

1 10 20 30 40
QUERY A P L R F S S D K P L L L L L I D M Q Q A V D D P S W G P R N H P Q A E Q A C A G
UniRef90_J3JFP0 P D D A V L L L L V D L Q R G F D D P A W G E R N N N P E Q L E A N L T A R
UniRef90_UPI000374B557 P R G M D V T T A A L L L V D L Q T G F D D L E R D G S A S R N N N P E Q A E E N L A R
UniRef90_L9WX57 E S A A L L V L I D L Q E T G F D D L D G W G E R N N N P E Q A E A N A R
UniRef90_D5DEU1 M L M L R S R P V L L L I D V Q E G F Y S P Q W G E R N N N L D A E E K H M L T
UniRef90_R4TA13 M T T D T K A L I V I D V Q R G F D D P V W G P R N N N P G A E A N L K A
UniRef90_UPI0002E0BB16 M K K L P K N T A L I V I D I Q K G F D D S Y W G R N N N T H A E T N M E F
UniRef90_UPI00046EC163 M R E G F S N T A L I V I D V Q R A F E D E K W G T R N N N L N A E E N T Q L
UniRef90_T0LLX8 N N S V L I V I D V Q Q G F D D P K W G K R N N N L D A E E N V M A R
UniRef90_UPI00028A18A9 H A A L I V I D Q Q Q G I L Q P R L G P R N N N P A A E E R I A A
UniRef90_M0M877 P D D A V L L L V D V Q Q G F D D P G W G E R N N N P D C E E R I G G
UniRef90_L9WSQ0 E D A V L L V I D F Q T G F D D P T W G T R N N N P D A E E A N A A R
UniRef90_A6CJ12 K E K S A L I I V D V Q K A F D D P K W G E R N N N L E A E E N I A R K
UniRef90_O07081 E K K A L I I V D V Q K A F D D K K W G E R N N N V K A E E N I S K
UniRef90_K2NAZ7 M Q K N Q K A L I I V D V Q K A F E H E K W G E R N N N L D A E E K N I N R
UniRef90_I0GG04 P A L I V V D V Q R A F D E T A G K R R N N P D A V A R I V D
UniRef90_I4XWF9 N A A L I L I D Q Q Q G I L L H P R L G R R N N N P E A E E R I A E
UniRef90_A1ZWY6 M S L R E K S P A L L V V D I Q K G F D D L A G G A R N N N Q D A E E K A A Q
UniRef90_G7Z211 M E T L P H N A A L L V V D L Q K A I D D P R L G P R N N N Q Q A E A N I A A
UniRef90_A0A024RHY7 P K T L A A R T A L L V I D F Q N E Y F G G R L P L P D G A R A L R N A Q R
UniRef90_UPI00047CD3A8 Q P A L L V L D V Q K G F D D P Y W G K R N N N V Q A E E N T I Q T
UniRef90_V8D5Q0 E L P A G K S A L L V I D F Q N E Y F T G R M P L P D G D K A L A N T R E
UniRef90_J2XQX5 A N A L I I I D Q Q K G I Q Q P R L G P R N N N P L A E E R L D
UniRef90_U1NUT2 D Q P A L L I D F V Q Q G F D D P Q W G S R N N N P D A E E Q R A S R
UniRef90_K2L5I7 T A N T A L I M I D W Q Q G F A D L D W G Q R N N N P G A E A N G A K
UniRef90_UPI000288B89B R L D P S V T A L L V I D F Q E E Y F S G R L P L P N G A A A L E N A K L
UniRef90_MODFL5 M T D S D A V L L V I D F Q T G F D D P G W G E R N N N P D A E A V A A A
UniRef90_UPI000378F229 A A L I I V D M Q K G M Q F A T L P P R N N N P A A E D N I A A R
UniRef90_D3SRY4 S P T D A D L A D A A L L V V D F Q T G F D D P A W G T R N N N P N A E E R A A E
UniRef90_UPI0003642EC6 N E P A L L V V D M Q Q G F Y E E S W G T N N Y P G C E N N V D R
UniRef90_U1P452 P A L L V L D L Q R G F H A D G W G P R N N N P A A E E D R A R R
UniRef90_A0A031RR91 A P A T L S A A K T A L I V V D I Q N E Y F R G K M V I P D G Q K V L D N S N K
UniRef90_UPI0003651F0A S T G K P A L L V I D M Q K G L V D Y E G G H R N N T Y A E A N A K R
UniRef90_S2Z0T0 I D A G R A A L L V I D M Q N D F V E E G A P L P E G R S V I P A I Q K
UniRef90_UPI0003B715BD A V V R L E P N A A L L I D V Q Q A F D D S A W G E R N N N P D A E T H V I G E
UniRef90_F2LKQ5 A L I I I D V Q E A F N L P Y W G T R N N N L F A E E G N M K S
UniRef90_J8DJ37 M Q P L A A N A A L L I I D M Q Q G M N Q P A L G R R N N N P D A E L H M Q R
UniRef90_E2XR14 P Q V L P M A R Q A L I V I D I Q N D F A D G K W P L I G V D A A A D N A A R
UniRef90_M0BM53 A K Q A L I V I D I Q N D Y F A G G W P L V G V D A A A D N A A R
UniRef90_UPI0004696450 Q L P R D A T A L L V I D F Q N E Y F S G R L P I P R G P Q V L E Q A R R
UniRef90_F6AWX9 K K A L L I I D V Q N D Y F P G K C Q L Y K P E V A L N T I K D
UniRef90_U3ZK95 D P K R A A L L V I D M E N D F V R P G A P V P M A Y D M L P N I K R
UniRef90_UPI0002F4D744 P A A V K A D K T A L L L I D L Q N D Y F T G G L F I P D G E Q A A A N A A R
UniRef90_A5GAJ3 K T A L L V D I Q N D Y F P G K M E L R N A V E A S E Y A R Q
UniRef90_A7GKJ5 A P D T L D P F S T A L L V I D F Q E E Y F S G K L P I P D G M R A L N N A R R
UniRef90_H8MV54 S K Q A L V V V D I Q N D Y F P G G W T L T G A D A A D N A A R
UniRef90_L8MGW7 M P T E L P A L I I I D M Q K A M T D P A A G A R N N N Q A A E C I A A
UniRef90_UPI00034A5775 K R A L L V I D V Q E E Y F S G N L P V S Y P P E S L E N I L K
UniRef90_U6EF93 A K Q A L I L I D I Q N D Y F S G K W P L D G V E A A A D K A A Q
UniRef90_I2BXF2 M S S T P P V L L L V D F Q Q G F D H S E W G T R N N N P D A E A N A A R
UniRef90_Q18HX7 A P L T P S P A S S A L L V I D L Q N E Y Q S G A L P L D Q L D R A L T E T K K
UniRef90_UPI0003B40B77 N K S A L L I I D V Q N D Y F P G G M A L H Q P E L A L E K I T E
UniRef90_UPI000464A8C6 M E I N E N A A L L V V D V Q K G F E L D Y W G R N N N P E A E E G N I A A
UniRef90_UPI0003789829 M S T P R R A L L V I D V Q N E Y F D G N M P I E Y P P E S L P N I V R
UniRef90_K2R2J7 K R A L L V I D V Q N E Y F S G K L P V T Y P P K S L E N L L N
UniRef90_S4Y1L8 R L H R A R T A L L V L D L Q E E L F S G G L T L P D A R A A L E K A T R
UniRef90_Q0W799 R T A L L L I D I Q N D Y F P G G K E L T G A V E A S M N A R R
UniRef90_UPI00047C2984 R K G L L V I D V Q N D Y F P N G R E L F K A E E T L G N I K K
UniRef90_W0BWX6 S L S A S E T A L I V V D I Q N E Y F R G R M V I P D G A D V L K N K K
UniRef90_UPI0003655F7E M K L R Q V K P I L I C V D L Q L G F L D E K G G K R N N K D A E K I C A K
UniRef90_G4HA97 N T A L I V I D I Q N D Y F K G G R E L Y N S D E A A A R A Q E
UniRef90_W2UR87 M N L R E K K P A L I L I D V Q K A F L D E D G G N R N N N K N A E I V C G K
UniRef90_A5W799 S H A S L I I I D A Q K E Y L S G P L K L S G M D E A V A N I A R
UniRef90_J3D2P6 T A L L V I D F Q N E Y F T G K M P I P D G L A A L N N A K R
UniRef90_F4C760 S K K A L L V I D I Q N D Y F E G A W E L V G A E E A S L K A R K
UniRef90_UPI000478BDF3 K Q T A L L V D F Q N D Y F S A K F E L E K T E N A S N N A S K
UniRef90_N9Q2P6 K Q A L L I I D V Q N D Y F H G K M E L V N P D L A L A Q T N K
UniRef90_W5J062 N A P K R A L I V I D V Q N E Y F S G N L R L E Y P D S L P N I L R
UniRef90_UPI000299D452 L V I L D V Q D A I D R P I W D G K S N P E Y L A V I Q R
UniRef90_UPI00047AB469 N Q P A L I I I D V Q K A F N L P Y W G E R N N N P L A E E N M K R
UniRef90_V5SF03 A P L S K S A L L V I D C Q N T Y R E G I M Q L E G V E P A L Q E C A K
UniRef90_Q1QER7 E I D W S N C A I V M I D F Q N E Y V D G A M P L G D G N K A T A N A C L
UniRef90_D9VC77 T V D P A R T A L V V I D M Q H D F L A P G A P L P A G R A M L P T L N D
UniRef90_G8PNL1 K R A L I V I D C Q N D Y F P G G A C P L A G Q E A G K N I A R
UniRef90_UPI0003749D3A M T A T P R R A L I V I D V Q N E Y F T G K M R I P P V E T S L P N I G R
UniRef90_S9Q8K2 S K R A L I V I D V Q N D Y F P G G W T L N G I D A A A D N T A R
UniRef90_K6BIR7 K P G L I V V D L Q N E Y L P G K L P L T G I E A A V A N A V R
UniRef90_UPI00037F1F52 K T G L V L I D I Q N D Y F P G G R E L H E S L R A V E N A K E
UniRef90_K0L0K9 K T A L L I I D L Q N D Y F N G K F L V G I N E A T L K A K T
UniRef90_K2P061 M E L D G A V L L L V D Y Q Q A F D G A P W P R R W N D A L D D N G L T
UniRef90_M3KJ58 M S A N D T A L L V I D V Q E S F R H P Y Y R E E E V A A Y I E R Q Q A
UniRef90_UPI00034D99B4 M S Q H A S A L L I I D M Q N G L V H A A Q A P F A I E S V A N T N Q
UniRef90_A3JCL5 K T A L I I V D M Q N D Y F D G K W T L N G V E T A A K N V E K
UniRef90_Q48J46 W P I N P L R T A V I V V D M Q K V F C E P T G A L Y S T A D I V Q P I Q K
UniRef90_UPI00029A63A5 N T A L L I I D I Q N D Y F P A K W A L S E T E K A A Q K G S Q
UniRef90_V3TV42 S R S A L L I I D V Q E S F L H P F W Q E Q S D V P A F Q S E I R R
UniRef90_J1TH82 A D T A L L V I D A Q E S F R H P Y F R E D E I G T Y I A S Q Q A
UniRef90_UPI00038268D4 M T K P A S R A L I V I D V Q N E Y V T G D L P I P S V D A S L A N I G R
UniRef90_A0A031WGW0 A L I I I D I Q N D Y F N G K C E L F Q S E E T A E N A K K
UniRef90_C7RJX5 R A A L V V I D V Q E S F R H P F W S E A D L P A F R D A V L R

QUERY S N S V E A T V R M A G N L G F A V C L L A E D G C F T F D K T D W H G R R R S A
UniRef90_J3JFP0 D H C V S E T T A R M A G N L G F F D V L L L E D G T A T F D R E G L D D G S H Y T A
UniRef90_UPI000374B557 N H C V S E T T T R M A G N L G F F E T F L V E D A T W T F D R T G P D D G E R T F Y T A
UniRef90_L9WX57 N H C V S E T T T R M A G N L G F F E P L V V A D A T A T F D R E F D D G E R T F D A
UniRef90_D5DEU1 N H C V S E T T A R M A G N L G F Y R T Y V V N D A T A C F D C M S Y D D G K T R P A
UniRef90_R4TA13 N F C C E T S T A R V G V G L G F Y S T Y T F A L D A T A T F D F D L A G A Y D D G A V Y T A
UniRef90_UPI0002E0BB16 D Y C V S T T T R M S G N L G F F E S T Y L V S D A T A A F A K G A D D T Y Y S A
UniRef90_UPI00046EC163 P H C V S T T T R M S G N L G F F E T Y L V S D A T A A F A K G A D D T Y Y S A
UniRef90_T0LLX8 N H C V S T T T R M S G N L G F F K S Y V I E D A C C A A F E K I D D Q F H G K M S A
UniRef90_UPI00028A18A9 D N S V E A T A R S A G N L G F F V T W V V E D G C C Y T F D K A D Y F G G Q L R T A
UniRef90_M0M877 D H C V S T T T A R M A G N L D F F R V F V V A D A T A T H E R R V G Y D G E S Y D A
UniRef90_L9WSQ0 D H C V S T T T R M S G N L G F F D V A V V A D A T A T F D R M S Y D D G K H F Y D A
UniRef90_A6CJ12 P H C V S T T T R M S G N L G F F E T Y L I S D A T A A F G M R D Q T N D T Y Y D P A
UniRef90_O07081 P H C V S T T T R M S G N L G F F D T Y L I S D A T A A F G M R D Q T N D T Y Y D P A
UniRef90_K2NAZ7 P H C V S T T T R M S G N L G F F D D A R L V S D A T W T F F E R I G P D G D T H S A
UniRef90_I0GG04 N H C V S E T T T R M A G N L G F F D T W V V E D A C Y T F D K V D F F G Q A H S A
UniRef90_I4XWF9 H N S V E S T T A R T A G N L G F F D T W V V E D A C Y T F D K V D F F G Q A H S A
UniRef90_A1ZWY6 N H C V S T T T R M A G N L G Y H T Y L I A D A T A T F D R V G I N G R K Y K A
UniRef90_G7Z211 N N S V E A T V R M A G N L G Y D V H L V A D A C A T F D A R L D R S N G R V W T A
UniRef90_A0A024RHY7 H A C V A G A A R D A V P L G Y S V I V V D D A C A T R D L D L G D G D T V S H
UniRef90_UPI00047CD3A8 Q H C V S T T T R M S S N L G Y Q T F L V S D A S A A F E I T D H T H G K R H T P
UniRef90_V8D5Q0 H A S V A G T A R D A A P L G Y K V I V A S D A S A T R D L T R V N G D Q L P K
UniRef90_J2XQX5 H A S V E S T A R T A G N L G F F D T F V A S D A C F T F D K A D Y F G T L R T A
UniRef90_U1NUT2 D H C V S T T T R M A G N L G F F E A V I A S D A T A T F D R Q L A D E T F D A
UniRef90_K2L5I7 D H C V N T T T R M A G N L G F F E V T I V S D A C A T A T F D R K L P D G R V F G A
UniRef90_UPI000288B89B H A C V A G A A R D A A P L G Y Q V I V S A D A S A T R D L S N H Q G G V I T P H
UniRef90_MODFL5 D H C V S T T T R E A G N L G F F G D V R V V A D A T A T H A R E A P D G G E R L D P
UniRef90_UPI000378F229 N N S V E A T A R T S G N L G F F G T V V V S D A T A F A D K A D F F D G G T H R R A
UniRef90_D3SRY4 D H C V S T T T R M A G N L G F F D V H L V A D A T A T F D R T F D G E E F D A
UniRef90_UPI0003B42EC6 N L C V S T T T S R M G N L G F F E V I V P L D A T R T F D L A G P D D G A V T P A
UniRef90_U1P452 D H C V S T T T R M A G N L G Y D T S L A R D A T A T H D R E L D D G D L L P A
UniRef90_A0A031RR91 H M C I S S T A R D A V P L G Y D V L I P Q D A T A T R D L D D G G A G G V D H
UniRef90_UPI0003651F0A D H C I S S T T R M A G N L G Y D T F L V S D A T A T F D K V G P Y G T K F K A
UniRef90_S2Z0T0 E C C V L G T T A R G A L E R G F R S V V L K D A C A S C D Y P D L G A G P M S A
UniRef90_UPI0003B715BD D H C C S T T A R M A S N L G F F E T W F V A D A T A T H A R A A G F D
UniRef90_F2LKQ5 N N S V E S T A R T A G N L G F F S T L V V A D A T Y T F D R R H D L D G R L W R A
UniRef90_J8DJ37 N H C V S E T T T R M A G N L G F F Q T Y V V S D A T A T F D R I G P D D G K E Y S A
UniRef90_E2XR14 N N S V E A T A R S G G N L G F F D V I V A A D A C Y T F D Q T D L S G R L W S A
UniRef90_M0BM53 D H C V S T T T R M A G N L G F F T L V A D A T A A F D R S Y D D G K E H F D A
UniRef90_R4RSB7 H M C V E G T A R A A A D L G Y P V K V I H D A C A T L D L E F A G G Q R V P A
UniRef90_UPI0004696450 H M C V E G T A R A A A D L G Y P V T V I H D A C A T L D L E F N G E Q Q V A A
UniRef90_F6AWX9 H A C V A G A A R D A A P L G F E V V V A S D A V A T R A I L E R S N G E S V D A
UniRef90_U3ZK95 H M C I D T S V R E A K D L G Y H V T L I A D A C A T A T K D L E W N G R K L P A
UniRef90_UPI0002F4D744 N M C C E S T A R D A Q F R D Y K V I F V S D A N G T M D H P D L G A G S M S A
UniRef90_A5GAJ3 H M C V D S T A R A A L E D L G Y K V V V A A D A C A S R D L P D P N G A T I D H
UniRef90_A7GKJ5 H M C I D A T V R A A F D F G F H C T V I H D A C A T K D L L F K N A T I P A
UniRef90_H8MV54 H A C V S G A A R D A V P L G Y N V I V A D D A S A T R D I D V P G G G T I P H
UniRef90_L8MGW7 H M C V D G I T A R A A V D F G Y P V T V I H D A C A T L D L E F N G T R V P A
UniRef90_UPI00034A5775 N N S V E G S A R S A S N L G F F D V T V V A D A C A F A F D K T D Y A G T R R N A
UniRef90_U6EF93 Q M C C D T T A R Q A F H R G F K V E F L S D A T G T L D V S N Y A G T V T G
UniRef90_I2BXF2 H M C I D A T V R A A A D L G Y K V I V I H D A C A T R D Q E F E N G Q V I P A
UniRef90_Q18HX7 D H C V S T T T R M A G N L G F F E L Y I V A D A T A T F D R T L N S E H F D A
UniRef90_UPI0003B40B77 H M C I S A T A R S A F D H G Y R A T V V A D A C A T R S L P G A L L G G S I P A
UniRef90_UPI000464A8C6 H M C V E D T T T R A A A F D L G F D V Q V A I D A T A T K A L A F G G D T V S A
UniRef90_UPI0004647903 N M C N E T T A R M G N L G Y E V L F P L D A M H T F D L E G P F G W T Q T A
UniRef90_UPI0003789829 H N C D A S T I Y Q A S H D G F K V E F L A D A S G S L P Y R N A A G S A S A
UniRef90_K2R2J7 Q M C C D T T A R Q A F H R G L K V E F L S D A T G T L N V S N Y A G S V T A
UniRef90_S4Y1L8 H L A V D S T A R D G L V L G Y R V L L P S D A S A S R D L P A V G G A R V D H
UniRef90_Q0W799 H M C V D S T V R A A Y D Y G F K C I L A S D A C A T K D L Q F K D Q I V D A
UniRef90_UPI00047C2984 H M C I D S T T V R A A S R D L G Y S N I L S D A C T T K D L Q W N D L K I P A
UniRef90_W0BWX6 H M C I S S T A R D A V P L G Y S V I I P E D A T A T R D L D D G K G G V V D H
UniRef90_UPI0003655F7E D H C I S T T T R M A G N Y G Y N T Y L I S D A T A T F N K V G Q N G E I Y D S
UniRef90_G4HA97 H N C V I D S T T V R S A S R L G Y E V L L S D A C A T R D L E W D G T V T P A
UniRef90_W2UR87 N H C V S T T T R M A G N F G Y E T Y L I S D A T A T F D R I G I N G E K Y D S
UniRef90_A5W799 H S V S T T V R A K D Y G Y R C T L V E D A S A T R D L A F K D G V I P A
UniRef90_J3D2P6 H A C V A G A A R D A S P A G Y D V I V V S D A S A T R D L D A P G G G V I A H
UniRef90_F4C760 H M C V D A T T R A A K D F G F D C T V I S D A C A S K D Q E L G G K V V K A
UniRef90_UPI000478BDF3 H M C I D A T T R A A K D F G Y E C T V L S D A T V T R D L L F G D I V V P A
UniRef90_N9Q2P6 H V C L D S G T R A A K E L G Y Q P I V I A D A T A S R D L L E Y N G K T V K A
UniRef90_W5J062 H N C D D S T A R Q A A H E G W Q V E F L D D A S G S L P Y A N S A G A A T A
UniRef90_UPI000299D452 H N S M D A T V R A G K A L G Y S I L L P S D A T T A V P V V A A H G K S W D A
UniRef90_UPI00047AB469 N H C V E N T T T R M A G N L G F S T Y L V S D A T A T F N R K G P D D G G T K Y C A
UniRef90_V5SF03 H V C V E N S T A R A A F N H G Y R T V I A N A T A T R A L P N P V G G T V P A
UniRef90_Q1QER7 H M C V S S S V R A A F D L G F E N F V C H D A C A T R D L P S V A G G V I M A
UniRef90_D9VC77 E D C V H A T L R D A M F R D F R T A V L S D A C C A T Y D H P D L H G G A M S A
UniRef90_G8PNL1 Q N C V N A T A R Q T L D L G Y F R T I I Y S D A C A T E D L E F N G V K V P A
UniRef90_UPI0003749D3A H N C N A S T I Y E A M H R G L Q V E V L E D A T G A L P Y Q N A A G K V S A
UniRef90_S9Q8K2 H M C I D A G G V R A A A D L G Y R C T V I H D A C A S R D L E F G G V R V P A
UniRef90_K6BIR7 H M C I D A T V R A A A D M G Y P V A V L H D A C A T R D L L S Y N G V R V P A
UniRef90_UPI00037F1F52 H M C I D T T V R A A S D L E F R C T V I E D A C T T K D L V F N N E L T Q A
UniRef90_K0L0K9 H C V I S T T T R S A E L G F K V I V P K D A V A T R D L E F D G V I V N A
UniRef90_K2P061 D M C V S T T T R T G A N M G W K M M L V A D A C D C F R D L P D G H G G T V A
UniRef90_M3KJ58 E Q C C E T T T R H A S D L G F N V D Y V G E A T L T F P M T D I S G H V W S A
UniRef90_UPI00034D99B4 D Y C V D T C R G G R D L G L E M V L A S D A H T T F A N G V L S A
UniRef90_A3JCL5 H T C L D A T T R A A G D L G Y A N V L H D A C A T L D A E F N G V K V P A
UniRef90_Q48J46 N V C L E T T T R D G V H R E Y K V I A L S D A N A A M D Y P D V G F G A V S A
UniRef90_UPI00029A63A5 H M C I D A T V R A A A T D L G Y E C H V A H D A C T T L D M E F N G I T V P A
UniRef90_V3TV42 E Q C C E T T A R V A S D L G Y Q V T V A T E A T M T F P M T H C G Q T L S A
UniRef90_J1TH82 E Q C C E T T T R H A S D L G Y E V T Y V G E A T L T F P M T D T S G R E W S A
UniRef90_UPI00038268D4 H N C N A S T V Y H A A H A G L G V E Y L E D A T G A V P Y E N A A G A S A
UniRef90_A0A031WGW0 H M C I D S T V R T A K K L R Y D I T L I S D A C T T K N L S W N N I E I N A
UniRef90_C7RJX5 E Q C C E T T T R V G S D I G Y Q V D F V S D A T L T F P M T H P S G R T Y S P

QUERY	170	180	190
UniRef90_J3JFP0	D E E V H A M S L A N L D G E Y C R V C G S A D I L A A L G N A G A A		
UniRef90_UPI000374B557	E E E M H Q T A L T H L H G G E F A R V V V S T E S V L A S L A S L		
UniRef90_L9WX57	E T I Q Q A M T M A N L S E G E F A R I V V V T G E V L A R L		
UniRef90_D5DEU1	E D V H T F A L S S L H E E F A T V V V S T K E T L Q V L Q T F Q Y A		
UniRef90_R4TA13	D E E I Y R A T A T N L H G M F A T V T S T K E T L G S L		
UniRef90_UPI0002E0BB16	E E I H N V S L A T L D D E F A T V L T T E E L I G K L Q		
UniRef90_UPI00046EC163	E E Q I H N V N L A S L H G E F A Q V I G S A E D L V		
UniRef90_T0LLX8	D Q E V H A M S L G N L H G E F A T V L S A A E V L G R		
UniRef90_UPI00028A18A9	E Q S H R T L A L A H L D G E F A T I V E T D A L L E		
UniRef90_M0M877	E T V H R T A L A V L H E E F A T I V M T T A D L L E		
UniRef90_L9WSQ0	D I I H D V S L A T L H E E F A T I L T T K Q L I E		
UniRef90_A6CJ12	A T I H N I S L A T L H D E F A T I L T T D Q L I		
UniRef90_O07081	E T I H R L S L A T L H E E F A T V L T T A E Q L M		
UniRef90_K2NAZ7	E E I H A M T S L N L N G E F A R I V T T H E V I A S L E A V		
UniRef90_I0GG04	E E V H A M S L G N L H G E Y A T V I D S R Q I L Q R		
UniRef90_I4XWF9	E T L H L T T L A N L R D G E F A T V M N T A Q L L E A L		
UniRef90_A1ZWY6	D E V H D L S L A N M S L G E F A T V V E T A E V L G A V		
UniRef90_G7Z211	R D L H R A T L A A L S D T F G D V L T T E Q L L		
UniRef90_A0A024RHY7	E D I H Q F E L A T L H K E F A T I L N T N E V I T Q L S		
UniRef90_UPI00047CD3A8	D A L H K A A L A E I E D T F G D V M T T A Q I L K M		
UniRef90_V8D5Q0	E E V H A M S L G N L H G E Y A T V V S A A L I L A A		
UniRef90_J2XQX5	R L V H R T A L A Q L R E E F A S I E P T D S L V S R L R S A		
UniRef90_U1NUT2	D L V H D V A L A S L N G E F A K V C T T D Q V I		
UniRef90_K2L517	E Q L H Q S A L A V S L E D T F A E V H S T A E I L S Y F		
UniRef90_UPI000288B89B	E T S H R V A L A H L N G E Y A A V V E S D D L L R R		
UniRef90_MODFL5	D E V H L M A L A N L H D E F A C V L S T E E V L R R		
UniRef90_UPI000378F229	E T M H R T A L A Q L D G E F A T V V R A S L V D		
UniRef90_D3SRY4	A T L M Q V T A T N L H G G F A Q V V S T Q D V L D S L K Q V		
UniRef90_UPI0003B42EC6	S E V H R T A L A H L D G E F A T V T T T A D L L D R F		
UniRef90_U1P452	R V L Q R A A L A A V A D V F A E I K T T E G I L A		
UniRef90_A0A031RR91	E M L H E T E L A S L H N E F A L V I G T D E L L R Q I A E		
UniRef90_UPI0003651F0A	E E M H L A A L R V M S L T S Q L V G T D E F L A R L A E		
UniRef90_S2Z0T0	E T M H R T A L A S L D G E F A R V M T T A E A I T G L R G L A S S S		
UniRef90_UPI0003B715BD	E E I Q A L S L A N L A M D Y A C I L D T A A L L A		
UniRef90_F2LKQ5	E D I H N M T L V N L H D E F A K I I T I E D V L K		
UniRef90_J8DJ37	E D V H A L S L S N L A M D Y A R V V A T D T I L		
UniRef90_E2XR14	D T V H R T A L A H L A G E F A T V L D A A A V L D R L		
UniRef90_M0BM53	A Q V H A A F M A A L A F G Y A S V L S T E Q F L A A G Q A P A A		
UniRef90_UPI0004696450	A Q V Q G A V M S A L A F A Y A S V L S T E A F L A A		
UniRef90_F6AWX9	D S L H R A A L A E I E D V F G D V M P T A H V M Q		
UniRef90_U3ZK95	S F I N D V Y M A S L N S K F A K V I A S A D Y F A E		
UniRef90_UPI0002F4D744	E E V Q K A V L T S L S F C I A E I A S T E E V I K K L		
UniRef90_A5GAJ3	K V Y H N T A L A A L G D R F A D I L R T E E L V		
UniRef90_U7GKJ5	V Y I H Q T L A S L N E G Y A D V I S T E E F L		
UniRef90_H8MV54	D V L H K S A L V T I A D T F G A V M G T N A I V		
UniRef90_L8MGW7	A Q V H A A F M A A L A F G Y A S V L S T E Q F L A		
UniRef90_UPI00034A5775	A D V H A M A L A N L D G E H A R I T S T A A L L A T L P G L A		
UniRef90_U6EF93	D E L H R A V L V T Q A M R F S E V L N T V D W L E K L K		
UniRef90_I2BXF2	A Q V H G A Y M A S L A F G Y A G V V S A E E Y L K A Q A A A A		
UniRef90_Q18HX7	P V V H R T A L A H L S D E F A T I I P T E Q A		
UniRef90_UPI0003B40B77	S Q V H D T A L A E I A D G F N V V V		
UniRef90_UPI000464A8C6	D Q V K N T V A A A L H G T F A Q V Q T T D A I L Q Q L S R		
UniRef90_UPI0004647903	E E L T R A T A V S L H G R F A R V V A T E D V L K		
UniRef90_UPI0003789829	E E I H R V F S T V F H S N F A A V T G T A G W I A A V Q E		
UniRef90_K2R2J7	Q E L H N A V L V T Q A M R F S D V L S T A D W I Q G V E N		
UniRef90_S4Y1L8	R T L H E V S L A A L A D R F A D V L P T E A V L A		
UniRef90_Q0W799	I D V H N A F V S A L S G M F A V V K C T D E L L		
UniRef90_UPI00047C2984	E T I Q N V Y M A S L N R K F A Q I M K T D E Y F K K L		
UniRef90_UPI0003655F7E	D T L Q R A A L A G V A D V F A E I M T T D Q V M A		
UniRef90_G4HA97	E L M H K T A L A S L N D E F A K V I T S K D L L Q		
UniRef90_U2UR87	Q T V H Q T F M A S L Q D T F A Q V R N T S S L		
UniRef90_A5W799	E I I H L T T L A N L N E E F A T I W N S E T L T K E L		
UniRef90_J3D2P6	A Q I H Q C E M A V M A D N F A C V A P T A S L I		
UniRef90_UPI000478BDF3	D V L H R T A L T T V A D T F G D V L S T N A V L E		
UniRef90_N9Q2P6	A D V H T A F I A A L T F F Y A T V T T A E E Y L		
UniRef90_UPI000478BDF3	K Y V H A S F M A A L E F A Y A R I K T T S E L L E G L		
UniRef90_W5J062	A D V Q T A F L S A L S F F A T V Q N T A D F L A		
UniRef90_UPI000299D452	E E I H R V F S V L H S S F A A V A S T A D W L A A V A S G K A		
UniRef90_UPI00047AB469	T T V H E L T L A I L G D E Y A E V M S S D E V I A Q L		
UniRef90_V5SF03	D E I H N M T L V N L H E E F A T I V T T L E T V E K I		
UniRef90_Q1QER7	D A V H T G A L A A L A D F A I V V P S G D		
UniRef90_D9VC77	S T V H D S A M A A L Q D R F A A L V A T D K L		
UniRef90_G8PNL1	A E V H A A T L V V L A Q S T A D V L T S A E F T A		
UniRef90_UPI0003749D3A	D H V H T A M M A S L R F A H S N V I S T D E F L D T V N G A		
UniRef90_S9Q8K2	E E I H R V F N T V F H S N F G A V A S T E T W Q G A V		
UniRef90_K6BIR7	A Q V H A A F M A A L S F A Y A R T Q S T D E F L A		
UniRef90_UPI00037F1F52	A Q V H A A M M A A F E F G Y A T V K S V D D Y L S A		
UniRef90_K0L0K9	K H V H T V F M S A L D K M F A N V I K T T E F L S		
UniRef90_UPI00034D99B4	A Q V S A S V F A T L E F G Y A T V S S T E E V L K		
UniRef90_UPI00034D99B4	E T V Q A V H V A T L G F E F C T V T F T Q A L L A S L		
UniRef90_Q48J46	A E I R A R T E L V L A D R F A R I A T V E Q A L A G S A E R K A A		
UniRef90_UPI00029A63A5	E Q I T A H H K L L S G P F V S V V K A A E I		
UniRef90_V3TV42	A H V H A F M A G L A F A Y A E V I A T D A F L T R		
UniRef90_J1TH82	A D V Q R I S L T T I A Y E F G E V T T T A E V I R R I E S A		
UniRef90_UPI00038268D4	A H V H A A F M A A L S F G Y A N V A S A N E L E N L L		
UniRef90_UPI00038268D4	S Q L K H R T E T V L V D R F A A I C T V D E C L E K L N H A		
UniRef90_UPI00031WGW0	A E I R A R T E L V L A D R F A R I V T V E Q V L N G L A A R A A A		
UniRef90_C7RJX5	E E I H R A F T V V L Q S N F A A V M S T D A W I A G L A G G A		
	N T V H Q V F M A S L Q N S F A D V K N T D K F L S		
	A E I K E H T E L V L A G R F A R I V G V D D C L A A L G E A H A		

UniRef90_UPI00047866CF 1 10 20 30 40
UniRef90_E6WM27 K N A L L I I D V Q N G L F H G P Q I P Y A N S A V L A N T I R L
UniRef90_K2LEH5 L P L L D N D T A L L I V L D V Q Q A I I D D P R W N S K N N G A G Y A D V I A K K
UniRef90_UPI00036F4756 M E L D T E H A C L L I V L D V M Q E F L N P H S P T Y G G A A L P N V I K K
UniRef90_I3XTT4 K R A L I V V D V Q N E Y F E G G L P I S Y P P N S F E N I K T
UniRef90_XOR9J8 I Q A S K Q A L V I V D M Q N D F I E G G F N V R S F E P I T S V I Q K
UniRef90_A0A022LCV7 S S S S D T A L L V I D A Q E S F R A D D W A A T A N P A V I D N I A L
UniRef90_A0A021XF83 S K R A V V V I D I Q N D Y F P G K Y E L V G I E K A A A N A A Q
UniRef90_UPI00047E2D12 T T A L L I I D M Q N G L F C S G E E A V F G I D Q V L A R I N G
UniRef90_N8XHE9 M S A L Q N K Q A L I V V D M Q N A L F H A P Q P P F E A H Q L L Q N I N Q
UniRef90_F4XYS0 K T A L L I V D I Q N D Y F P G G M E L V G M N L A S Q N S Q H
UniRef90_U7P694 S D T A L L I V D L Q N D Y F D G K W P L V G I E P A A E Q A A A
UniRef90_W9DGH1 M T T I R R A L I V D V Q N Q Y F D G P L A I P P R D M S V Q N I V R
UniRef90_Q4K819 N L S H A T L V I I D A Q K E Y L S G P L A L S G M D A V A N I R Q
UniRef90_UPI00023765FE T T P R R A L I V D V Q N E Y F A G G N L P P V A E T L P N L T R
UniRef90_UPI00037D2915 S L A S S A L V M I D C Q N T Y R K G L M Q L T N V E P A I I E A K K
UniRef90_UPI00026315F7 M S S P R R A L L V I D V Q N E Y F D G A L P I A H P P V A L P N L Q
UniRef90_UPI0003F5823F Q S C L V L I D L Q N E Y R T G P L A L P G A D A I A S A S R
UniRef90_UPI0004200BB8 P I E L D W S K S A L L I I D M Q R D F L E P G G D V S Q L S R A V K P I G A
UniRef90_R1GJW6 A P A T L G K A T L L V I D I Q Q G F N H P T G K S R S T P E F E S N I A K
UniRef90_U3AWQ2 A L L I V D A Q E E Y R S G A L Q L P D V E A A I S E I A T
UniRef90_U5WA71 A L L I V D V Q E S F A R P L W Q A V S N P G S V A Q V O R
UniRef90_UPI0002ED04BC A L L I I D V Q N D Y F S G G M A L H E P E K A L H H I R Q
UniRef90_UPI00046A1383 A A L L V I D M Q V G L F H G P E K P H D G A R V L A N I R H
UniRef90_UPI0002FF98A1 K K S L L V I D V Q E G M Y T A G M P V H H G Q K L I E T L K E
UniRef90_D6XVT4 F T F D P K T T A L L V I D M Q R D F V A P G G D I S A T R A I I P A T Q E
UniRef90_A0A016PFV0 P S S A S P T D S V L I I I D A Q N E Y A E G K L Q Q V T N V A E S R K V L A A
UniRef90_F0KX74 R L R P E S T A L L V I D V Q Q S F E H K S W Q Q Q D L P A F S A A T A N Q
UniRef90_G6Y6Y1 P T A I D P A R T A L L C I D Y E L E F F A G H L H V P H G P Q A V M Q G A R
UniRef90_A1V9S8 F T L D A T K T A L L V I D L Q E G L L P F A G G P H T A D D V V S R A R I
UniRef90_D6DQ70 M T A P R R A L I V V D V Q Q E Y F D G V L K I P P R E E S L A N I A S
UniRef90_UPI00039AC625 A L L I I D V Q L D Y F P G G F P L V E P E A A A D A A G A
UniRef90_UPI0003B33DCA S P Q R S A L L I I D M Q V G L F H G P Q Q P W G D Q V L A R I T A
UniRef90_UPI000289C30A S F G P E K T A L L V I D M Q V D F C A P G G S I E P A R A V I P R I Q A
UniRef90_F0XB37 M T A P R R A L L V I D V Q N E Y F Q P P M Q V P P V D D S L A N I L R
UniRef90_G0EH65 S S K A L V I I D I Q N D Y F P G G W P L A N A D L A A D N A A K
UniRef90_M6ZXZ2 K K A L L V I D V Q A G M Y T A G M R V H N G E K F L E N L K T
UniRef90_L1M824 K K A L L V I D I Q N D Y F E G A M E L V Q P L Q A S E N A K L
UniRef90_UPI0002FEDB97 T F D P E K T A L L V I D M Q R D F C E H G G D I S E V T A I I P Q V I G K
UniRef90_J7Y5B6 K N T A V L V V D M L N D F V T G S L K C D R G L A I V P T T A R
UniRef90_UPI00041D2C39 N K A L L V I D V Q E S F R Q P S W Q L V S N P G I A E Q V I G K
UniRef90_R6VKY9 K K T A L L I I D V Q N I M F S E G G S L W N E Q Q V L K N I I Y
UniRef90_UPI0003A9B9C6 P S T A S P T D S T L V I I D A Q N E Y A E G K L A V S E V A A S R K A I A S
UniRef90_D5DPD8 L E F D P G T T A L I M I D M Q R D F V I E P G G D V S L L R S A I E P C R R
UniRef90_UPI00034D5465 M N P T R T A L L V V D A Q Q S F L Q E S W Q A S S D P E V A N I R I G R
UniRef90_B0BH35 L T L N T A S T A L L V I D L Q Q E G L L P F A G G P Y S A D E V V A R S A R
UniRef90_H5UWR9 K Q A L L V I D I Q Q D Y F P G G A L P L E G P D A A A N A A
UniRef90_UPI00047D6EA5 P L T L N P A E T A V I V V D L Q N A Y A S A G F D V S T T A P V I Q N T I K
UniRef90_K0CTK9 K S A L L V I D V Q K G L F T P P P A D A E A T I D R I N T
UniRef90_S5EEN9 A P K Q A L L V I D M Q I G Q C S V A P L P P F Q R E A L L D N I N Q
UniRef90_UPI00035FF59A A K R A L L V I D M Q V G L F N G P D K P Y Q R E Q V L D H I N Q
UniRef90_U6ZMA1 E F D L E R T A L L V I D M Q R D F C A P G G D I T P T R S I E P L R K
UniRef90_W8UBX2 D T A L L V V D I Q N D Y F P G G M A L E H A V I E A G A K A T A
UniRef90_S7YX6 N T A L L I I D I Q E G L N H P T G L N R S N P A F E S N I V K
UniRef90_S3DZU0 T L H Y S T T A L L V I D M Q K D F A E G Y L A K Q N I D D L V P N L R K
UniRef90_G2YUB5 A D T T L L M I D F Q N T Y R T G V M A L E G A E P A L A A G A R
UniRef90_UPI00036F5902 A V I V I D L Q N D Y F P G G L P L S E I E P A A A N A L A
UniRef90_UPI00046F9EB2 T A L L V I D V Q E A M F S P D M K L H D E E G V M D R L L F
UniRef90_UPI0003B30275 A A L L V V D V Q N D Y F A G G M A L P G A E R A G K R A A A
UniRef90_G4RKK2 V S F P S R S T A V L V V D M Q N D F A H P N G K L Y S P G E I I P R I A R
UniRef90_UPI0004780A2B N T T R T A L L V I D I Q N D F L G G N W P L Q K Q E A A E K A Q K
UniRef90_D7UWN0 K Q A L L V I D I Q N D Y F P G G M E L S Q P E E A L T L V K Q
UniRef90_D4X782 K Q A L L V I D V Q E S F R H P F W D E S E Y P A F L T Q L Q S
UniRef90_UPI0003495816 A L L V I D M Q R G F D D L D W G P T A N P D C E A N V G A
UniRef90_R8WTQ6 L E L N A K T T A L L V I D L Q E G L L P F A G G P Y S A N D V V A R A Q
UniRef90_I3CZA4 T W Q E A V L L I I D H Q T E Y T T G R A P L A D I D A V G Q T A E
UniRef90_V5U5P5 R T A L L I N I D T Q Q S F F H R S W R E D D F P A F C E A L N T
UniRef90_E6X2C0 A M L L V L D M Q K D Y Y P G G R E S G I L T A H A N L R
UniRef90_UPI00029AC522 A K R A L L V I D M Q V G L F H S P E Q P W Q G D R V L N K V N T
UniRef90_R8QTD4 A L L I I D V Q T G S F Q E K Q P L Y K G K E L L E N I Q L
UniRef90_UPI00036F2CC3 M S L D K T R T A V I V V D M I N D F C K P G G A L P G Y E T L V P Q Q L
UniRef90_F0C3C4 I I V I D L Q N D Y F P G G M P L S G I E Q A S A N A A L
UniRef90_D6U600 K Q T A L I V V D V Q V A L F K P G R P T Y R E E E L L A N T I A H
UniRef90_UPI00036F9EB2 F D A A A T A L I V V D M Q N G Y C S P G G D L T P T Q K V I P A I A R
UniRef90_E6VNR9 S R I A L I N I D T Q Q S F H H R D W Q E Q D V P A F E Q A M L G
UniRef90_D5CBH3 T H N T A L L I I A Q N D H F P G G F E L P K Q M E A A G N I V E
UniRef90_G8PNL4 P R T T A L L I I D M Q N D F V D G K L Y V P Q A K S T I P S I R R
UniRef90_F4G1K3 P L S F N P Q T T A L L M I D M Q R D F V I E P G G G F G E A V R S A I Q P C K R
UniRef90_S6FAV3 S F T P F T A L L V I D M Q K D F C A P G G D I S A S R A I T P R L Q S
UniRef90_B6Q965 P F Y I N K D V C A L F V I D M Q K Y F C D G G A V I P G A E L L K T K I K R
UniRef90_X1LGW3 L T L D P A H T A L L V I D L Q N S N V K H D L A P H S A E N V V G N C V L
UniRef90_K9DMQ3 D T C L L L I D V Q Q G F D G G P T G R R N N P D A E S V M A S
UniRef90_M4ZXD5 P M G L D P R T A V L V I D M V I N D F C T G A M V L P G A E K L Y G P Q N A
UniRef90_UPI000307BBE5 K T C L L V I D V Q E S F R H R P Y S T E T G M A A L Q A Q N A
UniRef90_UPI000371E1E9 N R A L L V I D V Q E S F R R P N W R A V S A P D I A D R A A R
UniRef90_UPI00040E7C2B A L L I I D M Q T G L Y A P E H P F E R E R V A Q T I N Q
UniRef90_UPI00034A2536 S M S P E T T A L I I I D M Q N D F C S P G Y S L T P T R A S I P A I R T
UniRef90_D5G8Z2

UniRef90_UPI00047866CF H M C I D T T V R A A F D L G F R C V V V G D A C A T R N L R F G D V L V E A
UniRef90_E6WM27 E F C V D T T C R A A F D A G F F N V V L V S D A H T T M D S P A L T A
UniRef90_K2LEH5 S N S M D V T R A A H Y R D G F E N W L V L D A T T A I N D V T D A N G K T F P A
UniRef90_UPI00036F4756 S M C C C E S T T A R D A Y Y R D Y R V F F P A D G T G A I N D V T D A N G K T F P A
UniRef90_I3XTT4 Q N C C C E D A T A R D A Y S Q L G Y T V F F L S D A N G T L D F E N N A G S V S A
UniRef90_XOR9J8 N V C C C E D A T A R A A H D L D Y T H V F L I E D A T T A T S A I P A H G G A A V S A
UniRef90_A0A022LCV7 E Q C C C E T T A R A A A D L L G Y E V E F V T D A T T S A I P A H G G A A V S A
UniRef90_A0A021XF83 H M C I D A T T R A A S S D Y G Y K T T V V Q D A C A T R D L E Y A G T T V P A
UniRef90_UPI00047E2D12 D F C C C V D A T T R A A L E L G Y K V T L V A D A H S T M D N G G R S A A Q I S A
UniRef90_N8XH9 E F C C I D A T T R A A A K D L G F K C K V V H D A C A T R D L V F G N Q T I I A
UniRef90_F4XYS0 H M C I D A T T R A A A S D L G F K Q K V V H D A C A T R D L V F G N Q T I I A
UniRef90_U7P694 H M C I D A T T R A A A S D L G F K Q A V E V L Q D A T T G A H D Q T F N G E T V P A
UniRef90_W9DGH1 N N C C D L A S A A G A E E L G L G A V E V V S D A T G A H I I A N A A G K A S A
UniRef90_Q4K819 H S S V S T T V R A A K N L G F R C T L V E D A C A T R D L P Y K G G I L S A
UniRef90_UPI00023765FE H H M C I D A S T L Y E A S H R L G L G V F L S D A S G A L P Y A N A A G S A S A
UniRef90_UPI00037D2915 H H M C I N S T A H G G F N L G Y T V T V V S A T A T R P L E A A N G K V L T A
UniRef90_UPI00026315F7 H H N C N A S T V Y E A F H R L G L A V E V L V G D A S G A L P Y A N A A G Q A S A
UniRef90_UPI0003F5823F H M C C V S S T A R A A L D L R G L R V T I D A E S C A T R D L P D G R G G A I D A
UniRef90_UPI0004200BB8 E V C C V N T T V R E A A N D R G Y R C V V I S D G C A S Y F P
UniRef90_R1GJW6 D H C C V S T T V R M A A N L D G R L L V K D A T A T Y E K S F A S K T Y D A
UniRef90_U3AWQ2 H S S V S T T V R A A A K D Y G Y R C T L V D A C A T R D L P Y Q H R E L T I P A
UniRef90_U5WA71 E Q C C V E T T A R V G S D L G Y A V T F V T D A T A T F P I P H R D A R T L L A A
UniRef90_UPI0002ED04BC H M C C V D S T T R A A A E L G Y N P L L I H D A T A T R P L T F N G N D V Q A
UniRef90_UPI00046A1383 Q Y C C I D A T C R A A A D L G F K P V L V A D A H T C M D T P F N G N D V Q A
UniRef90_UPI0002FF98A1 E Y C C V D T T T R R A A F S E G Y K V T L I R D A H S T F D S E Q L C A
UniRef90_D6XVT4 H V C C V Q S T I R E A N D R G F D C T L L E D C S A A F D P K D H E D S I R
UniRef90_A0A016PFV0 H V C C V S T T A R A A E R G F D V L I P E D A V G D R N I P G V G A
UniRef90_F0KX74 E Q C C C E T T A R V A S D L G Y Q V T F V T E A T L T F P M T Q P N G I V L S S
UniRef90_G6Y6Y1 D V C C V H T T L R E A C D R N F Q C L T I S D A C A S G D R Y A H E A A
UniRef90_A1V9S8 H M C V E S T A V A D A S Y R G F S V I V A A D A C A D R N L P A H H D G G I I P H
UniRef90_D6DQ70 N I G V E S T A R N A W E L G F N L V I A E D A C S A S A D Q H Q G
UniRef90_UPI00039AC625 N N C D L A T A A G A E A L D V S A E I L S D A T G A I N L A N E A G T V S A
UniRef90_UPI0003B33DCA S M C V D S T A R A A S E L G F A C T V V A D A C A A P D L T L G D T T V P G
UniRef90_UPI000289C30A Q Y C C V D S T C R A A R D L G F E A V L V G D A H T C M E T P G M S A
UniRef90_F0XB37 D V C C V T T T M R D A N D M G M D C V I V S D A C A A G R
UniRef90_G0EH65 D L C C V L H T A A A G A F F R G Y K V I V V K D A T A G V T K D R H N F A L E Y S A
UniRef90_M6ZX22 N N C D L A T A A E A E V R G L S A E I L S D A T G A I H L A N D A G K V S A
UniRef90_L1M824 H M C I D A T T R A A A D L G Y T V T V L H D A C A T R D L E F N G V T V P A
UniRef90_UPI0002FEDB97 E V C C V D T T T C R A A F S E G Y K V T L V S D T H S T W N A N G L N A
UniRef90_J7Y5B6 E Y C C V D T T T R R A F S E G Y K V T L I S D A H S T F D T D V L R A
UniRef90_UPI00041D2C39 H M C I D A T V R A A K D Y G F D C T V I A D A T A T R A L E I Y G Q S V D A
UniRef90_R6WKY9 H V C C V Q T T I R E A N D R G Y E C L L I V D A T S A A Y D R A D H L A S L Q
UniRef90_R7DNF6 H M C C V R H T S A D A Y C L G Y N V I V C K D A T N S F T E E D Y V S G L K Y L
UniRef90_UPI0003A9B9C6 E Q C C C E T T A R I A S D L G Y A V T F V T D A T A T E P I P H R D A R T L G V
UniRef90_D5DPD8 E F C C L D S T T C R R A Y S L Y K E N I L V K D A H S T F D T A V L S A
UniRef90_N4VF34 H V C C V L S T T A R Q A A Q R G Y E D V L V A E D A V G D R D I P G V D A
UniRef90_C1D759 E V C C V H T T V R E A N D R G Y E C V V P S D C V A S Y F P E F Y R V A L
UniRef90_Q8TY03 D L C C V L F T T A R M D L M R G Y R V Y V V R D C V A S L E
UniRef90_UPI00034D5465 E Q C C C E T T C A M G S E L G L J A M T F A V D A T A T E P I E A P D P R T L R P
UniRef90_BOBH35 E F C C V D S T I R A G A A L G Y Q I Q I V S D A H T T H N K A H A S A E T I I
UniRef90_H5UWR9 N I G V E S T A R N A W E L G F S L V L A E D A C S A A S A S Q
UniRef90_UPI00047D6EA5 S M C V E D A S V R T A A D L G Y D V T V V A D A C A C P A L E H A G R K V A A
UniRef90_KOCTK9 N V C C V E S T L R D G F H L E Y F G V V L A D A A Y Q A G P
UniRef90_S5EEN9 E F C C V D T T T R R A A A L G Y P V T L A A D A H S T S H D K A H A S G L Q I T R A
UniRef90_UPI00035FF59A Q Y C C V D A T C R A A G D L G F T A L L V Q D A H T C M D T P Q E A S I R M I
UniRef90_U6ZMA1 H V C C V Q T T T R E A N D R G F D C L M L E D C T A A F D P R D Q E A S I R M I
UniRef90_W8UBX2 N M C C I D A T T V R A A W M G Y A C V V A G D A T A A C A L K H G G V A V T P
UniRef90_S7TYX6 N H C C V D T T V R M A S N Q H V R L V L I G D A T A A F D G K G V F D A
UniRef90_S3DZU0 D V C C V S T T M R D A N D N F D C V L V E D A C A A G V L E N H Q G S A V
UniRef90_G2YUB5 H M C C V S T A Q G A F N L G Y R P T V V A E A T A T R S L A T P D G A A L P A
UniRef90_UPI00036F5902 E F C C V D A C V R A A S D L G Y T V T V L H D A C A T M D L D F G D T K V P A
UniRef90_F0B7N9 N M C I D A T V R A A F S L G Y S V L V E D A H S T F D N G S L S G G
UniRef90_UPI00046F9EB2 E M C I D A T V R A A F D L G F E C L A A H D A C A C A L E F N G L R V G A
UniRef90_UPI0003B30275 N I C C V L H A V A G A R L R L Y N V A V P I D G I A A L N D F D Y V A A L R Q M
UniRef90_UPI0004780A2B H M C I D A S T T R A A S D H G F Q C V V A E D A C A T R D L E F K G V T I P A
UniRef90_D7UWN0 H M C V L D S T T R A A A E L G F D Q J I L I G D A T A T R D L E V A E K V V A A
UniRef90_D4X782 E Q C C C E T T S R H A S D A G F K V V F P T N A T L T F A M Q S P S G K H Y T P
UniRef90_UPI0003495816 N M C V E T T A R M A G N L G Y D V T V V L D A T R T F D L A G A G T V T R S A
UniRef90_R8WTQ6 N I G V E S T A R N A W E L G F N L I V A E N A C S A S A E Q H Q G
UniRef90_I3CZA4 H M C C V S A T V R S A L D H G Y A S T V V A A C A T R D L P D P G G A P V Q A
UniRef90_V5U5P5 E Q C C C E T T T R V A S D L G Y R V T F V S E A T L T F P M T W K G V T L D V
UniRef90_E6X2C0 H M C C I D T T V R A G Y D L G Y A I T L A H N A C A T R N L Y F G G E R I P A
UniRef90_UPI00029AC522 Q Y C C V D T N C R V A R E L G F N V L V S D A H T C M D T P G I L S A
UniRef90_R8QTD4 E I C C V D A T C R R A Y S L G Y N L T L V E D G H S T Y D S T I L S A
UniRef90_UPI00036F2CC3 N I C C V R S T V H D A F F I G Y D V V V V P Q D C C A T G A R E
UniRef90_F0C3C4 H M C C V D A C V R A A A D M G Y S V T V L H D A C A T M D L S F D G V T T P A
UniRef90_D6U600 D F C C V D S T T C R A A L S H G Y D V T V L V G D A H S T I D R V V L N A
UniRef90_E6VNR9 N V C C V E S T T R A D A F F R E Y F V T L V R D A C Y Q A G P
UniRef90_D5CBH3 E Q C C C E T T A R V A S D L G Y A V T F V S E A M L T F P M T Y K G V T L S A
UniRef90_G8PNL4 Q Y C C I V E T A R A T M D L G Y P V T V I Y D A C A A S C M E F R G R E V S V
UniRef90_F4G1K3 N V C C V L H T A G S A A L R W Y N V T V I P M D G I S T L T E F D Y Y A T L R Q V
UniRef90_S6FAV3 E V C C V N T T V R E A N D R G Y E C I I P E D C V G S Y F P E F Q E Y A L K
UniRef90_B6Q965 D V C C V S S T M R E A N D R G F D C V I V E D A C A A T E P S
UniRef90_X1LGW3 N L C C C E S T A R S A F M R G F E V Y F I T D G T A T Y K
UniRef90_K9DMQ3 N F G V I E S T A R A A Y D F G F K L V F A E D A M S S F D
UniRef90_M4ZXD5 N M C V E T T V R M A G N M G Y D T Y L V P D G C A T T N R V G P D G V D H D P
UniRef90_UPI000307BBE5 N I C C V R S T V H D A F F L G Y R V V V P Q D C V A A T G P R E
UniRef90_UPI000371E1E9 E Q C C C E T T T R H A S D L G W Q I D Y V T D A T H T Y D M M Q P D G S P L T A
UniRef90_UPI00040E7C2B E Q C C C E T T A R V A A D L G Y G V F V E V T D A T A T F P I E H R D A A T L P T
UniRef90_UPI00034A2536 Q F C C I D T T C R V A V E L G F S V I L P E D G H T C M D T A T L S A
UniRef90_D5G8Z2 D V C C V S C T M R E G N D R G F D C L L V R D A C A G A S L

