

QUERY 1 10 20 30 40
UniRef90_D5MHY5 M W M P P R P E E V I A R K L R R L G F V E R M A K G G H R L Y T H P D G R L V V
UniRef90_B7A8W8 L S P L R P R E E V I R K K L E A A G F Q L R R Q T G S H A R Y V L H P D D N R R K V T
UniRef90_Q1CPG5 M P P R P E E V V R K K L K R L N G F Y E A G S Q N G S H R V F L H D D D G R R Q T V
UniRef90_UPI000301D92B M P M T P K Q M I K L L K S F G F V F H R Q A G R H E T W F N P D N R Y T T
UniRef90_C6WRD0 S Y K E T I K I L L K S F G F V F H R Q A G S H A V Y R H E T D G R A V
UniRef90_L8LSN5 S Y R K I V K V L L K S F G F I F D R Q A G S H E S I W Y N E T D G R N Y T T
UniRef90_W9DP31 P I S A K K V I K A L E S L G F T Q T R Q K G S H L F M Q H P D G R T T T
UniRef90_D3DC32 M P P V P K Q D V V R A L L Q K A G F E L V R Q A G S H H R L R N P D G R I D V T
UniRef90_H1BFW2 M P M T S K Q M V K L L K Q N G F I E I R Q A G S H K I L N N P D G R S V V
UniRef90_E4TW48 M K A K D L I K E L Q K N G F E L A R S K G S H H I F K H S D G R R T T
UniRef90_Q39W17 R Y R E I I K R L K A F G F V F D R Q A G S H E L W Y N P D K K Y T T
UniRef90_V5UIG8 M T S A D I I K R R L K A A G F T E V S V R G S H H K F R H E N G R V V I
UniRef90_F6DF38 L I P I T G Q E L V R L L E E E G F Q V V R V R G S H V R L R H P D G R V T T
UniRef90_UPI0003724A07 K P K A D I V K K L L K L G F N V I R Q T G S H V R L T H P D D G R A T T
UniRef90_UPI0003489A7E M P A K A S D L Q R V A G K L G F E K V R Q K G S H A R W L H P D G R A T T
UniRef90_H1UMI6 M I M R M D S R E I I K K I K A D G W Y L V A T K G S H Q Q F K H P T K P R V T
UniRef90_J0S6Y7 M P L S P K Q K V I K I L E T K G F V L A R T K G S H H L Y R H P E G R R V T
UniRef90_K7VYC1 I F P S V K A K E F I K V V E K N G F Y F D R Q K G S H V I Y K H P D G R R V V
UniRef90_Q8TNZ2 L P S L T G R E V I A A L E A D G W Y L V A T K G S H R Q Y K H P P G R V T I
UniRef90_K9U8G9 L P S L T G R E V I A A L E S K I G F E I A R V R Q K G S H H I L L H S D G R R T V
UniRef90_H5SVT8 L P S L T K A R E V I K V L L E K A G F Q F L R Q K G S H A L Y A H P D G R V T E
UniRef90_G9R795 M P M T P K E M V R L L K K N G F V E V G Q S G S H L K L N H E T G K R T V
UniRef90_Q5SJS6 M P P K T S E V A R K L E R L G F K P R R G K G S H R V Y V H P D D G R K V V
UniRef90_X1LIV2 T G S E A V R A L L Q K A D F E L V R Q R G S H V Y M R H T D G R A T V
UniRef90_S7T975 M T S R E V I R K L E Q A G F Q Q V A K K G S H L K M R H P D G R T T I
UniRef90_A4XFQ1 M K P K E L I K I L E E D G W Y E V R Q S G S H K Q F R H P V K K L V T
UniRef90_UPI0004770AC6 M M P L P G E L V K V L L E K L G F E T V R Q S G S H H M L R N P D G R F V T
UniRef90_UPI000344B970 M P K L P S E V I K A L E E I G F Q V V R Q K G S H V R M K H K D S R V V T
UniRef90_UPI0003B79532 L R P L S Y R E V K R R L E A A G F A I Y S Q K G S H V K F V R E D R R T V T
UniRef90_UPI00036355AA M T M K V R E V I K L L E A D G W L L V R T R G S H R Y R H K S G T V T V
UniRef90_D8F267 M P I K P K D V V S N L R Q L G F Q E V R Q R G S H K Q F R H L D G R V T T
UniRef90_UPI000344C874 M N S R E V I S R L K Q D G W Q L V N T R G S H A Q Y K H P D K P K V T
UniRef90_UPI0003B49FBD K P Q E V V K L L N K L G F V E V R Q V G S H K Q F K H P D G R F T T
UniRef90_U2DT95 M P M T A K E M I K L L T K N G F Q V V A Q N G S H V K M K N P E G K Q T T
UniRef90_Q1QQP1 M D S R D I I A A L K A D G W K Q V A Q K G S H V Q F K H P T K P R V T
UniRef90_K9W5D4 M K V R E L I R L L E D D G W Y L A R T R G S H R Q F Y H P E G V V T V
UniRef90_G2MW98 P D K I L R A L E E F G F E K V S Q K G S H I K L K N P D G K V V I
UniRef90_C8VWK4 K V R E V I K L L E K E G W Y L V A Q R G S H R Q Y K H S P G R V I T
UniRef90_B3EM08 T Y R Q V V K K L K K L G F E F Y R Q A G S H E L W Y H S P E R Q I T T
UniRef90_I0HHD7 R K V V D A L K K A G F A H V R T K G S H A V F Q N A D G R L V V
UniRef90_UPI00035EDD6E M P L T S K E V L R A L E A G G F Y I H H S Q S G S H A R L F H R S R S R V T
UniRef90_I411L6 M P L K P R E I I K R K L E A A G F E V I S Q K G S H V K F A K P E S G R T T
UniRef90_I3CF99 K Y R E I V S R L R A L G F E L Y R Q A G S H E I W Y N A T N R Y T T
UniRef90_H1G3T9 M Q S K D L I K A L E A D G W Y L D R T K G S H H V F K H P T K P G V P
UniRef90_E8TE65 M P P T V R E I I R L L E A D G W Y L V A T K G S H R Q Y K H K A G R V T V
UniRef90_UPI00036DC3FB M P P V P S K L V K A L E R A G F H M V R T R G S H H A M R H P D G R G T S
UniRef90_D3D743 M P P V P S R V V Q A L E R N H G F K V A R V N G S H H I M R H P D D G R Q T T
UniRef90_H1AH92 M P M T P K E M V R L L K K N G F V E I R Q K G S H L M M H N Y E G K Q T T
UniRef90_UPI0004224D55 M N S K A L I Q L L Q N D G W Y F V A S K G S H Y Q Y K H P Y K K R V T
UniRef90_A3ZA32 R Y R D V A K K L K A L G F G F D R Q A G S H E I W Y R P D S A Y T T
UniRef90_UPI00034C86A0 T A N D V I R V I E K I G F I L V R Q S G S H K I Y K N S E G K R V T
UniRef90_D7CNM8 K P Q E V V R I L E K L G F V E V R Q K G S H K Q F R H P Q D A R G T T
UniRef90_K9RD15 K Y R K I I K V L E Q G F V E F H R Q A G S H E I W F N P T N R Y T T
UniRef90_L8M278 M P K L P K K V I N T L E K L G F Q V V R Q R G S H V Q M E H D D G R L V T
UniRef90_Q8YVZ2 M K V K E L I R L V E Q D G W E Q V R S R G S H R Q F K H P F K R V T
UniRef90_UPI00037D8B0C M P K L P D A V I N A L E K V N F Q V V R Q K G S H V R M Q H E D G R V V T
UniRef90_G6FW93 M P K T A R E L V K I L K S N G F K K T G Q T G S H A K F Y N K T K R T V V
UniRef90_J7B237 M P K T A R E L V K I L K S N G F V V V R Q R G S H V I V V L E E S K T V V
UniRef90_K8JHW0 M P K T P Q K I I K A L E K K G F V L D R V K G S H H I Y Y H E T K R R V V
UniRef90_D1JAU5 E T I M A L G R A G F V K V S Q K G S H V K V R R K D G R Q A I
UniRef90_D5WVP7 M P L K P R E V K R R L N N A G F E I V S Q K G S H V K F A K E E G R L T T
UniRef90_UPI0003490C20 M P R L P R E V I R V L E Q L G F V Q V R Q R G S H V I L K K Q N E I G C V
UniRef90_J7QGK5 M K V K D V I R L L E E D G W F L A A T R G S H R Q F K H P T G R A T V
UniRef90_HORPP2 M N S R D V I S V L Q R D G W Y Q I A Q K G S H V Q F K H P S K K R V T
UniRef90_UPI00031D895D M K V K E V I K L L E E D G W Y I V R T R G S H R Q F H H P T G T V T V
UniRef90_R2QKR0 M P K S A R E I V K I L K K N G F V K T D Q N G S H V K M Y N P T H H T T I
UniRef90_A0ZBF2 M P K L P R E V I R A L E R L G F V Q T R Q R G S H V I L K N S T E I V C V
UniRef90_Q026W0 M S R T P R E I A A L T R A G F Q V V R Q K G S H H F L R H S Q D G R S T V
UniRef90_K9YBL4 I K T E K L V K A L K A A G F E A V R Q R G S H L R L K H P D G R V V T
UniRef90_K7VZS8 I T G E E L I A A L E K V N F Y I V R Q K G S H V R M K H P D N R V V S
UniRef90_R6R5J3 M T F K L E K L K A D G W V L K D T R G S H F Q Y T N E N K P K V T
UniRef90_K9XV81 M P K L P R E A I K A L E K L G F A K V R Q K G S H V I M K K K T Q I G C V
UniRef90_B9MLA0 K P Q E I R A L K K L G F E E V S Q R G S H L K L K R E N T R V I
UniRef90_Q5WRX3 M K S A E I I K I I E R D G W V Q C H Q R G S H C Q F K H P T K K R V T
UniRef90_B4WFN5 M K V K Q A I K L I E A D G W Y L S R T R G S H R Q Y K H S E K R V T I
UniRef90_B1WWU3 T G K K M I S A L K K A G F I V A R V K G S H H F L T H S D G R R T V
UniRef90_E1RH28 N P D R V I K I L E S R G F V L D R V K G S H H I Y I H S P E T R R V V
UniRef90_B2IJC0 M N S R A V I A A L E A D G W K K V G Q K G S H V Q F K H P T K P R V T
UniRef90_X1GXW6 L P S L T S Q K V I R I L E R K G F V L D R T K G S H R L Y Y H S E K R R V T
UniRef90_T2GFN2 M N S R D V V K I L E A A G F V L V S Q R G S H H K Y R H P D G R M T V
UniRef90_D3A7H4 M T S A Q V I A L L E S D G W F L V S T R G S H R Q Y K H P E K K R V T
UniRef90_K9UQJ3 R Y R E V A K V L R V Y G F A L D R Q A G S H E I W F N A S G K Y T T
UniRef90_UPI0003828245 M T S R E V L K L L R Q D G W Y V K N Q K G S H L Q L V H D E S K P K V T
UniRef90_BOJQW1 M P K L P D E V I K A L T K I G F Q S I R Q K G S H L R L K H E D G R V V T
UniRef90_Q31PW9 M P K L P R E V I R A L E R L G F V L I R Q T G S H V V L K K E G E I G C V
UniRef90_UPI0002D4386E E C I K V L E Q L G F T I A R Q R G S H I L V R E D P R T V V
UniRef90_E6QV30 M D S R A T I K R L E A D G W E L V R V R G S H H Q F K H P D R Q L V T
UniRef90_L7ZM42 M K S S E L I A L L E S H G W V L R R V K G S H H Q F K H P D A L I T
UniRef90_H8YVK1 R Y R Q L K K L K K L G F V F D R Q A G S H E I W F N P D T D R Y T T
UniRef90_R6QGC1 M P M T P R E M I K L L K Q N G F K E V S Q N G S H I K M I N E N N K Q T T

QUERY
 UniRef90_D5MHY5
 UniRef90_B7A8W8
 UniRef90_Q1CPG5
 UniRef90_UPI000301D92B
 UniRef90_C6WRD0
 UniRef90_L8LSN5
 UniRef90_W9DP31
 UniRef90_D3DC32
 UniRef90_H1BFW2
 UniRef90_E4TW48
 UniRef90_Q39W17
 UniRef90_V5UIG8
 UniRef90_F6DF38
 UniRef90_UPI0003724A07
 UniRef90_UPI0003489A7E
 UniRef90_H1UMI6
 UniRef90_J0S6Y7
 UniRef90_K7VYC1
 UniRef90_Q8TNZ2
 UniRef90_K9U8G9
 UniRef90_H5SVT8
 UniRef90_G9R795
 UniRef90_Q5SJS6
 UniRef90_X1LIV2
 UniRef90_S7T975
 UniRef90_A4XFQ1
 UniRef90_UPI0004770AC6
 UniRef90_UPI000344B970
 UniRef90_UPI0003B79532
 UniRef90_UPI00036355AA
 UniRef90_D8F267
 UniRef90_UPI000344C874
 UniRef90_UPI0003B49FBD
 UniRef90_U2DT95
 UniRef90_Q1QQP1
 UniRef90_K9W5D4
 UniRef90_G2MWW98
 UniRef90_C8VWK4
 UniRef90_B3EM08
 UniRef90_I0HHD7
 UniRef90_UPI00035EDD6E
 UniRef90_I411L6
 UniRef90_I3CFF9
 UniRef90_H1G3T9
 UniRef90_E8TE65
 UniRef90_UPI00036DC3FB
 UniRef90_D3D743
 UniRef90_H1AH92
 UniRef90_UPI0004224D55
 UniRef90_A3ZA32
 UniRef90_UPI00034C86A0
 UniRef90_D7CNM8
 UniRef90_K9RDI5
 UniRef90_L8M278
 UniRef90_Q8YVZ2
 UniRef90_UPI00037D8B0C
 UniRef90_G6FW93
 UniRef90_J7B237
 UniRef90_K8GHW0
 UniRef90_D1JAU5
 UniRef90_D5WVP7
 UniRef90_UPI0003490C20
 UniRef90_UPI00030986E1
 UniRef90_J7QGK5
 UniRef90_HORPP2
 UniRef90_UPI00031D895D
 UniRef90_R2QKR0
 UniRef90_A0ZBF2
 UniRef90_Q026W0
 UniRef90_K9YBL4
 UniRef90_K7VZS8
 UniRef90_R6R5J3
 UniRef90_K9XV81
 UniRef90_B9MLA0
 UniRef90_Q5WRX3
 UniRef90_B4WFN5
 UniRef90_B1WWU3
 UniRef90_E1RH28
 UniRef90_B2IJC0
 UniRef90_X1GXW6
 UniRef90_T2GFN2
 UniRef90_D3A7H4
 UniRef90_K9UQJ3
 UniRef90_UPI0003828245
 UniRef90_BOJQW1
 UniRef90_Q31PW9
 UniRef90_UPI0002D4386E
 UniRef90_E6QV30
 UniRef90_L7ZM42
 UniRef90_H8YVK1
 UniRef90_R6QGC1

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

1 10 20 30 40

UniRef90_J0S168 K T V V R A L Q H I G F E P I R Q R G S H V I L K H P D G R M T V

UniRef90_B2T7A5 M K S A E V V K L I Q T A G W Q V V R T G S H H H F R H A S R T L V T

UniRef90_F8EZA2 M P K L P A D V I C A L K N L G G F V V V R Q R G S H I V M R R H G S K G G V

UniRef90_UPI000374F0C9 M P M R G A L D V V K A L Q K K G F V V A R V S G S H H I M R R H P D G R G T T

UniRef90_UPI000365578F M P L K V R E I I K L I E A D G W V L H R I R G S H R H Y V H P K K P V T T I

UniRef90_T0NBC9 I S G K D V V K I L C K N G F L V R R R Q T G S H I I T I K R A E K R R Q V V

UniRef90_K9YD96 T A K E F I K L L K K L E F Y L D R R Q Q G S H A I Y K N A E Q G R R V V

UniRef90_UPI00041CD81E M S K L P R E C V K A L E K V G F Y L R R R Q Q G S H L I L R R N E P T Q V V

UniRef90_K6DUB2 K A K S E F I R V I S K L G Y Q L H R Q K G S H V I Y K H S S G Q R V V

UniRef90_K9TTX2 M P K T G S E V I H A L E K V G F V V V R Q K G I Y V R M Q H S E D G R V V T

UniRef90_B0BGF1 K G K D L L S A L G R A G F E V T R T R G S H H F L R H P D G A T T

UniRef90_A6VBH9 M R S R E V I D L L L E D G W Y E V A V K G S H H Q F K H P S K P K V T

UniRef90_U5DID4 M P A K A S E I E R V D R K F G F K K V R Q K G S H A R W Q Q L D G R A S T

UniRef90_K9XRQ8 M K V R D I I K L I E Q D G W Y L A R T R G S H R Q Y K H P S G L V T V

UniRef90_V4JK54 M K V R E L I K L I E D N G W F L V R T R G S H R Q F H H P S G T L V T

UniRef90_T0Z1M9 M P K L P K D V I K I L S K R G Y V F D H Q T G S H I T L V D Q S G K K I T

UniRef90_UPI0002F015A3 M K V K D I I K I L E N D G W Y H V R T R G S H R Q F R H K S G T V T I

UniRef90_A8UUT0 K P D E V V R A L K N L G G F K E A R Q K G S H K V F K H D D G R V T V

UniRef90_M6UUM8 M K V K E I I K I L E D D G W Y L V D Q R G S H K Q F K H K S G R V T V

UniRef90_UPI00026321FF M R S R E V I R K L E A D G W E E V R Q T G S H K Q F R H P T K P T T T

UniRef90_D6R431 M S S R E L I K L I E K D G W Y E V R A K G S H H Q F K H P T K P V T

UniRef90_R9JGE4 M P M T P K E M V K F L K E N N F E T V G Q N G S H M K M R N S T G K T V I

UniRef90_UPI0002DB5259 M K T I S G K R M C R I L E Q R G W T L A R V S G S H H I Y R H S T G R R T T

UniRef90_B6FX93 M P M T P R E M I A H L K K S G F V V V S Q N G S H V K L R N K E D G K T L

UniRef90_I4FNY4 M V R I L E N L G F V E V R Q K G S H K Q F C P E D G R A T T

UniRef90_T2IAP9 M K I R E V I K I L E N D G W Y L V R T R G S H R Q F K H P S G L V T I

UniRef90_R6P3B4 M P M T S R E M I N Y L K K A D G F I T N Q S G S H I K L F H P T N R T V I

UniRef90_S6BG43 M R S R E L I K L I E A D G W F E V D V K G S H H Q F K H P A K K R V T

UniRef90_W7T361 M K V S E I I K L I E A D G W R L H R T T G S H R H Y V H P T G V V T V

UniRef90_G5CIX4 M T A R E V L R K L K K L G G F V I D H V S G S H Y L L I G P T H Q R T V

UniRef90_W6MC17 M D S K Q V I K Q L E A D G W F L V R V K G S H H Q F K H P K P L V T

UniRef90_Q8TIM1 P L P A K K V V K A L E N I G F E Q I R Q K G S H L F L R H P D G R T T I

UniRef90_G1VXN3 M P M T A K Q M I K Y L K Q N G F Q E V P G G G S H R K F Y N P D T R T T L

UniRef90_B8H3Z8 M N S R E V I A A L E A D G W V E V A R R G S H A Q F K H P T K S R V T

UniRef90_UPI00037C2AD7 T G K Q V V N A L K R L G F Q E V R Q K G S H V T L H N P T G K T C

UniRef90_A7BNP4 M K V N E V I K L I K Q D G W Y L R T Q G S H R Q F K H S G C V T V

UniRef90_L8NUA5 K V K E F I K V I E K L G F Y L D R Q K G S H A I Y K N S G G R V V

UniRef90_Q0AZA4 K E M V K L L I F L G F I E T R Q K G S H A F F A H P D G R A T V

UniRef90_UPI0002BC3B84 M K S L D L V K M I E A D G W Y L V R V K G S H H H F K H P T G G L V T

UniRef90_E1UP85 K S S R D I I K I L T K D G W Y L K R V V G S H H H F K H P N K P T V T

UniRef90_Q8PVN8 L L P V S G R D M C K I L E M L G F Q K V Y Q V G S H V R Y V H P D G R K T V

UniRef90_W0VBD7 M N S A D I I K Q L R K D G W E H V S T R G S H H K Y R N P T G K S V I

UniRef90_E4P1K9 M G V R F K E I E K M L R K D G W R L Y S Q S G S H C Q Y T H P D K P R V T

UniRef90_UPI0003B36295 M V Y S S K Q I I K L I E K D G W Y E V S C V G S H H Q F K H P V K P R V T

UniRef90_R4KE14 M P R T G K K V V T A L K R A G F T V V R V T G S H H H L H K P G N K L V T

UniRef90_Q9X138 P K T M E K V L L K L G F Q R V R Q K G S H V F Y R H S N G K Y T T

UniRef90_Q5F6D1 M N S L D V I A L L K Q D G W Y K V A Q S G S H S Q Y K H P T K K R V T

UniRef90_S5EAK0 M R S S E L I G L L E Q E G W Y L T R T K G S H H Q F K H P N S R V I T

UniRef90_E1RH13 M K V R E V I K I I E V E G W Y L V S V R G S H R Q Y K N P N G R L T I

UniRef90_K9X7P2 K P Q E V V R I L E N L G F V E V R Q K G S H K Q F R H T D G P T T V

UniRef90_X1RKS2 M K L R E L I K I L K K D G W Y M V A Q K G S H K Q F K H P K G R V T I

UniRef90_Q2IR98 I N G R R V I Q A L M R T G F V V D R I V G S H H V L V Y P G D R T V T

UniRef90_F4Y199 M P A K A K T L E K V A K Q L G F H K V R Q K G T H A R W K H P D G R S T T

UniRef90_UPI0004797381 A L E K A S F Q V V R Q K G S H V R M Q H E D G R V V T

UniRef90_I0GX87 M P P L P S R I V R A L E R H G F K I A R V A G S H N I M R H P D G R G T T

UniRef90_Q2RLV4 I F L V I S G Q E V V R A L Q K G G F V K V S Q K G S H V K L R K E N I R T V I

UniRef90_K2DZJ9 K P G K L I K V I E K Q G F V K D R Q S G S H A I F V H S D G R W T S

UniRef90_Q1NX62 M P R L P A D V V R V L E R L G F V V K R Q R G S H I V M R R H G A S G C V

UniRef90_K4MAX1 M P N N Y S E I V K V I L E T A G F Q I V S Q K G S H I K M K K P D A T F V T

UniRef90_F8F460 M K S R D I K M M E D G W Y E V A V R G S H H Q F K H P K S P R V T

UniRef90_N6W3C2 M P L T P K E L I K K L K Q N G F V T I S Q N G S H I K L R N P E G K Q V I

UniRef90_R9NJT5 M K V R D V I R L L E A D G W Y L S R T R G S H R Q F K H K S G L V T V

UniRef90_I4HHU3 M Q S R L L R E L E A A G W R L D R V T G S H H I F T H P Y S P Y T I

UniRef90_A0A010RMU5 M D A K E L A K I L K N D G W Y F D S Q R G S H R Y Y K H P I K K K V P

UniRef90_R2RF59 M K V K D C I T M I E A D G W Y L V A T R G S H R Q Y K H P S G R I T I

UniRef90_UPI00037ED8E3 M K I K E L I R C L E R D G W V Q V R Q R G S H R Q F K H P T K P V T V

UniRef90_K9YAU2 L P S I S G Q E C I K A L E K I G F Y Q K R Q A G S H I I M R R D E P T Q V V

UniRef90_K4LEF5 K D V V R A L K R A G F R V T H I R G S H Y Y L R R S G G S L V T

UniRef90_B6VKL3 M K S S E L I K L I E K N G W T L E R I K G S H H Q F R H P D S I L V I T

UniRef90_B7K6G6 I S G K E C I K T L E K A G F Y I K R Q K G S H I I L C R D E P F A E V

UniRef90_G5JIN9 S S K E V I K R I E Q S G W Y L V R V G S H H H Y K H P T T G L V T

UniRef90_R5R5A8 M P M T P K E M I K H L K N G F E E I R Q N G S H I T M K H T T G I S V V

UniRef90_UPI0003816F15 P M N S A K L I R E L T K A G W K E V S C R G S H H I F K H L D G H S V T

UniRef90_A3YTU8 K F S E V A D I L R K L G F D V V R Q R G S H L Q F R D P R G R C T T

UniRef90_E8LCF8 M K F K E L E K L L K K A G W T L Y S T R G S H F Y Y V H P Q N K V T

UniRef90_A5GCC7 K E V V A V L V K Y G F V V D R Q R G S H F F L K H A D G R A T V

UniRef90_UPI0003822A4B M N S S R L I R M L E E G G W E L V R V T G S H H H F K H P R K Q L V T

UniRef90_S6JG9 M R S R D M I R M I E A N G W Y R V A I K G S H H Q Y R H P Y R P R V T

UniRef90_I0GPX1 M K P K D L K I L E A D G W Q V E R I R G S H H I L K H P T K P R P V

UniRef90_D8FWR1 M P K L P R E A I R A L E G L G F I K V R Q R G S H A L L K N P Q G A L V

UniRef90_E7RTZ0 M G S K E L I K L I E A H G W H L V A T R G S H R Q Y K H P T L P R V T

UniRef90_G7QB86 M D S K E L I R R L K D S G F T L L R V N G S H H V F G H A D G R R V V

UniRef90_A8LAT9 M P A L P R K V V T A L E S R A G F E E V A T R G S H C K L R H K E N D R V V I

UniRef90_L0KWK7 P V P A K K A I K A L E S L G F V Q V R Q K G S H L F M Q H P D G R T V V

UniRef90_U2RAS2 M S A K N V C K I I E K I G G E L V R T R G S H R Q Y R L P N G N L V T

UniRef90_D8FBP3 M K P V Q V I R K L K K G G F V F D R Q K G S H E I W Y N P R K R V I V

UniRef90_B1WZN4 M K V R E V I K R L K T D G W Y E A R I K G S H R V F K H P T G I V V V

UniRef90_UPI0004287AA3 M K S R E L I K E I Q A D G W Y L A R V T G S H H H F K H D N K L V T

UniRef90_Q73LM4 M T A K E I E K I L K A D G W Y F V T A K G S H N Q Y K H P V K S K V T

UniRef90_B1ZGP7 M K V R E I I R L I E T D G W T L V A T R G S H R Q Y K H P T G R V T V

UniRef90_X1QV83 M S R T F S G R E V V K A L R R I G Y V V D H Q R G S H I F L H N L E K N I S V

	50	60	70
UniRef90_J0S168	V P V H E G E I	G R G L L R T I	I R E A G L T K D Q F L Q I
UniRef90_B2T7A5	I P H P K K D L	P P G T L N S I	L K Q A G L K K
UniRef90_F8EZA2	I P N H R E D L	K L G T L T G I	L K Q A G L T P E E F L K
UniRef90_UPI000374F0C9	V P V H S R L D V	S K G V L R G I	L T D T G L S V D D L K
UniRef90_UPI000365578F	P G K P S R D L	P G T E R S I L	L K Q A G I T W
UniRef90_T0NBC9	V P N H S D E V L	D R G T L R S I	L K Q A G L T V D E F L D
UniRef90_K9YD96	V P I H S K D L	D K G T L L G M I	Q D T G I D K E R F F E L
UniRef90_UPI00041CD81E	V P N H S E L L	D K G T L R S I	I R G A G L S V D D F L Q L
UniRef90_K6DUB2	V P I H G K D L	K P G T L S G M I	K D L G L E K R E F F D L
UniRef90_K9TTX2	I P V H G K N V L	G R G L L R K I	L R D A K M T R E E F I D L
UniRef90_B0BGF1	V P V H G G E I	G P G L L S K I	L R D T K L S R D D L E T L
UniRef90_A6VBH9	V P H P S S T I	G K G T L N N I	L K Q A G L K
UniRef90_U5DID4	V P I H G K E I	G S W L F Q E T	L K Q L G V T D Q E F I R L
UniRef90_K9XRQ8	P G K L S D D L	A V G T L N S I	L K Q A G L K
UniRef90_V4JK54	A G K S S V D I	P P G T L K N A	L K Q A G L T E
UniRef90_T0Z1Q9	V P N H K E L	G P G L L R A I	I K Q A G F S V D D F L K L
UniRef90_UPI0002F015A3	S G K L N V D M	P P G T L N N V	L K Q A G L K
UniRef90_A8UUT0	V P I H K G D I	S P V L L R K I	L K D L G I P V D E F L E
UniRef90_M6UUM8	A G K P S L D I	P G T L N S I L	L K Q S G L K
UniRef90_UPI00026321FF	V P H P K A S L	G I G T L K S I	E R Q S G L K
UniRef90_D6R431	I P H P K K D F	P K K T V K S I	M K Q A G L E
UniRef90_R9JGE4	V P Y H S K D L	K K G L E Q A I	L K Q A G L K
UniRef90_UPI0002DB5259	V P V H N D D L	K P G T Q R S I	M R D A G L T D D D L
UniRef90_B6FX93	V P Y H S K S L	K K G L E T Q I	L K Q A G L K
UniRef90_I4FNY4	V P I H K G D I	A P R L L R Q I	A S D I N L T V E E F L E
UniRef90_T2IAP9	P G K L S D D I	A I G T L K N I	L K Q A Q L N L D
UniRef90_R6P3B4	V P Y H N K D L	K K G L E Q A I	L K E A G L
UniRef90_S6BG43	V P I H P K S D L	P E G T V R N I	L K Q A G L
UniRef90_W7T361	A G K P S K D L	P V G T E R S I	L K Q A G L G R
UniRef90_G5CIX4	V P F H S R D L	R Q G T L L A I	L K Q A Q V S E E V F R R L
UniRef90_W6MC17	V K H P D S D I	P A G T L N S I	R K Q A G W K
UniRef90_Q8TIM1	V P M H P T E I	G S G M I N K I	I K D A K I T R N E W I E L
UniRef90_G1VXN3	V P Y H C K D L	K K G M E Q A I	L K Q A G L K K
UniRef90_B8H3Z8	V P H P K R D L	P I G T L R S I	E R Q A D L K
UniRef90_UPI00037C2AD7	V P I H A G E I	K P K T L Q S I	M K Q A G I S A E E L R K
UniRef90_A7BNP4	S G K S S V D I	P P G T L N S I	L K Q A G L K
UniRef90_L8NUA5	I P I H S K D I	K Q G T L M G M I	Q D I G L D K E T F F E L
UniRef90_Q0AZA4	V P C H N E D L	G R G L I R K I	L R D I D I S V P D Y E R L
UniRef90_UPI0002BC3B84	I P H P K K E L	P S G T V K S I	L K Q A G L
UniRef90_E1UP85	V P H P K K D F	K P G T L N S I	L K Q A G L K
UniRef90_Q8PVN8	V P V H G N D L	G T G L I K E I	L K Q S R I S R E M Y E E L
UniRef90_W0VBD7	V P H P K K D L	P I G T V N S I	L K Q A Q L K
UniRef90_E4P1K9	V P K H S G D L	A P F T V R S I	W K Q A G I N E
UniRef90_UPI0003B36295	V P H P K R N I	P I G T A R N I	F N Q A G I N P K E
UniRef90_R4KE14	V P V H A G E L	S P L I L K S I	L E Q A G L T V I E E L I E L
UniRef90_Q9X138	I P F H A K E C	P S H L I R K I	I R E A G I S V I E E F K K
UniRef90_Q5F6D1	V P H P K K D L	P T S G T V K N I	Y K Q A G L K
UniRef90_S5EAK0	V P H M P R K D L	K A G T L R Q I	M K D A G L
UniRef90_E1RH13	P G N M R D T L	A P G T L N S I	L K Q A G I K E
UniRef90_K9X7P2	P F H K G R D I	S P K L L R Q I	A I D I N L T V I E E M L E
UniRef90_X1RKS2	A G N P G D D I	A P G T L N S I	L K Q T G L K K E
UniRef90_Q2IR98	V P V H A G D L	K P G T L R A I	I R Q T G L T V D E F S E L
UniRef90_F4Y199	I P V H G N E M	G G W L F R E I	L K Q L G I S D Q E F Y Q L
UniRef90_UPI0004797381	I P V H G K I T	G R G L L R K I	L R D A E L T R D E F M A L
UniRef90_I0GX87	V P V H N R D V	A K G T L R G I	L S D V G M T I D Q L
UniRef90_Q2RLV4	V P L H E E L A	P G T L K S I L	R Q S G L T V K E L K N L
UniRef90_K2DZJ9	I P L H R K T V	G K G L L R K I	L R D I Q L T P E E I L K K L
UniRef90_Q1NX62	V P N H R E I K	T I G T L S G V	L K Q A G I S A E E F V N
UniRef90_K4MAX1	I I P D Y D E I	P V G T L R S I	I R Q S G M T P E E F L N L
UniRef90_F8F460	V P M S K K E I	P E G T L R S I	L R Q A D L S L I D F K K
UniRef90_N6W3C2	I P H P K K D L	P R G T V N S I	L K Q A G L K
UniRef90_R9NJT5	V P Y H S Q A M	K K G L E Q A I	L K Q A G L K
UniRef90_I4HHU3	P G K L S D D L	A K T L R S I	F K Q A Q L N K
UniRef90_A0A010RMU5	V P H P R K D L	P T G T V K S I	R R R A G L
UniRef90_R2RF59	V P F H S K D I	P I G T L N N I	L K Q A G L K
UniRef90_I7KZ13	A G H P A D V L	A P G T L N S I	V L K Q A G L T
UniRef90_UPI00037ED8E3	A G K P D L D I	P P G T L N N A	L K Q A G L K D K
UniRef90_K9YAU2	V P N H S E I A	K G T L R S I	I R E I G L S V D E F I
UniRef90_K4LEF5	V P V H P D E I	D L K T L K S I	L K Q A G I S I E E L I D L
UniRef90_B6VKL3	V P H P R K D I	K I G T L H Q I	M K D A G L K
UniRef90_B7K6G6	V P I N H K N L	D K G T L R A I	I R Q A D L D V D E F I E L
UniRef90_G5JIN9	V P H P K K D L	P I G T E R S I	L K Q A G L
UniRef90_R5R5A8	V P Y H S K S M	K K G L E Q T I	L K Q A G L K
UniRef90_UPI0003816F15	V P H P K K D L	S K G L V A A I	R K Q A G L S
UniRef90_A3YTU8	V P V H K G D I	S P P L R Q I	A K D I G M T L E E F L
UniRef90_E8LCF8	V P N H K G D I	P I G T V K A I	F K Q A G L D
UniRef90_A5GCC7	V P I H A G E I	G P G L F A K I	L R D V I E L T R E D F L K
UniRef90_UPI0003822A4B	V P H P N K D L	P I G T L R S I	L K A A G L E
UniRef90_S6JG9	V P Q S D S D L	P R G T I N S I	L R Q A G L
UniRef90_I0GPX1	I P M H N K D M	K P G T F N S I	L K Q A G I K
UniRef90_D8FWR1	I P M Q R K T L	A L G T L K S I	L N Q A G I S V E D F L R
UniRef90_E7RTZ0	I P H P N K D L	P R G T V Q S I	L K Q A G L K
UniRef90_G7QB86	V K D P C K D I	P A G T L R N I	F R Q A A W P W
UniRef90_A8LAT9	V P L H R E L A	T G T L A S V L	R Q A G I T E A E E L R T L
UniRef90_L0KWK7	I P I H S G D L	G K G M V K S L	M E D V R I S R K E W L E L
UniRef90_U2RAS2	V P Y P K K D I	P I G T L R S I	L E R Q S G I K
UniRef90_D8FBP3	P N H P G K D I	P Q K T L R S I	M I T Q S G I P V D D F L N L
UniRef90_B1WZN4	P G N C G D D V	A I G T L N S I	W K Q A K L E
UniRef90_UPI0004287AA3	I P H P K K D L	P K G T I K S I	L K Q A G L
UniRef90_Q73LM4	V P N H K G D I	P I G T V K A I	L K Q A G L K
UniRef90_B1ZGP7	A G A M S D E V	A P G T R G A I	L K Q A G L K
UniRef90_X1QV83	V V P V H K E L	K K G T L N S I	L K K A G I T I K D L N K L

