

QUERY	1	10	20	30	40
UniRef90_UPI0004785F3F	M P R L K V K L V K S P	G Y P K D Q K A A	L K A L G L R R L Q Q E R V L E D T		
UniRef90_UPI0003752D29	M A Q L K I T Y V K S A I	G Y A Q D Q R A T I	R S L R K L N Q S V I H Q D T		
UniRef90_UPI00037F03DD	M A K L Q V T L V R S L	G R P E T Q R K T V	N S L R K I N Q T V V H N D S		
UniRef90_UPI00047E47A5	M A K L K I T L V R S T	G R P D D Q I D T V	K A L G L R K L H S T V I K E D T		
UniRef90_R7RU89	M A K L K V T L V R S T	G K R P D H V A T V	V K A L G L R K L G H T V E H D D T		
UniRef90_UPI00035CB596	M A K L Q I T L V R S T	G R P E V Q R R T V	Q S L R K L N Q S V V K E D N		
UniRef90_UPI0004720598	M G K L R V T Q V R S T	G C T Q D Q I A T L	R K K I R S S Q K I H E D N		
UniRef90_C6D4M1	M A K L Q I T L V R S V	G R N E K Q R A T V	E S F G L L K K I H Q S V V L N D S		
UniRef90_H6RMR6	M A Q L K V T Q V K S A I	G T K P N Q R E T L	R S L G L L K K I N D S V V Q E D R		
UniRef90_UPI00036898B2	M A K V K V T L T R S L	G H P Q T Q R N T V	R S L G L L K K I N S V V E L P D N		
UniRef90_UPI00037C087E	M A K L A V T L K R S L	G R T Q D Q R D T V	K A L G L L R K L H Q T V E H D D D T		
UniRef90_A5USH1	M K I T Y R K S A I	G Y S R D Q K A T I	R S L G L L R R L N S V V I H D D T		
UniRef90_UPI000370EF6B	M A K L K I T L T R S L	G R P E N Q R V T	V K A L G L L R K L N S S V V E Q E D T		
UniRef90_R5B6N8	M A E L K I T L V K S T	G A D D Q Q A T V	K A L G L L R K T N S T V I K P D N		
UniRef90_UPI00031B713F	M A R L R I T L V K S P	G Y A Q D Q K D T A S R	S R L G L L K K M W R T V E F D D N		
UniRef90_UPI00037D4C88	M A Q L K I T L T K S P	G R K P E Q R K T A V	A L G L L G K L H S T V I K E D N		
UniRef90_A6W5V6	M A R L K V T Q I N S G	G R K Q N N Q R E T L	L R S L G L L H K I G Q S V V V K D D K		
UniRef90_H0UL86	M A K L Q I Q W K R S T	G R P D R Q D R T I R	T R A L G F T K L N S T V V H E D T		
UniRef90_UPI0003619C01	M Q V T L V R S P	G C P K D D Q K A T V	V K A M G L N K I G K T V V T L P D N		
UniRef90_A1TYL5	T I K V T L T R S P	G C Q P K H K L C V	K G L R K I G H T V E V E D T		
UniRef90_F3A8W4	T L L K V T L T R S T	G R P K N Q R K V	V E A L L G L L K K M H Q T V E H K D N		
UniRef90_D6THC6	M A K L R V K W V K S S	G Y A Q D Q K D T V	R A L G L L R K L H Q I V E H N D Q		
UniRef90_B9DM29	M A K L Q V T L T R S V	G R P E T Q R K T V	V E A L L G L L K T N S S V V L E D N		
UniRef90_R4Z221	M A K I K V T Q T R S S	G S K P K Q R G S L	R A L G L L G R I G K S S N V L E D T		
UniRef90_A6GCG2	M A K L K V T L V R S P	D R T K K Q K D T V	R V G L L R R M N H S V V L E D T		
UniRef90_U5C7N5	M A K I K I T Q L R S P	D R P K D Q K D T I	K A L G L L G K I N R R T V E V E N T		
UniRef90_UPI0003719DD8	M A Q L K I T Q S K S Y	G S K Q N H R D T L	T R L G L L H D S V V R D D S		
UniRef90_UPI0003B6563F	M K K L K I T L V R S R Y	G R T P N Q R E N L	K G L L K K I G Q T V V L R E D T		
UniRef90_UPI00037ECCD6	M A R L K V T Q L R S G	G G K Q N Q R E T L	L R T L G L L K R I N D E V V K E D R		
UniRef90_H9UD79	M K K L K I T L V R S P	G Y K Y D Q K D T V	R V R R L G L L R K M H Q T V I K D D T		
UniRef90_F2NTW7	M A K I R I T L V R S V	G Q K P A K R A T V	V R S L L G L L K K I N S S V E H E D T		
UniRef90_R6M4P7	M A Q V K I T L T R S L	G Y P K D Q R A T V	K A L G L L G K I R T S V V V K E D S		
UniRef90_UPI0004725034	M A K L K I T Q R K S A	G Y R Q S Q R D T L	L R S L L G L L K R T N D V V V Q E D R		
UniRef90_UPI0003F2E26A2	M A K I K V T K V R S V	K R P Q N Q K R T M E A L	G L L N K M G Q T V E H E D T		
UniRef90_UPI00035DFC39	M A K L Q I T L T R S L	G R P Q D Q R D T V	K A L G L L R K L H Q T V E K P D H		
UniRef90_R6HGB1	M Q K L K V T L T R S L	G Y P Q D Q R M T V	V K A L G L L G K I N S T A I K D D T		
UniRef90_R6ITQ9	M A T I K V T Q I G S P	G R P E K Q R A T L	L I G L L G L L N K M G K T V E L Q D T		
UniRef90_UPI00042879A5	M A K L Q I T L K R S L	G R P G N Q R A T I	Q S L G L L T K V N S T V V V K E D N		
UniRef90_I4EC54	T I L R I T Y V K S A	G Y T K D Q K E T I	R A L G F R R L N Q T V E R P D N		
UniRef90_H8FN20	M A T V K V T Q I H S P	G R P A D Q R A T L	V G L L N K M N R T N E L E D T		
UniRef90_Q2JFF8	M A K L R I T Q I R S G	G G T S N Q R A T T L	R T L G L L R K I N A T T V R D D R		
UniRef90_UPI000300A48E	M A K I K V T Q T K S A	G R P K H R A T T L	V G L L R K I N H S V V L E D T		
UniRef90_UPI00047085E4	M A K L C V T W V K S S	G Y A E D Q K R T L	R A L G L L H R L N Q S V V T H D D S		
UniRef90_E3CUM7	M A K L T I T W K H S A	G R P D R Q G L T	T I V A L G L L R K K I H Q T V T H E D T		
UniRef90_B0TC74	M A K L K I T W V K S A	G Y A K N Q K L T	V A T L G L L R K K I H Q S V V L H D D T		
UniRef90_W6RY33	M A N V K I T L V K S T	G R K K D H I A T V	N A L G L L R K I G H S V V V K E E T		
UniRef90_E3BBH1	M A Q L K V T Q I R S E	G G K P Q H R E T L	R S L L G L L R K I G H T V V V K E D R		
UniRef90_Q1R0F7	M A T I K V T Q T R S T	G I L E K H K A T M	M R G L L R R K I G H T V E H E A T		
UniRef90_UPI00047EBCB46	M A R I K V T Q V K S Q	G R L Q S Q K R T L	L E A L G L L R K M H Q T V E H E A T		
UniRef90_L0IH08	M A K L K V T L V R S T	G R E K S Q I D T V	R V A L G L L R K I G S S S V L D D T		
UniRef90_S7WXW1	M A K I Q I T Q I R S T	N R P K S Q K A T I	S A L G L L G K I N R T V E K E D T		
UniRef90_UPI00023786D9	M A Q K I T Q V R G L	G T K Q N Q R D T M	R M S L L G L L R K I R Q S V V R P D D		
UniRef90_Q2BLN4	M A K V K V T L V R S P	G T R P N H K L C V	K G L L R R I G H T V E V E D T		
UniRef90_D3L433	M S K I I R V T W K K S T	G R P E R Q R K S I	R A L G L L K K I N H S V V T H D D T		
UniRef90_UPI0003B3111A	M A R L L C I Q Q V R S A	G R K K D Q K K T L	I A L G I L T K V G R K V I H N D T		
UniRef90_Q1AU47	M S Q R V T Q V R S T	G A I E K H K R T V	R V A L G L L R R I R D S R V H R D T		
UniRef90_D6GQ54	M L K I T L K K S P	G T K P N Q R G T L	V A L G L L K K R H Q T V E K P D N		
UniRef90_M7P096	M A K L I I T Q V K S S	K R P A R Q K A T L	Q A L G L L R K L N Q T V E H E G T		
UniRef90_A0A010ZNQ5	M A K L R I T W K K S T	G R P P S Q E R I	I K A L G L L H R L I N E T V Y H N D S		
UniRef90_C7NKX2	M A T L K V T Q V R S A	G S K P Q H R E T L	R S L L G L L R K I G H T V E K P D R		
UniRef90_A0A031M3E6	A K I K V T L F K S V	G R L P S H K A S V	K G L L R R I G H T V E V E D T		
UniRef90_F8AA55	M A K L K I T L V R S K Y	G W S K K Q R G T I	I A A L G L L R R I R H T V V V K P D N		
UniRef90_UPI000365A17A	M E K V K V T L T R S L	G R P Q D Q R A T V	V R A L G L L T K I N H S V V V K E N S		
UniRef90_G9PH29	M A K L K I T Q V K S G	G G T H R Q R E T L	K S L L G L L R K I G H T V E R E D S		
UniRef90_UPI0004258760	M A K V K V T L T K S V	G K P Q T Q R E T V	T A L G L L R K M H Q T V E H E D T		
UniRef90_Q5E896	T I I K V T Q T K S S	G R L P K H I L C	G K G L L R R I I N H T V E V E D T		
UniRef90_G5JQF4	M A K I K I T L S K S P	G R K P E Q R K T V	V A L G L L G K I N S S V V R E D N		
UniRef90_B4RT46	M A T I K V K Q T K S A	G R L P K H K A T L	K G L L R R I I N H V R E L E D T		
UniRef90_C3JAI4	M S T I K I K Q V R S R	R R P K N Q K L T	L D A L G L L K K I N Q V V E H E D T		
UniRef90_UPI0003679D9D	M S Q L K I T Q K R G L	G R K P N H R E T M	R S L L G L L R K I G Q T V I R P D N		
UniRef90_H5SGY2	T I I R V T L V R S V	G T R Q D H R A T V	V R G L L R R I I N H T V E L P D T		
UniRef90_UPI00041C86CE	M A K L E I T L T R S T	G R P E G Q R Q T V	K A L G L L S K I I R Q T V V H E D T		
UniRef90_UPI00016C0052	M A K I K I T L I K S T	G A I P K H K K T V	V K A L G L L R K L I N S F N I H Q D N		
UniRef90_S2XHT9	M A K L Q V T L T K S V	G S K P D Q R K T	V E A L G L L R K M H Q T V E H A D N T		
UniRef90_D9SCT0	M A T I K V T Q L K S Q	G T K E S H R A T L	R G L L G L L R R I I N H T V E L E D T		
UniRef90_UPI0002DA8A6D	M A K L E I T L K R S V	G A N E K Q R K T V	T V E A L G L L K K I V N S T V V E H A D N T		
UniRef90_M4U315	M A T I K V T Q T K S A	G R L P K H R A C	T V E A L G L L K K I I G H T V E E L E D T		
UniRef90_R5Q1X8	M A K V S I T L K K S P	G C L P N Q R K T L	T K I N K T V E E L E N N		
UniRef90_G8X6G0	M A K I L V K Q V R S I	N C P Q D Q K R T M	K A L G L L R K M G Q V V E H E A T		
UniRef90_Q3Z963	M A K I K I T W V K S A	G Y K F D Q D A A T	M Q A L G L L R K I N Q S V V I Q D D S		
UniRef90_UPI0003B6D670	M A Q L K I T Q V K S T	G T L Q N M K D T L	R T L G L L R R I I G Q S V V V R E D T		
UniRef90_Q1YN04	M A K I K V T Q T K S V	G R L Q N H K A C	C V S G L L R R I I G H T V E V E D T		
UniRef90_UPI0004794109	Q L K I T Q T K S A	G G K Q N Q R D T L	L R S L G L L R R I I G H T V V R D A T		
UniRef90_UPI00036D2F7A	M A K V R V T L V K S L	G T K Q D H R A T V	V R G L L R R I I N H C V E L E D T		
UniRef90_C3P9S3	M A K L E I T L T R S V	G R P Q D Q R V	T V E A L G L L K K I N S T V V V K E E T		
UniRef90_UPI00028981A3	M A K L E I T L K R S L	G G T E P Q R A T L	R G L L G L L R R I I G H T V V V P D N		
UniRef90_Z9JVN2	M M Q L K I V T Q V R S T	G G T E P Q R A T L	R G L L G L L R R I I G H T V V V K E D R		
UniRef90_UPI00046CDAA1D	M S E L K I V T Q T R S L	N K T P K Q R A T I	Q S L G L L R R I I R H S V V L R P D T		
UniRef90_D1BP45	M A Q V K V T L T R S V	G R P E D Q R A T V	K A L G L L R R I I K T N S Q V V V K E V T		
UniRef90_F7FYX40	M A K L E I E L V K S P	G Y K P D Q R S T V	K A L G L L R R I I R D K V V V K D D T		
UniRef90_A0A024IH02	T V K V Q L V R S L	G C K E D H R A T A R G	G L G L L R R I I R K L I N S T S E L Q D T		

