

QUERY	1	10	20	30	40
UniRef90_UPI0003704A94	H M K	S E R Q K D V L L K E I V G N I G G A G N A A T A L S Q L L D K K P I E D M L S V P P			
UniRef90_M8DKN7		F G G E L Q L D V L L R R E E V G N I G G A G N A A T A L S S R L L D K K P I E D M L S V P P			
UniRef90_UPI00040B02B8		K F G D F F K M D V L L R R E E V G N I G G A G N A A T A L S S R L L D K K P I E D M L S V P P			
UniRef90_L7ZXC6	N	T G M H I D I L L R E E I V G N I G G A G N A A T A L S S T L L D N K K P I E D M L S V P P			
UniRef90_UPI0003707CF9		F E E F K M D I L L R E E I V G N I G G A G N A A T A L S S R L L D N K K P I E D M L S V P P			
UniRef90_K9CIP5		Q L S E E M Q L D V L L K Q E I V G N I G G A G N A A T A L S S R L L D N K K P I E D M L S V P P			
UniRef90_S9SW31		R L L G S E F K L D V L L K E I V G N I G G A G N A A T A L S S R L L D N R K P I E D M L S V P P			
UniRef90_T0JYU8	L	K L L A P L Q L D A L L K E I V G N I G G A G N A A T A L S S Q L L D N N K K P I E D M L S V P P			
UniRef90_F5LS16		Q L L A D Y Q L D V L L K E I V G N I G G A G N A A T A L S S T L L D N N K K P I E D M L S V P P			
UniRef90_UPI00047BF971		K L T P Y H L D V L L K E I V G N I G G A G N A A T A L S S K L L D N K K F I E D M L S V P P			
UniRef90_X4ZEA5			D F F K M D V L L K E I V G N I G G A G N A A T A L S S Q L L D N N K K P I E D M L S V P P		
UniRef90_C9LSR3	I	D L S P V Q L D V L L R E E I V G N I G G A G N A A T A L S S Q L L D N N R R I E D M L S V P P			
UniRef90_D7CM24		Q L S G L Q L D A L L R E E I V G N I G G A G N A A T A L S S Q L L D N N S K I E D M L S V P P			
UniRef90_W4PX55		K L L T S P Y Q L D V L L K E I V G N I G G A G N A A T A L S S L L L D N N T K I E D M L S V P P			
UniRef90_W4F089		K I T S L H L D V L L K E I V G N I G G A G N A A T A L S S L L L D N N T K I E D M L S V P P			
UniRef90_A3DCQ1	N	L D N S L Q I D V L L R E E I V G N I G G S G N A A T A L S S G L L D N N K R V I E D M L S V P P			
UniRef90_B15I8	M	K F S N S E I D V L L K E I V G N I G G S V G N A A T A L S S L L L D N N Q A K V I E D M L S V P P			
UniRef90_W8YUF9		K F A D F S F E L D V L L K E I V G N I G G S V G N A A T A L S S T L L D N N K P I E D M L S V P P			
UniRef90_V6T1Z2		S I S D I H L D I L L K E I V G N I G G A G N A A T A L S S T L L D N N K K I E D M L S V P P			
UniRef90_UPI0004148AA0	Y T	K L T T I Q R M D V L L K E I V G N I G G A G N A A T A L S S M S K L L D N N R K I E D M L S V P P			
UniRef90_B7GG95		R M D A V H M D I L L K E I V G N I G G A G N A A T A L S S K L L D N N K R I E D M L S V P P			
UniRef90_Q8EQV9		K L N E A D Q R D L L K E I V G N I G G A G N A A T A L S S Q L L D N N Q K V I E D M L S V P P			
UniRef90_A0A059NZT0		F G P V Q L D V L L K E I A G N I G G A G N A A T A L S S L L L D N N K K I E D M L S V P P			
UniRef90_G9QMT6		R Q N A H L D T F K E I V G N I G G A G N A A T A L S S T L L M G R K K I E D M L S V P P			
UniRef90_B1BCT8	Y	V D M T P A I Q L D A L L K E I V G N I G G A G N A A T A L S S Q L L D N N G R K K I E D M L S V P P			
UniRef90_B7IDV7		K L N D S Q L D F L K E I V G N I G G S G N A A T A L S S T M I G K K I E D M L S V P P			
UniRef90_A5I511	Y N	S M T P L Q L D A L L K E I V S N I G G T G N A A T A L S S Q L L D N N G R K K I E D M L S V P P			
UniRef90_K0B0Y2		N F N S M L D V L L K E I L G N I G G S G N A A T A L S S T M I N K K I E D M L S V P P			
UniRef90_B8CW51		L T E D D H K D A L L K E I V G N I G G A G N A A T A L S S V A H A A T A L S Q L L D N N G R S I E D M L S V P P			
UniRef90_Q39Q01		L T E E H K D A L L K E I V S N I G G V A H A A T A L S Q L L D N N G R S I E D M L S V P P			
UniRef90_UPI0003B3E4F5		L S S E Q Y F D V L L K E I V G N I G G A G N A A T A L S S T M L G G K K I E D M L S V P P			
UniRef90_UPI000427CB11		K L S T Y Q L D T L K E I V G N I G G A G N A A T A L S S K L L D N N R K V I E D M L S V P P			
UniRef90_Q2RKB9		K L N A L H L D A L L K E I V G N I G G A G N A A T A L S L A S K L L D N N R K V I E D M L S V P P			
UniRef90_D9QRI5	E	L S D I L Q L D A L L K E I A N I G G A G N A A T A L S S Q M L D R R K V I E D M L S V P P			
UniRef90_L7VLX2		L S E S F H L D I L L K E I V G N I G G A G N A A T A L L A K M L D D K K V I E D M L S V P P			
UniRef90_UPI0003F5258F		L S E Q Y F D V L L K E I V G N I G G A G N A A T A L L A K M L D D K K V I E D M L S V P P			
UniRef90_D5WPH3		L G D R H L D A L L R E E V G N I G G A G N A A T S L A L L L Q R P V R I E D M L S V P P			
UniRef90_R1CLZ3	N	L S S M L D V L L K E I L G N I G G A G N A A T A L S A K M I N K K I E D M L S V P P			
UniRef90_U5LAZ1		L S S L H L D L L L K E I V G N I G G A G N A A T A L S T L L D N N K K I E D M L S V P P			
UniRef90_Q8RA15	R	L N E I Y L D V L L K E I V G N I G G A G N A A T A L S T M I G K K I E D M L S V P P			
UniRef90_L0K7X4		L N E P L E L D A L L K E I A S I G G A G N A A T A L S S R M I D S K I E D M L S V P P			
UniRef90_UPI000401909B		E I K P M H L D V L L R E E A G N I G G A G N A A T A L S S Q L L D N N K K I E D M L S V P P			
UniRef90_W6N5V4	Y S	N L S A M Q I D T L R E E V G N I G G T G N A A T A L S S Q L L D N N K K I E D M L S V P P			
UniRef90_R5QM99		H V S Q Q Q Y F D I L K E I V G N I G G A G N A A T A L S Q M L G K K I E D M L S V P P			
UniRef90_E6TSU2	Y S	Q L H S Q H L D V L L K E V G N I G G A A H A A T A L S K L L D N N K T I E D M L S V P P			
UniRef90_R4KB94	Y S	Q F T P M Q F D A L L K E I V S N I G G A G N A A T A L S R L L D N N R K V I E D M L S V P P			
UniRef90_J7J365	M K	L T Q F Q L D A L L K E I V G N I G G S A H A A T A L S T L L D N N R R I E D M L S V P P			
UniRef90_R6DR47	N E	S M D D I E F D V L L T E I V G N I G G A G N A A T A L S Q L L D N N A R R I E D M L S V P P			
UniRef90_UPI000289E1EE		R T N S T H L D I L L K E I V G N I G G A G H S A T A L S S K L L D N N R K I E D M L S V P P			
UniRef90_F9DP90		E I T E M H L D V L L K E I V G N I G G A A H A A T A L S S E L L D N N G H K I E D M L S V P P			
UniRef90_UPI000381F5FF		I P D V Y I D A L L K Q E I S N I G G L G N A A T A L S A E L L D G K K I E D M L S V P P			
UniRef90_F4LTR3		T D V E I D A L L K E I L G N I G G A G N A A T A L S T L L S K K I E D M L S V P P			
UniRef90_V6M2K1	N T	E L T E L H I S A V Q E E A M N Q M M G S S A T A L S M S T I F N R K F I N I T T V P P			
UniRef90_A8F4V1	M N	L T D K Q L D L L K E I V G N I G G T G N A A T A L S S L L T G K K I E I I S V P P			
UniRef90_H9U9Y8		K L N E A Q L D A L L K E I V G N I G G T G N A A T A L S S M L L D K K V I E I I S V P P			
UniRef90_F7YXZ0	M E	L T E R Q L D I L L K E I V G N I G G T G N A A T A L S T L V N K K I E I I S V P P			
UniRef90_B2A373		N L N E L H I D I L L K E I V G N I G G A G N A A T A L S Q F L N G K S I E D M L S V P P			
UniRef90_R6NP09		Q V N D M Y V D V L L K E I V G N I G G A G N A A T A M A N M L N I R I N M D V V P P			
UniRef90_UPI00030FD98A		S L T D Y Q L D A L L K E I V G N I G G S A H A A T A L S D L L N H K I E D M L S V P P			
UniRef90_UPI0002F5CD25	H P	L N S M H L D I L L K E I V G N I G G A A H A A T A L S S D L L N K K I E M R V P P			
UniRef90_R7BIJ5		K L N D L Q F D V L L K E I V G N I G G A G N A A T A L S A K M L N T K I E D M L S V P P			
UniRef90_C0ZF88		L S P F E Y Q D A L L G E I V G N I G S F G S A A T A L S T L L S Q K V D I T T V P P			
UniRef90_R6C8K9	K V	L T E N Y F D V L L R E I V G N I G S G A G N A M T A L S Q M L S Q K V D M Q V P P			
UniRef90_R5L9X5		L D D S Q Y D V L L K E I V G N I G G A G N A T A L S A C M L N Q K I E D M L S V P P			
UniRef90_H2JEI3	E	L N N I Q M D V L L K E I V G N I G G A G N A A T A L S A K M I D K K V D M A V P P			
UniRef90_A5D0K4		L S G L Y M D A L L Q E I S N I G G L G N A A T A L S A E L L N G K V N M A V P P			
UniRef90_UPI00037117BA		E L N E I H I S A V Q E E A M N Q M M G S S A T A L S M S T I F N R F V N I S P P			
UniRef90_N2BFT5		E I L S E M Y F D V L R E I V G N I G G A G N A A T A L A T L L D K K I E D M L S V P P			
UniRef90_UPI0003808659	Y P	L N S E M H L D A L L K E I V S N I G G M G N A A T A L A Q L L V N R R I E D M L S V P P			
UniRef90_N4WV29	N M	E L T D Q H F D I L L K E I V G N I G G A G N A A T A L S A M V N K K I E D M L S V P P			
UniRef90_R5YSP4		H V L N E M Y M D V L L K E I V G N I G G A G N A A T S L A N M I N E K I E D M L S V P P			
UniRef90_R7IVB1		L N T V Q Y D V L L K E I V G N I G G A G N A A T A L S A K M I N T K V I E D M L S V P P			
UniRef90_UPI00031AFED1	Y E	Q F Q R I H L D V L L K E I V G N I G G A G N A A T A L S S L I N R K V I E D M L S V P P			
UniRef90_R6GQU0		L T D M Q F D A L L K E I V G N I G G A G N A A T A L S Q M I N M K V I E D M L S V P P			
UniRef90_UPI00047970CA		L S T F E Q D A L L K E I V G N I G S F G S A A T A L S S Q I L N N Q K V I E I T T V P P			
UniRef90_F7NL68	L	K L T S L Q L D A L L K E I V G N I G G A G N A A T A L S S Q I L H R K I E D M L S V P P			
UniRef90_M1ZLW8		R L E P L Q L D I L L K E I V G N I G G A G H A A T A L S S K I L G M R I E M L S V P P			
UniRef90_UPI00035EA5AF	E E	E L N E I H I S A V Q E E A M N Q M M G S S A T A L S M S T I F N R F V N I S P P			
UniRef90_UPI0004656E11		F S H L Q L D A L L R E E V G N I G G A G N A A T A L S K L L G K P V D M D V P P			
UniRef90_UPI00047A3B41		N L N S T E I D V L L K E I L G N I G G S G N A A T S L A K L I N K K V D M D V P P			
UniRef90_R9JDZ9		L V S Q E Y Y D I L R E L G N I G G A G N A A T A L A Q M L N K K V D M S V P P			
UniRef90_A0A037ZD96	Y E	H L T P I Q I D A L L R E E V G N I G G A G N A A T A L S Q L L N K K I E D M L S V P P			
UniRef90_L0FB63	M E	L N S Q I Q L D A L L R E V G N I G G S G H A A T A L S T M L N R K I E D M L S V P P			
UniRef90_R5P688		E I S S M Q Y D V L L K E I V G N I G G A G N A A T A L S Q M I N R K V I E D M L S V P P			
UniRef90_A4XJ00		E I S N E M Y L D V L L R E L G N I G T G N A A T A L S A M I G R R I E D M L S V P P			
UniRef90_W8RH59		E I K D E Q L D I L L S E I V G N I G G A G H A A T A L S S L L N R K I E D M L S V P P			
UniRef90_Q9KA45		L T A D E V E K D A L L G E I V G N I S F G S A A T A L S T L L N E K V D I T T V P P			
UniRef90_C8WVF9	R	L T A D E E I D V L L G E I V G N I C F G S A A T A L S S L L G R R V D I T T V P P			
UniRef90_L0EF07		L D S P V E E D A L L G E I V G N I T F G S A A T A L S S Q L L G K K V D I T T V P P			
UniRef90_UPI0004795D88		N L N S L Y L D V L L R E L G N I T T G N A A T A L S A M T G K K I E D M L S V P P			
UniRef90_V9HF00	Y K	N L T S F Q L D A L L R E V S N I G A G N S A T A L S M L L G T K I E D M L S V P P			

QUERY UniRef90_UPI0003704A94 UniRef90_M8DKN7 UniRef90_UPI00040B02B8 UniRef90_L7ZXC6 UniRef90_UPI0003707CF9 UniRef90_K9CIP5 UniRef90_S9SW31 UniRef90_T0JYU8 UniRef90_F5LS16 UniRef90_UPI00047BF971 UniRef90_X4ZEA5 UniRef90_C9LSR3 UniRef90_D7CM24 UniRef90_W4PX55 UniRef90_W4F089 UniRef90_A3DCQ1 UniRef90_B15I8 UniRef90_W8YUF9 UniRef90_V6T1Z2 UniRef90_UPI0004148AA0 UniRef90_B7GG95 UniRef90_Q8EQV9 UniRef90_A0A059NZT0 UniRef90_G9QMT6 UniRef90_B1BCT8 UniRef90_B7IDV7 UniRef90_A5I511 UniRef90_K0B0Y2 UniRef90_B8CW51 UniRef90_Q39QK1 UniRef90_UPI0003B3E4F5 UniRef90_UPI000427CB11 UniRef90_Q2RKB9 UniRef90_D9QR15 UniRef90_L7VLX2 UniRef90_UPI0003F5258F UniRef90_D5WPH3 UniRef90_R1CLZ3 UniRef90_U5LAZ1 UniRef90_Q8RA15 UniRef90_L0K7X4 UniRef90_UPI000401909B UniRef90_W6N5V4 UniRef90_R5QM99 UniRef90_E6TSU2 UniRef90_R4KB94 UniRef90_J7J365 UniRef90_R6DR47 UniRef90_UPI000289E1EE UniRef90_F9DP90 UniRef90_UPI000381F5FF UniRef90_F4LTR3 UniRef90_V6M2K1 UniRef90_A8F4V1 UniRef90_H9U9Y8 UniRef90_F7YXZ0 UniRef90_B2A373 UniRef90_R6NP09 UniRef90_UPI00030FD98A UniRef90_UPI0002F5CD25 UniRef90_R7BJ5 UniRef90_C0ZF88 UniRef90_R6C8K9 UniRef90_R5L9X5 UniRef90_H2JE13 UniRef90_A5D0K4 UniRef90_UPI00037117BA UniRef90_N2BFT5 UniRef90_UPI0003808659 UniRef90_N4WV29 UniRef90_R5YSP4 UniRef90_R71VB1 UniRef90_UPI00031AFED1 UniRef90_R6QKU0 UniRef90_UPI00047970CA UniRef90_F7NL68 UniRef90_M1ZLW8 UniRef90_UPI00035EA5AF UniRef90_UPI0004656E11 UniRef90_UPI00047A3B41 UniRef90_R9JDZ9 UniRef90_A0A037ZD96 UniRef90_L0FB63 UniRef90_R5P688 UniRef90_A4XJ00 UniRef90_W8RH59 UniRef90_Q9KA45 UniRef90_C8WVWF9 UniRef90_L0EF07 UniRef90_UPI0004795D88 UniRef90_V9HF00

50 60 70 80

N K V R I V P P F S E E I A D S V G G G A E E Q V V V A V I F L R R V V E G D T P G S N L F F I I M
UniRef90_UPI0003704A94 K V R I V P P F S E E I A D S V G G G A E E Q V V V A V I F L R R V V E G D T P G S N L F F I I M
UniRef90_M8DKN7 Q V R K L I P P F D E S I A D R V V G G G P P E A E V V V V A V V F F L R R V V E G D D C P P G N M F F I L M
UniRef90_UPI00040B02B8 T V S F V I P P F E S I A D R V V G G G P P E A E V V V V A V V F F L R R V V E G D D C P P G N M F F I L M
UniRef90_L7ZXC6 R V R Q I A T F F A E M M E S V I G G G P P E Q N V V V A C V Y F F L R R V V E G D A P P G N M F F V L L
UniRef90_UPI0003707CF9 K V A Q M L K P F I D E A V I A E R V V G G G P P E E N I V V L A V I F F R R V V V E G D A P P S G N I L F F L L
UniRef90_K9CIP5 H V R L L V K P I E E D V I P E Y V V G G G P P E L V V V L A G I Y F L R R V V V E Y G K A P P S H L F F M F
UniRef90_S9SW31 K V R L L V P F F E E I A D E V V G G G A E H V V V A V I Y F R R V V V E G D A P P S H L F F M F
UniRef90_T0JYU8 E V A I L V P L G E E V P E I V V G G G P P E D A M V A G I Y F L R R V V E G L A P P G S N L F F L L
UniRef90_F5LS16 K V M V L V P L F E E V P E I V V G G G A E E V V L A I Y F L R R V V E G D A P P G N M F F L L
UniRef90_UPI00047BF971 S V R I V S F F Q E E I T E L V V G G G T D E T V V A A V I F L R R V V E G D A P P G N M F F V L L
UniRef90_X4ZEA5 K V V L L V G F F E E I A E K V V G G G P P E T L V V Y A V I F L R R V V V E G E A P P G N I L F F I L L
UniRef90_C9LSR3 K V S V V P L L D E V P D L V V G G G P P E T L V V V G V I F L R R V V Y G K A P P S N I L F L M
UniRef90_D7CM24 R V N I L V P L G E E V P D L V V G G G P P E T L V V V G V I F L R V V T G S A R A S N L F V M S
UniRef90_W4PX55 S V R L V S F F Q D L P D D Q V V G G G A D R F V V A A I Y L R R I D G D A P P G S M F F I S
UniRef90_W4F089 K V E M V S F F N E M M E R G G G A E Q V V A G I Y L R R I E G D A K P G G M F F I L L
UniRef90_A3DCQ1 Q V K V L S Q F Q E E V S D I L G G G A E I P V V V G L L R V V T G D I S G S I M F I L L
UniRef90_B15I8 R V A F L L E E E A I E S L G G G L E P V V V C V N L Q R V V E G E A P P S A T L L F I F
UniRef90_W8YUF9 K V S L V P F F E E V A E R A G G G A E E L V M A V I F L R R V E G E A P P G S M F F I L M
UniRef90_V6T1Z2 S V R I V S F F D E M M D L A G G G P P D N V V A S V F L R R I E G D A P P G S M F F I L L
UniRef90_UPI0004148AA0 S V N R V S Y F D E M M L L G G G A D N V I V A L F R I E Q G V A P G G T V Y F I L L
UniRef90_B7GG95 D V R I V S F F D E M M D I V G G G P D N V V A A V F L R I E G D A P P G N M F F V L L
UniRef90_Q8EQV9 K V N V V G F F D E V M D L L G G G P E K T I V G L M F R I E N G D I P G T V Y V I L L
UniRef90_A0A059NZT0 G V E V V G F F D T V M E L A G G G A D N K E V V S I F Q R I E G D A P P G T M F F V L L
UniRef90_G9QMT6 T V Q I L H F D D V M E M A G G G P D N I V A S I F L R I E G D I E G S M F F V L L
UniRef90_B1BCT8 S V N I L P F F D E V F A S N G G V E K V V G I I V R V L G D T P G N I L F I L L
UniRef90_B7IDV7 S T K V V P I F S Q I P F I F E N P E E I V C A I K M K M R E D V E G E I L L I L L
UniRef90_A5I511 D I N I V P F F E E V M A E I I G N D E K V A V G V I L V R V L G D T P G N I L F V F
UniRef90_K0B0Y2 R V K I L E F F K N V S E V L G D V E K P V V V G I Y F E M N G D I E G N I M F I L L
UniRef90_B8CW51 S V E I L P L S E V P E I T G G G A E D R V V G I L L K V M G E A P G S I L F E V L L
UniRef90_Q39QK1 K V L L T E L C I C E V P E I V F G G A E K L V V V G I Y L Q M L G D A R G N I L V L L
UniRef90_UPI0003B3E4F5 K V R L M E F K D V G T T M G G G E E Q I V A G I Y L V V Q G D I N G S L M F V Q
UniRef90_UPI000427CB11 A V R I A S F F D E T M E L V G G G A E K V I V S V F L R I E G E A P P S M F F L L
UniRef90_Q2RKB9 R A G V L P L K D M V S L V G H E E E P V A C V E F T V A G P A P S K I F F L L
UniRef90_D9QR15 K V D I M P L N E I P E I L G G G P E E S L I A G I L V E V M G E I S P G K I L F A L L
UniRef90_L7VLX2 Q V I K I M G F S E V S E S V G G A E T P V A G I L L G L R G D I S G Y I L F V L L
UniRef90_UPI0003F5258F Q V R R L E F F K D V S G D S M G G A E Q I M A G I Y L R M E G D V D G S I M F L S
UniRef90_D5WPH3 T V Q V L D F D H V V D A V G G G A E D V V V G T Y F R G G D Y P G N L F F I I
UniRef90_R1CLZ3 K I K I L S D F K D V P D I L G G G E E K P V V V G I Y F Q M N G D I K G N L M L V L L
UniRef90_U5LAZ1 N V K I V S F F D E M M A G G G P E E N V V A S V F L R I E G D A P P G S M F F L L
UniRef90_Q8RA15 T V K I L E L V I E V P D I F G S G P D T V I V G I Y F G L D G D V K G N I L F T L L
UniRef90_L0K7X4 K V D I L P V A D V P E I L G G G A E K L I A A V L V R I E G E L N G G V L F T L L
UniRef90_UPI000401909B S V R I V D F Q E M Q N M A G G G E E K V V A A A F L R V T G E A P P S M F L I L L
UniRef90_W6N5V4 S I N I L P F N K V F E S V G E D Q I V V G V I L R I L G D I P G N I L F V F
UniRef90_R5QM99 Q V K L L K F Q E V G A A M G G E E A Q I M A G V I L R I V E G D I T G S I M F L L
UniRef90_E6TSU2 A V R V V P F H E I S E F V G G D E A V V A S I F L R I Q G E V T G S L F M L L
UniRef90_R4KB94 S V N L I P L E S V F T K I D A E K L A V G V I V R V L G D T P G N L F F I F
UniRef90_J7J365 E V W A V R F F E E L S A I V G Q L D D P Q A V I Y V K V E G D A P P G K A V F F F
UniRef90_R6DR47 K V E L L T F A E L A E V I V G G A E T L V A G I L L S L E G D I Q G S M L F I L L
UniRef90_UPI000289E1EE N V R I V S F F N E M M D F A G G G A D N V V A G I F L R I E G D L T G N M F F I L L
UniRef90_F9DP90 N V E L V S F F E E M F E L A G G G T E K I V A G I F L R I E G D I R G S M F F V L L
UniRef90_UPI000381F5FF K A F F V D V E E I F D M V V G G P E E V V S C V F L N F E G D I R G T V L F I F
UniRef90_F4LTR3 Q T K I I P F D E V S K S V G G G P E K L V V G I F M R I T G D V D G N I L I I
UniRef90_V6M2K1 G L D V M D I L A Q K G D S F K E D D S P L V V K V S F R L K V G I D S N I M Q L L
UniRef90_A8F4V1 D A E V I A I E R I I F V F P K P E D L V V G I K M F L K G D L E M N I L V L L
UniRef90_H9U9Y8 Q V K V I P I S K I P F L F E N P P E E V V C S V K M E L K E D M T G E I L L V F
UniRef90_F7YXZ0 S A Q V V P I S K L F M F E N P P E D I V V G V R M S V S G D L K M D V L L L L
UniRef90_B2A373 E V N I L P F F E E V P E V V G G P P E E L V A G V Y M R I E G E A P P G S L M L L L
UniRef90_R6NP09 R V E L L T F Q E E L G S A I C P E D E S I V G I Y L E V T D D I T G S M M F L M
UniRef90_UPI00030FD98A A V R L V T F Y N E M M D L V G G G P P D K L I A A V F L R I E G E A P P G N M F F V L L
UniRef90_UPI0002F5CD25 K V E M I D F N E M M D L A G G G P P E K V V V G I F L R I E G D I E G S M F F I L L
UniRef90_R7BJ5 R V E M V P F T E L P D T F G S P E E V L A G I L V Q L D G D I K G M M F L A
UniRef90_C0ZF88 T V S V V N V D E L E S E F P E I P H V A V H V E Y T D G F K G I N L L V I
UniRef90_R6C8K9 Q V K L V P F D R I T D V M G G E E Q I M V G I Y L A V E G D I T G S I M F L V
UniRef90_R5L9X5 K V N L V P F D R I T D V M G G E E T I L A G I L L G L E G D V I T G S M M F L L
UniRef90_H2JE13 E V K I M G F D R V S Q I L G G G E E I L V V G I L L N V E G D I T G N M M F I L L
UniRef90_A5D0K4 K A V F L N T E E L F T L A G G G P E E V V A C V Y L G V E G D V P G T I L F I F
UniRef90_UPI00037117BA A I D I L D V S N V S N L P A E E T L V K V S F R L I I G D I I D S T I M Q L I
UniRef90_N2BFT5 N V K L M A V Q D L N T A I G G S E E E E V V G I S F R L V Q N D I E G S L M F L L
UniRef90_UPI0003808659 G A Q F M P F F E E I A L V G G L E E E V A C V F L R I L G D V L G T V L F I F
UniRef90_N4WV29 A T K V V G F N E L M E E V G G G P E E E I V S V F L R I E G Q A P G S M F F V L L
UniRef90_R5YSP4 K V E L L I E A S K L G S A I C P S E D E T V G I F L E V T R D I K G S M M F L M
UniRef90_R71VB1 K V R L L G F S E L A S S I G S E E Q V M T G I F L E T L S G D I D G M M F L L
UniRef90_UPI00031AFED1 I V N I V S F D E M M M E V G G G K D E V Q A A V F V Q A T G D L S G S M F F M V
UniRef90_R6QKU0 K V A L V P L S D L S G I L G S E E M V I V G I M L G M E G D I T G T M M F L L
UniRef90_UPI00047970CA E V S M V Y K R D L H K E F P K P Y V A V V V D Y T E G F S G N L I I
UniRef90_F7NL68 R V A T L P L G D V P D V V G G P E I M V A G V Y F R V F G P A P G S I L F L L
UniRef90_M1ZLW8 N V E I L S F D K S A Q Y V G S D K L V V G I Y M S V E G D M T G S I F M L L
UniRef90_UPI00035EA5AF G I D I L N M T S H G H L G S L P E D L I K I S F R L T G D S T I M Q L L
UniRef90_UPI0004656E11 K A E L V S I Y D L G S H Y G P A L S L V A A V F V R S Q G E F C S L I F I Q
UniRef90_UPI00047A3B41 Q V K I L D F K D V S E A L G N A E K T I M G I Y F E M E G D I V G N I M F I L L
UniRef90_R9JDZ9 Q V K L L E F G D V A T L M G G E E Q I M A G I Y L G V E G D I T G S I M F L L
UniRef90_A0A037ZD96 A I N V V P F D Q L F S G I G G N E E I V Y G V L V R V L G D T P G N L F L F
UniRef90_L0FB63 E V R A I E F D R A P A V I G S E I E V P Q A V I Y V K V E G D A P P G K A V F F F
UniRef90_R5P688 H V R L V D F N E I S T I I G C E E N V M V G I L L N M L S G D V N G M M F L L
UniRef90_A4XJ00 V V K M V D L K E V P E I L G G A E I P V V V G I L L N V E G D I D G F I M L V M
UniRef90_W8RH59 F V K V L S F E D L M D F F F G G A D L P V A S I F L R M E G D L T G S I F E I M
UniRef90_Q9KA45 Q V S V I H K D Q L E K E F P Q P H V A V H V D Y T E G F E G M N L V I
UniRef90_C8WVWF9 V V S I L P R S E V E S R F P T P Y V L V Q V D F T E G L Q G T N A L A I
UniRef90_L0EF07 K V S I L R R E D L E T E F P R P H V A V H V Y M V E G F Q G I N S L V I
UniRef90_UPI0004795D88 M V K I L K L S Q V P D L M G N P E E K V A G V F F E M T G D I K A N I L F V L L
UniRef90_V9HF00 N M N I I E F D E L F N N Y K E N E V V A V L V K V L D D I P G S V L Y I F

QUERY
UniRef90_UPI0003704A94
UniRef90_M8DKN7
UniRef90_UPI00040B02B8
UniRef90_L7ZXC6
UniRef90_UPI0003707CF9
UniRef90_K9CIP5
UniRef90_S9SW31
UniRef90_T0JYU8
UniRef90_F5LS16
UniRef90_UPI00047BF971
UniRef90_X4ZEA5
UniRef90_C9LSR3
UniRef90_D7CM24
UniRef90_W4PX55
UniRef90_W4F089
UniRef90_A3DCQ1
UniRef90_B15I8
UniRef90_W8YUF9
UniRef90_V6T1Z2
UniRef90_UPI0004148AA0
UniRef90_B7GG95
UniRef90_Q8EQV9
UniRef90_A0A059NZT0
UniRef90_G9QMT6
UniRef90_B1BCT8
UniRef90_B7IDV7
UniRef90_A5I511
UniRef90_K0B0Y2
UniRef90_B8CW51
UniRef90_Q39QQ1
UniRef90_UPI0003B3E4F5
UniRef90_UPI000427CB11
UniRef90_Q2RKB9
UniRef90_D9QR15
UniRef90_L7VLX2
UniRef90_UPI0003F5258F
UniRef90_D5WPH3
UniRef90_R1CLZ3
UniRef90_U5LAZ1
UniRef90_Q8RA15
UniRef90_L0K7X4
UniRef90_UPI000401909B
UniRef90_W6N5V4
UniRef90_R5QM99
UniRef90_E6TSU2
UniRef90_R4KB94
UniRef90_J7J365
UniRef90_R6DR47
UniRef90_UPI000289E1EE
UniRef90_F9DP90
UniRef90_UPI000381F5FF
UniRef90_F4LTR3
UniRef90_V6M2K1
UniRef90_A8F4V1
UniRef90_H9U9Y8
UniRef90_F7YXZ0
UniRef90_B2A373
UniRef90_R6NP09
UniRef90_UPI00030FD98A
UniRef90_UPI0002F5CD25
UniRef90_R7BIJ5
UniRef90_C0ZF88
UniRef90_R6C8K9
UniRef90_R5L9X5
UniRef90_H2JE13
UniRef90_A5D0K4
UniRef90_UPI00037117BA
UniRef90_N2BFT5
UniRef90_UPI0003808659
UniRef90_N4WV29
UniRef90_R5YSP4
UniRef90_R7IVB1
UniRef90_UPI00031AFED1
UniRef90_R6QKU0
UniRef90_UPI00047970CA
UniRef90_F7NL68
UniRef90_M1ZLW8
UniRef90_UPI00035EA5AF
UniRef90_UPI0004656E11
UniRef90_UPI00047A3B41
UniRef90_R9JDZ9
UniRef90_A0A037ZD96
UniRef90_L0FB63
UniRef90_R5P688
UniRef90_A4XJ00
UniRef90_W8RH59
UniRef90_Q9KA45
UniRef90_C8WVF9
UniRef90_L0EF07
UniRef90_UPI0004795D88
UniRef90_V9HF00

90 100 110 120

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

QUERY T Y V L S S A L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI0003704A94 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_M8DKN7 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI00040B02B8 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_L7ZXC6 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI0003707CF9 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_K9CIP5 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_S9SW31 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_T0JYU8 A Y L N A S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_F5LS16 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI00047BF971 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_X4ZEA5 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_C9LSR3 A Y L N A S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_D7CM24 T Y L N A S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_W4PX55 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_W4F089 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_A3DCQ1 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_B15I8 S F T G A S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_W8YUF9 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_V6T1Z2 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI0004148AA0 A Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_B7GG95 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_Q8EQV9 N Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_A0A059NZT0 A Y L T A S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_G9QMT6 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_B1BCT8 T F M N A I S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_B7IDV7 S Y V T A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_A5I511 S Y M N A I S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_K0B0Y2 S Y I N S L S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_B8CW51 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_Q39Q01 A Y L N A S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI0003B3E4F5 A Y L N S I A L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI000427CB11 S Y L T A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_Q2RKB9 S F L N A F S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_D9QRI5 S Y L N A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_L7VLX2 S Y L S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI0003F5258F S Y L N S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_D5WPH3 A Y L T S L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R1CLZ3 S Y V N S L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_U5LAZ1 S Y L S S S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_Q8RA15 S Y V A S L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_L0K7X4 A N L N A F S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI000401909B A Y L S A L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_W6N5V4 S Y M N A I S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R5QM99 A Y L N S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_E6TSU2 S Y L S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R4KB94 S Y M N A I S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_J7J365 S F I M A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R6DR47 A Y L S A I S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI000289E1EE S Y L T S L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_F9DP90 S Y L S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI000381F5FF S F M N A I S L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_F4LTR3 S Y V V A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_V6M2K1 S Y I T A L A E F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_A8F4V1 S Y I T A L A E F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_H9U9Y8 S Y I T A L A E F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_F7YXZ0 S Y I T A L A E F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_B2A373 S Y L N S L A D M T K M E V L G P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R6NP09 S Y L N A L S A D M T K M E V L G P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI00030FD98A S Y L S A L S A D M T K M E V L G P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI0002F5CD25 S Y L S A L S A D M T K M E V L G P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R7BIJ5 A Y L S A M S N L T N L K T A S S V P Y I A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_C0ZF88 S A A T S M S T I F N Q F I N I T P P G I L D V M D L A Q G K G G G D S F S F G
UniRef90_R6C8K9 A Y L N S L S A L T N L K T I N I P P P E L A V D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R5L9X5 S Y L S A L S A L T N L K T I T A S V P Y T S I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_H2JEI3 S Y L S A L A G L T N L K L L P S V P E L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_A5D0K4 S F I N A I G S M T G L R M V T T V P M F A F D M L G A I L S Y G L I Q E E L E F D G
UniRef90_UPI00037117BA S Y I T A L A E F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_N2BFT5 S Y I T A L A E F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI0003808659 S Y I T A L A E F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_N4WV29 A Y L S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R5YSP4 A Y L S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R7IVB1 A Y L S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI00031AFED1 S Y L R A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_R6QKU0 S Y L S A L S A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI00047970CA S A A T S M S T I F N Q F I N I T P P G I L D V M D L A Q G K G G G D S F S F G
UniRef90_F7NL68 A Y L N A L S Y F T R F T L L P S I P A L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_M1ZLW8 S Y L S A L A D F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI00035EA5AF S Y I T A L A E F T T K L S M Y P T T V P Q L A I D M A G A I L S Y G L I Q E E L E F D G
UniRef90_UPI0004656E11 S F L N S L S I N M F V G S T Y S I S V P G V A H D M L A A V L D V V V I S I F G
UniRef90_UPI00047A3B41 S Y I N S L S I N M F V G S T Y S I S V P G V A H D M L A A V L D V V V I S I F G
UniRef90_R9JDZ9 S Y L N S L S M M T N L K I C P T I T T V P N F A M D M L G A V V A D L M I E F F G
UniRef90_A0A037ZD96 S Y M N A I A K F T N L T I I P S V P A V A Y D M L G A I L S T S F I E E S G
UniRef90_L0FB63 S F L V A L S E M T N L K I D V S V P M L Q I D M A G A I L S V P A I E E D F G
UniRef90_R5P688 A Y L R S L S E M T N L K I D V S V P M L Q I D M A G A I L S V P A I E E F G
UniRef90_A4XJ00 A Y L T A L A S L T G F K M I Q S V P Q L A E D M A G A I L S F P A I E E F G
UniRef90_W8RH59 S Y L S A L A D L T K L Q I H P S V P D V T L D M F G A V L S E G L M Q F S
UniRef90_Q9KA45 S A S T S M S T I F N K R I D I S P P G V N M L D V G N D Q G T D R V P E
UniRef90_C8WVF9 S A A T A M S Q L F G R Y I N I S P P S V R V L V T F T P D E A Q A A F
UniRef90_L0EF07 S S A T S M S T I F N R L V N I S P P S V N I L D V M K G D G V S L P P V
UniRef90_UPI0004795D88 S Y V N A L S H L M N L K L T I S P P A Y S A D M A G A I L S V P A V Q F G
UniRef90_V9HF00 S F M N A I A N F T G L K A T A S V P A V A N D M L S A I L I S T F V E T G

QUERY N S E D Q I V F V ET LL K V E E E E P L T S Y M M I P K P G Y L V K I F E
UniRef90_UPI0003704A94 Q M G D H A L L I D T Q F W E E G S D E Q V K G G H F F L I P D P E S F G K I F A
UniRef90_M8DKN7 Q A G D D F A L T I D T A F F E E G N E Q V Q G H F F L I P D P E S F K T I F R
UniRef90_UPI00040B02B8 T M G D D A L L I D T T F F L R G R Q E A E G H F F Y F I P D P E S F E K I F V
UniRef90_L7ZXC6 R V G D Y A I L I D T A I Y D E R R D E S I N G G H F F L I P D P E S F S T I F R
UniRef90_UPI0003707CF9 E M G D S A L L I D T T F F E G Y H E S I V S G G Q F F L I P D P E S F A K I F A
UniRef90_K9CIP5 E M G D S A L L I E T N F Q A D D Q S I S I V S G G H F F L I P D P D G S L S T I M N
UniRef90_S9SW31 E M G D S A L L I D T K F L Q D C D D E V Q G G T F F L I P D P D G S F D K I F A
UniRef90_T0JYU8 Q M G D H A L L I D T E F T T D N D G V K G H F F L I P D P D S L S T I L A
UniRef90_F5LS16 E M G D Q A L L I D T K F L E G N E E V V Q G N G F F L I P D P E T F S T I F A
UniRef90_UPI00047BF971 Q I G D Y A I V I D T E I T L N R K S E E H S I N G G H F F L I P D P D S F S Q I F N
UniRef90_X4ZEAS Q M G D D A L L I D T T F F L E D E G K D E L R G G H F F L I P D P D G S F P K I F K
UniRef90_C9LSR3 Q M G D H A M V I E T E F L A E D D E L R G G H F F L I P D P D G S M E M I L S
UniRef90_D7CM24 A I G D Y V L M L E T E F K K E G Q D E V V G H F F V L P E P G A L Q T I L S
UniRef90_W4PX55 V G S D Y A I V I D T Q M M E L E A E K P I V G H F F L I P D P D S F E I I F S
UniRef90_W4F089 Q V S D H V I V I D T T T Y E F N M G D T V R G H F F L I P D P D S F E S I F R
UniRef90_A3DCQ1 K L G D S V L F I E T E F S E G S T K V V G N F F L I P D I D S Y E V L L K
UniRef90_B15I8 Y L D E R V L C I Q T S F L G A F N Q D Q V D S H M L L I P D I D S L D H I F E
UniRef90_W8YUF9 E M G D T A L L I E T K F L D G G E V L D G Q F F L I P D P D S F H I I F S
UniRef90_V6T1Z2 Q V S D Y A I V I D T A L D E E E A Q D S V N G G H F F L I P D P D S F H I I F S
UniRef90_UPI0004148AA0 Q V T D Y A I V I N T K M N P S H L S H S I N G G H F F L I P D P D S F P K I F Q
UniRef90_B7GG95 R V I G D H V I V V I D T A F L H E E H Q N D R V I N G G H F F L I P D P D S F H I I F R
UniRef90_Q8EQV9 H T N D Y V I I I D T E M H Q D D K K E K I S G N F F L I P D P E S F R K I F T
UniRef90_A0A059NZT0 Q V S D Q A I V I K T S F T D G E G S D S V K G H F F L I P D P D S Y E K L E T
UniRef90_G9QMT6 Q Y S D Y A I F I D T T L K E A D G S D S V K G H F F L I P D P D S F W K V L D
UniRef90_B1BCT8 Q F D E Q V L D L E T K F L Q D K Q E N T N G H F Y Y I P M P G S L E K I L N
UniRef90_B7IDV7 T T E D Y I L I E T S F K I E D D D K E L T G Y L L L I P N M P G S L E K I L N
UniRef90_A5I51 Q Y N E H V L D I E T V F K E E D G S E I N G G H F Y Y I P M P G S L E K I L N
UniRef90_K0B0Y2 H T G D H A I F I E T Q F E E G E R S I N G G D L F L I P E V D S F E K I L K
UniRef90_B8CW51 E S S D Y A L L I E T K F L D G G N E I N G Y F L I P D P G S L D K I L K
UniRef90_Q39QQ1 E I G D L A L M V E T D F F G E E K I N G Q F F L I P D P D S L K I L N
UniRef90_UPI0003B3E4F5 T I A D K L L I E T D F T D D K D M V G Y F L V P D A E S Y T K I L Q
UniRef90_UPI000427CB11 R E S D H A I I D T M I Q E E S G A K E D I E G H F F L I P D P E S F E R I F K
UniRef90_Q2RKB9 Y F S D R A L V I E T K F Y S E A T I N G H F F L I P E D R A L G I L Q
UniRef90_D9QRI5 Y I G D Y A L V V E T E F W D G K D K I S G N F F F I P T P E S L N K I L S
UniRef90_L7VLX2 K T T D K V L Y I E T E F S E M G H R V I N G D F F L I P D T D S Y L K I L N S
UniRef90_UPI0003F5258F L M G D K L L I E T E F S D D I K L N G Y F L L I P D I E Y K K I L N
UniRef90_D5WPH3 A D A D Q C L I V H T G A H I E E L D V W C H F L L V P D P D S V L P L L T
UniRef90_R1CLZ3 Q V V D K V L F I E T E F Q E D E K Q V L G D L F L I P N M E S F E T I L K
UniRef90_U5LAZ1 Q V S D S A I V I E T L T E P A V T H T L K G H F F L I P D M C G E F E V I F S
UniRef90_Q8RA15 E I S D K I L F I E T Q F V E G E R L I R G D F F L I P D I N S F D L I L K
UniRef90_L0K7X4 Q V V G D Y A I V I E T D F L S D G L E E N L N G Q F F L I P N P D S Y Q V I L N
UniRef90_UPI000401909B Q A G D Y A I V I D T V M E E A G L K E E A N G Q F F L I P D P E A F Y K I F Q
UniRef90_W6N5V4 Q F D E N V L D I E T L F V E D N S E I N G G H F Y Y I P M P G S L E K I L S
UniRef90_R5QM99 A L G D R A L L I Q T Q F T D D Q N L D G G F F L I P D L E S Y D K I M A
UniRef90_E6TSU2 P I A Y A I F I D T K I S E K D E Q N Q T Q G H F F L I P D P D S F G K I F K
UniRef90_R4KB94 Q F E D N V L D F E T E F L Q D D L N K I S G G H F Y Y I P M P G S L E K I L N
UniRef90_J7J365 V L G D T V L F I E T Q L T G L P K I E G Q F I F L I P E E G S L K K L L G
UniRef90_R6DR47 K L G D K A L L I E S Q F T D M D V D I S G Y F I L I P T L D S Y S K I L K
UniRef90_UPI000289E1EE Q I S D F A I V I E T N E D E N P E N N N I N G G H F L L I P D P N S F E K I F T
UniRef90_F9DP90 Q Y S D E V I V I E T E F E G E Q G I S S L A G H F F L I P E T P G S Y R T I F S
UniRef90_UPI000381F5FF H W S D K V L F I E T V F F Q E Q D R I K G H H F F L I P E T G A L N R L F E
UniRef90_F4LTR3 Y M G D T A F L I D T E F T E G L D G T K L H Y F F L I P D D E S L K L L K
UniRef90_V6M2K1 S Y E D D V T F V E T Q L K I E G I E S V T S Y M F L I P G R G S L E K V F S
UniRef90_A8F4V1 G E E N I L L V E T L I E I E G L E E A L Q G Y L L L V P S V D S L E K L L K
UniRef90_H9U9Y8 F E E N V V V V E T Q I L S M E G V Q S I T S Y M F L I P G K D C L D K I F K
UniRef90_F7YXZ0 E I S E H V I L I G T E F A Y E G N T R G H F F L I P D N E S F P K I I K
UniRef90_B2A373 K I G D N A L M I T T E F G D E V M I E G Y F L L I P D L E S F E K I L K
UniRef90_R6NP09 V S D Y A I V I D T I T D D H E D E N K P L Q G H F F L I P D P D S F P K I F N
UniRef90_UPI00030FD98A Q V S D Y V I V I N T S I S E E G E N T E M K G H F F L I P D P E S F N V I F K
UniRef90_R7BIJ5 K L G D K V L L I E T Q F S G E L D L V N G Y F L M V P E L E S Y D V L L S
UniRef90_C0ZF88 D D D S P L V K I V S F R L K V G E H G E L I D S N I M Q L L P L S F A K M I D
UniRef90_R6C8K9 A I G D K I L L I Q S Q F Y D D T M I D G Y F I L I P D L E S Y A K I L R
UniRef90_R5L9X5 K I G D K V L L I E T Q F G E E V L L G N G Y F V M I P E L E S Y E K I L T
UniRef90_H2JEI3 K V G D S V L Y I E T E F S E G I T R V F G D F L I P D V E S Y E I L L R
UniRef90_A5D0K4 Y W D D Q I L L I E T L F F Q E N F Q I K G H F F L I P Q T G A L N R I F E
UniRef90_UPI00037117BA Q Y G D N A L L I E T A F G G D T V I N G Y F F L L I P E L D G S Y D K I L T
UniRef90_N2BFT5 R V I E D N V L V I G T D L E V H E E D T V I N G Y F F L L I T D P G A I D K I F A
UniRef90_UPI0003808659 Q E S D Y A I V I D T T L E E E G T S A G T K G H F F L I P D P G S F S Q I F Q
UniRef90_N4WV29 Q Y G N N A L L I E T E F G S D Y M I T G G Y F I L M P E E D S Y A K I L E
UniRef90_R5YSP4 T I G D K V L Y I E T F N E E S E L N G Y F L L V P E L E S Y D V I L N
UniRef90_R7IVB1 S D Q A I M I E T V L H I E G M K R E I R G H F F L I P N P E T Y T S I F E
UniRef90_UPI00031AFED1 K I G D K V L F I E T Q L G E D D F L N G Y I V M V P E V D S Y G K L L T
UniRef90_R6GQU0 D D P L V K I S F R L K V G N L I N S S I M Q L L P V Q F A Q R M V E
UniRef90_UPI00047970CA Q M G D H A L V I E T E F S S E G D G V K G H F F L I P D P G S L G T I L A
UniRef90_F7NL68 R S G N D A L L I D T S F M N G S E K L E G H F F F I P D P S F F P T L F K
UniRef90_M1ZLW8
UniRef90_UPI00035EA5AF Q T G D T A L V V N T T L R L G E S S L S V Q G N V V M I P D P G S L E G L L E
UniRef90_UPI0004656E11 I M G D K V L F I E T E F Q E D N K Q V L H G D L F L I P D L E S F E K I L N
UniRef90_UPI00047A3B41 L L G D H I L L I E T Q F F E D N Q L D G Y F L I P D L E S Y G K I L S
UniRef90_R9JDZ9 Q F D E Y I L L I E T A F L Q D N S E I S G H F Y Y I P M P G S L E I L L N
UniRef90_A0A037ZD96 V L E D T V L F I E T Q L S G L P Q I S G Y F V F L P D E G S L E S K L L G
UniRef90_L0FB63 K I G D K V L L I E T E F E A D N N E T S G Y I L L V P E L E S Y E K I L E
UniRef90_R5P688 E T G D T A L Y I E T E I F E S S S R I V A D F F L I P T I E S Y Q K M L K
UniRef90_A4XJ00 P L G D Q A I V I D T S I F D D Q N Q Q E L K G N M F L L P D F E S F E K L F K
UniRef90_W8RH59 G D V L I K V S F R L R I G E L I D S S H I M Q L M P I P F A R E L V R
UniRef90_Q9KA45 G P A E E L V N V E F R L H V H E L I D S S H I M Q L M P I P F A R E L V R
UniRef90_C8WVWF9 G P A E E L V N V S F R L H V H E L I D S S H I M Q L M P I P F A R E L V R
UniRef90_L0EF07 E V G D V F V K I S F R L T I G D L I D S T I M Q L L P V F V K E L V R
UniRef90_UPI0004795D88 E V G D Y A L Y I E T E F L E N D K R I D G Y I M Q L L P D V E G I G R I M K
UniRef90_V9HF00 Q Y E E Y A L D I E T L F M G E G D N K I E G H F Y F V P A P G S L E K L L E

