P													A	A	M	D	G	Q	R	D	R	L	F	R	A	L	L	T	A	V	R	L	F	D	D				
UniRef90_UPI0003592FCB	R	G	T	F	M	T	F	R	D	K	T	E	E	L	K	A	S	T	A	L	R	S	H	V	L	R	V	M	G	A	V	E	K	V	V	A	R	L	D	N				
UniRef90_UPI0003F0E70B	K	I	Y	F	H	T	L	E	N			L	T	P	G	S	K	D	I	K	A	Q	G	K	K	V	A	D	A	L	T	Q	A	V	D	Q	L	D	D					
UniRef90_UPI0003835450	L	P	L	F	Q	Y	N	C	K	S	P	Q	E	C	L	S	A	P	E	F	L	D	H	I	R	K	V	M	L	V	I	D	A	A	V	S	H	L	E	N				
UniRef90_V5H2Z2	Q	E	A	F	P	F	R	G	I	P	I	A	D	L	P	K	N	R	F	L	A	H	A	N	G	V	I	Y	G	F	S	S	I	V	D	A	V	D	D					
UniRef90_O17824	K	L	I	W	P	Q	F	R	A	I	P	D	S	S	L	M	N	A	E	L	R	R	H	A	S	V	Y	L	N	G	L	G	K	I	I	D	S	M	R	D				
UniRef90_UPI00038EF4A8	K	T	Y	F	P	H	W					D	L	S	T	G	S	A	Q	V	K	A	H	G	Q	K	V	A	D	A	L	T	L	A	V	N	Q	M	Y	D				
UniRef90_P83479	K	T	Y	F	A	H	W					S	D	Q	S	P	G	S	E	P	V	K	H	G	K	K	T	I	M	G	A	V	G	D	A	V	G	K	I	D	N			
UniRef90_V5N6P1	K	T	Y	F	A	H	W	P	D	L	S							L	G	S	D	V	K	H	G	K	K	V	M	D	S	V	G	E	A	V	N	N	I	D	N			
UniRef90_C3Y0P3	I	E	K	Y	P	R	G	M	D	Q	E	E	L	R	N	S	Q	F	L	Q	E	H	S	Q	R	V	L	D	A	F	D	H	T	I	D	S	L	D	D					
UniRef90_M3YFH4	Q	R	F	F	D	S	F	G	D	L	S	D	A	I	M	S	N	G	P	V	K	A	H	G	K	K	V	S	L	T	N	G	L	K	N	L	D	N						
UniRef90_V9ZVV7	I	N	L	F	P													D	P	A	G	M	P	V	A	K	V	S	D	T	L	N	T	V	I	T	S	L	E	Q				
UniRef90_UPI00035A227A	Q	R	F	F	E	H	F	G	D	L	S	S	A	S	M	S	N	A	Q	V	K	A	H	G	K	K	V	I	H	S	F	A	D	G	L	K	H	L	D	N				
UniRef90_W5LAN4	K	T	Y	F	A	H	W	A	D	L	S							P	G	S	A	P	V	K	K	H	G	K	T	I	M	G	A	V	S	A	A	V	S	L	E	D		
UniRef90_P18436	Q	R	F	F	D	N	F	G	N	L	S	S	A	S	M	G	N	P	K	V	K	A	H	G	K	K	V	I	M	G	A	V	S	S	L	G	E	A	V	T	H	M	D	D
UniRef90_Q7LZM6	K	V	I	F	S	H	L					D	L	S	P	G	S	S	D	V	R	H	Q	G	Q	K	I	I	R	A	L	D	N	A	L	K	H	L	D	N				
UniRef90_P18973	K	T	Y	F	P	H	F					D	L	S	H	G	S	A	Q	V	K	A	H	G	K	K	V	A	D	A	L	A	L	A					A					
UniRef90_UPI0003F134CF	K	T	Y	F	A	N	F	N				L	K	P	G	S	T	Q	I	K	D	H	G	K	K	V	A	V	A	L	T	Q	A	V	N	H	L	D	D					
UniRef90_P18993	Q	R	Q	F	S	H	F	G	N	L	S	S	A	I	A	G	N	P	R	V	K	A	H	G	K	K	V	L	T	S	F	G	D	A	I	K	N	L	D	N				
UniRef90_Q95NK8	Q	K	L	F	S	F	A	S	V	P	Q	D	E	L	L	G	N	G	N	F	L	A	Q	A	Y	T	I	L	A	G	L	N	V	V	I	Q	S	L	G	S				
UniRef90_A7ICZ3	K	R	L	F														G	D	T	M	A	G	Q	G	K	L	F	A	A	L	D	L	V	S	A	S	L	R	H				
UniRef90_Q6VKX1	A	G	M	F	Y	F	L	K	D	Q	N	E	I	P	R	N	N	P	Q	L	R	S	H	V	V	K	V	F	T	M	T	C	E	S	A	A	Q	L	H	N				
UniRef90_Q7LZC2	Q	R	Y	F	G	Q	F	G	D	L	S	S	A	I	S	G	N	P	K	V	A	A	H	G	K	V	V	L	D	G	V	E	K	A	V	K	N	L	D	S				
UniRef90_P0C227	Q	S	Y	F	K	F	D	G	K	P	D	E	L	K	G	D	A	Q	L	A	T	H	A	S	Q	V	F	G	S	L	N	N	M	I	D	S	M	D	D					
UniRef90_R1EGH0	L	T	V	F	N	P	A	H	N	V	P	I	S	T	H	Q	P	E	A	L	A	S	V	C	A	Y	A	T	N	I	K							D	L					
UniRef90_P84203	R	L	Y	F	S	H	W	P				D	L	A	P	G	S	P	S	V	K	K	H	G	K	I	I	M	K															

	90	100	110	120
UniRef90_C7QCW0	P D S L V A	Y L R E L G R D H R K Y G A Q P E H Y D V V W R C L I S A L K H		
UniRef90_D3Q2U1	L D A V V P	A Y L K Q L G R D H R K Y G A V P R D N F Y P A V L G A M L L A T L E A T		
UniRef90_UPI0002C687E3		L K A T Y F A Q L S E L H C K L H V D P E N F R L L V G A N M I L T V L E A T		
UniRef90_E9HNB1	P G A L N G K	L V D L A N Q H R K Y G V T T R A H Y T D N M A T V L L G F L A A		
