

1 10 20 30 40  
QUERY L F D E V V G A F L K G D A G K Y Q A L S W V E E Q Q G G G I S A G L I E K F Q S Q G  
UniRef90\_W1J959 F F D Q I A N L L S R G K N Q Q I Q H M V D W V E E Q Q G G G I S A G L I E K F Q S Q G  
UniRef90\_B6XDE9 L F D Q M L S M V S A G G D K L Q M D Y S S A I L Q W V E E K Q Q G G G L P A G A V I V D D K F F N T R Q E  
UniRef90\_U2NMT8 L L D G L V G A L S G G K G Q M D Y S S A I L Q W V E E T Q Q G G G L R G L I E D K F F E N S Q Q  
UniRef90\_D2TWN9 F L D Q L T S M V S G G E K F N Q Y K N I L S W I E E T Q Q G G G L R G L I E D K F F E N S Q Q  
UniRef90\_K8W6X2 L F F E Q M M G M V A G G E K M Q Q F K S V I L N W V E E T Q Q G G G L R G L I E D K F F E N S Q Q  
UniRef90\_B4EWC4 L F N Q I A S L L G G E K I N Q F K T V L E W V E E T Q Q G G G L R G L I E D K F F E N S Q Q  
UniRef90\_S3IGD8 F F D Q I A G S L L N G D A G K Y Q A I L S W V Q Q Q Q G G G V Q A L L D K F R Q Q G  
UniRef90\_UPI0004637858 L F D Q V A G M L L N G D A G K Y Q A I L S W V N N Q Q G G G V Q A L L D K F R Q Q G  
UniRef90\_G9Z4W5 L F D Q L T G M L G G G E G S Q I T A I L S W I E N Q Q G G G I Q Q G I L L A K F R Q S E  
UniRef90\_K8VY44 L F D Q L I T L A A G D K M N Q F Q S V I Q W I D E Q Q G G G L T G V A N K F F N Q Q G  
UniRef90\_UPI0003624B12 L L D Q V T G M L G G G Q N K F Q A I L G W V E N Q Q G G G I Q Q A I L L T R L R N G  
UniRef90\_UPI000329BBA7 L F D Q V A G M L G G G D A A K Y Q A I L S W V N N E Q Q G G G V Q A L L D R L R N G  
UniRef90\_Q21VQ7 L F D Q I L S A T G G G G N S P L G A I L Q L V N N P G G G L A G L I L Q S F E T G G  
UniRef90\_A6SUG2 L L D Q L A G Q V M G S S G D L M G S V M E L V N N Q A G G G L P G G L L L Q K F Q S G S  
UniRef90\_A0A031GRW0 L L D Q L A G Q A M S A L S G L M A S V M D L V N N Q H G G G L P G G L L L Q K F Q S S  
UniRef90\_G0E209 L L D Q I G G V L G G G K A E Q L Q A I M T W I E E Q Q G G G L Q G I L L E K F R N G E  
UniRef90\_UPI000360ECF2 L L N T V T N T L A G Q G A S P Y Q V I F T W I E E Q Q G G G L Q G A I L L E K F K A E  
UniRef90\_G9YAM1 L F D S L V N A A G G Q G G D T L S A V S N L I Q E N Q G G G V T G G L V E K F Q Q G G  
UniRef90\_C1DA31 L F N K I T G M L S D K V T Q G I T A L L D W I K D S M G G G I Q G G L V Q T R F R R S E  
UniRef90\_X6PFK4 L F T E I V K S A I G A N Q N L V N G A L G M L E S M G G G I G G G L V Q T R F R R S E  
UniRef90\_H8GG19 L F D T L A S Q V L G S S E Q G S A L S G L L E S M G G G V A G L I V D K F Q N G  
UniRef90\_T1G8T5 L F D S L A G A V G G D K G A M L Q I A M D L F K Q S M G G G L E G V L A K F N D A  
UniRef90\_C6VY46 L F D S S A S Q A E S Q S Q N L V N G A L Q M L D S M G G I L N G L V K F Q S  
UniRef90\_UPI00036FDA01 L F D G I A G S V G G E Q S G G V A Q A A L D L F N Q N G G G L N G I L L E K F K E G G  
UniRef90\_UPI00035CE5A1 L F D D V A G A V G G N G G M A Q L A M E M F N N Q H G G G L P G G L L L Q K F R D A  
UniRef90\_D7DP67 L F D D T L V D V S S Q G N G L L S T V M E M V N N P G G G L K G L V E K F V T A G  
UniRef90\_UPI0003826036 L L D S L A G G M M G E K G A M A Q V A M D M L N N Q H G G G L S G V L D K F K E S  
UniRef90\_YOKL37 L F S S I A G S V L G G E Q G R M F V A L E I I E R N G G G A P G G L V L Q R K F R D A  
UniRef90\_C6XB82 L L G S I A S S V L S G N N S A M Q L I Q S L L Q S S Q G G G I E G L I Q R F N D S  
UniRef90\_B9CXL1 S I L N N G N N S Q S T A I N L I K A L L Q S S Q G G G I E G L I A R F Q Q S  
UniRef90\_J4TNS8 L L D D I L G M V G N G A N N I L G V I T H L M D G E S Q G G G L N G L I K K F Q D S  
UniRef90\_UPI00034658CF L I N T I Q S A L G G G K D L M S T V M E L L G G Q G G G L N G L I S Q F Q D S K  
UniRef90\_I0AFK6 L L D S V V G A L A G G Q S G L L N I V M Q L I N N P G G G L G G L V Q S F Q Q G G  
UniRef90\_Q478Z8 L L D Q I G S L E G G N A R L L Q G V I A W I D S Q G G G L A A L I A K F Q Q G G  
UniRef90\_I2B8G6 L L D G I I G G A I G V E I A T L I N G Y I E K R G G G L A N V V A D F E K G  
UniRef90\_UPI0001D2E4F9 L L D Q L G S M L G N S Q G G L L Q A A N T L L N D N G G G V A G L V E K F Q N G  
UniRef90\_UPI0003731253 L L D Q L G S M L G N S Q G G L L Q A A N T L L N D N G G G V A G L V E K F Q N G  
UniRef90\_B5EDM8 L L D Q L G S M L G N S Q G G L L Q A A N T L L N D N G G G V A G L V E K F Q N G  
UniRef90\_UPI00047B33E9 L L G S L A S S V L S G N N Q A T Q L I Q N L I A S S Q S G G G L E G L I A K F Q Q G  
UniRef90\_M4XHK6 L L G S L A S S V L S G N N Q A T Q L I Q N L I A S S Q S G G G L E G L I A K F Q Q G  
UniRef90\_UPI0003B6A0FF L L G S L A S S V L S G N N Q A T Q L I Q N L I A S S Q S G G G L E G L I A K F Q Q G  
UniRef90\_UPI00036A0FF L L G S L A S S V L S G N N Q A T Q L I Q N L I A S S Q S G G G L E G L I A K F Q Q G  
UniRef90\_L7ZH63 L F D S V L G N I L G G G A N G G K A I M Q W V E E Q Q G G G L Q Q A I L D K F R Q G  
UniRef90\_UPI0003654153 L F D Q L G T L L N G E G S G P L A A V S D L I E Q Q G G G L G G L V S R F Q E G  
UniRef90\_B2T3R1 L L D T L G S L V G G G Q Q A L V S A A L E F F I N N Q P G G G L N G L I E R F K E K  
UniRef90\_C5AFG6 L L D T L G S L V G G G Q Q A L V S A A L E F F I N N Q P G G G L N G L I E R F K E K  
UniRef90\_UPI00047812C7 L L D Q L A G Q V L G A S A E A L L T G V M G L I D S A G G G L P G G L L L Q K F Q E S  
UniRef90\_UPI000349AB7F L L K A I A G G V I G D N P M L Q V V M G L M N N S G G G L S G L L D K F Q Q G  
UniRef90\_J7QTP6 L L K A I A G G V I G D N P M L Q V V M G L M N N S G G G L S G L L D K F Q Q G  
UniRef90\_D5WYQ7 L L K A I V G G A I G A E A L T L I K G Y V E K E G G L D A V V K F E T G  
UniRef90\_Q4FQX6 L L K A I V G G A I G A E A L T L I K G Y V E K E G G L D A V V K F E T G  
UniRef90\_UPI0002ECF989 L V D K V S S A L G V D L H E K L S G Q I Q T L L Q P E M I Q N I V A K A D E A  
UniRef90\_UPI0002260173 L L D S L G S M L G G G Q A A L I G A A L E F I N Q P G G G L N G L I Q R F Q Q N  
UniRef90\_B2JG46 L L D S L G S M L G G G Q A A L I G A A L E F I N Q P G G G L N G L I Q R F Q Q N  
UniRef90\_UPI0004641376 L L D S L G S M L G G G Q A A L I G A A L E F I N Q P G G G L N G L I Q R F Q Q N  
UniRef90\_V5B6C8 L L D S L G S M L G G G Q A A L I G A A L E F I N Q P G G G L N G L I Q R F Q Q N  
UniRef90\_A3MYF8 L L G S I A S S V L S G N N G A L Q L I Q A L L Q S S Q G G G I E G V L A K L Q Q G  
UniRef90\_Q1GY94 L F D S I A G S V M N K M A G M I Q A G L E L M N K C G G G P G G V L D K L R A N  
UniRef90\_W0V3C6 L L G S I A S S V L S G N N G A L Q L I Q A L L Q S S Q G G G I E G V L A K L Q Q G  
UniRef90\_A1AK80 L F D D I I I G N M L G G A G G E Q A N L G G I M E D A G G G L N G L L Q K L Q E S  
UniRef90\_F0GHU7 L L D D I I I G N M L G G A G G E Q A N L G G I M E D A G G G L N G L L Q K L Q E S  
UniRef90\_BOUEP6 L L D D I I I G N M L G G A G G E Q A N L G G I M E D A G G G L N G L L Q K L Q E S  
UniRef90\_F2LCR0 L L D D I I I G N M L G G A G G E Q A N L G G I M E D A G G G L N G L L Q K L Q E S  
UniRef90\_B8IG08 L L L A A A L E F V N Q P G G G L N G L I E K F R R Q G  
UniRef90\_Q39S12 L L D E L V S K A T G G Q E G L L G G V M E M L G G Q G G G L G N L V Q N F K D K  
UniRef90\_UPI00028ZCN8 F L D E L A G A L D G N Q S G Q R L Q A V W H W V Q E Q G G G I E V L L Q K F Q Q G  
UniRef90\_V7FB44 L L D E L A G A L D G N Q S G Q R L Q A V W H W V Q E Q G G G I E V L L Q K F Q Q G  
UniRef90\_M7XNV1 L L D S L G G S L G Q M A L K A L P G I T Q Q V L P G G G L N A L L D Q L R R S  
UniRef90\_G8M455 L L D S L G G S L G Q M A L K A L P G I T Q Q V L P G G G L N A L L D Q L R R S  
UniRef90\_E9CLH3 L L N S V L G N I L G G A S S K Y A I M Q W V E E Q Q G G L Q A I L D K F R H G  
UniRef90\_Q39FM5 L L N S V L G N I L G G A S S K Y A I M Q W V E E Q Q G G L Q A I L D K F R H G  
UniRef90\_B5ZXD0 F F D N L G G M L G G L G L M S D A F S E F G G L D G G V T K L N D A  
UniRef90\_V8QWY8 L L D N L G G M L G G L G L M S D A F S E F G G L D G G V T K L N D A  
UniRef90\_V7IDL4 Q M L G G K D G S Q G S L T D M A M D L V K Q H G G V G N L T N Q L Q Q G  
UniRef90\_UPI00036450CD L L G D I L G S V L G G Q A A L M P M V L S W I Q R N G G L S G A L S K I T G M  
UniRef90\_UPI0002898611 L L G D I L G S V L G G Q A A L M P M V L S W I Q R N G G L S G A L S K I T G M  
UniRef90\_M4ZH91 L L G D I L G S V L G G Q A A L M P M V L S W I Q R N G G L S G A L S K I T G M  
UniRef90\_UPI00046F1F0D I F N D V M G K L S E G L S Q Q V H A Y L S Q L L T P D T I N N L L A Q A E Q A  
UniRef90\_UPI000422737 L V D K L G G A L G V D L H A K L N E A L L G S L L T Q P D T I N N L L A Q A E Q A  
UniRef90\_UPI000472918E L L D D L V G S L T G G Q Q G Q L Q A V W N W V Q E Q G G V E V L I Q K F Q Q G  
UniRef90\_Q47E96 L L D D L V G S L T G G Q Q G Q L Q A V W N W V Q E Q G G V E V L I Q K F Q Q G  
UniRef90\_UPI00036450CD L L D D L V G S L T G G Q Q G Q L Q A V W N W V Q E Q G G V E V L I Q K F Q Q G  
UniRef90\_UPI0002898611 L L D D L V G S L T G G Q Q G Q L Q A V W N W V Q E Q G G V E V L I Q K F Q Q G  
UniRef90\_M4ZH91 L L G S I L G S V L G G N A A L M P I A L N W I Q R N G G L S G A L S K I T G M  
UniRef90\_UPI0003AA7254 L L G S I L G S V L G G N A A L M P I A L N W I Q R N G G L S G A L S K I T G M  
UniRef90\_UPI00036BFF40 L L G S I L G S V L G G N A A L M P I A L N W I Q R N G G L S G A L S K I T G M  
UniRef90\_UPI00035E6ED5 L L G S I L G S V L G G N A A L M P I A L N W I Q R N G G L S G A L S K I T G M  
UniRef90\_J1SVD5 L L G G V L S D V L A G R Q V D Y A A V A T R I F D N G G G L Q G I V S Q L N S A  
UniRef90\_UPI00036F0423 L F D S V A G A V M G D K G P L A K L A M E L F Q Q Y Q G G G L P G I V L A K L K N G S  
UniRef90\_UPI00040E9843 F R S A L S Q L G A A V L P V V M S E V M G T G G S G G G L S A V V A K L Q Q S  
UniRef90\_Q13E12 L L G G V L S D V L A G R Q V D Y A A V A T R I F D N G G G L Q G I V S Q L N S A  
UniRef90\_I3UFN4 L L G G V L S D V L A G R Q V D Y A A V A T R I F D N G G G L Q G I V S Q L N S A  
UniRef90\_Q89JV3 S A L G Q L G A A V L P A V L S E V N N Q Q G G G L S A I V A K L Q Q A  
UniRef90\_Q21BV6 L L G G V L S D V L A G R Q V D Y A A V A T R I F D N G G G L Q G I V S Q L N S A

