

QUERY	1	10	20	30	40
UniRef90_G9NJ55	A E S S	R V I S	K E K N S	L T V E M I N Y	D N T L L R T L V E E I L K D
UniRef90_A9SFX7			T D T A A S F E F T D E D	H T L L G N S A L R Y F I I M K N D	P D V V
UniRef90_T5AMD2	R V K	L L P	E T D P R S A A S F E F I S D E D	H T L L G N S A L R Y F I I M K N D	P D V V
UniRef90_B9GIX0			R D P S S A S T F C F V D E D	H T L L G N S A V R F F A L N Q D	P R D V
UniRef90_U5D302			E S D P N S S T F S L T D E D	H T L L G N A V L R Y F V L N Q D	P R D T
UniRef90_C3YRU6	V Q T	L D	S D E S C Q T F V L H D E D	H T L L G N A V L R Y M I M K N D	P D V
UniRef90_UPI0000E4658A			D K S D C V T F V M H N E D	H T L L G N A L R Y M V M K D	P D D V
UniRef90_V7B4C7			S S D P T K S T F S I L D E D	H T L L A N T S V R F T L N Q D	P R D V
UniRef90_UPI0003F0D7FA	E R K	L E L M	H E D D T A A S F C V T F V L N G E D	H T L L G N S L R Y F I I M K D	P E V
UniRef90_S4RHE9			D D D T A A S F C V T F V L N G E D	H T L L G N S L R Y M V M K N	P D D V
UniRef90_U1HK33	K I R	V L P	G S P T A A S F Q L E K E D	H T L L G N A L R Y F F I M K N	P D D V
UniRef90_B6QVD5	E N R I	T I L L P	S G T D T A A S F Q F K E E G	H T L L G N A L R Y F V I M K N	P K V
UniRef90_W9CGL9	E Q R L	R I L L P	G T D T A A S F E F K K E D	H T L L G N A L R Y I I I M K N	P D V
UniRef90_K1WJ6	E K R I	R I L L P	G S D T A A S F E F K K E D	H T L L G N S L R Y I I I M K N	P N V
UniRef90_A9NNU7	M E L	G S V E N	P R S S T F A F N D E D	H T L L G N S L R Y V I L N H D	P R V
UniRef90_M7SKI7	K V R	I L L P	G S S T A A S F E F T K E G	H T L L G N A L R Y I I I M K N	P D V
UniRef90_R7YV19	R I R	V L P	G S E T A A S F E F E K E D	H T L L G N A L R Y I I I M K N	P S V
UniRef90_W2RYE5	E K K	L R I L L P	G S S H A A S F Q I E K E D	H T L L G N A L R Y F I I N K N	P S D V
UniRef90_F9XJ4			G T D T A A S F A F E K E D	H T L L G N A L R Y M I M K N	P D V
UniRef90_B0YCZ1	K R I	V V L P	G T E T A A S F Q F E G E G	H T L L G N A L R Y A M I M K N	P E V
UniRef90_B6JWF5			T S V T F Q I Q K E D	H T L L G N A L R Y M I M K N	P D V
UniRef90_T1JU99	E K K	I I I E K	E T K N A A I F T V N K E D	H T L L G N L I R H Q L L K D	P N V
UniRef90_M7ARS3			D G N C V T F V L H D E D	H T L L G N S L R Y M I M K N	S E V
UniRef90_UPI0003506718			D G N C V T F V L H D E D	H T L L G N S L R Y M I M K N	S D V
UniRef90_G1X7Y3	E E K	V T A V D	E T P N C V T F T F N K E D	H T L L G N L L R S Q L L K D	P K V
UniRef90_D8SK71			S S S S T F C F L M D E D	H T L L G N S L R Y F L L N Q D	P R V
UniRef90_M0TMW7			D S S S T F F L M D E D	H T L L A N S L V R Y T L L N Q D	P R V
UniRef90_T2MFS6	E K K	I N I V K	D T K N A A H F T V M K E D	H T L L G N L I R S Q L L K D	P Q V
UniRef90_V7C0B7			M E L G S N S D N S S T F C L V D E D	H T L L A N S I R F T L N Q D	P R V
UniRef90_UPI0002C2E959	M E L	G S L S	D P S Q S T F S L V D E D	H T L F A N A V I R Y T L N Q D	P R T
UniRef90_M2WNE1	M R L	R V L D	G T D T A A S F S F E N E D	H T L L G N A L R Y M L T K D	P D V
UniRef90_D8T102			E P E S S T F C I L N D E D	H T F G N L R Y V L N G D	P R V
UniRef90_A0A016VJH6	E R K	I S V E N	D T K N A A V F T I L N K E D	H T L L G N L L K H Q L L K D	P M V