QUERY	R	M	G	I	Q
UniRef90_UPI0003704A94	A	L	G	V	
UniRef90_M8DKN7	S	L	G	V	
UniRef90_UPI00040B02B8	S	L	G	V	
UniRef90_L7ZXC6	A	L	G	V	D
UniRef90_UPI0003707CF9	A	L	G	V	S
UniRef90_K9CIP5	A	V	G	V	
UniRef90_S9SW31	A	L	G	V	
UniRef90_T0JYU8	A	I	G	V	
UniRef90_F5LS16	A	L	G	V	E
UniRef90_UPI00047BF971	S	L	G	V	D
UniRef90_X4ZEA5	S	L	G	V	
UniRef90_C9LSR3	A	V	G	V	
UniRef90_D7CM24	A	L	G	V	N
UniRef90_W4PX55	A	L	G	V	D
UniRef90_W4F089	A	L	G	V	S
UniRef90_A3DCQ1	A	L	G	V	
UniRef90_B1I5I8	A	L	G	V	
UniRef90_W8YUF9	S	L	G	V	
UniRef90_V6T1Z2	A	L	G	V	
UniRef90_UPI0004148AA0	A	L	G	I	N
UniRef90_B7GG95	A	L	G	V	D
UniRef90_Q8EQV9	K	L	G	I	D
UniRef90_A0A059NZT0	S	L	G	V	Q
UniRef90_G9QMT6	A	L	G	V	
UniRef90_B1BCT8	T	L	G	V	K
UniRef90_B7IDV7	K	L	G	M	
UniRef90_A5I5I1	T	L	G	V	S
UniRef90_K0B0Y2	S	L	G	V	S
UniRef90_B8CW51	A	L	G	F	D
UniRef90_Q39QQ1	A	I	G	V	K
UniRef90_UPI0003B3E4F5	S	L	G	V	
UniRef90_UPI000427CB11	A	L	G	V	N
UniRef90_Q2RKB9	S	L	G	L	Q
UniRef90_D9QRI5	K	L	G	V	
UniRef90_L7VLX2	S	L	G		
UniRef90_UPI0003F5258F	S	L	G	M	N
UniRef90_D5WPH3	A	L	G	V	
UniRef90_R1CLZ3	Q	L	G	V	
UniRef90_U5LAZ1	S	L	G	V	
UniRef90_Q8RA15	A	L	G	V	E
UniRef90_L0K7X4	K	L	G	V	S
UniRef90_UPI000401909B	S	L	G	V	E
UniRef90_W6N5V4	S	L	G	V	
UniRef90_R5QM99	S	L	G		
UniRef90_E6TSU2	S	L	G	V	
UniRef90_R4KB94	T	L	G	V	N
UniRef90_J7J365	A	M	G	V	
UniRef90_R6DR47	S	L	G	L	
UniRef90_UPI000289E1EE	A	L	G	V	Q
UniRef90_F9DP90	S	L	G	V	
UniRef90_UPI000381F5FF	A	L	G	I	S
UniRef90_F4LTR3	A	L	G	V	N
UniRef90_V6M2K1					
UniRef90_A8F4V1	K	V	E	L	K
UniRef90_H9U9Y8	A	L	G	M	
UniRef90_F7YXZ0	K	V	G	I	
UniRef90_B2A373	S	L	G	F	D
UniRef90_R6NP09	S	L	G	I	
UniRef90_UPI00030FD98A	K	L	G	I	
UniRef90_UPI0002F5CD25	A	L	G	V	E
UniRef90_R7BIJ5	S	L	G	M	
UniRef90_C0ZF88	R	L			
UniRef90_R6C8K9	S	L	G	M	
UniRef90_R5L9X5	S	L	G	L	
UniRef90_H2JEI3	A	L	G	V	
UniRef90_A5D0K4	A	L	G	M	
UniRef90_UPI00037117BA					
UniRef90_N2BFT5	S	L	G	I	
UniRef90_UPI0003808659	A	L	G	L	
UniRef90_N4WV29	A	I	G	V	
UniRef90_R5YSP4	S	L	G	I	Q
UniRef90_R7IVB1	S	L	G	I	S
UniRef90_UPI00031AFED1	S	L	G	V	N
UniRef90_R6QKU0	S	L	G	L	E
UniRef90_UPI00047970CA	S	L			
UniRef90_F7NL68	S	I	G	V	K
UniRef90_M1ZLW8	A	L	G	V	
UniRef90_UPI00035EA5AF					
UniRef90_UPI0004656E11	K	L	G	V	Q
UniRef90_UPI00047A3B41	S	L	G	V	
UniRef90_R9JDZ9	S	L	G	I	S
UniRef90_A0A037ZD96	S	L	G	V	
UniRef90_L0FB63	A	I	G	V	
UniRef90_R5P688	S	L	G	V	
UniRef90_A4XJ00	A	L	G	V	
UniRef90_W8RHS9	A	L	G		
UniRef90_Q9KA45	D	L			
UniRef90_C8WWF9	S	M	Q	V	
UniRef90_L0EF07	N	L			
UniRef90_UPI0004795D88	H	L	G	V	
UniRef90_V9HF00	S	L	G	L	

UniRef90_F7TXE7
UniRef90_D4IVJ6
UniRef90_A0A024Q0T8
UniRef90_R7N560
UniRef90_I3DZD4
UniRef90_F6CIB3
UniRef90_UPI00031F3C37
UniRef90_C4ZA84
UniRef90_H2AIN4
UniRef90_I0U5S7
UniRef90_I0U5S7
UniRef90_T0N119
UniRef90_D2Z3J5
UniRef90_UPI0003138194
UniRef90_UPI0004067F3B
UniRef90_I0JMM2
UniRef90_F7Z424
UniRef90_G8LVF2
UniRef90_UPI0002FE43AB
UniRef90_UPI0003711BC4
UniRef90_A6M1D6
UniRef90_R7B2K9
UniRef90_F4HN47
UniRef90_A6TRP4
UniRef90_L0IM26
UniRef90_A9BHZ1
UniRef90_I4BUJ2
UniRef90_F0KA04
UniRef90_G9QMS3
UniRef90_R7NGY9
UniRef90_UPI00042A012C
UniRef90_D9S3A7
UniRef90_UPI00034D16A7
UniRef90_UPI000425D6F7
UniRef90_M1Z4S4
UniRef90_UPI0003B7715F
UniRef90_R9TVX7
UniRef90_UPI0004289960
UniRef90_Q3ADC0
UniRef90_UPI00047E971B
UniRef90_D3FT27
UniRef90_A8FD97
UniRef90_S0EWR3
UniRef90_S9SH70
UniRef90_R9CAU6
UniRef90_F5LS29
UniRef90_J9HTM8
UniRef90_UPI0003685299
UniRef90_J9HAZ6
UniRef90_S6F879
UniRef90_UPI000289FD08
UniRef90_E0QH15
UniRef90_UPI0002893FF8
UniRef90_UPI000372CFB8
UniRef90_R6QWB8
UniRef90_UPI0001E891CC
UniRef90_W4V6F7
UniRef90_U6B9T2
UniRef90_R5EL51
UniRef90_A0A015MTK9
UniRef90_E3PSH8
UniRef90_UPI00047B6780
UniRef90_R5E1A5
UniRef90_B0TFF9
UniRef90_F8II00
UniRef90_W8U6Y3
UniRef90_A8MHF0
UniRef90_Q0AYL0
UniRef90_I4ACW4
UniRef90_R6E8Z7
UniRef90_D6XTX6
UniRef90_UPI00046F7551
UniRef90_B9MM12
UniRef90_UPI00047AA10C
UniRef90_W2E6D0
UniRef90_B1YI92
UniRef90_T0BZL7
UniRef90_UPI0003B310A9
UniRef90_UPI0004706224
UniRef90_UPI000380EF78
UniRef90_K2AK80
UniRef90_UPI00029A5EFA
UniRef90_E3PSJ2
UniRef90_B6YX74
UniRef90_R7K252
UniRef90_N9XUQ8
UniRef90_F5L806
UniRef90_UPI00031AE8D7
UniRef90_UPI0003B78E63
UniRef90_UPI0001E2C242
UniRef90_G2T3E6
UniRef90_R6L2G6

1 10 20 30 40
L S P F E Q D A L G E I G N I T F G S A A T A L S T L L S Q K V D I T T P
E V N E K Y F D V L K R E I G N I T G A G N A A T T A L S A N M L G L K R I D D M S V P
Q Q L T S V Q F D D V L K R E I G N I T G A G N A A T T A L S A N M L G L K R I D D M S V P
K I T S L Q Y F D V L K R E I G N I T G A G N A A T T A L S A N M L G L K R I D D M S V P
Y R P L S P V E L D D A L K E I G N I T G A G N A A T T A L S A N M L G L K R I D D M S V P
N V N S M Y M D V L K R E I G N I T G A G N A A T T A L S A N M L G L K R I D D M S V P
I K E E Q M D I L R E V G N I T G A G H S A S A M A Q L L N R K I D M E V P

UniRef90_T0N119
UniRef90_D2Z3J5
UniRef90_UPI0003138194
UniRef90_UPI0004067F3B
UniRef90_I0JMM2
UniRef90_F7Z424
UniRef90_G8LVF2
UniRef90_UPI0002FE43AB
UniRef90_UPI0003711BC4
UniRef90_A6M1D6
UniRef90_R7B2K9
UniRef90_F4HN47
UniRef90_A6TRP4
UniRef90_L0IM26
UniRef90_A9BHZ1
UniRef90_I4BUJ2
UniRef90_F0KA04
UniRef90_G9QMS3
UniRef90_R7NGY9
UniRef90_UPI00042A012C
UniRef90_D9S3A7
UniRef90_UPI00034D16A7
UniRef90_UPI000425D6F7
UniRef90_M1Z4S4
UniRef90_UPI0003B7715F
UniRef90_R9TVX7
UniRef90_UPI0004289960
UniRef90_Q3ADC0
UniRef90_UPI00047E971B
UniRef90_D3FT27
UniRef90_A8FD97
UniRef90_S0EWR3
UniRef90_S9SH70
UniRef90_R9CAU6
UniRef90_F5LS29
UniRef90_J9HTM8
UniRef90_UPI0003685299
UniRef90_J9HAZ6
UniRef90_S6F879
UniRef90_UPI000289FD08
UniRef90_E0QH15
UniRef90_UPI0002893FF8
UniRef90_UPI000372CFB8
UniRef90_R6QWB8
UniRef90_UPI0001E891CC
UniRef90_W4V6F7
UniRef90_U6B9T2
UniRef90_R5EL51
UniRef90_A0A015MTK9
UniRef90_E3PSH8
UniRef90_UPI00047B6780
UniRef90_R5E1A5
UniRef90_B0TFF9
UniRef90_F8II00
UniRef90_W8U6Y3
UniRef90_A8MHF0
UniRef90_Q0AYL0
UniRef90_I4ACW4
UniRef90_R6E8Z7
UniRef90_D6XTX6
UniRef90_UPI00046F7551
UniRef90_B9MM12
UniRef90_UPI00047AA10C
UniRef90_W2E6D0
UniRef90_B1YI92
UniRef90_T0BZL7
UniRef90_UPI0003B310A9
UniRef90_UPI0004706224
UniRef90_UPI000380EF78
UniRef90_K2AK80
UniRef90_UPI00029A5EFA
UniRef90_E3PSJ2
UniRef90_B6YX74
UniRef90_R7K252
UniRef90_N9XUQ8
UniRef90_F5L806
UniRef90_UPI00031AE8D7
UniRef90_UPI0003B78E63
UniRef90_UPI0001E2C242
UniRef90_G2T3E6
UniRef90_R6L2G6

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

UniRef90_F7TXE7
UniRef90_D4IVJ6
UniRef90_A0A024Q0T8
UniRef90_R7N560
UniRef90_I3DZD4
UniRef90_F6CIB3
UniRef90_UPI00031F3C37
UniRef90_C4ZA84
UniRef90_H2AIN4
UniRef90_I0U5S7
UniRef90_I0U5S7
UniRef90_T0N119
UniRef90_D2Z3J5
UniRef90_UPI0003138194
UniRef90_UPI0004067F3B
UniRef90_I0JMM2
UniRef90_F7Z424
UniRef90_G8LVF2
UniRef90_UPI0002FE43AB
UniRef90_UPI0003711BC4
UniRef90_A6M1D6
UniRef90_R7B2K9
UniRef90_F4HN47
UniRef90_A6TRP4
UniRef90_L0IM26
UniRef90_A9BHZ1
UniRef90_I4BUJ2
UniRef90_F0KA04
UniRef90_G9QMS3
UniRef90_R7NGY9
UniRef90_UPI00042A012C
UniRef90_D9S3A7
UniRef90_UPI00034D16A7
UniRef90_UPI000425D6F7
UniRef90_M1Z4S4
UniRef90_UPI0003B7715F
UniRef90_R9TVX7
UniRef90_UPI0004289960
UniRef90_Q3ADC0
UniRef90_UPI00047E971B
UniRef90_D3FT27
UniRef90_A8FD97
UniRef90_S0EWR3
UniRef90_S9SH70
UniRef90_R9CAU6
UniRef90_F5LS29
UniRef90_J9HTM8
UniRef90_UPI0003685299
UniRef90_J9HAZ6
UniRef90_S6F879
UniRef90_UPI000289FD08
UniRef90_E0QH15
UniRef90_UPI0002893FF8
UniRef90_UPI000372CFB8
UniRef90_R6QWB8
UniRef90_UPI0001E891CC
UniRef90_W4V6F7
UniRef90_U6B9T2
UniRef90_R5EL51
UniRef90_A0A015MTK9
UniRef90_E3PSH8
UniRef90_UPI00047B6780
UniRef90_R5E1A5
UniRef90_B0TFF9
UniRef90_F8II00
UniRef90_W8U6Y3
UniRef90_A8MHF0
UniRef90_Q0AYL0
UniRef90_I4ACW4
UniRef90_R6E8Z7
UniRef90_D6XTX6
UniRef90_UPI00046F7551
UniRef90_B9MM12
UniRef90_UPI00047AA10C
UniRef90_W2E6D0
UniRef90_B1YI92
UniRef90_T0BZL7
UniRef90_UPI0003B310A9
UniRef90_UPI0004706224
UniRef90_UPI000380EF78
UniRef90_K2AK80
UniRef90_UPI00029A5EFA
UniRef90_E3PSJ2
UniRef90_B6YX74
UniRef90_R7K252
UniRef90_N9XUQ8
UniRef90_F5L806
UniRef90_UPI00031AE8D7
UniRef90_UPI0003B78E63
UniRef90_UPI0001E2C242
UniRef90_G2T3E6
UniRef90_R6L2G6

50 60 70 80
T V S I V K R S E L V D E F P R P H V A V H V E Y T D G F Q G I N M L V I
E V A F L P V E E L G S A I G A E D E T I V V A V M L G R V I E A D A D G S M M F L I M
S V N I V N S Y D E M M D L L I G G P E E T I L V V A V F L R Q V I Q G G D A P G S V Y L F I L
S Q V R L L N F N E L M G A L L I G G G E E T I L V V A V I V L R Q V I E G D A P G S M M F L I L
N V R L V S F D E M M E M A G G A E E N V V A G V V F L R I E G D A P G S M F F I L
R S S F L P F E M I L E L V G P Y E E L V V G V L R V L G D A P G I V L Y I F
A V S I V R K A H L G D A D E F P Q P Y V V A V S Q V L R V Y T V G F R G Y N L L V I
R V L L M D A T K L G D A L C P E E E T I V V A V I V L E V T N D S G S M M F L I M
F A T L L T F D E L A D F F G G A E T P V A S I V L R M E G D M T G S I F L I M
M L S Q
K V N V I Q L E D I V S R F F D G E E V V V Y A V V I A R V L G T T P G N M L F I L
D V E L V S I L Y E D I F S E R F F G P P E E D F V V A S V V I A H V L G T T P G N M L F I L
V V S L I N R N N Q L E E E E F F P H P Y V V A V V S V E Y T T G F S G V N L L V I
Q V S M I S R R N R L F A S E E F F P K P H V A V H V R Y T V D G F F S G V N L L V I
K I T V V N R R N R L P D E F F P K P Y V V A V V G V T Y T D G F F S G E N L L V I
E V S I V R H D K L A D E F F P H P Y V V A I Q V K Y T E G F S G V N V L V I
K V K V M E R F R E L V T E M F F G G A E L P V V G I L K M T G D V T G S I M L I L
T V S A I R K S E L V T S A E F F P Q P H V V I H V K Y T D G F F E G V N V L V I
S V S T V P F S E M M E L T G G S E Q E V V S V T S L R I E G E A G G N M F F I L
A V N V V K L E E V L F Q E S G G E A V A G T V V R V L G D T S G N M L L V F
K V E L V P F S Q L A D F I G G S E E E Q V V G M L L Q M S G D V D G M M F F V
D L K I L E I K K V P E V V G E E V K V A V V Y I E L G K D F S S H A F F V A
R V S V L T F E E I A Q E Y P L P F V A V D V K Y K E G L E G V N L L I L
S V K L M D F N E V Q N I F G L A D A I I V G I Y F Y L E G G L V K G N L L F S L
S A E I L P I S E L W E E F S D P E D I T A G S M V E I G G E L H G A L F I L
K A E L V S I L Y E T D R E Y A S P T E L V C A V V V L R F E G G E L S G N M L W I F
D I N I V S F D T L F S E I G E E K V A V V V R V L G D T P G N I L F V F
S V S I I P R S K I Q D E F P H P Y V V A I L L E Y R D G F T G M N L L V I
N V A I I Q F K D I S T I G S E D Q T V V G I L G L E G D D G M M L F I F
R T S A I R S R I A E E F P Q P H V V A I Q V N Y T E G F S G A N L F V I
E T K V L P F D E V S K S V G G P E N L V T G I F L R V I E G D L G F N L L F I M
H V T A I S R N L P E N E F F P H P H V V A V H V E Y T E G F F E G M N L L V I
T V S V M K P E D I L T D F P R P Y V V M V T V E Y T E G L S G T N A L A V
K V R I M E F K D V A E V L G G E E E L V A G I Y L N L G S D V E G N I M F I L
Q V R L L D F K D V G D L M G G A E Q L M T G I V L S V E G D I N G S I M F L L
T V S V I E K S H L N D E F F P H P Y V S I G V L S Y T E G F S G N N L L V I
S V D V V P I A Q L L E K E F F P T P Y V A I Q V H Y T I G F T G L N L L V I
E A V V I G F D E L Q R I G S P E E L V A C V F L G L Q G D A P G T I L F I F
A I S M L D P I D Q G T K P I D S E D I L V K V S F L Q L Q I G D P S N I M Q L L
T L S L V E S K E L P A E F F P Q P H V A V H V E Y T E G F E G M N L L V I
R V E L L D V L K E G E D R I P A A E M L V V S F R L K I G E L D S N I M Q L Y
C V D I V S O E W R 3 H F L E I L C R P E D E A I G I Y L A V E G D A P H V A F L V I
R I T L L Q R E N L E N E F F P K P H V A V H V R Y V E G F E G V N S L V I
T V S V I S K N M L S E E F F P H P Y V V A I R V N Y T E G F S G M N L L V I
G I D I L N L S N G E G K L P N E D V F I K I S F R L T I G I D S T I M Q L L
R V S L I R H D D V I E A R F P P T P Y V L V Q V D F T E G L R G S N A L A I
T V T V I E E S R I L K D V F P H P Y A A I E V E Y T E G F T G V N L L V I
D A R L C P F S E I V D D V V F G G E T I V A A V F I R I L G T I S G N M F V L M
N I N I I G F E E L F N Q Y E E N E V V A V L V K V L D D I E G S L L Y V F
N V S L V Q S S E L A D E F F P H P Y V V A I Y I N Y T V G F T G T N M L V I
N I E V M E T E K V V D L F N D P E E I T V G V Y I N F T G D I E G T I L T L L
G I D I M D L A N Q N G K D S V P D E E V I S F R L T I E D L I D S T L M Q L L
K V S L I T R S Q F E T E F P K P H V A I H V Q Q Y V D G F F E G I N S L I I
Q V T Y M T W D E L A D S Y D R P C V F L Q Q Y T A G L D G N N V L V L
K V T L V E K S R L E S E F P D P Y V V A I R V S Y T E G F S G S N I L V V
K V T I C S W D E L A G E Y Q S S Y V A V K V E Y T E G L D G M N L L V I
S A E L E S F T T I I D R V G G A E A Y T A G A L L R F S G D I R A T L L F L M
V V K V L K F D E I A D M I G G P D T V V A A V L T H F T G E V S G M T L F V L
G I D I L D V E G V S Q L P V D V V F V K I S F H L K I G D L I D S T I M Q L L
N I E V I E T E K V E I F P E D E E E I T V G V Y I N F N G D I N G T I L T L L
G I D I M D V E G M S N V P K D E M L V K I S F R L K V G D L I D S S I M Q L V
N V A L V P F D N I S S F I G S E E Q T V V G I L E I Q G G D L D G M M F L F
S L G V L P D H V A D H M G G P E T L V A G V Y L R V E G K A P A N L L F V I
D A R L C R F A E V V D V V G G N D T M V V A V Y I R I E G E T A G N M F V L
V T E V I E T E K I V N T V E T A E M L I V G V Y K F W G D I S G N I M L V I
R V Q V L T I E S K K Y P L P Y V V A V D V K Y K E G L E G T N L L V I
Q V N L L P F A E V P D L V G G A D L H V V G L F L V A T G S A P A S I L F L L
K V D M A S A E Q L R K D Y P I P S V I V D V R Y K A G I E G S N I M L Y
S A S L V D L N D T I D S F L D D E I L V Q I S F D M K I G D L V D S Q I M Q L Y
K V S V V R K S D L E K E F P K P H V A I S V T Y T A G F E G L N L L V I
E V T I T I Q E L A K Q Y P I P F V A A E V Q Y T E G L I E G T N L L I I
E A F V I D F A Q I P E L K R A D E I L V K V A A F R M T I G D L I D S Q I M Q L I
S V S I I H K N K L G E Q F Q H P Y V A I E V N Y T E G F S G S N L L V I
K V S V I A R E D L V N E F S K P H V A V H V K Y V D G F F H G I N L L V I
H V R M I T M E E L R S R Y P I P H V A V L R V G Y T E G F K G E N V L I L
A A R V C P F A D I V D V V G G P E A I V A A V F I R I D G Q I S G N M F V L F
S V I Q M V P F P K L I E A A G G E E K V A A V T F L R L A G H I S G S I F F V L
A I S V I D P R N D L I E T A F V H P Y V V A V G V E Y T G V I S G T N L L V I
G I D V L D V K E G T D K V P G D E T I I S F R L Q V I G D L I D S V L M Q L V
Q V Q F S T I D E A T R V F V G P A E T I V S A V C L R V L G D V T G I L I T F
G L E V I P I K V L P E K V G E D V K V A V V Y V L G L G K E F S G H A F F I L
R V E E T T I G A I A S S Y P L P F I A V V V N Y R I G I E G M N L L I L
E I D T P I K S V P E K V I G E D I K I A V Y I Q L S G G F N G H A F F F M
K V S Y V T I N E I S A Q Y E D K P C V F I H I S Y I D G G I S G N V L I L
N V K I M K F E E V P A M L G G P E E I K L G V L L E L S G D L N G M F F L I
K L S L L H T D R L A E E F P K P H V A V V N Y T E G F K G L N L L I I
S V S L I E R A R V A E E F P H P Y V V A I Q V N Y T E G F L G T N L L V I
G V K A V S T E R M V E K S F P R P H V A V N V E Y T E G F E G T N L F V I
Q V T V C S W E L S E H Y R T N Y V A V K I E Y T E G L N G A N L M Q L Y
Q A D L I D L Q E V I D E F L A G E F V K I R F R L E I G D L V D S D I M Q L Y
I A N L V T Y N E M D D S L P P F Q F V M V A F K M Q I G D L I D S E I M Q L Y

UniRef90_F7TXE7
UniRef90_D4IVJ6
UniRef90_A0A024Q0T8
UniRef90_R7N560
UniRef90_I3DZD4
UniRef90_F6CIB3
UniRef90_UPI00031F3C37
UniRef90_C4ZA84
UniRef90_H2AIN4
UniRef90_I0U5S7
UniRef90_I0U5S7
UniRef90_T0N119
UniRef90_D2Z3J5
UniRef90_UPI0003138194
UniRef90_UPI0004067F3B
UniRef90_I0JMM2
UniRef90_F7Z424
UniRef90_G8LVF2
UniRef90_UPI0002FE43AB
UniRef90_UPI0003711BC4
UniRef90_A6M1D6
UniRef90_R7B2K9
UniRef90_F4HN47
UniRef90_A6TRP4
UniRef90_L0IM26
UniRef90_A9BHZ1
UniRef90_I4BUJ2
UniRef90_F0KA04
UniRef90_G9QMS3
UniRef90_R7NGY9
UniRef90_UPI00042A012C
UniRef90_D9S3A7
UniRef90_UPI00034D16A7
UniRef90_UPI000425D6F7
UniRef90_M1Z4S4
UniRef90_UPI0003B7715F
UniRef90_R9TVX7
UniRef90_UPI0004289960
UniRef90_Q3ADC0
UniRef90_UPI00047E971B
UniRef90_D3FT27
UniRef90_A8FD97
UniRef90_S0EWR3
UniRef90_S9SH70
UniRef90_R9CAU6
UniRef90_F5LS29
UniRef90_J9HTM8
UniRef90_UPI0003685299
UniRef90_J9HAZ6
UniRef90_S6F879
UniRef90_UPI000289FD08
UniRef90_E0QHI5
UniRef90_UPI0002893FF8
UniRef90_UPI000372CFB8
UniRef90_R6QWB8
UniRef90_UPI0001E891CC
UniRef90_W4V6F7
UniRef90_U6B9T2
UniRef90_R5EL51
UniRef90_A0A015MTK9
UniRef90_E3PSH8
UniRef90_UPI00047B6780
UniRef90_R5E1A5
UniRef90_B0TFF9
UniRef90_F8II00
UniRef90_W8U6Y3
UniRef90_A8MHF0
UniRef90_Q0AYL0
UniRef90_I4ACW4
UniRef90_R6E8Z7
UniRef90_D6XTX6
UniRef90_UPI00046F7551
UniRef90_B9MM12
UniRef90_UPI00047AA10C
UniRef90_W2E6D0
UniRef90_B1YI92
UniRef90_T0BZL7
UniRef90_UPI0003B310A9
UniRef90_UPI0004706224
UniRef90_UPI000380EF78
UniRef90_K2AK80
UniRef90_UPI00029A5EFA
UniRef90_E3PSJ2
UniRef90_B6YX74
UniRef90_R7K252
UniRef90_N9XUQ8
UniRef90_F5L806
UniRef90_UPI00031AE8D7
UniRef90_UPI0003B78E63
UniRef90_UPI0001E2C242
UniRef90_G2T3E6
UniRef90_R6L2G6

90 100 110 120
K[V]A D A S V T I A D L M M G G D G R N N A E L S E M H L S A V Q E A M N Q M M G
D M Q S A H H I V N K L M M R D D S Y N E E P F N E M D L L S A I K E V G N I T A G G
S T E E A E L L V N Q I T G D S L T E E E G P F N E M D L L S A I K E V G N I T A G G
S E D S A L H L V N K L M G P E K P L I E E C H F G E M E C L A V S A M K E V G N I T G G
S L K Q A A A F I K R M I G D L E F T T F E N Y N E L A L S A I Q E V L G N I L S T G G
D G E S T L H L V D M L M G L P V G T T G S E L L Q L S A I K E V L G N I L S T G G
K Q S D A A L I A D L M L M G G D G T N P S D L G E I Q L S A I K E V A M N Q M M G
K L P A A H F L V N K L M G R P Q D Y N E P F D E M D L L S A M K E V G N I T A G G
P F H Q A E Q F I R E L I G N P D F D D Q L G G E L L S S D A L H E F G N I L A G G
D E I D A L L R G S A G N D E I P Q L D E L L S P L E Q Q D A L G E V G N I S F G G
D E I D A L L R G S A G N D E I P Q L D E L L S P L E Q Q D A L G E V G N I S F G G
D K K T I F R L V E S L V G E M G E E L N E V G Y S V L G E M G N I L E T
D E E A A Q G M V D A M F R M N T D G R D F P P E M R D S A L S E L G N I L L S
K Q S D A A I T A D L M L G G D G R N N P N D L G E I Q L S A V Q E A M N Q M M G
K A H D A Q V I A D L M L G G D G S N S T E E L N E I H I S A V Q E A M N Q M M G
N t K D A A I I A D L M L G G D G S N S P D D E L L N E I H I S A V Q E A M N Q M M G
K Q S D A A I I A D L M L G G T G E N S P S E M F D E I H I S A V Q E A M N Q M M G
E N N A A R I L V N M L M G K S N E K S E M F D E I E M S A V Q E L G N I L A G G
R M E D A A I L A D L M M G G V G I D N A I E F T D L Q I S A V Q E A M N Q M M G
T V A E A D R F I R K L M S D D L F T F H N R E A Q H I S A M Q E M G N I L S G
E Q E T A E N V I K K L V G S K Q S D E F S E M G S S V L C E I A N I I S A
N M R S A H N L V D M L M G R D D N D S D E F S E M D M S A L S E I G N I I S G
D Y D D V L K M Y D T I M G N P P G T T K E L D E M A R S S F M E V G N I L I S
R E K D V K L I T D L M M G G E G V A S E E F S D L E H L S A I G E A M N Q M V G G
D I E S A S Y L I E Y L M G V N V G E E F S D L E H L S A I G E I G N I M A G
G T E E M K N I L E L L M L P R P Q D L T Q I D D E M T S S A I G E I G N I M C S
S E E T A Q E L V N I L V K K D L G D M D Q I D D Q L A D S L L V E V G N I V L S
E K E T A V E I V E T L T G I K D D D D I L T D L G S S V L C E I G N I I V L S
K Q Q D A A I I A D L M L G G T G E N S S E L D D D K L S A V Q E A M N Q M M G
D T K S A H H L V N S L M L Q N D D E S A D F T D M E M S A L N E I G N I A S G
K Q Q D A A I I A D L M L G G D G L N P E E L N E I H I S A V Q E A M N Q M M G
Q A G D T T N L K I I L H E S K E T L E T A M E E S A V K E I G N I T A S
K T K D A A I I A D L M L G G D G T N P E D M S E M H V I S A V Q E A M N Q M M G
E V I S D A K T I A D L M L G G D G R N T D E L N E L H V I S A V A E A M N Q M M G
D L D S A L N L T N M L L G R E D V E L D D L A M S A L S E V G N I L A S
G M K A A R H L V N M L M G K D E T V P F D D T E L S A I K E V G N I T T G
K Q E D A A I I A D L M M G G D G T N A D S L G E I H L S A V Q E A M N Q M M G
K Q S D A A I I A D L M L G G D G K P S E E L N E I H I S A V Q E A M N Q M M G
N Q E S T N K L V K L V I G T E T T G Y E M D E F S A S A L K E I C N I L A G
P V I N F A K D L V D Q L L N P A E E N N Q E
K T G D A A I I A D L M L G G D G T N P S D L S D M H V I S A V Q E A M N Q M M G
P I T F A K D L I A E L L T G P A Q E E E P V Q E A Q V V S T
S Q E G A L K T A D R L L D Q P A L G T T K V L G E L E C L A V L M E L G N I I V S
K T S D A Q V I A D L M L G G D G T N T H D L T E I H I S A V Q E A M N Q M M G
E Q A D A A V I A D L M L G G D G L N A E M L G E T L Q L S A V Q E A M N Q M M G
P V D F S A K E M H I L M G G S E E V Y E T A A A V S
E I D D A K R I A D L M L G G D G T N T S E L N E L H L S A V G E A M N Q M M G
H Q D D A A I I A D L M L G G S G V D V A E E L G L Q S A V Q E A M N Q M M G
S L P S A D R L E R L L P A P R K A Q E Y T E L E Q S A I A E V G N I I S G
E T D S A L N I I S R L C R D K K S L D E M G A S V I A E V G N I I A S
K Q S D A A I I A D L M L G G T S G G A P E S L G L Q L S A V Q E A M N Q M M G
D Q K S A Q V L I S K L I G T S P G D G Y M Y T D M E K S V V V Q E L G N I M T S
P V I S F A K D M V R T L V G S G E E A A P Q Q P E S V I S A
K T K D A Q V I A D L M L G G E G N P E E L N D I H I S A V Q E A M N Q M M G
K E H D V R I I T D L M M G G E V N D D E P I G E L H I S A I G E A M N Q M M G
E Q K D A A I I A D L M L G G T G E N D P N E F D E I H L S A I H E A M N Q M M G
K E D D A K V I T D L M M G G D G S N D G E L T D L H L S A I S E A M N Q M I G
P L H D A E K L I G Q L M G K S E F N F S D S H E M G V S A W E E I G N I L I G
E L I E A K N L A G T M L N K T G D D F T T F D H M D K S A L K E I G N I L L M S
P V I S F A K E M V S T L M G G A S P E P A A V D
D K A S S D N L V R I L F G K K P S E S D I Y N E I E S S V I Q E L G N I M S S
T V R F A K D L V N E L M N P S S T E E E
D M K S A H H L V N S L M L H Q D E N G M A D F S E M E M S A L N E I G N I V A S G
P I D S A K A L V D M L M G F P A G T Q A I G E M E S A L K E V G N I L A G G
S I E S A E R L V N E L I P G R E R G H P Y G E M E Y S A L G E V G N I L S G
D K P S A D H L I K I L L G G V S E N D F Y S E M E M S A I Q E L G N I L S S
K E D D V S I I T D L M M G G N G E G A V E L T E L H L S A I G E A M N Q M V G
P V D K A C L L V D M L M G K E K T N P S N L S D M D I S A L M E L G N I I C A
S Q R D G A V I V D L M M G G T G E N S P E L S E L G I S G I A E A M N Q M M G
P F D F A R D L Y Q K F M G N T E A S A D
K T K D A S I I A D L M M G N D G T N P E E M G D M E L S A V Q E A M N Q M M G
Q E K D V K V I T D L M M G G D G T N V I E I T E L H L S A I G E V M N Q M M G
P V D F A K Q L V D A M L K N T L G T P A Q
K Q S D A A I I A D L M L G G D G T N P D E L L G E I Q V I S A V Q E A M N Q M M G
K R S D A Q V I A D L M M G G D G P E T D E M E S I H I A L S A V Q E A M N Q M M G
T Q R D A S V I A N L M M G G D G D E S L E M E P I A L S A V Q E A M N Q M M G
T L D T A D R L L D Q L L P V Q A P R E D Y S D L D L S A I A E V G N I L T G
E P Q E M Q A V G R S L V W N L P Y T P E N E Q E L L E S A V C E L T N I L A G G
K Q S D A A I I A D L M L G G D G L S P E D L G E I H L S A V Q E A M N Q M M G
T V I G F A K Q M V E D L M N P P E E E A E T L A S P E T S
G K A E A T R L S C L L M M G R Q T A D Q D E W D E L G L S A I K E V A T I L A G
D F D D A C A L F D L M T M Q E P G T T K E I N E M V Q S A V M E M G N I L L I A G
K E D D V K I I T S L M L G G D G K S D E E L N E I H L S A I S E A M N Q M I G
D F K D A L T M F D L M M G M S P G S T T K F D E I V Q S A V M E A G N I L I S
K E H D V K V I T D L M M G G D G S N T E L T E L H L S A I S E A M N Q M M G
S T K F A Q T M L D K L L G T E A E D V R N L D D M S L S A V C E I G N I M C C
K I E D A S V I A D L M L G G D G K N P E E L N E I H T L S A V Q E A M N Q M M G
E Q S D A A I I A D L M M G G D G T N P P A M D D I Q L S A V Q E A M N Q M M G
S M T D A S I I A N L M M G G D G D E A D H I D E M Q Q S A V Q E A M N Q M M G
K E N D A K V I T D L M M G G D G S N L S E L T D L H L S A I G E A M N Q M I G
P I P F A K E M C E S V T Q N M E D T N
P I D F A R E L L N M F S I D P T M G G Q M N T E

UniRef90_F7TXE7 S A A T S M S T I F N Q L V N I S P P 140 D M M D L Q N G Q G E E G L P 160
UniRef90_D4IVJ6 S Y L S A L S G L T N L T I V P S V P F V A V D M A A A I L S V P A V Q F G
UniRef90_A0A024Q0T8 S Y L S A L S D F T S L N M Q P S V P Q L L S M D M A G A I L T A G L L E I F S
UniRef90_R7N560 A Y L N A L S L S L T N M K I F P S V P Q L G I D M A G A I L S V P A A E F G S
UniRef90_I3DZD4 S Y L S A L S D F T N L L Y P S V P A L L S I D M V G A I L S C G L T I E L S
UniRef90_F6CIB3 S F V S A L S M M T G L N M V T T V P L F A F D M L G A V L T S L D M V A A G
UniRef90_UPI00031F3C37 S A A T S M S T V F S K K V D I S P P K I D I L D F M E G E G T D Q V P D
UniRef90_C4ZA84 A Y L S A L S T M T N L K I L P S V P Y I A V D M A A S I L S V P A I Q F G
UniRef90_H2AIN4 S Y L T A L A D L T K L E I Y P S V P E I S L D M F G A V L S E G L M E L S
UniRef90_I0U5S7 S S A T A L S V L L N Q K V E I T T P S V S I I Q R K N V D S E F P L P Y V A I
UniRef90_I0U5S7 S S A T A L S V L L N Q K V E I T T P S V S I I Q R K N V D S E F P L P Y V A I
UniRef90_T0N119 T Y M N A I G K L T N L S L F P S V P A V A K D M L C A I L S T T F I E A A G
UniRef90_D2Z3J5 S F L N A V S R M I G E S I S I S V P G V A H D M L G A L L E F V I A S I F A
UniRef90_UPI0003138194 S A A T S M S T M F N K K V D I S P P S L A L L N I K E N E G E E N I P D
UniRef90_UPI0004067F3B S S A T S M S T I F N R K V N I S P P D V D I M D V K S N S G V S N I P P
UniRef90_I0JMM2 S S A T S M S T I F N R K V D I S P P S I D V L N L E E D R G T D Q I P D
UniRef90_F7Z424 S A A T S M S T I F N K R I D I S P P A V S L L N I L E G E G T D K L P D
UniRef90_G8LVF2 S Y L S S L S T L T G L N I L P T V P D I A I D M A G A I L S V P A I E F G
UniRef90_UPI0002FE43AB S A A T S M S T M F N Q L V N I S P S V D I M D L A G I N G D G N L P D
UniRef90_UPI0003711BC4 S Y L S A L S D F T H L K L Q P S V P E L A I D M F G A I T S Y G L L E I S
UniRef90_A6M1D6 S Y M N A I A Q L T N L V M A P S V P A T S F D M L G A I L T T F I E S N G
UniRef90_R7B2K9 A Y L V A L S K L T N L T I E T S V P S M S I D M V G A L L S V P A I E F G
UniRef90_F4HN47 A F A N A L S Q F L G I T I E Q S P P N L A I D F L P A I I D I A L A D I F G
UniRef90_A6TRP4 S S T S L S E M F G K K L D I S P P H A F T L D L T S D V N A P E F I E H F
UniRef90_L0IM26 S Y V S S L S T L T N L D M K I S P P A I S I D M A G A I L S V P A I K F S
UniRef90_A9BHZ1 S Y I S A L S N F T G L N T H S L P P K I T V D M L T A I V S E S S L M V T E G
UniRef90_I4BUJ2 S F L N A I S T M L N C A L V P T V P A I A H D M L G A I L D L L A A Y Y G
UniRef90_F0KA04 S Y M N A I S K F T N L V I T P S V P A F S Y D M L G A I L T T S F I A G
UniRef90_G9QMS3 S A A T S M S T I F Q K R V D I S P P S L V L M D L K N G E G T D A I P D H
UniRef90_R7NGY9 S Y L T A I S L T K L N I I A T V P Q M T I D M I G A L L S V P A S E F G
UniRef90_UPI00042A012C S A A T S M S T V F T K K V D I S P P E I T L L D V E G G E G T E Q I P K
UniRef90_D9S3A7 A F I A A L S D F T K L A L R I S V P S L A I D M A G A I L S F P L S L Y G
UniRef90_UPI00034D16A7 S A A T S M S T V F N K K V D I S P P G I D L M D I R N D E G T G N L P Q
UniRef90_UPI000425D6F7 G A A T A M S Q M F G M P I N I S P P T V Q F V D M S N P T Q Q D L
UniRef90_M1Z4S4 S Y V N S L S G L T G L K I T V S V P S L A I D M A G A I L S V P A I Q F G
UniRef90_UPI0003B7715F S Y L N S L S M I T N L K L D I S V P F I A I D M A G A I L S V P A I E F G
UniRef90_R9TVX7 S A A T S M S T V F S K K I D I S P P E V D L D V N E G E G T E Q I P K
UniRef90_UPI0004289960 S A A T S M S T I F N K K V D I S P P S I D L M N L K E G S G E N V L P K
UniRef90_Q3ADC0 S F A Q A I S S L T G L T L L S E V P L F S Y D M L A A T L S T G L I A S G
UniRef90_UPI00047E971B S A S T S M S T V F N K R V D I S P P G I D L M D L K H N V G T S N V P E
UniRef90_D3FT27 S F L M A I S E L T G L T L F T T P P A F A C D V T A S I L S S A S M L A A T G
UniRef90_A8FD97 S S A T S M S T I F N R L V N I S P P G I G I L D M S N G T G V D T L P E
UniRef90_S0EWR3 S A A T S M S T I F S K K V D I S P P S I D I L D F N Q G E G T E S I P D
UniRef90_S9SH70 G A A T S M S Q M F G R Y I N I S P P T V R V L V D L T S S E A Q Q A F G
UniRef90_UPI0003685299 S A A T A M S T I F N K K I D L S P P S I S L L N L N E G K G N D T I P K
UniRef90_J9HAZ6 A Y V A A I S D L C G F R I T Q S I P A V A I D M A A A I L D I G L M M S G
UniRef90_S6F879 S F M N A I S N F I N I K A T V I S V P A I A N D M L S A I L V S T F V D A G
UniRef90_UPI000289FD08 S A A T S M S T V F S K K I D I S P P S I D I L D I K Q G E G A E N L P
UniRef90_E0QH15 G Y V N A I S M F S N L F M N I S I P S V S V D M V S S I L S V P A V E Y G
UniRef90_UPI0002893FF8 S S A T S M S T I F N R F V N I S P P G I D I L N M S N G T G V G S L P
UniRef90_UPI000372CFB8 S A A T S M S T M L G K K I D I S P P V A N L I D L N V K Q D E N N L P E F L N
UniRef90_R6QWB8 S A A T S M S T V F A K K I D I S P P S V M L I D F K A G D G T S E M P E
UniRef90_UPI0001E891CC S A A T S M S S M F N K K I D I S P P K A F P M T L N D A V P E T E F
UniRef90_W4V6F7 A Y A R S I S D W L D L S L Q V S V P A S A F D M V G A L L E V A L L E S S
UniRef90_U6B9T2 S Y I S I S I T L T N L K L S I A P P A I C V D M A G S V L S L P I S E L G
UniRef90_R5EL51 G Y V T S I S M M T S L N I N I S V P A V N I D M V S S I L S V P A V E Y G
UniRef90_A0A015MTK9 S Y L S A L S G L T G M K M V S S V P A L S I D M L G A L L S V P A I E F G
UniRef90_E3PSH8 T Y L S A L S M F T R L T F E Q S V P A L A I D M A A A I I S V V L T S I A
UniRef90_UPI00047B6780 A Y V A A I A D L C G F R I T Q S I P A V A V D M A S A L L D I G L M Y G S
UniRef90_R5E1A5 S Y L N S I S Q L S N L N I Q M S V P S V S I D M A A S I L S V P A I E Y S
UniRef90_B0TFF9 S S A T S L S E I F S K K I D I S P P D A F L L N L A T D N L L E L F K
UniRef90_F8II00 T Y L N A L A M F T Q L D F R P S V P A L G I D M A G A I L N S V L A Q F G
UniRef90_W8U6Y3 S A A T S M S T M F N S V V D I T P P Q L V L N D M S P K D D D I I T N V L
UniRef90_W4U6Y3 S A S T S M S T I F N K K V D I S P P G I D M M D L A E N P D A I E I P
UniRef90_UPI00046F7551 S A C T S L S T M F N K S I L I S P P N T F I M D F S T D F P Y T L F
UniRef90_B9MM12 S A A T S M S T I F N R K K V D I S P P S V E L L D A N E T E D A N T I P N
UniRef90_UPI00047AA10C S S A T S M S I F N R L V N I S P P G I D I M R L S E G E G N L
UniRef90_W2E6D0 A A A T S M S T V F S M R I D I S P P A V E I F D F S Q E K T I V D S F
UniRef90_B1YI92 A Y V T A I S D L C N I Q L N Q S V P S V A I D M A A A V L D V I G L M L T G
UniRef90_T0BZL7 S Y L S A L S D F T G L Y M M P T V P S S A V D M I G A L L S E G L I E A G
UniRef90_UPI0003B310A9 S A A T S M S T V F N K K V D I S P P T I E L L D V Q K D K G T G S I P N
UniRef90_UPI0004706224 S Y L N A L S K M L E L Q F N L S L P S F A Q D M A G A L I Q N V L I E T N
UniRef90_UPI000380EF78 A Y A N A L S E F L G L T I E Q T P P E M A I D F L P A V L D F A L A D I G
UniRef90_K2AK80 S S S T S L S E M L A K K I D I T P P I V S K V N F S D S Q L D P E L L
UniRef90_UPI00029A5EFA A F A N A L S E F L G T E I N Q T P P N L A I D F P A I L D F A L A D I G
UniRef90_E3PSJ2 S A A T S L S S M L D K K V D I S P P T A S V V D L N D S I D D V T V S S
UniRef90_B6YX74 S Y I N A M T V M M D L R V H V S V P D I C I D M T G A I L S V P M I H F A
UniRef90_R7K252 S A A T A L S T M F D R R I D I S P P G I D I F D V T N T E F E H P L L E
UniRef90_N9XUQ8 S A A T S M S T I F S K K V D I S P P S I H L L D L S E G E G L E Y L P
UniRef90_F5L806 S A A T S M S T I F N K R V D I S P P G V N I M N L E Q E E S A R Y I P D
UniRef90_UPI00031AE8D7 S A S T S M S T I F N K R V D I S P P R A F C M T F D N Q Q E D V F
UniRef90_UPI0003B78E63 S A A T S M S S M F D K R V D I S P P R A F C M T F D N Q Q E D V F
UniRef90_UPI0001E2C242 S A A T S M S S M F D K R V D I S P P R A F C M T F D N Q Q E D V F
UniRef90_G2T3E6
UniRef90_R6L2G6