QUERY	R	G	N	V	E	K	V	A	H	L	V	R	V	E	V	E	V	
UniRef90_UPI0004785F3F	P	A	I	R	G	N	V	E	K	V	A	H	L	V	R	V	E	V
UniRef90_UPI0003752D29	P	V	I	R	G	M	I	F	K	V	A	H	L	V	K	V	E	V
UniRef90_UPI00037F03DD	P	A	I	R	G	M	V	N	Q	V	N	H	L	V	S	V	Q	E
UniRef90_UPI00047E47A5	A	A	I	R	G	M	V	N	K	I	D	H	L	V	S	V	Q	E
UniRef90_R7R89U9	P	V	I	R	G	M	V	N	K	V	I	Y	M	L	V	E	V	E
UniRef90_UPI00035CB596	A	A	I	R	G	M	I	N	H	V	S	H	L	V	Q	E	I	Q
UniRef90_UPI0004720598	P	T	I	R	G	M	V	Q	K	V	K	H	L	V	E	V	E	E
UniRef90_C6D4M1	P	A	V	R	G	M	V	N	A	V	S	H	L	I	K	V	E	E
UniRef90_H6RMR6	P	E	I	R	G	M	V	W	A	T	P	H	L	V	T	V	E	E
UniRef90_UPI00036898B2	P	A	I	R	G	Q	I	H	K	V	E	H	L	I	K	V	E	E
UniRef90_UPI00037C087E	P	A	I	R	G	M	I	N	K	V	S	H	L	V	E	V	E	E
UniRef90_A5USH1	P	T	I	R	G	M	V	F	K	V	R	S	L	V	S	V	E	E
UniRef90_UPI000370EF6B	A	V	I	R	G	M	V	W	H	E	H	L	V	T	V	E	E	E
UniRef90_R5B6N8	A	A	V	R	G	M	I	F	K	V	K	H	L	V	K	V	E	E
UniRef90_UPI00031B713F	P	S	I	R	G	M	V	H	K	I	R	H	L	V	R	V	E	E
UniRef90_UPI00037D4C88	P	A	V	R	G	M	V	T	A	I	S	H	L	T	V	E	E	E
UniRef90_A6W5V6	P	E	F	R	G	M	V	N	T	V	S	H	L	V	T	V	E	E
UniRef90_H0UL86	P	Q	I	R	G	M	V	Y	A	V	R	H	L	V	E	W	K	E
UniRef90_UPI0003619C01	P	S	V	R	G	M	I	R	K	V	A	H	L	V	R	W	Q	E
UniRef90_A1TYL5	P	S	I	R	G	M	V	N	R	V	Y	L	V	R	V	E	E	E
UniRef90_F3A8W4	A	A	I	R	G	M	I	N	K	V	S	H	L	V	T	V	E	E
UniRef90_D6THC6	P	A	V	R	G	M	V	R	K	V	N	H	L	V	Q	V	V	D
UniRef90_B9DM29	V	A	N	R	G	Q	I	N	K	V	S	H	L	V	T	V	V	D
UniRef90_R4Z221	P	D	A	R	G	Q	I	N	K	V	P	H	L	I	S	V	V	E
UniRef90_A6GCG2	P	S	I	R	G	M	V	R	K	V	Q	H	L	V	A	V	E	P
UniRef90_U5C7N5	A	S	L	R	G	M	I	H	K	V	A	H	L	V	E	V	V	D
UniRef90_UPI0003719DD8	P	Q	V	R	G	M	V	H	T	V	R	H	L	V	T	V	E	V
UniRef90_UPI0003B6563F	P	M	I	R	G	M	I	K	K	V	S	H	L	V	K	V	V	D
UniRef90_UPI00037ECCD6	P	E	I	R	G	M	I	N	T	V	R	H	L	V	K	V	E	E
UniRef90_H9UD79	P	Q	I	R	G	M	V	E	K	V	K	H	L	V	K	V	E	E
UniRef90_F2NTW7	A	S	I	R	G	M	A	A	A	V	S	H	L	V	K	V	E	I
UniRef90_R6M4P7	A	S	L	R	G	M	I	H	K	V	A	H	L	V	E	V	V	K
UniRef90_UPI0004725034	P	E	I	R	G	M	I	N	A	V	R	H	L	V	T	V	E	V
UniRef90_UPI0003FE26A2	P	S	I	L	G	M	I	N	K	V	N	H	L	V	S	V	E	V
UniRef90_UPI00035DFC39	P	S	I	R	G	M	I	K	K	V	S	H	L	V	T	V	K	E
UniRef90_R6HGB1	P	A	I	R	G	M	I	H	K	V	R	H	L	V	K	V	E	V
UniRef90_R6T1Q9	P	A	I	R	G	M	I	R	K	V	I	P	H	L	V	K	V	E
UniRef90_UPI00042879A5	A	A	I	R	G	M	V	N	Q	V	S	H	L	V	E	V	E	V
UniRef90_I4EC54	P	S	V	R	G	M	V	Q	K	V	Q	H	L	V	R	V	E	V
UniRef90_H8FN20	P	S	V	R	G	M	I	A	K	V	R	H	L	V	R	V	E	V
UniRef90_Q2JFF8	P	E	I	R	G	M	V	R	T	V	T	H	L	V	R	V	E	V
UniRef90_UPI000300A48E	A	C	V	R	G	M	V	H	K	V	A	Y	M	I	K	V	E	E
UniRef90_UPI00047085E4	V	S	I	R	G	M	V	N	K	V	R	H	L	V	K	V	E	V
UniRef90_E3CUM7	P	Q	I	R	G	M	V	R	A	V	E	H	L	V	E	V	E	E
UniRef90_B0TC74	P	A	I	R	G	M	V	R	T	V	N	H	L	V	T	V	E	V
UniRef90_W6RY33	P	Q	L	R	G	M	V	N	K	V	N	Y	L	V	T	V	V	D
UniRef90_E3BBH1	P	E	F	R	G	M	V	R	A	V	A	H	L	V	T	V	E	V
UniRef90_Q1R0F7	P	A	V	R	G	M	V	N	T	K	V	N	H	L	V	K	V	E
UniRef90_UPI00047EBC46	P	S	V	I	G	M	V	N	T	K	V	H	L	V	S	F	E	I
UniRef90_L0IH08	P	Q	V	R	G	M	V	N	K	V	K	H	L	V	S	A	E	V
UniRef90_S7WXW1	P	Q	L	Q	G	M	V	N	K	V	K	A	H	L	V	K	V	N
UniRef90_UPI00023786D9	S	N	V	R	G	M	V	N	A	V	R	H	L	V	T	V	E	V
UniRef90_Q2BLN4	P	S	V	R	G	M	V	N	K	V	N	Y	L	V	Q	V	E	V
UniRef90_D3L433	P	Q	I	R	G	M	V	R	A	V	E	H	L	V	D	W	E	V
UniRef90_UPI0003B3111A	P	Q	I	R	G	M	V	N	K	V	N	Y	L	V	V	S	E	I
UniRef90_Q1AU47	P	Q	I	R	G	M	V	N	K	V	I	S	H	L	E	V	E	V
UniRef90_D6GQ54	P	Q	I	R	G	M	V	N	K	V	A	K	H	L	V	R	V	E
UniRef90_M7P096	P	Q	I	L	G	M	V	N	K	V	G	H	L	V	S	Y	K	E
UniRef90_A0A010ZNQ5	P	Q	I	R	G	M	V	N	K	V	I	G	H	L	E	V	E	V
UniRef90_C7NKX2	P	E	I	R	G	M	V	N	K	V	K	S	T	L	V	T	M	E
UniRef90_A0A031M3E6	P	A	V	R	G	M	V	N	R	V	S	Y	M	V	R	V	E	V
UniRef90_F8AA55	P	C	O	I	R	G	M	E	K	V	K	H	L	V	K	V	E	D
UniRef90_UPI000365A17A	P	C	V	Q	R	G	M	H	K	V	I	R	H	L	V	K	V	E
UniRef90_G9PH29	P	T	V	R	G	M	V	A	T	V	A	H	L	V	T	V	E	V
UniRef90_UPI0004258760	P	Q	L	R	G	Q	I	A	K	V	G	H	L	V	T	V	E	V
UniRef90_Q5E896	P	C	T	R	G	M	V	N	K	V	Y	Y	M	V	K	V	E	E
UniRef90_G5JQF4	S	A	V	R	G	M	V	K	A	V	S	H	L	V	T	E	D	V
UniRef90_B4RT46	P	A	V	R	G	M	V	N	K	V	R	Y	M	V	E	I	V	E
UniRef90_C3JAI4	P	Q	I	R	G	M	V	A	K	V	S	H	L	V	E	V	E	V
UniRef90_UPI0003679D9D	P	M	V	R	G	Q	I	H	T	V	G	H	L	V	S	V	E	V
UniRef90_H5SGY2	P	Q	V	R	G	M	V	R	K	V	G	Y	L	V	K	V	E	V
UniRef90_UPI00041C86CE	P	A	I	R	G	M	A	D	K	V	S	H	L	V	T	Q	E	A
UniRef90_UPI00016C0052	A	A	V	R	G	M	R	Q	V	S	H	L	V	K	V	E	V	N
UniRef90_S2XHT9	A	A	I	R	G	M	V	G	K	V	A	H	L	V	S	V	K	E
UniRef90_D3SCT0	P	C	V	R	G	M	I	N	K	V	F	Y	L	V	K	V	E	V
UniRef90_UPI0002DA8A6D	P	A	I	R	G	M	L	N	K	V	S	H	L	V	S	V	K	E
UniRef90_M4U3I5	P	A	V	R	G	M	N	K	V	F	Y	M	V	K	V	E	V	E
UniRef90_R5Q1X8	P	T	T	Q	G	M	I	R	V	V	G	H	L	V	T	V	E	E
UniRef90_G8X6G0	P	A	I	L	G	M	V	N	K	V	K	H	L	V	S	S	E	T
UniRef90_Q3Z963	A	A	I	R	G	M	I	L	K	V	R	H	L	V	V	L	V	D
UniRef90_UPI0003B6D670	E	A	V	R	G	A	V	R	T	V	R	H	L	V	T	V	E	V
UniRef90_Q1YNU4	P	S	V	R	G	M	V	N	K	V	H	Y	L	V	Q	V	E	E
UniRef90_UPI0004794109	D	S	T	R	G	M	I	N	T	V	S	H	L	V	K	V	E	A
UniRef90_UPI00036D2F7A	P	A	V	R	G	M	I	H	K	V	A	Y	L	V	K	C	E	A
UniRef90_C3P9S3	P	A	I	L	G	M	I	N	K	V	S	H	L	V	K	T	E	E
UniRef90_UPI00028981A3	A	S	I	R	G	M	V	N	K	V	S	H	L	V	A	V	K	E
UniRef90_Z9JVN2	P	E	I	R	G	M	V	R	A	V	T	H	L	V	T	V	E	V
UniRef90_UPI00046CDA1D	P	D	T	R	G	M	I	A	L	V	D	H	M	V	D	V	E	V
UniRef90_D1BPA45	P	Q	I	E	G	M	V	H	K	V	R	H	L	V	K	V	E	V
UniRef90_F7YX40	P	Q	I	R	G	M	V	E	K	V	K	H	L	V	R	V	E	E

	1	10	20	30	40
UniRef90_D0WIZ1	T L R I K Q I K S S	G Y K Y D Q G Q T L R S L G L G K I N R V V E Q K D T			
UniRef90_UP100037A6699	M A Q L K V T Q V K S S	G A K R N Q R E S I R T L G L G K I H K T V V I R E D T			
UniRef90_I4ALV5	M A K I R I T T Q V R S S	K R P K K Q Q R L T L H A L G L G K M H Q T V E Q E D T			
UniRef90_H2BYR8	M G K I K V T Q V K S S	T Q T N Q K Q R T L E A L G L G K R R L N Q V V E H E N T			
UniRef90_K2G5A5	M A K L E V T L T R S V	G R P Q D Q K D T V K A L G L G K I R Q S V V E D N			
UniRef90_10WDV8	M A K I K V T Q V R S D	G R P Q T Q K R T L A S L G L G K I G Q V V E H E A T			
UniRef90_UP10003F63F86	M A R L K I T Q V K S V	G R P P K H R A T M Q T L G L G K R R Q T V V K D D R			
UniRef90_UP10002D6A17E	M A K L E I T L K R S V	G R P Q D Q R A T V Q T L G L G K R R K I H Q T V V H E D N			
UniRef90_U1MPS3	M S K L K I T Q I K S V	S E K Q Y Q R E T L R S L G L G K R R G Q S V E R E D N			
UniRef90_B2B147	M S Y F R I T L H R R S A	G L P Q R T R D V L S A L G L G K R R S Q T V Y H P V E			
UniRef90_U1WX20	M A K L Q I T L K R S L L	G R T Q N Q K A T V A A L G L G K R R L N H T V V K E D N			
UniRef90_U2EKX5	M A K L Q I T L K C S L L	G R L D S H I A T A K A L G L G K S V E K E D T			
UniRef90_UP10004704702	M A K I K I T Q I K S G I	D R P E R Q K L T L R A L G L G K L N A S K E V E A T			
UniRef90_R5QPH0	T I K V T Q I G S T I	G R P A S Q E A T L I G L G L G K M H K T V V L E D T			
UniRef90_V717Y7	M A T L K V T L K K S L I	A R K K D H I A T A K A L G L G K T G K T V E H N D T			
UniRef90_L1P6V3	M G K L R V T Q V K S S I	K R P K N Q N K L T L E A L G L G K I G V S V E H D A T			
UniRef90_UP1000422649A	M A N L K I T L V R G L V	V N R K P A Q R E T V R T L G L G K I N Q S V V I R E D S			
UniRef90_S0JLF1	M A K L K I T L V K S P I	G A V P K N R R K T V E A L G L G K L N H S V E M P D N			
UniRef90_F4KMQ4	M A K I K I E Q V R S R I	R C N K S Q K R T L D G L R K M H Q V V E H E D T			
UniRef90_E0QLN9	M A S L K V T L A R S V I	G T N P K Q R A T V K A M G L G K R E S F V I K E D T			
UniRef90_G2KQUS	V R V T Q I R R S A A	G R Y D Y Q E A T L K G L G K I N R S R E L E D T			
UniRef90_B2RLX4	M A K I K I Q Q V R S R I R	R C P K D Q K R T L D A L G L G K L N Q I V E H E A T			
UniRef90_K0J5Q3	M A K L E I T L V R S V I	G R T E T Q K Q T V K A L G L G K I N Q S V V C D D T			
UniRef90_K0AZM2	M A K I Q I K L T R S K I	G R S K K Q I A T I E A L G L G K I G Q T V E K E D T			
UniRef90_A4AM81	M A K I K V Q K Q L K S S I	G R P Q N Q K R T L E A L G L G K I G Q I V E H D A T			
UniRef90_L8XZC4	M S T I T V T L I K S T N G	R L Q S H K D C V R G L R R I S H T V E V K D T			
UniRef90_F7V4U4	M A K L K I T L V R S T I	G A K P K H K K K T V E A L G L G K L N K T V E L P D N			
UniRef90_I2EPP8	M A K V K I T Q V R S A I	G R P E V Q V R T I A A L G L G K I N R T V E K E L N			
UniRef90_W3ALX0	M A L K I T L V K S P I	G A I P Q K R A T V Q A L G L G K I R Q T V E L Q D N			
UniRef90_UP100036615D2	T V T T Q V G S P I	G R R A D Q R A T L I G L G L G K I H R T S T L E D T			
UniRef90_H6NS08	M A K L Q I T L K R S L I	G R P E T Q R R T V A A L G L G K L R R K I H Q T V T Q A D N			
UniRef90_Q3A9T4	K L K I T L V R S V I	G Q S E R Q R K A T V K S G L G L G K I N Q T V I K A D T			
UniRef90_R7IM35	T V K V T L V R S P I	G C K A D H R A T V R G L R R I R Q T R E L E D T			
UniRef90_F5RDB6	T L K V T L V R S L I	G R K Q D H R A T V R G L R R I H H T V V L E D T			
UniRef90_D5UW14	M A Q F K I T Q V R G T I	G T K Q N Q R D S L R T L G L G K I R K S V V I R E D T			
UniRef90_UP1000255D86E	M A K I K V T Q I K S R I	K C S Y K Q K R T L D A L G L G K I N R T V E H E D T			
UniRef90_UP100040A0F94	M A K L K V T Q V K G L T G C K Q N R E T I R T L G L G K I G D I V V K E D T				
UniRef90_U4TNF7	T L T V T Q T R S S I	G R L Q R H K D C L R G L R R M H H T V T V I D T			
UniRef90_S2WTB3	M A K L K I T R V R G D V	G R P E R Q R A T M R A L G L G K I N Q S V V L P D N			
UniRef90_I7L6B1	M A Q I K I T L T K S P I	G R L P A Q R T V K A L G L G K I S S S V I K E E S			
UniRef90_W0F040	M K K L K V T L V R S P I	D R P E R Q R K L T L K A L G L G K I N T N S S K E V E A T			
UniRef90_F8E290	M A L K I T Q T K G L I	G T K K N Q R D A V R T L G L G K R I G Q S V V L E D T			
UniRef90_D2PU65	M A R L K V T T Q R S G I	G G K Q N Q R D T L R T L G L G K R I G D V A V H D D R			
UniRef90_Q2RQX8	T V V T T Q I G S P I	G R R S D Q R A T L I G L G L G K M N R T R E L E D T			
UniRef90_F7UWC4	T L T R T Q V K S A I	G R P A D Q G K T L R A L G L G K I G R S V D Q V D N			
UniRef90_W7Z575	M A K L E I T L T R S L I	G R P S D Q R V T V N T L R A L G L G K M H Q T V T Q E D N			
UniRef90_A9B429	M R I T Y K K S S I	G Y S Q A Q K D T V R S L G L G K L N Q V V E L P D T			
UniRef90_F6D9F9	K L N V T L V R K S T I	G R L P N H I A C V K G L G L G K L H H T V S V I D T			
UniRef90_H1HT74	M A K L K I T L V R S P I	G A I P K Q R A T V A A L G L G K L M H K T V V M P D N			
UniRef90_H5SFZ2	M A K I R I T Q V R S V I	D C N E K H K R I L R A L G L G K P N Y T V V Q E A T			
UniRef90_C4FGP4	M A K L K I T L H H G L V	N R K P N Q R A T A Q T L G L G K I G Q T V V R E D T			
UniRef90_UP10003F75FD6	M A T I K I K Q V R S R I	N C P K D Q K K T L D A L G L G K I N R V V E H P D N			
UniRef90_M5DVA9	T V K V T Q T R S T I	G T K E H K R A T V R G L R R I G H T V E E L E D T			
UniRef90_S0K008	M A E L K I T L K R S V I	G P Q S Q R K T V Q A L G L G K I N S S V V K P A N			
UniRef90_Z4WUR8	M A Q I K I Q Q V R S Q I	K C P K V Q K L T L Q A L G L G K I N H T V E V E D T			
UniRef90_A0YGM1	M A K V K V T L L R S A N G	R L K A H R A S V A G L G L G K I G Q S V V R E D R			
UniRef90_UP1000373B2FD	M T N L R V T Q T K S V I	S E K Q N Q R D T L R T L G L G K I G Q S V V R E D R			
UniRef90_A6LEH3	M A T I K V K Q V K S R I	C P K D Q K R T L D A L G L G K I M N Q I V E H E A N			
UniRef90_I0IW61	M A K I K V K Q I G S P I	R R P E G Q R K T L I G L G L G K M H R V S E L E D T			
UniRef90_UP10003614D19	M A K I K V T L T K S L I	G K A E T Q R K T I A S L G L G K M H Q T V E H E N T			
UniRef90_R7KLU4	M A K I K V T L I K S P I	G T K A D H R A T L R G L G L G K M N Q T R E L E D T			
UniRef90_U7PU11	M S F F Q V T L N R S A I	G L P Q R T D R A L A A L G L G K R R R R N Q T V V H A V S			
UniRef90_UP100037A809F	M A Q L K V T Q I K G T I	G T K E S H K A S L R T L G L G K R R Q S V V R E D T			
UniRef90_B5JYC4	M A K I K V T Q I K S A I	G R L K N H Q A S L R G L R R M H Q T V E V I D T			
UniRef90_UP1000310AE36	M A K L K I T Q I K S R I	G S S A L Q K N L D A L G L G K R I N Q T V E H D D S			
UniRef90_D3QB96	M G R V V T Q R K S T I	G T K P N Q R A T R T L G L G K K I N D V T I K D D R			
UniRef90_Q250L4	M A K I K V T L V R S P I	G Y S E N Q R K V L K S L G L G K M G S S V V H D D T			
UniRef90_V6IVQ6	M A K L E I T L K R S V I	G R P E S Q R V T V R T L G L G K R R K T Y Q T V V Q D D N			
UniRef90_B8I7Z7	M A K L K I T L K R S T N K A V K S Q A T V K A L G L G K I Q Q T V E H D D N				
UniRef90_I3ZY79	M A K I K V T Q V R S A I	I N R S K R Q K A T L L A L G L G K R R Q T V V H Q D S			
UniRef90_D8K1A2	M A K I A V T W V R S D I	G Y R A D Q R K A T I A S L G L G K R R Q T V V H Q D S			
UniRef90_E3GH06	M A K L K I T L K K S I I	G R N Q R Q R K T I E A L G L G K K I G Q T V V H D D T			
UniRef90_UP1000478488A	M R L A I T Q R R R S T I	H R P S D Q R K A T I R A L G L G K R R R R N H R V V H Q D T			
UniRef90_J3CQE7	M A T I K V K Q V R S R I	G R T K T Q R K T L E A L G L G K F K K L H Q V V E H E A T			
UniRef90_L1MAA3	M A K I K Q Q T R S R I	G A P V D Q R K T L D A L G L G L T K L H Q V V E L E D N R			
UniRef90_H2J786	M A K L K I K L V R G R A	G G K N Y R Q L A T L D A L G L G L R R K T N Q V V V K E D R			
UniRef90_F9EEY4	M R I R V T Q V R S S I	G G T R R R Q R E T L R S L G L G L R R R R I R Q S V V R E D S			
UniRef90_C7R893	M A K M K V T Q T R S S I	G R L E S H K A S L R G L R R I G H T V E V E D T			
UniRef90_X1D345	M A L I R I R Q R K R S K I	G S S R K R Q K T L E A L G L G L R R K I N S S V E V E A T			
UniRef90_W0SBT6	M T I K V T L V R S V I	G T K Q D H R A T V R G L R R K R L N S S A V L E D T			
UniRef90_Q47LL1	M A K L K I T Q V R S K I	G G N R K R Q H A A L A S L R G L R R K M H R T R E L E D T			
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UniRef90_R5AUP1	M A Q I K I Q Q L K S R I	K C P A V Q R K T L D A L G L G L R R K M H R T R E L E D T			
UniRef90_UP10002E63EB6	M T V K V T Q T G S P I	G R K P G Q R E T L I G L G L R R K T I R K T V E P E A T			
UniRef90_A6LPS9	M A K L R I T L V R S P I	G R K K D H I A T A N A L G L G L R R K T I R Q S V E K E L N			
UniRef90_UP1000379CFC	M K V I T L V R S P I	G R K P A Q R R T V E A L G L G L R R K I N R H V E L N N T			
UniRef90_C4K7A0	M T I K V T L I R S R I	G R P K D Q K L T L Q A L G L G L R R N K I N R T V E V E N T			
UniRef90_UP100034D738B	M G K I A I T Q V R S S I	G R P Q N Q R D L V K G L G L G R G L G L G G K L H S S V I L P D N			
UniRef90_B2GDV1	M A K V K V T L I R S V T	H R Q P T Q R R T V K A L G L G L R R G L G L G G K L H S S V I L P D N			
UniRef90_E6XCH2	M A K V K V Q V R S G I	K K P L R Q R K T L E A L G L G L R R K L G Q V V E H E N T			
UniRef90_R6JF44	M A K L K I T L V R S P I	G A V P Q K R K A T V K A L G L G L R R K M H K T V V K E D R			
UniRef90_Q1WSA8	M D K L K V T L I R S V I	G R P Q N Q R D L V K G L G L G R V N S S V V V P D N			