UniRef90_D2AV35	D S P D S L S S F L G Q L T G R D H R K Y G V I A E H Y T A V G N A L L A T V R R			
UniRef90_UPI00037DED22	P D T V A Q E M G Q L T Q S H V G L G V K P A E H Y T G P V K E A L L W T L S R			
UniRef90_P04443		L K E T F A H L S E L H C K L H A D P E N F K L L G N M L V I V L S S		
UniRef90_Q8JH84	L A G G L A A L S E L	R A F A K L R V D P A N F K L L A H N L V V I A M		
UniRef90_Q2KPA4	L K G T Y A K L S E L H C K L H V D P E N F R L L G N V L V C V L A R			
UniRef90_UPI000316497E	E H P A R F T G F L S Q L G R G H R K Y G T S P E N Q Y P V F G C L A A V S R			
UniRef90_Q45XJ0	L K G T F A D L S E L H C K L H V D P E N F R L L G N V L V I V L A R			
UniRef90_V5GLC7	P D M L V T I L S R V S E S H G P R K I T E K S F F D L K D T L I E			
UniRef90_UPI00045412ED		L D S T L S A L S D L H A K L R V D P I N F K L L A H C L I V V V A R		
UniRef90_E9D297	I Y E L I P K M E R L C Q K H C S V G V Q P H H Y K I M G A Y L L E A F T G			
UniRef90_A4FQN9	P D D L L P F L H Q L G R D H R K Y G V V S A H Y E A V G T A L L A S I K R			
UniRef90_W1RUG2	L E A L G G A V A R M V A R H V D T G V K P A E H Y P K V A A A L L P A I R D			
UniRef90_K1PR28	H S E F F N G I V E N I G R S H G Q R K I K P K M L E A W P S L N Y G I R K Q			
UniRef90_W5MMA8	I K A T F S K L S E L H E K L H V D P G N F R M L G E T L I I V L A A			
UniRef90_UPI0004660275	P S L A A Y L G H L G R D H R K F L A S P A L Y A A V G E S L I G A F A H			
UniRef90_P0C237		L K A G L S D L S E Q H F K L R V D P A N F K I L G N H C I M V V I S S		
UniRef90_I6ZW92	L K G T F S H L S E L H C K L H V D P E N F K L L G N V I V I V L A H			
UniRef90_F8TUD8	L P A L A G A L E R I A Q K H V G Y H I L P E H Y P F V A R A L L G A I E E			
UniRef90_P23740	I T D T L H D I S L V H A K L L V D P V N F E L L S H C L E V A L A A			
UniRef90_H2QA68	I N G A Q S L L R L G L R S Y I L L A D R V N F K L L S H C L L V T L A A			
UniRef90_Q3Y9L5		L V V A L S Q L S E L H F K L R V D P A N F K I L A S H N M M L V I A M		
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UniRef90_A4ZQ34		L P G S L S A L S D L H A K L R V E P A N F Q F F N K C L E V T L A R		
UniRef90_B1ZVJ7	A R L E R L Q P A L R R L G H R Q A A H G T R D E H Y A F S G A A L L W T L E K			
UniRef90_UPI00035943AF	Y D F V K Q L S K T G A S H V K Y G T K S T N F L A I K E P F L E A V R V			
UniRef90_UPI000368FE1D	G K L L G E Y L A G L G R G H R K Y G T L P A H Y P A V G C L E M A I A R			
UniRef90_UPI0003592FCB	K E K M V A L L H D L G Q R H M S Y N A T G I S R W L V G P Q F N N A I Q P			
UniRef90_UPI0003F0E70B		L P G A L S E R D L H H K L K V D P I N F S T F H G C L E V T L A R		
UniRef90_UPI0003835450	L S C L E E Y L C N L G K K H Q A V G V K V E S F S T V G E S L L Y M L E K			
UniRef90_V5H2Z2	P E M L V P I L S R I G E S H A P R R I D E K S F Q D L K E S V L E			
UniRef90_U17824	E E A L G K S M S R I A V A H I K W N V Q R N H V I H M I E P V L E V V K E			
