



QUERY	50	60	70	80
UniRef90_B2VHS6	N	E	K	S
UniRef90_L0MBS0	N	E	K	S
UniRef90_UPI00037A0CD4	N	E	K	S
UniRef90_UPI00035F8485	D	E	K	N
UniRef90_UPI000379E45D	D	E	K	N
UniRef90_F3KGT5	T	E	N	E
UniRef90_T0ZAI1	S	E	Y	E
UniRef90_E6QUI7	Q	E	Y	E
UniRef90_C0AYR5	N	E	K	A
UniRef90_Q3A8J6	E	N	E	A
UniRef90_Q747R1	E	K	D	A
UniRef90_UPI0003B57044	A	E	D	K
UniRef90_F9ZL31	K	D	H	E
UniRef90_Q3ACU3	N	E	K	E
UniRef90_D3V0U7	N	E	K	E
UniRef90_C5BRG2	T	S	K	E
UniRef90_UPI000368433F	D	N	G	E
UniRef90_R6INM9	E	E	K	C
UniRef90_F9N7A2	D	G	D	T
UniRef90_A0A023NNP1	D	E	F	S
UniRef90_UPI0004054D1E	D	G	K	S
UniRef90_X0YTR7	S	D	L	V
UniRef90_UPI0003B52F69	N	K	F	V
UniRef90_B8GQ87	D	K	F	V
UniRef90_V3T751	N	E	K	A
UniRef90_UPI00041CA140	D	G	E	S
UniRef90_T2GE68	N	K	K	D
UniRef90_Q1QUI7	E	G	E	T
UniRef90_G2DHM3	N	D	S	E
UniRef90_T0IG42	V	L	D	K
UniRef90_Q7NWE3	N	D	K	E
UniRef90_J8TTY1	S	G	D	E
UniRef90_G2GWU1	N	E	K	S
UniRef90_C1D7H3	A	D	K	I
UniRef90_UPI000470D474	E	G	E	S
UniRef90_J7U1Q2	N	E	K	N
UniRef90_I2BBR3	N	D	K	E
UniRef90_UPI0003A224F3	D	D	K	L
UniRef90_C0GJ76	E	D	G	N
UniRef90_UPI000369ED4C	Q	E	N	E
UniRef90_E8JJZ4	S	A	D	N
UniRef90_H8GQN8	N	A	D	N
UniRef90_UPI0003B6DF4D	D	R	A	N
UniRef90_G4SUH6	K	D	D	T
UniRef90_C3X5J6	K	E	H	E
UniRef90_G4E268	N	E	A	E
UniRef90_R7BQT1	D	K	N	A
UniRef90_F5REV1	G	E	K	L
UniRef90_K1YZ74	D	K	S	K
UniRef90_UPI000366AE7A	E	E	K	E
UniRef90_UPI00036E72E5	E	D	R	S
UniRef90_H3SJZ2	D	K	N	E
UniRef90_W0R3J3	R	R	G	E
UniRef90_W9VXG1	T	D	D	K
UniRef90_F9ZXP8	Q	D	D	S
UniRef90_W0TKP4	S	K	E	S
UniRef90_A6W5R2	S	K	E	S
UniRef90_UPI000344CE40	D	D	F	V
UniRef90_K1EME1	S	G	D	N
UniRef90_D0WPG9	S	E	G	K
UniRef90_F6DUQ5	E	G	K	P
UniRef90_UPI0004693E08	E	K	E	N
UniRef90_D5XF65	D	G	N	T
UniRef90_F9S210	Q	K	D	E
UniRef90_I3DFD3	N	E	K	T
UniRef90_C7M2V3	N	D	R	E
UniRef90_F4HFA5	N	E	K	N
UniRef90_Q31ED1	K	E	S	M
UniRef90_B3QV75	N	Q	K	D
UniRef90_E8UCL2	K	D	L	S
UniRef90_A0L886	E	D	A	V
UniRef90_R8ANQ1	N	E	K	N
UniRef90_C0VYY6	K	S	D	V
UniRef90_C8VWWM3	E	G	D	R
UniRef90_E7RTT3	K	D	K	E
UniRef90_UPI0003B4CD75	K	D	E	I
UniRef90_Q47LG7	A	G	E	H
UniRef90_C4LB18	N	K	E	I
UniRef90_UPI000417D639	D	D	Q	N
UniRef90_UPI0003F5235A	S	E	T	V
UniRef90_UPI000348F742	S	E	G	E
UniRef90_G2LES7	E	G	R	D
UniRef90_D5CQM1	A	E	L	V
UniRef90_UPI00036FDE10	S	G	Q	D
UniRef90_UPI0002884CDE	G	K	D	E
UniRef90_UPI0002FE0DF7	E	G	E	T
UniRef90_K6WPV4	S	G	E	G
UniRef90_Q6MQW5	D	K	K	E
UniRef90_A0A017RZ20	N	K	E	I
UniRef90_F5SV09	S	D	K	E
UniRef90_I7J6P2	N	G	K	D

QUERY P A E S E H H G  
UniRef90\_B2VHS6 P E Q I E H S G  
UniRef90\_L0MBS0 P E E F E H S G  
UniRef90\_UPI00037A0CD4 G D I E N A S G  
UniRef90\_UPI00035F8485 K D V E K V S G  
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UniRef90\_F3KGT5 G K L E K T G  
UniRef90\_T0ZAI1 G K E E T I G G  
UniRef90\_E6QUI7 G Q S E K V S G  
UniRef90\_C0AYR5 P E E M T H S G  
UniRef90\_Q3A8J6 G K K E P A S G  
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UniRef90\_Q7NWE3 G K L E K V S G  
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UniRef90\_C8VWWM3 G K V E P A A G  
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UniRef90\_Q47LG7 P E T P K V S G  
UniRef90\_C4LB18 G D V E H S G  
UniRef90\_UPI000417D639 K D V  
UniRef90\_UPI0003F5235A D P P Q V S G  
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UniRef90\_D5CQM1 S K I E K V S G  
UniRef90\_UPI00036FDE10 G E P T R S G  
UniRef90\_UPI0002884CDE G K I E N G S  
UniRef90\_UPI0002FE0DF7 D D P E  
UniRef90\_K6WVPV4 G D A P K P S G  
UniRef90\_Q6MQW5 E K I E E A G G  
UniRef90\_A0A017RZ20 G K L E P A S G  
UniRef90\_F5SV09 K D  
UniRef90\_I7J6P2 G K I E A A T G