	1	10	20	30	40
UniRef90_L0DTT1			R L G F V E V R	Q R G S	H K Q F R H P D G R A T T
UniRef90_R2QRU9		M K A K E M I	K L L E S D G W Y E K N Q	K G S H R H F L H P	T G K V T V
UniRef90_K1LDM2	M N	L S P R N L I	R I L L E A D G F V E K R	S K G S H H L Y F N S	T N K T I L
UniRef90_K7S7Y0		M K S S E L I	K K M L Q A H G W V L V A	V R G S H H Q F K H P	D N K A R V T
UniRef90_R4ZQV9	M P	R T A R E L I	K L L K K N G F V K V S	Q N G S H A K Y K N E	T G N I T I
UniRef90_UPI00026CB0CF	M P	R L P R E T I	R A L E R L G F V L A R	K G S H V V L K R	G S A T C
UniRef90_G9Z135		M T S A D V I	T L L K K Q G W I Q K R	V K G S H H Q F C H P	N L L V T
UniRef90_D5BYY8		M K V E E V I	Q M L E Y E G G Y L V R	V R G S H C Q F K H P	E G K V T V
UniRef90_HOP513		M K V K V L L	K I L E R D G W Y V A R	L R G S H R Q L K H P	H G L V T V
UniRef90_F8C3L0	M S	K L P R Q A I	T A L E Q K A G F T V I	R Q T G S H I V L K R S	D P A Q L V
UniRef90_K7W5H9		I S G E E V I	R R L E K L G F Y K V R	Q R G S H V V L K K S	E G E T V C
UniRef90_UPI00047A48E9		M K V K E V L	K I L E A D G W Y I D R	T R G S H R L L K H P	S G I V V V
UniRef90_S3JAH6	M P	K L P R E A I	R S L E R L G F E Q V R	Q T G S H V V M K K E	E S G K I G C
UniRef90_W7CFA7	M P	I T P K K M A R I	L K K N G F K H L R	T Q A G S H M F F K N P	S N R A T T
UniRef90_D7CPF9		I S A E D M E R I	L H L G F Q R K R	Q G S H V M F A H P	D G R C T V
UniRef90_C0SQR7		M D S R E T I	K I L R Q D G W Y T V R	T R G D H W H F K N D	K P I V T
UniRef90_K2A570	M P	K L P N Q L I	K K L K Q F G F Q L D	H T G S H Y I F Y H P	N N G K R A V
UniRef90_B9E2P7		M K I K E L V	K K L E K A G W Y Y S Y	Q R G S H M Y F K H P	K D K P K V P
UniRef90_B7JW94		M S G R E V V	R V F E S L G W E A V R	Q T G S H I I M T K D E	E L V T L
UniRef90_F0VWD2	M P	K T P K Q M V	K L L K Q S G L T K V R	Q R G S H L L M K N E	P S T G K V T
UniRef90_UPI000289998		M T S S R E I	K L I K N D G W Y E V R	V K G S H H Q F R H P	H K K L V T
UniRef90_F4BVV0	M P	K T P Q K V I	A I I E K K G F V L K R	V T G S H Y I F A H P	E K R R V T
UniRef90_B1Z6C6		M D S R T V I	R R L E Q D G W V Q K R	V K G S H H H F R H P	S K P T V T
UniRef90_G0JN11	M P	K L P A T V V	R A L E R L G F T K I R	Q S G S H V I M R R G	S K G C V
UniRef90_T0LNY3	M P	K L P K D A L	K A L S K V G F E F R R	Q P R S H M I L K R K	D G K R V V
UniRef90_H1Z083	M L	P T L K S R E L I	K E L E Y L G F N I T R	Q K G S H I R L K S D	D D G R F T T
UniRef90_L8NW70	M T	T K I R D V I	K L L E K D G W F L V N	T V G S H R Q Y E H P	T G K V T V
UniRef90_K8M272		S Y R E V K R	K L E R F G F E K A T	Q K G S H V K F I K E	S G T L T V
UniRef90_U7WMD8		T A D D A I	R A L E R A G F Y L A R	Q S G S H K I F K N E	A G T R I T
UniRef90_A0A011P1K1		M K V S D I L	A V L R N D G W L V A T	R G S H R Q F K H P	P G R V T V
UniRef90_F8AAU0	L S	P V K P E L I	K F L E S L G F V K A R	Q K G S H I F F R H K	D G R T A T
UniRef90_F8EHN4		I S G K E L I	R L L E K L G F E V T R	I N G S H H R V R H P	D D G R V T S
UniRef90_UPI000470FE94		M S G K D I V	K F L E K E G F N V V S	Q K G S H V K L Q G A	D D G Q I V I
UniRef90_Q2IY11	M L	A T S R D I V	R R L E R E G W T C V R	I T G S H H V F K H P	D R K I V T
UniRef90_T0M8X0	W M	P K L P E V V I	K A L S K R G F I L R K	G K G D H V I I Q S K	D G Y R N I
UniRef90_F8ICA5		I S R E V I	T A L K R A G F I P I S	Q R G S H L K L R H P	D D G R T V I
UniRef90_F9ZMS0		M N S G D L I	K Q L L A D G W V V R A	T K G S H H I Y I H P	N K P H I T
UniRef90_UPI000373C695		M N S R E L I	R E L R E A D G W R Q V R	V R G S H H Q F S H P	D G A L T
UniRef90_R9XRC3		M D S K T I L	R E A D G W Y L V A T S	G S H H Q F K H P	T K Q R V T
UniRef90_K7RJK6	M P	P R P E E V A	R K L W R L G L E E R A G	G S H R L F T H P	D G R V G V
UniRef90_L0M015		M K S A E V I	A I L K K H G W V H V R	T R G S H Q Q F H H P	S R A L V T
UniRef90_B1WUZ9		I S G K E C I	K A L K K V G F V V F R	Q R G S H I T M I R E	D P C Q V
UniRef90_UPI00037303A5	M P	I S S R E A I	R V L E R L G F E Q V R	Q T G S H I V M K K T	A E G C V
UniRef90_UPI00041D8A57		M K V K A V I	K L K H G W E E K S	Q K G S H L Q L E H P	L K P K V T
UniRef90_K0N4G4		M K V K Q L I	K V L K A I K F S V I R	I K G S H H F L R H P	H V D G R S T V
UniRef90_K9ZIP8		M K V R E V I	N L L E S D G W Y L V T	T E G S H R Q F K H P	T G K V T V
UniRef90_B8HN44			E C I K A L E K I G F L V	Q R K G S H I V L L R S	S D P A Q L T
UniRef90_H5SG81	M P	K L P K E V S	R V L E R V G F S L A R	Q S G S H K I Y K N K	S D G K R V T
UniRef90_M1YGF1	M S	P S L P R D V V	K K L E R A G W K V E R	Q K G S H V M M V K P	D Y E Y T L
UniRef90_UPI00037600BA		N A R Q L I	K I L E A Q K G F T F S R	Q S G S H A A Y I Y E	E G L R T T
UniRef90_K7WT58		M K V R I V I	Q R L E A D G W Y L A R	T R G S H R Q F Q H P	H G T V T V
UniRef90_UPI00037AD1CC		M K V R D V I	R R L E D D G W Y L A R	T R G S H R Q F K H P	T G T V T V
UniRef90_B4CWV0		K L P R D I V	R A L Q R L G F G V V R	Q R G S H V R L A K G	T L T V T V
UniRef90_F8GLR6		M K V R N E I	L R M L K Q D G W Y L V	T M R G S H R Q F K H P	S G R V T V
UniRef90_X1TP64		M K V R D I I	K M I E D D G W Y I V	D T R G S H R Q Y K H P	T G R V T I
UniRef90_S5Z955	L R	P V P A D K V I	K V L M K V G F K P	V R K G G H I L L K H	E D G R V T V
UniRef90_UPI0005MXW8		M N S K D L I	K Q L E E A G W Q E V R	V K G S H H H F R H P	N H T L I T
UniRef90_X1E2M1		I S G R E C I	K A S K K A G F Y K K R	Q S G S H I V L R K D	E P F V Q V
UniRef90_F1WL40		M N S R Q M I	K L T D D G W Y E V A	V R G S H H H Y K H P	T K Q K V T
UniRef90_I4IUA0			R Q V L K A I G K I G Y E	L D R Q R G S H I L R Q K	P Y R R I T
UniRef90_H2BV97		M N S N D L I	K M I E K E G W Y L V R	T I G S H H H F K H P	A H K L V T
UniRef90_F5T4H5	M P	K K A K E M E	R I L L K D G W Y L V S	Q E G S H R Q Y K H P	I K K K V T
UniRef90_L8XQ11		M K A S E V I	K L L K Q D G W F E I A	Q N G S H K Q F K H P	D G R V T V
UniRef90_N9P0P9		M N S K D I I	K R L E Q E G W Y K V G	G K G D H E K Y K H P	E K S H V V
UniRef90_K2CLG1		M T P S K L I	K V L R E H G F V F I R	Q S G S H A L F K N Q	E N K K V V
UniRef90_Q2IS04		M K V R D A I	L L I E A D G W V H I A	T R G S H R Q Y K H P	T G R V T I
UniRef90_R5F1N5		M R A R E L E	K M L L E D G W Y V K N	Q K G S H R Q Y K H P	S K P K V T
UniRef90_UPI000463B1E8	M L	T N S R D I I	R R L E R E G W R L V R	I N G S H H H F A K D	G R R L V T
UniRef90_UPI00047B23AE		M D S R T I I	R R L E K E G W Q L D R	I T G S H H T F V K P	G S T L V T
UniRef90_W0E4E4		M N S A D V I	R R L K A E G W V L A G	G K G D H Q K F K H P	Q R R H V V
UniRef90_L8AL69	M P	K L P R E V I	R V L E K L G F E V V R	Q T G S H V V M Q K E	G N I G C
UniRef90_R6XT12	M P	L T P K E M I	R L L Q N G F V Y V K S	N G S H V Q Y F N P	Q R N I T V
UniRef90_H5SQG4		M K V R E V I	K L I E A D G W Y Q V T	C E G S H R Q F K H P	T G R V T I
UniRef90_E8WNE5			K E V V E I L K G F G F L	V D R Q R G S H L F L K H	A D G R V T V
UniRef90_Q0AWE5		M T V R E V L	K L L Y K D G W K E I R	T K G S H I Q L K H P	T K T K V T
UniRef90_H1Z316			G F L L D R V K G S	H H I Y V H P	E T R R V V
UniRef90_W5X5D1		M Q V R S E I L	D K L R K E G W V L D	H Q G S H R Q F V H P	T G I V T V
UniRef90_H8YY72		M K I L S E I	R E R L K E D G W Y L A	A T R G S H R Q F K H P	D G R V T V
UniRef90_K9VBM8	M P	R L P R E V I	R V L E R L D F Y Q A R	Q T G S H V V L K K P	D G E I V C
UniRef90_UPI00036D3093	M L	P V I K G K E L I	A F L K T L G F S V T R	S R G S H V R M K S E	D G R Y T T
UniRef90_A0A059DLV4	M E	R D S R K L I	K L L E D D G F E F V S	S R G S H H K Y R K G	D L T V I
UniRef90_UPI000344E712		M K V R D V L	K R L K K D G W Y Q V R	M R G S H R V L A H K	S G I V V V
UniRef90_Q0A6C2		M K V R D I L	K V L R E D G W Y L H A	T R G S H R Q F K H P	S G R V T V
UniRef90_K2DVJ0		I R P K N L I	S F L E G L G F V T G K	R G S H I R L I N P	S D G R W T V
UniRef90_K2FTE5	M P	K R P T K F I	K I L N R L G F V E I R	Q R G S H R F Y R K S	D N K A T V
UniRef90_E3DZQ7		S A K Q V I	K F L K S K G F S V V S	Q K G S H V V K L K N S	K G K T T I
UniRef90_E7N3V3	F M	S Y S S R E L E L	K K D G W Y E V H C	T G D H H Q Y K H P	V K K R V T
UniRef90_UPI00047829B8			E I V K A L E R A G F G H V S	T R G S H A K Y R K	D D R T V I
UniRef90_I4XQZ0		M Q S R Q L I	K E L E A A G W V L E R	V T G S H H L F K H P	Y R P E T V
UniRef90_T1BV16		M Q S R D L I	K Q S D G W H L H R	T R G S H H Q F V H P	T R P G T I
UniRef90_K9GT69		M T S R E V M	R A L K A D G W V V V D	Q V G S H V Q L K H P	T K P R V T

		50	60	70
UniRef90_L0DTT1	V	P F H A G D I	S T P L L R Q I	I K D I G L T P D D F L
UniRef90_R2QRU9	P	E H G S K D I	S K G T A N N I	L S Q A G L L K N T L
UniRef90_K1LDM2	V	P V H S K D L	K K G T F L A I	L K Q A G L D K N T L
UniRef90_K7S7Y0	V	P H P K K D L	L G I G L V R A I	M K Q A G L K E E
UniRef90_R4ZQV9	V	P M H K G D M	P K G T E D D I	L K K A G L K
UniRef90_UPI00026CB0CF	V	V P Q R A E L	K L G T L A G I	L D Q A G L T V D E L L
UniRef90_G9Z135	V	P H P R K K D I	K P G T L A Q I	W R Q A G I S R E E
UniRef90_D5BYY8	A	G K P S V D V	P P G T L N N I	L K Q A G L K
UniRef90_HOP513	L	G K P S D E L	A P G T L A S I	L K Q S
UniRef90_F8F110	V	P D H K E L L	D T G T L R A I	I R Q A N T S V N E F L N L
UniRef90_F8C3L0	V	V P L H K E L	A I G T L R G I	L R Q A K L T I E E F L
UniRef90_K7WSH9	P	G K P S D D I	P V G T L S S I	W K Q A K L
UniRef90_UPI00047A48E9	V	P V H N K S L	P K G T L K S I	M K Q A
UniRef90_S3JAH6	V	V P L H R E L	K V G T L S G I	L K Q A Q V T V E E F I E
UniRef90_W7CFA7	V	P Y H S K T L	G K G L E Q A I	L K Q A G L K
UniRef90_D7CPF9	V	P F H K G D L	A R G L I R K I	L R D I D I S P E E Y E T L
UniRef90_C0SQR7	V	P H P R K D I	P K G T L N S I	L R Q A G L K
UniRef90_K2A570	V	P Y H L K T L	P K G T F L S I	L R E A G L T K E G I L K
UniRef90_B9E2P7	V	P N H K G D I	P K G T L N A I	L K Q A G I K
UniRef90_B7JW94	S	I P D H R E V	A K G T L R S I	L I R T A G L T V E E F
UniRef90_F0VWD2	V	P M H S K E L	A K G T E E A I	L K Q A G L K
UniRef90_UPI0002899998	I	P H P K K D L	P K R T V K S I	L E Q A G L E
UniRef90_F4BVV0	V	P S H S D D I	A R G T L I Q I	L E D A G I K R E E L E D L
UniRef90_B1Z6C6	V	P H P E K D L	T I A T L K S I	L E R Q S G L T
UniRef90_G0JN11	V	P M H N E I K	L I G T L A G V	L R O A D I S P D E F I N
UniRef90_T0LNY3	I	P N H D E L	P K G T L R A I	I R Q D L T V E E F V N L
UniRef90_H1Z083	V	P F H S N D I	P K G L I R K I	I R D L E M T Y E E F N E
UniRef90_L8NW70	A	G K L S D D V	R K G T L A S I	L K Q A G L K
UniRef90_K8M272	I	V P E H K E I	A I G T L R S I	L R Q A R I S V E E F E N L
UniRef90_G7WMD8	L	P Y R S G K I	H P K L K S I	L K D A D L T A D E F I D L
UniRef90_A0A011P1K1	A	G K P S D D L	A P G T L N S I	L K Q A S L K
UniRef90_F8AAU0	I	P F H K G E I	G R G L L K K I	L R D V E V S K K D F I K
UniRef90_F8EHN4	V	P V H K N D L	P K G L V R K I	L R D L D M D F E E F I
UniRef90_UPI000470FE94	V	V H S K D L	P I G T L N S I	K K Q A G
UniRef90_Q2IY11	V	P H P K K D L	G K G L V R A I	Y K G A G W K P D
UniRef90_T0M8X0	V	V P L H K E L	K P G T L R A I	I K Q S G L T V E D F V N L
UniRef90_F8ICA5	V	P M H H E L A	L I G T L S S I	L R O S Q L T L E E F Q R L
UniRef90_F9ZMS0	V	P H P K K D L	G V G L V N K I	L K Q A G L K R S E
UniRef90_UPI000373C695	V	P H P K K D L	G K G L V K A I	R K Q A G L E
UniRef90_R9XRC3	V	P H P K K D L	K K G T E L S I	L K Q A G L K
UniRef90_K7RKJ6	I	P F P S G E P	P Q G T F K K I	L K A A G L T E E E Y H A L
UniRef90_L0M0I5	V	P H P R K D I	K P G T L A Q I	C R Q A G I K
UniRef90_B1WUZ9	T	I P N H K T V	A K G T L R A I	I R Q A D L T V D E F T K L
UniRef90_UPI00037303A5	I	P V H R E L K	V G T L N G I	L K Q A Q I P V E E F I E
UniRef90_UPI00041D8A57	I	P V H G G D I	P K G T L N S I	L K Q A G L K
UniRef90_K0N4G4	L	P V H S G E I	G P G L L T K I	L R D C E L K S R D D L L K L
UniRef90_K9ZIP8	S	G K M S D D V	R K G T L G S I	L R Q A G L K
UniRef90_B8HN44	I	P N H R T I A	K G T L R N I	I K Q A G L T V D E F I S L
UniRef90_H5SG81	L	P Y H R K T I	H P K V L Q S I	L R D A D L T V E K F K E L
UniRef90_M1YGF1	S	I P Q H K E I	G I G L L K K I	L R Q A N I T S E E F R N L
UniRef90_UPI00037600BA	V	P I L H K K E L	G I G L L K Q I	M K D T D L S I E D L E N L
UniRef90_K7WT58	S	G K P N I D V	P I G T L K S I	W R Q A Q L L E D E
UniRef90_UPI00037AD1CC	S	G K L S V D V	P I G T L K N I	W Q Q A Q F E E
UniRef90_B4CWV0	P	A H G E I A	P G T L Q N I	L R Q A G I T V E T F
UniRef90_F8GLR6	S	G K P G D D L	A P G T L N S I	L K Q A K L K E
UniRef90_X1TP64	A	G N P N H D V	V P G T L N S I	L K Q A K L K E
UniRef90_S5Z955	I	L V H K G E I	G R G L V A T R I	I K E A G L T R E E L L K L
UniRef90_M5GXW8	V	P H P K K D L	K K G L V A K I	L K D A G L
UniRef90_X1E2M1	V	V P D Q K E L	D R G T L R A I	I R H A G L S R D D F L G L
UniRef90_F1WL40	I	P H P K S D L	P I G T V K Q I	L K Q A G L K
UniRef90_I4IUAO	I	P D H R E V A	K G T L R S I	I R Q A G L T V A E F K T L
UniRef90_H2BV97	I	P H P K K D V	P K G T V K S I	L R Q A G I E
UniRef90_F5T4H5	L	P F H T K E L	T K F T E C S I	Y K Q A G I E R
UniRef90_L8XQI1	P	C H N N V D L	G I F V L K S I	E K Q A G L K
UniRef90_N9P0P9	V	P H P R K D M	P I G T L R N I	Y K Q A G W E W
UniRef90_K2CLG1	V	P L H N K D I	P R G T L H A I	L K D T N I T
UniRef90_Q2IS04	A	G K P S D D L	A P G T F A S I	L K Q A G L K E
UniRef90_R5F1N5	I	P F H T G D V	D K G T A D S I	L K Q A G L K
UniRef90_UPI000463B1E8	V	P H P R S D I	P L G T A R N I	Y K Q A G W A K E
UniRef90_UPI00047B23AE	V	P H P R K D L	G K G L L R S I	Y R Q A G W
UniRef90_W0E4E4	V	P H P R K D L	P V G T L R N I	Y R Q A G W E W
UniRef90_L8AL69	V	P L H R E L K	V G T L S S V I	L K Q A R V S V N E F I
UniRef90_R6XT12	V	P L H T K E L	K K G L E Q A I	L K Q A G L K R
UniRef90_H5SQG4	A	G N L I G D D I	A K G T L N S I	L K Q A S L K K K
UniRef90_E8WNE5	V	P V H A G E I	G P G L F T K I	L R D V K L T R E D F L K
UniRef90_Q0AWE5	V	P D H K G D I	A P G T L N S I	F K Q A G L K
UniRef90_H1Z3I6	I	P A H K K D L	P K G T L M E I	L K Q A G I N K D D F E D
UniRef90_W5X5D1	P	G P P N K E I	P P G T L N S I	K K Q A G W K
UniRef90_H8YY72	P	G K P N D D V	A P G T K N S I	F K Q A G W K
UniRef90_K9VBM8	V	V P L H R E L	K I G T L S G V	L K Q A K V T P D E F I
UniRef90_UPI00036D3093	V	P L H S D D I	P K G L L R K I	I R D L E M T L K E F
UniRef90_A0A059DLV4	V	P H P R K D I	P T G T V R S I	Y R H A G W
UniRef90_UPI000344E712	P	G K P S D D I	P I G T L N A I	W K Q A Q I
UniRef90_Q0A6C2	A	G K P G D E L	A P G T V N S I	F K Q A G W
UniRef90_K2DVJ0	V	A V H P K P I	P V G T L K K I	I S Q A D L T E E D L K G L
UniRef90_K2FTE5	I	P I H N K D I	G R G L T R K I	L N E I N L S V D E F V K L
UniRef90_E3DZQ7	V	P S H N K S L	A K G T L N S I	L K Q A G I K
UniRef90_E7N3V3	L	T H P R K D V	P E G T A R N I	L K Q A G L T V R D
UniRef90_UPI00047829B8	V	P L H R S L A	P G T L R S I	L R Q A D W T V D D L T E
UniRef90_I4XQZ0	V	P H P K K D L	P R G T V R A I	Q K L A G L
UniRef90_T1BV16	V	P H P K K D L	G K G L V Q A I	R K Q A G L K
UniRef90_K9GT69	V	P H P K R D L	K I G T L K S I	I E K Q S G V

UniRef90_K9X258
UniRef90_UPI00037F850E
UniRef90_X11XP1
UniRef90_UPI00037EFDD4
UniRef90_B1XP64
UniRef90_Q98J18
UniRef90_U2BQS6
UniRef90_F5RPM2
UniRef90_UPI00035F24BD
UniRef90_A5F9M9
UniRef90_G4L5B5
UniRef90_I4I770
UniRef90_BOJTC2
UniRef90_S1R3X4
UniRef90_C4XHY3
UniRef90_UPI00047C3503
UniRef90_G7WMD2
UniRef90_K8WP24
UniRef90_W0U7D1
UniRef90_D5MM99
UniRef90_G0JN18
UniRef90_UPI00037636E7
UniRef90_UPI00036B8FD3
UniRef90_B2J611
UniRef90_M2BCE1
UniRef90_Q113D1
UniRef90_I2EET1
UniRef90_UPI000368706C
UniRef90_R9A860
UniRef90_X1TVB9
UniRef90_D0GMY5
UniRef90_UPI000475E264
UniRef90_UPI000365A9E9
UniRef90_W0DI76
UniRef90_F2KR18
UniRef90_W2U777
UniRef90_R9KX0
UniRef90_D8GQA2
UniRef90_I4H8V7
UniRef90_D8K310
UniRef90_UPI0004777572
UniRef90_I0GLG5
UniRef90_D4M8P5
UniRef90_X1P8B2
UniRef90_A9DEB2
UniRef90_W5J3G4
UniRef90_J3HGE3
UniRef90_D7B9V0
UniRef90_M1Q024
UniRef90_H7D099
UniRef90_K1MEI6
UniRef90_V5AZL3
UniRef90_A0A011MGL8
UniRef90_K2F6N3
UniRef90_K5A7Z5
UniRef90_UPI00034BFB5C
UniRef90_UPI00047AEE37
UniRef90_UPI00036762D4
UniRef90_D8PFQ0
UniRef90_J1L210
UniRef90_W0A5Y9
UniRef90_F7UWI9
UniRef90_K7VSK4
UniRef90_E1RD32
UniRef90_Q1NMQ6
UniRef90_K1X923
UniRef90_F5VFM3
UniRef90_W0Q2S3
UniRef90_K0MKP9
UniRef90_K6CGB6
UniRef90_A7BR57
UniRef90_UPI00046ABF82
UniRef90_C6JP22
UniRef90_H1XWA5
UniRef90_UPI0004775179
UniRef90_W9BUR9
UniRef90_E1RA26
UniRef90_UPI0003FC0582
UniRef90_B0S445
UniRef90_I7LNC4
UniRef90_L8AL64
UniRef90_UPI000378FF36
UniRef90_T1AB89
UniRef90_V2ZB63
UniRef90_UPI0004714BCF
UniRef90_D7AQJ4
UniRef90_F8AC28
UniRef90_Q72HE2
UniRef90_F4C0P7
UniRef90_I3CK62
UniRef90_H0HZM7
UniRef90_S7TRR0

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

		50	60	70
UniRef90_K9X258	V	P N H Y E	V A R G T L R S L	T S K A G I T A D E F E
UniRef90_UPI00037F850E	V	P H P K K D L	P V G T W K S V	L K D A G L K D M E E F V K L
UniRef90_X1XP1	V	A V H K G D L	P R G L L R K I	V T Q V G L D M E E F V K L
UniRef90_UPI00037EFDD4	V	P T H K G E I	P T G T W S A I	Q R Q A G L K P V E D F L N L
UniRef90_B1XP64	T	I P H H K T I	K E G T L R A I	L Q Q A Q I P V E D F L N L
UniRef90_Q98J18	V	P H P N K R D I	P I G T L R S I	E K Q S G L K
UniRef90_U2BQS6	V	P N H N T E I	P I G T L R N I	W R Q A G W
UniRef90_F5RPM2	V	P I H A G T L	G K G L E H K I	L K Q A G L
UniRef90_UPI00035F24BD	V	P N H Y E V	A K G T L Q S I	L E Q A G I T L E E F
UniRef90_A5F9M9	V	P Y H N K D L	K P G T L N K I	L K D A G L K
UniRef90_G4L5B5	V	A Y S S D E I	R P G T Y N N I	L K Q A G L K
UniRef90_I4I770	V	P I H N R D L	S I G T L K G I	L K D A G L N E D D
UniRef90_B0JTC2	V	P F H K G D I	S P T L L R V I	A G D I G L T V E Q L L Q
UniRef90_S1R3X4	P	V H G N Q D L	G K G L E Q R I	L K D A L A S A D V F L
UniRef90_C4XHY3	A	P H P K K D L	P A G T L R S I	E R Q A G I S
UniRef90_UPI00047C3503	V	A T H S K E L	K K F T E Q T I	L K Q A G L K K
UniRef90_G7WMD2	I	P I H N S E I	G G W P F Y E I	L K Q L G I S E E D F W K L
UniRef90_K8WP24	I	P H P R K D L	A V G T L K S I	L K Q A G L K
UniRef90_W0U7D1	V	P N H K G D I	P K G T A N A I	L K Q A G L K
UniRef90_D5MM99	P	N Q H E G D I	G V G L L Q R I	L R Q A G V S R D E W L
UniRef90_G0JN18	V	P F H Q G D I	S P I L L R Q I	A K D I G L A L D E L L K
UniRef90_UPI00037636E7	V	P H P R K D I	A V G T L R N I	F R Q A G W D W
UniRef90_UPI00036B8FD3	V	P H P S R D L	D P K T A K S I	L K Q A G L
UniRef90_B2J611	P	G K F S D D L	A P G T L S S I	W R Q A Q L
UniRef90_M2BCE1	I	P F H G G D L	K A G T L N S I	L K Q A G L K
UniRef90_Q1I3D1	I	P H P K K D L	L P A T A A S I	L R Q A R I
UniRef90_I2EET1	V	P H P K K D L	P P G T L N A I	L K M A G L K P
UniRef90_UPI000368706C	V	A I H K G D M	P I G T L N S I	L K Q A G L K
UniRef90_R9A860	P	V H S N R D I	P T G T M N A I	L K Q A G L K
UniRef90_X1TVB9	I	P N H P K D L	P E G T L K A I	L R Q A G I
UniRef90_D0GMY5	V	P C H S K E L	K K G M E Q V I	L K Q A G L K K
UniRef90_UPI000475E264	P	N H S R E L	K T G T L A G V	L K Q A G I S P E E F L D
UniRef90_UPI000365A9E9	I	P H P K K D L	H I K T V N S I	L K Q A G L K
UniRef90_W0DI76	V	P N H R E L	K T G T L A G I	L K Q A Q I S P Q E F L D
UniRef90_F2KR18	V	P L H R E L	D R G T L R A I	I K Q S G M T V K E F A E L
UniRef90_W2U777	L	D P G E D P P	P I G T F K K I	L R D A G L P E A P F R E
UniRef90_R9KX0	V	P L H G K D V	P I G L L N S I	L K E A G L K
UniRef90_D8GQA2	I	P N H N K D L	K P G T L N S I	L K Q A G L K
UniRef90_I4H8V7	T	I P V H Q K E I	K E G T L R N I	L K Q Q I E V D E F L D L
UniRef90_D8K310	V	P V H H K G E I	K R G L L R K I	M R D G E I S R D T L L T L
UniRef90_UPI0004777572	P	V P L H K E L	A K G T L K S I	M K Q A E L S L E D F L K I
UniRef90_I0GLG5	L	P M N K K E I	P L G T F R S I	L K Q M G I D Y N D F N K L
UniRef90_D4M8P5	V	P M H N E L	A V G T L R S V	L R Q A G V S S E E F L K
UniRef90_X1P8B2	V	P A N R K E I	P Y G T F R S I	L R Q S Q L R E E D F K K
UniRef90_A9DEB2	V	T H P R K D I	P V G T V R S I	Y T Q A R W P K D
UniRef90_W5J3G4	V	P H P R K D I	P I G T V N S I	L R Q A G L
UniRef90_J3HGE3	V	P H P R K D L	K T G T L M Q I	L K D A K L K
UniRef90_D7B9V0	I	P F H S G E L	P K G T F R K I	R K D A G L S V E E
UniRef90_M1Q024	I	V P D H P E I	P S G T L K S I	I R Q A G M T D D E F V K L
UniRef90_H7D099	I	P H P K K D L	P I G T V R S I	F K Q A G I K I
UniRef90_K1MEI6	V	P K P S R D Y	A P G T L N K I	L K D A G L K
UniRef90_V5AZL3	V	P H P K K D I	P I G T L R N I	F R Q A G W D W
UniRef90_A0A011MGL8	V	P H P K K D L	A I K T V K S I	L T Q A G L
UniRef90_K2F6N3	I	A I H P K P I	P Q G T L R K I	L N Q S G L T I R D L G K
UniRef90_K5A7Z5	V	P V H N K G L	P V G T L N S I	Q K
UniRef90_UPI00034BFB5C	P	I P G N K D L	K I G T L R Q I	I R Q L D L D W E E F K N L
UniRef90_UPI00047AEE37	V	P H P K K D L	G Q G L V K A I	R R Q A G I
UniRef90_UPI00036762D4	V	P H P K K D L	K T G L V K G I	R K S A G L E
UniRef90_D8PFQ0	V	P V P N H E L	K I G T L L S I	I R Q S G I T R N A F E E
UniRef90_J1L210	I	P V H G K T L	A P K T L Q T I	L F Q A G L S V D E F R T L
UniRef90_W0A5Y9	V	P H P V K D L	P I G T L K S I	A K Q T G V P
UniRef90_F7UWI9	V	K H P T K D I	P K T L K S I	E K Q A G L
UniRef90_K7VSK4	V	P L H P E L	K V G T L S G V	L K Q A Q I T P E E F I E
UniRef90_E1RD32	I	P N H K E I	S K G T I N S I	I R Q A G L T R D E F I E L
UniRef90_Q1NMQ6	I	P D H G K D V	P Q G L L S K I	I R D L E M E P E D F W N
UniRef90_K1X923	V	P M H K E V	A I G T L K S V	L K Q A N I S V D D F L K
UniRef90_F5VFM3	P	I H G N Q D L	G K G L E R K I	L K E A G I D K K
UniRef90_W0Q2S3	F	P H P K K D L	P T A T V K S I	L K Q A G L E
UniRef90_K0MKP9	V	P H P K K D L	D I G L L N S I	L K A A G L K
UniRef90_K6CGB6	I	K H P D S D I	P I K T M N S I	L K Q A G L K
UniRef90_A7BRS7	V	P D H N E V	A K G T L R A I	I S Q A G L T V A E F L E L
UniRef90_UPI00046ABF82	V	P V L A K E L	K K G T Q E A I	L K Q A G L K
UniRef90_C6JP22	V	P H P K K D L	P I G T V N S I	L K Q A G L K
UniRef90_H1XWA5	P	D H H E I	A K G T L R K I	I K Q V G L T V E E F K K L
UniRef90_UPI0004775179	V	P N H R E L	A P G L L R S I	I R Q A G I T V D E F L E
UniRef90_W9BUR9	I	P L H K E V	K T G T L A G I	I R Q A E L S H D E F I K
UniRef90_E1RA26	I	P L H H P G D I	P E G T M S A I	L K Q A Q V D V D L F L D
UniRef90_UPI0003FC0582	I	P V H N R D L	P I G T L K A I	L K D A G L T E D D L N
UniRef90_B0S445	V	A H P Q K D F	T T K T L K S I	Y K Q A G W
UniRef90_I7LNC4	V	P V H S K T L	A P K T L Q A I	L I Q A G I S P E E F Q A L
UniRef90_L8AL64	I	P I L H G K T I	G K G L L K I	L I R D A E I T K E E L I R L
UniRef90_UPI000378FF36	V	P H P R K T E I	A K G T L H S I	L K S A G L K G E
UniRef90_T1AB89	P	D H G S R P L	R R G T L L J A	A I R R A G L T P E E F L R L
UniRef90_V2ZB63	P	V H S N K D L	K K G L E Q R I	L K D A G L D
UniRef90_UPI0004714BCF	I	P Y Q R R E L	A I K T L H S I	L K Q A A I S P D R F S E L
UniRef90_D7AQJ4	I	P Y H N K D L	K P K T L N S I	L K Q A G L K K E
UniRef90_F8AC28	I	V P A H K P I	K R S T L S H I	L K Q A G L S V E E F L E L
UniRef90_Q72HE2	V	P F H I G E L	P K G T F K R I	L R D A G L T E E E F H N L
UniRef90_F4C0P7	V	P I H S R E I	P K G L L R K I	I R D L E M S L I E E F L D L
UniRef90_I3CK62	S	I P N H D P V	K K G T L R A I	L R V A G L T V E E F L K
UniRef90_H0HZM7	V	P H P K K D L	P A G T A R N I	A R A A G W L E Q E
UniRef90_S7TRR0	V	P T H S G Q I	G R G L L R K I	L D E T G V T Y A E L