UniRef90_C0SH10			T E T A V S F Q F D R E D	H T L L G N A L R Y V I M K N	P E V
UniRef90_H9GMN1			D K S C V T F V L H N E D	H T L L G N S L R Y M I M K D	P E V
UniRef90_K9FUS7	E R Q	I V V L P	G T E T A A S F Q F E G E G	H T M G N A L R Y A M I M K N	P A V
UniRef90_W7HYA9			T D D D S C A S F Q F E N E D	H T L L G N A L R Y I I I M K N	P Q V
UniRef90_C4JP01	R I K	V L P	D G S E T A A S F Q F E K E D	H T L L G N A L R Y V I I M K N	P G V
UniRef90_UPI00021A41F5			D D V T C M T F V L Q D E D	H T L L G N A L R W I L I K N	P D V
UniRef90_J7SAA6	K V K	I L L T	E D G T C A S F Q I L N E D	H T L L G N A L R Y V I I M K N	P E V
UniRef90_S8D2U7	M E Q	E T	K S E S Q A T F S F R N E D	H T L L A N S L R Y C L N Q D	P R V
UniRef90_UPI00045601F6	E K R	V E I V E	D T P N A A T F Y F R N E D	H T L L G N M L R H A V L A N	P A I
UniRef90_E1GDK9	E K K	I T I E K	D T K N A A I F T V N K E D	H T L I G N L L K H Q L L K D	P Q V
UniRef90_UPI000265794F	E K K	I T I E K	D T K N A S T F T I V N K E D	H T L L G N M I R A Q M L K D	P L V
UniRef90_S9R8V9	K I T	I L P	G H S T S V T F I Q V K E D	H T L L G N S L R Y A M I M K N	P E V
UniRef90_L8GXA1	K K L	E L S A	D S D N L I T V T L S N E D	H T L L G N S L R W I L I M K N	P E V
UniRef90_A7SBE9			D E S C M T F V L H D E D	H T L L G N S L R Y I I I M K N	P D V
UniRef90_R7TU61	E K K	V T I E K	D T K N A A I F T V N K E D	H T L L G N A L R T Q L L K D	P K V
UniRef90_I2GXX0			P D G S A A S F Q I R D E D	H T L L G N A L R Y L L L M R N	P A V
UniRef90_A0A058Z5G1	K I S	I L P	E V D S A A T F V L F N E D	H T L L G N A L R Y H L L M R N	P R V
UniRef90_W9XFK2	E K K	I K I D T	R T P N T I F T V N K E D	H T L L A N L L R D K L L K N S	H V
UniRef90_Q09177	A T E	K I I L L P	G D L T S V T F Q I Q K E D	H T L L G N S L R Y V I I M K N	P E V
UniRef90_V4A3L1			D E S C K T F V M H N E D	H T L L G N S L R Y I I I M K N	P D V
UniRef90_E7NM97			T S E D G T S A S F Q I V E E D	H T L L G N A L R Y I V I M K N	P D V
UniRef90_A7TTT6	E D K	I K I L L S	E D G T C A S F Q I M D E D	H T L L G N A L R Y I I I M K N	P E V
UniRef90_A0A059BBA2			G D Q R N A T F A L A E E D	H T L L A N A L R F T L N Q D	P R V
UniRef90_V9LJS0			D D S S I T F V L H E E D	H T V L G N A L R Y M V M K N	P E V
UniRef90_W1Q6T9	K I K	L L P	G D G T A A S F Q I S D E D	H T L L G N A L R Y M I M K N	P E V
UniRef90_UPI000359C061			S G D E S C Q T F I L N D E D	H T L L G N A L K Y I L N K N	P E V
UniRef90_C4Y1Z9	K I R	M L S	S D D G T A A S F Q L V D E D	H T L L G N A L R Y M I M K N	P E V
UniRef90_M1B174			E D Q S K A T F S L T D E D	H T L L A N A V R F T L N Q D	P R V
UniRef90_F0XH13	R V K	I L L P	G T P T A A S F E F L D E G	H T L L G N S L R Y I I I M K N	P D V
UniRef90_H1VEW2	R V K	I L L P	G T D T A A S F E F L D E G	H T L L G N A L R Y F I I M K N	P D V
UniRef90_N1JCX8	E Q R I	R I L L P	G S E T A A S F E F K N E D	H T L L G N A L R Y I I I M K N	P M V
UniRef90_C5FYD6	E I E	V D T	R V P S R A T F T F N K E D	H T L L G N M I R A R L L Q S	Q H V
UniRef90_E0W436			D E S S T A T F V F D G E G	H T L L G N A L R S V I S R Y S E V	
