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                    1              10                  20                  30              40
QUERY               Y L T H R C L I A P P E M A D D F F A N T V I Y L A R H D E E G A Q G I I N R
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UniRef90_S6BEB9       L T N H L L I A M P S L R D P N F S H T V T Y I C E H S P N G A M G I M I N N
UniRef90_B8GP63       F T N Q F L I A M P G L E D P N F F H S V T Y I C E H N E Q G A M G I V I N Q
UniRef90_D0L0G7       L K N Q L L I A M P S L D D P N F N H T V T Y V C E H N E D G A M G I T I N R
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UniRef90_Q87LK0       L T N H F L V A M P G M K D P Y F Q N S V I Y V C E H N E E G A M G L M I N A
UniRef90_F3LDR6       L K N H F L I A M P G L T D S R F S K T V T Y I C E H N E G G A M G I V I N Q
UniRef90_UPI0004739D2D L A N H F L I A M P S M A D P V F S G T V T Y I C E H N S Q G A L G M V I N K
UniRef90_V5HNF6       L T N H F L V A M P S M Q D P H F K R S V I Y I C E H N E H G A M G I M I N A
UniRef90_W9ASF6       L T N H F L V A M P T M Q D P N F K R S V I Y L C E H N D E G A M G I I I N Q
UniRef90_U1K723       L A N H F L V A M P S M D D P F F N H T V T Y I C E H S E D G A M G L V V N H
UniRef90_U0ET37       L T N H F L V A M P G M K D P Y F Q R S V I Y V C E H N D D G A M G L M I N A
UniRef90_U1JS71       L E N H F L I A M P S L Q D P F F K Q T V T Y L C E H N D E D G A M G I V V N H
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UniRef90_E6QWY2       L T G H F L I A M P G M E D T R F A R T L T F V C K H D E D G A L G V I V N R
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UniRef90_UPI00040BAF48     N Q F L I A M P S L D D P Y F S R S L T Y I C E H N E D G A M G I V V N Q
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UniRef90_A6FHL8       L Q D H F L I A M P S M K D G I F E R A V I Y I C E H N A D G A M G I I I N L
UniRef90_M5DLE3       L T N H F L I A M P A M A D P F F S K T L T Y I C E H N E Q G A L G L V V N R
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UniRef90_A3WLD6       L Q N H F L I A T P S M N D P L F R R S V T Y I C E H N E D G A M G L I I N R
UniRef90_C6X9Q8       L T N H F L I A M P A M A D P N F A K S V T Y I C E H N A D G A L G I V I N R
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UniRef90_G3IUQ2     Y L T D Q F I I A M P N L A D P N F F H T V A Y L C Q H N K D G A L G L V I N K
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                                      50            60            70          80
QUERY             P A G I Q I K E L L N D L D I D A D N V N P H E V L Q G G P L R P E A G F V L H
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UniRef90_A6D852   P I D V T V A N M L K Q V Q V E L P I A S Q E P V L N G G P V S E D R G F I L H
UniRef90_S6BEB9   P I D I R V S E V L E Q M E I P S D D V K E A P V Y L G G P V E E Q R G F V L H
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UniRef90_V5HNF6   P I D I T V G G M L K Q I E I Q A G D S L K Q P V H N G G P V S E D R G F I L H
UniRef90_W9ASF6   P I E I S I A D M L E Q I E I E R T Q P L I Y P V L N G G P V A E D R G F V L H
UniRef90_U1K723   P I D I T V G E L L D Q I I D I D N D K S S Q A A I Y A G G P V H T D R G F V L H
UniRef90_U0ET37   P I D I T V G K M L K Q V D V E A T Q P Q E K P V L N G G P V S G D R G F I L H
UniRef90_U1JS71   P I D V T V G E L L D K I D I D N D S S A Q Q Q V F A G G P V H T D R G F V L H
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UniRef90_U4K885   P L D I S V G K M L K Q V D P T D S L E K P V L N G G P V A E D R G F I L H
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UniRef90_R8AMG7   P S E M T L E E M L A Q I E I T P E P R D N R P V L A G G P I A N D R G F V L H
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UniRef90_C0N5F4   P T R V M L E E L L N H L K I E A D S L K T T P V L F G G P V Q K G Q G M V I H
UniRef90_E6QWY2   P I D M R M S D L F S Q T G L T S D D L G E R P L Y F G G P V E T E R G F V L H
UniRef90_UPI000403AD7F  P I D L T L A G L F E E L E L K V E E L A R L P V Y F G G P V Q T D R G F V L H
UniRef90_K2KLN1   P A D V A V N H L L Q Q L E I E Q S Q L L Q A P V Y S G G P V A R D R G F V L H
UniRef90_UPI00036BA73C  P I D M S L D L F E R I D L E S P R F Q G Q P V Y F G G P V Q T D R G F V L H
UniRef90_UPI0003744694  P L E I C I S D M L E Q L D I E G D E L P T P V Y S G G P V Q N E R G F V L H
UniRef90_UPI00034B4F37  P I D V T V G E L L D K I D I D N D Q A A G R Q V F A G G P V K T D R G F V L H
UniRef90_H5WIX2   P I D I K L K N L F E E L P L D R D E L A E Q P V Y Y G G P V Q T E R G F V L H
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UniRef90_UPI00036BCD94  P S Q R N F P D L L V Q L Q I P K E T E T I Q V L Q G G P V Q T D R G F V L H
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UniRef90_A6E5Q1           L T G K L L I A M P G M G D P R F A H S V V L L C A H S P D G A M G L I I N K
UniRef90_Q3SNY6         Y L D G Q L L I A M P V M E D E R F A R S V Y V C A H S S E G A M G I I L N R
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UniRef90_K8VZZ6         T P I K G F L S S L H L N D E V M V T T S K D I L E T L G S E H S P S N S L V A
UniRef90_V6F8V9         S D D Y R H D S T M L V Q D G I A L T A T V D V L R A I A Q G A G P D Q S I L A
UniRef90_L0DSP4         S S E Q S W T G S R T L G S G L T L T T S R D V L E A M A L G K G P A Q A L V A
UniRef90_K2JZF8         T S K R G F N A S L A L G D S L M V T T S I D I L S A L G A N H G P E R F M V T
UniRef90_K0C6S3         T P V G N W D S T L T V N D E F A L T S S K D I L E A I A E G K G P E K W M V A
UniRef90_S3JKG8         S T P D S F G S S I R I S D D T V I T T S R D V L E T L G T A K Q P K E V M V A
UniRef90_A3QC17         T P Q P Q W S N S Q Q I S D D L M L T T S R D V L T S L G S K E A P E Q F I V A
UniRef90_Q3SFS4         T P P L T F S S T L T V N D A V S L T T S K D V L E A V S Q G A G P E K F I V S
UniRef90_UPI0003B5028F  S S E Y L Q E S S L R I R E E V A L T A T V D I L K D M A N G Q G P Q H S L L A
UniRef90_UPI000466C622  D G D R G W D S T L Q V A D G L Y L T T S R D I L E A M A A G E G P P R A L V A
UniRef90_Q7N7G6         T P K P G F S S S I K I S D D T M I T T S R D V L E T L G T P R Q P K Q I L V T
UniRef90_A0A024HBB0     P A G Q Q F Q A T L E L G E L S L S T S Q D V L F A I A D G S G P Q K S L I T
UniRef90_UPI0003799D6C  S G D Y F I D S T L A I D S D I C L T A T V E I L K A I A E G R G P R R A L L A
UniRef90_D4GMB6         S A Q R T F T S S I R V S D N T V I T T S R D V L E A I G T A S Q P D H V L V A
UniRef90_E1ST98         S P L D G M A S S Q A L T P E L M I T T S K D I L S T L G S D A A P N Q Y L V A
UniRef90_UPI00047BC00F  A P S E G W R S S A Q I S D D V M I T T S K D I L E A M G R N Q A P A D F L L T
UniRef90_Q478W0         R P I G Q W Q S T L A I N S D V M L T S S R D V L S S V G S A G L P A E I L V T
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UniRef90_D5CQD9         D T I G Q W Q S T L Q V N D R I G L T T S K D I L Q A V G E G Q G P E H M L V T