QUERY	50	60	70	80
UniRef90_W1J959	GGLDGGTILHS	TEGGEENNTQ	SDQQLSIFGG	STGAIIVSQ
UniRef90_B6XDE9	GLDGGTIVV	ETEGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_U2NMT8	NLJAGDVV	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_D2TWN9	GGFGGGVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_K8W6X2	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_B4EWC4	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_S3IGD8	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0004637858	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_G9Z4W5	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_K8VY44	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0003624B12	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI000329BBA7	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q21VQ7	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_A6SUG2	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_A0A031GRW0	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_G0E209	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI000360ECF2	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_G9YAM1	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_C1DA31	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_X6PFK4	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_H8GG19	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_T1G8T5	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_C6VY46	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00036FDA01	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00035CE5A1	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_D7DP67	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0003826036	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_YOKL37	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_C6XB82	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_B9CXL1	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_J4TNS8	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00034658CF	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_I0AFK6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q478Z8	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_I2B8G6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0001D2E4F9	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0003731253	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_B5EDM8	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00047B33E9	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_M4XHK6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0003B6A0FF	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_L7ZH63	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0003654153	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_B2T3R1	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_C5AFG6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00047812C7	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI000349AB7F	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_J7QTP6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_D5WYQ7	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q4FQX6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0002ECF989	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0002260173	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_B2JG46	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0004641376	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_V5B6C8	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_A3MYF8	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q1GY94	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_W0V3C6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_A1AK80	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_F0GHU7	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_B0UEP6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_F2LCR0	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_B8IG08	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q39S12	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_A0A028ZCN8	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_V7FB44	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_M7XNV1	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_G8M455	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_E9CLH3	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q39FM5	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_B5ZXD0	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_V8QWY8	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_V7IDL4	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00036450CD	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0002898611	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_M4ZH91	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00046F1F0D	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0004222737	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI000472918E	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q47E96	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_F5SNY6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI0003AA7254	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00036BFF40	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00035E6ED5	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_J1SVD5	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00036F0423	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_UPI00040E9843	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q13E12	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_I3UFN4	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q89JV3	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ
UniRef90_Q21BV6	GLLSEGLVIA	SGEENNTQ	DDQQLSIFGG	STGAIIVSQ

QUERY UniRef90\_W1J959 UniRef90\_B6XDE9 UniRef90\_U2NMT8 UniRef90\_D2TWN9 UniRef90\_K8W6X2 UniRef90\_B4EWC4 UniRef90\_S3IGD8 UniRef90\_UPI0004637858 UniRef90\_G9Z4W5 UniRef90\_K8VY44 UniRef90\_UPI0003624B12 UniRef90\_UPI000329BBA7 UniRef90\_Q21VQ7 UniRef90\_A6SUG2 UniRef90\_A0A031GRW0 UniRef90\_G0E209 UniRef90\_UPI000360ECF2 UniRef90\_G9YAM1 UniRef90\_C1DA31 UniRef90\_X6PFK4 UniRef90\_H8GG19 UniRef90\_T1G8T5 UniRef90\_C6VY46 UniRef90\_UPI00036FDA01 UniRef90\_UPI00035CE5A1 UniRef90\_D7DP67 UniRef90\_UPI0003826036 UniRef90\_Y0KL37 UniRef90\_C6XB82 UniRef90\_B9CXL1 UniRef90\_J4TNS8 UniRef90\_UPI00034658CF UniRef90\_I0AFK6 UniRef90\_Q478Z8 UniRef90\_I2B8G6 UniRef90\_UPI0001D2E4F9 UniRef90\_UPI0003731253 UniRef90\_B5EDM8 UniRef90\_UPI00047B33E9 UniRef90\_M4XHK6 UniRef90\_UPI0003B6A0FF UniRef90\_L7ZH63 UniRef90\_UPI0003654153 UniRef90\_B2T3R1 UniRef90\_C5AFG6 UniRef90\_UPI00047812C7 UniRef90\_UPI000349AB7F UniRef90\_J7QTP6 UniRef90\_D5WYQ7 UniRef90\_Q4FQX6 UniRef90\_UPI0002ECF989 UniRef90\_UPI0002260173 UniRef90\_B2JG46 UniRef90\_UPI0004641376 UniRef90\_V5B6C8 UniRef90\_A3MYF8 UniRef90\_Q1GY94 UniRef90\_W0V3C6 UniRef90\_A1AK80 UniRef90\_F0GHU7 UniRef90\_B0UEP6 UniRef90\_F2LCR0 UniRef90\_B8IG08 UniRef90\_Q39S12 UniRef90\_A0A028ZCN8 UniRef90\_V7FB44 UniRef90\_M7XNV1 UniRef90\_G8M455 UniRef90\_E9CLH3 UniRef90\_Q39FM5 UniRef90\_B5ZXD0 UniRef90\_V8QWY8 UniRef90\_V7IDL4 UniRef90\_UPI00036450CD UniRef90\_UPI0002898611 UniRef90\_M4ZH91 UniRef90\_UPI00046F1F0D UniRef90\_UPI0004222737 UniRef90\_UPI000472918E UniRef90\_Q47E96 UniRef90\_F5SNY6 UniRef90\_UPI0003AA7254 UniRef90\_UPI00036BFF40 UniRef90\_UPI00035E6ED5 UniRef90\_J1SVD5 UniRef90\_UPI00036F0423 UniRef90\_UPI00040E9843 UniRef90\_Q13EI2 UniRef90\_I3UFN4 UniRef90\_Q89JV3 UniRef90\_Q21BV6