50 60

UniRef90_D0WIZ1	P V I R G M I	F K V K H L V E V E E I	V Q
UniRef90_UPI00037A6699	P Q T R G L I	N V V R H L V S V E E E I	V Q
UniRef90_I4ALV5	P N I V G M V	K A V S H L V K V E E N V	
UniRef90_H2BYR8	P N I L G M V	D K V K H L V S V E E E T K	
UniRef90_K2G5A5	P A M R G M V	N K I S H L A D V K E V	
UniRef90_I0WDV8	P N I L G M V	N K V K H L V S V E E E V E	
UniRef90_UPI0003F63F86	P E F R G M V	H S V R H L V E V E E V E	
UniRef90_UPI0002D6A17E	V A V R G M I	N K V A H L V S V K E E I V Q	
UniRef90_U1MPS3	E Q N R G Y V	N T V R H L V K V E E I V D	
UniRef90_B2B147	P Q F A G M I	M K V K E L V K V A E V K E I V	
UniRef90_U1WX20	A A M R G M V	E K V K H M V E V K E E I V	
UniRef90_U2EKX5	P Q I R G M I	N K I N Y L L E V K V E E E L	
UniRef90_UPI0004704702	P Q I L G M I	E K V H H L V K V E E E L	
UniRef90_R5QPH0	P S V R G M I	K K V S H L V K V E E E V	
UniRef90_V717Y7	P Q V R G M I	K K I E Y L L S V E E E V	
UniRef90_L1P6V3	P S I V G M I	N K V K H L I S V E E E V K	
UniRef90_UPI000422649A	P A N R G L V	H A V R H L V T V E E E V D	
UniRef90_S0JLF1	A A V R G M I	R Q V N H L V K V E E E I	
UniRef90_F4KMQ4	P Q I R G M V	A K V H H L V Q V V E E V	
UniRef90_E0QLN9	P Q L R G M I	E K V K H L V K V E E E V	
UniRef90_G2KQU5	P S S V R G M I	N A V Q H L V K V E E D V	
UniRef90_B2RLX4	P S S I L G M V	N K V R H L V L I V E	
UniRef90_K0J5Q3	P S S V R G L I	N K V S H L V S V K E E L	
UniRef90_K0AZM2	P Q I R G M I	D K V S H M V Q V I E	
UniRef90_A4AM81	P N I L G M I	D K V K H L V S T E E	
UniRef90_L8XZC4	P E N R G M I	N K V S Y L L K V S E	
UniRef90_F7V4U4	A S T R G M V	Q Q V R H L V K V E E E I	
UniRef90_I2EPP8	P A L K G M I	N S V Q H L I V V E E	
UniRef90_W3ALX0	G A T R G M I	Q R V N H L V K V E E E I	
UniRef90_UPI00036615D2	P S V R G M I	A K V A H L L K V E E E I	
UniRef90_H6NS08	A A I R G M V	N Q V T T H L V E V K E I E	
UniRef90_Q3A9T4	P E I R G M I	N K V S H L L K V E E E I	
UniRef90_R7IM35	P A V R G M I	N K V S Y L V R A E E	
UniRef90_F5RDB6	P A V R G M V	T K V S Y L L K V E E E I	
UniRef90_D5UW14	P Q N R G L I	Q V V S H L V E V E E V	
UniRef90_UPI000255D86E	P N I L G M I	E K V K H L V K V E E E I	
UniRef90_UPI00040A0F94	P E F R G M V	K T V S H L V T V E E E V D	
UniRef90_U4TNF7	P C N R G M I	N K V S Y M L K V E E E I	
UniRef90_S2WTB3	K S N R G M V	R A V R H M V E V E E V D	
UniRef90_I7L6B1	P A I N G M V	T K I A H L V T V E E K V	
UniRef90_W0F040	P Q I L G M I	R K V E H M V T V E E E V N	
UniRef90_F8E290	P A V R G Q I	N A V R H M V Q V E E E V	
UniRef90_D2PU65	P E I R G M V	R T V R H L I T V E E E V D	
UniRef90_Q2RQX8	P A V R G M I	D K I A H L V R V E E D V	
UniRef90_F7UWC4	E C V R G M I	F K I K H L V T V E E E L	
UniRef90_W7Z575	V A I R G M V	N K V K H L V T V N E E I D	
UniRef90_A9B429	P V V R G M I	F K I K H L V T V E E E V	
UniRef90_F6D9F9	P E N R G M I	N K V S Y L L K V E E E I	
UniRef90_H1HT74	A A M R G M V	W R V R H L V R V E E E V E	
UniRef90_H5SFZ2	P Q I L G M V	A K V A H L L R V E E E I	
UniRef90_C4FGP4	P A V R G M V	N A L R H L V T V E E A D	
UniRef90_UPI0003F75FD6	L A I R G M V	A K V H H L V S I V E	
UniRef90_M5DVA9	P S V R G M I	N Q V Q Y M I K V E	
UniRef90_S0K008	D A I K G M V	N A V S H L V D V K E V	
UniRef90_Z4WUR8	P Q I R G M I	N A V K H L V R I V E	
UniRef90_A0YGM1	P S V R G M I	N Q V S Y L I R V E E	
UniRef90_UPI000373B2FD	P E V L G M I	R T V A H L V A V E E E V D	
UniRef90_A6LEH3	P A I L G M V	E K V K H L V S V E	
UniRef90_I0IW61	P E V R G M I	R K V H H L V E V V E	
UniRef90_UPI0003614D19	P Q I K G Q V	E K I N H L V T V E E E	
UniRef90_R7KLU4	P A V R G M I	T K V A Y L V R A E E	
UniRef90_U7PU11	P S S A G M I	F S V K E L V K V K E V	
UniRef90_UPI00037A809F	P Q V R G L I	H S V R H L V N V E E V K	
UniRef90_B5JYC4	P E N R G M I	N R V V A Y M V K V E E	
UniRef90_UPI000310AE36	A I L L G M V	E K V K H L V R I E E V K	
UniRef90_D3QB96	P E I R G M I	H T V R H L V A V E E V E	
UniRef90_Q250L4	S S I Q G M I	R K C A H L V A V E E N V	
UniRef90_V6IVQ6	P A I R G M I	N K V S H L L A V R E E I N	
UniRef90_B8I7Z7	P Q I R G M I	R K V S H L V C V E E E I	
UniRef90_I3ZY79	P V I R G M I	K K V E H M V T V E E E I	
UniRef90_D8K1A2	Q S V R G M I	Q K V R H L V E V A E A E	
UniRef90_E3GH06	P Q I R G M I	H K T D F M L D V E E E V	
UniRef90_UPI000478488A	P Q V R G M L	A K V K H L V S V E E E V	
UniRef90_J3CQE7	P S I L G M I	A A V S H L L E V Q	
UniRef90_L1MAA3	A C T R G M I	R K V H H L V T V V E E V E	
UniRef90_H2J786	P E I R G M I	R K V Q H L V T V E E E I E	
UniRef90_F9EEY4	A S V R G M I	A T V S H L V T V E E E	
UniRef90_C7R893	A S T R G M V	N K V Y Y M V S V E E E	
UniRef90_X1D345	P Q I L G M V	N K V K H L V Q V E E E I K	
UniRef90_W0SBT6	P A V R G M I	R K V A Y L V K C E E E	
UniRef90_Q47LL1	P E V R G Q I	N V V A H L V T V E E E V	
UniRef90_UPI000248E6C0	P S I L G M I	N K V Q H L V S V E E T I	
UniRef90_R5AUP1	P S V M G M V	N K V R H L V K V E E E	
UniRef90_UPI0002E63EB6	P A V R G M I	R K V A H L I K V E E E V	
UniRef90_A6LPS9	P Q V Q G M I	K K I E Y L L K V E E E E V	
UniRef90_UPI0003797CFC	P P L Q G M I	N R V S H L V E V E E E L K	
UniRef90_C4K7A0	P A I R G M L	N L V S Y M I K V E E E L L E	
UniRef90_UPI00034D738B	P Q I V G M V	N K V K H L T V K E E E L	
UniRef90_B2GDV1	A A T R G A I	F K V A H L V S I E E E V K	
UniRef90_E6XCH2	P S I M G M I	A K V N H L V S I E E E V	
UniRef90_R6JF44	G A V R G M V	A A V R H M V K V E E E V	
UniRef90_Q1WSA8	A A M R G A I	R K I N H L V D V E	