UniRef90_UPI00038EF4A8		L P N A L S A L S E V L H A K L R V D P T N F Q F L V H C L L V T L A R		
UniRef90_P83479		L L G G L S A L S E V L H A K L A I D P T N F K L L S H C L L V T F A V		
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UniRef90_C3Y0P3	V D Y I Q L L K K I G Q M H A D L E L K P D D M W K L E Q P F L A A V A E			
UniRef90_M3YFH4		L K G A F A K L S E L H C K L H V D P E N F K L L G N V M V C V L A R		
UniRef90_V9ZVV7	L D A L S F I I R D L G R H Q K F K V Q S H Q F D L L K Q A L T L V L A R			
UniRef90_UPI00035A227A		L K G T F S T L S E L H C K L H V D P E N F R L L G N M I I A L S H		
UniRef90_W5LAN4		L P G A M S Q L S E L H Y K L R V D P S N F K I L A H N I I V V L G M		
UniRef90_P18436		L K D A F A H L S R L H C E L H V D P E N F R V T L G K R A V I V L A H		
UniRef90_Q7LZM6	I H G V A D L D L S D L H Y N L R V D P V N F N L L G K C L L V E L A T			
UniRef90_P18973	A H L D D L P S A L S A L S D L H Y K L R V D P V N F K L L S H C L L V T L A R			
UniRef90_UPI0003F134CF		L P G A L S V L S E L H Y K L R V D P V N F Q L L S H S L L V T L A R		
UniRef90_P18993	I K D T F A K L S E L H C K L H V D P T N F K L L G N V L V I V L A D			
UniRef90_Q95NK8	R E L L A N Q L N A L G G A H F S R G A T P V M F D E F G A I A M D V L A E			
UniRef90_A7ICZ3	L D K V V P V L E Q L A V R H V H Y G V R D A H Y A T V I G A A L I E T V S L			
UniRef90_Q6WKK1	G K V E A V G S T L K K M G A I H V K G V Q E S H F E V I K V A L K V K E			
UniRef90_Q7LZC2	I K A T Y T K L S Q L H S T L N V R D P D N F K L L G D C L T I V L S A			
UniRef90_P0C227	P D K M V G L L C K N A S D H I P R G N V R Q Q Q Y K			

	130	140	150
UniRef90_C7QCW0	Y A G A A W T P D M D A A W L A A Y Q L V A G T M M E A A E Q D A		
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UniRef90_UPI0002C687E3	H F S G K E F T P Q M Q A A W E K L T I G V A N A L A H K Y		
UniRef90_E9HNB1	T L G S A F T P E A K Q A W T S T M Q G L I N T V V E A S A		
UniRef90_D2AV35	F A A E L W T A E I E A A W V S A Y T V A A K L M I D S A E		
UniRef90_UPI00037DED22	G L G N D W N D D V K R A W K A Y D A I T P S M L I E		
UniRef90_P04443	Y F G K E F T A E A Q A A W Q K L V V G V A T A L S H K Y		
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UniRef90_UPI000316497E	W A P L S W D A A T Q S A W I S A Y T A I S Q T M I D A A E E A		
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UniRef90_UPI00045412ED	H C R G E F T P S A H A A M D K F L S K V A T V L T S K Y R		
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UniRef90_C3Y0P3	C L E D R Y T P K F Q E I Y S K L I T F I L E H V V N G F D P		
UniRef90_M3YFH4	H F G K E F T P Q V Q A V F Q K V L A G V A N A L A H K Y		
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UniRef90_UPI00035A227A	H L G K E F T P C A Q A A F Q K V V A G V A N S M		
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UniRef90_UPI0003F134CF	H Y P G D F S P T M H V S L D K F L S H V S A L V S K Y R		