UniRef90_UPI00047866CF A Q V Q A A F L A A L A S P F A R V I S T T E L L R E 170 180 190
UniRef90_E6WM27 D N I V R H H N Q T L A G P F V S L V T T E E W V
UniRef90_K2LEH5 Q D V F D L S Y A A V L A S E Y C S L T Q S S D V I S A L L S
UniRef90_UPI00036F4756 E E M H L A S L L N L G F G F A Y I N I V K D L L D Q L K G L
UniRef90_I3XTT4 E A L H R A F L V A Q A F G F S R V L T L N E W I P L L K K
UniRef90_XOR9J8 E D A Y L A S L R N F E R H F G L V M K S E E W I K S V S
UniRef90_A0A022LCV7 E D I M R R T E S L A A R F A T I A S T S E W I G A V
UniRef90_A0A021XF83 A Q V H A A M M S A L G F A Y A T I T D T A S Y T G A
UniRef90_UPI00047E2D12 D L H N R A F A A I G P R I E V V P A A A V
UniRef90_N8XHE9 Q L I I Q H H H Q T L S Q A F A Q L K T C A E F
UniRef90_F4XYS0 Q D V H G A F M H A L G V A Y A D V I S L S D F
UniRef90_U7P694 A Q V H A S F M A G L A F A Y A E V T D T A E W I K Q
UniRef90_W9DGH1 E Q V H N T L M A I L H S N F A A V A T T D Q W I D A S A G G A
UniRef90_Q4K819 E H V Q Q T E M A I M A D N F A T L A Q T A S L I
UniRef90_UPI00023765FE E E I H R V F S V V F H S N F A A A A S T R D W V A V Q A G Q A
UniRef90_UPI00037D2915 E E V H E A A I A S T R D L Y A A A V D N V D A L S
UniRef90_UPI00026315F7 E E I H R V F G V V F H S N F A A V A D T A Q W I A A V Q A G Q
UniRef90_UPI0003F5823F S V V H E V A L A E L A D R F A L I A
UniRef90_UPI0004200BB8 E F H A M G L K M I G G I F G W V A S S A A V L E A M
UniRef90_R1GJW6 E T V H S V H L T S L N G E F C E V V T T E D V L R E L
UniRef90_U3AWQ2 R D L H R M T L A A L A D N Y A M V V P Q A R A L
UniRef90_U5WA71 E D V V T R T E Y A L T G R F A A V R T V A E L T G S L
UniRef90_UPI0002ED04BC S D V Q N A F I S S L S N F S T V M T T D D W M K A
UniRef90_UPI00046A1383 K A I T E H H N A T L G G A F A R L I N S A D A
UniRef90_UPI0002FF98A1 E D I I A H H N T V L G W F A E L I D L K D I
UniRef90_D6XVT4 M I H Q Q G G I F G W T S T S D E V K K A L A S
UniRef90_A0A016PFV0 D Q L V K V A L S E I G D A F G T I I K S S D I
UniRef90_F0KX74 E E L K L R T E T V L V D R A F A T I H T V A Q V L A A L D S L S V A A
UniRef90_G6Y6Y1 L H M V T V E D G V F G A L A D S S A V L A A L S R L P G K A
UniRef90_A1V9S8 L A L H R N A L A A L A D R F A D V M D T D A I I A
UniRef90_D6DQ70 L A L H R N A L A A L A D R F A D V M D T D A I I A
UniRef90_UPI00039AC625 E D L H S T L M V L Y Q S N F A A V A S T S D W I E A V K S G S
UniRef90_UPI0003B33DCA A S V H A A F L A A L D G S F A T V V R S K D L L D A
UniRef90_UPI000289C30A Q A I V E H H N A T L N G V F V Q V L S A T Q V
UniRef90_F0XB37 E D L H D A A L A S I G G I F G A V T T T A D L L T A L R G
UniRef90_G0EH65 R Q V Y R Q V Y G A E V L S S E E L I S K L
UniRef90_M6ZXZ2 E V L H N T L M V L Y H S N F A A V A T T G E W L D A V N S G A A L A
UniRef90_L1M824 A Q A H A A Y M A S L A F A Y A R V I S T A Q W L E A
UniRef90_UPI0002FEDB97 Q Q I T D H H N G T L R W F A R V T N H D E V
UniRef90_J7Y5B6 E D I V K H H N V I F G S F A D V I A L K D L
UniRef90_UPI00041D2C39 A S V Q T S F L A G L S F F Y S K L I S T A E S L K
UniRef90_R6WKY9 M I T Q Q G A I F G W T A D T E S L L K A
UniRef90_R7DNF6 K D V Y K D V Y G A E I Y S A D E L I S M F K
UniRef90_UPI0003A9B9C6 A E I I S R T E Y A L A G R F A T I R T V A E L T G A A A V A G
UniRef90_D5DPD8 S K I V E H H N N M L G G R F V T L K Q V N E I I
UniRef90_N4VF34 A Q L T K V A L S E I G D A F G T V V Q S K D I
UniRef90_C1D759 E M I K A Q G G I F G W V S D A D R I V E A L
UniRef90_Q8TY03 E E S H R F A L K H M E K L G A E V V D S E E I L
UniRef90_UPI00034D5465 E D V I T R T V Y A L A G R F A A V R T V D E I V G E
UniRef90_B0BH35 E H H N K T L S N I K S F G V E I K A S E E I I K K I G
UniRef90_H5UWR9 H Q N S F T H I F P R I A R V R S V E E I I A A L
UniRef90_UPI00047D6EA5 A D V Q A A F L G A L G S A Y A T V V D A D A V L A
UniRef90_KOCTK9 P D I H E A S L F N I Q T F F G W V S T T A Q F C E V F E G T S
UniRef90_S5EEN9 H H N A T L S N I F G V L T D A L P T A E I
UniRef90_UPI00035FF59A A D I I A H H N A C L N G P I A R V M D T A A F I A A
UniRef90_U6ZMA1 R K I I D H H N T T L D G A F V I T L A A T A D V
UniRef90_W8UBX2 N Q N Q G G I F G W T A M S K N L L E E L
UniRef90_S7TYX6 S Q A R A A F L A A L G M V Y A E V V E T D A L C A A L A R
UniRef90_S3DZU0 D T I M N V H V E S L K G E F C E V L G T N E V V D C L E R L A
UniRef90_G2YUB5 A S I T E E G G I F G A V I T V R D V L N G L G A G S
UniRef90_UPI00036F5902 A T L H S A A L A T I G D L F G A R I A P R V E D L T A
UniRef90_F0B7N9 A H V H A T M M A A F Q F G Y A A V R S T R D Y L Q A
UniRef90_UPI00046F9EB2 Q I V K H H N S L G G R F A K L R K A R E V
UniRef90_UPI0003B30275 D Q V H A A F L A A L G L V Y A R L A S V E E L V G E L D A
UniRef90_G4RKK2 D Y L Y K A V L T T I D G
UniRef90_UPI0004780A2B E Q V H A A F M S A L A F A Y A K V T P S D D A L N H L
UniRef90_D7UWN0 A D V Q T A F L A A L T S F A E V K P A A D Y L Q
UniRef90_D4X782 A E I R D H T E L V L N G R F A R V V P A A E A L A
UniRef90_UPI0003495816 A E L M A A T L V L Q Q G G F A R I A R T T D L I
UniRef90_R8WTQ6 S M T H I F P R I A R V R S V D E I L Q A L
UniRef90_I3CZA4 A E V Q R V A L T E L A D R Y
UniRef90_V5U5P5 D A L R H R T E T V L A G R F A T I S S V A Q C L E S L G
UniRef90_E6X2C0 Q T V H N S F V A A M D G K F C R A E S T E R L I
UniRef90_UPI00029AC522 E A I I A H H N L T L G G A F A R L Q S T A D V
UniRef90_R8QTD4 S Q I L D H H N Q V I G Q W F A H V K P A E Q I
UniRef90_UPI00036F2CC3 Q E S S L Y D I A T H F G V V T N A A D V V A S L
UniRef90_F0C3C4 A Q V H A A M M A A L Q F G Y A A V H S T Q S Y L Q
UniRef90_D6U600 E Q I V A H H N A T L N G F G S T V K P T S E V
UniRef90_E6VNR9 E F C Q Q A T I Y N V E S F F G W S T V D D V A Q A L A S S I A A
UniRef90_D5SCBH3 A E I R H R T E T V L S G R F A A T K T V A E T L E S L
UniRef90_G8PNL4 D D V Q A A I M A S L I F S N A S V V S T D E F L
UniRef90_F4G1K3 D F L Y K
UniRef90_S6FAV3 L H T S T L E S I G G I F G A V I T S S E D V M Q A L
UniRef90_B6Q965 D M H D A T L L N L K Y G F A T L L T N D E V M K T M
UniRef90_X1LW3 A D A H R F A C E N I F P K M G R V R S T R T L I D V L Q A G T G A A
UniRef90_K9DMQ3 E T V H Q L S V A S L H G E F C T A L S P S D A S A L I
UniRef90_M4ZXD5 Q A S S L Y D I A T H F G V V S T A D S T M A L I S S G S
UniRef90_UPI000307BBE5 A E I K A R T A T V L S G R F A T L C T V E Q A L A R
UniRef90_UPI000371E1E9 D Q I T A R T E Y A L A G R F
UniRef90_UPI00040E7C2B A A I I E H H N A T L A G A F V Q R V S A A A I
UniRef90_UPI00034A2536 Q R L H D A A V I E M V G G I F G A S A G T Q E V V R A V E A W A A
UniRef90_D5G8Z2

UniRef90_G7GLD6 1 A P L S D S A L I M I D C Q N T Y T Q G V M E L D G V Q N A L D V G A E 40
UniRef90_C7BNH4 W S L D K N R A A L L V H D M Q N Y F L N F E E N S P L I N Q V V A N T A R
UniRef90_D6U804 E K L A L V L I D L Q N G F A G P T T P H S M E E V I A N S I K
UniRef90_S3IN65 S Y S S S N T A L M V I D M Q T D F C S M G Y D I E L T R A P L K P L Q R
UniRef90_C7QHR3 Q R A L L V I D V Q E S F V R P L W R L I D N P D I A D D V L N R E
UniRef90_Q0HJ46 K S A L L V I D V Q E S F L F D P E P Q P F E S Q I L V L A K L N E
UniRef90_UPI0002376297 K T C L V I V I D V Q E S F R H P Y F T A Q D L P A Y L P A R Q N A
UniRef90_C4T083 M K L D V K T T A L L V L I D L Q Q G I L P F A K G P Y T A A Q I A T N A Q
UniRef90_A3JXX8 L R P D N T A L L I I D M Q T D F C S M G Y D I S L T R A P I Q P L Q S A
UniRef90_G4I5G5 T T A L L I I D C Q N T Y T R G V M E L E G V Q A A L D R E A A A
UniRef90_D4XIM9 E H T A L L I I D V Q R A L F E T Q P A P A D A D A V L D R I T N E
UniRef90_A4VL19 E H T A L L I I D V Q R A L F E T Q P A P A D A D A V L D R I T N E
UniRef90_Q0K8T7 E H T A L L I I D H Q R E Y V D G R L P L A G M P A A V A A C A Q
UniRef90_K1JQC5 T G V L V I D V Q R A L F E P E P K P F E S E L V V E R T I N A
UniRef90_F1Z3R9 P L A V D P A T T A V I V I D M Q N A Y A S A G F D I S G A A Q T I T R I A K
UniRef90_B5EUB0 K S A L L V I D V Q S A L F D P E P K P F E S D I L V V K K I N K
UniRef90_UPI000477C437 M T L N P A T T A L L V L I D L Q E G I L P F A G G P H S A D Q V V S R A A T
UniRef90_B8DQR0 T A L L V L D L Q E G I L P F A G G P H S A D Q V V S R A A T
UniRef90_W1PMZ3 D P Q K A A L L V I D M Q N Y F S G I A A P I L P N T I K A
UniRef90_Q2KV19 K T A L L I I D V Q E S F R Q P F W D A A E L P D F L R N T Q N
UniRef90_U7DMH9 T A L L I I D V Q Q A L C A G E Y K C F E I A R V I D A T I N G
UniRef90_F0KN79 L Q L A E Q T A L L V I D M Q N A Y T S A G F D V S K T K P V V E N I K K
UniRef90_X6KRL6 T P R R A L L V I D V Q N D Y D G G N L A I P P F R D S V V N V A R E
UniRef90_F0JBF2 T A L L L I D L Q N D Y F P G G M E L V G G P E A S A R A A E
UniRef90_UPI00036E9586 T A L L L I D L Q N D Y F P G G M E L V G G P E A S A R A A E M K A
UniRef90_UPI00005101F7 P L A S Q R E K T A L I V I D V Q N G V F A E S W H A D E V I G T I S D
UniRef90_J3GP30 A L L V I D V Q H G L F T P L P R P A S S L E V I R R I S N E
UniRef90_I9KAU2 N R A L V V I D V Q R E Y E T G A L P I S Y P L E A L A S I G R
UniRef90_UPI00036424B2 T L D P K T A L V V I D L Q A G V V A M P T V P H T G P E V L S R A V A
UniRef90_UPI0004414CEE R F T L K R P A L L L I D L Q S Y F T S P D S P L R G V E V A I E N I L R K
UniRef90_A5IKT8 N N T A L L I V D M V K D F T D P E G L V F Y P Q E L P R L K Q
UniRef90_B8HZT8 A D A A L V L I D I Q N E Y L A G P L A L P D A K P A I A R A A A
UniRef90_UPI0004643D0F L R A D N T A L L I I D M Q T D F C P G G Y V D K M R A P I A P L S A
UniRef90_UPI0003784FCA T A L L V I D F Q Y G L I D M P L A T R G P E T L A T L N R
UniRef90_W0AGN9 P I R L S P T D T A V V V I D M Q N A Y A S P G G D I S G A A D T I G K I A T
UniRef90_I9C535 P I R L D P A T T A V I V V D M Q N A Y A E A G F D V A P A Q A V I G R V I G E
UniRef90_F0KNR1 W P L N T N R A V L L V H D M Q Q Y F L D F D L T Q E P I P E L I K N T K A
UniRef90_A1CDZ7 P S S A S V K D S T L I I D A Q N E Y A T G L L K T V N V S E T R K A I A N
UniRef90_A0A014MDJ9 L E L T A A S T A L L V I D L Q E G I L P F A K A P H S A T E V V S R A A M
UniRef90_E6PLE3 N T C L L V I D A Q E S F R H P Y F T A E R A T P Y L A A Q N A
UniRef90_X0SA05 F E F E P S A T A L M I D M Q N D F V N P G G D V S L L R K A I N P I R N D
UniRef90_I0QMA2 Q L S P T N T A L V I I D M Q T D F C T M G Y D I A L T R A P I A P I G D
UniRef90_B5WPA8 A K T A L V V I D L Q R G I V A L P T A H P A G E T V Q R S V T
UniRef90_G0AA35 V T M L D P K T A L V I D L Q N G I V A Y P T V H P A S E V V Q R A S A
UniRef90_M7XWL8 S D V A L L V I D V Q E S F R H P Y F T A D A D V P R F T E R L Q G
UniRef90_W3WQ01 S T R K T A L V I D V Q N G F L H P T G T S R S T P E C E K N I E R
UniRef90_UPI0003640B01 P I T L D E R A L L V I D L Q N G I L G L P T V H P S A D V L K N G V R
UniRef90_V6KRQ2 A S F D V R P E K A A L L V I D M Q D E F V R P G W S P Y W V P A A A P R L H Q
UniRef90_F0QY03 V T L T A S N T A V I V V D M Q N D F V N G K L Y V P T A Q A T I P A I R K
UniRef90_C7MVZ8 W R L D P N R A L L V H D M Q R Y F L A P Y A G E P I P E V V D N I A T
UniRef90_V5BES5 L R P N R A C L I I D M Q L D F C K M G Y D I S L T R V P I E P I R R
UniRef90_E3DSR3 D P K R S V L L I H D M Q N Y F V D A F A G T S P V V E L V D N L R K
UniRef90_W6KB01 F E F D P A T T A L V V I D M Q R D F L E P G G D V S Q L A P V V E P A T E K
UniRef90_L0JS63 M Q L E P E R T A V V V V D M Q N G F C H P D G S L Y G S E A V I E P A I A D
UniRef90_D3SWA4 V T L E P D R T A V I V V D M Q N G F C H P D G T L Y G S E T V I E P A A E
UniRef90_B6H277 S F T P Y T A L V I I D M Q K D F C L P G Y D I S A A Q A G I P R L Q R
UniRef90_UPI00047D144B E I D P S K T A L M L I D W Q A D F C G P G Y D I S L T R A G I E P T K R
UniRef90_UPI00047A68B1 I D V E K T A L L V I D L Q N G I V N R E L S P Y S S E N T V K N A S K
UniRef90_W5I859 R F D P R T T A L L V I D V Q H A L C G G A D A C F H Q G V V E R T I N A
UniRef90_UPI0003638F3B R F D P R T T A L L V I D L Q Q G I L V P M T L A A R S G A D V V E S I A
UniRef90_A9WLP0 A L L V I D V Q E S F R Q E N W A V I S D P N I A A K V S Q
UniRef90_C0BZ10 I T I D P A K T A L L I I D M Q H V F L T R P A P E D P T E A V V P N N Q K
UniRef90_E9CKC9 W Q L E P K R C A L L I H D M Q N Y F L N T R P A P E D P T E A V V P N N Q K
UniRef90_V5BV83 I T P V R A A L L V I D M Q H D F I D E D A P I P C G R D I V P H V A T
UniRef90_B8GI59 E L K A E K T A L V V I D M Q K G I V N R G A H A P H T S E Q V V L N A S R
UniRef90_F3NGU8 R P H T A L L V I D V Q N D V M T G A H E R D G V V A N I S A
UniRef90_U5VFU6 S K H A L I I I D I Q N D Y F P G G W P L D G V E A A A D N A A R K
UniRef90_Q6W1P7 L R P E N T A L I I I D M Q T D F C G P G G Y V D H V R A P I E P I R K
UniRef90_G9PN49 R R A L L V L V D V Q N E Y A R L P L R I R Y P R D C L E Q I E R
UniRef90_U1HYZ7 S P S T A S P S D S T L I I V D A Q N E Y A D G L L Q T T N I A Q T R P A I S S
UniRef90_J3AKJ7 I A P G R T A L V V D V Q V D F A S P E G L T S P A E A I D R I E E
UniRef90_J1GZK2 K K T A L V V D M V V D F T N S P E G L T Y Y P Q E L P R I R Q
UniRef90_UPI00017462BC L R P E N T V I L V I D M Q T D F C G P G G Y V D S M R A P I E P I K N
UniRef90_E1QW53 I E G R S A L L V V D M L R D F T D P K G L A P Q N R E T L P R I R R
UniRef90_E6S619 N R P K S A L L V I D M Q K G V V A D A H D R E R V I A N L G S
UniRef90_Q08S47 I E P R R T A L L N I D M Q N M E V A A G Y Y E R V D Q L V I P N Q Q R
UniRef90_L0HPW4 S A L L V V D M I H D F V D G K F G S A K A K S L V P V V A K
UniRef90_UPI00037018ED S K R A L I L I D I Q N D Y F T G K W P L H G M D A A A V A A K
UniRef90_S0ARR9 L E I D K K S T A L V V I D L Q K G I A S M G L V P Y D A N T V I K N A S E
UniRef90_UPI00037A87D8 L T L N L A K S A I V V I D M Q N D F C S P S G W L T P A R A P I E P V N R
UniRef90_U2W5S83 L T P A N T A L L V I D F Q N G F T D S S G G S S H V N A A V D K T V K
UniRef90_D8IPA6 L T P A N T A L L V I D M Q T D F C K M G Y D L S L T R A P I E P I R K
UniRef90_K2K4D8 K A A L L V V D V Q N G V F G P S N P H L S E E V I V N L N Q
UniRef90_U4Q059 T L E K G K V A L L V I D M Q N T Y L D R P A P E R M H D T V I P N T R K
UniRef90_B8D6P5 R P A L L V V D M L K E F V H G R L R S P E A S R I I P V I T K D
UniRef90_W818D8 A L L V V D V Q R A F I S G A D A V P D L L S L Q R A V I R N
UniRef90_W4LZL3 A L L I I D L Q V G L P D D P R L D L A G V I E R I N C
UniRef90_UPI0003493962 S E T A L L L I D I Q Q S F Y Q R G Y Q E T E T P A F E L K V S Q
UniRef90_R8GDF1 L Q L D F P K T A L L V I D L Q K G I V S P G G K E V V D K A T K
UniRef90_J7QI52 W S F A Q R A A L L I H D M Q D Y F V G F Y G E S P V D Q L I S N I G R
UniRef90_D5UY25 W T P D P A R A V L L I H D M Q E H F V R P E R D Q Q P L A T V V P N I A A

UniRef90_G7GLD6
UniRef90_C7BNH4
UniRef90_D6U804
UniRef90_S3IN65
UniRef90_C7QHR3
UniRef90_Q0HJ46
UniRef90_UPI0002376297
UniRef90_C4T083
UniRef90_A3JXX8
UniRef90_G4I5G5
UniRef90_D4XIM9
UniRef90_A4VL19
UniRef90_Q0K8T7
UniRef90_K1JQC5
UniRef90_F1Z3R9
UniRef90_B5EUB0
UniRef90_UPI000477C437
UniRef90_B8DQR0
UniRef90_W1PMZ3
UniRef90_Q2KV19
UniRef90_U7DMH9
UniRef90_F0KN79
UniRef90_X6KRL6
UniRef90_F0JBF2
UniRef90_UPI00036E9586
UniRef90_UPI00005101F7
UniRef90_J3GP30
UniRef90_I9KAU2
UniRef90_UPI00036424B2
UniRef90_UPI0004414CEE
UniRef90_A5IKT8
UniRef90_B8H2T8
UniRef90_W1JL22
UniRef90_UPI0004643D0F
UniRef90_UPI0003784FCA
UniRef90_W0AGN9
UniRef90_I9C535
UniRef90_F0KNR1
UniRef90_A1CDZ7
UniRef90_A0A014MDJ9
UniRef90_E6PLE3
UniRef90_X0SA05
UniRef90_I0QMA2
UniRef90_B5WPA8
UniRef90_G0AA35
UniRef90_M7XWL8
UniRef90_W3WQ01
UniRef90_UPI0003640B01
UniRef90_V6KRQ2
UniRef90_F0QY03
UniRef90_C7MVZ8
UniRef90_V5BES5
UniRef90_E3DSR3
UniRef90_W6KB01
UniRef90_L0JS63
UniRef90_D3SWA4
UniRef90_B6H277
UniRef90_UPI00047D144B
UniRef90_UPI00047A68B1
UniRef90_W5I859
UniRef90_UPI0003638F3B
UniRef90_A9WLP0
UniRef90_C0BZ10
UniRef90_E9CKC9
UniRef90_V5BV83
UniRef90_B8GI59
UniRef90_F3NGU8
UniRef90_U5VFU6
UniRef90_Q6W1P7
UniRef90_G9PN49
UniRef90_U1HYZ7
UniRef90_J3AKJ7
UniRef90_U1JGZK2
UniRef90_UPI00017462BC
UniRef90_E1QW53
UniRef90_E6S619
UniRef90_Q08S47
UniRef90_L0HPW4
UniRef90_UPI00037018ED
UniRef90_S0ARR9
UniRef90_UPI00037A87D8
UniRef90_U2WS83
UniRef90_D8IPA6
UniRef90_K2K4D8
UniRef90_U4Q059
UniRef90_B8D6P5
UniRef90_W818D8
UniRef90_W4LZL3
UniRef90_UPI0003493962
UniRef90_R8GDF1
UniRef90_J7QI52
UniRef90_D5UY25

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

UniRef90_G7GLD6 P R D G E P V I T K N F P N S F V G T 100 D D Q L K A L G K T 110 N L V V A G F M T
UniRef90_C7BNH4 P Q A G D T V M E K W R S Y S A F F Q R T D F L E Q Q L K V A G G R D T Q L I I C G V Y A
UniRef90_D6U804 Q Q G N D T V I V D K R S W S A S F H Y A T S L L E D M H L R R S R R E I R E N L I V L A G G I M T T
UniRef90_S3IN65 P E L P G E V I V I P D K R S G S A S F Y A T D L E L I L R S S R R E I R E N L I V L A G G I M T T
UniRef90_C7QHR3 P E D G E P E I V R K K T S H N A S F T T N L Q Q V L T E H G V I V G D S R L I V S A G G I L R T S
UniRef90_Q0HJ46 I Q T G A D Y F V R K K T T R P D S A F L V G T G L Q S V L N E Q H D V V D Q R L I V S A G G I A R S T
UniRef90_UPI0002376297 D F E A A T F T K S R H S A L V G T G L D V W L T O R L H G R L I V S A G G I A R S T
UniRef90_C4T083 V A D Q D T K I T K H Q W G A F Y G T D L D L Q L R R R R G I K Q T I I V S A G G I A T T
UniRef90_A3JXX8 P E P G E V I V D K P G K G C F C A T D L D E M L R L R G G L Q N L I V L T G G F M T T
UniRef90_G4I5G5 P R D G E P V V V D K N Y P N S F V H T S L D E H L K S V G G A Q N L I V L T G G F M T T
UniRef90_D4XIM9 P A S T D L R V R K K T T P D S F F A H T R D L G Q A L S E A G G V T A L A V C G G Y A T T
UniRef90_A4VL19 P R A G E P V I V D K P G Y S A F A H T R D L E L L R R R R G G I E R L I V L A T G G V T T
UniRef90_Q0K8T7 P Q A G E I T V T K K G L P N S F F A G T T L A D E L A R L G R K E L I V L A T G G V T Q T
UniRef90_K1JQC5 T A T T D V M V R K K T T P D S F F H R T E L E S A L C E R G G I S H L I V V C G G Y A S T
UniRef90_F1Z3R9 P R E G D I R V R A K K T P R Y S A F F E N T Q L D S V L R S R G G I R T L I V E V G G I A S T
UniRef90_B5EUB0 L E V T D I K V R K K T T P D S F L N T E L K V V L N A H Q I L E H L I I V C G G Y A S T
UniRef90_UPI000477C437 V Q P G D L E V T K R Q W G A F Y G T D L E M Q L R R R R G G I D T I V L A G G I S T
UniRef90_B8DQR0 P L P G E A V L T K K P N S G F F R G T A L L H H L R A T G G A T D L V V V T G G M M T
UniRef90_W1PMR3 R K T S E K I L V Q K N T Y S G F H G D T M E D Y L K S V G K T E V I V V T G G L A T
UniRef90_Q2KV19 T P T A V F H K T V H S A L F A R A A D G Q T W L E Q Q G G I E Q V V V A G G I R T T
UniRef90_U7DMH9 V S P K D W R V R K K T T P D S F F Y N T N L Q K L L P K E R D F F E R N L I I C G G L Q T
UniRef90_F0KN79 P L P Q D I I E K P R Y S G F F Y N T A L D S L L R A R G D I R E N L I V V F V G L A T
UniRef90_X6KRL6 R R S R D H Y V E K S L P N S A F A G T D L E A W L R A N T I D E T I T V I G Y M T
UniRef90_F0JBF2 P L E G E S V I T K H Y P N S A F R D T D L L A Q L R A A G G I E R L I V A G G M M T
UniRef90_UPI00036E9586 P I G N E K I V T K R V N S A F I G T D L D V Y C R M K G I K T L F V A G G I T T
UniRef90_UPI00005101F7 P A E G E A I V E K T H G N T F E D T D F E E V L A S K D V G S H L V V T G G A Q S T
UniRef90_J3GP30 I G S A D Y F V R K K T P D S F F L K T L L E S V L V J E S S H L V V C G G Y A T
UniRef90_I9KAU2 D R P R D A L F H K R T P G A F T D T G L E A W L R E R A I D T V V T V G Y M T
UniRef90_UPI00036424B2 T A P G D T V V I T K R N W G A F H G T D L D T Q L R R R R G V I T Q I V L A G G I A T T
UniRef90_UPI0004414CEE P R E G E R V F T K N V N S A F I G T N L E D A I R E R A G I R T L I V I T G L E M T
UniRef90_A5IKT8 F S D V L F E K N T Y S A F Y S T K L E E E L R S R N V N Q L I I V T G G V M T
UniRef90_B8HZZ8 G D E I D P M I K K R R Y S G F V G T D L D M V L R E N K L Q N N V I I V G T K T
UniRef90_W1JL22 P L A S E L V I E K E L P N A F A G T D L Q A Q L A A S G R K N L V L A G G F M T
UniRef90_UPI0004643D0F P Q P G E I V I D K P G K G S F Y A T D L E L L L R T R G I R N L V L T G I T T
UniRef90_UPI0003784FCA R R D S D V V I E K T A C D S F L D T S L R Q Y L D S R G I E N L W V G G Y A S T
UniRef90_W0AGN9 P K P G D I R L R H K T R Y S A F F N S Q L D S T L R A R G I R N L V F V T G I A T
UniRef90_I9C535 P Q Q G D I R L V H K P R Y S A F F N S Q L D S V L R A R G I R T L V F T G I G I A T
UniRef90_F0KNR1 P Q K N D T V L T K W R Y S V F K F S P L E Q L M R D S G R D Q L I I C G G V Y A
UniRef90_A1CDZ7 P Q A G E K V V T K N H P W S A F A H T D L D D Y L K G R E V G K K I V L V G G Y M S T
UniRef90_A0A014MDJ9 R Q Q S D L V T K H Q W G A F Y G T D L E L Q L R R R R G I R N L V L V G G I S T
UniRef90_E6PLE3 L V A F E P E F V K T R H S A L V G T G L D V W L T R H G V I R R L I V S G G I S T
UniRef90_X0SA05 P L E G E P I I D K P G K G S F Y A T D L Q L L L H N W G I K Y N L A T G V I T T
UniRef90_I0QMA2 P L A G E I I D K P G K G S F Y A T D L E L L L H T K M G I T N L L L T G I T T
UniRef90_B5WPA8 Q Q A S D H L V T K R T W G A F T N T D L A A Y L Q Q Q G V T Q V V L V G I A T T
UniRef90_G0AA35 Q Q P Q D H T V T K R T W G A F T G S D L D A H L K K Q G V T Q V V I A G I S T
UniRef90_M7XWL8 A I A P T A T F H K H R H S A L V D T G L A S W L T Q H G I R R L I V S A G G I R T
UniRef90_W3WQ01 P L A G E S V W T K N V N S A F I G T G L E T L L R E N G V R Q L I V I C G G L T T
UniRef90_UPI0003640B01 P L G D D L V I T K R H W G A F T G T E L D L Q L R R R R G V T I V I V G G I S T
UniRef90_V6KRQ2 H H P D E A V I R K P S Y G A F Y D T P L D T M L R R N L G R D T V I V T G T L T
UniRef90_F0QY03 P V P D D I I R K R R Y D A F F G T D L D Y V L R H V H A M N L V I V G T V A
UniRef90_C7MVZ8 P E P A D T V I V K W R Y S A F Q R S A F A E Q L A E L G R D N I V L T G V Y A
UniRef90_V5BES5 P L A G E S I I D K P G K G S F Y A T D L D L L L H N R G I T D N I V T G I T T
UniRef90_E3DSR3 P D D H D T V L T K W R Y S A F K K T N L L D L L R G K N R D Q L I I C G G I Y A
UniRef90_W6KB01 P L E P G E T I I D K P G K G A F Y K T G L E H R L A D D G T E D L I E A G V T T
UniRef90_L0JS63 V E D G D H V I E K H T Y D A F Y N T E L E G W L N A R G I D D L V I C G G T L A
UniRef90_D3SWA4 V H T E D H V V E K H T Y D A F Y N T E L E G W L N A R G I D D L V I A G V T T
UniRef90_B6H277 P L P G E P V I D K P G R G A F A H T D F E L L L R N K G I K N L V I A G V T T
UniRef90_UPI00047D144B P M P G E V I I D K P G K G S F Y A T D L D I I L R N A G I T H L I F T G I T T
UniRef90_UPI00047A68B1 N T Q N A H I V T K R Q W G A F Y G T D L D L Q L R R R G I D T I V L G G I S T
UniRef90_W5I859 V A A D G D P R V R K K T P D S F H G T E L D A L L R K R R G I T G I V L C G G M A T
UniRef90_UPI0003638F3B R H D G D L V I V M K R H W G A F T G T E L D L Q L R R R R G I R T I V L G G I A T
UniRef90_A9WLP0 P I S A E P I F T K T S H N A S S A T G L Q Q Y L V S H G I D E L R I C G G I R T
UniRef90_C0BZ10 P R E D E T V V I T K T T D S A L T G S P L R L W F H N M G L D T V V I T G V L T
UniRef90_E9CKC9 P A E Q D T V L V K W R Y S A F Q R S D L E S R L R E L K R D T V I V G G V Y A
UniRef90_V5BV83 P L E G D Y V I V K R R Y S A F F A T D L E L L L R G L G V N T I L I T G V A T
UniRef90_B8GI59 H F D Q V H V I T K R Q W G A F Y G T D L D L Q L R R R R G I D T I V L C G G I S T
UniRef90_F3NGU8 R R E S E P L V H K K Y G S F E A T D L E E V L A S R G V G R V V V T G A Q T
UniRef90_U5VFU6 P L D G E P E V L K H K V N A F L D T S L K R T L D Q H G V K S L T I V I G S M S
UniRef90_Q6W1P7 P R I Q G E T I I D K P G K G S F C A T D L E L L L N Q K R I D N I V L T G I T T
UniRef90_G9PN49 R R R T P Q W K R K H R G S I Y A D T D L A A W L S E R G V D T V T L V G F M A
UniRef90_U1HYZ7 S E K V I S K H L P S A F R D T E L H A Y L Q S L P D G K G K I V L A G Y M A
UniRef90_J3AKJ7 P E P G D L E V S K K L A Y S A F F H G T D F E Q Q L R A R G I T R R V I M T G L T T
UniRef90_J1GZK2 V L P Q D Y V I K K R Y S A F F G T D L D L V L R E H D I R R V I V V I G T K T
UniRef90_UPI00017462BC P L P G E P I I E K P G K G S F Y A T D L D L L L A R R N L Q N I V L C G G I T T
UniRef90_E1QW53 G D Q C D Y V I K K R Y S G F F G T D L D L V L R E N G M R N I V V V T G T K T
UniRef90_E6S619 P G D D E P L V K K R Y G S F E E T D L E S V L A K R A M G R V V V V T G A Q T
UniRef90_Q08S47 P V G D E T I L P K T S S G I F N S T N I E Y V L R N L G V E Y L I V Y G V L T
UniRef90_L0HPW4 P K D G D V V I E K N T Y D G F L F T D L E R I L D A D A G I E Q I H I C G G V A T
UniRef90_UPI00037018ED P Q A G E A V V I K H R V N A F R D T E L K A L L E A G G I E Q I T L V I G A M S
UniRef90_S0ARR9 P R D N D V V I S K K Q W G A F Y G T D L E L R L R R G G I K T I V L C G G I S T
UniRef90_UPI00037A87D8 V A S G D L H V D K Y R M S G F W D T P L D S L L R N L N V I T F F A G V N V
UniRef90_U2WS83 D P D N H F E F L P S I F F L T P L L T W L T K H N I D T T I I T G C T
UniRef90_D8IPA6 P I A G E I I D K P G K G S F C A T D L E M I L H T R G I R N I V I T G I T T
UniRef90_K2K4D8 V T D S S K I R K A S P D A F Y G T D L K E V L D A S G I E H V I I C G G Y S T
UniRef90_U4Q059 P Q D G E I V V T K T T D S A L T G T N L R L L L T N M G I H V V C S G I F T
UniRef90_B8D6P5 P G P S D L V L Y K R S Y S G F R E T G L D Y L L R D L G I D T V I I T G I H T
UniRef90_W818D8 P G E T V V R K S V D D G F H D T D L E A R L R S H R V E T I A I C G G M L S
UniRef90_W4LZL3 R K P A D V I I R K R A S D A F Y E T C L D E A R L R K H G V E Q L V T G C A S
UniRef90_UPI0003493962 H H Q A D K T F Y K N V H N A L I G S G L D E V L R Q Q Q V S D L I I C G G I R T
UniRef90_R8GDF1 V L E D D Y T V T K R Q W G A F F G T D L D L Q L R R R G L D T V V L C C G I A T
UniRef90_J7QI52 P D A G E T V L T K W R Y S A F K R S R L A E M M K E M G R D Q L A I C G G V Y G
UniRef90_D5UY25 P A D S D V L L T K W R Y S A F A K S D L A E D R M R T W G R D Q L V I A G I Y A

UniRef90_G7GLD6 H M C G V N S T A R G A F N L G Y S P A V V A S A T A T R S L P G A G G V E A D A
UniRef90_C7BNH4 H I G C L M T A T D A F M R D G Y Q P F M V A D A L A D F S S Y E E
UniRef90_D6U804 S I G V E S T A R A G E H D H G F E H Q I F V E D A M S D R S E
UniRef90_S3IN65 D V C V H T T L R E A N D R G F E C L V L T D C C A A T E L K H H E A A L
UniRef90_C7QHR3 E Q C C C E T T A R L G S D L G Y Q V T F V V D A T A T N P L A H P D A R T L P A
UniRef90_Q0HJ46 E F C V D T T T R R A A S D L G Y P V T L V S D A H T T H D K E H A S G A Q I R
UniRef90_UPI0002376297 E Q C C C E T T T R R A S D L G W E V D Y V T D A T L T W D M E Q P D G Q T L A A
UniRef90_C4T083 N I G V E S T A R A A W E H G Y E L V I A E D G C S T A S N
UniRef90_A3JXX8 D V C V H T T M R E A N D R G F E C V M L T D C C A A T D P A N H
UniRef90_G4I5G5 H M C V I N S T A R E A G A F N L G Y A P T V V A G A T A T R A L P G V D G S A I P A
UniRef90_D4XIM9 E F C V D T T V R R A A A Q G Y P V T L A A D A H T T R D K P H A S G A Q I R I
UniRef90_A4VL19 E V C V A S A T V R R S A L D L G F D C L T V R D A C A S A D P
UniRef90_Q0K8T7 H M C V A S A T V R R S A L D L G Y F P T V V A A A C A T R D L P D P G G P A V P A
UniRef90_K1JQC5 E F C V D T T I R R A A A L G Y F P T Q L V S D A H T T H D K S H A T A R Q I R
UniRef90_F1Z3R9 N V C V E S T L R R D G F A H L G Y S G V M L E D A T
UniRef90_B5EUB0 E F C V I D T T V R R A A A G L G Y S I E L V S D A H T T H D K P H A S G N E I R M
UniRef90_UPI000477C437 N I G V E S T A R N A W E L G F N L V I A E D V C S A G S S E Q H Q G
UniRef90_B8DQR0 H M C L D T T V R R A A F D H G F R C R V A G D A T A S P A L A Y G G T Q V D A
UniRef90_W1PMZ3 N L C C I N S T A R D A F V R G F R V F S T D A T A T A D
UniRef90_Q2KV19 E Q C C C E T T A R H A A D S G Y K V R F V T D A T L T F A M Q S L S G K H Y T P
UniRef90_U7DMH9 D Y C V E S A T V R R Q A L K L G Y D V V L A A D A H S T V D N G N L A A E D I A
UniRef90_F0KN79 N V C V E S T L R D G G F L E Y F G V A L K D A C
UniRef90_X6KRL6 H N C D L S S I I H A A H V G F A V E F L S D A T G S L P Y A N S A G Y A S A
UniRef90_F0JBF2 H M C L D A G V R A A A D L G F D C L V L A D A S A T R D L V F A G R T I P A
UniRef90_UPI00036E9586 D H C V L S T S A R M A G N L G F E N Y V I E D A C Y T F D R I G K S G K I P A
UniRef90_UPI00005101F7 D A C V R S T I H G G F A R G Y D V T L V S D A H T T E D L S D W G A P P P
UniRef90_J3GP30 E F C I D T T V R R A A A L G Y D V V S D A H T T H D K A H A D A A Q I I A
UniRef90_I9KAU2 Q H C V I D T T A R Q A S H A G F A V E V L A D A T G T L D Y R N E V G T V D A
UniRef90_UPI00036424B2 S I G V E S T A R A A H E H N Y H V T L A T D A M S D R D P
UniRef90_UPI0004414CEE D R C V E S T T R M G A N L H V T I W L V E D A V A N F E R G K W D A
UniRef90_A5IKT8 H L C C C E T T A R S A F V R F E V I M V E D A L W D K N
UniRef90_B8HZZ8 N C C T R A T V T D A Y Y L D Y T P I V V S D C V A T N D
UniRef90_W1JL22 H M C V S T T A R A A L D L G F R T I D A D S C A T R D L P D G S G G T L D A
UniRef90_UPI0004643D0F D V C V H T T L R E A N D R G F E C T V L A D C C G A T D V G N H H A A L
UniRef90_UPI0003784FCA D F C V D T T V R R A A S M G Y A V T V V A D A H T C K D R P Y V S G E A L V A
UniRef90_W0AGN9 N V C V E S T L R D G F H L E Y F G V M L E D A T H H L G P
UniRef90_I9C535 N V C V E S T L R D G F H L E Y F G I L L E D A T H H L G P
UniRef90_F0KNR1 H I G C L M S A A E A F M L N I Q P F L C G D A L A D F S R E E
UniRef90_A1CDZ7 H G C V S S T A R A G S E R G Y D V V I A R D A V G D R D L P G V K A
UniRef90_A0A014MDJ9 N I G V E S T A R N A W E L G F K L V I A E D I C S A G S E A E
UniRef90_E6PLE3 E Q C C C E T T T R H A S D L G W E V D F V A A A T L T F D M Q Q A D G T I L L P A
UniRef90_X0SA05 E V C V H T T V R Q A N D R G Y E C L V L D D C V A S Y F P E F
UniRef90_I0QMA2 D V C V H T T L R E A N D R G F E C L L V A D C C A A T D P A N H L A A L
UniRef90_B5WPA8 S I G V E S T A R F A S E L G L N V T L V I D A M T D R N
UniRef90_G0AA35 S L C V E S T A R Q A Y E H G F H V T L A V D A M T D T N P
UniRef90_M7XWL8 E Q C C C E T T A R H A S D S G W G V D Y V T E A T L T F A M T H P D G R R F G A
UniRef90_W3WQ01 D H C V S T S T R M A S N L R I E L V L V G D A C A T Y A K G A F D A
UniRef90_UPI0003640B01 S I G V E S T A R S A F E L S Y H M V I V E D A T T D T D A A S
UniRef90_V6KRQ2 N Y C G T T A R Q A Y E R G Y K V V F G S D V T A T D D
UniRef90_F0QY03 N I C V L H T A G S A A L N W Y N V V V P I D G I S A L D E F D Y Y A A L R Q V
UniRef90_C7MVZ8 H I G V Q T T A V E A F M R D I R P F L V S D A V A D F S R E H
UniRef90_V5BES5 D V C V H T T M R D A N D R G F E C L L L A D C C G A T D F G N H Q A A L
UniRef90_E3DSR3 N I G C L L T A C D A F M Q D V E P F F V G D A V A D F S L E Q
UniRef90_W6KB01 E V C V Q T S M R E A N D R G F D C L L V A D C T G S Y F P
UniRef90_L0JS63 N V C V L H T T M R G S A G L R D F R P I M L E D C I G A I E
UniRef90_D3SWA4 N V C V L H T G G S A G L R D F R P L M V E D C I G A I D
UniRef90_B6H277 D V C V S T T M R E A N D R G F D C L V L D D G T A A A E P S L H L G T M Q S V
UniRef90_UPI00047D144B D V C V H T T M R E A N D R G Y E C L I L S D C T G A T D K G N H E A A L K
UniRef90_UPI00047A68B1 N I G V D T T A R E A Y Q Y G Y N Q I F V E D A M T A V T K E E
UniRef90_W5I959 D F C V D T T V R R A L A E G Y D V V L A G D A H S T L D N R V L R A
UniRef90_UPI0003638F3B N F G V E S T A R S A W E L G Y D L V I V E D A C A S A S
UniRef90_A9WLP0 E Q C C C E T T A R V A S D F G Y P V E F V I N A T A T Q P I E H W T A E T L G T
UniRef90_C0BZ10 D Q C V S G T V R S L A D E S F N V W L I E D A C M A S T
UniRef90_E9CKC9 H I G C L T T A T D A F M R D I Q P F M V A D A L A D F S
UniRef90_V5BV83 D V C V R A T A Q D A M Q L D Y R V W V P Q E C V A G T S Q T R
UniRef90_B8GI59 G L G V D T T A R E A F Q R G Y D Q I F V E D A M T A
UniRef90_F3NGU8 D M C V R S T R H G A F V R R G Y D V T L V S D A H T T E D L T S Y G A P T P A
UniRef90_U5VFU6 H M C V I D A T R A A A D Y G Y A V T V A H D A C A T L P L E F D G K Q V P A
UniRef90_Q6W1P7 D V C V H T T M R E A N D R G F E C L L L E D C C G A T D Y G N H L A A I K
UniRef90_G9PN49 N N C I L A S A A W G E T I G L T E V L S D A V G A I N L R N R A G K A N A
UniRef90_U1HYZ7 H V C V S T T A R Q G H E L G Y D V V I C G D A V G D R D L P G A T G
UniRef90_J3AKJ7 D C C C I R D S T R D A F H R D F H T F V V S D A C A S F D
UniRef90_J1GZK2 N C C C I R A T V T D A Y N L D Y E H V V V R D C V A T N D P V
UniRef90_UPI00017462BC D V C V H T T M R D A N D R G Y E C L I L S D C T G A T D H G N H L A A L K
UniRef90_E1QW53 N C C C I R A T V T D A F C L D Y D P L V V R E C V A T D S
UniRef90_E6S619 D A C V R A T L H G A L V R G Y D A T L V S D A H T T E D L R Q W G V P V S P
UniRef90_Q08S47 D Q C V E S A L R D A A D R G F M V T Q I E D C C A S Y T P E Q
UniRef90_L0HPW4 D H C V Q G H T A F G A F A R G Y K V H T I K D A C A G T S E E H E R A L K Y M
UniRef90_UPI00037018ED H M C I D A A R A S A D F G Y A T T V I H D A C A T R G Q E F L G R R I P A
UniRef90_S0ARR9 T H G V E S T A R F A Y E M G F Q Q I F A E D A M T A M T K
UniRef90_UPI00037A87D8 D Q C V M A T L Q D A V C L G Y D A I L L A D C C A T T S P G F C A
UniRef90_U2WS83 S G C C I R A S V I D S F S Y G Y R T I V A E D C C G D Q D
UniRef90_D8IPA6 D V C V H T T M R E A N D R G F E C V M L S D C C G A T D Y N N H L A A L
UniRef90_K2K4D8 D F C V I S T A F S A S K G Y K V T L I E D A H T T H N K P H L D A T A I I A
UniRef90_U4Q059 D Q C V S S T V R S L A D E S F D V I V D D A C A G S M
UniRef90_B8D6P5 H I C V L H T A M D A F Y N R Y Q V I V V E D A V S A F S R S D H E W A L N Y M
UniRef90_W818D8 E M C L A T A R A A M D L G F Q V I L A H D A H A T Y D V P P G P G E K V I A
UniRef90_W4LZL3 E M C V D T T I R A A A S R G Y H V V V A A D G H T T R A K Y L N G A T I T S V
UniRef90_UPI0003493962 E Q C C C E T T A R V A S D L G Y N V T F V T E A T L T S P L T H N G I T L S V
UniRef90_R8GDF1 N M G V E S T A R E A F M L G Y Q I F I T D A M T S F T K E E
UniRef90_J7QI52 H I G C L E T T A L D A F M R D I Q P F M I A D A I G D F S L E D
UniRef90_D5UY25 H I G L M T T A L D A F M R D I Q P F V V R D A V A D F S A D E

UniRef90_G7GLD6 UniRef90_C7BNH4 UniRef90_D6U804 UniRef90_S3IN65 UniRef90_C7QHR3 UniRef90_Q0HJ46 UniRef90_UPI0002376297 UniRef90_C4T083 UniRef90_A3JXX8 UniRef90_G4I5G5 UniRef90_D4XIM9 UniRef90_A4VL19 UniRef90_Q0K8T7 UniRef90_K1JQC5 UniRef90_F1Z3R9 UniRef90_B5EUB0 UniRef90_UPI000477C437 UniRef90_B8DQR0 UniRef90_W1PMZ3 UniRef90_Q2KV19 UniRef90_U7DMH9 UniRef90_F0KN79 UniRef90_X6KRL6 UniRef90_F0JBF2 UniRef90_UPI00036E9586 UniRef90_UPI00005101F7 UniRef90_J3GP30 UniRef90_I9KAU2 UniRef90_UPI00036424B2 UniRef90_UPI0004414CEE UniRef90_A5IKT8 UniRef90_B8H2T8 UniRef90_W1JL22 UniRef90_UPI0004643D0F UniRef90_UPI0003784FCA UniRef90_W0AGN9 UniRef90_I9C535 UniRef90_F0KNR1 UniRef90_A1CDZ7 UniRef90_A0A014MDJ9 UniRef90_E6PLE3 UniRef90_X0SA05 UniRef90_I0QMA2 UniRef90_B5WPA8 UniRef90_G0AA35 UniRef90_M7XWL8 UniRef90_W3WQ01 UniRef90_UPI0003640B01 UniRef90_V6KRQ2 UniRef90_F0QY03 UniRef90_C7MVZ8 UniRef90_V5BES5 UniRef90_E3DSR3 UniRef90_W6KBU1 UniRef90_L0JS63 UniRef90_D3SWA4 UniRef90_B6H277 UniRef90_UPI00047D144B UniRef90_UPI00047A68B1 UniRef90_W5I959 UniRef90_UPI0003638F3B UniRef90_A9WLP0 UniRef90_C0BZ10 UniRef90_E9CKC9 UniRef90_V5BV83 UniRef90_B8GI59 UniRef90_F3NGU8 UniRef90_U5VFU6 UniRef90_Q6W1P7 UniRef90_G9PN49 UniRef90_U1HYZ7 UniRef90_J3AKJ7 UniRef90_J1GZK2 UniRef90_UPI00017462BC UniRef90_E1QW53 UniRef90_E6S619 UniRef90_Q08S47 UniRef90_L0HPW4 UniRef90_UPI00037018ED UniRef90_S0ARR9 UniRef90_UPI00037A87D8 UniRef90_U2WS83 UniRef90_D8IPA6 UniRef90_K2K4D8 UniRef90_U4Q059 UniRef90_B8D6P5 UniRef90_W8I8D8 UniRef90_W4LZL3 UniRef90_UPI0003493962 UniRef90_R8GDF1 UniRef90_J7QI52 UniRef90_D5UY25

170 180 190

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

UniRef90_A0A009PJE2 1 WQ L D P S R A V L L I H D M Q R Y F L N F Y D A E S E L K T V V N H L V Q 40
UniRef90_M0MLA3 M E F D P D R T A V V V V D M Q N G F C H P E G S L Y G S E E V V D P I A D Q
UniRef90_D2R061 S P E L M N P D R T A L V L V I D V L Q E K L L P A L H G G R E V V A G N I L G R D
UniRef90_X5DPQ2 I A Y S P E L S A L L I V M D M Q Q Y F L N P E A Y I P A S R A I I A N I V Q A
UniRef90_K2E292 M A E D W K R T A L L V I D M Q Q G D F V E G G M L V K G G K D V V P K N V I K
UniRef90_I3SHE0 T L D P K S A L L I V I D L Q N G I V T L P A A D L V E P V I K H A A A A
UniRef90_E8V2D7 M Q L N A N T T A L L V L I D L Q K G I I G G D R R P Y S G E Q T V V T V A K G
UniRef90_V4PA74 W T L R D P S R A V L L I H D M Q E Y F V N A D R S V I D P L Q T V P N I D Q K
UniRef90_COZYH2 A P A T A S P S D S T L I I I D A Q N E Y A E G Q L K T V N V E Q T R K A I A S
UniRef90_B7FUZ0 P K L D P R R T A L L L I D L M T R I V I E Q T P T A P S H S G N P A V V A R S L A
UniRef90_V9DAK5 L T F N H P T A L L L I D N Q N G F T H P S X Z P S R S N P N Y E T N I O S
UniRef90_W2EN36 L K L D A Q T T A L L V L I D L Q N G I L P Y A G G P H H S A G Q V V A N A A L
UniRef90_A2QXZ8 D R D R S A L L V I D V Q N A V V D E G H E R D A V V A N I G E
UniRef90_L7ZPN9 N R P N T A L L V V D V Q N A V V D E G H E R D A V V A N I G V
UniRef90_UPI000365C25E D A K K A V L L V I D M Q E Y F R G M A E E P I L P A I I Q R
UniRef90_M2NYZ5 A L L V V D V Q N A F V S G I D A V P E S E E L I A S L S
UniRef90_A9SLN3 D A V L V M I D I Q N T Y R T G V M A L E G A E E A L A A S A R
UniRef90_S3TDS9 W P L D T S R A A V L V H D M Q N Y F A R Y Y G D N P L L E K V I E N T I A L
UniRef90_D7B796 M T L T P G N T A L L V I T D P Q L I D F L S P K G G V T W G V N D T V K N I E K
UniRef90_C5BUB8 N T A L L V I D V Q K G L C S G E E E C F D I Q R V I R T I N I N D
UniRef90_A6FHF2 E S S Q V A L V V I D M Q R D F L E P G G F V A R L Q A I V P T L K R
UniRef90_W8PUT9 P S T A S T S D S T L I I I D A Q N E Y A T G L L A V E K V A E T R K T I A K R
UniRef90_K8GP27 L T F N H P T A L L L I D N Q N G F T H P S X Z P S R S N P N Y E T N I O S
UniRef90_B6HQH4 T L D P R T A L L V V I D L Q R G I V G M Q T Q P Y A A A D V V A R S V E
UniRef90_UPI0002FEF5CD K K T L L I I D F Q N S L V E E K P F R I E T I T K N I K I
UniRef90_UPI0003745849 L K L D I A T T A L L V L I D L Q K G I A G P G R L P Y A S E D V V N R A K T
UniRef90_C0QTV1 L R I D V L A K A A L L I I D M Q N D F C H P D D G D I T P A R K P I A P L N K
UniRef90_W6S0I4 L R I D L A K A S A L L I I D M Q N D F C H P D D G D I T P A R Q P I A P L I N H
UniRef90_V4PL25 L R L R P D N T A L L V I D M Q T D F C G M G Y D I T L T R A P I A P L Q R
UniRef90_K9WE80 L R L R P D N T A L L V I D M Q T D F C G M G Y D I T L T R A P I A P L Q R
UniRef90_K9V4D7 L R L R P D N T A L L V I D M Q T D F C G M G Y D I T L T R A P I A P L Q R
UniRef90_J0KUL8 L P F E I G S T A L V M I D M Q K D F V E P G G D V S L V R S A I E P C K R
UniRef90_C6SSH9 L S L K A L E T A V I V I D M Q N A Y A S P G G D I S G A R S T I A N I K R R
UniRef90_W0L9F7 A K W A F E P D R A A L L I H D M Q N Y F I N A E S P D V S P I A K A I P I K N I A R
UniRef90_V4NP31 A P L R I N P A K V A L L V I D L Q K Y F V D E S A H V S S V K A I P I G L L K
UniRef90_J3HMQ2 D R P N T A L L V I D V Q N G V V A G A H D R D G V I A N I T N T
UniRef90_UPI00036BFB53 V R I D L R S T A L L V I D M Q N D F C T N G G W V A Q I R A P I A P L Q R
UniRef90_UPI0003B33516 D H A A L L V L I D L Q A G I C A R E T K P H T A S E V V H R A A D
UniRef90_UPI0003747D06 T V L L V I D I Q T A L I E A K P Y A V D N C L S V W Q K
UniRef90_UPI00033516 M N L Q I N K T A L L V L I D L Q N G I I G R N S L P Y T P E A T V E R S R G
UniRef90_UPI00036F4146 F D L N R T A I V V D M Q N D F C H P D D G D V S P A R A P I N P L Q R A
UniRef90_W7DT75 A P A A L S E S A V V I D A Q R E Y E E G P L A L P A V H A A I A E I L S A
UniRef90_UPI00046471EC P Y K F P P E S T A L I I I D M Q R D F V H G F G Q I Q C G N D I V P R T R Q
UniRef90_V4RHD6 A P W V L A P E R A A L L I H D M Q N Y F I D A Y R D E E P M S T V M P N A K L
UniRef90_M3DCD0 I E L D P K R T A L L I I D M Q N E F V R R D M G E R L D N V T I P A C K K
UniRef90_UPI00035E61BA S K A A V I V V D V Q N D Y C H P E G A L P G V G E M M P K L H K
UniRef90_R5U208 L D P K T A L L V I D L Q Q G I V S L P V A H P A N E V V K Q A A A
UniRef90_W4AG00 L P F A A D H T A L L L V D M Q R A W L E P Q F D P H L H E Q V V P N Q R R
UniRef90_H1SAX8 S A F T L E P G R T A L L V I D M Q R D F L L P G G D V D Q L L K V V P P L A A
UniRef90_J2PB00 F N L D P K T T A L L V I D L Q H G I V N L P L A H T G A E V L A N V V R
UniRef90_W9AHV8 W A F E P E R A V L L I H D M Q D Y F V N F G A D S P L A Q Q L I E N T I A A
UniRef90_W9ATR2 A L L V V D V Q S A F V T G D G A V P A A E R L V D R T T D
UniRef90_G1Y131 N R P N S A L L V V D V Q N G V V A G A H A R D V V V G N I G K
UniRef90_C6DJV7 K N T A L L V I D L Q N G I V Q L P L A H P V S D V L A N A S K
UniRef90_F2R9V4 A L L L I D L Q V G L V H G P E K P W R C E A L I Q T V N T
UniRef90_UPI0003689F34 Q K V A L L I I D M Q R D F L E P G G D V R H L S A L I P T L K S
UniRef90_H1YF16 L I V I D V Q K G I T D E R L Y D F D G F I R N V T N
UniRef90_A0A023CHJ0 S E A T L I L I D I Q N T Y R T G V M E L T G W Q P A L D A A A E
UniRef90_UPI0003616A30 D R P N T A L L V V D V Q N G V M K A S V D A E S V I A N I V T
UniRef90_UPI00046E843A K N R K A L L V I D M Q K G S F T S K T P R F D T K G V V S R V N T
UniRef90_UPI0004067AE4 L P F N P A T T A L L M I D M Q R D F V E P N G D V S L V R S A I E P Q R R
UniRef90_E6WIM0 F P L R R N E L A L I V I D M Q R D F V E P G G D V S R L F A I V P A V K R
UniRef90_C8WJX4 W T L E P Q R A A L L I H D M Q A Y F L N F G E N S P L V N Q V V E N I A R
UniRef90_I4YSY7 I D P R K A A L I I D M Q H G F L D S A L C V A G A A A T V P A C T R
UniRef90_G4LE9 A L L I I D V Q E G I L P S K G A E R P A D E V R R I F D
UniRef90_UPI0001FFE333 M R K N T T K S A L L V I D M E D A F I N K N S P L C N A E A I I P A C V R
UniRef90_D4LX6 D A S R A A L L V H D M Q R Y F L A P Y A G S P V P E V V A N I A A
UniRef90_UPI00037760EB P V S A L D D R A A L V I D L Q Q G I A L A A G A G L D L D A V V A N S K A
UniRef90_T0HQD1 L D A N S T A L L L I D L Q N F T L D F A T H P R T P A E C V T G A A R
UniRef90_I9MH18 W K A N P K R S V L L I H D M Q Q Y F L N A Y L G E S P I I Q L I E N I Q L
UniRef90_K5YQ86 E L D P A R T A L L V I D L Q N G I T A L P T S P R S G A D I V A R T L P
UniRef90_B8KY83 A K P A L V V I D V Q N G F T D E Q C P L A K A D T V V D A N V A
UniRef90_O67117 T D R D A L L V V D M Q K D F M P G G L P V P E G K I I P R I N E
UniRef90_D6B713 N R A L I V V D V Q E S F A R P E W S R M A D P D I A R S V D R
UniRef90_DOKLZ3 W S I E P E R A A L L I H D M Q T Y F L N F G E K S A L T A Q L V A N I V R
UniRef90_A1TEW4 N R P D S A L L V V D V Q T A V V E G A Y R R D A Q V V A N I A A
UniRef90_S7ZIH2 P S T A S I Q D S T L I I I D A Q N E Y A S G K L A L H N I T P S R K V I A D
UniRef90_UPI00042595B6 S L D P R S T A L L V I D L Q N G I L G M P L A P R S G A E V L A T A K A
UniRef90_H7EL00 K N M V L L V I D T Q K G I T D A R L F A F E K I R D N I R T
UniRef90_T0BF15 N H P A L L V M D M Q N G I V S R F Q E N Q T M M N A V I Q K
UniRef90_A7HKQ9 A L L V V D L Q N D F A K P G G A L Y G A E N V I P N I V K
UniRef90_A4C423 K S A L L V V D V Q N G I F G S S N P P Y L S E D V V G N I N K
UniRef90_UPI000475E1C0 E R P H T A L L L I D V Q V A V V A D A Y E R D A V V A N I A A
UniRef90_J2L5Y2 T S A L L I I D M Q N V M Q E R A G R E R V N G E A G E K I A A
UniRef90_UPI0003702069 D R P H T A L L V I D V Q N G V M A G A H D R D Q V I A N V D A
UniRef90_UPI0002FA3B31 L P A P V Q A L I V V D L Q S A F V A G D H P V P D A A R V L D R V G G

UniRef90_A0A009PJE2
UniRef90_M0MLA3
UniRef90_D2R061
UniRef90_X5DPQ2
UniRef90_K2E292
UniRef90_I3SHE0
UniRef90_E8V2D7
UniRef90_V4PA74
UniRef90_C0ZYH2
UniRef90_B7FUZO
UniRef90_V9DAK5
UniRef90_W2EN36
UniRef90_A2QXZ8
UniRef90_L7ZPN9
UniRef90_UPI000365C25E
UniRef90_M2NYZ5
UniRef90_A9SLN3
UniRef90_S3TDS9
UniRef90_D7B796
UniRef90_C5BUB8
UniRef90_A6FHF2
UniRef90_W8PUT9
UniRef90_K8GP27
UniRef90_B6HQH4
UniRef90_UPI0002FEF5CD
UniRef90_UPI0003745849
UniRef90_C0QTV1
UniRef90_W6S0I4
UniRef90_V4PL25
UniRef90_K9WE80
UniRef90_K9V4D7
UniRef90_J0KUL8
UniRef90_C6SSH9
UniRef90_W0L9F7
UniRef90_V4NP31
UniRef90_J3HMQ2
UniRef90_K2DWB7
UniRef90_R5BG56
UniRef90_UPI00036BFB53
UniRef90_B2TD98
UniRef90_UPI0003747D06
UniRef90_UPI0003B33516
UniRef90_UPI00036F4146
UniRef90_W7DT75
UniRef90_UPI00046471EC
UniRef90_V4RHD6
UniRef90_M3DCD0
UniRef90_UPI00035E61BA
UniRef90_R5U208
UniRef90_W4AG00
UniRef90_H1SAX8
UniRef90_J2PB00
UniRef90_W9AHV8
UniRef90_W9ATR2
UniRef90_G1Y131
UniRef90_C6DJV7
UniRef90_F2R9V4
UniRef90_UPI0003689F34
UniRef90_H1YF16
UniRef90_A0A023CHJ0
UniRef90_K9XA17
UniRef90_E0S0J5
UniRef90_D3QBZ2
UniRef90_UPI0003616A30
UniRef90_A0A023BVK5
UniRef90_UPI00046E843A
UniRef90_UPI0004067AE4
UniRef90_E6WIM0
UniRef90_C8WJX4
UniRef90_I4YSY7
UniRef90_G4L0E9
UniRef90_UPI0001FFE333
UniRef90_D4L4X6
UniRef90_UPI00037760EB
UniRef90_T0HQD1
UniRef90_I9MH18
UniRef90_K5YQ86
UniRef90_B8KY83
UniRef90_O67117
UniRef90_D6B713
UniRef90_D0KLZ3
UniRef90_A1TEW4
UniRef90_S7ZIH2
UniRef90_UPI00042595B6
UniRef90_H7EL00
UniRef90_T0BF15
UniRef90_A7HKQ9
UniRef90_A4C423
UniRef90_UPI000475E1C0
UniRef90_J2L5Y2
UniRef90_UPI0003702069
UniRef90_UPI0002FA3B31