UniRef90\_W7WT49 1 P S S F D T V L E A D L V E V K N A V E Q V A G K E E I V I G T R R Y D F K R N D S G A S S I I A S W  
UniRef90\_D1BW44 S S F D I V V S K V D R Q Q E V D N N A F N G Q Q A K K K E E I L V S Q R R Y D F K R N D S G A S S I I A S W  
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UniRef90\_UPI00046EC5F5 P S F D I V V S E V V D M H E L V D N N A S I I D Q Q A K K K E E I L V S Q R R Y D F K R N D S G A S S I I A S W  
UniRef90\_Q11SS5 P S F D I V V S K V D D P Q E T L D N N A L N D Q Q A K K K E E I L V S Q R R Y D F K R N D S G A S S I I A S W  
UniRef90\_UPI00045EA328 S S F D I V V S K V D D R Q Q E V D N N A L N Q Q A A K K E E I V L A S Q R R Y D F K R N D S G A S S I I A S W  
UniRef90\_UPI00037D6161 P S F D I V V S K V D D E Q Q E V R D N N A V L E N A T R E E I L L S S Q R R Y D F K R N D S G A S S I I A S W  
UniRef90\_Q21ND2 P S F D I V V S E T D L Q Q E V R N A V D E Q Q S N R E E I T S T R R Y D F K R N D S G A S S I I A S W  
UniRef90\_UPI00037AFEE8 P S F D I V V S E T D L Q Q E V R N A V D E Q Q S N R E E I T S T R R Y D F K R N D S G A S S I I A S W  
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UniRef90\_B1H0H0 S S F D I V V S E V N M M E V D N A V V N Q Q A R K E E I L A N R R Y D F K R N D S G A S S I I A S W  
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UniRef90\_UPI00039EBB15 P S F D I V V S K T D M P E V V D N A L Q D G V R E E I V S G T R R Y D F K R N D S G A S S I I A S W  
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UniRef90_E6QJW2	S	F	D	V	V	S	K	V	E	L	D	L	E	S	E	V	R	N	A	V	I	N	D	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L
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UniRef90_I3IQ77	S	F	D	V	V	S	K	V	E	L	D	L	E	S	E	V	R	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L	
UniRef90_A1S8Q3	P	S	F	D	V	V	S	E	V	D	A	M	H	E	L	V	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_I0HP14	P	S	F	D	V	V	S	E	V	D	A	M	H	E	L	V	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_UPI0003B33408	P	S	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	D	Q	T	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L			
UniRef90_Q8DKR4	S	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	D	Q	T	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L				
UniRef90_UPI0003764CA7	T	F	D	V	V	S	K	E	L	D	L	Q	E	E	V	S	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_Q5P0Z4	P	S	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	D	Q	T	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L			
UniRef90_D7E2G1	S	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	D	Q	T	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L				
UniRef90_D1A427	S	F	D	V	V	S	K	L	D	R	Q	E	E	V	D	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L			
UniRef90_A6FGA9	P	S	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L			
UniRef90_K2E207	S	F	D	V	V	S	E	F	D	K	Q	E	E	L	L	N	A	V	I	N	D	Q	T	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L			
UniRef90_W8RDN5	P	S	F	D	V	V	S	E	L	D	K	H	E	V	T	N	A	V	I	N	D	N	A	L	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L	
UniRef90_L8D655	P	S	F	D	V	V	S	E	L	D	K	H	E	V	T	N	A	V	I	N	D	N	A	L	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L	
UniRef90_A4SVJ7	P	S	F	D	V	V	S	E	L	D	K	H	E	V	T	N	A	V	I	N	D	N	A	L	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L	
UniRef90_D5V0L4	S	F	D	V	V	S	E	L	D	K	H	E	V	T	N	A	V	I	N	D	N	A	L	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_E4NCU8	S	F	D	V	V	S	K	V	E	L	D	L	E	S	E	V	R	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L	