UniRef90_F7TXE7 S G E E L V K I S F Q I K V G D Q G E L I D S N I M Q L L P I N F A K Q M I S
UniRef90_D4IVJ6 I F G D N A L M I N T D F S D D L G I K G H F I L M P E E D S Y E K I L S
UniRef90_A0A024Q0T8 Q V T D F A I V I D T K I S H T D S K R G I Q G N F F L L P D P E S Y E K I L S
UniRef90_R7N560 V M G D N I L L I D T Q F S S D D I E M Q L D G Y F I L L I P D V E S Y E R I L S
UniRef90_I3DZD4 Q V S D Y A I V V E T A L N E D D L S D G V K G H F F L L P D P D S F L T I F K
UniRef90_F6CIB3 R V E E Q V L V I E T E L F H E E E T L I K G H F F L L T E P G A I D R L M A
UniRef90_UPI00031F3C37 D E V L V Q V S F N L K I G D L I D S N I M Q L L Q L D F A K E L V E
UniRef90_C4ZA84 Q Y G D N A L F I E T E F G S D D I M M N G Y F I L M P D P D S Y D N I L S
UniRef90_H2AIN4 Q V G E H A I V V D T S I F D Q G S R Q E L K A H M F M L P D Y D S F E K L F V
UniRef90_I0U5S7 Q V N Y T D G F L G T N L V I K Q E D A A I I A D L M L
UniRef90_I0U5S7 Q V N Y T D G F L G T N L V I K Q E D A A I I A D L M L
UniRef90_T0N119 Q Y S D N V L D I E T D F V Q Q E N E E L R G N F Y F I P M P G S L E K I L S
UniRef90_D2Z3J5 Q S G E L A L L V N T T L K L D Q E E G T D I R G N I M M V P D P G A L E I L L S
UniRef90_UPI0003138194 D E I L V R V S F R L L I G D L V D S T I M E L L P L D L S K K L V K
UniRef90_UPI0004067F3B P E H I F V K V S F R L R I A E L I D S T I M Q L L T V P F S K E L V A
UniRef90_I0JMM2 D E T L V K V S F R L K V I G T L I D S N I M Q L L P V P F A R E L V D
UniRef90_F7Z424 Q D L V K V S F R I M V I G S L I D S Q I M Q L L P L S F A K K L A R
UniRef90_G8LVF2 K I G D S V L Y I E T V F L E G E T R A L G D F F L V P D M D S Y E Q L L R
UniRef90_UPI0002FE43AB E D T F I K V S F R L K V G D L I D S Q I M Q L L P I Q S F A K Q M I D
UniRef90_UPI0003711BC4 Q Y S D Y A I V I D T V L T E D D N V E T V K G H F F L L L S P G S F P V I F E
UniRef90_A6M1D6 Q Y D E Y I L D I E T V F L D S D T E E N I G G Y F Y I P M P G S L E K I L K
UniRef90_R7B2K9 K L G D K L L F I Q S Q L K V I G D E N G C L I D S Q I M Q L L P E L E S Y D K I L G
UniRef90_F4HN47 K Y C D Y T L L H T K I T I S G E D F E E H F L M L P K P E D M K K I I E
UniRef90_A6TRP4 S P D K N F V R I A F R M V I G E L T D S E I M Q L L P L D F A K E I T S
UniRef90_L0IM26 E L S D K L L F I E T E F V E G S K L K G D F F L P D I E S F D K I L N
UniRef90_A9BHZ1 S D F V L I R T E I N M E E Y E G N V K G F L I Y L S D E Q N I L K L L K
UniRef90_I4BUJ2 M T G E V A I S E T K L C V A S N K N S L G H V M L L P D P Q S L E S T L L S
UniRef90_F0KA04 Q C D D N V L D L E T V F L Q D K T K N I S G H F Y Y I P M P G S L E K I L N
UniRef90_G9QMS3 E L F V K I S F R L T I G N L I D S N I M Q L L P I S F A K S L V E
UniRef90_R7NGY9 K Y G D K L L I Q T Q F G E L D E V K G Y F L L P E L E S Y D K I L R
UniRef90_UPI00042A012C D D V L A K V S F R L K V G E L I D S N I M Q L L P V H F A K D L V N
UniRef90_D9S3A7 C M G D T A F L M E T E F E E G L D G V K I H F Y L I P D D S F S T L L K
UniRef90_UPI00034D16A7 D D I L I K V S F R L K V G E L I D S T I M Q L V T V P F A K S L V E
UniRef90_UPI000425D6F7 G F D S T I V N T A F R L K V G D L I D S H L M Q L V P L H F A K Q I L G
UniRef90_M1Z4S4 L I A D Q V L F I E T V F Q E G N N F V Q G N L F L L P D M S S F E K I L S
UniRef90_UPI0003B7715F M M G D K L L I E T S F F D T E T L S G Y F I L L P D M D G Y S K I L S
UniRef90_R9TVX7 E D P L V K V S F R L K V G E L I D S H I M Q L Y P L T F A K D I D
UniRef90_UPI0004289960 E D M L A R I S F R L K V G S L I D S N I M Q L L P L T F A K S L V N
UniRef90_Q3ADC0 A F D D Q V L V I D T N L I E Q G E K I K G H F F F V P K P G S L Q K L F A
UniRef90_UPI00047E971B D Q I L V K I S F R L K I G E L I D S N I M Q L V T V T F A K R L V D
UniRef90_D3FT27 T L Q T D A L T I V T N M E Q R E T D L E G F F L Y I P E S N S L S I F L N
UniRef90_A8FD97 D N V L V K V S F R L T I S D L I D S T I M Q I L T I P F A R N M V S L L
UniRef90_S0EWR3 E D I F A K I S F R I K I G E L I D S N I M Q L L Q L S F A K K L V E
UniRef90_S9SH70 E G G D L V N V E F Q L R V D D L I D S H I M Q L M P I E F A H E I V R
UniRef90_UPI0003685299 Q E L V L K I S F R L K V G S L I D S N I M Q L L P L Q D G T K V L V T
UniRef90_J9HAZ6 D E E N Q A I L I S T S L V H D G N N I D A Y F F L L P D L Q D F G E L L D
UniRef90_S6F879 Q Y N E Y I L D I E T L F S G D D S S N I K G N L Y Y V P A P G S L E K I L E
UniRef90_UPI000289FD08 I D D I L V K I S F R L K I G E L I D S T I M Q L V P V I E F A K D L V G
UniRef90_E0QH15 I E S D K L I L I E N K L D L E G E N V N C Y F F F M P D L P S F E K L F V
UniRef90_UPI0002893FF8 P D E T L V K I S F R L T I G D L I D S T I M Q L L T V Q F S K E M V D
UniRef90_UPI000372CFB8 T K F V K V A F R M T I G N L I D S E I M Q L Y P F D F A R N L Y E
UniRef90_R6QWB8 D E L L I K V A F S I K I G K L I D S S I M Q I L P Y P F A K K L V E
UniRef90_UPI0001E891CC P R D E K L V R V A F K M V I G E L I D S Q I M Q L L P I D
UniRef90_W4V6F7 T P G N M A L Y I D T H L S S A G N E L T G H L L L P E A N A F Q T V F Q
UniRef90_U6B9T2 Q I G D K A L I I D S K F L D N E R P I N G F L L F V T D E M S Y E H I F R
UniRef90_R5EL51 L E S D K L I L I E N K L E I D D E K I K C Y F F F M P D L T S F D T L F R
UniRef90_A0A015MTK9 K Y G D K L L M I Q S E F G E D D F V T G Y F L L I P E L E S Y D K I L T
UniRef90_E3PSH8 E V G D H A L L L A T E F I G E G Q Q I A G F L F L I P E E G S D K I L L G
UniRef90_UPI00047B6780 G E D N Q V L L I S T L V T H G G R E I Q M H F F L L P D F E S A S R L F D
UniRef90_R5E1A5 E V S D R I L I E N K I L E G D N E I V G N L Y F M P D L D S F A K R L E S
UniRef90_B0TF99 D N S Q S I V Q I S F R M V I G E L I D S E I M Q L M P I N S F A K E I G
UniRef90_F8II00 A V A D H V L V L E T E F K R G D Q E I V G H F F L L P E P G S L D V I L A
UniRef90_W8U6Y3 Q S H E E L V R I S F R M V V E D V I D S I L V Q V I P I H V A K G M V N
UniRef90_A8MHF0 G E D V L V Q I S F N L K I G D L I D S R I M Q L L T V S F A K D M V D
UniRef90_Q0AYL0 K S D Q P I V R I N F K M V V E G L I D S Y I M Q L L P I D F A K E L L N
UniRef90_I4ACW4 P E E L F V Q V S F R L K I G T L I D S N I M Q L L P L H F A K D L I D
UniRef90_R6E8Z7 S L W E S M V I E F D L K I G T L I D S K I V Q L A P L D F S K E M V S
UniRef90_D6XTX6 Y E D N E A I I S S T L A Q G Q S A I H G H F F L L P D A E G M Q T L L R
UniRef90_UPI0004706224 L E G D E A I M I D T N M T K G E N H S Q M A G R F F M L P D A H S L P K I F A
UniRef90_UPI000380EF78 E D L L I R V S F N L K V G T L I D S N I M Q L F P L G L G K E L V S
UniRef90_K2AK80 Q N A E H A I V V N T E M S V V D E R V M G Y F F F I P E A Q S L G K V I E
UniRef90_UPI00029A5EFA H C D Y T I L L G T T I S V E G L E F K E H F F L L P K P E D M V K V I E
UniRef90_E3PSJ2 S A D E P I I C I S F R M T V G D L I D S T I M Q I L P I D F A R A L V N
UniRef90_B6YX74 Q H C D Y T M L L K T Q M T V E G V E F R E H F M L L P H P F S M K K I D
UniRef90_R7K252 F L A D E L V Q V S F T M Q I G D L V D S Q I M Q L Y P F D F A R D L Y Q
UniRef90_N9XUQ8 R L S D E L L V I E D K Y H F D D Q E V V S H I L F L P E I H S L E R I F K
UniRef90_F5L806 E K V L L K V A F K L R V G E L I N S E I M Q L T P I S F A K E M V G
UniRef90_UPI00031AE8D7 S D M V L K V S F R L K V G E L I D S S I M Q L L P I H F A K E L V E
UniRef90_UPI0003B78E63 E D T V V Q I A F R I Q I G E L M D S Y I M Q L I P L G F A K K M V E
UniRef90_UPI0001E2C242 Q P E D R L V K I A F K M V I G E L V D S E I M Q L I P L K F A K S L V D
UniRef90_G2T3E6
UniRef90_R6L2G6

UniRef90_F7XE7	R L
UniRef90_D4IVJ6	A L G I
UniRef90_A0A024Q0T8	A L G V
UniRef90_R7N560	A L G V
UniRef90_I3DZD4	S L G V
UniRef90_F6CIB3	A L G
UniRef90_UPI00031F3C37	N L
UniRef90_C4ZA84	A L G I S
UniRef90_H2AIN4	S L G
UniRef90_I0U5S7	
UniRef90_I0U5S7	
UniRef90_T0N119	S L G L N
UniRef90_D2Z3J5	K L G V
UniRef90_UPI0003138194	S L
UniRef90_UPI0004067F3B	S L
UniRef90_I0JMM2	Q L
UniRef90_F7Z424	D L
UniRef90_G8LVF2	A L G V
UniRef90_UPI0002FE43AB	R L G V D
UniRef90_UPI0003711BC4	A L G
UniRef90_A6M1D6	S I G I N
UniRef90_R7B2K9	A L G L
UniRef90_F4HN47	K L
UniRef90_A6TRP4	T L
UniRef90_L0IM26	A L G V E
UniRef90_A9BHZ1	S L G M
UniRef90_I4BUJ2	K L G V
UniRef90_F0KA04	I L G V N
UniRef90_G9QMS3	E L
UniRef90_R7NGY9	S L G V
UniRef90_UPI00042A012C	Q L
UniRef90_D9S3A7	T L G V
UniRef90_UPI00034D16A7	
UniRef90_UPI000425D6F7	L L G
UniRef90_M1Z4S4	S L G V
UniRef90_UPI0003B7715F	S L G M
UniRef90_R9TVX7	E L
UniRef90_UPI0004289960	D L
UniRef90_Q3ADC0	A L G L S
UniRef90_UPI00047E971B	
UniRef90_D3FT27	D L
UniRef90_A8FD97	
UniRef90_S0EWR3	A L
UniRef90_S9SH70	
UniRef90_R9CAU6	G L
UniRef90_F5LS29	
UniRef90_J9HTM8	T M G L
UniRef90_UPI0003685299	E L
UniRef90_J9HAZ6	I L
UniRef90_S6F879	S L G I
UniRef90_UPI000289FD08	E L
UniRef90_E0QHI5	K L G V
UniRef90_UPI0002893FF8	
UniRef90_UPI000372CFB8	N L
UniRef90_R6QWB8	A L G M Q
UniRef90_UPI0001E891CC	E L
UniRef90_W4V6F7	
UniRef90_U6B9T2	R L G V D
UniRef90_R5EL51	T L G I
UniRef90_A0A015MTK9	
UniRef90_E3PSH8	S L G V
UniRef90_UPI00047B6780	
UniRef90_R5E1A5	S L G M
UniRef90_B0TFF9	S L G L
UniRef90_F8II00	T L
UniRef90_W8U6Y3	N L G V
UniRef90_A8MHF0	G L
UniRef90_Q0AYL0	S L G V S
UniRef90_I4ACW4	K L
UniRef90_R6E8Z7	
UniRef90_D6XTX6	Q L
UniRef90_UPI00046F7551	N L
UniRef90_B9MM12	
UniRef90_UPI00047AA10C	Q L
UniRef90_W2E6D0	N M
UniRef90_B1YI92	K L
UniRef90_T0BZL7	V L
UniRef90_UPI0003B310A9	S L G V Q
UniRef90_UPI0004706224	S L
UniRef90_UPI000380EF78	
UniRef90_K2AK80	A M G V
UniRef90_UPI00029A5EFA	K L
UniRef90_E3PSJ2	R M
UniRef90_B6YX74	T L
UniRef90_R7K252	K
UniRef90_N9XUQ8	A L G
UniRef90_F5L806	L L
UniRef90_UPI00031AE8D7	N L
UniRef90_UPI0003B78E63	E L
UniRef90_UPI0001E2C242	N L
UniRef90_G2T3E6	
UniRef90_R6L2G6	

UniRef90_U1LGN1
UniRef90_R5HKT8
UniRef90_UPI00047B0131
UniRef90_R1ASS7
UniRef90_UPI00030299CE
UniRef90_UPI00040C162C
UniRef90_R7BIK6
UniRef90_UPI00035FADA8
UniRef90_A9KNE6
UniRef90_UPI000470B70A
UniRef90_R6K2W6
UniRef90_V9HPP9
UniRef90_UPI0003754F05
UniRef90_D7CM10
UniRef90_UPI000479A932
UniRef90_J7J033
UniRef90_C4ZAN3
UniRef90_R7N181
UniRef90_L0FC95
UniRef90_UPI00047D913F
UniRef90_F6B7Y3
UniRef90_V6J8E6
UniRef90_F4A1U9
UniRef90_A1HN27
UniRef90_G9YNA6
UniRef90_Q2FMS9
UniRef90_UPI0003F7B874
UniRef90_UPI00028899AC
UniRef90_F7KG05
UniRef90_F7NL54
UniRef90_UPI0003B5ABC7
UniRef90_UPI000312750E
UniRef90_R5NM97
UniRef90_B0K9T5
UniRef90_W7YYPQ6
UniRef90_D5XFG1
UniRef90_UPI00036FD538
UniRef90_UPI0003B6ECBC
UniRef90_UPI000225AA36
UniRef90_R5KD47
UniRef90_UPI00036C1D16
UniRef90_R7HTB0
UniRef90_R5QFV7
UniRef90_R7PQG5
UniRef90_R7AEK3
UniRef90_F6CIB0
UniRef90_U2TBQ5
UniRef90_D4KQH6
UniRef90_F2JGP7
UniRef90_W3AMB0
UniRef90_UPI0003719287
UniRef90_G5GQ67
UniRef90_I5ARV4
UniRef90_UPI0002885666
UniRef90_W1SF65
UniRef90_S0FMF2
UniRef90_G5HJK3
UniRef90_R5SP11
UniRef90_U2AXR0
UniRef90_Q5WFR8
UniRef90_UPI00047D5849
UniRef90_C9R9W6
UniRef90_G7V5V8
UniRef90_E0RVI5
UniRef90_C0C1M9
UniRef90_E0P214
UniRef90_UPI0003FC4C00
UniRef90_D9S394
UniRef90_D7GSR7
UniRef90_M5E2P7
UniRef90_F7ZXA4
UniRef90_UPI0003B2EE36
UniRef90_W9A8Z3
UniRef90_F0SZG1
UniRef90_R5JWQ2
UniRef90_R9IVC9
UniRef90_D3F413
UniRef90_I7LJK4
UniRef90_W0EFE3
UniRef90_UPI0003181D74
UniRef90_A0A024QD32
UniRef90_N1ZJN9
UniRef90_D9TMR1
UniRef90_R5F2R4
UniRef90_UPI000471FAA8
UniRef90_UPI00047893D9
UniRef90_UPI0004205859
UniRef90_K6SXZ0
UniRef90_K6SXZ0
UniRef90_L7EL33
UniRef90_UPI00029A9619
UniRef90_F5T9P9

1 10 20 30 40

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

UniRef90_U1LGN1 S A E M E P I T Y L P E R V I G G P E R H V A S V L L E L G G D I S G M I L L L 80
UniRef90_R5HKT8 V A D L V D L H D N I D E F L S G S F V K I S F K M E L G D L V D S E I M Q L Y
UniRef90_UPI00047B0131 K V S L I D I N E L S N Q H L L P F V A V D V K Y K E G L D S E I M Q L Y
UniRef90_R1ASS7 N A F E I N F I N K A I D I L N Y D D S V V K V S F R M I V G D L D S Q I M Q L I
UniRef90_UPI00030299CE T I S V I R R N E L E D E F P H P H V G V E V E Y T E G F E G V N L F V I
UniRef90_UPI00040C162C N V S V I K R D R L M D Q F P V P H V A V Q V I Y T E G L K G A N N L V L V L
UniRef90_R7BIK6 T V S Y V E W G E L A D S Y D R P C V F L Q I K Y V D G L D G G N N V L V L
UniRef90_UPI00035FADA8 R V H I Y T Q R Q L F A S F Q I P Y I L I Q V E F T E G L Q G F N V L V I
UniRef90_A9KNE6 K V C Y A E W E D L S A Y D R P C V F L Q I Y K K D G L D G G N N L V L V L
UniRef90_UPI000470B70A N V S L L N I G E G T E N L P E Q D L L V V S F R L M I G N L I D S K I M Q I
UniRef90_R6K2W6 R V S E L A D W D H L S R K Y D R P C V M L Q I R Y K E G L D G N N V L I L
UniRef90_V9HPP9 K V S R V T I Q D P D L L D L G N Q P E E E V A A S Y V G Y H G E L D D S E I M Q I
UniRef90_UPI0003754F05 E V Y L E S I S K V A D V L L G N Q P E E E V A A S Y V G Y H G E L D D S E I M Q I
UniRef90_D7CM10 R L T L V D L E N I D A K L G Q E Y Q D I V Q T R M E I E G L V D S E I M Q I M
UniRef90_UPI000479A932 N V E M I T L E D L S D E Y P L E E P L V R I S F R M E D V I Q D S G A N L V I
UniRef90_J7J033 N L D M L D G K D V I H D F L P L E P L V R I S F R M E D V I Q D S G A N L V I
UniRef90_C4ZAN3 V V S F S N W D K I V D E Y E K P C V F I K I G Y T Q G L N G S N I L V L
UniRef90_R7N181 V V T M A T W D T V V E D Y Q R P C V F I K I K Y T A G L D G A N I M V L
UniRef90_L0FC95 K V D L A D S D Q I R K D Y P I P S I L V D V R Y K V G I E G S N L L I L
UniRef90_UPI00047D913F E V E V L T W E E L K E E Y H I P Y V G I L V E Y V E G L K G F N M L I L
UniRef90_F6B7Y3 Q V S K F L S L D E V M S L V G G L E E V V A C V N L R L E G D V P G Q I L F L F
UniRef90_V6J8E6 K L N D I L M D V K Q G I E Y L V P K D E I M F E I S F Q L I L G D L D S E H I M Q L I
UniRef90_F4A1U9 R V D N I T T M N E L G K E Y P I P F V A V E V K Y T Q G L E G V N L L I L
UniRef90_A1HN27 Q V S V T T L N E L K R Q Y P L P Y L V I E V Y S H G I L G T N L L A I
UniRef90_G9YNA6 E V R I T L G Y N E A I D W I G G P E V I T A G V L V R L G G E L N G I M L S V Q
UniRef90_Q2FMS9 E I S I V D L H A I N E Q I E Q G L S A M V V F T M E G Q M A K A G Y V I L H V
UniRef90_UPI00037B874 K V T V I R K E N L D E E F P Q P H V A V H V K Y T T G F E G V N L M V I
UniRef90_UPI00028899AC K V E M V S F N D M M E R V G G A E T F V T G I Y L R I E G D V S G G M F I M
UniRef90_F7KG05 G L Q T M K Y Q D C C S L L P E A E E L M T G I I V G V R G E L N G L F L F L L
UniRef90_F7NL54 K V S L T I N E I K N Q Y P L P Y L V I E V Y T D G I I G S N L L A M
UniRef90_UPI0003B5ABC7 I V S Y S T W S D I E E T Y E R P C V F I R I A Y T V G L D G S N I L V L
UniRef90_UPI000312750E V V S A I N S D S L D D S F P T P H V A V K V D Y T T G F K G T N L F V I
UniRef90_R5NM97 T A S L V D L N D N L Q D F L S K G F V K N A F K L T I G D L V D S E I M Q L F
UniRef90_B0K9T5 K V S V L S W E E L K K E F I P Y I G V E V E Y T E G L K G H N L L I L
UniRef90_W7YPQ6 N V N V D F N E P S Y V P E G D H I L A I T F T L K I G T L I D S K L M Q L I
UniRef90_D5XFG1 V E E L T T P A R L R H E Y P L P Y L V L V N V E Y V T G L K G S N V L I L
UniRef90_UPI00036FD538 E C F M C K A Q D L P S A F G D A Q E I V V A V L L E A Y G T G K G E I M L I L
UniRef90_UPI0003B6ECBC M V T T A N W D T V L E E Y P A P C V F I E I Q Y T E G L A G S N I L I L
UniRef90_UPI000225AA36 T V S I T M K Q E I E E A F S Q F E H P C V S V V Q V K Y V E G F S G Q N V L V I
UniRef90_R5KD47 K V M V C T W E E L S K E F S R P C V F I N I D Y V D G V K G N N V L L L
UniRef90_UPI00036C1D16 S V A V A T M S I I K E H Y P L P Y L I V E V G Y T T G I D G N N V L A I
UniRef90_R7HTB0 V V S L V T L N E L S K F G R P C V F V Q I A Y I E G L D G S N V L I L
UniRef90_R5QFV7 T V S I A N W K N F I D E Q E K P C V F I Q I K Y T E G L D G A N I L I M
UniRef90_R7PQG5 E V N I L G Y E E A V S R I G N P E E T I A A V L V K M D G D V E G L M L F L F
UniRef90_R7AEK3 V S N L V E V E D L P D F L K G K F V E V M F K L T I G T L I D S S I M Q L Y
UniRef90_F6CIB0 R V V T C T Q E E F F S T F K V E Y V I Q V E F K E G L K G F N V L I L
UniRef90_U2TBQ5 R V N L I D L D K V T E I V G N D E T V I S F R M E V D G L I D S E I M Q I L
UniRef90_D4KQH6 V V A F A N W S D I C D A Y E K P C V F R I A Y T V G L D G S N I L V L
UniRef90_F2JGP7 R V R I E N I Q E L A D V L G D A E E V I A G M I N V Y G D I N A M L L A L
UniRef90_W3AMB0 Q V K I L G Y D E A I E A I G G N E E I V G A T L V K M D G D I N G L M L F L F
UniRef90_UPI0003719287 E T I W Q D A E A V E Q A L E E Q K E P F F A V R L N G V E D V I D S T M L Q I V
UniRef90_G5GQ67 T V S V S N R L R A L K E K E Y P I P F L V V E V L G Y S I G I E G N V L C I
UniRef90_I5ARV4 K V S V Q S R S E F V F K E I E P A V G V E I Q Y V E G L S G K N V I M F
UniRef90_UPI0002885666 S V T I M P M N E L M K K D A E K Y V A A T F I E V T G G L K G C Y V M I F
UniRef90_W1SF65 T L S V I E R D R I E E V I Q E K N A L D D D Y E K T C I F V Q I H Y V K G L Q G N N V L V L
UniRef90_S0FMF2 N V S L T S W S D L S K S Y S S Q Y V A V K V E Y T D G L I G S N L L I L
UniRef90_G5HJK3 A L K V L S Y Q E V C R V L G Q P E E L Q T G I L V E V T G Q M K G I F L F M L
UniRef90_R5SP11 Q V K M L T F Q Q L A N V I G G S A E E T L V A G I M V S L E G D I E G S M L F M L
UniRef90_U2AXR0 D L K I L K Y Q E V C S L L D S A E E L Q T G I M V G V G G E M E G M F L F L L
UniRef90_Q5WFR8 K V E V I E F A D Q S R T S D G E D L I A I S F S L R V G D L D S K L M Q L Y
UniRef90_UPI00047D5849 K S D I I K F A D I T N S Y N S P E E L V I G T V L Q L S G D M E G F I M V I M
UniRef90_C9R9W6 H I V Q V T T K E E L L K S F T V P Y L I V S V P Y T E G L E G L S L L V V
UniRef90_G7V5V8 E A E V L P F E E L P T H F G N P E T P V C A I L S T C Y T N L D Q H L V M I L
UniRef90_E0RV15 N V K M I K R S E A L D D D Y E K T C I F V Q I H Y V K G L Q G N N V L V L
UniRef90_C0C1M9 D V E T L G F N E A A D F L G Q P E E M V A A V L V Q M S G D L K G I M L F L L
UniRef90_E0P214 V V T L V D L E E V V S K L L D K A D P I V S F R M E V D G L I D S E I M Q L L
UniRef90_UPI0003FC4C00 G V S I V K Y Q L F D A I G H T E E V Q T G I L V E I S G D I S G I F L F L L
UniRef90_D9S394 T L K R V N F A D L Q S Y F K K D E K I V I S F K M E V G D L I E S E I M L L M
UniRef90_D7GSR7 S V N I L G Y N D A M N R I T G D A E E L V A A A L V K M S G D I E G L M L F L F
UniRef90_M5E2P7 R I E L M P I E E L P E I T G S Q E E Y L A C T L I N F D G E L S G K I L L V L
UniRef90_F7ZXA4 I V S V T T L E T L K K N F E V P N V A L D V K Y V S G I S G E N L L V M
UniRef90_UPI0003B2EE36 R V T L C N W D R L M A D Y E R P C V F V Q I K Y T I G L D G S N I M I L
UniRef90_W9A8Z3 T V S V I Q K A D L E K E F N F E P V S V E V S I D G F T G K N V F V L
UniRef90_F0SZG1 N V I I T K E G E D A F L Q D P N E P V V K I S F K M E G V L D S T L L Q V I
UniRef90_R5JWQ2 K V S F M N L D E F V E S I G G A E N V I A G V M S N I S G E I E G F V L F A L
UniRef90_R9VC9 N I H L I N F E D V S Q Y L G G P A D N Y A L G L T I T L E G D I E G G M M L Q I I
UniRef90_D3F413 R A L A L P L A D A V D A V G P A E K T V A S V V L P I V G D L E A L V L L L F
UniRef90_I7LJK4 R I W N K D V D K I S E L I D E N E R I V I S F R L T I A E L L D S E I M L L L
UniRef90_W0EFE3 S L E L L N I G E G T K V V P P E E T L V V A F K L K I G E L M D S D I M Q L M
UniRef90_UPI0003181D74 K V S V M E Q Q E L E A F T F E P V S I Q V N Y V E G F T G K N V F V L
UniRef90_A0A024QD32 E V Q I L G F N E A I T K L G D P E M I V S G V L V N I S G E L N G V M L Y L Q
UniRef90_N1ZJN9 K V S I I N W E N L K K E F N I P Y V G V E V E Y T E G I K G N N L L I L
UniRef90_D9TMR1 S L K V Y K Y K V H E L L E Q S E E L Q T G I L I E V T Q Q L K G I F L F M L
UniRef90_R5F2R4 V V R V L T S D E F E K S L E P A V G V E I A Y T E G L G S N I M M F
UniRef90_UPI000471FAA8 I V N R I D V E S I K V F E K M F D T T Y I A F R M T I G D L I D S V M V Q L Y
UniRef90_UPI00047893D9 T V S L Y E A D S I R A E F P K P F V L V S V E Y T E G L T G T N A L V V
UniRef90_UPI0004205859 E I N A L L A G
UniRef90_K6SXZ0 E I N A L L A G
UniRef90_L7EL33 T S E I I N S D T Q K L S A G I T E D I Q V A F R I T I G D L V D S S I M Q I L
UniRef90_UPI00029A9619 E V K I L S R V E L K H L L Q N R I S S F V V G F D I T E G L R G L A I L Q F
UniRef90_F5T9P9 K V K L L G Y N G A V K R I G Q E E E I V G A T L V Q M S G D L D G L M L F L Y

UniRef90_U1LGN1 P V I D D A E M M V S S L I G S G F T F Q A A D E L G Q S A W E E I G N I M S G
UniRef90_R5HKT8 P V S F A K E M C A S I T K N M E A D T N S T S N E A E K A V S
UniRef90_UPI00047B0131 Q E D D V K I T T D L M M G G S G S S P D P L S E L H L S A I S E A M N Q M V G
UniRef90_R1ASS7 P L N F A K K M V N K I L N I D E K D N E
UniRef90_UPI00030299CE K S N D A A I T A D L M L G G D G Q T E T E L S D I H M S A V Q E A M N Q M M G
UniRef90_UPI00040C162C Q T T D A R I I A D L M L G G D G T N P S D F G E L H L S A V G E A M N Q M M G
UniRef90_R7BIK6 K E N D V K I I T D L M M G G P G A S D E P I T E L H L S A I G E A M N Q M M G
UniRef90_UPI00035FADA8 K M H D A M I I A D L M M G G S G E M T G E I G E L E L S A A S E A M N Q M I G
UniRef90_A9KNE6 K E K D V K I I T D L M M G G D G L N S E D L T Q E L H L S A I S E A M N Q M M G
UniRef90_UPI000470B70A P L T F A K S L V S E L I N E N A S S E N S E S V Q E
UniRef90_R6K2W6 K E K D V K I I T D L M M G G A G D D S E E L T D L H L S A I G E A M N Q M M G
UniRef90_V9HPP9 P V I D F A K E L V G K M M G V P V E T N A S V K E E A V P M Q S E
UniRef90_UPI0003754F05 D S A S T H G L V Q T L M G A D M D L T D P M A M S M M Q E V I G N I L V G
UniRef90_D7CM10 P L E A A K S M V S T L M G G V P E T S D
UniRef90_UPI000479A932 K I E D V K I T T D L M M G G D G T N T S D L N E M D L S A I S E A M N Q M V G
UniRef90_J7J033 P V S V A K G M V D L M M G A M G G G S S T A S T A E S A
UniRef90_C4ZAN3 K E K D V K I I T D L M M G G D G T N T N E I G E L H L S A I S E A M N Q M M G
UniRef90_R7N181 K D H D V K V I A D L M M G G D G T N T D E E L G E L H L S A I S E A M N Q M M G
UniRef90_L0FC95 S Q R D G A V I V D L M M G G N Q N P E E L N E I S I S G V A E A M N Q M M G
UniRef90_UPI00047D913F K E E D A K K I A D L M M G G D G T N T Q E E M S E I V L S A V G E A M N Q M V G
UniRef90_F6B7Y3 N L E S T L K L I D M L M G E T E N G T T T E L D E M G E S V V K E I G N V L T G
UniRef90_V6J8E6 P I D F G K Q L V N L L L Q E T G T S S
UniRef90_F4A1U9 K E E D V K I I T D L M M G G D G S N T D E I S D L H L S A I G E A M N Q M V G
UniRef90_A1HN27 R Q Q D D A L I A D L M M G G D G S N P T E L N S D L Y M S A V S E A M N Q M M G
UniRef90_G9YNA6 Q M M F I N Q V L G R M M N R T V C Y G L N P L N E M D E S A I N E I G N I M V S
UniRef90_Q2FMS9 P Q E S V I Q M T S I M L G L P I E P D R P L N E M D E S A I N E I G N I M V S
UniRef90_UPI00037B874 K T T D A A I T A D L M L G G D G L N P D N S D M H I S A V Q E A M N Q M M G
UniRef90_UPI00028899AC P V E Q A S H F I R Q L I H E P Q G L D F N E P S D L G Q S A M Q E M G N I L S G
UniRef90_F7KG05 D E T F T R E V L D T V L G E E E R N L L S L D E M E R S L I C E L G N I M C G
UniRef90_F7NL54 R E S D A L V I A D L M M G K D G T N P P E L N E L Y M S A V T E A M N Q M M G
UniRef90_UPI0003B5ABC7 K E R D V K I I T D L M M G G D G Q N V E E L G E L H L S A I S E A M N Q M M G
UniRef90_UPI000312750E K S Q D A A I A D L M L G G D G T S T E E L G E I Q L S A V Q E A M N Q M M G
UniRef90_R5NM97 P V E F A K N L C R R F E N G S D V E T A S L P E E P V S
UniRef90_B0K9T5 K K E D V L K M T D L M M G G E G K E D G E I T D L H L S A I G E A M N Q M I G
UniRef90_W7YYPQ6 S V P F G K S Y A N A L L G E Q M S S I E E
UniRef90_D5XFG1 K D G D A G V I V D L M M M G D G T S P A Q L E E M H L S A I A E A M N Q M M G
UniRef90_UPI00036FD538 D Q H M A T E L A D M V L G R E H G T S R A L D D M D R D A I C E I G N I C A S
UniRef90_UPI0003B6ECBC A E R D V K I I T D L M M G G D G T N T D E L G E L H L S A I S E A M N Q M M G
UniRef90_UPI000225AA36 K A E D A A I S D I M L G G T G E G P F E L N E I H L S A V Q E A M N Q M M G
UniRef90_R5KD47 M E N D V K I I T D L M M G G D G T N L D Q L T D L H L S A I C E A M N Q M M G
UniRef90_UPI00036C1D16 Q A H D A A I A D L M M G G D G T N P D N I G E I A M S A V G E A M N Q M M G
UniRef90_R7HTB0 D E R D V K V I T D L M M G G D G S N A D E L S D L H L S A I S E A M N Q M M G
UniRef90_R5QFV7 R E R D V K V I T D L M M G G D G S N D E L G E L H L S A I S E A M N Q M M G
UniRef90_R7PQG5 N L E F A N T V L D K L M G E S F S D F T E L D E L S Y S A L V I E A G N I I I C
UniRef90_R7AEK3 P I D F A H E L V N M F S V D T D T N V S N
UniRef90_F6CIB0 Q L K D A M V M A D L M M G G D G T N V A E I S E L E L S A A S E A M N Q M I G
UniRef90_U2TBQ5 P V H V A K E M V E S L T A S G Q A E E P E
UniRef90_D4KQH6 K E E H D V K I T T D L M M G G D G T N T D E L G E L H L S A I S E A M N Q M M G
UniRef90_F2JGP7 E P E S A T K I V N M M L D K K M Q D L N D E L D E L G H S V L C E T G N I L A G
UniRef90_W3AMB0 N L E F A N T I F D K M M G I S Y A G F E Q M D A M A H S A L T E I G N I I I C
UniRef90_UPI0003719287 P L S F A R E I V A V L L P E E T T T E E V F A G V E G T Q V R E
UniRef90_G5GQ67 Q A K D A A I A D L M M G G E N D G T N P D E L N E L H M S A V S E C M N Q M M G
UniRef90_I5ARV4 S R E D V R I I V G M M M G M E P P E E F E L D E M N Q S A I R E V M N Q M M G
UniRef90_UPI0002885666 G E Q Q A N S L I S R L I P S G T V D D G G M G S S A F C E I S N I L C G
UniRef90_W1SF65 K E N D A K I I A D L M M G G E G V G D F E L S E L H L S A V Q E A M N Q M M G
UniRef90_S0FMF2 K Q D D V K I I T D L M M G G E G V I A E E L T D L H L S A I S E A M N Q M I G
UniRef90_G5HJK3 S E T F T N A V I E A I L G R R A Q R L M E M D E M E T S L V C E L G N I M C G
UniRef90_R5SP11 G S E D A H R L V E Q L L G M K P Q A D D T F S E M E M S A L M E L G N I I T G
UniRef90_U2AXR0 S E T F T M M V L N K I L G E E R E F L N P G E M E R S L I C E L G N I M C G
UniRef90_Q5WFR8 S V P F S K D Y A N A L L G G G A T A E P P V Q E A E
UniRef90_UPI00047D5849 K V D S A L N L L S K L C G K G E D R A N D Y N L V C E E L S S M G E I C N I L C G
UniRef90_C9R9W6 K V E D A S V I A D L M M G G E G K R S P T L G E I E I S A V A E A M N Q M M G
UniRef90_G7V5V8 S E E D A F Q L S E M L M G G I S S P D G Y E A L V E S A L A E A G N I V L G
UniRef90_E0RVI5 K E H D V K V M T D L M M G G D G T N T S E I T E L H L S A A S E A M N Q M M G
UniRef90_C0C1M9 K L D F I N A V T E T I L G C K I E D Y S E M D E M A V S A V T E V I G N I I I S
UniRef90_E0P214 P L D V A R E M V D A L M N Q Q P D V D D E E E
UniRef90_UPI0003FC4C00 D E T F T E Y V L N A I L N S D I K G L G L S E M E E S L I C E L G N I V C G
UniRef90_D9S394 T I P F A K K L V R E L M S I S K G I P F E
UniRef90_D7GSR7 D L D F A N E V L E K L L G S G Y K S F L D M D E M A R S A L V I E V I G N I I I C
UniRef90_M5E2P7 E M D S V E K I L H L L F G E G E L P G T E I R N S A L R E L G N I I I S
UniRef90_F7ZXA4 K V I T D A A V I A N L M M G G D G K E S K T L S E I E L S A V S E A M N Q M I G
UniRef90_UPI0003B2EE36 K E H D V M V I T D L M M G G D G T N T Q E I G E L Q L S A I S E A M N Q M M G
UniRef90_W9A8Z3 K S P D A A I S D I M L M G G D G T S P E E L N E I H L S A V Q E A M N Q M M G
UniRef90_F0SZG1 P L S V A K N M T E R L L N N Q P E
UniRef90_R5JWQ2 D L E D A H R L V N R L M G L E I L S I D L F D D V D L S A V K E I G N I L I S
UniRef90_R9IVC9 Q K E F A E K L I N T R F Y K E I L T S L H D I T E M D L S V R E M G N I I T A
UniRef90_D3F413 P T Q D A A A L C G L L G V I E P G T E V I G D S A I G E I G N I L L G T
UniRef90_I7LJK4 P V I E T A K M I N K M T G G L S E E P I A E P E P V K E A A Y E
UniRef90_W0EFE3 S Q E E I D A L L R G T M T P E P S A E E E F T E M E K D A I G E I A N I S M G
UniRef90_UPI0003181D74 P L R V A K Q M V G S L I H R D M A H K N D S N E L
UniRef90_A0A024QD32 K A E D A A V I S D I M L G G D G T N T D E L N E I H I S A V Q E A M N Q M M G
UniRef90_N1ZJN9 N L D L I N I M L E H V L T S K I D N T S Q L G D L E V S A L V I E I G N I M I S
UniRef90_D9TMR1 K E Q D V L R I T D L M M G G D G N V T E E I T E L H L S A I G E A M N Q M I G
UniRef90_R5F2R4 S E A F T K T V I N T I L G E E R N L T S L D D M E C S L I S E L G N I M C G
UniRef90_UPI000471FAA8 R R N D V R I I V G M L M G A D P D E E F E M N E I N V S A I C E V M N Q M M G
UniRef90_UPI00047893D9 P I R F A K D M C N K F Y T K E N A E N N E
UniRef90_UPI0004205859 Q L T D A K T I A D L M L G G N G E N P D E L N E L H L S A V A E A M N Q M M G
UniRef90_K6SXZ0 E D T S S A E S G N T L S D E G E S E A E A I T E I D K D L L G E I G N I S M G
UniRef90_K6SXZ0 E D T S S A E S G N T L S D E G E S E A E A I T E I D K D L L G E I G N I S M G
UniRef90_L7EL33 P I E T G K K L T S I M M G V N S E D E P K E T E T A K E
UniRef90_UPI00029A9619 P E R S A N L S A T L M G M D P S G V Q E L D D M G R S A V T E V I G N I L I S
UniRef90_F5T9P9 D F H F A K R L L K K L L E K E Y E D F S K M D D M A F S A L K E V I G N I I I C

UniRef90_U1LGN1 A Y A R A L G D W L N T P P H V P A T A V D M A G S I V E F V V T S V Q 130 140 150 160
UniRef90_R5HKT8
UniRef90_UPI00047B0131 S A S T S L S E M F S K K I D I Y P P R V F S M D F N S E S F T E I F P E F T M
UniRef90_R1ASS7
UniRef90_UPI00030299CE T A A T S M S T V F S K R V D I S P P S T M M I D V K D E S S E Q H I P
UniRef90_UPI00040C162C S A S T S M S T L F N K K V D I S P P K L D I L E F N S E E N L I
UniRef90_R7BIK6 S A A T S M S M L N K K I D I S P P T A E L V D L N E S M N T G K L P E F
UniRef90_UPI00035FADA8 T A S T S L A N M F G Q A I N I A P P N S I V L R E E D K D Q L V L
UniRef90_A9KNE6 S A S T S L S S M L E K K V D I T P P V A S I V D I P E V I D G G D I A E F L K
UniRef90_UPI000470B70A
UniRef90_R6K2W6 S A A T S L S S M F N R K I D I S P P I A N I V E T Y N E I D D S L P P F L A
UniRef90_V9HPP9
UniRef90_UPI0003754F05 S F V S A L A S F F G S T I Y A E P P G V A V D M L G A V L N V L L A E V G
UniRef90_D7CM10
UniRef90_UPI000479A932 S A S T S L S E I F S K K I D I D P P R A F E M Q F N N A D V D T N I F D I N G
UniRef90_J7J033
UniRef90_C4ZAN3 S S A T S L S S M L N R T I D I S P P I A E V V D L K N T L N E G E I D S F
UniRef90_R7N181 S A A T S L S T M L G K V I D I S P P E A S I L N L E E V E S G E S I E G
UniRef90_L0FC95 S A A T S M S T M F N S V I D I T P P Q L V L N D M S G Q D T N A I N N F L
UniRef90_UPI00047D913F S A A T S L S S M L Y M N I N I S P P K V Y V V N F D S D E I K D I P
UniRef90_F6B7Y3 S F V S A L I G T M T G L N L I P T V P M F A T D M L G A V L S A S L V A G G
UniRef90_V6J8E6
UniRef90_F4A1U9 S S A T S L S T M F D K N I N I S P P K A F V I N F T D E S P Y D A F
UniRef90_A1HN27 S T A T S M S T V F K K K V D I S P P Q V N V F D F G V D G N I S A M A
UniRef90_G9YNA6 T F V N A L S G L A G V T I Q S V P G F A V D M Q G A I T V P M A E F G
UniRef90_Q2FMS9 A F L D G T A E L L G I I M L P S P P R T I F D L P K N V F D L V I K E S N
UniRef90_UPI00037B874 S A S T S M S T I F N K R V D I S P P G I D L D L S E N I G L N Q M P D
UniRef90_UPI00028899AC S Y L S A L L D F T K L K V L P T P A L A S D M F G A I I S A G L I E V S
UniRef90_F7KG05 S Y I C A L S G V L D L K M E V T V P S M S I D M G L A I L S V P V A H Y S
UniRef90_F7NL54 S T A T S M S T V F K K K V D I S P P A V N L Y D F A V E P A I T E S I S
UniRef90_UPI0003B5ABC7 A A S T S L S M L N R M I D I S P P V A D L I N Q D D V D E A S I D E F L T
UniRef90_UPI000312750E S A A T S M S S V F D K R V D I S P P N T T L L D V E S G E G V D Y I P D
UniRef90_R5NM97
UniRef90_B0K9T5 S A A T S L S T L L N K T I N I S P P K A F V V D F T A S L P T D I S
UniRef90_W7YYPQ6
UniRef90_D5XFG1 S A S T A F S T I I K E R V E I S P P T V D L I N L A T D E L K G R L A
UniRef90_UPI00036FD538 A Y L S A V A K F L G T T L L P S P P G V A V D M L R A I L Q Y P A A L A E
UniRef90_UPI0003B6ECBC S S A T S L S S M M G K K I D I S P P K A S L V K I N E I I G E G K E N N P
UniRef90_UPI000225AA36 A A A T S M S T V F D K R V D I S P P S I S Q D H L A D D A G D
UniRef90_R5KD47 S A A T S M S S M L N K K I D I S P P S E A E L T T L G S E G S G K V E E R L K G
UniRef90_UPI00036C1D16 T V A T S L S T M F N K K I D I S P P K V N L I D L G T E E K V T E I V G
UniRef90_R7HTB0 A S S T S L S S M L E R K V D I S P P K A S L L D L S D S I Q D E M T S
UniRef90_R5QFV7 S S A T S L S S M L G R M I D I S P P E A S L V N I L E N K N G A D I A P F L A
UniRef90_R7PQG5 S Y I N A F S Q L V G V E M E L S V P S A T V N M L G G V L T V P I A E Y G
UniRef90_R7AEK3
UniRef90_F6CIB0 T A S T S L A T I F R R T I N I S P P Q T T V L E V S E G G A G Y R L P
UniRef90_U2TBQ5
UniRef90_D4KQH6 S A A T S L S S M L D K V I D I S P P S A D L D L Q Q T I D E S Q I D E F L A
UniRef90_F2JGP7 S Y L S A L N T F T G L E L D V S I P P Q M S I D M A G A I L S Y P A I E F V
UniRef90_W3AMB0 S Y V N A F T E L V D M N I S L S V P S A A V N M L G A I L T V P I A E Y G
UniRef90_UPI0003719287
UniRef90_G5GQ67 S V A T S L S S M F N K K V D I T P P A V T L V D L G T E E V V S K L L
UniRef90_I5ARV4 S S A T A L S E F L G Y R V D I S T P V S F E I A N E K V F K D K Y F
UniRef90_UPI0002885666 S Y L S A L S S M L D T R L I Q S P P D F A V D M E G A I L G E A L N E L S
UniRef90_W1SF65 S A A T S M S T L F R Q K V D I S P P S I D V L G L P P K K L D Q
UniRef90_S0FMF2 S S A T S M S S M F S K R I D I S P P K A F V V S F G N G D P F G E F E
UniRef90_G5HJK3 S Y I R A L S Q F M N T E M D V S V P E L C I D M A G A I L S Y P L S H W V
UniRef90_R5SP11 A Y L S A I S K M T N L T I S V S V P Y L S V D M A G A I L S V P
UniRef90_U2AXR0 S Y I N A L A S V M D L K L E V S V P D V C I D M G G A I L S V P L S R F L
UniRef90_Q5WFR8
UniRef90_UPI00047D5849 T Y L T A I S D M T N L T I D P S I P Y F S V D M V M A I M N L P I S L Y G
UniRef90_C9R9W6 A A A T S L A D I Y H R T V G I A P P Q V R I F S K E G E A A T N D L
UniRef90_G7V5V8 A F L N A M G D F L N L E L H P D V P S L A F D M L G S V L D I L V S I F G
UniRef90_E0RVI5 T S A T S L S S M L G V P T D I S T P I V N Q I D V E S I K V F E K M F D
UniRef90_C0C1M9 S Y V N A L A G L S G M E I N L S V P A V S I N M L G G I L S V P M I E F G
UniRef90_E0P214
UniRef90_UPI0003FC4C00 S Y I R A L S Q L L E I E I D V S V P S L C I D M G G A I L S A P L S R I A
UniRef90_D9S394
UniRef90_D7GSR7 S Y I N A F S Q L V N V E V E L S V P S A T I N M L G G I L M V P I A E Y G
UniRef90_M5E2P7 A Y L K A I N I F S D L N L S Q G L P A V A Y D M A G A V L S S S V I D Y S
UniRef90_F7ZXA4 S A A T S M A T M L L R E V N I S P P V S K I W D S K T D V L T D N I K E
UniRef90_UPI0003B2EE36 A A A T A L S S M I D Q K V D I S P P Q A T L L A A M E T D P G E I A E F L R G
UniRef90_W9A8Z3 A A A T S M S T V F N K K V D I S P P N I L L E D P E D D T K A R
UniRef90_F0SZG1
UniRef90_R5JWQ2 S Y L A S L E T L T G L R M R P S N P M L A I D M A G A I L S F P A V V N S
UniRef90_R9IVC9 A Y I N S I A Q M T N T F I N I T P P E D H I D T I G N I L E I P S Q N F A
UniRef90_D3F413 S Y I N A L A S M A G I A I E P R P P H V V T D M L G A I I V A S L L A G T A
UniRef90_I7LJK4
UniRef90_W0EFE3 T A A T T L S Q L L G K K V D I T T P K V D V T N A E Q V R K D Y P I P S V I V
UniRef90_UPI0003181D74
UniRef90_A0A024QD32 A A A T S M S T V F G Q K K V D I S P P T I H L E N P D N Q S E I A L
UniRef90_N1ZJN9 S Y V S A I S K L T I G S I N I S V P A M S V N M L G G I M S V P M V E F G
UniRef90_D9TMR1 S A S T S L S T L I G E S I N I S P P R A F V V D F N G L P E N I S
UniRef90_R5F2R4 S Y I R A L S Q L M D M D M D V S V P E L C I D M G G A I L T Y P M S R W V
UniRef90_UPI000471FAA8 S S A T A L S E F L G N P V N I S T P V S F P I E S E N S F K E K Y F
UniRef90_UPI00047893D9
UniRef90_UPI0004205859 G A A T A M S Q I F H R T I N I S P P D V Q F V D L S E N E W K L
UniRef90_K6SXZ0 S A S T A L Y Q L I N Q Q V N I T P V V S V T T L R E I K A G F E T P N I V L
UniRef90_K6SXZ0 S A S T A L Y Q L I N Q Q V N I T P V V S V T T L R E I K A G F E T P N I V L
UniRef90_L7EL33
UniRef90_UPI00029A9619 V Y T D I L A K L L G E P V S L S P P K A I A S L Y D V E R E L N R P D L R N
UniRef90_F5T9P9 S Y I N A F S Q L V G V D I N L S V P S S T V N M L G G I L T V P M V E F G