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

UniRef90_A0A009PJE2 P A E H D L V L T K W R Y S A F K R S D L E R M Q N W N R D Q L I I G G V Y A
UniRef90_M0MLA3 V S P G D H V V E K H T Y D A F Y E T E L E G W L Q D A H G T I Y G D D L V I C G G T L A
UniRef90_D2R061 S L K S E L P E P R A K T L M F A F Y E R E D M I Q S W E D R G G I Y G H I L L A S G G L E T
UniRef90_X5DPQ2 Q E D G D R L V P K K T Y G D A F E G T L L N E V L N E D L G V G H I V V I T G G A E T
UniRef90_K2E292 E L T N S V V I E K T Q Y D A F F E K T N L N E E L L N N G H N V K S Q V V V T G V M T T
UniRef90_I3SHE0 I R E G D Y K L V K T R F S A F F T N T H L H S V L Q Q G A G I N S Q V V V T G V Q T T
UniRef90_E8V2D7 Q Q P E D H T V T K K T W G A F F T S T G L A D Y L K E G A G V T Q V V V T G V V A T
UniRef90_V4PA74 Y A D G D T I I H K R N W G A F F Y G T P L D L H L R R R S G G L D T V V L A G I Y A T
UniRef90_COZYH2 P H P D D V M L T K W R Y S A F I K T D L R E R L R S S G R D Q L I I L A G V T T
UniRef90_B7FUZO P L D G E L I I D K P G K G S F F A N T D L H E Y L S S E R G K K T V L V G Y M A T
UniRef90_V9DAK5 A R P G E K V V E K Q A I S S F A N T D L H E Y L S S E R G K K T V L V G Y M A T
UniRef90_W2EN36 G V L G D L E I V K K R T W G A F H I G T G L E E E A L R E H A I D R T Q L I I V A G L T T
UniRef90_A2QXZ8 P L P T E K Q I W K H V N S S F I G T E L E E E Y L R E K G I R Q Q S V V L A G L T T
UniRef90_L7ZPN9 V C D N D L I T K R Q W G A F Y G T D L D L Q L R R R R G I K G S V V L A G G L S T S T
UniRef90_UPI000365C25E R A D D E P L I H K K Y G D S F F E A T D L E S V L A D R R G H V G R H L F V A G A Q S T
UniRef90_M2NYZ5 P E A A E P R V I E K S Y G D S F F E D T D L E K V L A E R R G V V G R L V V V A G A E T
UniRef90_A9SLN3 K L E S D K L V P K H T Y S G F F Y N T D L E R H L K E T G K T R E V I I T G V M T S
UniRef90_S3TDS9 P L S N E F V V R K Y E P D N G S F D G T S L E K K L N E A L K V K K L I I C G G L M S
UniRef90_D7B796 P A D G E P V V V K R F P G S F H L T E L E R T L T A L G A K D L V L A G V F M T
UniRef90_C5BUB8 P Q P G D T T L V K W R Y S A F Q R T H L Q D L L Q E G K R D Q L I I V G I Y A
UniRef90_A6FHF2 N D G K T V S S P H K V Y G P Y E N N D L L L Q L R K A R G I D R K V L I A G M S Q T
UniRef90_W8PUT9 I A A D D L R V R K T T P D A F Y Q T D L L S L L Q R R G G I D K L V I C G G L M S
UniRef90_K8GP27 P L P G E F V I H K P G K G A F Y A T E M E T I L Q K Q G I T H L L I T G V T T
UniRef90_B6HQH4 P K P N E F T K N F P S F A K T D L H D Y L Q G L G E V G Q K I V L V G I Y M A T
UniRef90_UPI0002FEF5CD P E R G E V L I P K P G K G A F Y N T P L E E I L R A I Q G I T Q I I V T G V T T
UniRef90_UPI0003745849 G H D G D I T V T K H N W S A L F G T D L D V Q L R R R G G I T Q I I V T G I A T T
UniRef90_COQTV1 T E G A Q F H P E L K I P S D N K F I L S K G V S R E F D I K R I F V G G V M A T
UniRef90_W6S0I4 P I D G E K I I S K R Y N S A N F K E T G L K D Y L E S K D I I R T L I M V G M Q T
UniRef90_V4PL25 K Q A G D I V I H K R N W G A F H G T D L D L H L T R R G G I R T T L I V L G G I A S
UniRef90_K9WE80 Q N P D D I F V D K Y R M S G F W D T P L D S I L R N L G K T T L F F F T G V N A
UniRef90_K9V4D7 Q L P E D I C I D K Y R M S G F W D T A L D S I L K N L G R T T L F F F T G V N A
UniRef90_J0KUL8 P L P G E V V I D K P G K G S F Y A T D L D M V L H M A G V Q N L L A G I T T
UniRef90_C6SSH9 P P P E E K I V D K F Y N S I F Y E T G L K E Y L D S K G I K T L T F A G M Q A
UniRef90_W0L9F7 P Q A G E P V I D K P Y N G A F Y Q T D L H L I L Q S N G G I R N L I I V C G I Y A
UniRef90_V4NP31 P Q P G D I K V A K T R Y S A F F N S Q L D S I L R S R G G I R N L I I F V G I A T
UniRef90_J3HMQ2 P A H G D T V L A K H R Y S A F Q L S E S H L M R V R G R N Q L I I I C G I Y A
UniRef90_K2DWB7 P M A E A I T I V K T R Y S A F Y N S E L E S I L K A K G I E S Q L I I I T G V M T
UniRef90_R5BG56 V S D K D Y V V P K R R Y S G F F Q T D L D I L L T E L G V V K T V V M T G L H T
UniRef90_UPI00036BFB53 R R A A E P L V H K I Y G D S F F E D T D L E A L L A E R G V R T V V V T G A Q S T
UniRef90_B2TD98 P L P Q D I C V H V R K H Q W G A F Y G T D L D L Q L R R H G L D Q I V L A G I V T
UniRef90_UPI0003747D06 A Q P G D L H V R K H Q W G A F Y G T D L D L Q L R R H G L D Q I V L A G I V T
UniRef90_UPI0003B33516 P V G N G K V F C K T I N S C F G N A D A E Y L K S Q T A G E K E R L M I I G L Q T
UniRef90_UPI00036F4146 P E D E K I L F D K H Y N S A F K E T H L Q A Y L D K S Q A I I I G M A T
UniRef90_W7DT75 G I D G T Y T M T K R Q W G A F H V T D L D L Q L R R R G G I D T I V L G G V S T
UniRef90_UPI00046471EC I A E T D S V I D K F R M S G F Q D T E L D S V L R N L G V I A T L F A G V M V
UniRef90_V4RHD6 P H D G E R V I E K T L P N A F A G T E L H E A V K A L G V I T H L L F A G V T T
UniRef90_M3DCD0 P I P G E P V I D K P G K G S M W D T N L H R V L L A R G G I T H L L F A G V T T
UniRef90_UPI00035E61BA P L D S D I Q V T K W R Y S A F Q R T D L R E L L S H H G R D Q L I I V T G V Y A
UniRef90_R5U208 P Q D N E I V V N K T T D S V V T G T N Y V R L M Q N M G I E T I V V C G I V T
UniRef90_W4AG00 R R Q D D I V N K H R Y S A F V N T R L D S V L K T L K I I E T L I M T G V S T
UniRef90_H1SAX8 Q Q P D D H T V P K R T W G A F T N T G L E A Y L S K L G L E T R H L I I A G I V T
UniRef90_J2PB00 P T E N E I V L P K T S S G V F N S T N I D Y V L R N L E T R H L I I A G I V T
UniRef90_W9AHV8 P I D G E V V I D K P G K G A F Y A T E L Q D V L T G A G I T Q L L V T G V T T
UniRef90_W9ATR2 R S Q G E P L V E K S H G D S F F E G T D L S T V L A H L G V V T H L I V A G I A T
UniRef90_G1Y131 V K A G D I V T K R Q W G A F Y G T D L D L Q L R R R G V T T I V V A G I A T
UniRef90_C6DJV7 P D E H D T V L V K W R Y S A F H R S P L E P M M K E M G K D Q L I I C G V Y G
UniRef90_F2R9V4 P P R E T V I R K S Y D D G F E E T A L G V V L A D A G V R A V A V C G V M S T
UniRef90_UPI0003689F34 P R D G E A L V E K S Y G D S F F E D T D L E A V L S R L A V L K R R R L Q L I I V V G A Q T
UniRef90_H1YF16 T Q P G D I F I T K H T W S A F Y E T Q I D E K L K E K G V T G I V L A G I S T
UniRef90_A0A023CHJ0 L L G D E V V F E S K R R P N A F E M T S L A D N L R S R E V T G V V I T G M K T T
UniRef90_K9XA17 P M T G E L V I S K P G K G A F Y Q T S L E S Y L H K Q G I T H L I I T G V T T
UniRef90_E0S0J5 P K E N E K I F I K T I N S C F G N N D L A N Y L R E S K E K D L M I V G L Q T
UniRef90_D3QBZ2 P I D G E P V V V K T A P N S F F E D T D L D E Q L K A A G N T D V I I V G F M T
UniRef90_UPI0003616A30 R R E P E L V H K T Y G D S F F E D T D L E E V L A A R G I G A L I V V G A Q T
UniRef90_A0A023BVK5 I E T T D H F L N K Y A N D I F Y K S K L Q S K L N D L N I N E L F V T G C A T T
UniRef90_UPI00046E843A P I D G E P V I D K P G K G A F Y A T D L H L V L Q N H G I K T L I V C G V T T
UniRef90_UPI0004067AE4 P L P G E L V I E K P G K G A F Y A T S L G E I L K R R R L T Q L I I F A G V T T
UniRef90_E6WIM0 P D Q D D H V L T K W R Y S A F H R S P L E S I L Q E M G R D Q L I I T G V Y A
UniRef90_C8WJX4 P Q P G D R V I A K P R F S A F F A T Q L D L V L S R N L G V G T V V L A G T T
UniRef90_I4YSY7 R T A G D I V V S K T S C D S F F Y E T D L Q M V L S N Q S V K H L V V A G L M T
UniRef90_G4L0E9 P I R G D Y T I I K P R F S A F F Q T E L D L I L R R L Q Q V R T V L V C G T A T
UniRef90_UPI0001FFE333 W Q Q G D E V L T K W R Y S A F Q R S T F A E R L A E G G R D K I V L T G I Y A
UniRef90_D4L4X6 P Q I A D G L D V P D A I H I D K P S F G Y T H W D A E F C F E K I E L V G L C T
UniRef90_UPI00037760EB V Q P G D I K V T K K T W G A F T N T G L D A L L R E Q K V T Q V F L T G V S T
UniRef90_T0HQD1 V Q P Q D L I V D K Y N W G A F H G T S L M D T H L R R R G G V D T L I V G G L V L
UniRef90_I9MH18 P N A S D T V L T K W R Y S A F K R T K L M E I M Q R E Q G R D Q L I I C G I Y A
UniRef90_K5YQ86 F Q P G D V T I I K R Q W S A F H G T E L D L Q L R R R G G I T N I V L C G I A T
UniRef90_B8KY83 I A E T D L S L E F D H A S G F H G T D L D K Q L R A R G V D S L V V T G L A T
UniRef90_O67117 T E G A K L H Q E K V D A Y S G F Q G T L N D L L K A R G V R R I F V T G V A T
UniRef90_D6B713 A L P G E P V L T K T S H N C F T T T E L Q R L L T E V G V T A L T V C C G I R T
UniRef90_DOKLZ3 P E A D D V V L V K W R Y S A F H R S D L E E Q Q L K S A G R N Q L I I C C G I Y A
UniRef90_A1TEW4 P D D G E P V I E K H Y G D A F E D T D L E Q V L T D S G V G R L V V V G A E T
UniRef90_S7ZIH2 P A A G E K V V K K S F A S C F A Q T D L H T Y L Q G L G P K K I V L V G Y M A
UniRef90_UPI00042595B6 A E P G D T L I T K R Q W G A F T G T E L D L Q L R R R G G I T T I V L A G I A T
UniRef90_H7EL00 N D G E K V F V K K V N S A H K S V G L S D Y L R S G K G V K T I V A V G L Q T
UniRef90_T0BF15 P R T G E P I V T K Y R V S A F A G S N L E V I L R A K Q I D T L I L T G I A T
UniRef90_A7HKQ9 E I V D E L K K A L E D Y Q N K Y E I K K S R E Y S K K L G V T E V I H I G G L V T
UniRef90_A4C423 L V E S G I K I R K K S P D S F Q G T S L G E Y L E G S E V E V I V C G G Y S T
UniRef90_UPI000475E1C0 L R D Q E P L I H K T Y P D S F D D T N L E E V L A A A Q I V G R L V V A G A S T
UniRef90_J2L5Y2 A R E N E P V F I K S T S S A F A S T E L E S Y L H E V G I T D L V V V G A V A
UniRef90_UPI0003702069 R H D D E P L I H K T Y P S S A F E A T D L E S V L A D L K V G H I V V A G A Q T
UniRef90_UPI0002FA3B31 G G P A E K V I R K S E D D G F E G T S L A E T L T A A G V G A L A V C G V M S

UniRef90_A0A009PJE2
UniRef90_M0MLA3
UniRef90_D2R061
UniRef90_X5DPQ2
UniRef90_K2E292
UniRef90_I3SHE0
UniRef90_E8V2D7
UniRef90_V4PA74
UniRef90_COZYH2
UniRef90_B7FUZO
UniRef90_V9DAK5
UniRef90_W2EN36
UniRef90_A2QXZ8
UniRef90_L7ZPN9
UniRef90_UPI000365C25E
UniRef90_M2NYZ5
UniRef90_A9SLN3
UniRef90_S3TDS9
UniRef90_D7B796
UniRef90_C5BUB8
UniRef90_A6FHF2
UniRef90_W8PUT9
UniRef90_K8GP27
UniRef90_B6HQH4
UniRef90_UPI0002FEF5CD
UniRef90_UPI0003745849
UniRef90_COQTV1
UniRef90_W6S0I4
UniRef90_V4PL25
UniRef90_K9WE80
UniRef90_K9V4D7
UniRef90_J0KUL8
UniRef90_C6SSH9
UniRef90_W0L9F7
UniRef90_V4NP31
UniRef90_J3HMQ2
UniRef90_K2DWB7
UniRef90_R5BG56
UniRef90_UPI00036BFB53
UniRef90_B2TD98
UniRef90_UPI0003747D06
UniRef90_UPI0003B33516
UniRef90_UPI00036F4146
UniRef90_W7DT75
UniRef90_UPI00046471EC
UniRef90_V4RHD6
UniRef90_M3DCD0
UniRef90_UPI00035E61BA
UniRef90_R5U208
UniRef90_W4AG00
UniRef90_H1SAX8
UniRef90_J2PB00
UniRef90_W9AHV8
UniRef90_W9ATR2
UniRef90_G1Y131
UniRef90_C6DJV7
UniRef90_F2R9V4
UniRef90_UPI0003689F34
UniRef90_H1YF16
UniRef90_A0A023CHJ0
UniRef90_K9XAI7
UniRef90_E0S0J5
UniRef90_D3QBZ2
UniRef90_UPI0003616A30
UniRef90_A0A023BVK5
UniRef90_UPI00046E843A
UniRef90_UPI0004067AE4
UniRef90_E6WIM0
UniRef90_C8WJX4
UniRef90_I4YSY7
UniRef90_G4L0E9
UniRef90_UPI0001FFE333
UniRef90_D4L4X6
UniRef90_UPI00037760EB
UniRef90_T0HQD1
UniRef90_I9MH18
UniRef90_K5YQ86
UniRef90_B8KY83
UniRef90_O67117
UniRef90_D6B713
UniRef90_D0KLZ3
UniRef90_A1TEW4
UniRef90_S7ZIH2
UniRef90_UPI00042595B6
UniRef90_H7EL00
UniRef90_T0BF15
UniRef90_A7HKQ9
UniRef90_A4C423
UniRef90_UPI000475E1C0
UniRef90_J2L5Y2
UniRef90_UPI0003702069
UniRef90_UPI0002FA3B31

130 140 150 160
H I G C M V T A L E A F M S D L Q P F L V G D A V A D F S
N V C V L H T A G S A G L R D F R P V L V D D A I G Y I E
H V C V L R Q S T V I L D L L G E R D F Q V V L V A V D A H T A G S S R S L L D
D A C C L R S T V I H G G F T R G Y D V T L V A D A H T A G S K T E W G A P P V
H L C C E T T V R S A F V R G F K P F M P I D A T A T Y N
P N C I R S T V F D A V A L D Y N P V T V I V D A T A A A T P D I H L G L Y L S A
S I G V E S T A R Q A Q E F G F N V T L V A V D A M A D L N
N Y G V E S T A R D A W E R G Y E L V I V E D A C T T V S
H I G C L T T A L D G F M Q D V Q I F F V G D A V A D F S L G E H V G
D V C V H T T M R N G N D M G Y E C L L L E D C C A A T D P D N H A A A I
H V C V S T T A R Q G N D L G Y N V V L A K D A I G D R D P G I S G S
N F G V E S T A R F A D E F G F T V I L P E D A T A L D
D H C V S T T V R M A A N L K G R I V L V S D A T A T F A K G G W D A
N I G V E S T A R A A W E H G Y E L V I A E D V C S A Q N
D A C C I R S T L H G A F T R G Y D T T L V S D A H T T E D L T A Y G A P T P
D A C C L R S T L H G A L V R G Y D A T L V G D A H T T V D K T E W G A P T P
N L C C E T T A R E A F I R G F R V F F S S D A T A T I N
E M C V A A T A R E A F A L G Y D V L L A H D A H A T Y D V P A G P G E G V P A
H M C V N Y T A Q G A F A L G Y R P S V V A E T T A T R A L T A P D G T V L P A
H I G C L T T A L D A F M R D K P F F I A D A V A D F T E D D
N L C V E S T H M R E M I E R G F E V A V V K D A T A G A K V P E G D G
D Y C C I N A T V R R E A H A L G Y D V V L A D A H S T V A N G S M A A E Q I I A
E V C V Q T T M R E A N D R G Y E C L M V E D C T E S Y F P E F K Q A T L D
H V C V I S T T A R V G S E L G Y D V L V V R D A V G D R N I P G A D A
E V C V Q S T M R E A N D R G Y E C L L V E D A T A S Y F P E F K Q A T L
S I G V E S T A R D A Y A A G Y N V T L A T D A M A D S D
D Y C C K N T V L G G L N L G Y Q V I V L E D G I K G V D V N E G D S E R
E Y C F D T S C K V A F E Y G Y K I I P E M T N T F D N E F M T G E K L Y
N I G V E S T A R D A W E R N Y S L V V A E D V C T T N A
D Q C V M A T L Q D A N F L G Y D C I L L V K D C C A A T T S P E Y C L
D Q C V M T S L Q D A H F L G Y D C I L L Q D C T A T T S P E Y C C L
D V C V H T T M R E A N D R G Y E C L L L S D C T A A T D P A N H Q A A L
E F C I D V S T K V A F E H G Y Q L E L I G D A I T T F D N D Y M D A E T
E V C V N T T V R E A N D R G Y E C I I P Q D C V G S Y F P E F Q K Y A L
N V C V E S T L R D G F H L E Y F G I M L E D A T H Q L G P
H I G C L T T A A A F Q R D Y P F M V A D A V A D F S R E N
H M C V R H T S A D A Y C L G Y D V V V A K E A T N S F T E E D Y
D G C C I R A T L H G A F V R G Y D V T L V G D A H T T Q D L S R Y G A P P P
D Q C V L H S L T D A N F L G Y D C V L V E D C C A T S P D F C T
N M G V E S T A R S A W E H G Y S T L F A E D A T S S F S
N F C I D A T V K S A F E R G Y K V I P E G T N S T F D N D Y M D A E T
N Y C I D T T I K V A F E L G Y N V T V I K G G T T T F D D M K I T A
G I G V D T T A R E A F Q L G Y N Q I F V E D V M G A A T
D Q C V L C T L Q D A G F L G Y D C I L L V E D C S A T T S P Q F C
H M C V S S T V R A A L D L G Y S S T V V A N A T A T R D L P Q V G G E N I G W
E C C V N T T A R E A C A D R G F E T C I L L A D C T D G F D E G F Y S S T L D
H M G C M L S A A E A F M T D I P F F V A D A T A D F T R D E
D Q C V A S T I R D E A D N D F K I I C V E D G C A A D
N V C V E S T A R D G F M L D Y H I V L V A D A C A S Y S Q S A
S I G V E S T A R Q A H E L G F N V T L A V D A M T D M N L
D Q C V E M A V R D A A D R G Y L V T L V E D A C A T Y T
E V C V H T T T R E A N D R G Y E C L V V S D C V G S Y F P E F Q R V G L
D F C I R S T L H G A F T R G Y D V T L V A D A H T T D D S T A L G A P P P A
N I G V E S T A R G A W E H G Y A L V F P T D A M S T F N
H I G C M I T A T D A F M R D K P F M V G D A V A D F S L Q E
E M C V H A T A R T A L A R G Y R V V V P H D A H A T Q D V P A V P G E A V P A
D A C C I R S T L H G A F V R G Y D T T L V N D A H T T A D L S A W G A P P P F
S I G V E G T A R D A S E R G Y N I T F A T D A M T D M
Q Y C V Q S T C R A A R D L G F D A V L A D G D A T C S D T P V M K A
E V C V Q S T M R E A N D R G F E C L L V E D A T A S Y F P E F K E S T L
N F C I D A S V K S A F E R G Y K V I I P K G T N S T F D N D Y M D R E T
H M C V T F T S E G A F L A R G Y K P T V V A D A C A T R P L K T A V A E V S A
D A C C I R S T L H G A L A R G Y D A T L V A D A H T T E D L S A Y G A P T P
D F C V E S T V Q S A L T K D Y N I T V V A D G H T T G D R P H L K A K K V
E V C V T T T V R E A N D R G Y E C I I P Q D C V G S Y F P E F Q K Y A L
E V C V Q T T M R E A N D R G H E C L L A E D A T E S Y F P E F K A A T L
H I G C L T T A T D A F M R N I Q P F M V A D A L A D F T R E E
P N C I R T T C Y D A L S L D Y N V V L L E D C T S S R T P
Q Y C V D T T C R R A V S L G F D V T L V A D A H T T A D T G T F T V E Q I V D
P N C L R T T A Y D A F S L D Y N V L I L Q D C C S S I T
H I G C Q A A T A V E A F M R D V A P F L V A D A V A D F S R R H
D I C V V S N A L L K A L F P N A E I S V D C C A G V T P E T H N S A L A T M
S I G V E S T A R F A G E L G Y N V E L A I D A M L D T S P A S
G I G V D T T M R E A M A L Q D M E T Q I L A E D T T T S F S A E E
H I G C L T T A C D A F M Q D M E T F F V C D A V A D F S
N L G V E S T A R Q A W E H G Y Q L V L A E D L C T S L G
S G C V R A T V V D G L Q N N Y R V V V P E E A V G D R N P
D Y C V K N T T I G L N L G Y Q A F V L E D A I L K G V D V N P G D V E R A I N
E Q C V E T T A R V G S D L G Y A I T F V P D A T T D G V G G F S A
H I G C L T T A N D A F M R D K P F M V A D A L A D F T Q E N
D A C C V R S T L H G A F T R G Y D V L V G D A H T A G D K T Q W G A P P V E A
H V C V S T T A R A G E E L Q Y E V I V V S D G V A D R H I P G V I Q A
N F G V E S T A R N A W E L N Y S V V F A E D A M T S L S
N F C I D A T I H T G F D L G F E M L V P A Y A N S T F D S E Y M S A E T A Y
S G V V L S T L R E A A D K D F A I T V L E D A C A D P D
H I C V L F T V E E L R N R G I E T I V H S N C V D S F D K S M H E F A L R E M
D F C I D R T A F S A S R G Y K V T L V D D A H T T H S K P H L D A S S I I A
D Q C C I R S T L H S A F T R G Y D V T L V G D A H T T T D L S Q W G A P P P
G F C V N T T V R A G S D L G F K M S V V S D A H T L G F D L P D A D L S A
D I C C I R S T L H G A L T R G Y D A T L V D A H T T E D L T Q F G A P T P
E M C V L A T A R R A L E L E Y R V V L P H D A H A T Y D L P A A P G E A V P A

UniRef90_A0A009PJE2 E E E H R L A L K Y V S S R C G Q V V D T E S V V G Q V A T
UniRef90_M0MLA3 E D H H E Y A L D H A D W L F G E V T E R T D L
UniRef90_D2R061 H E L A V R R M D S S G A T I T T T E A A M F E W C E R A G T A
UniRef90_X5DPQ2 E Q V I D H T N L Y W Q G K T A A V E T A D Q V I
UniRef90_K2E292 E E F H K A T F K N L S H G F T S P V V I T R E L L E
UniRef90_I3SHE0
UniRef90_E8V2D7 A D A H L N S V T R I F P R L G E T G T T Q D V L A L L K T T H A
UniRef90_V4PA74 E D A Q T L S F K Y V F P R I A R V T T S A N L
UniRef90_C0ZYH2 A L E Y A A G R C A S V T R T D D L V K A M S A E T V S A
UniRef90_B7FUZ0 S M V K K Q G G V F G S C T T S D R L V A A L S
UniRef90_V9DAK5 E V T E A T L K E L S D A F G T V V Q S S D I
UniRef90_W2EN36 A H A H Q F A F D Y I F P R I A T V C T T G E L V A A L
UniRef90_A2QXZ8 E T V H Q V S V A S L D G F E A E V V G V G E V V G A L D H Y S A S S
UniRef90_L7ZPN9 A E M H R F A F E H I F P R L A R V R D T G E I L A A L E R
UniRef90_UPI000365C25E D K V I A H T N L Y W Q G R T A G L V T T A D I
UniRef90_M2NYZ5 E Q V I A H T N L Y W R G R K G G T V K T E D V
UniRef90_A9SLN3 E D L H V S S L K S L A Y G F A Y L V N V N S L A A M S K
UniRef90_S3TDS9 A M A R A A E W S L G D E I R I C A S V S E V
UniRef90_D7B796 A T L Q A A A L T T I A D L F G T V V P T V N A L
UniRef90_C5BUB8 H R M S L D Y V A G R C G Q V M S C G Q V I S
UniRef90_A6FHF2 Y A A A L V N F R Y L A N D V I D T E E A V K S M H Q S A
UniRef90_W8PUT9 N H N N R L G R L S S A V S R L
UniRef90_K8GP27 M V R A Q G G I V G W T A T A E E V L A G L R Q W Q P S
UniRef90_B6HQH4 D T V V S V V L S E L A D G F A T L V S E S E I
UniRef90_UPI0002FEF5CD A M I S A Q G G I V G W T A T A N Q V L N A L D G L Q
UniRef90_UPI0003745849 A E A H T N S V E R V F P R L G E N G T T A E I L E L L A K T H A
UniRef90_C0QTV1 A V E I V M K N K G A V I I N A E D I
UniRef90_W6S0I4 N Y Y N F K L F K D R F A K I D T V D N I I A N L
UniRef90_V4PL25 T E A H A A S F K Y I F P R I A R V V Q S A D V
UniRef90_K9WE80 Q A T L Y N V N Q C F G F V T N S E S L L E A I K
UniRef90_K9V4D7 W Q A T L Y N V K Q C F G F V S D S Q A M L K A I D N I
UniRef90_J0KUL8 N M V T M Q G G V F G A H A T S A E L L M A L E
UniRef90_C6SSH9 E Q I L S F Y E F L W D N R F A Q V K N T E D I L V D G L Q R
UniRef90_W0L9F7 E M I K A Q G A I F G W V S D A S A I V
UniRef90_V4NP31 A F L Q Q A T V Y N I E T F F G W V A T V D D F I N A I
UniRef90_J3HMQ2 H D M A L S Y L A K T S G I P M P L E T L L A K I Q G
UniRef90_K2DWB7 Q F H L G A L M N L A H G F A V P M L I D E V I N Q L G A
UniRef90_R5BG56
UniRef90_UPI00036BFB53 D Q V I A H T N L Y W Q G R R A G V V G T A D V
UniRef90_B2TD98 E A A V W N V K K C F G F V T D S A R I V D A L S D A A
UniRef90_UPI0003747D06 S E M H D F A F A N I F P R L G L V T D T A T I I A E L A G
UniRef90_UPI0003B33516 T Y K Y N E M M W P G R F A E C V S M E K A I A L L E E
UniRef90_UPI00036F4146 E Q L V D Y E N I W N G R F A Q V V E L E N M L K E
UniRef90_W7DT75 K E M H A Y T C Q T I F P R L G K I R S S A E V I S Y L
UniRef90_UPI00046471EC M D A T L Y N I R Q C F G F V C S S D D I V A G L S R A D A
UniRef90_V4RHD6 E A L Q L A S L A A L A D R F A T V V A A E
UniRef90_M3DCD0 M L C S Y D G L F G F V G T S A E L L K
UniRef90_UPI00035E61BA H E M A L S Y V A K R C A V V T T D D V I G V L R H A A A A
UniRef90_R5U208 Q E L H D A E L K I M N V I Y C N V L S S D E T I E V I E K
UniRef90_W4AG00 H D M T L E N I E G Y F G K V S G V Q H V I D
UniRef90_H1SAX8 E A H V N S I T R I F P R L G E T G T A R E I I G L L G A
UniRef90_J2PB00 E Q R H H A C L N A I K G Y C W I T D T Q T L L G R L Q E M Q
UniRef90_W9AHV8 E M I K A Q G G I F G W V A D T A A V I P A L L Q Q L T T N A
UniRef90_W9ATR2 Q L I N H T N L Y T A P G R S A D V V Q T A Q V
UniRef90_G1Y131 A E M Q D F A L N T I F P R L G R R T T S D A I
UniRef90_C6DJV7 H Q M A L K Y V A T R A G R V V S T A E L T G A
UniRef90_F2R9V4 A V V S R V A A Y A L G S D A E V T V R A A D V
UniRef90_UPI0003689F34 E Q V I A H T N L Y W N G R T A G T V A T A D V
UniRef90_H1YF16 A D A H H N S L K Y I L P R I G E T G T D K L I E V L L G
UniRef90_A0A023CHJ0 Q D I V A H H N A T L A G P F C Q L V Q A E D W
UniRef90_K9XA17 E M I R A Q G G I V G W T A T A A N V M Q A F G S I
UniRef90_E0S0J5 T Y K Y N D M M W P E R F A S C I S V D D A I K M I E D L
UniRef90_D3QBZ2 Q Q L H H S A L A T I N D I Y G V V V A S A
UniRef90_UPI0003616A30 D Q V I A H T N L Y W Q G R T A G T L K T T E V
UniRef90_A0A023BVK5
UniRef90_UPI00046E843A A M I K A Q G A I F G W V S D A N A I V D G L Q R
UniRef90_UPI0004067AE4 A M I R A Q G A I V G W T A S V D A I L E A L D A
UniRef90_E6WIM0 H M M A L T Y T A G R S G K V V M T A D L M
UniRef90_C8WJX4 E V Q A A N I E D M A F I G A H I M T C D E F C E R L A N V A D V A
UniRef90_I4YSY7 H H N G L D G F D A G T A V I T V K R A N E A F A K A
UniRef90_G4L0E9 Q E I Q V A N L A D M A R V G A Q L M T S A Q F E D Y Q E A A A
UniRef90_UPI0001FFE333 H D A A C E Y V A Q R C G V V T G T A D V L G A F A A T P A
UniRef90_D4L4X6 K M C Q
UniRef90_UPI00037760EB H E H S V N T I F P R L G E T A T T A E V L A
UniRef90_T0HQD1 H D M I L R S I M P R L A R I R T V E A I I D A I
UniRef90_I9MH18 A D H H K M A M T Y A A D R C A V T I S T A L L L E Q L K S I Q
UniRef90_K5YQ86 D G A H E F A T K T I F P R L G L V R Q S A E I
UniRef90_B8KY83 D A H A A N L Y D M N A K Y A D V L S L S K T L E A L A A L R Q S A
UniRef90_O67117 E M M E R G A
UniRef90_D6B713 A Q I V E R T E A V L R D R F A R I A T V
UniRef90_D0KLZ3 H L M A L R Y T A S C C G R V L T V D Q S I S E L S P A
UniRef90_A1TEW4 V I A H T W S Y Q A A P G R T A A V A T A A E I
UniRef90_S7ZIH2 E S L V S V V L S E L A D G F A T V L R A A E I T E
UniRef90_UPI00042595B6 A E M H S F A V E S I L P R I G I V S Q A A D I V
UniRef90_H7EL00 R Y Y N E F L W N G R F A K C I P M D D A V R L L E E
UniRef90_T0BF15 S E V H R V L M E K V F P R Q A T V I Q T V D E W V K T L D S I H A
UniRef90_A7HKQ9 K E V
UniRef90_A4C423 H H
UniRef90_UPI000475E1C0 E Q V I A H T N L Y W K G R T A G V D T T K D V
UniRef90_J2L5Y2 R Q I F D V T M A H L K S D F A E I I D T R Q L L A M
UniRef90_UPI0003702069 D L V I A H T N L Y W K G R E A G V V E T A D V
UniRef90_UPI0002FA3B31 A M A S R V A E W A L G D E V E V V A R A E D V

1 10 20 30 40

UniRef90_A6LJ49 A L I I I D M Q N D F A K N G G T L Y G A E K I I P P L L S 40
UniRef90_E0XTP1 F K L N S E E T A L L V I D V Q N T Y L E D A W S P F H D R M V I P Q T K K
UniRef90_UPI000411DA7B P V T Q L D P Q T A L L V I D L Q N T G I V G M G L A P N S A A D V I A R N S A E
UniRef90_M7N10 D R N R T A L V I V D V Q N D V V A E A Y R R R E E T I E A R N S I E S T
UniRef90_H5UB80 F D P T A T A L L C I D W Q T D F C G P G G Y V D S M R A P L G P T A R T
UniRef90_B5XXN1 L T F A P Q Q S A L V I V D M Q N A Y A S A G F D V S A T R P V I V N I N T E
UniRef90_UPI000474A60 T V D F K K T A L V I I D L Q K G I V Q L A P N S A Q V V I Q A S E
UniRef90_UPI00035D6EC2 A L I V I D V Q R A F V T G A D A V P D H A R L L P T I A V
UniRef90_UPI00046382A4 P I D L N W S T T A F L I I D M Q R D F L E P G G F G E T L G N D V S R L L G S E
UniRef90_D2RFL4 P A E I D L A R T A L V I V D M Q K D F C Y P E G A L Y I G D K I I S T T K E
UniRef90_UPI00045E5DD3 P A E I D L A R T A L V I V D M Q N D F L E P D G D P A P L L A I V P T L Q A
UniRef90_UPI0003724615 F D P A H T A L L I I D M Q R D F V E P G G D V S L L Q A I V P A C Q A
UniRef90_T1BZL3
UniRef90_UPI0004649311 E P A R T A V L N I I D T Q C S F F H T S W Q D A D F P A F Q Q A I S A
UniRef90_UPI0003758496 K V A I L L G I D M Q G Y F L N G K A Y L P S S P E F L P N R M A R R
UniRef90_B5IAW4 K C A L L T I D F Q I G F T E D A F G G F N I N S A I T A T G K
UniRef90_G8AUW5 S F N G E T T A L V I I D M Q R D F C E V G G D V S S A R G L I P G L V K E R
UniRef90_W9YDF0 L I V V D I Q R D F C P G G L A V P Q G D E I I D G L V N R
UniRef90_B5YK7 S T L I M I D F Q N T Y T G V M A L P G A D A A L D A G A R
UniRef90_UPI00047B7B4B WT I D T S R C A L L V H D M Q N Y F I D A Y R D A E P L A T V V P N I V R
UniRef90_V9XHY9 A L I V V D V Q N D F C E G G L A V P G G E D V V P N I V R
UniRef90_D5EFN8 T A L L Y V D M Q R I W C E P N L D P T H P Q D V V P N Q V R
UniRef90_A6X712 F T F D P A T T A L V V I D M Q R D F M E P G G D V S Q L R S T I E P L K A
UniRef90_E3I294 A L L V V D L Q R D F V D E G G A L Y G A E K V I N P I L K
UniRef90_Q9WYU6 I D P T R T A L L T I D L Q N D F L H P E G A A E P I A A L P E R I A P
UniRef90_Q0FN72 S P I P L E L A K R T A F L P I D L Q K G I V S G Q L F P Y D A T T L L S N I A E S
UniRef90_I6SW92 M K I D P K R V A L V V V P Q N D F L S P N G V M W G V N N T I E N I A E S
UniRef90_M4R7C6 S L S N A T L L V I D A Q E E Y R S G I L A L P G L A P A L A E I A S
UniRef90_W6QYM5 T A L L I I D V Q N A I L A G K C S P E R Q P E T V S R R L Q S
UniRef90_J2JAY3 A L L I I D M L Q N D F I D E D G A L T S G K G I E F I K T
UniRef90_M1YQG7 V R F D I E K S A L V I I D M Q N D F C T K G G W V D H I R A P I A P L Q R
UniRef90_W4NNJ2 A S P E I D P K R T L L V L D M Q P M Y I P S V G G A P S G Q D V I K N V E K
UniRef90_UPI00026273FC M K I D P Q R V A L L V V P Q I D F L S P K G V L W G A N N T V E N L R
UniRef90_UPI00035D38B3 M K F E N T K T A L L V V D L Q N D N F E G S G A V E H A E K V V Q N I K A
UniRef90_I1WE25 P W R P H P D R A V V L H D M Q R Y F L R P P A G Q S P M T E L V A N V S G
UniRef90_V6IUZ4 E N T A L I I I D L Q I G V Q S E A T P L Y N L A N V I D G V N Q
UniRef90_UPI0003667F7A A P F S F D P A E T A L V L I D M Q R D F L E P G G D V E Q L R R T I A P L R A
UniRef90_U1KWH2 W Q L D A N R A A L L I H D V Q H Y F V I N G Y Y G D N P L I E T M I S H I Q R R
UniRef90_R5EFN2 R K T L I V V D M Q N D F I N G S L G T K E A I V Q N V R N
UniRef90_I4BWH9 A L I V V D V Q V D F C P G G L A V P G G D E I V A I V N E
UniRef90_UPI000476ACF9 M L V V D V Q S A F V T P G A V P D A A R L L D R T A D
UniRef90_S7ZV83 T A L L I L I D N Q S A F T H P D D G T A R S N P H Y E E N L Q S
UniRef90_C4TWM3 N T A L L L I D L Q N D F C H P G G L A V A E G D A V I A I A N Q
UniRef90_UPI000237F02C V T L D L A R T A M I V I D M Q N D F C H P G G V D I T P A R A P I A P L I R R
UniRef90_E3H114 W R V D P A R S A L L V H D M Q R Y F V R A F E L E R D G Q P A I A N I S R R
UniRef90_M1XT96 L E L D P E S T A V V V D M Q N G F C H P E G S L Y G S E A A I D P C A E
UniRef90_U5W3E9 D R P N T A L V I V D V Q N R V V A S T H E R D A V V A N I G S
UniRef90_UPI00047D5A03 M E T D R N D A A V V I D I I N D F D E G P Q L L E O T T K K I L P N L K K
UniRef90_K9YF18 Q D A A L V I D L Q A D I F T G G L K V V G A E E V L P K A E Q
UniRef90_UPI00026CB546 L D P K T A L I V D L Q K G I V G T L V A P I I G D V I A R S R T
UniRef90_D7AMB3 N D A A L V I D V Q N D F C P G G L A V P E G D T V V P V L N G
UniRef90_R4NK05 K S A L L V I D I Q N L L V E E K P Y A I E E R L A L W Q D
UniRef90_D3E667 A L I V I D E T N D F V D G N L P V K P A I D I Q K T I A E
UniRef90_Q13XE6 K T A L I V I D L Q K L V A S I P T A H P F T N V L E N A S N
UniRef90_J3AIA9 M D P K T T A L V L I E Y Q N D F V S P G G A Q H E A V K M L A N S L A
UniRef90_UPI00047DC73F K R A A L I V I D V Q Y R S M G Y A P E H G W Q A V P H I T A R
UniRef90_D3SML5 A L I V V D V Q N D F M P G A L P V P E G D K V V E P L N Q
UniRef90_D1CA81 M A N K K A A L L V V D V Q N D F L P G G L G V P E G H A V I P V L N E
UniRef90_U3C5D4 W S I E P D K A V L V H D M Q N D F I N F D K A K Q P I P H L L R N V Q N
UniRef90_A3K5N2 L D A S R C A L I I Q D M Q N D V V E G G A F A A S G Q N A I A N I A R
UniRef90_A1ATA3 M K D R T K Y A L I I I D M Q N D F V L P G A P V A G A Y A T L P C V R R
UniRef90_P37532 M S K A D K A L L V D M I N E F D M G E T L A K K T E K V L P H L L S
UniRef90_UPI0002D84E18 D A T V L M I D F Q Q T Y R T G V M A L E G A E P A L A A G A R
UniRef90_E8TN77 F R A G E T A L L V I D M Q R I W L I E P G A D P S H P E Q T I P N Q E R
UniRef90_UPI00030DB169 N K P C F L V V D V T K G F T D P A M P L A D L S R Q I E V T I N R
UniRef90_X1M9J0 K I D P K T T A L V I I D P Q N D F L S E N S V V W D L N R V V D K L K A
UniRef90_UPI0003737B00 M K I D P E R T A L V I T D P Q N D F L S P N G V T W G V N N T V Q N L I E R
UniRef90_A9WGD9 P A L L V I D F L K A Y T T P G Y A A P G V P D A V R A S Q P
UniRef90_UPI000465095C W L I S P S R G I L L V H D M Q N F F L N P L P E L L R N T L L E N C K R
UniRef90_J2TBK1 L L I I D L V I E G F A D P A F G G G N I P E A I E R T R P
UniRef90_DOMGG3 A L L V V D V Q N D F C P G G L V P E G D A V V P V T N R
UniRef90_UPI0003B7BA09 K K A I L V V D M L N D F T N A P L K V E E N R K I I P N I K E
UniRef90_UPI00036AF887 A V L V I D M L V G F L E S G H N L Y C G D N I I P S V Q T
UniRef90_A0A024HAB1 L P Y R R G E T A L F V D M Q N A W V V P G R D A H V D P Q V I P N Q Q R
UniRef90_G2P611 N N T A L L V M D V Q E G I V A R V Q D P D Y V P R V S R
UniRef90_X6KZB3 A L I V I D V Q N D F C P G G L A V E G G D E I V Q P I N A
UniRef90_L0IW03 N P V L V V V D I Q Q S G A M P V A D V P M G H A E R V E R A E K
UniRef90_G7VR80 P Q H S A L I V V D I Q N D V E S D A I P V M E G G T C M L N S P K
UniRef90_B7FKR8 M T E N W N H T A L L V I D M Q K D F I E S P V N V K G G K D V V P N V I K
UniRef90_I2BA86 K Q T A L L V D L Q N G D F C A G G L A V P R G D E T I P V A N R
UniRef90_G7MCH4 I N A K K T A L V L I D L Q N G I A S R E L S P S Y E E I I Q N A S K
UniRef90_F0LXD0 L I L V D V Q N D F A P G G L A V P E G D V I V P V I N R
UniRef90_A0A023D492 R I T P E E T A L V L I E Y Q N D F I S P G G A L H D G T Q M L A H T R D
UniRef90_U2UTQ2 M R L D K A R T A L L V I D V T K G E D T L Y T Q D P A E Q G L V G A S V R
UniRef90_I9WJS2 R P A L L L I D F C Q A Y F E P G N A L Y E V D D A I A S A L R
UniRef90_B4SLS4 P W R P Q R D R V A L L V H D M Q R Y F L A A D A R N A P L R P A V D N I V R
UniRef90_UPI000380C871 T L D P R T A L I L I D L Q A G I L L A P T A H P S S E V L R Q C C V
UniRef90_UPI00037E17E8 A D K T A L V I D M Q N H F L A P G A G T P P A R E I V P A I N R
UniRef90_C6J23 A L I L V D I Q K D F C N G A L E V K D G D M L P I A N K
UniRef90_I3XBP3 T K A L I I D I Q N A I L S G K G R E A A L N E T V A R L C A
UniRef90_A0A014N287 S Y D P R R T A V L L V D P Y N D F L S E G G K I W P A V I E S V A R E V G

UniRef90_A6LJ49 L I K N A K S K K L P L I L T Q D W H E E D D I E F N I W P K H C E I F D V L K Q
UniRef90_E0XTP1 L L D L F R T H G I E C M M S Q K M P G W N N L L L P K N L P S Q L V D V L K Q
UniRef90_UPI000411DA7B L I G A F R A R A R D L P V V L V N V N A Q P P G R T E I P P R F Q G E I P E E W T
UniRef90_M7N10 L V I R A R A R A R T P V V I W V Q H S D E E L V K G S P G W E I P E E L S
UniRef90_H5UB80 V L A A A R D A G L T I I H T R E G H R A D L S D L P A N K R W W Q I V P E L V A T
UniRef90_B5XXN1 A V A A A R A A G M L I I W F Q N G W D D Q Y K L L A K G W D Y Q L V D E L T G
UniRef90_UPI000474A4E60 L V K C F R E K D G L I S F V K V D F L D G K D A L Q P I G T D W A E F I P E L G
UniRef90_UPI00035D6EC2 L V E K A R S A G A P V I F L Q N D G A D G M V D E P H Q P G W A L Y F E
UniRef90_UPI00046382A4 A A P R A K L G R G A P S L R L G D P G P M G R I L I R G E P G H D I T S E L Y
UniRef90_D2RFL4 V L E V A R G K I P I V F T Q D W H R K D D P E F N I W P K H C I I I D E L N
UniRef90_UPI00045E5DD3 L A A A T R A A G L P V I F V N W G V R A D R R I L V E G D W G A A T I D A L A
UniRef90_UPI0003724615 V L Q A W R A L G G C V V H T R E A H R P D L S D C P P G E P G N Q I L P E L A
UniRef90_T1BZL3 V L R K F R S H G R T I I H V R H D S L N P A S L L K S G K P G F E F K P E V M
UniRef90_UPI0004649311 L I A G A Q A R Q M P V V D I F H V I E E G V F S S A S G H V R P M P F L
UniRef90_UPI0003758496 L I A G R A S G A E I V F T V I D Y K Q T N F H F A P G S P E T R V I A E E L R
UniRef90_B5IAW4 L Y E F A K N K G I L T K H C K K W N D E M K C D D T S T A I L L E L R
UniRef90_G8AUW5 L L G H V R P L G M P L A H A C F I A P E A P G T L T A G S P D V A F A P E V A
UniRef90_W9YDF0 L I E R F R S R N R P R H L G L G D K G P L G R F L I R G E A G H D V I P E L Q
UniRef90_B5YK7 L I K K A E E A G S V I V T R D W H R K P E N H I S F K A Y G G I W P P H C V Q W
UniRef90_UPI00047B7B4B L L A A A R A A G T P V V H V V N D W G G E G T P Y D I R A E I G R I E S R V A P
UniRef90_V9XHY9 L R E A C L A A G R I P V V Y T M Q P G D Q H W G V G L S T G R D T E V I D E L T
UniRef90_D5EFN8 L V I Q Y C E S R Q I P M F F S R D W H P E N H I S F K E Q G G P W P P H C V Q G
UniRef90_A6X7I2 I L E A G R K A G C N V L H T I I D H K L S D M H V P K G S P E G Q V I P A L A
UniRef90_E3I294 V F A A A R A A G L T V I H T R E G H L P D L S D L P P G E G H Q Q D I I D E L A
UniRef90_Q9WYU6 W V I E F K K E N L P I I T Q D W H D P E D R E F N I W P K H C K L E K A L K
UniRef90_Q0FN72 L R D A L R A K G G T Y I S A Q F T P F L G K G D F A P G K F G H Q L V I E T
UniRef90_I6SW92 Q L K H T P A W N L V I V D I T S F Q Y A F Y T P L K E F T D L L L E P T T K
UniRef90_M4R7C6 L F K A A K K V D M P V I V S P H Y Y P T D H Q W E F M A P G E N F M H K T N
UniRef90_W6QYM5 L L A A A R S A G A D I V H V K H L G I P G G L L D P S G P R G R H L P E A A
UniRef90_J2JAY3 L R A E A H R K G A P V V L V Q H D G D P G H R L A V I G T D G W A I R P E L S
UniRef90_M1YQG7 K T D E F R K N G G P V I V Y I C D N H E K D D K E F E M F L P H C Q I I E D L T
UniRef90_W4NNJ2 L L P V V R D S G I P V I W V N W G N R H G A R V L I E K D S W A A A V V D E L K
UniRef90_UPI00026273FC V L E Q F R K A G S Q V V F S Q W P G T P E S P A S W G N P Q T D S F S G N L Q
UniRef90_G2DUP8 L F K A A K A V G M P T I V S P H Y Y P Q D H Q W A F G P G E H F M P Q Y K
UniRef90_UPI00035D38B3 I A D K A R E A G I P V F H N H F V A I A E V G S V R G T W G A A P V K E V E
UniRef90_I1WE25 L L A T A R Q A G V P V M Y T A Q P H D L W G P G M G V I E A D R I F A D D V A
UniRef90_V6IUZ4 R I R L F R E R N N P V I F V Q H N D A E L V L N S P S W Q L F P E L D
UniRef90_UPI0003667F7A V L D A C R A A G M A V I H T R E G H L P D L S D C P P G E E G H D I I E E L Y
UniRef90_U1KWH2 L K Q F C Y Q D Q G L P V Y Y T A Q P I K Q G W G P G L Q D P A Q Q P I V D A L A
UniRef90_R5EFN2 K I G E Y R E R G D E I I F T R D T H Q T D Y L N T P E G P V E H C I E G T K G
UniRef90_I4BWH9 L V E L F E K R G G L V I F S R D W H P Q R H K S F R D E G G T W P P H C V Q N
UniRef90_UPI000476ACF9 L I A R A R A A G A L V I H V I N D G P D D G A E D A P G T P G W E I H H P V R
UniRef90_S7ZV83 L I S S F R A A K A E I I H I F H S S D S P T S P L H H A H P L N G I L Q P L A F
UniRef90_C4TWM3 A I A T C L R H K I P V I A S Q D W H P A G H R S F A V N S Q A E P W T V G D L
UniRef90_UPI000237F02C L L P A L R G A G V P V I W N W G N R H D A H V L E H G S W S A G I V D E A A
UniRef90_E3H114 L L D A A H A A N I P V Y Y T A Q P R Q N W G D G L Q D D E N A R I V D E L A
UniRef90_M1XT96 V V A E A R K A G A A V V H Y Y D E F D R W G E H V L E G S W E A E L V S E L S
UniRef90_U5W3E9 L V S K A R A E N V P V I V W V Q Q F D D V L V K G T E P W Q V V P E L S
UniRef90_UPI00047D5A03 L K E F A Y Q S I P I I V N D H Y G I W Q S D F C R N E Q N K Q I I D Q M Q
UniRef90_K9YF18 A L I A T A R S L K I P I I H T K E V H R K E K V D F G R E W S G T D F Y P S L A
UniRef90_UPI00026CB546 L A D A F R A H G L P V V V T V T G V P P G R T E Q P R R D D F A T V S E L G
UniRef90_D7AMB3 Y I S V F R T A G L P I F A S R D W H P R M T S H F K E H G G W A P V H C V Q G
UniRef90_R4NK05 S I T K A R Q A G I E I I Y V R Q N D E E L V K G T A D W E I H S I V A
UniRef90_D3E667 L T R L Y S D R G D F V V M A V D L H E Q D P P H N I R G T R G R E L Y P E L Q
UniRef90_Q13XE6 L A A T F R Q H G L P V V L V N V V G M A P P G R T E Q H H P D W S E L L P E L D
UniRef90_J3AIA9 L V E A A R A K G V T V M L V P I A F S A G Y P A F Q A G T W G A E I I E D L T
UniRef90_UPI00047DC73F L L D V I F H E M G A P V I Y P Y V A P K Q S H D V M S V A P S D Y D F V K E V S
UniRef90_D3SML5 Y I D L F H R K G L P V I Y A S R D W H P E E T S H F Q E F G G P W P P H C V Q D
UniRef90_D1CA81 Y L R R F A E A G L P I Y A S R D W H P E E T S H F Q E F G G P W P P H C V Q G
UniRef90_U3C5D4 V A Q A A R H A D I P V V Y T A Q P A N Q D P K E R A L L T D F W E I T A E V A
UniRef90_A3K5N2 L A A R C R E L G V P V I H V Y F L V H P G A P G F V R G T W G A Q A V D G L E
UniRef90_A1ATA3 L L D F F R A N S W P V F H V V R E Y R A D G S D I E C T R L H G F L N D K R Y
UniRef90_P37532 L K E H A R Q N E W P I T Y I N D H Y G L W Q A D L K N I Q Q E C D I T K I A
UniRef90_UPI0002D84E18 L L A A R E A G A P V V H I V N D G G E S P Y D I R A D I G A V S P E V A P
UniRef90_E8TN77 L L A A A R A N G V I E V L H T I I D H K L T P I H V A P S L P E G L P V I A S L A
UniRef90_UPI00030D169 L L T A V H E K N L P V I F T T L A Y E E N M K T L K F G T D A V G L D P R L K
UniRef90_X1M9J0 L V A K A K E A G V A V Y S P H Y Y D K E Y K A W H N I N F I D R V M F E R K
UniRef90_UPI0003737B00 L M K V A G K K D V P L F I S P H Y Y P H D H K W K F E G N L E V V M H K L G
UniRef90_A9WGD9 L L A A A R A A A I P I Y T T V A Y A S D G R D L T H E S P L I A I V D E L A
UniRef90_UPI000465095C L I N W A R E N S P V Y Y T G O K G D F W G A G M Q A D P I H T A I T P S L L
UniRef90_J2TBK1 L L D Y A R D K G W P V A H S R I V F A D D M L T L L E H A H R S A I V P S L T
UniRef90_DOMGG3 L I Q D W H P A G H W S F A S A H S P G K K P F E T L Q L S Y G E Q V L W P D H C
UniRef90_UPI0003B7BA09 L L E K E R K N N T P I T Y I V C D S H L P D D R E F K I W P K H C Q I V D E L K
UniRef90_UPI00036AF887 L L E N E S S K G S E L I Y I C D T H L E D D L E F D M F P V H C L E G S E E S
UniRef90_A0A024HAB1 L I A A M R E A G Q D V L H T I I D H K L S D M H L P K G H P D A Q V I D A L A
UniRef90_G2P61 A I D A A R S A G I P V V Y V V I G F R S P P G L Y T E D D P K L I A I H D G V T
UniRef90_X6KZB3 L M Q D W H P A G H S S F A S H H E G K A P F E T V I E M P Y G T Q V L W P D H C
UniRef90_L0IWO3 L V A A A R A A G V P V V V F F Q E V H R P E G V H C V E G R P T D L E P S L R
UniRef90_G7VR80 V I K H F R E L G L P V I Q I R E L H R A D K I H C L E G T P A E E F H P L T A
UniRef90_B7FKR8 A V E I A R Q R G L I V V V R E H D P K V G P T S K G T E G A E L V N G L V
UniRef90_I2BA86 L I A A F T S Q K N A P V I A T R D W H P A G H S F A S T H Q T T P Y T R P E L
UniRef90_G7MCH4 L V K A L S D G Q A F V M A T R K P K T D L K A T G M K Y P E G W N L V P E I A
UniRef90_F0LXD0 L L P H F D H V I A T K D W H P A D H A M W P D H C V Q H T D G A A F I P G L N
UniRef90_A0A023D492 V V A K A R Q S G M K P V V S L L F A A G H N A F L Q G A W G G D Q A E G F T
UniRef90_U2UTQ2 V V D A A R A M G L P V I F C C D Q H I P G L D R E L D L W G D H G I K G L A I
UniRef90_I9WJS2 L R T A A R A A G V P V I L I T N V V Y H M P L K N R L R G S P M G A W G P G L A
UniRef90_B4SLS4 L L A H C R A H G I P V F Y T A Q H G D Q D R R D M R R S A D H E P I T E A L A
UniRef90_UPI000380C871 L A E A F R R H Q L P V V L V N V A G A A P G R T E Q G S R P W S E L S P E L N
UniRef90_UPI00037E17E8 L A A S L R G A G G L V V W V R T L F S E G A L L T L P H F H R T A L W P G L D
UniRef90_C6J23 M I D F F K E K G D M V I G T K D W H P S H K S F A V N S N G P Q V W V P I H
UniRef90_I3XBP3 L K D R A R A A G V P V V L V Q H D G S H H R L A V G T H G W A I R D E I A
UniRef90_A0A014N287 L L D H A R Q A G V R V V F V P H R R W E P R H S F A R D T W G G E F H P D F R