UniRef90_UPI00019141C6	S	F	D	V	V	S	K	V	E	L	D	L	E	S	E	V	R	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L	
UniRef90_F3LIB3	P	A	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	D	Q	A	N	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_K9RGJ6	S	F	D	V	V	S	D	F	D	R	Q	E	E	V	D	N	A	V	I	N	D	Q	A	N	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_X1FZV1	P	S	F	D	V	V	S	K	T	D	L	E	V	D	N	A	V	I	N	L	A	N	M	T	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_R9PGQ8	P	S	F	D	V	V	S	E	L	D	K	H	E	V	T	N	A	V	I	N	D	N	A	L	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L	
UniRef90_W5X7S3	S	F	D	V	V	S	R	A	D	K	M	E	V	T	N	A	V	I	N	D	G	Q	A	E	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L	
UniRef90_A0YEQ1	P	S	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	D	Q	A	G	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_E6X225	S	F	D	V	V	S	A	K	L	D	M	M	E	M	K	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L			
UniRef90_R4YTM7	P	S	F	D	V	V	S	E	L	D	K	H	E	V	T	N	A	V	I	N	D	S	A	N	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_E1STF9	P	S	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	D	N	S	V	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_B6IWZ8	P	S	F	D	V	V	S	K	T	D	L	A	E	V	Q	N	A	V	I	N	D	G	V	L	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L		
UniRef90_UPI000407F7DB	S	S	F	D	V	V	S	K	V	E	L	D	L	E	S	E	V	R	N	A	V	I	N	Q	A	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K	D	T	K	A	S	T	D	I	L	L
UniRef90_V5BVV0	P	S	F	D	V	V	S	E	V	D	L	H	T	F	T	N	A	V	I	N	D	Q	A	S	K	R	E	E	I	L	N	T	R	Y	D	F	Q	G	G	K											

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UniRef90\_A0YEQ1 S E L A V T T I A S D D F Q I T Q M E D M L R T A L I K C K I D P L A M T M  
UniRef90\_E6X225 N E K A K T L T L V S S S D S K I D A L K D I L L S K M I K R K I S P K S L D E Y  
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UniRef90\_I3ZEL7 S G E S I S M K A N S E E R C L A V L D V V F K T H L V K R K V S L K Y L D V  
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UniRef90\_W0BB60 K D E V T L L S A E S D F Q L K Q M R D I L R A N L A K R E V D G N A M  
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UniRef90\_U1MQE2 N K K E L G L I E V D S D M K G Q V I D V L I S R T M R O G L D G N I F D L  
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UniRef90\_H5TDX6 E K E L V L N A P D T H K L S A V N E I L D S K C I R R N I S L K N L D R  
UniRef90\_J9ZEN7 A E Y V L Y A D D N F K L E E Q I F I L V N D S T F G K R N I S L K N L D R  
UniRef90\_S6B654 T E E N E I V L I G D D D F K L K L V R E I L N G K L V K R R N G I V V S L K N I E  
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UniRef90\_UPI0003829537 S E K S V D L E A E Q D F Q L E Q M F M M L E N H F H K R K I D L R T L G E  
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UniRef90\_A7NIS7 S E K E E L T I T T E S E M H L A A V R D V L Q T K A L R R N I S I K I F K F  
UniRef90\_A1WNN8 Q E R E I T L I G D D E F Q L T Q I E D V L R N K L T K R S V D V R F L D I  
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UniRef90\_D2PVH4 S G E S I E M Q A S T E E R V N A V L D V F K D K L V K R R N I S L K G L E  
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UniRef90\_C7Q2E9 S G E G I E M R A N S E E R V A A V L D V F K D K L V K R R N I S L K V L D  
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UniRef90\_B8G9Z3 S K T E L I I E A D S E M A L R S V R D V L E T K A L R R K L S L K I F D Y  
UniRef90\_UPI0002E51AFF D Q E N I F I I T D S E M L T L N S V I D I L R Q K A T K R N I S L K I F D F  
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