UniRef90_U1LGN1 P E E D A A L Y I D T T F R I D G K V S A G H V L F L P T H G S L E R I K Q 170 180 190 200
UniRef90_R5HKT8
UniRef90_UPI00047B0131 S F I K I S F R M E I G T L I D S E I M Q L I P L F G K E M I E K L M S
UniRef90_R1ASS7
UniRef90_UPI00030299CE G D D I L I Q V S F Q L K I G D L I D S K I M Q L L P T H F A K E M V D
UniRef90_UPI00040C162C P D E D I L V N I S F R L K V G T L I D S S I M Q L V Q V D F A K T L V E
UniRef90_R7BIK6 L K S K F V K V S F K M L I G N L I D S E I M Q L Y P F E F A K S L Y E
UniRef90_UPI00035FADA8 P V G D P V V V S F Q M K I G D L V D T E L M Q I M S L E T A R K
UniRef90_A9KNE6 S R F V K V S F R M V I G D L V D S E L M Q L Y P F D F A R E L Y E
UniRef90_UPI000470B70A
UniRef90_R6K2W6 E P F V M V A F K M Q I G D L I D S E I M Q L Y P I D F A R E L L N
UniRef90_V9HPP9
UniRef90_UPI0003754F05 Q H A D H L I V A K T T I A I E D V N I R G W I V D I P T P E S F Q R I T E
UniRef90_D7CM10
UniRef90_UPI000479A932 K V V K V S F K M V V G D L I D S Q I M Q I L P F D F A K K L T T
UniRef90_J7J033
UniRef90_C4ZAN3 L S E E F V K I S F H M E I G D L V D S E I M Q L Y P P A F V K E M
UniRef90_R7N181 F L A G N F V K I S F R M Q I G D D D L V D S T I M Q L Y P I E F A R S L Y E
UniRef90_L0FC95 N T Q E K L V R I S F R M V V E D V I D S I L V Q V I P I P V A G M V E K L L G
UniRef90_UPI00047D913F I Y G Q K I V K V A F K M V V G D I I N S E I M Q L L P L D F A K D L V G
UniRef90_F6B7Y3 Y V Q E N I L M I E T L F F E N N E E I K G H F F L I
UniRef90_V6J8E6
UniRef90_F4A1U9 D S N E P L V R I A F S M E I G T L L K S E M M Q L L P I D F A K E L V N
UniRef90_A1HN27 A G D E P I V S V S F R M E V E D L I D S E I M Q I I P I N S V A K E M V E
UniRef90_G9YNA6 G Q S D Y I M T I G T N F I C E K H S V P C R L L L S P D V R S I N F L L R
UniRef90_Q2FMS9 I L Y D N V V F F K T E L I C D E H E L S L N I F M L P N P P V L L D I V K
UniRef90_UPI00037B874 G D V L G N I S F H L K V G E L I D S K M M Q L V S I S F A K E M V E
UniRef90_UPI00028899AC Q V S D Y V I V I D T S I V T E A D Q E E V S G H F F L I P D P S F E T I F N
UniRef90_F7KG05 R V S E D I L V I D N I F R M G G K A F S G R I L F L P E P E A L E M M L Q
UniRef90_F7NL54 G D E A V V R I N F R M E V E D L I D S E I M Q I V T M R V A R E M V N
UniRef90_UPI0003B5ABC7 H P F V L I K F R M Q I G D L V D S E I M Q L Y P F E F A R E M
UniRef90_UPI000312750E E D T F V K V S F Q L Q V G Q L I D S S I M Q L L P V D F A K D F V D
UniRef90_R5NM97
UniRef90_B0K9T5 F P E G D V V K I A F K M E V G E I I D S E I M Q L L P L D F A K E L V Q
UniRef90_W7YYPQ6
UniRef90_D5XFG1 N P D E P L V K V S F K M T I E D L V N S E M M Q L M P L D F A R E L V G
UniRef90_UPI00036FD538 A E S D C S V V I K T R F V Y G H E S C L L G F M L Y M P D R G S Q A A L M E
UniRef90_UPI0003B6ECBC F E E D T F V K I A F R M Q I G E L V D S T I M Q L Y P L K F A K S L Y E I F
UniRef90_UPI000225AA36 P D E E V F V K V S F Q L K V G T L I D S N I M Q L M P I R F A K Q L V E
UniRef90_R5KD47 K S F V K V S L K M E I G D L V D S N I M Q L Y P I D F A K E L Y Q
UniRef90_UPI00036C1D16 Q D E P V V R V S F R M E V D G L I D S E I M Q I L P V H V A K E M V E
UniRef90_R7HTB0 F L D G E F V M V S F K M E I G D I V D S Q I M Q L Y P V D F A K D L Y Q
UniRef90_R5QFV7 G D F V K I E F R M Q I E D L V D S T I M Q L Y P I D F A K S L Y K I F
UniRef90_R7PQG5 Y E T D K L M Y F N A D F V M E G K K L P G W L L M L P D I D S L N G I L D
UniRef90_R7AEK3
UniRef90_F6CIB0 T E D P I V V V S F K M T I G D L V D T E I M Q I M S L E T A K E
UniRef90_U2TBQ5
UniRef90_D4KQH6 G E F V K I S F R L E I G D L V D S E I M Q L Y P V S F A K E M
UniRef90_F2JGP7 R N D N T M L F I E T A F R D V N G L L S G T Y I L I I D N E A Y N K V I D
UniRef90_W3AMB0 Y E T D K L M Y C S A D F V I D G K T Y N D W L L M L P D I S S L N R I L E
UniRef90_UPI0003719287
UniRef90_G5GQ67 D K A D P I T Q A S F R M E V D G L I D S E I M Q L L P L D V A R D M V D
UniRef90_I5ARV4 S D D K Q E V V R F S L E I G D E L S S E F L N I M S L D L V K K L L E
UniRef90_UPI0002885666 L Y D D S V L M I D T A L F H Q E Q Q D K L S G E F L F M P Y P G S L D L I F S
UniRef90_W1SF65 F K E D I I I E V S F H L S V G T L I D S N M I Q L I P L S F A K E M I Q
UniRef90_S0FMF2 M N D V L V K I A F K M V V G T L I D S E I M Q L L P M K F A K E L V N
UniRef90_G5HJK3 I V S D D I L L I E N R F Q M S G K A Y R G H I L F L P E Q E D L G I M L H
UniRef90_R5SP1
UniRef90_U2AXR0 R V S D D I L M I D N L F H L G G E S F L G R I L F I P E P D S L D M M L R
UniRef90_Q5WFR8
UniRef90_UPI00047D5849 P D A D S I L C I E T D F F T T D L K I E G K Y Y F I P K V E S C N K L L A
UniRef90_C9R9W6 G V E D P I A V I S F R M T I E D L L S S E F L N I M S L D L V K K L L E
UniRef90_G7V5V8 E V G D T A F L N T S L S F P E L E D H F S G K I L M V P A P G T F E K L F S
UniRef90_E0RVI5 T T Y D K F V K I A F R M T I G D L I D S V M V Q L Y P V F A V D M C Q K F M D
UniRef90_C0C1M9 Y E T D K I M M I T G N F I L G H H K L E S S L L M L P D I E S L N K L L K
UniRef90_E0P214
UniRef90_UPI0003FC4C00 Q A S D D I L L I E N T F Y I D G E S F I G R I L F F P E L E A L E T V V
UniRef90_D9S394
UniRef90_D7GSR7 Y E T D K L M Y C N A D F V I G G K A L S D W L L M L P D I R S L N D I L E
UniRef90_M5E2P7 Q S G D E I L L E T E F I S E K K L E L Y Y F F I P E E K S I D I L F Q
UniRef90_F7ZXA4 D E N I V Q V A F K L T I G D L V D S S I M Q I L P I D T S R K M I D
UniRef90_UPI0003B2EE36 T F V R I T F K M Q I G D L V D S S I M Q L Y P V D F A K S L Y D
UniRef90_W9A8Z3 F T E D A Y V K V F F E L K V G D L I D S N I M Q L M P M S F A K G L V D
UniRef90_F0SZG1
UniRef90_R5JWQ2 R E R D E V L R I E S Q F E G E D L S I E G H L M M I A D S E S Y N T I R K
UniRef90_R9IVC9 S L G R K V L Y I D E S F Y I S G T Q I K G S M I L I L E Y S S M N T L F Q
UniRef90_D3F413 G E S G V A L V L D S E L D V A D A A C S L S F L L L P T T G G I D E L L T
UniRef90_I7LJK4
UniRef90_W0EFE3 D V K Y K A G I E G S N F L T S Q R D G S V I V D M M M
UniRef90_UPI0003181D74
UniRef90_A0A024QD32 D G N P F V K V S F Q L K V G N L I D S N I M Q L M P V Q F A K E L V N
UniRef90_N1ZJN9 H Q T D K I M I I N G K F I V E D K E V Y S N L L M P D I P S L N Y L L K
UniRef90_D9TMR1 F P D G Y V V K I A F K M V V G E I I D S E I M Q L I P I A F A K R L V E
UniRef90_R5F2R4 I V S D D I L L I E N I E H M S G E I F K G R I L F F P E Q E D L G T M L S
UniRef90_UPI000471FAA8 T P D V K M V V V R F S L E I E G K L E S E F L N I M S S K L A K H L L E
UniRef90_UPI00047893D9
UniRef90_UPI0004205859 G L E G Q L V N V S F R M R V G S L L D S T I M Q W I P L S F A K A M V N L I R
UniRef90_K6SXZ0 D I E Y V A G I I R N I L I I K I S D G L V I S N L M M
UniRef90_K6SXZ0 D I E Y V A G I I R N I L I I K I S D G L V I S N L M M
UniRef90_L7EL33
UniRef90_UPI00029A9619 V E N I M L F K T R F Y E E N V G F E S Y F Y L V P D E K S F E K L V T
UniRef90_F5T9P9 Y E S D K L M Y C N A D F L V D G K S I P S W L L M L P D I H S L N T I L G

UniRef90_U1LGN1 R
 UniRef90_R5HKT8
 UniRef90_UPI00047B0131 S Y G E
 UniRef90_R1ASS7
 UniRef90_UPI00030299CE G
 UniRef90_UPI00040C162C E
 UniRef90_R7BIK6 F G M K
 UniRef90_UPI00035FADA8
 UniRef90_A9KNE6 Q
 UniRef90_UPI000470B70A
 UniRef90_R6K2W6
 UniRef90_V9HPP9
 UniRef90_UPI0003754F05 K G
 UniRef90_D7CM10
 UniRef90_UPI000479A932 E
 UniRef90_J7J033
 UniRef90_C4ZAN3
 UniRef90_R7N181
 UniRef90_L0FC95 S M G
 UniRef90_UPI00047D913F R
 UniRef90_F6B7Y3
 UniRef90_V6J8E6
 UniRef90_F4A1U9 N
 UniRef90_A1HN27 S
 UniRef90_G9YNA6 K L G
 UniRef90_Q2FMS9 M L E
 UniRef90_UPI0003F7B874 E
 UniRef90_UPI00028899AC S L G
 UniRef90_F7KG05 R
 UniRef90_F7NL54 G
 UniRef90_UPI0003B5ABC7
 UniRef90_UPI000312750E S
 UniRef90_R5NM97
 UniRef90_B0K9T5 S
 UniRef90_W7YYPQ6
 UniRef90_D5XFG1 R
 UniRef90_UPI00036FD538 K
 UniRef90_UPI0003B6ECBC
 UniRef90_UPI000225AA36 D
 UniRef90_R5KD47
 UniRef90_UPI00036C1D16 S
 UniRef90_R7HTB0 K
 UniRef90_R5QFV7
 UniRef90_R7PQG5 K L G
 UniRef90_R7AEK3
 UniRef90_F6CIB0
 UniRef90_U2TBQ5
 UniRef90_D4KQH6
 UniRef90_F2JGP7 A L G
 UniRef90_W3AMB0 K L G
 UniRef90_UPI0003719287
 UniRef90_G5GQ67 A
 UniRef90_I5ARV4
 UniRef90_UPI0002885666
 UniRef90_W1SF65 Q
 UniRef90_S0FMF2 S
 UniRef90_G5HJK3 R
 UniRef90_R5SP11
 UniRef90_U2AXR0 S
 UniRef90_Q5WFR8
 UniRef90_UPI00047D5849 S L G
 UniRef90_C9R9W6
 UniRef90_G7V5V8 M G
 UniRef90_E0RVI5 K
 UniRef90_C0C1M9 K
 UniRef90_E0P214
 UniRef90_UPI0003FC4C00
 UniRef90_D9S394
 UniRef90_D7GSR7 R L G S
 UniRef90_M5E2P7 H
 UniRef90_F7ZXA4
 UniRef90_UPI0003B2EE36
 UniRef90_W9A8Z3 E
 UniRef90_F0SZG1
 UniRef90_R5JWQ2 K L G
 UniRef90_R9IVC9 K L G
 UniRef90_D3F413 R L G
 UniRef90_I7LJK4
 UniRef90_W0EFE3
 UniRef90_UPI0003181D74
 UniRef90_A0A024QD32 Q
 UniRef90_N1ZJN9 K L G
 UniRef90_D9TMR1 Q
 UniRef90_R5F2R4 R
 UniRef90_UPI000471FAA8 P F E S
 UniRef90_UPI00047893D9
 UniRef90_UPI0004205859 S
 UniRef90_K6SXZ0
 UniRef90_K6SXZ0
 UniRef90_L7EL33
 UniRef90_UPI00029A9619 K L E
 UniRef90_F5T9P9 K L G

UniRef90_F2JGR0
UniRef90_D4MNI4
UniRef90_UPI0003697D9A
UniRef90_UPI000414B38
UniRef90_B8CYQ5
UniRef90_W0EIK4
UniRef90_N2BBE7
UniRef90_G2SRG7
UniRef90_A0PZZ0
UniRef90_C3L212
UniRef90_C3L212
UniRef90_F7K497
UniRef90_UPI000374C4D1
UniRef90_C0GJF0
UniRef90_C0GJF0
UniRef90_B2TLR1
UniRef90_R9MFL7
UniRef90_U2NSW1
UniRef90_UPI00016C0EF6
UniRef90_U2D267
UniRef90_W3ALP9
UniRef90_UPI00040692C8
UniRef90_UPI00047CD079
UniRef90_R6NLL0
UniRef90_D7GSQ7
UniRef90_R9IHP0
UniRef90_N9ZZK9
UniRef90_J1L2C4
UniRef90_U5MWH7
UniRef90_B1ZY75
UniRef90_Q2RKB6
UniRef90_UPI000375B4C0
UniRef90_J0L206
UniRef90_Q47Y74
UniRef90_A6M1D2
UniRef90_R9BT15
UniRef90_R7PQF3
UniRef90_Q3ADB7
UniRef90_K2LV30
UniRef90_B7IDK1
UniRef90_R9M254
UniRef90_F8AGS7
UniRef90_UPI000463825D
UniRef90_UPI0004254DE5
UniRef90_D1B699
UniRef90_H8MJZ8
UniRef90_R5KZT4
UniRef90_V9H491
UniRef90_Q0W7Z1
UniRef90_K4MHQ0
UniRef90_UPI0002492980
UniRef90_B7ATS2
UniRef90_D8GPV7
UniRef90_D9QRJ5
UniRef90_B3PIC0
UniRef90_J1Q4T5
UniRef90_F4LTQ0
UniRef90_C0C1N9
UniRef90_H3ZR49
UniRef90_F7NXA3
UniRef90_D7E9B9
UniRef90_UPI000255BE37
UniRef90_O58224
UniRef90_V4J4N7
UniRef90_L7UKM0
UniRef90_UPI0003B4A3B4
UniRef90_Q1N0K3
UniRef90_N9ZZN0
UniRef90_A0A023S8Z9
UniRef90_G8QNI1
UniRef90_L0K7W3
UniRef90_F7XQE6
UniRef90_W6RYJ9
UniRef90_A5IJA7
UniRef90_UPI0004643AF1
UniRef90_S6AMA1
UniRef90_K9TKY8
UniRef90_K2A1S0
UniRef90_B1BCU2
UniRef90_W6RWF6
UniRef90_F9VJT9
UniRef90_UPI00047C96BB
UniRef90_UPI00038158EB
UniRef90_S6GJ20
UniRef90_M4U8D4
UniRef90_M1E9K0
UniRef90_A4J737
UniRef90_UPI000368F6DD
UniRef90_A0A023CX00
UniRef90_F7K418
UniRef90_K9TKQ6
UniRef90_L9PFT1

1 10 20 30 40

H I E V E

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

E L T D L E K D D A I S E A M N Q M M G S S A A T A M S E M L G R K V V E I T T P P

E L T D L E K D D A I S E A M N Q M M G S S A A T A M S E M L G R K V V E I T T P P

E L T D L E K D D A I S E A M N Q M M G S S A A T A M S E M L G R K V V E I T T P P

Y E D M D D T A K D M M R E I G S I G S T M G S N A A T A L S S L L K T G V N E M T V P

E I T D I E K D D A I S E A M N Q M M G S S A A T A L S S Q L I N K K V I N S M N V V

E E L S E I E V S A V S E A M N Q M I G S A A T S M A T M F A R E V N I S P P

E L L S E Q K D D L G E I A N I S M G S N A A T N L S T K L V N L P V I T T T P P

L S F N E M E L D A L G E M M N I S L G S S A A T A M S L L G S T V I N T P V I E V

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

M K L T D L Q S D A L R E V G S I G T A H A V T A L S S Q M L M T Q I V D M D V P

M E L T S G Q V D A L T E L N I S Y G R A A G S E L I T G Y R V I A L E V P

L S D L E K D D A I S E A M N Q M M G S N A A T T L S I L L N N K V I D I T T P P

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

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

L S E I E I S A V S E A M N Q M I G S A A T S M A T M F G R K V V E I S P P

I S D I E K S D L L G E I G N I S M G S S A A T A L Y S E F L N K K V V N I S T T P P

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

L D S E L E H D T I S E L N I S M G S S A A T S L S E M V D K K P V E L I T T P P

N E E V D E I S L S A V S E A M N Q M M G S S A A T S L S E M V D K K P V E L I T T P P

F S P M D I D A L G E M M N I S L G S S A A T A V S N L L D H R V V D I T T P P

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

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

L T D D E K D A I G E V A N I S M G S S A A T T L Y S L V N Q K V V N I T T P P

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

N V E F S S Y E I D A V G E I L N I S M G S S A A T A V S E L L N A K V V I T T P P

E L S E I E V S A V S E A M N Q M I G S A A T S M A T M F A R E V N I S P P

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

E L T E L Q A S A L K E I V N I G V G N A V T S L S K M I G K Q I S I E V P P

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

L T D S E K D A V G E I G N I S M G S S A A T T L S S I L N Q Q V V N I T T P P

Q L P I E K D L L G E I G N I S M G S S A A T A L Y S L L D E T V E I T T A P

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

N Q L D A E L R D V F Q E V A N V A M G Q A A D L L A R L L N V F V V L S I P P

V K I S T M E I D A I G E I G N I S I G T S A T T L Y S T L R N K V V I T T P P

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

L S N D L R D V F K E L S N V A M G Q A A D L L A R L L N V F V V L S I P P

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

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

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

Q I E P L R D I Y Q E I A N V A M G Q A A D L L A R L L N V F V E L P I P

S D A Q L D A L R E V A N I G C G H A A N A L S R L M G R Q V V D L S V P P

K L T D E Q R D A L R E V A N I S M G S S A A T A L G M M I N Q K V V I T T P P

I E L T E D E R D C I L Q E I T N V A M G Q A A D R L A R L L N V V V L P I P

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

K I S P E V R D V Y Q E I A N V I G V G Q A A D L L A R L L N A F V V L S I P P

M E L N E L Q R D A L V E A F N I S V G Q A A S L A S M V N E E V K L S V L P

L S D L A R D A L G E I G N I S M G S S A A T A L Y G L L D K E V V E I T T A P

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

L T D I E K D D L L G E I G N I S M G S S A A T A L S S Q I I N C K V I N I T T P P

L T L E E K D M I G E I G N I A M G S A A T T L S M I L G R D I H I T T P P

D V L Q R E Q A N I A M G S A A D L L A R L L G V F V V E L S V P P

R D A L R E V S N V A M G R A A L L A R V L G V F V V E L S V P P

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

E L T N I Q L D A L R E A G N I G A G H A A L A L S Q M M N K K V V M M S V V

E L T E I E E S A V S E A M N Q M I G S A A T S M A T M F G R K V V N I S P P

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

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

Y S D L G T L E L D I L Y R E L V N V A M G R A G E S L A T L L G E F V D L S V P P

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

L T D F Q Q D V T S E L S N I A M G S S A A S L S Q M V G E T V T L S V P P

R E A L S E V S N I A M G R A A L L A R V L G V F V V E L S V P P

M N L T D E Q I D A I G E V L N M A M G S A A T T L S S Q L V N K K I S I T S P P

E I S E L E I S A S E A M N M M I G T A A T S L S Q M F Q R T I N I S P P

L T P D Q R D A L Q E V T N V A M G Q A A G A Q I L E V F V V E L S V P P

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

R F S P V E I D A I G E I L N I S L G S S A A S T M L D A R V D I T T P P

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

S L S E L E N D A L I E I F N I G V G Q A A S S M S A T V N E S V R M S V P P

	50	60	70	80
UniRef90_F2JGR0	KVVEALTW	EQFLINTL	ITDD	
UniRef90_D4MNJ4	KVVTVVQ	ASSELNY	DRLEP	ATC
UniRef90_UPI0003697D9A	KVVGVS	SLMELK	ETPF	LVLV
UniRef90_UPI000414BB38	KVVSIT	TLLKEIK	NETF	
UniRef90_B8CYQ5	KVVEVVT	TKELLS	QEY	
UniRef90_W0EIK4	KVDLIT	TAKKVL	FEDY	
UniRef90_N2BBE7	EANLID	LKELID	DEF	LT
UniRef90_G2SRG7	SVEILS	YGDLY	KRVLA	D
UniRef90_A0PZZ0	QVVRVT	TLKELR	DTF	
UniRef90_C3L212				
UniRef90_C3L212				
UniRef90_F7K497				
UniRef90_UPI000374C4D1	QVNEV	LSDFNE	ALNALS	GNP
UniRef90_C0GJF0	DLTYV	VEKQIG	EFA	LDS
UniRef90_C0GJF0	DLTYV	VEKQIG	EFA	LDS
UniRef90_B2TLR1	VVSLT	TLTKD	MKASF	
UniRef90_R9MFL7	KVVEI	LTGYN	EAVD	LGL
UniRef90_U2NSW1	VVSVI	QDILN	SEIKN	
UniRef90_UPI00016C0EF6	QVSDV	IQTDL	SELK	YH
UniRef90_U2D267	NSKI	DSTTQ	LAEK	ID
UniRef90_W3ALP9	GVS	ITNRS	YAE	LDD
UniRef90_UPI00040692C8	KVEV	ITTAG	ELSY	PEY
UniRef90_UPI00047CD079	VVSVI	TTTLK	ELRST	F
UniRef90_R6NLL0	NI	LM	DYTK	AA
UniRef90_D7GSQ7	KVKI	LITRD	QGE	FK
UniRef90_R9IHP0	HVT	LH	KNEI	L
UniRef90_N9ZZK9	DIH	SIL	DYNE	S
UniRef90_J1L2C4	KI	SIL	DIAE	YR
UniRef90_U5MWH7	VVSV	TTT	NEIK	
UniRef90_B1ZY75	QVA	AI	HE	LA
UniRef90_Q2RKB6	TIK	IM	TE	E
UniRef90_UPI000375B4C0	RVT	VAN	IQQ	K
UniRef90_J0L206	EIS	FL	EV	S
UniRef90_Q47Y74	NVN	FL	EV	S
UniRef90_A6M1D2	TAK	VVD	GSI	P
UniRef90_R9BT15	KVKI	IT	T	L
UniRef90_R7PQF3	SFE	I	ED	TS
UniRef90_Q3ADB7	RVE	V	Q	K
UniRef90_K2LV30	TIT	F	V	E
UniRef90_B7IDK1	TVE	L	I	D
UniRef90_R9M254	KVT	V	P	T
UniRef90_F8AGS7	EVE	I	V	P
UniRef90_UPI000463825D	NVN	V	L	E
UniRef90_UPI0004254DE5	QVE	L	A	N
UniRef90_D1B699	VAE	L	V	S
UniRef90_H8MJZ8	EVR	V	T	S
UniRef90_R5KZT4	QVS	V	V	K
UniRef90_V9H491	KSK	I	D	M
UniRef90_Q0W7Z1	EIE	I	A	P
UniRef90_K4MHQ0	EEL	K	I	E
UniRef90_UPI0002492980	EVN	I	L	S
UniRef90_B7ATS2	HVS	I	S	T
UniRef90_D8GPV7	VV	V	T	T
UniRef90_D9QRJ5	EVE	L	V	T
UniRef90_B3PIC0	HVS	V	L	N
UniRef90_J1Q4T5	NVN	N	L	I
UniRef90_F4LTQ0	KVY	I	R	N
UniRef90_C0C1N9	I	V	Q	V
UniRef90_H3ZR49	E	V	M	I
UniRef90_F7NXA3	NVN	N	V	I
UniRef90_D7E9B9	DNL	K	I	E
UniRef90_UPI000255BE37	SVR	L	Q	S
UniRef90_O58224	DVD	I	V	S
UniRef90_V4J4N7	NVN	N	V	L
UniRef90_L7UKM0	RVL	L	A	G
UniRef90_UPI0003B4A3B4	RIE	V	I	N
UniRef90_Q1N0K3	NVN	N	V	L
UniRef90_N9ZZN0	SFE	L	H	S
UniRef90_A0A023S8Z9	NVN	N	V	L
UniRef90_G8QNI1	T	L	Q	L
UniRef90_L0K7W3	EVE	V	S	T
UniRef90_F7XQE6	A	L	K	M
UniRef90_W6RYJ9	V	V	T	S
UniRef90_A5IJA7	T	V	R	E
UniRef90_UPI0004643AF1	KVS	M	L	A
UniRef90_S6AMA1	NVN	N	V	L
UniRef90_K9TKY8	QVS	I	H	P
UniRef90_K2A1S0	RTE	I	V	P
UniRef90_B1BCU2	V	S	K	I
UniRef90_W6RWF6	C	A	R	I
UniRef90_F9VJT9	T	V	E	V
UniRef90_UPI00047C96BB	EVR	I	M	G
UniRef90_UPI00038158EB	NVN	N	V	L
UniRef90_S6GJ20	SVE	Y	I	A
UniRef90_M4U8D4	NVN	T	L	A
UniRef90_M1E9K0	M	V	D	I
UniRef90_A4J737	Q	T	N	L
UniRef90_UPI000368F6DD	R	I	N	I
UniRef90_A0A023CX00	E	J	S	I
UniRef90_F7K418	V	I	R	V
UniRef90_K9TKQ6	F	I	R	V
UniRef90_L9PFT1	S	V	S	F

UniRef90_F2JGR0
UniRef90_D4MNI4
UniRef90_UPI0003697D9A
UniRef90_UPI000414B38
UniRef90_B8CYQ5
UniRef90_W0EIK4
UniRef90_N2BBE7
UniRef90_G2SRG7
UniRef90_A0PZZ0
UniRef90_C3L212
UniRef90_C3L212
UniRef90_F7K497
UniRef90_UPI000374C4D1
UniRef90_C0GJF0
UniRef90_C0GJF0
UniRef90_B2TLR1
UniRef90_R9MFL7
UniRef90_U2NSW1
UniRef90_UPI00016C0EF6
UniRef90_U2D267
UniRef90_W3ALP9
UniRef90_UPI00040692C8
UniRef90_UPI00047CD079
UniRef90_R6NLL0
UniRef90_D7GSQ7
UniRef90_R9IHP0
UniRef90_N9ZZK9
UniRef90_J1L2C4
UniRef90_U5MWH7
UniRef90_B1ZY75
UniRef90_Q2RKB6
UniRef90_UPI000375B4C0
UniRef90_J0L206
UniRef90_Q47Y74
UniRef90_A6M1D2
UniRef90_R9BT15
UniRef90_R7PQF3
UniRef90_Q3ADB7
UniRef90_K2LV30
UniRef90_B7LTK1
UniRef90_R9M254
UniRef90_F8AGS7
UniRef90_UPI000463825D
UniRef90_UPI0004254DE5
UniRef90_D1B699
UniRef90_H8MJZ8
UniRef90_R5KZT4
UniRef90_V9H491
UniRef90_Q0W7Z1
UniRef90_K4MHQ0
UniRef90_UPI0002492980
UniRef90_B7ATS2
UniRef90_D8GPV7
UniRef90_D9QRJ5
UniRef90_B3PIC0
UniRef90_J1Q4T5
UniRef90_F4LTQ0
UniRef90_C0C1N9
UniRef90_H3ZR49
UniRef90_F7NXA3
UniRef90_D7E9B9
UniRef90_UPI000255BE37
UniRef90_O58224
UniRef90_V4J4N7
UniRef90_L7UKM0
UniRef90_UPI0003B4A3B4
UniRef90_Q1NOK3
UniRef90_N9ZZN0
UniRef90_A0A023S8Z9
UniRef90_G8QNI1
UniRef90_L0K7W3
UniRef90_F7XQE6
UniRef90_W6RYJ9
UniRef90_A5IJA7
UniRef90_UPI0004643AF1
UniRef90_S6AMA1
UniRef90_K9TKY8
UniRef90_K2A1S0
UniRef90_B1BCU2
UniRef90_W6RWF6
UniRef90_F9VJT9
UniRef90_UPI00047C96BB
UniRef90_UPI00038158EB
UniRef90_S6GJ20
UniRef90_M4U8D4
UniRef90_M1E9K0
UniRef90_A4J737
UniRef90_UPI000368F6DD
UniRef90_A0A023CX00
UniRef90_F7K418
UniRef90_K9TKQ6
UniRef90_L9PFT1

90 100 110 120
K D H D V K I I A D L M M G G T G A Y A E P V T D L H L S A I I A E S M N Q M I G
K Q D D V Q L I L N Q L M G G K P P S P A F E F D E L N L S A V S E V M N Q M M G
K E S D A L I I A N L M M G N D D G T N P T E E L N E I Y M S A V G Q E A M N Q M M G
K T E D A V I I A N L M M G G D D G T E N H E L L S E I E I I S A V G Q E A M N Q M I G
K E E D A M V I A N L M M G G G D G T S N D E K L D S E I H L S A V I G Q E A M N Q M M G
S R E D F G S I L V D L M M G N G M T G K N P T E E L S D I Q L S G I S E A M N Q M M G
P I S F A R E M C E S I K S G N S G K D L E E
S D A A A D K L A G L M M G S D V E G V S E R E V K A S A V S E L T N I V A N
K I P D A A V L I A N L M M G G D G E E K S L L T T D L E K D L L S A V S E A M N Q M I G
D G S Q G E E A K K E A T D T E L P E L P D L T T D L E K D L L G E V G N I S M G
D G S Q G E E A K K E A T D T E L P E L P D L T T D L E K D L L G E V G N I S M G
K P D L V N D I V G R L L G H H I D D Y S Q L D D Q M D I S A L N E V G N I M I S
E S G D A A I I T D L M M G G D G T E P E E I S A D E G D T I A E I G N I S M G
P L E F A E N M V A E L L G S F T D G T E E I S A D E G D T I A E I G N I S M G
P L E F A E N M V A E L L G S F T D G T E E I S A D E G D T I A E I G N I S M G
R T D D A A V I I A N L M M G G D G P E N P E L S E I E V S A V G Q E A M N Q M I G
K I D F I N E V L Q V L L Q E N I S G Y E Q M G S E M E I S A S T E V G N I I S
K T S D A S V I A N L M M G G D G T V T Q E E L S E L E I S A V Q S E A M N Q M I G
E S S A K E I I F N V L G I Q V L N L H E L L G E M E L S L L S E L G N I L A G
P V V T A K K I V S I M M G T E S T G A D T P K T S Q Q P A A S E
Q Q P D V T A I T D L M M G G D G T N R E N E V S D L H L S A I I S E A M N Q M M G
N I D D V K I I T D L M M G G D E I D T N E L T E L D L L S A I I S E V M N Q M M G
K V T D A G V I A N L M M G G D G K K I E N L S E L D L L S A V S E A M N Q M I G
E K E F T S R L I N T F Y E K N V D S L D S L D D D M D L S V L R E M A N I T T A
S R N D V R I V G T L L G E E P D D K F L D E I D N R S A I I C E V M N Q M M G
K D D D A K I I T D L M M G N G G F S T G D I T P L H I S A V S E A M N Q M T A
R K A L I N A V L E R M F G E A E V I E P R L E E L Q R S A L L E I G N I M I S
P Q T S A I R V L T N T M L G M T D M N R E M N E M D Q S A I I E I G N I M V S
K N A D G L V I S N L M M G G D G P D D H Q L S E I E I S A V S E A M N Q M I G
D E R A A A A L S R L L I E D G V P G T R L D D A T A R E V V T E V G N I L L N
K V S D A A I I A D L M M G S G S G E N T P E L D D E I K S S A V A E A M N Q M V G
K E H E A M I I A D L M M G G D G L N P T E T T E L Y M S A V S E A M N Q M M G
P D K S I K K L V K L L L G G V S A S D E L E V S A I N E L T N I T N
N D S S F K D V A S L M N Y Q Y D A D M G T E L E L L M D L A N V L I G
P I E T A K N I V A I M T G E D K G K E V A A S E P A K D
Q T T D A A V I A N L M M G G D G Q N T T E L S E L E V S A V Q E A M N Q M I G
S V E L A K R L L E P F A S T F G Q M E E T A E G M E
K E N E V G V I A S L M M G G D G T H S G E I T E L E Q S A A Q E A M N Q M I A
P E K R S L L V R R L K K V D V P L D T L T D L Q E A L M E V G N I L L N
P P E F V K K L Y S M I F E S E K K V E S S A A G T S
R R R D I K V I V D I L M G E T P D E E F E L N D L T I S A V C E V M N Q M M G
P K T S A L N L S A V L L G M E P G S V Q E L D E M A K S A I M E V G N I L I S
H D S F A D L A K L M K Y Q G I M D R N A E L E L L M D M S N V L I G
K E H D V M V I T D L M M G G D G T N T D E V G E L Q L S A I S E A M N Q M M G
Y E E E A S T L A D L L I S M D L S S M E E E V R M Q L S A L A E V G N I L L G
P S V D A E A L E S A L L R G H P A S P E E R E S A L A E A A N I L L A S
K Q D D V Q L I L N Q L M G N P V S P D F E F D E M N I S A V S E V M N Q M M G
P I N T A K K I V S I M M G E D Q E V A N E I D D
P E E S A Y S I S D M L M C L E K G T R E I I T D L E K S A L M E V G N V L I S
S R D T A E T I C T T I T G E E A P D I L S S M N Q S L I E E V G H I L A G
T E N D P A K E I S S L M M G T D G Q V T E E I K V I S A V S E L T N I V S S
R E N D V K I I T D L M M G G P G D P N E E L T D L E I S A I G E A M N Q M M G
K I T D A A V I A N L M M G G D G P D I K E L L G E I E I S A V S E A M N Q M I G
E Q Q D A A I I S D L M M G G D G N N P D E L N E L H L S A V S E A M N Q M M G
H G T D F A N D L A K L L K Y D R I P D E Q A Q N E L L M D T A N V L N G
T D S S F A D I A R L L N Y Q G E L D T A A E L E L L M D V A N I L I G
K E D D A K I I A D L M M G G D G S N V D E L L D D R M S A V G E A M N Q M M G
K R N D V R V I V E M L M G M E P S E E F E L D E D E M N I S A I C E V K N I L I G
P Q K S A T A L A A V L M G M D P S Q I E E L D E M G K S A I M E V G N I L I S
N D S S F V D I A R L L M Q Y D G E L D T T K V E L L E L L M D I A N I L I G
P E E S A E K I S Q I V M D S D D A D L Q S E M T L S M M G E V G Q I L A G
A I D Q A N M L I E E L V P Q G N I C D D G G I G S S A F Y E V S N I L C G
P R Q S A L N I S S V L L G M E P G S M T E L D E M G K S A I M E V G N I L I S
N D S S F K E I A S L M K Y G E L N Q K V E L L E L L M D I S N I L I G
S Q A D G Q S L E T L L L G G E T S G Q E E R D S A V S E A A N I V A S
K D H D V K C M T D L M M G G D G S N V E I E T D I Q L S A A S E A M N Q M M G
N D A S F S D I S T L L D Y P G N Q T A H E E L E M L M D V A N V L N G
S V D L A K K L L N V F L P S E Y R E D V D M N I E E N S
H D S S F K D L A R L M N H Q G V L D R N A E L E L L M D T A N V L I G
P E E K G L E I V R R M V G D S L S L K E L T E L E Q E A M S E I G N I L I N
E V K D A A I I T D L M M G G D G T E P P E L D E M H L S A V G E A M N Q M M G
P T E S V K S I S S I L L N Y E N G D L L S E M N M S M M Q E V G H I L L G G
K I K D S G V I A N L M M G G D G R E V S E L T E I E I S A V Q E A M N Q M I G
N K K L V A V I A N L M M G G S G E E T E L D E I K L S A V G E A M N Q M M G
S D S S I D D M S A L L G Y Q D D N A P H K E L E V L M D L S G I L A G
H D A E S D E V A R L L G W Q N H G D A D E A E M Q L D L A S I L I G
N Y D G A V I Q L T E L V T P E Q N I H R D R L D A S A A E V L T E I G N I L L N
P K A A A L N L C D L L L T R Q R G S T T F V D E Q A Q S A L K E L G S I L T G
P I K A T A K K I V S I M M G E E E K Q E V P Q S N I H Q
N E E I A K N L I E S L T G S K E N I F D E M G T S L M C E I G N I M S G
S I R D A I I A D L M M G G D G K N V E D L N E T E I S A V S E A M N Q M I A
Q L D F L N I L S N M L D T Q V E S Y E Q L T S L S C S A L I E V G N I M I S
N D T N T R N I M A L L G Y E N G Q D E Q H L D Q L S L E A L M D V S N I L T G
P E S R S R E L V R A L L K D D E L P L E T I T E M E Q E A L T E V G N I L L N
H D S S F A D I A K L L K Y E E E L T N N I E I E L M D I S N I L I G
K K T D G S I I A D L M M G G E G N P E L P F D E L A E S A L Q E A M N Q M M G
S V E T A K E E A H L L L K D I M G G T E E Q V I E
D Q N G C R D L A D L M G Y E D D I D R D S E R E L L L D V G N V L V G
S D D S A D K L S E L M L G M K T D D I N V K M S A V S E L T N I I S N
K R Q D V A K I V E M L M G M A D E D F E L N E M N I S A I C E V M N Q M M G
P T D S A K I V A L L T N E E V G T P D L D A V K I G T L E I G N I V I N
P E D K S L E I V R L M V G E S V P L K E L T E M E Q E A M C E I G N I L L N

UniRef90_F2JGR0 S S S T S M A Q L F N K K I D I S P P Q A L K M E A N L E D I F G
UniRef90_D4Mnj4 A S S T A L S E F L G M G I D I S S T P Q Y L L S E I N L A D L Q N
UniRef90_UPI0003697D9A S V A T S M S T M F K Q K V N I S P P K A N L I H F A T H E P L T S A L
UniRef90_UPI000414B38 S A A T S M A T M F S R E V N I S P P I S K I W S I S E S E A L S S E
UniRef90_B8CYQ5 S S S T S M S S I L N E V V N I S P P E T K Y L D I D E L W S N G K R E K Y L G
UniRef90_W0EIK4 S A A T S M S T V F N S V V D I T P P R V I V A E K D E E A Y E L S K N L
UniRef90_N2BBE7
UniRef90_G2SRG7 S F L R A I G T M L N I Q L I T S L P A T S Y D Y F G A V I S S A Y M A L D
UniRef90_A0PZZ0 S A A T S M A T M F G R E V N I S P P I S K I W K D A A L P L S E S
UniRef90_C3L212 S A S T A L S T I I N Q Q V N I T T P V V S V T T L E R L K N S F E I P N I A L
UniRef90_C3L212 S A S T A L S T I I N Q Q V N I T T P V V S V T T L E R L K N S F E I P N I A L
UniRef90_F7K497 S Y V N A L S G L A G V D V A L S V P E I S V N M L G G I L S V P M I E F G
UniRef90_UPI000374C4D1 S A S T S M S D F F G D K V N I S P P K A E L L E I S S D I F N L E G V
UniRef90_C0GJF0 A A A T A L S T L L D N R V N I T T P R I S I T T L R Q V R E
UniRef90_C0GJF0 A A A T A L S T L L D N R V N I T T P R I S I T T L R Q V R E
UniRef90_B2TLR1 S A A T S M A T M F S R R V D I S P P T S K L W K E K D E P I T E T L S E
UniRef90_R9MFL7 S Y I L S L S K L A D M E I S L S V P A F S V N M L G G I M T V P M A E F G
UniRef90_U2NSW1 S A A T S M A T M F A R E V N I S P P T S K T W E N P D D K L S E G M
UniRef90_UPI00016C0EF6 N Y L N A I G T F V N L T I S Q S T P Q I V M D M A T A I L S I P L I E F C D E
UniRef90_U2D267
UniRef90_W3ALP9 A S A T S L A T L L D R M V D I S P P E V C K I D V D S V K T F E K L E F A
UniRef90_UPI00040692C8 S S A T S L S E I L F L K R I D I E P P K S Y E I T F S E G R E K L E V L
UniRef90_UPI00047CD079 S A A T S M A T M L L R E V N I S P P T S E I L D S N T K E I T S A
UniRef90_R6NLL0 A Y V N S T A K M T N T F I D I E P P Q N H L G T I G E I L A V P E K E F T
UniRef90_D7GSQ7 S A T A L S E F L K F T V N I S T P V S F E I T D A E S F K N K Y F
UniRef90_R9IHP0 S S A T A M S K M F N K K I D I S P P S V Q Q I V V I E N F E L P N E
UniRef90_N9ZZK9 S Y I N A L S D L S G I T L E L S V P V L S V N M L G G I L S V P M V E L A Y Q
UniRef90_J1L2C4 A F L D A T A E L L G I V L L P S P S L C M D M A H A G I E A V I A E V A V
UniRef90_U5MWH7 S A A T S M A T M F G R K V D I S P P T A R V I E S E E T P I S D S I
UniRef90_B1ZY75 A C L G V F G N L L N V H V S F A V Q F H L E S V T G V L K S V A T E A A E Q
UniRef90_Q2RKB6 S A A T S M A T I F Q R S V K I T P P H L T A V N F N N E S Y T S P W
UniRef90_UPI000375B4C0 A I S T S M S T M L A K K I D I S P P K C E I V D F S H T G E I T K S V
UniRef90_J0L206 S F L N A I E G L L S A E L Q T S V P R T Q E D Y F G A I S S S Y L A L E
UniRef90_Q4Y74 A C L K G I S E Q L D I Q F S Q G H P E V L G Q H R K I S D L I A N N A
UniRef90_A6M1D2
UniRef90_R9BT15 S A A T S M A T M F A R E V N I S P P K S T I W R D I N E K V S E N I P E
UniRef90_R7PQF3
UniRef90_Q3ADB7 S S A T A L S E I F K R K I N I S P P R S K M I N S R E N D T Y E P
UniRef90_K2LV30 A C L G S I A N V L G E P I N C S M P T F R K R E T R A L L N E D T A F D A A S
UniRef90_B7IDK1
UniRef90_R9M254 A A A T A M S D F L G F P V D I S T P K P F E L E D L Q A F K E N H L P K G
UniRef90_F8AGS7 V Y T D I L A N L I G E Q V S P P K P A E S L Y D I E K E L S K P S L R N
UniRef90_UPI000463825D A F L R G F A M Q L D V P F N Q G H P V V L G Q H R P V E D L I K A N Q
UniRef90_UPI0004254DE5 A A A T S L S T M T G Q K V D I S P P V A T L L D M I D D D P S E I S D
UniRef90_D1B699 A F L N A L S S M T G W A L P V S V P A V A H D M L G S I M D V V A A M F G
UniRef90_H8MJZ8 A C L S A I G R L T G W R L P S V P Q L Q R G P V R P V L A G V L G D V E P G
UniRef90_R5KZT4 A S A T A L S D L L G I S V D I S T P P Y L I E Q T N F C Q L A E L
UniRef90_V9H491
UniRef90_Q0W7Z1 S F G D A S A E L L G I T M L P S T P T Y R H D M A R S L I N E I V A D L G
UniRef90_K4MHQ0 S Y V S S L S E F L G L N F R I S P P M Q T Y D M L G A I M D Q I L I E M S R N
UniRef90_UPI0002492980 S F L T S L G M L E K K L D I P E V P V S S E D M F G A V I S S A Y M E F E
UniRef90_B7AT52 S A A T S M S M F N R K I D I S P P V S N L V E V Y N N D T E D L P D F L K G
UniRef90_D8GPV7 S A A T S M A T M L M R E V N I S P P V S K V W N D I T K P L T E G
UniRef90_D9QRJ5 S A S T S M S T M Q G D K V N I S P P N A E L L T L N T D E I K S R S F
UniRef90_B3PIC0 A C L R G M A E Q L D T N F S F G P M L L G H H C N I T D L L Q S N N
UniRef90_J1Q4T5 A V L K G T A E Q L D I S F S Q G H P V V L G Q H A P V T E L I K A N A
UniRef90_F4LTQ0 S A A T S L S L M L K K D I N I S P P R V T R I N L A T D S L K G Y F
UniRef90_C0C1N9 A S A T A L S E L L G K A V N I S T P V S F D I E S P E Q K E K Y F
UniRef90_H3ZR49 V Y T D I L S T L I G E S V S L T P P I P A S T L Y D V E K E L A S G
UniRef90_F7NXA3 A V L K G L A E Q L D M T F S Q G H P V V L G Q H A P V S E L I K A N A
UniRef90_D7E9B9 S Y S S A I S D F F G I N T S I T I P Y T N Y D M V A I M D N L L I E M S
UniRef90_UPI000255BE37 S Y L S A L S S F L N V A F I Q S P P V I S V D M A G A I L S E G L V E L S
UniRef90_O58224 V Y T D I L S N L L G E P V S L S P P K P A E S L Y D I E K E L G R S
UniRef90_V4J4N7 A I L T G L S K Q L D M P F S Q G H P V V L G Q H C E V S E L V K A N K
UniRef90_L7UKM0 A C L S A I G K L T S W R L M P S V P T L R R G S A R V L V E A A V S Q V I E G
UniRef90_UPI0003B4A3B4 S S A T S L S S M L G I P V D I S T P E V K W I D V E S V K I F E R M F E
UniRef90_Q1NOK3 A C I Q G I G G Q L D I D F S Q S H P V V L G Q H C N I S D L I N Q Q Q
UniRef90_N9ZZN0
UniRef90_A0A023S8Z9 A F L R G Y A S Q L D T P F S Q G H P V V L G Q H R P I N E L I N T N K
UniRef90_G8QNI1 A C V G T L A N L F R R P L N S T L P T Y H L G S P D E V L G G Q I Q
UniRef90_L0K7W3 S A S T S M S D F F G N K V I S P P E A E L L E V N E E T F S L N N I
UniRef90_F7XQE6 T Y V S S L S D F F N M K I S V S P P Y A T Y D M A A A I D L A L I E M S R D
UniRef90_W6RYJ9 S A A T S M A T M L G R E V N I S P P V S E V W N N T E A V K S G I E
UniRef90_A5JA7 S A A T S L S E L L G I T I N I S P P K V E I L L N F D D P S T Q F P P V T D
UniRef90_UPI0004643AF1 A F L K G L G E Q I H L S P R L T P V V L G T H V T M D D L H H S N
UniRef90_S6AMA1 A C L A G I A E Q I D V R F S Q G H P V V L G Q H S I E R L F Q L S N
UniRef90_K9TKY8 A C L S V F G N L L Q M Q I S F S V P R L H L E A L D G L L H S L S I G K A E M
UniRef90_K2A1S0 S F F S V L S D M L H L N F F H K T P L Y A E D D A A V I L Y G I C D S V F G
UniRef90_B1BCU2
UniRef90_W6RWF6 T F L E T I A N F T E E S L T L S V P A L C Y D M L T A I L L S T I F I E S G
UniRef90_F9VJT9 S S A T S M S T M F Q K T I D L S T P E T V I S Y N S K D S E K I F G
UniRef90_UPI00047C96BB S F I N P L S T L A N I S I R P T V P A F T V D M Q G A I L T V P M A A F G
UniRef90_UPI00038158EB A C L N A L S A Q L N V S F S H T Q P I L L R D R G L E V L L N D N I
UniRef90_S6GJ20 A C L G S L A N I F K Q N L I Y G L P Q Y T Q G D C E E L L A S G T E K
UniRef90_M4U8D4 A F L N G L A E Q L D I Q F S Q G P C V L G Q H C Q V E D L I Q E R Q
UniRef90_M1E9K0 A A S T A L A S I L L G R I N I M P P S V V N F D E Q P I V E S L K Q I A S
UniRef90_A4J737
UniRef90_UPI000368F6DD A C L N G T I A E L L G A K L S F S A P T I I M A E D V E V G R L I N P Q Q
UniRef90_A0A023CX00 S F L G A I G N L L N V I Q L V S A L P V I Q D D Y F G A V I S S V Y M A L D
UniRef90_F7K418 A S A T A L S E L L G K P V N I S T P R S F E I T S D E Q F K E K Y F T
UniRef90_K9TKQ6 G V M G S M S N L L R Q H L N Y S L P M Y L E D T V E H L L S S K Q L E
UniRef90_L9PFT1 S C V G T L A N I F Q R E L H G S L P Q Y H V G T S D E L I A S G S

