

1 10 20 30 40
QUERY [L] I S H S D M N Q Q L K S A G V T G F N A T E L H G F L S G L L C G G L K D Q S W
UniRef90_E8XR55 P T Y D S L L D Q N L K Q Q A V V A L T A A E E M H G L I S G L L C G G L N R D D Q S W
UniRef90_E9CNL6 P N Y D S L L V L A L N Q Q A N I A G L T A A E E M H G L I S G L L C G G L S K D D A S W
UniRef90_I2B517 M P D Y D K S V L A Q L K N Q Q N I A G L T P S E E M H G L I S G M L C G G G I K D S A W
UniRef90_C9PLY0 M P S Y S D F S Q Q L K N S G I A G V S A A E E L H G F L S G L I C G G G I N D D Q S W
UniRef90_Q65VC5 M I S Y S E L N Q Q L K S A D I A G A T A S E E L H G F L S G L I C G G G I I N D D Q R W
UniRef90_B0UTH5 L P T Y S E F N Q Q L K Q A N I A L T V A S E E L H G F L T G L I C G G G I I N D D Q R W
UniRef90_Q1CEZ3 L P T Y P S L A L A L S Q Q A V V A L T P A E E M H G L I S G M L C G G G S K D D N G W
UniRef90_UPI0004790BC6 L P G Y E A T E Q L Q Q H Q Q V V A L T T P A E E M H G L I S G I L C G G G I H D D S W
UniRef90_UPI00047544CC M P G Y N T L A S A L T L Q Q V G M T P A E E M H G L I S G I L C G G G P G D D R N W
UniRef90_D3V8X7 L P N Y Q S F D E L L H Q Q Q V V A L T A A E E M H G L I S G L L C G G G N H D D S W
UniRef90_V3T546 L P G Y E A I D S H L Q Q Q Q V V A L T A A E E M H G L I S G V L C G G G A G N Q D D S W
UniRef90_UPI0003FC6BD0 L P S F D K I S Q A L D S A D L F T N A A E E T H G V L S G F V C G G G V L D D K S W
UniRef90_B4F0P3 L P D Y S A I D S L L Q Q H A V P L T A A E E M H G L I T G F I C G G G A V H D D N S W
UniRef90_G9Y3N3 P E Y S V F T Q A L Q Q Q Q V G L T P A E E M H G L I T G L I C G G G A G N Q D D N W
UniRef90_D2U1W3 L P N Y Q T L E L L Q Q Q Q N V A L T A A E E M H G L I S G L I C G G G G N Q D D N W
UniRef90_D4F1R8 L L A D Y A V L T Q A L Q Q Q Q V A L T A A E E M H G L V S G L L C G G G N R D D A S W
UniRef90_F2PAY1 L L P T Y Q A V E S A L K E Q Q S L A S A E E L H G L I S G M I C G G G L D D D Q S W
UniRef90_K8W5P7 L P N Y A S L A S A L Q Q Q S I A L T A A E E L H G L I S G L I C G G G S R D D Q G W
UniRef90_D4GM92 L P D Y N A L A A A L S Q H G V G M T P A E E M H G L I S G I L C G G G N A D D N S W
UniRef90_J7TB85 L P D F K T L D E L L R Q Q A V A M T A S E E M H G L I S G L L C G G G N T D D D S W
UniRef90_W0HUH9 P D Y E N L N R L L A A Q A V A L T A A E E M H G L I S G L V C G G G N H D D S W
UniRef90_G4QMA4 N Y E S F S T M L S Q E N I I V D A A E E V Q G L L C G M L A G G A D D D Q S W
UniRef90_UPI00022CADD1 L Y T Q L T L E L K S Q E I G L T G A E E V H G F L S G L L C G G L A G G L H D D E T W
UniRef90_F5ZBV8 L D Y D S V L N K L S Q H G I V V D G A E E V H G L C G M L C A G G L T D D Q K W
UniRef90_K2LCM1 N Y D R L N E L F E R Y E L L S S P A E E H G T L A G L V A S G S E G D E W
UniRef90_L8UDF8 M S G L I C G D G V Q D Q K S W
UniRef90_B8CK13 L D Y D N I L T N A L F Q D S V N A D A A E E I H G L I T G M C G M L C G G V E T D Q K W
UniRef90_UPI00036AAC10 P N F D D F E E L L E K H E L M V N A A E E V H G L I T G M F A G G G A S K D E W
UniRef90_UPI0004036A6D L P S Y D A L S A T L E S S Q Q V G M T A A E E M H G L I S G I L C G G I A G G N Q D H S W
UniRef90_UPI0004704B59 L L N Y E E L S T L L E S Q H N I L T D A S E E V H G I F C G M L S G G L E S Q D D W
UniRef90_K6YDP3 L P D Y E K A Q L L E K Q N E I F V S P A E E A H G V I S G L L A G G L D D D K E Y
UniRef90_E6RLX5 L P D Y E K A Q L L E K Q N E I F V S P A E E A H G V I S G L L A G G L D D D K E Y
UniRef90_A6D941 L P N Y I T T A T E L E Q A N G L A V S P A E E L H G L L V G M V C G G L S D D S W
UniRef90_D4ZBW1 L N L L A A L D T A E I A G Q T P V E V H G A L V G I C G G L S K D A W
UniRef90_UPI0003603E8F L P A Y L S A T E L N S A T L A V N P S E E L H G L T G M L C G G L T D Q A K W
UniRef90_A3QH15 L L A E L N A A D I A Q H P V E V H G S L V G L C G G G V T D Q A K W
UniRef90_N9U3B8 S Y E T L V T L F E Q H D L M A T A V E E A H A V V C G L I C G G L D D G K S W
UniRef90_V4HUY1 L K D Y Q Q A Q L L E K H G L F V A P A E E V H G T I S G L I A G G L D D D K E Y
UniRef90_M4U747 L S F D D D I T K I L L S A T E L Y T T P S E E A H G I L S G L I A G G L E D D K S W
UniRef90_UPI00034673E1 T Y Q Q A Q Q L L E S N D I F V M P A E E V H G L I T G L L A G G V D E K D Y
UniRef90_X2H7E1 L N Y D E L N R Q L V Q Y A G L V N P A A E I H G F I V G L I A G G N H D D K S W
UniRef90_F9RWG0 L P D Y L T F A T E L E R S A G L A V N P A E E I H G L L T G M L A G G L T D K S W
UniRef90_UPI00047E6B82 Y D R L T E L F E R S G L L S N A A E E I H G L L T G M V A G G A E T G E Q W
UniRef90_K7AEK4 F D Q L T P L L E R A N N I L T T A A E E V Q G M F C G M L S G G L T D Q D W
UniRef90_U4K107 P T Y Q L T N E L K S A Q L A V S P A E E L H G L L T G M L S G G L T D N S W
UniRef90_K2JXE2 Y V G M A R L L A S H Q V L T A S P A E E L H G L L T G L V A A G L D D G K S W
UniRef90_U3CDZ1 L P E Y Q S I A N E L K S A N L A V V D A A E I H G L L T G M L S G G L S D N T W
UniRef90_UPI000412A0D7 T Y E Q L S A L N Q N N I V V D A A E I H G I L C G M L S G G L S E S R E W
UniRef90_F4HEL7 L T A Q Q L S N E L K Q A G L A L N G V E L H G L L S G F I C G G L K D E S W
UniRef90_S6HX71 Y K A F A T L L A S S Q H P V S P A E E L H G L L L G R S C A G A G D F E N E
UniRef90_U1M5H4 D Y Q A T Q V T L A S Q N E L F I M P S E E V H G V I T G L L A C G G L D D K E Y
UniRef90_UPI0002E20A0C L P N Y L S V A D E L K T A G I A V T P A E E M H G L L T G M L S G G L D S D A W
UniRef90_UPI0004711D30 L N L D N L A L E L N G A E I A Q H P V E V H G A L V G L I C G G A P V Q S W
UniRef90_UPI0002D7B1B9 L P D Y T T A Q T E L T T A S I S V T P A E E L Q G L I T G M L S G G L E D D Q S W
UniRef90_U1LBX5 D Y Q Q A Q L L L E K H E L F I A P A E E V H G T I S G L L A C G L E D S E Y
UniRef90_UPI0003944A69 P K Y E S F A E T L K S V S L V T P A E E L H G L L T G M L S G G L S P E R N W
UniRef90_F4APW1 Y E L I T A A L Q R N N I L A S A A E I Q G V L C G M L G G G L E A Q N W
UniRef90_F0LT51 P N Y A N L A S E L Q S A S L G V T P A E E L H G L L T G M L A G G L S A D K S W
UniRef90_UPI000467B2FC L S Y E Q L S E L L P K L G L I N P S E E L Q G L L C G K F C G G A K P D E W
UniRef90_A4CCL7 L T Y Q E A Q L L L E K H Q V F V M P S E E V H G V I S G L L A C G L L E E Y
UniRef90_U3HD15 Y S A F A T L L A T S G Q P V S P A E E L H G L L L G R S C A G A E I E P W
UniRef90_UPI0000E0F4DC N F I N T T E L L A K H D V L I D G A E E V H G I L C G M L C G G L D N Q D W
UniRef90_F7YLK8 L P D Y L S L A T A L Q S A A L A V N P A E E L H G L I T G M L A G G L D N K S W
UniRef90_A6VM36 M T E Y S L L N Q K L K A A G L A V S P T E L H G F L T G L F T G G I R D Q Q W
UniRef90_W0H3I5 Y K A F A T L L N T S G H P V S P A E E L H G L L L G R S C A G A D S E G W
UniRef90_A6F9G5 L P L F A D V N T Q L H S D L L V H P A D V H G V I C G G L C G G L D N K A W
UniRef90_L8D4P7 P E Y Q A A Q M L L E K Q D I F V A P S E V H G T I S G L L A C G L E E K E Y
UniRef90_E3BFU2 L P E Y L N F A S E L Q S A G L A V N P S E E L H G L L T G M L S G G M S D K S W
UniRef90_Q8EIR1 E S L K T A L D A E I G Q H P V E V H G A L V G L I C G G V E G D L W
UniRef90_B7VK95 L P D Y L T V A T E L Q S A S L A V N P A E E M H G L L T G M L S G G L N D K S W
UniRef90_I2BYB3 Y D A F S K L L S A S G H P C S P A E E L H G V L L G R S C V G F D A D N W
UniRef90_Q8DC90 L P S Y Q V A D E M K S A M A T L A V T P A E E L H G L I S G L I S G G L S D Q S W
UniRef90_F9Q7D1 L A Y S Q L N Q Q L K S A G L G I N A T E L H G F L S G L L C G G L R D Q S W
UniRef90_U2ZHL4 Y A A F A A L L A S T G K P V S P A E E L H G L L L G R S C A G A E A E S W
UniRef90_UPI0003958AD7 L P A Y A K T A E L T A D S L A V T P A E E M H G L I A G M L S G G L E A S W
UniRef90_F9U91 L D A D R L A V Y L A E G A L C A T P S E E A H G I L C G L M C G G D A D S T W
UniRef90_UPI00037571D S F D G L L K Q L E R N K I E A E P S E E V H G L I T G M L C G G I N S E E W
UniRef90_F7Y72 T F E Q L N R Q L Q E E D I L A S A E I H G M L T G L I A A P A K S E R E W
UniRef90_UPI00036974FC L I D F P S M Q A T L T S E G V E C H A S E E L H G V L T G L V C A G F E D Q G Y
UniRef90_B3GZV1 L P D Y L G A T E L Q S A G L A V N P A E E L H G L L T G M L S G G L S D D S W
UniRef90_U3A611 M P E F L T V E S A L K D S G L A V T P S E E L H G L L V G M I S G G L D D Q T W
UniRef90_Q5E2Z9 L P E Y Y E I C D M L V A E D S M S S A A E L H G L L S G Y L S A G A R H E A W
UniRef90_UPI00038189FD Y Q G F A D L L N A G G H P V S P A E E L H G L L L G R S C A G A D F D A D
UniRef90_I4MZ51 E F K Q L I N Q L Q T I E Y T P A E E F H G F L C G L I A G G I Q D D S W
UniRef90_A0A011NFM7 A Y A A F T Q L L S E A A L P V I S P A E E H G H L M G R I C A G A G K T D E S
UniRef90_N2JA11 P S Y S E L V N T L T Q A K L N V T P S E A H G L L C M G Y L C A G A N K T P W
UniRef90_K2BI51 A Y D D L Q E A L A A T N A S S H P A E A H G V L C G M L P D G A D K A R W
UniRef90_Q0A5K6 S E F S Q L L K T L A I D Y S A A E F H G F L S G L I A G G I Q E D S W
UniRef90_M4R3X7 D Y Q A Q L L L E Q H A D I Y I A P A E E V H G T I S G L L A C G L F E Q E Y
UniRef90_U1KT23 L H Y D T V T E V L K K H N I I V D A A E E V H G L L C G M L A G G M D D Q E W
UniRef90_H5TDP8