UniRef90_A6LJ49 D Y N K V Y Y I K 90 T R Y S A F F N T 100 D E L L K K L N I K E V D L C G L V S
UniRef90_E0XTP1 P T E N E I C V T K T T S D S A F T G T N L R L L L H N L N G I K T N V T C C G L F T S
UniRef90_UPI000411DA7B R Q P S D L L V T K R S R G D S A F F A T T N L E E Q Q L R D S R A G V G K I V V L T T G G L E S T
UniRef90_M7NI70 P A A D E P R I E K L Y G D S F F A T T N L E E Q Q L A S D R A G V G K I V V L T T G G A E S T
UniRef90_H5UB80 P R D G E I V I D K P G K G S A F F A T T N L D L V L R T S N G I G T H L I L T T G G I T T T
UniRef90_B5XXN1 P Q E G D L V L P K P R Y S G F F F A T T N L D S L L R R S R R G I R D H L I V E T T G I A T
UniRef90_UPI00047A4E60 V N A K D Y V V V T K R Q W G A F F F G T D L D L Q L R R S R R G I R D H L I V L C C G I A T
UniRef90_UPI00035D6EC2 P R P G E A V V R K T M D D G F F E H T D L E D I L T R A G V I R D V A I S G V L S
UniRef90_UPI00046382A4 P A D G E I V I D K P G K G A F F A T T E L D G D I L R K H G I E N E L L V C C G V T T
UniRef90_D2RFL4 P S E V D Y F V K K R R Y S A F F A T T D L D L L L R E L G V I N E L L V C C G V V T
UniRef90_UPI00045E5DD3 P E P G D L V V H K H R L S G F F H D N E L D S I L R N R R G I S D T L L F S G V N I
UniRef90_UPI0003724615 P Q P G E L E I D K P G K G A F F A T T G L H E L L R Q Q R G L S H L V Y M G L T T
UniRef90_T1BZL3 P L E H E T V I T K H V N S A F F A T T R L E T L L R S L G E P E V Y Y M G L T T
UniRef90_UPI0004649311 T H A P A A R F E K Q V H N A F T G T G L D R W L R L H D C Q H L V I C G L R T
UniRef90_UPI0003758496 P S D D E I L L P K T S S S L F N S T V F E E Y L M R N L G V I D E T L V I V T G F L T
UniRef90_B5IAW4 K Y G N K L I E K N T Y N A F L K T E L E E H L K N K G I V D T L L I V T G V M T
UniRef90_G8AUW5 P L P N E F I V R K Q H A S A F F G T A L E S S W L R A N A V I D T L L V T G C T T S
UniRef90_W9YDF0 P L P E E N I L D K P G K G A F F A H T D F E H L R L R G I K N R V L V T G V L T S
UniRef90_B5Y7K7 T P G A E F H P K F E A Y S G F G T G L H Q I F K D R G K N R V L V T G V L T
UniRef90_UPI00047B7B4B R D G E P V V V K G F P N A F H E T G T L E A V L R G L G A G P D L V L A G F M T
UniRef90_V9XHY9 P G P D D L Q V T K W R Y S A F D Q R T D F R Q L L A H N G R D Q L V I V T G V Y A
UniRef90_D5EFN8 Q K G A A F H P D K D A Y S A F D Q T E L L E M L R D Q S L R V F I C G L A T
UniRef90_A6X7I2 P I D N E I V L P K T S S G V F N S T N I D Y V L R N L N T R Y L I I A G V V T
UniRef90_E3I294 P L E G E F V V D K P G K G A F F A T T S F G D I L T E K G E I T S I L V V T G V T
UniRef90_Q9WYU6 D Y P N H F S V K K N R Y S A F Y N T N L E K I L R D N E I D E I Y V C G V V T
UniRef90_Q0FN72 L A P A D Y T V E K V A Y S A F Y Q S R L E Y L L R A L G I I D T L I I G G I V T
UniRef90_I6SW92 G T Q N T L T L T K H N P S A F F G T S L D A Q L R R R K G I D T Q V I L S G V A T
UniRef90_M4R7C6 M F A R K G A Y T M H K I F G P E T N D V V V L Q L R K R K G I D Q V I L A G M A A
UniRef90_W6QYM5 P L A G E I V V E K R L P N A F A G T E L H D R L Q A L G H L D L I V C G G F M T
UniRef90_J2JAY3 P A E G D T V V H K K R S S D S F F G T D L A D R L A E R N V D T H L I V G G C M T
UniRef90_M1YQG7 V K D E D K I V K K R R Y S F F G T D L D L Y L R E K G V D E I Y L V G V C C T
UniRef90_W4NNJ2 I E R Q D I C V D K Y R I S G F W D T P L D S I L R N L G T R T V F F A G V N T
UniRef90_UPI00026273FC P R E G E P T V R S R F S A F Q S T P L G E F M R E N N S D T Q V I V A G V S T
UniRef90_G2DUP8 P Y I F D V I A S P H K V F G P E S N D V V V L Q L R K R K I D Q V I L A G M S A
UniRef90_UPI00035D38B3 P Q E G D F V I E K S R M S A F N G T Q L D V L L R G L G I E T Q I I V T G V W T
UniRef90_I1WE25 P E P D D A V L T K W R Y S A F Y R K T L E E R M R R L N G R D Q L I V C G G V Y A
UniRef90_V6IUZ4 C K D T D I Y I N K T H A N S A F Y R S T N L K N Q L M K L N I R N K L E I C G A Q T
UniRef90_UPI0003667F7A P V A G E P V I D K P G K G A F Y A T G F S E L L T S R G I R R L V V T G V T T
UniRef90_U1KWH2 P G E Q D V G L T K W R Y S A F Q K C D F E A Q L R E R N R D D E I M L V G I Y G
UniRef90_R5EFN2 W Q I A D V L E T E G A V Y I D K P T F G W T H W K D R T F G V I E M V V G L C T
UniRef90_I4BWH9 T K G A E F H L D R E A Y S A F D G T G L S E T L K A A G T E R I F V C G L A T S
UniRef90_UPI000476ACF9 E G P R E T I V V R K P E D D A F A R T S L E E G L D E H G I R A L A V C A G L M S
UniRef90_S7ZV83 T D G T E P I F W K N V N S A F I G T T L E A Y L R A R D I R A C I V C A G L T T
UniRef90_C4TWM3 A G L T Q V W W P V H C V Q N T S G A A L H P W L R Q Q G I D R L F I M G L A T
UniRef90_UPI000237F02C D A S R D L H V I D K Y R M S G F W D T V L D S V L R N L G V D D Q L L E A G V N M
UniRef90_E3H114 P T E A D T V L T K W R Y S A F A R S V L E E Q L K D L G R V D Q L I I G G I Y A
UniRef90_M1XT96 P E D G D L V V V K H T Y D A F H Q T E L E G Y L R S H G T D D L V F C G T L A
UniRef90_U5W3E9 P E D A D Q H I D K A W D S F E E T A L E S L A G E L G V N H I I I A G I A G T
UniRef90_UPI00047D5A03 P A S D D Y F L I K P K H S G F Y E T A L E S L K E L N V N H I I I A G I A G T
UniRef90_K9YF18 P Q E G E Y T I A K R R Y S C F F A T T D L E I L L K G L N V K T L I I M G A L T
UniRef90_UPI00026CB546 Q Q P D D L L T K Q S W G A F A T T D L E L R L K A L N V K T Q V V I T G V A T
UniRef90_D7AMB3 S H G A Q F H P D L A L G N A I V I S K G M D P E A R G I R H L Y I G G L A T
UniRef90_R4NK05 P L A S E K I F D K T F N S A F K E T G L H A Y L Q E K G I E Q L I I M G M A T
UniRef90_D3E667 Q V Y E D Y W M D K T R Y S A F C G T D L N Q K L R E R G I T E V D L V G V C T
UniRef90_Q13XE6 R Q P Q D H L V S K R T W G A F T S T G L E T H L K S A G V T V V V V C G V A T
UniRef90_J3AIA9 P Q T G D I V V E G K R G D C F A S T N L D F L R Q R G I T D V A I A G F L T
UniRef90_UPI00047DC73F P K A G D L Q L P K F D A S A F H G T G L A S Y L V I G R S I D T L V V T G C T T
UniRef90_D3SML5 T E G A M F H R D F D A Y S G F Q G T F L D Q L R E R G V I K R I L V V G G V A T
UniRef90_D1CA81 T S G A E F H Y S A F H G T T D D G E S L A D R L Q R D G V T H L Y I G G L A T
UniRef90_U3C5D4 P E Q G D I Q Y K K W R Y S A F K G T P L L D W M R E A G R D Q L I I V G V Y G
UniRef90_A3K5N2 P Q P G D H V V K M R M S A W E K T S L E T V L K A E G R D L I E T G A W T
UniRef90_A1ATA3 P V I E G E Y R V V K N R F S G F M N T E L D F M L R R I G A T Q L V I C G T Q Y
UniRef90_P37532 P V D A D Y F L I K P K H S A F Y E T A L H T L L T E L Q Q V D H I I I T G I A G
UniRef90_UPI0002D84E18 A G D E P V V V K R F P D S A F Y T G L R Q T L R E S G T G D I I I L A G F M T
UniRef90_E8TN77 P V I G D E I M L P K T S S G I F N S T N V D Y L L K N L G I T R Y L V V V I G V L T
UniRef90_UPI00030DB169 Y K K G D L I L N K K Y A S A F C G T D L S R L N V N G I D N T V I V T G C T T
UniRef90_X1M9J0 M F N R G T W G A D W H P E G F H T S D V D I Q L R K R N G I N T I L L A G M S A
UniRef90_UPI0003737B00 M F N R E V V T G P H K I Y G P E T N D L V L Q L R K Q D I D K V I L A G M S A
UniRef90_A9WGD9 P Q P D D L V I E K K Y A S A F F G T H L A A T L T A L R L D T L I M I G C S T
UniRef90_UPI000465095C P Q L G E P V L K K W R Y S A F F S E L A D I F A A Q K R D Q L I I C G V Y A
UniRef90_J2TBK1 P V I E G E L V V R K T L P S A F F G T D L A A W L N F N G V R T L L V A G A V T
UniRef90_DOMGG3 V Q E I D S Y S A F Y E N D K Q T T T N L A G Y L K E R G I T L I Y V I G L A A
UniRef90_UPI0003B7BA09 P K E S D F I V E K T T Y D G F Y R T G L A D D L K K E L G V D H L I I T G C V I
UniRef90_UPI00036AF887 Q I I P E I R I N K H R Y S G F Y G T N L S E H L R E L N P E K L I V C G V C T
UniRef90_A0A024HAB1 P T E N E I V L P K T S S G V F N S T A I D Y V L R N L G V I R H L I V C C G V V T
UniRef90_G2P611 P R P G E V V V T K R R A S A F T G S D L D V V L R A G D V I G H L V L T G V A T
UniRef90_X6KZB3 V Q G I D S Y S A F F E N D H Q T P T G L E G Y L R T R G L E S L L V M V I G L A T
UniRef90_L0IW03 P L P D E F H I V K R R Y S G F F A T T D F E I L L R G L R A S T L L I G G L T
UniRef90_G7VR80 P L E G E Y I I T K R R Y S G F F A T T D L D L L R C L G V K L F L I G G M T
UniRef90_B7FKR8 I K E G D Y K V V K T R F S A F F S T H L H S F L Q G A G V N S L V V T G V I Q T
UniRef90_I2BA86 D G L P Q T W W P D H C I Q H S P G A Q L H P W L T R R H Q I N H I V V L G G V A T
UniRef90_G7MCH4 D T K N A H I I T K K Q W G A F Y G T D L D L Q L R R R G I D T I L I G G V S T
UniRef90_F0LXD0 T D E I E Y V V Y K G T H S A I D S Y S G F F D N Q R Q Q I D D V Y I V G L A T
UniRef90_A0A023D492 P L P G D L V V S G K R G C A F A S T N L E F L L R H S G I R R V A L G G F L T
UniRef90_U2UTQ2 P N P R D F I I P K R R Y S G F F Q T D L D L T L R E L G I D T L I A V I G E D T
UniRef90_I9WJS2 P F D D E L V I S K Q Y P S A F F G T S L A S T L T A A G L D S V I L T G L T T
UniRef90_B4SLS4 P Q P G E H V L V K H R Y S A F F Q R S N L E T L M R V R Q R G R D Q V V I T G V Y A
UniRef90_UPI000380C871 P Q P Q D H R V T K H T W G A F T D T G L A E Y L H Q Q Q V T Q V V I A G I S T
UniRef90_UPI00037E17E8 V R K D D I V V G K T R Y S A F I Q S D L D G I L R A R G I E A V V I A G T M T
UniRef90_C6J23 C V I Q N E N G S K F H S N G K R Y K T P L D N L L K N N H I D T L Y I M G L A T
UniRef90_I3XBP3 P A S G D V V V H K K S C G D S F F E T D L S T R L E E R S V T H L V I G G C M S
UniRef90_A0A014N287 P G P G E V V V R E H W A Q S G F A N T D N M Q L K Q H G L T H V I L T G L A

UniRef90_A6LJ49 N I C V L F T A E E L R N R D T V N L Y T N A T N S Y D E K M H N F S K L M 130 140 150 160
UniRef90_E0XTP1 D Q C V S S T V R E S L A D E S F N V L V L E D C C A A G S M
UniRef90_UPI000411DA7B S A G V I R S T A R E A H E T R G G L N V L L A T D A T T D S S
UniRef90_M7NI70 D A C A V I R S T V H E G F T R R G Y D V T L V S D A H T T S D M T E W G A P A P E
UniRef90_H5UB80 D V C L H T T M R E A N D R G Y E C L I L S D C T G A T D S A N H E A A L
UniRef90_B5XXN1 N V C V E S T L R D G F F L E Y F G I V L E D A T H Q A G P
UniRef90_UPI00047A4E60 N I G V E S T A R E A F Q Y G Y N Q I F V T D A M S S F T
UniRef90_UPI00035D6EC2 E M C V A A T A R S A F E R G Y G V L P H D A H A T Y D V P A G P G D R V P A
UniRef90_UPI00046382A4 E I C V N T V R A A N D R G Y R C V V I A D G C A S Y F P E F H D M G L K
UniRef90_D2RFL4 N I C V L H T T V A D A V M R G Y K V T V L K D C T T A L N E Y D Y E Y G I K H M
UniRef90_UPI00045E5DD3 D R C V F S T L C D A S F R G Y G C L L V E D A C A T V S P
UniRef90_UPI0003724615 E V C V Q S T T A R E A N D R G Y D S C L L L E D C T E S Y
UniRef90_T1BZL3 D H C V S T T A R E M S G N L G F R S F V I R D A C A A H E K I M D G R K I P A
UniRef90_UPI0004649311 E Q C C E T T A R V A S D L G Y R V T F V T E A T L T F P M T H K G I T L D V
UniRef90_UPI0003758496 D Q C C D H T T V R D G A D R G F R M I C P V D A C T T D S R E R H D N A L A A
UniRef90_B5IAW4 H L C V C E T T A R D A F N R G F N V I F P I L D G T I T Q N K
UniRef90_G8AUW5 S G C V R A S V I D A S A H G L R P I I V E E C V G D R
UniRef90_W9YDF0 D V C V S T T M R E A N D R G Y D C V V L E D L T A A A T P E L H H F A L E S V
UniRef90_B5Y7K7 D Y C V K E T A V D A L R Y R Y E T F V V A D A V K G V N V N P D D S Q K
UniRef90_UPI00047B7B4B H M C V Q F T A Q G A F N L G F S P V V V A E A C A T R P L T G P D G A A V P A
UniRef90_V9XHY9 H M G C M L S A A D A F M S D V A P F M A L D S T A D F S R D E
UniRef90_D5EFN8 D Y C V K S T A L D A L K E G F E V I V T D G I K G V N V Q P D D S S R
UniRef90_A6X7I2 D Q C V D M A V R D A A D R G Y L V T V V E D A C A T Y S Q E R H D A A M R A Y
UniRef90_E3I294 E V C V H T T V R E A N D R G Y E C L V L S D C V G S Y F P E F Q R V A L
UniRef90_Q9WYU6 H L C V L F T V E E L R N R D I P V K I I T E G V A S Y D E E L H R F A L R E M
UniRef90_Q0FN72 N G G V A S T L R D A H L R N V D T V L L T D G C A A F R P
UniRef90_I6SW92 S N G V Y E A T A L D A F Q H G Y H V I V I E D G C S D R D L
UniRef90_M4R7C6 N L C I E S H L R E L V E Q G F E V A V V K D A T A G P R I L P E G D G
UniRef90_W6QYM5 H S S V S T T V R A A K D Y G Y R C T L V D A A C A T R D L P A P D G S V I A A
UniRef90_J2JAY3 Q F C V D T T V R R A V S L G Y D V T L V G D G H T T A D S D T L N F A D I V A
UniRef90_M1YQG7 N I C V L Y T A A D A R N L E Y K V N I Y K E G V A S F D E E A H N F A L K E M
UniRef90_W4NNJ2 D Q C V L H T L T D A N F L G Y G C V M L T D C C A T S S P A F C T
UniRef90_UPI00026273FC A N C V I S T T T I D A W N Q N Y K V V V I A D G A A A V P S S H T L D V P E G
UniRef90_G2DUP8 N L C I E S H L R E L V E Q G F E V A V V K D A T A G T I I P E G D G
UniRef90_UPI00035D38B3 N M A V E H T C R D G A D H G Y Q V V I A T D G T S T I S
UniRef90_I1WE25 H M G C L M T A T D A F S R D I Q P F L V A D A L A D L S L D D
UniRef90_V6IUZ4 E Y C V D T T I R M A H G L G Y Q L F M K K G L T T T L N N D L L G A
UniRef90_UPI0003667F7A E V C V H T T V R E A N D R G Y E C L V L S D C V G S Y
UniRef90_U1KWH2 H I G V M T T A V D A F M R D I Q P F V I A D A I A D F S R D E
UniRef90_R5EFN1 D L C V V S N A L L K A E F P E V E I T V D A C A G V T P A T H V A A L E T M
UniRef90_I4BWH9 D F C V K S T A M D A R K L G Y D T Y V V L D A S R G L S
UniRef90_UPI000476ACF9 E M C V Q A T A R T A L A L D Y R V V L P H D A H A T R D L P A P G E A V P A
UniRef90_S7ZV83 D H C V S T T V R M A A N L K G R V I L A A D A T A T F G K G G F D A
UniRef90_C4TWM3 D Y C V K Y T V L D A L T L G Y K T S V I S E G C R G V N L Q P Q D S Q Q
UniRef90_UPI000237F02C D Q C V M A T L Q D A S C L G Y D C I L L E D C A A T T S P D F C A
UniRef90_E3H114 H I G C L T T A L Q A S M R D I Q P F M V A D A L A D F T E K E
UniRef90_M1XT96 N V C V L H T A G S A G L R D Y R P I L L E D A I G A I E D D H R E Y A L E H A
UniRef90_U5W3E9 D E C I R S T L H G A L V R G Y D T I L V S D A H T T E D L S E W G A P P P
UniRef90_UPI00047D5A03 D F C V L F T A Q G A H M R E Y S I S V P K N C I A S N E Q Q N D R A L A L M
UniRef90_K9YF18 N V C V H Y T A V D A H Q H D Y H F Y V L E N C C I G A D W E A H E A A L K A M
UniRef90_UPI00026CB546 A T G V E A T A R Q A Y E H G F N V I L A T D A M T D T R P
UniRef90_D7AMB3 D Y C V K E S A L E G R H G L I V T V L T D A S R G V D L A P G D S E R A V Q
UniRef90_R4NK05 N F C I D T T I K V A F E L G Y K V A V I R D G T T T G Y S G K L D A
UniRef90_D3E667 D T C V L H T A V D A Y N Y G K I T V Y E D G V A S F N P E G
UniRef90_Q13XE6 S V G V E S T A R Q A H E L G F N V T L A V D A V T D I S
UniRef90_J3AIA9 N C C V E S T M R S A Y E R A F R V V T L T D C C A T L S
UniRef90_UPI00047DC73F S G C V R A T V V D G C A L N Y K V V V P Q D A V Y D R S Q V S
UniRef90_D3SML5 D Y C V R A N T V L G G L H L G Y Q V F L L H D A V R G L E G S T R A I
UniRef90_D1CA81 D Y C V R A S A L D A R R L G L E V T L L I D A S R G V D V Q E G D S E R A I E
UniRef90_U3C5D4 H I G I S T A L D A F M L D V K P F I V G D A I A D F S L E D
UniRef90_A3K5N2 N M S I E H T A R T G A D K G Y V M V I P E D G C S T M N
UniRef90_A1ATA3 P N C I R T T I F D A I A H G Y P V I N V T D A T S A Q T P
UniRef90_P37532 N I C V L F T A N D A Y M R E Y S R T I P K D C I A S N S D E D N E F A L T M M
UniRef90_UPI0002D84E18 H M C V T F T A Q G A F N L G Y R P A V V A E A T A T R P L T A P D G S T L P A
UniRef90_E8TN77 D Q C V D M A V R D G A D R G Y L V T C V S D A C A T I T Q E R H D I A L K A
UniRef90_UPI00030DB169 S G C V R A T V V D A L Q Y G Y R P I V V K D A V G D R S L A S
UniRef90_X1M9J0 N L C V E S H L R D A E E K G Y E V I V I N D A T A A A G
UniRef90_UPI0003737B00 N L C T E S H M R E L L E Q G F E V A V V T D A T A G A N L P E G D G
UniRef90_A9WGD9 S G C T R A S A V D G M Q H G F R V I V P R E C V G D R A
UniRef90_UPI000465095C Q I G I L T T A L D A Y S R D I E V F L V Q D A I A D F S
UniRef90_J2TBK1 S G C V R A S V D A M S H G F R P L V V S D C V G D R A
UniRef90_DOMGG3 D F C V K W S A L D G R R L G F D V Y V V T D A T R G I D T N G S L A R
UniRef90_UPI0003B7BA09 N I C I L Y T A S S A V L R G Y Q V E I P L N C V S A D E E S R R C A I A Q F
UniRef90_UPI00036AF887 D L C V L H T T A D A R N R D Y V V E L A S D A V V S F D N E A H E W A L N H M
UniRef90_A0A024HAB1 D Q C V D M A V R D A A D R G Y L V T V L V E D A C A T H T
UniRef90_G2P611 S G V V L S T L R Q A A D L D F R L T V L S D A C Y D P D P
UniRef90_X6KZB3 D F C V G F S A I D A A R L G F G V T V R R D L T R A I D L D G S L A A S L A A
UniRef90_L0IW03 D V C V H Y T F A D A H Q R D Y Y V R V S D C V G G S S Q Y L H D A A L A A M
UniRef90_G7VR80 D I C V R F T A V D A H Q H D Y H F H V V S D A V I G T S R Q A H D M A L K N M
UniRef90_B7FKR8 P N C I R Q T V F D A V A L Y Q P V T V L V D A T A A A T P
UniRef90_I2BA86 D Y C V K F T V L D A L A L H Y G V D V I T D G C R G V N I A P E D S A L A F Q
UniRef90_G7MCH4 N I G V D T T A R E A Y Q H G Y N Q L F A E D A M T A I T K E E
UniRef90_F0LXD0 D Y C V K F T A L D A A S L G L Q T T V I A D A C R G V N L S P
UniRef90_A0A023D492 D C C V E S T M R T A Y E H G Y D V V T L T D C V A T L S R T Q
UniRef90_U2UTQ2 N I C V L H T L A A Y F L G Y G T L V V E D A T R T F L
UniRef90_I9WJS2 S G C L R A S C I D S M S H G F K T A V V A E A C G D R H A A P
UniRef90_B4SLS4 H I G C T A T V V E A F Q R D I E A F I A A D A V A D F S R A D
UniRef90_UPI000380C871 S I G V E S T A R Q A Q E R G L N V T L A I D A M T D T S
UniRef90_UPI00037E17E8 N A C C E S S A R D A M M L N Y R T T M V H D A C A S L R
UniRef90_C6J23 D Y C V K F T V L R D A L E L N Y K V T L I E D G C R G V N I S P D D S E K
UniRef90_I3XBP3 E F C V D T T V R R A V S L G Y A V T L V A D G H T T A D S G A L A F
UniRef90_A0A014N287 N T C L E S T G R F A M E L G Y H V T L V R D A T A F R P

UniRef90_A6LJ49 K E V L N L S M 170 180 190
UniRef90_E0XTP1 E L H D K E L E I I N M I Y C H V M T S K E L I S M M G
UniRef90_UPI000411DA7B A D A Y A Y S L A N T Y P K I S E T G T T A E I L A L L
UniRef90_M7NI70 V A I S H I N L Y W Q F Q R T A A V V A T D S V
UniRef90_H5UB80 N M V T M Q G G V F G A V A A S S D L L A V I A P R A G
UniRef90_B5XXN1 A F A Q Q A A L F N I E T F F G W V S D V E S F C H A L S P A
UniRef90_UPI00047A4E60 E E E H Q S S C R F I F P K I G K V R S T E Q F I T A
UniRef90_UPI00035D6EC2 A M A R A A E W S L G D E I R I C A T A S E V V A H A Q G I A A A T
UniRef90_UPI00046382A4 M I K A Q G G I F G W V A D S A A V L R A M Q A E T A
UniRef90_D2RFL4 K E V L R A K I T S
UniRef90_UPI00045E5DD3 A Y V S D A I L L F L V R Q L Y G V T L S S G D L M A A L A
UniRef90_UPI0003724615
UniRef90_T1BZL3 D T V H S V N L A S I S G E F A Q I P W S S D L
UniRef90_UPI0004649311 D A L R H R T E T V L A G R F A T P L T V A E C L E S L
UniRef90_UPI0003758496
UniRef90_B5IAW4 E L H E C T L R S I S H G F G V V I S I E R L L E W L
UniRef90_G8AUW5 E E P H R A N L F D M G K K Y A D V M P L D A V I A H L A L A D A A
UniRef90_W9YDF0 K M E G G I F G A V A H S R D V V E G L R R Q P
UniRef90_B5Y7K7 A L Q H I E D M G G K V I L S Q E L L
UniRef90_UPI00047B7B4B D V L H A A A L T T I G D L F G R I A
UniRef90_V9XHY9 H L M A L Q Y V A K R V G R V E T T D A L I E S I T A S A
UniRef90_D5EFN8 A L E E L D Q G A W L T T S Y E A V E
UniRef90_A6X712 S G Y C W I T D T E T V V R R L A T L G Q A
UniRef90_E3I294 E M I A A Q G G I F G W V A P S A A F I E
UniRef90_Q9WYU6 K E I L G A
UniRef90_Q0FN72 E V H D A T L V S L G S L G S Q K T C A E V I A E L E A L S
UniRef90_I6SW92 E L H T L F F E K M F P K T A R V R T T K E L L Q A L E E A
UniRef90_M4R7C6 Y L A A L V N F R L I A N D L W T T Q Q A V K N M G A
UniRef90_W6QYM5 A E V H R I E M I A L A D N F A T L V P H A
UniRef90_J2JAY3 H H N E T L D D F D A G S A R L L
UniRef90_M1YQG7 K D
UniRef90_W4NNJ2 E A S I W N V K K C F G F V A D S L Q F A A A L K G G A
UniRef90_UPI00026273FC Y G Q H W E F L R N I Q M N Y G D V I T S D E C F E R L E A
UniRef90_G2DUP8 Y Q A A L A N F R I A N D L W T T D Q A V R Y M K G
UniRef90_UPI00035D38B3 E E W Q N A L N Y A M N N I A T K M T S A E I E S I
UniRef90_I1WE25 H L M A L R Y A A D R C A V P L S T Q D V L A E L R Q
UniRef90_V6IUZ4 K I I I E H H E N I W N N R F
UniRef90_UPI0003667F7A H L M A L N F V A G R C G K V A T V A E I L G E
UniRef90_U1KWH2 K M C Q
UniRef90_R5EFN2 E E S V R A S L E E M K E T G I K I V K S F E I
UniRef90_I4BWH9 A T V S R V A E W A L G S D V E I V A R A A G V
UniRef90_UPI000476ACF9 E T V H R V S V A S L E G E F A D V M D T E A I V Q A L N R V G G A
UniRef90_S7ZV83 A L D A M N A G A N I Q S L K E F M A E I K T L A G S T
UniRef90_C4TWM3 Q A T V Y N V R Q C F G F V T S G D E C L R A M H D G A A
UniRef90_UPI000237F02C H R M A C E Y A S G R C S R V L N T A E V L E H I N A
UniRef90_E3H114
UniRef90_M1XT96 E W L
UniRef90_U5W3E9 D K V I A H T N L Y W D G H K A R V A G T V E
UniRef90_UPI00047D5A03 A E
UniRef90_K9YF18 A Y L Q R D S R I S L K D
UniRef90_UPI00026CB546 E A H D H S I R S V F P R L G E T G S T D D I L A L L E R T A
UniRef90_D7AMB3 E M M R A
UniRef90_R4NK05 E D L I D H Y Q N I W S W N F A Q V D R L E N I I
UniRef90_D3E667 H K W A L S H F Q G L G A A V V R S E E F L N R
UniRef90_Q13XE6 A E A H A N S L E W I F P Q L G E T G T C R E I A N L L S K R S
UniRef90_J3AIA9 E E E Q R V A T E K D F A M F S R P M T H E A F L A E L A
UniRef90_UPI00047DC73F H A V N L F D M A S K Y A D V M P T D D L V T L L R A L
UniRef90_D3SML5 E E M Q E A
UniRef90_D1CA81 E M
UniRef90_U3C5D4 H Q Y A S I K Y V A G R A G C I K S M S Q V I N E I A Q
UniRef90_A3K5N2 A D W H R A S I D Y A M Q N V A L V T K V D E V I G A L G
UniRef90_A1ATA3 Q I A E A N I T D L K N I G V E C V T L R E F L Q S F
UniRef90_P37532 E N V L F A E I T T E E Q I I E
UniRef90_UPI0002D84E18 A V L Q T A S L T T V A D L F G T V A P T V E
UniRef90_E8TN77 F G G Y C W V A D T D T V V D R F N A L G K P A
UniRef90_UPI00030DB169 H D Q S L F D M E Q K Y A D V L N A S E L I K
UniRef90_X1M9J0 E D A Y K A A L T N Y G F I A H E S I T A E E A L K R L E
UniRef90_UPI0003737B00 Y E A A M I N F K Y M A N D I L T T K E A V K L I K K
UniRef90_A9WGD9 P E P H L A N L F D I D G K Y G D V V S V S E V L A Y L Q Q F A G
UniRef90_UPI000465095C Q D A H Q R M L A Y A A S C C A S I L S V G E V L A
UniRef90_J2TBK1 L E P H E A N L F D M A Q K Y A A V M T L E E A L A T V G
UniRef90_DOMGG3 A W E M K A A G V H L I T S D E V V R Q T E P V A
UniRef90_UPI0003B7BA09 K N V L N V K L I T
UniRef90_UPI00036AF887 Q K I L G V N M F S V A D L Y
UniRef90_A0A024HAB1 A E R H Q A C L E A I K G Y C W I A D T D T V L A R I A S L
UniRef90_G2P61 E I H R L L I E K V F P S Q A E V T T V G E W A E
UniRef90_X6KZB3 M Q E A G V T L A
UniRef90_L0IW03 E Y L Q T G A M R T T E E I L A A F A Q L
UniRef90_G7VR80 E Y L Q T G A N I T T E Q V L A
UniRef90_B7FKR8 D I L H L A N V L D M K N I G V A T P T L Q E W
UniRef90_I2BA86 E M A A A G A T L Y T L A D W L D
UniRef90_G7MCH4 H D Y V C K Y I F P R I G K I R S T K E I V S S L K
UniRef90_F0LXD0 D D S H Q A F E A M K A S G C R V I S S D E F L A S L G
UniRef90_A0A023D492 H D A A I S Y T F P M F S R P M T H Q E F I
UniRef90_U2UTQ2 C G T Q E A G I E H C R R C F G T I T T E E L V T A L A Q A
UniRef90_I9WJS2 H D A N L F D M N A K Y A D V V S E A E T I A F L E G L
UniRef90_B4SLS4 H D Q A L H W I A R T C G V P M T T D Q L L E V L
UniRef90_UPI000380C871 A E A H T N S I T R I L F P R L G E T G T C A D I L R L L E T
UniRef90_UPI00037E17E8 D D E H A A L V N F Y L F F G D V T D T A T L E A R Y A A L H S T
UniRef90_C6J23 A H N E M K N R G A V I I N S S D I
UniRef90_I3XBP3 P E I V A H H N E T L D G F D A E V R P A A E I
UniRef90_A0A014N287 E M M H S A H E L N G P T F A H A L L T T K E L L T A L R G E G P G A

1 10 20 30 40
UniRef90_UPI0003727C34 WT A P Q R A V L L I H D M Q R Y F L D Y D V A A E P I P A V L E H L A G
UniRef90_B1HWW6 K Q A L I I I D I Q E A F F D N E Q N L W N D E T I K H L N S G
UniRef90_UPI0003B2ED06 S R P A V L I V V D F S Y G F T D T A Y P A A E M S G P I A R T R Q
UniRef90_A8KYN9 S F S P A T T A V I N I D W Q V D F C T M G Y D L E L T R A G L A P T A R Q
UniRef90_B1M6B8 P I A L D P A T T F L I V V D V Q N A Y A S P G G D V S G T G P V L A R I A R E
UniRef90_F6B312 S K S A L L V I D A M Q T G L L I P M P C V D V R N A V E R K I A R S
UniRef90_C1E136 S L A A D D V A L L V I D M Q T D F C Q M G Y D V S L T R A P I E P L A R S
UniRef90_A0A022MLZ8 S L A D A T L I L V D Y Q N T Y V G G V M E L T G W R A A L D S A A A
UniRef90_A8TM29 S P G E T A L L V I D V Q N E I A E P D R R A H P E A R V V P N I A K D
UniRef90_W2S1U8 F Q F D P E H T A L L V I D V Q R D F V D P D G F G A S V R S I V P A I K D
UniRef90_UPI00047C3498 M T L D Q N R D L L V V D L Q N D F C S G G L E V I P E G E R V V P V I N R R
UniRef90_X1NL16 V V L V S D M L R G F L Q E E G Y P L Y C G E R I L P N V Q R A
UniRef90_M5G9T4 I T V N P G D T A L V L V G L Q Q G F H Q E G A P M V P H T Q L A G S V A A
UniRef90_A6NT71 N R S R Y A I V S T D L Q N E F L D G G M S C R R I I Y N I I E P L R R A
UniRef90_U2FUH4 P V T I D A A R T A L I V D M Q N D F C H D D G D L T A I Q A V V P Q V R R R
UniRef90_D7W121 M E K T N T A L L V M D M Q S A I V N T L P D T T T L M S N T K E
UniRef90_F0LJ92 A L I I V D M Q K D F M D G A L P V P D G D K I I P K V I E E
UniRef90_UPI000418DE22 M D I K Q N S T A L L V I D V Q N D F L P G G L E V K D G D Q I I P M I N A
UniRef90_X7D3J9 S T F E W D L N S R T A L L V I D P Q I D F M S P G W V F G A Q N L V P N L R R
UniRef90_UPI00047D5082 A D N A P L I V I D L Q T G M F D G V H E P P D A P A I A E R A R V
UniRef90_H6N1R7 W T L Q P P E R A A L L I H D M Q R Y F D A Y L D H E P M A T A L P N M I A
UniRef90_U3U180 I A L P P A Q S E L I V D M Q N A Y A S A G F D V S A T Q P V I A R I H Q
UniRef90_J0B7U3 W R P Q A N R A A L L I H D M Q T Y F L Q Y D M S L A P I P M L I E R I A A
UniRef90_A3VY05 S D M K I D L A R V A L V I D P Q N D F L S P N G V T W G V V I G A V A N L E S
UniRef90_V4TGV9 N P K S V L L V I D M Q N H F S S I A K P I L D N T L A
UniRef90_G0LG26 A D Y S F D T D T A I V V D M Q I G F C D G N M Y A P G S E A V V D D V R T
UniRef90_W1IUS4 W K I K T E S C A L L I H D M Q R Y F V H A L P D N E P A V N L I N S T V K
UniRef90_S3IAR0 L S F D R N E N T G L V V D P Y N D F I S E G G K V A E A N N C V P H M L Q
UniRef90_C6L147 S N P L L L V I D I T R A F T E P D R P L A E S G A L I E A T I N T
UniRef90_D9TCJ8 R P H R T A L L V V D V Q N G V V I G G A H D R D R V A T L A G A
UniRef90_G2NUE6 A P V R R G D R P A I V V V D L V R G F T E D R F P S A D L T E V V G A T S A
UniRef90_U3QTU5 S D L T L D L P R T A L L V I D P Q I D F M S P E G R S W E V Q N M V P N L I R
UniRef90_H8YWL2 M T L P R R E T A L L C I D V Q N Y G M A E H Q D P A E R A R V I P R L Q S
UniRef90_F6IKP3 K R P A L L V D M V M A Y L D P Q S P L Y A G E A A L A Q A V R
UniRef90_D9VSL8 T A L L V I D L Q H G I L A L P T A R P G D E T L R N A I A
UniRef90_A7F6Y2 S S P L L V V D M Q N G F C H P S G P I L R Q A A L E I P V I K R
UniRef90_W8X2R0 Q R P G L V I V D I I Q A F T D P D M P L S N M D A E I E A A N R
UniRef90_A3UIQ3 M Q I E R G V T A L V V T D P Q N D F L S P D G V T W G V N G T V E N T I G R
UniRef90_UPI000361FB1D A N S A L L V M D V Q R D V V A I A D D G S G Y L P R L R R A
UniRef90_D0D2T2 V P L V P E Q S A L L F V D V Q N D L P E A E F A E K Y G T R V I P N M Q R
UniRef90_R5IR50 V L I V I D M Q N D F V T G S L G N K D A Q M I V P N V K A
UniRef90_C1DU94 T D K D A L I V V D M Q N D F M P G V L P V K D A D K I V P T I N S
UniRef90_A7MT05 W S V D P Q R A V L L I H D M Q Q Y F L N F D V D S E L I Q T L T R N I Q A
UniRef90_E7RUE4 W K L D P S R T A L L I H D M Q R Y F L R F Y E T D S G L Q T L I G N I A T
UniRef90_U5DLY6 L R L D L A K T A L L A I D M Q N D F C H P D G D I A P A R K P I A P L Q K
UniRef90_E6PK35 R R D T A L L V I D M Q R D F L D P G L N T A L L R Q A I P G A Q R
UniRef90_D2NR08 W P V D P S R A V L L V H D M Q V H F V Q A F E G A D L G E G A I R N L R R
UniRef90_F1ZB59 V R I D L S R T A L L V I D M Q N D F C H P D G D I T P A R A P V A P L L D
UniRef90_UPI0003455038 A P W K P D P A R A A V L V H D M Q N H Y F L R P A V G A E P L A T A L R N I A R
UniRef90_A0R0G6 A A M S F T A G T T G L V V I D P Y N D F I S E G G G V A E A I G C V P H M I E
UniRef90_UPI0003060E78 F D P K T A L I V V D L Q K G I V A L N T C H P T Q T I I D N T S Q
UniRef90_R2SGU4 P I Q I E L A K T A F L P I D L Q K G I S G N L F P Y D S A T I L A N N R Q
UniRef90_A0A059DXL4 I D P A R T A L L V V D V Q V D F V S P D G D L R P A H I A M A Q M A R
UniRef90_E6QQH9 T L D P N T A L I V V D L Q N G F I A L P A V H P A A E V V R R A A A
UniRef90_F0IFS3 N R V L I L I D L Q N D F I T G T L P V P D G K A I A P V A N R
UniRef90_UPI000464B0E4 S S F R L I E D K T A L V V I D M Q R D F L L P G G F G E S L G N D V G Q L L K
UniRef90_Q2FQS4 A Q K P A L L I I D M Q N D F A H A V L P V A G A Q A V I T P L T Q
UniRef90_B7LQ23 H R A L L V D M Q N D F C A G G L A V P E G D N V D I L A N Q
UniRef90_A0A022Q7M4 E L K W K N T A L L V I D M Q K D F T L P G G P V R G G E S I V A N V I K
UniRef90_K2NTB2 L D L K K T A L V M I D L Q K G I V N P H L I E P Y S R D E L L K K N E L
UniRef90_C8WZU0 P A L I I I D M Q E D F V H G S L C I Q G A K D T V P R I R E
UniRef90_E0MRQ1 A S L Q L D G N R T V L I I Q D L Q N D V M M D G G A F A D T Q N V V A N V K R
UniRef90_X0QC06 P I K L D P T Q T A L I V V D M Q N A Y A S A G F D V T A T K P V I D K I K Q
UniRef90_UPI0004756EC4 M L L V D L Q R A F V T G D G A V P A A V P L R T V S A
UniRef90_S7JN99 S H T A L I V I D V Q N D Y F P G A Y P Q H L A E Q T L A N T L S
UniRef90_UPI000368DA9 E N P A V L V D M M V A F V I E R R T G E D V V E S T A R
UniRef90_G0PKM5 R I N P T N S A L F V C D L Q E K F A S N I K Y F P E I V T V S R R R
UniRef90_C5NU54 A L L V I D V Q A A F V S G W E A V P D A D R V L R C T R D
UniRef90_J2LPL5 F D V T R T A I I V V D M Q N D F C H P D G D V T P A R A P I A P L Q S
UniRef90_E5S4H1 A L L V I D M Q E E F R Q C A V K I V D Q L N K
UniRef90_UPI000377AD0C K K K F A L I I V D M I N D F F P K G R Q L A E F T N I V P S I L T
UniRef90_R7EM90 L I V I D M Q N D F V T G V L G S K E A V A V L P N V K K
UniRef90_C2VMH1 K N T A L L I I D M I N D F Q H G P I L A K K C E M I T N P L L Q
UniRef90_J3IG31 N N N A L L I I D M Q Q E D G F V L I E H F D K V A N T A A
UniRef90_L0DB14 I S L N P L T T A L V L I D L Q K G I V G S S L A P H T A S E V V N V G V D
UniRef90_Q0AXN0 F R L R R D D S V L M I I D L Q E R L M Q A M K D R E R V V K N T N L
UniRef90_K2Q770 A L L V I D V Q N D F C T G G L A T K G G E E V A P V I N A
UniRef90_UPI00037E2D7B M S N T K T A L I V I D L Q N D Y F A G G Y P L E N A E G A L A N A L T
UniRef90_I0JW20 V V I V D M L E D F I G G K L A S R E A K I I E P I R K
UniRef90_UPI000469F8F1 A Q W H I D P Q R A V L L V H D M Q R Y F L R P L P E P L R E S L V G N A A R
UniRef90_ROMKX6 L N I N F Q K T A L A L I D L Q K G I V S V D Q S G K G V P N G
UniRef90_M9VXA1 N R A L L V D L Q N D F C A G G L A V P E G D S T I D I A N R
UniRef90_A3JB31 M K F S K S D T A L V V T D P Q N D F L S K R G A W N L N G T V G N L D K
UniRef90_J4Z479 L L I V D F V N G F A D P A L G G G N I P E A I A Q T R H
UniRef90_A9LGR5 S P L L M N R H D T G L V V I D V Q Q K L I P L V Q D H L L I C W N I G R
UniRef90_Q0SF00 D L G R S A L L V V D T Q V D F V D G G T A P P G T S A V L P A I A R
UniRef90_E4PJK1 Q R Y A L I L V D L S V G F T D P S Q S P S E S D D V V E A N R V
UniRef90_C5Y017 S E T A M L V I D M Q K E F V D P A M L L P A G E A L I P A V T E
UniRef90_UPI0003A73FB5 Q P V L I V V D I Q K A F M D H K A G I P V M P G Y R A N I A R
UniRef90_A2C9D1 S P M L M Q S K D T A L L I D V Q E R L T Q A V D P D Q K Q V W N I R R
UniRef90_UPI00031469A8 Y S R E R T A L L V D P Y N D F L S E G G L V P H I K P I A N L R Q
UniRef90_G9MSA2 M S T A H A H T A V L L I D P Y N D F L H P D G A S L E A T N T V K H I L D

UniRef90_UPI0003727C34 L I A A A R E V G V P V V Y T A Q P T 60 P D D D L P A H P E Q Y P I D A L 80
UniRef90_B1HWV6 L I A W A R H N E A P V I F I Q H T D A E D V D F A Y G Q P G W E I Y H G L H
UniRef90_UPI0003B2ED06 I T D L A R E R E R G Y P V I Y T T T L A Y R P D G M A A L L Q N G S R L W V E I D A A T G
UniRef90_A8KYN9 L I G V L R P L G F M I Y H T R E G H R P D L S D C P P N P D L L W V E I V P A E V A
UniRef90_B1M6B8 A V A A A R A A G L P V L W F Q N G W D P A Y Q L L A K G S W D Y A L V D A E L T K
UniRef90_F6B312 V L E F R R A K K L P I I H F T M E L H R K E M V D F I E G E T K D A E I I P E L V K Y
UniRef90_C1E136 V L A A A R A A G V R V I H T R E G H R P C P G R I L L V R E G E P G W D I I D P E L V Y
UniRef90_A0A022MLZ8 L L A R A R R A G A T V I H V V H D G G P G S A Y D I R E E E G A V H P S V A
UniRef90_A8MT29 L V D A C R R A D L E V V Y Y T V I D H K L S G L L V P K G A W E G R V I D D A V L R
UniRef90_W2S1U8 T L T A S R R L G L H V I H T R E G H R P D D G R I L L V Q G E Y G H D I I D D L R
UniRef90_UPI00047C3498 L I Q D W H P V G H S S F A S Q H E G K A P F E T T E M P Y G T Q V L W P D H C
UniRef90_X1NL16 L L E R E L A Q G S T V I F L C D H H A P G D P E F D M F P P H C L E F G T A E A
UniRef90_M5G9T4 L L A A F R H Y G S C I V H V R E D Q S D P E S F L H P G Q P G H Q F E T W A T
UniRef90_A6NT71 M L E R A R A M G L P V I Y V R D S H H R W P D H C L E G T W G A Q I T E Q L T
UniRef90_U2FUH4 T I D A A H A H G M P V I Y V F L N W Y S R A G G E P A L V T G T W G A A T L D A L A
UniRef90_D7W121 V I R T A R R N N I P V I Y L T V S F R Q G M M A D V M K E W V T I H P L L A
UniRef90_F0LJ92 Y I K K F K E K G A L I V A T R D W H P P N H I S F K E Q G G P W P R H C V I Q N
UniRef90_UPI000418DE22 I Q K K F K S P G E F V A L S G L D Q L L W P D H C V Q G T F G A E F H K P L L D
UniRef90_X7D3J9 L F A A S K K A G T T V A L I S P H Y Y P H D H K W E Y G A D F M Q E I I D L L
UniRef90_UPI00047D5082 V I D W A R R S G R K I A F V R H D G P E G D P L A P G E P G W P W P A L G
UniRef90_H6N1R7 I R E A C S A A G V P V Y T A Q P G D Q H P S R R G L S D F W E I L E Q L T
UniRef90_U3U180 A V I T A A R A A G M Q I V F W Q N G W D N H G T L L A K G W D Y A L V D E L V
UniRef90_J0B7U3 L R D V C H K R G I P V F Y T A Q D F W G P G L T A S E F H S Q Q A V V P E L T
UniRef90_A3VY05 L F K A A K A A G I T V A A S P H Y Y P A D H G W K F G A D F L G D L Y K P Y
UniRef90_V4TVG9 T V Q L C R R A S I P V F F T R H C H K S P A D Y G M L G E W N G D L V Y D G
UniRef90_G0LG26 L V T D A Q D A G A R V V Y T R D V H P S G Q F D D A H Y Y D E F E R W E H V
UniRef90_W1IUS4 I L R W A R E K N I R V F Y A S A Q P R R M W G P G D Y E N W T F I A P I Q R A W H
UniRef90_S3IAR0 V L N A A R E A R L R V F Y A M H H R Y R P G D Y E N W T F I A P I Q R A W H
UniRef90_C6L147 L I A A A R S T D V P V M F T R V A Y E R P D D D L M D G S D G V D L D P R L D
UniRef90_D9TCJ8 L V D R A R D A A V P V V W Q H R S D D L P P D S E Q W R I V P E L S
UniRef90_G2NUE6 L I E A G R P A G V P V V F T W L H K A R G M R A L V E D S E E V T I D P R L P
UniRef90_U3QTU5 L F Q A A K Q A G I T V A I S P H Y Y P H D H T W K V I G A D F M P E F K Q Y I
UniRef90_H8YWL2 V Q R S F R E H G I D V I H A R I A C G W N N L L M P K S P E S Q I T P E L A
UniRef90_F6IKP3 L A D A F R A A G V P V I L T N V E Y V D G K R N F M A G S P L G A F P E L T
UniRef90_D9VSL8 L A E A F R A H K L P V V L V N V A W S P D G C D L P T T D V D R P G P A T A P
UniRef90_A7F6Y2 L I D L C R R T G I P V F T R M E F S E D F S D L I R G T W D A Q I L D E L R
UniRef90_W8X2R0 L I D A C R E A G V P V F F I W L K Q G A T L R S G T A A V E L D P R L H
UniRef90_A3UIQ3 L F E T A H E V G M P V F V S P H Y Y E H D H E W R F G A D W L E Q Y R P H I
UniRef90_UPI000361FB1D A I D G A R A A G I T V I Y K V M A D L V R T G L F T E G E P G T G I H D D Q I A
UniRef90_D0D2T2 I Q S A C R K A G L E V M Y T C I L D Y K I T G F N V A K G S W D G K V I D Q V A
UniRef90_R5IR50 K I K E Y A D R G D R I I F T R D T H G E N Y L D T P E G K K L P V K H C I K G
UniRef90_C1DU94 Y I E L F E K M S N P V F F T R D W H P E N H I S F K G F G G I F P A H C
UniRef90_A7MT05 I K Q T C I D A G I P A V Y T A Q P G D F W G P G L K A D E S I T R I F P A L A
UniRef90_E7RUE4 L K R W A A A H D V P V F Y T A Q P H D Q P A S D R A L L N D M W A V V P E I A
UniRef90_U5DLY6 L L A P H L R A Q D V P I I W L N W G N R P D A P V L T A G S W A A I V D E L Q A
UniRef90_E6PK35 L L A A A R R G M V I I H T R E S H R A D G R L L V R G E H G H N I I D E L A
UniRef90_D2NR08 L V D A A H A A G I P V Y T A Q P P R Q N P E D R R L L T D F W R I L D E L A
UniRef90_F1ZB59 L L P A V R K A G M P V I W L N W G N R P D R R V L E L D S W A A A V D E L G R
UniRef90_UPI0003455038 I T E A Y R A V G A P V V Y T A K P G G M W G P G M R D V P E H T A I D E A V R
UniRef90_AOR0G6 M T E A A R A S G I P V F Y A L H R R Y R P R R T F E Y G S W G G E I H P D L A
UniRef90_UPI0003060E78 I T A F R D A K L P I L V N V A G V A Q G R T E Q Q N S W S H L I N E L N
UniRef90_R2SGU4 I A E Q L K N T A A L N V L V N V A D I T S F Q Y L S T Q N D R P V S L E P A L N
UniRef90_A0A059DXL4 L R E A L K Q K S G T I C F Y A W R G K P G Q H A I C R A D E A G S D Y Y Q L V
UniRef90_E6QQH9 L A E A F R R H A L P V V L V N V T G E Q P R N P G A F P A G G E N L A V E L N
UniRef90_F0IFS3 L I Q D W H P E N H F S F F T H H K G K A F E S I T K D S Y E Q N L W P H C
UniRef90_UPI000464B0E4 V V P P A K L N R G A P S K R I G D P G K Y G R I L I R G E Y G H D I V D E L A
UniRef90_Q2FQS4 L L S L F R G K H L P V I H I V R V H E P D G S D V E W G S H S A A V I D E L T
UniRef90_B7LQ23 L I N W C Q S R D I P V I A S Q D W H P A N H G S F A S Q H Q P Q T F W P D H C
UniRef90_A0A022Q7M4 A V Q V S R N R T I P I I W H L Y D S A E K P T S K G T V G A E L V D G L V
UniRef90_K2NTB2 L L A E L K N T E A L I F V F V H Q K N Y G P E T P V A S G T V P E D F S D F V S
UniRef90_C8WZU0 V L D G F R Q R A L P I F H R E Q A F R K G H H A V V P G T P G A R I V S E L A
UniRef90_E0MRQ1 L A E A C R A A G V L I I H V W M V A E P G H P A M R R G T W G V Q P V S G L E
UniRef90_X0QC06 A V D I A H Q A G L Q V I Y F R N G W D N K E Y T L A K G G W D Y E L V D E L
UniRef90_UPI0004756EC4 L D R A R S S G A F V V Q L Q N D G T A G E P D E P G A G R R L Y F P
UniRef90_S7JN99 A I D I A Q Q R G W S V V L V Q H I G G E A P F F K A G S E G V K L H S A M A
UniRef90_UPI000368DA9 L L E T A R A A D V P V F Y A V P S G R R T A S H E E W V E K L D R F P A V E
UniRef90_G0PKM5 L I D A A R I L N I P T V V T E Q Y P K G L G H T V P L K E A G L V E
UniRef90_C5NU54 L I S R A R A A G A L V V H L Q N D G E P G A V D A P H T P G W E L H L P V E
UniRef90_J2LPL5 L L P T L R A A D V P V I W L N W G N R P D K P V L Q A G S W A A E V I D E L T
UniRef90_E5S4H1 T I Q I C R Q N N I P V I F T Q H G H R Q S I D I E Y G S K E W Q M M P E V N
UniRef90_UPI000377AD0C L K K Y C Q S N N I P V V Y V N D H Y K L W I I D H T Q N D L S A P I I Q Q I K
UniRef90_R7EM90 K I T D A Y M A A G D E V I F T R D T H E E N Y L E T N E G R L P V P H C V I K E
UniRef90_C2VMH1 L K K T M K S F G Y P I I Y I R N D H Y Q L W R S D I D Q L I T H C N I I H K I A
UniRef90_J3IG31 L L D T A R Q Q R V P I L Y T R H I N Q A D G S D L P R G E P R A C I I D S I A
UniRef90_L0DB14 L A R R F R G A G S S V I L V N V A F A A D P W P P G G F P A G F S D L V S
UniRef90_QOAXN0 L L A T A R E F D S P V I L S E Q Y P K G L G P T V N E I K D N I T
UniRef90_K2Q770 I A D K F D A S K D W H P E K T I H F E K W P S H C V A G S H G A E F H A D L N
UniRef90_UPI00037E2D7B A M T H A K D Q G M P I L V Q G D H A N P A N P F F N E N T E G V Q I H P K V R
UniRef90_I0JW20 L S I A A R A K K K P V I L V G G H A I I W G E H F A M K G S P G A S I I K E L A
UniRef90_UPI000469F8F1 I R Q W A A E H Q L P V A Y T A Q P G D F W G P G M Q A S P N D R E V V D A L A
UniRef90_ROMKX6 F V K V A F H D G T E G L K P E T D A P Q A S G E Q P Q D W A E F V P E I G
UniRef90_M9VXA1 L I D H C L A R G E T V A S Q D W H P A N H G S F A S Q H Q V E P Y T Q G Q L
UniRef90_A3JB31 L L G A A K A A G M Q V F V S P H Y Y P A D H D W E F G G D W L D Q L K P Y I
UniRef90_J4Z479 L L A H A R A Q G W P V A H S R I V F S D D M L A L K E H S K N S A I V S P E L A
UniRef90_A9LGR5 L I R G C I L N I P V I A S E Q Y P T G L G K T I D S L V S L L
UniRef90_Q0SF00 L V D A Y R E A S A P I V H V V R L Y E G D D V D L C R D P E S L L L G G R L Q T
UniRef90_E4JPK1 L L E R F R E R G M P V F F T T V A Y S E P S Q V L E A G S G L V E M D S R L Q
UniRef90_C5Y017 A V A V A R Q R G I F I V W V R E H D P T G R D V E L F R R H F Y L A E G F V
UniRef90_UPI0003A73FB5 V V D A A H D A G I P V V F I Q E I H R R D M H C M D G E P G T P V A F E E M G
UniRef90_A2C9D1 L L D A A N V L C I H R A S T E Q Y P Q R L G D T E L I A E R I V
UniRef90_UPI00031469A8 L D G A V R A A G I Q V I V P H E R A S T E Q Y P R H S F A R G E W G E W H P D F A
UniRef90_G9MSA2 L L A A A R S N K I P V F Y P L H E S Q K A G K V F E E G S W G A K I Y E G M E