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UniRef90_H2FTX1         T P V D G F G S S R R L S D E L M I T T S R D V L E S L G T D E A P E K Y L V A
UniRef90_A1KB69         R P A G D W H S T L R V N D D I A L T S S R D I L Q S I G S S G E P Q E V L I S
UniRef90_R4YJD8         L E K G D W H S T L S I T D D I H V S T S K D I L T S L A Q G A G P K H Y K V A
UniRef90_A8LL67         T G D Y T G S S T L Q V D D R F G M T A T L D V L E D L S Q G T G P R R C F L A
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UniRef90_I0QMI8         T P R K G F G S S I Q I S D Q T M I T T S K D V L E T L G T P D Q P K D L V A
UniRef90_B1KIY1         T P Q T N W N N S Q S L T D E I M L T T S R D I Y T S L G T D A A P E N F I V T
UniRef90_I3CKN4         S P V G S W D S M L T V G E L G I T T S R D I L T A I A K G D G P K Q V L I A
UniRef90_B6IXH0         S T D Y A R D A T M M V D D E V A L T A T V D I L R A I A E G R G P K H A L L A
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UniRef90_A4G8M1         A P R G N F S S T L P V A G D I A L T T S K D I L E A V A M G A G P Q R M L V S
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UniRef90_UPI0003B4D403  D D P R D W G S T L R F G K N L A V T T S R E I L A A M A R G E G P E R S L I T
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UniRef90_UPI000472A232  Q P I H D W N S L V I G E D I A L T T S K D I L E A M A N G T G P D H A L I T
UniRef90_H8FSW4         S D D Y L H D N T M R V A E G V A L T A T V D I L R A I A E G T G P S R M L L A
UniRef90_F7NTA7         T P K D G Y T S S M R L N N D L M V T T S R D I L E K L T T E E A P D K F I L A
UniRef90_UPI00037BAB77  S S Q T G W T S S L A L S K E L M I T T S K D I L L A L G T D K A P E Q F I V T
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UniRef90_UPI00029B3E7A  R P G T K W Q S S F N L S N E V C I T A S N D I L Q A I A R Q E G P E K F I F S
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UniRef90_A0A021X1X6     S D D Y M S E S S I P V S D D I C L T A T L D I V R A I S R G R G P E K G L M M
UniRef90_A1S8G9         T T Q E G W A N S R L T D E L M L T T S K D I L S A L G T S K A P S H F M V A
UniRef90_Y0KFN7         S P S I E Y N S T M Q I N E S V A L T T S K D I L E S T A Q S A G P D K I L I A
UniRef90_A1RHM8         T S Q P Y W A N S T D L G S G L M L T T S R D V L T A I G G K R S P D K F L V A
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UniRef90_B1Y8F0         P R P G S Y N S T L S I P G G L E M T T S K D I L E A L S H G A G P K K V L I T
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UniRef90_A0A017HLF1     S A D Y E S E G T M R I D E E V S M T A T L D I L R Q I A A G D G P K A S M L A
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UniRef90_S3JKG8         L G Y S S W E K G Q L E Q E I L E N S W L T A P A A P E I L F H T P I A E R W R
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UniRef90_A1KB69         L G Y A G W T A G Q L E D E L A Q N A W L T V P A D L G I I F D P P E E R L V
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UniRef90_H8FSW4         L G Y A G W S G G Q L D N E I R D N A W L T A P S D P D L L F A P D L D R K Y E
UniRef90_F7NTA7         L G Y A G W S A G Q L E K E M A E N S W L M I P A D N N I I F E L S H A E K W Q
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UniRef90_Y0KFN7         L G Y A G W S A G Q L E E E M S K N A W L S V S V S N D L I F N L P Y D E K L P
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UniRef90_R0DRP5          L T G K L L I A M P G I G D P R F D N S V V F L C S H G E G A M G L I V N K
UniRef90_Q1GZH1          L T G Q F L V A M P A M T D P Y F A K S V T F I C E H N A D G A M G L V I N R
UniRef90_J3C4U4        F L N G Q F L I A M P G M D D S R F A R S V I Y I C A H S E K G A M G L I I N R
UniRef90_Q0AMH8        F L G G K L L I A T P A I G D P R F D R A V I L V C D H T A E G A M G L I V N K
UniRef90_UPI000466BBB7       G Q F L I A M P Q L A E S D F E R S V I Y L C E H S D E G A M G F V I N R
UniRef90_A3JXS6          L T G H L I A M P G M A D P R F D L S V V F I C D H S D E G A M G L I I N K
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UniRef90_UPI00047C154C   L Q H H F L I A M P A M Q D P V F K R S V V Y I C E H G E D G A M G L I I N K
UniRef90_A3YCR8          L K N H F L I S M P Q L N D P N F Q Q T V I T F V C D H N D R G A M G I V I N R
UniRef90_UPI0003766FB2   L S Q H F L I A M P S L V D P I F A R T L T F V C D H N D R G A M G I V I V N R
UniRef90_D0ZAG5          L A H H F L I A M P A M Q D S R F K R T V I Y V C E H N E D G A M G M I I N K
UniRef90_V4QBB3          L Q G R L L I A M P G L D D P N F D H S V I Y L C Q H D E E G A M G L I I N Q
UniRef90_A0A011Q8F5      L A G K L L I A M P G L I D S F F S K T L V Y L C D H N E G A L G L V I N K
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                                                  50              60            70              80
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UniRef90_Q2P5W3        P S E Y T L G E V L S Q M G I D T E P L R E Q I V L S G G P V H P E R G F V I H
UniRef90_UPI00035FAD75 P T D M S Y E T L F E K I N I K L E D T A I A P V L Y G G P V Q P E R G F V L H
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UniRef90_W6LX52        P L S L T L G G Q L L D H L Q I D Q S E L A A L P I Y H G G P V Q P E Q G F V L H
UniRef90_UPI00046D3543 P T P F L L G Q I Y E G Q D I E G E G G A D E P I H Y G G P V Q P E M G F V L Y
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UniRef90_J3C4U4        S Q E M E F A D I L V Q L G V M P D R T R D F L V R S G G P V E M R R G F V L H
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UniRef90_UPI0003766FB2 P L G M P L S T L F E Q I G V E L P D V A D L A V C F G G P V Q T D R G F V L H
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                              90          100         110         120
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UniRef90_A7ZR71          T P P S N F A S S I R I S D N T V M T T S R D V L E T L G T D K Q P S D V L V A
UniRef90_T1CD18          T P L G V W R S T L R I N D E F G L T T S R D I L E Q L S L G H G P D H M L I A
UniRef90_A0A059KS71      D R P A D D A A A L L V P G G L A M T T S R D V L E A L S G G N G P R R V L I T
UniRef90_UPI00047E3526   T G N P V W Q S S I A V S E N V C V T T S K D I L E A I A H N E G V E R Y Q I M
UniRef90_D3V478          T P Q S G F S S S I Q I S D E T M I T T S K D V L E A L G T T R Q P E N V L M T
UniRef90_W0SE98          R P A G H W Q S S L S V S D D I A L T S S R D I L Q S M G S T G E P A E V L V S
UniRef90_B0UR82          S P D F H I D S T L L I D D G I C L T A T V E I L R A I A A G T G P R D A V L A
UniRef90_F8J968          S S D Y S E D S T L A I E Q G V C L T A T I D I L K A I A Q G R G P E R A L L A
UniRef90_UPI0003B73CCE   K H G Q D P E G R M R I S P A L A M T T T R D I L E D L A M G Q G P E Q A V L A
UniRef90_W8S2Y6          S A D Y H A D E G L V V D G R F A M T A T L D I L E D I A A G R G P D R A L M A
UniRef90_UPI00035EC412   S G P R V F N S S I R I S D T T V I T T S K D V L E A M G S K Q Q P E Q V L M A