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UniRef90_E2MUP6	M A L K I T Q V R G T A G T K Q N Q K D S L R T L G L K R I I N D S A V R P D T				
UniRef90_B0VI13	K L K I V T Q T R S T I N R I E D H K K V I K A L G L G K I G K S R I H N D T				
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UniRef90_D7BCZ7	M A T I R V K L T K S P I G Y P K D Q K D A L K A L G L G I T K M H R E R E L P D N				
UniRef90_F3ZQ02	M A S I K I K Q I K S R I G A P K D Q K K T L D A L G L R K L N R V V E H E S T				
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UniRef90_UPI0003B6F7A9	T I K V T L V K S L I G R I E G H R A C A R G L G L R K K L N Q T V E V I D T				
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UniRef90_UPI0002FC19A1	M A K L K I T Q I K S T I G G K P Q H R E T I R T L G L K R L H H S V I R E D R				
UniRef90_F9WWF6	M A Y F R I T L L R S A I G L P E K T S G V L R A L G L R K R L T T V Y Q P V T				
UniRef90_F9ZAZ6	M A K I I K I T L V K S K I G S D K T Q V G T I Q A L G L K K T N S S V E K E A T				
UniRef90_F6GJY6	M A K I K V T K V K S A I N R T K R Q K L T L L A L G L K K V G Q T I E H E D T				
UniRef90_R5J310	M S K I Q I K V L V R S V I G T T P N Q R K N V E A L G L K K R E S V V V I K E D N				
UniRef90_UPI000464C1E2	M A K I K V T Q V R S T A G R L K K H Q A S V A G L G L R R I I G H T V E V E D T				
UniRef90_F8EX40	M A K I R I R L V R S T I G T L P A Q R A T V R S L G L R K I I G S T T E K E V N				
UniRef90_Q4K551	M A T V K V T L I K S M T G R I P N H K L C V K G L G L R R I I G H T V E V Q D T				
UniRef90_UPI00035FB95B	A T I K V T L V R S L I G R I E A H K A S V R G L G L R R I M H H T V E V L D T				
UniRef90_M7NUS3	A K L K V T L V K S T I G R I D K H K A C V T G L G L R R K T G S S A L V I D T				
UniRef90_UPI00046F5F69	T I V T V Q T G S P I R R T P Q E K N L I G L G L R K I M H R T V E V E D T				
UniRef90_UPI000369588D	T V S V T L V K S F Y G R L P K H R A T V T G L G L R K I I N H T V V L E D T				
UniRef90_UPI00037D9611	M A K V K V T Q I G S S P I R R T P Q E K N L I G L G L R K I M N R S R E H V D T				
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UniRef90_UPI000472808A	M A E Y K V K L V K S L I G R P Q N Q I K T A Y A L G L R R V V N S E V V K P Q N				
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UniRef90_K9EG54	M A K L K I T Q V K G T V G S N Q R Q K D N L L I T L G L R R I I G Q T V E R E D T				
UniRef90_L8JV59	M A K V R I S Q V R S T I G R P E R Q K R T I K A L G L G K I I D K S V E V E M T				
UniRef90_Q3B6E4	M A K L K I T Q V R S I I G G T K K Q K A T I Q A L G L G R P H Y T V E R K D N N				
UniRef90_UPI0002888275	M A K L A I T L T K S P I G A K P G Q K K T L E A L G L R R K M Q Q T V E Q A D N				
UniRef90_F2NMQ9	M G T I R V K L V K S P I G Y A K D Q K A T L R A L K L T K L N R E R E L P D N				
UniRef90_D8K7U5	T L L R V T L V R S T I G R L A R H K A C V A G L G L R R K I G Q T V E I I D T				
UniRef90_D1VTM6	M S T L K I K L V K S P I G P V H R T K I T K I L G L R K I I N N F S V L E N T				
UniRef90_UPI0002896EBD	M A K I K V T Q I R S R I G A Q K K Q I A C L S G L R K I V N S S V I K P D N				
UniRef90_UPI00024908B7	M A Q V K I T L I H S A A H R L P A H R A I V K A L G R V N S S V I K P D N				
UniRef90_G6EXL3	A T V K V T Q V A S A I G R Q K Y Q K Q T L V G L G L R R K R Q E N C F E D S				
UniRef90_A3DJ00	M A K L K I T L V R S I S K L N E S Q T A T V R A L G L R R G S C V E Q Q D T				
UniRef90_F8GHL4	T I K I V T L V K S P I G T K Q S H R A T V R G L G L R K I I N S F S I L N D T				
UniRef90_G2KVX4	M A Q L K I T L I H S A A H R L P K Q R K I I V E A L G L R R G R I V N S S V V R P D T				
UniRef90_L9PKQ0	M A T L K V Q L V K G L I G T K Q D H R A T V R G L G L R R V N S V R E L E D T				
UniRef90_UPI0003B410A2	M A Q V T V K Q T G S P I R R T K D Q R A T L L A A L G L R R K I R Q E N C F E D S				
UniRef90_UPI00037526CA	S T V K V T L L R R S V I G R P K N Q V E T V K A L G L R R K I G D S R E L A D T				
UniRef90_C8W7Y1	M A K L S I K L V R G A V G V K K D Q T A T V K A L G L R R K I G D T V E Q P D N				
UniRef90_R5XUL7	T V K V T Q V R S S I G H G K E Q I A T L K G L G L R N K V G R T S V L E D T				
UniRef90_K7S6W8	M S S I K V T Q I K S A N R A K A N Q K E S L R S L G L K H G D S V V V K E D R				
UniRef90_UPI0004720266	L R I T L L V K S A I G F S V T H K K T V R A L G F H R L H Q T V E H E D T				
UniRef90_UPI0002625BFE	Q L L E I T L T R S V I G R T E G Q R Q T V Q S L G L K K I R Q S S V V R E D T				
UniRef90_R9J2A1	M A K L K I T L V K S P I G A I P K H R K T V A A M G L L R R K I L N K T V E L P D N				
UniRef90_D7JGU5	M A K I K V T Q I K S R I K C P A V Q K Q R T L D A L G L L H K M N Q I V E H D D T				
UniRef90_S3YF76	M A E L K I V T Q V K S G I G E K P S A R A T L R A L G L L K R I I G D Q V S H A D R				
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UniRef90_E8RLM7	M A Q V T V K Q T G S P I R R T K D Q R A T L L A A L G L G N K M G R V S T L E D T				
UniRef90_A9DU41	M A K L V I K Q V G S P I R R P A K Q K A T L V G L G L N K M G R T R E L E D T				
UniRef90_W5XR79	M A L K I T Q V K G L V G T K P N H R K N I E A L G L G R R Y I G H S V I Q Q D T				
UniRef90_B8D9S9	M K N I K I T Q I K S A I G R L P K H K K T L I G L G L R R Y I G H T V I R E D T				
UniRef90_Q2RFR5	M A N L L R I T L V K S L I G R P E T E R K T A R A M G L L K K L H R Q V V I C P D T				
UniRef90_S6CDG2	T T L R L T Q V K S A I G R P N Q G R T L V R A L G L R R K I G S T T E Q V D N				
UniRef90_B9K8A4	K L L K I K L V K S P I G Y P W D Q K D T V K R L G L R R M N Q V V I K D D C				
UniRef90_W8F2L9	M A Q I Q I K L V K S V I D R P E R Q K R T V Q A L G L G K M G S T K S V E N T				
UniRef90_Q0AUJ8	M A K L K L T W T K S F I G C P E T Q R A T I V K S L G F K K L L Q Q S L I K E D C				
UniRef90_D3SCR8	M S K L K L T L V R S T A G R L K N H K A C V R G L R K T H S T S V I E A T				
UniRef90_Q0BYD2	M K V T V R Q V G S P I G P R K P E Q R Q T L Q G L G L N K I G R T S F L E D T				
UniRef90_R5NBV6	M A T I K V Q I K S R I G A P K D Q K R T L L D T L G L R R K I I N Q V V E V E D T				
UniRef90_A4BT30	Q F K V T L V R S P N G R L S R H K A C L A G L R R R I I H Q T V M V T D T				
UniRef90_H6L0M5	M K K V R I T Q I K S V I D R P K D Q K A T M V A L G L R R K I I N Q S S E Q V V T				
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UniRef90_Q1LTC0	M N I R I T Q T R S S I G C L P K H K A T L A G L R R G H A V E R Q D N				
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UniRef90_Q4FUD8	M K K M K V T Q F K S G A H R L K S H K A S L K G L R R R I I N H T V I V E D T				
UniRef90_R5FJ08	L K K I T L I K S T N S C L K N Q K A T V A A L G L K K I G S S K V H A D T				
UniRef90_E6U8H9	M A E L K I T L L K S L S G R K A S H I A T A H A L G L R K I R D E V T Q P D N				
UniRef90_K1ZL74	Q L K I T Q V K S Y I G R P E A Q R R V L R G L G L G K V H K T V L L N D T				
UniRef90_U5N7V1	M L K V K L V R S V I G C R A D H R A T V R G L R K L Q S T K V L Q D T				
UniRef90_G4ML81	M S Y F A I R L H R S A I G L P E R T R G V L A A L G L R R G M T V F H P V S				
UniRef90_H1G725	L K K I T L I K S R H G R L K S H Q A C L R G L R R I I H N P V V V K D T				
UniRef90UPI0003731195	K I K V T L L V R S V I G T K D H R D T I R G L G L R K I I N S T S V L V D T				
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UniRef90_U2WU92	M A K L E I T L K S F I G K K D G Q L I A T C K A L G L G Q S V V R E D N				
UniRef90_UPI000255F28A	M A K V T V E Q I G S P I G R P Q D Q R A T L V G L G L N K I L H R R K T L E D T				
UniRef90_D0KXJ0	A T L A I T Q V K S V I G G K Q N Q R D T L R S L G L K R I G H T V T R K A D				
UniRef90_G8QRK6	A M I R V K L I R S T I G R L A S H K A C L V K G L R R R I M H E V E V M D T				
UniRef90_UPI000362B7C9	S T L V I T Q K K S P I G R K S D Q K K T L I G L R K I G R S S K V L N D T				
UniRef90_E8Q5Z5	I K I T Q I K S S I G C V L K H A T L R G L R R I I G S T V S K M D T				
UniRef90_D7N711	M A D V K I T Q V R S P I G R I E T H K R T V R A L G L R K I I G Q V V E K E D N				
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50 60

UniRef90_C4GC14	A A V R G M V R H V A H L V K V E E
UniRef90_E2MUP6	P A V R G L V N V V R H L V E V E E V
UniRef90_B0VI13	P S I R G M I N K V A Y L L K V E E E V
UniRef90_R7PB38	P V L R G M I R K V R H L V T V T E
UniRef90_D7BCZ7	P A V R G N L R K V T H L V T I V E A K
UniRef90_F3ZQ02	P S I L G M V E K V K H L V T I V E
UniRef90_W9YG65	P S V A G Q I M K V K E L V A V S E V D
UniRef90_A7HBN6	P Q T M G M I A K V S Y L V E W E R V D
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UniRef90_F3KYC1	P S T R G M I N K V A Y M V K V E E E
UniRef90_UPI0002FC19A1	P E V R G M V N A V R H L V K C E E V D
UniRef90_F9WWF6	P S I A G Q V F A V K E L V D V Q E E V D
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UniRef90_UPI00035FB95B	P E N R G M I N A V S Y L L K V E E
UniRef90_M7NUS3	P E N R G M I N K I S Y M L R V E E V
UniRef90_UPI00046F5F69	P S I R G M I R K V Q H L V Q V K E
UniRef90_UPI000369588D	P E V R G M I N K V S Y L L K V E E
UniRef90_UPI00037D9611	P E I R G M I K K V A H L L K V E E V
UniRef90_A9WH84	P S V R G M L F K V Q H L V
UniRef90_UPI000472808A	D A V K G M I N T I S H L V T V E E V
UniRef90_G5ZX93	P A V R G M I N K V K H L V R V E E
UniRef90_K9EG54	P V V R G S L R V V A H L V E V E E V
UniRef90_L8JV59	P Q I A G M V N K V S H L V S V T E L
UniRef90_Q3B6E4	P C T R G Q I R V V Q H L V K V E E V
UniRef90_UPI0002888275	A A V R G Q I A K V A H L V T V T E
UniRef90_F2NMQ9	P A I R G M I R K V Q H L V K I V E E V K
UniRef90_D8K7U5	P E N R G M I Q K V S Y L L K L E E
UniRef90_D1VTM6	P Q I R G M I K Q V E Y M L E V E E
UniRef90_UPI0002896EBD	P A V R G M I K K V S H L V R I E
UniRef90_UPI00024908B7	E A T R G A I F K I A H L V S I E E V K
UniRef90_G6EXL3	P A V Q G M I N K V R H L V K V E E
UniRef90_A3DJ00	P Q I R G M I K K V E H V L S V E E I
UniRef90_F8GHL4	P E I R G M V N K I N Y L V K C E
UniRef90_G2KVX4	A A T R G A L F K I A H L I K V E Q V K
UniRef90_L9PKQ0	P A V R G M I N K V S Y L V K V
UniRef90_UPI0003B410A2	P V V R G M I N K V K H L V E V
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UniRef90_C8W7Y1	P S I R G M I F K V K H L V E V E E
UniRef90_R5XUL7	P A V R G M I N K V A H L I K V E E
UniRef90_K7S6W8	P E F R G M A N T V R H L V T V E E V D
UniRef90_UPI0004720266	P A I L R G M L S K V N H L V K I E E V K
UniRef90_UPI0002625BFE	P A I L R G M I D K I S H L V T V K E V
UniRef90_R9J2A1	A S T R G Q I Q Q I R H L V K V E E
UniRef90_D7JGU5	P S I M G M I H K V H H L V K I
UniRef90_S3YF76	P E I R G M V R A V R H L V V L E E V K
UniRef90_UPI00046E9D33	P Q I A G M I A K V N H L V S V K E I
UniRef90_E8RLM7	P S V R G M I A K V A H L I E I V E
UniRef90_A9DU41	P S V R G M I N K V S H M V E I V E E E K
UniRef90_W5XR79	P I I R G M A N K V R H L V T V E E V
UniRef90_B8D9S9	P S I Q G M V K K I S Y I L K I Q E
UniRef90_Q2RFR5	P V T R G Q V Q K L A H L V R V E S I E
UniRef90_S6CDG2	E S V R G M I F T V K H L I E V E E I
UniRef90_B9K8A4	P Q I R G M I R K V R H L
UniRef90_W8F2L9	P Q V A G M I N A V K H L L E V T E L
UniRef90_Q0AUJ8	P Q I R G Q I S K V Q H L L M V E E E L
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UniRef90_Q0BYD2	P A V R G M I R K V S H L V E V
UniRef90_R5NBV6	P S T R G M V Q K L H H L V I V
UniRef90_A4BT30	P Q N R G M I R K V S Y M L K V E E
UniRef90_H6L0M5	P Q V A G M I N K V K H L L K V E E E L
UniRef90_FORJV6	P A I R G M I R K V E H L L E V Q
UniRef90_UPI00037C25B5	P Q I M G M V A K I K H L V R V E D V K
UniRef90_X8IPN4	S A T R G A I A K V S H L L D V E E E L
UniRef90_UPI00036663F8	P E V R G Q I T I V S H L V S V E E V
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UniRef90_UPI0004716DC5	P S T R G M A N K V Y Y M I Q V E E
UniRef90_Q4FUD8	P S T R G M V N R V N Y L V K V E E E
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UniRef90_UPI0003731195	P E V R G M I R K V D Y L L S V S E
UniRef90_I0HZJ4	E A V R G M I G T I A H L V E I V E
UniRef90_UPI0003B34D0F	D A I T G M V N T I A H L V D V E E V K
UniRef90_F0GV54	K A T R G M I K K V S F M V D V N E L N
UniRef90_U2WU92	P A V R G M I A K V S H L V R I V E
UniRef90_UPI000255F28A	Q V T V G M V N T V P H L V T V E E V N
UniRef90_D0KXJ0	P E N R G M I N K I E Y L L E V Q E
UniRef90_G8QRK6	P S T L G M V R V V A H L V K V E E
UniRef90_UPI000362B7C9	P S I R G M I N K V K H L V E I
UniRef90_E8Q5Z5	P S V R G M I N T I A Y M V K V E
UniRef90_D7N711	P Q I R G M I K Q V S Y M L E V E E
UniRef90_B1MGC4	A Q T R G L Q V V A H L V T V E D V K
UniRef90_UPI0003B30699	P E I R G M V K S V A H L V V V E E V E
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UniRef90_D1NVB9	M A K L	K I T L V V H G V C G A N P K Q R A T V Q T L A L G L H K I G Q S T I R E D N			
UniRef90_F5SID2	M A K L	K I T L V V H G V C G A N P K Q R A T V Q T L A L G L H K I G Q S T I R E D N			
UniRef90_UP100047C11DB	M A K I	K V T Q V K S K I G A T S R Q K K T L E A L G L H K I G Q S T I R E D N			
UniRef90_Q04G68	M A D L	K I T L I K S I V H R E P R Q R E I A K S L G L H K I G Q S T I R E D N			
UniRef90_K5ZIA2	K I R I	T Q L G S G F G R K P G Q Q A T L V G L G L H K I G R T V E L N A T			
UniRef90_R7IFG3	L K V	T L I K S P I A S P V H K A T V A A L R K V G Q T V L K P D N			
UniRef90_B6BV60	M A K I	K V T Q V K S T I G A G K K H I A T I K G L G L R K I N H T V E L V D S			
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UniRef90_H3NP50	M A K L	E I T L T K S T I G R L D K H I K T V E A L G L R K M L S S T V K E A N S			
UniRef90_U7D6W2	M A K I	K I T K T K S D I G S S Q R Q K D T L K A L G L G R M L S S T V K E N S			
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UniRef90_UP10003706C27	K L S	V T M L K S K F G R L P S H Q A C L H G L K K I N Q T V E V L N T			
UniRef90_UP1000409B921	M A L	K I T Q T R G T A G T K Q K Q D S L R S L G L K R I H Q S V V R P D T			
UniRef90_UP10003B65DA2	M A T I	K V Q T Q T G S P I R R T K D Q R A T L V G L N K M H K V S E L E D T			
UniRef90_A9KJH6	M A K L	K I T L T K S T I G A L P K H K L T V S A L G L G K L H S T N E V P D N			
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UniRef90_C0Q9V5	K L K L	K V T Q V R S A I G R L K S H K A C L R G L R R M H K P V Y V Q A T			
UniRef90_I2F3A9	M A K L	R I R L I K S P I G Y N R Q R Q L K T V K A L G L G K L D S E I V Q P D S T			
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UniRef90_Q0ANR8	M A K I	K V R Q T G S A I R R P K D Q R A T L V G L N K I G R E R E L E D T			
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UniRef90_U7UDX7	L K I	L V V K S P I G K M E S H K R T V K A L G L R R L H Q S V V R P D D N			
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UniRef90_W0EUA5	M E K I	K I K Q V K S R I N C P A V Q K K T L D A L G L R R L H Q S V V R P D D N			
UniRef90_UP10004681F0B	K I K V	T L V V K S L I G T K R S H R A T A R G L G L R R L H Q S V V R P D D N			
UniRef90_R7K6I1	K I V	V T L V K S T I G C L K V Q R Q T V E A L G L R R L H Q S V V R P D D N			
UniRef90_V5WFH6	K I V	I T L V K S P I G R G R K P R H R A T V E A L G L R R L H Q S V V R P D D N			
UniRef90_UP1000363B8AB	M A S I	K I T L K S S V I G R R A S Q V A T V K A L G L R R L H Q S V V R P D D N			
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UniRef90_UP100036ACCA8	M P R L	K V T Q I R S K V G N K P E L R D T L R S L G L R R L H Q S V V R P D D N			
UniRef90_D6ZDR6	M S E L	K V T Q I R S T I G R P A K H G R I I R S L G L R R L H Q S V V R P D D N			
UniRef90_I5B4B5	K I K I	T Q I R S T I G R P A K H G R I I R S L G L R R L H Q S V V R P D D N			
UniRef90_UP10002D5CF06	A N L R	I K Q V R S R V V G Q K Q N M R D T L R S L G L R R L H Q S V V R P D D N			
UniRef90_L0H011	M K V T	L M R S P N G R L A S H K A C V Q G L R R L H Q S V V R P D D N			
UniRef90_E4TU04	M A K I	K V T Q T R S V I G R P K D Q K L T I Q A L G L R R L H Q S V V R P D D N			
UniRef90_I0R283	A R L K	V T Q L K S S N G G K Q N Q R D S L R T L G L R R L H Q S V V R P D D N			
UniRef90_G7EB04	F K V	T L T R S P I G L P E R T K L S L K T L G L R R L H Q S V V R P D D N			
UniRef90_K1LEE8	M A N L E I	T L K R S S L I G R K K N Q V E T A K A L G L R R L H Q S V V R P D D N			
UniRef90_UP1000382E85D	Q I K V	K V L V R S V I G T R E D H R A T V R G L R R L H Q S V V R P D D N			
UniRef90_R5WF12	L K V	T L V K S T A G S L K E H Q A T V V A A L G L R R L H Q S V V R P D D N			
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UniRef90_A8MLF8	M A K V S I	K L T K S S V I G T K P N Q R K T V E A L G L R R L H Q S V V R P D D N			
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UniRef90_UP10002D6C115	K L K	T L V V K S T I G R K P C H V Q I A K Q L G L R R L H Q S V V R P D D N			
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UniRef90_UP1000374336D	M T Q L K	V T Q V K V S S I G A K H K Q K E S L R T L G L R R L H Q S V V R P D D N			
UniRef90_TOMS12	M A K I	K I T Q I K S S V I D R S E R Q K K T I E A L G L R R L H Q S V V R P D D N			
UniRef90_UP100037E3D33	Q I A V	T Q I K S S S I G R L K K H K S C L A G L R R L H Q S V V R P D D N			
UniRef90_E6W728	A K K V	K V T Q V K S S I G R P E K Q R R V V K S L G L R R L H Q S S S I V E N V			
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UniRef90_W4LUM9	I I K V	L V V R S S M I G R P E K H R A T V V L R G L R R L H Q S V V R P D D N			
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UniRef90_UP100036E2A8	Q V K	V V R S K I G Y A V D V Q K A T L R G L R R L H Q S V V R P D D N			
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UniRef90_D3QZ83	M S K L K	I T L I V K S S I G N K A Q D F Q V R T V R A L G L R R L H Q S V V R P D D N			
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UniRef90_R5BLR7	M A K L K I	T Q V K S S I G S T K R Q I A N L T S L G L R R L H Q S V V R P D D N			
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UniRef90_D8TL09	V T L	R R G F A G T P W F H R R L D A L G L R R L H Q S V V R P D D N			
UniRef90_Q0AIH8	I I K I	T L V V K S S I G A K R H R L L I Q G M G L R R L H Q S V V R P D D N			
UniRef90_V6KMV9	M T R L R I	T Q T R S V I G T K Q H R D T L R T L G L R R L H Q S V V R P D D N			