UniRef90_UPI0003727C34 P R D D E W V L T K W R Y S A F Q R S 100 R E R M R Q W G R D Q L I I G G V Y A
UniRef90_B1HWV6 R Q A E D K V I Q K P T W D A F F Y R T E L A A A L L R Q S Q H T I E Q L I I F A G G A Q T
UniRef90_UPI0003B2ED06 I Q S S D P V I T K K G K G S A F F Y A T P L D L A A L L R R Q S Q H T I E Q L I I F A G G A Q T
UniRef90_A8KYN9 P L P G D V I V I D K P G K G S A F F Y A T P L D L A A L L R R Q S Q H T I E Q L I I F A G G A Q T
UniRef90_B1M6B8 P E P G D I V M G K P R Y S G F F Y A T P L D L A A L L R R Q S Q H T I E Q L I I F A G G A Q T
UniRef90_F6B312 P S D G E F I T G K R R Y S G F F Y A T P L D L A A L L R R Q S Q H T I E Q L I I F A G G A Q T
UniRef90_C1E136 P L S A E D V V I D K P G K G S A F F Y A T P L D L A A L L R R Q S Q H T I E Q L I I F A G G A Q T
UniRef90_A0A022MLZ8 P A E G E A V V V K Q A P N A F V G T E L G D L V D A A G H Q R D V V V V T G F M T
UniRef90_A8TM29 P T A D D I V L P K T S S G V F W N E T S I L D Y L L R N M A R G D I T H L I V F C G V T T
UniRef90_W2S1U8 P L P G E S V I D K P G K G S A F F Y A T P L D L A A L L R R Q S Q H T I E Q L I I F A G G A Q T
UniRef90_UPI00047C3498 V Q T I D S Y S A F Y E N D S G E T T T G L S G Y L R E R G L T R L F M T G L A L
UniRef90_X1NL16 E V I P E L A Q Y K R T Y S S F F D T P L E G K L S E Q L K P E K L I V V C G V T T
UniRef90_M5G9T4 P A T G E V V I A K T T T L D A F L V T D L Q A V L E L Y R L E L V L V G V Y T T
UniRef90_A6NT71 P A P G D Y V L K K N Y F N G F L G T K L Q N T L K K L G T E T T I L F T G W R T
UniRef90_U2FUH4 P T D N D I V V H K N R Y S S F F W H N S L D A V L R R L D I T T Q H C F T T G V N T
UniRef90_D7W121 P E K D D I V I N K R R F S A F T G N E D L E V V L R G L D I Q H L V L T G V N T
UniRef90_F0LJ92 T E G A E F V V K L P A Y S G F E G T N L A E T L R K R G I K K V Y I C G V A T
UniRef90_UPI000418DE22 Q S N W E I V F Q K G K N P E V D S Y S G F F D N K A K G I D T K I V I L A G M A S
UniRef90_X7D3J9 E D G K T I V A S P H K L Y G P Q S N D L M L Q L H K K Q R V I D K I V I L A G M A S
UniRef90_UPI00047D5082 Q A D D E P T F A K S V R D A F S N P A F G D W I A G Q Q G A A Q V I L L G A Q T
UniRef90_H6N1R7 P R D G D I C V T K W R Y S S G F Q R T P L R Q L L A H H G R D R L I I V G V Y A
UniRef90_U3U180 P Q A G D I V L P K P R Y S G F F N T D L D S M L R S R G I R H L V F T G I A T
UniRef90_J0B7U3 P A K Q D I M L T K W R Y S A F Q R S D L R E Q L R N L G R D Q Q L I I T G V Y A
UniRef90_A3VY05 H D G A E I V S S P H K L Y G P E H N D L A L Q L R K R G I D T D E V I V A G M S A
UniRef90_V4TGV9 T A D A E L L S P E I K T Y S A F G N T R L Q E R L V G M G V I D E V I V A G V M T
UniRef90_G0LG26 R R S Q D H V V I K H T Y S A F Y N T E L D G W L R A H G L D D S L I F C G T L A
UniRef90_W1IUS4 P Y P E T F V L T K W R Y S A F H Q S D L A D K L C E H Q C Q R L I I T G I Y A
UniRef90_S3IAR0 R K S F E F G T W H W C S S G F A N T D L D L E L K R H G L I Q R L I V I G L V A
UniRef90_C6L147 V Q S T D I V L T K K Y A S C F F G T D L A S R L V S S G I I D T L V I A G V S T
UniRef90_D9TCJ8 R R D D E P L V H K A Y G D S F F E D T A L E P V L A A A G V I D R L V V V G A Q T
UniRef90_G2NUE6 R G A R D H M I A K K G A S A F F E G T A L A S L L T G L G R D T V L V C G A T T
UniRef90_U3QUT5 E D G K T I V C S T H K L Y G P Q A N D L V L Q L R K Q R V I D Q V I V A G M A A
UniRef90_H8YWL2 P I E D E L V I T K T G D S A M T G T N L R L V L A N M G I D T H L V V G G I Y T
UniRef90_F6IKP3 P R P G D R V I T K F P S A F F G T A L A P M L V A E G I D T L L I V A G G I S T
UniRef90_D9VSL8 P A A F D V T V T K R H W G A F F G T E L D L Q L R R R G I H K I V L A G V I S T
UniRef90_A7F6Y2 P E P Y D F V V S K Q R H S A S F F G T D L H R V L S E R N G C D T V I V A G V A T
UniRef90_W8X2R0 H Q P Q D S I L V K K Y A S C F F G T D L L S R L V S N G C D T V I V A G V A T
UniRef90_A3UIQ3 E H D H T V V T S P H K V Y G P E T N D L V L Q L R K Q N V I D R V I V L A G M S A
UniRef90_UPI000361FB1D P Q Q G D V V V T K R R G S A F S G S D L D L V L R A R R L G V L V L S G L I T
UniRef90_D0D2T2 P E G D E M V L P K S S S V F V S T H I D Y I L R N L G V K Q S L V I S G L I T
UniRef90_R5IR50 T D G W Q I V P G L E T G N C E Y I D K P T F G W M N W N K D E L E L T G V C T
UniRef90_C1DU94 V Q N T E G A K F H P A Y S A F F Q G T N L H S L L Q E R G T K R L I F I C G V A T
UniRef90_U7MT05 P T D Q D I V Y T K W R Y S A F Q R T P L L K S M M D E T G R D Q L I I V G V Y A
UniRef90_E7RUE4 P V E G D V V T K W R Y S A F Q R S D L D T R M K A L K R D T Q L I I V G V Y A
UniRef90_U5DLY6 P P P T D I R V D K Y R M S G F W D T P L N S I L R N L G R T Q L I I F A G V N A
UniRef90_E6PK35 P L A G E P V V D K P G Y S A F H Q I D L Q Q I L A A Q G R G E L I L C G V T T
UniRef90_D2NR08 P T D R D T V L T K W R Y S A F V R S P F E D L L K E S G R D Q L I I G G V Y A
UniRef90_F1ZB59 D T S G D I H V A K Y A M S G F W D T P L D A L L R N L Q G R T T T L F A G V N L
UniRef90_UPI0003455038 P R E G D T V L T K R R Y S A F S G T D L A E R L A A Q Q R D Q L L V T G V Y A
UniRef90_AOR0G6 P R P G D I V A Q E H W C S S G F A N T D D M L L K R H G T I H Q I I V V I G L I A
UniRef90_UPI0003060E78 P T P S D H I I T K K T W G A F F N T D L A S Y L V S H D I T D Q V V I V G I A T
UniRef90_R2SGU4 D A E N T I K I T K H N P S A F F N T S L D L Q L R R R K I D T L I L V S G V A T
UniRef90_A0A059DXL4 P E D G D L D I A K V L F D G F H G T E L D A E L K A R G I D T V L M A G V T T
UniRef90_E6QQH9 R Q P E D L T L T K R T W G A F F N T G L D V Q L K G L S V I D Q S V Y I A G I S T
UniRef90_F0IFS3 V Q G S E G A N F L P E L Q M N T I A I F R K G T N P D I D S V Y H F V I G L A A
UniRef90_UPI000464B0E4 P I D G E V I T D K P G K G A F Y A T E L S D V L T E A G I T Q L L V T G V T T
UniRef90_Q2FQS4 P V P G E H L L E K V R M S A F I G T I L D L M L R T L G V N G L V V V G G I Q T
UniRef90_B7LQ23 V Q N S E G A L K P L L K Q K A I N R I F H P L R E H N I G E L I I M G L A T
UniRef90_A0A022Q7M4 I E E G D Y K L V K T R F S A F F N T H L N S Y L H C A G V T N L V I M G V Q T
UniRef90_K2NTB2 P L A Y D I H V K K N W G A F Y G T D L D V Q L R R R G I R E N L I L T G V A T
UniRef90_C8WZU0 P R P N E Y V V T K K R F S A F M H T E L D L L R R R L H I R E L A V C G T Q L
UniRef90_E0MRQ1 P Q T G D L V V E K L S M S A W E S G R L E N Y V K G A F R D T I I S T G S W T
UniRef90_X0QC06 P A P Q D L V I D K P R Y S G F A N T N F D S V L R S R G I R N L I L T G V A T
UniRef90_UPI0004756EC4 P V E G E P V V R K T T D D G F Y Q T E L G D L L R A K G V I R E L I A V C G V L S
UniRef90_S7JN99 K A P S S V V V E K Q H A D S F L N T T L S D V L R A Q N I R E L L V V C G M M T
UniRef90_UPI000368DA9 P A E S D H V V E K P R A S A F F D T H L S N L L H S S G I D T L V V C G T N T
UniRef90_G0PKM5 E N T P V Y D K S K F S M C I P V E D K L K N V I Q N V I L V G I E A
UniRef90_C5NU54 P G P R E R V V R K T E D D G F A D T P L G D L L T D A G V T E L A V C G V L S
UniRef90_J2LPL5 P C A E D I R V N K Y R M S G F Q D S E L D S L L R N L N V N T T L L F A G V N T
UniRef90_E5S4H1 L L P T D Y L I E K R R Y D A F Y G T V L G E M L R K L N V N T T L A I S G V M T
UniRef90_UPI000377AD0C P D H S D Y F L I K P K H S A F Y Q T A L N T L L Q E L D T K A V I V T G V A G
UniRef90_R7EM90 T E G W Q V V K E I D C P D C E H Y I H W A E Q F K D S R V S G I E I I T G V C T
UniRef90_C2VMH1 P S S D D Y I F I K P H Y S A F Y E T P L N S L G Y L K I E N L I L T G V A G
UniRef90_J3IG31 P R P D E A I V D K G R Y S A F H R T D L D A R L K A L D V R T I L I C G V L T
UniRef90_L0DB14 G E P S D L R L T K R Q W G A F Y G T D L D L Q L R R R G I I V L T G V S T
UniRef90_Q0AXN0 S Y H Y L D K T C F S L C N Q E A Y T I L D K I G K H T I I V L T G S E T
UniRef90_K2Q770 T E V I D Q V V E K G T A N L D D G Y S A F Q Y L K S K E I D T V V V C G I A T
UniRef90_UPI00037E2D7B A A A P D A P V I V K R F A D A F H Q T T D D T L Q Q L V T K L I L V C G M M T
UniRef90_I0JW20 P S P A D I V L E K R T Y S G F R E T G L D L V L R S L K V G D T I I L V G L H T
UniRef90_UPI000469F8F1 P R P G D W L L T K W R Y S A F F N S D L L E R M R A S G R N Q L V L C G V Y A
UniRef90_ROMKX6 V K E N D Y T V T K R R W G A F F G T D L D L Q L R R R G I D T I V L C G I A T
UniRef90_M9VXA1 D G L V Q T F V P D H C V G H R Q K T R L D E W L R Q R E T D L I I L G L A T
UniRef90_A3JB31 E D G S T I V T G P H K I Y G P Q N N D L A L Q L R K H G I G K V I L A G M S A
UniRef90_J4Z479 P A A G E Y V V R K S T P S A F F G T M L A P W L A Q R G V I Q N L L V A G C V T
UniRef90_A9LGR5 N E G N S H I L E K T M F S C R E L S E F R K L E N R G I H N L I I T G V E S
UniRef90_Q0SF00 V S P T E F I L F K P R W S S F Y R T E L D D R L R Q W R V D T V V I A G C N Y
UniRef90_E4PJK1 P R S D E P V L V K H W A S G F F G T D L D D R L K A A G V D G T V V T G L T T
UniRef90_C5Y017 I K D G E Y K L V K G R F S S F F A T N L D S V L K T S G I K N L V V T G V Q T
UniRef90_UPI0003A73FB5 R Q P G D Y F V H K R R Y S A F Y G T E L E I L L K G L K A Q T I L L G G L T
UniRef90_A2C9D1 H K P C P K M S F S V I G C A E I L Q Q F R D S G T R K I L L C G I E A
UniRef90_UPI00031469A8 P K P G D I V V I G E H W F G S S G F A N T D D L R L K Q K G T H I V I V G L L A
UniRef90_G9MSA2 P K P E N L F S K H W S S S F Q N T D L D F L L R Q R T I T N V V I A G L T A

UniRef90_UPI0003727C34 H I G C L A T A L E G F M Q D V Q C F L L A D G V A D F S R A R 150 160
UniRef90_B1HWV6 E F C L D T T I R S A F S H Y H H N I L V K E A H S T L A N D I L L E A
UniRef90_UPI0003B2ED06 S G C V L R A S A V D A V Q G F T V L V P E D C C A D R
UniRef90_A8KYN9 N V C V H T T M R D A N D R S G Y E C L I L S D C T G A T D P A N H R A A L
UniRef90_B1M6B8 N V C V E S T L R D G F H R E Y F G I V L A D A T H Q A G P
UniRef90_F6B312 D V C V H T T A V D A H Q Y N Y R V R I L E D A V R G S S W E A H Q A A I K A I
UniRef90_C1E136 D V C V H T T M R E A N D R G Y E C L I L E D G C G A T D A G N H A A A I K M V
UniRef90_A0A022MLZ8 H M C V Q F T A E G A F L R G N R P T V V A D A C A T R P L P S G G T L L D A
UniRef90_A8TM29 D Q C V D M A L R D A A N D R G Y E T V C V V D C C A T R H T R E R H E A A L R A
UniRef90_W2S1U8 E C C V T T T A R E A N D R G F E C C I L T D C T A G F N A T S V
UniRef90_UPI00047C3498 D F C V F Y S A L D G R R E G F E V V L I N D A T A A I D L N G S
UniRef90_X1NL16 H I C V L Y A V A D A R I R G Y E V E V P V D C V A S F D E K A H H F A L E Y M
UniRef90_M5G9T4 E R D V H A T A N S A Q L R G Y Q V V V V P D A T A T W G E P E A R V T A
UniRef90_A6NT71 H V C V A Q T A I E A F Q R G Y R I M V A E D C V E S T T Q V E
UniRef90_U2FUH4 D R C V L A S L M D A T F A G Y D V A L V D D A T A T P S P A D
UniRef90_D7W121 S G V I L S T L R E A A D K D Y Q L T V I E D C C K D S D
UniRef90_F0LJ92 E Y C V R A T A L D A L K Y G F E V Y I L K D A I K G I N P E D E
UniRef90_UPI000418DE22 D Y C V K F T A L D A K S L G F E T F L I E D A T R A V N L S P S D G K D
UniRef90_X7D3J9 N L C V E S H L R E F L E R G F E V V V V R D A I A G P K L P D G D G
UniRef90_UPI00047D5082 D F C V A A T V R S A I A R G L G V I V V S D A H S T L D S T D E T A
UniRef90_H6N1R7 H M G C M I S A T D A F M S D V A P F F V V D A M G D F S R D E
UniRef90_U3U180 N V C V E S T L R D G F F L E Y F G V V L A D A T H Q A G P
UniRef90_J0B7U3 H I G C M S T A L E A F M Q D V Q P F L A I D G V A D F S L E E
UniRef90_A3VY05 N L C T E S H M R E L L E Q G F E V A V I K D A T A A A M L P E G D G
UniRef90_V4TGV9 D Q C V E T T A R D A F L R G F R V F F S T D A T A T S D L
UniRef90_G0LG26 N V C V L H T A G S A G L R D Y R P V L I E D A I G A I E P N H
UniRef90_W1IUS4 S V G I Q A T G I D A F S H N I H P F V V A D A I A D F T Q A G
UniRef90_S3IAR0 H T C I E A T V R Y A A E L G Y D V T V V K D A V A D Y S P
UniRef90_C6L147 S G C V R A T A V D A I Q T G F R P I V V E D A V G D R W
UniRef90_D9TCJ8 D A C I R S T L H G A F T R G Y D A T L V A D A H T T E D L S A Y G A A Q V I A
UniRef90_G2NUE6 S G C V R A T A V D A V Q S G L S V L V P R E C V G D R A
UniRef90_U3QTU5 N L C V E S H L R D L L E Q G F E V A V V R D A V A G P K V P E G D G
UniRef90_H8YWL2 D Q C V S S T V R S L A D E S F N V I V L D D C C A A
UniRef90_F6IKP3 S G C V R A S A L D A L C H G F V P L V V A D A C A D R D P R P H E G G T
UniRef90_D9VSL8 S I G V E S T A R A A W E H S Y G L V F A E D A T A D L D
UniRef90_A7F6Y2 N L C V E S T V R D A W M Y G F Q S L I V Q D A T D T L S E K E H
UniRef90_W8X2R0 S G C V R G T A V D A V M G F R P I I V A E A V G D R S
UniRef90_A3UIQ3 N L C T E S H M R E L I E Q G F E V L V V T D A T A A A Q V P G Y D G
UniRef90_UPI000361FB1D S A V V L S T L W R A V D L D F G L T V L A D A C L D T D P
UniRef90_D0D2T2 D Q C V E S A I R A D A C D L G Y L V T E V T D A C L T Y T
UniRef90_R5IR50 D I C V V S N A L T L K A K Y P E A A I S V D A S C C A G V T
UniRef90_C1DU94 D F C V K N T A I L G G L N L G Y Q V F L L V D A I K S V F P E
UniRef90_A7MT05 H I G C L Q T A A E A F M T D I Q A F M V S D A V A D F S S D D
UniRef90_E7RUE4 H I G C M I T A V E A F M K D I Q P F M V G D A V A D F S
UniRef90_U5DLY6 D Q C V L V T L Q D A N F L G Y D C I F L A D C S A T T S P E F C
UniRef90_E6PK35 E V C V H S T L R A A V D L G Y R C R L A G D A C A S A Y P A L H H A A L D
UniRef90_D2NR08 H I G C L T T A L E A F M R D I Q P F M V A D A L A D F S E G E
UniRef90_F1ZB59 D Q C V L C T L Q D A S F R G Y D C L L L E D C A A T T S P E Y C A
UniRef90_UPI0003455038 H I G C L L T A A D A F M R D V Q P F F V A D A M A D F T A E D H H F A V R Y A
UniRef90_A0R0G6 H T C V E A T V R Y G A E L G Y Q V T L V R D A T A D Y S V
UniRef90_UPI0003060E78 S I G V E S T A R Q A W E L G Y N V T L P I D A M T D L N I
UniRef90_R2SGU4 S N G V Y A T A L D A F Q H G Y H V L I V A D G C G D R D
UniRef90_A0A059DXL4 D C C V D Q T A R S A F H H N F N V V V S D A C A A Y E
UniRef90_E6QQH9 S I G V E S T A R S A Y E L G F N V T F A I D A M T D R N P
UniRef90_F0IFS3 D Y C V E Y F S M M D A L S L G Y K V F L H E H C T R A I N K E S F E Q Q K R E L
UniRef90_UPI000464B0E4 E V C V H T T T R E A N D R G Y E C L V V S D C V G S Y F P E F H R I G L
UniRef90_Q2FQS4 P N C I R T T V I D A M A F N Y E T L L V D D A T G A Q T
UniRef90_B7LQ23 D Y C V K F T V L D A L Q L G Y R V N V I T D G C R G V N I N P Q D S A Q A F M
UniRef90_A0A022Q7M4 P N C V L R Q T V F D A V A L D Y K V T V I V D A T A A T P D I H I A N V V D M
UniRef90_K2NTB2 T I G C D T T A R E A Y Q H G Y N V I A V E D A M T D F N
UniRef90_C8WZU0 P V C V R Y C S V F D A I A L D Y R V T L I A D G T S A Q T
UniRef90_E0MRQ1 N M S V E H T A R T G A D K G Y T V I V P E D A C S T M N
UniRef90_X0QC06 N V C V E S T L R D G F F L E Y F G V L L D D A C
UniRef90_UPI0004756EC4 E M C V R A T V I E A A L D Q D Y G V V L P H D A H A T Y D I P P A P G D T D P V
UniRef90_S7JN99 Q N C V T H T A L S P A S D Y S V R V L S D A C S A P D
UniRef90_UPI000368DA9 S G C V R A T V V D S H S N F R T I V P E E C V A G V T T A T
UniRef90_G0PKM5 H V C V L Q T T Y D L L E R G H N V H V V V D A V S R S H T D R H F A F K Q M
UniRef90_C5NU54 E M C V A A T A R T A L V R G H R V V L P H D A H A T Y D I P A A P G D T V P A
UniRef90_J2LPL5 D Q C V L C T L Q D A N F R G Y D C L L L E D C S A T T S P D Y C
UniRef90_E5S4H1 N L C C E T T T R S A F V R D F R V F F L S D G T A T V S E M H N A S L L N I
UniRef90_UPI000377AD0C N I C V F F T A N D A Y M R E F N V Y V P K D A T A S E R P E F N E Y A L K M M
UniRef90_R7EM90 D I C V I S N A L L K A V L P E I D I S V D A S C C A G V T
UniRef90_C2VMH1 N I C I L F T A N D A H K M R N Y T L Y V P Q D C I A S N H D Q D N L H A
UniRef90_J3IG31 D V C V L T T V F D A F A L G Y H I R L V S D A C T T T T Q A G H Y S A L L I M
UniRef90_L0DB14 N I G V E S T A R Q A Y E Y G Y E V V I A E D A T T S R S
UniRef90_Q0AXN0 H V C V F Q T V R D L L E S G F N V H L V R D A V C S R F
UniRef90_K2Q770 D Y C V L S S A L D S Q K Q G F N T F V I K D A V R A V N L K E G D G D R
UniRef90_UPI00037E2D7B Q N C V T H T A I L S K T A E K Y Q V E I I G D A C A T V T N
UniRef90_I0JW20 H L C I R H T A A D A F F L N Y H T I V P V D C V C A F S P Q E
UniRef90_UPI000469F8F1 H V G V L I S T V D A Y S N D I Q P F L V A D A I A D F S K E H
UniRef90_ROMKX6 N L G V E S T A R E A F Q L G Y Q Q I V I T D A M A A F S
UniRef90_M9VXA1 D Y C V K F T V L D A L N L G Y T Q V N V I T D G C R G V N I N P Q D S A H A F M
UniRef90_A3JB31 N L C V E S H L R D L L E R G F E V A V V K D A T A A K H P D M G D G A
UniRef90_J4Z479 S G C V R A S V V D A M Q A G F R P L V V S D C C G D R
UniRef90_A9LGR5 H V C V L Q S V L D M Q S Q G F N V F V P V D A I G S R Y P V D
UniRef90_Q0SF00 P N C P R A T I F D A S E R D Y K V L V A D A I S G V D
UniRef90_E4PJK1 S G C V R A T A L D S L Q H N Y R T L I P R E A V G D R D P
UniRef90_C5Y017 P N C V I R Q T V F D A V A L D Y K V T V I I D A T A A A N P
UniRef90_UPI0003A73FB5 D V C V H Y T F A D G H Q G D Y Y C R V V G D C V G G S S T D A H D A S L K A M
UniRef90_A2C9D1 H V C V L Q T A L D L S N D Y Q V F V A V D A I L G S R R I D Y
UniRef90_UPI00031469A8 N T C I E S T A R F A M E L G Y H V T L A R D A T A F F S H
UniRef90_G9MSA2 N A C V E S T A R Y A Y D L G Y H V T L L S D A T A S F T Q

UniRef90_UPI0003727C34
UniRef90_B1HWV6
UniRef90_UPI0003B2ED06
UniRef90_A8KYN9
UniRef90_B1M6B8
UniRef90_F6B312
UniRef90_C1E136
UniRef90_A0A022MLZ8
UniRef90_A8TM29
UniRef90_W2S1U8
UniRef90_UPI00047C3498
UniRef90_X1NL16
UniRef90_M5G9T4
UniRef90_A6NT71
UniRef90_U2FUH4
UniRef90_D7W121
UniRef90_F0LJ92
UniRef90_UPI000418DE22
UniRef90_X7D3J9
UniRef90_UPI00047D5082
UniRef90_H6N1R7
UniRef90_U3U180
UniRef90_J0B7U3
UniRef90_A3VY05
UniRef90_V4TGV9
UniRef90_G0LG26
UniRef90_W1IUS4
UniRef90_S3IAR0
UniRef90_C6L147
UniRef90_D9TCJ8
UniRef90_G2NUE6
UniRef90_U3QTU5
UniRef90_H8YWL2
UniRef90_F6IKP3
UniRef90_D9VSL8
UniRef90_A7F6Y2
UniRef90_W8X2R0
UniRef90_A3UIQ3
UniRef90_UPI000361FB1D
UniRef90_D0D2T2
UniRef90_R5IR50
UniRef90_C1DU94
UniRef90_A7MT05
UniRef90_E7RUE4
UniRef90_U5DLY6
UniRef90_E6PK35
UniRef90_D2NR08
UniRef90_F1ZB59
UniRef90_UPI0003455038
UniRef90_A0R0G6
UniRef90_UPI0003060E78
UniRef90_R2SGU4
UniRef90_A0A059DXL4
UniRef90_E6QQH9
UniRef90_F0IFS3
UniRef90_UPI000464B0E4
UniRef90_Q2FQS4
UniRef90_B7LQ23
UniRef90_A0A022Q7M4
UniRef90_K2NTB2
UniRef90_C8WZU0
UniRef90_E0MRQ1
UniRef90_X0QC06
UniRef90_UPI0004756EC4
UniRef90_S7JN99
UniRef90_UPI000368DA9
UniRef90_G0PKM5
UniRef90_C5NU54
UniRef90_J2LPL5
UniRef90_E5S4H1
UniRef90_UPI000377AD0C
UniRef90_R7EM90
UniRef90_C2VMH1
UniRef90_J3IG31
UniRef90_L0DB14
UniRef90_Q0AXN0
UniRef90_K2Q770
UniRef90_UPI00037E2D7B
UniRef90_I0JW20
UniRef90_UPI000469F8F1
UniRef90_ROMKX6
UniRef90_M9VXA1
UniRef90_A3JB31
UniRef90_J4Z479
UniRef90_A9LGR5
UniRef90_Q0SF00
UniRef90_E4PJK1
UniRef90_C5Y017
UniRef90_UPI0003A73FB5
UniRef90_A2C9D1
UniRef90_UPI00031469A8
UniRef90_G9MSA2

170 180 190
H D M A L D Y V A T R C G V T T T S A A V R A
P Q I I I Q H H E C I W H N R F V R I Q P V A
E A P H R A N L Y D I N Q K Y G D V T T A D D I I A W I E G L P A
H R A M V T M Q G G V F G A V A T S A A V
E S L H R A A L A N I E T F F G W V S D V A A F E S A L G
R Y L Q R E A L I S I E D L F
H M Q H G V F G A T A T C D A V C A A L D A L P
G Q I H A A A L A T V G D L Y G V V V A S G E
F G G Y C R T V T L D A M L A E I A A T A
E V S L N M F C S Y D G L F G Y V A S S N E L V A
R E A A L W Q M E D K G V V M T E S T N I L R T V A E V Q G A
E Q T L G A K L T S L G V R R A K P A K F E P L E A V L S G E T A
L D A W Q D G I R T L Q G N G V T L K A T N V V L A E L G G
H D F G L N L Q V N Y A E V L P G Q D I L D L I A R E G G
V R E A A C T L V R Q I Y G F T T T V D A F V D A
E E V H R V L M N K V F P R Q A D I T A A S D W I K
E K A L K E L E D Q G A K I I T
A I E E M R K S G I Q I C T Y K E F L
Y G S A L V D F R Y I A N G L L T T D E V V K K L E G
R Q I I D R H N S E F A R D G A A V L T T K
H R M A A E Y I G K R A G R V V R A A Q V L R A V Q V A A
S F A Q Q A L F N I E T F G W V S D T D T F C E A L K S
H H M A I R H V S Q R C G V S L T C A E I Q D S L Q S
Y L A A L I N F R Y M A N A V W S T E E V V A M L G
E L H E A T L K N L A Y G F A Y L F D C E R L E A G L
H E Y A L D H A E W L F G E V C S R A D I
H Q N A V D Y M A D N C A R V L T S A D V V
E M M H A A L E V N L P S Y A S A I V D T S E A I Q A I A N K A A
E D A H R Q S L A D L A A K Y A D L A T V E T A V G R L K Q R Q
H T N L Y W S F Q T A P G R T A G T V E A A E V
A G P H E A N L F D I Q A K Y G D V I H L E E A I A Y L S A L P V A A
Y H A A L V N F R F I A N A L W D T D E T V R R L G S V R A A A
D E L H R A E L T I N R L Y C H V M Q S D E L L G M M G
N L F D I R A K I G E V I D A E T A L D V I R A A
A D S H A H T F G K I F P R I G R V S S T R E I I A A L D P L S
E A A H R Q S L F D L Q A K Y C D V V A L E E A L D Y L R T I R P R A
Y A A A M T N F R M I A N H V G D T D E T V A M T A A
E V H R F L V E R L F P Q W A E V V T V E D W V R A V A
Q E R H D H S L R T I S G Y C R Q V T T A Q L L E E L G A A
P E K H K A A L E T M K S C Q I D V
H D M A L N Y V A G R C G Y V L D K Q Q L L S Q I N R A
E E E H R M A L K Y V A T R C G V V T S C Q E I
W Q A T Q Y N I N Q C F G F V S D S Q R L S E A I A T A K L A
M V A V E G G I F G S V H A S A A L A D A I D T M P R E A
H R T A C E Y A S G R C A R V L N T A D V L A D L H A A E G
Q A A A L Y N I R Q C F G F S T M G R Q L C E R L A T A P
A R R C G A A L A S
E E M R A A L E V T L P N Y A S A I A S T D E V I H A I A G M
N A H R N S V N I L F P R L S E T G T T Q D L L G L I N S
Q E L H Q L F I E K M F P K M A R V R S T K E I L Q A I K E A
E I L H V G A L M A L E K N C A L L A D T Q T V L D T I E G
D A H F N S I T R I F P R L G E T G T T R E I I D L L D S T R A
H T Y P N F T L
E M I K A Q G G I F G W V A D T S A V I P A L S N L T T T A
K E I H E A N V L D M K N I G V K I L H A A A D V
E M V A G A T L Y T L A D
T N I G V A T
A D L H T G I V F G I F K R L G R V R S T E E V L E M I K
E A I A E A N R F D M A N I G T R C L N A A D Y L S Q L A G A
A E W H R A S I E F G L T S V S T V T N V D A V I A A L
P A V L A A R T A E W
A M V H G T A L R A L S D R
H E V A L F D M D L R Y A D V T P L D D V V S A L E
E Q A G A V L T T S E I L A L L G G
A M S S R A A E W A L G D E
R D A T L Y N V Q Q C F G F V V Q A R E L Q Q Q L E R
S Y E R N S I Y Y L
E T V L G A D I R S V C E L I N V L K Q Q A
P E T H R A A L T A M K A C Q V N V I
L K I M E T T L K A N I V P S S Q I
A
A E M H A F S V G E I L P L L G R V A P S S A I
D E N Y R N A L A L M R D M G A I I T N T E T V V F D L L Q E A G T S
L L H A L L E G A V K T R M T V L N T A E A F A
Q E S G L E Y L H K F Y G E L S T V S I I E N W K K
H W M A I E Y A A S R C A M V V T T D E V V
A E Q H E S T L R F I F P R I G E T R T E E F L T Q V
E M A A G A T L Y T L D D W L E
Y E A A M V N F R Y I A S D V L S T D D A T S A I S N M
L G P H D A N L F D M A Q K Y A A V M P L A Q A I S D T D A L A Q T
H E T A L C R L D T S G A T L V T T E M V L F E L C E R S G T
A R H L I E A G R I G V L H A E T D E I V E A L Q
D A H E A N L R D L G I K Y A D V M S L S E L L A F L
E I L H L A N I R D M K N I G V E T P T L E E W
E Y L Q T G A V V T A D Q I T A E L G R L Q V A A
E F A L R R M E S V G V T L T T E S V M F E W C H R A
E M M H A A H E L N G P T F A H A I V T T T E L I A A L P E A
E Q K L A A T E V S W P L F A S K V V T V E E Y V A S L

UniRef90_UPI0004272C89
UniRef90_S4XMW8
UniRef90_W9H772
UniRef90_UPI0004732B52
UniRef90_C2Z957
UniRef90_F5XQV4
UniRef90_C2RNL7
UniRef90_F0RQU6
UniRef90_M5R843
UniRef90_E4N0J3
UniRef90_S0AU22
UniRef90_UPI0003790F7A
UniRef90_I3TJU1
UniRef90_G2SKY4
UniRef90_UPI0003A7C1EE
UniRef90_K8W5Z8
UniRef90_K7ZFX6
UniRef90_UPI0004689999
UniRef90_K0K0I3
UniRef90_A0A023X7M2
UniRef90_R5YL42
UniRef90_J0JWM9
UniRef90_Q0BF28
UniRef90_F9DRT1
UniRef90_X5QPW7
UniRef90_E6V1E0
UniRef90_G2THG6
UniRef90_G2FLS4
UniRef90_D0SP19
UniRef90_E1YCA0
UniRef90_J8RTY3
UniRef90_Q8EU64
UniRef90_B2HMI1
UniRef90_Q8L175
UniRef90_UPI0002DFBA38
UniRef90_UPI0002627C8E
UniRef90_UPI000237B445
UniRef90_G4CSN6
UniRef90_S4YJ95
UniRef90_K7N105
UniRef90_UPI00034A0762
UniRef90_H1RXD8
UniRef90_U7R508
UniRef90_UPI0003706F32
UniRef90_S6AE43
UniRef90_A3V5S1
UniRef90_E0SBC4
UniRef90_U1Y6W9
UniRef90_UPI00036B2EFF
UniRef90_UPI0004764F7D
UniRef90_R6FMW2
UniRef90_UPI000255728E
UniRef90_UPI000225B8F1
UniRef90_G7UM09
UniRef90_E9EYC4
UniRef90_A0A024PEQ5
UniRef90_M2Q6L7
UniRef90_UPI000373F4AF
UniRef90_UPI00036DFE6D
UniRef90_UPI0004717034
UniRef90_UPI00036F2AA2
UniRef90_Q2BGL8
UniRef90_A0A024PZ01
UniRef90_A0A023D211
UniRef90_D2TZA6
UniRef90_A0A059DMM1
UniRef90_D9VIF4
UniRef90_UPI0003774962
UniRef90_UPI000368A05F
UniRef90_UPI0003704F84
UniRef90_B0PB60
UniRef90_D2C0U2
UniRef90_L8EF01
UniRef90_B9DID2
UniRef90_UPI00021935F1
UniRef90_V9RMP3
UniRef90_F8G0M0
UniRef90_W1IKS5
UniRef90_X0PWC1
UniRef90_B0UKV6
UniRef90_L0LG32
UniRef90_Q31BP8
UniRef90_S9QIF8
UniRef90_G2S9E9
UniRef90_G0U214
UniRef90_F9PQA3
UniRef90_K0PZB6
UniRef90_K0CFT3
UniRef90_B9NT89
UniRef90_UPI0003742916
UniRef90_UPI000371A002
UniRef90_A0A024JTH1

1 10 20 30 40

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

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

UniRef90_UPI0004272C89 A V D S C R K G M S I A W V N W G N R L D T A N L P P S L L Y A F K G G K E K A
UniRef90_S4XMW8 L V R A A R A Q G R A V V W V T S A Y H T G S A C C A R G T W G A E L F P A L A
UniRef90_W9H772 L L S A A A E L A V P V L A T E R Q Y S K G L G H T I E P V I A E
UniRef90_UPI0004732B52 Y I A L F V R H A R P V L L A T R D W H P Q Q H C S F R Q Q G G I W F H C I J A G
UniRef90_C2Z957 L A H T A K F F D L P V I L I T T S F E D G P N G P L M Q E L I E L F P N A P K I
UniRef90_F5XQV4 L A S A A R S A G A T I F H A P I T F V J A G Y H A F V K D T W G A A I V D D L A
UniRef90_C2RNL7 L I H K A R T V Q A P I F Y A M K F N G K T G S L L E R G N P E W A I H E T S L
UniRef90_F0RQU6 L A D A F H A A G L P V V W V R A V G L P P L P P E K V P G D F S E L H P S L P
UniRef90_M5R843 L K R H A F K K N W P I I Y L N D H Y G L W K A D M T K A V M E T C P I L V E Q M A
UniRef90_E4N0J3 L R R R A D A L G V T P V I A Y T A Q P G G M W G P G M R T T E E D R Q V V P E L A
UniRef90_S0AU22 A L K Q L K G N L P L I F A K D S H I K N D P E F E V W G E H A T D G T W G S
UniRef90_UPI0003790F7A L A Q R W H P A G H A S F A S S H P G S K P F D T V Q L P Y G P Q V L W P D H C
UniRef90_I3TJU1 L L D G F R A A G L R P V F H T R E C H L P D L S D C P P G E P G A D I I P E L A
UniRef90_G2SKY4 A Y R R A R A L R M P V I F S K A V R E R S G I D L I R D T W D A D I I E A L A Q
UniRef90_UPI0003A7C1EE L K Q K A H D A N I P V V F L T Q H D G A K G H R L E K D T A G W E L R P E I A
UniRef90_K8W5Z8 L R Q Y C K K Y N I P V Y Y T A Q P G N D M W G P G L T H S P E K Q K V V D L L T
UniRef90_K7ZFX6 L K V R L R K H R I P V I Y L N D N F G Q W R S D W Q S D C L G K D I A E L L H
UniRef90_UPI0004689999 L Q R G F R A A G S E V I F Y T T I E S Q T L D G R D R K G S W E G A K V D D E I L A
UniRef90_K0K0J3 L V D A A R A A G V T V M H A P I T F A E G Y H A F V K G S W G A I V D D E L A
UniRef90_A0A023X7M2 A I E A A R G F G M W V V W V Y W H N R R D L R N L G A P T L Y S F K H D P H Q
UniRef90_R5YL42 L L D K K D Y D N L F T R D T H Y E N Y D T Q E G K N L P V K H C I K N T E H G
UniRef90_J0JWM9 I A T S L K A A G G T I F L V T V G F S P D Y A D A D N Q R A D E A L I P E L A
UniRef90_Q0BF28 L I D F A R A A G M P V Y Y T A Q P A D M W G P G L T A Q P S R A A I C D A L A
UniRef90_F9DRT1 L I K V C R Q K K I P I Y T R H N R G D G P L H T D S N S I E I N D L R G
UniRef90_X5QPW7 L I E W A R R S G R K V A F L R H D G L Q G D P L A P G E P G W P V W P A L G
UniRef90_E6V1E0 A L A A W R K A G G L V V H T R E A H K P D L S D C P P G E P G N Q I T D G L A
UniRef90_G2THG6 A I E S A R A H H I E V I F V R H D G F S K G Y P E S G L T K G T N G Y E I H P S V Q
UniRef90_G2FLS4 I I D T A R K N I E V I V R H D D G P E S G L T K G T N G Y E I F E K F K
UniRef90_D0SP19 L A Q K W H P D Q H I S F A D N H P N K K P F E T I E L D Y G C Q V L W P K H C
UniRef90_E1YCA0 W I E A A V T I G V H V Y A S R D W H P L G H P S F Q D N S W P H C I H D S H G
UniRef90_J8RTY3 D A P F F A P G S Q G A A I Q A K V E
UniRef90_Q8EU64 L R S F A K E N N L P I I Y V N D H Y G L W Q A D F N K V T D Y C T I I D K I K
UniRef90_B2HM11 M L D G F R G A D V P P I I W L N W G T R S D R A N L P P N V L H A Y I L D G L V
UniRef90_Q8L175 L L A D A R D A D V P P I I F S T V A Y D A D N S W L V E G S E W V E L D E R L G
UniRef90_UPI0002DFBA38 L L G A A R A A G V P V L Y T A I A F P P G V P H L R S G T P A V Q I D Q A V A
UniRef90_UPI0002627C8E V L D A A R E K N V P I E H S R W A D K I P L D E L K L G E D W L D I D E R L N
UniRef90_UPI000237B445 L V R A A A G G T V T W V L P A V I T D R T P A A E E F Y G P E A Q R V W R E F T I
UniRef90_G4CSN6 K I K Q A K A D G W L V V V Q H F I P G D D A P L F R K G S S G A N I H T S V A
UniRef90_S4YJ95 A I A A C V A R G E P V V A C Q D W H P A N H R S F A V N Q V W P V H C V I Q E
UniRef90_C7N105 I V K A A R A K G V P V V I F S D D N H L P E V D L E L T L W G E H G M V D F E D
UniRef90_UPI00034A0762 L R E R C A A H G V P V Y Y T A Q P G M W G P G M R S D P R D R E I A E E L A
UniRef90_H1RXD8 L L S T A R E H A W P V A H S R I V Y A P G M L G L K E H S P A S A I V D V L A
UniRef90_U7R508 L I N Y A R C Q S D W L V V Y A N D A H R T N D R E M D I W G R H A L A G T P I
UniRef90_UPI0003706F32 L I G Q A Q A G Y R H V V A T R D H H I D P G D H F S A H P D Y V D S W P R H C
UniRef90_S6AE43 L D R A V A R A R G L P V E L A P H R R W M H G H H F A R G E W G G E W H P D F A
UniRef90_A3V5S1 L P A R I A P R R D A L V E A A G G I Y S A Q F T L V P G R D G A P L I S A H L
UniRef90_E0SBC4 A I A A C Q Q A G V T I I A C Q D W H P A D H R S F A V N S G T Q Q I W W P V H
UniRef90_U1Y6W9 I T E E A T A G A Y V V H S L A Q R D P Y H P E T K L F P P H N I E D I L Y R K Y K
UniRef90_UPI00036B2EFF I I G A S R H A G P V V H S H A Q R G D F W P G V A D D P E A L A P Q E V A
UniRef90_UPI0004764F7D L R D R C D E L G M P I A Y T A Q P G G M W G P G M R V D P V D R E V V I E P L T
UniRef90_R6FMW2 K I E E Y R K M G G Q I V I F T M D T H D R H Y M E T Q E G R H L P V E H C L D G
UniRef90_UPI000255728E V R A Q C K A L G I P V V Y T A Q P G D M W G P G I T Q H P E R Q A V I A G L A
UniRef90_UPI000225B8F1 V I K V I K V Q N Y P V I F I K H Y D T N I E S S L H K D S Q G S E L Y D G L S
UniRef90_G7UM09 L I R Q A D I T L F I Q H R E G N M I E G S H A F A L L P E I A
UniRef90_E9EYC4 V L R A A R A Y N V L I T I H A H N H S A H P A Y V F P D G A I G V A P M A V I A
UniRef90_A0A024PEQ5 F K K E F K K Q G F P V I Y V W Q D N V S D L L K E C K Q G R G K P I V I E R M I
UniRef90_M2Q6L7 L A R K A R A H G V P V I A L R Q V G A P G T D F D P A S P G T R L S T P A L L G
UniRef90_UPI000373F4AF L R A A D A A G V P V I Y V N D N N G Q W H E T L A K D T P G R A V S Q A L R
UniRef90_UPI00036DFE6D M L E F F R G E G I A V V H L V L G S R Y Q R D I W W S G N P D F A V R D E L A
UniRef90_UPI0004717034 A L K Q A Q Q N S V P V I A T Q D W H P W P D H C I Q G S E G A E F H P Q L N A
UniRef90_UPI00036F2AA2 L A T V C R E Q G I P V I Y T R Q V N R A D G I G L S S M E P I T N I F P E I A
UniRef90_Q2BGL8 L T E I A V K L N L P V L T S E Q Y P Q G L G H T
UniRef90_A0A024PZ01 L L D D W R G G E G C L V H I R R F P H K P H S S C R T E N H P S A E A M P C A V
UniRef90_A0A023D211 L L A T A R R L G W K T A H S R I L V F A D D G A D L T E N N P L S A E I V P E L T
UniRef90_D2TZA6 V I T Y C Q Q H D I A I T A S Q D W H P A D H L S F A V N S A T K V G T E G K L
UniRef90_A0A059DMM1 L E K V A D E T G M P V E V S P H F Y F E H D H K W E F G A D W L D R Y K P Y L
UniRef90_D9VIF4 I L T L Y R A D L P I V H V T T G A Q R L D R G D L P H I R R R F E D S T G
UniRef90_UPI0003774962 L K Q K M K N A G C P I I Y V N D H Y H L W R I T Y C T N E H S E E I I K K I T
UniRef90_UPI000368A05F A V E R A R A D G V E V I E V R F V J A G D P G Y Q G P S W N T W G A E F C E V I P
UniRef90_UPI0003704F84 A M T T A N K E G I P V I L I Q H I A D P A A P F F N K G X G E D L P P E I L
UniRef90_B0PB60 L F E A G R A A N I P I V Y V C D S H H P W K E H A M E G T W G A E I V K E L A
UniRef90_D2C0U2 A I A A C K S A G V M V V A S Q D W H P A D H R S F A V N S G T H W V V R K G M
UniRef90_L8EF01 L K E Q A A R L G I P V L Y T A Q P G D F W G P G L P A N D S H A A I A D A V A
UniRef90_B9DID2 A I E T A R K A G L P V I F V R V A F S K N F Q T M T T E D D S T Q I I S T L N
UniRef90_UPI00021935F1 L A A A L K N T P A Q I V K N D G T E G M N P V T D A P H H Q V A K P L P D A T
UniRef90_V9RMP3 L C D A V R A A G C T V V W V Q T A S D N A D A F W S H H G V M L T P E R S A
UniRef90_F8G0M0 I C D L A R A L E F P V I F T T I A Y H P G E I P L L Y G S R L V E I D M A T G
UniRef90_W1K5S L T A Y S R K N A G P I V Y T A Q R G D M W G K G M S R K D E T A I V K E L A
UniRef90_X0PWC1 V I K A I R A A G G H V F A P I A A D P K L R A A M H A D S A T T A I V D R V A
UniRef90_B0UKV6 L L A A R E A G A P V V H V A H R G R D G G L F D R G G P G G A I V P E A L
UniRef90_L0LG32 I A N K L K A D G G T T V E V T V G F S A D Y A D T V N Q P T D E S F P A E M A
UniRef90_Q31BP8 L I N A Y Q I L E E N I F V S E Q N P L K L G V I T P E L P K V R
UniRef90_S9QIF8 A I D K A R E V G I P V V F I Q T D G D E D V H C L D S N P L T A F A E E L G
UniRef90_G2S9E9 L I A W C K T R G D A V V A S Q D W H P A N H G S F A S Q H N V G T F W P D H C
UniRef90_G0U214 I S T Y T F R A V V A S K D W H P L N H I S F R N E D G T G T W P D H C
UniRef90_F9PQA3 L T E D F K C K N M P I I F T K H L D E N I E S P L Y K N C E G I E I I D N L D
UniRef90_K0PZB6 L L D N L R R L N G A V A A D I Q V A L V P H R R W E P G D Y E D W H P N P T
UniRef90_K0CFT3 L L E A A R H S G I P V I H T N I R Y R G M R A M V E G N P D A E F C P Q V A
UniRef90_B9NT89 L T Q D W H P T G H S S F A S S H P G K A P F D M I Q M P Y G P Q V L W P D H C
UniRef90_UPI0003742916 L T A R A R S E R V P V I Y V N D N F G E W R S H H T L A G K N A E I V E P V L
UniRef90_UPI000371A002 A I A T A R S A R L P V I Y V N D N F R A G Y P E M L I G E R D T E I L P D I T
UniRef90_A0A024JTH1 L L D A A K L A G L T V A L S P H H F Y P T D S Q W R F G D P L E Q F M Q H H I

UniRef90_UPI0004272C89 Q Q P E D W W I D K Y R V S G F P G T 100 L D Q T L R A N G I N T L F F A G V N T
UniRef90_S4XMW8 P V R A D W H V E K R W Y S A F R D T D L R A R L R E E A G G I V T A V I L C G G V A T T
UniRef90_W9H772 L L Q E G A V L I E K I N F S A A R E P L F L E R A R R A S G D S R A R L F V F T G G L A T E T
UniRef90_UPI0004732B52 S K G A E P A A Q Q D A Y S A F E G T V L A A Q L R A R A G R D Q L V V T T G G L A T E T
UniRef90_C2Z957 A R P G Q T I A Q Q D A Y S A F E G T V L A A Q L R A R A G R D Q L V V T T G G L A T E T
UniRef90_F5XQV4 P Q P G D I V I E G K R G D T F A S T N L D F L L N K R D I E H I V I L V G G V L Q S T
UniRef90_C2RNL7 Q Q E L N K R D I E H I V I L V G G V L Q S T
UniRef90_F0RQU6 V K E G D L V A D K F G T S A L V V P E V R A F L Q E R G V V K G D V V V N G L V A T T
UniRef90_M5R843 P S K D D Y F L I K P K H S A F Y G T A L E T L L N E L G G R D Q L V L V T G G V L A G A
UniRef90_E4N0J3 P A D G D W F E T K W R Y S A F F N T E L L A R M R A A G R D Q L V V T T G G V L A G A
UniRef90_S0AU22 K P F P D Y I L K K R H Y D A F F D T D L D S L L R A S G I T D N I Y I F G G I S T
UniRef90_UPI0003790F7A L Q H A D L R L P H A R L V I R K G C N P Q I Y L R E C G I S D T L Y L V G L A L
UniRef90_I3TJU1 P L P G E V V I D K P G K G A F H A T S L G D E L A R R R G I S H L V I F A G V L A T
UniRef90_G2SKY4 P A S D D L I V E K R R D S I F Q D T E L E L W L R A M R V I D T L V F T G G L D T T
UniRef90_UPI0003A7C1EE A T G N D I L V H K K Y S D S F L E R S L E A D R L K D H G R D H L I T T G G C M T S
UniRef90_K8W5Z8 P D E N D I L V M T K W R Y S A F F H E R S S L E Q M L K D T G R D Q L V V T T G G V L A G
UniRef90_K7ZFX6 P A D D D F F I L K P R H S G F F N T N L D V L L K E L G V V Q K L I I T G V V A G
UniRef90_UPI0004689999 P S E N E I V I P K T S S S V F I S T N L D Y V L R N S K G I S V E G T I V V I A G G F L T
UniRef90_K0K013 P R E G D I V I E G K R G D T F A S T N L D F I L R N S K G I S V E G T I V V I A G G F L T
UniRef90_A0A023X7M2 R E E E D I H I E K V R M S G F Y G T H L D Q V L R T Q G G I N T L F F T G V N T T
UniRef90_R5YL42 W Q I H D I L N T D G A E I D K E S F G F N G W K G D N F D E V I L V G L V A T
UniRef90_J0JWM9 A L A A D V R I V K H H W S A F Y G T E M D L Q L R R R G I S H L V I F A G V L A T
UniRef90_Q0BF28 P A S G D T V L D K W R Y S A F F R R S P L E T C L R E Q A R D Q L A I C G I Y A
UniRef90_F9DRT1 N Q P G D I V D K Y R Y S G F H E S S L D L M L R S G L N K N K N I V G G V L A G
UniRef90_X5QPW7 Q A G D E P T F A K R V G D A F S N A L A E W V V G G A G E V V L I G A Q T
UniRef90_E6V1E0 P I D G E L V I D K P G K G M F Y A T G L H K V L Q Q R G I T H L L F G G V I T T
UniRef90_G2THG6 P L E N E P V V T K Y R I L S A F S G S G L E M L L K A Q E I D T L I L S G I T T
UniRef90_G2FLS4 P S N Q E R I V F D K Q V N S A F K E T G L L E Y L I S Q G E K E I I V I V G L I Q T
UniRef90_D0SP19 H Q N I D S Y S A F M E A D R K T P T G L N G Y L R E H Q I T N T V F I V G I A T E
UniRef90_E1YCA0 A R F H P V R F D Q D Q N S A F D Q T G L S F K L K K D G I K R A L T I V S G L A E S
UniRef90_J8RTY3 P Q A G E P V V L K H K V N A F I G T D L E H T L D R H G V E L T I V I G S L A M S
UniRef90_Q8EU64 P D E D D Y F L I K P Q H S A F F Q T P L H S L L T E L E R N H V L A G T A G
UniRef90_B2HMI1 V D D I D H V N K H R M S G F W D T E L D S L L R N L G V D T H L F L C G C N T V
UniRef90_Q8L175 R R E N E M L L V K K Y A S C F F G T D L A A R L I S R G V D T V I L L G C T T
UniRef90_UPI0002DFBA38 P R P D E P V L T K A S A S G F F G T G L A S A L G S L R V D T V L V C G G A T T
UniRef90_UPI0002627C8E P Q K E E I V F V K K T A S C F F N G R P L Q Y W L T T H G V D T L V I V G I A T
UniRef90_UPI000237B445 H D D V L V E N S A P S A F F P G R C A L P E L L V R R G I D T V L I T G T V T
UniRef90_G4CSN6 G L L A D A P L V E K V H A D S F N T D M G G L K K E G I T D L Y I C G M M T
UniRef90_S4YJ95 S H G A P L H P Q L H R N G H R A Q T A L D G W L R A Q G V D T H L A I M G L A T
UniRef90_C7N105 V Q P T D R I I P K R R Y N G F R Q T D L D I S L R E I I A V I G C D T
UniRef90_UPI00034A0762 P R P E D P V L T K W R Y S A F F R S D L L A R M R G M G R D Q L I V C G G V Y A
UniRef90_H1RXD8 P A P G E L V V R K T V P Y A F F G T N L A P W L T Q H G V C T L V I V A G C V T
UniRef90_U7R508 G A D R E I V S P K R F Y G A F D G T D L E D V F K E Y G V T E V V L T G G Q H T
UniRef90_UPI0003706F32 V A G T E G V G F H P N F A P A V A S G A V A A V F D K G A Y S A A Y S G F E G
UniRef90_S6AE43 P K E G D T I E A H W A S G F A N T D L D F R K Q K G I S H V I V I V G L L A
UniRef90_A3V5S1 Q K P A D F T I A E K V A Y S A F Y Q T R L E Y L R A M Q I E T L I V I G G I V T
UniRef90_E0SBC4 C V I G S P G A D F H P G L N Q Q A I N W Y D W L K A R D I T R L T I M G L A T
UniRef90_U1Y6W9 D R E N V L Y M D K T R Y S A F A G T E L E L K L R E R N L K D L Y I T G V C
UniRef90_UPI00036B2EFF P A P G D T V L T K W Y S A F F R S D L L E S L I R E D G R D Q L V I C G V Y A
UniRef90_UPI0004764F7D P R P S D W V F T K W R Y S A F F R S D L L E R M R E L G R D Q L V I C G V Y A
UniRef90_R6FMW2 Q D G W Q L Y G K I A G L K G E Q D L V F Y L H T H K E E Y G S V E F V G V Y T
UniRef90_UPI000255728E P D P D D T V L V K W R Y S A F Q R S P L E Q M L K E Q G R D Q L I I G G I Y A
UniRef90_UPI000225B8F1 D Y A E H I I E K E T P S A F Y K T D L A K L L E E L G V D Q L F I T G F N T
UniRef90_G7UM09 Q P Q N A Y V I T K T A C D S F W Q T T L A S L L A T L A T D F V I C G C A T
UniRef90_E9EYC4 P V A P E P V L V K D V N S A F I G T D L E A R L R A F A T A Q L V V L G L A S T
UniRef90_A0A024PEQ5 P D E D D Y F I I K P K H S G F F G T Q L S I L L D Q L G I T K N L I L T G V A G
UniRef90_M2Q6L7 L E P D D V V V D K T A T D S F H R T G A G L V D R G V D T V V L T G V L A T
UniRef90_UPI000373F4AF P R D D D Y F I I K P Q F S G F Y A T N L P V L L P Q L G V S R L I L T G V A A
UniRef90_UPI00036DFE6D P I E G E T V V R K T T N G G F N G S G L D D V L R R M G I D T L V V A G V V T
UniRef90_UPI0004717034 A A H E D H I V H K G T N G R A S T E L H S W L Q R H Q I D T L Y M M G L A T
UniRef90_UPI00036F2AA2 P H E D V V V D K Y R W S A F Y E T P L D L F L R N Q G I T D L I M A G F V T
UniRef90_Q2BGL8 I A P K D G F M E K T Y F S C M S E P E C N E K I N S I R P N Q V I V T G M E A
UniRef90_A0A024PZ01 P L P G E R V V T S H T D D A F V D T D L E A W L R A H G I T S H L V I V A G A T T
UniRef90_A0A023D211 P E P G E Y V V R K T V P S A F S G T P L A A W Y V A H G V R T I V V A G C V T
UniRef90_D2TZA6 N G L R Q I W W P V H C V Q H Q K G A E F H Y W L T Q N Q I K H L Y I M G L A T
UniRef90_A0A059DMM1 N N G K T V V T S P H K V R Y G P E T N D L V L Q L R K A G I S K V L L G G M S S
UniRef90_D9VIF4 P R P G E V V L N K V T R S A F T S T G L D S T L R S L Q V R S L L G G I A S
UniRef90_UPI0003774962 P A R D D Y I F I K P H Y S A F Y E T P L N S L L G H L K I E N L I L L G V A G
UniRef90_UPI000368A05F R P G E A V F T K Y A C F D A F L D P G L E R H L T G A G V E R L V L A G L Y T
UniRef90_UPI0003704F84 A L A P D A D I V I K T Y A D F E K T N D A V L Q E H G V T K L L V C G M M T
UniRef90_B0PB60 P K P Q D Y V L K K G Y F N A F F Q T N L Q Q T L N K L G T D T I I M V I G W R T
UniRef90_D2C0U2 H P F D D S Y S A F F D N G H R T R T D L N D W L K A R N I D T R L T I M G L A T
UniRef90_L8EF01 P G P D D T V L T K W Y S A F F G V R T D L A E R M R G L G R D Q L V I T G V Y A
UniRef90_B9DID2 I K P D D I I T K Q R F S A F T G S N L D V L L S G L E V D H L I L S G V A T
UniRef90_UPI00021935F1 R L A M D I V V N K H N W G A F Y G T D L D V Q S L R R R G I D T I L L T G I A T
UniRef90_V9RMP3 R R L E T L R R D S P G F A L H P A D S D R R G R G V D T L I A G T V T
UniRef90_F8G0M0 I Q P N D V V V K K G A S S F F G S T L S S L L A G T N T D T V V V T G A T T
UniRef90_W1IKS5 P Q P E D S I L A K W R Y S A F H A T S L G D L F L K E K R D Q L I L C G V I A
UniRef90_X0PWC1 P E D G D I V V R K T R V G P F F T T D L D Q Q L R S R N V N I L L A G L I S T
UniRef90_B0UKV6 P R P G E P V I E K T L P N A F A G T D L A A R L R D L G R T D L V L A G F M T
UniRef90_L0LG32 A L T P D I A K A K R Q W S A F Y G T E L D L Q L R R R G I T K T L I V T G V A T
UniRef90_Q31BP8 F K K I D K M D F S L A N I Q E F L Q E I N E N K K I T N L I V C G I E T
UniRef90_S9QIF8 M R P D D Y R I S K R R Y S A F Y G T D L E I L L K G L K A E T L I L V G G L T
UniRef90_G2S9E9 V Q Q T E G A E L H P D N G H R Q K T A L D E W L R H H D T A R E L I V L G L A T
UniRef90_G0U214 Q Q S T K G A K L H P D N G H R Q K T A I V H M L K G M G V I R R L F I C G L A Y
UniRef90_F9PQA3 I N A K Y I V I E K S K P D S F F N T N L E K I L K N E D I T E L V I C G F N T
UniRef90_K0PZB6 Q Q R I M H Q H Q F A R G E W G G E W H P D M R L K Q K G I T H V I V A G L L A
UniRef90_K0CFT3 P A A D E L V I T K Q Y A S A F F G T S L A M S T L A L G V D T L V L A M G C S T
UniRef90_B9NT89 V Q G T E G A F H P E N D H S T P T G L R G Y L Q T R G I T Q L T L V I G L A T
UniRef90_UPI0003742916 P D D E S L E V V K A R H S I F Y E T P L S Y L L S Q S L G A D H L V L C G Q V T
UniRef90_UPI000371A002 P Q G S D I V V T K R V S A F A G S D L D V V L R A S D T L V L S G I A T
UniRef90_A0A024JTH1 H D G Q T V I A S P H K I V I G P E S N D L V L Q L R K R G I N Q V V L A G M A A