QUERY UniRef90_E8XR55 UniRef90_E9CNL6 UniRef90_I2B517 UniRef90_C9PLY0 UniRef90_Q65VC5 UniRef90_B0UTH5 UniRef90_Q1CEZ3 UniRef90_UPI0004790BC6 UniRef90_UPI00047544CC UniRef90_D3V8X7 UniRef90_V3T546 UniRef90_UPI0003FC6BD0 UniRef90_B4F0P3 UniRef90_G9Y3N3 UniRef90_D2U1W3 UniRef90_D4F1R8 UniRef90_F2PAY1 UniRef90_K8W5P7 UniRef90_D4GM92 UniRef90_J7TB85 UniRef90_W0HUH9 UniRef90_G4QMA4 UniRef90_UPI00022CADD1 UniRef90_F5ZBV8 UniRef90_K2LCM1 UniRef90_L8UDF8 UniRef90_B8CK13 UniRef90_UPI00036AAC10 UniRef90_UPI0004036A6D UniRef90_UPI0004704B59 UniRef90_K6YDPD3 UniRef90_E6RLX5 UniRef90_A6D941 UniRef90_D4ZBW1 UniRef90_UPI0003603E8F UniRef90_A3QHI5 UniRef90_N9U3B8 UniRef90_V4HUY1 UniRef90_M4U747 UniRef90_UPI00034673E1 UniRef90_X2H7E1 UniRef90_F9RWG0 UniRef90_UPI00047E6B82 UniRef90_K7AEK4 UniRef90_U4K107 UniRef90_K2JXE2 UniRef90_U3CDZ1 UniRef90_UPI000412A0D7 UniRef90_F4HEL7 UniRef90_S6HX71 UniRef90_U1M5H4 UniRef90_UPI0002E20A0C UniRef90_UPI0004711D30 UniRef90_UPI0002D7B1B9 UniRef90_U1LBX5 UniRef90_UPI0003944A69 UniRef90_F4APW1 UniRef90_F0LT51 UniRef90_UPI000467B2FC UniRef90_A4CCL7 UniRef90_U3HD15 UniRef90_UPI0000E0F4DC UniRef90_F7YLK8 UniRef90_A6VM36 UniRef90_W0H3I5 UniRef90_A6F9G5 UniRef90_L8D4P7 UniRef90_E3BFU2 UniRef90_Q8EIR1 UniRef90_B7VK95 UniRef90_I2BYB3 UniRef90_Q8DC90 UniRef90_F9Q7D1 UniRef90_U2ZHL4 UniRef90_UPI0003958AD7 UniRef90_F9U911 UniRef90_UPI000375571D UniRef90_F7RY72 UniRef90_UPI00036974FC UniRef90_B3GZV1 UniRef90_U3A611 UniRef90_Q5E2Z9 UniRef90_UPI00038189FD UniRef90_I4MZ51 UniRef90_A0A011NFM7 UniRef90_N2JA11 UniRef90_K2BI51 UniRef90_Q0A5K6 UniRef90_M4R3X7 UniRef90_U1KT23 UniRef90_H5TDP8

50 60 70 80

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

QUERY	F	E	L	G	L	T	D	E	K	N	I	V	F	T	Q	A	D	S	L	S	D	W	A	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_E8XR55	K	M	L	M	P	D	D	E	K	N	I	V	F	F	R	A	D	A	L	S	D	W	A	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_E9CNL6	F	Q	L	Y	L	A	D	D	D	D	D	S	V	F	F	R	A	D	A	L	S	D	W	A	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_I2B517	F	Q	L	Y	L	A	D	D	D	D	D	S	V	F	F	R	A	D	A	L	S	D	W	A	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_C9PLY0	F	Q	L	W	L	P	E	E	D	D	D	V	F	F	R	A	D	A	L	S	E	W	A	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_Q65VC5	F	E	L	W	L	P	E	E	D	N	E	V	F	F	R	A	D	A	L	S	E	W	T	N	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_B0UTH5	F	E	L	W	L	P	E	E	D	N	E	V	F	F	R	A	D	A	L	S	E	W	T	N	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_Q1CEZ3	F	Q	L	L	I	P	E	E	G	E	D	V	F	F	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_UPI0004790BC6	F	Q	L	Y	L	P	D	D	E	D	Q	V	F	F	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_UPI00047544CC	F	Q	L	Y	L	P	D	D	E	D	Q	V	F	F	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_D3V8X7	N	L	L	L	P	D	E	E	A	C	V	F	F	F	C	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_V3T546	F	R	M	F	L	P	D	D	D	T	S	V	F	F	D	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_UPI0003FC6BD0	N	L	L	L	P	D	D	D	K	P	L	V	F	F	D	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_B4F0P3	S	M	L	L	P	D	D	D	T	E	S	V	F	F	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_G9Y3N3	F	Q	L	L	L	P	D	D	D	V	T	V	F	F	D	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_D2U1W3	F	N	L	L	L	P	E	D	D	T	K	V	F	F	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_D4F1R8	Q	L	L	L	P	T	E	E	E	S	V	F	F	V	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_F2PAY1	S	L	L	M	P	D	D	D	S	P	L	T	V	R	A	D	A	L	S	E	W	A	N	Q	F	L	L	S	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_K8W5P7	V	M	L	L	P	D	D	D	S	V	F	F	D	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_D4GM92	Q	L	M	L	P	A	D	D	D	T	V	F	F	D	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_J7TB85	N	L	L	L	P	A	D	D	E	A	G	L	F	A	R	A	D	E	L	S	G	W	V	N	Q	F	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_W0HUH9	Q	L	L	L	P	A	D	D	E	A	G	L	F	A	R	A	D	E	L	S	G	W	V	N	Q	F	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_G4QMA4	T	L	C	L	P	D	D	A	S	P	L	N	D	R	G	T	A	L	L	Q	W	V	N	Q	F	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K		
UniRef90_UPI00022CADD1	F	Q	L	L	L	N	D	D	Q	T	L	Y	S	Q	I	D	D	L	L	V	G	W	V	N	Q	F	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_F5ZBV8	Q	L	M	L	P	D	D	Q	A	P	L	P	E	R	L	Q	A	L	V	N	W	V	N	Q	F	L	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_K2LCM1	Q	L	L	L	P	E	D	N	A	P	L	P	E	R	L	Q	A	L	V	N	W	V	N	Q	F	L	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_L8UDF8	F	E	L	C	L	P	E	E	E	N	V	F	F	Q	A	D	G	L	A	E	W	S	N	Q	F	L	L	L	L	G	L	G	L	A	Q	P	E	L	A	K	E	K	
UniRef90_B8CK13	S	P	M	L	P	E	E	E	E	T	L	A	K	R	V	E	A	L	S	L	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_UPI00036AAC10	Q	M	M	L	P	D	D	D	Q	T	S	L	N	D	R	G	V	A	L	I	N	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_UPI0004036A6D	Q	L	L	M	P	D	D	D	Y	S	P	E	E	R	A	E	A	I	A	Q	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_UPI0004704B59	F	R	L	L	M	P	E	D	S	Q	V	F	F	E	R	A	D	A	L	S	G	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
UniRef90_K6YPD3	N	L	C	M	P	D	D	S	A	P	L	N	E	R	G	K	A	L	I	N	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_E6RLX5	D	L	F	L	P	S	D	D	E	S	T	L	D	Q	A	N	G	L	V	S	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_A6D941	L	S	L	L	P	S	G	E	E	S	V	L	F	E	I	A	N	G	L	S	E	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
UniRef90_D4ZBW1	S	P	M	L	P	E	E	E	E	S	L	T	K	R	V	E	A	L	S	L	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
UniRef90_UPI0003603E8F	L	T	L	L	L	P	E	E	E	A	V	L	S	D	L	A	D	G	V	S	D	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
UniRef90_A3QH15	T	P	M	A	P	E	E	E	T	L	A	S	K	R	V	E	A	L	S	L	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
UniRef90_N9U3B8	L	M	L	P	P	D	E	A	P	L	D	E	R	I	D	A	L	V	E	W	S	Q	A	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_V4HU11	E	V	L	L	P	N	G	D	E	A	L	D	Q	A	N	A	L	V	S	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
UniRef90_M4U747	S	L	L	L	P	E	E	K	V	P	L	D	E	R	C	E	S	M	A	K	W	A	Q	G	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_UPI00034673E1	E	M	L	L	P	D	E	E	D	S	L	D	Q	A	N	A	L	V	A	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_X2H7E1	F	Q	L	F	L	P	R	D	E	K	D	L	Y	A	Q	I	D	D	L	V	G	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_F9RWG0	S	L	L	M	P	D	E	E	A	S	L	F	D	M	A	D	D	L	S	E	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
UniRef90_UPI00047E6B82	Q	L	L	L	P	S	D	H	A	P	L	Q	E	R	L	Q	A	L	T	A	W	V	N	Q	F	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
UniRef90_K7AEK4	V	L	C	L	P	D	D	S	A	P	L	N	E																														

QUERY UniRef90_E8XR55 UniRef90_E9CNL6 UniRef90_I2B517 UniRef90_C9PLY0 UniRef90_Q65VC5 UniRef90_B0UTH5 UniRef90_Q1CEZ3 UniRef90_UPI0004790BC6 UniRef90_UPI00047544CC UniRef90_D3V8X7 UniRef90_V3T546 UniRef90_UPI0003FC6BD0 UniRef90_B4F0P3 UniRef90_G9Y3N3 UniRef90_D2U1W3 UniRef90_D4F1R8 UniRef90_F2PAY1 UniRef90_K8W5P7 UniRef90_D4GM92 UniRef90_J7TB85 UniRef90_W0HUH9 UniRef90_G4QMA4 UniRef90_UPI00022CADD1 UniRef90_F5ZBV8 UniRef90_K2LCM1 UniRef90_L8UDF8 UniRef90_B8CK13 UniRef90_UPI00036AAC10 UniRef90_UPI0004036A6D UniRef90_UPI0004704B59 UniRef90_K6YDP3 UniRef90_E6RLX5 UniRef90_A6D941 UniRef90_D4ZBW1 UniRef90_UPI0003603E8F UniRef90_A3QH5 UniRef90_N9U3B8 UniRef90_V4HUY1 UniRef90_M4U747 UniRef90_UPI00034673E1 UniRef90_X2H7E1 UniRef90_F9RWG0 UniRef90_UPI00047E6B82 UniRef90_K7AEK4 UniRef90_U4K107 UniRef90_K2JXE2 UniRef90_U3CDZ1 UniRef90_UPI000412A0D7 UniRef90_F4HEL7 UniRef90_S6HX71 UniRef90_U1M5H4 UniRef90_UPI0002E20A0C UniRef90_UPI0004711D30 UniRef90_UPI0002D7B1B9 UniRef90_U1LBX5 UniRef90_UPI0003944A69 UniRef90_F4APW1 UniRef90_F0LT51 UniRef90_UPI000467B2FC UniRef90_A4CCL7 UniRef90_U3HD15 UniRef90_UPI0000E0F4DC UniRef90_F7YLK8 UniRef90_A6VM36 UniRef90_W0H3I5 UniRef90_A6F9G5 UniRef90_L8D4P7 UniRef90_E3BFU2 UniRef90_Q8EIR1 UniRef90_B7VK95 UniRef90_I2BYB3 UniRef90_Q8DC90 UniRef90_F9Q7D1 UniRef90_U2ZHL4 UniRef90_UPI0003958AD7 UniRef90_F9U911 UniRef90_UPI000375571D UniRef90_F7RY72 UniRef90_UPI00036974FC UniRef90_B3GZV1 UniRef90_U3A611 UniRef90_Q5E2Z9 UniRef90_UPI00038189FD UniRef90_I4MZ51 UniRef90_A0A011NFM7 UniRef90_N2JA11 UniRef90_K2BI51 UniRef90_Q0A5K6 UniRef90_M4R3X7 UniRef90_U1KT23 UniRef90_H5TDP8

130 140 150 160

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

QUERY I A M L F Y S H F N
 UniRef90_E8XR55 A A I L C F G E F G
 UniRef90_E9CNL6 A A I L C H T E F T
 UniRef90_I2B5I7 A A L L C N D T F N
 UniRef90_C9PLY0 I A C L L F S H F
 UniRef90_Q65VC5 I A S L F Y T H F H
 UniRef90_B0UTH5 I T F L F F N H F G
 UniRef90_Q1CEZ3 A A I L C H I E F T
 UniRef90_UPI0004790BC6 A A I M C H N E F T
 UniRef90_UPI00047544CC A A L L C H D T F T
 UniRef90_D3V8X7 A V Q L C Y I A F
 UniRef90_V3T546 A A I M C H N E F T
 UniRef90_UPI0003FC6BD0 S A M L C F N T F S
 UniRef90_B4F0P3 S V Q L C Y I T F
 UniRef90_G9Y3N3 A A M L C H S E F S
 UniRef90_D2U1W3 A V Q L C F I A F
 UniRef90_D4F1R8 A A M L C H G E F H
 UniRef90_F2PAY1 C V L S C H S E L G
 UniRef90_K8W5P7 A V Q L C Y I A F T
 UniRef90_D4GM92 A A L L C H D T F T
 UniRef90_J7TB85 A V Q L C Y I S L
 UniRef90_W0HUH9 A A L L C H N D F T
 UniRef90_G4QMA4 T A M L C F T E L G
 UniRef90_UPI00022CADD1 A T I L F H D E F
 UniRef90_F5ZBV8 S A I L C F S E L G
 UniRef90_K2LCM1 S A I M C F S E L G
 UniRef90_L8UDF8 I A T L F F T H F N
 UniRef90_B8CK13 A A L L C Y S E F G
 UniRef90_UPI00036AAC10 S A L L C F S E L G
 UniRef90_UPI0004036A6D G A V T I F A H L N
 UniRef90_UPI0004704B59 A A V L C Y E T F N
 UniRef90_K6YPD3 S C M L C F N E L G
 UniRef90_E6RLX5 S A L L C F A E L G
 UniRef90_A6D941 C A L T I H A E F G
 UniRef90_D4ZBW1 A A L L C Y S E F G
 UniRef90_UPI0003603E8F C V L T I N A E Y G
 UniRef90_A3QHI5 A A L L C Y A E F G
 UniRef90_N9U3B8 G V M M A F E E C G
 UniRef90_V4HUYY S A L L C F A E M G
 UniRef90_M4U747 G A M L C F N T F S
 UniRef90_UPI00034673E1 S A M L C F S E L G
 UniRef90_X2H7E1 T S M L C F D E F N
 UniRef90_F9RWG0 C V L T I H A E F G
 UniRef90_UPI00047E6B82 S A M L C F N E L G
 UniRef90_K7AEK4 T A M L C F N E L G
 UniRef90_U4K107 C V L T V H A E F G
 UniRef90_K2JXE2 V A M L V F S N L G
 UniRef90_U3CDZ1 C V L T I H A E
 UniRef90_UPI000412A0D7 S V M L C F N E L G
 UniRef90_F4HEL7 I A M L F Y S H F G
 UniRef90_S6HX71 A P L L L F T E C N
 UniRef90_U1M5H4 S V H L C F A E L G
 UniRef90_UPI0002E20A0C C A L T V H A E L G
 UniRef90_UPI0004711D30 A A I M C H A E F
 UniRef90_UPI0002D7B1B9 C V L T I H S D L G
 UniRef90_U1LBX5 S T L L C F A E M G
 UniRef90_UPI0003944A69 C V L A I H A E Y G
 UniRef90_F4APW1 S A M L C F N E L G
 UniRef90_F0LT51 C V L T L H A E F G
 UniRef90_UPI000467B2FC A A L S L F M E F G
 UniRef90_A4CCL7 S T L L C F A E L G
 UniRef90_U3HD15 A P L L L F S E C
 UniRef90_UPI0000E0F4DC I A M S C F N E C
 UniRef90_F7YLK8 C V L T I H A E F G
 UniRef90_A6VM36 I A Y L F H S H F
 UniRef90_W0H3I5 A P L L L F T E C S
 UniRef90_A6F9G5 G A T Y C F N E L S
 UniRef90_L8D4P7 S S L L C F A E M G
 UniRef90_E3BFU2 C V L I I H A E F G
 UniRef90_Q8EIR1 A A I L C Y S E F G
 UniRef90_B7VK95 C A L T I H A E F G
 UniRef90_I2BYB3 A P L L L F T E
 UniRef90_Q8DC90 C T L L I H A E F G
 UniRef90_F9Q7D1 I A M L F Y N H F N
 UniRef90_U2ZHL4 A P L L L F A E C G
 UniRef90_UPI0003958AD7 C S L V V H A E L G
 UniRef90_F9U911 A A M T I Y Q E
 UniRef90_UPI000375571D S T L L C F S E L G
 UniRef90_F7RY72 T A I M C F N E L G
 UniRef90_UPI00036974FC S A L L C F S E L
 UniRef90_B3GZV1 L T L F L H S H F
 UniRef90_U3A611 C V L T I H A E L G
 UniRef90_Q5E2Z9 C V L T I H A E L G
 UniRef90_UPI00038189FD S S M M I F T E C N
 UniRef90_I4MZ51 A P M L L F T E C
 UniRef90_A0A011NFM7 L A L F L H S H F
 UniRef90_N2JA11 A P V L L Y S E Y G
 UniRef90_K2BI51 G A L M I F Q E L
 UniRef90_Q0A5K6 A A L L V R D N L H
 UniRef90_M4R3X7 V A L F L H S H F G
 UniRef90_U1KT23 S A L L C F A E L G
 UniRef90_H5TDP8 G A M L C F N E L G

UniRef90_UPI000380E913 1 P D Y D S V D G A L A R A G A D T D A A E E L H G T L C G M L S G A G L P V E D W 40
UniRef90_UPI000377937C S Y D R W S S E L E Q A H V M A S A A E E L H G G L I A G M L S A G A G A D A K S L
UniRef90_UPI00035DAC6A F E L L S A N A L L S A G G V Q A D P S A E E L H G G F I C G L V A T A A G T P D R W
UniRef90_A3WJG2 N Y D R L I S S L Y A Q A H D V T P Q P A E E V Q G G I L V G L T A A T G A T Q P D D L
UniRef90_H8YZ03 L A D F S A L A H L S D L S D L A L T P S E E A H G G I Y C G L L C S G K R D A R W
UniRef90_J2IH46 S Y D R W S A A L D A A Y L M A S A A E E L H G L I S G L L C G G M P A E D F
UniRef90_F7NUY1 S Y E R H W T S L D D Q S V L M A S A A E E L H G L I S G L L C S A G V S A E P A
UniRef90_C3LR19 L P A Y P A L A N E L R S A S L G I N P A E E L Q G G L L T G M L S S G G L S D K S W
UniRef90_W0BAF1 L P D Y Q T F I D S V A M L A V P F S G S E E L H G G I M C G Y L C A G A T G S G E
UniRef90_UPI00036D35D7 E F D D I A N V L V G E G V L T L S P A E E L H G G L L S G A L V A G A R P D P W
UniRef90_UPI0002558B66 L P D F D V L A D L V E E G L T L S P A E E L H G G M L A G Q V A A G A R F D P L
UniRef90_Q6LMP3 L P S F E A I E S E L K T H G F S V S P S A E E L H G G L L C G M I A S G G L S A D D N W
UniRef90_A0A024PVW7 L D F S R V A D T F L A H G S M Q S P A F L D G R L C A R L A A A D L S A D D T W
UniRef90_S6ER56 L L S Y D E L A K L R Q A S T P V S A A E L H G F L T G L I C G G A S E Q K W
UniRef90_K2APR0 L P T Y V E L N H A L A K T T L K L H S A A E V H G L L S G L L C G G P N S P S A
UniRef90_I1E2Y4 L L S Y D E W M Y K L D Q A Y V M A S A A E E V H G L I S A G L S A G P D A Q Q L
UniRef90_A7BRM1 Y D P I N N A L Q H V G A L M D A A E E A H G I L C G L L C T S Q E E D V W
UniRef90_R8B454 E F E R W A N V F T A H K A F S H P S E E L H G V L C G R L A A G A D E S E W
UniRef90_L8JCU6 L P A Y D A V D A L K E H G L A V S P S E E L H G L L N G M V A A G L D G D N W
UniRef90_W7QXY3 L P A E Y D A F D F L H Q H E L P C T A A E E L H G L I C G C L C G G M A Y Q H W
UniRef90_R4VHV3 Y T E I T A A L A A V D A N V S A A E E A Q G M L C G L F C S P N E P E R W
UniRef90_F2K1Y6 L D F D S I A D V F V T E S I S A S P A E E L H G G L C G Y L A S G L S L E H W
UniRef90_B8GNE8 D Y D T V D A L A R A G A T D A A E E G H G T L C G M L S V N N S E D W W
UniRef90_H1G152 M P D Y Q A L Q D A L R G A G A T A D A S S E F H G T L C C G M L S A G S G E V R W
UniRef90_UPI0003B3FB80 D Y E A L D A L M K Q V G D D E S S E F H G S L C G A L C A R Q K P D E I D
UniRef90_J4KDA9 E F K Q L I A Q L A I E L N P A E E F H G F L S G L I A G G I Q D E S W
UniRef90_B3PH96 L S F D D L A N L L A P L G T L N S P S A E E L H G L C G K L A G G A T E I N W
UniRef90_B7V5B5 A Y S A F S S L L A E A M P V S P A E E L H G H L L G R V A G A G A D E A A W
UniRef90_D0YVW7 D D F E T W A N F F A S Y K A F S H P A E E L H G G L C G R L A A G G L D N Q M W
UniRef90_N6VW86 L D D E F E T W A N F F A S Y K A F S H P A E E L H G G L C G R L A A G G L D N Q M W
UniRef90_C4LC77 E Y I Q A E Q L L E Q N E V M S P A E E L H G I C G L L C G G S T G K Q W
UniRef90_UPI000381827D A Y E R L S A T L L A R I G H G E D A S E E Y H G A L C G A L C V A K P D E I D
UniRef90_R8AN17 L P D T Y S L T A S L M A E G L A I S A A E E L H G L S G Y L C G G I K D D S W
UniRef90_UPI0002E54B37 L P T Y Q S F V D I S V L G L P I S S E E L H G V M C G Y L C A G A I T E G E
UniRef90_Q5QVA3 N Y D R L V E L Y A Q Y D M T P S A S E E V Q G M L T G L I A T G S D A K E L
UniRef90_D3RR96 P D Y S R F D Q L L S S L H L Q V G A A E E L H G V I S A L L C A A H T D A H W
UniRef90_G2D9I8 L P N F E E L Q T A L T K A N V A F H P S Q V H G L L C G Y I S A T S G M K T
UniRef90_K2A0K8 P D Y D E L G H A L A V S E L S P A A E E A H G L Y C G L L A A A P E Q R W
UniRef90_V4JQC4 D F D R Y V Q L F N D L G A A G F P A E E L H G H L V G R L S A G A R Y D H W
UniRef90_UPI00039EC1FF A L E A A E T G Q H P V E V H G A M V G L I A G G V E Q G R W
UniRef90_A1S970 L N F D D L A N L L A P L G T L N S P S E E L H G L L C G K L A G G A S E I N W
UniRef90_I3IDH5 E F D E L A D L V E L K T V Y S S P S E E L H G L L C G G L A G G F D E N V W
UniRef90_F3KBF5 L H E Y S T I T A T L S S D S L A V T P A E M H G L L S G M L C G G L D P A N W
UniRef90_UPI0002D26D78 L N F D A F T T L L E Q S H N M V P T A A E V H G V I C G L I C G G M D D A R W
UniRef90_I3YE38 L S Y Q R V Q D I V L N N D S A A S A A E V H G V L S G L L C L N S R T E C N
UniRef90_UPI0003F62F2E M P D F D Q L A D I Y W R L G M Q S P S Q L C G Y L V G L L S A G G E S D A W
UniRef90_A0Y9S6 Y Q D I N T I V K I D A G M L S A A E S H G M A V V G M L C V N N R T G P G
UniRef90_V5BF14 E F E R W A N V F T A H K A F S H P S E E L H G V L C G R L A A G S R E P E W
UniRef90_W5YKT1 Y A D L A A A L S R L G S P E E A S E E F H G T L C G V F C S Q D A A E V D
UniRef90_I8I301 Y A F A A L L S S A G H S V S P A E E L H G L L G R S C A G A G F D A D
UniRef90_A4XP32 L P S Y A S I S D A L R R I N A L S E A S E A H A L L C A L F T V G A D V A W
UniRef90_UPI0003615CAB L P T P Q E V A A A S R E L G L V A S P A E E L H G A L C G W L A G G A D A R D
UniRef90_UPI0002E60431 P D Y D E F A A T I A V L M L H V S A S L L H G M M C G Y L C A G A D S Q G E
UniRef90_T5K773 Y Q Q G V A E V L E A V G T P V S A A E A H G M L T G M L S G D A G Q A H W
UniRef90_UPI00026C81C0 M T Y Q D I D S V F K A G V S D E A N S A A E A H G L A T G M L C V N G Q T Q S W
UniRef90_A1WWW97 L G N Y E D L Q L I F D E H D A G M N V I S E A H G L A S G M L C V Q F D A D R W
UniRef90_H8GH44 L P N Y D E F S K N I S V L N L H I S A S L L H G A M C G Y L C A G A D I Q G E
UniRef90_S5T4U6 P S Y F E D V A E A L K V M Q A L S S A S E A H G L L C A L F S F G A E V K A W
UniRef90_D3HMV4 L P D F E V I A N L F V E G V G V S P A E E L H G L I A G H L A A G A R L Q M L
UniRef90_B2SG43 P S Y E E I Q A I F L N H V P A S A A E A H G T L A G L L C V D G R L D C G
UniRef90_Q2BL73 M T F E Q I E D L F F K L R V K A D P S G F H G F L C G R L C C G I P L D Q L
UniRef90_Q603N2 I N Y S D M A S Y L E R A G V D L L A S E I H G I A C G M L A G N N A A D K W
UniRef90_Q1YVJ7 G W T D W N Q Q F G S T E I T S P S E E L H G L L T G L V C V P P S H E E W
UniRef90_UPI0003B37C35 Y Q P L N K S L Q Q V G A L M D I A E A H G I L C G M L C A S P H D E C W
UniRef90_A0A031LIP1 L P D F D T L A N A L T E E G I L V S P A E E L H G V I A G H V A A G A D P D T L
UniRef90_I3CG64 D Y R Q L A Q Q L E E V S L V S P A E E L H G I L W G L L C S G T P E K A W
UniRef90_W9UTW8 L S F D D I A D L L I S E K I M V S P G E L H G L V G G Q M A G G L S N D L W
UniRef90_L0GVZ9 Y Q T I D Q T L R E Q G A E V T A A E A H G L A T G M L C V D A S Q S N W
UniRef90_S6GA9 L P D E D T Q A A R G L G L G A T P F E L H G G L C G W L A G G G E N D W
UniRef90_E1VFW4 E Y H E V G H L L E A T H L V P S P S E A H G L C G L V C G G S K D P V W
UniRef90_G4T4F2 D F S D V A D V F L L H G S M Q S P A F L D G R L C A L L A L D V N A E A W
UniRef90_G7UTA7 L P S L P E I D D A S R S L G L G V T A P E I H G A L C G W L A G G S D G P
UniRef90_W9VHC5 L P D Y V A L E R A L G H A E V T L S A E I H G V C C G M L V V N A S H D A W
UniRef90_L9UE00 E F E R W A N V F T A H K A F S H P S E E L H G V L C G R F A A G G R E D E C
UniRef90_UPI00047CDB9A L S F D D L A N Q I V A A G G K V G P S E L H G F I C G L L A A G A R P D R W
UniRef90_I3BRW4 M E F D Q I N D A L Q A Y P E L E S P S F L Q G M L V G L M C G N L K E S A W
UniRef90_M1FIT3 F E A L Q V G L T Q A E S V Q T P G E V H G T L T G M L C V D N
UniRef90_UPI0002557EEC M P D Y H Q L D E A L T A V D S D T T A A E A H G L L C G M L S G P G E P D R W
UniRef90_Q31FC1 T L L A E A A L P V S P A E E L H G H L L G R V C G G A D E N D W
UniRef90_U2EAX2 L D H D E L A N L L E S M G A L Q P P A E E L H G Y A V G F L A I G G R V E R W
UniRef90_UPI00036750EF I D D T R L D Q L L E A S P L T P T A S E A H G M L C G L I C T G I T D Q R W
UniRef90_H0JF48 F H Q F A N A M V T I S A L G S P S G L H G W L T G Y L S T G A D D A Q W
UniRef90_UPI0003B3AB4F D F S T L A D V F L L H G S M Q S P A F L D G R L C G L A L R D L S A E A W
UniRef90_W0DVZ6 G F E L W D E R F A P L E A L N S P A E L D Q G M L C G R L C G P L N E A D W
UniRef90_R4YMJ0 L P D Y D T F D F F L H Q N D L T C T A A E I H G V I C G C L C A G M P Y Q Q W
UniRef90_W1N7Y5 D F S T L A D V F L L H G S M Q S P A F L D G R L C G L A L R D L S A E A W
UniRef90_UPI0003628EB6 L P D Y A S E A R A F A S A G V A H S P S E V Q G V I C C G L L A H G R R D E L
UniRef90_UPI00036D73E2 L P L Y A E V T A Q A E A L R L G T D A S E L H G S L C G Y L S G A T P K D W
UniRef90_K0CAR3 L G F D D F C N L L M P Y G A L N S P A E L H G L L C G K L C G G A T R D D W
UniRef90_UPI0003B3844D L G F D D F C N L L M P Y G A L N S P A E L H G L L C G K L C G G A T R D D W

UniRef90_UPI000380E913 F R E L L P E P A P G D R M A D E S R R Q L A E L F R E T R M Q L H D T E L G 80
UniRef90_UPI000377937C L P V L Y D F L N D G Q A V L P V G L E K Q V L Q L L V N A T A K Q S L L N Q G D D F S F F
UniRef90_UPI00035DAC6A Q H E L A E L L D L E G Q A V L P A D L N K D F L Q L Q A K E S Q K Q L L S D T R D D L G F F
UniRef90_A3WJG2 D G L L S A E L L Y D G Q Q V L P A E L N A K L L K Q Q A T E L Q H A L A Q S A A D Y S G A F F
UniRef90_H8YZ03 L D E I L P K T P T S D H D S A N C R A A L T Q V A E Q T L A A I L A Q S A P E G A F F
UniRef90_J2IH46 L P V L H D F L N D G Q A L S P A L K A D V L Q S A L I M Q T S S E S L A H A T D Y S F F
UniRef90_F7NUY1 L P V L H D F L N D G Q A L S P A L K A D V L Q S A L I M Q T S S E S L A H A T D Y S F F
UniRef90_C3LR19 Q A L V F D Y T N D G M G W P I G A L A S A E Q I L L A M S A Q I L V D T D D F F E F F
UniRef90_W0BAF1 A Y L R A T F T I N Q N G D A Q K R M A L L A L L E D A Y A A S Q Q Q L T G T D D F F E F F
UniRef90_UPI00036D35D7 L Q L A A T F L E I G D F T Q E T S K V R L L E M F Q H A L L T Q L Q L E G T E L D F F
UniRef90_UPI0002558B66 L Q R T I Q T L F D I E P F R N E A A R R G A M Q V Y M A T L L Q Q F Q A P D F S F F
UniRef90_Q6LMP3 L G P V A D Y A N E G K P L L D G A K G V V R T V F D A T A S E L T A A P E L F N F
UniRef90_A0A024PVW7 L E E V C A T L G V D P N S R E D G A G V V L L A W R R Q A L D A L L A A P E L F N F
UniRef90_S6ER56 P L M N E F T N N G E A Y P T A L L K E I S A L Y H D I H H S L E E I D S F N
UniRef90_K2APR0 W E E L I T G D K G S K K T H E V L Q G V Y E S T A K S L N D F L F F F
UniRef90_I1E2Y4 L P V L H D F L N D G Q A L P T E L K Q Q V L S L S L Y D E S T A A A L A K N D F S F F
UniRef90_A7BRM1 L R H V L S D T A T E D G A L V I Q S Q Q L L L K K Y T L E Q L L A N S V N D F S F F
UniRef90_R8B454 L A M V C E H M G L P D E E S D E L K G F M Q A Y D D Q T L T L K A T A E L K A D E M S F
UniRef90_L8JCU6 V G P V C E H M G L P D E E S D E L K G F M Q A Y D D Q T L T L K A T A E L K A D E M S F
UniRef90_W7QXY3 R K F V S E F A L Q E A E I P D E V I A S K M Q E I Y K A T A Y Q Q L L D P D F V
UniRef90_R4VHV3 I A Q V L E G L S P K E P A R E V L E A L T L Y H D T R D R L Q E N G S L E F
UniRef90_F2K1Y6 L A M V E F C D I E S W K E A D S R A A I V E L Y N A T L T L Q N G E Y A L
UniRef90_B8GNE8 F R E L L P D P E P G D L L A Q E A R R Q L G E V F K E T R M E L H D T G L D F
UniRef90_H1G152 L Q E I F P E A G E T P P P E G E A R R L D E V F A E T R T Q L A D A L L G F
UniRef90_UPI0003B3FB80 P V A L L D L P E Y T P E G R D R E Q L V R L R D D T I A A L T D L H S A F
UniRef90_J4KDA9 K T L T Y Q F T N D G H A F S Q V P L Q A L S Q F Y E T L S Q S Y R E A N T L F
UniRef90_B3PH96 L L E A A V E F L D F V S A P D E K V R L A L S T H L Y H N L Q A L Q G S A G E V A V
UniRef90_B7V5B5 Q H A A A E F L L G G A P G E R L K A A L S G L G M V R Q D F S A G E V A V
UniRef90_D0YVW7 L G P V C D Y A N E G E P L T D G A K T F T E T L F A T T S Q E L V G G D V D F
UniRef90_N6VW86 R L L A C E Q M G L A P E A T E G A D E L L D T A Y D V T L A A L Q S S D M S F
UniRef90_C4LC77 L T E F N S L V N D G M P A P A A V R S W L E Q L F L L T Q A A L S Q S Q S G L Q
UniRef90_UPI000381827D L L R L I E H D E Q A V P N D P D T R R A L V E L R R E T V I E A L Q S D M A F
UniRef90_R8AN17 Q V W M H D L T N D G Q A Y P S E L A K V A R T M Y L Q I K Q Q L N E E F G F
UniRef90_UPI0002E54B37 A Y L R A L M V N K R D E P T R A A L A M A F D V Y S V S Q Q L A N F D F F
UniRef90_Q5QVA3 M I L M S D L A Y D G Q G L P V I E L E N L L Q Q Q A E E I E H S L G D E D L G Y
UniRef90_D3RR96 L A Q V A P T P D G E A L V A E G R A A L R E L G L A I E R E F Q G D E P L L
UniRef90_G2D9I8 F E E L F S E L P N G D L V K E M R Q L L G Q L L Y Q I T E R Q M S E F S F E F
UniRef90_K2A0K8 I H F L E K I I F G K K S L P C R E L L Q H I Y E T S Y H Q M S E F S F E F
UniRef90_V4JQC4 L A E L L P T D V A D D A S A H C R A L L E L L A E H T R G Q F A D P V S G L
UniRef90_UPI00039EC1FF L N V A A E L L D A R G T L S E A G K V Q L I Q L Y D A S M A E L A G S G F V
UniRef90_A1S970 L K P L L E L M N D G Q S I P A E L Q A L V E E L F V D T Q A R L G E I D F G F
UniRef90_I3IDH5 L L D A V E F L D F V A A P D E S V R L A L S K L Y H N C S E L Q G G E F S
UniRef90_F3KBF5 L Q G A A T F L D E Q E R F E T D E A K T L L L E M Y A T T S Q Q F M A D G F E L
UniRef90_UPI0002D26D78 A P M L Y D Y T N D G Q G W P I Q S K G L A A T C V I Q Q A S E Q L T G E D L D F
UniRef90_I3YE38 F L Q L L P A A E P A E P A D P R L R E G L S D L A T A T Q N G I R D P D L G F
UniRef90_H2FSY6 Q Q H F N E L N D G F G L P A E L K A V N L L F N R V Y E D L F Q S R F E
UniRef90_UPI0003F62F2E Q W L E V V F G E N T A D L D P A E H A L L S A L C E T T R R Q L D D F D F S F
UniRef90_A0Y9S6 L E Q A A H Y I D A V E A P D R E D S R A L V A L L Y E A T H S Q R L S A G E M E L
UniRef90_V5BF14 Y W L S E L I H E G D V S V E D K A I L E D L F G E T S S L A S D E F T F
UniRef90_W5YKT1 L N M V C E L P E N A A D D S E D L A P F M N K A Y D Q T L S H L K S T D M S F
UniRef90_I8I301 P L E L L D I P T E D I R N D E E A E A L L Q T L A A Q T L E S L M S S E M H F
UniRef90_A4XP32 A W L D A A D L L G E P Q D S V R Q A L I G L Q E M V K G E L C S E D M A V
UniRef90_UPI0003615CAB V S L M A S P I D P N D A M A K P A L K V L S E M Y Q A T K T Q F E S G D L S F
UniRef90_UPI0002E60431 W T A K V M A D E S L P P P A G S A L D R L R E G S V A L E D G E F A F
UniRef90_T5K773 Q P L L H D L T N E G L A F P P H E L A Q A L R K M H A A T S D A L E D D G F L
UniRef90_UPI00026C81C0 A Y L R A L L N N K K D E A S R N A I L A M F S V F S S Q Q Q I N T M D F G F
UniRef90_A1VW97 I A E V L A D T E P R G E A A R A C L E T L T L Y E D E T A E L A D D A M G F
UniRef90_H8GH44 I K Q L F D Q G D D I G A E Q S R Q L A Q L F E E T R A S L E S G D Y G F
UniRef90_S5T4U6 I S A I F D T E D Q L K A L T N E D K Q G L I G L F E Q T L E L L K T D E F I F
UniRef90_D3HMV4 A Y L R A L L N N K K D E T S R N A I L G M F A V F S S Q Q Q I S L D F G F
UniRef90_B2SG43 S S L M T K P I E G D L V A S S A L K T M K L Y D Y T K S Q F D E K G L S F F
UniRef90_Q2BL73 I Q A A C E L M D T E A L K Q S S S K V T L N L Y G A T T D A L E S M D L S F F
UniRef90_Q603N2 Q W L N A V F G E D K A G L A P D E R A S C E T L C K R T R E Q L D A F D F S F
UniRef90_Q1YVJ7 I E T S T G W L G L T E E Q A D G A S Y P L R D F Y E A A L T S L E D V S F F
UniRef90_UPI0003B37C35 V R E M I P A I D P V D V L Q K E A I R Y M G D L F D D S Q R A L Q D S N L R F
UniRef90_A0A031LIP1 I Q I L S T L N V P Q L E P T A L N L L A E E S E D V S H A L S E D L D Y
UniRef90_I3CG64 I K H V L G E S S G K D L L A E A A Q Q L I A L E R E Y T H Q L N A D N F E F
UniRef90_W9UTW8 L R M L A D L T D V S A F K Q E A S K L G L L S V Y Q A T L V Q L Q S D S L A V
UniRef90_L0GVZ9 L G E L A H G D G A S S V Q A A L T A I V E Q T R A G L A G H E L A L
UniRef90_S6GPA9 L Q M A N D F L D I E A F A H E S Q S A G L V A L Y Q S L S Q F E S L D M S L
UniRef90_E1VFW4 L K Q F L P M I G V K R E P W E A L T Q R L Y Q L R H F C E E D L K G A E L D F
UniRef90_G4T4F2 L D E L F G E G S A S G G N V V L L E Q D L F E S T R S L T D D D Y T F
UniRef90_G7UTA7 P A R V L A D R A A T P A A D S P L E Q L R S A T S A Q L L E D R G F G F
UniRef90_W9VHC5 L E H L F S D R D A D P A E S S E V R Q H L E E Y G A Q A A D S A R D R S E G L
UniRef90_L9UE00 L D E V C Q S L G V E P R D Q A S A E R L L G W R R Q T V E A L L S A S D L D Y
UniRef90_UPI00047CDB9A E W L G K L L V D D T L P A V V E S G S A L D R M A R A S A Q L E D R S F G F
UniRef90_I3BRW4 L A E V L D G D P R D F Y V Q E A R T L L R E L F T S T R L Q L N D A E M G
UniRef90_M1FIT3 A A V V C E H I G L A S E E S P E L R V F A A G A I Y Q Q A L A L S E N D L D L
UniRef90_UPI0002557EEC Q K E A G F F L D L A A V P A D L N S G V L A Q A L A T K S L H D F S E K D F S
UniRef90_Q31FC1 I K K T L E E A N V K S V K E S F L I A L H E L Y L E T D K T L N G S G F E L
UniRef90_U2EAX2 E I S G A R A V E D V K N K I D G A L D A L R E M T L E G L F D P D L S F F
UniRef90_UPI00036750EF I A Q V L E H A H A R G E A A R A C L E V L T E L F T D T A E D M A D E E L R F
UniRef90_H0JF48 L A A S E L L G G A P G E R L Q A A L S G L L G M V Q Q E F A G Q Q V A L
UniRef90_UPI0003B3AB4F L K H C G E L L D V E T P N P E Q G D A L F D V Y R N A L A L S E N D L D L
UniRef90_W0DVZ6 L D Q L L A D A E Q S E A A P P E A H A A L G E L A R A T R A A L A D E D E G F
UniRef90_R4YMJ0 Q V I E A N Y L E T P E A L P K P V I Q S L M T I F Y G W V L Q G L K N E S M N
UniRef90_W1N7Y5 L G E T C L S L G V E P P R D E A S A E R L L G W R R Q T L D A L S S E L N F
UniRef90_UPI0003628EB6 L R L V N D F M A L T D E P Q D A T T D A L L D F W K Q T R G Q L S G E G F S F
UniRef90_UPI00036D73E2 R K F I S E F V L Q D A E V D D R V A E K F R E I Y Q V T Y Q Q L M E P D F S
UniRef90_K0CAR3 L G V L A A H V L D P S G F D N D V S A L L L G C R D Q A L S A F A D T G L D L
UniRef90_UPI0003B3844D L A L V M A D S D L D D V E P D S A L D Q M F R A T A L L E S P D F G F
UniRef90_F3LI02 L Q A A W E F L D L T D T P D G Q A Q D E V A M L L D V T M Q Q L T S G M Y D M

UniRef90_UPI000380E913 D L L L P G D D A P L A R R V E A L G L W C Q G F L Y G L S V V C G V Q E G S L P
UniRef90_UPI000377937C S V L L L P S D D D A L F E R L E A L V E W S Q A F L V G F A V Q Q T D L G S L V S
UniRef90_UPI00035DAC6A F R L L L P C D D D D I V A R R T L A L G H W C E Q S F L H G F G V N Q A N K G A T S
UniRef90_A3WJG2 Q L L L L P E D N A P L Q E R L N A L A G W V V E Q S F L V G F G V N Q A N K A A T S
UniRef90_H8YZ03 T P L L L P E P E A P L A A R A E A L V S D W S R G F L Y G L G L N G C D P N S A F S S
UniRef90_J2IH46 A L L L L P S H D D D A L T E R R L E A M V E W A Q S F L V G F A I S Q Q T D L S L L S S
UniRef90_F7NUY1 A L L L L P S D D D D L P E R R L E A M V E W T Q S F L V G F A I S Q Q T D L S L L C S S
UniRef90_C3LR19 L S L L L P E E E E A L F E L A D A V A E W N H F L S G L G L S G A N L L K H A S S
UniRef90_W0BAF1 Q L M L L P N D D D S L M A R A A C F S E W C C G G F T Q Q G L T M A G V D F T D Q F E S
UniRef90_UPI00036D35D7 D L M L L P D D D D Q P L S L R A A C L G W C C G G F L S G F G M Q Q T G S T G G L S S
UniRef90_UPI0002558B66 E L M L L P D D D D Q P L S L R A A C L G W C C G G F L S G F G M Q Q T G S T G G L S S
UniRef90_Q6LMP3 T L L L L P D D D D S L V D R A E A L T E W V S G F L S G L G L S G A N L L K H A S S
UniRef90_A0A024PVW7 E P L L L P D D L F S L A E R A H G L Q E W T Q G F L E A I V E A G G Q S D D W S
UniRef90_S6ER56 F H L Y L P E S D V F D E I D A L A E W T S H F L L G L G L L Q T G L S D K E K
UniRef90_K2APR0 Q L L L L P S D D D S L P L R A E A L T M W C Q G F L T G F G L K L T Q V D Q I L S R E P
UniRef90_I1E2Y4 A L L L L P S D D D S L P E R L R A A C L G W C C G G F L V G F A V Q Q T D L S L V S
UniRef90_A7BRM1 M P L L L P G D D D T P L P Q R V Q A L G G W C E G F L F G V G L T G G D T K G S L P
UniRef90_R8B454 H P L L L P D D D Y A I D Q R L E A L T S W V R G F L S G M A L A G E S L G Q A S
UniRef90_L8JCU6 S L L L L P T E G A D L M E R A E A L S E W T N F I L S G L G L M G L S K N K M S
UniRef90_W7QXY3 F D V Y I P E D I P L A E Q A Q M L I E W L A A F I S S F G A T G G E R F A N V D
UniRef90_R4VHV3 E P L L L P D D D E A D L P E R A T A L G R W C E G F L F G L G M A G G D P A E L P
UniRef90_F2K1Y6 E P S I A D D D S E L S V R G M T L G S Q W A H G F L A G Y G L S G K P D N L S
UniRef90_B8GNE8 H L L L L P G D D D E G L E R R V E A L G H W C C Q G Y L Y G M A V C G V E G A N L P
UniRef90_H1G152 Q M L L L P D D D D A L S T R V D A L G H W C C E Q G F L Y G L A V I A G T D P A K E S
UniRef90_UPI0003B3FB80 M P L L L P S D D D D L A D R R A L L G A W C C G G F L Y G L G R I K L N R E E T
UniRef90_J4KDA9 S L W L L P E N E N D G I A L A E S I A D W I S Q F I L G L G L A Q P K L N E E T
UniRef90_B3PH96 K L M L L P D D D D T L L S D R R A R C L S Q W C H G F L T G F G S V I E L A T R E S L D
UniRef90_B7V5B5 V M L L L P D D D E T L L S Q R T E A L G W C C Q G F L A G F G L T A R E T G S Q L T
UniRef90_D0YVW7 T L L L L P S D E A D L F E R A E A L T E W V S S F M S G F G L V G V N T S Q L P
UniRef90_N6VW86 R P L L L P D D D E Y T L E Q R L Q S A V W V R G F L E G M A M A S R E L D G E A T
UniRef90_C4LC77 L L L L L P D D D E D G P L D E R L Q A V S E W V Q A F L A G F A V M Q Q D L L A R L S
UniRef90_UPI000381827D D L L L L P D D D E A L V P R V R A L V S W C E G F L F G F A S R G L D L A R L S
UniRef90_R8AN17 S L L L L P E D D E S L V F D R V D A L E E W V S Q F L V G L G V A Q P G L K K G H
UniRef90_UPI0002E54B37 Q L M L L P D D E H E S L V D R A Q A F S E W C E G F T Q G M T M A G I S Y E Q L E
UniRef90_Q5QVA3 R L L L L P E D T T P L S D R L S A L A G W V N A F L V G Y G V N Q S E N M T N L S
UniRef90_D3RR96 G L P S P G D S A P L G E R A L W L Y E W I R G G F L Y A L G L V S L T S E S D L S
UniRef90_G2D9I8 A P F L L P S E N V P L V E G R A Q A L G W C C Q G F L T G L E R S N I S R K E K
UniRef90_K2A0K8 S L L L L P D D D A D I N S R T E A L G L W C C Q G F L T G L E R S N I S R K E K
UniRef90_V4JQC4 T L L L L P D D D S A T R E R A V A L H D W T R G F L F G L A L S G L D D T A R M P
UniRef90_UPI00039EC1FF D L L L L P D D D S A T V D H R T Q A L G Q W C E G F L G G F G L V I E R Q G E L S
UniRef90_A1S970 M P L L L P E E E E P L C D R V E A L S L W V Q S F L A G L A I I Q P G L N Q A S
UniRef90_I3IDH5 L K L M L P D D D S L L E R V R A L G E W C H G F L T G F G S V H Q G K R T I D
UniRef90_F3KBF5 L M L L L P E D D A A I A E R A E A L G R W C L G F V T G F G A A R T S V S
UniRef90_UPI0002D26D78 E L L L L P A D S Q A N L L D R G D A L T E W V S A F I A G I G V V G V T S G V L S
UniRef90_I3YE38 H P L L L P D D D D R P L A E R A T A L Y D W V R G F L F A F G V L G V A V S D L S
UniRef90_H2FSY6 L L L L L P A D E E P L D D R L D A M E W A G A F L A G F G V V Q Q E L N K A S
UniRef90_UPI0003F62F2E L L L L L P D D T F S L E E R A N A L S E W C C Q G F L Y G L G Y R S D S A E W P
UniRef90_A0Y9S6 Q L L L L P D D D A A E V S G R I E A L G Q W C C Q G F I F G L G S T S A T S A N W S
UniRef90_V5BF14 E L L L L P D E D A P L S G R I E A L G Q W C C Q G F I F G L G S T S A T S A N W S
UniRef90_W5YKT1 H P L L L P D D D Y A I E Q R L E A L V A W V R G F L E G M A L A G E A L G Q A P
UniRef90_I8I301 A P L L L P D D D I P L S T R V Q A L A L W C C Q G F L Y G L S S R H I D L T T V S
UniRef90_A4XP32 V L L L L P D D D E T P L A Q R A V A L G Q W C C Q G F L G G F G L T A R D D G A L S
UniRef90_UPI0003615CAB D L L L L P D D E E P F H K R I D A L A M W A Q G F L S G L G L M E I N L N D G S
UniRef90_UPI0002E60431 Q L L L L A D D D A S V R Q R A Q A L F D W C R G F L G A F G L A A G A K P P L S
UniRef90_T5K773 F Q L Y L P D D D V S V F D R A D A L G W V N H F L L G L G V T Q P K L D K V T
UniRef90_UPI00026C81C0 E M L L L P D E Q E T L L V R A Q A F S E W C E G F T Q A L T L A G I N P S Q F E
UniRef90_A1WWW97 A P L L L P A E D D P F G D R V R A L A A W S Q G F L F G L G R T E P G E D D Q L P
UniRef90_H8GH44 E P F L L P A D D V P L S E Q I A A L A D W C C Q G F L F G V G A L Y R N G E Q S
UniRef90_S5T4U6 D L L L L P Y E E E R I G V R A V A M S E W C C Q G F L Y G V A Y M G G D D K D W S
UniRef90_D3HMV4 E M M L L P D D E Y E P L L V R A Q A F S E W C C Q G F I E S L K L A G I G V G R F D
UniRef90_B2SG43 D L F I P A D D E P L S Y R A E A L T Y W I R G F L S G V G L F G L D V F E S K
UniRef90_Q2BL73 E L L L L P D D D E N E L S L R A E A L G R W C C Q S F L S G F G L Y G K H T D S L S
UniRef90_Q603N2 E L Y L L P D D D H P M T D R A R A L G E W C C Q G F L Y G L G Y K L G G S D W P
UniRef90_Q1YVJ7 Q P V L L P D D D E L P E R L V A V L G W C C S N Y L S V G D G M T D G F A V S
UniRef90_UPI0003B37C35 E L F L L P D D D E S P L A G R L E A L Q D W C S G F I L G M T L E G T D Y S K L P
UniRef90_A0A031LIP1 L P I L L P D D D E H V L S E R V Q A L A D W C A G V V L G F G L A S G H I R T
UniRef90_I3CG64 S L L L L P Q D D D P L Y T R T Q A L A S G W C C E G F I F G L S L A G L D I R Q F E
UniRef90_W9UTW8 E L L L L P D D D D Q A L G D R V D A L G S W C C S G F L A G F G M Q V A T K H L S
UniRef90_L0GVZ9 T L L L L P D D D E W P L V E R A E A L Y G W C R G L L Y G L G L A R L D A A D L S
UniRef90_S6GPA9 D L L L L P D D D D Y L S Q R V E S L V W V Q G F L A G F G T Q G Q A D K K L S
UniRef90_E1VFW4 S P L L L P D E E E P I T A R L N A L S E W C C S G F L A G F G S I G L S A E I M P
UniRef90_G4T4F2 D L M L L P D D D E N L S E A V E A M R D W C C Q G F L F G I G F S Q S S S N W T
UniRef90_G7UTA7 D L L L L P Q G D A G L D E R A Q G L F D W C R A F L G G F G L A A G A S P L S
UniRef90_W9VHC5 R L L L L P D E E A A L L E R A T G V Y D W V R G F L F A V G T L G V K E S D L S
UniRef90_L9UE00 T P L L L P D D L F S L G E Q A Q G L K E W T L G F I E V I D E V A G D N E E R W S
UniRef90_UPI00047CDB9A V L L L L P D D D A G L A E R S G A L F D W C R G F L E G A F G L A A G K D P S L S
UniRef90_I3BRW4 F D L F L P E D D A E L P D R L E A I Q E W C Q G F S Y G L T L A G V D M R K L P
UniRef90_M1FIT3 Q P L L L P D D D Y V L E Q R L E S L S W V R G F L A G M A L A G E S L G E A P
UniRef90_UPI0002557EEC F E P L L S D S D Y E L A E R G Q T L C L W C E G F L H G F G V A G E S L K E L
UniRef90_Q31FC1 I L C L L P D E N E A L P A R A A M L G Q W C E G F L Y G M G L A G Q S E Q K L T
UniRef90_U2EAX2 Q P L L L P A D D V L E R R V Q A L A R W C A G F L Y G L S A D G T D I N N L S
UniRef90_UPI00036750EF R P L L L P A D D A P I G E R S A A L G H W C E G F L G V S M G G E G G Q R P
UniRef90_H0JF48 V L M L L P P D E F P L A E R T A A L G Q W C C Q G F L A G F G L S G R T G E V S
UniRef90_UPI0003B3AB4F Q L L L L P G D E L D L S Q R I V S L G Q W V Q G F L T G F A M A G K Q F D A L S
UniRef90_W0DVZ6 S P L L L P D E G A P L A Q R A T A L Y D W V R G F L Y A F G M L G I S Q O G L S
UniRef90_R4YMJ0 F T L F L P D D A E L S Q Q V D A M A Q W C K G F L D G F G A A G K I S G K L D
UniRef90_W1N7Y5 E P L L L P D D E M F S L A E R A Q G L K E W T L G F L E V V E D A G E E P R K W S
UniRef90_UPI0003628EB6 V L L L L P D D E Q S M S E R V E A L S E W C H G F L S G F G A S G V E Q G E V N
UniRef90_UPI00036D73E2 F Q I Y L P E D V P L N E K A Q I L L E W L A A F I S A F G V V G E Q F S A V D
UniRef90_K0CAR3 T L L L L P D D D E D L G S R V A A L G Q W S E G F L V G F G T A G T S D S A L S
UniRef90_UPI0003B3844D E L L M P D P D L S V E R G D A L L G W C R G F L G G F G L A A G A S P L S
UniRef90_F3LI02 Q L L L L P E N D T D L D Q R T Q A L A E W C H G F L G G F G T A G I D P D K F T

UniRef90_UPI000380E913 E D S A E I V R D Q L T G A I V A T R S V D D A D E V D A D E A N E E T A Y S E I V E Y V R R T M
UniRef90_UPI000377937C E D V R E A L R D Q L T G A I V A T R S V D D A D E V D A D E A N E E T A Y S E I V E Y V R R T M
UniRef90_UPI00035DAC6A P D T S D R E A L R K D D M L G A I E I V A T R S V D D A D E V D A D E A N E E T A Y S E I V E Y V R R T M
UniRef90_A3WJG2 G D L R E A L R K D D M L G A I E I V A T R S V D D A D E V D A D E A N E E T A Y S E I V E Y V R R T M
UniRef90_H8YZ03 E I T R R D A L R G D D L T E I V A T R S V D D A D E V D A D E A N E E T A Y S E I V E Y V R R T M
UniRef90_J2IH46 E E V R R D A L R N E Q L L S T E I V A T R S V D D A D E V D A D E A N E E T A Y S E I V E Y V R R T M
UniRef90_F7NUY1 A D V K R D A I R N E Q L L S T E I V A T R S V D D A D E V D A D E A N E E T A Y S E I V E Y V R R T M
UniRef90_C3LR19 V E A K E A L R E D L L E E F M S K L L G D V A E D D L A E N E Q A E L L E Q V I E E H I L K A R M
UniRef90_W0BAF1 E E V Q R E A A Q H D L V E F A Q I L Y A E D D Q V N E E G D E R A L M E M V S E E Y A R R M M
UniRef90_UPI00036D35D7 K E S R E R E V L T D D L L A Q E I V Q I S G T E A D D A E G D E D Q A E N L M E M V Q E E Y V R M M
UniRef90_UPI0002558B66 V E G Q R E V L R D D L L A Q E I V Q I S G T E A D D A E G D E D Q A E N L M E M V Q E E Y V R M M
UniRef90_Q6LMP3 A A L R R E V L A E D L L Q S L V N L L E T Y Q E E D A P E E E L A D S L E Q L A E Y V R R T M
UniRef90_A0A024PVW7 G E M T R E A L R N D Q L T E V A K M D Y E E V V A S G E E D N D E A Y V L E E H I L K A R M
UniRef90_S6ER56 S A D V K R D F I D D V I S I S R R I A S P I E N N D E E Y E A D Y M E I V E Y V R R T M
UniRef90_K2APR0 D E I L R E A L R D M V A I S Q S Q L G I E D E D D D S Q A E L F E N V L A Y V P E
UniRef90_I1E2Y4 P D L R S R E A V A A L E I S S Q M D T E M E S E N L I A F E E V A E Y I R R A
UniRef90_A7BRM1 K E V R R E A Y Q D L L A I S S Q M D T E M E S E N L I A F E E V A E Y I R R A
UniRef90_R8B454 R E A N E V V N D L L T A I S A R M D S T D A S D N N D S N E A D L T E L I E Y V R R A
UniRef90_L8JCU6 D D T K Q V L R Q D F A N I S A M O D S D A D L E S D N N D S N E A D L T E L I E Y V R R A
UniRef90_W7QXY3 E D T A E L V R D F A E I A G A T G F D V E I D D E T N E T A Y S E I V E Y V R R V
UniRef90_R4VHV3 A D S A E I L R K D L S D I A G A S G F F E D D D D D E A S E S A Y A V E I L E Y V R R V
UniRef90_F2K1Y6 E E V R E L V K D D F T E F T R T R S L D S G D D D E G E S A Y A E I L E Y V R R V
UniRef90_B8GNE8 D E V G E A I D D L L E E I S K L I G Y H D D D D N E E L L E A G E E V V E Y V R R V
UniRef90_H1G152 E E A Q D M L Q D D F A S H I V I Q Q V G D D D E D S P S A E T A D Y M E V E Y V R R M
UniRef90_UPI0003B3FB80 G E A E E E V L Q D M A S I A Q Q V L Q V G D D D E D S P S A E T A D Y M E V E Y V R R V
UniRef90_J4KDA9 E A V T E A L A D L R D I A T Q V L G Q D Q E D D D D S M E E Q S A A L F F E N Q I T M E H V R R M
UniRef90_B3PH96 G E V R R E V V E D M V A I T S Q L A Q D Q E F E D D S E D N E A S Y F N E V L M E Y H V K L
UniRef90_B7V5B5 E E L Q R E M I G D F S N I T S Q L A Q D Q E F E D D S E D N E A S Y F N E V L M E Y H V K L
UniRef90_D0YVW7 E D A R E I V R D L T E F T Q L A V G E E D D D P D I E E T A Y A E L V E Y V R V
UniRef90_N6VWV8 A E V G E M I D D L T S I S Q L G Y D L D E D E L E E K A S L E V A S E Y A R R M
UniRef90_C4LC77 D E S G E A L R H L L E F A Q L D Y E S L Q I D D E E E D E K A L M E V S E Y A R R M
UniRef90_UPI0002E54B37 G D L K E A I E D M V E L A K L E F T D D D G D E E E E R A Y T E I V E Y L R T
UniRef90_Q5QVA3 E Q G R E I L R D L T A I T R Q M D D D L E E S N E A Q A L A E V T E F V R V
UniRef90_D3RR96 E D G R E V V A D L T R L T R L D Y E I I E S T G E S N E A Q A L A E V T E F V R V
UniRef90_G2D9I8 S E L A D T L N D I V E I A K V S Y G D I V D N E D D E T A Y F E L V E Y V R L
UniRef90_K2A0K8 A Q A R E A F D D L L E V A T R M Q D L N L L E E S E A N E V D F M E V M E Y V R R M
UniRef90_UPI00039EC1FF E E A D S A L H D F A A I A Q V I Q T D L E E S E A N E V D F M E V M E Y V R R M
UniRef90_A1S970 E D V R E V I A D L A A I V A Q V I E I D V V D D E E S E T A Y V E I L E F V R M
UniRef90_I3IDH5 E E A E M L Q D D I A N I V Q I Q V D D D E D D P Q S A E A D Y M E V T E Y A R R M
UniRef90_F3KBF5 E E A R E T V E D I A N I V Q I Q V D D D E D D P Q S A E A D Y M E V T E Y A R R M
UniRef90_UPI0002D26D78 E D G K E V L A D L A E I A Q Q L G T D D D G D M E E Q A L L F E Q V I E H V R V
UniRef90_I3YE38 E Q T R E L L R D F T S D L T R M D L D D D D V E E N E A A L A E V I E F V R V
UniRef90_H2FSY6 P E L Q R E M I Q D I T S I T Q V S G E F E Q E D E E N E A A F V V V L Y E H I K L V
UniRef90_UPI0003F62F2E G E S S E V L H D L L E I S R L V N P D S G G E S D E V A Y A E I T E Y V R V
UniRef90_A0Y9S6 A D V S R E T L S D I A A A S Q V L G L S A N D D E S P R R A Q D I F E I T E Y L R A
UniRef90_V5BF14 D D S R E I V K D I A E F T K L A G D A D A E D S D E P R A E N D F M E I T E Y L R A
UniRef90_W5YKT1 D E I R E L I E D M V A I S Q A L A D D E E A S S D E S E Q Q L L E I T E Y I R L
UniRef90_I8I301 E E A R E I G D L S A F T Q A G L D A G D D Q S E I E S A Y V E L V E Y I R V
UniRef90_A4XP32 A E A M E V L Q D L S A I A Q V L Q S A L E E S E I D G E N D Y M E V M E Y L R V
UniRef90_UPI0003615CAB E A V G E A I N D L I D V S R L Q Y D D D E V T G E A E E S A Y M E L A E Y T K V
UniRef90_UPI0002E60431 E E G S E A L Q D D L G K L A G A R V Q V D E D D E D E A S L S E I E F V R V
UniRef90_T5K773 G E T G E A L D D L R N I A Q L R G Y D E S E D Q E E L E A S L S E I E F V R V
UniRef90_UPI00026C81C0 E E A Q D A F Q H L I E F A E L L D C D T L D V D E E D E R A L M E V S E Y A R M
UniRef90_A1WWW97 A E V T R E F L S D L A E F S R V L A A E P A E D E D D E A S Y T E L L E Y L R T
UniRef90_H8GH44 Q T R E I L R D I A E I S R L D A D N S D E S D E R A F M E V L Q S E Y V R M
UniRef90_S5T4U6 E D C R G I L R D L M E I S R L D A D N S D E S D E R A F M E V L Q S E Y V R M
UniRef90_D3HMV4 E E A Q D A F Q H L I E F A E L L D C E T A L G E D D E R A L M E V S E Y T K V
UniRef90_B2SG43 D E I K E A I S D L I K E I S Y M D Y E A L G E L D E N E S D L M E V L Q T E Y V R A
UniRef90_Q2BL73 P E A K E T L N D L G Q I A Q T S A D A D E L D E N E S D L M E V L Q T E Y V R A
UniRef90_Q603N2 G D E C R E V L D D I L Q L A S R L S V D F E T D D E T D D E R A Y A E L F E Y V R A
UniRef90_Q1YVJ7 D D V K E A L E D L S A I A Q V L V D F E T D D D T G D E R D Y S E L V E Y I R I
UniRef90_UPI0003B37C35 E D T A D L L K D F T D I G T S G E F D F D D D Q S E V A Y T E I S Q Y V R I
UniRef90_A0A031LIP1 D E A E L I H L Q L N I A A V I F F E D S D N D E E G E I S Y Q E L Y E F V R L
UniRef90_I3CG64 E N I Q D F I K D V L N I S H L A E A F L T T S T E E G D E A A Y M E V L V E Y I R M
UniRef90_W9UTW8 E Q V N E A I Q D D L A Q I A Q I E A D S E E E P G D E A A F M E V A E Y V R M
UniRef90_L0GVZ9 P A A R E V E D D F M T I T R L D L T L E A D D E E N S N A L T E I T S E Y V R M
UniRef90_S6GPA9 Q D A K E M L N D L G Q I A Q V A T V D L L E A D D E D S E N A F F E L T S E Y V R M
UniRef90_E1VFW4 D E I S A L K D L Q A I S Q V D V S A E E Q G S G G E N D F Y E V F E Y T R V
UniRef90_G4T4F2 G D V G E V K D I V E I T K L S S D D D S S G E E G D E A F A E I Q E E L R V
UniRef90_G7UTA7 E D G Q R E L A D L A R L A Q A S P E L S S G E E D E D A L A E I E E F V R V
UniRef90_W9VHC5 E Q G R E V I R D F A D L T R M D L A G L E E S S E E N E A L M E I T E F V R V
UniRef90_L9UE00 Q A L R E A I D D L Q A L G R I D T D P E I D D S P E E N E A L A E I T E F H A R M
UniRef90_UPI00047CDB9A D E G H E A L A D I A R L A A A S P Q E D G D E E D E A L A E I T E F V R V
UniRef90_I3BRW4 A D S R E W A L D V V N I G S S G E F D L N D E E E S E N A L A E I T E F L R V
UniRef90_M1FIT3 E E I R E L M E D M V A I S Q L S D E E D A S E E N Q Q L V E I T E Y V R M
UniRef90_UPI0002557EEC P T S S E A L K D M A E I A Q L S D A E G M E N G A Q E R Q R L V E V Q E Y V R M
UniRef90_Q31FC1 G E V A E L F R D F G D I A R L E V D G L E D S D Q E E S D F M Q L V E F V K I
UniRef90_U2EAX2 G E V G E V V N D L T E L A R R A G L T A E D D N E S A E A A Y A E L A E Y V R V
UniRef90_UPI00036750EF R E V D E V L R D F G E I S R I D D P E D D S D S E A A Y A T E L A E Y V R M
UniRef90_H0JF48 G E A R E V L E D L A A I A Q I Q E P A E E G E E G E N D F M E V T S E Y L R V
UniRef90_UPI0003B3AB4F E D S R E A L S D L A A I A Q L S A D E A E H E E G E Q A L V E I S E Y V R V
UniRef90_W0DVZ6 E Q G R E I L R D F A A I T R M D L N D L D D N E E N E A L T E I T E Y T R A
UniRef90_R4YMJ0 A E T R E V L Q H F D A F S Q V I E L T A D D S P E D S E N D L L H E L V E H A R V
UniRef90_W1N7Y5 S A L R E A V E D L A G L A A M E T S I D D S S A S E N S D L F A L T E Y H A R M
UniRef90_UPI0003628EB6 P D I A D T L E D F S A I V Q I E S D N D A A S A S E S D F I E V A E Y V R M
UniRef90_UPI00036D73E2 K E V R E A Y Q D L I S I S Q M D T E M E T E E N L I A F E E V A E Y I R M
UniRef90_K0CAR3 M G I Q E A L S D L A A I S Q V A T P A Y D D P E E G E E M F E Q V A E F C R M
UniRef90_UPI0003B3844D E S R D A L S D L S R I A Q S D L A E Y D D P E S E D E A L E E V A E F V R M
UniRef90_F3LI02 S D A A D A L R D M A A I V Q A A V S D E E D E E Q E K D Y S D L I E Y V R M

UniRef90_UPI000380E913 G V L L V N E E L
 UniRef90_UPI000377937C M V L C C F N E V G
 UniRef90_UPI00035DAC6A A V L N I F T E
 UniRef90_A3WJG2 S A M M C F T E L G
 UniRef90_H8YZ03 V A M L V Y E E
 UniRef90_J2IH46 M V E S C Y N E V G
 UniRef90_F7NUY1 L V L T C F N E V G
 UniRef90_C3LR19 C V L V L H A E F G
 UniRef90_W0BAF1 A V L R I Y H D L
 UniRef90_UPI00036D35D7 A A L M L F A E C N
 UniRef90_UPI0002558B66 A A L L I F S E C N
 UniRef90_Q6LMP3 C V L T C L V E L G
 UniRef90_A0A024PVW7 A A M M L Y T E Q H
 UniRef90_S6ER56 L V A V L Y A H Y
 UniRef90_K2APR0 A V I L I Y Q D L H
 UniRef90_I1E2Y4 M V L A C Y T E V G
 UniRef90_A7BRM1 G V I T L Y E E L
 UniRef90_R8B454 G A L A V F T E F N
 UniRef90_L8JCU6 C V L S C L V E L S
 UniRef90_W7QXY3 T T I M C F G E L G
 UniRef90_R4VHV3 A T L L V R E H
 UniRef90_F2K1Y6 S A M M L Y S E H H
 UniRef90_B8GNE8 G V L L I N E E L
 UniRef90_H1G152 G V L L V S E E L
 UniRef90_UPI0003B3FB80 G A Q L V F M E L H
 UniRef90_J4KDA9 L S L F L H S H F
 UniRef90_B3PH96 A T N S L Y L E F
 UniRef90_B7V5B5 A P L L L F A E C G
 UniRef90_D0YVW7 C V L T C H A E L G
 UniRef90_N6VW86 G A L T V F T E F N
 UniRef90_C4LC77 G A M L A F E E F G
 UniRef90_UPI000381827D G A Q L L Y M E L H
 UniRef90_R8AN17 G A M L C F N T F
 UniRef90_UPI0002E54B37 A V L R L Y G D L
 UniRef90_Q5QVA3 S A M M C Y T E L G
 UniRef90_D3RR96 A A M L I H H E
 UniRef90_G2D9I8 G A L L V R E E L
 UniRef90_K2A0K8 G A L M I F Q E L
 UniRef90_V4JQC4 A S I L L Y E E
 UniRef90_UPI00039EC1FF A V L M I F S E C
 UniRef90_A1S970 A A I H C Y Q E F G
 UniRef90_I3IDH5 V V S S L Y L E F
 UniRef90_F3KBF5 A A L M L Y S E T H
 UniRef90_UPI0002D26D78 C A M T L H A E L G
 UniRef90_I3YE38 A A M L I H D E
 UniRef90_H2FSY6 G A T L A F E E F G
 UniRef90_UPI0003F62F2E G V Q L I W T E L
 UniRef90_A0Y9S6 A A I T V Y L E C N
 UniRef90_V5BF14 A V I F L H T E L N
 UniRef90_W5YKT1 G A L A V F T E F N
 UniRef90_I8I301 G A Q L V F L E L N
 UniRef90_A4XP32 A P L L L F T E C
 UniRef90_UPI0003615CAB A V L L I Q S E F G
 UniRef90_UPI0002E60431 A T L L L H G D C
 UniRef90_T5K773 A A L L C H D T F T
 UniRef90_UPI00026C81C0 A V L R L H S D L
 UniRef90_A1WW97 G V L L C R E H M G
 UniRef90_H8GH44 A V L L L R A E L G
 UniRef90_S5T4U6 G V Q I L M Q E L
 UniRef90_D3HMV4 A V L R L Y S D L
 UniRef90_B2SG43 A V L L I D S E
 UniRef90_Q2BL73 A V L M L F T E C N
 UniRef90_Q603N2 G V Q L V R S E F
 UniRef90_Q1YVJ7 A V Q L I F S E L H
 UniRef90_UPI0003B37C35 G V L L I N E E L
 UniRef90_A0A031LIP1 I P V S L
 UniRef90_I3CG64 G V S N F Y E
 UniRef90_W9UTW8 A L V L V F L E Y N
 UniRef90_L0GVZ9 A A L L L Y E E C
 UniRef90_S6GPA9 G A V Y I F T E C N
 UniRef90_E1VFW4 V V I H L Y Q E C
 UniRef90_G4T4F2 A V Q L I R T E L S
 UniRef90_G7UTA7 A V L L L H G D C
 UniRef90_W9VHC5 A A M L I Q E E R N
 UniRef90_L9UE00 A A M L L Y T E Q H
 UniRef90_UPI00047CDB9A A T L L L H G D C
 UniRef90_I3BRW4 G V L M M N E E M
 UniRef90_M1FIT3 G A L A V F T E F N
 UniRef90_UPI0002557EEC A A L N I F V E C N
 UniRef90_Q31FC1 G V L T I N E E L N
 UniRef90_U2EAX2 G V Q M V F L E L
 UniRef90_UPI00036750EF G A L L V Q E H L T
 UniRef90_H0JF48 A P L L L Y G E Y G
 UniRef90_UPI0003B3AB4F V A M S I F L E C N
 UniRef90_W0DVZ6 A A L L I H N E
 UniRef90_R4YMJ0 A A L T V F L A F N
 UniRef90_W1N7Y5 A A M L L Y T E
 UniRef90_UPI0003628EB6 S A L T L Y Q A F H
 UniRef90_UPI00036D73E2 T T L M C F A E L G
 UniRef90_K0CAR3 A A L M I Y T E L
 UniRef90_UPI0003B3844D A A L L L H S D C
 UniRef90_F3LI02 A A M H F Y A E H H

UniRef90_W8L878
UniRef90_UPI0002486DFD
UniRef90_UPI0003743BEF
UniRef90_UPI0003B4A0EC
UniRef90_D8KAX0
UniRef90_R9PU20
UniRef90_K2GLZ4
UniRef90_M4WU25
UniRef90_UPI0004655599
UniRef90_U7NGT6
UniRef90_I2JG38
UniRef90_UPI00047EE35B
UniRef90_UPI0003B60B9C
UniRef90_UPI000476D722
UniRef90_K4KLD0
UniRef90_UPI00045E6E25
UniRef90_G2E263
UniRef90_A4B9S1
UniRef90_UPI000378F3C2
UniRef90_UPI00039A405E
UniRef90_UPI00030BDE90
UniRef90_I4W1A1
UniRef90_I4W1U0
UniRef90_UPI000382316C
UniRef90_B5JXX5
UniRef90_E1SR74
UniRef90_UPI00047AC0D5
UniRef90_D1KA06
UniRef90_D3SBA8
UniRef90_Q2SN24
UniRef90_I4VRL7
UniRef90_D0I4K6
UniRef90_D2UCH9
UniRef90_H8L3T9
UniRef90_UPI000379C90F
UniRef90_W0TJ54
UniRef90_I4WVZ7
UniRef90_G3IVW1
UniRef90_A0A031MGE1
UniRef90_UPI00037B4442
UniRef90_F3L2K0
UniRef90_S2KFH4
UniRef90_A4BS92
UniRef90_UPI00036556A1
UniRef90_UPI00035EB4A3
UniRef90_L0DT07
UniRef90_UPI000464CDEE
UniRef90_C9P1M8
UniRef90_F5T306
UniRef90_UPI0003610123
UniRef90_UPI00035DA605
UniRef90_UPI00034A2590
UniRef90_A3YIC8
UniRef90_UPI00035DBC6D
UniRef90_W1FXQ2
UniRef90_UPI00036E110C
UniRef90_UPI0003B4F374
UniRef90_UPI0003B5F786
UniRef90_S6C124
UniRef90_UPI000471CD8C
UniRef90_A0A023NYL9
UniRef90_UPI00037B02CA
UniRef90_I1XMS2
UniRef90_A5EV22
UniRef90_L0WAK8
UniRef90_UPI00035F012D
UniRef90_Q21EW0
UniRef90_N9CDQ6
UniRef90_G9ZD98
UniRef90_UPI00047E1FCA
UniRef90_M5E9P4
UniRef90_UPI000362413B
UniRef90_UPI000364708C
UniRef90_U7G086
UniRef90_M7P3M5
UniRef90_V2T5H9
UniRef90_UPI00040E5D31
UniRef90_U4TMS1
UniRef90_UPI000360D115
UniRef90_E0XWR5
UniRef90_UPI0003723282
UniRef90_UPI000262D0F4
UniRef90_G0A5U0
UniRef90_B7S3E3
UniRef90_UPI00029A020E
UniRef90_UPI0004074B4C
UniRef90_Z9JMZ4
UniRef90_H3NUS9
UniRef90_B8KU50
UniRef90_C5BMD6
UniRef90_V6UR13
UniRef90_L2FBE9

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

UniRef90_W8L878
UniRef90_UPI0002486DFD
UniRef90_UPI0003743BEF
UniRef90_UPI0003B4A0EC
UniRef90_D8KAX0
UniRef90_R9PU20
UniRef90_K2GLZ4
UniRef90_M4WU25
UniRef90_UPI0004655599
UniRef90_U7NGT6
UniRef90_I2JG38
UniRef90_UPI00047EE35B
UniRef90_UPI0003B60B9C
UniRef90_UPI000476D722
UniRef90_K4KLD0
UniRef90_UPI00045E6E25
UniRef90_G2E263
UniRef90_A4B9S1
UniRef90_UPI000378F3C2
UniRef90_UPI00039A405E
UniRef90_UPI00030BDE90
UniRef90_I4W1A1
UniRef90_I4W1U0
UniRef90_UPI000382316C
UniRef90_B5JXX5
UniRef90_E1SR74
UniRef90_UPI00047AC0D5
UniRef90_D1KDA6
UniRef90_D3SBA8
UniRef90_Q2SN24
UniRef90_I4VRL7
UniRef90_D0I4K6
UniRef90_D2UCH9
UniRef90_H8L3T9
UniRef90_UPI000379C90F
UniRef90_W0TJ54
UniRef90_I4WVZ7
UniRef90_G3IVW1
UniRef90_A0A031MGE1
UniRef90_UPI00037B4442
UniRef90_F3L2K0
UniRef90_S2KFH4
UniRef90_A4BS92
UniRef90_UPI00036556A1
UniRef90_UPI00035B4A3
UniRef90_L0DT07
UniRef90_UPI000464CDEE
UniRef90_C9P1M8
UniRef90_F5T306
UniRef90_UPI0003610123
UniRef90_UPI00035DA605
UniRef90_UPI00034A2590
UniRef90_A3YIC8
UniRef90_UPI00035DBC6D
UniRef90_W1FXQ2
UniRef90_UPI00036E110C
UniRef90_UPI0003B4F374
UniRef90_UPI0003B5F786
UniRef90_S6C124
UniRef90_UPI000471CD8C
UniRef90_A0A023NYL9
UniRef90_UPI00037B02CA
UniRef90_I1XMS2
UniRef90_UPI0003A5EV22
UniRef90_L0WAK8
UniRef90_UPI00035F012D
UniRef90_Q21EW0
UniRef90_N9CDQ6
UniRef90_G9ZD98
UniRef90_UPI00047E1FCA
UniRef90_M5E9P4
UniRef90_UPI000362413B
UniRef90_UPI000364708C
UniRef90_U7G086
UniRef90_M7P3M5
UniRef90_V2T5H9
UniRef90_UPI00040E5D31
UniRef90_U4TMS1
UniRef90_UPI000360D115
UniRef90_E0XWR5
UniRef90_UPI0003723282
UniRef90_UPI000262D0F4
UniRef90_G0A5U0
UniRef90_B7S3E3
UniRef90_UPI00029A020E
UniRef90_UPI0004074B4C
UniRef90_Z9JMZ4
UniRef90_H3NUS9
UniRef90_B8KU50
UniRef90_C5BMD6
UniRef90_V6UR13
UniRef90_L2FBE9