UniRef90_F2JGR0 P K G D I V K I S F R L Q I E E N I I D S E L M Q V L P I Q F A K E L L I A
UniRef90_D4MNI4 Y E Q D M V A I N F D L T I D G V I K S E F I S V L D I D L A A T L A D
UniRef90_UPI0003697D9A T A T E N V V R V A F R M E V E D L I D S S E I M Q I L P V E T A K K I L V K
UniRef90_UPI000414B38 I P E D Q A I V V N F R M T I G N L V D S S N I M Q I L P V E T A K K I V S
UniRef90_B8CYQ5 S D D E K V V S I S F R L K V G D L I D S S F K Q I A P M F T K Q L A V K L V E
UniRef90_W0EIK4 N A D E L L I R V S F R M I E G I I D S V L I Q V L P F D V A K G M A D
UniRef90_N2BBE7
UniRef90_G2SRG7 Q Y D E Q V M V I R N E F L Y M D D K L D A S L F L I P E V G M L D R M F K
UniRef90_A0PZZ0 I S E E E L I E V S F K L T I G D L V D S S N I M Q I L P I K T A K K I V S
UniRef90_C3L212 E V K Y T S I V G E N L L V M K I D D A S V I S N L M M
UniRef90_C3L212 E V K Y T S I V G E N L L V M K I D D A S V I S N L M M
UniRef90_F7K497 Y Q T D K L M I R G K F I D E K E L I D S S D L L M L P D I V S L N Y L M K
UniRef90_UPI000374C4D1 E D D D I V V K I V F D M H I G D L I D S S Q I I Q V M T V E F A K K L A D
UniRef90_C0GJF0 Q Y P Q P C V V V N V R Y R T G L S G E N V
UniRef90_C0GJF0 Q Y P Q P C V V V N V R Y R T G L S G E N V
UniRef90_B2TLR1 D E E I V R V S F R L I T G D L V D S N I M Q I L P L N T A K K I V S
UniRef90_R9MFL7 Y V S D K L M M I T G K I I G G R N L V D S N L L M L P D I Q S L N Y L M D
UniRef90_U2NSW1 N D D E S V V K V S F R L T I G D L V D S S I M Q I L P L Q T A K K I V
UniRef90_UPI00016C0EF6 Y L D T L L I R T Y F E S D H M L L T G N Y L F V L D K E T E R K I M N
UniRef90_U2D267
UniRef90_W3ALP9 S P Q D M F V K V A F K M E I G D L I H S T M V Q L Y P V S F A L E M V D
UniRef90_UPI00040692C8 K T L A P I I K V S A F K M V E D L I D S E I M Q I L P L D F G Q Q M V E
UniRef90_UPI00047CD079 I T D D E T I V V A F R L T I G D L V D S T I M Q V L P I E T A K K I S A
UniRef90_R6NLL0 K L D Y Q M L F I D E R L S F A H T Q I K S A M I L I L E I D S M K V L F E
UniRef90_D7GSQ7 P E T I P M V I S F T L E I E G K L K S E F L N I M P E K L A K R L L E
UniRef90_R9IHP0 I P D D L F V K I N F R L K I G K L I D S T I M Q L Y P F D L A H S I Y K L F Q
UniRef90_N9ZZK9 T N K L M T I E G N L T Y G G M K L E S N L E M V P E V D G L S E L L D
UniRef90_J1L2C4 K T N D V V I F K T N L T S D Q Y S I D G A L L M F P D P D L I S E I L G
UniRef90_U5MWH7 P E D Q P L V K V S F R M T I G D L V D S N I M Q I F P I E T A K N I V S
UniRef90_B1ZY75 L R Y A L M I H T R F S I R T G D L V N G Y L V T I L G V A S L D T L L V
UniRef90_Q2RKB6 A T A Q S I V V V C F K M E I E G L V D S Q I M Q V M P M E
UniRef90_UPI000375B4C0 G M Q D P V A K I S F S L K I G D L I N S E I M Q I V I T I D V A K A M V A
UniRef90_J0L206 H Y D D Q L M I M R N E F T Y A D E Y K I D S S L E L I P E Q G V L D K M V E
UniRef90_Q4Y74 N K W K K T L A I E I S Y S I E D Y P I K C D L L L L F T E K S M Q T L N N
UniRef90_A6M1D2
UniRef90_R9BT15 D E A I V E V R F D L T I E G L L Q S N M M Q I L P I D T A K K I V S
UniRef90_R7PQF3
UniRef90_Q3ADB7 F G G H E V V V I Y F N M Q I E D L V D T D I M Q V M E P A T A K E V A Q
UniRef90_K2LV30 G K M P V L M I L H V Q F M L R Q N D I D G Y V L F V M D L D S I Q T L K E
UniRef90_B7IDK1
UniRef90_R9M254 E D T L V V V R F A L K I E D A L E S E F M N V I T V K L A K E L L K
UniRef90_F8AGS7 H R W R T L A I E I N Y K I R D H Q V Q C D L L L F T E D S L Q Y M N H
UniRef90_UPI000463825D F L T G T F C R V T F K L Q I G D L V D S T L M Q L Y P V D F A K S L K D T V S
UniRef90_UPI0004254DE5 I M G D T A L L V K T T L K I Q D S D A E A R G M V I M V P D P G S L E V L L K
UniRef90_D1B699 P G V V L A A R F S A P G P T P L G G Q M L V L E R G S A Q A L L S
UniRef90_H8MJZ8 D P D E T I V A V T F N L S V D G V M N S E F M S V M S V D L J A K S L S D
UniRef90_R5KZT4
UniRef90_V9H491
UniRef90_Q0W7Z1 K T T K N A L L F K T A L T N E T N N V N G Y L L L L P E P Q T L E N M L T
UniRef90_K4MHQ0 V E Y T F L F D T F F T M E G N R M E G I L L T L F D P E S M D R I L T
UniRef90_UPI0002492980 Q F G D E I M V I R N E F T Y D S N Y L E A S L Y F I P E L G V I D K M I K
UniRef90_B7ATS2 K F V E V M F K L T I G T L I D
UniRef90_D8GPV7 I S E D E A V V S F S L K I G E L V D S S I M Q V L P I A T A K K V V S
UniRef90_D9QRJ5 P D D D E V V K V S F D L T I G E V I D S S E I L Q L M P L D F A K E L L V A
UniRef90_B3PIC0 M K W K Q A L V V E I N Y A I E N R Q I N C D L L L V I A E H S I S G L V E
UniRef90_J1Q4T5 K R W R T L T I E L S Y G I E G F H I H C D L L L L F T E D S L K T F R Y
UniRef90_F4LTQ0 D E D E D V T I S F K M E V G D F L K S E I M Q L M P I P F A K S L V E
UniRef90_C0C1N9 T E E S P M V V I G F T R I A D K M E S E F M N L M P I G L A R E L V
UniRef90_H3ZR49 D L K D I E N V V M F K N K F K K T E L G T E S Y F Y L V P T Q A S L E K I I S
UniRef90_F7NXA3 R R W R T L A I E I S Y G I E N Y N I S C D L L L L F T E D S I K T L
UniRef90_D7E9B9 I E V D Y A I V F D T E F T I K D E H K V R G S F L T M F D K S L D D F L E
UniRef90_UPI000255BE37 L Y D E F A L L I D A V V F D R Q K G H Q L N G E F L F L P L P D S L D V I F E
UniRef90_O58224 D L R N V N S V V I F K S K F Y K E D I R V E S Y F Y I I P T P E S F T K L V K
UniRef90_V4J4N7 A R W R T L A I E I S Y G I E H H I N C D L M L L F T E D S L K T L
UniRef90_L7UKM0 D A S R V V L E A R F M A S S T P S V S G Q L L L V L I E R E S S R A L L A
UniRef90_UPI0003B4A3B4 T N V E K F V K V T F R M E I G N L V D S T M V Q L Y P E N F A C D M C E
UniRef90_Q1NOK3 T R W R R T M A I E I N Y T I E G H Q I N C D L L L L F T E D S V R H L
UniRef90_N9ZZN0
UniRef90_A0A023S8Z9 S R W R T L A I E I N Y R V Q D Y A V Q C D L L L L F T E D S I A T M N N
UniRef90_G8QNI1 G N D E A V L L L H I D L T L E Q H E I Q G Y V A F L L S V D S I A N L V
UniRef90_L0K7W3 S P E D K V V Q I I F D M K I G D L I D S Q I V Q V M T I D F A E E L A E
UniRef90_F7XQE6 L E Y A L V F D S E M M V K N D I I N G K I F T M F D T S L D Q I M N
UniRef90_W6RYJ9 L E K E I V K V S F R I T I G D L V D S N I M Q I Y P V E T A K K I
UniRef90_A5JA7 N P E K D V A V V E F E I E I E G L P K S K F Y Q V I S A D L V K K M Y E
UniRef90_UPI0004643AF1 H L W E Q M L S I E V S F A V E N H N I L G N L L L L F T E D S I P R L Q E
UniRef90_S6AMA1 K R W R K T L A V E I S Y A I E D H N L H F D L L L L F T E T S I A R L T Q
UniRef90_K9TKY8 R Y A M V V Y T G F R M K E N S I H G Y L V M V L S V S L E K L L E
UniRef90_K2A1S0 D R Q E R L C V T T E F V E S N S R I K G S F V F I P T V E T M Q K F L T
UniRef90_B1BCU2
UniRef90_W6RWF6 Q H E D F V L E L D T E F T I E D D K K D C L F Y F I P V P G S L D N I L E
UniRef90_F9VJT9 N S N E K I K I K F Q M N V A D L I N S N I V Q V V S I E T G K N I I N
UniRef90_UPI00047C96BB G Q S D Y I M T I G G N F I C N H V E I V P C H L L L L S P D L S L N I L L G
UniRef90_UPI00038158EB S R W S K V M A V E I A Y A I K R H D I S F D L L L L F P D D A M E K I Y T
UniRef90_S6GJ20 K S D E G L L L H M D F L L Q Q T N L N G Y L T L M N V E S V K A L S E
UniRef90_M4U8D4 T H W K T L A I E V N Y R I E H H D I K C D L L L L F T E D S I K T L H
UniRef90_M1E9K0 G K E A V E V L F D F T G E N V F Q T K L V M I L S E P V A Q K M
UniRef90_A4J737
UniRef90_UPI000368F6DD L T W N Y A L L V E V H F T L E V R D F T C H L M T L M P E E S I V A L K S
UniRef90_A0A023CX00 Q Y D D H I M V I R N E F T Y S E E K L D A S L F F I P E T G V L E Q I L K
UniRef90_F7K418 E G N H N M V V I S F H L K I A G K L E S D F L N L M P T R L A K E L V
UniRef90_K9TKQ6 P N T V L L A Q A R F T I E Q L Q I A G D I L I F K V G S F D A L L K
UniRef90_L9PFT1 Q H D T V V L M L H I I D F V L E K H Q I H G Y V A F V L D L S A L H D L K E

UniRef90_F2JGR0	G L
UniRef90_D4MNJ4	R M
UniRef90_UPI0003697D9A	N L
UniRef90_UPI000414BB38	
UniRef90_B8CYQ5	E M G
UniRef90_W0EIK4	K L
UniRef90_N2BBE7	
UniRef90_G2SRG7	S L G I
UniRef90_A0PZZ0	
UniRef90_C3L212	
UniRef90_C3L212	
UniRef90_F7K497	K L
UniRef90_UPI000374C4D1	A L
UniRef90_C0GJF0	
UniRef90_C0GJF0	
UniRef90_B2TLR1	
UniRef90_R9MFL7	R L
UniRef90_U2NSW1	
UniRef90_UPI00016C0EF6	S M
UniRef90_U2D267	
UniRef90_W3ALP9	K
UniRef90_UPI00040692C8	N L
UniRef90_UPI00047CD079	M M G V Q
UniRef90_R6NLL0	G L G I D
UniRef90_D7GSQ7	P F E L S
UniRef90_R9IHP0	R
UniRef90_N9ZZK9	R M G V
UniRef90_J1L2C4	L L D
UniRef90_U5MWH7	
UniRef90_B1ZY75	E L
UniRef90_Q2RKB6	
UniRef90_UPI000375B4C0	D M
UniRef90_J0L206	S L Q V
UniRef90_Q47Y74	K L
UniRef90_A6M1D2	
UniRef90_R9BT15	
UniRef90_R7PQF3	
UniRef90_Q3ADB7	M L
UniRef90_K2LV30	
UniRef90_B7IDK1	
UniRef90_R9M254	G L G L S
UniRef90_F8AGS7	R L E
UniRef90_UPI000463825D	K L
UniRef90_UPI0004254DE5	A
UniRef90_D1B699	R L G V
UniRef90_H8MJZ8	R L G L
UniRef90_R5KZT4	K M
UniRef90_V9H491	
UniRef90_Q0W7Z1	L L G
UniRef90_K4MHQ0	R I
UniRef90_UPI0002492980	S L G V
UniRef90_B7ATS2	
UniRef90_D8GPV7	
UniRef90_D9QRJ5	Y L
UniRef90_B3PIC0	K L
UniRef90_J1Q4T5	K L
UniRef90_F4LTQ0	Q L
UniRef90_C0C1N9	
UniRef90_H3ZR49	R L E
UniRef90_F7NXA3	
UniRef90_D7E9B9	R I
UniRef90_UPI000255BE37	R
UniRef90_O58224	K L E
UniRef90_V4J4N7	
UniRef90_L7UKM0	R L G V
UniRef90_UPI0003B4A3B4	K
UniRef90_Q1N0K3	
UniRef90_N9ZZN0	
UniRef90_A0A023S8Z9	K I
UniRef90_G8QNI1	
UniRef90_L0K7W3	N L
UniRef90_F7XQE6	R L D
UniRef90_W6RYJ9	
UniRef90_A5JA7	
UniRef90_UPI0004643AF1	T L D
UniRef90_S6AMA1	K I
UniRef90_K9TKY8	E I D
UniRef90_K2A1S0	Q L Q V
UniRef90_B1BCU2	
UniRef90_W6RWF6	K L K I N
UniRef90_F9VJT9	
UniRef90_UPI00047C96BB	K I
UniRef90_UPI00038158EB	R L
UniRef90_S6GJ20	Q I D L
UniRef90_M4U8D4	K L G
UniRef90_M1E9K0	
UniRef90_A4J737	
UniRef90_UPI000368F6DD	A L D
UniRef90_A0A023CX00	S L G I
UniRef90_F7K418	
UniRef90_K9TKQ6	A L
UniRef90_L9PFT1	Q I

UniRef90_K0CUG3 UniRef90_R0FZG0 UniRef90_Q12RV1 UniRef90_C5BTN6 UniRef90_W9DPN2 UniRef90_E3DPN7 UniRef90_UPI0002492B9E UniRef90_I4YYC0 UniRef90_UPI00028805FE UniRef90_J1EDC3 UniRef90_T0PEU2 UniRef90_G7Z9D6 UniRef90_UPI00039C3B19 UniRef90_E1RJT1 UniRef90_UPI0002898BE8 UniRef90_C2KZ02 UniRef90_B4VNS8 UniRef90_J2CP20 UniRef90_G5FBF9 UniRef90_A0A011RKN3 UniRef90_F7JK26 UniRef90_S6HTI9 UniRef90_A0A017RWJ0 UniRef90_Q893T3 UniRef90_UPI00034C842D UniRef90_K9VMP8 UniRef90_W9H0S0 UniRef90_G8AWC1 UniRef90_D4GWX3 UniRef90_H9U9K8 UniRef90_UPI000348951F UniRef90_J1F683 UniRef90_I3Y5W6 UniRef90_L0AHQ8 UniRef90_M1Y482 UniRef90_R9VS52 UniRef90_F2GBS1 UniRef90_W6NHY6 UniRef90_H2J6E4 UniRef90_S1NSW1 UniRef90_UPI0001850D76 UniRef90_A0A023CWR5 UniRef90_A7GNF7 UniRef90_A7GNF7 UniRef90_W0V271 UniRef90_U5SAS6 UniRef90_R9JS47 UniRef90_K6ZBW4 UniRef90_D9SKE6 UniRef90_L0HH85 UniRef90_G7QAC3 UniRef90_W9H4K2 UniRef90_H6LE37 UniRef90_D5WE79 UniRef90_W7ZSB6 UniRef90_K9W4H3 UniRef90_A3CU25 UniRef90_Q29223 UniRef90_UPI00034880AD UniRef90_Q15P52 UniRef90_K9PL75 UniRef90_K6XYW2 UniRef90_X1F828 UniRef90_K4MFG0 UniRef90_E6U6I9 UniRef90_Q20XK0 UniRef90_D7V0F0 UniRef90_B8GE40 UniRef90_R7R9R7 UniRef90_A8U602 UniRef90_B5ED63 UniRef90_UPI000364C2C1 UniRef90_Q07KG6 UniRef90_A8U608 UniRef90_C8W116 UniRef90_C8W116 UniRef90_UPI000345C410 UniRef90_C7NUX4 UniRef90_F4BNS9 UniRef90_Q2SLF9 UniRef90_F7PIY0 UniRef90_UPI000288E518 UniRef90_F5R7C3 UniRef90_W5YVJ8 UniRef90_M0LRJ0 UniRef90_C2SI26 UniRef90_J2ZH44 UniRef90_A6VSW9 UniRef90_G8AWA9 UniRef90_M1FH25 UniRef90_D6SRI0 UniRef90_D3RXXM0

1 10 20 30 40

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

	50	60	70	80
UniRef90_K0CUG3	NVNVLI	ESNE	ELLS	MAVLA
UniRef90_R0FZG0	SNVEVL	RTDA	LINE	QKQK
UniRef90_Q12RV1	NVNVLE	EVSD	ELTAM	ALMAL
UniRef90_C5BTN6	HLLAVM	VRPS	SDIAMA	LLKKG
UniRef90_W9DPN2	DFKVEV	ETIED	VPEVLL	GGGGA
UniRef90_E3DPN7	EVEVEV	QTFK	QLLE	EEYEG
UniRef90_UPI0002492B9E	RVVKKI	HFGL	LDQI	GGGGA
UniRef90_I4YYC0	SIEITM	APQN	AARR	LIGER
UniRef90_UPI00028805FE	VVTIT	TTKE	LRNQ	FGAG
UniRef90_J1EDC3	HVSI	FTTV	SEAA	QQQL
UniRef90_T0PEU2	TLSIT	TMKV	LKST	FTF
UniRef90_G7Z9D6	SFAV	SLHAR	ITRE	VGGG
UniRef90_UPI00039C3B19	NVNI	LEVE	GEHL	HMA
UniRef90_E1RTJ1	EAKVI	DISE	ISEH	FGD
UniRef90_UPI0002898BE8	NIVQV	STLR	KVFR	EGF
UniRef90_C2KZ02	NIVQV	KNKN	ENFR	FRF
UniRef90_B4VNS8	EVEIL	PLLE	MQNQ	KKR
UniRef90_J2CP20	SIEFV	VSSQ	KRAAR	LTLT
UniRef90_G5FBF9	VSVF	PVVE	SEEF	KKFP
UniRef90_A0A011RKN3	KVVR	GLTI	SEET	VSA
UniRef90_F7JK26	VNVV	VVRK	DEFK	MDD
UniRef90_S6HTI9	NVNM	MLEV	GELE	HMA
UniRef90_A0A017RWJ0	KVWDD	KTQD	LSKN	VNE
UniRef90_Q893T3	VVVS	ATTL	NLKN	KNTF
UniRef90_UPI00034C842D	ALQIL	LSPP	QQAQ	KEEL
UniRef90_K9VMP8	YLQIL	LSPP	QQAQ	KEEL
UniRef90_W9H0S0	SLIED	VRRR	SDAAS	EQLL
UniRef90_G8AWC1	SIEDI	VSRN	SDAAS	EQLL
UniRef90_D4GWX3	KVEEL	GTKS	DVINE	FAER
UniRef90_H9U9K8	QVES	VMTL	SELR	KGTG
UniRef90_UPI000348951F	NVVKL	WENP	EAVN	LDKD
UniRef90_J1F683	EVL	LVRP	AEVA	TTLG
UniRef90_L0AHQ8	RVLS	FVPL	ADIP	AVH
UniRef90_M1Y482	NVSL	MSPS	DLLEY	YELG
UniRef90_R9VS52	TIRRT	PRSE	AAEE	LGAG
UniRef90_F2GBS1	NVNL	LEVS	ELHM	MLSD
UniRef90_W6NHY6	VVTVT	TLNE	LKND	DFK
UniRef90_H2J6E4	TPLKL	LKSE	LKNQ	QFG
UniRef90_S1NSW1	NVNL	GLMT	JETQ	SLS
UniRef90_UPI0001850D76	DVRMV	SFDE	MMEL	LQAG
UniRef90_A0A023CWR5	RVTIK	VKKF	ADL	LSGG
UniRef90_A7GNF7	TIKVV	KKLF	EEEL	EKIS
UniRef90_A7GNF7	TIKVV	KKLF	EEEL	EKIS
UniRef90_W0V271	SISFL	SRA	DAAS	LLSG
UniRef90_U5AS6	DVEV	WKDQ	EAYD	KLSG
UniRef90_R9JS47	VVEML	CNWX	QDVL	LN
UniRef90_K6ZBW4	NVNL	DI	EVSE	ELHM
UniRef90_D9SKE6	KIWN	DSN	DSLS	ETIDE
UniRef90_L0HH85	EIN	IVDI	SR	TGM
UniRef90_G7QAC3	VLRV	L	TQTQ	QVAE
UniRef90_W9H4K2	RMEI	MT	RDQ	QAVE
UniRef90_H6LE37	RJETI	IGV	EEFE	FAYL
UniRef90_D5WE79	RVKMV	AVSD	DAART	LRER
UniRef90_W7ZSB6	EIAL	HAMED	PLRL	SAYH
UniRef90_K9W4H3	KVSL	HPLT	GLANE	SNF
UniRef90_A3CU25	EVLAI	DIAD	LHNH	ITNE
UniRef90_Q29223	EAVI	VKLI	PLH	KYIN
UniRef90_UPI00034880AD	YTKIL	SPL	LEVK	LELE
UniRef90_Q15P52	NVNL	IT	NNEL	HMA
UniRef90_K9PL75	NVNV	LIT	NAE	TYQE
UniRef90_K6XYW2	NVNL	IET	TE	ELHM
UniRef90_X1F828	DVGL	I	SFD	QQLT
UniRef90_K4MFG0	DVGM	L	QKQK	LM
UniRef90_E6U6I9	HVEK	GS	RQA	LEDL
UniRef90_Q20XK0	AVEV	LT	QA	AAAK
UniRef90_D7V0F0	KVEI	V	DL	LYNT
UniRef90_B8GE40	SIDL	V	LD	DLNE
UniRef90_R7R9R7	EAQF	MD	GGQ	QLLV
UniRef90_A8U602	DVEV	VKD	QNNY	ADR
UniRef90_B5ED63	RLK	FV	DS	EKLA
UniRef90_UPI000364C2C1	TVG	D	L	TRND
UniRef90_Q07KG6	AVD	L	L	TQEA
UniRef90_A8U608	VIE	M	M	DYAA
UniRef90_C8W116	QTR	I	I	NEGD
UniRef90_C8W116	QTR	I	I	NEGD
UniRef90_UPI000345C410	DIT	K	L	V
UniRef90_C7NUX4	QIT	L	M	D
UniRef90_F4BNS9	VVS	L	C	K
UniRef90_Q2SLF9	RVN	L	L	E
UniRef90_F7PIY0	QIN	F	A	R
UniRef90_UPI000288E518	NVNL	I	EV	GE
UniRef90_F5R7C3	RVRE	A	G	L
UniRef90_W5YVJ8	RVRE	M	I	A
UniRef90_MOLRJ0	RLRF	F	V	P
UniRef90_C2SI26	QVE	L	V	D
UniRef90_J2ZH4	RLN	S	F	V
UniRef90_A6VSW9	KVN	S	L	V
UniRef90_G8AWA9	MV	S	L	V
UniRef90_M1FH25	KVA	F	I	A
UniRef90_D6SRI0	EIK	V	L	E
UniRef90_D3RXM0	RV	L	I	A

UniRef90_K0CUG3
UniRef90_R0FZG0
UniRef90_Q12RV1
UniRef90_C5BTN6
UniRef90_W9DPN2
UniRef90_E3DPN7
UniRef90_UPI0002492B9E
UniRef90_I4YYC0
UniRef90_UPI00028805FE
UniRef90_J1EDC3
UniRef90_T0PEU2
UniRef90_G7Z9D6
UniRef90_UPI00039C3B19
UniRef90_E1RJT1
UniRef90_UPI0002898BE8
UniRef90_C2KZ02
UniRef90_B4VNS8
UniRef90_J2CP20
UniRef90_G5FBF9
UniRef90_A0A011RKN3
UniRef90_F7JK26
UniRef90_S6HTI9
UniRef90_A0A017RWJ0
UniRef90_Q893T3
UniRef90_UPI00034C842D
UniRef90_K9VMP8
UniRef90_W9H0S0
UniRef90_G8AWC1
UniRef90_D4GWX3
UniRef90_H9U9K8
UniRef90_UPI000348951F
UniRef90_J1F683
UniRef90_I3Y5W6
UniRef90_L0AHQ8
UniRef90_M1Y482
UniRef90_R9VS52
UniRef90_F2GBS1
UniRef90_W6NHY6
UniRef90_H2J6E4
UniRef90_S1NSW1
UniRef90_UPI0001850D76
UniRef90_A0A023CWR5
UniRef90_A7GNF7
UniRef90_A7GNF7
UniRef90_W0V271
UniRef90_U5SAS6
UniRef90_R9JS47
UniRef90_K6ZBW4
UniRef90_D9SKE6
UniRef90_L0HH85
UniRef90_G7QAC3
UniRef90_W9H4K2
UniRef90_H6LE37
UniRef90_D5WE79
UniRef90_W7ZSB6
UniRef90_K9W4H3
UniRef90_A3CU25
UniRef90_Q29223
UniRef90_UPI00034880AD
UniRef90_Q15P52
UniRef90_K9PL75
UniRef90_K6XYW2
UniRef90_X1F828
UniRef90_K4MFG0
UniRef90_E6U6I9
UniRef90_Q20XK0
UniRef90_D7V0F0
UniRef90_B8GE40
UniRef90_R7R9R7
UniRef90_A8U602
UniRef90_B5ED63
UniRef90_UPI000364C2C1
UniRef90_Q07KG6
UniRef90_A8U608
UniRef90_C8W116
UniRef90_C8W116
UniRef90_UPI000345C410
UniRef90_C7NUX4
UniRef90_F4BNS9
UniRef90_Q2SLF9
UniRef90_F7PIY0
UniRef90_UPI000288E518
UniRef90_F5R7C3
UniRef90_W5YVJ8
UniRef90_M0LRJ0
UniRef90_C2SI26
UniRef90_J2ZHW4
UniRef90_A6VSW9
UniRef90_G8AWA9
UniRef90_M1FH25
UniRef90_D6SRI0
UniRef90_D3RXM0

90 100 110 120
N D T N S Q N I V E L L K Y P P S A S S D K L A L E A L M D V S N I L I G
T E D R A L A L V R D M M G S Q M S L D Q L A E F E R E A M C E L G N I I L N
H D S F E D M A K L M K L D T A K D T S T Q V E V M M D T T G N V L I G
N D T S F S E D L A K L M K Y L D D D E M D H Q A E R E L L M M D T T G N V L I G
P E E A A Q T I C E I T T H E E E N T D L T P L N Q S L L E E V G H I L L A G G
D T K D A A V I A D L M M G G G D G K M S Q E E M L N E I S T S A V G S E A M N Q M M G
E V S D A T V I A D L M M G G G D G K S E E F T E V E L S A V S E A M N Q M M G
P E A T S F D L V K A T I G N D V P P E E Q I V I E M E Q E A L A S E A T G N I L L N
K V T D A G V I A N L M M G G G D G H D S G E D L S S E I E L S A V S E A M N Q M M G
P G D K S L D I V R I V A G Q S L S G E D L S S E I E L S A V S E A M N Q M M G
K I T D A A V I A N L M M G G G N G E V E Y E L S E L E V S A V Q E A M N Q M I G
P E R G T L A L V G R L V P V D P A A E A P G E M E Q D A L L T E I G N I I L N
H D A E I N D V A K L L N T Q E D E S A K L E M L L T D L A S I I I G
P K D S A I N L N T M L G S T D C D R E L N E M D E S A L L E V G N I M V S
K I S D A A V I A S L M M G G G D G D G E L S E L S E I E L S A V S E A M N Q M M G
S R N D V R I V S M M M G S E P D G D E F V M D E I N A S A I R E A M N Q M M G
P T E S A A M L V S V L T G E D V E S P D L D S L K I S T L S E V G N I L L N
P E T N S L E L V R A V T G G E L S A Q D V V D M E Q E A L A E T G N V I L N
S T D L V K H L I E P F T E S L K E N E S Q I A E
K M E D A N V I A D L M M G G N D G K D V I S D F T E L E L S A V S E A M N Q M I G
K R H D V R V L V E M L M G I P M T D E E E L N E M N L S A V C E V M N Q M M G
H D S E V A D M G K L M N R D S A E Y S D M E M L L D L S T I L I G
P V I E T A K A T I N K M T G K A E T E T S E F F E D I
K I T D A A V I A N L M M G G G D G K D V T S L S E V I E V I G A L V S E A M N Q M I G
P T D S A S K L V A A I C N E D L G A A D L D E V K I G T A L T S E V G N I F I S
P T N S A A L L V T M L T G E E V G T H D L D S V K I G T A L T S E V G N I V I N
P E G S S L E L V R R L M P D S P P L G D M T D L E E E A L A T E V G N I V I L N
P E T N S L E L A R A V L G S E L S L E E V D L E Q D A L A E I G N I V I L N
S P E S A E R L V D A L M P G G I D A T D A D G E L A E S S L K E V A N I M L G
E K Q L A E I A D I M M G G L G P E S D E L D F K L S A V G E A M N Q M M G
N Y E G A L M L T N L N P T P N L P T H R L D T S A S E V L T E I G N I L L N
T A D M V E D I A K A M L S D K A T T V R D D E K V I E S K T T V I E T S
P E R N A L A L V S H M L D P R M S P E E L S E F F E Q S A M C E I G N I I L N
D P A A A R T A V D A L L S I E S E G E W T D Q E R S A L E E L G N V I A S
D E A A R E T I A D V L A P G A G P H E L G E M E R R S S I E E V G N I I L T S
P E A S S F E I V R M M V G D L T P A H E L G E M E R E A I S E I G N I V L N
S D S S F D D V A K I L N V I E G E V D A D Q L Q L E L M D A S L L I G
A V K D A A V I A N F M M G G D G D E A K E L S E I S Q E S A V S E A M N Q M I G
P A E T S S I A A D L M M G G T G E N P E T F D E I S Q E S A L A E A I N Q M M G
S E E V V R D I E K A M L A D E A K D L R Q T A P V Q E S T
P L I E A S R F I Q I L T N D E T F E F S N Y S E I G L S A M H E L G N I L L S G
E V K D A L I A D L M M G G D G T T S D K K F T E L E L S A V A E A M N Q M I G
S V I E H A K Q M I S K L L Q E E P P F Q E K L T Q E E K D V L G E I A N I S I G
S V I E H A K Q M I S K L L Q E E P P F Q E K L T Q E E K D V L G E I A N I S I G
P E D K S L E I V R L M V G D A M P L Q E L T E M E Q E A M S E I G N I I L N
T L E T V R N I S K I V L A D E G E V I Q D
K E H D V K V I T D L M M G G D G T N V D E L S D L H L S A I S E A M N Q M M G
S D S S F G D V A K I L N T K E D V D D Q L Q L E L M D V A S I L I G
P L E T S K N L C S I M M G E A D D D I D Q I V Q A E V Q S Q S A A M N
P R D S A V R T A G I M Q G S A G A V H T F D E M D Q S T I V I E V G N I M I S
P P E S A S K L V A V V L G K E A L P L G D D A M R C Q E T L Q E V G N I V L N
P E A K S L E L V R T I L D G P L S L E E I V D L E Q E A L A E V G N I V L N
Q E S D M K K I L S Q L F D M D T S D D I E F D E I S K S A I G E I M N Q M M G
R S D S I A Q L C S V S D P N Y A R S S Y E A L G E R E L M L D V A N I L S G
S M D T A V R L V K M V L P N V I E S D L D V H T P L A S S A F Q E I G N I V I G
D Y Q S A A K L T N L L T A N R E A Q T D N L D I T A S S E V L L E V G N I L L N
P R E T V T Q L T N Q M L G T T D T D R E I N E M D Q S A A L E I G N I M I S
P E K S S K K L A E I L L G D S S D E E M V D S T L M E I G N I L L S S
P I E S A S L L V A I L T G E E L G D P E L D S L K M G T L S E V G N I L L N
N D A N I A N M G K L L N Y K H N S T S E E S E L E V L M D S I G N I V I G
P T D S A S L V A V L T G E E P N G S A D L D A V K I G T L S E I G N I V I N
N D S N F T N M V K L L N Y K Q A K L D E S L D E L E A L M D V T N I L V S
D M K P L M S L I A S L A G K K V K K D L D D F A L S T I T E M G N I M A G
E F N N A V L L S S L M L G E S E Q A N D P T M H E S A L A E L G N I L L A G
R S A D A A Q I V N L L M G G D V E S E E F G E I Q I S A I A E V M N Q M M G
S E A N S L E L V R A V V G P K M T L E D I V D L E D E A L A E T G N I L L N
K S E V A A S M A D L M M G G D G K M D V E L S E L H L S A V Q E A M N Q M M G
P T A S A A Q L V S C L T D E E Q G T P D L D A L R A V T L I E V G N I V V N
P Y M L A K A I S D L F L T K K A K E K A G Q G E
T L D T V R N I S K I V L A D E G E V I Q D
P Q Q N A L R V V E L L L G K A P N P E A P L S E L E R A T L M E V G N I L L A S
N G T N Y H D L A T L L R Y Q Q S E G I T K N E L L M D T T G N V L L G G
P E A N S L E L V R A I A G P T L S L D D I V T L E D E A L A E T G N I I L N
D Q Q F S K D L V A M M L P K N T P Y S E A M A D S A L Q E L V N I L V N
S V I E T A K E L M N A M D V S A G V S L E N I L L E Q E K D A L G E V G N I S T G
S V I E T A K E L M N A M D V S A G V S L E N I L L E Q E K D A L G E V G N I S T G
G R D G R R E L K E L M G Y E D V S S D I E S E V L A D I A S L L V G
D Q D S S E T I A G T L M P G D E L S A E M A K S G V K E L G N I M M S
N E K D A S I I A D L M M D G D G N E G K E F T E L E L S A V G E A M N Q M M G
H D S S F K D M A K L M R Y D G K L N E L V E L L E L L M D V S S V L I G
D E T S A K N A A E A L M R Q T A V E G E G L T D Q H T A A I E E L G N I M T S
H D S E I A D M A Q L L K R P G P E Y S D L E M L L D L S S V L I G
G I T G C R D L A G L M G Y G S A L I E D C E E D E L L L D V S N V I V S
A D A S F N D M A E L L H Y E D M D T E S Q V E V L M D M S S V I F G
D P G A R T A V G A L P F V D L E S D A D G A E I E R E A L E E L G N V I A S
Q Q D V A L S I A D L M M G E V E S G K E L G E L E L S A V Q E A M N Q M M G
D E S S A R S V A G T M L P V E P S S E G L S E M E Q S A I E E L G N I M T S
S D S S F R D M A K L L N V T E A I D S I V E V E L L M D V S S V L V G
P E R S G L P L A A A A L P P G V P K E D A A E L V E E A L A E V G N I V L N
A D S S F R E M A E M L H Y D N L D G P A V N V E A L M D M S S I L E G
P P E S A L N L V T L V Q E E P G D T D L D S I R S E A L T E I G N I V L N
P S E T S N K I A E I L V G D T S D K S M V E S V V M E I S N I L A S

UniRef90_K0CUG3 A C L N G L S E Q L N V A F S H T H P V L L G Q H Q G L S T L L S D N V 130 140 150 160
UniRef90_R0FZG0 A C L S A M A D M L E I T L N S S L P Q Y V V S S P E E I S S R L S E V Q
UniRef90_Q12RV1 A F L N G T S E Q L D M S F S Q S H P V V L G R H C T V N D L I N D N S
UniRef90_C5BTN6 A C L N G I G E Q I D L E F S Y G S P M V L G Q H V R V S E L L N L N S
UniRef90_W9DPN2 S Y V S S L S D F L G L N I R I S T P M Q T F D M L G A I I D Q I L I E M S
UniRef90_E3DPN7 A A S T A M S N I L D V L V N I S P P T A E F I D D D V I E E G R D W F
UniRef90_UPI0002492B9E S A S T S M A T M I N Q K V D I L P P K V H L W E N P D D V D E N S L D
UniRef90_I4YYC0 G C L A T M A N M L K R S L N I S L P E V I R G D G M R L F T D A H E S
UniRef90_UPI00028805FE S A A T A M A T M L R E V N I S P P T S E I I N S D T Q R L N S A G I
UniRef90_J1EDC3 A C L A T A D L L G N E F E L S P P R V D V G D S R T I L G T R I Q N H
UniRef90_T0PEU2 S A A T S M A T M F N R E V N L S P P F S S I I D E N T T P V S Q D
UniRef90_G7Z9D6 G C L A S L S N L I G G E L S G A V P G Y G A G A P A A V I G
UniRef90_UPI00039C3B19 A C L N G L S E Q L N I N L S Q G H P L V L G Q H C P L I E D L I R I N Q
UniRef90_E1RJT1 Q F L D A T A S L L G V V M L P S P P A I A I D M S H A A F A S I V A Q V A V D
UniRef90_UPI0002898BE8 S A A T S M A T M F R R E V N I S P P S S I C D E T T S P L S E E L N E E E E I
UniRef90_C2KZ02 A S A T A L S E F L G T T V D I S T P I S Y E I T D G A A F K D K Y F
UniRef90_B4VNS8 G V M G S I S N I L E Q Q L D Y A I P C Y E E E D I D H I L S F K M G
UniRef90_J2CP20 S C L A T M A N M L R R S L T M T I P E V L R G S G A S L F E V D E N G
UniRef90_G5FBF9
UniRef90_A0A011RKN3 S A S T A M A T M F S R R V D I S P P D V K E W H N P D E A A I D M P N Q
UniRef90_F7JK26 A S S T A L S E F L G K V V N I S T P I S F E V E N E K A F I D K Y F
UniRef90_S6HT19 A C L S G I A E Q I D V E F S Q G H P Q V L G T H G G I D E L I R I N Q
UniRef90_A0A017RWJ0
UniRef90_Q893T3 S S A T S M A T M L G R E V N L S P P L S K I W D D L T S P L S E N I D E
UniRef90_UPI00034C842D G V L M G A I S N L L E Q D F N Y S L P T Y I E G L V A Q L L T D N N F D P N A
UniRef90_K9VMP8 G V M G A I S N V L Q Q R L N Y S I P T Y S E G T I A N L L I S G G L A
UniRef90_W9HOS0 H C L A S F A N L L H A E I R T E I P V Y Q I G R P E E I I G S A N G V
UniRef90_G8AWC1 G C L V V M A N T L K A D N L D I S I P S V L R G D S D R I F Q S N G P
UniRef90_D4GWX3 G F I D G W A D Y L D T T V D I T T P T Y V D D E N D G P L D R V D A E G F E N
UniRef90_H9U9K8 S A A T S L S D M I K K P V S I T P P T T E I L N F D D E S V K F P I G
UniRef90_UPI000348951F A C L S I F G N L L Q I Q I S F S V P C L H L E A L D G L L H S L I V N K E E M
UniRef90_J1F683
UniRef90_I3Y5W6 A C I S S L A D E F G V E F Q G G L P T H Y F S D T H S L P I F G H
UniRef90_L0AHQ8 G F I D G W A N V L E T S I R H S P P E F V A D M S S S I V S P I A D I A R S
UniRef90_M1Y482 G F I D G W A D H L D A I I D I S T P T Y I Q G A G T D V L P A G T A
UniRef90_R9VS52 A C V G T L A N M F Q K E L Q G S G L P V V R V G S S K Q I L L N P N
UniRef90_F2GBS1 T C L T G L A N Q M D I N F S Q G H P L V L G Q H R A I T E I I A M N Q
UniRef90_W6NHY6 S A A T S M A T M F M R E V N I S P P K S Q I W T D V T E P L T E A I
UniRef90_H2J6E4 A A A T S L S D F L Q T K V D I T P P Q V E V L D F D D P N L T F P P D F E
UniRef90_S1NSW1
UniRef90_UPI0001850D76 S Y L S A L S D F T K L H I Y P S V P S L S I D M I G A L L S Y G L I E I S
UniRef90_A0A023CWR5 S A S T S M A T M I T R K V D I L P P T V K L W K E P A S V E Y D G I D K
UniRef90_A7GNF7 S A S T V L S T L L N Q P V S I S T P N V
UniRef90_A7GNF7 S A S T V L S T L L N Q P V S I S T P N V
UniRef90_W0V271 S C V G T L A N I L F D S E L H G S L P L Y H V G T S T E I M S A F G A
UniRef90_U5SAS6
UniRef90_R9JS47 S S S T S L S S M L G K T I D I S P P E A S L V D L H S K E P R E L S P F L V
UniRef90_K6ZBW4 S C L A G F A K Q L D M Q F R Q G H P V V L G Q H Q S V E D L I K A N K
UniRef90_D9SKE6
UniRef90_L0HH85 S F L S A T S D L L G F N M L P S P P V L I V D M A H A A I T S L I A Q M T I
UniRef90_G7QAC3 G V I D G W A N V L E T S I R H S P P E F V A D M S S S I V S P I A D I A R S
UniRef90_W9H4K2 G C L V V M A N M L K Q A L D M S L P R V M R G S S Q V V L E A D I T G L V G
UniRef90_H6LE37 A A A G A L A S F L G K V V N I S P P V L L D T T S D A S I R E L F S
UniRef90_D5WE79 A C V S S I L D Q L G R T P V F S A P G V L G D T L T L D E V F Q P G V
UniRef90_W7ZSB6 S Y V T A I G S L T S R T L Y P L V A P E L T I D I G S A V L A E A T Y Q N V E V
UniRef90_K9W4H3 G C L G M F G N L L E M Q V S F A V P R L H L E V L Y G L L N S L I T I G N Q G L
UniRef90_A3CU25 A F L D A T A E L L G I V M L P S P P A L A I D M A H A A F E S I V A Q V A G
UniRef90_Q29223 S F C D A A A E M L G I V L L P T P S F G R D F A I A V I D A V V S Q L A E
UniRef90_UPI00034880AD G V M G S I S N I L H E R L D Y T V P S Y T E D T V E N L W R F N E L D G N S S
UniRef90_Q15P52 A C I N A L S E Q L H V T F S H N H P I I L G R H C D I D Q V L E S N H
UniRef90_K9PL75 G V M G S L S N V L K Q H V N Y T L P I V Y L E D T I E N L L V S T Y
UniRef90_K6XYW2 A C L T A L S D Q L N V K F T H N H P I I L G Q H C G L E E L L E N N V
UniRef90_X1F828 H Y A S A L A D L L E T K L M I D I P E F A M S N A G E L G E F L S Q E I K
UniRef90_K4MFG0 S Y I G A L T S F L D E M A V R H S T P E V I G A I L N V L K R A S S L I E
UniRef90_E6U6I9 G S A T A L S G F I G R T V N I S P P S A F V L T E E N K E E K L A
UniRef90_Q20XK0 S W A T L A N I L K R A L R M S L P V V V R G D G R Q M F D S P G
UniRef90_D7V0F0 H S A T A M S N L F D R M I D I T P N I K I I T I K D Q L K D
UniRef90_B8GE40 C V M G S I T N M L N E H V R Y S L P I Y L E G S I A A L V H S D A A
UniRef90_R7R9R7
UniRef90_A8U602
UniRef90_B5ED63
UniRef90_UPI000364C2C1 A C L N A L G N T L K M T L L P S V P T L V S G S D E F F A R I Q E Q G
UniRef90_Q07KG6 S W V A T I A N L D R T H F S L G P P T L L N G N P D L A S S L Q E R E
UniRef90_A8U608 S F L N A V M K L I D R N L I T S V P I M I E D M F G A I M S S A Y M E Q S
UniRef90_C8W116 S A S T T L S A L L N Q R V Q I T S P R I S I L T E T E L L S S F E L P F M T V
UniRef90_C8W116 S A S T T L S A L L N Q R V Q I T S P R I S I L T E T E L L S S F E L P F M T V
UniRef90_UPI000345C410 A C V C S V F E Q L G R R L S F S R P T F V L P D G L V R A L G E Q H L
UniRef90_C7NUX4 G F I D G W A D Y L E T T I D H S P P T Y I E G T G K E I L L P T S D D S
UniRef90_F4BNS9 S A A T A M A T M L E R I V D L L P P E V E V W K N Q E Q V N S D R I
UniRef90_Q2SLF9 A C I K G I A E Q L D I A F S Q G H P V V L G Q H V N V I G D L L S N N N
UniRef90_F7PIY0 G F V D G W A N V L Q T S V D H T P P R L V I Q D M G R A I D P L A A Q V G
UniRef90_UPI000288E518 A C L S S I A E Q I D V V F S Q G H P Q I L G Q H A A I E D L I R V N Q
UniRef90_F5R7C3 A C L G G I A E Q L N A D V C F S A S V L A S H V P P A G L F D R T S A
UniRef90_W5YVJ8 A F L K G I G D Q L D L K L G L G H P T V L L G Q H R Q I G D L L E H H S
UniRef90_MOLRJ0 G F I D G W A N V L E T S I E H S P P A F V D D M G S S I V S P I I A D V G
UniRef90_C2SI26 F A A T S M S E F F Q D T V D M S P P T I K V V I Q L T E E M E K I S G I
UniRef90_J2ZHW4 G F I D G W A N V L Q T S I D H T P P Q E V H D M G S A I V S P V V G R L G
UniRef90_A6VSW9 P F I D A F G K Q L N I D F S H S P A L L A Q H A K V S I D L V D A K R
UniRef90_G8AWA9 S C L S S M G N L L G V A V G T T L P Q V L R G A G D G L L E R C G V
UniRef90_M1FH25 A F L K G I G D Q M D L R L L G L S H P T V L L G Q H R Q I N E L L Q H H R
UniRef90_D6SRI0 S V L G N F A N L S L M L E G Y S L P D F M F E T S V H D L L Q E G
UniRef90_D3RXM0 H F C D A I A T M L N T V L I P P P N Y A E D Y S I A V I D A L I A K L A