UniRef90_UPI0004272C89 D Q C V M G T I M D A A F L G Y D C I L L R D C T A T T S P S Y A L 130 140 150 160
UniRef90_S4XMW8 N V C V L A A R D A R R L G L E V E V L E D A T S A S T
UniRef90_W9H772 H V C V L N T T L V L A E L G F D C F L V A D A V G S R A P V N R D
UniRef90_UPI0004732B52 D Y C V L Q T V T D A L A Q G F E V V L L D A I L R A V D H A G D G R A A L A
UniRef90_C2Z957 D V C V A F P A L S A L N A G Y E V F V V T D A S G T F N K
UniRef90_F5XQV4 N C C V E S T M R T R G Y E N G Y R V V T V T D C T A A T S T A E
UniRef90_C2RNL7 E I C I D E S T C R R A Y S L G Y N V T L V E D G H S T Y D T T L L S A
UniRef90_F0RQU6 G M G V E S T V R A A F D T G Y H V T V A S D A V T D P N A E R G
UniRef90_M5R843 N I C V L F T A N D A Y M R E Y N L T V P K D C I A S N D D R D N E Y A L T M M
UniRef90_E4N0J3 H V G V L A T A V E A F S N D L E T F L V A D A V A D F S G A E
UniRef90_S0AU22 D L C V E H T C A G A F Y R Y N V K V I S D L C A C I D A S H
UniRef90_UPI0003790F7A D Y C V A Q W S A L D A R A A G F T T F L V P D A C R A L D L D G S L K R A M
UniRef90_I3TJU1 E V C V V A T M R E A N D R G F D C L L A T D A T D S Y F P E
UniRef90_G2SKY4 A I C V E S S L R D A F N R G Y D V V L L A D A T A S R E T
UniRef90_UPI0003A7C1EE Q F C V D M T T V R R A L S L G Y D V T T L L A D A G H M T G D S D T L L Y
UniRef90_K8W5Z8 H I G C M T T A T D A F M R D K P F M V A D A L A D F S R
UniRef90_K7ZFX6 N I C V L F T A N D A H M R D F K V W I P Q D C V A S N T K K E N V G A L T Q M
UniRef90_UPI0004689999 D Q C C I E S A L R D A C D L G Y L V I T Q A T D A C A T H T K S R
UniRef90_K0K0I3 N C C V E S T M R T G A Y E N G Y R V I T L T D C V A A T S R E E H D N A I R
UniRef90_A0A023X7M2 D Q C C V I T T M E D A Y F H D Y N A I L L E D A T S T S S P G Y C K D A V V
UniRef90_R5YL42 D I C V E I S N I T K A F Y P E K I N I V E D A T A G V T P E S K A A A I A T A
UniRef90_J0JWM9 N F G V E S T I R D A F A H N Y A V I A A E D A M T S F S P
UniRef90_Q0BF28 H I G C L M T A C D A F M R D V I Q P F F V A D A L A D F S E R E
UniRef90_F9DRT1 D V C V L S T V M D A Y A R D Y Q I D L V K D L C T T T D G A H M A A V C M M A
UniRef90_X5QPW7 D F C V A A T V M K D A F A A G L G V T V V S D A H S T L D A A S E T A
UniRef90_E6V1E0 E V C V Q T S M R E A N D R G Y D G L L L E D C T E S Y F P A F
UniRef90_G2THG6 S G V V L S T L R E A A D K D Y S L I V L R D A C H D G N P
UniRef90_G2FLS4 D Y C I D A T I K C G F E H G F R M I V P G N S N T T V D N K F M S A E
UniRef90_D0SP19 D F C V A W T A I D A A E L G F D T Y V I E D A C K G I D L
UniRef90_E1YCA0 D M C V L A T V T D G L K D G F E V I L I S K A T K P I T I K S G E N A R R N M
UniRef90_J8RTY3 H M C I D A A T R A A A D L G Y E V I T V A H D A C A T L P L E F D G K R V P A
UniRef90_Q8EU64 D I C I L F S A K D A Y M Y K I D M S I P K N C M A S E Q E E N N Y A L Y L M
UniRef90_B2HMI1 D Q C C I Y A T A I D A A C A G Y D C L L I T D A S A T T S P S Y C T
UniRef90_Q8L175 S G C V I R A T A V D A C S G Y F H T V V V E E G V G D R A
UniRef90_UPI0002DFBA38 S G C V R A T A V D S V I Q H G F A T L V V A D C V G D R A R P P
UniRef90_UPI0002627C8E C A C V R H T C M D S T E L G F R T I V P E G T I A D R R V P G A V
UniRef90_UPI000237B445 N V C C E S S A R D A S T L G F R V I M I A D A N A A R R D E D
UniRef90_G4CSN6 Q N C T T Y T A I S P H A S G F N V H V I A N C C T A P S
UniRef90_S4YJ95 D Y C V K F S V L D A L E L G Y K T S V I T D G C R G V D L Q P G D S P K
UniRef90_C7N105 N I C V L Q T L A G A Y F L G Y K T L V A A D A T G T F L
UniRef90_UPI00034A0762 H V G V L A T A L E A F T N D I E A F L V A D A L G D F S
UniRef90_H1RXD8 S G C V R A S V V D A M C W G F R P V V I E D C V G D R A
UniRef90_U7R508 H C C I R H T A Y G A F I R G Y R I V P S D A V C A F P G V D
UniRef90_UPI0003706F32 S D E N G A T L A E W L R D R E V T E V D V V G I A T D H C V R A T A L D A A R
UniRef90_S6AE43 N T C T E A T A R F A A E L G Y H V T L V R D A T A A F R Q
UniRef90_A3V5S1 N G G V A S T L R D A H L R D H I T V M L S D G C A A F N
UniRef90_E0SBC4 D Y C V K Y T V L D A L A L G Y Q T E V L T D G C R G V N L H P K D S Q Q
UniRef90_U1Y6W9 D I C D L H T C V D A Y N L G Y T F V H T D A V A S F N P A G H E W A L Q H M
UniRef90_UPI00036B2EFF H I G V L M S A A D A W M R D I Q A F V V A D A V A D F S R E D
UniRef90_UPI0004764F7D H V G V L M S A V E A F T N D I Q A F V V A D A I A D F T
UniRef90_R6FMW2 D I C V I S N I V V A K A A M P E V I V D V S C V A S N D P K R Q E A A L C V M
UniRef90_UPI000255728E H I G C L M S A C D A F M R D I Q P F L L A D G V A D N Q A D
UniRef90_UPI000225B8F1 E F C C M F T A I A A Y D R G Y K V T F I E D A T G T A N D G T A Y E M
UniRef90_G7UM09 D Y C V S T L K V G A G L G Y R I T V A A D A H T T A D R T Y A N A E Q L I G
UniRef90_E9EYC4 D E C V S T V R M A A N L K S R I V L L S D A T A W A K G G F C A
UniRef90_A0A024PEQ5 D I C V I F T A N D A Y M R E F N L W V P V D G T A S E Y N D D N E N A L R I M
UniRef90_M2Q6L7 D Y C V D A T A R S A Q S H G L D V V L V G D G H A P S S D G D P T V G L T A
UniRef90_UPI000373F4AF D I C V L F T A A D A H M R Q Y D L W V P G D A V A G N H P E R T R W A
UniRef90_UPI00036DFE6D S A C V E T T V R D A A D R G Y H C A L V D D A T A D Y D P
UniRef90_UPI0004717034 D Y C V K Y S V M D A L H L G Y R Y T V V I T D G C R G V N I K P E D S K I
UniRef90_UPI00036F2AA2 D G C L M T S T Y D A Y F R D Y T H M V H D L T A T T S E G A H M S A H L T M
UniRef90_Q2BGL8 H V C V L Q T A L Q L K Q Q A R E V Y V V A D C V S S R N P K D
UniRef90_A0A024PZ01 L G T I T M L A R H A Q C L G F S V T V L A D A C A D N E M T D R D G F H W K A
UniRef90_A0A023D211 S G C V R A S V L D A M Q A G F R P V V V S D C V G D R A
UniRef90_D2TZA6 D Y C V K F T V L D A L Q L G Y Q V T V I Q D G C R G V N L D P
UniRef90_A0A059DMM1 N L C T E S H M R E L I E R G G F E V M V V T D A T A G A I T P L Y N G
UniRef90_D9VIF4 D G C V H L T A L D A S D R G Y W T Y V L A D A S A F D P A
UniRef90_UPI0003774962 N T C I L F T A N D A H M R N Y Q L Y V P E D C I A S N C D Q D N K H A L R I M
UniRef90_UPI000368A05F D V C V D S T A R T A F Q K G F H I T V L T D C T A A L H L D D A D
UniRef90_UPI0003704F84 Q N C V T H T A I S K A A E K Y I K V S I L M D C C T T V D E M I H M I A L H A V
UniRef90_B0PB60 H V C V A Q T V I E A F N Q G Y Q V I I A E D G V D S T T L A E H E
UniRef90_D2C0U2 D Y C V K Y T V L D A L A L G Y Q T E V L A D G C R G V N L Q S N D S Q Q
UniRef90_L8EF01 H I G V M M T A C D A W M R D L Q A F L V A D A V A D F S A E D
UniRef90_B9DID2 S G V V L S T A V E A F D K D F K L T F L E D A S A D R D I
UniRef90_UPI00021935F1 S I G V D T T A R E A A Q H G Y N L V F V P E A M T D R T
UniRef90_V9RMP3 N V C C E S T A R D A M M R D F R T I M V D D A L A A V T P A E
UniRef90_F8G0M0 S G C V R A T V V D A V I Q S G F K V L V P A D C C A D R A
UniRef90_W1IKS5 H I G I Q T S S V D A Y S R D I E V E L I Q D A I A D F S K
UniRef90_X0PWC1 S G V V L S T V R Q G A D L D Y R I V V L S D A C A D P D
UniRef90_B0UKV6 H N C V S A T A R A A L D L G Y R V T V A G D A T A T R L P D P L G G P P L P A
UniRef90_L0LG32 N F G V E G T V R D A H A N Y A V I V A E D A V T T L S
UniRef90_Q31BP8 H I C I Q Q T V L D F L Q K G F E V V L I S D A M G S R N C I D
UniRef90_S9QIF8 D V C V H Y T F V D A H Q G D Y F C R V I E D C V A G S S R E A H D A S L K A V
UniRef90_G2S9E9 D Y C V K F T V L D A L A L G Y S V N V I T D G C R G V N I Q P H D S A L A F M
UniRef90_G0U214 D F C V Y H T S L D A A R A G F E V F V L E D A V R A V F P D K M P E K R T H L
UniRef90_F9PQA3 E Y C C L F T S I V A A D K N F K V Y F I E D A T G T V C D E N
UniRef90_K0PZB6 N T C I D T T A R Y A M E L G Y H V T L V R D A T A A F S H
UniRef90_K0CFT3 S G C I R A T A V D G L Q H G Y R V M V V R E A V G D R H
UniRef90_B9NT89 D F C V H Y S A V D A A R L G F D V I V Q T N A C R A I D M D G S L A A A Q Q A
UniRef90_UPI0003742916 E Q C V L Y S A L D A H I R Q L H V I T V P R D A V A H L H S D L A D A A L R M M
UniRef90_UPI000371A002 S G V V L S T L R Q A A D L D Y R I T V L S D G C L D G D
UniRef90_A0A024JTH1 N L C V E G H L R E L I E Q G F E V V V K D A T A G P R L P E G D G

UniRef90_UPI0004272C89
UniRef90_S4XMW8
UniRef90_W9H772
UniRef90_UPI0004732B52
UniRef90_C2Z957
UniRef90_F5XQV4
UniRef90_C2RNL7
UniRef90_F0RQU6
UniRef90_M5R843
UniRef90_E4N0J3
UniRef90_S0AU22
UniRef90_UPI0003790F7A
UniRef90_I3TJU1
UniRef90_G2SKY4
UniRef90_UPI0003A7C1EE
UniRef90_K8W5Z8
UniRef90_K7ZFX6
UniRef90_UPI0004689999
UniRef90_K0K0I3
UniRef90_A0A023X7M2
UniRef90_R5YL42
UniRef90_J0JWM9
UniRef90_Q0BF28
UniRef90_F9DRT1
UniRef90_X5QPW7
UniRef90_E6V1E0
UniRef90_G2THG6
UniRef90_G2FLS4
UniRef90_D0SP19
UniRef90_E1YCA0
UniRef90_J8RTY3
UniRef90_Q8EU64
UniRef90_B2HMI1
UniRef90_Q8L175
UniRef90_UPI0002DFBA38
UniRef90_UPI0002627C8E
UniRef90_UPI000237B445
UniRef90_G4CSN6
UniRef90_S4YJ95
UniRef90_C7N105
UniRef90_UPI00034A0762
UniRef90_H1RXD8
UniRef90_U7R508
UniRef90_UPI0003706F32
UniRef90_S6AE43
UniRef90_A3V5S1
UniRef90_E0SBC4
UniRef90_U1Y6W9
UniRef90_UPI00036B2EFF
UniRef90_UPI0004764F7D
UniRef90_R6FMW2
UniRef90_UPI000255728E
UniRef90_UPI000225B8F1
UniRef90_G7UM09
UniRef90_E9EYC4
UniRef90_A0A024PEQ5
UniRef90_M2Q6L7
UniRef90_UPI000373F4F
UniRef90_UPI00036DFE6D
UniRef90_UPI0004717034
UniRef90_UPI00036F2AA2
UniRef90_Q2BGL8
UniRef90_A0A024PZ01
UniRef90_A0A023D211
UniRef90_D2TZA6
UniRef90_A0A059DMM1
UniRef90_D9VIF4
UniRef90_UPI0003774962
UniRef90_UPI000368A05F
UniRef90_UPI0003704F84
UniRef90_B0PB60
UniRef90_D2C0U2
UniRef90_L8EF01
UniRef90_B9DID2
UniRef90_UPI00021935F1
UniRef90_V9RMP3
UniRef90_F8G0M0
UniRef90_W1K5S5
UniRef90_X0PWC1
UniRef90_B0UKV6
UniRef90_L0LG32
UniRef90_Q31BP8
UniRef90_S9QIF8
UniRef90_G2S9E9
UniRef90_G0U214
UniRef90_F9PQA3
UniRef90_K0PZB6
UniRef90_K0CFT3
UniRef90_B9NT89
UniRef90_UPI0003742916
UniRef90_UPI000371A002
UniRef90_A0A024JTH1

170 180 190
A G K H A A A L R E I E G L G G R R R R W A D V L S
Q M L
Q V A D A A L M R M A H G G V Q L M N W F S V A A E L Q R
H E S A L R F D Y P M F S L P V S A D D V I N A L A G A A
S Q I K H H N D I I G E W F A
K N S L R L T L P G F A E L G T V D E I L N V L S A Q G G K A
E N V
H R M A I D Y A A R R C A V V A L A D E V L
Q I S A L T N I K I N Y G T S I K S E E L L K E V
A E M E A A G V E I I Q S A
D F Y E T T L R E V Q D N F G L V L Q V S Q F F D R L E R
T D I M K H H N E T L N G F G T D A A S V A
E K H L M S L K Y V A E L S G R V V M T Q D L L S
K T V L D V S I S A
H E N S I S A I A G Y C R Q R T T Q S L I D E L A K H P Q R A
F N A K N C W G F S T T T E K F A A A
E M H D F S C R Y I L P R L A R I R K T V E I V
H R M A L D Y V A G R C G M A V T T D A L V
N W V Y D I S L F D A D Q M C
A E I I A R H N A A F A A A G V K L A T T K A L
K A A T L D M I R A Q G A I V G W T
D I H H M L M E K L F P V I Q A K V M T V S T W A G T L
Q T Y Q Y Y N E F M W N R R Y A E C I S L D E T L K
R D A
A Q V H D S V M A A L A F A Y A K V V R T D E L L
E S V M D A
E A T I Y N V R Q C F G F T C D T A A L R A S L
L P H L A S I L F D I D N K Y G D V V S L E D A S A Y L Q H V
H D A A L F D L Q Q K Y A D V V G L D D A A E Y L G R A R K A A
E W N L F D I D A K F G D V D P L D K V I K Y L N G I
H N A T L H T I Y R S F G D V R P T A E V V A M L
E L V H I L L A L E A L A D R G V K I I
A F Q T M E L A G A Q L V T L S Q F I A
I G T Q E A G L E Y F S R C Y S R V V D T E T V L G Y L A
A D Y H R L A L D Y A A L R C S V V T T T E E V L
I G P H E A S L F D M R Q K Y A D V I S L E A L H A Q L
Q Q A A L D Y L K A I Y S A E I T T S T A L
E G F T R V L L D L T A G V A R A T T D A A L D E L R A A
D M M H A A H E L N G P T F A H A I L S T D E L I A N L G G P A A
S D V H D A T L V S L G T V T R I L T C A Q A T A E I G A
A L E V M A K H G A T L L E L P A F I A S L S Q
K N C L G A T L
H D M A L R W A A G R C A V V T T T D V L L K E I
E D Y H R L A V E Y A A E R C A V V L T A K E V L
E S I H
H Q M A L N Y V A T R C G K V I S C T E V
Q D L
D I R D F V G T V L H W S E A I E V L
Q H N E V W A A L S M P G N V P R V V D T A T L L A E W
R T I H E V H L A S L N G E F A R V E T T E D A I E A V
E Q V I A R H N L L L A G G R L R V V P A A E L
L E I L M R N S M D A L A E P T K E M T L A E W V A R
E M H R A T L K A F S L N F G R V V D S A D L I E A V D R G A
A L Q Q M Q T L G A T L M T L S D V
K E L A L E R M R Q A G I Y I V S R E M V A F E W M Q K A G T
D L L H E L G L T L L E R Q G L D I L S V E E L
I G P H E A N L F D M A Q K C G D V I D L A T L L G R L
E D S H N A L Q E M A L A G A K L I T S S D L
Y D A S L T N F R M I A S S V D N T A N T V K A I K A A H G
M H R S A V E H F H R L W G T A V T T D E V A D R L A S I
Q T T L K A N
S T R V P L I T M D Q A F
A I D V M V K H G A T Q V S L A T F I A S L G
H A M A L R W A A G K C A V V T T T A T V F E
K V H D F L I N N I F P K Y G D V L T T K A W T E K I N N
D Q G H N A S V E V I F P R L G K V R T I A E V L A A I E
H E N A L H G W L L F F G D V L S V D E V S T R L R P A Q A A
K G P H E A S L Y D I Q Q K Y G D V T D S D D I L K W L R S V A G
Q I H L Q A L I Y A D K C C A K V L P T Q E I C K
S E V H D V L V G K V F P R Q A D V I A A E V V G L L G
E A V Q R A A L A A L A D R T A V V A P A R E I V A
Q E M Q D F A C T K V L P R L S R I R K T A E I L A
H E I A L Q R M T Q K G A V L T T T E S I I F E L C K T A
E Y L Q H
G A V R S L D E V L D A M Q T N A A T
E
M S T A G A T L Y T L E D W L E
R Q
E L M H A A H E L S A P T F A H A I L T T A E V I A A L Q E A Q G
S E P H E A N L F D I D S K Y G D V I G I D E A I A Q L K S S S
M R D A G V T L
E
R N M G A R V T S T D D V
E E V H R V L T T K V F P R Q A E V C R I E N W I
Y L A A L V N F R F L A S A I W T T A D A V D Q L K R A V G A

1 10 20 30 40
UniRef90_UPI0003A8B641 MDLDRITV L V V V D V Q H G F V K E P S R H V V P R I V D
UniRef90_K2JIK8 MR P A N E A L I V I D I Q N D F C P G G G L A V T G G D E L V P G V N A
UniRef90_D0LF32 L T L N P A T T A L L I V I E Y M Q N D F T S D T S G G V L H D A T G M L A N T V A
UniRef90_B2A6S0 S P R H I N I N E D C A L L V I N M Q N D F L D T S F F E C P R C G R E I V A N T L Q K
UniRef90_N1ZRU8 K K A L L I I D Y T N D F I A D N G T L E P G Q A I E E P I I N D K
UniRef90_A1UTD7 E K K A L L V V D V Q N D F L P G G L A V A L Q G N T I L P T I I N D
UniRef90_BOVA03 M K M N P Q N S A L V V V D V Q N G F T P G G L A V A D A D T I I P T I N Q
UniRef90_UPI00036920D1 M K I R L D R V A L V V I D P Q I D F L S P S W P V F G R S D T V K H L G Q
UniRef90_UPI000367C795 K K A L L V I D V Q N D F C P G A L E V A G G N E I I P Y I I N E R
UniRef90_L1QJV0 A Q W T L Q L D R A A L V V H D M Q R Y F M R P A P G A E P L P G L I A N I A R R
UniRef90_UPI00031DC502 A D W S V D P D R A V L L V H D M Q R Y F L A P F P G T V R A E L L G N A G R
UniRef90_K0T9D6 I K L R P I S S A L L V I D I Q K E I L S H I E Y A K I A F P R M I E N T S K
UniRef90_U2KY8 L L V V D T Q K A I T N D K L Y Q F D L F K S R V I E
UniRef90_UPI0003745B1D M L I D A Q K A L V V V D V Q E K L V P S A I H E L E P L L K A S E L
UniRef90_UPI000364746D M T S T Q T A L L V D L Q Q D F L S S P T L T P T R G E L I D R A T T
UniRef90_UPI00047A60F0 K P K Q A L L I I D M I N D F N H G P I L A E Q T E T I S H I N L S
UniRef90_B9Z820 S R D A L I V V D V Q N D F L P G G L P V I G D G D E V V P V L N R
UniRef90_A5N887 F T L I Q E E S A L L V I D I Q E R L I P A M P T S Q K V I E N T N
UniRef90_F0PWY2 A L L V L D M Q K A L L E C K D F S V E K E L I T N
UniRef90_J9WQW4 W T A E A H R S V L L V H D M Q R Y F L K P F P D S L R D D L I R N A A H
UniRef90_K2C935 M L P Q N S A L I I V D V Q N D F C P G G L A V A E G D R Q I S I A N T
UniRef90_UPI000362B90C P M N Q A L I V I D A Q Q A L T D G G E P E V V N K Q Q L I Q T I N D
UniRef90_UPI000362DBD E R S N S A L I I D L Q N D F V P R G G L A V P G G D A V V A L A N Q
UniRef90_UPI0003829957 E R S N S A L I I D M Q S D Y T R R E G K P E D V E T L I G N V A N A
UniRef90_UPI0003762F7A A L I I V D V Q N D F L P G G L A V P E G D K V I P V I N E
UniRef90_UPI0004635815 K L S C Q E T L F L F I D I Q E R L L P A L S N D R E V K A N T L R
UniRef90_UPI000362B90C A A W T P D P A R A A L V V H D M Q R F F L R P I P E P L R S Q L V H N A A L
UniRef90_A0A059MUG9 W T I D P G R A V L V H D M Q E Y F V R A D R A A D P L A T V V P N T D A
UniRef90_H2C2B2 P F V Y D K R R R A V V I D M L N D F V L G R L G N E R F K S I V P S I R E N S
UniRef90_C3MFW0 A L I V I D M Q N D F C P G G L A V A G G D E L V P V V N S
UniRef90_Q6L196 V L V I D M L N D F I H G A L K T D E A L K T V G P A S R Q
UniRef90_W6T870 K L D L R Q T A L V I D L Q E N I L D A P L Y P R D A Q Q V L A A N N Q
UniRef90_Q7VCE7 M N P S E T A L I V I D V Q E R L T K A I P E N A D L L V A N I K K
UniRef90_S6HC64 A L L V I D M Q N D Y F E G G F P L W N T Q Q T L D N V Q V
UniRef90_UPI0003B7305D L N L D K N T T G L L V D P Y N D F I D G A L G T K E A V A L V P A V K K
UniRef90_W3ALA8 S R T A I V I T D P Q N D F L S P D G V T W G A N N T V E N L E S
UniRef90_UPI000289223C A I L V T D M L R G F L E S G H P L Y G A R R I I P N L Q R S
UniRef90_X1LBS9 R P A L V H I D M A N A W T R E G H A C E N M D T I P A C Q S
UniRef90_M1UWF9 S E T A M L V M D M Q K D F V D P A M G L A P G E A I V P S V A D
UniRef90_J3LBQ5 A L I V I D V Q N D F C P G G L A V I E D G D A I V P V V N R
UniRef90_UPI000465B339 Q K V L V V D M Q N D F I D G A L G T K E A V A I V P V G V K E
UniRef90_H8GAR5 T A L I V V D V Q N D F C E G G L A V A G G T A V A E A I S T
UniRef90_J3HS37 A K D A L I V I D V Q N D F C E G G L A V S G G N E V P L I N K
UniRef90_W7Q438 N K A V L V N V D P Q K A Y T R T D L A Y E T D P N Q L D Y V N Q
UniRef90_J2HEG9 S R P A L I L I D F C Q A Y F E P G N A L Y E V D E A L E V P V V
UniRef90_M8D198 S K K A L I V I D Y T N D F V A A D G A L E P G G H I E K R I C
UniRef90_X1SHW3 D M L T N G F L E E G Y P L Y C G G E R I P N I Q R
UniRef90_G8PQN4 T A L L I I D V Q A D F T S R K W D P D Y L Q S R L D Q I N A
UniRef90_N6US57 A L L V V D V Q S A F V Q G P Q A V S G H G T P L S M I S I
UniRef90_Q65FG9 K K A L I C I D Y T N D F V A A D G K L E P G R K I E D A V A R
UniRef90_UPI000467A1B7 K Q R A L L V D L Q N D F C A G G L A V A E G D S T I D V A N T
UniRef90_K1PJTO K T I L D P K N T A L L L C D M Q E K E R G N I M Y P Q I I E V A R R
UniRef90_K8NSH6 L T I L D P Q R S L L I I D F Q S R L M P A I D A G A T A V R N A N
UniRef90_D5QGQ4 P L P A I D G R D A L L I V D V Q N D F L P G G L A V A Q G G R I I P I T N R
UniRef90_B5ZJT1 A L L V I D L Q N D F L P G G L P V P E G D A V I P V I N H
UniRef90_UPI00036B858C T I D P R H S A L L V M D Y Q N G I I G S L P P D A E A L L E R A A G
UniRef90_E1V896 R D A L L V V D M Q N D F C P G G L A V A G G D A L V P G I N A
UniRef90_V2W6W7 L P A E R P N S A L V V F D A Q Y A A L A A W N A E V I A T I A D
UniRef90_K9AM22 R L N K D D A V L L V D H Q T G L T S L V Q D F S P N E F K N N V L A
UniRef90_UPI00036FC44B V R L N K D D A V L L V D H Q T G L L S L V R D L D P D K F K N N V L A
UniRef90_C6LFF0 L L V V D M Q K D F I D G A L G T K E A Q A I V P A V V E
UniRef90_W8HCG9 P I S L D P T R T A L V N V H W Q H D I V D G A F A P F F A E G V I G T T R E
UniRef90_Q2LX27 K P A V I V I D M V K D S S H P E L I T P F A R A I V P A I N R Q
UniRef90_UPI0002487DAE L Q S E R S V L I V V D V Q N G F T S G G L A V A N A E Q I I P T I N Q
UniRef90_UPI0002D51797 K P A V L V R D M T L A F T D P N S K L S Q L N G Q I E A V T Q
UniRef90_UPI00038293F5 E R P N S A L I V I D F Q N G V V A S A W R R D E V L A S I K A
UniRef90_UPI0003B6E0A2 T S A L I V I D V Q N D F C P G G L A V A G G D A I V A G I N V
UniRef90_R6VDC9 V L V V V D M Q N D F T S G S L G T K E A Q A I V P A V V E
UniRef90_UPI00039F8938 L V V V D V Q N D F I D G S L G A E G A L D I I V V V K E
UniRef90_W8HN60 R P A F I V V D L V H A Y T D G M F A L P G M E A V I E A T E T
UniRef90_UPI00036685BE S Q F E L D I N R V A L V V V D P Q N D F L T P Q G V S W P F N N T V S N T I E S
UniRef90_A0A024YRD8 S V D P A C T A L V V I D M V P F F A G A N P Y A R G T V P H I N R
UniRef90_W4ZF58 K L V L R N S S L F L C D M Q E K F R P M A N K Y F P E I V E V S S R
UniRef90_UPI000288B994 R Q A L L I V D M S N D F V D D H G G L T A G Q K I V P Y T V S
UniRef90_UPI0003776733 L S L D P E R T A L V L V D L M D R V V A L P L E P Y K G P E V L A V A E E
UniRef90_A6EYX1 L D P E K T A I L F F D M L N G H V E D P K T I E R Y R P V L A A A E
UniRef90_A4A2K5 A L L I I D V Q N D F L P G G L A V A E G D Q I I P I T N A
UniRef90_UPI00046367F9 T S T Q A L L I I D Y T N D F V A D Q G A L T P G Q A L A Q P I V A
UniRef90_Q2S2K0 A L L V I D L Q N D F C P G G L A V P E G D T L V P T V N A
UniRef90_W9YZB9 N T A L L V L D I Q N G I V P G A L A V P Q G D V I P I V N N
UniRef90_M1N499 E K K A L I V I D I Q N D F L P G A L A V P Q G D V I P I V N N
UniRef90_U1HA31 M Q I D P Q R C A M I I Q D M Q N D F A E S G A P A H A R Q Q V I E N V R R
UniRef90_A6LXB9 I N A K T S A L V L I D L Q K A G G G I S G S P H L M D Q V I Q N A S K
UniRef90_Q5LMI3 R A T R P G T A L V V I D M Q S D F T A P V W E A A Q L N T A M E N T R T
UniRef90_Q8E8S1 K T A L V I I D V Q N D F V D G A Y P Q W Q V N E M L E R T L H
UniRef90_F4GKD0 K Q V L I V V D F Q N D F V T G T L G F P G A T K L E G P I V E
UniRef90_S3JV16 N D V L A V I D M Q N D F V S G S L G T K E A Q A L V Q N V V K
UniRef90_I9CNT5 P V L V L V D M Q Q E Y V G R P L A C T A G I A P A L A K C R L
UniRef90_W6W8V3 P S D T L L V M D M I N D L V H P D G A G A G E R N V I E N T R L

UniRef90_UPI0003A8B641 L V E R W Q G E G G D V L F T R Y L N Y W K D M R R E D G G R E L E L V D E L L 80
UniRef90_K2JIK8 L M D E F T Q D W H P A G H S S F A S T H A A A P F S T T E M P Y G T Q V L W L P
UniRef90_DOLF32 L V E K D R A A A G V I T M H A P K E L T F A P G Y M A F I V K G T W G A E I V S D L L T
UniRef90_B2A6S0 F K H E M A R A F R V P I V I Y T P K E L L H R P G M E H C I L E G T K G A E I V S E L L T
UniRef90_N1ZRU8 L A D T Y L A N G D Y V I L P T D T H Q D K Y H P E S K L F P P H N I E K T W G
UniRef90_A1UTD7 L T Q D W H P K G H L S F A S S H P D K K S P Y D M I N L D Y G S P Q Q L W P D H C
UniRef90_BOVA03 L A Q D W H P D N H L S F A A N H P G K Q P F E T I E L D Y G S Q Q V L W P K H C
UniRef90_UPI00036920D1 L F A A A K Q A D I T V A V S P H Y Y Y P C D H A W Q F G G P L J E Q V M H N I R
UniRef90_UPI000367C795 L T Q D W H P K G H S S F A T A H E G K N P L E L T K M P Y G D Q Q V L W P D H C
UniRef90_L1QJV0 L T J A A R A A G V P V I F Y T A Q H E G D Q D R R D M S R A L E H E I L P E L A
UniRef90_UPI00031DC502 L R T S C A A R G V P V A Y S T Q P G D F W G P G M R A S A D D R Q V A E E L A
UniRef90_K0T9D6 L L A A M R Q G S E V I F T Y L D E A L T D D S R D V P S N D P G F V L Y Q G V E P
UniRef90_U2KY8 L I R T A R N K I E V I F T Y R H D D G L G N E L T K G N D G F E I L P D G V F Q
UniRef90_UPI0003745B1D V L K S A C E L N V P V L V T E Q Y P R G L G H T L E R L K T Y Y A P G D V F E
UniRef90_UPI000364746D L V D G W R R Q G K P V V H M P H W R A A G V W R C E A G T A G H C Q T P D T L R
UniRef90_UPI00047A60F0 L K N K M K E N N C P I I Y V N D H Y N L W O A N F E K I A R K C K I T H R L F
UniRef90_B9Z820 Y I D I F V A Q G L A V Y A T R D W H P A G H C S F T L Q G G P W P V H C V A G
UniRef90_A5N887 L L S V S N K L E L P T I T E Q Y P K G L G K T V P E I H
UniRef90_UPI0003829957 L L K R F K V E N E P I L F L K H R D N N P E S T L Y F E A A G S E L V E E Y A
UniRef90_J9WQW4 L R D R C A A L G V P V A Y T A Q P G M W G P G M R T S P E D R Q V V D A L A
UniRef90_K2C935 V M P H F K T L I A T Q D W H P D N H F S F Q S L W P V H C V Q D K I L K K G T
UniRef90_K6VD54 L A Q K W H P E N H V S F A K N H I N K K P Y D S I E L A Y G T Q V L W P A H C
UniRef90_W3ACV1 V T N K A K A V I S V P V F I R D L D V A E G Q G A G F Q I H P D I D
UniRef90_UPI00036C2D8D L T Q D W H P A G H G S F A S A H P G R Q P F E Q G E L N G L P Q Q T L W P D H C
UniRef90_UPI0003829957 L I R K A E A Q N M P V V T I R Q V I T H G K L K L A V N R M N P G I Y F D D R I
UniRef90_UPI0003762F7A L Q E K F K S P G D I V V V E G E D Q L W P D H C V Q G S F G A E F H Q D L K
UniRef90_UPI0004635815 L L Q T A A V F K I P L V Y T E Q Y P K G L G R T D S D I L E V
UniRef90_UPI000362B90C L R K R A A E L G V P V A Y S A Q P G G M W G P G M R T A P E D R E V V P E L A
UniRef90_A0A059MUG9 I R R S A Y E A G I P V V Y T A Q P G D F W G P G L A D D P A L T S V V A D L A
UniRef90_H2C2B2 L L D W A S E H S V P V V Y S N D S H R P W G E H A I R G T W G A E V V E E L K
UniRef90_C3MFV0 L I E K A K H V G H S S F A S S H P G K A P F Q T V T M P Y G E Q T L W P D H C
UniRef90_Q6L196 V V E I F H N K N L P V I Y A C D S H N K W G E H A M K N S W G S K I I D E L K
UniRef90_W6T870 L V A A L K N T P A L I V G V K M A T F R Q L Y P F V S G P D E R D L H N D A
UniRef90_Q7VCE7 L I E G F K I L D I N I F E T E Q N P T K L G V T L E I T R G L E V I K F S K
UniRef90_S6HC64 A I A K A V Q Q N I T V I H I Q H D E K M G I A P F F N A Q T P G V Q I H S D I
UniRef90_UPI0003B7305D L I V Q S C R S R E L R V E F V P H R R W R D I K L F A D G E W G G E F H P S F Q
UniRef90_W3ALA8 P I E S F D T H F E N Y L E T H E R S N L P V T H C I K G T D G W K I R E L D E
UniRef90_UPI000289223C L F K V A K E K N M T V F V S P H Y Y Y K H D H N W K I E M H K I N M F D R S H
UniRef90_X1LBS9 L L E Q E I A E G S K V E F I C D H H A P N D P E F E M F P H C I E G T T E A
UniRef90_M1UWF9 L S E A A R A K G I P V I Y T I W V H K I P L E T A L A V G S E A V Q I D S R L E
UniRef90_J3LBQ5 A T A V A R Q R G V I V W V R E H D P G K G P A I K G S E G V E M A D G L T
UniRef90_UPI000465B339 M I Q A W H P A G H S S F A S R H A G K A P F E T V E M E Y P Q T L W P D H C
UniRef90_R7CNM1 K I E N F D G V V L F T R D T H E T Y Y L D T Q E G Q K L P V H C I R D T E G
UniRef90_H8GAR5 Y L R S D D A T Y D H V V A T R D Y H I D P G E H F S D E P D F V R S W P R H C
UniRef90_J3HS37 L T Q D W H T P A H S S F A S S H D G K A P E E T I T M P Y G Q R T L W P D H C
UniRef90_W7Q438 L A R S F R Q L G W P V V W H T D T P D S L Q N I K Y G S E R A E F D E R V E
UniRef90_J2HEG9 L T N V V Y H P S G I D G G R F Y E K A M P L K N F L K G S P M G A F G P L E
UniRef90_M8D198 L T N E F L Q N G D Y V V M Y H P E T A L Y P P H N I M G T K G R H L Y G A L H
UniRef90_X1SHW3 L L E R E L A R G S T V F M L C D H H A P D D P E S S M F P H A I E G T A E A
UniRef90_G8PQN4 L A E L A K Q K G W P I I A I R H V Y Q G W Y T N F L V R L L G G G L M D P R V
UniRef90_N6US57 L A A E A R S A G A P V I F L Q N D G P P G A V D A P F Q T G W F L H F P
UniRef90_Q65FG9 L A D T F I Q N G D Y V V F A V D S H E A G D T L H P E T R L F P L Y R K H E
UniRef90_UPI000467A1B7 L T D W S K A R G E A V V A S Q D W H P A H H D S F A S Q H D A E P F T Q G E L
UniRef90_K1PJTO M L E G A N A L D M P V I V T E Q Y P K G L G H T V I S E L D V S Q L
UniRef90_K8NSH6 L I G M A E L V D I P C I L F T E Q N A K G L G S T V E
UniRef90_UPI00036B858C L Q D V A T Q D W H P R G H V S F T A D N P P A P D R W P E H C V A A T W K G M
UniRef90_D5QGQ4 L T Q A A S Q D W H P H G H A S F A T A R P P P A P W R Q H C R I G L V T R K G R
UniRef90_UPI00036B858C A I S L M R D R G G H I I M A A M V T P E R R A A M H A E A P A T A V H E R L A
UniRef90_E1V896 E M D A A Q R A G A L V V A S R D W H P V D H A S F A H R G G P W P V H C V I Q D
UniRef90_V2W6W7 L T Q D W H P E Q H I S F A D N H E N K V P F E T I E L P Y G T Q V L W P K H C
UniRef90_K9AM22 L V I E R A R Q S G T E V V W V R H S S A G L P P G S D Q W Q I V E L I
UniRef90_W0H4Y2 L G D V A K F F N L P T I L T T S F E Q G P N G P L V P E L K E M F P D A P Y I
UniRef90_UPI00036FC44B L A D L A E Y F K L P T I L T T S F E D G P N G P L V P E L K A Q F P D A P Y I
UniRef90_C6LFF0 K I R S Y A K D R E R I V F T M D T H G E N Y L E T Q E G K N L P V H C I K G
UniRef90_W8HCG9 L V I E T F R T A G A L V T W A R A A F Q P G Y P A L I D G S P G A R I T I P E L T
UniRef90_Q2LX27 L T E E A R K R S L P V I F S T S F L E G D F I F K G R M K E R S I R D L L V
UniRef90_UPI0002487DAE L A Q H W P R A N H I S F A E N H S P D K K A Y D T I R L D Y G T Q V L W P S H C
UniRef90_UPI0002D51797 L V K T A L A N H F P V V F S W G Q K F P S I Q L L D R N T A W V K I W P K L D
UniRef90_UPI00038293F5 A V J A A R A A G V P V V W V Q D V I G E D R T P G T Q P W Q I V P E L D
UniRef90_UPI0003B6E0A2 L M Q D W H P A G H S S F A D N H A G A D P Y S M M D M P Y G P Q V L W P R H C
UniRef90_R6VDC9 K T R K Y Q D N G D V V L Y T Y D T H G E D Y P E T Q E G R N K H C I R G T W G
UniRef90_UPI00039F8938 K I D K F S G E V I F T M D T H D E G Y L E T L E G K N L P V I H C I T K N
UniRef90_W8HN60 L V G V M R R A G F P I V W T D V R Y D E T M S D F A K G A P E R G G K L V L Q
UniRef90_UPI00036685BE L F K A A K K A E I T V V D H Q W D F G G P L E H V M H D I G M F E I Y K P Y I
UniRef90_A0A024YRD8 I A A A L R T A G G L V A W V V P A N E A P L G G V S E G P P R S R L W P S L D
UniRef90_W4ZF58 L F R A A R I L D I P V I V T E Q Y P K G L G P T V K E L G I N R D
UniRef90_UPI000288B994 L A G K F H Q E G K P V I F C M D A H H E H D P H F K L W P P H N I W Y E A H R
UniRef90_UPI0003776733 L A G V I F R S A G A L V L I R V E R P G L A E Q P A G S G L A D G L
UniRef90_A6EYX1 L M Q G A R A H S V M V A Y A H A N R A D N A T S A H G T W E S Q V I D E L G
UniRef90_A4A2K5 C L R K F Q H V I G H A V G Q Q I D L H G L P Q L W P D H C V Q H H V I Y K G D
UniRef90_UPI00046367F9 L A D Q M A T A G D W V H T P H D P Y H P E S K L F P P H N V R G T W R Q L
UniRef90_Q2S2K0 M A A R W H P A G H Q S F A S S H P D H A P M D V I E V D Y G E Q V L W P D H C
UniRef90_W9YZB9 T I K S A R E A D I K I I Y V T T G F R P G Y P E F V E G S T S T Q V H S A V A
UniRef90_M1N499 L T Q D W H P K G H C S F A S S Y P E K A Y D T V E L N Y G T Q L W P D H C
UniRef90_U1HA31 V A D A A R A R G V A I I H V W F E G L V D S K A M V R G S W G A P V S G L E
UniRef90_A6LXB9 L V K E F G E K G A F I V L V R V S T V D G K D M M K Y Q E G W D E L V P E I A
UniRef90_Q5LMI3 A V D A A R R T G M P V I A V R Q V I Y K A G L A R L N G W F N Q G R G D P R L
UniRef90_Q8E8S1 C A Q Q A Q Q G M P I I L V Q H I A D T T Q P F F N P G T Q G V E I H P K L L
UniRef90_F4GKD0 K I K Q F K D A G D D V I F T L D T H Q E D Y R G T E E G R N L P I E H C I K G
UniRef90_S3JV16 K I E T F K G H I V F T Q D T H Q S S Y L Q S Q E G M F L P V Q H C I K N T E G
UniRef90_I9CNT5 A I D H A R E S G L P V A Y V R W L Y A P L F Q P G T R F A R W I E G F E
UniRef90_W6W8V3 A I R K A R E A G C P N S P V F S R A R D N G L F K L I G W G T E V F E D F A

UniRef90_UPI0003A8B641 P Y T G R G E V L D K T T Y S L F T D T D E G V A L I D Q R G W Q N L L I C G L A T
UniRef90_K2JIK8 D H C I D S Y S A F F E N D T H V T P T G L E G Y L K T R G G I D T L T L V G L A F
UniRef90_D0LF32 P A D G D D L V L E G K R R H S G F A Y A S T N L D E F L L R G L K K N T I I L G G F L T
UniRef90_B2A6S0 P A E G D D H V L L K R R R H S G F A Y A S T N L D E F L L R G L K K N T I I L G G V L P T
UniRef90_N1ZRU8 H Q L Y V W Q Y S K D R Y S S F Q N T G L D N F L R T H K I D T T L C L T A G V C T T
UniRef90_A1UTD7 N R K I D S Y S A F F E N D Q K T P T G L D Q N Y L K E R H S F T K T V L M C G L A T
UniRef90_BOVA03 H A H I L D S Y S A F F M E A D H T T M T G L L T G Y L K E R G I T K T V L V V V G L A T
UniRef90_UPI00036920D1 M F D R A T I A S P H K I Y G P E S N D L A L Q L R K R G V S Q I I L A G M A A T
UniRef90_UPI000367C795 V Q F I D S Y S A F F E N D R K T P T N G L E N G Y L K S L E J E K I N L V G L A T
UniRef90_L1QJV0 P A P G D F P L V K H R Y S A F F Q R S N L E T L M R V R G R Q I I V C G V Y A
UniRef90_UPI00031DC502 P A A G D W V L T K W R Y S A F F R S P L L R R M R A A G R D Q L I L C C G V Y A
UniRef90_K0T9D6 I P N G K D I R M P K T S C S V F M S T N I D Y V L R N L N V E T Q I I I C C G Q L T
UniRef90_U2KY58 P L N G E L V F D K N V N S A F K D T G L L E Y L R O K E N T I I I V G L Q T
UniRef90_UPI0003745B1D K M S F S S V G C S P D F M A Q L K Q S G R Q Q V V I I V G L E A
UniRef90_UPI000364746D P Q S G E P V V H K T D F S G F Y G G T D L A S T L E A S L N A S E I L V I A G T H L
UniRef90_UPI00047A60F0 P N D D D Y F L I K P K H S A F Y G G T D L A L N T L L Y S L N V K E L V I A G T A G
UniRef90_B9Z820 S D G A L F P T L H A Y S G F D G T E L A A Q L R R S G V E R V I F V G G L A T
UniRef90_A5N887 Y N I N E N S V H E K T T F S G C T D E V I D T L K Q K S G K K K I I I V G G M E N T
UniRef90_F0PWY2 E F A D Y V V E K T T P S A F K G T S V E E V L T K H K R G D H V I I V G G M E N T
UniRef90_J9WQW4 P A G H D W L T K W R Y S A F F K T D L L E R M R A A G R D Q L V L C G V Y A
UniRef90_K2C935 D K N I D S Y S A F F Y D N E H F R K S T G L T E W L H E K N I S T V V Y I M G L A T
UniRef90_K6VD54 V Q G T D D A E L H P R K G F H P D I D S Y S Y L K E R R I S T D T V Y I V G L A T
UniRef90_W3ACV1 S S N P A A I F D K K A T N A F Y Q T P L L N F L Q D Q H I E H I V I M G C K T A
UniRef90_UPI00036C2DBD V Q G I D S Y S G F F D N G H R K S T G L A D Y L R G R N G I S A V L Y I A G L A A G
UniRef90_UPI0003829957 K V I S P T A D F E K E R G D A F S T L A F E D W L A A N K I V S Q L Y I A G I A D G T
UniRef90_UPI0003762F7A Q S N W D S Y S G F H D N A R K A D T G L A D Y L L A Q E V S E V Y I V G L A T S
UniRef90_UPI0004635815 L E G H A P A F E K T H F S C C D E S G F V K E L E W H K R K D Q L V L W G I E S A
UniRef90_UPI000362B90C P A E G D W L T K W R Y S A F F N S G L D R L R A E G R D Q L V L C G V Y A
UniRef90_A0A059MUG9 P R E D D V Q L T K W R Y S A F F I R T D L R E R M R A W G R D Q L V V T G V Y A
UniRef90_H2C2B2 P K P K D F V V P K T S Y S G F F T N L D S V L R E S L Y A N T L L S G L H T
UniRef90_C3MFV0 V Q G I D S Y S A F F E N D H R T P T G L A G Y L R E R G I S K V S L C G L A T
UniRef90_Q6L196 L N P G D F I T E K H F Y S A F H D T N L D A I L N Y L N A G R L F L T G L D A
UniRef90_W6T870 D A T N V V K L T K H N P G A F F G T D L D L Q L R R H G I Q N I I T G V I E T
UniRef90_Q7VCE7 M D F S V L G C N D L L K S I K K K K I Q H L I I C G G L E T
UniRef90_S6HC64 L A A A D P V V V K T Y A D A F E G T Q L Q Q L L Q S M G C E E L L V C C G M M T
UniRef90_UPI0003B7305D P Q N E D V I V Q E H W A S S G E A N T D D M L K K E D G V L E S K I I T I G L R V
UniRef90_W3ALA8 L R T N E A I D K V T F G S S E L M L A Q M N A E D P L E S I T I I G L G L A T
UniRef90_UPI000289223C T L K T D I V T N P H K V Y G P E S N D L A L Q L R K H G F D N V I L G G M S A
UniRef90_X1LBS9 E V I P E L A K Y P R R F S G F F A G T N L D E R L G K L A P E K V L V C G V C T
UniRef90_M1UWF9 P A E G E L V I T K R R A S G F A G T N L A Q I L T A A H V D T V I L T G V T A
UniRef90_J3LBQ5 V E Q G D Y K V V K T R F S A F F A T H L D S V L K T S G I K N L V V V G V L Q T A
UniRef90_UPI000465B339 V Q G I D S Y S A F F E N D R P T P T G L G G Y L K E R G I E N S I T L V G L A T
UniRef90_R7CNM1 W Q I R E P I D K E T F G S T D L A G E L V A M N E D N E S I T F V G L C T
UniRef90_H8GAR5 E A D T P G A A F H P R L D V A P I T A V F D W L R A R D V I T D V D V V G I A T
UniRef90_J3HS37 V Q H I D S Y S A F F E N D H V I T P T G L A G Y L R E R G I S T H V T F A G L A T
UniRef90_W7Q438 I D P R D V V Y I K R M P S A F F E T P L A G L V W H Q V I D T V I V T G G S T
UniRef90_J2HEG9 P F D D E L V V S K Q Y P S A F F G T S L A S T L T A S G I D S V I L T G L T T
UniRef90_M8D198 D L Y L E Y W M D K T R Y S S F E G T D L A L Q L Q A R G R E V I H L V C C T
UniRef90_X1SHW3 E V I P E L A N Y K K T Y S S F E G T P L E E K K K L K P K K V I V C G V C T
UniRef90_G8PQN4 T A K P D L D I E K S K S D A F G E Q E L S A F L K T H Q V D H L L T G L D G
UniRef90_N6US57 P R P G E R V I R K A E D D D F E G T N L D D V L K G S V R Q D L A I C G V L S
UniRef90_Q65FG9 H D Q N V Y M E K T R Y S A F A G T N L E L K L R E R D I E L H L V G V C T
UniRef90_UPI000467A1B7 D G L P Q T W W P D H C N G H R Q K T A L D T W L R H H E I I E L T V M G L A T
UniRef90_K1PJTO K V F P K T H K S M L I P E V V D H I K T L K D L N S V M I C G I E N A
UniRef90_K8NSH6 D L P V I E K G K L I H K Q F D A C R E N S F L D H I P I D A H V V V A G C E A
UniRef90_D5QGQ4 Q R D I D S Y S A F R D N E G G H E S G L A P W L A A C G T R R V F V C G T A L
UniRef90_B5ZJT1 A Q D V D S Y S A F L D N D R T T T G L E D W L R G L G I T R I F I A G L A T
UniRef90_UPI00036B858C P P G D I Q V R K T R I G A F S T T D L D E Q L R A R E V H T L V L A G V A T
UniRef90_E1V896 T P G A F H F D R D A Y S A F D D T G L G D Y L R E R G I E R V T V C G L A T
UniRef90_V2W6W7 H P D I D S Y S A F M E A D R K T P T G L K G Y L K E H Q I D T V Y I V G L A T
UniRef90_K9AM22 P A E G E A I V E K T H A S S F E D T D F D E V L A G R G I H L V V T G A Q S
UniRef90_W0H4Y2 P R P G Q I N A W D N E D F V K A V K A T G R K Q L I I A G V V T
UniRef90_UPI00036FC44B A R P G Q I N A W D N E D F V A A V K A T G K K I I A G V V T
UniRef90_C6LFF0 T A G W E L C E Q I R G T V N L S E M K D W E A K G C A D V T E V E I I G L C T
UniRef90_W8HCG9 P A E G E P V V S H P G T S A F P N T A L D T L R R R Q I D T V V F T G V A T
UniRef90_Q2LX27 Q A P T D L W L P K R R F S A F F K T D L D Q T L R L Y G I D T V A V T G I A T
UniRef90_UPI0002487DAE V Q G S Q D A E F H P D L N I P T A Q M I I R Y L K E R G I D T V Y I V G L A T
UniRef90_UPI0002D51797 E F T Y D M I N A T A Y I N D F Y C S P L E E F L Q Q R E I D T V L A G T T T
UniRef90_UPI00038293F5 P R D D E P R V I Q K K Y G D S F E D T D L T D L L A A A G V I G R V Y I A G A Q T
UniRef90_UPI0003B6E0A2 V Q Q I D S Y S A F F E N D H K T P T G L D G Y L R A S R G V T K L V L T G L A T
UniRef90_R6VDC9 W Q L A D E I A D T Y E K P T F G S R E L M Q D L A E L N P E A I E F I G L C T
UniRef90_UPI00039F8938 T K G W E L R K G I Y K K C K I F E K N C F A N Q K E E T E S I E F I G I C T
UniRef90_W8HN60 P E P G D V R I T K N Y A S S F F G T S L A S T L H T A G V D T V L V G G V S T
UniRef90_UPI00036685BE L D G K T I A S P H K V Y G P E S N D L A L Q L R K K G V D T Q V L L A G M A A
UniRef90_A0A024YRD8 V R A Q D P V V I E K N A Y F P G R C P L P E L L A E R G D T V L I T G T L T
UniRef90_W4ZF58 E V N I Y P K T C F F M V L R P E V E E K L K E N D T K T V L L C G I E T
UniRef90_UPI000288B994 E E P G V I F V P K P E Y D A F I G T N L D Q I L K S L H V E T V H L T G V C T
UniRef90_UPI0003776733 L R E G D L E I V K G T I G G F Y G T G L E E R L R E R G V D T L V E G G L A T
UniRef90_A6EYX1 P R E D Y L I P K Y R I G G A F Y Q T Y L D L A L R S R N I D T L I V A G G S T
UniRef90_A4A2K5 D P Q I D S Y S G F F D N D R R H A T G L H A W L Q A K G V T E L Y I A G L A T
UniRef90_UPI00046367F9 Y G P L Q D W Y D Q H R K A T N V W Q F D K T R Y R E R H V I T T L H L V G V C T
UniRef90_Q2S2K0 V Q G T E G A E F H P E N D G T P T G L T G Y L R E R G I D T L Y L C G L A T
UniRef90_W9YZB9 P L E G D I I T K H R V S A F H G T D L D I T L R S L N L D A L I T G M A S
UniRef90_M1N499 N E K I D S Y S A F F E N D Q K T P T G L Q F Y L K A T H G F T K I A M C G L A T
UniRef90_U1HA31 P R P G D F V V E K M R M S A W E G T R L E T L K A T G R D M I N T G A W T
UniRef90_A6LXB9 G T K N V H I V T K R Q W G A F Y G T D L D L Q L R R R G I D T I V L G G I S T
UniRef90_Q5LMI3 G L L A P D V E V E K S M G D A F S E P A F V R Y L Q E E N R I G T L I L T G L D M T
UniRef90_Q8E8S1 A L L P N A S I V V K Q F A D S F D N T E A K Q L Q E M Q I T H L L L C G I M T
UniRef90_F4GKD0 T P G W E L Y G K I F E K P T F G S M S L A R H L A E K R Y N R V E L I G L V S
UniRef90_S3JV16 W E L V A P I K K L I T D Q V Y E K P A F K S L H E R T P H S I T L I G L C T
UniRef90_I9CNT5 P H G C D M I F D R D T P S C Y A S P A F A D A M E R G G A Q L V I A G F A G
UniRef90_W6W8V3 P Q P G D A D I K H R V S P F Y G T A L L P L L S A K G I R L V L S G V S T

UniRef90_UPI0003A8B641 E S C V F A T A V S A F E R G L R P L V I T D A C A S H S K R D V D A 130 140 150 160
UniRef90_K2JIK8 D F C V N F S A V S A F E R L G F K V A V R A D L C R A D M E G S K K T A I D
UniRef90_DOLF32 N I C C Y E S T A M R S D G Y E N G Y R N I T L T D C T A A T S V A E H D N A I
UniRef90_B2A6S0 N I C C Y E S T A M R S D G Y E N G Y R N I A V P D C T A P S K G V D
UniRef90_N1ZRU8 D I C C V L H T A V D A Y D L N Y A L E I P K N A V A S F D Q I G H D W A L R H F
UniRef90_A1UTD7 D F C V A F S A L H A V Q C G F Q V S V L N A C A G I D V N G S L N I M L
UniRef90_BOVA03 D F C V A W T A L D A V K Q G F K T L V I E D A C K G I D L N G S L E Q A W Q T
UniRef90_UPI00036920D1 N L C C V E S H L R E L L E Q G F E V G V V R D A T A G P S V P E G D G
UniRef90_UPI000367C795 D F C V N Y S A Q D A F N L G Y K V S L L E K M C R A I D L N G S L A A A K S E
UniRef90_L1QJV0 H I G C Q L T A A E A F Q R D I E P F V A D A L G D F S R D K H M G A V A W A
UniRef90_UPI00031DC502 H I G V L A T A L D A Y A N D I R T F L V G D A V A D F S
UniRef90_K0T9D6 D Q C V E S A C L R D A A D R G Y L V T V A K D A C A A Q C T K D
UniRef90_U2KYY8 D Y C I D A T I R K S G F E H G F K M I V P A N A N S T V D N Q Y M T A E
UniRef90_UPI0003745B1D H V C V Q Q T V L E L L D E R F D V F V V A D A V G S R T P E N
UniRef90_UPI000364746D H A C C V R A T A L D A Y Q R R L D V T I A A D A V G T D D
UniRef90_UPI00047A60F0 N I C C V L F T A N D A Y M R E Y D I T I P A D C I A S N T K K D N E F A L S M M
UniRef90_B9Z820 D Y C V L N T V R D A L K Q G F T V C L L V D A I R A V N V D P D D G M R A E G
UniRef90_A5N887 H V C V F Q T V R D L L A R N Y Q V F V I S D A V C S R T K E N Y L N G
UniRef90_F0PWY2 E F C C L F T S I A A F E K G Y K V T L I E D A T G T A N D
UniRef90_J9WQW4 H I G V L A T A V E A F T H D I Q P F F V A D A T A D F S
UniRef90_K2C935 D Y C V K F S C L D A Q D G F T V Y L I T D G C R G V N V K Q H D S D N A L R
UniRef90_K6VD54 D F C V A W T A M D V R Q D G F N T F V I E D A T K A I D L E G
UniRef90_W3ACV1 E F C C I D T A V R T A T I N K F D V T L I Q N G H S T T D S P I L K A
UniRef90_UPI00036C2DBD D F C V F S A L D A L Q Q G F V F I E D A A R A I S P E G Y Q Q A R
UniRef90_UPI0003829957 C Y C I K N T S F G L R N Q G Y D V T I I E D A T L T V F P D R W T K V R Q H L
UniRef90_UPI0003762F7A D Y C V K F T V L D A L K E G F D T Y V I E D A S K A V N I N P N D F T L
UniRef90_UPI0004635815 H I G V L A T A M D L L R N G F S V W L A A D A C G S R K N D N
UniRef90_UPI000362B90C H I G V L A T A V D A F T H D I Q V F L A A D A V A D F S R R E H T E A L H
UniRef90_A0A059MUG9 H I G C L S T A L D G F M Q D V Q V F V A D G V A D F S R R E H T E A L H
UniRef90_H2C2B2 D I C C V R H T A A D A F F R G Y E L I P F D T V N S F T D A Q
UniRef90_C3MFW0 D F C V A F S A L D A V A E G F S T S V V L D A C R G I D L N G S L A A M
UniRef90_Q6L196 D I C C V R H T T A D A F Y L G Y E T I I I K D A V A A R
UniRef90_W6T870 S N G V Y A T A L D A F Q N A Y Q L I V V E D A C A D R K L V R
UniRef90_Q7VCE7 H V C V L Q S L D L A K A G F N I H V I A D A T K S R N L L D
UniRef90_S6HC64 Q N C V T H T A I S K T A E D Y Q V S I L S D C C T T D
UniRef90_UPI0003B7305D N T C I E S T A R F G M E L G Y E V V L V K D A T A G F S W D E M N A S H D I N
UniRef90_W3ALA8 D I C C I E S N A M I A K A F C P E V P I I V D A C C A G V T P Q S H E N A L Q A
UniRef90_UPI000289223C N L C T E S H M R D L V E S G F R V A V S D A T A G A I L P N M N A
UniRef90_X1LBS9 D I C C V L H T V A D A R N R D Y I V E I P T S C V A S F D H R A H Q F A L E H M
UniRef90_M1UWF9 A G C V R H S A E D A I A A G F R V E I I A R E A V G D R V
UniRef90_J3LBQ5 P N C V R Q T V C D A V A L D Y K V T V I T D A T A A T P
UniRef90_UPI000465B339 D F C V A Y S A L D A A R L G F S V T V A L E A C R A I D L G G S L A A M K A E
UniRef90_R7CNM1 D I C C V I S N A L L A K A S L P E V P I I V D A C A G V T P E S H E N A L K A M
UniRef90_H8GAR5 D H C V R A T S L D A A R H G F S V R V L A D L T A G V S K S T V D S
UniRef90_J3HS37 D F C V A Y S A L D A V K Q G F T A E V L D A C R A I D L G G S L A A M
UniRef90_W7Q438 S G C C I R A T A V D S L S R G Y R T L V P M E C V A D K H
UniRef90_J2HEG9 S G C C V R A S C V D A M S H G F R T A V V A E A C G D R H
UniRef90_M8DI98 D I C C V L H T A V S A W Y L G Y E V V I H E D A V A S F N P A G H E W A L
UniRef90_X1SHW3 H I C C V L Y A V A D A R I R G Y E V E V P V D C V A S F D E K S H H F A L D Y M
UniRef90_G8PQN4 N A C V K N T S I G A L N R G Y R V E L C D P A I L A Y N Q K A W E L Q K E A L
UniRef90_N6US57 D M C V A A T A R A A L K C R Y G V L L P H D A H A A Y D V P A G P G
UniRef90_Q65FG9 D I C C V L H T A V D A Y N K G F N L V I H Q N A V A S F N P D G H D W A L
UniRef90_UPI000467A1B7 D Y C V K Y T V L D A L Q L G Y S V N V I T D G C R G V N L S P Q D S A Q A F M
UniRef90_K1PJTO H V C V Q N T V L D L L E D N F D V H L I A D A C S S R S M T D R I
UniRef90_K8NSH6 H I C C V Q Q T V L G L L N A H R T T Y V V R D A L G S R R P E D
UniRef90_D5QGQ4 E Y C V R A S A L D A V T D G F D T F V L D D A C A A I N D D R R D
UniRef90_B5ZJT1 D Y C V A S T A J D A K A L G F E T I V V E D A C C R G L D P P D A T W Q A L A R
UniRef90_UPI00036B858C S G V V L S T V I E A V D R D Y R V V L L T D A C G D A D P
UniRef90_E1V896 D V C V K A T T L D A L R E G F A T R L L E D L S A A V D P D A I E E C R D T L
UniRef90_V2W6W7 D F C V A W T A L D A A Q M G F K T Y V I E D A C K A I D L N D
UniRef90_K9AM22 D C C V R S T I H G G F A R G Y D V T V S D A H T T E D L T E W G A P P P Q
UniRef90_W0H4Y2 D V C V A F P T L C A L A E G F E V F V T D A S G T F N
UniRef90_UPI00036FC44B E V C V T F P V L S A L E E G Y E V F V I A D A S G T F N E M T R N A A W S R M
UniRef90_C6LFF0 D I C C V I S N A M K A F A P E I K V T V D A S C C A G V T P Q S H E N A L A A M
UniRef90_W8HCG9 N V T V E G T A R D A V N L G Y N V I L V S D A C A A
UniRef90_Q2LX27 H W C V L S T V L D A L A N D F A A F F I E D G C A S H K A E L H
UniRef90_UPI0002487DAE D F C V A W T A I D A K L G F K T F V I S D A T K A I D L Q G H A W Q E M L A
UniRef90_UPI0002D51797 S G S I R A T A V E A L Q R G Y R V I I P E E A V G D R S
UniRef90_UPI00038293F5 D A C I R S T L H G A F V R G Y D T L L L S D A H T T E D L S E W G A P S P
UniRef90_UPI0003B6E0A2 D F C V G F S A L D A V A Q G F D V T V R M L C R A I D L D G
UniRef90_R6VDC9 D I C C V V S N V L G T K A W L P E T T V D S R C C A G V T P
UniRef90_UPI00039F8938 D L C V I S N A L I K S L G L P E F R I V D S N A C A G V T L E S H E K S L A T M
UniRef90_W8HN60 S G C V R A T A T D A L N H G F R V Q V R E T C A D R S P
UniRef90_UPI00036685BE N L C C L E S H L R E L L E Q G F E V A V V R D A T A P R V P E G D G
UniRef90_A0A024YRD8 N V C C E S S A R D A A T G L R V V M V A D A N A R R D Q D
UniRef90_W4ZF58 Q V C V I Q S T L D L L E K G Y E V H V V A D A C S S R T M V D R M
UniRef90_UPI000288B994 D I C D F L T A Y G A Y S R G F R T V A Y N Q G M A T F T
UniRef90_UPI0003776733 N L G V E S T A R A A G D L G H E L V F V E D A M S A L T A A E
UniRef90_A6EYX1 D V G V A S T A F A G R D M Y N L V F A R D A C S S P E K D N
UniRef90_A4A2K5 D Y C I K Y T A L D A I D L G Y R V Q L I V D A C R G V D L S P G D
UniRef90_UPI00046367F9 D I C C V L H T A V D A Y N L G Y Q L V I H R D A V A S F D Q A G H D W A L R H F
UniRef90_Q2S2K0 D F C V K W S A V D G R E G F V Y V I E D A T R G I D Q D G S L A Q A W D
UniRef90_W9YZB9 S G A V L S T V R Q A A N M D C S L V V L E D L C T D V R P E F H
UniRef90_M1N499 D F C V G F S A L H A I K C G F K V S L L N A C A G I D L
UniRef90_U1HA31 N M S V E H T A R T G A D K G Y F M I V P E D C C S T M N A D W H N A A I N F A
UniRef90_A6LXB9 S I G V D T T A R E A F Q H G Y N Q I F L E D A M T A V T K E E
UniRef90_Q5LMI3 C H C V K N T A F G A L N R G Y A V R I D P K A V L A N D A G W S
UniRef90_Q8E8S1 Q N C V T H T A L S H S A L G Y S V K I S D A C T A P T
UniRef90_F4GKD0 N I C C V L A N A L L A K A A L P D A H V V V D A R C T A S G D
UniRef90_S3JV16 D I C C V V S N A L L L K A F F P E T I P I H V D A C A G T T P E N H K A A L Q V M
UniRef90_I9CNT5 E A A C L A T A I L D G F H R G F E V T F L S D A S A S H D L E G I A A
UniRef90_W6W8V3 N G V V I Q A A A R E G H D R D F E C V V L E D C C A G A T