90 100 110 120

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

QUERY	L L K G K L F
UniRef90_W1J959	L L K N K F L
UniRef90_B6XDE9	L L K Q K L F
UniRef90_U2NMT8	L L K G K L F
UniRef90_D2TWN9	L L K D K F F
UniRef90_K8W6X2	L L K S K L F
UniRef90_B4EWC4	I L K A K I F
UniRef90_S3GD8	L L K G K L F
UniRef90_UPI0004637858	L L K G K L F
UniRef90_G9Z4W5	L L K G K F L
UniRef90_K8VY44	M L K E K L F
UniRef90_UPI0003624B12	L L K G K L F
UniRef90_UPI000329BBA7	L L K G K L F
UniRef90_Q21VQ7	L L K G K F F
UniRef90_A6SUG2	L L K G K F F
UniRef90_A0A031GRW0	M L K G K I F
UniRef90_G0E209	L L K G K L F
UniRef90_UPI000360ECF2	L L E G K F F
UniRef90_G9YAM1	I L K G K F F
UniRef90_C1DA31	L L K G L F
UniRef90_X6PFK4	L M K K F F
UniRef90_H8GG19	I L
UniRef90_T1G8T5	L L K G K L F
UniRef90_C6WY46	M L K
UniRef90_UPI00036FDA01	
UniRef90_UPI00035CE5A1	M L K
UniRef90_D7DP67	M L K
UniRef90_UPI0003826036	A L T G F L
UniRef90_Y0KL37	M L K
UniRef90_C6XB82	
UniRef90_B9CXL1	G V L G K L F
UniRef90_J4TNS8	G M L G N L F
UniRef90_UPI00034658CF	V L K S N F L
UniRef90_I0AFK6	L L G G L F
UniRef90_Q478Z8	M L K G G L F
UniRef90_I2B8G6	M L A G K L L
UniRef90_UPI0001D2E4F9	
UniRef90_UPI0003731253	L L G G L F
UniRef90_B5EDM8	F I K S R F
UniRef90_UPI00047B33E9	F I K D K L
UniRef90_M4XHK6	G I L G N L F
UniRef90_UPI0003B6A0FF	L L K G F L
UniRef90_L7ZH63	D M V G K L F
UniRef90_UPI0003654153	L F
UniRef90_B2T3R1	G A L G G L
UniRef90_C5AFG6	G T L S Q L
UniRef90_UPI00047812C7	L A L G K L F
UniRef90_UPI000349AB7F	L L K G K L F
UniRef90_J7QTP6	
UniRef90_D5WYQ7	M L G K L L
UniRef90_Q4FQX6	Q L S S R L
UniRef90_UPI0002ECF989	
UniRef90_UPI0002260173	
UniRef90_B2JG46	G A L G A L
UniRef90_UPI0004641376	
UniRef90_V5B6C8	
UniRef90_A3MYF8	G V L G K L F
UniRef90_Q1GY94	L L K G
UniRef90_W0V3C6	L L K S K L F
UniRef90_A1AK80	Y V M G Q L
UniRef90_F0GHU7	M F G G
UniRef90_BOUEP6	
UniRef90_F2LCR0	G T L S Q L
UniRef90_B8IG08	
UniRef90_Q39S12	F L K G K L
UniRef90_A0A028ZCN8	
UniRef90_V7FB44	
UniRef90_M7XNV1	
UniRef90_G8M455	
UniRef90_E9CLH3	
UniRef90_Q39FM5	V L G S
UniRef90_B5ZXD0	
UniRef90_V8QWY8	L F K
UniRef90_V7IDL4	M L L K N F
UniRef90_UPI00036450CD	I L S
UniRef90_UPI0002898611	Q L S S R L
UniRef90_M4ZH91	
UniRef90_UPI00046F1F0D	
UniRef90_UPI0004222737	
UniRef90_UPI000472918E	I F K S
UniRef90_Q47E96	
UniRef90_F5SNY6	I L S
UniRef90_UPI0003AA7254	
UniRef90_UPI00036BFF40	
UniRef90_UPI00035E6ED5	
UniRef90_J1SVD5	
UniRef90_UPI00036F0423	M L K
UniRef90_UPI00040E9843	
UniRef90_Q13EI2	
UniRef90_I3UFN4	
UniRef90_Q89JV3	
UniRef90_Q21BV6	

UniRef90\_UPI00037D97BD 1 F D Q V L S T V G G L A A Q Q P E V V L H W L N D P G G L S G L V K T F E Q Q 40  
UniRef90\_X0QYL0 L L G D I L G S V L G G S A A L M P M V L S W I K R N G G L S G A L S K I T G M  
UniRef90\_UPI00046E5D4F L V G K V E G A L G V S L Q G E M Q Q Q L Q K L L Q P E T L Q D N I L T R Q A D Q A  
UniRef90\_X6GDG9 G G L G D I L E R L R N A  
UniRef90\_I4YKL0 S G G L G E L I D S F R Q S  
UniRef90\_K8PFR0 A A R A A S E L D S A V I P A V L S E V L G S Q G G L S A I V A R L E Q A  
UniRef90\_UPI0003A138CC S P I G G L D L L K T F Q Q N  
UniRef90\_K6UJM7 A V L P L V L A W I Q K Q G G L Q G A L D K L R N A  
UniRef90\_UPI0001746640 S M P G A N A P G S A N L V Q L G I A L V S Q S G G L D G L V A K F Q Q G  
UniRef90\_UPI0003792DF4 L F D S I A G Q V G G T D G G S L T K M L T G L L N N G G L S G L V T A F Q K N  
UniRef90\_UPI000472CC80 M M G K L A A G S N P M L Q A G L D I M K H Y G G P Q G V L K L M R E Q  
UniRef90\_UPI00046E87AB I V G K V E S V L G G D V Q T L L K Q Q L Q S L T Q P Q T I Q S L D R A D Q A  
UniRef90\_I4B6G3 D Q A S S Q I N V G K E K L E G L V A S L V E R K A Q L D G I V A S L K E K  
UniRef90\_A1VNZ3 Q W V Q R N G G I G A V L E R F Q N K  
UniRef90\_B4CTP5 L F D S L L G S V L G G L T S L A S S L I A D H S S G Q G L G G L Q Q F E S A  
UniRef90\_L1QP65 L L D N I L L A G V G D G A A G G V A D L L K S Q G G V A G L T E K F G O N  
UniRef90\_J6IZM6 D L V D Q F H Q K  
UniRef90\_D5QE7 I F D D V M G A A S S G L A E Q V H T Y L A Q L L T P D T I S S L M D Q A Q K A  
UniRef90\_UPI000464FDCA I L D S L G A Q G A G N G L V D A A I G F V N Q P G G L N G F V T A F Q K N  
UniRef90\_F4QHP9 L F D D A L G A L S G G D A G D L M S Q V T G A L G N G G L Q D L V A K F Q H N  
UniRef90\_UPI00036841B6 F L D N V V K G L G D D A A G G L S D L L K D Q Q G G L G G L A E K F G Q A  
UniRef90\_U1H7M7 E L K G M L G Q L G A A V I P V V L G E V G G G G L S A I V A K L E Q A  
UniRef90\_UPI000429E148 G G N P L M G A V M G L I Q H P G G I Q G L L G Q F Q E K  
UniRef90\_D2ZST3 L M D S L L N A A A G A Q N S L T D M A M D L V R Q Q G G V A G S L I N Q L Q Q G  
UniRef90\_B9YY42 L F D Q V T G L L G G S G G L L G V A G L L E Q N D G V A G S L V E K F Q Q G  
UniRef90\_UPI0003612B59 L F D S I A G Q V A G S N A G L I Q A A M S L I N S P G G L Q G L I A K F Q Q G  
UniRef90\_UPI0003499318 S P Q G G L M G L L K T F Q Q N  
UniRef90\_W0N5B9 S G G L G D L L R Q L Q H N  
UniRef90\_B3QAF1 S G G L G D L L E K L K K S  
UniRef90\_C7Q6V5 G G G M G S A I V A R L E Q A  
UniRef90\_UPI00041FA8DA D R Q G G L S A I V A R L E Q A  
UniRef90\_UPI000475E923 L L D S L K S M V G G G V S S E D H A V N A V Q Q H P G G L S G I L D N F K Q N  
UniRef90\_A0A023XB85 N G G I G E L L E H F K Q N  
UniRef90\_N9N0N2 A W I Q K Q G G L Q G A L D K L K N A  
UniRef90\_N1WA63 L V Q N N P Q I V S G I Q K I V E E N G G V S G I V Q K F K D K  
UniRef90\_H8DRN0 L L D Q V L A M L N N Q T S Q E V K G V L E W V E Q Q G G L H A I V N H L Q S G  
UniRef90\_UPI000376FF37 L G S V V S D V L N G R P V N L L A V A E D V F Q N G G L D G V L T Q L N Q S  
UniRef90\_UPI00036AF951 Q W V Q R N G G M G S V L Q R F N Q R  
UniRef90\_F5Y6B4 Q L A G I L G G E A G I P T A A V A E V V E S G G L N D L L K Q F Q D N  
UniRef90\_L0D5Z0 L F D G V L N A L G G G A M A D L Q A L A G H F G E G G L Q T I L D K F H Q G  
UniRef90\_F7QGf2 G Q G V A G L A E K F G O N  
UniRef90\_V4NT11 L L G D L M G G S V Q G G G S L L G V A G E L I E K A G G V V Q G L V A M L Q Q H  
UniRef90\_UPI0003490A85 S G G L G S L N Q L Q Q K  
UniRef90\_Q1QQU6 A V V P L I L A W I Q K Q G G L Q G A L D K L K N A  
UniRef90\_N9A5T2 D P A I I P I V L S E V L G K G G E G G L V A R L Q Q A  
UniRef90\_F7QP78 G L D E L L S T F R N A  
UniRef90\_A0A024K725 A A G M M G G D N P V M Q A V L G L L G Q N G G L S G L V Q A F Q K N  
UniRef90\_D8P8X0 W I Q K Q G G L Q G A L D K L K G Q  
UniRef90\_N9KZB1 L F D D A L G A L Q G G D A G D L L N Q A A G A F N G G L Q D V V A K F Q Q N  
UniRef90\_V4Q1N1 Q N G L S E L L E R F R O N  
UniRef90\_D7A3N9 S G G L G D L L N Q L Q Q K  
UniRef90\_U1IBG1 S G G L Q A I V T K L Q Q G  
UniRef90\_D4E4K9 I A A I L Q W V E Q Q G G L Q A L D K L K G Q  
UniRef90\_N9M7G4 S G L G G G S T G K L P L V L A W I Q K Q G G L Q G A L D K L K G Q  
UniRef90\_B4VCJ8 I L G A L L G A L M G G G G A G G G A Q A A G G G S N P L G G L M D M L T K S  
UniRef90\_UPI0003B634E3 L F D Q V L G M A G G G Q G D I V Q S V A R L T E E N G G L P A L V E Q F Q A A  
UniRef90\_A9HRJ8 L F D G L M N T V T E G L T D Q L H Q H L G E L T S P Q G I S T L L A Q A E Q A  
UniRef90\_G6YDH0 Q G G L M D Q L S K G V S G T A L G D I L D R F R N A  
UniRef90\_B2VF04 G M G G K L G S L A M M A I L Q W V Q S Q G G F Q A V L A K L Q Q G  
UniRef90\_D9VFN2 L G G L D M L T T S  
UniRef90\_UPI00041F93F7 S G G L S D L L K Q L Q D S  
UniRef90\_N8ZRJ7 Q Q N G G L Q G A L A K L Q G A  
UniRef90\_W6WF81 L G D I L D R F R T A  
UniRef90\_M5FH97 I V N Q A M G A L G G Q L G D K L G G S F G D M L K G E G L N M L I N Q A K R A  
UniRef90\_K7SX00 S Q P G G I M G L L V Q R F Q Q H  
UniRef90\_R4WYP5 L L E K L Q S G  
UniRef90\_A0A037YN75 L L D D L V G S L Q G S Q L G Q L Q A I W S W V Q E Q G G I E A L L H K F Q Q G  
UniRef90\_E6W8L2 S G G L S D L L K T F Q Q N  
UniRef90\_U4QFC9 Q K L A P M L G S L V A G G G L A K L M E Q L K G G  
UniRef90\_C7QCU1 L K G V V G N L V G Q A E Q A A L P D L I K G V L G N E G L Q T I S K L Q S A  
UniRef90\_F8JCJ0 D D G V T R D A G Q Q R G L V G M A S E L L G S A G G M S G L V A L S A G  
UniRef90\_I0IA8 S G G L G D L L K T F Q Q N  
UniRef90\_UPI00035CB643 E R F N Q N  
UniRef90\_W1JVR2 L L D D L V G S L G N G N S Q Q L M A I W N W V Q E Q G G V E V L L Q K F Q Q G  
UniRef90\_J2LMY9 I I G S V L S N V L G G S A N S T S V L G S L L K N Q G G M E G V F N Q L Q K G  
UniRef90\_A6VQ30 S F L S E I S S M F T G A A A G R S L Q S G L G E L F D S F R S S  
UniRef90\_Q28Q79 I V G K V G S A L G V D V Q T F V Q Q Q V Q S L L Q P Q S I Q A L V D R A E Q A  
UniRef90\_UPI00047129EC S E L V D H F T K G  
UniRef90\_B1M1L7 I L G E L G K M F G G S E E G S L S K G V G E L V D A F K N G  
UniRef90\_A6UJ11 L G N V L G N A L G N G G K D I A A I L Q W V E Q Q G G L Q A I L N K L Q Q G  
UniRef90\_L0MGU1 F L D D V G S A I K G A I D K I A A I P A M I S E A G D L Q G L I D K L R L G  
UniRef90\_E6VPI1 I F Q D A K G G A Q N S G G L G E L G K M F G D P G G L G E L V D A F K N G  
UniRef90\_F6C0N9 L L D S V I G A L G G Q G D A L Q A V I A M L A R G G Q G G V Q Q F Q Q G  
UniRef90\_A2SC72 L L D N L M G A L G G H E G G A L S G L I E T I G R G Q G A A G G L V E A F Q K G  
UniRef90\_J2PHP9 E Q F T K N  
UniRef90\_UPI0003B58287 L L P A L I E Q L N K P G G L S G L I A S F Q Q G  
UniRef90\_R4XMM6 D Q F R Q N  
UniRef90\_I4Z2F1 S G D Q G L V R V V L S M L T K Q G G L G A L L H K L Q A G  
UniRef90\_UPI000475AADE S G G L S D L L R K L Q Q A  
UniRef90\_UPI000464CEBD G S S N G L L A A A M T L V Q Q G G L E A I V Q K F Q A G  
UniRef90\_UPI00047901D1