UniRef90_UPI0003B43FED   T A P G G W D S T L K V D E N L Y I T T S R D V L G A I G R G E G P S D Y L V L
UniRef90_Q2P5W3          D D A R E W D S S L E V G Q Q G V F L T T S R D I L E A M A A G N G P R N V L V A
UniRef90_UPI00035FAD75   E P F G D W D S S I T I N D K T S L T T S K D I L E A V A V A V G A G P K K L I F S
UniRef90_UPI000471A5D9   Y P A G G F Q S V L T L E S G I G V A T S K D I L S A T A K G E G P Q K A I V A
UniRef90_B4EUS1          T P V S G F S S S I K I S D S T M I T T S K D V L E T L G T A R Q P E K T L V S
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UniRef90_Q605E8          E P A T V W A S T L V V S E R L A L T T S R D I L E A V G R G E G P R R M L L A
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UniRef90_UPI00046D3543     E G P D Y E G S L E V L D G L R L G T S L E I L R D I A R E E G P E R F L F F
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UniRef90_K2P1S3          S E D V T V E S S M P V S N H I Y L T A T V D M L R A I S L G R G P R Q A M M A
UniRef90_K6YBT4          T T Q S G W S S S L Q L T S E I M I T T S K D I L S A L G N E N A P E K A L V T
UniRef90_UPI0003735CC6   S S E Y Q Q D G T M N V A N S V A M T A T V D I L N D I A N N A G P Q S S L L A
UniRef90_Q8UHA2          S D D Y L S E S S I P V S D D I S L T A T L D I V R A I S N G R G P Q K A T M M
UniRef90_K0C797          R D E R H W Q S T L M L A D G L C M T T S R D I L E A I A V G E G P E S T L V C
UniRef90_A0A010SFW8      P I G S T Y Q A T V E L D G L A L S T S Q D V L F A I A D G V G P S K S L I A
UniRef90_X2HB62          T P T G S W E S S L L V T D D I A M T S R D I I L G L T Q E N E V D K A V A T
UniRef90_B5JTR0          R K E Y Q W E G T E T I S D H L A I T S S L D I L E D L A R G K G P D N C L I A
UniRef90_UPI0003B65240   Q P A G E W Q S S L Q V T D H T A L T T S R D I L N A M V E G G G P E R L F L C
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UniRef90_X6KYH1          T P D Y S V V T T L E V R D D I H M T A T L D I L E D L G R G D G P E K W L M L
UniRef90_M5DMW7          R E Q G N W E S T L N V T E Q A H L T S S K D I L E A I A T G A G P R H Y L L G
UniRef90_UPI00037FA4EC   T T D W V Q D G S L Q V D Q G F A L T A S I D V L K E I A R G G G P R E G I L A
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UniRef90_X6KYH1         L G Y A G W G P G Q L E R E I A E N G W L V C D A S T G L V F D E G D M D K W T
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UniRef90_S2L7E7          A A A G I L G V   D L N L M   S
UniRef90_A3SSR7          A A L T S I G V   D P L G L   S A
UniRef90_A6VKT4          A A Q K L L G F   E S Y N L   S
UniRef90_UPI000402AFEA   R A L A T L G V   D L A A L   S
UniRef90_UPI000469E8A1   T A L R S I G I   N P I T L   S
UniRef90_Q0G174          Q A L A L L G I   Q Q A F L
UniRef90_UPI0002558FC8   A A A A T L G I   N L N L L
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Multiple sequence alignment (positions 1–40):

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                        1         10        20        30        40
UniRef90_UPI00047D22FC  F L D G Q F L I A M P T M G D K R F E R T V I Y L C A H S E Q G A M G I V I N K
UniRef90_F3L3H9           L K D Q L L I A M P S L S S G F F S H S A I Y L C E H D E H G A M G I T L N K
UniRef90_Q2KUT1          F S N Q F L M A M P G M V N Q D E L A G T V I Y L C E H T P R G A L G L V L N R
UniRef90_UPI00046E8F79  Y L E G Q I L I A M P T M P D P R F Q K A I I L L C A H D A G A M G I V I N R
UniRef90_B8FL92          L A G Q F L I A M P A L N D P N F A L S V T Y I C V H N Q D G A F G L V I N Q
UniRef90_M4UJV4          L K D H F L I A M P T L T D P Y F K Q S V V Y L C E H D A Q G A M G F I I N F
UniRef90_G8PSG8         Y I D G Q Y L I A M P T M E D G R F A H S V I Y L C A H S E E G A M G I V L N Q
UniRef90_Q12EE9          L T H H F L I A M P G L E D E A F A K S V V Y M C E H S D R G A L G L V I N K
UniRef90_Q1CEX0          L Q H H F L I A M P S L Q D P Q F K R S V I Y I C E H G E K G A M G L V I N K
UniRef90_D7MZQ0          L A N H F L V A M P D M D D P F F D G S V V Y I C E H N E D G A L G L I I N K
UniRef90_F4GFX4          L T H H F L I A M P G M E D A S F A R S V V Y L C E H R G A L G L L I N K
UniRef90_A3TV94          L S G H V L M A M P D M G D D R F T R S V I L I C A H S E D G A M G L M V N L
UniRef90_Q28KE9          L T G K L L I A M P G M E D P R F A G A V I F L C V H S P G Q A M G L V I N K
UniRef90_G2DT31          L T N H L L L A M P D V D D P F F E K S V V Y I C E H N A D G A V G L V I N K
UniRef90_UPI000468E704   L T G K L L I A M P G M G D P R F A H T V I F M T S H T K E G A M G L V I N R
UniRef90_UPI0003955F6E   L T H H F L I A M P G M Q D E M F G R S V V Y V C E H S E K G A L G I I I N K
UniRef90_B6AYF2          L V G K C L I S M P D M P D P R F Q S S V I F I C A H S A E G A M G L I V N K
UniRef90_UPI00031387AF   L K H H F L I A M P G L E D E T F A R S V I Y M C E H S E R G A M G L I I N K
UniRef90_R5QQK6         Y L T G K C L V S M P N M A D E R F E R S L I Y I C S H T K D G A M G F V V N K
UniRef90_Q493F3          L Q N H F L I A M P A L Q D P L F K Q S V V Y I C E H N D A G A M G I V I N K
UniRef90_A1SUE8          L K D H F L I A M P S L N D P Y F K H S V V Y I C E H D E K G A M G F I I N F
UniRef90_UPI000466E326   L T G K L L I A M P G M G D P R F A K S L V F I C A H S P E G G M G L M V N K
UniRef90_UPI0003B40691   L A G H F L I A M P L M S D P H F A E S V V Y I L T H D E Q G A L G I I I N R
UniRef90_A3SQJ1          L T G K L L I A M P G M G D P R F A H S V L M C A Y S P E G A M G L I I N K
UniRef90_D3A5F4          L A N H F L I A M P H M D D P F F T D T V I Y V C E H D E E G A L G I I I N K
UniRef90_UPI00046A7486   L T G E L L I A M P G T D D P L F S R S V V F I C S H S A D G A M G L L L N K
UniRef90_UPI00046F23AB   L Q N Q F L I A M P S L D D S F F E R S V Y V C E H D N K G A M G V M I N R
UniRef90_R7KMP1            K N H F L I A A P N M K D P T F A G T V V Y L C E H T K S G A M G I V I N R
UniRef90_A9LZR4          L S N H F L V A M P D M E D A F F S Q S V V Y I C K H D E D G A L G I A I N K
UniRef90_UPI0003B432B3   L I G K L L I A M P G I D D E R F E K S V I L L C A H T E E H A M G I V L N K
UniRef90_UPI0004755DD1   L K G Q L L L A M P S L M D P N F Q R H G V V L I C H H D Q E G C M G L L I N R
UniRef90_I3DJA9          L Q D K F L I A M P N L Q D S Y F A Y S V I Y I C E H N D Q G T M G L V V N Q
UniRef90_I1XFE7                  M P T L I D S F F Y H S V I Y L C E H D E E G A M G L I I N R
UniRef90_C4K450          L Q H H F L I A M P L L Q N T Y F E R S V I Y V C E H N E N G A M G L M I N Q
UniRef90_D5AM98          L S G K L L I A M P G M G D P R F E H S V V A M C S H S A E G A M G I V N K
UniRef90_S9S4K3          L A G Q I L I A M P T M G D P R F A R S V L C A H S P E G A M G L I V N K
UniRef90_UPI0003B3A8FA  Y L G G K L L I A S P L I G D P R F D R T V I Y M C A H D S E T A M G I I L N R
UniRef90_A0Y9P6          L K D H F L I A L P A L S D G I F A N S I T Y I C E H N E Y G A M G I V I N H
UniRef90_B8KLD5          L R D H F L L A M P G L D A G L F S G S I T Y L C E H G E A G A M G L V I N Q
UniRef90_UPI0003758741   L R D H F L I S M P H M H D A H F E H T V T Y I C D H S E Y G A M G I V I N K
UniRef90_UPI0003B4C72A  F M T G Q F L I A M P G I G D A R F D H S V I A M C S H D E Q G A L G V G V G A
UniRef90_B1XT82         H L A N Q F L V A M P G M V D P N F A G S V I Y L F E H T E R G A M G L V V N R
UniRef90_A4EHN6          L V G K L L I A M P D M S D P R F A N T V V Y M C A H S E E G G M G L I V N K
UniRef90_UPI0003B5501C   L K H H F L V S L P S L S E G I F A H S L C Y L C E H D E Q G A M G L I V N R
UniRef90_S7TFH3          L K G H F L I A M P G L L D P N F V R S V V C I C E H N A E G S L G L V I N R
UniRef90_C4GGM6          L A N H F L A M P N L E D S L F S G S I Y L C E H G E N G A M G I V I N K
UniRef90_UPI000367F6EB  Y L G G Q I L I A T P A M L D P R F A R S I I M M C L H D D D G A M G V V L N N
UniRef90_G2IIB3          L A G Q L L L A M P D M P D P R F A R S V V L I C V H D E G G A L G I A L D E
UniRef90_F0EWN7          L S H H F L I A M P S L D D S V F H Q S V V Y L C E H S G S G A L G L I V N K
UniRef90_F6CRY7          F K N H F L I S M P H L N D P H F E H T V I Y L C E H T P A G A M G I I I N R
UniRef90_UPI000375AE7A   L A N Y F L I A M P N M D D T F F S G S V V Y I C E H N E D G A M G V V I N K
UniRef90_N9UXW7         W F T G Q L L L A L P G I G D P R F D H S V I A M I S H D E E G A M G I G I D D
UniRef90_E1YHS6         F L K G Q F L F A M P E M A D P N F S G T V T C I S E H T Q E G A F G I V V K
UniRef90_UPI00042980CB  Y L T G Q F L I G D P R F E R A V I A M C A H D E G A L G I G I G E
UniRef90_T0HT48         Y L A G R L L L A M P G M F D P R F D H S V S V L C V H D E N G A L G I G V G R
UniRef90_UPI00036DC256   L T G Q I L I A M P A M E D P Y F S K S V I L V C N H D Q D G A M G M I L N H
UniRef90_B8KU72          L R G Q L L I A T P A L N V G F A R S V T Y L C E H G E A G A M G I V I N Q
UniRef90_UPI0003484AE5   L T N H F L I A M P H M D E S D F A E S L I Y L C D H D D N G S M G V A N R
UniRef90_C9Y7Q2          L T N H F L I A M P G L D D A M F G K S V V Y V C E H S A R G A M G L V I N K
UniRef90_UPI00046A70AF   L R D Y F L L A M P H L D D D N F S G S L S Y L C D H D E K G T L G V I V N K
UniRef90_UPI00036CF8C4   L T G Q F L I A M P A V S D P Y F S K T I T Y I C T H N Q D G A M G I V I N R
UniRef90_U3AD01          L S G K L I A M P G M A D P R F D H A V I V L C A H S D E G A M G L I V N K
UniRef90_S9REJ7          L T G R M L I A M P G M G D E R F E Q A L V F V C A H S D E G A M G L I V N K
UniRef90_G4CRM4          L T D H F L I A A P S M N D M F F E N S V V Y L C E H N E D G A L G V I I N K
UniRef90_C8S1K2          L G G S I L I A M P N L G M G D P R F E R S V I L I C A H S P E G A M G L I V N K
UniRef90_Q0C3C2          L A G Q I L I A M P G I G D P R F E R S V I L V C A H T P D F A M G I I L N K
UniRef90_UPI0003645BFD  F L G G R L L I A M P G V N D K R F I R S V I Y V C A H S E A G A M G I I I N Q
UniRef90_K2FDY9         Y L T G Q L L L A M P H M Q D P R Y E K A V I F I C G H D T N G A M G L V I N K
UniRef90_F4HDQ5          L Q N Q F L M A M P D L D D P F F Q R S V V Y I C E D N E Q G S M G L V I N Q
UniRef90_UPI00046A076E   L T G K L L A M P G M G D P R F D H S V I Y L V S H S D E G A M G L I V N K
UniRef90_A5V9R3          L R G Q L L I A M P G I G D P R F E K A V I A M C A H D E N G A L G V G V D R
UniRef90_L1QAB7          L T G R L L V A M P G I D D D R F R H A V I L I C A H D E D H A L G V R L D Q
UniRef90_S5RPZ1          L T N H F L I A M P G F S T P F F D G A V V Y L C E H N S N G A F G I I N K
UniRef90_A0L5K4          L A G K F L I A V P S L A D P F F E R T V L Y L C E H D A G A L G L V I N Q
UniRef90_UPI00029A3A46  Y L K H Q F L I A M P H M A D P N F A Q T L T Y I V E H N A N G A M G L V V N R
UniRef90_UPI000372B3E0   L A G Q I L L A S P T L D D P N F R D A V V L I C H H N A E G C M G L I I N R
UniRef90_G5ZXS6          L A G H L L V A T P Q M T D P R F R R A V I F I C Q H D K E A A M G L I I N Q
UniRef90_U7P937          L K D H F L I A M P H L E D P N F T G S L A Y L C D H D E K G T M G V I V N K
UniRef90_UPI0003B2F1A4  Y F T G R C L L A L P G M G D P R F E Q A V I A I C M H D E N G A M G I D L G R
UniRef90_U2W9U5          L S G Q M L L A M P G I G D P R F D R S V Y I F E H G P E G A M G F V V N Q
UniRef90_J7TBX3                  M P S L D D P Y F A R S V V Y L C E H N E N G A M G L V I N K
UniRef90_V4NYS5              Q G K L L I A M P S L A D Q P F D H S V I Y L C Q H D E Q H A M G L I V N Q
UniRef90_U4V580          L S G Q F L I A M P D P R F D K S L I F L C D H T E E G A M G L I V N K
UniRef90_X0SZM4         Y L D G Q I L I A M P G M P D D R F K R S V I Y M C A H S A D G A M G I I V N K
UniRef90_Q4FVM7          L T H H F L I A A P E L S D P R F E Q A L I Y I C R H D K H G A L G L M I N R
UniRef90_G4CF70          L S N H F L I A M P D M R D P F F S G S V V Y V C D Y S D E G A T G V V I N K
UniRef90_UPI0003744F45       G K F L L A M P T L E A S I F D R S I I Y M C A H S H D G A M G F Q V N K
UniRef90_A0Z2R3          L K D H F L M A T P A L S G G F A K S L T Y I C E H N A L G A M G I I N Q
UniRef90_U5NBJ1          L T N H F L I A M P S V Q D E M F A H S V Y L C E H S R H G A M G L V I N K
UniRef90_UPI00036D589E   L Q G K V L I A L P T I K D P L F E R A V I Y L C A H N E E H A M G L I I N Q
UniRef90_D5BSV7          L Q D H F L I A M P D M D D Q S A M G F V I N K
UniRef90_E3F1E3          L T G K F L I A M P D M A D E P F R Q S L I Y L C S H G D D G A L G L I V N K
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                              50            60            70          80
UniRef90_UPI00047D22FC  L A D I R F R D L L S Q L D I G E P E V E Q I R V H R G G P V E T G R G F V L H
UniRef90_F3L3H9         P M E F E L E H V L S Q L D I P C S P R V G R P V L S G G P V Q S E H G F I L L H
UniRef90_Q2KUT1         P T D L T L A S L F E R I D L T M G P T A D E K V F F G G P V Q T D R G F V L H
UniRef90_UPI00046E8F79  D L D I S F E D L F A Q L E I P L T D F T D K K I H F G G P V E S E R G F L L H
UniRef90_B8FL92         S F D S V T G K L F D Q M D M P A K A A E N Q T V H I G G P V H Q G Y V F V L H
UniRef90_M4UJV4         P V K L S I Q D L L K N V D H Q P Q P P L T Q S V Y L G G P L E L E R G F V L H
UniRef90_G8PSG8         P A P N I F G Q L L G Q L N I I D E D I A D R K V Y R G G P V D A G R G F V L H
UniRef90_Q12EE9         P S D I N L K N L F D K V E L P L D D L T E A P V F Q G G P V Q T E R G F V L H
UniRef90_Q1CEX0         P L E Q T V E T I L E K L K I D P A I R L D N V V L A G G P L A E D R G F I L L H
UniRef90_D7MZQ0         P S P V T M D L I F A A S D N I P L R F Q D E S V M M G G P V H V D R G Y V V H
UniRef90_F4GFX4         P T D I S L A G L F E K V D L T L E D L T R Q P V F L G G P V Q T E R G F V L H
UniRef90_A3TV94         R T D D V L S D L A E Q L D M E A P Q F H D R P L H S G G P V E Q E R G F V L H
UniRef90_Q28KE9         P M E I T F T E L M E Q L D I P R G S T P Q V P V C F G G P V D M R R G F V L H
UniRef90_G2DT31         P S P L K M G V V F G A V D V L P E R F E D D P V M I G G P V Q L D R G Y V L H
UniRef90_UPI000468E704  P A D M R F K D V M D Q L S S D V G P S P A M A V H L G G P V E T G R G F V L H
UniRef90_UPI0003955F6E  P S D I T M G K L F D K V E L P L E D L E L E P V F Q G G P V H T E R G F V L H
UniRef90_B6AYF2         R V D V E L G D L M N Q L S I P K G D T S P D P I Y F G G P V E H G R G F V L H
UniRef90_UPI00031387AF  S A D I S M R H L F D K V D L P L E D L V Q N P V L H G G P V Q T D R G F V L H
UniRef90_R5QQK6         K I E F S F T D L A N Q L P I T L K P I I P I D L Y Q G G P L D K V R G F V L H
UniRef90_Q493F3         V T R C T V E T I L N N L K I D P S V R L D N P V F A G G P L L D D R G F I L L H
UniRef90_A1SUE8         P V K L T L Q E L L N N I D H Y P E P P L L N P V F L G G P L E L E R G F V L H
UniRef90_UPI000466E326  P T D I A F Q D L L E Q L E I P H S G S P N P P V H F G G P V E T G R G F V L H
UniRef90_UPI0003B40691  P S G L T L A D V L E Q L Q P E H S D S D D Q D V F L G G P V Q S E L G F V L H
UniRef90_A3SQJ1         V T D E R L D N L L E Q L S I P S P M A R D L P V H F G G P V E H G R G F V L H
UniRef90_D3A5F4         P S P I T M D M I F A A A D N I P L R L Q H E N V M M G G P V Q I E R G Y V V H
UniRef90_UPI00046A7486  P A E L T L R E V F A R V D I P T T G G P Q R P V H F G G P V E T G R G F V L H
UniRef90_UPI00046F23AB  L A G V S I E S V L Q Q M E I I L P P N M G N N V L V G G P V S T D R G F V L H
UniRef90_R7KMP1         S I R L S V E S L L Q R V G I E N K N P A L K E I F L G G P V Q I E R G F V L H
UniRef90_A9LZR4         P S P I T M D M I F S A T G K N I P M R M Q H S V M M G G P V Q V D R G Y V V H
UniRef90_UPI0003B432B3  E M D L R L P D L L D Q L N V P L G L L P D E P V L H G G P V G Q D R G F V I H
UniRef90_UPI0004755DD1  L H H I S V G S I L D D M H L E S L T P L E V P A F E G G P V E S F R G F V I H
UniRef90_I3DJA9         P T D L S V A E L V A K L N F M M A D G R Q Y P V L A G G P V N I E R G F V L H
UniRef90_I1XFE7         P T R I M M Q E L L N H L Q I T S E W A T K T A V L F G G P V K D Q G M V V H
UniRef90_C4K450         P V R F T L E R L L K K L N I S S V H D A G H P V M S G G P L S D D R G F I L L H
UniRef90_D5AM98         P L P P P M G D L L D Q L G I T A S D R G A A P L F F G G P V E T G R G F V L H
UniRef90_S9S4K3         P R P D L R L A H V P R R S E G G G G L R D I R V H F G G P V E E T R G F V L H
UniRef90_UPI0003B3A8FA  P M G F R L P D L D V A G G G Q A A D A P V L E G G P V D R D R G F V L H
UniRef90_A0Y9P6         P L D L S L G D V F H Q L D I E V S R D H S G Q I L S G G P V H M N R G F I L H
UniRef90_B8KLD5         P L D L S L G E I F D H L D I A A D H F R D Q P V L A G G P V Q I D H G F V L H
UniRef90_UPI0003758741  P L D L R L D A L L N H L D D D L Q V V D N R Q V Y A G G P V Q G E R G F V L H
UniRef90_UPI0003B4C72A  I V G L G L H E V L E Q L E I A P G A A P D A P V H F G G P V E P R R G F V L H
UniRef90_B1XT82         P T E V N L S T L F D K I D L K L E P L L D Q P V Y F G G P V Q V D R G F V L H
UniRef90_A4EHN6         P Q P E K F A K L L D Q M D I P V S S A R D I R V H Y G G P V D G Q R G F V L H
UniRef90_UPI0003B5501C  P L D M D V S E I L E Q L E L D N R A A P E E A I Y A G G P V H T D R G F V L H
UniRef90_S7TFH3         T Y P S A A K D I F E E L N I E L P E Q A D I P I F F G G P V H M D E L F I L H
UniRef90_C4GGM6         P S P V T M N V V F A A I G D T P A R F K N Q Y V M M G G P M Q T E R G F V L H
UniRef90_UPI000367F6EB  P Q P R N L G E I L K Q S G V E P N A A R P R P V F N G G P V G R E R G F V L H
UniRef90_G2IIB3         P M G V G L H T L L S S F D I A V E G V A D G T V L A G G P V E P R R G F V L H
UniRef90_F0EWN7         P S P V N M E L V F A A I G P T P E K L Q G Q F V M M G G P V Q P E R G F V L H
UniRef90_F6CRY7         P S N I D F S E L A D H L S I E H P D L L T E T I Y T G G P V E A E R G F I L H
UniRef90_UPI000375AE7A  P S P L T M N Q L F E A I Q Q T P L Q Y D E Q A V L M G G P V Q V D R G F L L H
UniRef90_N9UXW7         P I D M T V G A V L D Q L D I A H D A P L D Q P V F L G G P V E P S R G F V L H
UniRef90_E1YHS6         I S S F V T G D I F D E L K I A I P G A E Q I P V Y M G G P V H T G E I F I L H
UniRef90_UPI00042980CB  T I E G G L H E L L K Q F E I D P G E V P D A P V H F G G P V E P R R G F V L H
UniRef90_T0HT48         R E G V R F H E I L E E L G I D P G V A P D C E V H E G G P V E P G R G F I L L H
UniRef90_UPI00036DC256  P L Q L N V G D L F E Q L D M E A N Y Q Q E R Q V H F G G P V Q V E R G F V L H
UniRef90_B8KU72         P L D L S V V D I L E H L E I I A G S L L E E P I L A G G P V D V D H G F V L H
UniRef90_UPI0003484AE5  P L D F T L D A L F D Q L E I L G G S Q S R N A P V Y Y G G P M H K D R G F I L H
UniRef90_C9Y7Q2         P A D M P L P A L F D K I D L P L A D L V S Q Q V F Q G G P V Q T E R G F V L H
UniRef90_UPI00046A70AF  P I K L T M R G L F E Q L E I T A D S E C D V V Y Y G G P V H K D R G F I L H
UniRef90_UPI00036CF8C4  A T D I T L T D L F E Q I K L D A S T L L G K T V H Y G G P V Q I D R G F I L H
UniRef90_U3AD01         P T E V R F S D L L E Q L E I A S D P I R D I R V H I G G P V E E S R G F V L H
UniRef90_S9REJ7         P S E V T M T A L L E Q L S I E P E E M G D R H V H F G G P V E M G R G F V L H
UniRef90_G4CRM4         P S P V T M D L V F E A A G H H P E R F K G E W V M M G G P V Q I D R G F V V H
UniRef90_C8S1K2         P L D L S F A G L L E Q L D I P A P E G R D I C A H F G G P V E R G R G F V L H
UniRef90_Q0C3C2         P M D I D L Q E I I D Q M D I P Q D D L G V A I L E G G P V A T E R G F V L H
UniRef90_UPI0003645BFD  S H H I D F P E L L Q L G V L S K P L K N F P V C Y G G P V D P S R G F V L H
UniRef90_K2FDY9         H L D L T L K G L L D Y L N L P Q E T I R D L P I F F G G P V D S G R G F V L H
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UniRef90_L1QAB7         P A G V S L A D V L E T L D T P T D D V R G R H V L I G G P V E R E R G F V L H
UniRef90_S5RPZ1         P T D M T I N I L L D K L K L V P N T K E T K T I M F G G P I Q I D R G F V L H
UniRef90_A0L5K4         P L D T T M S Q M A G Y L E L D W Q R P S D R V Y M G G P V S P E Q G F V L F
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UniRef90_UPI000372B3E0  P R Q I D V F E V L H D L G I Y M Q D S R H P T V F E G G P I D D F R G F V L H
UniRef90_G5ZXS6         P T D L S F Q K L A E H L N L E P S L D T D E P V Y K G G P V E P Q R G Y I L H
UniRef90_U7P937         P L E L T L E A L F E Q L E E S P H R N A P V Y F G G P V H K D R G F I L H
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UniRef90_V4NYS5         P S G L V S K M M K L G I E S G N L A T Q K I Y R G G P V Q N D R G F V L H
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UniRef90_F4GFX4         D P V R G Y A S T M S I P G G L E M T T S K D V L E A L S H G A G P R R V L V T
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UniRef90_Q28KE9         S P D Y A G E E A L R I D H R F A M T G T L D I L E D I A A G R G P K R S L L A
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UniRef90_B6AYF2         G A D Y K S E S T M Q T G L Q F A M T A T I D I L E D I G A H K G P E R A L I A
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UniRef90_D3A5F4         T P I G R W Q N S M V V T D N V A L T S S R D V I E N L S K E G A V D K A L I S