50 60

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UniRef90_D1NVB9	S Q T R G L I	Q V V R H L V T V E E
UniRef90_F5SID2	P A I R G M I	E K V K H L V E V K E
UniRef90_UPI00047C11DB	P Q I L G M V	D K V K H L L S V E
UniRef90_Q04G68	A A T R G I	F K I A H L V S V E
UniRef90_K5ZIA2	P E V L G M V	N K V K H L L K V E E
UniRef90_R7IFG3	A A V R G Q I	F A V K H M V K V E E
UniRef90_B6BV60	P E V R G M I	N S V N Y L L R V E E
UniRef90_H2CAP4	P A V A G M I	R K V S Y M L K V E E
UniRef90_H3NP50	P A I L G M V	K S I D F M L K V K E
UniRef90_U7D6W2	D C L R G M V	N K V S H L V S V E E
UniRef90_R5HBS5	A S T R G M I	Q K V G Y M L K V E E
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UniRef90_UPI000409B921	P V V R G Q I	L V V R H M V E V E E
UniRef90_UPI0003B65DA2	E S V R G M I	R K V Q H M V E V L E
UniRef90_A9KJH6	V A I R G M L	K Q V K H L V M V E E
UniRef90_M2PNP9	V Y V Q G Q I	N T V R H L V T V E E
UniRef90_UPI000409ED57	A A N Y G M I	N K V A Y L L E V E E
UniRef90_C0Q9V5	P A I M G M V	K K I P H L V T V E E
UniRef90_I2F3A9	P Q I R G M V	N S I R H L L A V E E
UniRef90_F9VLX9	P Q I L G M V	N K V K F L L N I I E
UniRef90_UPI0003B35C2D	P Y I R G M I	K K I S F M V E V E E
UniRef90_A0A031FWM3	A Q T R G Y I	K T V A H L V K V E E
UniRef90_UPI00035E9DED	A A V R G Q I	Q V V S H L V Q V E E
UniRef90_B8ELE5	P A I R G M I	A K V A H L V R V V E
UniRef90_X4QY25	A A I R G Q I	R K V A H L V E V E E
UniRef90_Q0ANR8	P S V R G M I	A K V S H M V E I V E
UniRef90_Q605D0	P E I L G M I	S K V S Y L L K V E E
UniRef90_B0U0X1	P E N R G M A	N K I Y Y M V K I E
UniRef90_L1M9C2	S Q V R G W I	N V V R H L V D V E E
UniRef90_U7UDX7	P Q I R G M I	K K I D Y M L E V T E
UniRef90_UPI0004272521	D A I N G M I	N T I S H L V L I E E
UniRef90_W0EUA5	P Q I L G M V	E K V K H L V K V V E
UniRef90_UPI0004681F0B	P A V R G M I	N N I Y Y L V K S E
UniRef90_R7K6I1	D A V R G M I	F R V K H L V T V E E
UniRef90_V5WFH6	P M I Q G M I	N T V D Y L L E V E E
UniRef90_UPI000363B8AB	P A I R G M V	K T V Q H M L E V E
UniRef90_Q1NPL6	P E I R G M V	A K V R H L V D V E E
UniRef90_UPI00036ACCA8	P E I R G M V	H A V R H M I T V E E
UniRef90_D6ZDR6	A Q N R G L L	Q V V R H L V V E P A D
UniRef90_I5B4B5	P V I M G Q V	K K V S H L V K V E E
UniRef90_UPI0002D5CF06	A A T A G M I	N T V S H L V E V E E A E
UniRef90_L0H011	P C T R G M V	N K V S Y M V K I L E
UniRef90_E4TU04	P Q I E G M L	R K V D H L V N V T E
UniRef90_I0R283	K S N R G L V	N T V A H L V K V E E I D
UniRef90_G7EB04	P E F A G M I	L K V K E L V T V E N V
UniRef90_K1LEE8	D S I R G M I	S V I S H L V E V K E
UniRef90_UPI000382E85D	P A V R G M I	R K V D Y L V R V
UniRef90_R5WF12	A A M R G M I	F K V K H L V T V E E
UniRef90_D1PZJ9	P G N M G M V	R K V H H L V E I
UniRef90_A0A011QVM9	E F T R G A I	K H I A H L V D V K E V
UniRef90_D7A971	P A V R G M I	Y K V R H L V R V V E
UniRef90_R7JJ51	V I I K G M L	E R V K H L V T I E E
UniRef90_A8MLF8	P Q L R G M I	D V V Q H L V E V K E I
UniRef90_UPI00037076CB	A A T R G Q I	L K V R H L V T V E E
UniRef90_J1FKK2	P Q I A G M I	N K V H N L V E V K D I
UniRef90_UPI0002D6C115	P C I R G L I	N S I Y Y L V Q V E E
UniRef90_H9UGN0	P A I Q G M I	D S V S F M V N V E E
UniRef90_I3C865	P N I L G M V	K K V E H L V S F E E
UniRef90_UPI000374336D	P Q N R G L I	N A V R H L V V V E
UniRef90_TOMS12	P A I I G M V	R K V N H L V A I S T I V
UniRef90_UPI00037E3D33	P A V R G M V	Q A V E Y M L R V E E
UniRef90_E6W728	P T M A G Q I	R K V Q H L I K V E E
UniRef90_V2Y877	E A T R G M I	K Q V A Y L L K V E E
UniRef90_X5DPL5	P I V R G Q I	N T V R H L V Q V E E
UniRef90_C2GGM0	A S V R G M I	R V V D H M V E V E E
UniRef90_R5EQL5	T Q T R G K I	A K I G Y L L Q V T E V E
UniRef90_E1YG71	P S I R G M I	G K V S H L V K A E E
UniRef90_E3H909	P D I V G K V	H L V S Y L L N V E E
UniRef90_UPI00035FB100	S A I A G V V	N K V K H L V K I E E I V
UniRef90_S3L449	P S V L G M V	A S V S H L V K V E E
UniRef90_W4LUM9	P Q T R G M I	Q K V S Y M V R V E
UniRef90_R5LTJ8	D A T K G M I	A Q V R H L V K V E E
UniRef90_V1CLK8	P V T R G A V	N K V P H L L T L E E I V
UniRef90_M1MUZ4	P A V R G M V	H V V R H L V T V E E
UniRef90_UPI00035C725F	P A V R G M I	A K V A H L V R I V E
UniRef90_C5WCS3	P A I R G M V	K L I S Y M V E V R E
UniRef90_UPI00036BEFD9	Q Q L R G Y V	R A V A H L V K V R E E I N
UniRef90_I4CE79	A A I R G M I	D K V S H L V Q V E E
UniRef90_Q6AP52	P E I R G M L	N K V K H L V R I D E
UniRef90_UPI00036E2A8	P A I L R G M I	N K V R H L V R I L E
UniRef90_R6ITH7	A A T R G K I	R K L A H L V E T S E V E
UniRef90_D3QZ83	A A I R G M V	T R I A H M V K C E E
UniRef90_U4L6P9	P D I A G K I	M K V K E L V T V S E T E
UniRef90_K4IR87	S S L M G M V	N K V K H L V S V Q E I N
UniRef90_Q4UMR1	N S I K G M V	E K V K H L L K I E E N
UniRef90_R5BLR7	P V T E G Q I	A K I R H L V E V E E I
UniRef90_F2IIQ8	P Q I L G M I	K K V E H L V Q V
UniRef90_D8TL09	P S I R G M L	S K V P H L V I I E
UniRef90_Q0AIH8	P S T R G M I	N K T A Y L L K V E E
UniRef90_V6KMV9	P E V V G M V	H T V R H L V T V E E V D