UniRef90\_UPI00037D97BD G M A H V V A S W I S N G Q Q T N D N L P I L D D A H Q L Q A V L L G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_XOQYL0 G Y E N Q A R R S W M S N N Q Q G D T N N D N L P I L D D A H Q L Q A V L L G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI00046E5D4F G L G D K V R S S W I S N G Q Q G T S N N R V P A T A R D E Q V L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_X6GGD9 G A G D Q V D S W V S G T G T G G P N N K E V V A Q A Q Q Q L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_I4YKL0 G H G D V A D S W V S G T G T G G P N N K E V V A Q A Q Q Q L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_K8PFR0 G L G E Q V K S W I S N G Q Q G T S N N R V P A T A R D E Q V L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI0003A138CC G H A D K A E W I K P G G Q N T E L D S A G Q Q L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_K6UJM7 G L G N Q V Q N W V D P N G Q S N N K E N A P E Q Q Q I Q L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI0001746640 G L G D T I S S W V S R R N G G A N L P I L S A G E Q Q I Q L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI0003792DF4 G L G D T V A S W I S N G Q Q G T S N N R V P A T A R D E Q V L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI000472CC80 G L N A E V E S W L S S G S G A S N L P I L T T V Q Q Q I V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI00046E87AB G L G D K V R S W I S S G T G G E S F P A T P E R S E A L L R S E A Q Q Q L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_I4B6G3 G L K D T V S W I S G T G G E S F P A T P E R S E A L L R S E A Q Q Q L I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_A1VNZ3 G Y S Q Q A A S W V S T S G G P N E A L A S A E Q Q I V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_B4CTP5 G L G H V V Q S W I S G G G G Q N N A A V I S A E Q Q I V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_L1QP65 G L G D V A A S W V S G K G G G N N A A V I S A E Q Q I V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_J6IZM6 G R G D V A D S W V S R G G E N N R G I S S E R E L A D V L L S G S P Q R Q I V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_D5QEV7 G L T D K V R S W I S G T G G A N L P I I S T D P A T L L R S L L L L S G S P Q R Q I V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI000464FDCA G A G A I V S W I S G T G G A N L P I I S T D P A T L L R S L L L L S G S P Q R Q I V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_F4QHP9 G A G D L V Q S W I S T G G A N L P I I S T D P A T L L R S L L L L S G S P Q R Q I V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI00036841B6 G L G D V I G S W I S G T G G P N A N I S P A Q Q L T Q A V L L S G S H G D T V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_U1H7M7 G L G D Q V K S W V S G T G G Q N N L P I I T A D Q Q L V L S G S H G D T V I S R E K A I L F G D G S E S T E I V I Q R Q L V A A G Q H T  
UniRef90\_UPI000429E148 G L G D Q V A S W I S G T G G A N Q P I I S A E H V L Q Q A A L L S G S D D T Q L Q Q Q L V A A G Q H T  
UniRef90\_D2ZST3 G L G D V L N S W V S G S G Q D N A P I I S S G S D D Q Q A V L L S G S D D T Q L Q Q Q L V A A G Q H T  
UniRef90\_B9YY42 G L G D V V S W V S G S G P A N L A V I S S G S D D Q Q A V L L S G S D D T Q L Q Q Q L V A A G Q H T  
UniRef90\_UPI0003612B59 G L G D V I A S W L S S G S G P A N L A V I S S G S D D Q Q A V L L S G S D D T Q L Q Q Q L V A A G Q H T  
UniRef90\_UPI0003499318 G A G G I Q S W I S S G G E N N Q P I I S S S S Q L L A E A L L S G S D D V L S G S D D T Q L Q Q Q L V A A G Q H T  
UniRef90\_W0N5B9 G H G D K I D S W V K P G G E P N A D I N D G Q L L A E A L L S G S D D V L S G S D D T Q L Q Q Q L V A A G Q H T  
UniRef90\_B3QAF1 G L G D A A N S W V S H G G E P N Q Q I G P S D L L A N A L L S G A D D Q L D A M T R Q Q T A H V R F A  
UniRef90\_C7Q6V5 S I G E Q V K S W I S G T G G E N N K P V S N A D Q Q L L Q E A L L S G A D D Q L D A M T R Q Q T A H V R F A  
UniRef90\_UPI00041FA8DA G L G D Q V K S W I S G T G G E N N K P V S N A D Q Q L L Q E A L L S G A D D Q L D A M T R Q Q T A H V R F A  
UniRef90\_UPI000475E923 G M D N H V N S W Q Q G G Q Q A N N Q P I I S P D Q Q A Q Q Q G L L S G S G V I D S I A Q R T T A Q R F A  
UniRef90\_A0A023XB85 G Q G D A A Q S W I D P N Q N R E V I T P P E L Q Q Q A L F G D D Q D V V S R N L L A A K K V  
UniRef90\_N9N0N2 G L T N Q V Q S W V D P N Q N R E V I T P P E L Q Q Q A L F G D D Q D V V S R N L L A A K K V  
UniRef90\_N1WA63 G F A D A A S W V S G T G E N N V N I G A N D V V M K V L L S G S D S I Q E E L A A K K V  
UniRef90\_H8DRN0 E Y S E V V S W L S G N S E E S N A P I L S R G D M V L M Q G K M I H S E A I E E L A A K K V  
UniRef90\_UPI000376FF37 G H G E K A E S W I S P N S S A P I L T A D Q Q I R A A L L S G S E Q L L R G R L L A A K K V  
UniRef90\_UPI00036AF951 G L G H Q V A S W I S T G G E D N I P I T A D Q Q I R A A L L S G S E Q L L R G R L L A A K K V  
UniRef90\_F5Y6B4 G Y G D H A S W V S G G E A N Q A L D D P G A V V Q Q Q A L L S G S E Q L L R G R L L A A K K V  
UniRef90\_L0D5Z0 G L G D V M S W V S K G G A N L P V S S G E Q I Q Q Q A L L S G S E Q L L R G R L L A A K K V  
UniRef90\_F7QGF2 G H T E T A N S W V S N G G P N K Q I T P P E Q L L A S A L L S G A D Q I V N T K V A S A K L L  
UniRef90\_V4NT11 G L G D I V Q S W V S G G A N L P V S P E Q Q L A Q A V L L S G S E Q I V N T K V A S A K L L  
UniRef90\_F4QXL6 G L G D V A A S W I S G K G G A N A A I S P P E Q Q L A Q A V L L S G S E Q I V N T K V A S A K L L  
UniRef90\_UPI0003490A85 G L G D A V Q S W V S T G G A N Q P I I S P P Q Q L L G A Q A L L S G A D Q I V N T K V A S A K L L  
UniRef90\_Q1QQU6 G H G E T A N S W V S N D P Q Q I A K P R D Q I A D A D A D Q I V N T K V A S A K L L  
UniRef90\_N9A5T2 G L G T Q V Q S W V D P N N H Q I A K E Q V I E Q E L L F D D D Q E V E A Q V L A Q Q T T A Q Q T  
UniRef90\_F7QP78 G L G D Q V T S W I S G N S A N L P V S A H Q I Q E E L L G S D D V V K Q L A T R F A  
UniRef90\_A0A024K725 G Q Q E T A D S W V S T G G V P T Q Q L S T D Q Q I E T A Q G L L G G R D T L T A Q L A S Q A  
UniRef90\_D8P8X0 G L G D I V N S W V S T G G E N A S V N P Q E V L Q Q A L L F D D D E E V E Q Q L A S Q Q T  
UniRef90\_N9KZB1 G L S S Q V D D W V S T G G E A N L P V S A D Q Q L L A V L L S G S D V V E Q Q L A S Q Q T  
UniRef90\_V4Q1N1 G A G E L V Q S W I S S T G A N L P V S A D Q Q L L A V L L S G S D V V E Q Q L A S Q Q T  
UniRef90\_D7A3N9 G H D E A D S W V S T G G E N R E I D D R N L E H A I L L S G S D V V E T L A S Q Q T  
UniRef90\_U1IBG1 G H G D A A N S W V S N G G P N K Q I S P G D L L A N A L L S G A D D Q I D S L A S Q S  
UniRef90\_D4E4K9 Q L G D I V G S W L S G N G D N Q N I S G D H V Q Q Q A L L F D D D A I A E Q L A E K L  
UniRef90\_N9M7G4 G L N S Q V D D W V S T G G E N A N S V D P Q V V I Q Q Q A L L F D D D A I A E E V L A Q Q T  
UniRef90\_B4VCJ8 G L T D Q A Q S W L S G K G G D N Q P V S G A Q I A E A L L P D A T L Q K V A E Q Q T  
UniRef90\_UPI0003B634E3 G L G E V T A S W M G T D G A N L P I I T P E P I R S S I L S S E T Q Q V G A F A E Q Q T  
UniRef90\_A9HRJ8 G L G D K V R S W I S G N G A N L P V S P D E I L R S S I L S S E T Q Q V G A F A E Q Q T  
UniRef90\_G6YDH0 G V G S K V D S W V S T G G P N E P I E P K D V L E T A I D D D T L T A M S M Q T  
UniRef90\_B2VF04 G L G G L A E S W L S T G G E N Q P V S A T S Q L K E A L L D D H S L L Q S Q A D K L  
UniRef90\_D9VFN2 G L G D Q A Q S W I S T G G E N Q P V S A T S Q L K E A L L D D H S L L Q S Q A D K L  
UniRef90\_UPI00041F93F7 G H A E K A N S W V S G S G Q N N Q Q L S P G D L S S A L L G A D D Q I G L L S S Q S  
UniRef90\_N8ZRJ7 G L G G Q V Q S W I D P N G Q S N T E A A T S Q L S E A L L F N T Q E V E Q V S A Q Q A  
UniRef90\_W6WF81 G H G E T A S W V R P N G Q S N T E A A T S Q L S E A L L F N T Q E V E Q V S A Q Q A  
UniRef90\_M5FH97 G A G A K V D S W F S T G G S N D P I E P R D V L E M A I D D E E T L T A L S T Q T  
UniRef90\_K7SX00 G L E D K I H S W I S G T G G E N N Q P I I T A D E L L R N L L T Q D Q V V G M L V S K T  
UniRef90\_R4WYP5 G A G D V V Q S W I S G T G G E N N Q P I I S S P G T L L R N V L L T Q D Q V V G M L V S K T  
UniRef90\_A0A037YN75 G L G A I L S T W L S N Q Q G N N Q S V S S G E Q L L E S A L L G G T N A V S S D L L G Q K L  
UniRef90\_E6W8L2 G L G D V L G S W I S G T G N N Q P I I D S G D M Q S E A L L G G T N A V S S D L L G Q K L  
UniRef90\_U4QFC9 G F G Q K A E S W I K P G A N D D I N A D E L S E A L L G G T N A V S S D L L G Q K L  
UniRef90\_C7QCU1 G L G S Q A K S W V S T E Q P N Q P V S G E Q L L T Q A L L G G T E Q I S S Q F A N T L  
UniRef90\_F8JCJ0 G F G D Q V Q S W F D K G K D S L P I I T P D Q I K E A A L L G S D E H V Q Q Q L A A K F  
UniRef90\_I0IA8 G L G E Q V K T W L S N A S V A G E Q I L K E A A L L G S D E H V Q Q Q L A A K F  
UniRef90\_UPI00035CB643 G H G D K I D S W V Q P G G P N A D I N D G Q L A E A L L S G S D V V L N E I A S N T  
UniRef90\_W1JVR2 G Q G E T A D S W I K P G G P N K Q I S S P E L K Q A I L S G D V L Q E K L A Q Q T  
UniRef90\_J2LMY9 G L G Q V L N T W I S G S G D N Q S I L S S G D I Q Q A L E P D Q L Q S L A D K L  
UniRef90\_A6VQ30 G L E D L L N S W L S T G G Q N N K P M A N A N Q V L N D V F G G D E T I S N V A Q Q A  
UniRef90\_Q28Q79 G R G D V A D T W M S H Q S D S N Q P I I D A R D E L T L G S D E T L D H L S D R T  
UniRef90\_UPI00047129EC G L G D K V R S W V S Q N S N Q P I I T P D E I R T L L G S D V V H L D M V Q K T  
UniRef90\_B1M1L7 G H A E T A Q S W I N H G P N R D I P A A D L E R A I G G P D T L A A L E Q R T  
UniRef90\_A6UJ11 G H R E A A D S W V S A E E R S Q G I S G E Q V V E S S I G S K D D A I Q D L A A K T  
UniRef90\_L0MGU1 Q L G D I V G S W L S N G E R N Q A I S G D H V I Q S A L L G S D D A I A Q L L A A K L  
UniRef90\_E6VPI1 G L K E Q V N S W L S N G E R N L P I I T A Q Q I H D A L L G S N E Q V K Q L A D K F  
UniRef90\_F6C0N9 G N R E A A D S W V S A E R P S Q G I S A S Q V L E S S I G S K D D L Q E L A A Q K T  
UniRef90\_A2SC72 G L G D L I A S W V S T G T A N L P I I S A S Q L Q O D V L L G S G A V S G Q F A E K L  
UniRef90\_J2PHP9 G L G A V A Q S W V S S G G A N L P I I S A S Q L Q A V L L G S G A V S G Q F A E K L  
UniRef90\_UPI0003B58287 G Y G D T A D S W V S P G G A N K P I I D D A R Q L S G R V L L G S D V V N E E L A S A K T  
UniRef90\_R4XMM6 G L G E I V A S W I S G K G G Q N N R R I S A P D E L L S Q A L L G P G T L D E L E Q Q T  
UniRef90\_I42ZF1 G Y G D H V D S W V S P G G Q N R R I S A P D E L L S Q A L L G P G T L D E L E Q Q T  
UniRef90\_UPI000475AADE G L G E T T K S W V E T G R N Q Q I A S G K E L T D A L G A D E M V R L A G Q A  
UniRef90\_UPI000464CEBD G H G E T A N S W V S P G P N K Q I A S G D L A N A L G A D Q I D Q L A S Q S  
UniRef90\_UPI00047901D1 G L G D V V I Q S W V S T G A N A P V S A G A Q L L E Q V L G H D A L A A V A S Q A

UniRef90\_UPI00037D97BD  
UniRef90\_XOQYL0  
UniRef90\_UPI00046E5D4F  
UniRef90\_X6GDG9  
UniRef90\_I4YKL0  
UniRef90\_K8PFR0  
UniRef90\_UPI0003A138CC  
UniRef90\_K6UJM7  
UniRef90\_UPI0001746640  
UniRef90\_UPI0003792DF4  
UniRef90\_UPI000472CC80  
UniRef90\_UPI00046E87AB  
UniRef90\_I4B6G3  
UniRef90\_A1VNZ3  
UniRef90\_B4CTP5  
UniRef90\_L1QP65  
UniRef90\_J6IZM6  
UniRef90\_D5QEV7  
UniRef90\_UPI000464FDCA  
UniRef90\_F4QHP9  
UniRef90\_UPI00036841B6  
UniRef90\_U1H7M7  
UniRef90\_UPI000429E148  
UniRef90\_D2ZST3  
UniRef90\_B9YY42  
UniRef90\_UPI0003612B59  
UniRef90\_UPI0003499318  
UniRef90\_W0N5B9  
UniRef90\_B3QAF1  
UniRef90\_C7Q6V5  
UniRef90\_UPI00041FA8DA  
UniRef90\_UPI000475E923  
UniRef90\_A0A023XB85  
UniRef90\_N9N0N2  
UniRef90\_N1WA63  
UniRef90\_H8DRN0  
UniRef90\_UPI000376FF37  
UniRef90\_UPI00036AF951  
UniRef90\_F5Y6B4  
UniRef90\_L0D5Z0  
UniRef90\_F7QGF2  
UniRef90\_V4NT11  
UniRef90\_F4QXL6  
UniRef90\_UPI0003490A85  
UniRef90\_Q1QQU6  
UniRef90\_N9A5T2  
UniRef90\_F7QP78  
UniRef90\_A0A024K725  
UniRef90\_D8P8X0  
UniRef90\_N9KZB1  
UniRef90\_V4Q1N1  
UniRef90\_D7A3N9  
UniRef90\_U11BG1  
UniRef90\_D4E4K9  
UniRef90\_N9M7G4  
UniRef90\_B4VCJ8  
UniRef90\_UPI0003B634E3  
UniRef90\_A9HRJ8  
UniRef90\_G6YDH0  
UniRef90\_B2VF04  
UniRef90\_D9VFN2  
UniRef90\_UPI00041F93F7  
UniRef90\_N8ZRJ7  
UniRef90\_W6WF81  
UniRef90\_M5FH97  
UniRef90\_K7SX00  
UniRef90\_R4WVP5  
UniRef90\_A0A037YN75  
UniRef90\_E6W8L2  
UniRef90\_U4QFC9  
UniRef90\_C7QCU1  
UniRef90\_F8JJC0  
UniRef90\_I0IA8  
UniRef90\_UPI00035CB643  
UniRef90\_W1JVR2  
UniRef90\_J2LMY9  
UniRef90\_A6VQ30  
UniRef90\_Q28Q79  
UniRef90\_UPI00047129EC  
UniRef90\_B1M1L7  
UniRef90\_A6UJ11  
UniRef90\_L0MGU1  
UniRef90\_E6VPI1  
UniRef90\_F6C0N9  
UniRef90\_A2SC72  
UniRef90\_J2PH9  
UniRef90\_UPI0003B58287  
UniRef90\_R4XMM6  
UniRef90\_I4Z2F1  
UniRef90\_UPI000475AADE  
UniRef90\_UPI000464CEBD  
UniRef90\_UPI00047901D1

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

UniRef90\_UPI00037D97BD  
 UniRef90\_X0QYL0 Q L S S R L  
 UniRef90\_UPI00046E5D4F  
 UniRef90\_X6GDG9  
 UniRef90\_I4YKL0  
 UniRef90\_K8PFR0  
 UniRef90\_UPI0003A138CC  
 UniRef90\_K6UJM7 M V S G F L  
 UniRef90\_UPI0001746640 L L G G D L  
 UniRef90\_UPI0003792DF4 L L Q G F M  
 UniRef90\_UPI000472CC80 L L K  
 UniRef90\_UPI00046E87AB  
 UniRef90\_I4B6G3 F L K  
 UniRef90\_A1VNZ3 M L E Q F M  
 UniRef90\_B4CTP5 L L G G  
 UniRef90\_L1QP65  
 UniRef90\_J6IZM6  
 UniRef90\_D5QEV7  
 UniRef90\_UPI000464FDCA A L G G L M  
 UniRef90\_F4QHP9  
 UniRef90\_UPI00036841B6 M L G G F L  
 UniRef90\_U1H7M7  
 UniRef90\_UPI000429E148 L L K K F L  
 UniRef90\_D2ZST3  
 UniRef90\_B9YY42 A L S G L F  
 UniRef90\_UPI0003612B59 V L G G L L  
 UniRef90\_UPI0003499318 G T L G G L  
 UniRef90\_W0N5B9  
 UniRef90\_B3QAF1  
 UniRef90\_C7Q6V5  
 UniRef90\_UPI00041FA8DA  
 UniRef90\_UPI000475E923 G F L S K L  
 UniRef90\_A0A023XB85  
 UniRef90\_N9N0N2 I V S G F L  
 UniRef90\_N1WA63 L A S  
 UniRef90\_H8DRN0 L M  
 UniRef90\_UPI000376FF37 N P A G F  
 UniRef90\_UPI00036AF951  
 UniRef90\_F5Y6B4  
 UniRef90\_L0D5Z0  
 UniRef90\_F7QGF2  
 UniRef90\_V4NT11 D L L G G L F  
 UniRef90\_F4QXL6  
 UniRef90\_UPI0003490A85 G L A G K L F  
 UniRef90\_Q1QQU6  
 UniRef90\_N9A5T2 L V S G F L  
 UniRef90\_F7QP78  
 UniRef90\_A0A024K725  
 UniRef90\_D8P8X0 L L R G K L  
 UniRef90\_N9KZB1 M V S G F L  
 UniRef90\_V4Q1N1 G M L G G F L  
 UniRef90\_D7A3N9  
 UniRef90\_U1IBG1  
 UniRef90\_D4E4K9  
 UniRef90\_N9M7G4 M V S G L L  
 UniRef90\_B4VCJ8  
 UniRef90\_UPI0003B634E3 L L G S L F  
 UniRef90\_A9HRJ8  
 UniRef90\_G6YDH0  
 UniRef90\_B2VF04  
 UniRef90\_D9VFN2  
 UniRef90\_UPI00041F93F7  
 UniRef90\_N8ZRJ7 L V S G F L  
 UniRef90\_W6WF81  
 UniRef90\_M5FH97  
 UniRef90\_K7SX00  
 UniRef90\_R4WYP5  
 UniRef90\_A0A037YN75 L L K G K L F  
 UniRef90\_E6W8L2  
 UniRef90\_U4QFC9  
 UniRef90\_C7QCU1  
 UniRef90\_F8JCJ0  
 UniRef90\_I0IIA8 L L G G L M  
 UniRef90\_UPI00035CB643  
 UniRef90\_W1JVR2  
 UniRef90\_J2LMY9  
 UniRef90\_A6VQ30  
 UniRef90\_Q28Q79  
 UniRef90\_UPI00047129EC  
 UniRef90\_B1M1L7  
 UniRef90\_A6UJ11  
 UniRef90\_L0MGU1  
 UniRef90\_E6VPI1  
 UniRef90\_F6C0N9  
 UniRef90\_A2SC72 D L G S V L  
 UniRef90\_J2PHP9 L L G G F L  
 UniRef90\_UPI0003B58287  
 UniRef90\_R4XMM6 A S L S G L F  
 UniRef90\_I4Z2F1  
 UniRef90\_UPI000475AADE  
 UniRef90\_UPI000464CEBD  
 UniRef90\_UPI00047901D1 M L R G



UniRef90\_C1AAH9  
UniRef90\_H0HZ56  
UniRef90\_G4CRM2  
UniRef90\_V8A7J3  
UniRef90\_UPI000376EB77  
UniRef90\_L9M8E2  
UniRef90\_UPI000378F06C  
UniRef90\_B1LTE9  
UniRef90\_L0WML3  
UniRef90\_L8EGL9  
UniRef90\_A0A017HV49  
UniRef90\_C8PXU1  
UniRef90\_UPI00047846C0  
UniRef90\_UPI0004777254  
UniRef90\_UPI000361172B  
UniRef90\_Q6FA10  
UniRef90\_X5PI81  
UniRef90\_Q1QGR9  
UniRef90\_B1Y0N0  
UniRef90\_UPI0004643BC9  
UniRef90\_A0A031LKZ8  
UniRef90\_UPI0004630279  
UniRef90\_UPI0002EA359A  
UniRef90\_G2DUE1  
UniRef90\_F4GT45  
UniRef90\_J0WBY0  
UniRef90\_UPI0003753958  
UniRef90\_UPI000465C3F6  
UniRef90\_UPI00047C465B  
UniRef90\_S6CYW9  
UniRef90\_A0A023D553  
UniRef90\_E3I0G6  
UniRef90\_W3RM25  
UniRef90\_X5PXE8  
UniRef90\_UPI0002377125  
UniRef90\_S3ZR33  
UniRef90\_A0A059KJ57  
UniRef90\_Q65U17  
UniRef90\_M5AKT1  
UniRef90\_F4LAR3  
UniRef90\_N8ZZY9  
UniRef90\_A7IFV6  
UniRef90\_K5Z056  
UniRef90\_B1ZGV5  
UniRef90\_UPI00037B453E  
UniRef90\_K0I5E4  
UniRef90\_E3HUQ9  
UniRef90\_X4Z4Y8  
UniRef90\_E6X0I9  
UniRef90\_UPI0002DC751E  
UniRef90\_S4AT88  
UniRef90\_A6DD96  
UniRef90\_B3ENN3  
UniRef90\_I4VW57  
UniRef90\_C5CSA1  
UniRef90\_A0A011Q265  
UniRef90\_UPI00037296F2  
UniRef90\_I4WDC3  
UniRef90\_X6EZS3  
UniRef90\_UPI00045E6041  
UniRef90\_J0B165  
UniRef90\_F0F2R6  
UniRef90\_I4VW53  
UniRef90\_H8L418  
UniRef90\_UPI0003684DCC  
UniRef90\_S3HUT0  
UniRef90\_Q8YFM0  
UniRef90\_I4B684  
UniRef90\_A0A024K117  
UniRef90\_G0ACX7  
UniRef90\_UPI000478F705  
UniRef90\_J2U994  
UniRef90\_I0HQ09  
UniRef90\_UPI0003789197  
UniRef90\_A0A011RW74  
UniRef90\_D8NY46  
UniRef90\_V4NCY1  
UniRef90\_G2U7T4  
UniRef90\_E6V043  
UniRef90\_UPI00034D5D5C  
UniRef90\_UPI00045E655F  
UniRef90\_H5WVQ5  
UniRef90\_UPI0003B31123  
UniRef90\_N9D6R8  
UniRef90\_C4GGB2  
UniRef90\_I9CLQ5  
UniRef90\_W6RDA4  
UniRef90\_A0A052JEJ1  
UniRef90\_V2UYM5  
UniRef90\_UPI0002FACF41  
UniRef90\_I3D9F8  
UniRef90\_UPI000401268A

1 10 20 30 40

LLAAAMTLLVQQQGGLEAVIQKLLQSGG  
AGGGGLLEQVVDRLLRSQQGLNDVLDLRFRTT  
QNTALQLVMQLMQQNGGAGNLLINQLQQG  
FFGSMINSALGSMGDKLGSIGEYLTSEQGITLVEHFTKKG  
GLSELVEHFKKGA  
QQGGGLQAALLSKLKGGA  
LLPALLSFIQQNGGLS GALSKLQNM  
PIVLTFIQKNGGLSGVLDLDRFRQG  
QAVLDTLQGN  
AAALLPALMFIRNNGGLS GAFNKIQNM  
LDQVKGS LGGE SAS GFLE R P GGLQAVLDQLQNS  
NNILGQLLNTVLS NKS GGGGAGGGS NPLGGLMDMITKS  
GGFDGLTDRLLQRG  
KQGGGLQGALDKLKNNS  
KLLKDA  
GGLLGNLSGMIGGAGVGGLLNDGLGELELLERFKQN  
VQKFTQES  
LGGGLLDMLTTRS  
LQGALDQLKGA  
KLLKDA  
AGGAGGISQIHEIMSSLMGGRTDSAGVQQQLVDRLRQGG  
LLGA AVSALSGGNNSSQIMVLDLVQKSGGLSGLINMLQQG  
LLDSTIVS AVGGDQAGLLPALMELVNNP GGLSGLIKFQEA  
LFDGLGGVVS DVLNG PLTVAEDDFQNA GGLDGLITQFNQS  
LLDGLLAGQVLTGTG GALLQIAMNLLQQP GGLLAGLLQ QFNQNA  
KLLKGA  
LAMMLPLVMQWVSRSGGITGNVLLQRVNQQ  
ILGKVESALGVDVQGALQQQLQSLLQPQNLLEALLTRADQA  
LVNSAVIGALGAGQFVQKFGSSVSEFIIQGPGLQALLDQARKS  
ANQAGSGGPAIP TSLQDLLNQA GNLTVIDKLSKKG  
SGGLNDLKLKQLEGE  
SMAAQNPLVQAVMSLISNDGGGLPGLMAKFKQA  
MAAFEAPASPLEHTLIATLFDGSSQVGAATIEELRQA  
LGGSSQQGGQAALIQALIGMLAPAGGLLEQFQRG  
SLLQSSQGGMEGLFNKLLQGG  
KFTGA  
SANGGMAALLPVLVAQLNNP GGLTALTIQRFQEG  
AVLPLVLAWLQKQ GGLQGALDKLKNNA  
GSLDGLVLEQLLQA  
QSNQLAGPLMNELSQH GGVLDGLVDRFQAQT  
AGGLD DLI RGFERS  
DQFSQT  
QNPLVQAVMSLISNDGGGLPGLMAKFKQA  
LLDTLASMAGGGQQGLL PALIEQLNK P GGLSGLTASFKKG  
LLDTLS SMAGGDSASLV PALIELVGK P GGLS SLLNQLQMG  
S GALLSKVFGGEGGDLDLGA LVQ QFAKG  
KLLKEA  
DGLTKA  
FGNLDINSVVVNGIQGLLGGIDIKD LLSKFA SN  
LLSSALGSLFGGKENKLD LGTVL GKMKNNS  
LLGGQQGQQA GAGSMISVA GDLLQRA GGVLG LISM LQQH  
VSKFEQA  
E H F QRA  
KQGGGLQGALDKLKNNA  
SLLSVA GE L I Q K A G G V Q G L V G M L Q Q H  
L G D I L L E R F R N V  
GAVGGLLDGNSSPAVVAALPGWIDQTPGIGAFADPLRAG  
LLNSVAVSALSSADAAALIQVIVSSGGGLIEFRFRA  
LLDTAMSLLGGGDGQQNQAVMHVQQSNGGI GGLLHQLQQG  
FLDDLLGGQGGGAGSLI AVAGQLIEKAGGVQGLVGM LQQH  
LLDNL LLGN GGQAASLMGVA S D L L D K V G G V Q G L V Q V L Q Q H  
DMLTKS  
DQFSQN  
MKQS  
LGGLASQLSGSDSELLTLLAKDLLSKGGNVIES ILLGALKKEG  
LLDQFEGILLQNELAGGIQGVLGQFQ GAGGYD G ILLAKL KGA  
LLSAL EGA  
S L I S V A G Q L I E K A G G L Q G L L N I L Q Q H  
LLD S V L G A L N N N A S G L I Q A V L G M L A N N Q S G G L L G T L Q N A  
G G E N S K L V Q S L M R L L R Q H G G L T A L A R F D A E  
Q L T Q G  
Q R A  
P G G V G P L Q Q I L L E Q A  
G G L L E G L V G Q L S Q G  
Q M L Q N A  
V S K F E Q A  
Q V L E N G  
L I D T L L S G M A S A L P G I L D G A L A K T P Y G S I E G V L A Q L H E A  
L L D S V L G S V L G G N A Q L L Q V V L G M L G N A G G L G L L Q K A Q Q A  
Q L T Q A  
Q G A L D K L R N I  
L L D N V I N A A T G E Q N Q A V Q L V S Q L V Q Q N G G V G E L L G K L Q Q G  
S T G S G K L A L A L A K F Y P G G L V A F L D R L R E T  
T E A  
L L D T L T S L A G G G E A S L I P A L I E V V G K P G G L S G L L Q Q L Q Q G  
A V V P L I L S W I Q Q Q G G L Q A A L D K L R G S  
L L D S V L G A L A N N K A A L I Q A V L G M L N Q S G G L G L L G N L Q N A  
M E G I F N Q L Q K S  
G M L A Q K L G G N S D A V G D V M N S L L G Q G D I G S L V S G F K D K

UniRef90\_C1AAH9 UniRef90\_H0HZ56 UniRef90\_G4CRM2 UniRef90\_V8A7J3 UniRef90\_UPI000376EB77 UniRef90\_L9M8E2 UniRef90\_UPI000378F06C UniRef90\_B1LTE9 UniRef90\_L0WML3 UniRef90\_L8EGL9 UniRef90\_A0A017HV49 UniRef90\_C8PXU1 UniRef90\_UPI00047846C0 UniRef90\_UPI0004777254 UniRef90\_UPI000361172B UniRef90\_Q6FA10 UniRef90\_X5PI81 UniRef90\_Q1QGR9 UniRef90\_B1Y0N0 UniRef90\_UPI0004643BC9 UniRef90\_A0A031LKZ8 UniRef90\_UPI0004630279 UniRef90\_UPI0002EA359A UniRef90\_G2DUE1 UniRef90\_F4GT45 UniRef90\_J0WBY0 UniRef90\_UPI0003753958 UniRef90\_UPI000465C3F6 UniRef90\_UPI00047C465B UniRef90\_S6CYW9 UniRef90\_A0A023D553 UniRef90\_E3I0G6 UniRef90\_W3RM25 UniRef90\_X5PXE8 UniRef90\_UPI0002377125 UniRef90\_S3ZR33 UniRef90\_UPI0004059KJ57 UniRef90\_Q65U17 UniRef90\_M5AKT1 UniRef90\_F4LAR3 UniRef90\_N8ZZY9 UniRef90\_A7IFV6 UniRef90\_K5Z056 UniRef90\_B1ZGV5 UniRef90\_UPI00037B453E UniRef90\_K0I5E4 UniRef90\_E3HUQ9 UniRef90\_X4Z4Y8 UniRef90\_E6X0I9 UniRef90\_UPI0002DC751E UniRef90\_S4AT88 UniRef90\_A6DD96 UniRef90\_B3ENN3 UniRef90\_I4VV57 UniRef90\_C5CSA1 UniRef90\_A0A011Q265 UniRef90\_UPI00037296F2 UniRef90\_I4WDC3 UniRef90\_X6EZS3 UniRef90\_UPI00045E6041 UniRef90\_J0B165 UniRef90\_F0F2R6 UniRef90\_I4WIW3 UniRef90\_H8L418 UniRef90\_UPI0003684DCC UniRef90\_S3HUT0 UniRef90\_Q8YFM0 UniRef90\_I4B684 UniRef90\_A0A024K117 UniRef90\_G0ACX7 UniRef90\_UPI000478F705 UniRef90\_J2U994 UniRef90\_I0HQ09 UniRef90\_UPI0003789197 UniRef90\_A0A011RW74 UniRef90\_D8NY46 UniRef90\_V4NCY1 UniRef90\_G2U7T4 UniRef90\_E6V043 UniRef90\_UPI00034D5D5C UniRef90\_UPI00045E655F UniRef90\_H5WVQ5 UniRef90\_UPI0003B31123 UniRef90\_N9D6R8 UniRef90\_C4GGB2 UniRef90\_I9CLQ5 UniRef90\_W6RDA4 UniRef90\_A0A052JEJ1 UniRef90\_V2UYM5 UniRef90\_UPI0002FACF41 UniRef90\_I3D9F8 UniRef90\_UPI000401268A

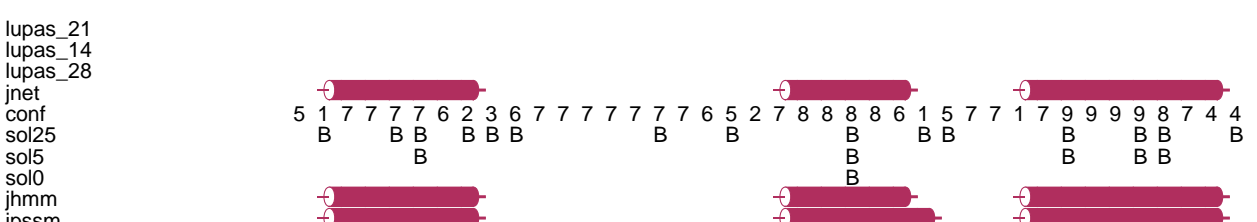
UniRef90\_C1AAH9 UniRef90\_H0HZ56 UniRef90\_G4CRM2 UniRef90\_V8A7J3 UniRef90\_UPI000376EB77 UniRef90\_L9M8E2 UniRef90\_UPI000378F06C UniRef90\_B1LTE9 UniRef90\_L0WML3 UniRef90\_L8EGL9 UniRef90\_A0A017HV49 UniRef90\_C8PXU1 UniRef90\_UPI00047846C0 UniRef90\_UPI0004777254 UniRef90\_UPI000361172B UniRef90\_Q6FA10 UniRef90\_X5PI81 UniRef90\_Q1QGR9 UniRef90\_B1Y0N0 UniRef90\_UPI0004643BC9 UniRef90\_A0A031LKZ8 UniRef90\_UPI0004630279 UniRef90\_UPI0002EA359A UniRef90\_G2DUE1 UniRef90\_F4GT45 UniRef90\_J0WBY0 UniRef90\_UPI0003753958 UniRef90\_UPI000465C3F6 UniRef90\_UPI00047C465B UniRef90\_S6CYW9 UniRef90\_A0A023D553 UniRef90\_E3I0G6 UniRef90\_W3RM25 UniRef90\_X5PXE8 UniRef90\_UPI0002377125 UniRef90\_S3ZR33 UniRef90\_UPI0004059KJ57 UniRef90\_Q65U17 UniRef90\_M5AKT1 UniRef90\_F4LAR3 UniRef90\_N8ZZY9 UniRef90\_A7IFV6 UniRef90\_K5Z056 UniRef90\_B1ZGV5 UniRef90\_UPI00037B453E UniRef90\_K0I5E4 UniRef90\_E3HUQ9 UniRef90\_X4Z4Y8 UniRef90\_E6X0I9 UniRef90\_UPI0002DC751E UniRef90\_S4AT88 UniRef90\_UPI00046DD96 UniRef90\_B3ENN3 UniRef90\_I4VW57 UniRef90\_C5CSA1 UniRef90\_A0A011Q265 UniRef90\_UPI00037296F2 UniRef90\_I4WDC3 UniRef90\_X6EZS3 UniRef90\_UPI00045E6041 UniRef90\_J0B165 UniRef90\_F0F2R6 UniRef90\_I4WIW3 UniRef90\_H8L418 UniRef90\_UPI0003684DCC UniRef90\_S3HUT0 UniRef90\_Q8YFM0 UniRef90\_I4B684 UniRef90\_A0A024K117 UniRef90\_G0ACX7 UniRef90\_UPI000478F705 UniRef90\_J2U994 UniRef90\_I0HQ09 UniRef90\_UPI0003789197 UniRef90\_A0A011RW74 UniRef90\_D8NY46 UniRef90\_V4NCY1 UniRef90\_G2U7T4 UniRef90\_E6V043 UniRef90\_UPI00034D5D5C UniRef90\_UPI00045E655F UniRef90\_H5WVQ5 UniRef90\_UPI0003B31123 UniRef90\_N9D6R8 UniRef90\_C4GGB2 UniRef90\_I9CLQ5 UniRef90\_W6RDA4 UniRef90\_A0A052JEJ1 UniRef90\_V2UYM5 UniRef90\_UPI0002FACF41 UniRef90\_I3D9F8 UniRef90\_UPI000401268A

UniRef90\_C1AAH9 M L  
 UniRef90\_H0HZ56  
 UniRef90\_G4CRM2  
 UniRef90\_V8A7J3  
 UniRef90\_UPI000376EB77  
 UniRef90\_L9M8E2 L V S G F L  
 UniRef90\_UPI000378F06C  
 UniRef90\_B1LTE9  
 UniRef90\_L0WML3 L L  
 UniRef90\_L8EGL9  
 UniRef90\_A0A017HV49  
 UniRef90\_C8PXU1 I L S  
 UniRef90\_UPI00047846C0  
 UniRef90\_UPI0004777254  
 UniRef90\_UPI000361172B  
 UniRef90\_Q6FA10 L V S G F L  
 UniRef90\_X5PI81  
 UniRef90\_Q1QGR9  
 UniRef90\_B1Y0N0  
 UniRef90\_UPI0004643BC9  
 UniRef90\_A0A031LKZ8 L V S G F L  
 UniRef90\_UPI0004630279  
 UniRef90\_UPI0002EA359A  
 UniRef90\_G2DUE1  
 UniRef90\_F4GT45  
 UniRef90\_J0WBY0  
 UniRef90\_UPI0003753958 L A S K F L  
 UniRef90\_UPI000465C3F6  
 UniRef90\_UPI00047C465B R M L G Q L  
 UniRef90\_S6CYW9  
 UniRef90\_A0A023D553  
 UniRef90\_E3I0G6  
 UniRef90\_W3RM25  
 UniRef90\_X5PXE8  
 UniRef90\_UPI0002377125 G M L G G L L  
 UniRef90\_S3ZR33  
 UniRef90\_A0A059KJ57 Q I L G G L L  
 UniRef90\_Q65U17  
 UniRef90\_M5AKT1 S L K G F  
 UniRef90\_F4LAR3  
 UniRef90\_N8ZZY9 M V S G F L  
 UniRef90\_A7IFV6  
 UniRef90\_K5Z056  
 UniRef90\_B1ZGV5  
 UniRef90\_UPI00037B453E  
 UniRef90\_K0I5E4  
 UniRef90\_E3HUQ9 A S L S G I F  
 UniRef90\_X4Z4Y8  
 UniRef90\_E6X0I9 Q V G G  
 UniRef90\_UPI0002DC751E  
 UniRef90\_S4AT88  
 UniRef90\_A6DD96 D T L K K F F  
 UniRef90\_B3ENN3 G L I G  
 UniRef90\_I4VW57 M L  
 UniRef90\_C5CSA1 L L Q N R  
 UniRef90\_A0A011Q265 L T R Q F  
 UniRef90\_UPI00037296F2 L V S G F L  
 UniRef90\_I4WDC3  
 UniRef90\_X6EZS3  
 UniRef90\_UPI00045E6041  
 UniRef90\_J0B165 G L T Q L F  
 UniRef90\_F0F2R6  
 UniRef90\_I4WIV3 L  
 UniRef90\_H8L418  
 UniRef90\_UPI0003684DCC  
 UniRef90\_S3HUT0  
 UniRef90\_Q8YFM0  
 UniRef90\_I4B684 I L K G L L  
 UniRef90\_A0A024K117  
 UniRef90\_G0ACX7  
 UniRef90\_UPI000478F705 S L A G S L F  
 UniRef90\_J2U994  
 UniRef90\_I0HQ09  
 UniRef90\_UPI0003789197  
 UniRef90\_A0A011RWT4 L T R Q F  
 UniRef90\_D8NY46  
 UniRef90\_V4NCY1 G M L G G L F  
 UniRef90\_G2U7T4  
 UniRef90\_E6V043  
 UniRef90\_UPI00034D5D5C Q F L G  
 UniRef90\_UPI00045E655F  
 UniRef90\_H5VWVQ5  
 UniRef90\_UPI0003B31123 M L G Q K  
 UniRef90\_N9D6R8 I V S G F L  
 UniRef90\_C4GGB2  
 UniRef90\_I9CLQ5  
 UniRef90\_W6RDA4  
 UniRef90\_A0A052JEJ1  
 UniRef90\_V2UYM5 M V S G F L  
 UniRef90\_UPI0002FACF41  
 UniRef90\_I3D9F8  
 UniRef90\_UPI000401268A M A K K F L



UniRef90\_A1BIW4  
UniRef90\_S3MZW4  
UniRef90\_C7RM47  
UniRef90\_N9EK79  
UniRef90\_UPI000474303A  
UniRef90\_V5EQ12  
UniRef90\_R7X9C0  
UniRef90\_A6QBD9  
UniRef90\_UPI000380F793  
UniRef90\_C4RYA7  
UniRef90\_Q46XC8  
UniRef90\_B4S558  
UniRef90\_E6PLH4  
UniRef90\_UPI00030FB393  
UniRef90\_UPI0004789BD8  
UniRef90\_B3EGS7  
UniRef90\_UPI00047D835B  
UniRef90\_UPI00037D895E  
UniRef90\_UPI00036800A8  
UniRef90\_S9RX80  
UniRef90\_A5G003  
UniRef90\_A0A021WAD0  
UniRef90\_UPI000349E5D0  
UniRef90\_V2JGS6  
UniRef90\_B1FYS5  
UniRef90\_G4CFL2  
UniRef90\_D4ZCM0  
UniRef90\_B1LXR1  
UniRef90\_V4YLF1  
UniRef90\_Q1LJ19  
UniRef90\_UPI00036BDB69  
UniRef90\_W9AVI8  
UniRef90\_M5J3L9  
UniRef90\_N9CSF4  
UniRef90\_A4A7J1  
UniRef90\_UPI000376A299  
UniRef90\_A0A023XZY1  
UniRef90\_E8RU19  
UniRef90\_B8L697  
UniRef90\_E8X1W2  
UniRef90\_J6UF68  
UniRef90\_Z7MEF8  
UniRef90\_W9A631  
UniRef90\_W0BVM9  
UniRef90\_I2K6Q1  
UniRef90\_UPI000380E91A  
UniRef90\_UPI000382745C  
UniRef90\_UPI000237EE6E  
UniRef90\_UPI00041C9C21  
UniRef90\_UPI0002D40AE9  
UniRef90\_B8KK66  
UniRef90\_D0YXG2  
UniRef90\_F3S626  
UniRef90\_G8NPE0  
UniRef90\_I3BYT9  
UniRef90\_G0E8Y2  
UniRef90\_UPI00046EA0AC  
UniRef90\_B7S071  
UniRef90\_B8ERJ8  
UniRef90\_E1SRL5  
UniRef90\_X5RVE8  
UniRef90\_UPI000255924F  
UniRef90\_UPI000225FF0F  
UniRef90\_F5S4J4  
UniRef90\_A9HPS1  
UniRef90\_A9HM78  
UniRef90\_F7VAM2  
UniRef90\_UPI0004706EE8  
UniRef90\_V9H997  
UniRef90\_UPI00037AE624  
UniRef90\_UPI0003699481  
UniRef90\_W5IU22  
UniRef90\_A9HB81  
UniRef90\_UPI00047234C8  
UniRef90\_F7VE11  
UniRef90\_UPI000421BE67  
UniRef90\_A9H4X6

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



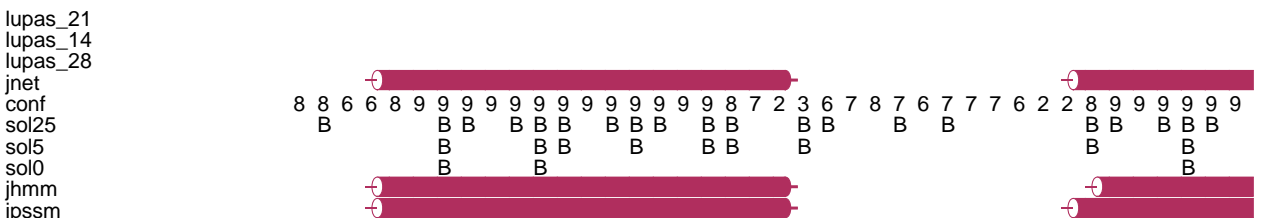
UniRef90\_A1BIW4  
UniRef90\_S3MZW4  
UniRef90\_C7RM47  
UniRef90\_N9EK79  
UniRef90\_UPI000474303A  
UniRef90\_V5EQ12  
UniRef90\_R7X9C0  
UniRef90\_A6QBD9  
UniRef90\_UPI000380F793  
UniRef90\_C4RYA7  
UniRef90\_Q46XC8  
UniRef90\_B4S558  
UniRef90\_E6PLH4  
UniRef90\_UPI00030FB393  
UniRef90\_UPI0004789BD8  
UniRef90\_B3EGS7  
UniRef90\_UPI00047D835B  
UniRef90\_UPI00037D895E  
UniRef90\_UPI00036800A8  
UniRef90\_S9RX80  
UniRef90\_A5G003  
UniRef90\_A0A021WAD0  
UniRef90\_UPI000349E5D0  
UniRef90\_V2JGS6  
UniRef90\_B1FYS5  
UniRef90\_G4CFL2  
UniRef90\_D4ZCM0  
UniRef90\_B1LXR1  
UniRef90\_V4YLF1  
UniRef90\_Q1LJ19  
UniRef90\_UPI00036BDB69  
UniRef90\_W9AVI8  
UniRef90\_M5J3L9  
UniRef90\_N9CSF4  
UniRef90\_A4A7J1  
UniRef90\_UPI000376A299  
UniRef90\_A0A023XZY1  
UniRef90\_E8RU19  
UniRef90\_B8L697  
UniRef90\_E8X1W2  
UniRef90\_J6UF68  
UniRef90\_Z7MEF8  
UniRef90\_W9A631  
UniRef90\_W0BVM9  
UniRef90\_I2K6Q1  
UniRef90\_UPI000380E91A  
UniRef90\_UPI000382745C  
UniRef90\_UPI000237EE6E  
UniRef90\_UPI00041C9C21  
UniRef90\_UPI0002D40AE9  
UniRef90\_B8KK66  
UniRef90\_D0YXG2  
UniRef90\_F3S626  
UniRef90\_G8NPE0  
UniRef90\_I3BYT9  
UniRef90\_G0E8Y2  
UniRef90\_UPI00046EA0AC  
UniRef90\_B7S071  
UniRef90\_B8ERJ8  
UniRef90\_E1SRL5  
UniRef90\_X5RVE8  
UniRef90\_UPI000255924F  
UniRef90\_UPI000225FF0F  
UniRef90\_F5S4J4  
UniRef90\_A9HPS1  
UniRef90\_A9HM78  
UniRef90\_F7VAM2  
UniRef90\_UPI0004706EE8  
UniRef90\_V9H997  
UniRef90\_UPI00037AE624  
UniRef90\_UPI0003699481  
UniRef90\_W5IU22  
UniRef90\_A9HB81  
UniRef90\_UPI00047234C8  
UniRef90\_F7VE11  
UniRef90\_UPI000421BE67  
UniRef90\_A9H4X6

90  
100  
110  
120

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

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

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



UniRef90\_A1BIW4 G L L  
 UniRef90\_S3MZW4 L V S G F L  
 UniRef90\_C7RM47  
 UniRef90\_N9EK79 L V S G F M  
 UniRef90\_UPI000474303A M L G Q F L  
 UniRef90\_V5EQ12 G I  
 UniRef90\_R7X9C0 F L G G  
 UniRef90\_A6QBD9 G M L S K M F  
 UniRef90\_UPI000380F793  
 UniRef90\_C4RYA7 F F K  
 UniRef90\_Q46XC8  
 UniRef90\_B4S558 G L I G  
 UniRef90\_E6PLH4 R L K G E L F  
 UniRef90\_UPI00030FB393  
 UniRef90\_UPI0004789BD8 Q V L S R L L  
 UniRef90\_B3EGS7 G L S G M L  
 UniRef90\_UPI00047D835B M L I N N F L  
 UniRef90\_UPI00037D895E  
 UniRef90\_UPI00036800A8  
 UniRef90\_S9RX80  
 UniRef90\_A5G003  
 UniRef90\_A0A021WAD0  
 UniRef90\_UPI000349E5D0  
 UniRef90\_V2JGS6  
 UniRef90\_B1FYS5  
 UniRef90\_G4CFL2  
 UniRef90\_D4ZCM0 L  
 UniRef90\_B1LXR1  
 UniRef90\_V4YLF1 G L L S K F  
 UniRef90\_Q1LJ19  
 UniRef90\_UPI00036BDB69 L L S K F  
 UniRef90\_W9AVI8 G L L N  
 UniRef90\_M5J3L9  
 UniRef90\_N9CSF4 L V S G F L  
 UniRef90\_A4A7J1  
 UniRef90\_UPI000376A299  
 UniRef90\_A0A023XZY1  
 UniRef90\_E8RU19 K L L G G L F  
 UniRef90\_B8L697  
 UniRef90\_E8X1W2  
 UniRef90\_J6UF68  
 UniRef90\_Z7MEF8  
 UniRef90\_W9A631  
 UniRef90\_W0BVM9 I L R E R M  
 UniRef90\_I2K6Q1 M L S K M F  
 UniRef90\_UPI000380E91A S L L G K L F  
 UniRef90\_UPI000382745C  
 UniRef90\_UPI000237EE6E  
 UniRef90\_UPI00041C9C21  
 UniRef90\_UPI0002D40AE9 G V T G  
 UniRef90\_B8KK66 A A K S L F  
 UniRef90\_DOYXG2 G L L N  
 UniRef90\_F3S626  
 UniRef90\_G8NPE0 L L Q K F L F  
 UniRef90\_I3BYT9 G L A S K L F  
 UniRef90\_G0E8Y2  
 UniRef90\_UPI00046EA0AC  
 UniRef90\_B7S071 A A K S F L  
 UniRef90\_B8ERJ8  
 UniRef90\_E1SRL5 M V S K L F  
 UniRef90\_X5RVE8  
 UniRef90\_UPI000255924F G V L G K L F  
 UniRef90\_UPI000225FF0F  
 UniRef90\_F5S4J4  
 UniRef90\_A9HPS1  
 UniRef90\_A9HM78  
 UniRef90\_F7VAM2  
 UniRef90\_UPI0004706EE8  
 UniRef90\_V9H997 D V  
 UniRef90\_UPI00037AE624  
 UniRef90\_UPI0003699481  
 UniRef90\_W5IU22  
 UniRef90\_A9HB81  
 UniRef90\_UPI00047234C8  
 UniRef90\_F7VE11  
 UniRef90\_UPI000421BE67  
 UniRef90\_A9H4X6

lupas\_21  
 lupas\_14  
 lupas\_28  
 jnet  
 conf 9 8 7 4 1 8 9  
 sol25 B B  
 sol5  
 sol0  
 jhmm  
 jpssm