UniRef90_K0CUG3 Q R W G K L M A I E I G Y A I K A R D 170 180 190 200
UniRef90_R0FZG0 S D E R Y V L V L H I D L V I E K H Q T I S F D L L L L F P G D A M N H I Y S
UniRef90_Q12RV1 E K W Q R T L A M E I N Y R I E D Y N I Q C D L L L L F T E D S L H A L V E
UniRef90_C5B2N6 N R W D Y A L V T E I N Y Q L E G Y D I V N C D M L I V L T D D S S M D L L K
UniRef90_W9DPN2 Q K V E H A L L F D T M F T I Q G N R T D G F F L T M F D P D S M D T I I D
UniRef90_E3DPN7 D P A E E I V V T S F K L K V G D V I T D S S F K Q I S S Y K F V K D L A D
UniRef90_UPI0002492B9E U R G E E I Y C I S F K L D V E G L I E S E I M Q I F S L E M V R D I V K
UniRef90_I4YYC0 S D E G L V L F L Y I N F S V R N R D L I R G Y I A M L M D L P S L S A L K E
UniRef90_UPI00028805FE T D D E T L I E V A F K I T I E G D L V I D S N I M Q I L P L D T A K K L S S
UniRef90_J1EDC3 I D E D Q T I A I S F R M T I G T L I D S N L L Q I L P L N T G T K I V S
UniRef90_T0PEU2 S A T D P V L F V R I D M A L A A G D A H H G H A L L L L D L A S L D A F R E
UniRef90_UPI00039C3B19 R R W K R T L A V E I S Y S L E A D M D I H F D L L L L F T E D S V P R L R E
UniRef90_E1RJT1 I N E I L L F K T E L T S K M H D I E S T I V M L P D E N T L N I T I L S
UniRef90_UPI0002898BE8 A E G N E E N V V I S F R M N I E D L V D S S I M Q V L P L V T A Q K I T I M
UniRef90_C2KZ02 Y N E A H V L L A R T H F D I E E L Q N L K S E F L N I M S V D L V K K L L K
UniRef90_B4VNS8 A T D G L V L F L Y I D F A V R S R D I R G Y I A M I M D L P S L A M L K E
UniRef90_J2CP20
UniRef90_G5FBF9
UniRef90_A0A011RKN3 D E L V A T I A F N M S V D G L I D S E I M Q V L P L D T A M E I
UniRef90_F7JK26 S D D D Y R V V V K F A L K I A D Q L E S E F F N V M P L S L A K S L V K
UniRef90_S6HT19 Q R W K K T L A V E I S Y S L E G H N I H F D L L M L F T E D S V E L L T R
UniRef90_A0A017RWJ0
UniRef90_Q893T3 N E T I I K V S F K L N I G T L V D S Q I M Q L L P M E M A K K I V
UniRef90_UPI00034C842D T I L L A Q A S F T I E Q L Q I E G D I I V I F K L G S F Q A L L L A
UniRef90_K9VMP8 T D T V L L A Q T S F M I E R L H I E G D I I L I F N V S S F D T L L T
UniRef90_W9HOS0 T V D S Y V L I R V D F G L F A K L I E G Y V L F L Q D I A S L Q A L Q A
UniRef90_G8AWC1 N P D E L V M F L Y I D F L R S R S I R G Y I A L L M G L S S L E S L
UniRef90_D4GWX3 G G D D E H V L V F R N Q L E A A D N A I E F D L Y M V P T A S S I G T I V E
UniRef90_H9U9K8 D E N D K V A K A T F T M T I E S L Q P A K F F L A M P I P F V K K L Y E
UniRef90_UPI000348951F R Y A M V I Y T A F H L R D N A V K G Y L V I V L S V V S L D R L V E
UniRef90_J1F683
UniRef90_I3Y5W6 D E E Q V V L L Q I H L T M R Q E R I Q Q G H L I F L L N V S S L T A L L D
UniRef90_L0AHQ8 E E Y A F M L D S T I C T G D S K T L Q C R L F A L P Q S G E L E T A L D
UniRef90_M1Y482 D A D E Q V F V F R S S V E S A S G S L D F H I L L V P E R E S L V E A L D
UniRef90_R9VS52 K D D N D P L V M M L R I D F A L E R Q Q I Q Q G Y L A F I L D M S A L R D L R E
UniRef90_F2GBS1 I K W K R T L A I E L S Y G L E G Y N V Q C D L L L L F T E E S M K M M S
UniRef90_W6NHY6 S P D E P I V R V S F S L K I G N L V D S S I M Q I L P V A T A K K I V S
UniRef90_H2J6E4 G T A D T I I A V K F I L K I Q G M K D G E M W Q F V P I D I A H D I K E
UniRef90_S1NSW1
UniRef90_UPI0001850D76 T Y S D R V I V I D T A L E E G E T N T R I Q G H F F L L P D P N S F E T I F S
UniRef90_A0A023CWR5 E Q V I Y R I S F K L S V E G L I E S E I M Q I L F T E D M V S D I T D
UniRef90_A7GNF7
UniRef90_A7GNF7
UniRef90_W0V271 E A E A V V L M L H I D F I L E A H Q I H G Y V A F L L N V S A L H D L K E
UniRef90_U5SAS6
UniRef90_R9JS47 D R F V K I S F R M Q I D D L V D S T L M Q L Y P L D F A K S V Y E
UniRef90_K6ZBW4 G N W R K T L A I E L S Y G L E G Y N V Q C D L I L L L F T E D S L E T L N S
UniRef90_D9SKE6
UniRef90_L0HH85 D V D D V I L L F R V E L K S V I E H N I A G N I L I F L E V N T L K R I E D
UniRef90_G7QAC3 T G D G M I L V A R T Q F S M K D H L I E G E V L I F S L S S F D S L L T
UniRef90_W9H4K2 D P A E L V L F L T I D F A V R A R N I N G E Y I A L F M D F P S L
UniRef90_H6LE37 L K G D N L V S I K F N L S I E G L V E S E F I S A M E P A L A R E I V T
UniRef90_D5WE79 L Q W Q V A L L V E V N F A L E H R S F R A H L V M L M A E D S I R H M N E
UniRef90_W7ZSB6 D Q F F L M E T S M K V K N E E E G M E G F L L F I P N E R A V A V L K R
UniRef90_K9W4H3 H Y G L V I G T A F R L Q D S P V S G Y L V I V L G V G S L N C L I R
UniRef90_A3CU25 D V N D V L I F N T E L T S E A P P V Y G G I Y M L P N A E L T Q L E V
UniRef90_Q29223 K S D Y V V I F E T K L E E S E N E I E A L V M L I P N E K F V S Y I L K
UniRef90_UPI00034880AD
UniRef90_Q15P52 Q R W D K I L A I E I A Y A I K S H D I Q F D L L L F P G N A M E L V Y A
UniRef90_K9PL75 E S D S K I L L A Q A R F I E K L E I I G D I L L I F H V G T F D A L L N
UniRef90_K6XYW2 S R W N Q V L A I E I A Y A I K T K S I N F D L L L F P D K S I D L M Y E
UniRef90_X1F828 S T A E F I I I K T S V K I S E L K L K C I F F L I P D K T L N M F F N
UniRef90_K4MFG0 N E P D E L L N V E T M F M H D A G D G I Y G D M F L L D P A S L D K L R E
UniRef90_E6U6I9 F I Y S Q A D Q V V F V K F R F F V I E N M F E S E I F M V M T R D F V Q A M L D
UniRef90_Q20XK0 R P D S L L I F L H I N F E I S H K P I S S G Y V A L V M D I P S F G E L R V
UniRef90_D7V0F0 F K Q Q D L I K V S F D L E I G D L I S S T L V Q L I P V E
UniRef90_B8GE40 A L N E W M L F I K T R F S I E H L H I E G D I L L I L E T R S L D A L F A
UniRef90_R7R9R7
UniRef90_A8U602
UniRef90_B5ED63
UniRef90_UPI000364C2C1 G E S E S I V M I D A M F S V D D A C C G G S I F L V P A A S S L E A M L A
UniRef90_Q07KG6 R P W S E A L V I E I N Y S I E D H K E I R G Y V A L L M D P S I D H L E
UniRef90_A8U608 T G E S L I L F L H I R F E I S N K E I R G Y V A L L M D P S I D H L E
UniRef90_C8W116 Q Y D D S I M T I K N E F Y Y L G D R L E S S L Y F L P K P G I E K M L T
UniRef90_C8W116 K V I Q Y T E G I I G F N L V V T L R D A L I A D L M M
UniRef90_UPI000345C410 K V I Q Y T E G I I G F N L V V T L R D A L I A D L M M
UniRef90_C7NUX4 G R W D V A L L L E V H F T L E R G G F V A K L V M L L P D A A I Q K M K S
UniRef90_F4BNS9 S P D D Q V F V F K S E I E W V D E S V D F E Y I Y M L P D Q D S L T D L M
UniRef90_Q2SLF9 S G D T V C K I A F Q M T V D D L I E S E I M Q I F T L E T V R N I
UniRef90_F7PIY0 W R W T K T L A I E I C Y S I E N Y N I N C D L L L L F T E D S L P V F R D
UniRef90_UPI000288E518 Q H Q D H A F V I D S R M R T E D V I E F E S E I Y A L P N D E I L R E A L E
UniRef90_F5R7C3 L R W K K T L A V E I S Y S L E G H D I H F D L L L L F T E D S L E R L T H
UniRef90_W5YVJ8 A P A D T A L V E V N F R L E R H S F A C S L L M M L P A D S M G A I R R
UniRef90_M0LRJ0 T R H E K L L C I E I S Y E L E D R E I S C C D M L V L L T E D S V P F L E Q
UniRef90_C2SI26 R E N Y A F L L D S A I R I G D S D A L Q C Q L F A V P R A E L E S A L D
UniRef90_J2ZHW4 N G N M V V K V S F E L K I D N L V N S Q L V Q V V S V I E H A K R M I N
UniRef90_A6VSW9 Q T Q D F A F M I D S T V R T A N E Q F S C E L Y A L P D E Q E L K R A L E
UniRef90_G8AWA9 A K W K R T L S V E I V Y E V E N Y Q I S C D L M M L F T E D S V S V L E N
UniRef90_M1FH25 T L T A E A Q A I L F H V T F R T P P H D V E G T V V L A L D A G S A V I E L K A
UniRef90_D6SRI0 N H E Q S I L L C I E I A Y A I E N R N I Q C D M L V L L F T E D S L P F L Q Q
UniRef90_D3RXM0 G E G H S I I L A K A H F K V R E H S I A G D I L L L F G I N S M T E L S S
E R S D S I I I F E T E L K D E Q S V I D I L L M L I P S E S F I N Y I V E

UniRef90_K0CUG3	R L
UniRef90_R0FZG0	
UniRef90_Q12RV1	K L G
UniRef90_C5BTN6	K L D
UniRef90_W9DPN2	R I E
UniRef90_E3DPN7	S L
UniRef90_UPI0002492B9E	A M
UniRef90_I4YYC0	L I
UniRef90_UPI00028805FE	M M G V Q
UniRef90_J1EDC3	A
UniRef90_T0PEU2	
UniRef90_G7Z9D6	A I
UniRef90_UPI00039C3B19	K L D
UniRef90_E1RJT1	L L E
UniRef90_UPI0002898BE8	
UniRef90_C2KZ02	
UniRef90_B4VNS8	A I
UniRef90_J2CP20	L L G
UniRef90_G5FBF9	
UniRef90_A0A011RKN3	
UniRef90_F7JK26	
UniRef90_S6HTI9	K L
UniRef90_A0A017RWJ0	
UniRef90_Q893T3	
UniRef90_UPI00034C842D	A I
UniRef90_K9VMP8	A I
UniRef90_W9H0S0	A
UniRef90_G8AWC1	
UniRef90_D4GWX3	A S G
UniRef90_H9U9K8	L I
UniRef90_UPI000348951F	A I
UniRef90_J1F683	
UniRef90_I3Y5W6	
UniRef90_L0AHQ8	E L L V K
UniRef90_M1Y482	
UniRef90_R9VS52	Q I
UniRef90_F2GBS1	K L
UniRef90_W6NHY6	
UniRef90_H2J6E4	K
UniRef90_S1NSW1	
UniRef90_UPI0001850D76	S L G V S
UniRef90_A0A023CWR5	A M
UniRef90_A7GNF7	
UniRef90_A7GNF7	
UniRef90_W0V271	Q
UniRef90_U5SAS6	
UniRef90_R9JS47	
UniRef90_K6ZBW4	K L
UniRef90_D9SKE6	
UniRef90_L0HH85	R L D
UniRef90_G7QAC3	A L D
UniRef90_W9H4K2	
UniRef90_H6LE37	S M G V S
UniRef90_D5WE79	A L D
UniRef90_W7ZSB6	A L E
UniRef90_K9W4H3	A I
UniRef90_A3CU25	M L E
UniRef90_Q29223	L L G M
UniRef90_UPI00034880AD	A I
UniRef90_Q15P52	K L
UniRef90_K9PL75	A I
UniRef90_K6XYW2	K L
UniRef90_X1F828	K L G I E
UniRef90_K4MFG0	S I G
UniRef90_E6U6I9	K M G I S
UniRef90_Q20XK0	L I G
UniRef90_D7V0F0	
UniRef90_B8GE40	G I D
UniRef90_R7R9R7	
UniRef90_A8U602	
UniRef90_B5ED63	A L
UniRef90_UPI000364C2C1	K L
UniRef90_Q07KG6	
UniRef90_A8U608	A L T V
UniRef90_C8W1I6	
UniRef90_C8W1I6	
UniRef90_UPI000345C410	A L E
UniRef90_C7NUX4	
UniRef90_F4BNS9	
UniRef90_Q2SLF9	K
UniRef90_F7PIY0	T L A V E
UniRef90_UPI000288E518	K L
UniRef90_F5R7C3	A L D
UniRef90_W5YVJ8	R L
UniRef90_M0LRJ0	E L L V E
UniRef90_C2SI26	K L
UniRef90_J2ZHW4	T L D I D
UniRef90_A6VSW9	L L
UniRef90_G8AWA9	A I G
UniRef90_M1FH25	R L
UniRef90_D6SRI0	M L D M
UniRef90_D3RXM0	L L E M

UniRef90_Q2FSS1
UniRef90_A6FD10
UniRef90_E7QQ33
UniRef90_Q12YW9
UniRef90_W6W2M6
UniRef90_E4NP61
UniRef90_S6EJ19
UniRef90_B6YX75
UniRef90_E1RDL4
UniRef90_Q07KH6
UniRef90_W0JP99
UniRef90_A1AK56
UniRef90_B6ERM2
UniRef90_UPI000016611E
UniRef90_U1NHH4
UniRef90_A4J3G9
UniRef90_R4W2J9
UniRef90_W8F6F7
UniRef90_A1U3W2
UniRef90_S5LY27
UniRef90_D2RE78
UniRef90_K2DZR1
UniRef90_J3HVT4
UniRef90_UPI0003778685
UniRef90_UPI0003778685
UniRef90_E6QQH4
UniRef90_UPI0004645276
UniRef90_D2RYE9
UniRef90_D3SR55
UniRef90_G3J0V7
UniRef90_V4GW16
UniRef90_A9BEY5
UniRef90_C7NX08
UniRef90_D3P698
UniRef90_R9JCX7
UniRef90_R5E1C0
UniRef90_UPI00016C37CD
UniRef90_J3D442
UniRef90_E7QQ32
UniRef90_UPI000374D816
UniRef90_R4W3A9
UniRef90_Q1PZB9
UniRef90_D3T0F0
UniRef90_H2G174
UniRef90_F3LEN7
UniRef90_K2EG63
UniRef90_D6Z1W3
UniRef90_V6DW00
UniRef90_F9TV01
UniRef90_Q1PXN6
UniRef90_W9DMZ8
UniRef90_D3RKN9
UniRef90_Q5R061
UniRef90_Q3IQE4
UniRef90_F7XQE6
UniRef90_C7P0R7
UniRef90_L0L057
UniRef90_E0RPM8
UniRef90_B0SCG7
UniRef90_Q5UZ95
UniRef90_L0AD46
UniRef90_Q3IRU9
UniRef90_R7RRS1
UniRef90_M0HGF4
UniRef90_B4UJS3
UniRef90_UPI000468D480
UniRef90_L8J9R0
UniRef90_W0RT00
UniRef90_C7NRQ8
UniRef90_B0R4J8
UniRef90_C7P8N8
UniRef90_B9LTG2
UniRef90_UPI00047A37FD
UniRef90_U1P7E9
UniRef90_Q5V0C2
UniRef90_M0CV35
UniRef90_Q1JWK3
UniRef90_W9DPW2
UniRef90_A0A011NZC9
UniRef90_A8ZX12
UniRef90_W9V2B5
UniRef90_R5YX40
UniRef90_F2G4E4
UniRef90_D5VQR5
UniRef90_R4W5U7
UniRef90_U1JVL6
UniRef90_V6HFQ3
UniRef90_Q9L3K6
UniRef90_A4C529
UniRef90_UPI000467BFF8
UniRef90_M0DUK8
UniRef90_M1XL91

1 10 20 30 40

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

UniRef90_Q2FSS1
UniRef90_A6FD10
UniRef90_E7QQ33
UniRef90_Q12YW9
UniRef90_W6W2M6
UniRef90_E4NP61
UniRef90_S6EJ19
UniRef90_B6YX75
UniRef90_E1RDL4
UniRef90_Q07KH6
UniRef90_W0JP99
UniRef90_A1AK56
UniRef90_B6ERM2
UniRef90_UPI000016611E
UniRef90_U1NHH4
UniRef90_A4J3G9
UniRef90_R4W2J9
UniRef90_W8F6F7
UniRef90_A1U3W2
UniRef90_S5LY27
UniRef90_D2RE78
UniRef90_K2DZR1
UniRef90_J3HVT4
UniRef90_UPI0003778685
UniRef90_UPI0003778685
UniRef90_E6QQH4
UniRef90_UPI0004645276
UniRef90_D2RYE9
UniRef90_D3SR55
UniRef90_G3J0V7
UniRef90_V4GW16
UniRef90_A9BEY5
UniRef90_C7NX08
UniRef90_D3P698
UniRef90_R9JXC7
UniRef90_R5E1C0
UniRef90_UPI00016C37CD
UniRef90_J3D442
UniRef90_E7QQ32
UniRef90_UPI000374D816
UniRef90_R4W3A9
UniRef90_Q1PZB9
UniRef90_D3T0F0
UniRef90_H2G174
UniRef90_F3LEN7
UniRef90_K2EG63
UniRef90_D6Z1W3
UniRef90_V6DW00
UniRef90_F9TV01
UniRef90_Q1PXN6
UniRef90_W9DMZ8
UniRef90_D3RKN9
UniRef90_Q5R061
UniRef90_Q3IQE6
UniRef90_F7XQE4
UniRef90_C7P0R7
UniRef90_L0L057
UniRef90_E0RPM8
UniRef90_B0SCG7
UniRef90_Q5UZ95
UniRef90_L0AD46
UniRef90_Q3IRU9
UniRef90_R7RRS1
UniRef90_M0HGF4
UniRef90_B4UJS3
UniRef90_UPI000468D480
UniRef90_L8J9R0
UniRef90_W0RT00
UniRef90_C7NRQ8
UniRef90_B0R4J8
UniRef90_C7P8N8
UniRef90_B9LTG2
UniRef90_UPI00047A37FD
UniRef90_U1P7E9
UniRef90_Q5V0C2
UniRef90_M0CJV35
UniRef90_Q1JWK3
UniRef90_W9DPW2
UniRef90_A0A011NZC9
UniRef90_A8ZX12
UniRef90_W9V2B5
UniRef90_R5YX40
UniRef90_F2G4E4
UniRef90_D5VQR5
UniRef90_R4W5U7
UniRef90_U1JVL6
UniRef90_V6HFQ3
UniRef90_Q9L3K6
UniRef90_A4C529
UniRef90_UPI000467BFF8
UniRef90_M0DUK8
UniRef90_M1XL91

UniRef90_Q2FSS1
UniRef90_A6FD10
UniRef90_E7QQ33
UniRef90_Q12YW9
UniRef90_W6W2M6
UniRef90_E4NP61
UniRef90_S6EJ19
UniRef90_B6YX75
UniRef90_E1RDL4
UniRef90_Q07KH6
UniRef90_W0JP99
UniRef90_A1AK56
UniRef90_B6ERM2
UniRef90_UPI000016611E
UniRef90_U1NHH4
UniRef90_A4J3G9
UniRef90_R4W2J9
UniRef90_W8F6F7
UniRef90_A1U3W2
UniRef90_S5LY27
UniRef90_D2RE78
UniRef90_K2DZR1
UniRef90_J3HVT4
UniRef90_UPI0003778685
UniRef90_UPI0003778685
UniRef90_E6QQH4
UniRef90_UPI0004645276
UniRef90_D2RYE9
UniRef90_D3SR55
UniRef90_G3J0V7
UniRef90_V4GW16
UniRef90_A9BEY5
UniRef90_C7NX08
UniRef90_D3P698
UniRef90_R9JCX7
UniRef90_R5E1C0
UniRef90_UPI00016C37CD
UniRef90_J3D442
UniRef90_E7QQ32
UniRef90_UPI000374D816
UniRef90_R4W3A9
UniRef90_Q1PZB9
UniRef90_D3T0F0
UniRef90_H2G174
UniRef90_F3LEN7
UniRef90_K2EG63
UniRef90_D6Z1W3
UniRef90_V6DW00
UniRef90_F9TV01
UniRef90_Q1PXN6
UniRef90_W9DMKZ8
UniRef90_D3RNM9
UniRef90_Q5R061
UniRef90_Q3IQE6
UniRef90_F7XQE4
UniRef90_C7P0R7
UniRef90_L0L057
UniRef90_E0RPM8
UniRef90_B0SCG7
UniRef90_Q5UZ95
UniRef90_L0AD46
UniRef90_Q3IRU9
UniRef90_R7RRS1
UniRef90_M0HGF4
UniRef90_B4UJS3
UniRef90_UPI000468D480
UniRef90_L8J9R0
UniRef90_W0RT00
UniRef90_C7NRQ8
UniRef90_B0R4J8
UniRef90_C7P8N8
UniRef90_B9LTG2
UniRef90_UPI00047A37FD
UniRef90_U1P7E9
UniRef90_Q5V0C2
UniRef90_M0CV35
UniRef90_Q1JWK3
UniRef90_W9DPW2
UniRef90_A0A011NZC9
UniRef90_A8ZX12
UniRef90_W9V2B5
UniRef90_R5YX40
UniRef90_F2G4E4
UniRef90_D5VQR5
UniRef90_R4W5U7
UniRef90_U1JVL6
UniRef90_V6HFQ3
UniRef90_Q9L3K6
UniRef90_A4C529
UniRef90_UPI000467BFF8
UniRef90_M0DUK8
UniRef90_M1XL91

90 100 110 120
P Q E S A E G L F R L M L G E E K K N Q T N D E L W Q M T L T E L J A N I I V I N
H D S S F D D M A K L L M G E G G S E Q D S N F Q E K E T L M D T A N I I L I G
D E T S A R D I T S A L L P G D D G F S D G E L S E M Y A S A V M E L A G N I M A S S
P V K S A D I L V K E M Y G T D D D V D D E M Y A S A V M E L A G N I L I S S
P E S N G L S L V R A T V G D E M G E A E L V E M E E E A L A E T G N I V I L N
D E T S A D R V A D A L M P G E M E A D P A M Q Q S A I Q E E L G N I V I T S
P J A T A K K I V S L I M M G E E A A L T K I E E A K V D Q I E E A I N V I K A
P K K S A Q A L V S L L L G M A P S D D G L D D M G R S A I M E I G N I L I S
P S Q S A A A L V M A I T D E K A D T P E L D D S T R A E T L A K E V G N I F I N
U N I R E F 9 0 Q 0 7 K H 6 P S Q A Q S L E L V R S I V G A D H P S L E D V I D L E Q E A L A E T G N I V I L N
D E Q A R T A V T D V L V P A D D P S L E D V I D L E Q E A L A E T G N I V I L N
H A D A G R E L I S I F G E E V M G S Y S L D T L E L R E T L M E V V S N I L I G
S D S S V S D L T K L M D Y P E E T D S D S L E L L M D V S N I L I G
D K K L V A V I A D L M M G G S G E E T E E L D E I K L S A V G E A M N Q M M G
U N I R E F 9 0 U P I 0 0 0 0 1 6 6 1 1 E E R E R A M K L Q D L M D V T G N D S S E E R L A K S A V T E L G N I Q M V G
U N I R E F 9 0 U 1 N H H 4 N E E E L A I A D L M M G G N G N Q V T K P I T E M A L S A S T E A M N Q M I G
U N I R E F 9 0 A 4 J 3 G 9 D A D S A R R V L Q T L L G D Q F D D P A E F D E L J A E S A M E E V G Q I T I N S
U N I R E F 9 0 R 4 W 2 J 9 S G Q H V F R L S R V L C L R M T T S D S V N I D E S M Q E S L L L M D S N I I I T G
U N I R E F 9 0 W 8 F 6 F 7 E D A S F R E M A E L L H Y G D V L E G E S V N V I E V L M D M S S I L F G
U N I R E F 9 0 A 1 U 3 W 2 S K N A A L I M A D L M M G D G Q E D A E L T E L E V S A V Q E L M N Q M M G
U N I R E F 9 0 S 5 L Y 2 7 P E E T E K R L J A E M M M L D G D M I Q V E K L M S L I M N I L I S S
U N I R E F 9 0 D 2 R E 7 8 S L D A A K D T E A H A L J E I V R D M M G S Q M S L D D L A E F E Q E A M C E L G N I L I L N
U N I R E F 9 0 K 2 D Z R 1 P I P K A K G I V K R L I P Q E E V N E V E P I P K A K G I V K R L I P Q E E V N E V E
U N I R E F 9 0 J 3 H V T 4 T E D R T L E L V R D M M G S Q I S L T D E L A D F E E E A M C E L G N I I L L N
U N I R E F 9 0 U P I 0 0 0 3 7 7 8 6 8 5 S A P F L K V M L E G L G M E S D D E D L T C L D D P M S M S A A V S E V I G N I I M C C
U N I R E F 9 0 U P I 0 0 0 4 6 4 5 2 7 6 E R E N A F R I V E T L L A E E S D D E G G E F D E M T K S A A T E V G N I M N S
U N I R E F 9 0 D 2 R Y E 9 E R E N A L R I V E T L L A E E S D D G D L E E F D E M T K S A A T E V G N I M N S
U N I R E F 9 0 D 3 S R S 5 T E E Q A L K I V S D M M G S Q M S L E E L A E F E H E A M C E L G N I I L L N
U N I R E F 9 0 G 3 J 0 V 7 D E P S A K A V A G G M I P T E T D D G I G E F E M E R G A L R E L G N I L M T S
U N I R E F 9 0 V 4 G W 1 6 P L N L T N I I A D L M L G K D L E N I E E L D D S L S A V S E A M N Q M M G
U N I R E F 9 0 A 9 B E Y 5 D E V S A Q N V A E A L M P T E P D G E G L T E Q H K A A I E E L G N I I M T S
U N I R E F 9 0 C 7 N X 0 8 P Q A G G L P L V R A A L P P D V P A D D A P A L E D E V L A E L G N I V I L N
U N I R E F 9 0 D 3 P 6 9 8 E E Q D A K A I A D L M M G S D G R G D F D L S E L H L S A V S E A M N Q M M G
U N I R E F 9 0 R 9 J C X 7 K E R D V S K I T D L M M G G T G D D D E P L S E L H L S A I G E A M N Q M M G
U N I R E F 9 0 R 5 E 1 C 0 D I D G A S K L V G L L A E A G P T G M G D S A R E V L A E I G N I L L N
U N I R E F 9 0 U P I 0 0 0 1 6 C 3 7 C D N E D Y A L E I V R D M M G S Q M S L D D L A E F E Q E A M C E L G N I I L L N
U N I R E F 9 0 J 3 D 4 4 2 S V G S A K Q L A H G M M G G M G S P A K K F S D M E K S A V Q E I A G N I I M T S
U N I R E F 9 0 E 7 Q Q 3 2 R S G E L A D L A V L A R A G P D G G S P E E A M G E T E L A F D I A N I V V T G
U N I R E F 9 0 U P I 0 0 0 3 7 4 D 8 1 6 D R E S A G R L L E R I V P E H W D D V D A T L D R S T V S E V A N I I M T G
U N I R E F 9 0 R 4 W 3 A 9 S M D S G K S F I S L L E Y N E M P A N M S I N L L E K E G A L T E V G N I I T G
U N I R E F 9 0 Q 1 P Z B 9 D Q P S G R A V V D S L V P M E T D E Q W G S S V E P K Q G A L T E L G N I M T S
U N I R E F 9 0 D 3 T 0 F 0 S D S G M E E M A R L L H L P S S D T T E P D V I E V L M D M S S I L F G
U N I R E F 9 0 H 2 G 1 7 4 N D T S F L D R A K L M G Y D E V I S A T A E K E V L T D A T N I I L V G
U N I R E F 9 0 F 3 L E N 7 T D D E L Q R I G K T A S M G Y E I D P R T V V S E I G N I I S G
U N I R E F 9 0 K 2 E G 6 3 P S S A S K G L I S L F D D D E L P L G E K S P L E K E T L L E V G N I L I G
U N I R E F 9 0 D 6 Z 1 W 3 E E S S A A V A D A M L P M D P D E P L G D M A E N A L C E L G N I V M T S
U N I R E F 9 0 V 6 D W 0 0 S D S S V S D I N K L M Q V P A D N E H E E L E L L M D V S N I L V G
U N I R E F 9 0 F 9 T V 0 1 P L J E G S T I L T D Y Y L R L P V G T T K E F N T D T E S V S Q E L G N I L A S
U N I R E F 9 0 Q 1 P X N 6 S K N H S E V L A D M L L K D S A E D S Y M K V S A F I E V A N I L A G
U N I R E F 9 0 W 9 D M K Z 8 P E R N A L A I L S N M L D P E L T P E E V S E F E Q A M C E I G N I V I L N
U N I R E F 9 0 D 3 R N M 9 N D A S I D D I G K L L G A K L G E S G S I K Q Q R I E S L M D V A S I L S S
U N I R E F 9 0 Q 5 R 0 6 1 D P N S A G R L R K R L Q S R G G E S T L A G G A F A E L G N I M I G
U N I R E F 9 0 Q 3 I Q E 6 P K Y S A G L S F S D L L M K G P I I G T T K V E E M H A Q K K L E E M G L R L C K
U N I R E F 9 0 F 7 X Q E 4 D P D H G K R L A G Q M M G G I Q G A D E G F S E M E S A L Q E E I G N I M T S
U N I R E F 9 0 C 7 P 0 R 7 D P G S A V T L C S N L L R E H A L J E E N P E M Y E A L S E T V N I L A G
U N I R E F 9 0 L 0 L 0 5 7 P P Q S A Q H L I S L L V Q E M D E D L D E R A G T L S E I G N I V L N
U N I R E F 9 0 E 0 R P M 8 S E E N G S E I A K E L L G S E E G N N H K L S D D M M S V L S E I G N I V C S
U N I R E F 9 0 B 0 S C G 7 E P A D S K Q M A S A M M G G E P S E G G F S D M E T S A M Q T E I G N I M T S
U N I R E F 9 0 Q 5 U Z 9 5 D E R S A R K V S D A M V P G V D G D P G E F D E M E T S A I T E L G N I M A S
U N I R E F 9 0 L 0 A D 4 6 D Q S S A S S V D A L V P V E T D G D W G E M E Q S A M K E L G N I M T S
U N I R E F 9 0 Q 3 I R U 9 K N E E A Q K F F D T L M F G F S N I N E E M F Y S M F Q E I G N I L G N
U N I R E F 9 0 R 7 R R S 1 D E P S A D N I A S S L P G M E G D E A M R Q S A I Q E I G N I V T S
U N I R E F 9 0 M 0 H G F 4 P E R D A E A L A A V L G F P P G G D W S G M A E S A L L E S G N I V G S
U N I R E F 9 0 B 4 U J S 3 Y D S E V A D I A Q L M E Q Q T D P Y Q E M E V L L D L S N I V L I G
U N I R E F 9 0 U P I 0 0 0 4 6 8 D 4 8 0 S D S S L T D L M S M K Y P V I E E G G N S E L E L L M D V S N I L V G
U N I R E F 9 0 L 8 J 9 R 0 D Y A S A T R L T G L M T D G G V A V G G R L D Q S A R E V L A E V G N I V L S
U N I R E F 9 0 W 0 R T 0 0 N A D S A K D L A R G M I G G M G G S D P E Q D E M E R S A I Q E I G N I M T S
U N I R E F 9 0 C 7 N R Q 8 D D E S A R R V A G T M M G G E S E G G Y S D M E R S A I R E V I G N I M T S
U N I R E F 9 0 B 0 R 4 J 8 S E D S A V E L S K A M L M G M E S D S D E M D E M K I S A I N E I C N I L I S
U N I R E F 9 0 B 9 L T G 2 D A E N V D A L L S L L P G G A S M G R S A V T E V G N I A L G
U N I R E F 9 0 B 9 L T G 2 T E V K S Y D L V R A V V P D H V A E M R M G D M A Q D A L J E V G N I V L N
U N I R E F 9 0 U P I 0 0 0 4 7 A 3 7 F D E R D A A E V L L E K L M P G G S S I D D E S F A R S G V Q E A G N I M T S
U N I R E F 9 0 U 1 P 7 E 9 D V D S A G T I T E E M M P G G S D D E A M A R S S V I E E I G N I M M S
U N I R E F 9 0 Q 5 V 0 C 2 D Q A G S E T I V E S L V P G G S D D E A M A R S S V I E E I G N I M M S
U N I R E F 9 0 M 0 C V 3 5 P T G A E K D L L T L F N S D E D D N D V D M D T L E Q E T L J E V G N I L I G
U N I R E F 9 0 Q 1 J W K 3 P K F S A L S F S D L L M K K S I G T T N K I E E Q Q V K K L R E M G V N L C
U N I R E F 9 0 W 9 D P W 2 A E H S A D D L A A L L A Y G D A L D G P A S R E L L L D I S N V L V G
U N I R E F 9 0 A 0 A 0 1 1 N Z C 9 P R G T E R I L S K F L N P D P S M N A V E I E T L K R G L L E I S N I L V G
U N I R E F 9 0 A 8 Z X 1 2 K E S N I S Q I A Q L L K Y D G D T N E A A E R E L I M D I S N V L V G
U N I R E F 9 0 W 9 V 2 B 5 D R H D A L I I A N L M M G G D G T S I S N I D E L T L S A I S E A M N Q M C
U N I R E F 9 0 R 5 Y X 4 0 S Q A G L T E V A T L M D Y E D P L S E E D I Q E E I L L E L C N I L I A G
U N I R E F 9 0 F 2 G 4 E 4 S E E D A L K L A K A M L M G M E S D S D E M D E M K I S A I N E I C N I L I S
U N I R E F 9 0 D 5 V Q R 5 P E S S A K K I T A E L M L S D M V D D M S S V S E M A R S A V E E L G N M M A S
U N I R E F 9 0 R 4 W 5 U 7 S P Q G L Q E I A E L M D Y D S P L D D S D L N E V L L D L S N I L A G
U N I R E F 9 0 U 1 J V L 6 S R E N A K N L A K E L L D T E V P G D N L D D D T K S V L S E I M N Q M A
U N I R E F 9 0 V 6 H F Q 3 T K D V A L T M V D L M M M G T E I V D P E K E L S E L S G L K E I M N Q M G
U N I R E F 9 0 Q 9 L 3 K 6 P Q H S S M E V V S K M L G E G V S A E T L A E L H Q E G F S E I G N I V L N
U N I R E F 9 0 A 4 C 5 2 9 K N E M V S T I L G G V L E R E P A G S C E L D G R H L D L L K E V A N I T A S
U N I R E F 9 0 U P I 0 0 0 4 6 7 B F F 8 D V R S G S V A E A M T P G D A A D L D A T V K A A I E E L G N I L T S
U N I R E F 9 0 M 0 D U K 8 S E A S A R R V A E A M L P D G V D P G G D M T E A I K E L G N I V T S
U N I R E F 9 0 M 1 X L 9 1

UniRef90_Q2FSS1 A V M G S L I T N I L G K K I K F H I P E Y H E D S L E H I L L T D S R F 130 140 150 160
UniRef90_A6FD10 A F L Q G G F S Q Q L N V I S F S Q G H P S V L L G Q H S T V Q E M I N A N N
UniRef90_E7QQ33 S F L I D G W A N A L L E T T I D L S P P T F A H D M G S A I A D P L V A Q L G Q K
UniRef90_Q12YW9 A F C D A A A D F L E D I L L P S P P N Y A V D M A T A V V D G L V S Q M A
UniRef90_W6W2M6 G C L G S M A N M L Q H T L K M S L P G V R R G D S I L L F G A G G G L
UniRef90_E4NP61 G F I D G W A N A L E T T I D I T S P P T Y V D D L G S A I I D P L A T E L A
UniRef90_S6EJ19 S N A T I E E T V M N K D I N V K Q P T I E V N K A
UniRef90_B6YX75 V Y T D I L A K L I E E P V S L S P P K Q A E S P Y D V E R E L A R P
UniRef90_E1RD4 G V M G S I G N V L R E N H L S Y S L P D Y Y E D K I E V L K D F K E T
UniRef90_Q07KH6 G C L A T I A N V L N S T M R M S L P T V V R G D G R S L F D V D G G T
UniRef90_W0JP99 G F I D G W A N H L N T K T K S S P P S Y I E G T G T E V L P R S A T E
UniRef90_A1AK56 A C V G K L A E L L G D M V T Y S P P R V I T N N T P Q D A F P E N S F
UniRef90_B6ERM2 A F L K G I G E Q A E V R F F Q S A P V L L G Q H V S V D S V V E S T K
UniRef90_UPI000016611E S A A T S L S E L L G I T I N I S P P R Y T E A E G P R I L P D E A I E A A K K
UniRef90_U1NHH4 G F I D G W A D H L D T A I N M T P P K A T M V E D L L N A S H T P L
UniRef90_A4J3G9 S S A T A M A D L F G I G I D J A P P K A T M V E D L L N A S H T P L
UniRef90_R4W2J9 G F V D G W A D V L E T A I D M T T P E F V Q G S D P E P F L E G L E A
UniRef90_W8F6F7 A L V T Q L A N I L K A H I Y G A P A H P R G D M A A A L R S L L L D R P M V
UniRef90_A1U3W2 A F I N G I G D Q L D L K L G L G H P T V L G Q H R P V N E L L D H H S
UniRef90_S5LY27 F S A T A M S E M L G T K I D I S P P T M E F C N F G D T M I Q K N I E E G
UniRef90_D2RE78 S F C D A M A E M L G T M L I P T P P S F A K D Y S V A I L D A L L A Q L A
UniRef90_K2DZR1 N V I A S S V S
UniRef90_J3HVT4 A C L S A M A D M L G I T L N S S L P D Y V V S S P R E I S L R L A A G E
UniRef90_UPI0003778685
UniRef90_UPI0003778685
UniRef90_E6QQH4 A C L S A M A D I L E L S L E S S L P V Y S V D S S E V I L Q Q I I
UniRef90_UPI0004645276 S Y I N A L T R M L D L K V I D V S V P D T C V D M L G A I L S V P M I H F A
UniRef90_D2RYE9 G F I D G W A D V L E T V I D V S T P E F V Q G A T A E P F F G E I N A
UniRef90_D3SR55 G F I D G W A D V L E T V I D V S T P E F V E G H S A E T F F D E V E E A P A G
UniRef90_Q3J0V7 A C L S A M A D I L H F T L E S S L P N Y R V A S A D E I L H R L K E N
UniRef90_V4GW16 G F I D G W A N V L G T S I E H T P P Q F V H D M G A A V M S P I V S Q L G
UniRef90_A9BEY5 T A S T A L S D F L K T N I D I S P P S S R V V N F S E A N I E F P P I
UniRef90_C7NX08 G F V D G W A N V L Q T S V E D H T P P Q L V H D I G Q A I L V D P L A A Q V G
UniRef90_D3P698 S A L A L V A N L L G E P V I T G L P A V V R G G A A D I L R G C A D A A E G
UniRef90_R9JCX7 A A A T S M S V M L E R K T D I S T P D T K F M E D G K Y L A Y E F
UniRef90_R5E1C0 S A A T S M S S
UniRef90_UPI00016C37CD A C L G V F G D L L Q V R F T F A V P R L H L D S L G S M L D T L V I G A D E I
UniRef90_J3D442 A C L S A M A D M L K I S L S S S L P T Y S M S S P E E I A A R L A E Q G
UniRef90_E7QQ32 G F I D G W A N V L Q T T I D F S T P K F T Y G P A S R T V E A L V I G H
UniRef90_UPI000374D816 A C V S S L D Q L G S T P V F S P P G L I G G E M S L D E I F L R E G
UniRef90_R4W3A9 G F V D A W A N H F D T R L Q L I G P P T Y I S G A A G D V I P G S V P T W D D
UniRef90_Q1PZB9 A C L S K L A E L L S D V V S Y L P P R Y I D G K Y F Y E D M P G N F F
UniRef90_D3T0F0 G F V D G W A N V L N A E I K H E P P Q F V A D T G S S I M T P I T A K M A
UniRef90_H2G174 A F L K G L G D Q L D V R L G L G Q P T V L G R H Q P I T S L L E H H S
UniRef90_F3LEN7 A L L R G I A E Q M D I E F S F G P P A I L G Q H Q E L D K L L S S K H
UniRef90_K2EG63 A Y I G A I A N M M H T T I N M S T P P K I K Q D K L D N L I N S V K S G I K
UniRef90_D6Z1W3 A C V G K V A E L L D D N V S F S P P R L V P Q L V I D N L S S E A I S S K L N
UniRef90_V6DW00 G F I D G W A N V L G T T I T H S P P E F V H D I G A S T I S P L V A K L S E R
UniRef90_F9TV01 S F L N G L G E Q S E V R F F Q S S P V L L G Q H I P I D S I I Q S T A
UniRef90_Q1PXN6 H I S N T L V S D F D A T L L P E P P Q V H N D Y A G I I F S L L L L E Q G
UniRef90_W9DMZ8 S Y Y N A L S K F L N L S I I P S I P T I S E G T T D E I F E K A K K H M S
UniRef90_D3RNM9 A C M S A L A D E F G I E L H G G L P E H Y F S D T D S L P I F A
UniRef90_Q5R061 A C L N G L G Q Q L H V E F A A S Q P V L L G E H Q S M R E L I K H G E
UniRef90_Q3IQE4 G F I D G W A D H L G T E V D M T P P T Y I E A A G T R I L P P I T R R D A E E
UniRef90_F7XQE6 A Y M K A V N E F I G I E L N V G K P V V E V N M A G V D D F I T R Q I E
UniRef90_C7P0R7 G F I D G W A N V L D A T I D M T T P S L L V D D T A T I D S M G
UniRef90_L0L057 S Y L N N I C E F L G T R V L H S T P E I L V L E D A E T V F F S R L K D R S D
UniRef90_E0RP08 S I M G T F S N F F S H I H Y T V P S Y T E S R P E E L F Q H Y T K A H K E Y
UniRef90_B0SCG7 S V M N S L S N K L K K E I L P S V P E M I T G S F M E V V D I V K P E R T K
UniRef90_Q5UZ95 A F I D G W A N V L E T T I D M G T P N F V F G P A D G A I I D E M G G W
UniRef90_L0AD46 G F I D G W A N V L D T T I D H S T P E F I H D I G A A A V D P V V V Q L M G S Q
UniRef90_Q3IRU9 G F I D G W A N V L Q T S I D H S P P T F V A D M G S S I M S P I V G R M A R T
UniRef90_R7RRS1 S Y L N A V S Q I L T N L S L
UniRef90_M0HGf4 G F L D G W A N T L G T T I D I T S P P K H V H D I G S A I V D P L A T E L A Q S
UniRef90_B4UJS3 A F V S A V A A L V G E K L L L S V P A L A R G S G R E C V E R L V T
UniRef90_UPI000468D480 A C L S S I A D Q L D V F F S V G H P Q V L G E H T S I D E L I V L N Q
UniRef90_L8J9R0 S F L K G L G Q Q A E V K F F Q S H P V L L G Q H I P I E D M I E Q T E G
UniRef90_W0RT00 S C L S S F G D M L H V A V T F S V P R M H V E S L E G L L R S L Q V D S E E L
UniRef90_C7NRQ8 G F I D G W A N V L E T T I D I S T P T F T Y G P G S G M V D E L V G E R
UniRef90_B0R4J8 G F I D G W A N V L G R T I D I S T P Q L I R A S G E D I A S H C V
UniRef90_C7P8N8 A Y V D S F A N F I N T S L N M T P P S Y I V G S G K E F L E K I F N E K N I
UniRef90_B9LTG2 G F L D G W A N Y L G A A I D M T P P R Y F E A D G A A V L P D G A L
UniRef90_UPI00047A37FD A C L T A V G E L G C A L I T R V P S L V K G E A A E V L E Q
UniRef90_U1P7E9 G F I D G W A D H L G V G I D M T P P S Y V R A T G T D I L P G N A F D
UniRef90_Q5V0C2 G F I D G W A D Y L G A T I D H S P P E Y I E E S G S D V L P D A P
UniRef90_M0CV35 G F I D G W A D F L E T T I E H S P P E Y V A G D G S A M L P D P P E D
UniRef90_Q1JWK3 A C L G K I A E L L D D V V T Y D P P R L M A K D L C L D D C S Q S P V
UniRef90_W9DPW2 A Y M R V N E F L G L H L N I G D P S M E V N M E G V I G D F I K Q E I G
UniRef90_A0A011NZC9 A C L G G I A E L L R T I I G F S A P S L L A D Q V A S S Q L L R A D G
UniRef90_A8ZX12 A C V G K I S D L L N T V V S Y T P P E L L T L D N P D F D F L L K H F
UniRef90_W9V2B5 A F I R N F S Q L L N Q F T S Q G T P Q I L L G L H C H A P N L Q Q N P
UniRef90_R5YX40 S I A T S M A S L L R V P T D I G F P L I N C T E Q K T F E I P E E L C N G
UniRef90_F2G4E4 A C L A G L S E Q L E L T I N L N M P T L F Q P D K S N F D D
UniRef90_D5VQR5 A Y I D S F A N F M K T S L T M T P P E F I T G S G K E V L K K I F E K Y N
UniRef90_R4W5U7 G F I D G W A D V L G T I D V A T P P Q L V Y A P A G E I V E R T A G L
UniRef90_U1JVL6 A C L N G F S S Q L E L K T S L T M P T I Y K H Q L S D D I A E
UniRef90_V6HFQ3 S V L N S I S N K A K V S V M P A V P E L V E G T F L E V L D A V K P E R T K
UniRef90_Q9L3K6 H A A T A M S E M F K E K
UniRef90_A4C529 A C I G A F G E S I E E V F D V S L P V Y S M G T A Q D V I A A G N L
UniRef90_UPI000467BFF8 S Y L T A L S A C S G C R I D L S E A A V S M D M V I G A I I T E L I G T A G N Y
UniRef90_M0DUK8 G F I D G W A N M L E S T I E H S P P E Y V R D S G E A I M R S V I A R L T D D
UniRef90_M1XL91 G F I D G W A N T L E S S I E H T P P E L L R D S G A D V V R S V Q R R L S