UniRef90_UPI00041CB26C 1 P I S R R D L I K Y L K Q L G F D G P Y A G S K H Q Y M Q K G D I T V R V 40
UniRef90_R6XT82 M P R K F K D I I K L I E K D G W V L V A Q V G S H R Q Y K H P T G R V T I
UniRef90_B0TAG8 D V I A K V L S R K D G F K P V R Q K G S H L R L V K G E L F A V T
UniRef90_H1Z0A8 Q V I K A F S K V G Y Y L H D R K E S H L H L R H P E K R P L T
UniRef90_K9Y2L6 F K P I K R Q E L I R N L K K L G F S N P I A G G N H Q Y M V R G E L K L F I
UniRef90_R6B0U1 M K F R E V I K I L E D N G W V Q K A V R G S H Y Q Y T H P G R P K I T
UniRef90_UPI0004781BE2 L R P L S G K E V M A L L A R H G F E P V R Q R G S H V A M Q K K D G P S T I
UniRef90_BOJHA8 M K V R D V L K R L E A D G W Y Q I R M R G S H R I L A H E T G I V V V
UniRef90_Q5HXI3 M K S A V L I R E L E K A G W T L D R V R G S H N V F K H P S R P L V V
UniRef90_A5GT09 K P K E V V R I L E H L G F E H V R N H G S H Q H F R D A N G R H T V
UniRef90_F9RIB7 M K S A D L I K L L Q K N G W E L V K V R G S H H K F R H P D F E N V V
UniRef90_ROG8K5 M D S A S L I K R L K A D G W Y L V H T A G S H Y Q F K H S T K P K V T
UniRef90_UPI00036D0BB0 I S G K K L C K I V E Q N G W V L K R V T G S H H I Y A Q G G A I L S I
UniRef90_UPI0003091BCF M R Y K E I E K R L K K D G W L F A Q R G S H C Q F V H K T K A K V T
UniRef90_F6A0B1 S S R E V L K L L E K A D G W Y E V N C V G D H H Q F K H P T K K R V T
UniRef90_UPI00047B94D1 M N S K E I I K Q L E K D G W S L R G T K G S H H V Y T H P E K S G H I
UniRef90_F8GGR1 I M K S Y S S R E L I N L V Q K D G W Y L V R H N G S H Q Q Y K H P T K P L V T
UniRef90_UPI00036334D6 N S R K L I K L L E K D G F E L V S T K G S H H Y R K H S T K M I T L V
UniRef90_Q0AMV1 M K A R E I I R L I E R G G W K L V R Q T G S H M Q F K H K P G I V T V
UniRef90_UPI00047B402A M P I T G V E L I K I L E K V G F K I I R Q G G S H L F L K H Q D N R T T
UniRef90_X1N4V7 M P M T A K E M I K F L E K N G F Y I K S Q D G S H R K F K N E S G K I V T Q
UniRef90_G9XD52 M R F R E I E K Q L L D D G W S L V D V R G S H H Q Y K H P T K S K V T
UniRef90_BOND18 M P K L P S E I I K A L K K I G F V E I R Q Q G S H L R L K H P D N R V T
UniRef90_UPI00034D9461 R E L V K V L C K M G F I V K R Q Q G S H I V L R R E E N W A Q T V
UniRef90_Q3AQH5 M P K L P R K T L K T L E K L G F V Q I R Q K G S H L I L K K E I K S E C V
UniRef90_A3IVA0 M E R N S T K I I K K L K A D G F E L V S V R G S H N K F R K D G R V V I
UniRef90_J1K2F1 I L A N I S G K A V K I F C K F G V V D H Q T G S H I L W H D S K P T L S
UniRef90_K9YNJ6 M P I K P S K M V R L L L K A G F K E V P K G G G H R R F R H P D G R M T E
UniRef90_E1NWWY9 M Q S K A L I K E L E D A G W V L K R I D G S H H M F K H P T N P N T V
UniRef90_UPI000464CFF1 T A A R L R K A L E R R G F L P V R R K G S H V F M R H P D G R G A V
UniRef90_S7UQG0 M M S S S K E A I K R L L S D G W Y Q V A T N G S H C Q F K H P T K P R V T
UniRef90_K2ME52 M D S R N A I A M I E A D G W Y L V R V K G S H H Q F K H P T K K L V T
UniRef90_D4I355 M E T N S R K I I K R L E A E G F A L V K V T G S H H K Y R K D G L T V T
UniRef90_UPI000380E2B8 M A T T S K E L L K I L K K H G W Y V E R V H G S H H L K H D E N P M T I
UniRef90_L1MXJ9 S R E I I R R L E R E G W L V R S K G S H R Q Y K H P N G R V T
UniRef90_UPI000368B411 M P M T S K D M E K F I L A D G W L L K S Q V G S H R Q Y I H P T K K K V T
UniRef90_R6ZRL2 M M T P R I P R D V I A A L I R A G F R L V H V R G S H H Y L E P S G G L V T V
UniRef90_R4KTP3 M M R T M K S A D L I R E L M S A G W M L D R V R G S H H V F T H P D G G H I V
UniRef90_UPI000288F361 K P K N I I F L E N H W W E Q D H I T G S H V I M Y H S S K R T V
UniRef90_K1YA32 M G T N F K D L I R L L E K N G W K Y D R T R G S H Y L Y V K D G R A I P
UniRef90_UPI000475C1C2 M E K V A K L G F Q K V R Q K G S H A R W Q H I D G R A T T
UniRef90_I4BWW1 K D V A K K L E K I D F V F V R Q S G S H A M L R K P S K M T V T
UniRef90_UPI00046A5643 M P L K P K E L V R L L K Q Y G F V E K S Q C G S H L K M Y N P D T K V T I
UniRef90_H1Z0V7 E A I K A L N K L G Y D I D H Q T G S H I L L R K E P H R R L T
UniRef90_D4CU66 M S S K D L M K L K K D G W Y L D R V N G S H Y H F K H K S K K L V T
UniRef90_I4F8L9 F A P I K R K E L I R Q L R K L G F S G P L V G G N H Q Y M V Q G K L K I W I
UniRef90_D5XAW6 S S K E I L K I L E K D G W L E K N Q R G S H K Q L I H P T K P K V T
UniRef90_A6TTG6 S P N K I I K A L E K I D F Q K V S Q K G S H A K Y K K L G T R V V I
UniRef90_A0A017HRZ9 M E T N S R K L I A M L K A D G W V H V D T K G D H M Q F K H P T K P R V T
UniRef90_UPI00036C60EA M K V R E L K R L I E E D G W R V V R Q S G S H Q Q Y K H P T K T G L V
UniRef90_D8K9Z0 M K V K E L I K L I E A D G W V Q I R M K G S H R Q F R H P T G I V T V
UniRef90_D9TM24 S S R E I L K I L L Q Q D G W Y I V K I N G S H H Q L K H P V K Q K V T
UniRef90_UPI00046257C8 M D S R D L L A A L L S D G W R E V R R R G S H M Q L K H P T K P L V T
UniRef90_W6LPM3 M P S L P A E A I R A L Q R L G F V V V R Q Q G S H I V L R R G S Q G C V
UniRef90_I4BWZ0 P I S R R E L I K R L K T L G F S G P Y S G G R H S F M K R G P L K V R V
UniRef90_UPI00046CF9EB I S G R E L A A A L S K I G Y V K D R Q K G S H M V L R Q N Y P H R R I V
UniRef90_L0KX20 T A K Q L I R I V E S L G F Q L V R Q S G S H M V F R N D A K R I V
UniRef90_UPI00036021F9 M T P R E M V K F L K K N G F I E K G Q R G S H K K M F N P D K K I T I
UniRef90_UPI000420389F E V C K I L E E D G G F V R V R Q R G S H I M Q K P D T S I T I
UniRef90_D8K863 M K V K E L I K L V E D G G W E R V R M K G S H R Q F K H P T G T I I I
UniRef90_E0NZW5 S S R E I I K L L K S D G W Y E V H C V G D H H Q F K H L T K K R V T
UniRef90_I3U7S4 M K S D E V I K R L K A D G W V W V G G K G D H M K F K H P H K Q H V V
UniRef90_G7WME3 Q E L L K R L S S L G F V V V R T R G S H L Q L R A E D G R S T T
UniRef90_K2DER0 M P K K A R Q L L K T L N K L G F L K Y H Q V G S H V Q L K H A D G R T T
UniRef90_J0MCA3 M T S A E L R M L K K L G W L H V R T R G S H H I F E K E E A N P V V
UniRef90_B9MR14 S S R E I I K L L M A D G W Y L E A V R G D H Y Q F K H P V K K V T
UniRef90_I4FE82 M K V R E V I R R L I D D S W L Q V S Q K G S H R Q F K H P V G K V T V
UniRef90_UPI000368F113 M N L S P K R L I K I P E E D G F Y L K R G K G S H H I Y N S D T K I T I
UniRef90_Q2FL89 M K V R E V I E F I E V D G W Y L V A T R V S H R Q Y K H P D G R L T I
UniRef90_Q2IX28 M P K D S R D L I K E L E A D G W R F V G A T G S H H H F K H P V K A K V T
UniRef90_M2C4J3 M T G K E I T K I L K K N G W T I D R I K G S H H I F K G D K T I P V
UniRef90_K2F144 M P K L P K E L I K A L G K M G F D F I R Q R G D H V I M K H A D G R V V T
UniRef90_G9AFA1 A L Q K D G W Y Q V A T K G S H V Q F K H P E K P R V T
UniRef90_A7A519 M R F K E I E K R L L A D G W V L K S Q R G S H R Q Y V H P V K V T
UniRef90_UPI00034CB72B P I K R S D L I R Y L R Q L G F E G P Y S G S R H Q F M R K E D I T V W L
UniRef90_UPI00036EC255 M K S R D L I K L I Q K D G W Y K N T K G S H H H F I H P T K K K V T
UniRef90_H5SR94 L P S V S G S R V V K A L E K L G W Y V H R Q S G S H V T L C H P D K L I V V
UniRef90_V4JFH4 M K S I S G K R L C K V L E S R G W S L K R I K G S H H I Y S H P D N N I L T
UniRef90_W4LTC2 M V R F L E S Q G F T V V R V R G S H H I V M A R D A Q R T S V
UniRef90_Q72GZ1 L R P V S R R E L V A R L K A L G F S G P Y T G G R H Q F M V R G S I R L V L
UniRef90_E6QFE0 M T S S E L I K C I E S A G W L H R S T K G S H H V Y V H P D R P H L S
UniRef90_R9JYC9 M K F R E I E S I I Q L N G W Y Q V K Q K G S H H Q Y K H L T K P K V T
UniRef90_B0USX3 S S K Q I I K R I E A D G W K F H A A T G S H H H F T H P T K K I V T
UniRef90_G7WD74 M K P R E L E N I V K A D G W Q Y T D T K G S H H H Y K H P S K P V T
UniRef90_K7W5N5 W K A I K W R E L V I F L K E A G F E G P Y S G G K H Q Y L V K G E L K L T I
UniRef90_V4JHM0 M P P L P K E V V R I F E R F G W Q V A R Q S G S H I M L S D E S I A T L
UniRef90_UPI00047AC82C S S R E I I K L L E A D G W Y I D A I R G D H Y Q F K H K T K K K V T
UniRef90_D3G210 I M H N M K S R D L I K E V E K A G W L L D R T R G S H H V F R H P H S H H I T
UniRef90_X1MR09 M K V R E I I E L I E R D G W Y L V R T K G D H R Q Y K H P V K K V T I
UniRef90_J0PZS5 M E Q D S R K I I A K L K R D G F E F I K V K G S H H K S K K D G K V V I
UniRef90_UPI00034AD24F M K V K E I I K I I E K D G W Y L I R T K G S H R Q Y K H K R G L V T I

		50	60	70
UniRef90_UPI00041CB26C	P	N P H R G D I	G R G L L A E I	L R Q A M I Q R D E W E N L
UniRef90_R6XT82	A	H K S D D I	S L K T E A S I	L K Q A G L K
UniRef90_B0TAG8	V	P G N Q K D I	K K G T L M G I	L Q Q A G L S K N E F L V L
UniRef90_H1Z0A8	I	P N H N E I	S R G T L R A I	I R E A G L T P D E F M N L
UniRef90_K9Y2L6	P	N P H R G E I	S K S L L A R I	L R Q A N I S K D E W E N L
UniRef90_R6B0U1	V	P C H R G D I	D K R T V K S I	F T A A G L D
UniRef90_UPI0004781BE2	I	P D H S E L	R K G T L M S I	I R Q S G I S R S E F E
UniRef90_BOJHA8	P	G K S G D D I	P K G T L A S I	W K Q A Q L E D K
UniRef90_Q5HXI3	V	P H P K K D L	G I G L V A A I	R K Q A G L
UniRef90_A5GT09	V	P V H P K G D L	L P G L A R R I	A K E I G M S F E E F L
UniRef90_F9RIB7	V	P H P K K D L	K I G L V K Q L	M K D A G L
UniRef90_ROG8K5	V	P H P K K D L	P L A T Q K S I	F R Q A G L K
UniRef90_UPI00036D0BB0	V	P V H K K G E L	G I G L L R K I	L R E A G V S L T D Y
UniRef90_UPI0003091BCF	P	V H S N R D L	P L G T L K S I	M N D A G L T E K D L
UniRef90_F6A0B1	V	P K H P G D I	N P S V V K S I	W R Q A G I S E
UniRef90_UPI00047B94D1	V	T H P R K D I	P Y E T L K S I	S Q Q A G I T
UniRef90_F8GGR1	V	P H P K K D L	G I G L S N K L	L K Q A G L K
UniRef90_UPI00036334D6	I	P H P R K D L	D P L T V K S I	L K Q A G L
UniRef90_Q0AMV1	V	P H P K K D L	P T G L V R A I	Y R Q A G W
UniRef90_UPI00047B402A	P	F H G S K D I	S K V T L E S I	L K Q A G L K
UniRef90_X1N4V7	I	P V H K K D L	D R S L L R K I	L R D T K I S P D K F K N L
UniRef90_G9XD52	V	P Y H N K E L	S K K L E H I	L K Q A G L K
UniRef90_BOND18	I	P N H R G D I	P Q R V V N S I	L K Q A G L K
UniRef90_UPI00034D9461	I	P V H S G K I	G K G L F T K I	L R D S E L S I E E L I K L
UniRef90_Q3AQH5	V	P D H K E L	D R G T L R A I	L R Q T D I T V Q E L L A L
UniRef90_A3IVA0	I	P M Q R K T L	A V G T L K N I	L N Q A G L T V E E F L D
UniRef90_J1K2F1	V	P H P K K D L	P L G T A K A I	A K Q A G W
UniRef90_K9YNJ6	V	P N H K E L	A P G L L R S I	L R Q A N I S V D D F L
UniRef90_E1NWY9	V	P M H G K E L	T P Y T Q R K I	L E Q A K I K
UniRef90_UPI000464CFF1	V	P H P K K D L	P R G T V R G I	K K T A G L
UniRef90_S7UQG0	V	P E H R A D V	G R G L L V R I	A R D V G L S P E E L
UniRef90_K2ME52	V	P H P K K D L	K K G T I Q S I	E R Q S G I
UniRef90_D4I355	V	K H P K K D I	P L P T L K S I	K K Q A G L
UniRef90_UPI000380E2B8	V	P H P K K D L	P I G T V R A I	Y K H A G W
UniRef90_L1MXJ9	V	P L H N T D M	K P G L L H S I	L R D A G L K
UniRef90_UPI000368B411	A	H P K K N I	P P K T A A D I	Y R Q A G W P K D
UniRef90_R6ZRL2	T	P L H S K D L	K K A T E L S I	L R Q A G
UniRef90_R4KTP3	P	V H G N K T L	K P K T L K S I	L N Q A G L T I E E L L E M
UniRef90_UPI000288F361	V	P H P K K D L	G A G L V A A I	R K Q A K I
UniRef90_K1YA32	V	P L H K K D I	P V G T L L A I	L K Q T G L T K E D L G K
UniRef90_C6JPL9	V	P R H N K D I	K I G L Y H K I	L K D A G V K
UniRef90_UPI000475C1C2	I	P L H G N E I	G G W L F K E I	L S Q L G V T E E E F N Q L
UniRef90_I4BWY1	V	P D H K E L	K R G T L K N I	L R Q V G I S V D E F L K L
UniRef90_UPI00046A5643	V	P L H V R E M	K K G T I E H A I	L K K A G I K E
UniRef90_H1Z0V7	I	P N H Q E I	A K G T I S I	L K Q A G L T R E E F L K L
UniRef90_D4CU66	V	P H P R K D L	P K T V E S I	F R Q A G L
UniRef90_I4F8L9	P	N P H Q G D I	S K S L L A K I	L Q Q A N I S R E E W E K L
UniRef90_D5XAW6	V	P H P K K D L	D P K T L R S I	L K Q A G L E
UniRef90_A6TTG6	I	P M H K D E I	A K G T L K S I	L E Q A D L Q L D E F L N L
UniRef90_A0A017HRZ9	V	P H P K R D I	P K G T V M S I	Y R Q A G W
UniRef90_UPI00036C60EA	T	H K P S D E V	P V G A L N S V	L K Q A G L K
UniRef90_D8K9Z0	S	G K A S V D I	P V G T L K N A L	L K Q A G L
UniRef90_D9TM24	V	P H P K K D I	P F K T A K S I	L D Q A G L K L E
UniRef90_UPI00046257C8	L	P H P R K D L	P S G T L R S I	E K Q A G L
UniRef90_W6LPM3	V	P N H R E L	K V G T L A G L	L K Q G G V S S N E F I
UniRef90_I4BWZ0	P	N P H V G D I	G I S L L K E I	L R Q A D I S E D E W N N
UniRef90_UPI00046CF9EB	V	P D H S E I	A K G T L R K I	I K E T G L T V I E E F K N L
UniRef90_L0KX20	I	P Y H G K S L	H P K I V S S I	I K D I G L S I E D F K R M
UniRef90_UPI00036021F9	V	P M H N K D L	G N G L E A S I	K K Q A G L K
UniRef90_UPI000420389F	P	V P N Y P E L	K I G T L Q S I	I R Q S G I P R S W F E
UniRef90_D8K863	A	G K P S V D V	P P G T A N N I	L K Q A G L K K
UniRef90_E0NZW5	V	P H P V K D L	P Q Y L V K S I	A E Q S G L
UniRef90_I3U7S4	V	P H P R K D I	A L G T L R N I	Y R Q A G W K W
UniRef90_G7WME3	I	P L H A K E V	P K G L L R K I	I R D L E M S L I E E F L D L
UniRef90_K2DER0	I	P Y H P Q E I	R R G T L K A I	I D D L N M S L I E E F S K
UniRef90_J0MCA3	V	P H P T K D L	A P G T L H K I	L K Q L L G
UniRef90_B9MR14	V	P H P K K N L	P I R T V K S I	L Q Q A G I K I E D I G E
UniRef90_I4FE82	P	C K L S D D I	P I G T Y K N I	L R Q A E L E
UniRef90_UPI000368F113	V	P L H G K D M	K K G T F M G I	L K D A G L
UniRef90_Q2FL89	V	P G L S D T L	P H G T L N S I	W K Q A G Y K E
UniRef90_Q2IX28	V	P H P K K D L	H P K I V R S V	T R Q A G L K E
UniRef90_M2C4J3	P	V H G S K D L	P I G T V K N I	F R L A G I K E
UniRef90_K2F144	V	P L K K E I	K K G T L K K I	L N P L N I T V I E E L V N L
UniRef90_G9AFA1	V	P H P K R D I	P I G T L K S I	E K Q A G L K
UniRef90_A7A519	L	P N H T G D L	D P R T V K S I	W K Q A G I N E
UniRef90_UPI00034CB72B	P	N P H K S D I	D K G L L A E I	L R Q A R I D K D E W E V L
UniRef90_UPI00036EC255	I	P H P R K D I	P M K T V N S I	L E Q A G L K K
UniRef90_H5SR94	P	I H G K K P V	K K R T L S R I	L K D A R L T V D E F K E L
UniRef90_V4JFH4	V	P V H N K R D	K H G T L S S I	L K A A G L S E E D
UniRef90_W4LTC2	P	V H G N R V L	K I G T L R G I	L R D I D M S P D E F E R L
UniRef90_Q72GZ1	P	N P H R G E I	G V D L L K R I	L R Q A G I T E E E E W L E
UniRef90_E6QFE0	I	P H P R K D L	G T G L L H K I	L L K Q A G L K E
UniRef90_R9JYC9	I	P E H G G D L	N P D T V K S I	M K Q A G L
UniRef90_B0USX3	V	Q H P E K D L	K K G T E H S I	L K Q A G L K
UniRef90_G7WD74	L	P F H G K D L	K T K T V N S I	L K Q A G L K
UniRef90_K7W5N5	P	N P H E A D I	S I G L L S K I	L K Q A H I S R D E W E K L
UniRef90_V4JHMO	S	V P D H K E V	A K G T L R S I	L R A S G L T V T E F I E
UniRef90_UPI00047AC82C	V	P H P K K N I	P I K T V K S I	L K Q A G I E I
UniRef90_D3G210	L	P H P K K E L	G V G L V R A I	H K Q A G L
UniRef90_X1MR09	A	G K L N H E L	A K G T L R S I	L K Q A A L K
UniRef90_J0PZS5	V	P H P K K N L	P I G T A R S I	A Q Q A G W L K K E K K N
UniRef90_UPI00034AD24F	S	G K L S D Y L	A P G T A N S I	L K Q A Q T K

UniRef90_K2QVU1 MRS S S A V I A A L K A D G W Y E V S T K G S H V Q F K H D K K P R V T 40
UniRef90_K9RD33 M K A K A M C K I L E R Q G W V L K R V T G S H H T Y S K E G D S I S
UniRef90_K4MQ12 M P I S G Q K I K I L V K G F V V V R Q K G S H V F L Q R H G H D T V T
UniRef90_A7I6F8 M K I R K L I K L I E S D G W S L H R R Q K S G D Q Q Q F R H P G L V T I
UniRef90_K9W3E2 M S K L P S D C V K A L Q K V G F Y Q K R R E S S H I L L R R D D P F A Q V
UniRef90_W7CBV3 M P I T P R K M A R L L K K N G F H V R T Q R G S H M F F K N P T K N R A T T
UniRef90_F8IGX9 F R P F T Y S R E V I R M L E E D N G W F L V A V R G D H Y Q Y K H P T K P K V T
UniRef90_K2BxB8 M P W K P A K M V R F L L K H G F G E Q A K G G G H R R F F N P T K P K V T
UniRef90_C2EN61 M P S S R D L I R Q L Q E D G W V L M R A R G S H H H F K H P T K P K V T
UniRef90_Q2FTT4 M P M K P R Q M V R L L K H G Y T Q V T Q N G S H L K M F N P D T N I T V
UniRef90_E3D0C6 M N S H D L I K E L T A I G G C T E L R C K G S H H I W Y S P T G K T F P
UniRef90_UPI0002490FF2 N Y N A V I K A L K R D G W V V R Q K G S H I R L Q K H T V D E T T
UniRef90_V4N8J4 M K V R D L R R L A D D N W F L V V T K G S H R Q F K H P G R N I T V
UniRef90_UPI00036900FC M P M T P K E M V R L L K K N G F Y I K S N N G S H Q Q Y H H P G R N I T S
UniRef90_T1D3P3 M E R N S Q K T I A R L K R E G F E I V S I K G S H H K L R R G N Q T I T
UniRef90_F5RMQ7 M R F R E V E R I L L Q D G W Q I K A Q V G S H R Q Y V R P H K Q K V T
UniRef90_B5ZW21 M D A K E L I R L P E Q R G W M E V R S R G S H R I F K H P N D G Q R T I
UniRef90_UPI0004632765 T A S D V I K V L E K I G F S L V R Q S G S H K I C R N K S G E R A T
UniRef90_UPI000427C97D L P S I S G R D C I K A L H K I G F Y K K R Q E S S H I I M R R D N P F A Q V
UniRef90_X1D9Q7 M K V N E I L D K L K T D G W Y L V A T R G S H R Q F K H P G G R V T V
UniRef90_K9XYM9 L S P V S W N E F L K R L R Q L N F D G P Y Q G G K H P Y M I K G D L I L T I
UniRef90_C3K5M6 M K S I S G K F A K L E R H G W E L L R I Q G S H H I Y C Q G P D N R I S V
UniRef90_E6QU94 K V V A A L R K V G F E H V R T K G D H A K L R R P D S R V V I
UniRef90_H1Z259 Q E I V N A L E R S G Y V R R Q K G S H I R L Y K P E R L P I T
UniRef90_UPI00021B27C M K M S G K A L C K I I E K L G W Q L K R V T G S H H I Y T K E D A I L C V
UniRef90_B1WUW8 M K S I S G K K L C K I I E K L G W Q L K R V T G S H H I Y T K E N K E I L V
UniRef90_UPI0002ECB902 M T A R E V E S I L R Q Y G F Q L T S Q K G S H R K W R N E D G L Q V L
UniRef90_U2PKD9 M S S K E I I K M L E K D G W L R K I V G S H H H F K H P N K I K V T
UniRef90_K1ZSR7 M K P L A Y R Q V I K K A R K A G F F F R R T T G T H E I W W N E K T R K T C
UniRef90_UPI000361C329 M T M K P R E M V K L K A N G F K E K S Q R G S H L K M Y N P Q T Q V S I
UniRef90_UPI0003601B48 M T R K L K Q A G L I E R S A K G G H H F Y Q H P D G R S T V
UniRef90_D0GN47 S R E T I K I L K D N G W E E T G S R G S H H Y F V N P D K P K V T
UniRef90_UPI00036716F0 M K S R D L I A E L A A G W M I Q R I R G S H H V F V H E N S P H S T
UniRef90_K2BWS3 M P K L Y R I L L S A L Q R A E F Q I I S Q K G S H I K L R H G D K A F T V
UniRef90_UPI00036DDAEA M K V R D V I K L I E K D G W Y L K R T R G S H R Q Y K H K K G L V T I
UniRef90_D4CVP5 M P M T S T E M I K L L L K N G F F I P G G K G S H K K F I N S T G K F T V
UniRef90_K1YK17 E S K G F F I S Q K G S H V K Y R N N G D P T V I
UniRef90_B0JPG7 M S K L P K D C I K V L E K V G F Y Q K R R E S S H V I L R R D N P S Q V V
UniRef90_UPI000374FC9D M N S K D L I K H L E A N G W Q L R N V R G S H H V F R H P T L P G H I
UniRef90_K7WJZ7 M K S V S G K S C K I V E R Y G W N L K R I T G S H H I Y V K E G M S V I I
UniRef90_UPI00024921BF M A M K P R K L L K L L R K N G F V E K S Q T G S H L K M Y N P Q T N V T P
UniRef90_I4D814 K D V I A A L R R A G F K E L Y I E G S H H Y L E R P D N K L V T
UniRef90_Q07PQ4 M L R D S Y D V I A R R L Q R A E G F E R I S S K G S H H K F R H R T K R T V I
UniRef90_B8FNX9 S S R E I L Q I L T A D G W Y H I N T E G D H H H Y K H P T K R K V T
UniRef90_A0A038GVJ7 M D S R D L I R M L M D D G W E L V R T R G S H H H F R H G T G R V T V
UniRef90_W9V7B0 M N S R D L L K M L E N D G W Y I H K V K G S H H Q L K H P L K A K V T
UniRef90_U3U4V8 M K S A T L I K L L Q K N G W K L E R I R G S H H Q F S H P D A H L I T
UniRef90_UPI0003B6CF4A M K V R E V I K L L T D D G W F L H K T K G S H R H F R H P T G K V T V
UniRef90_UPI000475EC78 P I T S Q K V R A L E K I G Y T Q V S T R G D H V K L R R G N R R V I
UniRef90_E1L7L3 T P K E L M K V L I K D G W Y I D R V R G S H H I L K H P T K N R V T
UniRef90_B5W629 M K Y R E V A R K L K A H G C E R R R G G S H R K W L N P N G Q A S V
UniRef90_I4C2E5 M P V S A Q E L L R F L K A H G F A E D R Q T G S H L I V K N E Q K G I T T
UniRef90_X1L6P8 M S K L P K K C I K A L E K V G F Y F K R Q E G T H V T L R R D E P F Y Q L
UniRef90_K2CHK6 K P T E L V K I A K K G F V A I R Q S G S H R I F K H P D G R W T T
UniRef90_F6CQX2 S S K E L I R M V Q E S G W A L V R V S G S H H Q F K H P T R P L V T
UniRef90_X0SIS1 Q E A I R I L K R L G F V Q I R Q R G S H V I L T K P E G K V G C
UniRef90_A8RC39 M P M T S K E M C K I L K N G F I E K H A P T G H R K F H N P T K R T T L
UniRef90_X2GZ80 I S S R E M I K I L N K D G W Y L H R I A G S H H H F K H P T K K I V T
UniRef90_UPI0002D57F79 R E T C Q I L E Q H G F V Q V R Q R G S H I I M Q Q E D S T I T V
UniRef90_G5IIW4 M R F R E V E K L L K D G W F E V N Q V G S H H Q Y K H K P G K I T V
UniRef90_UPI0003706971 M E R N S R A I I K R L K A D G F D L V K V T G S H H K F K K N G M I V V
UniRef90_L8LSB7 K E V C Q I L E A H G F E K V R Q R G S H I V M Q K Q S G S T V T
UniRef90_D8K9Z1 M D S R S L M A E I K A D G W E L I R V N G S H H H F V H P V K K L V T
UniRef90_J3D643 M D S R E V I K M L K K A G W K H V R T H G N H F Q F R N P G S G V V T
UniRef90_C2D061 M P P V P A E V I R K F Q R L G W V I R R Q T G S H I M M N K S V G H P L L V
UniRef90_I3CE05 G F L E N H Q K G S H L V L E H S D G R M V V
UniRef90_K7VZC4 K N Y R E I I R A I E R D G W Q F A R A S G A H R H Y R H P T K P I V T
UniRef90_E6Q6J4 S Y K R V I K A L E K A G F Q V V R Q R G S H I R M E R G S K R I V T
UniRef90_W2U2S4 P T S Y N E L V K K L R M F G E G P Y G G K H L Y M V K G S L R L T I
UniRef90_Q1Q2A7 M P K T P R E V I K Q L K Q S G F I E V S Q T G S H L K L F N P E T K R T I
UniRef90_B1WQN1 I S A D Q A I R A V E R L G F V Y V G Q R G S H L R Y Q K R Q T L T F L
UniRef90_UPI000378B655 M P M K P R Q M I K L L K N G F H E K S Q N G S S H M Y N H K T N K T V M
UniRef90_K6R7F3 M I I L V T P K E L L K V L K K D G W Y V D R I R G S H H M L K H T S K V R V T
UniRef90_F9N5C5 M T S A E L I K E L R A T G F E P V R S G S H W I W W S P T G K T F P
UniRef90_J0MBK4 M K A R E V E A L I K R Y G F E L I F Q K G S H R K W R N I D G L Q V I
UniRef90_L8LJC5 M K S R D L I R D L E A A G W S C R R I R G S H H V F V H P Q H H I T
UniRef90_B4SP51 S S R D I I R Q L I A D G W Y E V N C A G D H H Q F K H P S K K R V T
UniRef90_D4LCP4 M P I S R R D L V Y I L K E A G F D G P Y P A G K H Q Y M V K G E L K L T I
UniRef90_UPI0002D2D87C M T A R E L I K K L E E A G F V N K G G T N H D K M V H P D G R V T V
UniRef90_E5Y1Y4 P V S W K E L V T M L N E L G F E G P F S G G K H P Q M R K G N V T L I I
UniRef90_UPI00034CB634 M L A Q G F V K I T S Q K G S H Q K Y V K A N R V V I
UniRef90_UPI00037702B7 R K V V K V L Q K I G Y R V V H R K G S H I R M R N P N H L P V T
UniRef90_UPI00036CEC06 M T P R E A E K I L A D G W Q L Q E I Q G S H H Q Y T P T K P K V T
UniRef90_F5RIR5 M P M T S R E M I R H L K N G F K I I J G N G S H I K M R N K T G H Q T E
UniRef90_R9MH17 M Q S R H L M K E L E A H G W I L D R V T G S H H M F K H P Q K A Q T V
UniRef90_UPI0004099ECA I S G K Q C I E V L K K I G F Y Q K R Q S H I I L R L R D N P F L Q V
UniRef90_T2J6T8 E L I K A L Q K L D Y K P V R R Q G S H V V L V N D S G K M V V
UniRef90_W8PNJ0 P V S Q N Y L I K R L R E L G F E G P Y A G R H P Q M R R G D V T V I I
UniRef90_UPI0003490415

UniRef90_K2QVU1
UniRef90_K9RD33
UniRef90_K4MQ12
UniRef90_A716F8
UniRef90_K9W3E2
UniRef90_W7CBV3
UniRef90_F8IGX9
UniRef90_K2BxB8
UniRef90_C2EN61
UniRef90_Q2FTT4
UniRef90_E3D0C6
UniRef90_UPI0002490FF2
UniRef90_V4N8J4
UniRef90_UPI00036900FC
UniRef90_T1D3P3
UniRef90_F5RMQ7
UniRef90_B5ZW21
UniRef90_UPI0004632765
UniRef90_UPI000427C97D
UniRef90_X1D9Q7
UniRef90_K9XYM9
UniRef90_C3K5M6
UniRef90_E6QU94
UniRef90_H1Z259
UniRef90_I4FDQ7
UniRef90_J7L8U2
UniRef90_X1TWQ7
UniRef90_UPI0002E1B27C
UniRef90_B1WUW8
UniRef90_UPI0002ECB902
UniRef90_U2PKD9
UniRef90_K1ZSR7
UniRef90_UPI000361C329
UniRef90_UPI0003601B48
UniRef90_D0GN47
UniRef90_UPI00036716F0
UniRef90_K2BWS3
UniRef90_UPI00036DDAEA
UniRef90_D4CVP5
UniRef90_K1YK17
UniRef90_B0JPG7
UniRef90_UPI000374FC9D
UniRef90_K7WJZ7
UniRef90_UPI00024921BF
UniRef90_I4D814
UniRef90_Q07PQ4
UniRef90_B8FNX9
UniRef90_A0A038GVJ7
UniRef90_W9V7B0
UniRef90_U3U4V8
UniRef90_UPI0003B6CF4A
UniRef90_UPI000475EC78
UniRef90_E1L7L3
UniRef90_B5W629
UniRef90_I4C2E5
UniRef90_X1L6P8
UniRef90_K2CHK6
UniRef90_F6CQX2
UniRef90_X0SIS1
UniRef90_A8RC39
UniRef90_X2GZ80
UniRef90_UPI0002D57F79
UniRef90_G5IIW4
UniRef90_UPI0003706971
UniRef90_L8LSB7
UniRef90_D8K9Z1
UniRef90_J3D643
UniRef90_C2D061
UniRef90_I3CE05
UniRef90_K7VZC4
UniRef90_E6Q6J4
UniRef90_W2U2S4
UniRef90_Q1Q2A7
UniRef90_B1WQN1
UniRef90_UPI000378B655
UniRef90_K6R7F3
UniRef90_F9N5C5
UniRef90_J0MBK4
UniRef90_L8LJC5
UniRef90_B4SP51
UniRef90_D4LCP4
UniRef90_UPI0002D2D87C
UniRef90_E5Y1Y4
UniRef90_UPI00034CB634
UniRef90_UPI00037702B7
UniRef90_UPI00036CEC06
UniRef90_F5RIR5
UniRef90_R9MH17
UniRef90_UPI0004099ECA
UniRef90_T2J6T8
UniRef90_W8PNJ0
UniRef90_UPI0003490415