	1	10	20	30	40
UniRef90_Q8D1Z4	M N K L K I T Q I K S S I G C L K K H K S T L Y G L R H I G H T V I R Q N S				
UniRef90_S8A9H2	M S F F K V T L I R S G I G M P E K K L G V L K A L R K R M R T V F H K I T				
UniRef90_W8VVW6	M A K L H V K K V R S A I N R T A R Q K K T L E A L G L R K M N Q V V E H D D S				
UniRef90_TOLHN4	M A K L K I K Q I K S S A I G Y S Q R E K N T I K A L G I K R L Q Q E V I R P N N				
UniRef90_A1ALV9	T L K I T L V K S L I G T P K Q Q R N V V A G L L K K L N T T V V R S D T				
UniRef90_X3Y134	M A K I K I T Q T R S A I G R I P K H K A T L L G L L R R I G H T V E R E D T				
UniRef90_R7HCN8	M A K L R I T L V K S P I S A I G R I P K H K A T L L G L L R R I G H T V E R E D T				
UniRef90_F0RS35	K I K V T L I K G L S G R L P N Q R K I V K G L L R R V N S S E V V R K Q C				
UniRef90_UPI00037E9F81	M T D L K V T L I R S V A H R L P N Q R K I V K G L L R R V N S S E V V R K Q C				
UniRef90_N1ZQS3	M K V K L I K S K I G C T P K H K A T L L G L L R R I R Q V H E L P D N				
UniRef90_F3YWP7	T V T V K L V K S I A G T K E S H R A T V R G L L R R M H Q S A V V I D T				
UniRef90_UPI00046F71D4	M A K L K V T L I K S V H G R L A A H Q A C V R G L L R R M H Q S A V V I D T				
UniRef90_W6M8A5	T I H I S Q F K S G S G Y R F D Q K A T L I G L L R R M H Q S A V V I D T				
UniRef90_UPI00037307EF	K L R V T L V K S K Y G R K P G H R E C I E G L L R R M H Q T V E V T D T				
UniRef90_B6J5F0	K L Q L T M T K S K H G R L A S H Q A C V R G L L R R M H Q T V E V T D T				
UniRef90_G4STK0	M K I K L V R S V I G R P G N Q V K T V Q A L R K I G D S R E V S D T				
UniRef90_Q9RSL0	K L E I T L T R S V I G G S D V Q K K T V Q A L R K I R Q S V V R E D T				
UniRef90_W9BFL8	T L R V Q Q I G S P I R R R H D Q R E T L V G L L R R M N H S V E V L D T				
UniRef90_J5PP7	M S S L K I K L V K G R A G K D K R Q L A T L D A L D L R R M N H S V E V L D T				
UniRef90_UPI000255D536	M A T L K V R L V K S P I G Y P K D Q K V A L K V L T K M N R V R E I Q D N				
UniRef90_A6RAW6	M A K L E I T Q S K S T I G A T P A H R E T V R S L L R R M N H S V E V L D T				
UniRef90_F2IU5	M T Y F R I T L I R S A I G L P R R T T G V L M A L L R R M Q T V F Y P V T				
UniRef90_F8JG3	T I T V E Q I G S P L R R P Q D Q R A T L I G L L N K M H R R S T L K D T				
UniRef90_T0ZZB7	T I T L K Q V R S P N R R P E R Q A E T L I G L L N K L G R T S T L E D T				
UniRef90_A9BG00	T F R V T L T K S P I G A I K S H R D C V R G L L R R M N H S V E V L D T				
UniRef90_D3PN24	M S S L K I K L V K G R A G K D K R Q L A T L D A L D L R R M N H S V E V L D T				
UniRef90_Q5X841	M A T L K V R L V K S P I G Y P K D Q K V A L K V L T K M N R V R E I Q D N				
UniRef90_C7JSF7	M A K I K I T L V K S T I G R K P K H V A I A K Q L G G L R K I G R E R V L E D T				
UniRef90_K2BTS9	T F K V V Q I A S G N G R K P G Q Q A T L I G L L R K I G S E T I Q P D N				
UniRef90_B0PCU4	M A Q L K I K L V K S L V G R K P G Q Q A T L I G L L R K I G R E R A L P D R				
UniRef90_C7M2Z0	M A Q L R I V Q V R S A I G A K P E H R G T L R A L G G L R K I G R E R A L P D R				
UniRef90_C9RR16	M K K V R I T L I K G I V R R L P V H R A N V A A L G G L R K I G Q T V E H N L T				
UniRef90_M7NWK6	M G Y F K I T L Q R S S I G L P K N I K R T L L S G G L R K I R Q E K T F E D N				
UniRef90_Q38US9	M A K L K I T L R K S A I A H R L P E Q R K M M V K E F G G L R K I R Q S V V V N D T				
UniRef90_K2BTS9	K L K V T L I H S I Y G R K P T H A E C V R G L L R K I R Q S V V V N D T				
UniRef90_UPI00016DAF88	M K T I I T Q I K S S Q I G R P E T Q R R T V R A L L G L L T R R M H Q T V E Q N D V				
UniRef90_Q057C2	M K I K V T L I K S K F G R L R N H Q Q C L S A L R K I I H Q S C I V E D T				
UniRef90_G9ZCR1	A S L R I T L K R S P I G T P Y K H R L V L R G L L R K I L N A T V L R P A S				
UniRef90_D8PCX0	M P Y F K I T Q L R S A I A M P Q Y K D T L F K L G L G K R G K I S F R K V N				
UniRef90_Q30Z60	M E T I K I K I L I K S P I G R T S K H V A T V K S M G F S K V G Q V L E K Q D T				
UniRef90_C4R475	M P Y F K I T Q L R S A I A M P Q Y K D T L F K L G L G K R G K I S F R K V N				
UniRef90_F9MT64	K L K I T L I K S P I G A V P K H V A T V K S M G F S K V G Q V L E K Q D T				
UniRef90_UPI00047C01C3	M A K I I V K Q V R K S S I K K P L R Q K Q T L A A L G G L R K I I G Q E V S H D A S				
UniRef90_C0BMB4	M K I T L T R S A I G A T P K Q R K V L E A L G G L R S I R Q T K I Y P D N				
UniRef90_S7UR21	M S Y F R I T L I R S G I G L T K R T Q G V L K A L G G L R T R M K T V F Y P V S				
UniRef90_K1XLE4	A K L A I T Q V K S I I G G S Q V Q R D V V R S L G G L R K I I G H T V V R T A D				
UniRef90_E1VY48	M A K V K I T L V R G L I A G K S K R K K A T L E A L G G L R K R G A S T V K E L N				
UniRef90_E8T4B3	M A K K L K I T Q I K S R I G Y S R K A K A T L D A L G G L R K L M N K S V I L E A N				
UniRef90_UPI0000F89843	M A K T L K I T Q I K S R I G Y S R K A K A T L D A L G G L R K L M D V R E V K D S				
UniRef90_Z9JJ51	T L K I T Q V G S P I R R P S N H R L S V R A L G G L R K I N R V V E L Q D T				
UniRef90_F1ZBA7	M A T I K I K Q V G S P I R R P S N H R L S V R A L G G L R K I N R V V E L Q D T				
UniRef90_R4X7E3	M P Y L K V T L M R S A I G L P K T N L V L A S L G G L R K R M Q S V F H T V S				
UniRef90_UPI0003B58D0B	R V V V Q Q T R S A I G R T E D Q H A T L R G L L G R V N R K R E L E D T				
UniRef90_E4T7B3	M A T I K I K Q V G S P I K S P V Q K L T E A L G G L R K I M N A V V E H E A T				
UniRef90_M1LQW5	M Q L K I K Q L L R S T I G T R K D H R D T I R G L L R K I N V S I S I L N D T				
UniRef90_J4KSW4	T I K I K L I K S S G I G R M K S H H K L C I K G L G F K K L N Q T V A V Q D T				
UniRef90_UPI000344DF45	M E Q I R I T Q V R S L I G C K Q S H H R E T V R G L L R R M N S E R V L E D T				
UniRef90_K0P014	M E Q I R I T Q V R S L I G C K Q S H H R E T V R G L L R R M N S E R V L E D T				
UniRef90_UPI000464E56C	T L T V E Q I G S P I R R P D A Q R A T L V G L L R G R V N R K R E L E D T				
UniRef90_UPI000380D2C7	T V R V T Q I A S V I G S K P G Q A E T I K G L G L R G I G S F R V L E D T				
UniRef90_J7Q861	Q I V V E Q I G S P I G R P E R Q R R T T L L G L L T R I I G R R R A L E D T				
UniRef90_C0BGD7	M A Q I K V K Q V K S S I K R I Q V Q K R T L E A L G G L R G K E V I H E S T				
UniRef90_A9UP79	M A Q I K V R L V R S P I R R P E S I R N T L K A L G G L H R R N Q T V I H K N T				
UniRef90_UPI0003B54CE1	T I V V K Q I R S A A R R P A I Q T A T L K G G L N K M N R T R E L E D T				
UniRef90_D4LD89	M A K Q I T L V K S S I I G R K Q D Q I D T A H S L G G L K K I G D S T V Q P D N				
UniRef90_U6E1A8	K L K I T L T K S L I A C R S N S Q I K T A H S L G G L K K I I N S Q V I K D D N				
UniRef90_D4YHS5	M T E V K I T L K R S L I G R P Q D Q I K T A Q A L T K V G K T V V K T R N T				
UniRef90_K2FEN9	M A Q I K V K Q V K S S I K R I Q V Q K R T L E A L G G L N K I G R T R E L Q D T				
UniRef90_UPI00036E10B6	T L K V K Q T G S P I R R P A D Q L A T L K G G L N K V G R V R E L E D T				
UniRef90_UPI000362C600	Q I K I T L I R S L I A K R L P N H Q A C V H G L L R R M H Q T V T I A A T				
UniRef90_R5N168	M A N L E V K L V K S L I I G S K K D Q I A T A S S L G G L R K I G D K A T Q P D N				
UniRef90_A7TTJ9	M A F Y K I T L T R S L I G L P Q A T R N I V K T I G K R G S I V Y R E V T				
UniRef90_R6Y0V3	T V T I K L V K S P I T H P K N Q R E T T L K A L G G L S K I I G Q T V T K V D N				
UniRef90_A3WVT8	M A K I K V E Q T G S P I R R H H S Q R S T L V G G L N K I G R T A E L Q D T				
UniRef90_E8UBW2	M K I T L K R S V I I G R K Q D Q V E T V K A L G G L H R R N Q T V I H K N T				
UniRef90_G2XSL1	S Y F R I T L T R S A I G L P K K K S S R V L K F L G G L H K R T S S V Y H P V C				
UniRef90_K4INB6	Q I K I T L V K G V A H A T D R Q K E N V R S L G G L H K I G Q S V L R E D T				
UniRef90_UPI00036E4F89	M A K I K V R Q T G S P I R R K P E Q R A T L V G G L N K V G R E S E L L Q N T				
UniRef90_A1B045	M A K I V K V Q I G S P I R R P A L Q R E T L K A L G G L N M N R T R E L E D T				
UniRef90_B2A4F7	K L K I V T L K R G L I I G V S D G K I R T I K A L G G L K K R S H S V I K N D T				
UniRef90_R7GRK6	K V V I T L V K S P I I G G K E N Q K A T L K A L G G L N K M H A S V E K Y E T				
UniRef90_UPI00035C20B2	A E V K V T L K K S P I I G R A A Y F G K V L K G G L N K L Q Q T V C L K D T				
UniRef90_U5T518	T V V R S F A N R V A S H H K A C L A G G L R R M H H S V V V A D T				
UniRef90_UPI0003B56FD5	M A K K I T L V K S L I I G R L Q K H K D T A A S L G G L R K I G D S T V Q P D N				
UniRef90_A8Q858	M A K R I T L R R S A I G L P K H T G R V I E A L G G L R K R L Q S V Y H R Q S				
UniRef90_UPI00036EA523	M A K V K I T Q V V S S I K K T D K Q K K V L A S L G G L G K I N A T V I E Q E L T				
UniRef90_R7G684	A K K V K V T L V K S T I A C L P K Q K A V C E A L G G L H K I N Q S K V F T D N				
UniRef90_A0A017TDM6	S R L R V K Q H A S T I G R P E A V R K V V K G L G G L R G P G S E V E V A N T				
UniRef90_R5YG31	M A D V Q V K V L V K S L I I G S K K D Q I A T A H A L G G L H K I G D V S V Q P N N				
UniRef90_X0S3L1	M T K L K I T W R K S A I I G Y A N Q R R T I R A L G G L R R R L Q Q V V E H S D S S				
UniRef90_G7W9Y5	M A Y F R I T L M R S P I I G M P A K T Q G V L K A L G G L G K V G S S A V V H E D S S				
UniRef90_R0KCR3	M A Y F R I T L M R S P I I G M P A K T Q G V L K A L G G L G K V G S S A V V H E D S S				
UniRef90_K2E7C4	Q L K V T L V K S T N K K L K S H H K A C V H G G L R R I G Q T V E L E N N				

50 60

UniRef90_Q8D1Z4	P R L G M I	N S I S Y L V K I K
UniRef90_S8A9H2	P S T A G Q L	M K V K E L I A V
UniRef90_W8VW6	L A V L G M I	A K V A H L V S V E
UniRef90_TOLHN4	P Q I K G M V	A K V R H L L Q V E E V K
UniRef90_A1ALV9	P E I R G M I	N K I S H M L H I
UniRef90_X3Y134	P A V R G M V	X X X X X X X K V E E
UniRef90_R7HCN8	A S T R G Q I	Q Q I G Y M L K V E E □
UniRef90_F0RS35	P A N L G M V	R V V A H L V K V E E
UniRef90_UPI00037E9F81	P E I M G M I	K K I P H L L K V E E □ D
UniRef90_N1ZQS3	A A T R G A L	M K I A H L I S V E E □ N
UniRef90_F3YWP7	G A T R G M I	M Q V A H L V K V V T E
UniRef90_UPI00046F71D4	P A V R G M I	N K V S Y L V K V Q E
UniRef90_W6M8A5	P E N R G M I	R K V S Y L L K V Q E
UniRef90_UPI00037307EF	P A V R G M I	R K V C H L V H I Q E
UniRef90_B6J5F0	P A N R G M I	E K V S Y L L M I D E
UniRef90_G4STK0	P E N R G M I	N K V S Y M L R V E E □
UniRef90_Q9RSL0	P A V R G M V	K T V K H L L E V Q E
UniRef90_W9BFL8	D A V R G M V	N K V S H L V A V K E □
UniRef90_J5PPP7	P S V Q G M I	S K V H H L V R V L E R E
UniRef90_UPI000255D536	A V T V G M L	N S V S K H L V T V E E A K
UniRef90_A6RAW6	P D V A G Q I	M K V K E L V S V R E V E
UniRef90_F2IU5	P E V R G M I	N K I P H L V R I V E
UniRef90_F8JIG3	P A V R G M I	K K V Q H L V Q V E E
UniRef90_T0ZZB7	P E N R G M A	A S V H H L V R S E
UniRef90_A9BG00	P Q L R G M I	R T V H H L V E W E E □ D
UniRef90_D3PN24	P A M R G Q I	R K V A H L V E V L E
UniRef90_Q5X841	P A I R G L V	N E I N Y L L L V E E
UniRef90_C7JFS7	P S V R G M V	R K V A H L V K V E
UniRef90_B0PCU4	G A T K G K I	A K I S H L V E V
UniRef90_C7M2Z0	P E I R G M L	A R V A H L V V V R E E E
UniRef90_C9RR16	P S I Q G M I	N A V K D M V K V E E □ I
UniRef90_M7NWK6	P V T A G K I	K V K E L V S V E E V D
UniRef90_Q38US9	A A T R G V I	F K L A H L V T V E E E I K
UniRef90_K2BTS9	P S I R G L I	E K V S Y L L T V E E V
UniRef90_UPI00016DAF88	P Q I R G M V	N R I R H L V K V E E
UniRef90_Q057C2	A A I R G M I	K K V Y Y M I S I K
UniRef90_G9ZCR1	L S N R G L I	N K I S Y L L K I E E
UniRef90_D8PCX0	D Q V K G M I	A K V G Y L L E V
UniRef90_Q30Z60	A V V R G M I	A K V V H L V E V T E
UniRef90_C4R475	P Q Q A G M L	A T V K E L V K V E
UniRef90_F9MT64	P Q V R G M I	N A I D Y M V E I E
UniRef90_UPI00047C01C3	S A T R G Q I	Q Q I R H M V K V E D A E
UniRef90_C0BMB4	P A V I G M I	N K V K H L V S T T E
UniRef90_S7UR21	D A M R G M V	K H V A H L V E V Q E
UniRef90_K1XLE4	P E V A G Q I	M K V K E L V S V R E □ D
UniRef90_E1VY48	P V T V G M V	N K V P H L L K V E E A K
UniRef90_E8T4B3	P A I E G M I	E K V K E L V K V E P V E
UniRef90_UPI0000F89843	D A I V G M I	K K I D Y L V K V E E E V
UniRef90_Z9JJ51	P Q V R G L I	K K V H Y L V R V Q
UniRef90_F1ZBA7	A E V R G A I	A K L P H L V A V
UniRef90_R4X7E3	P Q T A G M V	L K V K E L V H V E Q V N
UniRef90_UPI0003B58D0B	P A V R G M I	G K V R H L V R V V E
UniRef90_E4T7B3	P Q I L G M V	A K V K H L V E V
UniRef90_M1LQW5	P E V R G M V	R K V N Y L I D V S D □
UniRef90_J4KSW4	P S N R G M I	N K I S D M V E I Q
UniRef90_UPI000344DF45	P A V R G M I	N K I A Y L V Q V
UniRef90_K0P014	P Q I W G M V	R K V N H L V V T E K □
UniRef90_UPI000464E56C	P S V R G M I	A K V Q H L V R V
UniRef90_UPI000380D2C7	S A V R G M I	R K V S H L L K V E
UniRef90_J7Q861	P A V R G M I	A K V A H L V K V D A K
UniRef90_C0BGD7	P S I L G M I	A K V Q H L V I V T E
UniRef90_A9UP79	S A V N G Q L I	A K V L H L V D V R P V
UniRef90_UPI0003B54CE1	P S I R G M V	S K I S H L V E I I E
UniRef90_D4LD89	V Q T E G K I	N K I S H L I E V Q
UniRef90_U6E1A8	P A I H G M I	K T I N H L I T V Q K V
UniRef90_D4YHS5	E A I N G M I	T K I A H L V V V E E
UniRef90_K2FEN9	P A V R G M I	E K V K M V K V E E
UniRef90_UPI00036E10B6	P S V R G M V	S K V S H M V Q I E V E
UniRef90_UPI000362C600	P E N M G M V	N K V A Y M L R V E E V
UniRef90_R5N168	P Q T Q G K I	K K I S H L I E V E
UniRef90_A7TTJ9	P S I A G S L	A K V K E L V S V E E
UniRef90_R6Y0V3	A A I R G M I	R T V S H L V T V V E
UniRef90_A3WVT8	P E I R G M I	A K V R H I V R V
UniRef90_E8UBW2	P A V R G M V	E K V K H L E V T E
UniRef90_G2XSL1	S D I A G Q I	M K V K E L V E V E E T K
UniRef90_K4INB6	P V Y R G M A	D K V R H L V N V E E A D
UniRef90_UPI00036E4F89	P S V Q G M I	A K V S H L I E V V E
UniRef90_A1B045	P A V R G M V	A K I P H L V I I E E
UniRef90_B2A4F7	P E I R G M I	D K V S N L V E V E E □ E
UniRef90_R7GRK6	E T I K G M I	N A V R H L V K V E E
UniRef90_UPI00035C20B2	P E I R G M I	R K V E H M V V V E
UniRef90_U5T518	P E N R G M I	N K V S Y M L S V E E V
UniRef90_UPI0003B56FD5	A Q T A G K I	A Q I G Y L C K V T D A E
UniRef90_A8Q858	P D I A G M V	L A V K E L V H V E N V
UniRef90_UPI00036EA523	P S I K G M I	N K V N H L V V V S E
UniRef90_R7G684	A S L Q G Q L I	A L V A H L V K V E E
UniRef90_A0A017TDM6	P S F R G M I	K K V L H L V T V E E V
UniRef90_R5YG31	P Q T L G K V	K K I Q H L I A V T E
UniRef90_X0S3L1	P V V R G M I	L R V R H L V E
UniRef90_G7W9Y5	P G I L G M I	H K C M H L V T V E
UniRef90_R0KCR3	Q A V A G Q I	M R I K E L V D V K E V E
UniRef90_K2E7C4	P A I C G M V	Y K V N Y L L K V E K I