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

UniRef90_W8L878
UniRef90_UPI0002486DFD
UniRef90_UPI0003743BEF
UniRef90_UPI0003B4A0EC
UniRef90_D8KAX0
UniRef90_R9PU20
UniRef90_K2GLZ4
UniRef90_M4WU25
UniRef90_UPI0004655599
UniRef90_U7NGT6
UniRef90_I2JG38
UniRef90_UPI00047EE35B
UniRef90_UPI0003B60B9C
UniRef90_UPI000476D722
UniRef90_K4KLD0
UniRef90_UPI00045E6E25
UniRef90_G2E263
UniRef90_A4B9S1
UniRef90_UPI000378F3C2
UniRef90_UPI00039A405E
UniRef90_UPI00030BDE90
UniRef90_I4W1A1
UniRef90_I4W1U0
UniRef90_UPI000382316C
UniRef90_B5JXX5
UniRef90_E1SR74
UniRef90_UPI00047AC0D5
UniRef90_D1KDA6
UniRef90_D3SBA8
UniRef90_Q2SN24
UniRef90_I4VRL7
UniRef90_D0I4K6
UniRef90_D2UCH9
UniRef90_H8L3T9
UniRef90_UPI000379C90F
UniRef90_W0TJ54
UniRef90_I4WVZ7
UniRef90_G3IVW1
UniRef90_A0A031MGE1
UniRef90_UPI00037B4442
UniRef90_F3L2K0
UniRef90_S2KFH4
UniRef90_A4BS92
UniRef90_UPI00036556A1
UniRef90_UPI00035B4A3
UniRef90_L0DT07
UniRef90_UPI000464CDEE
UniRef90_C9P1M8
UniRef90_F5T306
UniRef90_UPI0003610123
UniRef90_UPI00035DA605
UniRef90_UPI00034A2590
UniRef90_A3YIC8
UniRef90_UPI00035DBC6D
UniRef90_W1FXQ2
UniRef90_UPI00036E110C
UniRef90_UPI0003B4F374
UniRef90_UPI0003B5F786
UniRef90_S6C124
UniRef90_UPI000471CD8C
UniRef90_A0A023NYL9
UniRef90_UPI00037B02CA
UniRef90_I1XMS2
UniRef90_A5EV22
UniRef90_L0WAK8
UniRef90_UPI00035F012D
UniRef90_Q21EW0
UniRef90_N9CDQ6
UniRef90_G9ZD98
UniRef90_UPI00047E1FCA
UniRef90_M5E9P4
UniRef90_UPI000362413B
UniRef90_UPI000364708C
UniRef90_U7G086
UniRef90_M7P3M5
UniRef90_V2T5H9
UniRef90_UPI00040E5D31
UniRef90_U4TMS1
UniRef90_UPI000360D115
UniRef90_E0XWR5
UniRef90_UPI0003723282
UniRef90_UPI000262D0F4
UniRef90_G0A5U0
UniRef90_B7S3E3
UniRef90_UPI00029A020E
UniRef90_UPI0004074B4C
UniRef90_Z9JMZ4
UniRef90_H3NUS9
UniRef90_B8KU50
UniRef90_C5BMD6
UniRef90_V6URI3
UniRef90_L2FBE9

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

UniRef90_W8L878 G V L L V S E E L
 UniRef90_UPI0002486DFD G V L F I Q E T L
 UniRef90_UPI0003743BEF A A M N I Y F E C
 UniRef90_UPI0003B4A0EC G A M L C F N H F S
 UniRef90_D8KAX0 G L L L V Y E S L H
 UniRef90_R9PU20 G A L T I F A H L T
 UniRef90_K2GLZ4 A A M M V F T E L
 UniRef90_M4WU25 A P L L L F S E F G
 UniRef90_UPI0004655599 A A L L L H G D C
 UniRef90_U7NGT6 A A M L L Y T E Q H
 UniRef90_I2JG38 A A M T I F A E F N
 UniRef90_UPI00047EE35B A A L L L H G D C
 UniRef90_UPI0003B60B9C A P L F I F T E C
 UniRef90_UPI000476D722 A A M L I H A E
 UniRef90_K4KLD0 A V L T L Y M E L
 UniRef90_UPI00045E6E25 A V L L L R A E F
 UniRef90_G2E263 A A M L I Q E E
 UniRef90_A4B9S1 S A L T V F L E Y N
 UniRef90_UPI000378F3C2 S A Q I I F T
 UniRef90_UPI00039A405E A V L L L H G D C
 UniRef90_UPI00030BDE90 G A M L L F A E C C S
 UniRef90_I4W1A1 A A M L L H A E C C N
 UniRef90_I4W1U0 G A L L L H A E C N
 UniRef90_UPI000382316C A A M L L Y T E
 UniRef90_B5JX5 G V L L L F E T L N
 UniRef90_E1SR74 A A W E C L R E F
 UniRef90_UPI00047AC0D5 A A M L L H A E C
 UniRef90_D1KDA6 G T L L I Q E T L
 UniRef90_D3SBA8 G V L L I A D E L
 UniRef90_Q2SN24 A A L N V L Q E L T
 UniRef90_I4VRL7 G A M L L H T E C T
 UniRef90_D0I4K6 C A M T L H A E L G
 UniRef90_D2UCH9 A V L L L H S D C
 UniRef90_H8L3T9 G A M L L H A E
 UniRef90_UPI000379C90F T A L L L Y I E
 UniRef90_W0TJ54 A T S L I W H E A G
 UniRef90_I4WVZ7 A A M L L F A E C
 UniRef90_G3IVW1 A V L L L R S E L N
 UniRef90_A0A031MGE1 A V L L L F S E C
 UniRef90_UPI00037B4442 G V L T I H E T L N
 UniRef90_F3L2K0 V V L N L Y S T Y
 UniRef90_S2KFH4 A A M L L Y T E Q H
 UniRef90_A4BS92 S T L L I R E H V G
 UniRef90_UPI00036556A1 G T L M F N E E
 UniRef90_UPI00035EB4A3 G V L L I N E E L
 UniRef90_L0DT07 G V M L L A D E F
 UniRef90_UPI000464CDEE A V L L L H G D C
 UniRef90_C9P1M8 C V F M L Y I E F
 UniRef90_F5T306 G L F L L Y G E L N
 UniRef90_UPI0003610123 A A L N L Y H E L G
 UniRef90_UPI00035DA605 A V L L L R Y E I N
 UniRef90_UPI00034A2590 A A M M L Y T E
 UniRef90_A3YIC8 S A M M L Y S E H H
 UniRef90_UPI00035DBC6D A V L L L Q E E L
 UniRef90_W1FXQ2
 UniRef90_UPI00036E110C A W L N V Y A E
 UniRef90_UPI0003B4F374 G V I H L F E E L
 UniRef90_UPI0003B5F786 G A Q L I Y T E A H
 UniRef90_S6C124 A V M T L H S D M H
 UniRef90_UPI000471CD8C T A L T L Y L E C H
 UniRef90_A0A023NYL9 A A M L L F A E C C
 UniRef90_UPI00037B02CA G A Q I C F E E C
 UniRef90_I1XMS2 G L F L L Y G E L N
 UniRef90_A5EV22 G A L M L Y A A C H
 UniRef90_L0WAK8 A A L M I F T E L
 UniRef90_UPI00035F012D A V E T V R D Q F
 UniRef90_Q21EW0 A V L C V Y S E L
 UniRef90_N9CDQ6 I P V S L
 UniRef90_G9ZD98 G A L M L Y A Y C H
 UniRef90_UPI00047E1FCA I P V S L
 UniRef90_M5E9P4 A A L T V F Y A F N
 UniRef90_UPI000362413B G V L L I A D E L
 UniRef90_UPI000364708C S V Q L I F E E
 UniRef90_U7G086 S A L M I Y T D L
 UniRef90_M7P3M5 G L F V L Y S E L
 UniRef90_V2T5H9 I P V S L
 UniRef90_UPI00040E5D31 A V M L V H S D C
 UniRef90_U4TMS1 A A L E V H S E L
 UniRef90_UPI000360D115 G A L L L H A E L H
 UniRef90_E0XWR5 S V Q I I F S E I N
 UniRef90_UPI0003723282 A V L L L R D E L N
 UniRef90_UPI000262D0F4 A S L L I A T E L
 UniRef90_G0A5U0 A T L I V R D Q F
 UniRef90_B7S3E3 A T L N I F
 UniRef90_UPI00029A020E A I P L I H E E L
 UniRef90_UPI0004074B4C A A L L L H G D C
 UniRef90_Z9JMZ4 A V M L L H G D C
 UniRef90_H3NUS9 A A I S I
 UniRef90_B8KU50 A A L
 UniRef90_C5BMD6 A V L N I Y N D
 UniRef90_V6UR13 A P L L L Y T E L
 UniRef90_L2FBE9 I P V S V

UniRef90_A5WGM7 |V|P|V|S|L|
UniRef90_UPI00047C5A81 |A|T|L|L|L|H|G|D|C|
UniRef90_W6LSA6 |G|L|L|L|I|H|S|D|L|H|
UniRef90_L8Y3W8 |G|I|L|L|I|Y|H|E|
UniRef90_UPI000367C59F |G|I|L|T|M|N|E|S|L|N|
UniRef90_A8PLI0 |A|I|P|L|I|Y|E|E|L|T|
UniRef90_D5C2R0 |G|L|L|L|V|Y|E|S|L|H|
UniRef90_UPI0002555DD0 |S|I|Q|Y|S|F|E|E|C|
UniRef90_I4WN45 |A|A|M|L|L|Y|A|E|C|
UniRef90_Q1MZK1 |T|A|M|F|M|F|Y|H|F|N|
UniRef90_UPI0004036B45 |V|P|V|S|F|
UniRef90_UPI000427D10D |G|A|L|M|L|Y|
UniRef90_W6M3H5 |G|
UniRef90_A0A023XZL2 |A|V|L|L|L|H|G|D|C|
UniRef90_A0Z2P0 |A|A|L|N|M|L|T|D|
UniRef90_W0DV67 |A|A|M|M|F|Y|D|Q|L|H|
UniRef90_B4SI13 |A|V|L|L|L|H|G|D|
UniRef90_D0KZ65 |A|L|I|V|M|Y|
UniRef90_C0AW97 |
UniRef90_K8Z5U0 |A|A|L|L|L|H|S|D|C|
UniRef90_C8PX80 |I|P|V|S|V|
UniRef90_A0A021W698 |V|A|L|L|L|H|G|D|
UniRef90_W1EYG4 |
UniRef90_L0WJW5 |V|P|V|S|L|
UniRef90_UPI000375BB59 |S|A|M|L|L|H|A|E|C|
UniRef90_X0WMD9 |C|V|L|L|L|I|Y|T|T|M|H|
UniRef90_W7QN44 |
UniRef90_I1YHJ1 |G|L|F|L|L|F|G|E|L|S|
UniRef90_UPI0004684A3C |A|A|L|L|L|Y|T|E|Q|H|
UniRef90_UPI0004708B02 |T|A|Q|L|I|F|V|E|
UniRef90_W1GKW9 |
UniRef90_S6MKV0 |A|P|L|L|L|F|T|E|F|N|
UniRef90_C8NC05 |G|A|L|L|I|Y|A|E|C|H|
UniRef90_UPI000372D468 |
UniRef90_S6BWE7 |T|A|V|L|V|R|E|
UniRef90_B8KLA9 |A|A|M|N|V|
UniRef90_W6ZR11 |M|A|L|
UniRef90_R5EWQ4 |
UniRef90_A4ABX3 |
UniRef90_X0YD63 |
UniRef90_B4X159 |M|A|L|
UniRef90_U7G5M9 |
UniRef90_L0WB67 |
UniRef90_UPI00047A2CF2 |
UniRef90_UPI000379CD42 |
UniRef90_UPI0002198270 |
UniRef90_E8LLE4 |
UniRef90_V9ZYW7 |
UniRef90_G2IWI5 |

lupas_21
lupas_14
lupas_28
jnet
conf 9 9 9 9 8 6 1 4 9 9
sol25 B B B B B B B
sol5 B B B B B
sol0 B B
jhmm
jpssm