UniRef90_Q2FSS1
UniRef90_A6FD10
UniRef90_E7QQ33
UniRef90_Q12YW9
UniRef90_W6W2M6
UniRef90_E4NP61
UniRef90_S6EJ19
UniRef90_B6YX75
UniRef90_E1RDL4
UniRef90_Q07KH6
UniRef90_W0JP99
UniRef90_A1AK56
UniRef90_B6ERM2
UniRef90_UPI000016611E
UniRef90_U1NHH4
UniRef90_A4J3G9
UniRef90_R4W2J9
UniRef90_W8F6F7
UniRef90_A1U3W2
UniRef90_S5LY27
UniRef90_D2RE78
UniRef90_K2DZR1
UniRef90_J3HVT4
UniRef90_UPI0003778685
UniRef90_UPI0003778685
UniRef90_E6QQH4
UniRef90_UPI0004645276
UniRef90_D2RYE9
UniRef90_D3SR55
UniRef90_G3J0V7
UniRef90_V4GW16
UniRef90_A9BEY5
UniRef90_C7NX08
UniRef90_D3P698
UniRef90_R9JCX7
UniRef90_R5E1C0
UniRef90_UPI00016C37CD
UniRef90_J3D442
UniRef90_E7QQ32
UniRef90_UPI000374D816
UniRef90_R4W3A9
UniRef90_Q1PZB9
UniRef90_D3T0F0
UniRef90_H2G174
UniRef90_F3LEN7
UniRef90_K2EG63
UniRef90_D6Z1W3
UniRef90_V6DW00
UniRef90_F9T001
UniRef90_Q1PXN6
UniRef90_W9DMZ8
UniRef90_D3RNLK9
UniRef90_Q5R061
UniRef90_Q3IQE6
UniRef90_F7XQE4
UniRef90_C7P0R7
UniRef90_L0L057
UniRef90_E0RPM8
UniRef90_B0SCG7
UniRef90_Q5UZ95
UniRef90_L0AD46
UniRef90_Q3IRU9
UniRef90_R7RRS1
UniRef90_M0HGF4
UniRef90_B4UJ33
UniRef90_UPI000468D480
UniRef90_L8J9R0
UniRef90_W0RT00
UniRef90_C7NRQ8
UniRef90_B0R4J8
UniRef90_C7P8N8
UniRef90_B9LTG2
UniRef90_UPI00047A37FD
UniRef90_U1P7E9
UniRef90_Q5V0C2
UniRef90_M0CV35
UniRef90_Q1JWK3
UniRef90_W9DPW2
UniRef90_A0A011NZC9
UniRef90_A8ZX12
UniRef90_W9V2B5
UniRef90_R5YX40
UniRef90_F2G4E4
UniRef90_D5VQR5
UniRef90_R4W5U7
UniRef90_U1JVL6
UniRef90_V6HFQ3
UniRef90_Q9L3K6
UniRef90_A4C529
UniRef90_UPI000467BFF8
UniRef90_M0DUK8
UniRef90_M1XL91

170 180 190 200

LG EETVAIVVHTTFEVRERE IISGKIVILTTTRSLETL
FRKQKTIAIEINNYQIEHHD VVQCDL LLLFTTEK
QE LFAFVSDATIRAAKT PFDYCSL LYLVPDESELREVL S
QKSDNLFIMFETSLSNSE SDLEINL LALLPEDDLFKNIMN
DEESFVLFYINFSVREERD IIRGYVAMI MDLP SLEKLLKQ
QAQ EYAF LIDS AIRTPNDEFT CDLYALPNEAELRDALD

DLRD VLEVIIFRTRFYQSSSTGVESLFLYLVP TKDA FDKLVG
TNNENVL LTTTFYVE NINVTGLIF LMLJE TIE LNL LLLK
EAGSMVLFLYIDFSLIRNRD VRGFIALLMDLP SIAALKD
GDS HLLVFRSRVEAGGVNE PVD FRI LLV PDQASLETAL E
DDDAT ALV LKTVFRFNERNT EGLFLVTS HD SVIWLKK
GTFNK I MSFEVSYNI DGTD IKCDMLLMVDESL PLLDN

HG VVLFESHLRGLDLDL D FSLYMLPEYRQAFVKLLS
PTDK P VVVARFELITIGD LIKTTFMQITNVDQAR
APGEDDMAIMFRSQIEAVGEEI GFTHYLFPD H DDFAAALD
QP L L FSVIT QFSKDN SVELPLMI F EDRD TFEKILEK
KREEQ L L C I E I S Y A L E N R D I R C N M L L L T E D S I P F L E K
K T V E V I P L E V E G L L K T P M Y Q I F N P A A K E M A Q
T K G D H V V I F D T E L K D E D G V V N I E I L L L P S E N F M G Y I

SDET Y V L V L H I D L V I E K H Q T Q

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

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

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

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

UniRef90_Q2FSS1
UniRef90_A6FD10
UniRef90_E7QQ33
UniRef90_Q12YW9
UniRef90_W6W2M6
UniRef90_E4NP61
UniRef90_S6EJ19
UniRef90_B6YX75
UniRef90_E1RDL4
UniRef90_Q07KH6
UniRef90_W0JP99
UniRef90_A1AK56
UniRef90_B6ERM2
UniRef90_UPI000016611E
UniRef90_U1NHH4
UniRef90_A4J3G9
UniRef90_R4W2J9
UniRef90_W8F6F7
UniRef90_A1U3W2
UniRef90_S5LY27
UniRef90_D2RE78
UniRef90_K2DZR1
UniRef90_J3HVT4
UniRef90_UPI0003778685
UniRef90_UPI0003778685
UniRef90_E6QQH4
UniRef90_UPI0004645276
UniRef90_D2RYE9
UniRef90_D3SRS5
UniRef90_G3J0V7
UniRef90_V4GW16
UniRef90_A9BEY5
UniRef90_C7NX08
UniRef90_D3P698
UniRef90_R9JCX7
UniRef90_R5E1C0
UniRef90_UPI00016C37CD
UniRef90_J3D442
UniRef90_E7QQ32
UniRef90_UPI000374D816
UniRef90_R4W3A9
UniRef90_Q1PZB9
UniRef90_D3T0F0
UniRef90_H2G174
UniRef90_F3LEN7
UniRef90_K2EG63
UniRef90_D6Z1W3
UniRef90_V6DW00
UniRef90_F9TV01
UniRef90_Q1PXN6
UniRef90_W9DMZ8
UniRef90_D3RKN9
UniRef90_Q5R061
UniRef90_Q3IQE6
UniRef90_F7XQE4
UniRef90_C7P0R7
UniRef90_L0L057
UniRef90_E0RPM8
UniRef90_B0SCG7
UniRef90_Q5UZ95
UniRef90_L0AD46
UniRef90_Q3IRU9
UniRef90_R7RRS1
UniRef90_M0HGF4
UniRef90_B4UJS3
UniRef90_UPI000468D480
UniRef90_L8J9R0
UniRef90_W0RT00
UniRef90_C7NRQ8
UniRef90_B0R4J8
UniRef90_C7P8N8
UniRef90_B9LTG2
UniRef90_UPI00047A37FD
UniRef90_U1P7E9
UniRef90_Q5V0C2
UniRef90_M0CV35
UniRef90_Q1JWK3
UniRef90_W9DPW2
UniRef90_A0A011NZC9
UniRef90_A8ZX12
UniRef90_W9V2B5
UniRef90_R5YX40
UniRef90_F2G4E4
UniRef90_D5VQR5
UniRef90_R4W5U7
UniRef90_U1JVL6
UniRef90_V6HFQ3
UniRef90_Q9L3K6
UniRef90_A4C529
UniRef90_UPI000467BFF8
UniRef90_MODUK8
UniRef90_M1XL91

S L D A D
L L D
L I
R L G A E

R L E A Q
K L E

A L
K L

R L

R L
M L G L Q

H I D
A L G
R L
Q L

G L D

E L E V D
T L G

A L E

K I E V
A I D V

A
D L L L E
N L

A L

K L
A I G
R I E
R L G L
Q L

A
A
D L D L D

E L D

K
D I D L D
D L D V D
D L L V E

Q L
H L D L
K L
K L

E I E V
S I
S M

A V G
R

K T G

A L
A I
A L D
A L

R M E

Q

T L D

A I

N L E

K L

A L E V E
A L
A L

UniRef90_MOA6Q5
UniRef90_K5CBH0
UniRef90_R5UI63
UniRef90_C4Z8X6
UniRef90_N2AHU8
UniRef90_D4H1J3
UniRef90_MOCJ18
UniRef90_Q0B5R7
UniRef90_UPI000381BFDF
UniRef90_UPI0003733993
UniRef90_UPI0003B53E08
UniRef90_N6VSS3
UniRef90_Q47W78
UniRef90_R5TEX4
UniRef90_A0LDG9
UniRef90_UPI0003B48D71
UniRef90_UPI0003659CFF
UniRef90_B7JZR1
UniRef90_Q2SP51
UniRef90_F7NRK0
UniRef90_Q8EE44
UniRef90_UPI0003FEBAE9
UniRef90_U5F7L1
UniRef90_E1TIA3
UniRef90_K2K6E1
UniRef90_UPI000378E8D2
UniRef90_A6VFM3
UniRef90_UPI0002DA8BC4
UniRef90_R5WEV4
UniRef90_T3MPN9
UniRef90_UPI0002D53555
UniRef90_UPI00035FC73F
UniRef90_I1DTE5
UniRef90_H2CF94
UniRef90_K1RTS2
UniRef90_A6UNU4
UniRef90_U1JP32
UniRef90_E3BI37
UniRef90_D5V821
UniRef90_Q0B028
UniRef90_F8AK17
UniRef90_E4TZX3
UniRef90_W4BLE5
UniRef90_UPI000474F77E
UniRef90_L8JQS7
UniRef90_D7DU02
UniRef90_UPI0003940F7B
UniRef90_E8LZZ3
UniRef90_Q6AMZ2
UniRef90_W6N889
UniRef90_A1UXN0
UniRef90_G2HVS3
UniRef90_V6IW81
UniRef90_UPI000255C37C
UniRef90_F7YS23
UniRef90_UPI00047C0DF2
UniRef90_E1R1Q6
UniRef90_E8VS02
UniRef90_D7DU03
UniRef90_V4HC01
UniRef90_W6EKS6
UniRef90_F2P8E5
UniRef90_UPI000288BC3E
UniRef90_E2SPS8
UniRef90_K6FR11
UniRef90_A6UNU5
UniRef90_F3KJ20
UniRef90_I4AAR8
UniRef90_D8J2R0
UniRef90_UPI0002884D22
UniRef90_V6AQL1
UniRef90_B6ES17
UniRef90_UPI000477B2A6
UniRef90_H2IC30
UniRef90_D8G3V5
UniRef90_B8K6R2
UniRef90_K0IMK1
UniRef90_N9VJA1
UniRef90_L9WI57
UniRef90_F3LD62
UniRef90_B5EUV2
UniRef90_R6YGR0
UniRef90_UPI000255BE2A
UniRef90_F7YW72
UniRef90_F8E283
UniRef90_G5HN59
UniRef90_UPI0002556251
UniRef90_C5EFH2
UniRef90_R5SXT9
UniRef90_B0R4J7
UniRef90_R5EW18
UniRef90_G5HN30

1 10 20 30 40
M E I D T H S L E T Y N E L A R D G A E S A A D A L S E L A G V E T R V D V T P
L T E I E R D S L C E L F N I S T L G G A A K L M S S E M I S D E T L L T T T P
N I S R E N A D I I G G E V A N I C T I G N A A T T L S M I L N R K P T N I T T T P
K L D T D V Q D V L Y E L G N V I G V G M A S I T M G R L L D V R I V E L V S P P
F T D E D E I D A L L M N L A F G Q A A E L A E I S D I S V K L S F S P
E V D V R K L E L F N D M A K E G A T T V S E H L N Q L S G L H T E I E I E V S P
F T A E Q R D A L Q E I A N L A M G R A A R L A L L L G L H F I E L E I E V S P
H V T E L E K D I L K E L L N I G L A R A A G A F A V I A K D K V L L K V P
E F T D Y Q I D A L K E L A N I G M G R A G A K L S E V F E H R V T L N V P
E L T L N D M E I S A I G E V S N L S L G N A A T A L G I L L R D D I D I N S V P
L D P R Y F K K I E D I L G K F A S E K A M R D L A R Y L D T G Y S A E L K V F
H L T E D Q Q D C L Q E L L N I G M G K A S D Q L A R Y L D T G Y S A E L K V P
L S E L E E D A L K E F F A N M G L G K A A N S L S E M V H H G E V L L S L P
F N E M E L S A I K G E V A N I T L G N A M T A L S E V L T H G D I D I S T P
L S L T E D Q R D C L Q E E I V N V A M G R A S D K L A R F L Q T F V H L R V P
M K T Q I D S I N I L Q E E I V N I G V G Q G A S L L A N E M I G F H I D L Q I P
F T R D Q L D A L Q E E I F N I A M G Q A N R L A R L V E T F V V L S A P
F S E E Q R D C L Q E E I N V A M G L A S D K L A R F L N T F V H L Q V P
N M L L S E E Q R D A L Q E E L M N I A M G Q A A N S L A R L I E A K I T L S I P
L T E D Q R D A L Q E E L M N I A M G Q A A E R L A L L T G T I V T L S V P
M E N N S Y L L E T L K E F F G N I S G G N A A A A L A L L M D T Q V Y L S V S
E Q S L N E D Q R D A L Q E E I C N V G M G K A A A L A K L L G A F V T L S V P
D R M E V L R E V A N V A M G R A A G L M A G I F N V Q I P V P
L N E D Q R D A L Q E E I C N V G M G K A A A A L A Q L L G A F V T L A V P
A F E N I G K T A A E K A A S F V Q E M S G D C V E V E V A
M L L T D K Q Q D V L T R F I K I A L S R T A A S L S H L I G S P V V L E V A
D I L T P
R E M Y M E V V N V A M G R A A D S L A R Y F D V F V H M P L P
L D S D K E A L G E L I N I S Y G S A T A A I A D L F D S F A Q L K V P
H F T E E Q R D N L Q S V I N T G M I N G G L V L S Q L L G V T M V H L K V P
L T E E A D Y C R L Y S V I N T G M I N G G L V L S Q L L G V T M V H L K V P
L T E K E K D T I G E I A N I S M G T A A T T L F S L V N R K V E I S T P
L E S I L Q E E I G K T A A E K A A N D A L F V Q E M S G E S V D V S K V F
I E I N E D E R D A L Q E E I M N I S M G R A A C K L A T M L S N E V T L S I P
Y E E L T A D H K D S L K E L L N I S M G R A A C K L A T M L S N E V T L S I P
F N D D Q K D C L Q E E L M N I S Y G S A T A A I A D I L G K F A K L S I P
M L L N P L Q K D A L T E L V N V Y V G Y A A S L L S E M V G L R I L L S V P
E E I G K S A A E K A C G F I R D M T G N H V E T K S V
F T D D H L D M L R E L M N I A M G N A T A S I A D L L E A F G K M H I P
L N D L Q K D L I L T R E L V N V Y V G Q A A N M L S E I V D K R I V L N I P
Y M A H V D E V L T I W G K I C G P G L D E A G R A L S Q M T G L D F T M E D K
Y D Q M T Q L E K D I L Q E L M N I L A K A A D S F A R D M S K E E V L I N V P
L L E T I L G K A A T R A A S F V M D M S G D E V D V N V P
H P E L S A D H Q D A L Q E F M N I S M G R A A N K L A T L L D L H V T I S V P
L T P N A I D A I R E M S N V A L G S A S A T I A E Q V G K F L E M P L P
I G D D L K D V L E E L T N I S F G S A T A T I A D L F D N F A T L H V P
M K K R I L R Y D I L K E L F N I S V G K A A S M L A S E I T N K R I F L D V P
L T A E Q R D A L Q E E L A N L A M G R A A A R L A L L G A F A L E L S I P
H L T E D E K D C L Q E E L M N V A Y G S A T A A I T E L L D A F A K L S I P
D I L T E L F N I G V G Q A A S T L S D I I D K Q I G L T I P
D I L M T E L F N I G V G Q A A N T L S D I I G K R I D L S I P
M A L S E D H K D A L Q E E F M N I S M G R A A N K L A T L L N L H V T I S V P
N I L L T E D E Q D C L Q E E L M N V A Y G S A T A A I T E L L D A F A K L S I P
L N I G V G K G G E I L N K M L G S H I T L D V P
K L T S F S K F K E L T N I A L G K G A A I M A D H L N E F I L Q L P V P
I D A I K K I T E I G Q E A A E N V G D S F T G L T G Q S T D V S F L
M Q L S E L Q I D Y I K E L F N V G L G E A L V E L N D M I N E E L L M S V P
F N P Q Q E I L K E L I N V S F G L S A S I G D M L D N H A K L H I P
L S V D Y I A G F R E I A N I S L G R G A A I S D H L G E F I K M P L P
D I L Q E L F N I S I G K A S S V L S E I I E K K I L L N V P
Q D T I K E L L G N I G I G A A A T A L S A L L Q Q R V L T N T S
E A R M D I L A E C V N I G L G R A A E A L N R M C E S H V A L S A P
E T I N K L I S I G K D A A D N T A K S F S G L T G E N A D I H F T
T E K T C H A L S L L N E P I K H K P
S L K F D I L N E L F N I S V G Q A A S L L S E M I N R T L K L N V P
M R V D T D S L D F V R A I A A D G A R H A A D A F R E L T G V E T R V E S T P
D I L K E L F N V G V G K A A S T L S E I I D G V K I N L D V P
I T E K E L D Q L A M I F T K C I S K T V I E S L S T L L G E S I I Q C K I G
I Q E I S N I A L G V S A S L I S E Q F D R F I I D M P L P
V K P T S K Q I G A L Q K L F N T G V E R A N A M L N Y M T D S P I H L Q M S
L A K F R E V A N V A L G K G A A I M A D H L R E F I I Q L P V P
M K P N K E Q K V A S I R E K M S N I A L G T S A S L I A E Q V G O F I E M P L P
S V D L M G S I R E M S N I A L G T S A S L I A E Q V G O F I E M P L P
H V S I S E A E I T D L G T T I S M L A S G T S K S L A M M T G E E Y T Y S F G
I N M T D R Q V F D E A I N L H A K A A G E S L S S L K A D I E I L S G P
I T D D S L D L Q E A I A R E L G T A S I S D R L A A T D S H I E A T V D
I N E D Q R D C L Q E I T N V A M G A A A E S L A N F T D T F V N L P I P
N V A L G A S A A L I S E Q F D R F I I D M P L P
Q I S D M E M S A V Q E A M N Q M M G S S S T A M S T V F N R R I D I S P P
E L S D E D V N S V K E E V L N I F M G A A S S A L S V I V G R D V S F S I D
I S E Q S K A L S K Q E Y L V A T V Q T Q S S N L S M M T G T V T M Q L T
D V D K D A I K E L M E M E A V P V C D R L G S L L G R S V K M A V S
I T E N R F D E L A E K V N I A T G V A A A K M A D I M N L F I T M P V P
M S M L N M D K E A I K E L L E M E A V P V C N I L G S L L G R N V K M T V S
L D Q E A L T E L L D M E A V P V C N T L A S L L G R N A R A A V T
M R V D L D A V A S F S R T G D E G G Q R A A D S L E T L T G I P A N C Q L T
S M D K E A I K E L T E M E A V P I C N I L G S L L G R S V K M S V S
E V T D R Q M E E L I R I H A Q A G E S I S L L R A N I E I G E P

UniRef90_MOA6Q5 D V S L L S V A D L E Y E F A G R T F A G V D L S L G E P L S G E T V L A F 80
UniRef90_K5CBH0 S L K L V S T E E A K N I E Y L A D Q E V C T I E Q K F V G G L I D D G S A F L L F
UniRef90_R5UI63 L V E V L D K K E N T A L E S D N D H I L V K V P Y T S G L D D G T N L M V L
UniRef90_C4Z8X6 I V E V L K K E D A L D H D D R I L I L K V P Y T K G L L D D G T N L L I I
UniRef90_N2AHU8 N V I P V T E V S E Q M L L S Q I E P D D D I G I W M R F A A P M S G G F V L F L L
UniRef90_D4H1J3 K L E T V D K V C D L P C K L A G D D T N Q N M S I E Q V F R G K A G Y G I A Y L L F
UniRef90_M0CJ18 K I N F L D L A D V R T K H L I G E H Q Q V G I Y V E L T E A P Y G Y I L F M L
UniRef90_Q0B5R7 R V R V V K A A D A R G D A L R E M R E N V T A V R Q Q G F R S D I K G G E A I V L C
UniRef90_UPI000381BFDF A I Q L I D V K L N S L V T K Y E D T H L I I Q Q S D I K G D F E N G A T L M L F
UniRef90_UPI0003733993 N V A M V D E D K L N S L V L K F E T I V N I I Q Q S F I G E T I V G R S A F I I
UniRef90_UPI0003B53E08 N V L T K N K G D I V S D G K A C E T I T R V N Y V K G I Q G Y S I L M L
UniRef90_N6VSS3 N I R L I T T P E I I S E Y G D E L K L F T K L N F S G G I S G T G V L I F
UniRef90_Q47W78 S I E S V E A K D L M K T L S Q Q K N T V A V V S Q G F F G G I R G E A L L V Y
UniRef90_R5TEX4 V M K R V D Y D G L A E W I G Y A E E N V V A V L I P F A G D I N G M L L Q I Y
UniRef90_A0LDG9 L L K V V P Y E Q A R M L V A D Q D D E K L V A V R Q N F Y G D L L D G T A L L I F
UniRef90_UPI0003B48D71 L V E I K N K G D V I V R D D L E E Y I I T R V D Y V K G L L D G G S V L L F L
UniRef90_UPI0003659CFF A I E L I S A Q V L P Q S F A E A D Q G V S M V S Q G F Y G G V L R G G S I L F Y
UniRef90_B7JZR1 L V Q L L S F E S A K K E L E K R T D N L L S T V E L R F T G T L R Q G S A D L V F
UniRef90_Q2SP51 K L Y S L K S Q A D P E L I K R G D T P L I A T R Q S F V G P L R G G E V I V F
UniRef90_F7NRK0 A I E L V N S A Q I P A Q F R Y S N T E A A L V S Q G F L G G L R G G E A I V L Y
UniRef90_Q8EE44 K I S D V T P E Q F V S M L S D S Q T M W Y T R Q S F L G S I K G G E V I S T L
UniRef90_UPI0003FEBAE9 F I H P L V R E Q D N L S L P D H S S F I V T R Q S F L G E L R G G E V F V C F
UniRef90_U5F7L1 K V D K M T Q L D L K T N D L R V E E H M I S I L L P F D G D M E G M L L F L L
UniRef90_E1TIA3 D I R L V G V E Q L R T A L G A Q D S R L R P V I R Q A F Q S D I S G E A I V L V
UniRef90_K2K6E1 R I Q A M T A S E L C A L I D Q W Q S R H Q V I S Q G F V G G I C G G E V L M E L
UniRef90_UPI000378E8D2 D I R L V G V D Q L R V L L P Q G D G E L P P V R Q A F Q S D I S G G E A I V L V
UniRef90_A6VFM3 K I E L N S A Q D F K N M A D T L S E S N V F T K L D F S G D I C G G T G V L I F
UniRef90_UPI0002DA8BC4 E V A L Y P L S F L H T E F K N L L D E V A V I R H S F E G G I N G D A L L S L
UniRef90_R5WEV4 T V S Y T T L E D L A N D S S T P C V F I Y I S Y K A G L E N G K N I L L V L
UniRef90_T3MPN9 V K K L L E Y N E A T N L L G G P E N K N V C I L D M K G G D I N G M F M F L I
UniRef90_UPI0002D53555 Q V N V F E P I V S E L D M T I R H A N D N M S G I C G G F S G G L A G E A L M L I
UniRef90_UPI00035FC73F G I Q I I S V G D V E H A V L G H E P D L Y I T T Q M F K G T F E G E T I M L V
UniRef90_I1DTE5 A L K L V D T Q D L P E H F R Y Q Q S V S L T S L G E T G G L R A G E T I M L V
UniRef90_H2CF94 E F Q T L H Y G D L Q S Y L P D T D L I G V F L E T E G D F Y A L L M L V F
UniRef90_K1RTS2 V S F A N W S D I C E A Y E K P C V F I R I G Y T V G L D G S N I L V L
UniRef90_A6UNU4 K V N L T S T P E L D K K I S D E E N K V F T Q L D F N G E I S G V G V L I F
UniRef90_U1JP32 A I Q A M S P E D F Q G M I N S L S N N W F A R Q S F T G T I R G E V I M S M
UniRef90_E3BI37 A V D M A S P E E L M E M F G D A T S Y Y Y T R Q P F F G Q M S G E V I T Q L
UniRef90_D5V821 K I V T L S S S D F M K D Y I Q E K V E H Y P A V S Q L D G K L S G E N L F L I
UniRef90_Q0B028 R V E L I P S E A E M Q D L P L P E G H I V S S Y I S F G D F R G K A F L V F
UniRef90_F8AK17 N V M I T T P L E I T K E E K I K N D Y K I V T G I N F S G D I N G I G V L I F
UniRef90_E4TZX3 Q I E L I S D M E G L A S Y I Q Q D D D R N Y V T K Q L F G G M F S G E F L F V I
UniRef90_W4BLE5 E V E L I S I S D V R Y N I F S E G H L F R S L Q F G Y E F Q G K A F L M F
UniRef90_UPI000474F77E A V N E V A W G D V L K R F T Q Q D D E Y Y V V H L G A T G L L T A R I M L I L
UniRef90_L8JQS7 K L Y E A D K E S A L E E L F N D N R I E V I L Q S E V N K G D I Y A H T L I L F
UniRef90_D7DU02 K I K L T S L N K L S E T P E D K K V F T K I D V N G M L S G M G V L I F
UniRef90_UPI0003940F7B N I R L A T D E D L A R L K Q S E S D Y Y Y T R Q S F F G G M D G E L I T L I
UniRef90_E8LZZ3 N V A S L H Q S E L K M T V G S D N N S E S R A V S Q R F V G G I H G E A L V C L
UniRef90_Q6AMZ2 T I D F V D L E R V N I V G S N D N K F Y V S S Q Q F K G T F H G E V V L V I
UniRef90_W6N889 N V E T L L E N K N L R L E D Y F P M I I N S S I A F E K K L T G K A N L I F
UniRef90_A1UXN0 R V R V R A A D V G R V L R D M H D N V T A V R Q G F R S D I K G E A L M L C
UniRef90_G2HVS3 K I Q I V N A N E L K S Y L S D M D E E H L V S L Q Q I N G T I S G E N M F V I
UniRef90_V6IW81 E V K I L D A A K A K V E L N K Y E G A V M V S S I S F D S Q L E G K V S L L F
UniRef90_UPI000255C37C N V S I L N L E K G K H V L D H Y E G T V M V S S I S F D Q Q L E G R V S L L F
UniRef90_F7YS23 S I G V A T D E D L A Q L S Y E T D Y Y Y T R Q S F F G G M D G E L V T L M
UniRef90_UPI00047C0DF2 K I K I I D A S N L K A Y L S N L E N E H Y I A L Q Q I N G H L S G E N M F L I
UniRef90_E1R1Q6 D V T L V E E E H L D F L L R P N D P L L A A V N M E F L G A L A G T V N L V F
UniRef90_E8VS02 N V G P L T Y G E L Y M T M V D K R E G A V A V S Q R F V G G I H G E A L V C L
UniRef90_D7DU03 G T R F V P L E R L P E Q F S E D Y C K I T K I D F D G I L T G N S M L I L
UniRef90_V4HC01 S F D L F E K N A I F D D L Q E S G R N I T A V V L P I K G E M E C N G I L L F
UniRef90_W6EKS6 D I T S N I D I H N L D D E V L E E Y E F Y L T K Q R F L G S F N G E V L F V F
UniRef90_F2P8E5 C V S T M G S S D L A M T I A D I D Q Q S I A A Q R F V G G I H G E A L V D L
UniRef90_UPI000288BC3E N V K L S L E D E K N K V H F N E D A V M L S S I S F K E K L V G K A S L I F
UniRef90_E2SPS8 R L G V I L D D A F L N N Q K L L E D Q V A G I L F P Y D K D I Q G Y G L F I L
UniRef90_K6FR11 E I R V M N R P T L A A A A G R C P A V C E G V F L P F V G P M K G M T A L A F
UniRef90_A6UNU5 G L R F V P V E F I P E Q F T D E T C K V V R I N F D G I L S G T S V L M I
UniRef90_F3KJ20 S M F E N N P N S I N F H L P S N E I Q M C S V R L N G K G D L H I E L L Y S T
UniRef90_I4AAR8 S T E T I D I K D D A F L P M D V D G T L M V S S I C F E N K L T G K A N L I F
UniRef90_D8J2R0 S V T L I S R Q S A C E R F S R E M A G V E L G F E G A L S G R T L V F
UniRef90_UPI0002884D22 D V R I M N M Q E L D V F L R Q V T E G A A M V S I S F N R Q L E G T V S L I F
UniRef90_V6AQL1 K T H L L D I S D L D E L T P A F S D T V S A V Y L K Q T G D I N V G V L Y Y M
UniRef90_B6ES17 N V A S L H H S E L R M A L Q D N N S E Y R A L S Q R F V G G L N G E A L V C L
UniRef90_UPI000477B2A6 A I E L S P Q Q L Q A K L E Q P R A H A Y G M E L F I R G E F E A I A I L V F
UniRef90_H2IC30 H V G P L T Y G E L H M T L V D R R D G S I A V A Q R F V G G I H G E A L V C L
UniRef90_D8G3V5 P L E L S P Q Q E L Q A E L E K S T E R I V A M E L I F S G E F Q G S A Q L I F
UniRef90_B8K6R2 N V A S L H Q S E L K M T V G S D N N S E Y R A V S Q R F V G G I N G E A L V C L
UniRef90_K0IMK1 R I N E V K P Q Y V D Q L V Q L F N E E L C A V Y L R A D G D V T V G M M L F L
UniRef90_N9VJA1 E I T E I T P A K E V E Y G I L T E P A I F V K S C L T S G V A G N M V I L
UniRef90_L9WI57 S L E I V P A E R L S A E T A D T A G V A T V V E L I D P V S G C V L V L F
UniRef90_F3LD62 V I R C V N S E H L I D S L K Q V E D R L S S I S Q L F K S G L N C Y A L I V I
UniRef90_B5EUV2 N V A T L H H S E L K M V L Q D N N S E Y R A L S Q R F V G G I N G E A L V C L
UniRef90_R6YGR0
UniRef90_UPI000255BE2A K L N L M D V K S I E H L P L D E E M F E I A F Q L K I G D L V D S Q I M Q L V
UniRef90_F7YW72 N V F Q K P L E D F L K E L T D E M V I A E L K L A E G L K G D F A T L I
UniRef90_F8E283 Q V D G V N R E S F L Q K V P D M V V A I K A D F S S G F P G E H L F L I
UniRef90_G5HN59 K V E E T D T G A L A E L P H F N V V I E G R R A V N G L T A D Q L Y V F
UniRef90_UPI0002556251 E I K E T S D G K E V Y A D L Y G S T E I N G I S Q G F V G N I L G E V V L L M
UniRef90_C5EFH2 G V E E T D T D G A L A E C L P H F N V V I E G R R T A N G L T A D Q L V L F
UniRef90_R5SXT9 E L G E T D M E T L T E Y L P H F N V V I E A E R T A E G L R V P Q L Y V F
UniRef90_B0R4J7 R T A L V D A D G L S V F L G D S W E R I S V E F D G A L T G R A V L S F
UniRef90_R5EW18 K V E E T D M G S L A E G L P H F N V A I E S R K A V G G M S A D Q L Y I F
UniRef90_G5HN30 E L Q E I T V R E V E Y S I L E P A V F V K T C L T S Q V A G S L V L I L

UniRef90_MOA6Q5
UniRef90_K5CBH0
UniRef90_R5UI63
UniRef90_C4Z8X6
UniRef90_N2AHU8
UniRef90_D4H1J3
UniRef90_M0CJ18
UniRef90_Q0B5R7
UniRef90_UPI000381BFDF
UniRef90_UPI0003733993
UniRef90_UPI0003B53E08
UniRef90_N6VSS3
UniRef90_Q47W78
UniRef90_R5TEX4
UniRef90_A0LDG9
UniRef90_UPI0003B48D71
UniRef90_UPI0003659CFF
UniRef90_B7JZR1
UniRef90_Q2SP51
UniRef90_F7NRK0
UniRef90_Q8EE44
UniRef90_UPI0003FEBAE9
UniRef90_U5F7L1
UniRef90_E1TIA3
UniRef90_K2K6E1
UniRef90_UPI000378E8D2
UniRef90_A6VFM3
UniRef90_UPI0002DA8BC4
UniRef90_R5WEV4
UniRef90_T3MPN9
UniRef90_UPI0002D53555
UniRef90_UPI00035FC73F
UniRef90_I1DTE5
UniRef90_H2CF94
UniRef90_K1RTS2
UniRef90_A6UNU4
UniRef90_U1JP32
UniRef90_E3BI37
UniRef90_D5V821
UniRef90_Q0B028
UniRef90_F8AK17
UniRef90_E4TZX3
UniRef90_W4BLE5
UniRef90_UPI000474F77E
UniRef90_L8JQS7
UniRef90_D7DU02
UniRef90_UPI0003940F7B
UniRef90_E8LZZ3
UniRef90_Q6AMZ2
UniRef90_W6N889
UniRef90_A1UXN0
UniRef90_G2HVS3
UniRef90_V6IW81
UniRef90_UPI000255C37C
UniRef90_F7YS23
UniRef90_UPI00047C0DF2
UniRef90_E1R1Q6
UniRef90_E8VS02
UniRef90_D7DU03
UniRef90_V4HC01
UniRef90_W6EKS6
UniRef90_F2P8E5
UniRef90_UPI000288BC3E
UniRef90_E2SPS8
UniRef90_K6FR11
UniRef90_A6UNU5
UniRef90_F3KJ20
UniRef90_I4AAR8
UniRef90_D8J2R0
UniRef90_UPI0002884D22
UniRef90_V6AQL1
UniRef90_B6ES17
UniRef90_UPI000477B2A6
UniRef90_H2IC30
UniRef90_D8G3V5
UniRef90_B8K6R2
UniRef90_K0IMK1
UniRef90_N9VJA1
UniRef90_L9WI57
UniRef90_F3LD62
UniRef90_B5EUV2
UniRef90_R6YGR0
UniRef90_UPI000255BE2A
UniRef90_F7YW72
UniRef90_F8EZ83
UniRef90_G5HN59
UniRef90_UPI0002556251
UniRef90_C5EFH2
UniRef90_R5SXT9
UniRef90_B0R4J7
UniRef90_R5EW18
UniRef90_G5HN30

90 100 110 120
D E A G R D A I T S N L V P T D D P A L V E G A V V E A G N I M V N
H K S A S L E I V K M M M K D Y V A L L N E V S Q F E K D A L S E A G N I I L N
D V Q D A L V I A S L M M M G G N D G S R N L S D L D D E I T L S A I S E A M N Q M C G
K L N D A L V I A S L M M M G G N D G S R N L S D L D D E I T L S A I S E A M N Q M C G
K R S F V R A V V E K M T G N R E K E K L F D E I A F S A V S T E F A N N M L S A
P A G S E K R D F L S M F H M D G M E E N V N D I M D V E R S V L S E V I G N I L I G
E P E G S K R L A Q G M V G D M G S G E A D F T D M E R S A M Q E V I G N I M T S
R S A G V A R L M S L M E R T F G D G V Y A G M A T Q D E S V V F D V A N I V L M S
S D E H V T K L S E V C L S M L E D V R K G E L N V M Q E S L L L M E I S N I L I T G
G G H N F A D L V N I L G Y E E D D A I D E G R Q K E M L M D V S N A V N S
K A D D V K M M T D L M M G S D G H G M Q D L S D L H L S A V S E A M N Q M M G
S E K G A L E I T S K A M L M G M E C L D N D E M D D M K L S A I N E I S N I L I T
K E E N S G R I A D L L G Y E P E L T S Q D E Q L I D I S S I L I T T
K E E M K D V I L R K L L G T E Q V P E E M D G Q M L D L R E T A N I M A S
P G A N S L E I T S K A M L M G M E E M P L D V L T E L E Q E S A V S E V I G N I N
K E D D V K I L T D L M M G S D G H G M Q D L S D L H L S A V S E S M N Q M M G
R S H D A Q G I A R I L G Y E P E E A T S D L D L L K I G V L T E I G N I L I T T
P T D S A S K L V D L V T D E T S E T S D L D L L K I G V L T E I G N I L I T T
G M N G A N E L A E L M G Y S Q D S D T Q R V K E E L I L D V I S N I L V G
Q L D N A H R I A A L L G Y D T D S A S E L E M L T D I S S I L I T T
S K Q G C D A I G K L M D Y E P P L T Q D R L N E L L L E L A N I L L A G
G A M G A D D L A E L L G Y E G G G T E Q Q E E L M L D V T N I L L S G
N Q T F A Q T Y L K K V M Q R D V C A Y Q L Q E Q E L K M L E E T A S I M A S
G K D G Q R E L Q Q L M G H D V S A P D T E V E V L C D I T S N I L L V G
S S E E A H R I A A L M S L S S R Q P E E R A L M T E L S I L I L I G
G K D G Q R E L R Q L M G H D A G D P D T Q V E V L C D I T S N I L L V G
S E E S A K S M A D S L M Q G M E G D S E E V F C E M R V S A I N E T C N I L L I S
D Y H A A V Q L T D L M M G S D G M I Y P L D Q L N L S A C E V L T E V I G N I L L I T
K E R D V K V I T D L M M G S D G T N T E E L T D L H L S A I C E A M N Q M M G
D E S I T Q L M L S I L D Y N K E E A L L D E I E A L E I S A I K E I G N I M A S
S D S M K D L L G L L D Y P D D G S I D S D L E V L V D V A N I V L M S
D K Q S A Y N I Q N L I C L L E E T D Q E E D D S E T R Q S I L E I A N I L G A
Q L A N T G V L A K L L G Y S D D D S S E D E M L T D I T S N I L L V T T
D E E T G Y N A A G E L M G I S V Q D R N K R S E D V Q S V L S E L T N I V L S G
K E H D V K V I T D L M M G S D P F H P G T I E E N T K T Y L N V M K N
S E E S A L K M A D A M M G M E E S N E K F G E M R V S A I N E T C N I L L I S
H K D G C N A L A E V M D F D L P L D E A A T E E L V L E I T N I L L S A
T K K G G K T I A G N L L D L A E E D G I D T V D I N C S I L E V S N I L L S G
D E N S L K N L A L Q F D L L N E S D I N E D E L K D V V L K E I T N I L L S S
P V I Q Q A K L L V N A C I G E E L L E P P R F L D T D F D V L K E I S N I L I L N
S E D C A L K L S K S M L A G M G M E D D E L D E M K I S A L N E T C N I L I S
S E E S A L H L G H L Y D V D N P S D G D I L D A V L E L T N I L L S A
P V I E Q A K L L A N I C L G E L G E N D P N L M D T D L D V L K E V S N I L L N
S P E N G Q R L V S T M M G E D T G L P L D E V G L S A L A E M G N V V G T
S D K Q I R M F E A A C L K E T T V T N K M R E S L L L E I T S N I V I T G
T E P D A I K M G D S M M F M E D P T E V D V L S E L K I S A I N E T C N I L L V S
S R L G C Q Q V V A D L N R V K G H T S D A I N V D E S I L D I T S N I L L S G
H G S G F E Q L A S N S C G E E V N S T N E V I L D I S N I L L V S
D P E S G K N H T I I D K D E E F E E N E V Q Q N I L E I S N I L L S S
P A K K M K K F V D I C Y G Q Y E D N N E D F T N V D F D I I K E I G N I I L N
R S A G V G Q L V S L Y D G A Y A D D E F G T V T Q A E L V F D M A N V L M G
D K K S A K N I A Y K F G L E E N E I N D E E I C D I V L E I T N I L L S S
P A D K M H H F I D L C L H E E T E N T L E F N D I D F D T I K E I G N I V I N
P A D K M H Q F I A L C L H E T W D E T K E F T D I D Y D T I R E I G N I V I N
S R K G C E Q I V S D L K Q S T G D A Q D V V S L E E S L L E I T N I L L S S
D K I S A T N M A N K F L N E N E L N D E D I C D I T L E I T N I L L S S
R A G D V D K L V L A T G G E A D T G I D M E S L R T G S L L E I G N V V I N
W G R D I D V I G Q K L G Y H Q D F T T H N E I I L N V S N I L L V S
P E V D A D L I W D S L T N K T D M P D Y K E M E S S V I N E V A N I V L A
P A Q H S L N L V R K V L K E T S G A D S T L T A L E V E S I L T E T S N I I L D
N R Y S A H A F C D L L L K Q E M S D E S D I K S S I L E I T N I I T S
R G E D I V E F G E K L G F S Q T N D D K N E V V I D I A N I M V S
P A S K M K K F I K L C L H E D Q C E I N F T N K E L D F D V V K E I G N I L N S
E E E F A C A I W N S Y L H K T V R F A D L N K E C M A V L K E I C S I M I S
A Y G D A K L V T G L T A A M G I D E P T E D M R E D T L R E V G N V I L V
N E E D S V K L E K L L L D T M I T E L P E Y S E I E E S V I N E V A N I V L A
K L H Y A I K I A S K L L L G M E V N E I D E M G T S A L Q E V A N I V L T G
P A E K M R Q F I N L C M N E E E L G D L S F S D V D F D I R E E I G N I V L N
D R T R V R A L L A E C L P E E D A A V I D S G I E E F G S I M L S
P A E K M H Q F I L C L N E E E N S L E F S D V D F D T I K E I G N I I L N
P E R D G R R F A A K L L G K I L G S F T K L S R S S L S E T G N I L L S G
H G N D L A T E L I T T T N E T E V T T T N E A I L D I S N V L V S
S E K S A A T L V D I L A D E Q R R A I D R D S V K M K T L S E V G N V F F N
R G K H I D Q I G E R L G F Q L E F T S Y N E I L N I S N I L L V S
P R D S A A L L V N A I A S E D R R T L D Q N A L R K E T L T E V S N I F F N
H G R G L D N L G G E E S N G T N E V I L D I S N I L L V S
T H E Q A R Q L A R R L L G N N D L K E L D I L G R S S I S E V G N I L L F G
R Q R D M Q A F L N E L M G I S D P D P D F E F D E V A M S A A T E L M N Q M V H
D E D S A S T V A D L I E P S S I D S V A A E S P V E T D S V E S L G A L V A T
N D E S I D D L A R F T G R S L V D D G I K T L L H D L C E T I N K
H G D N L K E L N V N D S G K N T T T N E A I L D I A N L L V S
K E H D V K V I T D L M M G S D G T N T D E L T D H L S A L S E A M N Q M M G
P I N F G K Q L V Q L L V Q E S S G N D S Q A D Q T E A A A R D G S N
P V S L G T K I A N M M M G G E E P A V I G E L D E I R L S A L Q E T F N Q I V S
S E E G A K K I A S L M M N K E D N I E L D D M A L S V I S E I S Q L T G
S K D D M I R V A N Y I M G V P V D N P S P L D E A L S T L K E V A S Q C I S
T K Q D I Q A Y H T L I S D S P I T E K S L R Y V A I E L G G L I S G
S K E D M V R L T N Y I M G V P I D T D S P L D E I A I S T L K E V A S Q C M T
D R A D M L K L S N F I M G L P V N T E S P L D E I A L S T L K E V A S Q C M G
D E A F A D H V E D E L G V G A A L P E V A S Q C I T S
A K E D M I R L T N Y I M G V P V D A Q S P L D E I A A S T L K E V A S Q C V G
R Q R D M Q V F L N E L M G V D P D P D F V F D D V A M S A A G E L M N Q M G H