50
60
70
V P H P K R D L P G T L K N I E K Q S S L K
V P V H S R D L P T G T L K S I M K D A A L E E E D L
V P L H D D E V L R K K G T L N S V L K Q A A N V Q L D D F M R
S G L H P D D E V L R K P G T L N S V L K Q A Q I K R E D
V V P D H Q E L A K G T L R A I L R D A D L T E E F A L
V P Y H S K T L G R G L E Q A I L Q Q A G L K
V I H P T F K D Y K R K T L L S I L K Q A G I E P
I L P H H H E I K S G T L K S I L N Q M G I T Q K E F D R L
V P M H N K E L L R P G T E R Q I L K E A G L K K D
V I P D L N E L D R D R G T K A I L K Q S G I E E E L L
V K H P R K D V P E G T R R N I L R Q A G L K
V P H A K E L G K G L E R A I L R E T G L K
UniRef90_V4N8J4 V P L H P K K D L P G T V R S I K K S A G L
UniRef90_UPI00036900FC V P A H K P I K R S T L S H I L K Q A R L P V E D F I N L
UniRef90_T1D3P3 A G K P S D E I A T G T W H S I R K Q A G W T
UniRef90_F5RMQ7 V P M H A K E L K K G L E R Q L K E A G L K P
UniRef90_B5ZW21 V P H P K K D L P G T A L A I A K Q A G W N A S D
UniRef90_UPI0004632765 V P N H R G D L P A A V V K A I W K Q A G I Q R
UniRef90_UPI000427C97D P V H G H K D I P G T L K K I L K Q A G L K
UniRef90_X1D9Q7 I P Y H A G K I H P K T L S L L R D V N L T V D K F K G L
UniRef90_K9XYM9 V V P N H Q E L A K G T L R A M L R D A D L S I D E F I S L
UniRef90_C3K5M6 V P H P K K D L P G T V R S I R K R A G L
UniRef90_E6QU94 P G K P S D D L A P G T L N S V L K
UniRef90_H1Z259 P N P H Q K D I S V D L L S R L K Q A N I T R E E W L N
UniRef90_I4FDQ7 P I H G N Q D L K I G L L K H F L K Q A G L T S E E D
UniRef90_J7L8U2 V P L H K E L K R G T T V S I L K Q A G L T A D E L R K L
UniRef90_X1TWQ7 V P A H Y E V D R R T L K S I L H T A N L T V E E F K K L
UniRef90_UPI0002E1B27C P V I Y S N R D L P K G T L K S I M K D A E L T E K D L E Q
UniRef90_B1WUW8 I P V H N R D L P I G T L K Q I M K D A N L T E N D L
UniRef90_UPI0002ECB902 V P E H R G T L P I G T L R S I E Q G A Q I P E S E W R
UniRef90_U2PKD9 V P H P K K D L T A G I V N S I L K Q A G L K
UniRef90_K1ZSR7 V I P H H K E I T S G T L K S I I R Q M G I S E K E F R
UniRef90_UPI000361C329 I P I H A K E L G N G L E Q S V L K R A G L K
UniRef90_UPI0003601B48 I P F H S G E L P K G T D A G I G E E E Y G N L
UniRef90_D0GN47 V P H P R K D I P I A T V K A I F K Q A G I
UniRef90_UPI00036716F0 V P H P K K D L P L G T V R S I R K R A G L
UniRef90_K2BWS3 I V P N H K K E I A L G T F N S I L K Q A G M T R K D L E K L
UniRef90_UPI00036DDAEA S G N L N D E L A Q G T L N S V L K Q A R L K K
UniRef90_D4CVP5 V P D H K Q E L G K G L E Y K I L K Q A G L K
UniRef90_K1YK17 V P L H G K E L P H G T F R S I L R Q A N L T E E D F V K
UniRef90_B0JPG7 V P D H P K L A K G T L R S I I R D A E L S V D Q F I T L
UniRef90_UPI000374FC9D V P H P K K D L G K G L V N K I L K Q A G L K
UniRef90_K7WJZ7 P V H G N R D L P M G T L K S I L K D A G L T E E D L
UniRef90_UPI00024921BF V P V H D K E Y E H G L E S K I L K Q A G I T
UniRef90_I4D814 V P V H S K I L K P K T L K S V L N Q A G L T I E Q L M E L
UniRef90_Q07PQ4 V P H P R R D I A R G T V I S I Y R Q A G W S K D
UniRef90_B8FNX9 V T H P V K D I P I R T V K S I L K Q A G I T
UniRef90_A0A038GVJ7 V H P K K D V A L G T A R S V L K G A G L
UniRef90_W9V7B0 L P H P K K D L P S K T V A N I L K Q A G L K
UniRef90_U3U4V8 V P H P Q K D M K K G T L M Q I L K D A R L D
UniRef90_UPI0003B6CF4A P G K M G K D I H P R T L N F I L K Q A G L K
UniRef90_UPI000475EC78 V P L H K E I K R G T M A S I L S Q A G I S A D E L R K L
UniRef90_E1L7L3 I A L H K E D L K P K T L Q T L L K Q A G L K
UniRef90_B5W629 L P D G S R D L K G T L R S A L R Q L G L D W D V F N N
UniRef90_I4C2E5 I P V H T G D I G R G L A L R I L K D A G F T P D D F
UniRef90_X1L6P8 V V P L H K E L D R D T L R A I L R Q A G L S V N K F I E L
UniRef90_K2CHK6 I P I H T K T V G R G L A S K I K D I G
UniRef90_F6CQX2 I P H P R K S L P T K T V M S I L K Q A G L D K
UniRef90_X0SIS1 V V P L H R Q L A I G T L R G I L R Q A K V S P D Q F M E
UniRef90_A8RC39 V P Y H N K E L G K G L E Q A I L K Q A G L K
UniRef90_X2GZ80 V P H P R K D L L K K T T N S I L K Q A G L K
UniRef90_UPI0002D57F79 P V P D E E E V R I G T L R S I I R Q S G L P R I L L F E
UniRef90_G5IIW4 P E H K G K D I N P M L V K S I L K Q A G L
UniRef90_UPI0003706971 I P H P K K D L P L G T V R S I Y K M A G W
UniRef90_L8LSB7 P G K L S D E L P L G T L N S I L K Q A Q L K G E
UniRef90_D8K9Z1 V P V P H K E I R A G T L M S I I R Q S G L Q R S E F E
UniRef90_J3D643 I P H P K K D L P K T V K S I R K Q A G L T V
UniRef90_C2D061 V P H P R I P K G T L N S I L K Q A G L K
UniRef90_I3CE05 V P N H P E V A R G T L R G I I R V A G L T V E E F I K
UniRef90_K7VZC4 L P M H S K D I P I G T L Y A I H Q A K L S L E E W K N L
UniRef90_E6Q6J4 V A H H S A H V P P G T L N S I L K Q A G L K
UniRef90_W2U2S4 I V P A H I P I K R S T L A H I L K D A Q I S L E E F L D L
UniRef90_Q1Q2A7 P N P H R K E I S I D L L T R I L R Q A G I T K N D W I K
UniRef90_B1WQN1 V P I H G K M I P I G T L K S L E K Q S G I S
UniRef90_UPI000378B655 L P N K S E I A P G T L R N A L Q N A G I T L E E F R K
UniRef90_K6R7F3 I P I H A K E I G K G L E Q A I L S E A N L K R
UniRef90_F9N5C5 V P V H K E D L K P K T L H T I L K Q A G I K
UniRef90_J0MBK4 V P H P K K D L P V G T V K S I K M A G I
UniRef90_L8LJC5 V P E H G K D L P I G T L R G I L R G G Q I P D S E W R
UniRef90_B4SP51 V P H P R K D L G K G L V Q A L R K L A G L T
UniRef90_D4LCP4 V T H P V K D I P K T L K S I E K Q A G V
UniRef90_UPI0002D2D87C P N P H Q G D I S P S L S R I L R Q A K I S R E E W E A L
UniRef90_E5Y1Y4 I H R H K G D I P L G T L K A I A R Q T K I K
UniRef90_UPI00034CB634 P N P H K K E I S L G L L Q R L R Q A N I S R E E W L Q
UniRef90_UPI00037702B7 V P S P K N E I P M G T L Q S I K Q S G I T R A D F
UniRef90_UPI00036CEC06 V P D H K S I K P G L L R Q I L R N A N L T V E E F L R L
UniRef90_F5RIR5 I P F H P K D L S K R T L N S I L K Q A G L K
UniRef90_R9MH17 V P Y H C T D L K K G L E Q A I
UniRef90_UPI0004099ECA V P H P K K D L P V G T V K A I R K L A G L
UniRef90_T2J6T8 V V P D H Q T L A K G T L R A I R D A D I S V E D F I N L
UniRef90_W8PNJ0 V P L H K R L K T G L L K A I M R E V G I T T A E L L E L
UniRef90_UPI0003490415 P N P H E G D I S V I G L L S R L L R Q A G V S R E E W L

	1	10	20	30	40
UniRef90_C1FRX7		M N A K D V I I	K Q A Q N I	G W E I K T Q R	G S H V K L V K D N S T V I I
UniRef90_B5YKY8		I T G K D V I I	K F L E S I	G F K V I R K G	S H V R L K N D E E G K A T T
UniRef90_Q54V25		M K Y S R V I E	K T L K E N D	G W V M E R M K	G G H A Q F R N D S G G S T T
UniRef90_F6CPQ0		M K V R D I L R	L K Q E D G W Y	L I E Q K G	S H R Q F K H P T G K A T V
UniRef90_L1MKW4	M P	M T S K E M I K	L L L K D N G	F V E V K G K G	S H R K F E N T P T G K A T V
UniRef90_D6PSW1	M P	M K P R Q E M V	K L L K E E H G	F I E K S Q N G	S H L K L Y N T P T G S N I T V
UniRef90_UPI0003B6800C		M T A R Q I E A	L L L Q R Y G F	Q M V F S Q K G	S H Q K W R H P E G L Q V I
UniRef90_D5WVN2		S S R D L I K I	I I Q D D G W Y	Y I G S N G	S H H Q F K P P T K P K A T
UniRef90_I4I284	M K S	I S G Q A L C	K I I E R Y G	W Q L K R Q	S S H C Y T K Q G M K V I V
UniRef90_F5TD11	M P	L T S G K E M L	R L L K K N G	W K E L R Q	E G S H H I L E K K D G A L I V V
UniRef90_V8R9Q9		M Q S R I L M K	E L E E A G W T	L D R V A G	S H Q V F T H R Y N P N T I
UniRef90_UPI00046AE085		T S K E L I A E	L L L A G G W T	L V R V N G	S H H H F K H P T K K L V T
UniRef90_L0GZB2	M P	P L P R E A V R	V F E R L G W T	V A R V Q K	G S H I T L A K D N N I A T L
UniRef90_E8RBH1		K T I S A L K	R D G W V V V R	Q R G G	S H I R L Q K H T R T E V T
UniRef90_R4KQD1	M K	P K E L M K I	L A Q D G W	V V M R M Q	G S H H L H K H S T K P G T L
UniRef90_W9DML4		A K K M E K I	L H K I G F	K K T R H K	G S H A F Y R H S A D K G R I T T
UniRef90_R6IQQ9	M K	P L K V N E V	L D L L K K D	G W Y K V G	Q E G S H R Q Y K H P T G R V T V
UniRef90_UPI0002197785	M A	M K P Y K I V	K L L R Q H G	F V K K S Q N G	S H L K M Y N S P T K N V I T V
UniRef90_UPI0003473A4D		S Y R E V T R	K L R K L G	F E F Y R T K G	D H E I W I N S T T N I R T V
UniRef90_E8XM14		M K S T E L I K	A L L A A G C	E L K R H R	G S H Q I W S P T N K T F P
UniRef90_UPI00047089AB		S Y R Q I I N	A L L Q R A N G	F V V R Q R	G S H I R L Q K R T K E R V T
UniRef90_K9T000		S A K E L C	Q I L S A N G	F T Q V R Q	R G S H I L I M Q K D S T I T V
UniRef90_D0DKQ5	M P	W K P A K M V	R F L K K N G	F I E L P K K	G G H R R F F N P T G R K T E
UniRef90_N1ZV06	M T	M K P A K M I	R K L K A G	F I E V P K S	G G H R K F V H P D G G R M T E
UniRef90_K7QYI3		S Y K R V A	A A L E R A G	F Q Q V R Q K	G S H S M E K R G G G E R V V
UniRef90_L8NYY4		L V Q R L R	E L G F Y G P	Y A G G K	H P Q M R R D N L T I I I
UniRef90_T2JFA4		I S S R K A	J I K A F R K	L G F E K D R	H T G D H F L L K K T E T S T T T
UniRef90_B8GH41		K D V I K A	L V K L G Y	T I N D Q K	G S H I H L R H P V R R P L T
UniRef90_F7QZP0	M S	E M T A K K L	I D L L K K N	G Y N E V S	I K G D H H K Y K R E D G K T F V
UniRef90_T1C256	M P	L S Y R E V	V R L A Q D	G W V V V R	T A G G H A L I L D K P G A L R P L
UniRef90_S9S4P6	M S	L S S R E A	I R K I E A	D G W Y K A G	Q T G D H I H F K H P T K P K A T
UniRef90_I6V211		D V I K A L	R K L G Y V	P A R Q K	G S H V V L T G P S G K I T V
UniRef90_A8ET84		I T G K E L	I K F V K S	L G Y R F D R	Q K G N H R I L E V H E E K K T L T
UniRef90_UPI0004721AB9		I I K A L G	R A G F I L	R Q R G	S H V H L K H P D G R T T V
UniRef90_X1VT66		I N A K R M E	K L L L L L	G F E K T R	Q K G S H V F Y R H P D G R T T T
UniRef90_K2CNU8	M P	K L P Q K L I	K V L K K K	D G F L D R	I H G S H H I F V I R T R D R P K V T
UniRef90_D8FG67		M K S G E I I	Q R L K K D	G R L L H H	T K G D H L Q F K H P E K P K V T
UniRef90_E3GEK3		S S R E V I	K I L K A D	G W Y E S S	C D G D H H H F K H P T K K K V T
UniRef90_A9L6Q4		M T S K D L	I K L L E V N	G C E F V R	G K G D H Q L W Y S P T G K K F P
UniRef90_UPI000347B835	M P	I K R L E L I	C L F K Q L	G F E G P I	F S G G K H Q Y M V K E N L K V W I
UniRef90_UPI00047EBF25		M K A S E L I	R L L L R D	G W F I V R	Q S G S H L I M R H P C K P I V V
UniRef90_Q2FMM2	L L	P V S G V I E	M V K V F K	K I G F V I R	Q K G S H I L M L S R G E D F I L V
UniRef90_U3HEM5		M N S R Q L	V K M I E A	D G W Y L V R	V K G S H H H F K H P V A K R L V T
UniRef90_UPI00035F6E26	P	I S R S E L I	K K L R E L	G F V G P F	T G G R H Q F M Q R K A Q R L T L
UniRef90_A9BGA6		R E V V K V	F S R L G W	E V A R Q R	G S H I I L V I K G K H I A T L
UniRef90_H1ZOR2	L L	P V S A K D	M I K V F S	K I G Y Q I	E R Q R G S H V V M S K G E I L I
UniRef90_A5GC91		N S R K I I	E R L L K D	G W Y L V N	V R G S H R Q Y K H K V G R V T I
UniRef90_K2LI59		K K V I E R	L K D G W V	L V S Q K	G S H H K Y R R G E R T V I
UniRef90_R7IEI2		M D S S T L I	S E M K A D	G W V L T G	I N G S H H H F T H P T K P L V T
UniRef90_U4VR18		M T S K E V I	K R L K E D	G W I E V R	T P G S H R H F R H P T K P K T T
UniRef90_G1UXS2	M P	L T G K D L	V K L A I K N	G W I E V R	V N G S H H H F K H P D F P V T I
UniRef90_UPI00040DB306		I V A A L Q	R D G W V V V R	Q K G S	H I R M E K K M G E K T I
UniRef90_UPI00036E3637		N Y D R L I	V A L Q R Y	G F V V V R	Q R G S H M R L Q H N K T L K I T
UniRef90_H1Z0G6		M N G R D I	I Y K L T E	N G W K L R	Q E G S H V R M G K A D A R T I V
UniRef90_F4GNK5	F A	P I S R R D L I	Y Y L K Q I	G F D G P Y	S G T R H Q F M V R D D V R L I I
UniRef90_K7W824		Q I L I N L	G F E Q V R	Q K G S	H V F Y R H L D G R L I T T
UniRef90_L8LLR1		I S G K M C	V K A L A K I	G Y Q K R Q	E G S H M I L R K D D P F S Q I
UniRef90_UPI000344C5FF	W S	A T K S R R	V L A A L Y	R L G W T I	K R Q T G S H Q L L E H P D R G T F I
UniRef90_B7KH95	M P	L T G K E M	V K L A L E	N G W V E V R	Q R G S H H H F K K E G S Y L V T
UniRef90_A0A024DEV4		M T T R Q I	L K L L H K	D N G W K I	K N Q R G S H I F L I H P T K S K I T
UniRef90_UPI00030C7411		I S G R E A	V K A L N R	A G F R V V R	Q R G S H V R L E K R T E E R L I
UniRef90_X0UEC2		M T S G D L	I K E L K A	A G C E L K	R Q G S H E I W Y S P T G R T F P
UniRef90_H2FUK6		I T A R K L	V N A E L V	R D G F S K T S	K P G G H L I F R H P D G R R V E
UniRef90_H5SJH6	M K S	I S G K A L C	K I V E Q Q	G W Q L K R	I T G S H H L Y A K E G V A V I S
UniRef90_K1XE04		M H S S T L I	R L L E Q K	G W K L V R	T H G S H F T F K H P R H M L V T
UniRef90_Q1LPG3	M P	M K P K D L I	R L L E K D	G W E Y V P	S N G S H H Q Y K K K G T Q I T
UniRef90_R6AEJ1		K E V C A I	L S K H G F	V I E V R	R R G S H I V M Q K P Q G T I T V
UniRef90_A4BR22		W K D A V R	V F E K V G	W R H D R T	K G S H Y L M I K P D K P L L S
UniRef90_UPI000379C71B	M P	I K P K E M E	K L I L A D	G W I F K S	Q E G S H R H Y T H P I K K V I T
UniRef90_C0CM97		K D S K T I	E K L L L G	F I K Q R	Q K G S H A F Y K H E D G R C T V
UniRef90_D5U8Q3		S S R D V I	K M L E K D	G W Y L V N	V V G S H H Q F K H P I K K R T T
UniRef90_F4HBU3		T L T K H G	F V P V G	G K G S	H T T L R Y E N D R T V T
UniRef90_Q3ILV2		M L K D D	G W E E V R	C S G S	H H Q F Q H P T K K T V T
UniRef90_A0A009TJ14	M P	L S G Q E V	V K V E S R	C G W K V V R	Q R G S H I I M V K E G Y T A T L
UniRef90_D5C4G9		K V R E V V	K L L E S R	D G W V L S Y	W R G D H R Q F K H P D G K V T V
UniRef90_R5C9R8	M K S	I S G K K L	G Q I L E R	N G W K L V R	I K G S H H R Y Q K D N M S I S I
UniRef90_UPI00034BD725	P	V K R K D L	A Y L K Q L	G F S G P A	S G G K H Q H M K K G N I T L I L
UniRef90_R9KSP1		S S R E L I	E L R K D	G W Y E V G	C D G D H H Q Y K H P V K K K V T
UniRef90_A3CSX9	P	I S W N Q L	V K N L Q A	L G F E G P	C R G G R H P F M V K G D L V L T I
UniRef90_C9M6U1		M K F K E L	E K L L A D	G W R R K N	S R G S H F H Y V H P T K P K V T
UniRef90_UPI000360F05E	M P	T Y R E F R	E V L K A G	F V L K R M	G K H E I W R R P D G G R E R Q
UniRef90_T1AGJ6	M P	K L P K D V I	K V L T H S	G F R Q L R	Q K G S H V T L Y S K I D R T V T
UniRef90_A1VH66		S S A D V I	K L K A F G	W Y L K L V	G D H H Q F K H P T R P K V T
UniRef90_X1JZT9		I I K R L K	L F G F E F	L R Q A G S	H E I W Y N K P N N R Y T T
UniRef90_C4LFW8	M K S	I D L I K E L	T A A G C	E L K R G K	G S H H I Y Y S P T G K T F P
UniRef90_U4T8H8	L M	P I S G K S	V I R Q L E	K Y G W K H	T R T S G S H H L I M K K Q G L P I S
UniRef90_D7CNL9		T G K E M L	Q A L Q R S	G F V I T R	V Q G S H H F L S H P K D R T R T
UniRef90_W3Y2H6	M K	D K D L L K	L L Q K N G	W K D V R	Q R G S H H R L K K G D K V E I V
UniRef90_D5BY13	M K S	V S G K R L	C Q I L K K	H G W E L Q	R A R G S H H I Y A K S D N P T T V
UniRef90_W6M3B1		R E V C A I	L A R H G F	I E M R	Q R G S H I A M Q K E D A T I T V
UniRef90_A7NI18	M T	Y R E I A R	K L R A L G	C E E I R S	S G S H R K W Y N P T G R I A P

UniRef90_C1FRX7 P H H G S K D I P L I G T L N K I L K Q L G L K 50 60 70
UniRef90_B5YKY8 V P L H G S E L P K G L L R K I I R D L E M S L E E F L I L L
UniRef90_Q54V25 V P Y G N K D I P L I G T L K A I E K Q T G V S L
UniRef90_F6CPQ0 A G K P S E T L H P K T L G S L L K Q A K L K
UniRef90_L1MKW4 V P F H S K D L K K G T
UniRef90_D6PSW1 V P L H A K E L G K G L E R A I L R E A N I E K
UniRef90_UPI0003B6800C V P K H Q G Q L P L G T L R N I L L A N S E I P E S E W K E
UniRef90_D5WVN2 I L P H P R K E L A P K T V K S I L K Q A G L
UniRef90_I4I284 P V H G N K D L P L G T L K S I L K D A D L T E D D L R
UniRef90_F5TD11 P V L H A N Q D L G K G L E Q R I L K D T G L K K
UniRef90_V8R9Q9 V P H P K K D L P L G T V K S I R R R A G L
UniRef90_UPI00046AE085 V P H P K K E L P L K T V K S I R R Q A G I
UniRef90_L0GZB2 S V P D H K E L A K G T L R S I L R A F G V T I S E F N E
UniRef90_E8RBH1 I P A H T P L K R S T L A H I L K Q A G L S V E D F R A L
UniRef90_R4KQD0 V A L H N K D M A P G T L N K I L K A A R L K
UniRef90_W9DML4 I P F H S K K L A R P L I R A I L N E I N I T I E E Y N E L
UniRef90_R6IQQ9 N G K L S D T L D Q F R L N S I F K Q A G W K
UniRef90_UPI0002197785 T I H H D K E L E H G I E S K I L K Q A G I T K V T D
UniRef90_UPI0003473A4D T I P H H G E V R E G L R N I L K Q A R V E V E D F L K
UniRef90_E8XM14 V P H P K N D L P V G T L K S I R K M A G I
UniRef90_UPI00047089AB V P A H S P V K K T T L A K I I K D A S L S R K E F S E L
UniRef90_K9T000 P I P N Y S E I K L G T L Q S I I R O S S L P R S L F E
UniRef90_D0DKQ5 V P M H S K E L K K M T E K A I L E Q A G L E K
UniRef90_N1ZV06 V P A H A L S C H S T L K N I M D Q
UniRef90_K7QYI3 V I V P A H P I K R S T L A R I I K D A H L T L E E F L D L
UniRef90_L8NYY4 P N P H Q G E I G V G L L K R I L N Q A G I T R E E W L
UniRef90_T2JFA4 I P H P R Q E L A N P L T L K N I L I Q T N T T L E D F L N
UniRef90_B8GH41 V P N H P E I A R G T L R I I M D A D L T I E K F L E L
UniRef90_F7QZP0 V P Y T S S T I A P G T Y K A I C R Q A G I
UniRef90_T1C256 P V P L H G E I G P G L M S R I L R E A G M R R E E F
UniRef90_S9S4P6 I P H P N K D L T I K T I R S I E K Q T G V S
UniRef90_I6V211 I P L H K R I K T G L L R A I I R E V G V S V K I F I K L
UniRef90_A8ET84 I P V Y K K K I K I G L L G G I L R D L G I S K N E F L D L
UniRef90_UPI0004721AB9 V P I Q K G E V G R G L M R K I M R D T D L S R E E F Q K L
UniRef90_X1VT66 V P H H K G R L A L P L I R E I L R E I E V T V D D Y N K
UniRef90_K2CNU8 V P V H S K D L G R G I T R S I L D D A H L T L E E L L K
UniRef90_D8FG67 V P H P K K D L P V G T L R N I Y R Q A G W
UniRef90_E3GEK3 V T H P K K D L P Q K T L N S I S R Q S G V K
UniRef90_A9L6Q4 V P H P K K E M P L G T L K S I K K A A G I
UniRef90_UPI000347B835 P N P H Q R D I S P A L L V Q I L R Q A E I S R E E W E E L
UniRef90_UPI00047EBF25 P N H G S N E M G K G L E L K I K K A A G I K S R E E F N D L
UniRef90_Q2FMM2 V P N H S T L A K G T Q R D L I K D S G L S V E E F N D L
UniRef90_U3HEM5 I P H P K K D L L D K T V S S I K E Q A Q I
UniRef90_UPI00035F6E26 P N P H K T S I S V D L L V R I L K Q A G I T R E E W L
UniRef90_A9BGA6 S V P D H R E V A R G T L R S L I A R A G I T V E E F L
UniRef90_H1Z0R2 I P N H N P V S K G T E R E L I K D A G L T V E E F N N L
UniRef90_A5GC91 A G H P G D D V S P G T L N S I R K Q A Q L E K G E
UniRef90_K2LI59 V P H P K K D L P L G T A R N I A R S A G W
UniRef90_R7IEI2 V P N H K G D I P A G T L S N I V K S T G I K
UniRef90_U4VR18 V P H P K K D L P I G T V K S I R K Q A R I
UniRef90_G1UXS2 V P D P K K E I P L P T L K S I E K Q S G L K
UniRef90_UPI00040DB306 P V H G N K D V K P G L E K K I L K D L G L
UniRef90_UPI00036E3637 V P A H R P V K R S T L A H I L K Q T G L E V E D F L R L
UniRef90_H1Z0G6 V P A H K P L K R S T L S H I L K Q A G L T V E E F N D L
UniRef90_F4GNK5 P V H G S R D V K I G T L A N I Q R Q T G V K
UniRef90_K7W824 P N P H E G D I S K S L L A K I L K Q A Q I N R D E W E V L
UniRef90_L8LLR1 V P N H A G D L A R P L I R E I L Q E I E I S P K D F L E
UniRef90_UPI000344C5FF V V P N H K N I A K G T L R T I L K S A N L T I D E F I N L
UniRef90_B7KH95 F A F H N D E I G P K M L A K I A K L T G L T P D D L
UniRef90_A0A024DEV4 I P V H G N D L G R G L E R K I L K D L G L
UniRef90_UPI00030C7411 V P D H K G D L K K D T L E S I L K Q A G L K
UniRef90_X0UEC2 V P L H K S L K K G T L R R I I K D S G L T V Q E F N G L
UniRef90_H2FUK6 V P H P K K S L P V G T I K S I K K A A G L
UniRef90_H5SJH6 V P F H G K T F P P K T L K D I L T Q A R W T A E D L K R L
UniRef90_K1XE04 I P V D S D D L P T G T L K G I L K D A G M T E D D L
UniRef90_Q1LPG3 V P H P K K D L P T G T V R N I L R T A G L
UniRef90_R6AEJ1 I P Y H N K D L P T G L F M K I M K V T G L K K
UniRef90_A4BR22 P V P D H N E I R T G T L Q S I I R Q S S V T R S E F
UniRef90_UPI000379C71B V P M H S P L K R G T L R K I L N Q A G L S V D E F L C L
UniRef90_C0CM97 P F H Q G K D L T R K K T E N S I K K Q A G L K
UniRef90_D5U8Q3 I P F H S K V I S R P L M R K I L N E I N L D V E E Y N N L
UniRef90_F4HBU3 V P H P K K D L Q I K T V N S I L K Q A G L K
UniRef90_Q3ILV2 V P K A D P L P V G T L Q Q I A K Q A G A D D F H D
UniRef90_A0A009TJ14 V P A P Q K D Y P K T L K C I L K A A G L
UniRef90_D5C4G9 S V P N H K E A A K G T L R S I L R L A D L S I E Q F L E
UniRef90_R5C9R8 R G K P N E D M D Q N N L S I W K Q A G W
UniRef90_K9YTW8 P I H G N Q D V K I G L L K S V M K Q A N L T E S D L I
UniRef90_UPI00034BD725 P N P H Q G E I G R E L L A R I L R Q A E I S K E E W E S L
UniRef90_R9KSP1 L T H P K K D I P A G T L K S I S K Q S G I
UniRef90_A3CSX9 P N P H R S E I G V D L L V R L L R Q A G I S R E E W S R L
UniRef90_C9M6U1 I P N H P G D L D P K T A K S A L R Q A G L
UniRef90_UPI000360F05E V P V H G K D I P N I F A K M L R Q A G I S R D E F E R L
UniRef90_T1AGJ6 M P L H G E L K P K T L K S I L D R A D I T L D E F L K L
UniRef90_A1VH66 I P H P K K D L A I G T L K A I E K Q S G I K
UniRef90_X1JZT9 I P N H P G D M P E G T L R A I I K Q A D I
UniRef90_C4LFW8 V P H P K G D I P L G T V K S I K K A A G I
UniRef90_U4T8H8 V P V H N R D L G R G I L K K I E K A T G V T F E
UniRef90_D7CNL9 V P V H G K E L S P K V I K S I L K S A R L S P E E L E K L
UniRef90_W3Y2H6 I A V H G R D V P A G L L N A I L K R T G L K
UniRef90_D5BY13 P L V G N R E I K I G T F R R L P K D A G L T E N D L K
UniRef90_W6M3B1 P V P N H S E I R I G T L Q S I I R Q S G I P K S E F E
UniRef90_A7NI18 I P D G S K D L K V G T V R H I V Q Q L G L D W E T F K Q

1 10 20 30 40
UniRef90_K7WMJ6 Q E V V R T F E K L G W R F A R Q S A S H I I L V K E G E M V I T L
UniRef90_UPI0004706648 S S R E I I K I L E E D G W Y I I G A N G S H H Y F K H S T K L K V T
UniRef90_GOVQP9 M K R S E I L K I L K K N D G W Y I I G H G G N H D L Y Y S P T G K Q K F
UniRef90_E3DX86 M K S R E I I K R L K K D G W Y L V K V V G S H H H F K H P S G K K V T
UniRef90_A7C2H1 M K V T D I L K I I Q Y D G W F L V R T R G D H R Q F H H K R G T V T I
UniRef90_K2Q215 P L T P R E V D R K L R A D G W S I K R K G G D H V Q Y A H H P D R P K V T
UniRef90_UPI000478F27A M K C S Q L L R I L K K D G W Y A V S Q K G S H I K M R H Q T K S G T I
UniRef90_S3Y5V9 M K V K E V I K M L E A D G W R L L A I N G D H R Q F K H P T G K V T V
UniRef90_A5D3R3 E L R I L K K N G W T I K N Q R G S H A Q L T H P V K S K V T
UniRef90_K2IZM5 M N F R D F L R I L E T H G F E L A R Q R G S H R T Y R N G E T K I V V
UniRef90_C9LW66 M R F K E L D K L L K K N G W Q P V R S K G S H Q H Y R K E G A K T I T
UniRef90_K7R2U1 L R P V S R R E L I Q K L R T L G F E G P F V G G R H E F M V R G R V K L V L
UniRef90_E7N2G6 M W M K S E L I K L L K K Y G C T L V R E G G N H E I W A N K D D E R F S
UniRef90_R5SA08 K V S Q I I K L L E Q D G W Q I K N W K G D H R Q F T H P S G K V T V
UniRef90_UPI0002375045 N G K Q E I I K M L E A E G W V L A R V K G S H H P F R H S D G
UniRef90_W4LIU0 P I K R Q E L I Y F L R H L G F A G P Y A G G K H Q F M V I Q S N L R L R I
UniRef90_UPI0002D7FE84 M S G K E L A K L L E R N G W T L L R I Q C S H H I Y G K S G N R I S V
UniRef90_F3XSH7 K V S E V I R L L L D D G W F L Y A Q K G S H R Q F K H S E G K V T V
UniRef90_D1PHD0 M K Y S E L Y R K L K A G G F L L R H G G R H D I W S N P D D E R F S
UniRef90_J6UHD1 R A L I R R L E Q D G W I G R P G K G D H I V F R H P T R T R V V
UniRef90_X1H677 I S G D D F V K T V R K I G Y V W D H T E G S H M L L L H R S G R L V S
UniRef90_W7BWY2 P L T S K Q M V K L L H R N G F H K V V Q H G I H L K M Y S P K Q T V I
UniRef90_M5F7J2 R C R K I V K R L K D E G F E L I S V R G S H H K F R K G T I V L I
UniRef90_E7N401 M R Y I E L D R I K R H G W H V V R T K G S H N Q Y Q D E S A K T I T
UniRef90_N8VX23 M K A C K V I K A L K S K G W Y V R R V T G S H Y F K H S G K V T V
UniRef90_R9KQM1 M R F R E A D R M L K D D G W F V S D I S G S H Y Q Y K H P T K P K V S
UniRef90_A3CUI2 R I L K K K G P V L R R V K G S H H L F Y H P E K R R A V
UniRef90_K9Z217 K K L S T I V Q K Y D W V L K R V K G S H H I F D K E G L E T T S
UniRef90_UPI00026CBFF1 M E R D S K K I V K R L V A E G F D L V S V K G S H H K F R K D E I T V T
UniRef90_B5YJ97 M S N I S G K E A V R I F Q K F G Y I L D H Q T E S H M I L Y H E S R P I L S
UniRef90_K9YMC0 M P K L P M K K A V K T L E E K M G F I K S R Q T G S H V V L K K S G G E V C
UniRef90_K9YBM4 M K S I S G K K F A K I L E K N G W Q L L R V Q G S H N I Y C K P T T R I S V
UniRef90_M6VWE8 N A K Q V I E Q L K A A G F V E V S Q T G S H V I Y K K G S G T V T V
UniRef90_G5GQK4 M R F I E L D R L L R K N G W Y V V R T K G S H Y Q Y Q R D G S K T I T
UniRef90_D8K2A0 P I K R S D L V T A L R Q A G F E G P F S G S K H Q V M T K E Q L R I I
UniRef90_C4XIC3 M N G H D V I E R L K A A G W R L D R K G S H H V M L K D G R A V P
UniRef90_UPI00034D0360 M N A E V V E R L L R K Y G F E L I S Q K G S H R K W R S A D R K V I
UniRef90_C2D2E9 M P V K A S E V L K L L K R N G F R E L R Q S G D H H R F V D D R G H K V T
UniRef90_K7WS54 M N Y R E V A K K L S K L G F E E I R G G G S H R K W F N A T E Q K A T V
UniRef90_A3PQ23 S R K I L T I L K A A G F E E V S K R G S H L K L R K E G R T V I
UniRef90_K9V216 M G A D E V E R I L Q S Y G F E L I S Q K G S H R K W R N D D R Q Q V I
UniRef90_C2CFH4 M P M T S K Q M I K L L K K N E F Y I P S G D G S H K K F K N K N G R I I L
UniRef90_K9TIV4 M K S I S G K Q L C K I V E K K G W V L Q R I T G S H Y I Y N N P E Q K I L S
UniRef90_E7NVH4 M N F K E M E K I I K K N G W F K V E V V G S H H Y Y R H K S G K V T T
UniRef90_UPI0003F4CED0 M K S I S G K E F A K I L E Q N G W Q L L R L N G S H H I Y G K P N N P R I S
UniRef90_D8F7W9 F G G V F D R H A G S H E I W Y S P S E K Y T T
UniRef90_C7QTV6 S A K E V S K I L E D N G F S K I R Q K G S H I V Y Q K E N S T I T V
UniRef90_R7FB61 M K Y S E L K K L K K G G C Y K V S E G G N H E K W Y S P T D R Y F P
UniRef90_Q0AY80 M P I S G K A L R T F T R A G W V Y T R R H G S H M I L T K P G M N T L
UniRef90_UPI000365B354 N A K Q V I E Q L K A A G F V E V S Q T G S H L K L F N S A T R R T I
UniRef90_E4QXU6 S K T A I K M I E E D G W Y L D R V K G S H H Q Y K H P T K K T V T
UniRef90_Q2RLQ7 M S P R L P R D A V A A L R E G G F T V E Y I K G S H Y H M A H R S A R Q V I
UniRef90_UPI00037A74C9 M P I N R R D I Y Y L K Q L G F E G P Y S G K R H Q F M T K D E L R L I I
UniRef90_S3XQQ8 M K V S E M L K I L V K D G W Y L L R E G S N H S L Y L H P T G R V I L
UniRef90_W2CGF0 M K T S E I S R L K K D G W Y L A R Q R G S H R Q F K H P T K R V T I
UniRef90_M2CL19 M T F K E M E K I I K K D G W Y L D S T V G S H Y H Y L H K T G K V T I
UniRef90_I4G2N9 K A S E V I R L L E K R G F V Q V R Q R G S H K Q F R H D D T G R S T
UniRef90_W6FLT8 S Y R E V I R K F R T L G F E F Y R S K G D H E I W F N A E T N Q K T
UniRef90_B1LC06 P K T M E K V L L K L G F Q R V R Q K G S H V F Y R H S N G K Y T T
UniRef90_UPI00035CB63D M K A S E I L L K K D G W F Q V A Q K G S H K Q F K H N T K K R V T
UniRef90_A3IGX6 M K Y R E I A K K L K K L G C Q E I R S G S H R K W Y N S N R I V A
UniRef90_D5WW16 E I I E I L K A H G W T K R I K G D H Y H F F H P D G G P L P
UniRef90_I4BV87 L V P I A W H D L V E M L R K F G F D G P Y T G G K H P Y M K H G D L V L T I
UniRef90_K1Y8X1 M K I H E I L K I T K D G W Y L V R Q K G S H K Q F K H P T K R V I T
UniRef90_C3DWB4 S S K K M F K R L K Q A G Y E L H S V R G S H H Y F K H P T G I K I P
UniRef90_H1YZX2 L K K H G Y V P V R Q S G S H R T Y K N E D G I R I T
UniRef90_M1QEU9 Q A I K A F Y K A G W L P H R Q V G S H V V L R K E G S K V T T
UniRef90_S3K6R6 M N F K E M E K M I K Q D G W V K R D V G S H H H Y E H P K G K V T I
UniRef90_A5V2A4 M E R D S R K I I K R L L S E G W E Q V S A R G S H H K F R R D E V S L I
UniRef90_X1DF04 Q E T I K I L K K H G F I Q I R Q K G S H A V L K K I G I G C V
UniRef90_K1WAR5 R Y R E I V K K L K T F G F V F D R Q A G S H E I W Y N P A R N Y T T
UniRef90_UPI0003745F43 M P P L R K S I C Q L L E N H G F K P V R Q K G S H R I M Q K E K G T V T
UniRef90_UPI0002624FC3 K A L E H L G F E K A R Q S G S H V I M R R S R G C V
UniRef90_V8QS71 M K S S E V I K L L K A D G W V W V G G K G D H M K F K H P M K A H V V
UniRef90_K4ZK05 S R R E I I K I L K A D G W Y H K N T E G D H Y H F K H P T K K K V S
UniRef90_W5IIT6 Y P S M N P K K L K I L Q D L G Y K E I R Q R G S H R H L S P E H P S L T
UniRef90_UPI0003B47F9A M K D K E L V K L L Q N N G W S L D R I H G S H Y I L V K G K Q T L S
UniRef90_UPI0004785F2D S S S E I I K L L K K D G W F L Y K T T G D H R Q F K H P V K K V T
UniRef90_H8Z217 M K F S E L V R L L E S N G F R L I K Q K G S V R Y Y A K C D N L I R V
UniRef90_UPI00034607F8 S Y Q K V T Q K L N K L G F Q F Y R A K G D H E I W F N P E T K A K T
UniRef90_J6J1V1 M E K D S R K L I G M L K K D G W V L D R V N G D H H T F K H P Q R P L V T
UniRef90_I0R5Z1 S S R E V I K M L K E D G W Y E L P K N G S H L Q F K H P T K R T T
UniRef90_I4GW89 E R L G F E Q V R Q T G S H V V M K K E G G E I G C
UniRef90_G2KPC1 M P L K H N D M V D I L L H D G W K C V G Q T G S H E Q F K H D A K P V T V
UniRef90_K2D1V7 M P K R Y K Q V L K A L H R L G F S E V T Q N G S H L K V R G R D G K T A I
UniRef90_UPI000348D63F T A K E I I K Q L K N A G F D E I G Q T G S H L K L F N Q E T R T I
UniRef90_UPI00046E772E M P K L P R E L V K A L Q K E G F E I T R Q K G S H V Q M T K G E K L T F P
UniRef90_A7NN14 W M L V H V R V G S H H Y Y K H P N K P R V T
UniRef90_K9RYA9 M K S V S G K R L C K I V E K R G W I L Q R V T G S H H I Y E N P Q T Q I I S
UniRef90_UPI0003468A63 M K S S E L F K K L K K D G W Y V Y R G K G S H K I L R H P E G E V N F
UniRef90_R5SFJ2 M K S S E L K R L L R K N G C F L V R Q G T S H E I W E S P T G E R F S
UniRef90_K9VN43 L P S I S G R E A M G S L E R L G F R R D R Q N G S H V V L E R K Q D S C T

	50	60	70
UniRef90_K7WMJ6	S V P D H H E V A K G T L R G L I R T A G L T V E E F I		
UniRef90_UPI0004706648	V P H P R K S F P K T T Q A N I L K S A G L		
UniRef90_GOVQP9	V W R H N K D I P S G T I K A I F K Q A G L		
UniRef90_E3DX86	V K H P A K D F P K T L K S I E M Q S G L S		
UniRef90_A7C2H1	A G K P S D D L H P K T T Q K S I L K Q A G L D		
UniRef90_K2Q2I5	L D M G V R E V P T G T L R S I F K Q A G W D W		
UniRef90_UPI000478F27A	I N H G S Q E M G K G L E K K I L K D A G I K		
UniRef90_S3Y5V9	R G H K N E D L S Q F L L N S I W K Q A G W K		
UniRef90_A5D3R3	V P H P R K D L D P K T V R S L F K Q A G I T		
UniRef90_K2IZM5	V A C T R K D E I K P G T L R G S M I R Q S G L P K S L F R		
UniRef90_C9LW66	T P N H P G D I N P F I V K S V L K E A G I		
UniRef90_K7R2U1	P N P H R K D I G V D L L K R L L K Q A G L T E E E W Q D		
UniRef90_E7N2G6	V S R T K K E V P M P V V M K I L K Q A G L K		
UniRef90_R5SA08	R G K P S D T L S Q E L L N S I F K Q A G W K		
UniRef90_UPI0002375045	P N P H H S D V I S R Q L L G A I L K Q A G W K		
UniRef90_W4LIU0	P N P H H S D V I S R Q L L G A I L K Q A G W K		
UniRef90_UPI0002D7FE84	P I H K N K D I K V G L L R N L L K T A G L		
UniRef90_F3XSH7	N G K N S D T L S Q E L L N S I F K Q A G W K		
UniRef90_D1PHD0	V P R H G G E V P Q G T L K S I Y Q E L G L		
UniRef90_J6UHD1	V D P G K K E I P G T L R A I Y R M A G W E W		
UniRef90_X1H677	V P R H K E L G R G L L R S I L R D A G L S K E E F T R L		
UniRef90_W7BWY2	V P M H N N E L G K G L E R S I L K Q A G L		
UniRef90_M5F7J2	V P H P E K D L P A G T A R A I A K Q A G W I R		
UniRef90_E7N401	V P N H P G D I P L F I V K N I L K A A G I T		
UniRef90_N8VX23	P Y H A A E E L K L A T L Q N I M K M A Q L S E S D F		
UniRef90_R9KQM1	V P N H P G D I P K S I V K S I R N Q A G L K		
UniRef90_A3CUI2	V P V H G R D H P T G T L J E I L K Q A G I T E R E E I R D L		
UniRef90_K9Z217	I P I H S K D P K I G T L K A I L K Q A N L T E D D L		
UniRef90_UPI00026CBFF1	V P H P K K D L P L G T A R S I A K M A G W		
UniRef90_B5YJ97	I P N H K E L A P G L L R A L I R K S G L T V E E F L K		
UniRef90_K9YMC0	V V P L H K E L R V G T L S G I L K Q A Q V S V N D F I		
UniRef90_K9YBM4	P I H G K K D L K V G L L R Y L M K Q A S L S E E D L K		
UniRef90_M6VWE8	P V H G K K E L K L K T L N A I L K Q A G L K		
UniRef90_G5GQK4	V P N H P G D I A A I I V K N I L K G A G I R P		
UniRef90_D8K2A0	P N P H Q S E I G K D L L R R I L K E A G I S R G E W E K L		
UniRef90_C4XIC3	V P V H Q K D L G A G L L A A I A R Q T G V T		
UniRef90_UPI00034D0360	P Y H Q G D L P I G T L R N I M T T A M I P E K E W K		
UniRef90_C2D2E9	I P F A S K K I A P G T Y Q S L L K Q A G L K		
UniRef90_K7WS54	I P D W S G D L K L G T L R A A L K Q L G I E W A D F E E		
UniRef90_A3PQ23	V P H P K K D L S L G T A R S I Y R Q A G L		
UniRef90_K9V216	V P Y H K G D L P I G T L R N I M I G A D I P E L E W K		
UniRef90_C2CFH4	V P D H G K D L P K G T E H V I L K Q T G L K		
UniRef90_K9TIV4	I P H S N D L K I G T L K A L M K V A N L T E E D L		
UniRef90_E7NVH4	L F H G G K E L P Q F V V K S L L K Q A G L K E		
UniRef90_UPI0003F4CED0	V P I H G N Q L K P G L L R Y F I L K V A N L S T D N D L		
UniRef90_D8F7W9	I P N H P G D M P E G T L K A I L K Q A S I S T E D F L		
UniRef90_C7QTV6	I V P N Y S E I R S G T L S S I I R Q S Q L P R S L F E		
UniRef90_R7FB61	V G R H S Q D V K P G T L K S I L K D A G I T		
UniRef90_Q0AY80	S I P D H K E L D T G T L R S L I R K S G L T V E E F I N L		
UniRef90_UPI000365B354	V P I H S K R I P M G T L K A I E K Q A D I		
UniRef90_E4QXU6	I P H P R K D L G H L E K S I K K Q A G L T I E E F L D L		
UniRef90_Q2RLQ7	I P V H G K T L K P K T L K S I L E K A G L T I E E F L D L		
UniRef90_UPI00037A74C9	P N P H E G D I S K S L L S K I L R Q A Q V S K D D W E A L		
UniRef90_S3XQQ8	P R H P S A E L K K G T E Q S I L K Q A G L K		
UniRef90_W2CGF0	N G K M S E T Q S Q F M I N S I S K Q A G W		
UniRef90_M2CL19	P F H G N K D L S K L V I N S L L K Q A G L K E		
UniRef90_I4G2N9	V P F H K G D I S H F T F H		
UniRef90_W6FLT8	T I P H H R E I K E G T L R N I L K Q A Q V D I D I F L E I		
UniRef90_B1LC06	I P F H A R A L P K S L I R K I I R		
UniRef90_UPI00035CB63D	V P Y H S N D L S T A V I K S I E K Q A N I K I		
UniRef90_A3IGX6	I P D G N K D L K L G T L R Q I R Q L D L D W E E F K		
UniRef90_D5WW16	V P H P K K D V P L G T Q R N I F K R A G L		
UniRef90_I4BV87	P N P H R K E I S V D L L T R I L K Q A G I T R E E W L K		
UniRef90_K1Y8X1	I S C H S D E I A H G T L G S I L K Q S Q I E I E		
UniRef90_C3DWB4	V P H P R K D L G V G L T Q E I L K Q A G L K		
UniRef90_H1YZX2	V P I H S G K I H P K I L N K I S E D T G I P L D E F R		
UniRef90_M1QEU9	V P K H K E L K P G L L R N I L K A S G L T I E E F E V L		
UniRef90_S3K6R6	P F H G N K E L S K F V V N S I L K Q A G L K E		
UniRef90_A5V2A4	V P H P K R D L P I G T A R S I A R A A G W		
UniRef90_X1DF04	V P L H K E L A I G T L K G I L K Q A K I L P E E F I K		
UniRef90_K1WAR5	I P N H S G D M P E G T L R A I		
UniRef90_UPI0003745F43	V P V L H K D L K P G T L S S I I R Q S Q L A R N Y F E Q		
UniRef90_UPI0002624FC3	V P L H N E V K T G T L A G V I L R Q A D I S P E V F I		
UniRef90_V8QS71	V P H P R K D V P A Y V V S I A R Q A G		
UniRef90_K4ZK05	V P H P K K D I R R K T R E S I F K Q A G L		
UniRef90_W5IIT6	L A L H T K E I P P G L V K K I L K D I G L T E D E I K N I		
UniRef90_UPI0003B47F9A	V P V H G R D M K K G L E T A I L K Q A G I K		
UniRef90_UPI0004785F2D	V P H P K K D L N I S V L E S I R K Q S G L K I		
UniRef90_H8Z217	D Y H G A K E I P T G T C R S I L K A A G I E		
UniRef90_UPI00034607F8	T I P H H R E I K E G T L K N I L K Q A N L D I D I F L K I		
UniRef90_J6J1V1	V T H P R R D L P V G L V R R I Y K L A G W		
UniRef90_I0R5Z1	V K H P D K D I P K T L R S I E R Q S G L K		
UniRef90_I4GW89	V I P M H R E L K V G T L S G I L K Q A Q V T V E E F I E		
UniRef90_G2KPC1	T N H G P K D I P C G T V R S L K T A G L D		
UniRef90_K2D1V7	I P M H H E V A I G T L S S L R Q A N V T K Q E L E D		
UniRef90_UPI000348D63F	V P I H S K I I P I G T L K A I E K Q S G I K		
UniRef90_UPI00046E772E	V P V H A G K I K Q V G T L K G I L R K A N L S V E R L D G L		
UniRef90_A7NN14	I P H P K K D L P V G T L K S I Y R Q A G W S W S E		
UniRef90_K9RYA9	I P V H R N D L K I G T L R S L M K I A N L T E D D L		
UniRef90_UPI0003468A63	A F H G S Q E V A T G T C N K I L K D A G L K		
UniRef90_R5SFJ2	I P R H G Q E I A R T G T L E A I K K Q A G I		
UniRef90_K9VN43	V P L H D E L D S G T L A G I L R Q A N V T P E D F L D		

UniRef90_R6TGK1
UniRef90_I4G2F4
UniRef90_K2A3G7
UniRef90_B7R331
UniRef90_L8LXH4
UniRef90_C2D044
UniRef90_F5RKG7
UniRef90_F4EZM3
UniRef90_R3ZP23
UniRef90_G7WD66
UniRef90_UPI0003484A36
UniRef90_Q2FUN1
UniRef90_X0SM66
UniRef90_E5C7U4
UniRef90_UPI00035F4808
UniRef90_I5B4U0
UniRef90_H1YZV6
UniRef90_F0H2A3
UniRef90_I3CPJ9
UniRef90_M0BGM0
UniRef90_D1JIY0
UniRef90_B3XQ21
UniRef90_U2QT45
UniRef90_UPI00047AA848
UniRef90_R9K819
UniRef90_I9X0C8
UniRef90_UPI00047A3D5A
UniRef90_U1X6T9
UniRef90_G0JRL0
UniRef90_J5XPH9
UniRef90_C0QYE4
UniRef90_N6ZS36
UniRef90_D8K3F9
UniRef90_R5M7F7
UniRef90_F0YTZ2
UniRef90_B0S3F5
UniRef90_C7NBY6
UniRef90_X0ZWH0
UniRef90_UPI0001C37C56
UniRef90_J1AR17
UniRef90_X1JW72
UniRef90_UPI000379A9E1
UniRef90_A7C3W0
UniRef90_UPI00046A02A9
UniRef90_K2AXH3
UniRef90_I7HXT5
UniRef90_K9VQ70
UniRef90_W6MEC8
UniRef90_UPI0003B624ED
UniRef90_K8REG8
UniRef90_UPI000472DBCf
UniRef90_B1SE20
UniRef90_X0YLV1
UniRef90_C9KLU5
UniRef90_UPI00037B1FCD
UniRef90_UPI000475560B
UniRef90_D5VT98
UniRef90_F0LHL7
UniRef90_T3DM23
UniRef90_E8V3P6
UniRef90_N1ZV03
UniRef90_G9YED9
UniRef90_X1FSQ0
UniRef90_F3YVD2
UniRef90_I3ZB86
UniRef90_J3C8C1
UniRef90_UPI00034C4C44
UniRef90_A0A011NEU9
UniRef90_G1WJ17
UniRef90_E0NZB2
UniRef90_C3KDH3
UniRef90_X1LLE6
UniRef90_J3FA25
UniRef90_K2C4K4
UniRef90_X0YGR4
UniRef90_UPI000313AFDE
UniRef90_G4L9M6
UniRef90_K2RDG7
UniRef90_D5MKM3
UniRef90_UPI0004703A4C
UniRef90_D8G7A9
UniRef90_R5GCX1
UniRef90_H5SV19
UniRef90_UPI0004062CB9
UniRef90_U5DKB2
UniRef90_UPI00036B9751
UniRef90_U2JA97
UniRef90_UPI0003780E88
UniRef90_UPI00036B6A62
UniRef90_K1WHD1
UniRef90_R9MEF1
UniRef90_R5NQ13

1 10 20 30 40
M P L K P T E M E R L I L A D G W L F K N Q T R S H R H Y I H P S G K V T I
UniRef90_R6TGK1 L I S A L H K A G F Q G P Y T G K R H Q F M E K N G L R V R L
UniRef90_I4G2F4 K A V S A F S K L G F Y Q V V R Q K G S H I R M R H F C D G K S I T
UniRef90_K2A3G7 M P L S P R E V V K V L F K K F G V S R Q K G S H V V L K Y V D G R K T V
UniRef90_B7R331 M S K L P R E V V K V L F K K F G V S R Q K G S H V V L K Y V D G R K T V
UniRef90_L8LXH4 M N A K Q V E K I L R K Y E F E L I S Q K G S H K K W R N K R N L Q V T
UniRef90_C2D044 M E K K L L K A G F T P D R G K G S H R R Y R H P D T G R T E
UniRef90_F5RKG7 M T T A E L L R L L K N G C T L V R N G G N H D I Y F S P T G R N Q F P
UniRef90_F4EZM3 M K T S E L L R I L K N H A C T M V E H G G R H D K Y Y S P T G R V F V
UniRef90_R3ZP23 M P L T G K K M L K L A K K N G W K V V R D T G S H H I V A K E G F P V P V
UniRef90_G7WD66 M K R R D L I K K L E S N G F S K V R D H G D H T I Y K A P N T R A V Q
UniRef90_UPI0003484A36 W S S T K A K R V L A A L L R I G W E I K R Q S G S H K I L I R P G W D D F V
UniRef90_Q2FUN1 E V V K V L G K I G Y V V N D Q K G S H I H L R H L S R R P V T
UniRef90_X0SM66 M P L S G A Q V C R I L A R Q G F V E V R R R G S H V V M Q K P D T T I T V
UniRef90_E5C7U4 K S V K D V V T M L E N G F V L K G Q K G S H M K F E K N G R V V I
UniRef90_UPI00035F4808 M D S R E L I K M L K K D G W V L M T V H G D H Y H F K H P L K P K V T
UniRef90_I5B4U0 K E A C S L L S A N G F A E I R R R G S H V I M Q K K E G S T I T
UniRef90_H1YZV6 I S G E K V V K A L K K A G L E P V D V R G S H H Y F H N Q K N G A I
UniRef90_F0H2A3 N S R E L M K L A K K Q G F R L D R V R G S H H I F V N E T G V E V P
UniRef90_I3CPJ9 M D S A T L I K L L K A D S W A L V H T V G S H H Q F K H P S K P V T
UniRef90_M0BGM0 R D L V R A L L G N W G F R R V D Q T G S H V K L K Y G E T R Y V T
UniRef90_D1JIY0 K A V K A F S K A G W V A S R Q T K N H A L M E K I G V G S S T L
UniRef90_B3XQ21 M K V V A K R I L A L Q N A G Y N E V S K N S H H K Y R N K D G K I V I
UniRef90_U2QT45 M S K A K S Y R E V V K I M K R N G W E L D H T T G S H Q I Y V K N G K I C P
UniRef90_UPI00047AA848 R S V V R A P Q S A G F S V H R K K G S H H I M R H P G P R R V A
UniRef90_R9K819 M R F R E I K I L A D A G W F K K A K G S H Y S Y I H P L K P K V S
UniRef90_I9X0C8 S R D L I R M L V A D G W I W H S T T G S H R H F K H P M K P K I T
UniRef90_UPI00047A3D5A L L K A E G W N L V H T V G S H R Q Y K H P Q K P R V T
UniRef90_U1X6T9 Q Q D G W E L I R V A G S H H Q Y R H P S K K I L T
UniRef90_G0JRL0 W P S L K A R L V L A A L L R I G W R V K R Q T G S H R T L T R P N W P D V V
UniRef90_J5XPH9 M R F K E L E R I I K K D S W Y F D S N G S H M H Y K H P E K K I T
UniRef90_C0QYE4 L G F K E L R Q K G S H K F F I N D K G L T T V
UniRef90_N6ZS36 M N S A E L I K L L E R D G W T L A N V R G S H H V F R H P N K P G H I
UniRef90_D8K3F9 M P H L P D E F C A I A K I G Y A L D H T E G S H M L M L N S T G K R L S
UniRef90_R5M7F7 M K T S E L K R V L S A N G C Y F V S H G G R H D Q W F S P T G K T F V
UniRef90_F0YTZ2 M R D K E L L R L M K K N G W K V V R Q G S H H I M Q K D G K T E V
UniRef90_B0S3F5 M P M T Q K E M V K L L K Q H G F V E V K G K G S H I K M K P G V R S
UniRef90_C7NBY6 M S Y R K I E K R F R K L G G K V V R I K G S H Y Q W M I P G V E G V V
UniRef90_X0ZWH0 M P K K R N D L I K Y F R E L G F S G P Y S G G R H Q F M Q K G N I T I R I
UniRef90_UPI0001C37C56 M K Y S E L K L L R K N G Q L E R E G A G H E I W Y S P T G K R F T
UniRef90_J1AR17 P V S W N G L V R G L R N F G F E G P Y S G G K H P F M I R D D L V L T V
UniRef90_X1JW72 I K R K D L I R Y F K K L G F S G P Y S G G K H Q F M A K G N I T I R L
UniRef90_UPI000379A9E1 M R Y E E V E R V L R A Y G F E E V R S S G S H H L F R H P D D G R M L S
UniRef90_A7C3W0 M N G K Q V I K I L N Q N G W Q E L R I R G S H H Q L G K N N L R T T V
UniRef90_UPI00046A02A9 M E H T A K E I L K L L G E H G F Y E I R I I G D H H R L T D G N G R F A T
UniRef90_K2AXH3 S P E I V I K F L Y V N W W I D H T T W S H K I M Y N E N K K R T V
UniRef90_I7HXT5 M T G K E V I K T L E D H G W K V L R S K G S H Y R M G K N N L R T T V
UniRef90_K9VQ70 L K P V K R R D L I Y Y L K Q L G F D G H Y S G K R H Q F M L K D N L R I T I
UniRef90_W6MEC8 M N G N E V I A K L K A A G W T L A R I N G S H H V M V K G S Q S V S V
UniRef90_UPI0003B624ED M N S R E I K M L Q D D G W Y H V S T E G D H W H F K H P T K V T
UniRef90_K8REG8 M I R M L L D D G W H L D R I V G S H H H F K R R G N S L V T
UniRef90_UPI000472DBCf S S R E I V I K I K S D G W Y L V S H N G S H Q Q Y K H P V D K K R V T
UniRef90_B1SE20 M K T R K V V K T M K N D G W F K V R T E G S H E I Y R H N D G R I C P
UniRef90_X0YLV1 M P M S G K E A V S I L K K F G F R E I R Q R G S H I I L K R T T S E G C V
UniRef90_C9KLU5 M T T A E L I R L L K K H G Y M V R N G A N H D I Y Q S P T G K L F S
UniRef90_UPI00037B1FCD M A Y T Y D Q F R R V L R K A G F Q L L R S G K H E I W R R P D G T K R R
UniRef90_UPI000475560B T G D R L I R A L G K V G F V P K R G K G G H V V L L H P D G R Q A V
UniRef90_D5VT98 K E L I K F L K S L G F Y E V V R Q K G S H V R L R K E T T H N I T
UniRef90_F0LHL7 M S R L P K E V I K V L R K F G Y S R Q K G S H V V L K Y I D G R K T V
UniRef90_T3DM23 M R V R E L L K I A F E N G W E I K S Q N G S H I K L I H E T N R T A I
UniRef90_E8V3P6 I S G R E A A A F I R A G W F S R G Q V G S H L V L T K E G Q R N L S
UniRef90_N1ZV03 M K T S E L I K L K N G C Y L L R H G K R H D I W Y S P N K K F S
UniRef90_G9YED9 M N S R M L I A E I M A D G G I L K R V K G S H H H F T H P N K T L V T
UniRef90_X1FSQ0 V R Q K G S H V F Y R H P D G R T T V
UniRef90_F3YVD2 L V P L S R R E L V R K L R R L G F E G P Y S G G R H A F M L G R E K R A V I
UniRef90_I3ZB86 Q Q A I R A L Q R A G F E I T R Q S G H V V M S D G R R T I
UniRef90_J3C8C1 E L L K I L T K D G W Y L H R S G A N H D L Y R H A N G Q L I T I
UniRef90_UPI00034C4C44 S Y K K I L A A L Q R D G W I V V R Q R G S H I R L E K K E T L K I T I
UniRef90_A0A011NEU9 M H S R D L I K E L K A S G C E F V R G K G D H Q I W Y S P N K K A F I
UniRef90_G1WJ17 K Q V L K R L R K E G W E L E S G K G S H V V A R K C G R M V T
UniRef90_E0NZB2 M R F I E L E R L I K K N G W Y L K N S N G S H M Q Y I H D D E P K I T
UniRef90_C3KDH3 M D S R Y L I G H I V A D G W Y L A R I R G S H H H F K H P T K P L V T
UniRef90_X1LLE6 T G R Q A G K A F L Q A G W Y L H H S R G S H F Y Y K H P D G K Q I T
UniRef90_J3FA25 M P L T G K E L A R L A V K N G W E E V R V R G S H H H F K N G S C I V T
UniRef90_K2C4K4 M R F S E L V K L L E K N G F R L F K E K G S I R Y Y T K P G C K V R V
UniRef90_X0YGR4 M K F S E L V K L L E G N G F N L V R Q K G S I R Y Y A K S D K L I R V
UniRef90_UPI000313AFDE M I Y R E V A K R L R L H C V E I S G G S H R K W L N P T N O S T V
UniRef90_G4L9M6 Y M P M T Q K Q M V K Y L A K N G W T I V P G K G L H V K M C K S N S R P I I
UniRef90_K2RDG7 R Q T V K A L V K L G F T V R T G K G D H V V L Q K D H R V F S
UniRef90_D5MKM3 K F S E L V R L L E A H G F E L V R E K G S I R Y Y G K A G W P A I I
UniRef90_UPI0004703A4C M K F S E L V R I L E Q N G F E L V K E K G S I R Y Y G K S G W R L I R
UniRef90_D8G7A9 M K S M S G K Q L A K L L E D A G W L L R V Q G S H H I Y G K S G R L S V
UniRef90_R5GCX1 M R K R D V L K L L E K N G W Q I V R G K G S H T K L K K D G K M V I
UniRef90_H5SV19 R Q I V R A L L R D G F Y L K R Q K D A T R L F V H P D G R R V V
UniRef90_UPI0004062CB9 M K S K E F I R E A L R N G W V E V R Q K G S H E I Y Q K E G K V V I
UniRef90_U5DKB2 K K L C K I L E K R G W V L K K V T G S H H I Y E K S E S K I V S
UniRef90_UPI00036B9751 K Y G F Q Q I R Q K G S H I I M Q K E N G T I T V
UniRef90_U2JA97 M P M T Q K E M V K L L K K H G F E I K G G K G S H I K M T K P G Q L R P
UniRef90_UPI0003780E88 I I K Q L K A E A F V L R Q E G S H V R M G K A G A R T V
UniRef90_UPI00036B6A62 M S K S I S W K N L V K N F R Q L G F D G P Y S G G R H L F M F K G G F K V H I
UniRef90_K1WHD1 E V I R G L H R L K F V S Y R Q T G S H V H L K K T L F C T
UniRef90_R9MEF1 M V F K K I D K L R K N N W V A R V K G S H Y Q Y K H A D N Y C I T
UniRef90_R5NQ13 M K Y S E L V A A L K A A G C Y I K R N G A N H D I W Y S P T K Q V F P

UniRef90_R6TGK1
UniRef90_I4G2F4
UniRef90_K2A3G7
UniRef90_B7R331
UniRef90_L8LXH4
UniRef90_C2D044
UniRef90_F5RKG7
UniRef90_F4EZM3
UniRef90_R3ZP23
UniRef90_G7WD66
UniRef90_UPI0003484A36
UniRef90_Q2FUN1
UniRef90_X0SM66
UniRef90_E5C7U4
UniRef90_UPI00035F4808
UniRef90_I5B4U0
UniRef90_H1YZV6
UniRef90_F0H2A3
UniRef90_I3CPJ9
UniRef90_M0BGM0
UniRef90_D1JIY0
UniRef90_B3XQ21
UniRef90_U2QT45
UniRef90_UPI00047AA848
UniRef90_R9K819
UniRef90_I9X0C8
UniRef90_UPI00047A3D5A
UniRef90_U1X6T9
UniRef90_G0JRL0
UniRef90_J5XPH9
UniRef90_C0QYE4
UniRef90_N6ZS36
UniRef90_D8K3F9
UniRef90_R5M7F7
UniRef90_F0YTZ2
UniRef90_B0S3F5
UniRef90_C7NBY6
UniRef90_X0ZWH0
UniRef90_UPI0001C37C56
UniRef90_J1AR17
UniRef90_X1JW72
UniRef90_UPI000379A9E1
UniRef90_A7C3W0
UniRef90_UPI00046A02A9
UniRef90_K2AXH3
UniRef90_I7HXT5
UniRef90_K9VQ70
UniRef90_W6MEC8
UniRef90_UPI0003B624ED
UniRef90_K8REG8
UniRef90_UPI000472DBCf
UniRef90_B1SE20
UniRef90_X0YLV1
UniRef90_C9KLU5
UniRef90_UPI00037B1FCD
UniRef90_UPI000475560B
UniRef90_D5VT98
UniRef90_F0LHL7
UniRef90_T3DM23
UniRef90_E8V3P6
UniRef90_N1ZV03
UniRef90_G9YED9
UniRef90_X1FSQ0
UniRef90_F3YVD2
UniRef90_I3ZB86
UniRef90_J3C8C1
UniRef90_UPI00034C4C44
UniRef90_A0A011NEU9
UniRef90_G1WJ17
UniRef90_E0NZB2
UniRef90_C3KDH3
UniRef90_X1LLE6
UniRef90_J3FA25
UniRef90_K2C4K4
UniRef90_X0YGR4
UniRef90_UPI000313AFDE
UniRef90_G4L9M6
UniRef90_K2RDG7
UniRef90_D5MKM3
UniRef90_UPI0004703A4C
UniRef90_D8G7A9
UniRef90_R5GCX1
UniRef90_H5SV19
UniRef90_UPI0004062CB9
UniRef90_U5DKB2
UniRef90_UPI00036B9751
UniRef90_U2JA97
UniRef90_UPI0003780E88
UniRef90_UPI00036B6A62
UniRef90_K1WHD1
UniRef90_R9MEF1
UniRef90_R5NMQ13

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

70

UniRef90_UPI00037798F6 1 10 20 30 40
UniRef90_L8N4T9 Y D R I I N A L Q R D G W I V V R R R G S H M I L R R G S A G R V V T
UniRef90_I3IMZ3 M N S K E I I K R L L E S E G W V R V H T K G G S H H K F K H P C Q K K K L V T
UniRef90_Q1PUG0 M Y M P K K P K E L I R R L L K R G G C M F H R G K G D H R I Y R Y C Q K G K K R V T
UniRef90_UPI0003498F87 K A K Q V L K A L Q N K G W K I K R Q T G S H K L E K S G W S N V V V
UniRef90_UPI00046A9B60 K V S K L L R D L K R D G G V L D R T K G S H R E F K H P D T K K T V T
UniRef90_H5SS91 P V S R E D F L R R L R E L D G F V G P F P G R K H Q I M R R R P D K T I R V
UniRef90_UPI00037A4321 T Y R E F R Q V L R K A G F Q L V R S R K H E M W R R P D G T E R N
UniRef90_E7N0X4 M K H S E L V K L L K K N G G Y K D R N G T N H D M W Y S P T H R S F A
UniRef90_D3RTN5 M K F S E L V R L L E K N G F H L V K N Q K R S I R Y Y T R V D N V V R V
UniRef90_R9KUJ1 M P K E V R E V L K R L R K E G W I E A S G K G S H K V F R K D G I M I V
UniRef90_L9ZGN9 S S D E V I K A L A K H G F V P V I G G K G S H L R Y E N P D N R T V T
UniRef90_K9RU61 M K Y R D V A R K L S K L E C H E I R Q R G S H R K W F N P E N K T T V
UniRef90_UPI00036834B8 I S G K D C V K I L N K F G F K I I R Q R G S H I V L R R D K T G T V
UniRef90_MOPST2 R D V V K A L S K N R F V I V D R T G S H V K L R H P Q T N R V V S
UniRef90_UPI00035E723D M P T Y R E F R E V L R K S G F V L I R S R K H E V W W K P D N Y V L V
UniRef90_X1D588 I S G K R L I K A L L K E G Y L V Y K G K G S H V S M K H P N N N R T I
UniRef90_T4RYB2 N Y K E L N R K L L E K L G F K Y V R Q T G D H R L F K N N N G N S L S
UniRef90_E0NHX9 P K K P Q Q L E S E I L V A G F I L Q K G K G H R R Y R H P D G R T E
UniRef90_C0BCZ0 M R F R E L E R L I V A D G W I R C D V K G S H Y Q Y R H P L K K K V T
UniRef90_F5YRB7 M S G K E F V K K L M K D G W L D R V N G S H H I M R K N S I N L S V
UniRef90_R5LF47 M K A E E I I K I I E K D G W Y R V R S K S E H L Q F K H P K G K V V
UniRef90_Q0YP24 L L E K R G W L L V R I N G S H H V Y M K P G N R I S V
UniRef90_Q0RU54 M P P L P G E V V K V L E K L D F E V V R K G S H H M M R N A E G R F T V
UniRef90_X0YJQ9 Y R E I I K R L K R L G F K F D R Q A G S H E I W F N P E T R R T
UniRef90_U5NBV4 M N G K Q V I A K L K A E G W R Q D R H G S H H V M I K G S V A V P V
UniRef90_A7BZQ6 W T S T K A K R V L A A L L K I G W S I K R Q K G S H R T L S R P G W P D F V
UniRef90_K4I9I7 M K C S Q V L R V L T K H G W Y A V I S Q K G S H L K M R Y K E G I I F
UniRef90_K9CIH2 M K I S E L I K I L K K H G C R K E R S G G N H D I W Y S P T K K L F Q
UniRef90_UPI00037ED168 M T F D A F I R I L E L N G F A L H R Q K G S H A I Y R G E E V R L V T
UniRef90_F6DJ69 R G K G S H E V W R N P Q G M E V T
UniRef90_J4TEA9 M P M T Q K E M V K L L T A H G W I K K G G K G S H V K M E K E G E R P I T
UniRef90_D0SQN3 R A E G W Y K V G D K G D H E K Y K H P E K S H V V
UniRef90_A3CUX7 Y D R I V I A L Q R D G W V V R T R G S H I R L H K H L P A K T T
UniRef90_K2ALP9 I K P R Q I Q K V L L K S G F V P R P G K G S H C I M K K Q G S I L F R I
UniRef90_Q2FLV4 E M V K I L T R F G W T P V R Q T G S H I V M Q K Q S T L T A I
UniRef90_UPI00035D1F2E M P K L P N Q L I Q V L N K V G F Q F V R Q K G S H M R L R H E D G R V V T
UniRef90_T2J6K1 I S G K E A V K A F E K A G W K F V R V G S N C H I L L K K E G V I T T
UniRef90_Q1PUM1 K E I C K I L E D N G F I Q I R Q K G S H I V R Y E H P D G R R V T
UniRef90_M0J6A6 M P I S R R K L I R K L K A L G Y T G P F S G S K H Q F M K K G Q H K I R I
UniRef90_B0JPR8 M R T A E L L K L K R H G V F L L R E G G R H S L Y Y S P T G K K I P
UniRef90_D2RKP7 K V K E I L K M L K E D G W Y L S K H N G S H R Q F K H P T G V I T
UniRef90_UPI00036D83E1 M T V K E V E A I I L K D G W V R V P S N S S H R Q Y K H P T G R V T I
UniRef90_UPI000418857B M P M T G K D L R L A R K N G W R I V R Q K G S H V R L K R H F E T R E K V
UniRef90_R2S7Y0 R E I A K V L Q D H G F R P T D R T G S H L K L R H P E T R T V T
UniRef90_I7CPW4 R D L A K A L H R L G Y E V T R Q A G S H I R L T K V G D P T V T
UniRef90_X0RZ04 T Y R E F R Q V L R K A G F Q L V R S K K H E R Q R V D P D G T V R N
UniRef90_UPI0003600F29 P I N R R D L I F Y L R N A G F D G P Y S G G K H Q Y L V K E G F K L T I
UniRef90_K9X711 M S I T A K Q M V K F L K K N G F K E S R Q A C S H L I M I K L E M P H I P
UniRef90_F8I0B1 M P P K V R E L I S Q L E K A G F A N R G G K G S H R N F V H P N K P I T V
UniRef90_V4J8A2 M K V R E L N R R I E A L G G V V T R Q R G S H R R Y E E G V R A F T V
UniRef90_F9PLH3 I W P A A K A K R V Y A A L R Q G W T L K K Q V G S H R K L A R P G W A N F T
UniRef90_Q01QU4 P V S G D E V I R V L N K F G F T I S G R S G S H V R L S K A D G T G T
UniRef90_A7I4L4 D R Q T G S H K I W Y N P E T Q Y T T
UniRef90_A3ISG6 N G K Q V C K K L E N E G W V C K R I R G S H H I Y G K E G R K P V P
UniRef90_A7C4Q6 M P K L P R D L V A A F K R A D G W I V N H I E G S H Y L T K E G S P V H S
UniRef90_Q2FL52 S S R E V I H L L K A D G W F E V N V V G S H H Q F K H P T K K R V T
UniRef90_R5CAX0 M K Y S E L H K K L R E A G C Y V I R Q G G G H P I W Y S P E D S F P T
UniRef90_U2AW62 L V P I S W R V L K A L T K I G Y K V I H Q E G S H I V M Q L A D K S M I V
UniRef90_C7DH98 P I S D R L E K V F L A A G F T F A R Q E G S H R C Y I K P G I S R P L
UniRef90_UPI0003473AAE M P I P Y K V L V K I L L E N G W E L D H T T G S H E T Y L K D G K T C P
UniRef90_D5RAH4 M T E R L K K I A K K G G F S K T N G K G S H E V W K H P D G R T V T
UniRef90_Q8DXL4 S S D D V I K A L K K Q G F E Y K R G K G S H T A L Y K K G R K L L V
UniRef90_D1JDW9 M T A N E I I K L L K K A G Y E I T A G A K H D K A I H K G T G K M I A
UniRef90_C8PSJ1 M S K N I P Y R E V A K T L K K N G V L D H T T G S H E I Y Y K D G R M C P
UniRef90_C2KWE7 M L Q E N G F V L K S Q K G S H M K F E K D D K I V I V
UniRef90_R6V1R3 M T Y A E L I R F L K K N G C I L S S H N S N H D M Y S P T G K R F P
UniRef90_UPI000366BEB6 R E V V K V L R N H G F S P K S R T G S H V R L R H P E T R N V D
UniRef90_C7NWF7 M P K F P K R V V K A F E L L G F K I V R E R E H I V M K N E D G T E T V
UniRef90_K9XI1 M N S K Q M I K L L K Q D G W Y L D S I N G S H H H F E H H Q K K K V T
UniRef90_UPI000345FA43 M L P K L P K D L I K F L K K L G Y E V V R Q R G S H V R L R K E T E H N I T
UniRef90_F6BDP4 R E V V K A L T R H D F E P A G R T G S H V Q L R H P E T R T V T
UniRef90_D4GZL2 M P M T Q R E M V K L L K S H G F K K V G G K G S H V K M T K P G Q A R P I
UniRef90_R2NPY8 L S P V S W K E L V K R L G E L G F A G P T S R G R H P V M K K D N L S L I I
UniRef90_D8K2A3 W S S T K A R K V L A A L E K I G W C V K R Q T G S H K I L A R E G W D Y V
UniRef90_A0ZCU1 K V I K T L S A F G Y E P I R T G S H I H L L H P E K R L V T
UniRef90_H1YZU9 R D V V K A L T K N R F V I V G R T G S H V R Y E E H P D V C V V S
UniRef90_M0PLB6 M K S S E F H K I L R K S G W N H I R T S G S H Y I Y E K D E G R T Y P
UniRef90_T0NU36 S S D D L I K K L S E L G Y E V S R Q T G S H I R L T T S E N H Q I T
UniRef90_L8NKP4 S S R E V I K I L E S H G W Y L K R V V G D H H Q Y T D G H K L A T
UniRef90_A5N2E1 R E V V K V L T S F G Y T P V S R R G S H V R L R Y E N E R L V D
UniRef90_M0BAX4 R D L V K L L S R Y G Y E V V R Q N G S H I R L T L K D K K H I T
UniRef90_H1Y9H3 P K D L I K L K K Y W Y I E H S W V G S H C T M K N K T W K R T T
UniRef90_K2AYA0 R D L I G R L R A D G W V A R K G G D H V Q Y K H P T K P R V T
UniRef90_UPI0003496674 R D V V K V L R K H D Y E F V T R T G S H I Q M R D G E V R N V T
UniRef90_F7PFM6 M K H S E F R R W L R A Q G V T F E A A K G S H F K I T A P N G K T T I
UniRef90_U3HLY6 N F K Q I E K K L A D G W Y L V S V C G S H Y K Y K H P S K P A V V
UniRef90_H1LSY9 K E V C I I L S T H G F C E V H R R G S H I V M Q K R D S T I T V
UniRef90_Q2FTD4 M K C T E V I K T I K R R G W F L S R V K G S H Y H F K H P I G L V T V
UniRef90_H9BQV8 M D A R G V N R R I E Q L G G V S V R Q V G S H R R Y R Q S A T A H T T
UniRef90_UPI00038266C8 S S R E V M K I L E D G W V E L N C V G D H H Q F K H P T K K K V T
UniRef90_E0NXK8

UniRef90_UPI00037798F6 P N H R E L K T G T L A G V L K Q A G I S P E E F L D 70
UniRef90_L8N4T9 V P A H R P V K R S T L S H I L K Q A R L D L D R F L E L
UniRef90_I3IMZ3 V L H P K G K D Y P L G T L R S I F R Q A G W K W
UniRef90_Q1PUG0 V P M G A G E S P P Y V L R I F R Q F G F T D D E L E R L
UniRef90_UPI0003498F87 F A F H E G E I G S K M L A R I A K L T G L T P D D L
UniRef90_UPI00046A9B60 N G K E S G D I S A G F L L K S I E K Q S G L K
UniRef90_H5SS91 P N P H Q S E I S V D L L R R L L R D C G I S R S E W L
UniRef90_UPI00037A4321 V P I H G K D I P S W L L G K M L R E A G L S R D E F E R L
UniRef90_E7N0X4 V P R H S Q E V K T G T L A N A I L K Q A G L K
UniRef90_D3RTN5 D F Y D A K E V P T G T C R S L L K T A G L D
UniRef90_R9KUJ1 V P T S K R E L P L G T Y R N I A K T A G W
UniRef90_L9ZGN9 V P K A D D P V P T G T L T D L A S Q A G A E D F
UniRef90_K9RU61 I P D G S R D I K L G T L K A A I K Q L G I D W T F E Q
UniRef90_UPI00036834B8 V P N H K E L K T G T L K G I L E L A K L K E E F V K
UniRef90_MOPST2 V P Q H A R I R T G T L R N I A D Q S G A E D F E K
UniRef90_UPI00035E723D S H Q H G K D I P P N I F A K M L R Q A G L S R D E F E R L
UniRef90_X1D588 V P N T S K D I T K G L L A T T R R Q L N L S K E E F K I
UniRef90_T4RYB2 V P Q H S T L G K G L S R K I Q K D A
UniRef90_E0NHX9 I P F H S K E I K K G T E Q A I
UniRef90_C0BCZ0 I P R H G G D I P L R V A I S V L R Q A G L K
UniRef90_F5YRB7 P V H G N G D L K P G I L N T L M K K A G
UniRef90_R5LF47 S F H G N H D L R R K K V V K S L L K Q A Q I
UniRef90_Q0YP24 P V H G N D D L K I G L L R H F M K V A G I T E E D L
UniRef90_Q0RU54 V P V H P G D L R S G
UniRef90_X0YJQ9 V P N H P G D M P E G T
UniRef90_U5NBV4 P V H G T K D L G P G L L A N I A R Q T G V K
UniRef90_A7BZQ6 F A F H D R E L G S R M L S R I A K R T G L S P D D L
UniRef90_K4I9I7 P N L G S Q E M G K G L E K K I L K D A G I K K
UniRef90_K9CIH2 I P R H A G E A G I G L A N S I L K Q A G L K
UniRef90_UPI00037ED168 I A A H S D D I K P G T L A S M I R Q S G L P K K H F R
UniRef90_F6DJ69 I A V H D K D I P I G T L K G I L R Q A G I P E E E
UniRef90_J4TEA9 V P H G E L N K Y T E R G I R K Q A G L
UniRef90_D0SQN3 V P H P R K D M P L G T L S R N I Y K Q A G W E W
UniRef90_A3CUX7 V P M H K P L K R S T L S H I L K Q A D M T V E D L N N L
UniRef90_K2ALP9 V P V H N R P V R I G T L S Y S I L G Q A G T K V G D F L K L
UniRef90_Q2FLV4 V L P Q H R E L R P G L I H Q I M K E A D L S L E Q I T K
UniRef90_UPI00035D1F2E V P N H S S V K F G T L M S I I R Q S Q L P R S L F E
UniRef90_T2J6K1 V P V H
UniRef90_Q1PUM1 I P A H N T L D R G L L R S L I R D A Y L S I E E F K K L
UniRef90_M0J6A6 V P M H K E L A P G T L R K I A E Q A G
UniRef90_B0JPR8 P N P H G N E I S T D L V K E I L K Q A G I S D E E W D N
UniRef90_D2RKP7 V S R H A R E I P A G T A L R I L K D A G L D S E
UniRef90_UPI00036D83E1 N G K P S D T L S Q E L L N S I F K Q A G W
UniRef90_UPI000418857B A W H K A K D V P P K T L K R I M A Q A G L
UniRef90_R2S7Y0 P I H A N K D L P K G T E Q A L K
UniRef90_I7CPW4 V P M H S E D I P T G T M R S I A N Q C G A E D F R
UniRef90_X0RZ04 V P D H D P I K L G T L N N L L K D I S V T R D E L L R
UniRef90_UPI0003600F29 V H Q H G R N I P K G L L S E M L R Q A G L S R D E F E R L
UniRef90_K9X711 P N P H Q G D I S P S L L N R I L R Q A F R K L
UniRef90_F8I0B1 V P I H L W N L K P G T E R S I L K
UniRef90_V4J8A2 P G K P G D D A K Q Y I V R A V L R A I E E S K N E
UniRef90_F9PLH3 V P Q H A G E V P V I G T L A A I D R D L G W T R
UniRef90_Q01QU4 F C F H S E E I G P A A L A K I S K D T G L R P E D L
UniRef90_A7I4L4 V V P L H D E V K P G T L R G V L K L A K I D I E D F Y R
UniRef90_A3ISG6 I P N H S D D I L E R T L T A I L K Q A A I S P D D F
UniRef90_A7C4Q6 I P V H K K D L G I G L L L K I E K E T G V K
UniRef90_Q2FL52 I P V H S K E L G P G L L R K L I R T A G V T N E E Y L E
UniRef90_R5CXK0 V K H P D K D I P V K
UniRef90_U2AW62 S R H E S Q E V K V G T L N R I L K K A G L K
UniRef90_C7DH98 I P A H R P I G K G M V R T L M R E A D I S L D E F N K L
UniRef90_UPI0003473AAE V I P T Y D E I P V S I K N N L K T A E I S R D N Y F Q L
UniRef90_D5RAH4 V K C T K K D L N G T L A S T K R I T G L K
UniRef90_Q8DXL4 I P K P K K D Y R P G T L N N I L K
UniRef90_D1JDW9 I V P K R R E I P K G T L L S V L Q Q A N L S K D D F I G L
UniRef90_C8PSJ1 I P R H K G D I P T G T A Y N I L K E A G L K
UniRef90_C2KWE7 V K C D K K V M K N G T L S S I E R I T G L K
UniRef90_R6V1R3 P N H N S K G V E K G T Y Y S I L R Q A G L K K
UniRef90_UPI000366BEB6 V G R H K Q E V R P G T L N C I L L Q A G L K
UniRef90_C7NWF7 V P Q H D E I H I G T I R S I A D Q C G A N D F E
UniRef90_K9XII1 M P N H S T I K S G T L R A I C T Q T G I S R E E F L E
UniRef90_UPI000345FA43 V P H P R A E L G H L E K L I R K Q A G L
UniRef90_F6BDP4 I P Y H E E I A R G T L N N I L T D I N I P K E E L I K
UniRef90_D4GZL2 V P M K S D I P T G T L Q S I A K Q S G
UniRef90_R2NPY8 I I P H G E L N K Y T E R G I K K D A G L
UniRef90_D8K2A3 P N P H R R Q I S V D L L S R L L R Q A G I S H D E W L
UniRef90_A0ZCU1 F A F R S D E I G S K M L A R I A K K T G L Q P E D L
UniRef90_H1YZU9 V Q N H P G I A T G T L S I L I Q A D I E R K D F L
UniRef90_M0PLB6 V P Q H D Q I R I G T L R N I V E Q S G A E D F E K
UniRef90_T0NU36 V P Y H S K E I G E G L R K K I M K D L G L K
UniRef90_L8NKP4 I P A H N P V K I G T L N N I L R D V N L S K D E L L K
UniRef90_A5N2E1 V R H P V K D L G I G N I K S I E K Q T G L K
UniRef90_M0BAX4 V P Q H D E I R I G T L R N I A D Q C G
UniRef90_H1Y9H3 I P N H D P L K L G T L S A I L N E L G I P K D D L
UniRef90_K2AYA0 I P V H N K S L W K W L L N A I L K Q T N L D K
UniRef90_UPI0003496674 L D A G R R E Q A M G T L R S I F R Q A G W D W
UniRef90_F7PFM6 V P L H D E L D T G T L H S I A D Q C G
UniRef90_U3HLY6 F A D H S K E M K E P T R K A I I K Q L G L T E
UniRef90_H1LSY9 P N H G K K D I S I G V V R N L E K V T G L S
UniRef90_Q2FTD4 P V P N H D E I R V G T L S I I R Q S D L P R S E F E
UniRef90_H9BQV8 P F H R N R E L H P N T L H S I A R S V G I
UniRef90_UPI00038266C8 V P Q H S G D M P I G T L R A I E R D
UniRef90_E0NXK8 L R H P V K D L G V R D L K S I E K Q A G I K

UniRef90_G9ZRG2
UniRef90_K9RUF0
UniRef90_H5SJB6
UniRef90_K9YBM9
UniRef90_K9YDP9
UniRef90_B8HHT3
UniRef90_UPI0002483F03
UniRef90_UPI00037589DD
UniRef90_G3J0F0
UniRef90_K1ZRR0
UniRef90_K9QD06
UniRef90_UPI000415C927
UniRef90_D3S429
UniRef90_J3ETW9
UniRef90_Q1Q1U7
UniRef90_B7JYB1
UniRef90_M0MUH0
UniRef90_L1PAN5
UniRef90_L1PLW4
UniRef90_X1R5W3
UniRef90_UPI00037F624B
UniRef90_U2HPE6
UniRef90_U8RMG9
UniRef90_UPI00037DFEC8
UniRef90_K9YF67
UniRef90_T2GA47
UniRef90_U4S112
UniRef90_B21WV3
UniRef90_K9Y7V4
UniRef90_T0STT7
UniRef90_A5UU75
UniRef90_K2CFE8
UniRef90_UPI000365DA20
UniRef90_H1Z4F3
UniRef90_UPI00034594C5
UniRef90_UPI00035C7BF4
UniRef90_R1MXH0
UniRef90_I4GTA6
UniRef90_A3ZAS6
UniRef90_Q3UWV9
UniRef90_I6TYX7
UniRef90_A7I6L0
UniRef90_W0SEU8
UniRef90_C5G2A5
UniRef90_K1M2J4
UniRef90_UPI00035EA874
UniRef90_D7BJU1
UniRef90_H5SA03
UniRef90_K9RU54
UniRef90_F5RL77
UniRef90_D3HEH0
UniRef90_T1B8F1
UniRef90_R2V632
UniRef90_E6WDB4
UniRef90_K9ZAF7
UniRef90_UPI0003777895
UniRef90_R7JPS6
UniRef90_UPI00046832EF
UniRef90_B9NPA5
UniRef90_G9WTH9
UniRef90_K9W405
UniRef90_X0YIB1
UniRef90_K9X7L6
UniRef90_E8PKA5
UniRef90_UPI00037014FD
UniRef90_T2J170
UniRef90_D1W751
UniRef90_UPI0002D9A180
UniRef90_D2QK66
UniRef90_D4CLE8
UniRef90_K2LDM8
UniRef90_G7LSV3
UniRef90_K2FSQ2
UniRef90_K9PBT4
UniRef90_K9XFN2
UniRef90_UPI0004789038
UniRef90_K9TVL7
UniRef90_X1M9B3
UniRef90_T1AHL6
UniRef90_M0EEE3
UniRef90_B1R103
UniRef90_V6UVG3
UniRef90_UPI000347EEAD
UniRef90_UPI000362B867
UniRef90_X1J039
UniRef90_UPI00034AD002
UniRef90_M1XY8
UniRef90_K2CYT3
UniRef90_F0T0F6
UniRef90_UPI000316570F
UniRef90_UPI00036A380C
UniRef90_U1NH39

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

UniRef90_G9ZRG2 I P H G E L N K Y T E R G I R K E A G L 60 70
UniRef90_K9RUF0 I P N H S P I K V S T L S A I L R E A G L T R E E L L R
UniRef90_H5SJB6 P N P H H Q D I K V S T L K R I L R Q A G L A T K E W E Q
UniRef90_K9YBM9 V P A H R P V I K R S T L A R I L K Q A E M N L E Y F L E L
UniRef90_K9YDP9 F A F H D G E I G P K M L S R I A K S T G L K P E D L L N
UniRef90_B8HNT3 V P N H S L I A G T L S A I L R D V D L T R D E L L N
UniRef90_UPI0002483F03 S G K L S D D L A A G T L S A I L K Q A G L K
UniRef90_UPI00037589DD V P S N I V K T T S A N A I L K Q A G L D K
UniRef90_G3J0F0 V P V H G K D V G I G L L K A L E K Q T G V K
UniRef90_K1ZRR0 V S G S L G D D A K F Y Q E R A L K E A
UniRef90_K9QD06 P F H T G K V L H P K I V K Q V L Q A I G T S D D E T I E
UniRef90_UPI000415C927 V P N H R K L D P G T C K A I E K Q A
UniRef90_D3S429 V V P M H K S L K I G T L K G I L K L A K I D F D E F A K
UniRef90_J3ETW9 V P L H G E I P R G T L G S L A E Q C G A E D F H
UniRef90_Q1Q1U7 V L P E Y D E I D I G T I K N N M R T V G M T R E Q Y F E L
UniRef90_B7JYB1 V P V H S R N D L K I G T L K A L M K I A E L T E N D L L
UniRef90_M0MUH0 I P M G R D P V P I G T L K S I M N Q A G S W D E F
UniRef90_L1PAN5 T S K H S Q E V K A G T L N S I L K L A G L K
UniRef90_L1PLW4 V P I H S K E V G T G L V K K I T K E
UniRef90_X1R5W3 I P K S R G D I P K G T L V A I L
UniRef90_UPI00037F624B V H Q H G R D L P V K L F H K L L R Q A G L S R D E F E R L
UniRef90_U2HPE6 P Y H G S K E M G E G L R K K I M K D L G L
UniRef90_U8RMG9 V D K P K S P F H G D L I R Y M A L Q A G V T K K E F Y S L
UniRef90_UPI00037DFEC8 V A Q H P G D I P A G T L R A I E R D
UniRef90_K9YF67 I P I H G N
UniRef90_T2GA47 W A F S G D E L G R K M L S R I A K H T G L T P E D L
UniRef90_U4S112 V P H P R K D L G F L E K K I R K Q A G L
UniRef90_B2IWV3 V K R H R T I D R I T A N E I C K Q A G L
UniRef90_K9Y7V4 P I P H H N E I K D S L C R L I R K Q L N L E E D
UniRef90_T0STT7 I A V H G K D V P I G L L N A I L K R T G L K
UniRef90_A5UU75 F A F H N E E I G P R M L A R I A K H T G L R P E D L
UniRef90_K2CFE8 I P N H K V I R K G T L Q G I L K P I D L T I E D L K R L
UniRef90_UPI000365DA20 V P Y T K D T L S P T Y R F I K R Q A G W K
UniRef90_H1Z4F3 I P V H S K T M G P G L L K R I I N K A G L T T E E Y C K L
UniRef90_UPI00034594C5 I P A H D P I K I G T L S A I L R E I N L E R E E L L N
UniRef90_UPI00035C7BF4 I P S H K P I K K G T L T A I L R D I E M T R D E L L N
UniRef90_R1MXH0 I P H H G E L K K G T E I G I L K E A G L K
UniRef90_I4GTA6 P I K R H R T I D K V T A N V I C K Q A G L E
UniRef90_A3Z4S6 V P L H R R D L A V G T L A S V L R Q A G V D S D T F I E
UniRef90_Q5UWM9 V P L H D E L A K T G T L R S I A D D A G
UniRef90_I6TYX7 P I H G N K V L K I G L E K K L L R D L N L
UniRef90_A7I6L0 V L P R Y D E V P V T I L I N N M K T I G M T R E D Y L R
UniRef90_W0SEU8 F A F H D G E I G P R M L A R I A K H T G I T P Q D L
UniRef90_C5G2A5 I P M H A K E L R K G T E N Q I L K E A G L S K R D
UniRef90_K1M2J4 P N H G S K E L P Y G L E K S L R K Q M G L
UniRef90_UPI00035EA874 I H P R K D T S K G I L R Q V Q K Y T G M K
UniRef90_D7BJU1 D G L N S K R P G V G L F K A M L H Q A G L G E E D F R
UniRef90_H5SA03 V H F H G Q T F P P K T L K A M I E D A A W T I E D L K R L
UniRef90_K9RU54 I P N H R Q L D T G T C R A I Y R Q A
UniRef90_F5RL77 L R H P V K D M G V R D L K S I E K Q S G L K
UniRef90_D3HEH0 P I H G N K V L G V G L E K K I L K D I G L
UniRef90_T1B8F1 V P A H R P I G R G M L R T I M S E A D L S V D E F N G L
UniRef90_R2V632 I A V H N R D L P I G T E
UniRef90_E6WDB4 V P H P E K D L A T G T L N K L L K
UniRef90_K9ZAF7 P V K R H N L F D R I T A N Q I C K Q A G L D K K
UniRef90_UPI0003777895 V P L H D E L R E G T L R G I A D D A G
UniRef90_R7JPS6 V P F H S K E M G S G I A R R F I R E M G L K
UniRef90_UPI00046832EF N G H K S D V V W G F L L K S I E E Q S G L K
UniRef90_B9NPA5 V G R H K E I P L P T A R L I A K Q A N V K
UniRef90_G9WTH9 L P R H S K E I A T G T L N R I L K D A G L
UniRef90_K9W405 P I P R D Y P E L R I G T L Q S I R Q S G L A R Y L F E
UniRef90_X0YIB1 V P L H S E L A V G L R G I L M Q A K I S Q E E F V K
UniRef90_K9X7L6 T L P N H K Q L D L G T C R A I Y R Q A T I S E S D L Y D
UniRef90_E8PKA5 I P R H H P L K L G T L A G I L R E I N L T R E E L L K L
UniRef90_UPI00037014FD P F H S S K E V S P G V L R S I S K L V G V
UniRef90_T2J170 V L P R A N P I N A Y T M A G I I S D A G L S I D E F K Q L
UniRef90_D1W751 V P R H S K E I K E N T A R S I L D D
UniRef90_UPI0002D9A180 F A F H D D E I G P R M L A R I G K K T G L Q P G D L
UniRef90_D2QK66 I P R H D P I K I G T L N N I L K N I G L T K E E L
UniRef90_D4CLE8 I P R H G K E L M K K T E Q S I L T D A G L K
UniRef90_K2LDM8 V P K H S G D L A P F T V R S L W K Q A G I N E
UniRef90_G7LSV3 I P H P R K D S S K G V V R Q A Q E I S G L K
UniRef90_K2FSQ2 V I P M Y K T I P V F I I K N N L R T A K I S R E E Y L
UniRef90_K9PBT4 I P R R S D I P N G T V K S I L R M A G V D
UniRef90_K9XFN2 V P M G A K E M S P A Y V L R I F R Q F G L T D E E I E D L
UniRef90_UPI0004789038 V S F G S G E I P P P V F R K I L K Q L R I T L E E F N N
UniRef90_K9TVL7 L V M P N Q P I K S G T L R A I C T Q I G I S R E E F L R
UniRef90_X1M9B3 I P D H K E L A P G L R G L I R K A G L T V E E F F K
UniRef90_T1AHL6 I P N H D P L R I D T L A A I L K H R G V S R D E L L E L
UniRef90_M0EEE3 V P L H D R V K I G T L Q S I A D Q C G A E D F
UniRef90_B1R103 V P H H N K E L G V K T L C N I F R Q A G W E
UniRef90_V6UVG3 F P D H G K E I G E G L R K K I L K D L G L S
UniRef90_UPI000347EEAD V D M G A K E M S P A Y V L R I F R Q F G F T D E E I E N
UniRef90_UPI000362B867 I P D L K K E L K T G T L T A L K Q L G L S K E D L
UniRef90_X1J039 V P D T R A S L P S G T L M A L K Q T G L G R K G F H N L
UniRef90_UPI00034AD002 I P A H N P L K V G T L N S I F R D I G L N K N E L L N
UniRef90_M1XYX8 V P M H D R I D T G T L R S I A E Q S G
UniRef90_K2CYT3 I I P N H K V I K K G T L R I I K D S G I S T D K L
UniRef90_F0T0F6 I P R H K K D I P P G T L H Q I L R A A G L K
UniRef90_UPI000316570F I P A H D P L K I G T L N A I L R D I G L S R D E L I
UniRef90_UPI00036A380C V T H P I K D L S I G V I K N L E R V T G L S
UniRef90_U1NH39 V T V P K A E I P T G T L H D L A D Q A G A E D F H

UniRef90_UPI0003B5D4EF 1 P T D W K T Q V I K I F K K F G C K F V R Q K G D H L I F N Y S D A R R P V 40
UniRef90_UPI0003B7B162 L I P I P G Q E L A R L L E E G F Q V V R V R G S H V R L R H P D G R A T T
UniRef90_L0HDM0 V I K A F S K A G F T S S W Q T A R S H V I M E K E A G M E V I T
UniRef90_G9ZDE5 M K S S D V I K Q L E A N G W T L Q R V N G S H H I F A K E A G M E V I T
UniRef90_G9XJF0 M K T S E L L K L L A Q N N I T L K R H G K K H D I Y Y S P T N K S F P
UniRef90_I0RP95 M R A R E V N R K I E K L G G F V H I R T V G S H K R Y R V T P R K E I T A
UniRef90_UPI00035DEADE R E F T R V L R R H L G F E V N R G K G A H E K W V H P P E K R V V L
UniRef90_Q31LA1 S E I I R L L Q R E G F I K I R E G G G H E I W Q H P Q S K I T P
UniRef90_H1Z3F9 K V L K T F E L P G F V T V R A G N H I S M Q N P D G T K T T
UniRef90_K9YYR0 M P K T S R E L I K L A E E Y G W E L V S V K G D H H N F K H Q E S R V V T
UniRef90_B2J1Q6 M P K K I R E L K A L L E K A G F V Y R P A K G S H T F W T H P D E P V T I
UniRef90_E6VXK2 M N D R E V I Q T L L A K A G F W E K R R G K G S H T V M R H P D K P G K
UniRef90_G7WME0 I S G E R L I R I L A R K G F S V K R R A G S H V V L Q K G E I V S S
UniRef90_I4F7X6 M P K L G K D I I K I L D R F G F T I H S Q R G S H I K L R R E R K E T L T
UniRef90_K9YYR9 D L I R S L S R L G N Y Q V T R Q T G S H I R L K T E E N H H L T
UniRef90_UPI00036833B2 I T A D E L I K L A E L Y G V E L V S S G A E L I Y R K S S D G R R V S
UniRef90_G8N7R3 M R Y E D V E K V L V A F G F E C V R S K G S H Q Q F R H P G G R M L T
UniRef90_B8IUD8 K T R D V I A A L F K D D W E L Y R K G G D H I Q F K H P Q N K L K V T
UniRef90_D4H09 R E V T K A L T K Y G V P K S R H G S H V R L R H P E T R N V D
UniRef90_UPI0003798512 N G S E L V K R L E K Y G Y V V H H Q T G S H L I I R T P S E H S V S
UniRef90_H8KR99 M K S S E L H R L I K R N D G W L C R S E G S H Y I Y Q K D D R N Y P V
UniRef90_H5SR02 I T A D E L I A A L E R D G W Q L R K G R G S R R L F R K R S R V V A
UniRef90_D5BNI3 K V R E V I A A L E K H G F T Q E P A K G S H R K F K K A G G H V I V
UniRef90_UPI00035F4F5D G W S E A N R V G S H V Q F K H P T R P R V T
UniRef90_F2KQK3 E L A R L L R K Y G Y V V T R Q T G S H M R L T R L E G E H H I
UniRef90_R9KXV9 M P M T T R E A I R L I K Q R G G R F V R H G T R H D I Y A N A A G E E F P
UniRef90_Q6J2J8 M K C S E F R R W L Q A Q G A E F K A A K G S H F K V Y L N G K A T I
UniRef90_D1VRS5 N S K E I I K L A K K Q G F R L D R I N G S H Y I F V N K T K A E V A
UniRef90_E4Q4G9 K P Q E L I R A L K K V G F R E V S Q K G S H L K L K K E N P T R I V
UniRef90_G0HLI5 M I K L K R L G Y T V V R Q R G S H V R L E K R T T H K L T
UniRef90_UPI00034C2B20 S K I I K T L E K L G F K I V R E R E H I A M I R E N E N G T T
UniRef90_UPI0003B52E23 F M G Y T A K Q I M K I L K A N G W K K V R I E S S H H I F K R G F D R P V P
UniRef90_F7YTS2 E L V K L E L Q L G Y V I T R Q S G S H I R L T Y K S S E K I T
UniRef90_S3JC84 M R Y K E L A Q V L R R L G C E E I T Q K S G S H R K W L N L S N Q N V A
UniRef90_S7VF66 M D S K T V I R K L E E D G W F H C G T R G D H W Y F K H P T K P K V T
UniRef90_I0AI90 M P K L G V D I L K F E D F G F S V I T Q K G S H I K I L H Q G G E R Q V L
UniRef90_H8KUS7 M T C K E L L E T L K A H G W E E I T Q K R S Y L Q L K H P A K I K I T
UniRef90_UPI0003B4C941 L R P L P W E K L V R I F E R D G F T I V R Q E G D H L V L T K A A I A R P L
UniRef90_Q1Q744 F M S Y K R S K I I K V L R E Y G F T F L R E G G N H T I T N G E I N I P
UniRef90_K9W7H0 S K V I K V L E G F G F S I V R E K E H I S M Q N P D G T I T T
UniRef90_UPI000409E912 M P K I P G E A V R A L E N A G F R V I R Q G K H I V M S N G E R L L T
UniRef90_K9P887 M P R L P K E A V R V F L K L G Y R I V R E S G H L L L S N G E R R L V
UniRef90_L8DPX6 R K V V K A L K A A G F T S V R T V G S H S T W V S A D G A V V T
UniRef90_G2LDM2 M P R F P E R V I K A L E L G F R L L R E G N H I A M E N P D G T R T T
UniRef90_M0GUJ4 E V V K V L V N A G F E W R T T G D H A Q L Y Y E D R R Q V T
UniRef90_L8LNX5 M K S V S G K K L C K I V E K K G W I L K K I T G S H H I Y T K S E N K I I S
UniRef90_U1FHH3 M V K P M K Y R D V A K L L S K A G F T K S R V R G D H E R W D N G P H H I T T
UniRef90_B3QRU5 G Y R V V R N K G S H V I F S N G K I T P V V
UniRef90_K8DET0 R H N G S H Q I W W S P T G K T F P
UniRef90_I4FNX9 M V R I L E S L G F V E V R Q K G S H K Q F C P E D G R A T T
UniRef90_K0XLK4 V L K L L D D G W E I V H Q R G S H R Q L K H P K G K V I T L
UniRef90_D0BJY3 M P M T Q N E M V K L L I T H G W K T K G G K G S H V K M E K Q G G E R I I
UniRef90_UPI00036CAE39 R H V V K K L K K A G F E R T G G Q G S H S R W R H P S G V V I T
UniRef90_N8V8W5 I L W A V R W Y C K Y G T G S H H F K H P T K N L V L
UniRef90_UPI0004683152 M P K P E K M I K Y L K Q M G F V E V H I K G T S H I Y F K N K T G L S T E
UniRef90_UPI0003771182 K G K E T L K V L V K H G Y E I K R Q K G S H V S L S N K E I N I T V
UniRef90_G9MB62 M S Y E E V E R V L G W F G F S C Y R S G S H H Q F R H P S G R M L T
UniRef90_I4B2J0 I S G K F C K I L E N K G W V L K K I S G S H Q I Y M K E E D R I S V
UniRef90_X1KW66 P V S W D T L V R K L R N M T F E G P Y R G G K H Y F M L K G D F R L T I
UniRef90_G4CPI8 M K S S E L I A L E A D G W K L V R V K G S H H Q F K K E G N H L I
UniRef90_A6YU0 M K Q S E F R Y L E K M G V E V K Q G T N H L K L Y Y K G K R S I V
UniRef90_R9JIG0 M N T D F K S I E R K V T K A G W V L V R I T G S H F Q F K K E G P K T L V
UniRef90_K2BJJ0 M P K S G R N A V K A F L K S G Y K H V H T S G D H A I L Q K S G C P I L S
UniRef90_UPI00037D93CF Q L I E L L R A S G Y V F V R Q K G S H E I W R S P N Q K I F C
UniRef90_L8N020 Q L V T A L A K Y G Y V K T R Q T G S H I R L T T K G E H I I T
UniRef90_W6M208 M S S M Y R D I R Q R L I D A G C Q L V R Q K G S H E I W H S P N G E R H F T
UniRef90_K1W1B5 Q D L V K A L G L F G Y E V S H Q T G S H I R L Y Q N G D R H I T
UniRef90_T2NA17 M K W N E L R R I A E K K G W V L H R S G A N H D I Y R H P E K P G T I
UniRef90_I4FL93 R I K G S H Y I Y T K E N S A I I V
UniRef90_K1Y7S0 M V K I L R E F G F Y F V S Q K G S H V K L K K T V G G R T V
UniRef90_X0XBW8 L Y M P K K V K Q L I R L L R S G G C E F Y R G K G D H V R Y V G Q Q K R V V P
UniRef90_L9W399 K E V V K A L V N A G F E W R R T T G D H A Q Y E H P T N R R V T
UniRef90_D3VDJ6 M S S A E L I K L V N P D G W V K A R Q D G S H V T L T K P G M K I I T
UniRef90_UPI000369375C M K S I S G K A F A K L I E K R G W R L V R I N G S H H V Y M Q T G N R L S I
UniRef90_E6VLA9 R E L R D L L R A A G C T L V R Q K G S H E I W H S P T N R N F A
UniRef90_U8ZMI0 M K Y S E F R R W L K A R G V I F E P A K G S H F K V Y Y G D N Q R T F
UniRef90_UPI0004755222 V K I F E K Y G C I Y S R T K G D H M I Y H Y P D A I R P V
UniRef90_F8NB37 K V S K I I H D L I E K A G W R M D R M R G S H R E Y V H P T K K V I V
UniRef90_W4NIT8 M K Y S E V R K W L K Q Q G A T F E R H R G S H Y R V T I N G R T T I
UniRef90_I4HKD1 R I Q G S H H I Y C Q P D N R I S V
UniRef90_F8GE13 M P K L P V E A I K A L E R L G F S V V R Q R S S H I V L R E D S S G C V
UniRef90_G1V7F9 K A R E I K K E L Q E A G W T F E E G R H T L A I S P D G K T V P
UniRef90_UPI00037C164D R T K G S H A I L N K E T G K I T I
UniRef90_UPI0003463AB7 K E L C K I L K Q N G W K L K T I K G S H H V Y M K E S G R K R I S
UniRef90_UPI00035C8F7E T G E E L V Q R L A R L G Y R V E R Q T G S H V R M T W P S G P H A I
UniRef90_F6DHZ6 M T A K E A E R L L L Q N G F L I D R Q K G S H R I Y K K D S Y R M V
UniRef90_C3XP67 L I P I K P S K L I K L L K K L G F S Q R D A E G S H V F L K H S D G R T V
UniRef90_K2D6X0 A H G F L F V S Q N G S H A K F R K S G N R T V I
UniRef90_K2BXZ8 E L A K L L E A F G Y N I D H Q T G S H L R L T R N G E H H I T
UniRef90_UPI00035CB04D K I V K V K G S H H K F K K D G K V V I
UniRef90_Q6G4J0 M K S S E L Q R L I V K N G W M L L R V S G S H Y I Y E K E G R T Y P
UniRef90_W2C1V6

UniRef90_UPI0003B5D4EF I T P K Y S E I T L T I R T N M R T 60 70
UniRef90_UPI0003B7B162 V P L H K E L K R G T L R N L I R D S G L T V D E F V A L
UniRef90_L0HDM0 V P S H K K E M T I G Q V R D A E K K S G L K
UniRef90_G9ZDE5 I P R H K T E T A K G T L D S T L N D A G L K
UniRef90_G9XJF0 V P Q H N P G D L P T G T L H K L E R D
UniRef90_I0RP95 V S E H N Q P F A K G I L R A M I D Q T G L K P Q E F Y R
UniRef90_UPI00035DEADE V P R H T K I S P F V V K S T E K
UniRef90_Q31LA1 L P N H S K I K G S T L R A I C N Q A G I S R D E F L K
UniRef90_H1Z3F9 I V I H P Q K D V P I G T V K K I
UniRef90_K9YYR0 A G K D G D D A P R Y L V N R V L K Q L G E I E E E
UniRef90_B2J1Q6 V T I P K G E I K I G T L K S I E R A T G V K
UniRef90_E6VXK2 V P L H R D E L K K V T L K A I L S Q S G L E V D D L L R
UniRef90_G7WME0 I P N H R Q L D P G T Y A I F R Q A
UniRef90_I4F7X6 I P A H N P T Y K I G T L N N I L K S V D L S R D E L L R
UniRef90_K9YYR9 I H Y H R K T Y G P K L L K S L L N D I G W S E K D M R K L
UniRef90_UPI00036833B2 V P K R K G Q T V T R T Y L K Q T G K T L E E L I E
UniRef90_G8N7R3 V D N G E P E I P T G T L R N S I Y R Q A G W E W
UniRef90_B8IUD8 V P Q H D E L K I G T L R S I A D Q C G
UniRef90_D4H097 I P N H K P L K V G T L N S I I N D I G L D K Q E L L K
UniRef90_UPI0003798512 P F H G S K E V G K G L E M K I K K E M K L
UniRef90_H8KR99 I H Y H R K T F N P K M L Q T L L K D I G W D E A D L R R L
UniRef90_H5SR02 S G K S G S D V I Q Q T L K S M I A Q S G L P
UniRef90_D5BNI3 A P H P K R D L P L G T L R S I E K Q S G L K
UniRef90_UPI00035F4F5D T I P K H R A L K P G T L N S I L R H L G V D K K E L I K
UniRef90_F2KQK3 L P R H A G D L S P G V E R A V K E K L G L
UniRef90_R9KXV9 F A D H S K E M H E G L R K S I I K Q L G L K
UniRef90_Q6J2J8 I P H S P K G S F G I G L Q R N I L K K L G L
UniRef90_D1VRS5 I T P M H E E V A R G T L K
UniRef90_E4Q4G9 V P Y H E E I A K G T L N D I L N K V G I P R E E L I E I
UniRef90_G0HL15 T P N H K K I K A S T L R S I C N Q A S I S R E D F L
UniRef90_UPI00034C2B20 V P L H N K D L G I F G N K I L K E A G I N P K T L K E
UniRef90_UPI0003B52E23 I P N H K T L K V G T L N S I L K E L N L S D E I K K L
UniRef90_F7YTS2 V I P G S K D L K V G T I K A T I K Q L G I E W S A F E E
UniRef90_S3JC84 V Q H P V K D L W I K N V K S I E K Q S G V K
UniRef90_S7VF66 V F P N H K E I D K G T L K A I Y R Q A
UniRef90_I0AI90 I P V H S G D I P L G T L F N I
UniRef90_H8KUS7 V T P R Y H A V P V F I R N N L R T A G M S R D R F F E L
UniRef90_UPI0003B4C941 V G R H K E I D R D T A R A I A K E I Q I E W E E F K R
UniRef90_Q1Q744 L P N H K L I K G S T L R S I C T Q S G I S R D D F I
UniRef90_K9W7H0 L P R H N P I K A V T M G G I V K D A G L T V D Q F L R L
UniRef90_UPI000409E912 I P R H D P I S N A I T M G A I A R D A G L T P E Q F R Q L
UniRef90_K9P887 V P D G H R T I S P G V Y R K I L
UniRef90_L8DPX6 I P N H R K I K G S T L R T I L T Q S S I P R E D F L R
UniRef90_G2LDM2 V P L H S E L R T G T L R S I A E S A G
UniRef90_MOGUJ4 I V Q R R N D L K I G T L K S I M K I A E L L E N D L L
UniRef90_L8LNX5 T H S R E V S A G V V R Q V L
UniRef90_U1FHH3 P K H G S K E I S P G V E R Q L L K I L D L T L D E F R N I
UniRef90_B3QRU5 V P H P K K D L P P G T L N A I L K M A G L K P
UniRef90_K8DET0 V P F P K H G L K K
UniRef90_I4FNX9 N G K P S D D I W G D N L K S V E K Q S G L K
UniRef90_K0XLK4 I P H G E L N K F T E K G I R K Q A G L
UniRef90_D0BJY3 V P D G H R T I S P G V V R I I D K
UniRef90_UPI00036CAE39 V P H P K K Y L L A G T V K S I L K Q A G L
UniRef90_N8V8W5 V P M H K K E L R K G T Q N K I L K E A G L K
UniRef90_UPI0004683152 V L P L T T I G V Y R Q I S K K T G I P V E E F L
UniRef90_UPI0003771182 V P K R G Q V V T R T Y L K Q
UniRef90_G9MB62 P V H S N Q D I D V P L L K E I L K R A S I N R E Q W L
UniRef90_I4B2J0 P N P H A Q D I D V P L L K E I L K R A S I N R E Q W L
UniRef90_X1KW66 I S H P E K D V S R H Q V A D A R R K S G L K
UniRef90_G4CPI8 P R H P S K E I A E G T R K A I L K Q L G I D
UniRef90_A6VYU0 I P N H S G D I S I G V L K N L E K I T G L S
UniRef90_R9JIG0 I P L H K E L A P F L L K S Q V K R A G L N G N E Y L K L
UniRef90_K2BJJ0 V P F T I K S K P T A N A I L K Q A G L K
UniRef90_UPI00037D93CF I P N H S P I K V G T L N N I L K E L Q I T R D D L I R
UniRef90_L8N020 V P K S L A D T S L A N A I L K Q A G L P K
UniRef90_W6M208 I P A H N P L K V G T L N A I I K D I N I S R D E L L N
UniRef90_K1W1B5 I G R H G K E I A P G T F N K L K K Q I G
UniRef90_T2NA17 I P T H N R D L P I G T L K G I L K D S G L T E D D
UniRef90_I4FL93 V P M H R E L A Y G T L R G V L E L A E V E E K E F R
UniRef90_K1Y7S0 I D M G E K E F S P P Y V L R I F R Q F G F S D E E I E D L
UniRef90_X0XBW8 V P L H R D E L R T G T L R T I A D S A G A D F D E F
UniRef90_L9W399 V P H P R K D V S K G I L R Q A Q I S R L E L L
UniRef90_D3VDJ6 P V H G N E D L K I G L L K H F M K V V I G I V E E D F
UniRef90_UPI000369375C V P V G I P R H T A N A I L R Q A G L P K
UniRef90_E6VLA9 P D H G A K E I G D G L R K K I I K D L G L K
UniRef90_U8ZMI0 V T P K Y K E V P A F V I R N N M R T I G M T R N E Y F V L
UniRef90_UPI0004755222 N G K K S D D V G F L L K S I E R Q S G M K
UniRef90_F8NB37 F P D H G K E M G K G L V E A I R K Q L G I
UniRef90_W4NIT8 P I H G N Q D L K I G L L K H F L K Q A G L S E E D
UniRef90_I4HKD1 V P N H H E L K V G T L S G F L K Q
UniRef90_F8GE13 I P R H G K D I P T G T L K S I R K Q A G L
UniRef90_G1V7F9 P V P L H K E L A K G T L K S I M K Q A E L S L E D F L K I
UniRef90_UPI00037C164D L P M H N Q D I P K A T L Y S I
UniRef90_UPI0003463AB7 I P V H S K S L K K G L K A V I K L A G I K
UniRef90_UPI00035C8F7E T I P L H R P L K V G T L A G I L K A V I G I D R K E L Q Q L
UniRef90_F6DHZ6 I P H H S G E I L H P K L I K Q
UniRef90_C3XP67 I P I H N R E L S K G L R S
UniRef90_K2D6X0 I K M S E K E I P Y G T F K S I V A M S G L H E E D F R
UniRef90_K2BXZ8 I P A H N P L K V G T L S A I L R D M G L S R D E L L
UniRef90_UPI00035CB04D V P H P K K N L P I G T A R S I A Q Q A G W
UniRef90_Q6G4J0 V P F H S K E M G T G I A T R I K K D M N L K
UniRef90_W2C1V6

UniRef90_UPI00020D9772 1 M V E Y N F K K L S K M A K T K G F E V V R I K G S H H Q F L N K T T R V T I
UniRef90_W6M5R8 M N G K Q A I K I L Q A A G W S M T R I N G S H H M L K K G S V T V P V
UniRef90_H1Z264 M P K F P S Q L I K L L N S L G Y T I V R Q R G S H V R L M K N T V N H I T
UniRef90_A4TPZ0 M E S G E L I K R L E D A G W Q I R G G R G S H V T L C K P G R K I T
UniRef90_N1Z577 N G W V V K R V R G S H H V M Q K G D K I Q I
UniRef90_H3SM07 M P M T R E A E K L L K S D G W V H K N T E G D H Y H F V H P T K K K V I
UniRef90_V5XSR7 M P M T R E A E K L L K S D G W V H K N T E G D H Y H F V H P T K K K V I
UniRef90_Q01U72 S S K G S H R Q N N H P V G R V T V
UniRef90_UPI0003FC7FB3 Q D L V K A L R R F G Y E V S H Q T G S H I R L T T Q E Q H H I T
UniRef90_W2C7Q1 M K S S E F I R E I K R K G W I F I R T K G S H E I Y G K N G Q V A I
UniRef90_B8GS18 M K S S E L R L I L R D A G V F V R Q K G D H E I W Y S P K T N R N
UniRef90_L1NZ00 M K S S E L R L I L R D A G V F V R Q K G D H E I W Y S P K T N R N
UniRef90_UPI00035F4307 F P P L T C K D I K K I L A Y L G F V A R P Q K G S H E Q W V K E N G K K V T
UniRef90_U2V911 M S L N Y R E A V K L I R R N G G R F I W H G A S H D I F E T K D G K E I Q
UniRef90_UPI000376D5A M P K L P Q E V R V L R S F D F R F M T Q R G S H I K L R R K D G G R T I
UniRef90_U1ZX25 M K E I K R K D A E A E L R T K A G W S I R G S G K H D V W A S P D G T V T V
UniRef90_A5GCX8 I T G N D L A K A L V K L G Y H V T R Q T G S H I R L S T V E N H H I T
UniRef90_E4LA34 M T G K E I Y K K L I R L G W V E V S S K G G H R K L R K N G V M L T
UniRef90_UPI0003622437 Y P P L T C K E V K K I L A Y L G F V A R P Q K G S H E Q W V K E H D K V T V
UniRef90_I4HVM1 M E S R E I K K P K D E G W Y Q V G T T G S H H F K H P H K K G K V T
UniRef90_K9U5T4 M T A Q E A E K L L N D A G F L L R T R G S H R L Y F K E D T R V V
UniRef90_U4TPR1 K V A N V L V L L N R Q G F E L T R V R G S H H R F S D N H G H K V T
UniRef90_T1AIH4 W P S T K A K R A L S A L L R L G W T I K R Q S G S H R T L A R E G W P D F V
UniRef90_UPI0004673543 M K T S E L V K I L K K N D C V F L R E H G K E H D K W H N L T G K D I R
UniRef90_I2WAX0 M K S A D V I A I L K K H G W E H I R T R G S H H Q F R H P V H P L R V T
UniRef90_M1UEV1 M T K P M K Y R D L V R L L K N A G F V F A R G K G D H E V W E H P E L S R P V
UniRef90_R5UFL7 M K Y S E F Y K L I E A A G W T I D K G S N H Y K Y V H P D F D Y F I
UniRef90_D6YUC5 K W K T L C K E L A N A G F L L K R S S G S H H H Y Q H P K A K E V T
UniRef90_D6SNL1 P T S W R T Q L K I F E I F G C T Y I R K K G S H H I L R C P K A K R A V
UniRef90_H0HSE9 T G K A L A R A L E K R G W S L R I G S G S H H I Y G K A G S R L S I
UniRef90_X5L044 L P S V S S R R A I Q R L E N Q G W K V D R G K G S H I R L K H A E K Q A L T
UniRef90_UPI000401B392 M K Y S E F H R I I R R N G W L H I R T R G S H H I Y Q K D G Q T Y S V
UniRef90_K8J883 M P Q K F A R V I K A L K L L G F E I L R E R E H I S M E N S D G T K T T
UniRef90_H1LJ51 M K V T A K Q V L E M L V N Q G F V E T R I K G D H H R F V D Q H G K V T
UniRef90_I8QY18 V A A F Q R A G W E V A R R S G S H V V L R R A G V Q N L S
UniRef90_W4M307 M P K L P Q H A V R A L E K A G F R I V R G K H I V M S D G I R I L T
UniRef90_UPI000307ABF7 M P K K P R Q H I K L L E Q S G C Q F Y R G K G D H C L Y I R K T K R L V P
UniRef90_UPI000361FE69 P L T C R E V K E I L R A L G F S F R E Q S G S H E Q W V K C D A T K V T
UniRef90_UPI00047A140F M K Y S E F K R W L E Q Q G A T F E A R K G S H M M V Y L N G K K T I
UniRef90_L1Q5V0 M K R R D L I K L L E K N G W Y L K R N G N H D L Y T D G N R I E P
UniRef90_Q854W6 M K S R D V N R R I E S L G G I E T R Q R G S H R R Y A N E R T A F T T
UniRef90_Q4BXB3 M P S I S R R N L I K K E K S L G Y T G P S G K K K H Q F M T K G S Q K I R I
UniRef90_UPI0002484060 M R S V S G K Q C K I V E R K G W T L N G S H Y I Y A K A D G L R S I
UniRef90_I31KA9 M P K F P V D V I K S L E I L G F R I V R E K E H I S M E N P D G T K T T
UniRef90_UPI00046481B7 M S S R E N I A I L K A K G W E K V A S I G D P V Q L K A R P H K K N V T
UniRef90_I4WKY4 M K Y S E F Q R W L R Q Q G V S F E P G K G S H Q L A R Y R G R T S V
UniRef90_G7WNK5 I S G E D L A R L L E K L G Y Q V A R Q T G S H V N I K M P N G Q I V T
UniRef90_F2NFG2 M P S T Y A D F R S V L H K A G F L L V R S K K H E T W R K T D G T I L L Q
UniRef90_D5MLD9 M K A E E I I K L L K K N G Y Y F F N Q K E S H M Q F K H K N K N K I T
UniRef90_R5L561 N G W Q E V H I K G S H H K L R K G T Q T E I
UniRef90_K9CW28 T A D E I I R V L E K V D F T Q T R Q S G S H K I Y K N S A G K R V T
UniRef90_X1MLZ8 M K Y S E L E K I L R E A G C Y T D K Q A N G H P V W Y S P N K K F R L
UniRef90_J6I231 L V P L K P N E V R K L R R L G F E G P F P G G K H K R M V N S K K K I V P
UniRef90_X1UMU4 I S G K E F A R A V E R Q G W R L L R I A G S H H I Y G K E S R L S I
UniRef90_UPI0004125876 M K S I S G K E F A R A V E R Q G W R L L R I A G S H H I Y G K E S R L S I
UniRef90_K2A6L7 M K R K Q L I R H L L E K Q G C V F L R E G A N H T V Y F N P K T R M T T
UniRef90_N9XR79 H G C Y L Y R N G K K H D I W Y S P T D R Q F P
UniRef90_D3S0C3 E L A K L L R K F G Y E I T R Q T G S H I R L R L K G E H H I T
UniRef90_UPI00047A72C0 Q L I K I L I Q A G C V E V R G K G D H V I W Y S P L T E T H
UniRef90_Q3MGL0 M P Q K I R E L K A L L Q K A G F N Y R P A K G S H T F W T H P D E P V T I
UniRef90_UPI00047E9CE9 M K Y S E L E R K L K A G C Y W V K D G K K H P I W Y S P E K E F Q T
UniRef90_I4FDC5 M K R R D L R Y L S Q Q G C Q L V R E G S E H S I W E N P N G R R T A
UniRef90_A1BGE2 W P S I K A K R L L V L L R L G G W E V K R Q S G S H K T L S R N G W P D F V
UniRef90_J5H4G2 M K D R L L K L F L A N G W E I K R K G S H H H L Y K D G K R E T
UniRef90_E8IWX8 P L K Y D E V I R G L K N M G F E M K P K T G S H E Q W V L K N S K V V T
UniRef90_I4GF02 M P L K P R E I K R K L E A A G F E V T Q K G S H V K F A K P E G K R T T
UniRef90_G2FSP9 S S N E I L K I L K E E G W V I K E Q T S S H A Q F K H A T K K K V T
UniRef90_D0BNM4 M S K V K P Y K H V R S I L L K A G W L D H T T G S H E I Y T K D G I S C P
UniRef90_MODLD9 R E I A S V L H D F G Y K R V G R V G S H L K M R Y E E V R I V T
UniRef90_K9TJB0 M P K K I R E L K A I L G K A G F E C V R I R G S H E R W M H P D V R P E L P
UniRef90_UPI00037C1F82 L T Q K L I R L G R V L D R V R G S H H V L K H P Q R K V L T
UniRef90_T2J9N5 M K R R D L I K Y L E N N G C E L L R E G G N H T I Y V N K E Q K V I S A
UniRef90_H8YX23 M P K I P R D A V R A L R K A G F R V I R E S K H I I M S D G T R I L
UniRef90_M0DRQ0 K E T V K V M V N S G Y E W D R T N G D H A I L R W E D A R T V P
UniRef90_E1IEK1 M K R T D L I R Y L K Q H G C E L R R E G G S H S I Y E N P K G L R T P
UniRef90_Q72FJ0 M K T T E L V K R L K G L G F Q E V G K K H I K Y R H P D G R W T V
UniRef90_U1NX84 M T R R Q V A K V L I D N G Y Y P V D R T G S H L Q L R H P E T R T V T
UniRef90_T2J8X3 M P K L P R K T V K T L E K L G F V Q I R Q K G S H L L L K K E E G K I V
UniRef90_F4BVN3 M P K L R E I V I K V L C N H G F M V S G Q S G S H V R L S K Q G K I G T V
UniRef90_K2CBL6 G G R H Q F M L R G D L A L T L
UniRef90_U4QW39 I S G K D F I K M I E E K G W K L I R I K G S H H V F G K E G K V V V
UniRef90_L8LX61 M K R R D L I H Y L N Q Q G C Q L V R E G A E H S I W E N P Q N R R T
UniRef90_M0NH49 E I A K V L A N S G F D W V R T T G D H A I L K W S D D R T V S
UniRef90_A6D480 M K H S E F L R W L E A Q G V E V K Q G S K H L K L Y Y N G K Q S T F
UniRef90_J4WYK6 K K N G W Y L E R I H G S H H I L K H K D K K L I V
UniRef90_W8TFQ7 M P K T V R E L V K R L R R E G F R P H T G G S H K R W K H K D T R Y A D
UniRef90_R5CTS1 M K F S E F Y K L I E S A G W T I E K G K K H H K Y V H P D F D Y F I
UniRef90_R6WIB2 M K H R E L V K L L E A N G W Y I K R N G N H D I Y T D G R K I E
UniRef90_C7NT96 R E I A S V L I D H G F V R T G R V G S H L K L R Y E E V R I V T
UniRef90_M1XN72 D V Y K V L V N A G F E H V R T S G S H V I W T P E P R R V T
UniRef90_X0VE32 M P K L P R R A V R A F E K A G F V V R E G K H I S M T E G G R I I
UniRef90_I4GFT7 I N F A R L R N A F E K A G F R I T R Q R K H I T M T N G E Q T I

UniRef90_UPI00020D9772 P N H G N N P I A K G T A Q K I T K A L G
UniRef90_W6M5R8 P V H G H H D L G I G L L K K I
UniRef90_H1Z264 V P L H D E I A R G T L R N D L I
UniRef90_A4TPZ0 L P Y P R K D I S K G L L R Q A Q K I A G I K
UniRef90_N1Z577 V A V H N K D V P I G L L E K T L K E T G L K
UniRef90_H3SM07 V L T S H S K E L S R R V E D S V R K A V G I
UniRef90_V5XSR7 P G H P G H D I A P G T L Q S V L K Q A G L
UniRef90_Q01U72 I P A H N A E I K V G T L N A I L K H L K L E R E E L I S L
UniRef90_UPI0003FC7FB3 P N H G S A E I P K G L E L K L R K D M G L
UniRef90_W2C7Q1 F P V D S K I L S R N T A N A V L K Q A G L P K
UniRef90_B8GS18 P Y H G S K E V G K G L E K K V K R
UniRef90_L1NZ00 V D C P K S P F S Q T L I K S M A E Q A G L K K K D F Y R I
UniRef90_UPI00035F4307 V P R H A K D L S S G V E R D T K E E L G M
UniRef90_U2V911 I P D H K E L A R G T L G I L E L A Q V A K E E F I
UniRef90_UPI0003B76D5A A V P R H R T V S P G V V R Q I A K
UniRef90_U1ZX25 V P A H N R L K I G T L A A I L S D I E L T R E E L L K
UniRef90_A5GCX8 V P Y H T T E L A R K T E H S L K K I A N L K
UniRef90_E4LA34 D C P T K S P F T Q T L I K S M A A Q A G M T K K E F Y R I
UniRef90_UPI0003622437 V P H P K K D I P L K T L I S T E K Q A G I K
UniRef90_I4HVM1 I P F H A G R V L H P K I V K Q
UniRef90_K9U5T4 V P Y T S E A L A P K T Y A A I L Q Q M G L
UniRef90_U4TPR1 F A F H D G E L G P R M L A R I A R H I G P R P E
UniRef90_T1AIH4 I P R H S K E I P T G T A N R I L K D A G L K
UniRef90_UPI0004673543 V P H P K K I L S P
UniRef90_I2WAX0 I L T Q T R E I S P A V T R I A L K
UniRef90_M1UEV1 P V H Q S H E V P R G T L E S M M K A A G L
UniRef90_R5UFL7 V P V N S K D L S T G V V K N I R S Q I
UniRef90_D6YUC5 V I P E Y D E I D I I K S N M Q T A G M S R E T Y F E L
UniRef90_D6SNL1 P L H G S K P L K Q G L A R H L L K L A D I D Q E D
UniRef90_H0HSE9 I P A N R E S L S P V L K S I A H A L G V R L M D L E
UniRef90_X5L044 A N H G A R E M P E G T R L K A I K G M N L E
UniRef90_UPI000401B392 I P N H S K I K G S T L R T C S Q S G I S R D D F L D
UniRef90_K8J883 V P H L K D E I T L S T Y R Y T S N Q A G I K
UniRef90_H1LJ51 V P C T G Q E V K R P L L A K L I E R A G L T P E E Y
UniRef90_I8QY18 I P R H N P H A M T M G G I V R D A G L T N E E F R D L
UniRef90_W4M307 I D M G A K E M S P A Y V L R I F R Q F G F T D E E I D N I
UniRef90_UPI000307ABF7 V D C P K A P F S Q D L I S F M A R Q A G V N K K Q F
UniRef90_UPI000361FE69 F P N H G K E M G K G L E N K I R K D L G L K
UniRef90_UPI00047A140F I P R H P E I K E R L A K S I I K K L G L
UniRef90_L1Q5V0 V Q Q H K G E I P L G T L R A I Q R D
UniRef90_Q854W6 P N P H S Q D I S I D L V K E I L K Q A D I S N E E D W D N
UniRef90_Q4BxB3 P V H K N R D L K I G T L K A L M K I A Q L S S E E D L L
UniRef90_UPI0002484060 M P N H P K I K S S T L R T I C T Q A G I T R N D F L D
UniRef90_I31KA9 V K H P E K D L S G A L K S I E K Q A G I
UniRef90_UPI00046481B7 F P F H S K E M P E P L R K K I L K D L G L
UniRef90_I4WKY4 I P I S G D L K I G L L K S A I K K A G L D D D E F I A L
UniRef90_G7WNK5 I P C H E Y L K L G T L N G L K D L K I S K E E L
UniRef90_F2NFG2 V H Q H G R D I P T A L F H R M L R Q A N L T D A E F T K L
UniRef90_D5MLD9 V P Y H S K D L N I N V I K S I
UniRef90_R5L561 I P V H G A D I P S G L L S A L L K R T G L K
UniRef90_K9CW28 V P Y H K K V L H P K V L G K H I K
UniRef90_X1MLZ8 S N H K S K E V A T G T L S S I L K A A G I K K
UniRef90_J6I231 I P F H K G D V S I G V I R E I I K E I G V S R
UniRef90_X1UMU4 P I H G K S P L K T G L L R H L L K M A E I G E D D
UniRef90_UPI0004125876 V P R H N E I N D F L A K K I C K D L G L
UniRef90_K2A6L7 I P R H K S E I P T G T L H S I L T D A G V S M S E F H
UniRef90_N9XR79 I P K H R N L K P G T L N A I L K D L R I D K K E L I R
UniRef90_D3S0C3 F P V D S K I L S R H T A N G V L K Q A G L P K
UniRef90_UPI00047A72C0 A G K D G D D A P K Y L E K Q I K K
UniRef90_Q3MGL0 S H K S E E I K F G T L Q S L R D S G L K K
UniRef90_UPI00047E9CE9 I P R H R E I V E F T A V R I F R Q L E I P E
UniRef90_I4FDC5 F A F H G D E I G P K M L A R I A K H T G L S P D D L
UniRef90_A1BGE2 I A V H S K E L N P N L A K K I
UniRef90_J5H4G2 V D K H H A P F S R D L I K S M A K Q A G L K A R H F H A L
UniRef90_E8IWX8 I V P C Y K E V S R
UniRef90_I4GF02 V P H P Q K D L S A R T I Q S I F
UniRef90_G2FSP9 V K C T K K D I P A G T V S N I E R I T G L K
UniRef90_G2FSP9 V P M A S D E L P T G T L Q S I A D Q C G A D D F H
UniRef90_D0BNM4 I T L A G K D D A K P Y L E K L V K D A
UniRef90_MODLD9 I P H P K K N L G N G L V I A I C R Q A
UniRef90_K9TJB0 I P R H R E I N D Y L A R K I C R D L Q I P E
UniRef90_UPI00037C1F82 T I P R G N P V D A F T L G G I A K D A G L T A E Q F K K
UniRef90_H8YX23 V P L H D E V N M G T L R S I A E Q A G A K D D E F
UniRef90_M0DRQ0 V P R H R E I A D L L A K K L C R D L E V P E
UniRef90_E11EK1 I S K G S H E I S V D L L K N M E K Q I
UniRef90_Q72FJ0 V P M H D E I A T G T L R D I A D R C G
UniRef90_U1NX84 I P L Q R K T L T V G T L K N I L
UniRef90_T2J8X3 V P M H D E L K P G T L R S V L K L A K V D P G E F
UniRef90_F4BVN3 P N P H R G D I G K D L L R I L K Q A E M T R E E F E A L
UniRef90_K2CBL6 P V H G N R S L K T G L L N H L S K L A G I A E S D L
UniRef90_U4QW39 S I P R H R E I P E F T T I R I C K Q L E I P P
UniRef90_L8LX61 V P L H D R V P T G T L R S I G D D A G M N D D E F
UniRef90_M0NH49 P R H P S K E L G K G L E K S I K K Q L G L
UniRef90_A6D480 L P L H N T D M K P G L S N I L H D A G L K
UniRef90_J4WYK6 I S F H N E T I P I G T L K S L E K T T G V
UniRef90_W8TFQ7 V P H P S K E I P K G T L D S M M K K A G L K K
UniRef90_R5CTS1 P I P R H P E I N E R L A K S I I K K L G L K
UniRef90_R6WIB2 V P M K S A D I P T G T L Q S I A E Q S G
UniRef90_C7NT96 V P L H D R I D L G T L Q S I A E Q A G
UniRef90_M1XN72 I P R A N P I N A F T M G G I I K D A G M T V K E F K K L
UniRef90_X0VE32 T I P R A N P V N A Y T M A G I V K E A G L T I E E F L E L
UniRef90_I4GFT7

UniRef90_K9W4H2
UniRef90_UPI00036A32D5
UniRef90_B7JW22
UniRef90_V7FLM8
UniRef90_D4CQV1
UniRef90_UPI000348480C
UniRef90_R6HPB3
UniRef90_UPI000366DE00
UniRef90_K9T520
UniRef90_C3EVE5
UniRef90_X6GK25
UniRef90_S3U7K7
UniRef90_D6SU93
UniRef90_L8M524
UniRef90_UPI0003B4EF90
UniRef90_G7WPPQ0
UniRef90_X1L5E9
UniRef90_K9Z0Y2
UniRef90_X0PL69
UniRef90_K8ZQ86
UniRef90_UPI000366758F
UniRef90_U1PS00
UniRef90_F3EG11
UniRef90_D1YJ25
UniRef90_X1SJ82
UniRef90_W2CLN9
UniRef90_D6SNS7
UniRef90_B8F4G6
UniRef90_UPI0003616133
UniRef90_J3HDZ0
UniRef90_V2JS56
UniRef90_I4H5L2
UniRef90_N9PQQ6
UniRef90_I3ZLU4
UniRef90_W4LTN3
UniRef90_B8FKC8
UniRef90_UPI00034ADB46
UniRef90_UPI00037C202C
UniRef90_C8WVLZ0
UniRef90_M4NEL3
UniRef90_UPI000378169A
UniRef90_G7M8N6
UniRef90_A0ZFBV9
UniRef90_R9IMQ7
UniRef90_H1RRZ6
UniRef90_X0RQ28
UniRef90_UPI0003B2F23D
UniRef90_A8ZT18
UniRef90_K9YX16
UniRef90_L8AT28
UniRef90_W0S162
UniRef90_B0RIZ8
UniRef90_E1KNX5
UniRef90_I4F8K9
UniRef90_Q1Q6I4
UniRef90_W0RTD5
UniRef90_X1LB02
UniRef90_I2F4N2
UniRef90_L1PLK1
UniRef90_A0A024JWZ4
UniRef90_S0FSN8
UniRef90_T2IJP4
UniRef90_UPI0003FE8219
UniRef90_F4BYD0
UniRef90_R9JS32
UniRef90_MD0498
UniRef90_M2B4G2
UniRef90_V4IVY6
UniRef90_W7IT09
UniRef90_D8K3J3
UniRef90_K7WYD7
UniRef90_UPI0004743D86
UniRef90_J0S870
UniRef90_J7Q496
UniRef90_D5BV01
UniRef90_X0XT57
UniRef90_S5RJ03
UniRef90_E7FZP2
UniRef90_A0A015XAB6
UniRef90_UPI000370E4E6
UniRef90_D5MHY4
UniRef90_K2BWH9
UniRef90_UPI000373D4F9
UniRef90_E1YJ55
UniRef90_Q1AYG9
UniRef90_UPI000368ED4A
UniRef90_M1ZBJ5
UniRef90_UPI000368ED4A
UniRef90_F6DH10
UniRef90_UPI000289D083
UniRef90_S3ALC4
UniRef90_Q0AYT9
UniRef90_T0ZHR2

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

UniRef90_K9W4H2 P F H A G K I L H P K I V K Q V I E A I E L S K E 50 60 70
UniRef90_UPI00036A32D5 I P H H G R E L S R G I I K E I V N K L G Y S R E E A I E
UniRef90_B7JW22 I P F H S G E I L H P K I I K Q I
UniRef90_V7FLM8 I P H P K R D I P I G T L K S I E K Q S G L S
UniRef90_D4CQV1 L K C T K K D I P S G T V S S L E R I T G L K
UniRef90_UPI000348480C I K T S P R N V A V I T H I M T N L K T A G I S R D K Y L E L
UniRef90_R6HPB3 I P V H G K D M K I G L L T K I L K R T G L K Q K E
UniRef90_UPI000366DE00 V R N P K D E L K T G T L K A M L S Q L G I T Q D D L N D
UniRef90_K9T520 P V H G N K D L K M G T L K A L M K I A R L I A K D L E
UniRef90_C3EVE5 V K R H P C K D I P K G T L R S I Y K Q A G W
UniRef90_X6GK25 I P V H N R P L K T G L L R H L L A L A E M S E G D
UniRef90_S3U7K7 I V P E H K E I A I G T L R S I L R Q T K I S L E E F E N
UniRef90_D6SU93 V K R H R Q L D R I T A N E L C K Q A G L D P
UniRef90_L8M524 A G K D S S D A K P Y L E K E V
UniRef90_UPI0003B4EF90 V P N H T L I K L G T L M A I I N Q L K I N K E D I I
UniRef90_G7WVQ0 V V P M H R E L K M G T L K G V L K L A K V D E D E F
UniRef90_X1L5E9 V P L H K E L D K G T L G S I I
UniRef90_K9Z0Y2 P I P R Q K E I N E R L A K K I I K D
UniRef90_X0PL69 V S H L T K N I P K G T L N N V L K Q V E L
UniRef90_K8ZQ86 L T S H G K E L S L V V E K S V R K
UniRef90_UPI000366758F V P F H S G K I H P K L V R Q V L D A I N P A E E D
UniRef90_U1PS00 V P V T H D P V R K G T L Q S I A D D C G A E D F R R
UniRef90_F3EG11 A D H G S K E M H E G L R K S I I K Q L G L K
UniRef90_D1YJ25 I P K R K D T L P I G T A H Q I L R
UniRef90_X1SJ82 I P V H K K D L D R S L L R K I L R D T K I S P D K F K N I
UniRef90_W2CLN9 I P Y H S K E I G K G L A Q K L I K N M G L
UniRef90_D6SNS7 D Y H G S K E V P T G T C H Q I L K A A G I K K
UniRef90_B8F4G6 F Y H S K E I G T G L V N K I K K D L D L K
UniRef90_UPI0003616133 V R N P R D E L K T G T F N A M L N Q L G I G K H E L
UniRef90_J3HDZ0 P S H G A K E I G E G L R K E I L K Q L G L K
UniRef90_V2JS56 L P Y H G K E I G N G L V R R I N K D L G L
UniRef90_I4H5L2 T I P R A N P I N A Y T M G T I I K G S G L T I E E F K K L
UniRef90_N9PQQ6 P D H G S K E I P N G T R L K I K K D L G L
UniRef90_I3ZLU4 W A F H D G E I P G K M L A R I A K Q T G L Q P K D L
UniRef90_W4LTN3 V P R H R E I N E K L A E K I I R D A
UniRef90_B8FKC8 P V K R H R F V D R I T A N E I C K Q A K I Q P K
UniRef90_UPI00034ADB46 S G K D G S D A K P Y Q E K E L K Q A
UniRef90_UPI00037C202C V P K K G G Q K V K G
UniRef90_C8WVZ0 L P L R R K E L P K G L W E S L R K T A R W
UniRef90_M4NEL3 V D C P K A P F S H D L V H S M A R Q A G L K Q S E F
UniRef90_UPI000378169A T V P R H R E I D E N L S R K I C K D L G I K K
UniRef90_G7M8N6 V P I P A H E L K Y G L M L Q I Q K Q I Q I N K
UniRef90_A0ZV9 P A H R D P L K I G T L S A I L R D I D L N R E E L L K
UniRef90_R9IMQ7 V E R H K E I P E R L A Q A I L K R R G L K
UniRef90_H1RRZ6 P R H P S K E L K E G T R R A I L K Q L G I
UniRef90_X0RQ28 V P N H K E V A K G T L R A
UniRef90_UPI0003B2F23D A P H S K K N L P I G T A H S I A Q Q A G W
UniRef90_A8ZT18 I S G Q P G D D V K P Y Q E K I V K Q
UniRef90_K9YX16 I P H H R F T R R N I K R D S
UniRef90_L8AT28 I P V H N K K V K S I Y I R R I L
UniRef90_W0S162 L P M H G T E I G K G L E A S L K R Q L G L K
UniRef90_B0RIZ8 V P F G H K E I T P G V L A Q
UniRef90_E1KNX5 V P R H S A E I P K G T L A M I R R
UniRef90_I4F8K9 A L P R H N P I K A F T M G G I V Q D A G L T V A E E F R Q L
UniRef90_Q1Q614 F A F H D K E I G P R M L A R I S K H T G L T P N D L
UniRef90_W0RTD5 V P R H R E V D D F L A R K I C R D L D V P P
UniRef90_X1LB02 I P R A N P V N A F T M A G I V K D A G L T I E E F K K L
UniRef90_I2F4N2 I P H H S T L K P G T L N A I L I E I E M T K K D L L E
UniRef90_L1PLK1 S N H K S K E V A T G T L K S I L K D A G I
UniRef90_A0A024JWZ4 V P D S H R T I S P G V V R K I
UniRef90_S0FSN8 I P N H N P V A K G T L S D L
UniRef90_T2IJP4 V R N P S Q E L K T G T I K A M L K Q L G L E E N D I I
UniRef90_UPI0003FE8219 T I T R T R E V S P K V I R D A L R
UniRef90_F4BYD0 I P V H K K D L G I G L L K K L I A K A E L D K D E Y I N
UniRef90_R9JS32 F P R H S K E L G T G L E N K L R R D S G L K
UniRef90_M0D498 V P L H D R V R T G T L Q Q I A D Q C G A D D F R
UniRef90_M2B4G2 I P M H K E L K K G I E Q A L L K
UniRef90_V4IVY6 V P L H D R V R V G S L Q S L A E Q A G
UniRef90_W7IT09 I P C
UniRef90_D8K3J3 I P N H K P V R V G T L N S I L T D A Y L S R D
UniRef90_K7WYD7 V K R H R R R R H R I T A N A I C K Q A D L
UniRef90_UPI0004743D86 V P R S K S R H T A N S V L K Q A G L P K
UniRef90_J0S870 I P R H E V L G K G L L R K L L R D A D I S P E E F S T L
UniRef90_J7Q496 L P Q H S K D I P K G L W L S I L K Q L G I E E K
UniRef90_D5BV01 V D C P K A P F G P D L I K S M A S Q A G V S K R E F Y R
UniRef90_X0XT57 I P R N N P I N A I T M G N I V R D A G L T N A D F R K L
UniRef90_S5RJ03 S I H G N K V V G A G L V R K N L K D
UniRef90_E7FZP2 P F H S G K T L H P K L I K Q L M
UniRef90_A0A015XAB6 V G R H S Q E I K G G T L N S M M K D A G L K
UniRef90_UPI000370E4E6 L V H V N Q D L G S S L E R K I L K
UniRef90_D5MHY4 I P D H N E L D R G T L R K L I
UniRef90_K2BWH9 I R N L K D E L K T G T F N A M L K Q L G I N K K D L R
UniRef90_UPI000373D4F9 V I P R A N P V N A F T M A G I V K D S G L T I Q E F K Q
UniRef90_E1YJ5 I P N H D T I A K G T L N D I L T K V A L T K E E L I D M
UniRef90_Q1AYG9 V P R H A E I S D A L V R R I C K E I G I P P
UniRef90_UPI000368ED4A L S S H A G E I L H P K I I K Q
UniRef90_M1ZBJ5 I S F H S G V L P K G T L R N I E R T S G I K
UniRef90_F6DHI0 V D G K I K S R H T A N G V L K Q A G L P K
UniRef90_UPI000289D083 V I P R H G E V S A G V V G Q L M K
UniRef90_S3ALC4 L P R H N R I S P G V L R S I E K V I G H L P E E W K
UniRef90_Q0AYT9 I P D H N P L R I G T L N A V L G D I N V S K D E L I R
UniRef90_T0ZHR2 V R N P K D E L K T G T L H A M C K Q L G I D K A D L