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UniRef90_UPI0003B432B3  S E D F S A G A T V N I T D G L R L T A T K E V L N A I A S A D P P I R S R L A
UniRef90_UPI0004755DD1  E G G H H Y N S S L D I T H E I Q L T T S R D I L E G V A G G Q G P E N F M L V
UniRef90_I3DJA9         T T E Q D F E H S Y K V T D N L Q L T T S E D V I T T F G T L K A P T K Y L V A
UniRef90_I1XFE7         D G G E Q W K N T L K I T D E T F L T T S S D I L E S L G T E N G P P H S I V T
UniRef90_C4K450         S P Q S G F N S S I H V S D D T M I T T S K D I L K T L G T K K Q P K N I M V A
UniRef90_D5AM98         S A D W F A A T M P V G E G L A M T A T R D I L E E I A A G R G P S R A I L A
UniRef90_S9S4K3         S S D Y A A E G T L R I D D R V S M T A T L D V L R R I A E G G G P R D S M L A
UniRef90_UPI0003B3A8FA  T L D V A G P A T E R V G E D L G L T A T Q E I L N A L A S D A A P A R A L M A
UniRef90_A0Y9P6         R R D D K W D S T V H V S D Q I A L T T S Q D I L S A I A H D Q G P C D S L V A
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UniRef90_C4GGM6         T P I G N W D S S L S I T D S I A L T T S R D I I E G L H Q D D E I Q G A V L T
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UniRef90_T0HT48         S T D W G G Q D T I E V H P L C A L S A S M D V L R A I A E G K G P R R W L M S
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UniRef90_UPI0003484AE5  R N S D D W D S S L Q V T D E L A L T T S M D M L K A L A N N E G P E R Y I V C
UniRef90_C9Y7Q2         S D E S L Y S S T M T I P G G L E M T T S K D V L E A L S M G S G P K R V L V S
UniRef90_UPI00046A70AF  R G Q E E W D S S L Q V T E E L A L T T S L D I L K A I A G N Q G P E D F M V C
UniRef90_UPI00036CF8C4  T P L I E Y N S T I L V G N T I A L T T S K D I L E A A A E N N A P E K M L V A
UniRef90_U3AD01         T T D Y S S D G T L Q V D E G T A M T A T L D V L E D I A H G R G P K S S L L A
UniRef90_S9REJ7         S A D Y S S E T T L Q V D G T F H M T G T L D V L E H I A R G D G P A D W M A M
UniRef90_G4CRM4         M P I G S W Q S S L A V N D H V A M T S R D I I E K L S Q S D L V Q K A V I T
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UniRef90_G5ZXS6         T D D Q M L P E T I P I A N G I C L S L H V D M I T E I T R G L G P S F A K V M
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UniRef90_D3A5F4         I G Y S K W G K G Q L E R E L A E N V W L T V P A D E H I L F D V P Y E L R Y A
UniRef90_UPI00046A7486  V G Y S G W G V G Q L E R E I V H N G W L T A P A T P A L V F G T D P D V L W E
UniRef90_UPI00046F23AB  L G Y A G W A N G Q L E Q E L A D N L W L T T P A D Q Q T L F F H L A H E L R W Q
UniRef90_R7KMP1         L G Y S G W S E G Q L E A E L S V S G W L I A P A D E K I I F D T P I E E R Y E
UniRef90_A9LZR4         I G Y S S W G K G Q L E R E L A D N A W L T V P A D E H I L F D I P Y E H R Y A
UniRef90_UPI0003B432B3  L G Y S G W G P N Q L E A E L K Q N V W L V A D A D E D I I F D T D F D E K W E
UniRef90_UPI0004755DD1  L G Y A G W A A G Q L E Q E I S R N D W L I A P A S N E I V F R T P V K S R W K
UniRef90_I3DJA9         L G C A S W K P G Q L E E E I S E N A W L V V P A N E R V L F D V P F E N R W A
UniRef90_I1XFE7         L G Y A A W E A G Q L E Q E I A D N S W L T V Q A T P E L L Y E T P A D E R W Q
UniRef90_C4K450         V G Y T G W Q K G Q L E Q E L I D N V W L T T K A D T E I L F N T L I P N R W Y
UniRef90_D5AM98         L G Y A G W G P G Q I E Q E I L D N G W L V A E G N A A L T L D G D H A T K W T
UniRef90_S9S4K3         L G Y A G W G P G Q L E D E I A R N A W L T A P A R P E L L W S R A N E H K W H
UniRef90_UPI0003B3A8FA  L G Y A G W A A G Q L E D E I S L N A W L V A D A D H S L I F D D Q P E D K W A
UniRef90_A0Y9P6         L G Y A G W E A G Q L E Q E L G E N A W L T L P A D S H I M F N T P I D Q K A A
UniRef90_B8KLD5         L G Y A G W S A G Q L E E E I A N N S W L T L P A D K R I I F H T A I E D R V A
UniRef90_UPI0003758741  L G Y A G W A G G Q L E R E I S E N A W L S C P A S L D I L F K L P A E Q R L H
UniRef90_UPI0003B4C72A  L G Y V G W G P G Q L E G E L T R H G W L N V P D T P D M L F D T P V E E R W T
UniRef90_B1XT82         L G Y A G W G A G Q L E E E I T L N G W I N V P L T T D I I F S T P S S Q R Y Q
UniRef90_A4EHN6         L G Y A G W G P G Q L E Y E I G Q N G W L T C A P N D A I L F G A D N A G K W A
UniRef90_UPI0003B5501C  L G Y A G W G P G Q L E E E L A D N A W L S L P A D P K I L F E I P A E E R I D
UniRef90_S7TFH3         L G C S G W G P N Q M E S E I M E N A W L S C P M S P D I I F D R S V A S R W E
UniRef90_C4GGM6         I G Y S G W A G G Q L E Q E I A Q N S W L T V P A D P H I L F G I P P E E R Y A
UniRef90_UPI000367F6EB  L G Y A G W S P G Q L E A E L G V N A W L I A E G T D A L I Y D T K P E K M W E
UniRef90_G2IIB3         L G Y A G W E S G Q L E R E L A S P G W Y V S Q A D P R R L F A M P P E Q R W A
UniRef90_F0EWN7         I G C S Q W S A G Q L E R E L A Q N A W L V A P A D M G I L F D T P I E E R Y N
UniRef90_F6CRY7         L G C A G W E D G Q L E T E I A N N D W L V C E A D L D V L F N T P S E L Q F T
UniRef90_UPI000375AE7A  I G Y A G W K K N Q L E D E L A K N A W L T V K A D Q H I M F D L P V A E R Y N
UniRef90_N9UXW7         L G Y A G W S P G Q L E E E M V R H A W H L T P G S D A L L F D T P P A Q R W Q
UniRef90_E1YHS6         L G C A G W G P G Q L E Y E I K E N A W L T C C V S E D I L F N T S V E T M W D
UniRef90_UPI00042980CB  L G Y A G W A P G Q L D E E M T R H G W F S T S G D T K L L Y D V D A G R R W V
UniRef90_T0HT48         L G Y A G W A P G Q L E G E M R Q H G W Y A A D P H P E I L F D T A V E N R W A
UniRef90_UPI00036DC256  L G Y T G W S A G Q L E E E I Q A N A W L T L P L E H K L I F K L P N D D K L S
UniRef90_B8KU72         L G Y A G W G P G Q L E A E L A S N S W I T A P A W E D I L F S V P A G E R L N
UniRef90_UPI0003484AE5  L G C A G W E V G Q L E N E I K D N A W L V V E G N S S V L F E T P P A E R L T
UniRef90_C9Y7Q2         L G Y S A W G E G Q L E T E L G E N S W L T V A A D Q S L I F D T P V E Q R Y D
UniRef90_UPI00046A70AF  L G C A G W E P D Q L T N E L K E N S W L I V E G D S G I L F D A D S E S R L D
UniRef90_UPI00036CF8C4  L G Y A G W T P G Q L E E E I L N N T W L S L D T N H A L I F D A P N H E K F D
UniRef90_U3AD01         L G Y A A G G R G Q L E D E L G E A Q H A V V F G R A N E H K W S
UniRef90_S9REJ7         L G Y A G W G P G Q L E A E L T Q N G W L V C D A A P E L V F R T P D P E K W G
UniRef90_G4CRM4         I G Y A S W S E G Q L E Q E L M D N S W L T V P A D E R I L F D L P H E E R Y E
UniRef90_C8S1K2         L G Y A G W G P G Q L E S E I L R N D W L T S G A E A D L V F A A D D G G K W G
UniRef90_Q0C3C2         L G Y A G W A A G Q L E Q E L A Q N A W L I A P D S D L V F G D A Y E H K W R
UniRef90_UPI0003645BFD  L G Y A G W K A G Q L E E E I S T N G W L I S S T S P S F L F E S D L S R K Y D
UniRef90_K2FDY9         M G Y V G W A P G Q L D T E L H S N R W L Q I E A D K E L L F E V P V E K R W E
UniRef90_F4HDQ5         L G C A L W Q P E Q L A E E I K N N D W L T V P A D Y D I L F K L P F D Q R W Q