UniRef90_UPI0003A8B641 H D A G L L L C I R R A I G R M I T L D D V A K L E L P A T A
UniRef90_K2JIK8
UniRef90_DOLF32
UniRef90_B2A6S0 K E P F L R S I E K V V G E V M S S Q E I K E R F
UniRef90_N1ZRU8 E
UniRef90_A1UTD7 K T M H E A G V E L L
UniRef90_B0VA03 M Q
UniRef90_UPI00036920D1 Y L A A L I N F R F I A N A L W T T E E V L A Q L Q Q A
UniRef90_UPI000367C795 M Q
UniRef90_L1QJV0 A D T C A V A L S T A R V L E R L
UniRef90_UPI00031DC502 Q D R H R M A L T Y A A E R C A M V V P G D R L L A Q V A
UniRef90_K0T9D6 H L K G M K G M K G F S R Q L T T D E L L K E L
UniRef90_U2KYY8 Q S Y H Y Y N E F M W N K R Y A E C I P F E K T L E L M
UniRef90_UPI0003745B1D K Q L A L E R M I R S G A E V V S A E M V L F E L L R E A G T
UniRef90_UPI000364746D
UniRef90_UPI00047A60F0 E N T L K A T I I H
UniRef90_B9Z820 E M
UniRef90_A5N887 L S Q M S A M G A V I S N T E T V F F D L L K M A G T
UniRef90_F0PWY2 E E V Y E M P G L D I K D F I G S V L N W S N V I E V L
UniRef90_J9WQW4 Q D Y H R S A L T Y A A E R C A R V I T A K E V
UniRef90_K2C935 E M
UniRef90_K6VD54
UniRef90_W3ACV1 E E I I A H H N R A L H G
UniRef90_UPI00036C2DBD T D L E Q R G A Q F V T T A E L V A
UniRef90_UPI0003829957 K E A G A R F
UniRef90_UPI0003762F7A A L K D M S K S G A E I T R S R D I
UniRef90_UPI0004635815 H E M A L Q T M I Q A G A L V V P T E T V I Y Q L M K R S G T
UniRef90_UPI000362B90C H R M T V D Y V A K R C G M V L P S A E I F A
UniRef90_A0A059MUG9
UniRef90_H2C2B2 H L L G L K Y L S Y A Y A D V V P V K Q I V K G L
UniRef90_C3MFW0
UniRef90_Q6L196
UniRef90_W6T870 H Q F F F D E M F D R L G T V T T L A E L L P R L Q
UniRef90_Q7VCE7 Q E I A L L R L R Q F G I Q I S T V E T T I F E L C R T S K S
UniRef90_S6HC64 E M I H N I A L H G V S T R V T L V T T E Q A L
UniRef90_UPI0003B7305D A P T Y A H H L
UniRef90_W3ALA8 M E V C Q
UniRef90_UPI000289223C Y E A A L V N F K M I A S H V F T T D E I V K E I K T A
UniRef90_X1LBS9 E K T L G A K L
UniRef90_M1UWF9 A G V V A W N L F D M D A K F G D V E N T E D I V A Y L N S L P
UniRef90_J3LBQ5 D I H L S N L R D M K N I G V E T P T L A E W
UniRef90_UPI000465B339 M Q
UniRef90_R7CNM1 E A C Q
UniRef90_H8GAR5 A L T E L R D A G V D V V G S
UniRef90_J3HS37
UniRef90_W7Q438 E S Y H Y A N L T D L H L K Y A D V M P V A D V L N W L E
UniRef90_J2HEG9 D A P H E A N L F D M N A K Y A D V V G E A E V V A F L E G L K A
UniRef90_M8DI98
UniRef90_X1SHW3 E N T L G A K L T N L
UniRef90_G8PQN4 Q E M G A A
UniRef90_N6US57
UniRef90_Q65FG9
UniRef90_UPI000467A1B7 E M A A A A T L Y T L D D
UniRef90_K1PJTO Y A F Q R M K D A G A Y V T T S E S M L L A L V G G A
UniRef90_K8NSH6 K E T A L L R M E R H G A E I V T T E M V V F E W L Q T A
UniRef90_D5QGQ4 V H R A L R D G G I G I T T R D L L E
UniRef90_B5ZJT1 H D I L R V R S A E L A G
UniRef90_UPI00036B858C E L H T L L T E R M L G K R A R L S S T T E L P S L L G
UniRef90_E1V896 A D A
UniRef90_V2W6W7
UniRef90_K9AM22 D V V S H T N L F W T F G R Q A R V Q E S A E V
UniRef90_W0H4Y2 E T V Q Q A A W A R M T A A G A Q L V N W F S V A C E L Q
UniRef90_UPI00036FC44B E Q A G A Q L M T W F G A A G E L
UniRef90_C6LFF0 K M C Q
UniRef90_W8HCG9 D E A H E A T L G T F S L L G K I A S A G D I Q R A L
UniRef90_Q2LX27 E N V L N C F R R N P L D P L L Q V M T V D E F L Q K L
UniRef90_UPI0002487DAE A G V K R V
UniRef90_UPI0002D51797 E S I Q R A T L L D L N A R Y A D V M T L D K V M K C L N E A
UniRef90_UPI00038293F5 E A V V A H T N L Y W Q G R T A A V V K T A D L
UniRef90_UPI0003B6E0A2
UniRef90_R6VDC9 E S H E T A L A T M R S C Q V N V I
UniRef90_UPI00039F8938 K M C Q
UniRef90_W8HN60 E L H E S N L R D L D A K Y A D V C H L D E A I A R V A A L P G
UniRef90_UPI00036685BE Y L A A L I N F R F I A H A L W T T D E T L N Q L
UniRef90_A0A024YRD8 H N A A L H T V Y R S F G D V R S T A E V L G L I G A G A
UniRef90_W4ZF58 Y A I E R L R D C G A F I T T S E A I I L Q M V K D A A
UniRef90_UPI000288B994
UniRef90_UPI0003776733 H Q A S V R L D F P R L G S V V T A G E V
UniRef90_A6EYX1 H D Q F M E R I F P R M G R V R S V A E I V A M L D A G A
UniRef90_A4A2K5 V N A A L K E M E A H G V K L I Q S A D I
UniRef90_UPI00046367F9 Q T A L G A
UniRef90_Q2S2K0 E M N E A G V Q V I S S E A A L D L A A A
UniRef90_W9YZB9
UniRef90_M1N499
UniRef90_U1HA31 L Q N V S V V T N A D T V I K A L G
UniRef90_A6LXB9 H E Y V C K Y I F P R I G K I R T S E Q V I S I L L K
UniRef90_Q5LMI3
UniRef90_Q8E8S1 Q M V H Q I A L S A L S R R
UniRef90_F4GKD0 A S L H E K A L D I L A G V H V E V I
UniRef90_S3JV16 K M C Q
UniRef90_I9CNT5 D D I H R S V S A V M R V F A D V M D T Q S W I T A
UniRef90_W6W8V3 D E E H E Y A L A G L R R F A G I A T S S S V

1 10 20 30 40
UniRef90_UPI0002E933B1 A K Y A L V V T D M I N T Y R H R D A L V P S A E R A V P R I V D
UniRef90_Q8KBV5 I T P K E T L L L V I D I Q E K L A P R D A V F Q S D R V I K N T G K
UniRef90_R9NHG9 S V L L V I D A Q N S F Y H R G S Y Q A A E A T P A F E Q R L V S E
UniRef90_E0RWW5 L V V V D M Q N D F V T G S L G S A E A Q Q I V P A V
UniRef90_UPI0003C13195 A L I V V D L Q N D F C P G G L A V T G G D E T I V P L V N D
UniRef90_B9XNB1 A L L L V D L Q N D F L P G G L A V V S H G D R V L P L A N K
UniRef90_A0A014M6W6 R Q A L L L I D L Q N D F C P G G L A V S G G D R V I A L A N Q
UniRef90_K4KYP4 Q K K A L V I I D I Q N D I T K N Y K D I I D N I N K
UniRef90_G7Z5B3 M I L R A Q E S V L V V V D V Q R L L P A I H E S D R V V R H A G M
UniRef90_Q3A4K0 L L V V D V Q R D F C P G G L P I P E G D K V V P V I N A
UniRef90_E6PF75 R I D A K R T A L L V M D F Q A G I V G M L E H A D A L T A K A A L A I R
UniRef90_S3N6V7 W K I E K N R A L L I H D M Q E Y F I H F Y G D N S P M Q K I I E N I A Q
UniRef90_UPI000469A474 V L V V I D M Q N A L I K Y S Y N Y D G L I E N I A Q
UniRef90_R5J0G7 V L A I I D M Q K D F I D G A L G T K E A V S I V P K V A A
UniRef90_D3L0G0 P Y T L K K D K S Q L L I I D V Q E R L L P A I F D N T S I V R N L E L
UniRef90_D8F527 L N K E N T G L I V D A Q E K L M G V M G K K E R V I D R M L K
UniRef90_Q1QWM7 R L D K N D V A L L M V D H Q A G L L S L V R D F S P D D F K N N V L A
UniRef90_C5LYM4 R T N T A L L I I D V Q K D F C K G G L A V P D G D A V V D V I N G
UniRef90_M1ZDK7 K N E A L I I V D M S Y D F V A D D G G L T P A G E I V P Y I I A
UniRef90_UPI0001E894D5 K Q T A L L I I D I T N D F Q H G S T L A E K T T K L V P N I K E
UniRef90_S9SAD6 R P A L L L I D L V R A Y F D P A C D L Y A G E E A L A S A L R
UniRef90_UPI0003B4477A R K L I V I D M Q K D F V D G A L G T P E A V S I V P N V V E
UniRef90_G7H333 A T S A L V M I D V Q N D F V D G P S A I P G T A E R I D A M A T
UniRef90_A0A052IEK8 R P A L L I I D V Q Y R T V E G P T A C G E A G W Q A V D A L L A R P
UniRef90_UPI00016C540B A L L L V D V I N D F P E A D Q L L R H A A P A A K D L A R E
UniRef90_UPI00028805AC A L I V V D M Q K H I L L S Q K N F K E E K E K I K E
UniRef90_R1E9D2 S V D T K K T A V L F I E Y Q N E F T T E G G K L H G A V K M L E K T S A
UniRef90_K6XUL1 L K T D N T G L I V I D I Q N L A H Q V F Q S E A L L H N T L T
UniRef90_A0A010Z6W3 A L L V I D Y T N D F V D G S L P V Q P A T E I E Q R M I D
UniRef90_UPI00037354FA M E S Q N T A L L I I G Y Q N D Y F S P N G I L Y G V I E V I A N T V H
UniRef90_W9YXS2 R P A L L L I D V C Q A Y W T P G S P L P G A L A S I A D S M K A
UniRef90_W2EI08 M T S R A P W L A V V D M Q N V F A D P G W F T P R F A E T V E P V R R
UniRef90_C8WU52 A L L V V D M S N D F V H D E G T L T P G Q A L V P Y I L S
UniRef90_F8CC27 D T A L L I I D V I N D L D F P G G E L P W A L R M V E R Y L G P
UniRef90_S2KI80 Q K A A L V V V D F M Q G Y T D S P L F A P G V V E A V A Q S P T
UniRef90_S3FH08 Q N K A L V I I D I Q N D I T K N Y K E I I D N I N T
UniRef90_C7LLK4 M K S K N K N K A L I I V D Y Q Y D F C D P N G S L Y N A Y T L K P K I E K
UniRef90_A1WG83 A N A V L I V V D V Q N C F V P G G L P V A R G D E V V P V I N R
UniRef90_I3IK85 R L S K D N T A V L L V D H Q S G L V N L V Q D Y S P D E F R N N V L A
UniRef90_V2YC92 R K L L L V I D M Q N D F I N G A L G T P E A E A I V D R V A G
UniRef90_UPI0001F26E8C K S A L V V I D F Q N D F L S G N P S P A M A G V N N V P R
UniRef90_G4RD21 R P A I V V V D F T Y G F T D T R Y A T A D A A S Q M A A T R R
UniRef90_W0PHI5 R F T A D N A A L L I I D H Q V G T M G W A K S M P F E E L K R N A L M
UniRef90_UPI00037D4E25 A G L R Y E A D N T A L L V I D P Y N D F I S D G G K V W N G N N C V P H M L Q
UniRef90_F4GRC0 W T A Q T K R A V L I H D M Q H Y F L Q Y D V S A E P I P T L V K H T L G K
UniRef90_R6E4B0 N D S V L I V V D M L Y D F I D G S L A C A N A G N A V D N T L E
UniRef90_UPI000380BF47 D L A T T A L L L C D L Q N D F I H P K G A Y A R G G Q S A P E I A A
UniRef90_C1ED48 P D E V A L L I I D F Q S D F I D A G G D T K P A Q E A V M K V K P
UniRef90_A0A011A6C9 K K L L I V V D M Q K D F I D G S L G T P E A V S I V P K V K R
UniRef90_UPI00047E50FD S K R A L I N I D Y T N D F V A E N G A L E P G Q A I E E E I I A
UniRef90_E7G9Y7 A L V V I D I Q N D I T K N Y K E I I D N I N R
UniRef90_H7CT27 S L D K N R T M L L V I D I N K G F A A G A L Y S D R I E K L I N P I S N
UniRef90_UPI0004684DAD A L L V I D V Q N D F C D G A L A V A G G S E L V A G I N A
UniRef90_M1JHM4 V V M V I D M Q N G V F A T P R F D R D G R V A R L A N K
UniRef90_M2X6G2 S N P V L V L C D F Q N D I M G F V P P E K K E A V V K L Q
UniRef90_A1AT57 L D S E K A A L V V I D V Q D K L C Q A M D E K M L G K L T K N V G I
UniRef90_V4IH2 S P K L L T P D D H A L M L I D H Q M G F A V A S H P M E V V L N N V T G
UniRef90_I6TAM4 A L I S I D Y T Y D F V A D D G K L T T G K A I E Q A V T T
UniRef90_UPI00026C710B T T P R T A L L V D L Q E A F F E A P G L A A A R A D V L A A V G A
UniRef90_E1Z932 L L V I D M Q N D F C D A V L C V K G A M A C I L P A V I A
UniRef90_W9TCB6 E R D L L L I I D V Q N D F C S G G L A V P G D G A V I A P I N R
UniRef90_J2LBW0 A L L L V D I Q N G F C P G G L P V L D G H E V V P V A N S
UniRef90_A0B205 I A P S K T A L L V M H Y Q T D I L G L F P S V A P E L L A N T R R
UniRef90_G0LIR3 S A V E I L D T D S T A L L I T P Q I D F L K P D S V V W D K N A V E K L R
UniRef90_UPI0003B70DB8 R A S R S N T A L L L I D L Q D D F T S S T A K Y T Y P A E A I E A I N K
UniRef90_UPI000468355B A L V V I D L Q N D I T K N Y R E I I D N V N A
UniRef90_W9WC10 A N Q T A V L L I D P Y N D F L H P K G K L I A A T G T I E H L Q E
UniRef90_F1Z4Z0 M Q A S S T A L V L I E F Q N D F T T P G G G V M E S T G M L A N T C D
UniRef90_UPI000403BF8C T D R T A L L M L D Y Q V A L C E R G E H M R M P P G V L A A A E K
UniRef90_F4BVD4 N D A A L I V E P Q N D F T E G G L P A Q N M S E A I T V I N K
UniRef90_A0A024Q798 M D T S L E N T A V L F V D I T N D F R F D G G D L A N T K E I L P D L K N
UniRef90_G2NAF6 D M G K R A V V I D M L N S Y D H P D L L V P S V S R C V P A M A E
UniRef90_UPI000248598F I L L T P Q N S A F I C I D Y Q P V Q V N S I A S M D R Q L I N N I V G
UniRef90_U3TSC4 W A L E P Q R A A L L I H Y M Q A Y F L N F G E D S P L V N Q V V E N I A R
UniRef90_F2LJ21 N R P N L A L V V I D L Q N G V V A Q A H R R D E V L V V V D G
UniRef90_UPI000382B357 P V R V D R E R S A L I V V D M Q P D F M E G G L A T K G G S E L L D V G V T
UniRef90_A0A059ATH6 T G L V L V D I T N G F C T G S L A P R E P D E M V E E S S R
UniRef90_V6F1D8 M L M D A A R S S L L V V D V Q Q N L G P V M A E P R Q V Y R N C V R
UniRef90_F4CX22 A L L V V D L Q N G F C R P G L G L A G V D A V A H A A T
UniRef90_R6NKB9 A L I V V D M Q N D F T D G A L G T P E A L A I V P K V I A
UniRef90_R7AEM4 A R R Y L I V I D M Q N D F V T G A L G T A E A Q G I A P A V V E
UniRef90_M5G727 S P A K T A L L V D L Q N D F L P P D L A V P E G R D L P H V Y R
UniRef90_UPI00038096CA R D R I A L M I I D M Q Y H D A S P D H G M T R A W E A V P S I R R
UniRef90_UPI00031B27B8 K Q A L L I I D A Q Q E L I D G N A A V F H K D Q L L T T I N I
UniRef90_R9J979 A K K V L V V V D M Q Q D F N G A L G T K E A E A I V D N V A E
UniRef90_I4CBG3 L R L E D S L L L V I D V Q E K L A R A M H Q R D A V V E N T A K
UniRef90_N9CM60 N S A L I V V D V Q N G F C P G G L A V A D A D Q L I P C T N A
UniRef90_UPI0003B35ECA R L D K N N A A V L L V D H Q A G L L S L V R D I D D Q F K N N V L A
UniRef90_UPI00037C9F07 V V L V I D M V K G F L E P S H N L Y C G D E I I P R V H D
UniRef90_B8CRL8 T L T A D N A V L A M I D H Q T G L M V G L G D E H P T V I K N N I L A
UniRef90_F5YBZ4 A L L I I D M Q K A Y Y T G Y A K E S M D Q A S E Y I N Y
UniRef90_B1YHA1 R Q A V L V I D F Q Q D L V E G E A G V H A K E N M I Q V I N Q

	50	60	70	80
UniRef90_UPI0002E933B1	L L E R A R A A G I P	V V V Y R W R S H	H G Q I L L E M A L J A G	H H P E L V I E P V R
UniRef90_Q8KBV5	L I R A C K L L G I P	V V V H T E Q Y P	K G L G R T	V D E L G V
UniRef90_R9NHG9	L I A G C Q N Q H G L	P V V D V F R P E	A Q G P F S R A S	G W V K C P P F L
UniRef90_EORWV5	V D K V R R F D G T	V V F F T R D T H	E N Y M E T Q E G	H N L P V P H C Y E G
UniRef90_UPI0003C13195	L I Q D W H P A G H S	S F A S S H P G K Q	P F E M I E M P Y G	P Q T L W P D H C
UniRef90_B9XNB1	L T Q D W H P I N H S	S F A V N H P G R T	P G E T V V L K K R Q	Q K L W P V H C
UniRef90_A0A014M6W6	Y A T E F H Q R D Q P	V L A T L D W H P A E	H G S F A S T A R Q Q	P W T S G K L
UniRef90_K4KYP4	A I D W A V H N N T Q P	V I Y I R H E N L S	A G T R T F K T N T	Y G S E L A S D L
UniRef90_G7Z5B3	L L K A A A L S V P	V L V T E Q Y P R	G L G P T V I E A V	R A D
UniRef90_Q3A4K0	W A E A A L K K H L P	V V Y S C D W H P E	G H P S F K S H	G G D W P K H C V Q H
UniRef90_E6PF75	S M R A C G G H V G Y	V R V G F T E S E Y	A A P F H A D A P	A T A I D E R L A
UniRef90_S3N6V7	I K A W C I A Q N I P	V I E Y T A Q P A D	M W G P G L T A Y P E	Q A K I V H Q L A
UniRef90_UPI000469A474	R I D T Y R F A N L P	I I F L A H N D Q	D V V R G T D L W Q	F S K G L D
UniRef90_R5J0G7	R L K R A R E D G E T	V V F T R D T H H A	D Y L S T Q E G R	K L P V P H C M E G
UniRef90_D3L0G0	L L K A A Q V L S I P	T K Y T E Q Y P K	G L G P T V I S N	L E
UniRef90_D8F5Z7	L L D L A R V F Q L P	V I V T E Q N P K	H L G P T L Q A I R	E T L P G Y D P V T
UniRef90_Q1QWM7	L A D I A K F F D I P	T I L T S F E T G P	N G P I V P E L K E	M F P Q A P Y F
UniRef90_C5LYM4	L R E K L S P A T S L	V C L T Q D W H P V	G H V S F Q S T H A	C Q G A E L F K P
UniRef90_M1ZDK7	L A D R F L E E G H V	V I A M D A H E P N	D P H S F E R W P V	H N V V G T K G Q
UniRef90_UPI0001E894D5	I K E V M H K E G L P	V I Y I N D H Y N L	W Q A D Y C K N K	W S D P I M K A L Y
UniRef90_S9SAD6	L R A A A R Q A G V P	V V H T H V V Y H P	P L R H F L R G N P	M G D W A P G L R
UniRef90_UPI0003B4477A	K I K R Y D I K D	V F A T R D T H Q P	N Y M E T Q E G K N	L P V V H C V I E G
UniRef90_G7H333	L V E A F R G A Q R P	I V H V V R S Y R A	G E S D V I E P D	W Q L L R G G E P Q S
UniRef90_A0A052IEK8	L L A L F R E R D W P	V V I Y P H V A L K	V S T S D A G R L	G A K V P A I M D I P A
UniRef90_UPI00016C540B	L K G R A H G A G V P	V I Y A N D N F G R	W R S D L K W D K	G R E L V I E L L H
UniRef90_UPI00028805AC	I I N I C K A K G D K	I I F T K H E D Q D	D E S D P F N K N C	D R G N I H E E F V
UniRef90_R1E9D2	L A S K A R T A G A K	V F H A P L I S F K E	D D K L F T E G S	W N A D F H P S M Q
UniRef90_K6XUL1	L I K T A A Q I L A I P	I I C L E Q A P K	L K I G N T V R S L	A D E L S C P C L I T
UniRef90_A0A010Z6W3	L T T Q F A S N G D Y	A V M A V D L H E Q	N D P H H P E S T L	F P H N A Y E Q
UniRef90_UPI00037354FA	L L Q Y L A S T P V L	I T T P I F F T P	N Y N A F Q M G T	P G S E T I E V L Q
UniRef90_W9YXS2	L L S A A R E G G C P	V I V T K V E Y Q D	M W E K G D T R G Y	D Q W D G L V P
UniRef90_W2EI08	L V E A L A P R V T	F T R F V A P D V	P S G A W V A Y Y E	Q W P F A L E P Y R I
UniRef90_C8WU52	L A D R M L J A S G	V V A I C M D E H D	P D D R H F R D W P	H N V R G T W G Q
UniRef90_F8CC27	F A E R M R R T G V P	V I Y V N D N F G Y	W R S N F G D I Y A	H C T R P K S R K
UniRef90_S2KI80	L L N A A R E A G A P	V L H T N I R Y H G	P M K A M V A G N P	Y A E F C P E V V
UniRef90_S3FH08	S I D W A V N H N I	H V V Y I K H E N L	S P T R T F K T G	T R G A E L V P D L N
UniRef90_C7LLK4	L A K E L V S Q G W T	I A T K D H F H P I	D H S F K I W N K	H C V Q N T K G S
UniRef90_A1WG83	L T Q D W H T P G H I	S F A S S H A G K K	P F D T I R L G Y	G E Q R L W P D H C
UniRef90_I3IK85	L A D L A K Y F K L P	T I L T T S F E D G	P N G P I V P E L K E	V H P E A A Y I
UniRef90_V2YC92	L I E T Y P S Q D V I	A T R D T H A E N Y	P V T H C V K G T	P G W E L H A R I T
UniRef90_UPI0001F26E8C	A V D F A R A N N R P	V I Y T T I A Y H R	G M V A L V E G T	R L V E I D A T I G
UniRef90_G4RD21	L T D L A R S R G F P	V I V T T S S	M E E Y A Q G P	L L S E L E T I L P
UniRef90_W0PH15	V L N A S R M A K L R	V V Y A L H R R Y W S	H R T F E Y G T W G	G E I R A E F T
UniRef90_F4GRC0	L R E Q C H A L G I P	V V Y T A Q P A V Q	P P Q D R A L T D F	W G I I E E L A
UniRef90_R6E4B0	F I K K T R D E D L P	V V L F T R D H P A D	H S S F T E Y G G T	W P V H C V I A G
UniRef90_UPI000380BF47	L A Q R V R A G G G W	V A T L F T L V P H	L K A L R P F L R A	G D F A P G S W
UniRef90_C1ED48	L I E A A R S A G V V	I F T R E G H R P	G S M F L V R G S P	G W D I T P E L A
UniRef90_A0A011A6C9	K I E E Y Q A A G D E	V I F T L D T H E E	N Y L N S O E G K K	L P V V H C V I R G
UniRef90_UPI00047E50FD	L T K E F T V N D D Y	V V F A I D V H D F	P P H N L R G T D	G R H L F Y E E N K
UniRef90_E7G9Y7	S I D W A V K N N I	H V V Y I R H Y N L	S A G T R T F K P N	T P G S E L V S D L
UniRef90_H7CT27	L A K Y A L N N G I K	V K A F T D Y H T E	S D S I E L K A Y P	K H C M K D T S D W
UniRef90_UPI0004684DAD	L M Q D W H P A G H S	S F A S S H A D A A	P Y D L I E M P Y G	T Q V L W P E H C
UniRef90_M1JHM4	L M A G A E Q V I	I T I Q H T E P	G G L E E D S P G	F A F L P E L N
UniRef90_M2X6G2	L L N F A R E K K I P	V I H V G V R F R K	H P E V S K R N K	F L S L I S S R K
UniRef90_A1AT57	L L E S V A E L K I P	V L F T E Q Y V K G	L G A T L A	E L L E
UniRef90_V4IH12	L A K T A A L F G V P	A I V T I T M E R H	F S G N P L F R	G V R E A F P D T S G W
UniRef90_I6TAM4	H T K K F I E E G D F	V V F A I D A H D P	S D N F H P E N K	L F P H Y E R A Q
UniRef90_UPI00026C710B	L A D G A R E A G A P	I L V T T E H S R	D R S T W T L S M L	D D D Q G Y L F H
UniRef90_E1Z932	A V E L A R R K A V E	I I W I R E H D P	S G E D V I E P F R	E P M F R L G R S S
UniRef90_W9TCB6	L C E R W H P A N H	S F A S S H A G R S	P F E Q I E A P Y G	L Q T L W P D H C
UniRef90_J2LBW0	L I D S G K Y D L T I	A S Q D W H P A D H	G S H P D K N P	F E M G E L S G K P Q
UniRef90_A0B205	L R D A A R A A G V	G V W F A N L R F S	P G Y P E V S P L N	K N G Q P C P E L A
UniRef90_G0LIR3	L R D A A R E G D V P	V L Y S P H E Y T D	D E F D W E K L N	T I D Q I M F D T R
UniRef90_UPI0003B70DB8	L V I E T A N A N G S	P V I S I R Q T F V	G W Y I N F L V K L	L N E G R I D A R I
UniRef90_UPI000468355B	A I N W A V N N N I	D V I F I R H E N L T	P G T R T F K H D	T R G S E F V P E M
UniRef90_W9WC10	F V A T A R K H K I P	I Y Y C L H Q Q T D	K H S F E G W S M N	W S L E S L E G K
UniRef90_F1Z4Z0	L V A K A R E A G V T	I M H A A I S F A	D G Y P A F K R G S	W G A A I V D G L A
UniRef90_UPI000403BF8C	T I T A A R D A G L Y	V V H V R F D A Y P	R E R A M L R D A P	G A R I V S A L A
UniRef90_F4BVD4	I I P R F R Y	V I A S K D W H P	D H C S F A K W M	H C I A G T I G A
UniRef90_A0A024Q798	L R I Y A K E N K L P	I I Y I N D H Y G L	W Q A D F H K I I D Y	C H I I E T L K
UniRef90_G2NAF6	L T R A R E Q E V P V	I Y E W R S H H G E	I V D Q A L A G A K	P E L V I E P L L
UniRef90_UPI000248598F	S A K A A I V Y G L P	I I H S T V N	V K T G L N K P	P I P Q L R K
UniRef90_U3TSC4	L R A Y C K A Q G I P	V F Y T A Q P N	Q Q S D E D R A L L	N D M W G P G L N K H
UniRef90_F2LJ21	L I R Q A R A A G L P	V V V W R H A D A	D L I E A G S E A	W R I V P E L A
UniRef90_UPI000382B357	L I M Q D W H P A G H	I S F A S S H E G R	Q P F D I I E I Y G	H E Q V L W P D H C
UniRef90_A0A059ATH6	L A R S F C D K K W P	V L A F L D S H Q P	D P P H C I A G T	D E S N I V P A L R
UniRef90_V6F1D8	L L R G A A R L A V P	V T I S E Q Y P K G	L G P T M	G E V L A
UniRef90_F4CX22	A V H A A R E A G T P	V V F T R H L Y R	P G R D G L L G T	W D A Q V V D D L G
UniRef90_R6NKB9	K I K G F D T H G E	D Y L D T Q E G R	L L P V R H C I K	G T D G W Q I R A E L E
UniRef90_R7AEM4	A V R A F D T H G E	D Y P E T Q E G R	N L P V R H C I K	G S E G W Q L T P E L S
UniRef90_M5G727	L L E W N W D V V A	S Q D Y H P H G	H I S F T S H D	L P F T N I S V
UniRef90_UPI00038096CA	L L D Y F R Q E D L A	I V H V V I G S P	Y R D D V W W T	E N P D F A V I E P L A
UniRef90_UPI00031B27B8	A I K A I Q S N A L I	I F V R D T D V A	S G E G K G F Q I	H E I K
UniRef90_R9J979	V I K T F D G E V I	F T R D T H T D R N	L P V L H C V K	D S E G W Q L D R K L A
UniRef90_I4CBG3	L V Q G A V I L G I P	I I W T E Q N P K	G L G R T L	P E I A D
UniRef90_N9CM60	L G R V F H N I V W P	V H C V Q G T S	D A E L H P D L	D L P T A Q L I R K Y I
UniRef90_UPI0003B35ECA	L A D L A K P I F Q L P	V I L T S F E N G	P N G P L M P L K	A L F I P D A P G I
UniRef90_UPI00037C9F07	L L V R E A Q A G S E	L L I S D H H D	P D D L E F N V	F P I H C V I P E L A E
UniRef90_B8CRL8	L S N T A K A A G P	I S V I T A S M P	D G P N G P	V M P E I Q Q
UniRef90_F5YBZ4	A V E L F R G K N Y P	I I W V Q D E D	K K G N V I	Q G T I G F D I D A L K
UniRef90_B1YHA1	V V Q E A E N E G H	V M I F I	R D L D V A N G	Q G E G F A V H S S I Q

UniRef90_UPI0002E933B1 P D D E S L F V V K A R H S V F Y E T P L L A Y L L H T L G V D T L V L T G Q V T 120
UniRef90_Q8KBV5 L I G D D L P F E K L S F S C C G N E E F M K R L R V L L G C N D I L V V I G G M E R T
UniRef90_R9NHG9 T H Q P A N S V Y K R V L S N A L T E P G L E P W L R E R Q L V N S H L I I S G I R T
UniRef90_EORWW5 T E G W E L O R I V E L K V E L S Q G R K I F D K P T F G S I E L A S F L I I S G V C T
UniRef90_UPI0003C13195 I Q G I D S Y S A F F E N D H V I T P T G L A G Y L R E R N I G A V I T L V I G L A T T
UniRef90_B9XNB1 V Q N I D S H S G F F D V D H Q R S T G L G E Y L K E A K Q V K E V Y I V I G L A T T
UniRef90_A0A014M6W6 D G L S Q W W P H D C V D Q G S S G A E L H P W L K A K Q I V A L L T V M G L A T A T
UniRef90_K4KYP4 K I V S K N V F T K Y K G N A L S S E E F A D F I S K N E L C D F Y I T G A D A
UniRef90_G7Z5B3 L P P G T P V I E K I T F G C T G D E P A F N A A V E E L K R P Q I V L C G T E A
UniRef90_Q3A4K0 T P G A D F C F D Q D Q L S V F D G T G F A D A K L R R D G V D R L W V A G L A T
UniRef90_E6PF75 P Q S G D L V V R K T R V G A F S T T D L A E Q L R S R G L D T L V L S G I S T A
UniRef90_S3N6V7 P N E Q D H L L T K W R Y S A F Y R S D L A K K L L S E T Q K D Q L I L C C G I Y A T
UniRef90_UPI000469A474 I K D D D M V V E K T H A N A F Y R T N L N N L Q E N S L S T I E F C G V Q T
UniRef90_R5J0G7 T A G W Q I D A A L P V P D A P V F D K P G F G S P A L I D Y S V E F I G L C T
UniRef90_D3L0G0 L L P P E T P R F E K L H F S C C D E G N F K D F L G Q E R K Q V I L L A G I E T
UniRef90_D8F527 K V D F N C C E V Q A F N D C L E K M S L Q N I I L L T G V I E T
UniRef90_Q1QWM7 A R P G Q I N A W D N E E F V A A I K A T G K K Q L L I A G V V T
UniRef90_C5LYM4 F K L P D G T E Q M M W P D H C R V Q C T K G S Q F H D R L V
UniRef90_M1ZDK7 E L Y G E L N D W Y E K R K S D R D Q V H Y I P K S R R D M G V D T V H V V I G V A T
UniRef90_UPI0001E894D5 P C G D D F F L I K P K H S A F Y G T A L H T L L S Q L H V K K L I L T G L A G
UniRef90_S9SAD6 P A E D E L V V A K Q H A S A F F G T S L A A T L T C E W G V D T L V I T G V S T
UniRef90_UPI0003B4477A T E G W E I N I N K P T F G S T V L V D E I L K L S K E E L Q I E M V G L C T
UniRef90_G7H333 A G I D E Y L L Y K P R W S A F H R T A L D A L L R E R G I T T V V V A G C N L
UniRef90_A0A052IEK8 H R E R D D L V P K K H P S A F F G T A L V S H L V D L G A D T L V V A G C T A
UniRef90_UPI00016C540B P S E D D Y F V L K P K H S A F F S T T L D T L L G Y L L G T E T L V I G G F A A
UniRef90_UPI00028805AC D Y Y D E L V I K T T P S A F F K T N L E E L L K K N N I N E T V I I V G F N T
UniRef90_R1E9D2 P Q P G D V V V Q N K R G D A F P G T D L E A Q L K A N G L E T V V L A G F L T
UniRef90_K6XUL1 K H T F N A C D T Q T F V D T L H D S Q K E N W L V C G I E A
UniRef90_A0A010Z6W3 N E E H I Y W M D K T R Y S A F A G T D L A L R L R A R G I A E V H L I G V C T
UniRef90_UPI00037354FA P F Q D R I V P G K R G Y N A F I N T N L D E L L K Q R G I T N I V L A G A V T
UniRef90_W9YXS2 Q Q P K E L V V S K H Y P S A F F G T D L A T R L N L R V D T L V I A G V S T
UniRef90_W2EI08 V D A F A A Q A G P T V D A V T F G K W T P A L A A A V G D R P L V L A G V S T
UniRef90_C8WU52 Q L Y G D L A A W Y E R H K E H P D V W Y V P K R R E R G V H R V H V C G C T
UniRef90_F8CC27 P Q P D D Y F I L K P K H S A F F A T S L V P L L D H L G T K K L L L A G L A T
UniRef90_S2KI80 P Q G D E L V I T K Q Y A S A F F G T S L A P T L M A L G V D T L V L A G C S T
UniRef90_S3FH08 I V S E N V F T K Y K G N A L T S E A F A N F I R E H D I G H F E Y I T G A D A
UniRef90_C7LLK4 E L Y F D Y S Y G F G D A N N S N G L D E Y L K S K N I N E T V I I V G V A T
UniRef90_A1WG83 H P Q V D S Y S A F E E A D H K T A T G L T G Y L R Q R G I E S V F V A G L A T
UniRef90_I3IK85 P R P G Q I N A W D N E D F V R K A V R A T G C K Q L L I A G V L T
UniRef90_V2YC92 A A L R D A T V D K P T F G S K E L A E R L R L M A E G E E L D I L V I G L C T
UniRef90_UPI0001F26E8C V Q P G E R V F D K K A L D P F L V P E F T A Y L E E Q G G F E H L V L A G L F S
UniRef90_G4RD21 I Q P G D A I V T K K G A S A F F G T A A A M L T G M Q V D T L V I A G A V T
UniRef90_W0PH25 A E F A A R V K R L G I V N A M E D E N F A A V K A T G R K R F I I A G V T T
UniRef90_UPI00037D4E25 P K P G E T V A T E H W C S S G F A N T D L D L Q K R H G I Q R L I V I G L I A
UniRef90_F4GRC0 P A P Q D L V L T K W R Y S A F Y R S D L K K L M Q D Q G R D Q N V I C G I Y S
UniRef90_R6E4B0 T H G E I H E K L K Y A D E D T F D K G C D M K T V E Q Y N V F V C G I A T
UniRef90_UPI000380BF47 G Q P A D L T V I E K V A Y S A F Y M S R L E W V L R K A G T E R L L V A G I V T
UniRef90_C1ED48 P I E G E E V I D G P G Y D K F M H T D E L H C L R C A G L K Y L V A G L T T
UniRef90_A0A011A6C9 T A G W E L D N S L K E F G G I R F E K N T F Y V T E R E Y S I E L V I G L C T
UniRef90_UPI00047E50FD L H D H V A F M D K T R Y S A F A G T D L E I K L R E R G I T E V H L V G V C T
UniRef90_E7G9Y7 K I V S D H I F I K S K N A L T S E E F A N F I T E H Q I G E F Y I T G A D A
UniRef90_H7CT27 E L V D E L N E V I K K N S T N G F L E E N F L N K E E I D N V I V G D C T
UniRef90_UPI0004684DAD I Q G I D S Y S A F F E N D H K T P T G L E G Y L R T R G I T Q V T L V I G L A L
UniRef90_M1JHM4 V P Q N A L R V I T K A C D A F Y R T P L E A L L S R E H N L S A F E V V C G C A S T
UniRef90_M2X6G2 P I E G E F S V T K R R V G A Q F N T D L T L L S A L N A T H L I L G G V S T
UniRef90_A1AT57 K A A E A P R L E K M T F S C C G I P Q F M E T L K A S G R T Q I I I T G M E T
UniRef90_V4IH2 I D R T T M N A W E D T R V R D R Y L A T G R R K L V L A G L W T
UniRef90_I6TAM4 E Q A N V Y W I D K R H Y S A F S G T D L D I R L R E R G I T E L Y L T G V C T
UniRef90_UPI00026C710B G D P S T A V V H K T R D S A W F G T D L A L R L R N L G V D R V L I A G V S T
UniRef90_E1Z932 T V R G T P V R P G E R I V I K R F S A F F D T E L D R G V C R R M G V G R V T
UniRef90_W9TCB6 V Q G I D S Y S A F Y E N D R A T P T G L S G Y L R E R G V F E R L F V C G L A L
UniRef90_J2LBW0 M L W P D H C V I Q Y T R D A E L H P E L H S A Q I D D Q G I T E L D V C G L A T
UniRef90_A0B205 K R P D E P L I V A H R A S V F F G S T D L Q A R L J A Q G V D T L I M V I G L A S
UniRef90_G0LIR3 M F D A D V L S P H K Q L S G F W S N D V G T Q L R Q R G V D T L V L A G M S A
UniRef90_UPI0003B70DB8 D G D I D H D I V K S R A D A F H E A E L D R V L D R H H I G K L I I V I G L D G
UniRef90_UPI000468355B K I V T E N I F T K T K A N A L T S E E F V D Y I N A N G I K E F Y I A G A D A
UniRef90_W9WC10 N L V F E K G S W K W N S S F H N T D L D Y Q L R Q R G I R N L V I A G L V T
UniRef90_F1Z4Z0 P Q E G D V V T E G K R G L D C F A S T N D F I L R Q R G I V T V A L A G F L T
UniRef90_UPI000403BF8C P L P G E P V V D R K G G V G A F A G T P L L E M L L G T G V R H V V L G G V A T
UniRef90_F4BVD4 E F H F S L D Q R N I R Y S V F E N S H L E A M L R A D N L R V Y I L T G F V L
UniRef90_A0A024Q798 P D D Q D Y F L I K P Q H S A F F Q T P L Q S L L N E L G K T H L L M A G I A G
UniRef90_G2NAF6 P D D A S L F V V K A R H S V F Y E T P L P Y L N Q L G V D H V I L C G Q V T
UniRef90_UPI000248598F V L K D Y P T V D R T I N S W E D V E F Q A V K A T G R K K L I M T A L W T
UniRef90_U3TSC4 P D Q Q K I V D A L A L E S T L Q E M G R D Q L I I T G V Y A
UniRef90_F2LJ21 P A P G E A I V E K G Y R D A F E D T E L E P V L S R L G V G R D L M V I G A Q T
UniRef90_UPI000382B357 V Q G T A G A L H D G Y P W E R A S V I V R Y L R E R G V T D V F V C G L A R T
UniRef90_A0A059ATH6 W I E K E P N V I T I R R K D C Y D G Y V F V D W V K K N Q L K T I L V V I G T C T
UniRef90_V6F1D8 E A P E G A L V E K M H F S C A A E P A I L S R L Q A F Q R P Q V V V A G I E A
UniRef90_F4CX22 W T P A D L T V D K C R F D A F L W T S L D P L L R G L V G D E L V A V C G V V T
UniRef90_R6NKB9 A L G A E E V I D K P A F G S P E L L A M R L K N Y D E T H I G S V T L V I G L C T
UniRef90_R7AEM4 D V Q R E V F E K P T F G S T E L V H Y I T H A N A A E P I E S I E L I G V C T
UniRef90_M5G727 Q K P H C P P G V M V P Q M L W P D H C V Q G T H
UniRef90_UPI00038096CA P H P G E I V V R K T T N G A Y N G S E I D A T L Q R M G I S G L V I T G C V T
UniRef90_UPI00031B27B8 V P H V A L I I D K E A T N S F Y N T S L H A I L K E K E I N H L V I G G C K T
UniRef90_R9J979 S L R T D D M K I F D K P A F G S V A L A E Y L K E N T A L E S V T F A G L C T
UniRef90_I4CBG3 R L S G S E P I T K L S F S C C G E A A F M D R L E S L G K K Q V L V C G L E A
UniRef90_N9CM60 H P E I D S Y S A F M E A D R K T T G L A A Y L K A R E I D T V Y I V I G I A T
UniRef90_UPI0003B35ECA A R P G N I N A W D N E D F V K A V K A T G K K Q L I I A G V V T
UniRef90_UPI00037C9F07 F M T E D N V I P K N R Y S G F F N T C L E A T L A A G R P D K V I I C G V C T
UniRef90_B8CRL8 I L G G E L I N R A D E I N A W K S P E F R N A V K A T G R K K L I I M A G L V T
UniRef90_F5YBZ4 P K P D E K R I N K E N N S F N K T G L L E Y I I K E G V D T L I I T G Y N A
UniRef90_B1YHA1 I P D Q A V T F D K A A T N S F H G T P L L D Y L K Q H R V E H I V I L I G C K T

UniRef90_UPI0002E933B1 E Q C V L Y S A L D A H I R H F A V T I P R D A V A H I H E D L A D A A L R M V 130 140 150 160
UniRef90_Q8KBV5 H V C V Y Q T C V E L L E F G Y N V H L V T D G V S S R T
UniRef90_R9NHG9 E Q C C E T T A R V A S D P G Y R V T F F T E T T L T F P I T H N N L T L S I
UniRef90_E0RW99 D I C V V S N A L M I K A Y N I E V V P V S V D C C A G V T P A A H D A L A T M
UniRef90_UPI0003C13195 D F C V A F S A L D A A K Q G F A T T V R L D A C C R G I D L N G S V D T M L G R
UniRef90_B9XNB1 D Y C V K A T A L D A V A L G F K T H L I E D A C C R G V N E T D S
UniRef90_A0A014M6W6 D Y C V K Y S V L D A V A C G Y T T T V I S A G C R G V D L Q P G D S A R A L E
UniRef90_K4KYP4 I A C V K S T C Y N L C K A N Y G V N V L S D C I T S Y D K R K I D E M L R Y Y
UniRef90_G7Z5B3 H V C V M Q T A L G L R Q Q G H A V V L V A D A V S S R T P A N
UniRef90_Q3A4K0 D V C V L E T V L D G V R S G F E V A V I V E G C R P V T P A G G Q A A L A M
UniRef90_E6PF75 S G V V L S T I R D A A D R D F R L F V L A D A C A D
UniRef90_S3N6V7 H I G V L Q T A A E A F M N G I Q P F V V G D S V A D F S L E D H L F A L R
UniRef90_UPI000469A474 E I C C D A T I K M A H G L G Y K V I M R H D M T S T Y D N N Y M S A
UniRef90_R5J0G7 D I C V I T N A M M T K G A L P E V F V R A D C C A G V T P E S H E T A L N A M
UniRef90_D3L0G0 H I I L A T A M D L N D G Y Q V V I A I E G V G S R R K E H
UniRef90_D8F527 H I C V L Q T C V S L L L K R G Y G V H V P H H A V G S R T E A N W
UniRef90_Q1QWM7 E V C V A F P V L S A L E E G Y E V F V V T D A S G T F N Q T T R D A A R M S Q
UniRef90_C5LYM4
UniRef90_M1ZDK7 D I C D Y L T V A G A D A E G F K T V V H R K G V A T F T D K G E S A L E Q M K
UniRef90_UPI0001E894D5 N I C V L F T A N D A Y M R E F E L V I P S D A L A S A D
UniRef90_S9SAD6 S G C I R A S C V D A N A H G F I P L I P R E A V G D R H P A P
UniRef90_UPI0003B4477A D I C V V S N A L M I K A F M P E V E I S V D C C A G V T V
UniRef90_G7H333 P N C P R A T L F D A T E R D Y R A V L V I D A T S Q T T P
UniRef90_A0A052IEK8 S G C V R A S V V D A F S Y N F H V V V P A E C V Y D R G S T P
UniRef90_UPI00016C540B D I C V L F T A N D A Y M R D L R V V V P S D G V A S N K A E D R D A A L A
UniRef90_UPI00028805AC E F C C M F T A I A A F D R G Y I V T F I E D A T G T V N
UniRef90_R1E9D2 N C C V E S T M R T A Y E K G F N V I T L T D A C A T T S K E G
UniRef90_K6XUL1 H V C V Y Q T V L G M L D L G Y H V E V S D A V S S R A
UniRef90_A0A010Z6W3 D I C V L H T A M D A Y N H G F E I V V H E D A V A S F N A A G H D W A L
UniRef90_UPI00037354FA S L I D S T G R S A H E K G Y H V I L S D C T S A R T V F E
UniRef90_W9YXS2 S G C V R A S T L D A M S Y G F R P M V V G S A C G D R S
UniRef90_W2EI08 D C C V L S T A L A A A D A G V E V H V A A D A C A G V D
UniRef90_C8WU52 N I C D F L T V A G A Y D E G F H A A V H R Q G C A T F T
UniRef90_F8CC27 D I C V I F F S A H D A H M H E Y K L T V L S D C C A A E S D H D H D L A L
UniRef90_S2KI80 S G C I R A T A V D G M Q H G F R V M V V R E D C V G D R H P T P
UniRef90_S3FH08 T A C V K S T C Y N L R K S N Y G V Q V L S D G L T S Y N K K K I D S
UniRef90_C7LLK4 E I C V K A N Y D D A I K L G Y D V H V D L E Y C K G F T
UniRef90_A1WG83 D F C V A W T A L D A R R L G F D T S V V E D A C R A I D I D G S L Q A A W K Q
UniRef90_I3IK85 E V C V A F P A L S A L E E G F V F V V T D A S G T F N E A Y A A W T R M A A
UniRef90_V2YC92 D I C V V S N A L L M K V E F E T P V H V I A S C C A G V T P E S H A Q A L D T M
UniRef90_UPI0001F26E8C D V C I D S T A R T A F Q K G L R V T V V E D C T T A L H S K Q A D H L Q F M A
UniRef90_G4RD21 S G C V R A S V V D A V I Q S G F N T L V P A D C C A D R A
UniRef90_W0PHI5 D V C T V Y P T L S L S D G Y E V Q V V A D A G A S P S K F G D D
UniRef90_UPI00037D4E25 H T C V E A T V R F A A E L G Y E V T M V R D A T A D Y S D V
UniRef90_F4GRC0 H I G C M T T A L D A F M N D I Q P F F V S D A T A D F S A K E
UniRef90_R6E4B0 E F C V R N T C E D L K K A G F N V I L L E N C L A Y V N
UniRef90_UPI000380BF47 N G G V A S T L R D A A V R D F P C T L L S D G C A A F D P R T
UniRef90_C1ED48 E V C V S S T V R G A T E R G F E C L L T D T D G T A A T E Q N H L R P
UniRef90_A0A011A6C9 D I C V I S N A L K A F L P E T P V L V D S C C A G V T V K S H E N S L E A M
UniRef90_UPI00047E50FD D I C V L H T A V D A Y N K G F K I V V Y K E A V A S F N Q K G H E W A L G H F
UniRef90_E7G9Y7 V A C V K S T T Y N L R K A D Y Q V N V L S D C I T S Y D K K K I D
UniRef90_H7CT27 D I C V Y Q L A I S L R A E F N R V Y V P K L V I D T F D M P H K A
UniRef90_UPI0004684DAD D F C V N Y S A V D A A Q L G F E V T V D T G L C R A I D I D G S G A A A Q K A
UniRef90_M1JHM4 D Y C V D T T I K Q A A S R G F Q V T V A G D A H T T A D R R A A A A P V L I D
UniRef90_M2X6G2 S G V I L S T V R W A A D A D Y E I T V V R E A V T D G D
UniRef90_A1AT57 H V C V L Q T V I E L R E A G F T V H L V K D A V M S R D K R N W
UniRef90_V4IH2 E V C V V A P A L C A L D E G H Q V Y V V T D A C G G V S A E A H E R A V Q R L
UniRef90_I6TAM4 D I C V L H T A L D A Y N L E G Y Q L F I F E D A V A S F D P V G H D W A L R H F
UniRef90_UPI00026C710B H A C I A Q T A R D A Y A H N V R A A V V E D A V A D E R T
UniRef90_E1Z932 P N C I R G T A W D A L A L Y P Q V T V L S D A T A S S T
UniRef90_W9TCB6 D Y C V L Y S A L D A R R E G F A V T V L K D A C R G L D
UniRef90_J2LBW0 D Y C V K F S A L D A L E L I P G V K V R E D A S R G I T P E G V
UniRef90_A0B205 T G V M L S S I A H A S D A D F R L Y T I K D C C Y D P D P I
UniRef90_G0LIR3 N L C V E S H L R D A V E N G F E L V T T D A T A A A G
UniRef90_UPI0003B70DB8 D F C V K A T M Q A A L N R G Y D V S F S D A T T L A H N Q Q N W
UniRef90_UPI000468355B T E C V K S T C Y N M S K S N Y K N V L S D C I T S Y N K N K I A E M L K Y
UniRef90_W9WC10 N T C V E A T A R Y G Y E L G Y N L T M I S D G T A G F S T
UniRef90_F1Z4Z0 N C C V E S T M R S A Y E R G F R V V T L T D C T A T L S Q E E Q N F P M F S L
UniRef90_UPI000403BF8C N L V V E S T A R T A V D S G L A V T V V E D M C A S F D L
UniRef90_F4BVD4 D V C V Y E T A V S A I A L G F D T Y I V L D A T K P A Y
UniRef90_A0A024Q798 D I C I L F T A K D A Y M Y G Y N M H I P K N C M A S E G K D N N D Y A L Y L L
UniRef90_G2NAF6 E Q C V L Y S A L D A H I R Y L G V T V P E D A V A H I H P
UniRef90_UPI000248598F E A C L T F P A L D A I N E G Y E V Y V I A D A V G G T S V A A
UniRef90_U3TSC4 H I G C L T T A T D A F M R N I Q P F M V A D A L A D F S R D E
UniRef90_F2LJ21 D M C I R S T L H G A L V R G Y D A T L V G D A H T T E D L A Q W G A P P P D A
UniRef90_UPI000382B357 D F C V K W T A E D A V A M G F N T Y L L W D L T R P V D P A N D D G V R Q A L
UniRef90_A0A059ATH6 D I C V L D F V C S T L S A R N D V I V Y S R G C A T F N V P L H V A R A H P Q
UniRef90_V6F1D8 H V C V L Q S A I G L K M A G F D V F V A D A C S S R V A A N
UniRef90_F4CX22 N I C V E S T V R A A F M R D Y R V T L L A D A C C A A T P R
UniRef90_R6NKB9 D I C V I S M L I K A F M P E A K V T V D A C C A G V T P E S H K R A L E S M
UniRef90_R7AEM4 D I C V V S N A L L I K A A L P E V P I S V D A C A G V T P
UniRef90_M5G727
UniRef90_UPI00038096CA S A C V E T T A R D A A D R G Y D C V L V S D A C A D Y D P
UniRef90_UPI00031B27B8 E H C V D T A V R T A T I E G F D V T L I Q N G H S T I D S T I L S A
UniRef90_R9J979 D I C V I S N A L K A F L P E A E I K V I K N C C A G V T P K S H Q N A L E A M
UniRef90_I4CBG3 H V C V Y Q T A A E L A H R G Y E V H I V T D A V D S R T E T N
UniRef90_N9CM60 D F C V A W T A M D A C Q L E D F Q T Y V I E D A T K A I D L N G S L Q Q A W Q K
UniRef90_UPI0003B35ECA E V C V A F P A L S A L E E G F D F V V T D A S G T F T D I A R Q S A
UniRef90_UPI00037C9F07 D I C V L H T A S D A R N R D Y A V E V P A N C V A S F K Q E A H E W A L S H L
UniRef90_B8CRL8 D V C V L F P A L S A V A E G Y D V Y A V I D A S G T W N K T
UniRef90_F5YBZ4 V Y C V L S T Y R G A L D H D L M P I L L K N S L A S N T K E N S K F V E D I S
UniRef90_B1YHA1 E H C I D T A V R S A T V N G F D V T L V A D G H T T N G S D V L S A