UniRef90_MOA6Q5 G F I S G W A N H L D T K V D V S P P E Y V E G T G I D L L P D R M L E G R A V

UniRef90_K5CBH0 A T L S N L A K M S D Y K I E T H I P E F F S G K Y E D L L L R R N P

UniRef90_R5UI63 S I A T S M A S L L S R P T D I G F P L I N S S K D R K T F E I P D E L C N G

UniRef90_C4Z8X6 T L I A T S M S L L L N E P T D I G F P L I N S S Y Q K T F D I P D E L C N G

UniRef90_N2AHU8 A Y M K A I G N Y T N I R I F L S P Y M F V D K N E R I S L G A A P Q T E S

UniRef90_D4H1J3 A C V S K G L F D L L Q T S V V Y A P P V T M I G H S F E E Q F F K G R F

UniRef90_MOCJ18 G F I D G W A N V L D T T I D M S T P S F V F G P A S D I V D E M G

UniRef90_Q0B5R7 A C V S S T L D E L G R K P V F F P P G L L I G A N V S F D D V F Q P N V

UniRef90_UPI000381BFDF A L V T Q L A N I L K S N I Y G S P P K A P K S H L A N S L K D I L V Q H P L F

UniRef90_UPI0003733993 A C L S G L A E Q L E L D I E L T N P S I L V A F N T P N S T L K D F F F K Q K H

UniRef90_UPI0003B53E08 S A A T A M G I M L D R L V D I S T P E T I Q M N A G D Y I Q L E F

UniRef90_N6VSS3 A Y V D S F A N F M D T T L M T P P E F I T G M G G E I L N K I F K D N N I

UniRef90_Q4W78 T F L N V F A Q Q I N N Q L S Y N A P P K L L P N V Q E I L S E H I L Q Q M P F

UniRef90_R5TEX4 S Y L T G L S A C A G L R I I L A D S A V S M D M T G A I I T S L I G T A A G S

UniRef90_A0LDG9 A F L E S F T Q M M T L E L E F E A A E F L K G S S R F L D L D L M A H S G

UniRef90_UPI0003B48D71 S A A T A M G M M L K M V D I S T P T T I R M E A G K F V D S F

UniRef90_UPI0003659CFF T F L S G L A E Q I D N H I G Y S A P R V V T S D D T S I E K H L Q Q L S

UniRef90_B7JZR1 G I M G V I S N L K Q E F H Y F P N Y I E G N I E Q F L D D K D N

UniRef90_Q2SP51 A C I T G L S Q Q L N K S S F S T P G L L V E G K S V I L D R T D Q R V L A E

UniRef90_F7NRK0 T F L N G L A D Q I D N S L S Y S A P R V L S S R Q N N V S E A L Q E T A F

UniRef90_Q8EE44 A C L T G F A E Q L S L N A K L S M P T M Y S A T S Q H Y H

UniRef90_UPI0003FEBAE9 A C L S G L A R Q V A L Q L S Y D A P S I L V R R E E P Q N C L Q E L N

UniRef90_U5F7L1 A F M E G I A S Y L K Y A I R I Q Q P S I T M D M K G S I L L N E V L I T M A V Q D

UniRef90_E1TIA3 A C V Q S V F E Q L G R H L C F S Q P T L L P L A G K K Q D A L L P G

UniRef90_K2K6E1 A C L K G I A S Q L E L E F S Q G H P I L D R T D Q R V L A E

UniRef90_UPI000378E8D2 A C V R S V F E Q L G W H I C F S Q P T L L P P S G T K Q G G L V P G

UniRef90_A6VFM3 A F V D T I A N F M N T S L N M T P P E F S T G N L G D G F L E A E L K N Y E I

UniRef90_UPI0002DA8BC4 A Y L R M L D Q L L G Q P I T F G V P P S F E M N S M Q G I L N H L V L S R H E V

UniRef90_R5WEV4 S A S T S M S S M I N D V V D I S P P T A T R V D F A G E V S D E L Q E

UniRef90_T3MPN9 S Y V N A T A S M L N M T I S V S I P D I C I D M V G A V L N V P M I L R F S

UniRef90_UPI0002D53555 A F L A G I G Q Q A G L V F A Q S Y P V I L G Q H M D V D S L V D N M R

UniRef90_UPI00035FC73F S C I G K L A E L D S V V S F L P P S I E L N Q L L M G R E K

UniRef90_I1DTE5 T F L N G L A E Q L D N S F S Y A A P R I L L S S R D E H F A D K L A A T A

UniRef90_H2CF94 S L N E M A N R T S L A I T P T V P H F V H G K A S D L L S Y I D A K E N P D

UniRef90_K1RTS2 P Y V N I T I G

UniRef90_A6UNU4 A F V D T L A N F M E T G L N M T P P N F W I G K M R D L I M N E V K N H K I E

UniRef90_U1JP32 A C L Q G F T S Q L E L S T Q L N M P P A F Y Y P V Q S A H S

UniRef90_E3BI37 A S L R G L C E Q I L D T R T Q P P V M Y S P E H H P I P S D

UniRef90_D5V821 T T S S K L A E L E T D L F S P P D V R I V E S A Q N L E E H Y H

UniRef90_Q0B028 A V I G E F G N L L E T R V V F T V P E V E L I I D V T E S D Q R L F L

UniRef90_F8AK17 A Y V D T I A N F M D I S L N M S P P F F I K G I E Y E I T E N I F G D C G V N

UniRef90_E4TZX3 T I I S R L T E E L N T K V Q F F V P S T E L I D G N A L I S Q E D I M N Y H

UniRef90_W4BLE5 A I I G E F G N F L E I K L E Y V L P D I E L I Y V T N S D Q Q L L

UniRef90_UPI000474F77E A F L N V F A N I F G T V F E P T V P E V K Q G S G I D V F P L F

UniRef90_L8JQS7 T L V T H L A D L L K N I Y G S V P S A P I Y R T A V T E N D L V L D L D L T

UniRef90_D7DU02 A F V D T F A N Y M E T S L S M T P P E Y C L N D T V S F L N E A L E N H N I

UniRef90_UPI0003940F7B A S L K G L C E Q I E V K T K I Q P P V L F E P S R Q Q P L P V

UniRef90_E8LZZ3 S F L V S F S K Q L D L S L R Q P L V L E K E P L Q V S L N S S G F L

UniRef90_Q6AMZ2 S C I G K L A E M L D T E V A F A P P S I D F T N F I I R A N H A

UniRef90_W6N889 S I I G E V G N H L D I K L D Y T L P E V K V F N T I D F R R D I K Y

UniRef90_A1UXN0 A C V S S I L D E L G R T P V F S P P G L L G E D I A L D D V F Q P D V

UniRef90_G2HVS3 S T I S K L A E D I D T N V S F S A P T I K N L T S I N Q L N N L F I

UniRef90_V6IW81 S I I G E L S N T V N I P V E Y T L P E V D V L N N A S A D H F V D

UniRef90_UPI000255C37C S M I G E L S N A V S I P V K Y T L P E I D V L D H A C A D H F V V

UniRef90_F7YS23 A S L K G L C Q Q I D I K T K I Q S P I N S I T Q L N N L F I

UniRef90_UPI00047C0DF2 S T I S K L A E D I E T N V S F S A P T I K V I N S I T Q L N N L F I

UniRef90_E1R1Q6 G V V G T L S N I L H L K L N Y S I P A Y L E G N I K Q I T D K M R

UniRef90_E8VS02 S F L T S L G S Q L D K Q F S L R Q P A I I D S F S A I G D S E K

UniRef90_D7DU03 A F L N V F A N E L N G E I N I T T P K F A K D A G F N V V E S L V I E L M E R

UniRef90_V4HC01 A I I T S I S D M M H V S L S T A M P T A Y S G T F Q D L V D K Y

UniRef90_W6EKS6 A C I K G F C E I I H G E T I F K V P S I E K R E I S E M D K Y D K I E

UniRef90_F2P8E5 S F L V A L S E Q I S T P F S V R Q P T I L E E Y M N W N H K E Y

UniRef90_UPI000288BC3E S V L G E F G N Y L N I R L S Y T L P E V K V V D N L D F K C I A E N E E

UniRef90_E2SPS8 S Y L S A L A S F A D I N I R V Q L P A V S M D M K G S I N D G L S F I L R Q

UniRef90_K6FR11 G V L G A M G T M L G L H V T Y Q P L S T A K S L E P I L A V A D

UniRef90_A6UNU5 S F L N V F A N A L K D E I N I T T P E F T K N T G F N I V E S L V L E M A D

UniRef90_F3KJ20 S F F N A L S E N T G F R I D L S T P K F K E G G I Q K L L L E P T K D V I N I

UniRef90_I4AAR8 C I V G G V S N Y L E I N L D Y S L P E V K V F N K K D F A Q D I K N N E

UniRef90_D8J2R0 G A I D G W A D S L G T A I D T R P P T P L D G S L A I P V D A E F V

UniRef90_UPI0002884D22 A I I G E L S N T V H I P V E Y T L P E V S V L Q S A R A D L L V

UniRef90_V6AQL1 S F F N A L A N E Q D C K T F S D V P G F A V D T F R S V L E F P A M E I G I E

UniRef90_B6ES17 S F L L S F S K Q L D L S L R Q P I V L D T E H L K V A L K D K H S F L E

UniRef90_UPI000477B2A6 G I M G A F S S V I K G L T Y M A P S F R D G R L K E L I L S G

UniRef90_H2IC30 S F L T S L G C Q L D K Q F S L R Q P S I I E T L P T Y S E

UniRef90_D8G3V5 G I M G V I S T V L E R G I T Y M L P S Y R E G T V K Q L V S E N N S

UniRef90_B8K6R2 S F L V S F S R Q L D J A I S L R Q P I V L E K E L L Q V S L T C N Q F L A

UniRef90_KOIMK1 S F L N D M A K Y T G F K M K C S V P G F A T D T I H G I E F P I S D I A A

UniRef90_N9VJA1 A S V E V M A E Y L G N T M E S S D C Q L L L S D G R Q N L S P A L I G E

UniRef90_L9W157 S L V D M G V A D A T G R E I E T A P A V V H D M R S S I V T D A V V N L D P R

UniRef90_F3LD62 T C F E R L G E M I E N T V E T G S P I V N S M H V P L N S I Q M E S I A N

UniRef90_B5EUV2 A F L L S F S K Q L D I A I S L R Q P S V L N S D Q L K T A L K D N H Q F

UniRef90_R6YGR0 S A A T S M S S M I N E K V D I S P P N S T R V D L T S S A I E G G L Q D

UniRef90_UPI000255BE2A A G V T E L S T K T K K K I S V

UniRef90_F7YW72 T Q I T T L T E K T G N K S I A S V

UniRef90_F8EZ83 A A M N E L N D L L G R D M G V A M S R I A F D N T E R I L L E M I R I W K

UniRef90_G5HN59 S I M R S F A T Q F N T V N L T H P A L I Q Q L S N N N L C E N N

UniRef90_UPI0002556251 A A V A E L N D F L G R D M

UniRef90_C5EFH2 A A M E N L D F L G R E M E V L T R V T A F D S A E R I L D T I S L W D K V P

UniRef90_R5SXT9 G F V D V W A A D D E D T E L E P P D R L E D E H R V V Q D A A V I D D C A F

UniRef90_B0R4J7 A M D E L N D F L G R D M R D T I R I S A F D N T E R I Q D I R S W

UniRef90_R5EW18 S L V D M G V A D A T G R E I E T A P A V V H D M R S S I V T D A V V N L D P R

UniRef90_L9W157 T C F E R L G E M I E N T V E T G S P I V N S M H V P L N S I Q M E S I A N

UniRef90_F3LD62 A F L L S F S K Q L D I A I S L R Q P S V L N S D Q L K T A L K D N H Q F

UniRef90_B5EUV2 S A A T S M S S M I N E K V D I S P P N S T R V D L T S S A I E G G L Q D

UniRef90_R6YGR0 A G V T E L S T K T K K K I S V

UniRef90_UPI000255BE2A T Q I T T L T E K T G N K S I A S V

UniRef90_F7YW72 A A M N E L N D L L G R D M G V A M S R I A F D N T E R I L L E M I R I W K

UniRef90_F8EZ83 S I M R S F A T Q F N T V N L T H P A L I Q Q L S N N N L C E N N

UniRef90_G5HN59 A A V A E L N D F L G R D M

UniRef90_UPI0002556251 A A M E N L D F L G R E M E V L T R V T A F D S A E R I L D T I S L W D K V P

UniRef90_C5EFH2 G F V D V W A A D D E D T E L E P P D R L E D E H R V V Q D A A V I D D C A F

UniRef90_R5SXT9 A M D E L N D F L G R D M R D T I R I S A F D N T E R I Q D I R S W

UniRef90_B0R4J7 S L V D M G V A D A T G R E I E T A P A V V H D M R S S I V T D A V V N L D P R

UniRef90_L9W157 T C F E R L G E M I E N T V E T G S P I V N S M H V P L N S I Q M E S I A N

UniRef90_F3LD62 A F L L S F S K Q L D I A I S L R Q P S V L N S D Q L K T A L K D N H Q F

UniRef90_B5EUV2 S A A T S M S S M I N E K V D I S P P N S T R V D L T S S A I E G G L Q D

UniRef90_MOA6Q5 D N E D E E Y V F V F R S R V K A V S 170 180 190 200
UniRef90_K5CBH0 K K D N S I L L V F I D Y K L S G K D E G V D F R M L L F P T V D S L Q R L L E
UniRef90_R5UI63 G T D I V K V T F R L T V E G D L I D S D L I Q L Y P I S I V K Q I L K
UniRef90_C4Z8X6 T D I V K V T F R L T V E G D L I D S D L I Q L Y P I S I V K Q I L K
UniRef90_N2AHU8 V A A D Q A I W V E T R F Q L S D E G G K T D G R A I M L P D G N T V Q M L M R Q
UniRef90_D4H1J3 S D N D F A I M L K T N F H I S E K K T E G F L F L V N S H S V E V Q L K Q
UniRef90_M0CJ18 G W P D E E I A F V K D S C L I V A S D A D V E V T V Y T F P Q L J A D L V Q L I Q
UniRef90_Q0B5R7 L A W S V A L L L E V N F G L E D H A F R A H F V M L M A E D S I R L M G D
UniRef90_UPI000381BFDF Q E T H Q T L L F E I K F F I K D I N L Y C D N I I S L K I S S L E N L R N
UniRef90_UPI0003733993 P N D D K F V E I A F D V K I L G K E I K C N M V Q M
UniRef90_UPI0003B53E08 K D D D I T M A F K S T M H I C E V G E S F E V L T V L P N E S V D K L F K
UniRef90_N6VSS3 T W D L A L K V N I N Y Q V T D Y S F N C N M I L L I P E T A I T N I K H
UniRef90_Q47W78 F P G G I C I G N N F S T E A S L Q Q H T L S G F V V L L F T S Q A M R R L R R
UniRef90_R5TEX4 G N E E P V F V Q I N M D F K T G D D Q N D L I A T Q M I Q L Y P F R L A K A I
UniRef90_UPI0003B48D71 K N D D R F V Q I N M D V K T T D Y A F H C D M V L L I P G E A I H S F Q Q
UniRef90_UPI0003659CFF F T W E L A L K V D I S Y Q V K T D Y A F H C D M V L L I P G E A I H S F Q Q
UniRef90_B7JZR1 A I N T T L L L A R A N F F I K K M N I R G D I I I F N L G S F D N L I S
UniRef90_Q2SP51 P Q D S E A L L V E I Q F K I E A H A F F C E L L I C I A N E S I A S V I T
UniRef90_F7NRK0 H W E L A L K V D I S Y Q L V D H S F N C D M L L I P G E A I Q K I L E
UniRef90_Q8EE44 Y R W A S T L M M E V E F K V E V S Q Q F S D S K T V I C L E E A S V Q T L L A
UniRef90_UPI0003FEBAE9 L N E H L A M V L E I R F E V E A H Q V F S C D L L I C I T E R T A G I V I R
UniRef90_U5F7L1 Q H Q A L R I S R S F W V S S C E T P N E L I F L V K G N S V D K L C A
UniRef90_E1TIA3 G R W D V A L L E I H F T L E E G G F G A R M V L L L P D A E A L D H F L E
UniRef90_K2K6E1 L G D K A V L C I R F G Y Q I P D E E H V Q E L V L L V T P D S L P A L E R
UniRef90_UPI000378E8D2 G R W Q M A L L L E I H F T M E E G G F G A R M V L L L P D A A I R G M M E
UniRef90_A6VFM3 N S E D T L E T F T K E T F S K G I G S G F E V Y I V M N P E S T D K L F E
UniRef90_UPI0002DA8BC4 R Y V L L V S T T F R L C D T A V D S Y M M L V S G V A S S S L I R
UniRef90_R5WEV4 L S G Q T F A L V S F R M V I G D L V D S Q T M Q L Y P L E F A R T I Y Q
UniRef90_T3MPN9 D V I G D K V L F I E N K A M S D N Y F T S H I L M I P E M S L R E I L V
UniRef90_UPI0002D53555 I K T W K R T V T I E V S Y A I D D T N I K C D L L L L V D E S L P L D A
UniRef90_UPI00035FC73F A G Y S K V L I S T V L E F E E E Q I T G H L F I L F D D E M F V W L E K
UniRef90_I1DTE5 Q Q W Q L A L Q V D I R Y Q L T D Y S F H C D M L L L I P G E A V L R L R Q
UniRef90_H2CF94 R D S R F I Y I L S T D F L R E D T E L L G R M F M L P N R P E L M D L V K
UniRef90_K1RTS2 A K D S I E T F K S E I F S N N I G S G F E V E I V M D P E S T N N L F E
UniRef90_A6UNU4 N E W S S L I I E V E F F I E Q M Q F D A R I L I G L S E G S I E Q L L
UniRef90_U1JP32 K W S Q A I I L H V S F L V E S A S F E T K T I I C F
UniRef90_E3BI37 V E Y N H I I I I S T L I E F E V Q N I H S E L V M M L K D D S I G F M K S
UniRef90_D5V821 K D G V Y I L L I H T T F T V D E I I Q V Q G V I M I A L N L N S V S C L L Q
UniRef90_Q0B028 N Q D L V L T F K S G L F S Q G I G S G F E V I V M P P N S I N T L F K
UniRef90_F8AK17 R I I I I S T Q M E F E H Q N I N G H I E I L T M I E S L K A L I D
UniRef90_E4TZX3 Q N E V Y I L L I H T S F L A D T D V T G I V I A L S M N S I S S L L A
UniRef90_W4BLE5 S N Q Q R V L I T E A T F R V T G E T L T G E L L I V P E
UniRef90_UPI000474F77E R P V L F T V N T I F K S S H Q Q V D M S M V L I F D I P N L E K V M N
UniRef90_L8JQS7 G K D D L I F T F S E L V S K G I D S S F E V F M A M N P E S T A K V S E
UniRef90_D7DU02 S E W K L S L I M E I S F L I E K D S F A A R T I T C F A D R E L D R M L E
UniRef90_UPI0003940F7B E E Y D Q D I F T I E F V Y K A E N L D V A C D I I F L M D N E S L D A T I Q Q
UniRef90_E8LZZ3 S Q F N K V I V I S T I L A F E E L N I N G K I I L F S D E M F A W L E N
UniRef90_Q6AMZ2 K Q Y K N V L I L Y I T F V I D E I E I E G A V I I D L T L Q S L K E L M K
UniRef90_W6N889 L A W S E T I L L E V N F G V A D D G A R T H F V M L L A E D S I R Y H M
UniRef90_A1UXN0 S K Y E K V I I S T Q L N F G V D D L N I H A E L F I F T D N S I L Y I K E
UniRef90_G2HVS3 S E E Y R L V L M M F L A F D I E E T E I A G A I V I N M T L K S L D D I L N
UniRef90_V6IW81 F G D N Q L V L I M Y L D F D I L E G T E I A G A I V I N M S L N S L E E L D
UniRef90_UPI000255C37C S Q W K L S L I M E I S F L V E K A S F S A K T I I C F
UniRef90_UPI00047C0DF2 S N Y E K V I I I S T K L E F E D L N I H G E L F I L T T D N S I L L F I K E
UniRef90_E1R1Q6 K D D D A T L L I T A K T R F R A E S L D L E G D L I F F L G L S S Y Q E L V D
UniRef90_E8VS02 E S D Q E L F T V E Y T Y F A E S L D F E C E V L F L I D K P S V G I I Y E
UniRef90_D7DU03 N V I E Y A L V F D T K I E V V I G R F P L N C N I I M I N P E T I N N L
UniRef90_V4HC01 Y A G D T V M S V G M H F E I L K D S Q V R G D L L F V Q D R V I E E F L E
UniRef90_W6EK56 G Y D N V I V I K T A L D I E K E N I L G H M F L L N N E M L D H L K N
UniRef90_F2P8E5 Q S D D Y F T V E Y T Y Q A E T L D V E C E V L F M M D S Q S T K I I
UniRef90_UPI000288BC3E Y L Y L M L M Y I T F N I E G E A I E G A I I N V T L K S I E N I L E
UniRef90_E2SPS8 E K E A F W L D H E L K L S A S A K P S H I L F I M N I D S I Q N L M A
UniRef90_K6FR11 A C Q T V T L Y V R A H F V L E R F Q V T G D I L V V L A Q E G F D A L T A
UniRef90_A6UNU5 K G I N N A L V E D N T I D I V G R F P V R S N L F I L I D P E K L E N L
UniRef90_F3KJ20 T D D V V I T E V L L K G T Q T G I E H M L I I Q H T E H A R K L L S
UniRef90_I4AAR8 H Y A R N M L L L Y I T F I D E T E I D G A T M I N L T L I T S L Q E L L M S
UniRef90_D8J2R0 F E S R L E S V I E T G A E F G I Y M L P E W E P L A A V L D
UniRef90_UPI0002884D22 S D A S Y H L V L M M Y I T F N I E G T M I D G A L V I N M T L R S L D E I L E
UniRef90_V6AQL1 S Q S L I A T T A E F Y S T S G L K M R M L I I L D P A N A K K L L E
UniRef90_B6ES17 D Y D K D F T I E F V Y S A E S L D L K C D V I F L M D N D S L D A I K T
UniRef90_UPI000477B2A6 D S D S N Y T I L S G Q T H Y E I L P E Q K V A G N M V L F K V D P L E R L A
UniRef90_H2IC30 Q Q G K G E L F T I E Y T Y M A E S L D F E C E V L F L I D K P S V E I I Y E
UniRef90_D8G3V5 S V Y A I A L L G H I Q F K I E E A Q E Q S K Q Q L L H S F S K I L E
UniRef90_B8K6R2 G Y D E I F T I E F V Y K A E N L D I A C D V I F L M D N D S I D A I E Q
UniRef90_K0IMK1 T D N I L V I A E S E L V G K I T G T R I K V L L I M G I T D A R K L A A
UniRef90_N9VJA1 A P E S K T I V I H Y R V K I K D M V E S
UniRef90_L9WI57 D R F V V T G A T L E S A E T E L D C D I Y T L L T P D E L S R
UniRef90_F3LD62 S H Q L V S V E I N Y H I E N N T F N C D L L L L F P E D T L D E L T E
UniRef90_B5EUV2 L G E Y E K D I E T I E F V Y S A E S M D L K C D V I F L M D N D S L S A I K S
UniRef90_R6YGR0 M V I G K T F V Q V S F R M T I G D L V D S E I M Q L Y P F D F A K L I Y T
UniRef90_UPI000255BE2A T D Q S L L L V R L H Y L I D G V V E S D I S Q V L G I P D L E E L E
UniRef90_F7YW72 G S E N H I L L S V H L D Y K V K T I E M N I D C Y L L F
UniRef90_F8EZ83 H L L L I R F H L E I E G
UniRef90_G5HN59 V F E S Q I V L S S T Q G T C R F A V L P D V E S F
UniRef90_UPI0002556251 N A E D S V L L M G M H Y V I D G V V E S
UniRef90_C5EFH2 A E D S G V L A V T Y R M K I K D M V E S
UniRef90_R5SXT9
UniRef90_B0R4J7
UniRef90_R5EW18
UniRef90_G5HN30

UniRef90_M0A6Q5
 UniRef90_K5CBH0
 UniRef90_R5UI63
 UniRef90_C4Z8X6
 UniRef90_N2AHU8
 UniRef90_D4H1J3
 UniRef90_M0CJI8
 UniRef90_Q0B5R7
 UniRef90_UPI000381BDFD
 UniRef90_UPI0003733993
 UniRef90_UPI0003B53E08
 UniRef90_N6VSS3
 UniRef90_Q47W78
 UniRef90_R5TEX4
 UniRef90_A0LDG9
 UniRef90_UPI0003B48D71
 UniRef90_UPI0003659CFF
 UniRef90_B7JZR1
 UniRef90_Q2SP51
 UniRef90_F7NRK0
 UniRef90_Q8EE44
 UniRef90_UPI0003FEBAE9
 UniRef90_U5F7L1
 UniRef90_E1TIA3
 UniRef90_K2K6E1
 UniRef90_UPI000378E8D2
 UniRef90_A6VFM3
 UniRef90_UPI0002DA8BC4
 UniRef90_R5WEV4
 UniRef90_T3MPN9
 UniRef90_UPI0002D53555
 UniRef90_UPI00035FC73F
 UniRef90_I1DTE5
 UniRef90_H2CF94
 UniRef90_K1RTS2
 UniRef90_A6UNU4
 UniRef90_U1JP32
 UniRef90_E3BI37
 UniRef90_D5V821
 UniRef90_Q0B028
 UniRef90_F8AK17
 UniRef90_E4TZX3
 UniRef90_W4BLE5
 UniRef90_UPI000474F77E
 UniRef90_L8JQS7
 UniRef90_D7DU02
 UniRef90_UPI0003940F7B
 UniRef90_E8LZZ3
 UniRef90_Q6AMZ2
 UniRef90_W6N889
 UniRef90_A1UXN0
 UniRef90_G2HVS3
 UniRef90_V6IW81
 UniRef90_UPI000255C37C
 UniRef90_F7YS23
 UniRef90_UPI00047C0DF2
 UniRef90_E1R1Q6
 UniRef90_E8VS02
 UniRef90_D7DU03
 UniRef90_V4HC01
 UniRef90_W6EKS6
 UniRef90_F2P8E5
 UniRef90_UPI000288BC3E
 UniRef90_E2SPS8
 UniRef90_K6FRI1
 UniRef90_A6UNU5
 UniRef90_F3KJ20
 UniRef90_I4AAR8
 UniRef90_D8J2R0
 UniRef90_UPI0002884D22
 UniRef90_V6AQL1
 UniRef90_B6ESI7
 UniRef90_UPI000477B2A6
 UniRef90_H2IC30
 UniRef90_D8G3V5
 UniRef90_B8K6R2
 UniRef90_K0IMK1
 UniRef90_N9VJA1
 UniRef90_L9WI57
 UniRef90_F3LD62
 UniRef90_B5EUV2
 UniRef90_R6YGR0
 UniRef90_UPI000255BE2A
 UniRef90_F7YW72
 UniRef90_F8EZ83
 UniRef90_G5HN59
 UniRef90_UPI0002556251
 UniRef90_C5EFH2
 UniRef90_R5SXT9
 UniRef90_B0R4J7
 UniRef90_R5EW18
 UniRef90_G5HN30

Q
 Q
 A L G I
 A L
 N I D V
 S L D
 A L E
 A I
 V L D
 A V E V N
 E L D
 A L D
 A L E
 A
 R I
 K L
 A I D
 S L E V S
 A L
 R L
 A L D
 K L
 G I E A S
 R
 R L G L E
 K L
 S L
 M L D
 R I
 K I
 A L D
 K I D
 K L
 R
 K M D
 L I
 K L E
 R L D
 I L E
 A L
 K L D
 K L
 T I D
 Q I
 K L
 S F G
 I M E
 K
 T I D
 K I
 R L E V
 A L D
 S
 K I E
 R
 N I D
 R
 V L E
 E I D
 I M E L
 I L
 S T G
 V L
 I L E
 R

UniRef90_U3ALJ1 H V G P L S F G E L I R R K F G G E R A V A V A Q R F V G G L H G E A L V C L

UniRef90_G2MKD7 S V S V L T E R D L R R K F G G C V G V T V E L D G G F P G E T L F V F

UniRef90_R7C6D7 T A T R V D F G E G L D E L S G Q L F A R V S F R M E L G D L V D S E T A M Q L Y

UniRef90_I2Q7P5 E I R V M S R P S L T A A A S D C P A V C E G V F L P F S G A M R G M T A L A F

UniRef90_F5YPU0 T V S A S T R D S L V E K L P D M V T A V K A D F S G G F P G E H V F L F

UniRef90_P70872 E V K A V Q A E T F I R G L P E Q V V K V D L P F T E G T R A A H G Y V L

UniRef90_E0RS84 D V A L V D R G G L E G S L H G L D R Y M L T Q R M R T A D D L H T Q G M L V L

UniRef90_K1YR18 R T A L V D A G E L S T F L G E S P F R F T V G F D G A L S G R A V L S F

UniRef90_F5RGM2 K L S I R Q N D Q L L T N T K E P F I V V L G E Y E G G L N G L Q I L S L

UniRef90_W0K2M8 H V A L A D R E G L L R S L E A L D E C V I A Q S M R T P E D R R A D A M L V L

UniRef90_UPI0003684211 N C E V A P Q N S V V E K V L G A M S L F V F S M K W D G L D D A P A R L V T

UniRef90_A6D2E5 R V G E L T F S E L T M M I Q D R D N S C A A A Q R F V G G G L H G E A L V C I

UniRef90_G7M7N0 G L F V D P S E N A I D E R F I E S P G V V I L G L I G D I K G N I Y G L

UniRef90_Q67JG3 S I D L F P P Q Q L T M Q L E K R T K D L K S V E M V F T G E F Q G N T Q L M F

UniRef90_UPI00041DD3A3 I V E V L T R D D V L K K L P E M V V A V M T D F S A G L T G D H L F L M

UniRef90_S3KEL5 L C E S A P Q N S V V E K V L G A M S I F A F S M V W D G L D D A P A R L V T

UniRef90_H0UPQ7 V T E L L N R D A F L R N V P E M A V A T L T D F D K G L S G E H V F L M

UniRef90_E7NXN4 T T G Q L Q I K E V Q F F D Q Y I W I E I G M T G Q M N G N I V F G L

UniRef90_UPI00037671F9 L P G Q H G L K E L V L V D N Y V W I Q I G L K G Q M N G N V F G L

UniRef90_UPI00028978D1 D L K K V G M D D I A N H L P R F S A V F E G S N A Q N G H R A D V M L V F

UniRef90_R7BHR1 S T G Q L A I R D I K F Q D N H V W I Q I G L T G Q M N G D I V F G L

UniRef90_G5IMC0 V M P M L G F P E L Y A A S T R A K S L G V S V L V G F T K Q I R G N V V Y N M

UniRef90_UPI00047BB832 N D V K L K E R L I N S P G V V I I G L M G D I K G N I Y G I

UniRef90_UPI000370D24E D V K L K K G I E L N M R D N D N Q K N H I I V S Q G F V G G V L G E N I L Y F

UniRef90_UPI000475BC62 E F E D E T V A I M I G L T G E M K G Q V L M A F

UniRef90_R6K680 S T G Q L G V K E V V I S E Q Y I W I Q I G L T G Q M E G D L V F G L

UniRef90_F8F9U6 S V E V S N R S D V L K K L P E M V V T V M S D F S A G L T G D H L F L M

UniRef90_U2K280 Y V K T T E F A S D S V I M I G V T G E V R G Q V L M S F

UniRef90_R7HAF1 Y V K I T E F S E E S V A I M I G I T G Q M K G Q V L M A F

UniRef90_R6KH48 T V N I G S V S S N Q V S V L L G V K G Q L S G Q I I C S F

UniRef90_UPI00047EEEE9B S I G V T G S L E G F I Y F S M

UniRef90_L0K8W0 N V E L V D D H I W I M I G M T G Q L S G N I V F G L

UniRef90_E3E6M6 T T T V G D V N N L H Q M L S G K M V E A K V G Y T G S I N G N V Y F M

UniRef90_C0R179 V T E L S N R E A L L Q K V P D M A V A V T I D F E G A L T G D H L F V L

UniRef90_C8PRE2 V V I L I G V T G E M R G Q V L S I

UniRef90_C4Z6F9 I T G K L G M K Q V V T L E D H L W I Q I G M T G Q M K G D I F F G F

UniRef90_W2E850 S T G M L G I K D I E L I D N H I W I Q V G M T G Q L S G N I I F G I

UniRef90_S9UVD1 N V R N L T I E E K K D K I A S S I G Y Y G D M D G I I L V F

UniRef90_W4DL03 I N D I K R G K I S L R G K T I E S M G V L I I G I V G D L K G N I Y E T

UniRef90_Q30Q50 V M P Q M G F P E L K M G V K T K N A V S V S V I V G F T K Q I R G N V V Y N M

UniRef90_F0K6Z7 G F Q S V E R G Q I R L G E E F V E G R G V T V L I G L T Q D V Q G N L A Y N F

UniRef90_K0B1U2 G L K D M N F S P D S V I M I G L T G D V R G Q V I T E F

UniRef90_D8GI86 Q V N F T N R E T L L G Q L P D T V T V V K A D F N S G F P G E H L F I I

UniRef90_U2N763 T L T K D K D E M F A S V T A P F Y G V L G E Y A G A K G M Q I L A V

UniRef90_I0GT18 S V Q K V E R D M S S L L Y L M Q S K I T G E L K G Q A F F M L

UniRef90_UPI00038015DA F V Q K K L V P T N D I T V I L G I F G Q L E G Q L I C T M

UniRef90_UPI00047E1009 R G D L Y L K S T C M P V M G V A A I V G L A G D V E G R V I F D M

UniRef90_C8PNT4 R G E L Y L K S T S M S V L G V A A I V G L A G D V E G R V L F D M

UniRef90_V5WHI7 T I E M M T N S Q V Q N I I D D K N G K I A S S I G Y Y G D M D G M V L V F

UniRef90_B6BKX4 R G E L Y L K S S S M P V L G V A A I I G L A G D V E G R V L F D M

UniRef90_H9UJN3 I T R G K L S T R E K A M P S L G V T V L V G F T K S V R G N V A Y N M

UniRef90_UPI000378BD12 I S D L K R K L S V K G K T I K S P G V L I N V G L V G D L R G N V I Y G T

UniRef90_UPI00047E0300 T I E M M T N S K A I K Q S A Q V Q A T K I A S S I G Y Y G D L D G M V I L V F

UniRef90_T0JPN0 E L K E V S L E A L A E R L P H F S M V V E G R A F S E K E E V R M L Y F M

UniRef90_F7K3U6 R G D L Y L K S T C M P V M G V A A I V G L A G D V E G R V I F D M

UniRef90_D6MDA6 V I I N L G I V G D A K G N V V Y I T

UniRef90_F7IW81 T V Q V T D K E S F L S M L S D E V V V V A M D Y N E G V A A D H G Y V V

UniRef90_U1WZZ3 K V D K I E I A D K N D K I A S S I G F Y G D I D G M V M L V F

UniRef90_H9UKU6 K G K I Y R K D V P Y R S E S T L V L I G I T G G F H G S V M S F

UniRef90_E0UPN0 K G K I Y R K D V P Y R S E S T L V L I G I T G G F H G S V M S F

UniRef90_G2FR16 A I E Q V S F D E F V H S V P S F T L M G V F Q S A P L N G M Q I L E I

UniRef90_UPI000378BE85 I N V G V L G P V Q G A T L I G M

UniRef90_UPI00047E1009 I G F V G S A E G S L I Y S F

UniRef90_S0FKI9 K V G F T N R G K I F T K E Q F V D S L G V S I Q V G M S S Q S D G N I I F N M

UniRef90_A0A011SEQ4 R G D L F L K S S S M Q I M G V A A M V G L A G D V E G R V L F D M

UniRef90_T0IQQ1 G D M T M E E E I Y R R K V A A V V N V T G D I E G R I F D I

UniRef90_F7YV75 E L T K I E F D L S N N N Y V T S S L G F Y G D I D G M V L I F

UniRef90_I9NW34 R G E L Y L K S T T M P V L G V A A L V G L A G D V E G R V M F D M

UniRef90_F5YQ12 D V A V L N P D T N P F A T L E A P A V A V S V A Y V D G V T G A N V F V M

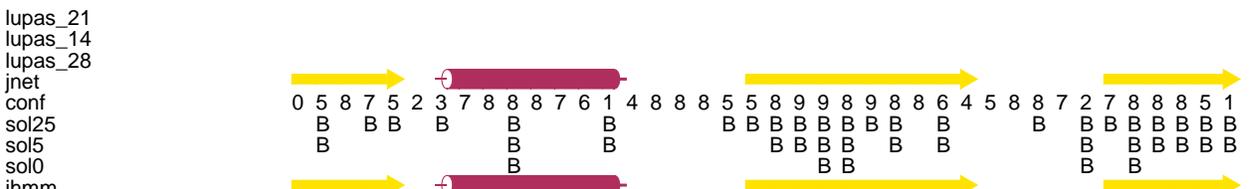
UniRef90_Q11QT1 I K R T N I K K K S K L Y V D S E V S T I I L L K G G L Q G N I V L S M

UniRef90_B9L9J7

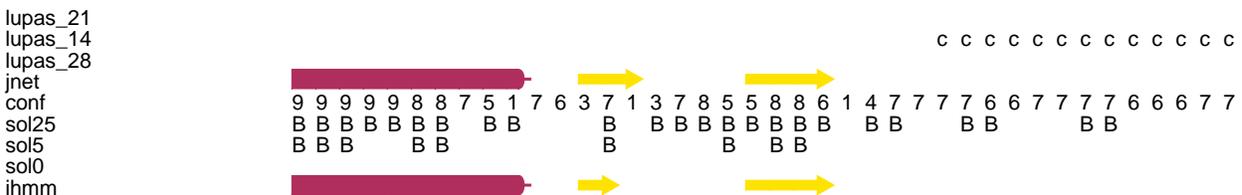
UniRef90_F8F2J5

UniRef90_D3F416

UniRef90_S0FLV1



UniRef90_U3ALJ1 S F L S S L G Y Q L N K S F S L R Q P T L I 130 140 150 160 D N F I P Y S D
UniRef90_G2MKD7 E Y L D G L A A R L G G P V E L S P P T Y Y D H L D D A T L L A D
UniRef90_R7C6D7
UniRef90_I2Q7P5 G V L G A M G T M L G L H V D Y Q P
UniRef90_F5YPU0 T Q I T T L T G K T G N K S I A N V A P E A A N V P K A T A A L P A G E F
UniRef90_P70872 F A A T S M S E F F Q G M T V D M S P P T I K V V K L L E E M E K I S G I
UniRef90_E0RS84 P V V T S L G D V S G M T I L T A P
UniRef90_K1YR18 A A I A V L A D Q R G E R L K V S L P V L A I N Q A G E V A A Q E L L G T I R G
UniRef90_F5RGM2 A C R G G L G G A F G L Q A E A A Q P A V D L T D A E S G F S L D D T L H
UniRef90_W0K2M8 G F V D V W A E G A D T T I D I E P P L E V T D E D R M V Q D A A
UniRef90_S2YCW2 S V S Q S M T T V L D Q E V S H S L S S M D L I E T L K D F P V A K F
UniRef90_UPI0003684211 A C T L G L A G A F G W Q I E A L R P R V A L
UniRef90_D1B6B2 S A L T S I S S G L L K
UniRef90_A6D2E5 S F L V S L S E Q L G L E F S L R E P L R I E D F S P E N S M L N A N E N
UniRef90_G7M7N0 N V A T N F S Q D N I T N I S T P T L V H G K F T A N A S S D K V V C V T M
UniRef90_Q67JG3 G T C I E L E Q L G F S A D I S P T I M I G A R S R I
UniRef90_UPI00041DD3A3 G I M G V I S T L C E Y G I T Y M I P K Y K E G D L R N L L F G S L S P K Y S
UniRef90_S3KEL5 T Q I T H L S S
UniRef90_H0UPQ7 S A L T S I S S G M L G A R L A P K N T S G G L S D F S W V P F D S L
UniRef90_E7NXN4 T E L T S L A
UniRef90_UPI00037671F9 N A S T I L F N Q G V K V D I T P P K V V Q S K A K Q A L T V P L M M E G I G
UniRef90_UPI00028978D1 N A S T L L Y N S Q G L A V D I T P P Q I I G S T S F A A L T V P L I M E G I G
UniRef90_R7BHR1 N A A T V L S T K G K I V D I T P P T I I Q G D F R L S S S Y A Q N I C V P L
UniRef90_G5IMC0 A S L S E M G D F I E
UniRef90_UPI00047BB832 N A S T M L Y N Q G V H V D I T P P R I V
UniRef90_K9CJB1 N T A T N I T G L G L D V D I S T P S L T V G S D F E V
UniRef90_U5MWW76 N V A T N F S Q N V S V N I S T P T L I Y G K F T A N A S S D K V I C I P M
UniRef90_UPI000370D24E T A A T G F A N L G V N I D I S T P T L L S G E N V S V M S S K Q V L S L Q L
UniRef90_UPI000475BC62 T L I R V L A T Q F N T V I R T T H P A L V P N R G D D P A K T A K E D E N Q E
UniRef90_R6K680 N A A T L F S T K G I V I D I T P P T V C Q G S M T I T Q T Y A Q N I C V P I
UniRef90_F8F9U6 N A S T M L F N Q G V V V D I T P P K L M V Q A A T E A K K A L T I P L I M E
UniRef90_U2K280 T E I T N L G
UniRef90_R7HAF1 N A A T I L S T K G I A M D I T P P T L C R G N V Y L K Q S Y S Q N I C V P L
UniRef90_R6KH48 N A A T I F S T K G I A V D I T P P T V C R G A M T I T Q S Y A Q N I C V P I
UniRef90_UPI00047EEE9B T T A T E L S K E E C I I D V T P P I V
UniRef90_L0K8W0 N S T T K L S D L G Y Q C D I T P P S I A I G D N M E I K G E S L I I P L H T
UniRef90_E3E6M6 N A S T L L S S Q G I V V D I T P P Q V M
UniRef90_C0R179 V S D S A L S S R F G G S F T N S P I E T S I
UniRef90_C8PRE2 K E I S A F
UniRef90_C4Z6F9 N A A T V F S V R N I G I D I T P P T V G R G T G K I D T M Y A K N I A I P L
UniRef90_W2E850 N A S T M L Y N Q G V K V D I T P P R V W H
UniRef90_S9UVD1 N A T S L M Y N Q G I S V D I T P P Q L L I D H P G P I Q E V L A V P L L L D
UniRef90_W4DL03 N A S T I L S N Q G V S V D I T P P K L M K S E G M S I L
UniRef90_Q30Q50 K I K T L L S D E N I S V N I T L P R T Y Q D
UniRef90_F0K6Z7 N A A T N F E E D S V N L D I S T P A L M Y G E F T A S A N Y G K V L C I E M
UniRef90_K0B1U2 N A S M N Y S N Q G L T T D I S T P V L M G K D I N I V N T K E I I C I N M
UniRef90_D8GI86 N A S T S F S N E G I R I D I S T P T L M Y G N F K A
UniRef90_U2N763 N A A T N L S S Q N I S I N I S T P T L I D G D F K S N S D L A K L I S A E L
UniRef90_I0GT18 N A A T N L T G M G L E V D I S T P S L S I G E N F Q V K I S D E
UniRef90_UPI00038015DA N A A T H F S S Q N L L V D I S P P S L V V G E A
UniRef90_V2XLW0 N T A T L F S S Q I G I D I T P P T V G K G G M S F N T S F T K N L C I P L
UniRef90_F5YEV5 T E I T A L T N K T G
UniRef90_M3CUC6 A V T E S M S T L M E K E I T H S L T G I D I V N Q G E D F A V D N Y T K E Q W
UniRef90_UPI000378BE85 N F L F A L T K R L K L S S L A E T P V L S E N Q A F N H H K L L Q K D V K K Y A
UniRef90_UPI00047E1009 N T A T E L S Q D Y V I D V T P P V V N N G T S T F H S T S S F I T L P
UniRef90_C8PNT4 Q A V T K L H D L G F K F D L T P P A L F T G D N M S I S S S D I E A L I V
UniRef90_V5WHI7 Q A V T K L H N L G F S F D L T P P A L T T G K D M E I S D N K V E A L I V
UniRef90_B6BKX4 K I K T L L S D E R I S I D I T P P R T Y N D
UniRef90_H9UJN3 Q A V T K L H N L G F K F D L T P P A I F T G D N M E I S D P K V E A L I V
UniRef90_UPI000378BD12 N A A T N L A S E M D F E V D I S T P S L T L G D N F S V K I S D I Q Y L V I
UniRef90_UPI00047E0300 N A S M G F S E E D I S V I D I S T P T L M Y G D F T A T A S S D K V I C V E
UniRef90_T0JPN0 K I K T L L S D Q N I S V D L T L P R T Y N D V L E V V Q D R K G V Q V E L S
UniRef90_D7K3U6 T S V T E L R N F L A R D M Q Q
UniRef90_D6MDA6 N A S I N L S E I G V N V N I S T P T L L Y G E D I Q I M N V D K I L C I Q L
UniRef90_F7IW81 Q A V T K L H D L G F K F D L T P P A L F T G E N M K I S N N D I
UniRef90_U1WZZ3 A C C T E L I N S G Y E V N L T P P I I N E G E S K F R S V H R F I S I P F Q
UniRef90_H9UKU6 P V I T A V G D K V D E T I M T V A P E
UniRef90_E0UPN0 K V K T L L A D E H I R V D I T L P R T Y H D
UniRef90_G2FR16 Y T A T L F S R E N I V D I T P P T I L T G D N I Q L S I P N T V V V C I P
UniRef90_S0FKI9 N T A T L L Y N K G I G I E I T P P S L L L G E N L Q I S P S K M K T I C I P
UniRef90_A0A011SEQ4 S F E S A W K E I K E I D V S L E D T E T K P Q L L Q
UniRef90_T0IQQ1 N V C I N F V K S G T N G M D I S P P T L L I G D G Q V R L A V I P N I I V V D F
UniRef90_F7YV75 S M A V N L E K I G V K I T I S P P T V V A G K E L K V T V E G F L P V G V F
UniRef90_I9NW34 H A S T S L N Q I G F T I K I N P P L F L Q G N G
UniRef90_F5YG12 Q A V T K L H D L G F K F D L T P P A L F T G D N M E V
UniRef90_Q1IQ11 N A V T A L N D Q G F R F K I H P P Q V H K D
UniRef90_B9L9J7 N T K T E F A K H D V I Q I N M T L P K V F D D
UniRef90_F8F2J5 Q A V T K L H D L G F R F E L T P P A L F T G D N M E V S D H E V E A L I V
UniRef90_D3F416 A A A A I G V V L G Q D V E I A P P E
UniRef90_S0FLV1 T S S T M L A S L G V S L Q I S P P M V I F E S C D I N L H E T L A V D F E T



UniRef90_U3ALJ1 M E V
UniRef90_G2MKD7
UniRef90_R7C6D7
UniRef90_I2Q7P5
UniRef90_F5YPU0
UniRef90_P70872 K
UniRef90_E0RS84
UniRef90_K1YR18 R
UniRef90_F5RGM2
UniRef90_W0K2M8
UniRef90_S2YCW2
UniRef90_UPI0003684211
UniRef90_D1B6B2
UniRef90_A6D2E5 Q M E L
UniRef90_G7M7N0
UniRef90_Q67JG3
UniRef90_UPI00041DD3A3 K
UniRef90_S3KEL5
UniRef90_H0UPQ7 R
UniRef90_E7NXN4
UniRef90_UPI00037671F9
UniRef90_UPI00028978D1
UniRef90_R7BHR1
UniRef90_G5IMC0
UniRef90_UPI00047BB832
UniRef90_K9CJB1
UniRef90_U5MW76
UniRef90_UPI000370D24E
UniRef90_UPI000475BC62 M E F S
UniRef90_R6K680
UniRef90_F8F9U6
UniRef90_U2K280
UniRef90_R7HAF1
UniRef90_R6KH48
UniRef90_UPI00047EEE9B
UniRef90_L0K8W0
UniRef90_E3E6M6
UniRef90_C0R179
UniRef90_C8PRE2
UniRef90_C4Z6F9
UniRef90_W2E850
UniRef90_S9UVD1
UniRef90_W4DL03
UniRef90_Q30Q50
UniRef90_F0K6Z7
UniRef90_K0B1U2
UniRef90_D8GI86
UniRef90_U2N763
UniRef90_I0GT18
UniRef90_UPI00038015DA
UniRef90_V2XLW0
UniRef90_F5YEV5
UniRef90_M3CUC6
UniRef90_UPI000378BE85 R L D
UniRef90_UPI00047E1009
UniRef90_C8PNT4
UniRef90_V5WHI7
UniRef90_B6BKX4
UniRef90_H9UJN3
UniRef90_UPI000378BD12
UniRef90_UPI00047E0300
UniRef90_T0JPN0
UniRef90_F7K3U6
UniRef90_D6MDA6
UniRef90_F7IW81
UniRef90_U1WZZ3
UniRef90_H9UKU6
UniRef90_E0UPN0
UniRef90_G2FR16
UniRef90_S0FK19
UniRef90_A0A011SEQ4
UniRef90_T0IQQ1
UniRef90_F7YV75
UniRef90_I9NW34
UniRef90_F5YG12
UniRef90_Q1IQT1
UniRef90_B9L9J7
UniRef90_F8F2J5
UniRef90_D3F416
UniRef90_S0FLV1

lupas_21
lupas_14
lupas_28
jnet
conf 7 1 5 9 9
sol25 B
sol5
sol0
jhmm

1



10

20

30



40





100





150

160