UniRef90_UPI00046A076E  L G Y S G W G P G Q L E G E I Q A N A W L T C D V P P G L V F G M T D A K K W A
UniRef90_A5V9R3         L G Y A G W G P G Q L D G E M R R H G W L A T R A E D G L I F D H R P P R R W E
UniRef90_L1QAB7         L G Y A G W G E G Q L E E E L N E N V W L T A E A D D A L I F D T D Y D T K W S
UniRef90_S5RPZ1         L G C S G W G A G Q L E E E I M N N H W L I V D A N S E V I F D V P C E Q R F F
UniRef90_A0L5K4         L G Y A G W E A G Q L E H E L Q E N S W L V C D A Q R S I L F D M G Y A Q R W E
UniRef90_UPI00029A3A46  L G Y A G W E G G Q L E A E L A D N A W L N C P F D P E I I F G M A C E Q R L A
UniRef90_UPI000372B3E0  L G Y A G W Q A G Q L E R E L S N N D W L V A P A S H H I V F Q E P P E K R W E
UniRef90_G5ZXS6         L G Y A G W S A G Q L E D E M R E N M W V H L P A T T D I L F R T D T E A L W D
UniRef90_U7P937         L G C A G W E S G Q L E L L D N A W L T V E G R G D I L F E V P P E Q R L Q
UniRef90_UPI0003B2F1A4  L G Y A G W D A G Q L E E E L T R H G W L I A D C D K E V L F A A P P E E L W Q
UniRef90_U2W9U5         L G Y A G W D A G Q L D A E L H E N A W L A C E A D L D L I F S I D P E K K Y P
UniRef90_J7TBX3         L G Y S S W T A G Q L E R E I M E N S W L V A D A S E R L L F R T P M P D R W R
UniRef90_V4NYS5         L G Y A G W G P G Q L E S E L S Q N A W L V G T C D H D L I F G S D P D H L W A
UniRef90_U4V580         M G Y A G W G P G Q L E K Q N A W L V G T C D H D L I F D D P H D D V K W E
UniRef90_X0SZM4         L G Y S G W S S G Q L E S E I Q A N G W L H C A P D V E L V F E T S E D K Y E
UniRef90_Q4FVM7         L G H A S W G K K Q L D Q E L A N G D W L V C P A D L N L L F D T P F E E R W Q
UniRef90_G4CF70         M G Y S G W S P G Q L E A D N S W L T V P A D L G I V F D L P H E A R Y E
UniRef90_UPI0003744F45  L G Y A G W G P G Q L E Q E V A D N A W L T L D A D I D V V F D P R H G K Y E
UniRef90_A0Z2R3         L G Y A G W G E G Q L E D E I A D N A W L T V A A N H E I F A T P Y E K R L Q
UniRef90_U5NBJ1         L G Y S A W G E G Q L E S E L S E N S W L T V V A D R R L V F D T P V P L R W D
UniRef90_UPI00036D589E  L G Y S A W G E G Q L E E E I M D N V W L V A D A S E A L V Y D R S Y N T K W N
UniRef90_D5BSV7         L G Y A G W G G G Q L D A E I A A N A W L T L P A H E L V F E C N T D D I W D
UniRef90_E3F1E3         L G Y A G W G A G Q L E A E I A D N G W L V A S S S S D L I F A E D A K W A
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UniRef90_UPI00047D22FC   R A L S K I  G V A E G R L  S S
UniRef90_F3L3H9          S A A G Q L  G F D M N L M P  S
UniRef90_Q2KUT1          A A M R L L  G I D P L M L A
UniRef90_UPI00046E8F79   T A I R K L  G V D P G A L  S
UniRef90_B8FL92          K A A Q S I  G V D L N L L  S
UniRef90_M4UJV4          E S L R R L  G I S P E Q L  S S
UniRef90_G8PSG8          N A L E I L  G I D P G M L  S S
UniRef90_Q12EE9          K A L M L L  G L Q S W M L  S
UniRef90_Q1CEX0          A A A N K L  G I N I F N I  A
UniRef90_D7MZQ0          A A F A K L  G I E P A S L
UniRef90_F4GFX4          R A L G L L  G L Q S W M L  S
UniRef90_A3TV94          A A L A N Q N I  S A L N L  S S
UniRef90_Q28KE9          A A V Q S L  G F D P L M L  S S
UniRef90_G2DT31          A A L A K L  G V
UniRef90_UPI000468E704   G A L Q S L  G V D P L L L  S A
UniRef90_UPI0003955F6E   T A L A L L  G V Q P W A L  S A
UniRef90_B6AYF2          A S L G A I  G I D P A L L  S S
UniRef90_UPI00031387AF   R A L D L L  G L K S W M L  S
UniRef90_R5QQK6          K A L D S I  G I D V T R L  S
UniRef90_Q493F3          A A A K I L  G I D I Y N I  A
UniRef90_A1SUE8          E S L Q R L  G I H P E Q L  S T
UniRef90_UPI000466E326   A A L N S L  G V G A L S L  S A
UniRef90_UPI0003B40691   A A A A L L  G V D L E R L  S
UniRef90_A3SQJ1          A A L A S L  G I S P L M L  S A
UniRef90_D3A5F4          A A F E K L  G I N P N A L  V S
UniRef90_UPI00046A7486   A A L R S I  G I D P V S L  S S
UniRef90_UPI00046F23AB   Q A S R S L  G F D T W Q L  S S
UniRef90_R7KMP1          K A L K L L  G I D S T T L
UniRef90_A9LZR4          A A F A K L  G I D P L A L
UniRef90_UPI0003B432B3   R A M K K L  G V S P S Q L
UniRef90_UPI0004755DD1   Q G A W S L  G I E P D Q L  S
UniRef90_I3DJA9          E A Q Q L L  G F K P S S L
UniRef90_I1XFE7          T A A K L L  G I D I N L M  S N
UniRef90_C4K450          E A A S K L  G I N I F H I  A
UniRef90_D5AM98          R A L G T M G I  D P R T L  S A
UniRef90_S9S4K3          A A L K A I  G I D P L S L  S
UniRef90_UPI0003B3A8FA   R A L N K L  G V T P E F L  T A
UniRef90_A0Y9P6          A A V A K I  G V D L A L I  S
UniRef90_B8KLD5          A A A S A L  G I D M N L M  S A
UniRef90_UPI0003758741   A A A S T L  G I N L D L L  T A
UniRef90_UPI0003B4C72A   R G F V A A G V  D P R L L  S T
UniRef90_B1XT82          K A M N H L  G F D P S D L  S
UniRef90_A4EHN6          A A L K L L  G V D P L V L  S A
UniRef90_UPI0003B5501C   A A L A I L  G I N F A Q L  G S
UniRef90_S7TFH3          A A V R K L  G I D P A R L  T
UniRef90_C4GGM6          A A F G K L  G I
UniRef90_UPI000367F6EB   A A L A Q I  G I K P S Q L  S
UniRef90_G2IIB3          G A F A L E G I  D P A M L  A S
UniRef90_F0EWN7          A A L G K L  G V D A A H L
UniRef90_F6CRY7          A A T Q V L  G I D M T R L  S
UniRef90_UPI000375AE7A   A A L Q L L  G I N P A N L
UniRef90_N9UXW7          A A F A E A G I  D A R L L  T
UniRef90_E1YHS6          A T A K K M G I  N P A L L  S
UniRef90_UPI00042980CB   K G F E I A G I  D P R L L  A N
UniRef90_T0HT48          A T W R A E G I  D P A L L  S S
UniRef90_UPI00036DC256   W A M Q Q L  G V D F A T L  S
UniRef90_B8KU72          A A S Q T L  G F D I N L M  T S
UniRef90_UPI0003484AE5   A A A G I L  G V D L N L M  T
UniRef90_C9Y7Q2          R A L G L L  G L E S W M I  S
UniRef90_UPI00046A70AF   A A A R K L  G V D M S L M  S
UniRef90_UPI00036CF8C4   L A M Q L M G L  N L A N L  S
UniRef90_U3AD01          A A L K G L  G I D P L S L  S
UniRef90_S9REJ7          A A L K S L  G V S A H L L  S A
UniRef90_G4CRM4          A A M A K L  G V S P Q T L
UniRef90_C8S1K2          G A L K H M G I  D P L S L  S
UniRef90_Q0C3C2          H A M T R M G V  D L S R L  Q S
UniRef90_UPI0003645BFD   E S L I R M G V  N S T Y L  V S
UniRef90_K2FDY9          K A I S K L  G V T P E S L  S
UniRef90_F4HDQ5          A A N K L L  G I N
UniRef90_UPI00046A076E   A A L E S I  G I D P L G L  S A
UniRef90_A5V9R3          A A M R S A G I  D P R L L  A A
UniRef90_L1QAB7          R A L A G L  G V D A A R L  S S
UniRef90_S5RPZ1          A A V K L L  G V N P L M L  S N
UniRef90_A0L5K4          A A I R S M G I  D P A L L
UniRef90_UPI00029A3A46   A A A A R L  G I N L S L L  T S
UniRef90_UPI000372B3E0   F G A R S M G I  E R S Q L  S S
UniRef90_G5ZXS6          K S F A R I  G L N A A T L  S S
UniRef90_U7P937          A A A G L L  G V D L N L M  T
UniRef90_UPI0003B2F1A4   A A Y R S A G I  D P A M L  S S
UniRef90_U2W9U5          A A M A R I  G I D L G K L  S A
UniRef90_J7TBX3          E A A A G I  G V N I Y T I  A
UniRef90_V4NYS5          R A L A S M G I  E P V H L  S
UniRef90_U4V580          M A L M Q A G V  D P R L L
UniRef90_X0SZM4          R A L S K L  G I N P S H L  V N