UniRef90_UPI0002E933B1 E E N R A L G I R C I E R A G A V P T S T E M A M F E L L R V A
UniRef90_Q8KBV5 D D L G H R T E S V L I H R V T D I R R M N E C L E E L
UniRef90_R9NHG9
UniRef90_E0RWW5
UniRef90_UPI0003C13195 M R A A G V T L
UniRef90_B9XNB1 K S A I E E M R K A G V E I T K T S V V L
UniRef90_A0A014M6W6 E M A T A G A I
UniRef90_K4KYP4 E
UniRef90_G7Z5B3 H A A A L E R M R A A G V T I V T T E M V L F E W M E R A G T
UniRef90_Q3A4K0
UniRef90_E6PF75 P D V H A L L L E K V F P R Q A D V I S I A D L Q K L L S
UniRef90_S3N6V7
UniRef90_UPI000469A474 E N T I E F Y E N I W D K R F
UniRef90_R5J0G7 K M C Q
UniRef90_D3L0G0 H L A A L N V L S Q F G A M L L P T E S I I Y Q W L S K S G T
UniRef90_D8F527 Q I G L S L M R E A G A T I T S T E T I I F Q I L K K A G T
UniRef90_Q1QWM7 A G A Q L M T W F A V G G E
UniRef90_C5LYM4
UniRef90_M1ZDK7 A N F H
UniRef90_UPI0001E894D5 D D D H K Y A L R M M E N V L A D V R P T E K F L S Q
UniRef90_S9SAD6 H E A N L F D M D A K Y G D V V S E A E T L A Y F Q S L
UniRef90_UPI0003B4477A E K H E A A L E T M R S C Q I K V I
UniRef90_G7H333 E R V S D M T L I G V E L R T V D E V R G A L A D S S R S
UniRef90_A0A052IEK8 H K A S L F D M N Q K Y A D V M S T E A V M Q A L R R L
UniRef90_UPI00016C540B
UniRef90_UPI00028805AC
UniRef90_R1E9D2
UniRef90_K6XUL1 Q E N K A L A V E K L S A R G A S I T G V E M A I F E L
UniRef90_A0A010Z6W3
UniRef90_UPI00037354FA A Q I H D A N M F D M N A K M A D A V T E E E A V A H L K S
UniRef90_W9YXS2 D D A H R R A L D V M R G P L I R V V T L D D V I G A L J A P E G
UniRef90_W2EI08
UniRef90_C8WU52
UniRef90_F8CC27 S Q L H R F L H V R V C R S D E V
UniRef90_S2KI80 H E A N L F D I D S K Y G D V I S V E D A V
UniRef90_S3FH08 M I D Y Y E S K G C E I I R L D D L L N E A G Q
UniRef90_C7LLK4
UniRef90_A1WG83 M Q A
UniRef90_I3IK85 A G V Q L M N W M A V A S E
UniRef90_V2YC92 R M C Q
UniRef90_UPI0001F26E8C
UniRef90_G4RD21 E P P H A A A L Y D M G Q K Y A D V T D S M E I G A W L A S V
UniRef90_W0PH15 M A L R R M E K N G A T M T S T N Q V I A E L
UniRef90_UPI00037D4E25 E M H A A L D I N I P N Y A N A I A N T A E V I E S F
UniRef90_F4GRC0 H I M A I K Y V S Q L C G V A V S S N Q L Q H W L S A
UniRef90_R6E4B0 E E G H R K A L E E M K S E G I K V I
UniRef90_UPI000380BF47 H E V A V E A L K P V A R I A T V A E T L D A F G
UniRef90_C1ED48 H I D T M L V E G G I F G S V A D A H H V L
UniRef90_A0A011A6C9 K M C Q
UniRef90_UPI00047E50FD E Q
UniRef90_E7G9Y7 E M L H Y Y E S K G C K L M S L N D L L D
UniRef90_H7CT27 N F M N Y V F L N S M L D N G V K V I E D I I
UniRef90_UPI0004684DAD M T A A G V T L
UniRef90_M1JHM4 H Y N D V W S T L T I P G N P L R V M K T D A I L D A W Q A
UniRef90_M2X6G2 D V A H Q A L L D H I F P S Q A N V V S V D D L I K N M S
UniRef90_A1AT57 K V A V E A M T L A G A I P T C T E S V L F Q L L K V A G T
UniRef90_V4IH2 V Q A G A Q P L T W L Q
UniRef90_I6TAM4 E T V L G A T L
UniRef90_UPI00026C710B E H M R T V L D L L V G D R Q A E L V T L E D A L A R L R S
UniRef90_E1Z932 D E V Q Q A N L Y D L R A V S V D T P T V A E W A A Q L G D V
UniRef90_W9TCB6
UniRef90_J2LBW0 A A A I D E M R Q N G I E I V N S A D I L A A
UniRef90_A0B205 V H E H L F A T A F E S R T T V L S L A D A L R L L A
UniRef90_G0LIR3 H D A L E A A H T N F G F I A H E T A T T E E V V D R L A T A
UniRef90_UPI0003B70DB8
UniRef90_UPI000468355B Y E S K G A N L I T L D
UniRef90_W9WC10 E Q K N A A T Q L I W P L F T N R I L T V S E W V K S L E
UniRef90_F1Z4Z0 P M T H D A F L S D L Q Q
UniRef90_UPI000403BF8C E L H D V A V R K I L P M F G D V R S S A D V I A G L
UniRef90_F4BVD4 H D Q L E E T M A K I R D A G I K V I Y S A D L L A R
UniRef90_A0A024Q798 N S V M K A D T S A I
UniRef90_G2NAF6 D L A D A A L T M M R R N M G A D I R T A D T V E
UniRef90_UPI000248598F H E A A L R R I E Q A G K L I S V V Q L F C E L Q R
UniRef90_U3TSC4 H M M A L T Y T A G R S G K V V M T A D L M
UniRef90_F2LJ21 V I R H T W A N Q K A P G R A G G V I E S R D V
UniRef90_UPI000382B357 A D A
UniRef90_A0A059ATH6 E F M H H V G L Y M A K E R G A K I V D
UniRef90_V6F1D8 H Q L A L D R M A A A G V A V V S T E M V L F E W L H V A G T S
UniRef90_F4CX22 L H E A G V E V M G E C F A T V R T V A E H V A A V P A V T G A
UniRef90_R6NKB9 K T C Q
UniRef90_R7AEM4 D A H Q A A L A T M R S C Q V Q V A
UniRef90_M5G727
UniRef90_UPI00038096CA D M H A A T L K A F G L Y F G S V A T S D D V I G A V S T G S
UniRef90_UPI00031B27B8 Q Q I I E H H N K T L H G H Y
UniRef90_R9J979 K M C Q
UniRef90_I4CBG3 K N I G L E R S K A C G A A L T S T E T A L F E L L K V A
UniRef90_N9CM60 M L A H G V
UniRef90_UPI0003B35ECA W E R M T A A G A Q L M N W F A
UniRef90_UPI00037C9F07 K D I L G A T V
UniRef90_B8CRL8 V Q E V T I Q R L V Q A G V K V T T W A S V L A E I
UniRef90_F5YBZ4 E I I S I N A L E
UniRef90_B1YHA1 E Q M I A H H N Q V L H G H F A I V R P S T E T V

1 10 20 30 40

UniRef90_A0A031LUD4 F Q P Q Q S V L I V V D V Q N G F T P G G L A V A N S D Q I L P T I N S

UniRef90_A4IYF5 K N T F V I V A D F I N E I V D G A F G A H N A Q R I M Q K A N K

UniRef90_D9V8U0 P V L V V V D L Y T R G F T E P E F P S A D L S A Q E V A E A A D V

UniRef90_D0IVU5 M L L E A S E S Q L V L V D Y Q R K L M P V I H E G A Q A L A N A V K

UniRef90_UPI0003763F4B V T L H S D S D F L V V V D L Q K E Y C H P M G Y L E S A R E L P N V L R

UniRef90_UPI0003712C28 M L I N K D D A T L V V V D I Q E K L V P A V I Q D A S G M V A R C R W

UniRef90_E1ZFF4 L T P S N T C V I V D F C S M G L D I F L T Q G P I E P I Q K

UniRef90_A0A031J63 E N T A L L I I D V I N D F E G A E Q L M Q Q T L P L S P L T K

UniRef90_UPI000370E52B V L A I D L Q N G V C Y G G D K P A A N M P Q A L A G I N A

UniRef90_UPI000470E824 K Q A L L V I D V Q N D F C P G G L A V D K A N E I L E P V N A

UniRef90_H6RT95 L V V V D L Q H V F G D E D W T A P R F E E V R P R I R R R

UniRef90_UPI0004782C58 T K A L I V V D V Q N D F C E G G M A V T G G S S V A S Q V I S

UniRef90_UPI0003B3F550 A L L I V D V Q N D F T E G G L G V D G G A A V A S G I T K

UniRef90_W1LEE0 L T P E N S A L L I D Y Q P V Q V S S I R S M D R D E L V F N I T G

UniRef90_W0149 Y E P A I T A L C I D L Y N D F L A E G G K L F P F M K D I E N L R N

UniRef90_UPI0002E6D993 S A L V V I D L Q Q G L V D Q L P E T V S R P I L E N S L A

UniRef90_K5YKX2 A P F V L D I G R V A L V I I D M Q R D F L E P G G F G A A L G N D V T K L R A

UniRef90_L8J100 L I I V D I Q N D F I P G G L A V P D G D K I I P I V N E

UniRef90_UPI000373072B T S A L V V I D P L N D F V S R R R G K G W P M L R L I P I N M R A

UniRef90_T1JPC2 S A L L V I D V Q N D F I S G S L S L K N G N D I I P V V N S

UniRef90_Q74J36 K K A L L I I D Y T N D F I S A D N G S L T P A Q A L E D Y L I E

UniRef90_G7DXK0 S A L L I V D V T Q K D F I S G A L A V E G A E T I L P V V E H

UniRef90_D8U4P0 A L L C I D V Q C D F M P G G L A V P R G D E V I P V I N K

UniRef90_UPI000425DEE9 A L V V I D I Q N D I T K N Y R K L V D G L N R

UniRef90_M7A6R5 L T L D P A T T A L V L I E Y Q N E F T S P G G V L H D A V A E V M D K T G

UniRef90_J6LDT6 L L V V D V Q N D F C P G G L P V A D G D A V V P V V N R

UniRef90_A6CQS8 S N T A L L I I D L I N T F D Y G K T L A E H T L K T V E P F K A

UniRef90_UPI000470AA28 Q K A L I N I D Y T Y D F V A D E G R L T P G Q V I E K N I V N

UniRef90_H5Y6L1 S A L L V I D V Q N C F L P G G L A V K E G E Q V V P V I N K

UniRef90_UPI000411ADC2 K Q A L L I I D A Q Q E L V D G N K S V F N K E L L D N V N E

UniRef90_R4X5H3 M Q L D R H H T A L V L A D I Q N D F L T E G G S Y Y P M I E V P D H I E

UniRef90_B7RY09 A L L L I I D I Q N G F T N P D C P L G C A P E V V A A N K M

UniRef90_N6V1G1 A L L V V I D I Q N D I T P G G L P V P D G D Q V V P V A N K

UniRef90_C0C2U7 K K A L V V I D I Q N D I T K N Y K E I I D N I N A

UniRef90_B9QY02 T W D P K R T A I L T I D L Q N D F L H Q E G A A D S I A A L P Q R I A P

UniRef90_UPI000288A402 K K A L L N V D Y T N D F V A N D G A L E P G Q A I E K E I V R

UniRef90_UPI000363BA8A K K A L I V V D M Q N D F T Y D A L G T Q E A Q A I V D R V N Q

UniRef90_B1ZMI5 A L I L V D I Q N D F L P G G L P V P H G D E V V A V A N R

UniRef90_W1RSK1 L R P E D S V L V I D H Q P Y Q L A N L N S H E P Q M V N N A T A

UniRef90_W1IS83 K I A L L L I D L Q N D F C T G G L A V K E S D A V I K A A N E

UniRef90_UPI00036505D4 A L I V I D Y T Q D F V T G S L P V Q P A V D L N E R T J A A

UniRef90_UPI0002E239BD M K I A P D S S V L V I V D V V N G F C T I G G L A V A S G D A V V P V V N R

UniRef90_Q9ZQ55 P L I L N R D S S V L V I V D V V N G F C T I G S G N M M V E S A K

UniRef90_R9M146 K K L V V V D F Q N D F V D G S L G F S G A E Q L E Q P T C Q

UniRef90_A0A010YY19 A L I V V D V Q N D F C H E G G L A V I T G G A G V A T A I S A

UniRef90_Q73XQ0 S D T A V L V V D M M N S Y Q H P D A E I P N V E K I E P L T G

UniRef90_F6IRB5 V L I I I D M Q V G I C D G S Q P L A N L A T V T T G I Q Q

UniRef90_V1DGK3 L S R D D A L V L V D H Q V G L T S G V R D T T V G E L K H N V V S

UniRef90_UPI000426A7C6 A L V I V D V Q N D F C P G G L A T I N G S R V A A G I T E

UniRef90_W6M1S9 M L M R A D T S C L L V I D L Q E R L M P A V E R A D T V A A I W

UniRef90_U2TCU8 R K I L L V I D M Q N D F I D A A L G S R E A E A I V D A V K E

UniRef90_U2CAA0 K K V L V V I D M Q N D F I D G S L G T A E A Q A I V G K V L E

UniRef90_T1FMM2 K L T P K G S A L L L C D M Q E K F R N T I S Y G P A V I K V V Q R

UniRef90_L0DW73 V R L N K D D A A V L V D H Q A G L L S L V R D L N P D T F R N N V L A

UniRef90_K0CP11 K Q A L I V I D I Q N D Y F P G K Y P L H K P E L A M Q E T L K

UniRef90_K4RDV3 L D P A G T V L L T V E C Q Q G V V G P D S A L P E L A K A L A N V A R

UniRef90_N6Y4W3 M L M N R D N S V L L T V D V Q A K L A P F L H E S E K V S A N C V W

UniRef90_UPI00017SG49 T A L L V L D I Q N G V L D R L G T T I T N D Y I Q R L S T

UniRef90_UPI00029AEBD3 K N T A I V I T D P Q N D F L R T D G V A W P I N N T I E N M S Q

UniRef90_J4TJD6 R K L I V V I D M Q N D F I D G S L G T K E A E A I V K G V I T D

UniRef90_UPI00047D1517 L V V V D M Q N D F V T G A L G S K E A Q A I V G D V D

UniRef90_D1B6N3 A L L I V D V Q Y D F L P G G L P V P E G H L V I P A I N S

UniRef90_UPI00046CA560 F M D P A T S V L I V V D M Q N Y F I N P I Y R D H A A G A I E P T I K

UniRef90_Q0TZ47 L L I I D V Q N D F M P G S L P V P N G D E T V P V I N K

UniRef90_S7VUZ3 E R D L L V V D V Q E D F L P G G L A V P G G D A V I E P I N R

UniRef90_UPI00047AF737 E P S H T V L V A W D V Q N G L V N S I F N K N E F L G V V K N

UniRef90_Q97BB4 N K A L L V I D Y T N D F V A N D G A L T P G Q E I E E T I L N

UniRef90_W7CZH7 K K T A L I V V D L Q E D F L P G S L A I K N G R S V I P K L N Q

UniRef90_Q59R36 L P I E K Q A A T L F I D V Q N Y N A R R D G G E Y V G R E T I S N M Q K

UniRef90_V3MF30 L H D S S A A L L I D V I N D F E E G Q R L V E Y A L P M A R N I T Q

UniRef90_M5DKG1 A K P A L V L I D V Q C R A Y W A E G S P L P S G G A S P D S M I R

UniRef90_B6QKC5 M D A D A D L V V I D L Q A R L M P A I S G G E A A V A D A G R

UniRef90_I3TM55 N N H A L L V I D Y T N D F V A D Q G A L K P A Q A C E N R T L E

UniRef90_W9EFB9 S Q T W L V I D P Q T V F A S P P W G S P A F P T I D P I D R

UniRef90_G7UA74 E T S A L L V I D V Q N F F L P G G L A V K D G E Q V V P I N R

UniRef90_A5E8J2 R L D K E N A M L L V V D H Q E G L Y Q M A R D Q G P I A V K S N I L A

UniRef90_K5VIG9 A L I V I D Y T Y D F I T G R L P C G D P A H I E D R V A D

UniRef90_K4ZJC6 N T A L V I V D V Q N D F I E G S L N N S R A P A I L P Q V L Y K

UniRef90_W9VII1 L C V D M Q R M F A E D P W H V P W M A R V S P Q I E E

UniRef90_W0IRG0 K K L L V V I D M Q N D F I D G A L G T K E A E A I V D N V I A

UniRef90_R6Q223 A L I L V D V Q K D F C P G G L A T K E R G E V A G K V I G A

UniRef90_A4QGP2 A L I N V D Y T Y D F V A A E G A L E P G Q A I E G Q I A K

UniRef90_UPI00037C784E M A Q T S R K H A L I V D L Q K D F L P G G L A V P G G D K I V S V L I R E

UniRef90_K1JR48 N P V L F I C D I Q E K F R E H I Y E F P K V V S T T K K

UniRef90_B6Q987 T A V V V I D F Q N D F I S L G D P A T M S H I T D A L V R

UniRef90_C5FHL7 M E T G K R C L I V V D Y Q K D F V D G S L G F E K A V T L D H G I A E

UniRef90_R7I3L4 E K L A I V N V D F Q N A Y T E F K T A Y E T D P R Q I E Y V N T

UniRef90_F6IKL9 A L L V D I Q N G F C P G G L A V A D G D A V V P V A N R

UniRef90_UPI0003716106 A L L I D L Q H G M C A P D G A E V E R G V L D N A R T

UniRef90_W5TH03 R L N K D D A V L V D H Q A G L I S L V Q D F T P S D F K N N V L A

UniRef90_W8QZ17 K H A L L V D Y Q Y D F V D G S L Y V P E A E T K I Q H I T N

UniRef90_UPI00047A6108

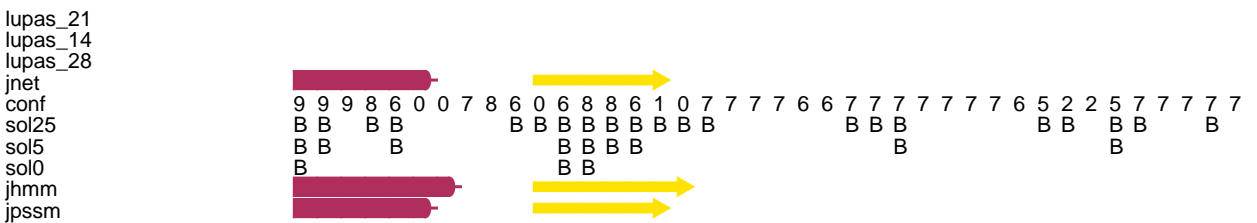
UniRef90_A0A031LUD4 L A R H F R Q V L W P S H C V Q G T H D A D F H P D L N I S K A Q L V T R K G F 80
UniRef90_A4IYF5 L I T A W A R D N S I Q T V S P M F K K A P E Y G V L Q L G T W A T E F H P Q M D
UniRef90_D9V8U0 L V R A A H E S G A P V V Y T W L R K A P G M R S L R E G M S A E V A L D P R L E
UniRef90_D0IVU5 L A K M A Q L D V P V W G T E Q N P S R C Q K T L E K M Y F S A V P E G L G E
UniRef90_UPI0003763F4B V L E A F R S K G G K V V F T M I H F A P N D P R F R K G E W G Y D L L D E L K
UniRef90_UPI0003712C28 L I A V A V D L G L P V V F S E Q Y P Q G L G E T L P L L S A L J A P Q A A V V E
UniRef90_E1ZFFA L L E A C R Q Q G Y H V I H T R E G H R P D G R V L V R G E P G W E I I P E L A
UniRef90_A0A031J63 L K Q H C K R Q N I P V I Y V W Q E N V N Q I I D E C R G G L G D V L I E A L H
UniRef90_UPI000370E52B R I A A Y R K A K K P L V F V Q H T D E D L V Q G T H D W E L I S G L D
UniRef90_UPI000470E824 L T Q D W H P A N H A S F A S N H A G A A P F S E V E M S Y G P Q I L W P D H C
UniRef90_H6RT95 L V E A F G D R V V W T R F V A P A E P V G A W K E Y Y E E Y D F A L Q P P C Y
UniRef90_UPI0004782C58 F I A D H S D D Y A H V V A T R D Y H I D P G A H F S D T P D F V D T W P R H C
UniRef90_UPI0003B3F550 L L E S K P G A Y D L V I A S R D W H D P D S D H I J A A D P D Y V N T W P V H C
UniRef90_W1LEE0 V A K A A V N Y G V P V I H S T V N V A T G L N K P P I Q Q L Q D
UniRef90_W0I4I9 I V A A A R A A G I T V V I H V P H H R W Q E A R Q V F A K G T W G G T F H D D F P
UniRef90_UPI0002E6D993 L C A D F D D A D L P V I V N V N A G R P Q A Q P D A S K I V W G E V I E S L R
UniRef90_K5YKX2 A L J A D L H P A K H R R A A G I G R A G P M G R I L V R G E A G H G I I D D L A
UniRef90_L8J100 L Q K S F D L V V A T Q D W H P A D H K S F A S N H P G K K T F D T T T
UniRef90_UPI000373072B A I T A A R D R G M P V V Y A P H R G G G E R R T Y R Y D G F G R F H P D L A
UniRef90_T1JPC2 L L D S V P F D L V V Y T Y D W H P S N H W P A H C I Q G S W G A K L H P D L K
UniRef90_Q74J36 L A N K F Y D N G D Y V I F P T D G H T G D T F S P E Y K L F P P H W Y E A H K
UniRef90_G7DXK0 L J E R G R W S M I V A S Q D Y H P R S H I S F A S R H G L S P L D E J L R D
UniRef90_D8U4P0 L R R I C R D Q L S L V A L T Q D Y H P E D H R R H R Y Q G G P R L W P T H C H
UniRef90_UPI000425DEE9 A I D W A V A E N M Q V V Y I K H N N S A G T R T F K P G T K G A E L V P E M K
UniRef90_UPI0007A6R5 M L D N T T A V A A A A R A A G V T V M H A P I T F A P G Y W G A E L V E Q L S
UniRef90_J6LDT6 L A E K F R H V V L T Q D W H P A D H P Y G P Q I L W P D H C V I Q E T P G A T F
UniRef90_A6CQS8 L R S N C R K K Q L P V I Y I E N D H Y N L W Q A D L K K I Y E K C Q V L E P L Q
UniRef90_UPI000470AA28 L T R T L F E R N D Y V V H E E Q D S Y H P E T L L F P P H N I Q K L Y E Q H K
UniRef90_H5Y6L1 I S K A W H T Q G H V S F A S V H A G K K P F E T V D L P Y G K Q V L W P D H C
UniRef90_UPI000411ADC2 V I N K A I E S D A F I V F I R D Q D V A G G K G E G F Q L R F K K Y L
UniRef90_R4X5H3 L L R A A K E Y G F P V I H S P H Y Y F P T D L Q W V S G A D Y P E R H K K Y L
UniRef90_B7RY09 L L E T F R R Q Q R P V F F T S V V Y H N E S Q V L T A D S R W V K V D Q R L S
UniRef90_N6V1G1 L I D D W H P A G H G S F A S A H L G K K P F E I G R L S G K P Q M M W P D H C
UniRef90_C0C2U7 L I D W A V S N N I V V I R H E N S A G T R T F K P N T H G A E L A S D L K
UniRef90_B9QY02 L V K A L R A R G G H Y I S A Q F T P F L G K G D F A P G C F G H T L V I D E L F
UniRef90_UPI000288A402 I T E E F L S N G D Y V V F A T D L H K E G D E L L Y G D L Q R V F N E Q Q T
UniRef90_UPI000363B8A K V I Q N F S G K V I Y T L D T H Q P D Y M E T Q E G K M L P V P H C I K D T H G
UniRef90_B1ZMI5 L L D R F P V I V A T Q D W H P E N H Q Q P G T M A E L G L P Q V M W P N H C
UniRef90_W1RSK1 L A K A A K V F G V P T I L T S V A D R G G L L F P Q I T D V I P D Q A V I D
UniRef90_W1S1S83 V J A L C Q Q V W W P V H C V G Q G F G A E F H P A L N Q S A L Q E V F R K G E
UniRef90_UPI00036505D4 V T R A F V J A Q G D F V V M Y H P E T T L F P P H N V R G T A G R E L Y G E L A
UniRef90_UPI0002E239BD L A A R W H P A G H S S E A T S H P G A A P F S E I A M P Y G R Q T L W P D H C
UniRef90_R9ZQ55 L A R E F C D R K W P V L A F I D S H H P D P P H C I I G T E S E L V P A L K
UniRef90_R9M146 K I F Q Y R A E G A Q V A F T F D T H G A D Y L D T Q E G R L L P I P H C T K S
UniRef90_A0A010YY19 A L T A D A R Q S W D R V V A T R D H H I D P G H H F S D Q P D F V D T W P A H T
UniRef90_Q73XQ0 L V R A R E S G V D L V V V N D N Y G D F T A Q F S D G A R P D L V K P I A P
UniRef90_F6IRB5 R I A S Y R A Q D K P I V F V Q H N D A D L V T G S A N W K V I S D L P
UniRef90_V1DGK3 L A K A A H T L G V P V I I T A T M P N G M W G Q T M P E L T Q
UniRef90_UPI000426A7C6 H V R A A G N Y Y S H I V A T K D W H I S P A T H F S T H P D F I D T W P A H C
UniRef90_W6M1S9 L I R I A Q R L G V P L L A S E Q Y P Q G L G R T V A A T R E
UniRef90_U2TCU8 V I A T M D T H G E N Y M D T Q E G R N L P V M H C I R G T H G W Q L Q D V A E
UniRef90_U2CAA0 K I K A Y D T H G E N Y L E T P E G K S L P V A H C V R G T D G W Q I R P E I A
UniRef90_T1FMM2 M L T F A D Q L E I P V L V T E H Y P K G L G N T M K E L N V S K
UniRef90_L0DW73 L A A L A R Y F E L P T V L T T S F E S G P N G P L M T E L K E T F P E A P Y I
UniRef90_K0CP11 A M A L J A K E S I P I I H I Q H E A G E G L F F Y E G S H G A E I H K E V I A
UniRef90_K4RDV3 L V I A G A H A T G V Q V I H F R A A E R L P V Q Q L S G T T A V R L J A P I E V
UniRef90_N6Y4W3 L A Q V A A R V G V P V V V T E H F P E K I G G T L E S V R
UniRef90_A0A017SG49 T I N K A R A A G T K I I Y I T T S F R P A Y T D L H P N N P S T K I K S S T Q
UniRef90_UPI00029AEBD3 V F K L A Q E H G I K V F I S P H Y F F P T D K G W K F G G A L E K F M H S S K E
UniRef90_J4TJD6 K I K E Y K K E D V F A T M D T H K D S P V E H C I E D T N G W E L H P D I S
UniRef90_UPI00047D1517 K I K N F D G E V V Y T R D T H Q D N Y M E T Q E G K N L P V V H C I E N
UniRef90_D1B6N3 I L D R W H P A N H G S F A S N H P G R S P F E T G E L N G L P Q V F W P D H C
UniRef90_UPI00046CA560 L L D Q F R Q A G N P I L H V R H Q S A E P E S I F H K R T S P L S L P L P A F E
UniRef90_Q0TZ47 A I E R C R K E G I Q I A W L N W P G R Q G R C L F K R T W N A D L Y E P M K A
UniRef90_S7VUZ3 I T Q D W H P K D H I S F A S N H E G K S N F D V I K L H G Q P Q T L W P N H C
UniRef90_UPI00047AF737 L A Q D W H P A G H V S F A S N H A G R P P F E T V D L J A Y G P Q V L W P D H C
UniRef90_Q97BB4 V I Q S A R K K G V K V I Y T S K I T P P P P G F F M E P G S P E A E I Y S E L A
UniRef90_W7CZH7 L L E T F A V N R D D I I H I E H D D Y H P E A T L F P A H N I N N W Y E A H R
UniRef90_Q59R36 L L N H S K F D W S L V I V A T Q D W H P P N H T S F A S Q H E N V A P F T E I E
UniRef90_V3MF30 I Q T A C R A S Q I E V M Y T V I D Y K I T G F N V P R D S W D A Q V L E A I E
UniRef90_M5DKG1 L K L E A K K R G I P C L Y V N D N F G Q W Q S D F K H G V C G V P V A C E L L
UniRef90_B6QKC5 L L A A A R E S D I P V I W C Q Y H Y N H P D M L D Y K K S P G I S I W E G D
UniRef90_I3TM55 L I D G A R A L G V L A T E Q Y P Q G L G P T V D M L R N R L H P S E I V S
UniRef90_W9EFB9 L A E K F R K N Q Q F V I L P T D V H Q P D D P Y H P E S K L F P T H N V R N T
UniRef90_G7UA74 M V J A F H G R T L V T R W L P W C D Y F D R W T F A D R P A N D P I F D L V D
UniRef90_A5E8J2 I A K A W H T P A H V S F A S H A G K F F E L V D L J A Y G K Q D M V W P D H C
UniRef90_K5VIG9 H A A L G K V F N L P T I L I T S A E T G P N G P L P Q E I I D M H P K A P F I
UniRef90_K4ZJC6 L V E S F A A A G D F V T M D L H E E Q D P Y H P E S A L F P H N I R A Y E R
UniRef90_W9VII1 L L D E W H P I G H V S F A S H H E A G K P K D H C V P G T W G A E I E P G V Q
UniRef90_W0IRG0 L A G R H P S R T I T R F L P P E R A D D M P G K W R D Y Y R K W W M M T G E
UniRef90_R6Q223 K L Q K Y P K D C L Y A T R D T H T A D Y P V V H C V E G T K G W E I N E K V A
UniRef90_A4QGP2 Y Q L S H G S E Y D V V V A T Q D W H I D P G E H S F E T P D F K N S W P I H C
UniRef90_UPI00037C784E L T K E F I E R G D F V V L J A I D L H K K G D T L H P E T K L F P P H Y Q A H K
UniRef90_K1JR48 V L E K W H P A G H V S F A R N H E G R H V L D V T E L P Y G M Q M L W P V H C
UniRef90_B6Q987 L L K A G S T L N V P V Y I T T Q N K A R L G D T V S E L L S H I A P N D N Q P
UniRef90_C5FHL7 V L A F S R S H A Q D V V I T I Q H L G D S R Y Q L C V E G T W G A Q L S P A L S
UniRef90_R7I3L4 K I R L Y H S R G D D V M F T L D T H N D D Y P T T Q E G K N L P V H C I A G R
UniRef90_F6IKL9 I S A L A R N A G M P V I W T H V A Y M W G T R T D T P D S L Q N I K Y E S R R
UniRef90_UPI0003716106 L I E D W H P P G H G S F A S S H P G K Q P F E M G E L S G K P Q V M W P D H C
UniRef90_W5TH03 A L S A A R E A G D T V I F V R F D H E A A G R Y V R G S Q E T D L Y G G L V
UniRef90_W8QZ17 L A A C A K F F E L P T I L T S F E Q G P N G P L V P E L K E M F P D A P Y V
UniRef90_UPI00047A6108 L I H K F K Q E K N L I A S Q D W H P A D H Y S F A Q W G N H C E Q N K K G S

UniRef90_A0A031LUD4 H P H I D S Y S A F L E A D H R T S T G L A G Y L H E R G I R D V F I V G I A T
UniRef90_A4IYF5 V Q E H D I I T T K H R V S A L Y G T D L E L L R A N S I E H V I I C G G V S T T
UniRef90_D9V8U0 R H D T D H L I V K K G A S A F H G K T S L A A L L A G L G A D N T M V V L V C G G A T T
UniRef90_D0IVU5 W L J R P P A K P Q K G N A S F L P K H L Q K P Q Q Q A P L E R G A D N T M V V I A G G C E T
UniRef90_UPI0003763F4B V T P G D L I V E K D C Y D P F L S S G I D S L L V S Y G K S T A V V T G A V T
UniRef90_UPI0003712C28 K L H F S C M E G Q C L P D S V I M S R R R Q V I V C G G M E T
UniRef90_E1ZFF4 P L P G E P I I D K P G K G S F Y A T D L D L V L H T R G I P L N T V I L T G V T T
UniRef90_A0A031J63 P E E D D Y F I I K P K H S G F F G T Q L D I L L K H L D V S R N L I L T G L T T T
UniRef90_UPI000370E52B H R D S D P L V T K N H A N A F H T N L R R V L T S F A A E S L L E I C G G A Q T
UniRef90_UPI000470E824 I Q S I D S Y S A F F D N D H R T P T G L D G Y L K T R A I F D L L T V V G L A T
UniRef90_H6RT95 Q L V E D P G A H P V V D A T T F G K W G P E L A G L V G E G P L L T V V A G V A T
UniRef90_UPI0004782C58 V A G T P G A A F H P D F D T S A V I E Q V F D W L R A R G V T E V L D V V G I A T
UniRef90_UPI0003B3F550 V S G T E G A E Y H P A L A S D R I D V H I K K G Q A H G V D E L D V A G I A T
UniRef90_W1LEE0 V L G D L Q V Y D R T T V N A W E D V E F N Q A V K A L G R R K L I T A L W L T
UniRef90_W01419 I Q P G D L V A T E H W G S S G F P N T D E H K K L K R Y G K E K I I C V G L L A
UniRef90_UPI0002E6D993 L N P N Y R Y L T K Y S W G A F T N T D L Q K Q L H C E R Q G I T D I Y L T G V L T
UniRef90_K5YKX2 P A D G E P V V D K P G K G A F Y A T D L E T L H K R S I T Q L L A G V A T T
UniRef90_L8J100 H G L D Q V L W P D H C M Q S S H G A E F H Y L R E R N V K S I V Y V C G G L A A
UniRef90_UPI000373072B P A A G D F V A S L H E V S S G F G G T D D A H L R S V G I E I V I C G G L L T
UniRef90_T1JPC2 V V D K A V E I Y K G V N P D V D S Y S A F W D N R K M N I T D V Y V C G G L A F
UniRef90_Q74J36 S S D R V Y K F N K N R Y S S F Q N T N L D N Y L R E R K L N D L W L T G V C T
UniRef90_G7DXK0 A D G Q P F Q Q M L W P D H C V Q H E P G S E I D E R I L R A L S S S H W K D R
UniRef90_D8U4P0 D V I V R K G T R R D V D G Y S A F F D N G R W L R S A G V S R L L V A G L A T
UniRef90_UPI000425DEE9 V V S D N I E T K S K N S L T S E E F S G F I N D N G I S E F Y I A G A D A
UniRef90_M7A6R5 P A D G D I V I E G K R G D T F A S T N I D F I L R S N G I E T V I L G G F L T
UniRef90_J6LDT6 H R E I D S Y S A F F E N D H E T P T G L A G Y L R E R G F A R V V I V G L A L
UniRef90_A6CQS8 P G K D D Y F L I K P K R Y S A F A G T A L N T L L H T L K V I D E L L S G I A G
UniRef90_UPI000470AA28 N R K N V Y I M D K T R Y S A F A G T N L E L K L R E R S I K E R V Y L C G V C T
UniRef90_H5Y6L1 V Q G T D H A E L I R K G F H K D V D S Y S Y L K A R K I K E R V F V A G L A T
UniRef90_UPI000411ADC2 V P K A T K I F D K A A T N S F Y G T P L L S F L K D N K I E H L V V M G C K T
UniRef90_R4X5H3 M D G K T A N T S P H K G A S A R T N D V I K Q L R M R R I E K V I M A G P V A
UniRef90_B7RY09 P E P G E P V I E K H W A S A F R A T D I D S M L R A K G V D S L V V T G L T T
UniRef90_N6V1G1 I Q N T K D A E F H P D L H V T D D A D F I Q Q K G Q N P L V S N F Y D L C G G A T
UniRef90_C0C2U7 L V S A N V I F T K S K G N A L T S E G F V N F I N E V S N S Y I A G A D A
UniRef90_B9QY02 P A D F V I E K V A Y S A F Y Q T R L E Y I M R A V G I D K L I V G G I V T
UniRef90_UPI000288A402 N A N V Y W M D K T R Y S A F A G T D L D I K L R E R G N I T E V H I V I G V C T
UniRef90_UPI000363B8A W Q L I D P F E K G T F G S V D L A Q Y I V N Q Y K R E G N I T S V E L I V G V C T
UniRef90_B1ZMI5 V Q N T G G A A F A P G L N T A R I Q R V F P K G T G P E L D H V F V L G L A T
UniRef90_W1RSK1 R T F I N T W E D Q T V V D A A K A T G R K Q L L I A G L W T
UniRef90_W1IS83 N P Q I D S Y S A F F D N D H K R E T R L Q G W L K E Q N I Q R L F V L G I A T
UniRef90_UPI00036505D4 T V Y M E Y W M D K T R Y S A F S G T N L E L K L R E R G I T E V H L V G V C T
UniRef90_UPI0002E239BD I Q A I D S Y S A F F E N D R K T P T G L A G Y L R E R G L R V I V M A G L A T
UniRef90_Q9ZQ55 W L E S E D C A T L R R K D C I N G F V G S M W V K E K Q L K V I V V V G I C T
UniRef90_R9M146 T Q G W D L Y G K V A G L R E A D D P C F E H Y V A K N G F E R V E L C G L V S
UniRef90_A0A010YY19 V V I G T G G V E L H P N F E T T R V I E A I F D W L R E H D V T E V D V I G L A T
UniRef90_Q73XQ0 V S G E A A S L T K N R H S A F Y S T A L A Y L L R L R G T K R L I V T G Q V T
UniRef90_F6IRB5 I E T T D F V I Q K T H A N S F Y H T D L Q Q Q L Q A L R C Q S L E I C G G A Q V
UniRef90_V1DGK3 A L P N V K V I E R T V I N A W D D P K V R E A I E K T G R K Q V I A G V S L
UniRef90_UPI000426A7C6 V E Y S A A Y S G F E G H L A N D D T S L A D W L R E R N T H I T I V G I A T
UniRef90_W6M1S9 V L P E D A F M E K T H F S C A A E V H C M R R I D L L S R P Q M V L L G T E S
UniRef90_U2TCU8 L L R H A K I Y E K P T F G S M K L A E E L K K L S E K E E I E L E L V G L C T
UniRef90_U2CAA0 R A M P D V I V D K P T F G S T A L A E E L F E E N K K E T L E L E L V G L C T
UniRef90_T1FMM2 Y K I F T K T Q F S M L V P D V E K H L Q S L S V K S A V I C G I E S
UniRef90_L0DW73 A R P G Q I N A W D N D A F V Q A V R A T G R K Q L I I A G L V T
UniRef90_K0CP11 A A P D A H I I T K Q H A D C F E N T N L D E T L Q S L G V D E I L L A G M M T
UniRef90_K4RDV3 R E E D F V V R R L H G L S P I Q G T D V D A L L R N L G C R T L V V T G V S A
UniRef90_N6Y4W3 A V T P D A R Y V G K Q C F S A Q A D G C L Q G T E V E R R P Q V I V C G G T E A
UniRef90_UPI00017SG49 F I Q G D L S T Q I H P A V S P D T S R G D I V V N K R R V S A F V V C G L I T
UniRef90_UPI00029AEBD3 M Y K R K I L C N P H K L Y G P Q N D L S L Q L R K Y K I D K V L M A G M S T
UniRef90_J4TJD6 K L D P E N I F K K P S F G S V E L A N K M L E I S K K E D I E I E L V G L C T
UniRef90_UPI00047D1517 T E G W D L I P E L K P L A E G K L I F N K P T F G S E E L A Q F I L V G V C T
UniRef90_D1B6N3 V Q T V D S Y S A F F D N R R A R P T G L C G Y L K E R G V R A Q V W I A G L A G
UniRef90_UPI00046CA560 A V T G E P V F I K S T S A F S T S D P V I F I K S T S S A F S S T D L F S Y L
UniRef90_Q0TZ47 V A E P G D L F F D K T R M S T E P L H E Y L R A S G K Q T L L F A G V N T
UniRef90_S7VUZ3 V Q G T D G A E F H P D L N T E K F E A I F R K G T D K T I D S Y Y V C G L A A
UniRef90_UPI00047AF737 V Q H A D W A E L V M R K G Y H F H T D S Y S Y L R E R G F D E H I Y L T G L A T
UniRef90_Q97BB4 P E Q G D I V I N K N T A D L F I G T N V E L M L R N A G I D I L F T G I A T
UniRef90_W7CZH7 L N A T V T W L D K T R Y S A F V G T T L D L Y L R A R N I R E L H L V I G V C T
UniRef90_Q59R36 F I H P E K K L D P K T N Q P I V M N Q I V W
UniRef90_V3MF30 P G D D E L V L S K T S S V F I L S T N I D Y V L R N L G T R Y L V V A G F L T
UniRef90_M5DKG1 P Q R D D Y F V L K P R H S G F F Q T P L D L L L Q N L H A R K L I L C G L T T
UniRef90_B6QKC5 T R G M D A W M P G L V I P D W D N E T V V L K K N P S G F V D T L V C G G V S T
UniRef90_I3TM55 K I T F S W N E N A F R D R V I J A S G R R L V L C G G T E A
UniRef90_W9EFB9 W G R C L Y G G L Q T W Y E K Y Q Q P G K I W Q I R E R Q V S T V H L V I G V A T
UniRef90_G7UA74 E A Q P W A E R P T I D V A T F G K W G T Q L S A V T G E H P H L L A G V S T
UniRef90_A5E8J2 H N A V D S Y S A F T E A D G K T T G L A A Y L Q A R G I T R V F V A G L A T
UniRef90_K5VIG9 K R N G E V N A W D N A E F R A A V K K T G K Q V I I A G I T
UniRef90_K4ZJC6 H K S D V Y W M D K T R Y S S F C G T D L D M Q L R A R H I Q E I H L V I G V C T
UniRef90_W9VII1 T R L H D S Y S A F A D N Q H Y R F T T L N D E L R A H K D N I V L V G G L V T
UniRef90_W0IRG0 H L P R D L Y F D K R T Y S P W F D G R L H A I L R S E R V D T L V V T G G E T
UniRef90_R6Q223 K A L E G A V I V N K R G T F G S A E L A D M L Y F E T I G Q D E V D I T G L C T
UniRef90_A4QGP2 V A D S D G A M H D R I N T D S I D E F F P W L K N K G V T D V D I V G I A T
UniRef90_UPI00037C784E D A A N V Y W M D K T R Y S A F A G T D L E L V L R T R G I T E L H L V I G V C T
UniRef90_K1JR48 V E N I D S Y S A F C A A D N E T K T G L A G C L R E R G N T D V W V C G G L A L
UniRef90_B6Q987 G N K V I A N I D K T A F S M Y T N E L V S Q Y Q S A T N N K D A I I V G I E T
UniRef90_C5FHL7 P A P G E H I F Y K K A Q F D F Q S P E F E K Y I S E K G I E H I I V I G L Y A
UniRef90_R7I3L4 T P G H R L F G E T A A C R Q K Q M V F F R Y L H T H P Y Q E I E L V I G V V T
UniRef90_F6IKL9 H A F D D R C E I D A S C D A Y T K R M P S A F F W H K V D T V V V T G G S T
UniRef90_UPI0003716106 V Q N T D S Y S A F R D N D R N A V T G L D A Y L R H K S V G T L D I L G L A T
UniRef90_W5TH03 P Q G D E A L L N K G S V A F P S T T L A S L L D R N G V T S L L T A G V A T
UniRef90_W8QZ17 A R P G Q I N A W N E D F V A A L K R T G R K Q L I I A G V V T
UniRef90_UPI00047A6108 N L M I N Q A D L D H V I L K G Q N K D I E S Y S K N L G V S E L T I V I G V A T

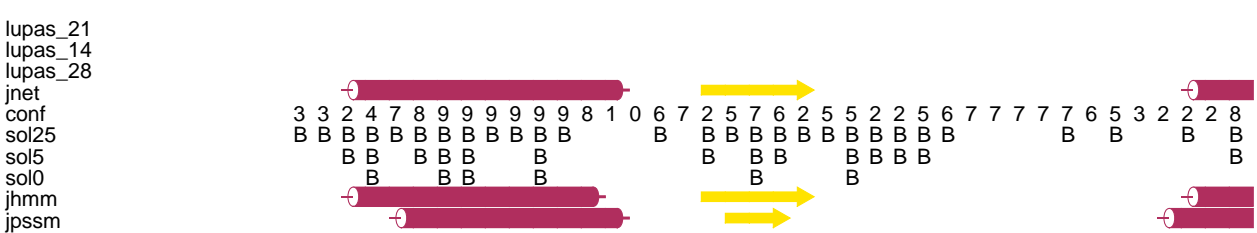
UniRef90_A0A031LUD4 D F C V V A W T A I D A A K L G F N S Y V V S D A T K G I D L N G H A W Q E M L A 130 140 150 160
UniRef90_A4IYF5 S Y V V E S T V R E L H D R D F K V T V I A D A C N A A S
UniRef90_D9V8U0 S G C V R A T A V D A V Q S G F N T L V V R D A C G D R A
UniRef90_D0IVU5 H V C V L Q T A L E L L E D F D V W V V T D A C G S R T E R N R D
UniRef90_UPI0003763F4B T T C V L Y H T V S G L F H R G Y K V V V P V D C V A D R S E A A Q T F G L W K F
UniRef90_UPI0003712C28 H V C V L Q T V M G L L Q E G K Q V F V V A D A V S S R S L L D R D
UniRef90_E1ZFF4 D V C V H T T M R D A N D R G Y E C L L L S D C T A A T D P A N H Q A A I
UniRef90_A0A031J63 D M C I L F T A N D A Y M R E Y A I H V P A D C T A A E T A V A K D H A L I
UniRef90_UPI000370E52B E Y C V D T T T K V A H R G T L G Y D L Q M T P G L L T T T V D N Q F M T A
UniRef90_UPI000470E824 D F C V V S T V L P A A D A G V H V R V V T D A C A G D G S L A K A A
UniRef90_H6RT95 D C C V V R A T A L D A A E A G F D T R V L L D L T A G V A E K T T D A A L R S L A
UniRef90_UPI0004782C58 D Y C V V R A S A L D A A E A G F D T R V L L D L T A G V A E K T T D A A L R S L A
UniRef90_UPI0003B3F550 E V C V L A F P A L D A L R E G Y E V Y V V P V D A V G G T S V A A H E A G L R R I
UniRef90_W1LEE0 N T C V L E A T A R M G M E L G F H V T L V R D A T S A R S H E A L H
UniRef90_W01419 S I G V L E S T A R Q M A F E L G Y N V V I V E D A I A D M N P E M
UniRef90_UPI0002E6D993 E V C V H T T L R E A N D R G F E C L V L E D G T A S Y F P E F H R A A L
UniRef90_K5YKX2 D Y C V V E S T A K D A L L E K F D T Y L I E D A T K P I D P A G F E K A K A
UniRef90_L8J100 N T C V V E S T A R H G V D L G Y H V T V L T D A V A A W T P A D H D A S V
UniRef90_UPI000373072B D V C V A H T A F H A L E H G F R T T L I D D A C R G V S
UniRef90_T1JPC2 D L C V L H T A M T A Y N L N Y D L T P S K G V T T F T E H G Q E W A L
UniRef90_Q74J36 H H I V Q K G T N V Q V D A Y S A F A P F A R G T A D P D R P D P L A A Y L H S
UniRef90_G7DXK0 E Y C V L W T V R D A V K L G Y Q V W V V A D A V R G M G G P E E I S A L A E M
UniRef90_D8U4P0 T G C V K S T C F N M T K A G Y T V H V I S D C V T S Y D L K K L D
UniRef90_UPI000425DEE9 N C C V V E S T M R S A Y E N G Y R V I T L T D C T A A T S V A E
UniRef90_M7A6R5 D F C V R F S A E D A R A C G F D V V V I E E A C R G I D M D G S V D A T R R
UniRef90_J6LDT6 N T C V V L F T A N D A Y M R E F K L F I P Q N C I A S V S E D D N R Y A I E M M
UniRef90_A6CQS8 D L C V L H T A A L D A Y N K G F K L F I Y Q D A V A S F N P K G H E W A L
UniRef90_UPI000470AA28 D F C V A W T A L D A R K A G F E V Y V V E D A C R G I D N Q G S L A K A W A
UniRef90_H5Y6L1 E Q C V I D T A V R T A T V N H F D V T L V G D G H S T T D S V I L P A
UniRef90_UPI000411ADC2 N I C V L E G H M R D I I E G M E V A M V R D A V S G G R N D E G D A Y L G A M
UniRef90_R4X5H3 S G C V R A T V V D G L Q E Y D Y R V V V P R E A V G D R N
UniRef90_B7RY09 D Y C V K F S A L D A V E M L P G V S V R E D A S R G I D P A G V K A A M
UniRef90_N6V1G1 V A C V K S T C Y N L R K A N Y D V N V L S D C I T S Y D K
UniRef90_C0C2U7 N G G V A S T L R D A H L R D I E T V L L T D G S A A F K N N V H E A T L L S L
UniRef90_B9QY02 D I C V V L H T A V L D A Y N R G F K I Y I H S S A V A S F N Q A G H E W A L
UniRef90_UPI000288A402 D L C V I S N A L L I K A Y L P E L Q I Y V D C C A G V T T E K H N A A I
UniRef90_UPI000363BA8A D Y C V K A T A I D A Q Q L G F T T T L V L D G C R G V E L N P G D C D R A L
UniRef90_B1ZMI5 E L C V A M P V I Q A L G E G W V T V I T D A S G A V S V E A H D D V A I R R M
UniRef90_W1RSK1 D Y C V K F T V L D A L M L G Y E T Y V I T E G C R G V N I H A D D S K
UniRef90_W1IS83 D I C V L H T A V D A Y N K G F A I T I Y E D A V A S F N E A G H Q W A L
UniRef90_UPI00036505D4 D F C V V F D Y S A L D A R L S G F E T T V V L A G C R A I D L
UniRef90_UPI0002E239BD D I C V V F D Y S A T A L S A R N H V V V Y S R G C A T F D L P L H V A K D I K G
UniRef90_R9ZQ55 N I C V I S N A V L I K A S L P E A E V V D A A C T S C A D
UniRef90_Q9M146 D H C V R A T A L D A A R N G F A T T V L L D L T A G V I A P T T Q R A L T E L
UniRef90_A0A010YY19 E Q C V L Y T A L D A Y V R H F P V V I P T D A V A H I D P E L G A A A C K M M
UniRef90_Q73XQ0 E F C V L D T T V K M A H G M G Y Q L E M V R G L T T T T D N P M M S A Q Q
UniRef90_F6IRB5 E L C V A S F P A L S A K A A G Y D S R V V L D A S G T F N Q A K R T A G L
UniRef90_V1DGGK3 D F C V V K A T A L D A L Q E G F E V E V L A D L T A A V G D Q D A A L D Q L R A
UniRef90_UPI000426A7C6 H V C V L Q T A L D L R L A G K D V E L V A D A V S S R S G D V
UniRef90_W6M1S9 D I C V V S N A L L L K A A M P E V K I S V D A A C C A G V T
UniRef90_U2TCAU8 D I C V V S N A L L L K S A M P D N R I A V D C C A G V T P K S H E A A L L T M
UniRef90_U2CAA0 H A C V L Q T V L D L I E K R Y E V H V V V D A V T S R S M V D R M
UniRef90_T1FMM2 E V C V A F P S L S A L E E G Y E V F V T D A S G T F N A L T R D A A W Q R M
UniRef90_L0DW73 H N C V T H T A L S P A A E K Y S P K V I E P C T R D A I G H L L A L D S M
UniRef90_K0CP11 N V A I P N A V F D A V N R G Y T A V V P T D A I A G V P A E Y T P A
UniRef90_K4RDV3 H V C V V Q T A L D L R W A G K Q V F V V A D A S G S R D P A N R D L A F E R M
UniRef90_N6Y4W3 S G A V L S T V R A A A D L E D Y R L T V L R D L C L D R D
UniRef90_UPI00029AEBD3 N L C V L E S H T R Q L L E E G F E V A V I A D A S G S A K L P G L D T F K
UniRef90_UPI00047D1517 D I C V V S N A L L L K A F L E P V K I S V D C C A G V T V E K H N A A L
UniRef90_UPI00047D1517 D L C V V S N A L L K T F S R E P V T V D S K C C A G V T S V E S H N A A L T T M
UniRef90_D1B6N3 D Y C A Y S A V D A S D L G F Q V V F L E D A T R P I S P Q G F L K A K E D M
UniRef90_UPI00046CA560 Q I A G N S T V S G S D L G L T M T V E D A V T S F E L D Q C E L J E A
UniRef90_Q0TZ47 D Q C V F G T V S G S Y L G W D C I L L N D C T G T M T G
UniRef90_S7VUZ3 D I C V Y F S M I D A L N E G F D C Y F I D D T S K A L D T K E F
UniRef90_UPI00047AF737 D Y C V L W S A L D A R K A G F A V T I I E D A V R G L D L D E R A W A T M A A
UniRef90_Q97BB4 E F G I E S S A R S A G N R G F V P V I G D G V S P N K
UniRef90_W7CZH7 D I C V L H T A V S A Y N L G Y K L V I H E A G V A S F N Q T G H Q W A L
UniRef90_Q59R36
UniRef90_V3MF30 D Q C I E S A V R D A C D L G Y L V T L V T D A C A T L S
UniRef90_M5DKG1 D S Y V L F T A N D G Y L R G L E I L F V P S D C C A A V A K Y R H M D A L G Q M
UniRef90_B6QKC5 S G C V R A T A V D A C G H G F R C M V V E E A S G D R S I
UniRef90_I3TM55 H V C V L Q T V L D A A R A G F R L A V A D A V A S S R A P A N
UniRef90_W9EFB9 D I C V L L H T A I S A Y N L N Y Q I I L H T G G S A G F T
UniRef90_G7UA74 D F C V I T T A L A A A D A G A W V K V V S D A C A G S A
UniRef90_A5E8J2 D F C V A W T A L D A R K A G L E T Y V V E D A C R G I D T Q G S L A K
UniRef90_K5VI99 D V C T A F L A L S L R A E G Y A V F A N S D A S G T F D T A E D A N D R M R A
UniRef90_K4ZJC6 D L C V L H T A V D A Y N K G Y K I V V H E D A V A T F N G Q A H A W A L
UniRef90_W9VII1 N A C V R G T S M D G I K L G Y N L T L L S D A T E S T T
UniRef90_W0IRG0 D V C V L A T T L G A I D L G Y R V I V L K D A V C S G A
UniRef90_R6Q223 D L C V V S N A I L I K T K L P K V T V D P S C C A G V T P E S H N A A L Q T M
UniRef90_A4QGP2 D H C V R A T A L D A L K E G F N V R V L T S M C S A V D F H A G D H A L
UniRef90_UPI00037C784E D I C V L H T A V D A Y N K G F E V V I H K D A V A S F D K E G H A W A L R H A
UniRef90_K1JR48 D Y C V S T A I D A A R E G F D T H V I T D A S A A I D A
UniRef90_B6Q987 H I C V T T Q T T L D L Q A G H R V Y I V A D G V S V N P E E R G
UniRef90_C5FHL7 D I C V I D A T A K A A F Q R G L W T T V V Q D C T T A L H L K N E D I
UniRef90_R7I3L4 N L C V I S N A V L L C A A L P E A R V S V D A S L C A S N D
UniRef90_F6IKL9 S G C V I R A T A V D S L S R G Y R T I V P I E T C A D K H
UniRef90_UPI0003716106 D Y C V R F S A L D A V A M L P G V R V R E D G C R G I D A E G V S D
UniRef90_W5TH03 H L C V E S T A R E A A D R G F A V T V L E D A C A G P
UniRef90_W8QZ17 D V C V A F P T L S A I A R G F E V F V T D A S G T F D K T Q A A W A R M S A
UniRef90_UPI00047A6108 D I C V A N T V I S S A I K S G Y K V H L D L E G C A G F S N

UniRef90_A0A031LUD4 QGVKRLIYAKEL 170 180 190
UniRef90_A4IYF5 QQAHESLNTNL SRIDIVDIDDFI
UniRef90_D9V8U0 RGP HDAAALFDLQAKYADVIGLGEGV ELLAKA
UniRef90_D0IVU5 AAADRLLAGAGAE LVTTEMVMEW
UniRef90_UPI0003763F4B ATL YN VVLT
UniRef90_UPI0003712C28 YGLQRM RDAGA VLVV TREMVLF E CLRVS GT
UniRef90_E1ZFF4
UniRef90_A0A031IJ63
UniRef90_UPI000370E52B EQT LA FYEG IWN HRF VT
UniRef90_UPI000470E824 IEGMRSAGAVIDER
UniRef90_H6RT95 DEE HARALQVMGGY LVTTFAT TDE VLA
UniRef90_UPI0004782C58 TE
UniRef90_UPI0003B3F550 DATSRAALDE LKAGAVLATSADV
UniRef90_W1LEE0 EQA
UniRef90_W0I4I9 AAMDIDGPTYATILSTAA LI DARI S AANA
UniRef90_UPI0002E6D993 HQHS CQNI FPKLS VLA KA QDLL
UniRef90_K5YKX2
UniRef90_L8JI00
UniRef90_UPI000373072B
UniRef90_T1JPC2 E EGV ERT VARV KQNYGVVTTSEKV
UniRef90_Q74J36
UniRef90_G7DXK0 HKIKS VYVVG L ATDY CVAATARDA
UniRef90_D8U4P0
UniRef90_UPI000425DEE9 HDNA ITYDYP MFSHPVEASE ILLTALGG
UniRef90_M7A6R5
UniRef90_J6LDT6
UniRef90_A6CQS8
UniRef90_UPI000470AA28 KNV LKAE IVD S GDI F
UniRef90_H5Y6L1
UniRef90_UPI000411ADC2 EK IIS HHNK I L HGHY
UniRef90_R4X5H3 VNYRYLANALW TTEEAVKRMKAVATA
UniRef90_B7RY09 SDA HEANLFD MHA KYAD VWN LAD VLTAL EGV S
UniRef90_N6V1G1 EEMRARGV ALI D SRAA
UniRef90_C0C2U7
UniRef90_B9QY02 ATV HQMA CADL
UniRef90_UPI000288A402
UniRef90_UPI000363BA8A
UniRef90_B1ZMI5
UniRef90_W1RSK1 EEMQRA
UniRef90_W1IS83 ILAGAN MMAEWQRDWAR LETAV E L T E V I K Q H A A
UniRef90_UPI00036505D4 HAFSEMSAKGAK LISQSE L T A I L
UniRef90_UPI0002E239BD
UniRef90_Q9ZQ55 AQA H
UniRef90_R9M146 PEMNRKALD VMEGLQ I R V I
UniRef90_A0A010YY19 EQA
UniRef90_Q73XQ0 EQNMSAE L T T A A G C L G
UniRef90_F6IRB5
UniRef90_V1DGK3
UniRef90_UPI000426A7C6
UniRef90_W6M1S9 E L A L A R M R A E G V R V V S R E M V A F E W L H R A G T
UniRef90_U2TCU8 V E K H R A A L E T M R S C Q I L H I V N
UniRef90_U2CAA0 K M C Q I A M E
UniRef90_T1FMM2 Y S L K R M S E A G A F L T T S E S L
UniRef90_L0DW73 A A A G A Q L M T W F G
UniRef90_K0CP11 Q V R G I D I V S I E T A F A
UniRef90_K4RDV3 M I R H T L A L V A T L T T T D E V L A A L G R
UniRef90_N6Y4W3
UniRef90_A0A017SG49 D E V H G V L M D R V F V R Q A R V V D S D E W L
UniRef90_UPI00029AEBD3 A A L M N L R M I T S H I L F T T E E F K E A L K D A
UniRef90_J4TJD6
UniRef90_UPI00047D1517
UniRef90_D1B6N3 A
UniRef90_UPI00046CA560 A Q L H R A T L A L L A A D F A T V T A C S Q L
UniRef90_Q0TZ47 R G A Q E L A E Y Q I L S Q N M G F V T T S S A L C E A
UniRef90_S7VUZ3
UniRef90_UPI00047AF737 A G V D R I E S A A L S D A
UniRef90_Q97BB4 D M H E A A L K I L A T Q A I T I K S E D L M S A W D T A
UniRef90_W7CZH7
UniRef90_Q59R36
UniRef90_V3MF30 A E R H Q N S L N A I K G Y C R Q I T T Q E F L N E L S A
UniRef90_M5DKG1 R T L K A D T T A S L Q M D F
UniRef90_B6QKC5 E I Q R A T L F D L D A R F A D V I N E S E A L A Q M K K
UniRef90_I3TM55 K A L A L D R M A R H G V E I V S T E M V L F E W L G R A G
UniRef90_W9EFB9
UniRef90_G7UA74 P D N H E A A L T V M D S P Q I D V V T S S Q V L A T L A
UniRef90_A5E8J2 A W T D M A A A G V K R I S S E D I A A
UniRef90_K5VIG9 A G V Q V L S L F A I A
UniRef90_K4ZJC6
UniRef90_W9VII1 Q D V K D R A L A E L D A F G V Y I M T T A E W E A Q
UniRef90_W0IRG0 D D T H D A S L E L L H D R F S E L I E T E E F M R G V G
UniRef90_R6Q223 K M C Q
UniRef90_A4QGP2 E E L H E A
UniRef90_UPI00037C784E
UniRef90_K1JR48 N G S L E K A E A A W R L A C I D V C R A E D V L E
UniRef90_B6Q987 V A L A R L R D A G A I V T T S E S L I F E M L K D A K S A
UniRef90_C5FHL7 L G Y M Q K V Y A R V V E S E K L L
UniRef90_R7I3L4 E A L H E K A L D V M R G L Q I N V T N
UniRef90_F6IKL9 E S Y H F A N L T D L Q L K Y A D V V P V Q E V V D W L E A R Q G G A
UniRef90_UPI0003716106 A I R E M R D A G V E I I D S D A I A
UniRef90_W5TH03 A A L H E H S V G Q V L P G F A Q V T S V A K W I
UniRef90_W8QZ17 S G A Q L M N W F S V A
UniRef90_UPI00047A6108

UniRef90_C7RIL8 L T R L A Q R L G V P V I C T E Q Y P K G L G P T L V T E Q Y P Q G L G P V L R 80
 UniRef90_UPI00044418F8 M L K V A R L L D M P V V



UniRef90_C7RIL8 H V C V Q Q T V L D L L A A G R R V F V V E E A V G S R R S A D 160
 UniRef90_UPI00044418F8 Q A C I L L N T A L D L L E R G L Q V H V V V D A C S S R S Q V D R



UniRef90_C7RIL8
 UniRef90_UPI00044418F8

170 180 190
 K E L A L A R M R S H G A D I V S R E M V A F E W L R Q A G T
 L V A M S R M R Q S G A F L S T S E G L I L Q L V G D A A

lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm