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UniRef90_S9P3F8	M A	K V K L T K S A A G S S V Q D Q A T I A S L G L G K K F G S E R R L L Q D T			
UniRef90_E4UDX3	K I	T V K Q V G S P I R R P S V Q R R I L V G L N K M N R Y C R V L E D T			
UniRef90_R7R2Z1	L L	K V T L V R S T I G A V P K N K K T I E A L G L G K K V V N K S V E L P D N			
UniRef90_E6YW21	T V T I	E Q I R S S I R K P Q V Q R A T L K G L G L N K M H R R R V L E D T			
UniRef90_E7GG26	K V I I	T L V K S P I G A K K N Q K D T L K A L G L T K M N K S V E K V N N			
UniRef90_W5X814	L R I	L R I K L V K S P I G H N P R L Q A T I Q A L G L R K V V N S V V E H D D N			
UniRef90_R6IXZ4	M A D I	R I K L T K S L I G S K Q D Q I A T A H S L G L R K I G N E T V Q P Q N N			
UniRef90_Q8L908	L Y I	T L V R G L P G T R K L H R R T L E A M G L G L R R C H R T V L H S S N N			
UniRef90UPI0004756D18		S P I R R P A D Q R A T L V G L G L N K M H R R R T L E D T			
UniRef90_E4KMQ4	M A N L	E I K L T K S L F G R P K N Q V D T A T K S L G L T R P N R V V V K A D S			
UniRef90UPI000401CCC9	M A Q I	T I K Q V K S L I D R P Q R K L T M K A L G L G K L N K S V T V E I D S			
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UniRef90UPI0003B5A2C9	A T I K	Q Y F R S K I A T P E K H K L V V K G L G F T R L L N Q V V R E D T			
UniRef90_S5DYN1	K V R I	T L K R S L I G Q K P K A R E T V R S L G L K K I N S Y T E R E I N			
UniRef90_B81SA3	M A T L	R V Q O I G S P I R R E A S Q R Q T L I G L G L K K I R Q E K T F E D R			
UniRef90UPI00037B063E	L L K V	K L I R S K C G N K P K Q V A T L D A L G L R K I G Q S T V R P D S			
UniRef90_E6K013	M A K L	K I V T L L V K G V A G A T R R R Q K D N V R T L G L R R E H T V Q V I A T			
UniRef90_F2BAL5	T I K L	T L V K S L I G T V S S H R A C A K G L G L R R I Q V D K B D N			
UniRef90UPI00029A73E6	K L R L	L L K K S I S G R L P H T E T V K T L G L R R I Q V D K B D N			
UniRef90_W0BBI8	K I I K	I T L V K S L I G R V P K H I E I A K Q L G R L S K L I N S V A I H Q D N			
UniRef90_F0JL22	I I K V	K Q I K S K I S C K P H Q V K I L E S L G L H R I N Q V K E H D D T			
UniRef90_W1QKH2	M A T F	V K T Q L R S A I A L P Q K K K E T L L R L G L R R I R Q V V Y H K V T			
UniRef90_Q6CUB2	M V F Y R I	T L Q R S V I G T P Q K T R A V V K S L G L G K R G S V A Y Q P A T			
UniRef90_D2NRQ4	A K L E I	T Q V K S Y V G Q K Q N M R D T L R S L G L G K R P G N K V V R T A D			
UniRef90_W6MPE7	F F K I	T Q I R S Q I A R P Q V Y K D T L A K L G L R R K P N Q V V Y H K V T			
UniRef90_K1Z9N5	K L R V	T L V K S T N K K L Q S H K D C V R G L G L R R I Q G V I D V Q N T			
UniRef90_B1CA33	Q L K V	T I K K S L I G R N E R Q R K S I C V R G L G L R R I Q T V L K Q D N			
UniRef90_U2FPD8	M A N I T	I T I K L I K S P I G R V K R H R A C C V R G L G L R R M H H Q V T V A D T			
UniRef90_AOLIK8	M A K I Q	V K L L V R S P I G R P E K H R K V L Q A L G L T R L N K T V N L H A T			
UniRef90_F2U3R2	V R L	V R S P I G H P Q A L R D T L S L G L K R V I N S V V I H K N T			
UniRef90_A5P6Y1	M A K I K	Q K I G S P I R R P E G Q K K I L I L G L G L T K R Q K T V T L K D S			
UniRef90_B9M6G0	A E V K	V T L V R S H G K S T S V K A V L N G L G L R R I Q V E H R Q D T			
UniRef90_A7BXH6	Y L L K V	T Q I K G L A G K Q A K H R V I I I A C H A T			
UniRef90_Q1D757	M A L L K V	K L L V K S F A G A S S D M L D T I R R G L G L K K F G D E R L L K D T			
UniRef90_R6C900	M A N L K I	V T L V R S L N S K S E Q K Q I A T A H S L G L R R K I G A E T V Q P D N			
UniRef90_D1AGT9	M S K I R V	T L V K G I N G R K P N H V E T V K S L G L R R K I G H S A L L H E K T			
UniRef90_C4XLZ1	M A N I T V	K L V R S R Y G N T P K Q R A T L A S L G L R R K I R Q E R S F E K T			
UniRef90_W0JDK0	T L K I	T M T R S C I G Q K D K I K K V A R S L S G L K R P N Q F V L R K D T			
UniRef90_H1D137	K V I I	T L K K S V I G S R P E H I A T I K A L G L H T T N S S V E K E L T			
UniRef90_S6BVG1	M K V K	V K L L V R S M H G R K P K H K E C V L G L R R M H Q V V E V E D T			
UniRef90_U2TJA0	M A T I T	T V K L L V R S A V A S K K D Q T A T C K A M G L G L R K I I N D V A V L P D N			
UniRef90_R5PU0	M E K I K I	T L T G S L I G T S P K Q R A V A K S L G L S K I I G S S S V Q N N D			
UniRef90_I4YWC5	T V T V E	Q I G S P I R R R E A K Q R Q T L I G L G L H R T S T L E D T			
UniRef90UPI00036DC574	Q V K I	V L L V K S N G R L K S H I Q C A R G L G I R R I I N R P V V V I D T			
UniRef90_R7D3V3	M A T I K I	R Q I R S T N G C K D D Q I V K T V R A L G L H R I I R E E R I T D			
UniRef90_U2EU89	M A D Y R I	K L I K G F Q G R K K D D Q I A T A H S L G L R R K I I G D V T I Q P D N			
UniRef90_R7NKF7	M K I T L V	K S L I S T S K D Q I A T A H A L G L R R K I I G D T T E Q P D N			
UniRef90_U4TRH0	M A Q L K I	T L I R S V A H R I P E Q P R L V V K E L G L R R G R V I S S T V T L P D N			
UniRef90_K2C029	K V A L K	Q T R S E A G C L P K H K A T L R G L G L R R K I I G D T T E Q P D N			
UniRef90UPI0004182CED	M A E I K V	V K L V R S R I G A S P A Q R K L L D S L G L R R K I I G M V K T F K D T			
UniRef90_B8YIK9	A T I K L	Q Y F R S M I C A P T K Q K L T I K G L G F T R L I N Q V V E H D T			
UniRef90_E8WZ45	K I I K T	Q I K K S T I C P L Q K Q L T F I A L G L K R L L I N H Q V E H I S T			
UniRef90_L7VJR6	M A Q V K V	T L V K S A V H Q K P K V R N V A Y G L G L G F T R L I H Q I V E R E D T			
UniRef90UPI00030966F5	A K I K I	Q Y Y R S S I Q A P V K H K K V V K G L G F T R L I H Q I V E R E D T			
UniRef90UPI00047E0D9B	L K I T	T L K K S L I G R P N Q V K T A H A L G L R R R K I I G Q S V S K V E N			
UniRef90_A9NEF1	F F K I T	T L R R S T I G L P K L R R V V R A L G L R R R K I I G Q T V Y H S Q T			
UniRef90_A0A015LBC4	T I K I E	Q I G S P I R R H S Q R E T T L I G L G L G R V T E L P D T			
UniRef90_A5ELK9	I I K I K L	T Q I K S T I T Q S P V Q Q K R T V K A L G F T K L I N Q V R T L P D N			
UniRef90_C7LU34	S T I I R V	R Q I R S G I G C P R Q M R E T L K A L G L G K M H R V T E R V D T			
UniRef90_D7GJ47	M A Q L K I T	Q I K S T V A E K P H V R S T V K A L G L G F T K L I N Q V R T L P D N			
UniRef90_M0U801	R L Y I T	L V R G L P G T R H H R T L D A M R L L G L K R I I G D V V T P K D R			
UniRef90UPI000033AC50	M Q K V K I T	R R S R S L I G Q G F K K A K E T I K S L G L K R I I G N S S V V R E M D			
UniRef90_X7ZP69		R S T I I G A R W K Q R E S L R T L G L R R I R H S V V R E D N			
UniRef90UPI000368655D	T I K V R	L Y K S M N S C K W Q H R L S V K A L G L R R I R D V E L K D S			
UniRef90_M7SY11	A F F R I T	L L R R S A I G L P E R T R G V L A A L G L R R M Q T V F H P V S			
UniRef90UPI00046F3637	S T I I R V	Q I R S G I G C P R Q M R E T L K A L G L G K M H R V T E R V D T			
UniRef90_R7JCW8	M A K I K I	K L L V R S L I G A S E K Q R R V V V G L G L R R Q N Q V V E H Y N S			
UniRef90_T0ZLJ9	L L K V T	L V K S L H G Q G A R I V A S A R G L G L R R P H Q T V E V A D T			
UniRef90_F0ZU10	I I K V T	T K S P N H C E Q D V K G T I K A L G L R R Q M H Y I F H K N T			
UniRef90_V5SFJ4	M A K I T V	E Q Y K S A N R R P E I Q T K T L I G L G L N K L I N R R R V L E D T			
UniRef90_K1YFH9	M G K V R I T	T Q T K S K N K A T I R Q A A T L A T G L G L R R K I I N Q S V E I E L N			
UniRef90UPI000315E8F7	M K K L E I T	L Y K S L I G R T P N Q V K N A H H L G L R R K I I N Q S V E I E L N			
UniRef90_S6A978	M A K I S V	L V K S T I G S L P K Q R A V T V R S L G L R R K I I N Q S V E I E L N			
UniRef90_F5YDU4	M A K I R K I	L V K S V I G S L P K Q R A V T V R S L G L R R K I I N Q S V E I E L N			
UniRef90_M2R3Q7	F R I T L	R R S R S A L S L A A N I K G T L L A S L G L R R K I I N Q S S E Q E A S			
UniRef90_D8QIX6	K I T S	T S R R S A W G L G D R I K G T L V I A L G L R R K I I N Q S V E I E L N			
UniRef90_T1BMS8	K I V T	L I R S A L K A K S S A R H R A S V H G L G L R R K I I N Q S V E I E L N			
UniRef90_K8P7B4	T I K V E	Q T G S P I R R Q A A Q Q R A T L I G L G L R R N K I I G G S V V V S A T			
UniRef90_F9ZM60	R V R V T	L V R S L I G V T E K H R A T V R G I G L R R H S V E R D L T			
UniRef90_G8JSD0	M V F Y K I V	V L I S R S T I G M P A K T R A V V K S L G L G K R G S V V V H S V S			
UniRef90_Q4S0N9	K I L L V T	T R V R S V I R R P Q Y W E K D M I K H G L R R K I I I N Q T V L H E D G			
UniRef90_A8V150	K I K L V T	R V G R L A G K P E A H V Q A V R S L G L R R K I I I N Q T V L H E D G			
UniRef90_A8UWY3	V T L L R R S L	R R Q A Q Q R A T L I G L G L R R K I I I N Q T V L H E D G			
UniRef90_M1V5J0	K I K L V T	L R R S L R G V P E R Q R R I L E A L G L R R K I I I N Q T V L H E D G			
UniRef90_E3ETN2	I K I K L V T	L R R S L R G V P E R Q R R I L E A L G L R R K I I I N Q T V L H E D G			
UniRef90_C1A6S3	M K I T Q V	T Q V R S A I G H S W M R M A T L A A I G L R R K I I I N Q T V L H E D G			
UniRef90_I4YCJ6	R V V L T	T R S A I G L P K E S Q R T L E A L G L R R K I I I N Q T V L H E D G			
UniRef90_E6VT83	L I K V K L	L I K S R I A V V K P S L V K T L D S L G L R R K I I I N Q T V L H E D G			
UniRef90_R7LX40	I K I K V K L	L I K S R I A V V K P S L V K T L D S L G L R R K I I I N Q T V L H E D G			
UniRef90UPI0003F4928A	Y F R I T	M R S A I G L P Y K S T G V L K A L G L R R K I I I N Q T V L H E D G			
UniRef90_U1GEI3		M R S A I G L P Y K S T G V L K A L G L R R K I I I N Q T V L H E D G			