UniRef90_M4FRD7			T P T A A S F E F L K E G	H T L L G N A L R Y I I I M K N	S E V
UniRef90_E2B1J9			T Y G T F V F V D E G	H T L L G N A L R S Y V I N Q Y	P G I
UniRef90_T2M3D8			D D E K C Q T F V F H N E D	H T I L G N S L R Y M I M K N	P E V
UniRef90_C5DGY8			T S E D G T C A S F Q I S E E D	H T L L G N A L R Y I I I M K N	P D V
UniRef90_D5GDE1			S A S F E I L G E D	H T L L G N A L R Y I I I M K N	P D V
UniRef90_E4UX53	E K K	V E V E T	D T P S T A I F T F N K E D	H T L L G N L I R A Q L L K D	P Q V
UniRef90_B3S6B1	E K K	I T I T K	D T K N A C H F T I A K E D	H T L L G N L I R A Q L L K D	P Q V
UniRef90_C1BN59			E S G E S C R T F I E K G E N	H T L L G N A L R S V I L Q N	P D V
UniRef90_Q5KMB4	E K	P L T I T	E D P K N A S T I V I R R Q	H T L L G N M L R A Q L L M L D	P T V
UniRef90_A0A022QNW7			N D P S Q G T F S M T D E D	H T L L A N S I R F T L N Q D	P R V
UniRef90_W6MJG6			K I K E L T K D G S A A S F Q I S D E D	H T L L G N A L R Y I I I M K N	P D V
UniRef90_C4WRJ5	E K K	I E V D T	K V T N A A I F T V N K E D	H T L L G N M I R N Q L L K D	P N V
UniRef90_S7PWV8	E K A	V E I T E	D T K N A A T I K V V K Q D	H T L L A N M L R S Q L L A T	P S V
UniRef90_A0A024JC77			K I T V L S E D G T A A S F Q I K N E D	H T L L G N P L R Y I I I M K N	P D V
UniRef90_UPI0003C3A83F			T F V L Q D E G	H T L L G N A L K T I I S R Y	P D V
UniRef90_F7VYQ2	A S T	K V R L L L P	G T P T A A S F E F L E E N	H T L L G N A L R Y V I I M K N	P D V
UniRef90_F0VGG1			L T F L T G E D	H T L L G N A I R S I V R K	P G V
UniRef90_Q54ES6			K V E I I S D R P D C A T F I F T D E D	H T L L G N A L H Y V L M K N	P K V
UniRef90_R8BTX3			T P T A A S F E F L D E G	H T L L G N A L R F I I I M K N	P E V
UniRef90_C5PBJ9	E K K	V E M E T	D T P S T A I F T F N K E D	H T L L G N M I R S Q L L K S	Q H V
UniRef90_T1FN7	E M D	T K V	P N A A I F T I N K E D	H T L L G N M I R N Q L L K D	P K V
UniRef90_N1QGP0	A E E E	I V I G K	Q T D T A A S F A F E K E D	H T L L G N V L R Y L I S K N	P D V
UniRef90_M5EBF3	E Q R I	E I L Q E	D M P N A A T F V L N K E D	H T L L G N M L R H A V L A Q	P G V
UniRef90_UPI0002740FD4			D R H R V T F V L H N K D	H T L L G N S L R Y M I M K N	P E V
UniRef90_R1E337			G D T S A A T F T L H N E D	H T I L G N S L R Y V L N K D	P Q V

QUERY	D	E	A	R	Y	Y	K	H	P	V	I	D	N	P	Q	I	Y	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	80				
UniRef90_G9NJ55	E	F	F	C	A	Y	S	I	P	H	P	S	E	P	K	M	N	I	V	R	R	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_A9SFX7	A	F	F	C	A	Y	S	I	P	H	P	S	E	P	K	M	N	I	V	R	R	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_T5AMD2	A	F	F	C	A	Y	S	I	P	H	P	S	E	P	K	M	N	I	V	R	R	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_B9GX0	S	F	F	C	A	Y	S	I	P	H	P	S	E	D	A	K	V	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_U5D302	S	F	F	C	A	Y	S	I	P	H	P	S	E	D	A	K	V	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_C3YRU6	S	D	F	C	A	Y	S	I	P	H	P	S	E	E	H	K	I	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_UPI0000E4658A	E	F	F	C	A	Y	S	I	P	H	P	S	E	N	R	V	I	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_V7B4C7	S	F	F	C	A	Y	S	I	P	H	P	S	E	N	R	V	I	