1 10 20 30 40
UniRef90_UPI00034B4B2B M P K K I R E L K A M V A K A G Y V L Q R G K G S H T F W K H P K E P L T I I
UniRef90_AOYN92 M P K K I R E L K S L L Q K A G F I H R S A K G S H T R W I H P D Q P L T I I
UniRef90_J9ZXD3 F P E R Q G K G S H G T L Y Y G E R L L T I I
UniRef90_E8N7U4 P M K Y R D L V A L L R D A G F D S E Q G K G D H E K W S A P V L S R P V
UniRef90_A3IQR7 M K S I S G K K L C E I V D K K G W T L K K I T G S H H I Y Q N A G K P Q I S
UniRef90_R7H4B3 M K H S E L I R L L K A G C F I K R H G A K H D I W V N P S G G R T S V
UniRef90_C6HVA2 M K R G T F I R K L L K N E G C V L V R H G G K H D V Y R N P S G G K Q A T
UniRef90_E1SYC8 M P T W R E L K R F C E R D G W E L Y K Q T D H Y F Y V K R D K R R T K
UniRef90_A0A024BWL4 T A K E A E K L L L Q N G F V F S R Q K G S H R I Y V K D K I R Q V
UniRef90_D5MJN5 K A I K P L E R L G F R I V R E G A H L A M Q N P D E T Q T I
UniRef90_I7LJF0 R K V L K A P G A L R F E V V R R A N H I A L V N P G G T T T T
UniRef90_UPI0002D4FCDE M E N F A K P L K K L L A E A G W E C L R Q K G D H E L W H H P G T R V I V
UniRef90_S1N6I3 M T V R E A I R L L L D A V G F V E V N G K G S H R K F E K A G C R P V I
UniRef90_H3SD77 T V R E V L Q A L K A A G F Y K S P T H G S H R R Y I H K D T R Y A D
UniRef90_S9STG7 T A R E V L K A L K A A G F Q K S P N A H G S H Q R Y L H K D D R F A D
UniRef90_M0PRE4 E I A K V L N A A G F E W R R T A G D H A Q L Y Y E D R R Q V T
UniRef90_A0YQ53 M K R R D L I K H L V K Q G C L L L R E G G K H T V Y Y N P A N R Q T S
UniRef90_R9L5I3 M K R K D I D K A L K K A G W I I S H G G S H D L A T H P Q K P G I R I
UniRef90_F4BY20 K S L G F S G P Y A G P D H A F M V R G F A R I R I
UniRef90_UPI000373AAAD T A R E A E R R L L R A G F N Q V R Q K G S H K I Y R K G N L R M V L
UniRef90_E0M4E9 M K Y S E F R R W L L S M G V E L T K S G G S S H F K A R Y N G R I S L
UniRef90_B7JBJO W M S M T G S E F E K R V K R L D V G F D R R H G H G S H G R L Y Y G T R F T T
UniRef90_F5SEB4 M P S W R D L R R F C E R D G W E Q Y K Q G G D H R K W E N G K L K R T K
UniRef90_Q7UUJ3 M K R R D L I R H L V S Y G C V L V R E G G N H S W W G N T T G A R S A
UniRef90_W8UNT8 K L T E L L I A A G C Y F D R R Q K G S H E I W F S P T Q K K F S
UniRef90_C9PUG2 M K K H E L E R R L K E A G C V L S R H G S R H D K W M N P T G A I E F
UniRef90_UPI00016C52ED M F G S Q M C Q S L E S R G W V L V R V S G V H D I Y R H P T S R Y T I
UniRef90_V2YAD7 M K R R D L I K L L S A A G C Y F E R Q K G D H E L W Y S P T E R R F V
UniRef90_I4I6S1 M K R R D V M K R L K A D G V G I S E T G S H T K V Q F S D G R R T V
UniRef90_G7H3P0 M K R R D L I R Y L Q K A G C E L L R E G G K H S I W W N P K T Q K T T
UniRef90_K9YWC8 S H V V L R R G T S C C V
UniRef90_T1B302 R S Q E V Y Y L L E A F G F E K K S K G S H S F R D S Q G K T I T
UniRef90_B2J5R2 M N P H Q F K R W L A Q Q G A T F Q P G K G G H L K V F L N G R Q S V
UniRef90_UPI000349E8E6 M P K K V R E L K K W L I Q A G F K Q V P G K G S H T N W I H E N G K I T V
UniRef90_I3YBF9 M K Y S E F K R W L D K Q G A V F R P G K G S H L H V I E L N G R H S I
UniRef90_F4BX78 M T P V P Y R V L I K K L E K G L E G P H S G N K H P Y M I L G E T V I I L
UniRef90_UPI000349E29 M K Y S E F R R W L R R E G F E Q H R A G S S H F R V T L N G R S T V
UniRef90_L0DTM6 M K G S E F L K R L R K L A W H P N L G K G S H G V L K L G D R R T V
UniRef90_A3IH47 K K R G K G S H V T L Y F G E R L T I
UniRef90_J0NQN9 M K P Q K T R D V L R Y L K S I G W V R L R G G S H E I W G L P D G S I R V
UniRef90_X0S6G4 R G S H R V L K H P S G A V V V
UniRef90_X1VQS2 I S G K Q L C R L L E K K G W D R K T I N G S H H I Y M K Q G K R I S
UniRef90_E1YD37 M K R K D V I R Y L E D N G C E F L R E G A N H T V Y V N R E K K V S T
UniRef90_H5Y9R3 E L K R I L E K A G F F V R R G R G D H E R L W E S P S G I R F T
UniRef90_UPI0002FBB2E7 M P R K I R E L K A E I E K Q G F V Y K R G K G S H E R W R H P R K T L T I
UniRef90_D5C3Y7 D L V K A L H R V G Y R V T R Q T G S H I R L T R E G Q H H I T
UniRef90_UPI00037B0EE0 M K R S E F I R W L Q Q H D C V L H R N G G K H D I Y V N K N G K K Q P
UniRef90_UPI00036620F9 S E L R R R L L A I G F E E E R G K H H I F F Y F R Y K G Q I
UniRef90_J0PZ09 M N S Q E L K R Y L I K H G C S F T S G K G G H L L V K R G F K K S V
UniRef90_F7T5Z6 M K Y S E F K K W L E R Q G A V F V H R S G S S H F R V T L N G V T T I
UniRef90_D4MWM0 M K Q R D L V K K L E K A G F E F A R H G G N H D I Y K R G D D E K I I
UniRef90_Q3MBS7 M K R R E L I R H L E E N G C L F L R E G G K H T I Y Y N P I N N R T S
UniRef90_UPI0003B53CAD I T G N Q L I K L K R D D W F E V R H G A S L A K Q F R T R K R V I V
UniRef90_UPI0003B4A786 K L K K L L R E A G C Y F V R Q K G D H E I W Y S P I T K R H F
F P S L K A R Q L L R V P G R L G Y R V T K Q D D S A H R W L E A D G R R L R
UniRef90_Q2JXC3 K Q K E F V R W L A E Q G A T F K D G G N H L K V Y L N G K Q S V
UniRef90_R7X1S2 N A R E M K K I L R D N G Y E Y Q R C K G S H F I Y S N G V N T I A V
UniRef90_R6QX70 M N G N E Y L K R L Q K L G L V I E H Q G K G S H G R I Y Y G D R F T T
UniRef90_UPI000365E2F5 M K Q K E L V K K L E S I G F Q F E R H G G S H D I Y A R G K E K E T I
UniRef90_N1ZKJ8 M K Y S E F R R W L K A R G F K A A K G G S H F K V T A P N G K Q T V
UniRef90_I4N3M3 K K I Q K L L K A D A G F T P A R T V G S H T F W Q G P N G A A V S
UniRef90_UPI0002F82C6E K E T I R L L E A H G F L L A R H G G N H D I Y F H P E T R L T
UniRef90_R9LE59 M K R L D L I R H L E A Q G C E L L R E R G S H T L Y I N R N T Q R S S
UniRef90_D2QMM3 M P K K I R E L K A I L L K A G F E L K R G K G S H A I Y Q Y P G T T I R
UniRef90_UPI00036C3AEB Y K K M D K L I K D Y G F E E L R Q T G D H K L Y S N G E K S
UniRef90_B1QP13 M N G N E L M R K L R K L A F E A H R G K G S H G T L Y L G D H R T T
UniRef90_K2M145 M L H L M N S S Q A K R F L A R R G C T F E P G K G G H L T V R R E G R M S V
UniRef90_B1M2L2 M K R R E L V K R L E K A G F V F K E H G G N H D T Y K R G T D T E Q
UniRef90_R7HY04 I S S D N I I Q L L K K A G D Y K V T H Q T G S H I R L T K G T E H N I T
UniRef90_X0ZK56 S D L V K R L D R L G Y R V T R Q T G S H M R L T S R G E H H I T
UniRef90_E6PND5 W K L D C V H G S Y S V F K H P S R P V V
UniRef90_UPI000237ECF5 M K G R E L L R R L V A L G V V V E R G K G G H C L L R H H G G K A P V L
UniRef90_K6FL63 S S R E I I K I L K A S G W Y L V H T V G D H F Q F K H P T I K K V T
UniRef90_UPI000376753E M P K K I R E L K A M L L K A G F L W E P G K G S H T K W T H P E L P Q F T
UniRef90_U5QD96 M P K K I R E L K K I L H K A G F T Y R Q G K G S H K V W S H P D E P I I
UniRef90_B1X0L9 E L R A L L L S A G C T F V R Q G G S H E I W Q S P S Q K R F S
UniRef90_A0A011PZW9 K P Q D I I R A L K K A G F K E V A Q K G S H L K L K H E N T R N V I
UniRef90_A4XGV4 M R H K P D G R T T L
UniRef90_D1JIM7 V K V F E K L G F R V I R Q G K H I S M A K N G K V I I
UniRef90_UPI0003471545 T Y H Q V R S V L R K L A G F K Q V R A R K H E T W E K E D G S M L Q
UniRef90_H5SSX8 T V R E V L K G L K A A G F I N H S G R G S H Q R Y I H P S D P T V S
UniRef90_UPI00046FF0E6 P F S G R D V L K A M V N S G Y E W D R T N G D H A L V H D S P R R T V
UniRef90_B0R8E7 M K P V S R R E L I R L R S F G F E G P F S G G H S F M K R G K L K L R I
UniRef90_B12V7 Y E K L V K L L K H G Y K L V R T K G S H E I W A S E K K G V S V T
UniRef90_UPI00036BFAE9 M K Y S E F R R W L R Q G V K L E A H K G S S H F K A T L G D R M T V
UniRef90_UPI00047C253E M P K I P R E L A K L D R Y K Y K I V R E S G S H I R Y K Q L E H K T I
UniRef90_V4GS15 M K R L R I A Q L E Q A G C Y L I R R G G K H D I Y H N P D T G K T E
UniRef90_S3JAN2 I R F N E I V K V L N H Y G Y I E V R V K G S H H F R N E E G D L I T
UniRef90_F5L5D4 M N R C D F V R E L E V D A G C Y L K R H G G K H D I Y I N P N G K Q S P
UniRef90_Q1Q4A9 R A L E K A G F R V R V E R G K Y I L V M S D G A R F L
UniRef90_A4BRJ0 M P M T I R E A E K L L K E A G F V E V K G K G S H R K F T K D N P R P V I
UniRef90_S4CZR2

UniRef90_UPI00034B4B2B P G K D G D D A P L Y L E K S I Q K
UniRef90_AOYN92 S G K D G D D A K P Y L E K E V N R Q L E I
UniRef90_J9ZXD3 V I R N P Q R D E L K T G T L Y A M L A Q L G L S R A D L
UniRef90_E8N7U4 I I T I Q T R E V S P G L T R K A L
UniRef90_A3IQR7 I L P V H R N D L K I G T L K A L T K I A E L T E H D
UniRef90_R7H4B3 P R H G S K E I E K E T A N S I L
UniRef90_C6HVA2 V P R H S E I A D R L C R I I T H Q L G L P E N
UniRef90_E1SYC8 V S M G S G E I P K Y L W K E I L K Q L Q V S E E Y F N
UniRef90_A0A024BWL4 L P F H S G E I H P K L V K E I M
UniRef90_D5MJN5 I P N H S D L R K G S T L R T I C I Q A S I A R D E F L K
UniRef90_I7LJF0 M P N H P K L K G P T L R S I C T Q A G I P R E E F L R
UniRef90_UPI0002D4FCDE V T F L K S R H L A N A I L K D A G L P K
UniRef90_S1N6I3 I T S H A K E I S R V V E R T V R K
UniRef90_H3SD77 V S Y H S S V L A K G T L K S I E R T S G V K
UniRef90_S9STG7 V S F H S D V I A K G T L K N I E R T S G V E
UniRef90_M0PRE4 V P L H D E L R T G T L R E I A D G A G A D F D E F
UniRef90_A0YQ53 T I P R H R E V V D V L V R K I C R D L G V
UniRef90_R9L5I3 I A I P R K E V P E F T A R G I L E D A G L K
UniRef90_F4BY20 P N P H K Q E I G I S L L V E I L R E G G I S R E E W L
UniRef90_UPI000373AAAD P W H Q G K I L H P I V L R N R W K
UniRef90_E0M4E9 V P F H G K E I P E P L R K K I K D L G L
UniRef90_B7JBJO L K D R K K E I G I G L L K A M C L Q L G I S P D D L
UniRef90_F5SEB4 V S H G T G E I N K H L W R Q T L K Q L E V T E E Y F N R
UniRef90_Q7UUJ3 V P R H R E V S D Y L A R K I C R D L G I P E
UniRef90_W8UNT8 V P Y T I V S P H T A N G I L K Q A G L P K N
UniRef90_C9PUG2 V P R H A G E L A N G T A I K I L K
UniRef90_UPI00016C52ED V P V R S K P M K P T T Q R H L A R D
UniRef90_V2YAD7 I P R H K E I A E Q L A K A I I K R Q G L E
UniRef90_I4I6S1 V D N T I K S R H T A N A V L K Q A G L S K
UniRef90_G7H3P0 V P R H N E I N E N T A N S I L K Q M G V K
UniRef90_K9YWC8 I P R H R E I R D I L A K K I C K D L D I P P
UniRef90_T1B3O2 V P L H R E L K L G T L A G V L K Q A G L T T Q E F I D
UniRef90_B2J5R2 I P K T G G Q K V K G V Q E S I V E L L N L E E W I D
UniRef90_W6LU18 L P M S S G E L K K G V T Q E S I K K Q L G L K E
UniRef90_UPI000349E8E6 S G N D G A D A K I Y Q E K L I K Q A I L E V K
UniRef90_I3YBF9 P P F H G K E M P A P L A N A I K K D L G L
UniRef90_F4BXT8 N P H Q G D V D V R L I K T I L K D V G I S R E E W L
UniRef90_UPI000349E29 F P D H G K E M G R G L V E A L K K Q L D L K
UniRef90_L0DTM6 L R N P R S D E L K T G T L H A M L K Q L G L K E E D
UniRef90_A3IH47 V R N P S Q E L K T G T V K A M L K Q L G L E E D I
UniRef90_J0NQN9 I P A G H R E I S A G V L M Q L K R A G V D V
UniRef90_X0S6G4 A G Q L G K D V A V G T L K S I W K Q A E L E D E
UniRef90_X1VQS2 V P V H N K D L K T G L L K A V I K I A
UniRef90_E1YD37 V P R H R E L D E L V I K I C K D L G I P K
UniRef90_H5Y9R3 V D N N I K S R H T A N A V L K Q A G L P K
UniRef90_UPI0002FBB2E7 P G K D G D D V P I Y L E K Q V A K
UniRef90_D5C3Y7 I P N H S P L R V G T L S A I I T D L R I S K D E A I K
UniRef90_UPI00037B0EE0 V P R H N E I D D L L V K H I K K Q L G L D
UniRef90_UPI00036620F9 V T Y G G K D I D G Q P L L S E I M R Q L H L S R E E F E R L
UniRef90_J0PZ09 L P M H R K E L G T G L V Q K I L K D L D L K
UniRef90_F7T5Z6 F P Y H S R E M G K H L E H E I K K Q L G L K
UniRef90_D4MWM0 P R H R E I N E R L A R A I L R K W G L
UniRef90_Q3MBS7 A V P R H T E I V D V L V V K I C K D L E I A R
UniRef90_UPI0003B53CAD V P T K N E S L P I G T L S A I L K Q T G L G K T G L Q K L
UniRef90_UPI0003B4A786 V I D S K I L K S R H T A N A V L K Q A G L P K
UniRef90_Q2JCX3 L A F H D R T I G P G V V R Q I L K Q V G L T V E E
UniRef90_R7X1S2 V P R H A T E L K K G T V Q A I K R Q L N L K
UniRef90_R6QX70 N K D L N R M V A R R L L K Q Y N L Q V K E
UniRef90_UPI000365E2F5 L K D R K K E I G P G L L K A M C K Q L G I D P N D
UniRef90_N1ZKJ8 P R H K E I N E K L A K A I L K K W G L
UniRef90_I4N3M3 F S D H G K E M G E G L R K A I N Q L S L K
UniRef90_UPI0002F82C6E L P D G H R T I S P G V V R K V H K
UniRef90_R9LE59 I P V K R H D F D E D D M R Y I L K E A K I D K N Q M G K
UniRef90_D2QMM3 A I P R H R E I N D F L A R K I C R D L Q I A E
UniRef90_UPI00036C3AEB V N L P G K D
UniRef90_B1QP13 I P I P Q K H E L G K G L S F K I Q K Q I
UniRef90_K2M145 L K D R K K E I S P G L L N S M L K D L G V D P K D
UniRef90_B1M2L2 L P Q H S K E L G T G L W K K I L K D L E I K E
UniRef90_R7HY04 V P R H K E I N E I T A K Q I L K K W G L
UniRef90_X0ZK56 I P K H K E L K I G T I N N I L N D I E I D K E S F I Q
UniRef90_E6PND5 V P R H D P L R I G T L A A V L D A V G L S R D A L L E
UniRef90_UPI000237ECF5 V P H P R R D L G T G L V A A I R K Q A G M
UniRef90_K6FL63 P V H G D A D I G P V F I K M L C K Q L G I D P K E L
UniRef90_UPI000376753E I T H P V K D V A I H M E
UniRef90_U5QD96 I L L S G N D
UniRef90_B1X0L9 A G K D G D D A K R Y L E Q Q I
UniRef90_A0A011PZW9 V P V T V A S R F T A N A I L K Q A G I
UniRef90_A4XGV4 I P M H
UniRef90_D1JIM7 I T V H P G D I G K G L I R K I T S D A K L T R D E W F E L
UniRef90_UPI0003471545 I P R S N L I N A Y T M A G I I K D A G F T I N Q F Q E L
UniRef90_H5SSX8 V H K G G R D V P S G T F A E I L R Q M G V D R E T F Q K L
UniRef90_UPI00046FF0E6 I H A M G Q M V P K G T L K S I E R T S G V K
UniRef90_B0R8E7 P V P L H D E L R E G T L K E I G E Q A G M D F Q E F K
UniRef90_B12V7 P N P H G K D L G V P L L R R D I K
UniRef90_UPI00036BFAE9 V N H A C K S R H T A N S I L K A A G I P
UniRef90_UPI00047C253E F P D H S K E M G T G L V N K I K K D L G L K
UniRef90_V4GS15 P D H Q S I K I G T L N N I L N D I N L S K Q E L I
UniRef90_S3JAN2 I P R H R E I N E R L A K K I K
UniRef90_F5L5D4 I P K H N
UniRef90_Q1Q4A9 V P R H S E I K E S L V L I K K Q L G L
UniRef90_A4BRJO T I P R N N P V N A F T M G G I I R D A G L T I E A F R R L
UniRef90_S4CZR2 L T S H S K E L

UniRef90_E4VJR6 UniRef90_Q18G19 UniRef90_UPI0002F48254 UniRef90_A0ZK27 UniRef90_UPI00030EC32E UniRef90_A7BU27 UniRef90_D0WCQ5 UniRef90_I3ZAU5 UniRef90_UPI000370C259 UniRef90_K2J3F2 UniRef90_K9XQ12 UniRef90_Q0I4H0 UniRef90_UPI00037A45C5 UniRef90_L0X7J0 UniRef90_X1F4T1 UniRef90_W2VCD4 UniRef90_K5W518 UniRef90_T2JEF3 UniRef90_I4B4A5 UniRef90_UPI0002886A72 UniRef90_K1XQQ2 UniRef90_D5P4H1 UniRef90_Q64TE8 UniRef90_B8GHG6 UniRef90_X0U1U8 UniRef90_U3TZ88 UniRef90_B8IEU3 UniRef90_D8PH96 UniRef90_UPI0003466CF4 UniRef90_A3IQF4 UniRef90_J0VKV3 UniRef90_G4QCW1 UniRef90_G8MS29 UniRef90_D6SM54 UniRef90_Q2N8S6 UniRef90_D6YWE1 UniRef90_E8WVJ5 UniRef90_K9XU25 UniRef90_G9RV21 UniRef90_D4YZR1 UniRef90_D7JCF7 UniRef90_I0IA97 UniRef90_K9X2M2 UniRef90_A7BWA8 UniRef90_UPI0003692B8E UniRef90_UPI000346981B UniRef90_M0E5M7 UniRef90_V4J9Y9 UniRef90_B8HMY2 UniRef90_U4VUE2 UniRef90_U7QNX8 UniRef90_U5EBR1 UniRef90_M7Y1J2 UniRef90_A0ZAG0 UniRef90_UPI0003631364 UniRef90_B7K208 UniRef90_L8LKP8 UniRef90_D6Z511 UniRef90_B1XR12 UniRef90_G8I6R4 UniRef90_N1U8H7 UniRef90_K9YZ99 UniRef90_H1XNF4 UniRef90_Q20YW8 UniRef90_UPI000366D6C7 UniRef90_U2I6Z6 UniRef90_M0EMN7 UniRef90_A0YIV6 UniRef90_M0MR05 UniRef90_V2IWL8 UniRef90_R5U8U9 UniRef90_A4BN78 UniRef90_I2Q5D5 UniRef90_L8AR55 UniRef90_A8ZKE1 UniRef90_UPI000314B24A UniRef90_UPI000375FB7C UniRef90_W6M073 UniRef90_L8AR75 UniRef90_D3FD17 UniRef90_F5YJ00 UniRef90_A0A011PEK1 UniRef90_K7S1K8 UniRef90_U1FPQ3 UniRef90_B0D0Q5 UniRef90_W1VB06 UniRef90_C0QWR2 UniRef90_UPI0003B5788C UniRef90_T0YQF8 UniRef90_UPI00047DE4AC UniRef90_UPI000416E614 UniRef90_M6LZR4

1 10 20 30 40

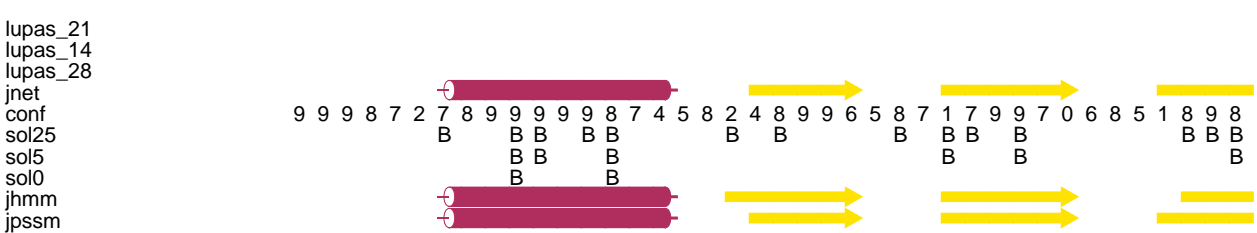
T A K E A E S L L L Q N G F V V D R Q K G S H K I Y K K D S K R M V L
E V A K A L V N K G F Q W V R T P G D H L K W E H P D G R S V T
R F R E I A K A L L E H H G Y I E V R V S G S H H H F R N S R K G D L I T
E V K R I L L E N A G C Y F K R Q K G D H E I W Y S P L I T Q T S F
M P K K I R E L K Q M L R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

UniRef90_E4VJR6 P H H S G K T L H P K I I K A L F 50 60 70
UniRef90_Q18G19 I P L H D R V R V G T L R G I A E D A G A K D F E K
UniRef90_UPI0002F48254 I P N H N P I K A V I V K D V L R R I G
UniRef90_A0ZK27 V V D G G C M K S R H T A N G V L K Q A G L E K
UniRef90_UPI00030EC32E S G K D S A D A K R Y Q E K E V Q Q A I L L E V E E
UniRef90_A7BU27 L S G K S G D
UniRef90_D0WCQ5 P F H G S R E M G S D L T N K I K K D L G L K
UniRef90_I3ZAU5 V P A H K E L R I G T L A S L I R Q K D L S R D E
UniRef90_UPI000370C259 P G K R V A T C R P G
UniRef90_K2J3F2 L P M H G K E L G T G L V N K I K R D L G L
UniRef90_K9XQ12 V P I G A R E M S P A Y V L R I F R Q F G F T D K E I E K L
UniRef90_Q014H0 I A Y T I K N R H T A N G I L K Q T G I E F K
UniRef90_UPI00037A45C5 I P D L K K E L K T G T S S A I L K Q L G L E K G D
UniRef90_L0X7J0 P Y H G N K I L H P K I I K
UniRef90_X1F4T1 V I P R D W P E V P V F I I K N N M R T A G I S
UniRef90_W2VCD4 V P R H R D I N E I T A K G I L R K W G L K
UniRef90_K5W518 I P H P D S T I P P N M L R R I K R T Y G W N D D D F L K
UniRef90_T2JEF3 I T P R A N P L N G Y T M G A I I K G S G M T V K E F K K L
UniRef90_I4B4A5 S G K N G D D A L P Y Q E K A V K K A L D L T K
UniRef90_UPI0002886A72 V Q P H G K D A K T
UniRef90_K1XQQ2 V I P K Y K E V P V F I I L N N L R T A K L S R Q R Y F E L
UniRef90_D5P4H1 V P D S H R T I S P G V V R N I N K K I E E S Q K E
UniRef90_Q64TE8 T S H H G K E V A S G T L K S I K R M S G I E
UniRef90_B8GHG6 I V P K S D E L D R R T L K C I L R V I G L S T R R F L E M
UniRef90_X0U1U8 I P V H D G K V K A F Y V R R I E K
UniRef90_U3TZ88 L P H P E K D L A N G T L R K L L K
UniRef90_B8IEU3 I P M H R K E L G K G L V N R I L K Q L D L K
UniRef90_D8PH96 I P Q H S P L R I G T L S A I L T D V E L T R E Q L S R
UniRef90_UPI0003466CF4 I P H P V K D V A T G T A H K I V K Q I
UniRef90_A3IQF4 V D G T L K R H T A N A V L K Q A G L S K
UniRef90_J0VKV3 V D H G V K S R H T A N E T L K Q A G L P K
UniRef90_G4QCW1 V P Y N L K S R H T A N A T L K Q A N I N K K
UniRef90_G8MS29 P Y H G S K E I G T G L V H K L K K D L N L K
UniRef90_D6SM54 I K T S P G N V P T T H I R T N L T A G I S R T R Y F E L
UniRef90_Q2N8S6 V Q P S G K D A K P Y Q I R E F L
UniRef90_D6YWE1 P I K
UniRef90_E8WVJ5 I P D H R P L K V G T L N S I L D Q V G V P R Q D I L R
UniRef90_K9XU25 I P K K G G Q K V K G V V Q K I V E L L N L K E D
UniRef90_G9RV21 V P R H T E I N E R L A R A I L K K W G L D
UniRef90_D4YZR1 V D G N I K S R H T A N G V L K Q A G L P K
UniRef90_D7JCF7 I P R H R K E I P K G T L K N I S K A S G V E
UniRef90_I0IA97 V P R H K E L Q H N T A R S I C R A L E I P V P E
UniRef90_K9X2M2 I T I S G K E M T L N L I
UniRef90_A7BWA8 I D Y H S K E V P T G T C H A I L K A A G I K
UniRef90_UPI0003692B8E V P R H N E I D D K L V R H I R R E L G V E E
UniRef90_UPI000346981B P A H D P I K I G T L N A I I K D I
UniRef90_M0E5M7 V P A H D S V S I G T L H A I A D D A G
UniRef90_V4J9Y9 P N P H Q G D I G R G L L A R I L R Q A G V E R S E W E S I
UniRef90_B8HMY2 I I A R K D D A P L Y L E K Q I
UniRef90_U4VUE2 F P D H G K E M P E G T R R K I L K D L G L
UniRef90_U7QNX8 P N P H Q G D I S K N L L K R I L M Q A G L S Q D E W E N L
UniRef90_U5EBR1 V P D G H R T V S P G V R T I F K
UniRef90_M7Y1J2 V Q S H I D P V P E F I I K N A L R A L G L T K K D F F E I
UniRef90_A0ZAG0 S G K D G A D A Q R Y Q E K K I K Q A
UniRef90_UPI0003631364 L P R H A K E L P E G T R K A I L K Q L G L X E
UniRef90_B7K208 I P A H N S L K V I G T L N A I F
UniRef90_L8LKP8 V P R H K E V D E H V A R H I L K H L G I
UniRef90_D6Z511 I P A H N P L K I G T L S A L L R S I K I S R D E
UniRef90_B1XR12 V P T G H R T I S P
UniRef90_G816R4 I V P E H K E L A I
UniRef90_N1U8H7 V V D Q S I K S R H T A N G V L K Q A G L P K
UniRef90_K9YZ99 P F H K G K T L H P K I I K S L F
UniRef90_H1XNF4 F P V D S K I K S R H T A N G I L K Q A G L P K
UniRef90_Q20YW8 I P N H E E L A K G T L N S I L K W N N I S K D K L I E M
UniRef90_UPI000366D6C7 T S H H E K E I P T G T L R K I I R E A G L
UniRef90_U2I6Z6 V P L H D E L R A G T L R G I A D A A G
UniRef90_M0EMN7 V P K T G G K M V K R T Y I K Q I
UniRef90_A0YIV6 V P L H D R V R V G T L R Q I A E N A G A K E
UniRef90_M0MR05 F P Y H G K E I P E P L R K K L L K D L G L
UniRef90_V2IWL8 I P R H S K E V S L H I E R N A R K V L G I
UniRef90_R5U8U9 L
UniRef90_A4BN78 F A F H E G E I G P R M M T R I A K T T G L N P E
UniRef90_I2Q5D5 A V P R H T E I K E F L A Q K I L K
UniRef90_L8AR55 A R K D G A D A P L Y L E R K V Q K
UniRef90_A8ZKE1 I P K K G G K M V K G I V K Q I V K L L N L E
UniRef90_UPI000314B24A I P R H R E I N E I L A N K I I R D
UniRef90_UPI000375FB7C P I K R H R Q F D R I T A N E L C K Q A G L A P K
UniRef90_W6M073 I I C G N D D A K P Y L E K Q V
UniRef90_L8AR75 F S F H G G T L P P G L V R K V L G D V G L S E D
UniRef90_D3FD17 V P R H N E I K E Y V A R S I R
UniRef90_F5YJ00 V S H G V K E L I D D S L L G M M S R Q C K L S R Q D F D R L
UniRef90_A0A011PEK1 V V A H D G I V S A G V R Q T
UniRef90_K7S1K8 I P V H G K D M K T G L L A A L L K R T E L E
UniRef90_U1FPQ3 I P H P D P T L K P K M L K N F A K R L G W T E E D F L N
UniRef90_B0D0Q5 S I T R T R E I S P G L V R K A L N T I E E
UniRef90_W1VB06 V P V H K N D
UniRef90_C0QWR2 I P R H K E L N E S L A K A I L R K W G I E
UniRef90_UPI0003B5788C V P R H A E J V D P L A R K I C R D L G I P V
UniRef90_T0YQF8 I V P N H K I V S P G V V R
UniRef90_UPI00047DE4AC P I A R H R E I N Q N L A K H I L K
UniRef90_UPI000416E614 V P E H K E L A I G T L R S I L R Q T K I S L E E F E N I
UniRef90_M6LZR4

UniRef90_R9KM22
UniRef90_U1QGT5
UniRef90_T8JKJ0
UniRef90_D5BXM2
UniRef90_E3IR97
UniRef90_K4LHA5
UniRef90_X0URU0
UniRef90_V2XR74
UniRef90_U7QB72
UniRef90_B4SD63
UniRef90_C3X854
UniRef90_UPI00046CAECD
UniRef90_X1UHM6
UniRef90_V8D375
UniRef90_UPI00036E0587
UniRef90_V4JG03
UniRef90_X1BTR7
UniRef90_H5SHB9
UniRef90_A0A016IB49
UniRef90_K1VXN3
UniRef90_K1W9Q5
UniRef90_X1TJN6
UniRef90_M4VRW8
UniRef90_UPI000424850D
UniRef90_H8GIB6
UniRef90_E1YEP1
UniRef90_UPI00035F5418
UniRef90_K6E2R6
UniRef90_P0CJ67
UniRef90_B2UKR3
UniRef90_B9DUL2
UniRef90_UPI0003B41710
UniRef90_T1BK80
UniRef90_UPI0003F89532
UniRef90_I3YCL2
UniRef90_UPI00047DC3AA
UniRef90_R6ECU2
UniRef90_H3SAB8
UniRef90_M6SXW8
UniRef90_J7QVK0
UniRef90_UPI0002E57CFD
UniRef90_K0NJZ2
UniRef90_F6CNE2
UniRef90_UPI00035C1230
UniRef90_G9WIM5
UniRef90_E1YLD5
UniRef90_K1XX01
UniRef90_K2AVH7
UniRef90_UPI0003B505CA
UniRef90_D4L0U7
UniRef90_I9MNM5
UniRef90_D6SLL9
UniRef90_A8AGJ5
UniRef90_A0A022PIM1

1 10 20 30 40

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



50 60 70

```

UniRef90_R9KM22      V R H   R E T D E D L A K A I I R R N G L K
UniRef90_U1QGT5      V P L H A E V I S D G T L R K I A D Q A G
UniRef90_T8JKJ0      M P R H S D E I K E P L R K A I L K Q L G L S
UniRef90_D5BXM2      P N P H Q G D I G K
UniRef90_E3IR97      V P R H   K E I K D F L A K R I A E Q T G V K
UniRef90_K4LHA5      L R T K H K E I P K Q L W Q R I L K Q L K I T E K E F W E
UniRef90_X0URU0      L F H A R K I L H P K I V K Q V L K
UniRef90_V2XR74      V T V D G K I K S R Y T A N A I M K Q S G I
UniRef90_U7QB72      S G K D S K D A K P
UniRef90_B4SD63      V P D H R
UniRef90_C3X854      I Q S F G K T A K S Y Q V R R I L
UniRef90_UPI00046CAECD A V P R H K E I K E P L A R K I L K N L G
UniRef90_X1UHM6      I P N H   K V L K P G L L K K L I R D S N L T I
UniRef90_V8D375      I P D G H K T I S P G V I R K V N K
UniRef90_UPI00036E0587 L P R H S A E L K E G T R R A I L K Q L G L K
UniRef90_V4JG03      S G S T N D D A K R Y Q E K Q V   K Q A
UniRef90_X1BTR7      V P R H A E I K E S L A L I R K Q L G I E D K
UniRef90_H5SHB9      F A F H D D E
UniRef90_A0A016B49  L S H H K S E E A K G T L K S I S R D S G V K
UniRef90_K1VXN3
UniRef90_K1W9Q5      S G Q D G D D V P R Y L E K Q L E K L L G L R E E E
UniRef90_X1TJN6      S L H   K E L K R R L E R A L F K R I E Q T R
UniRef90_M4VRW8      P L H   R E L K K G L E Q K L R K
UniRef90_UPI000424850D L P R H T   E I S D I L A H K I C K D L G I K
UniRef90_H8GIB6      P V P R H G E I D E Y L A K S I I K
UniRef90_E1YEP1      V P R H I   E I K E P L A K K I L K
UniRef90_UPI00035F5418 S G K D S S D
UniRef90_K6E2R6      I S F H G D V I P K G T L S S I E R T S G V K
UniRef90_P0CJ67      P R H P   D E L K E P L R K A I L K Q L G L S
UniRef90_B2UKR3      I C G H D G D D A K P Y L
UniRef90_B9DUL2      P V H G N K D T P I G L E K K I R H D L G
UniRef90_UPI0003B41710 I P R H   K E L K E P L A W K I L R R L G D D R E
UniRef90_T1BK80      S G A L G D D A K H Y Q V R A V K R
UniRef90_UPI0003F89532 T V D R S C   M S R H T A N A I M K Q A G L
UniRef90_I3YCL2      V P R H S   E I K D L M A H K I C K D L K I
UniRef90_UPI00047DC3AA V K E D K P T I K R A Y V E D I L I R I G
UniRef90_R6ECU2      I P V K R H D F N E N D M K Y L F K E A G I K R K
UniRef90_H3SAB8      I P K H N
UniRef90_M6SXW8      P I H G K K E L K
UniRef90_J7QVK0      L P R T T K   S R H T A N E V L K R A G L P K
UniRef90_UPI0002E57CFD I P V H N N K V K T V Y V K R V I
UniRef90_K0NJZ2
UniRef90_F6CNE2      I P L H   D P L K V G T L N G I L T D
UniRef90_UPI00035C1230 V   D G D I K R H T A N G T L K D A G L N K
UniRef90_G9WIM5      V P Y H L K D I R I G T Y R S I I R
UniRef90_E1YLD5      V P R H   D E I D E H L A K H I I K E
UniRef90_K1XX01      P N V H S K E L G K P L V H K L C Q E L K I D T K Y F I D L
UniRef90_K2AVH7      I P N H   K E L A Y W T F S W I L S Q L R I N E E E F L K I
UniRef90_UPI0003B505CA P R H P A Q E L K E G T R N A I L K Q L G L K
UniRef90_D4L0U7      N K D L N A M V A K R I I K Q
UniRef90_I9MNM5      V P F T I   V S R H T A N A I L R Q A G I N K K
UniRef90_D6SLL9      A P M G K K S L N P V Y C K R I F R Q L K L T D S E I E D
UniRef90_A8AGJ5      P R H P G D E I K D T L R K A I L K Q L G L
UniRef90_A0A022PIM1 P D H G S K E I P E P L R K K I M K D L G L

```