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UniRef90_Q95NK8	E L G S A F N A E A K A A W T T A V R G L N A G I V K T L K		
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L T A E E K V T A L W N K V D V G K I G G E A L G R L L V V Y P W T
T E E E R R I V R G V W E K V D I D E I G T E L W A R A L I V Y P W I
M S S D S R I K E S F A L M A P E A D K A S A Y F Y G R L F A E Y H P Q L
L T E D D K N H I R A I W G H V D N N P E A F G V E A L T R L F L A Y P A T
T A E E K K Q L I A N C W S K V D I G Q I G G D A L A C L L C V Y P W T
F S D D E K K A I K D S W S G V Y S E Y E S T S S E I L I K F F V D N P S A
M D A R S L A L V R A D F R G V S E G P E R L I S A F Y G H L F A Q N P A L
L D A R T I S L V R T G F K S V A Q D G P A L L S R S F Y A H L F A E Y P D F
L T S D E V A A I K S S W S A V Y D K K K E S G V T L F V K L F T E N P S F
L T P R Q L E L I R F S W D L I Q K D M L V T G L E I Y A N F L K N E S E I
L S A H Q I R D V Q R S W E N I R S V R N T L V S S I M I K L F K E T P R I
A S V S A D E A A L V Q S T W N Q V K S N E V D I L Y A I F S A Y P D I
A L T E P Q K T A L K D S W K L L A G D G K T M G A L L F G L L F K S H P D T
M T D L D R R H I R E I W T A A F E N P E E N G R L V I I R F F S D Y P A S
S A E D L V L V R A S L A A V A F E A D R A M A H F H A L M F L R H P E L
A L S A A D R A A V R A L W R K L G S N V C I Y T T E A L E R T F A S F P A T
S L T N T E R T I K S M W G K I S T Q A D M T G T E T L E R L F Q S Y P Q T
S L S D K D K T F V K A F W G K I K G K A D D V G A E A L A R M F G A F P A T
S P E K M A I V N A T A P Q L K E Q A M A I T M S F Y Y S M K D V Y P E L
L N E S Q T A L V K Q S W P M I V S N G F W T S F Y T N L F K R S P S Y
L S D D E V K V I Q S I W S V M K D A N T H G M N F L K F F R E N T P F
M T D A E L E Q L R E S Y S K L K D E A V R D P A F F Y D A L F R H A P E L
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L N A R Q R H I V Q E T F K V L D E D A A K A G L T I Y A R L L C K Y P Q Y
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P L T K K Q K F I L T K N W K G I A R D V T E A G A N M F V K M L S E N T D Y
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S A Q D R S L V R K S F E S E R M D I D A F A T A F Y A K F F A A C P E V
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L T D H E K E L I A K I W D K M I P V A S D I G A E C L L R M M T T F P G T
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P L S S D Q Y S L V K S T W D Q V S H N E V D I L Y A I F K A Y P D I
K Q L I T G L L G K V N E C G G E A P G Q A A D R L P L D P E V
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1 10 20 30 40

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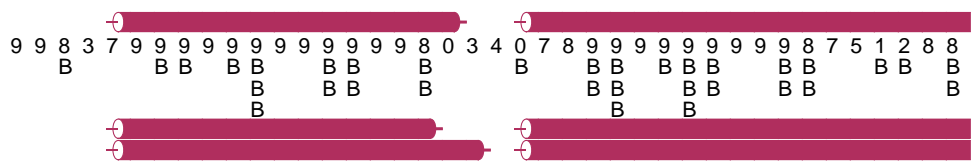
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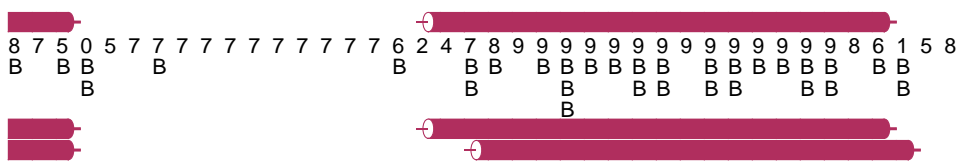


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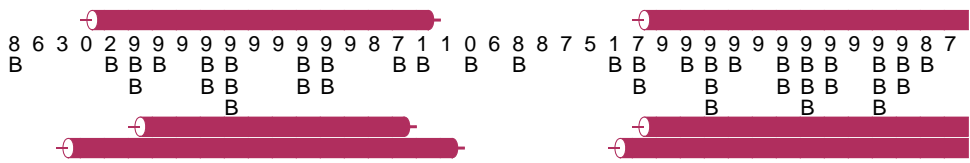
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