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_UPI0003F0D7FA	S	Q	F	C	A	Y	S	I	P	H	P	S	E	N	K	I	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_S4RHE9	D	F	F	C	A	Y	S	I	T	H	P	S	E	D	K	I	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_U1HK33	E	F	F	C	A	Y	S	I	P	H	P	S	E	E	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_B6QVD5	E	F	F	C	A	Y	S	I	P	H	P	S	E	E	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_W9CGL9	E	F	F	C	A	Y	S	I	P	H	P	S	E	E	L	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_K1WJ33	E	F	F	C	A	Y	S	I	P	H	P	S	E	E	L	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_A9NNU7	E	F	F	C	A	Y	S	I	P	H	P	S	E	D	N	R	V	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_M7SKI7	E	F	F	C	A	Y	S	I	P	H	P	S	E	D	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_R7YV19	E	F	F	C	A	Y	S	I	P	H	P	S	E	E	R	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_W2RYE5	E	F	F	C	A	Y	S	I	P	H	P	S	E	E	R	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_F9XJ4	E	F	F	C	A	Y	S	I	P	H	P	S	E	A	V	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_B0YCZ1	E	F	F	C	A	Y	S	I	P	H	P	S	E	A	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_B6JWF5	E	F	F	C	A	Y	S	I	P	H	P	S	E	A	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_T1JU99	I	F	A	G	Y	K	V	P	H	P	S	E	H	K	F	I	L	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L			
UniRef90_M7ARS3	E	F	F	C	A	Y	S	I	T	H	P	S	E	S	K	I	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_UPI0003506718	E	F	F	C	A	Y	S	I	T	H	P	S	E	S	K	I	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_G1X7Y3	L	F	A	G	Y	K	V	P	H	P	S	E	F	P	S	F	E	L	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_D8SK71	V	F	C	A	Y	S	I	P	H	P	S	E	N	K	V	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L			
UniRef90_M0TMW7	I	F	A	G	Y	S	I	P	H	P	S	E	N	K	V	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L			
UniRef90_T2MFS6	I	F	A	G	Y	R	V	P	H	P	S	E	H	K	F	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L			
UniRef90_V7C0B7	T	F	C	A	Y	S	I	P	H	P	S	E	F	S	R	V	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_UPI0002C2E959	K	T	F	C	A	Y	S	I	P	H	P	S	E	D	N	R	V	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
UniRef90_M2WNE1	E	F	F	C	A	Y	S	I	P	H	P	S	E	P	F	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_D8T102	T	F	C	A	Y	S	I	P	H	P	S	E	D	N	R	V	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_A0A016VJH6	I	F	A	G	Y	K	N	P	H	P	S	E	H	K	F	I	L	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L			
UniRef90_C0SH10	E	F	F	C	A	Y	T	M	P	H	P	S	E	A	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_H9GMN1	E	F	F	C	A	Y	S	I	T	H	P	S	E	S	K	I	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L		
UniRef90_K9FUS7	E	F	F	C	A	Y	T	I	P	H	P	S	E	D	P	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
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UniRef90_C4JP01	E	F	F	C	A	Y	T	M	P	H	P	S	E	E	R	K	M	N	I	R	V	V	K	S	G	K	P	Q	S	A	I	K	R	A	V	R	K	L	S	K	L	
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UniRef90\_F4J5R0 K K V S Y D R D T K N A S F T V E R E D H T I G N I L V R M Q L H R D E N V

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