50 60

UniRef90_M2U2T6	P A V R G M V	A R V P H L A Q I I E
UniRef90_S9P3F8	P A I R G M V	N K V R H L V T A E T V Q
UniRef90_E4UDX3	P S V R G M I	H A V R H L V R I V E
UniRef90_R7RZ21	A A T Q G M L	R M V A P Y V K V E E V
UniRef90_E6YW21	P C V R G M I	A K V K H L V R V I E
UniRef90_E7GG26	E F I Q G M I	K T V G H L V K I E E
UniRef90_W5X814	P S I R G Q I	H H V K E L L L V E
UniRef90_R6IXZ4	D A T Q G K I	K K I A H L I T V V E
UniRef90_Q8L908	S S I R G M I	D Q V K R M V V V E T E E
UniRef90_UPI0004756D18	P A V R G M I	A K V S H L V R V V E
UniRef90_E4KMQ4	E Q V R N M L	K S I S H L V E V K E
UniRef90_UPI000401CCC9	P Q I K G M V	Q K V Q H L V E V K
UniRef90_Q01WB0	P V F R G M V	K K I P H L M V V E
UniRef90_UPI0003B5A2C9	P S I R G M V	A K V P H L V R I V E
UniRef90_S5DYN1	P M I Q G M L	D K I E H L V E I E E I K
UniRef90_B8ISA3	P S V R G M I	A K V H H L V R V
UniRef90_UPI00037B063E	P E I R G M V	E K V K H L V E V T E
UniRef90_E6K013	S A V R G L V	R K V A H L V T V E E
UniRef90_F2BAL5	P E N M G M I	S K I S Y L L K V E E
UniRef90_UPI00029A73E6	S S I R G M V	N Q V S Y L L K V E E E I
UniRef90_W0BB18	P A I R G L I	R Q I D Y L L K V E E E
UniRef90_F0JL22	P V I R G M V	Y K V R H L V E V T E
UniRef90_W1QKH2	P Q Q A G M I	A T V K E L V K V E E L A D
UniRef90_Q6CUB2	P S I A G A V	A Q I K E L V S V E E L A D
UniRef90_D2NRQ4	P V T V G M V	N T V A H L V K V E E V K
UniRef90_W6MPE7	P Q Q A G M L	A R V K E L V K V E E
UniRef90_K1Z9N5	P E N C G M I	N A V S Y L L K V E E I
UniRef90_B1CA33	A Q I R G I C	Q K M D F M L D V E E E I
UniRef90_U2FPD8	P E N R G M I	M N K I V D M L A I Q E
UniRef90_A0LIK8	P A V A G A V	K K V I H M V E V K E L
UniRef90_F2U3R2	P V V N G M L	N K V I H L V D V Q P V Q
UniRef90_A5P6Y1	P E V R G A V	A K V P H L V T I V E
UniRef90_B9M6G0	P E V R G M I	N K V S H L L K V D E
UniRef90_A7BXH6	P A I R G M V	Q K V A Y L L T V E E V
UniRef90_Q1D757	P A V R G M A F	F K V K H L V T L E T V
UniRef90_R6C900	A Q T Q G K I	K V I S H L I K V T E
UniRef90_D1AGT9	A D I E G K I	K L V S Y L L Q V E E V
UniRef90_C4XLZ1	D T L V G M I	A K V Q H L V E V T E
UniRef90_W0JDK0	P H I R G M I	K K L Y F M V K V E E V E
UniRef90_H1D137	P Q I K G M I	H H V Q H L V E C K E A E
UniRef90_S6BVG1	P S T R G M V	N K V C Y M V Q V E
UniRef90_U2TJA0	P S V R G M I	F K V K H L V D V T E
UniRef90_R5PU0	E S V K G K I	K L V A H L I K V E N V
UniRef90_I4YWC5	P A V R G M I	E K V K H L V R V
UniRef90_UPI00036DC574	P E N R G M I	N K I S Y L L Q V E E V
UniRef90_R7D3V3	E S V R G M L	F K V K H L V E I V E
UniRef90_U2EU89	E A T K G K I	A K I A H L I E V T E
UniRef90_R7NKF7	P S T Q G K I	A K I V H L I K V
UniRef90_U4TRH0	A A T R G A L	T K I A H L I D V K V V E
UniRef90_K2C029	A C T R G M I	S Q V S Y L L K V K E L
UniRef90_UPI0004182CED	P Q V R G L I	N K V H Y L V R V E E
UniRef90_B8IYK9	P A I R G L I	A K V P H M V A V V E
UniRef90_E8WZ45	P S I H G M V	K K V P H L V R I
UniRef90_L7VJR6	P Q I L G M I	K K V E H L I K I E
UniRef90_UPI00030966F5	E A T R G A I	A K I A H L V T V E E V K
UniRef90_UPI00047E0D9B	P S I R G M V	K A V P H L V R I
UniRef90_A9NEF1	D A I N G M I	N T I G H L V V V E
UniRef90_A0A015LBC4	A Y I A G M I	L K V K E I L Q V I N V K
UniRef90_A5ELK9	P A V R G M I	T K V H H L V R I
UniRef90_C7LU34	D C V R G M I	N K V K H L V E V
UniRef90_D7GJ47	P E F R G M A	Q A A R H V V T M E E V K
UniRef90_M0U801	P S L L G M L	N Q V K R L V V V E
UniRef90_UPI000033AC50	D S L A G M L	D K V K H L V E T E D V K
UniRef90_X7ZP69	P Q T R G L I	A V V R H L V E V E
UniRef90_UPI000368655D	P Q V R G L V	N T V S Y L V R I E E
UniRef90_M7SY11	P Q F A G M I	L K
UniRef90_UPI00046F3637	K E T R G M I	A K I P H L V E V V E
UniRef90_R7JCW8	A T I L G M V	N K V P H L V E I
UniRef90_T0ZLJ9	P E N R G M I	H T A V H L L A V E
UniRef90_F0ZU10	P E I R G M I	H K A R V F I R V D E I
UniRef90_V5SFJ4	P A V R G M I	A K V P H L V R I
UniRef90_K1YFH9	P V Y K G M I	E K V L H L V K V E E I N
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UniRef90_S6A978	P A I L G M V	K T V S H I V E V K E E L N
UniRef90_F5YDU4	S A I L G M V	K V V S H L V S V E E I K
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UniRef90_K8P7B4	P A V R G M I	D R V K H L V R V
UniRef90_F9ZM60	P E L Q G M L	A K V P Y L L R W E V I
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UniRef90_I4YCJ6	A D T A G Q L	L R V K E L V K V D N I
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UniRef90_UPI0003F4928A	P T V A G Q I	L R V K E L V S V R N V
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1 10 20 30 40

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 K V S I K L T R S L I G S T K D Q I K V V R A L G L G L K K T N D V V E H F A S
 K I T T Q T R S T I G M P P I T R K N I E A L G L G L K K R N Q I V Y Q S V S
 K I T L T R S A I S L G T R K Q A T L A S L G I T R R M Q T V F H P H S
 L K I Q L I K S L I G K K N T H R A I I I R G L G L G L K R I I N S V R V L N D T
 M V F Y K V T L L A R S L I G M P R A T R Q I V K T L G L G L G K R G S T V Y K R A T
 M S F F R V K L L Q R S T I G L P R G I R S V V E S L G L G L G K R H S V A Y C E V N
 M A K N I K L V K S L I G R K K D Q I A T A N S L G L G L G K K V G D V S V Q P E N
 T I K V R Q I A S T I G A T K V Q R A T M I G L G L G L G K K V H A E K V L K D T
 M V F Y K I T L A R S L I G T P P Y I K N V V K A I G L G L G K R G S V V Y R E A T
 M A T I K I K Q I K S K I G A P I D Q K R T L V A L G L G L G K K I S Q V V E V E D T
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 M E T V I V T Q I V K S S N I G I K K G Q K L T L A A L G L G L R K T G Q Q R K H T L T
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50 60

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UniRef90_UPI0004407428	P E F A G K I L A V K E L V H V E N V N
UniRef90_S5R3G8	S S V R G M I N K V S Y F V K I
UniRef90_J7S9A2	P A I A G S L L K V K E L I T V E
UniRef90_S9R588	P M S A G K I F K I K E L V S V S E V Q
UniRef90_R7FD71	E A T L G K I Q K I S H L V E V T E
UniRef90_R5QKK5	P E V R G M V S K V S H L V K I V E
UniRef90_G8XBX2	P A M A G T L A M V K E I V K V E V T E
UniRef90_R5PT66	P S T R G M I R K V H L V T V V E
UniRef90_H1Q4C2	H S N R G M I K K
UniRef90_I0XWB1	P Q V K G M I N D V Q H L V R V E
UniRef90_UPI000345635C	P Q L Q G M L N S I R H L I K V E
UniRef90_G4E5U1	P E N R G M M N R V S Y L L K V E
UniRef90_M7NZX6	A V V R G M L K I K H L V S I
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UniRef90_B2I817	P Q V R G L I N K V H Y L V R I Q
UniRef90_C1MZE0	P A S R G Q I S K V K H L V S V E
UniRef90_C1C483	P T V N E K L K M I K H L V R V K P L K
UniRef90_V9TT86	P E V V Q G M I G K V K H L I E I I N I D
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UniRef90_T0RPC9	P A V R G M I K K V I H L L E I K E
UniRef90_F4PZJ8	P E I R G M I H K A R T H L S V E E I N
UniRef90_Q1SA4	P S I R G M V A K V P H L V E I
UniRef90_U4QRW1	P S I L G M I K K T Q H M I S V E
UniRef90_D4JY78	A A T Q G K I A K I G F L L S V T E
UniRef90_B9IAJ3	P T A M G M L Q Q V K R L V V I E T E E
UniRef90_R7KW44	A A V Q G K I K K I S H L V N V
UniRef90_L8WI9	P E A A G K I L R V K E L V G V E N V
UniRef90_H8X197	V S S A H S L A K V K E L V K I E V T D
UniRef90_UPI000225BC85	P A V R G L I T R L Q H M V S V E
UniRef90_M5G318	A T T A G Q I L R V K E L V K V E N V
UniRef90_C5DU91	P P Q C A G S L A K V K E L V N V E
UniRef90_N2AHB4	A A T Q G A L R K I A P Y V K V E E
UniRef90_L7N6F0	P D M A G A I L A V K E L V H V E N V
UniRef90_A1UBQ6	A Q T R G L I K T
UniRef90_L0HNQ8	P A Y R G M L Q K V K D Y V T W G E I D
UniRef90_I2GYD1	P S T A G A I L R V K E L V D V E
UniRef90_UPI0003C29199	P S V N N L K L R V I K H L I R V Q P L K
UniRef90_F1NJT0	P S V N S R L K I K H L I R I Q P L K
UniRef90_W6TGX8	P S V L G M V K K V E H L V K V E
UniRef90_G0HIS7	P S Y K G M V Q K V K D Y I T W G E I D
UniRef90_H8IAK1	P S Y R G M I H K V K D Y V A Y G P I N
UniRef90_H3AXZ8	P A V N I K L R A I K H L I R V Q P L K
UniRef90_A3CT18	P A Y L G M I R K V K D F V A Y G E V D
UniRef90_UPI00036AA758	P V N R G N L R I V R H L V E V V E
UniRef90_J3PT83	P D A A G L I L S V K E L L K V E N V
UniRef90_C1DX57	P M V C G N L E I V K H L V K V E E E L Q
UniRef90_R6WC79	H L L D G K I K V I G H L I S V D E V K
UniRef90_B3R009	P V N R G M I R K I Y H L V T I E
UniRef90_A0A023DXD8	P S V L G M V H K V K H L V R M E
UniRef90_A1USR2	L C V R G M I A K V R H L V H V
UniRef90_C5M8B3	P T S A N Q L A A V K E L L V S V E
UniRef90_Q6CCK1	P G I A G Q L Y K V K E L V N V E M A D
UniRef90_F7XUL8	S A V R G M I E K V K H L L R
UniRef90_F7WZN2	P S I R G M I K K V Y Y M I Q I K E K E
UniRef90_UPI00033321DD	P S V N A K L K V V K H L I S I K P L K
UniRef90_E1RKL8	P A Y T G M I R K V K D Y V A Y G E
UniRef90_M1F6U1	P S I R G M A N R V D Y L V R V E E
UniRef90_A0A024JHH0	P Q M V G Q I L K I K E I V K V N L V K
UniRef90_UPI00047982BA	P N V H G M V K L V P H L I D V Q
UniRef90_B0D7E1	P E T A G K I L K L K E L L E V E N V
UniRef90_S3D9X3	P E V A G Q I M R V K E L L V S V E E V D
UniRef90_H3ZNK6	P T Y K G M I Q K V K D Y I T W G E I N
UniRef90_X0UL15	A Q T Q G K I A K I S H M V A V
UniRef90_J9GL20	P S V N D Q L K V I K H L I R I Q P L K
UniRef90_H9G4D2	P S L L G M L T Q V K C H L V V V E T Q E
UniRef90_I1Q261	P M V C G N L E K V K H L V C V E E L
UniRef90_B4U762	P S V N N Q L K F I K H L V R I Q P L K
UniRef90_B5X9J1	P G V A G K I L R I K E L V S V T T V E
UniRef90_T0TB38	P S Y R G M L Q V V K D Y V A F G E I D
UniRef90_D2RE45	P S Y L G M L Q K A K D Y I T W G E V D
UniRef90_O26132	P Q I R G L I Y K C R L L S V K S V
UniRef90_D2VK00	P S V N A K L K V V K H L I R I Q P L K
UniRef90_UPI000273ACA9	P S Y A G M L Q K T K D F V T W G E V D
UniRef90_B3V5I3	S A I L G M V N K V K H L V S V E E T K
UniRef90_V6SKS8	P S N R G M I N K I S D M L E I I E
UniRef90_J4KRU5	P A V R G M V R Q V A H L V E V
UniRef90_F2NJC1	Q S I A G K L L T L K E L I K V D I V D
UniRef90_K0KM59	P S I L M G M I K K V S H L L
UniRef90_C7LKI6	D A Y R G M I S K V N D Y V A F G E
UniRef90_U1NBB7	P A V N E M L Q A I K H L V R I Q P V
UniRef90_UPI0003F0E602	P H N A G M I Q K V K D Y V A F G E I
UniRef90_W9DYA2	P S V N A Q L T M V K H L I K V Q P L K
UniRef90_UPI0003EBC379	E H Y I G M V K K V K D F V T Y G E I D
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UniRef90_D7DU89	P E N N A R L W K I K H L V K I L P I N
UniRef90_W4XVT2	P H T L G A T R V Q H L V R
UniRef90_U5EQI7	P Q I N E R L Q M I K K L I T V Q P I N
UniRef90_G0HIF4	
UniRef90_T2M8D9	

Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 1, 10, 20, 30, and 40. The y-axis lists UniProt entries. Positions 1, 10, 20, and 40 show high conservation of specific amino acids (e.g., I at pos 1, R at pos 10). Position 30 shows significant variation with S, H, A, V, and P.

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

	50	60
UniRef90_Q2NFX8	P S Y K G M L	Q K A K D Y I T W G E V
UniRef90_UP1000333D248	P S V N A K L	K V G K H L I R I Q T L K
UniRef90_C3XXF6	P S V N N K L	W Q I K H L I R I V P V N
UniRef90_B5IBH8	P S Y K G M L	Q K V K D Y V T W G E I N
UniRef90_U1P0J9	P T Y R G M I	T K V N D Y V A F G E
UniRef90_H0XT68	P S V N A K L	R V V K H L I R I
UniRef90_A0A034WHH0	P D V N A M L	W K I K H L I K V T P I
UniRef90_UP1000060850D	P S V N A K L	K R I Q P L
UniRef90_A0A023EHE0	P E N N A R L	W K V K H L I E V L P I
UniRef90_Q97BV5	A V T K G M L	Q K V K D Y V T W G E I D
UniRef90_D5VRT1	E T Y K G M L	Q K A K D Y I T W G E I N
UniRef90_R4UM68	P E V N A M L	W K I K H L V K I T P I Q
UniRef90_W5STX5	K S L Q G M L	S S V I S M V L L S E V N
UniRef90_B7XHR4	E C I R N M L	Q I V K D Y V
UniRef90_J6F3U5	V T A A G K I	L K
UniRef90_L9WC32	D A Y Q G M I	S K V N D Y V A V G E
UniRef90_S0ASS3	E S L N G M L	N R V K D Y V T W G E V D
UniRef90_D7E8R4	P S N L G M V	Q K V K D Y V
UniRef90_A4FVT8	E H Y T G M I	I K K V K D Y V T Y G E I D
UniRef90_H0AFA2	D S V E G M M N	K A K D F I T Y G E V
UniRef90_E0SQ70	K D I E G M L	M K V K D W V T W G E I D
UniRef90_E3GZE0	P S Y E G M L	Q K A K D Y I T W G E I D
UniRef90_A1RU38	P S I I I G M I	Q K V N D W V T W G E I D
UniRef90_C4VA71	K S M K R M L	Q F A K D Y V
UniRef90_G7VDI8	P D I M G M I	R K V N D W V T W G E I D
UniRef90_S7W946	E S S R Q M L	Q K I R N F V A Y G E L K
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UniRef90_L9X7I2	D A Y V G M V	N K V N D Y V
UniRef90_U3A643	D A Y R G M I	A K V N D Y V A Y G E
UniRef90_B3V6D6	D V Y A G M L	Q K A K D Y I T W G Q V D
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UniRef90_I6TTS7	K S T K N M L	H I I K D Y V A F G T I E
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 lupas_28
 jnet
 conf
 sol25
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 sol0
 jhmm
 jpssm