UniRef90_Q4FVM7          I A A D K I  G V N F D Y L  S S
UniRef90_G4CF70          A A I K L L N I  V P E Q L
UniRef90_UPI0003744F45   R M L V A M G I  T P A H F
UniRef90_A0Z2R3          A A G R L L  G I D I H L M  S
UniRef90_U5NBJ1          A A L Q L L  G L Q A W M L  S
UniRef90_UPI00036D589E   R A L A S I  G V S P E N L H  S
UniRef90_D5BSV7          E T Y A A L  G I N P A H L
UniRef90_E3F1E3          R A L R G L  G V E P A L L  S S
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Multiple sequence alignment (position markers at 1, 10, 20, 30, 40):

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                            1         10         20         30         40
UniRef90_A1ZFZ1             K G D L L I A E P F L G D R N F E R S V V L L C E H N D K G S F G F V L N Q
UniRef90_A0A024KCW7         L K G Q F L V A M P D M L D E R F R D S V I Y L V G H G D E G A M G L V V N K
UniRef90_UPI0004642697      L T N H F L I A M P G M R D A T F A H S V V Y L C E H G E D G A L G L V I N K
UniRef90_E1W1M4             L Q G F L I A M P Q L E D   Y F Q N T V V Y I C E H N E Q G S M G L V I N Q
UniRef90_Q21YP2             L T N H F L I A M P G L Q D E I F S R S V V Y V C E H S Q R G A L G L V I N K
UniRef90_U4TEB5                     A M P H V E D P N F S Q S V I Y I C E H S E K G A M G I M I N K
UniRef90_UPI0002E05CE5      L T G Q V L I A M P S M Q D P R F A R S V I C C A H S S D G A M G I V I N K
UniRef90_Q1LSZ6             L Q H H F L I A M P T L T D P L F K Q S V I Y L C T H N H E G A M G I V I N K
UniRef90_M4S7W1           Y L S G Q L L L A L P G M G D P R F S R A V I A M C A H D E E G A L G I G V G Q
UniRef90_UPI00035F93FF      L T G Q I L V S M P T M R D D R F Y K T V I F I C A H S N E G A M G L I I N K
UniRef90_A4BI12            L N H H F L I A M P Q M G D P V F S G T L T Y V Q H D E G A L G L I V N K
UniRef90_UPI000312EA26    F L S G Q L L S M P G I G D D R F D R T V I A M C L H D E G G A L G L V I N R
UniRef90_U2YQU0           F L S G R L L L A M P G M F D P N F D H A V I A M C L H D E N G A L G I G V G H
UniRef90_UPI0003B6F929      L T D Q F L I A M P D L A D G M F Q R A V I Y L F R H D E N G A A G L I I N S
UniRef90_B9KNE5            L S G S L L I A M S A D P R F E R S L V L V C A H S P D G A M G L V I N K
UniRef90_G8TCS0              G I L L I A E P F L K D P N F S R T V V F L C D H Q D E G S F G F V I N R
UniRef90_UPI0003FE4DBF     L K G H L L I A E P F L G D A N F E R S V V L L C E H N D D G A F G F V L N Q
UniRef90_E8RBQ6           L A G H F L I S T P Q M P D P R F Q E Q V I Y L C A H N E E G A M G L V I N N
UniRef90_K2AF31           L C G K L L V A M P G L G D P R F E H A V L V C A H S D D G A M G L I I N K
UniRef90_Q2GAJ3          Y L G G R L L I A M P G M G D P R F D H A V I A M C V H D E H G A L G I G V G H
UniRef90_V4NGV0            L Q G N L L I A M P G L A G E P F E H S V V Y V C Q H D E N H A M G L I L N Q
UniRef90_UPI00035C49FA   F L T G R L L I A S P T I G D P R F D K S V I F L C A H E S D H A M G L I L N K
UniRef90_UPI00036B728D      L T H H F L I A A P S M P D D R F A Q S L I Y I C R H D K Q G V L G L M V N K
UniRef90_L8JR73             K G S L L I S E P F L P D P N F E R T V V L L C E H S S E G S F G F V L N K
UniRef90_R7IMC9            L Q N H L L V A M P S L R D P N F A G T V V Y I T G H D E K G S R G F V I N R
UniRef90_B4WCC1            L T G R L L V A M P G I G D P R F E H A V I L I C A H G P D H A M G L R I D R
UniRef90_UPI0003B31526   F L T G Q L L L A M P G M T D P R F E R A V I A M C N H D E Q G A L G I G I H H
UniRef90_M2TKY8          F Q S G Q F L L S M P G M G D E R F E R A V A V C S H D E A A L G I V V N H
UniRef90_M1PTM8             L T G S F L S T P Q M P D P R F S E Q V I Y I C S H G Y E G A V G I A V N K
UniRef90_R9XNY8            L Q G Q F L I A T P D M N D D Y F D R A V I Y I C E H N E H G A M G I M I N S
UniRef90_L1NKB4            L T D H F L I A T P A L E D S F F S G S V V Y L C R H D E D G A L G V V I N K
UniRef90_C6AQK1            L Q D H L L I A M P N L D D S Y F Y R T V I Y I C E H N E K G A M G L V I N Q
UniRef90_UPI00047E5E06     L T N R L L I A T P Q M G D P R F K D A V I Y V C S H D E S S G A M G L V I N K
UniRef90_W0AFE3            M T G Q F L L A M P G I G D P R F E H S V I A M C A H D E K G A L G I G I G H
UniRef90_Q9A311          F L I G R L L V A M P G I E D P R F E R T V L L C A H D E D A A M G L A V N R
UniRef90_A0A059F895        L T G K L L I A L P G I G D T R F S R S V I L V C A H S P E F A M G I V I N K
UniRef90_UPI000288AA1D   Y L T G Q F L I A M P G I G D T R F E R A I I A M C A H D E E G A L G I G I G A
UniRef90_A8ZZX8           L R G E F L I A M P M L T D P N F R Q T V V C I C E H S A D G A L G L I V N R
UniRef90_M1LSS9           L V N H F L I S T S Y D L D N R L S G S V I Y I C E H N T K G A L G L V I N K
UniRef90_V7IFC7           L T N H F L I A M P D M Q D N F F A E S V V Y V C S Y S A E G C M G V I I N K
UniRef90_V9H609           L S N H F L I A M P D L E D S L F S G S L I Y L C E H S K D G A M G L I I N K
UniRef90_UPI00035F9C9A     L T G K L L I A M P G I G D S R F L R S V V L V C A H E P E Y A M G I V L N K
UniRef90_C1DI78                    M P H L A D P N F A Q S L I Y L V E H N D Q G A M G L V V N R
UniRef90_L2F861          F T H H F L V A T P N I E T D I F A N T V V Y I C R H D N Q G V L G L I I N K
UniRef90_I2ES50            K G K V L I A E P F L G D K N F E R S V V L L C E Y N N L G A F G L V L N Q
UniRef90_D9QMF6            L T G R L L I   G D P R F E H A V I L V C A H D P D H A M G L R I D R
UniRef90_A8PPF4         Y F T N Y F L V A M P I L T D A Y F S R S V V Y I C E H T E K G A V G I V I N Q
UniRef90_UPI000463F242   F Q H Q I L I A M P S L E D S W F E K T V I Y L A E D N Q H G S M G L V I N L
UniRef90_I2GBY4             G N L L V A E P F L G D S N F E R S V V L V C E H S E A G T F G L V M N Q
UniRef90_Q0I1B4            L Q D H F L I A M P H L E D E N F Q R S V V Y I C E N N E Q G S M G L V L T Q
UniRef90_UPI00022604C0     L A G Q L L I A M P S L A E S E F D R S V I Y L C A H S A D G A M G I V V N R
UniRef90_Q8D336            L K H H F L I A M P S I K N P L F R R S V V Y I Y Q H S T E G A M G L L I N K
UniRef90_E7C2U0           L V G H F L I A S P S L K D P N F E K T V T L V C E Q N E S G S L G L I I N K
UniRef90_C5WDJ6           L K H H F L I A M P A L Q D P F F R R S V Y I C E H S P E G A M G I I V N K
UniRef90_UPI0003A06138    L A Q H F L I A M P G M E D D A F A G S V V Y I C E H G P E G S L G L C I N K
UniRef90_UPI0004791E59     L T G R L L V A T P A L S D S D F A R S Y I C A H S E D G A M G I V V N K
UniRef90_Q9CJX1           L Q D H F L I A M P Q M E D D Y F A H S V V Y I C E H D N Q G T M G L V I N K
UniRef90_T0GDF6         F Y G G Q F L L A L P A M T D S R F D H S V I A L C V H D E N G A L G I A V E E
UniRef90_I2NKX8           L Q G K F L I A T P D M D D P Y F D R A V V Y I C E H N N N G A M G L I I N M
UniRef90_W1NCR4                    A M P H L E D P N F A G T L S Y L C C D H D A K G T M G V I V N K
UniRef90_UPI0003B39B7C       G T L L L A A P V L Q D P N F R R T V V L L C E H N P N G T F G L T L N R
UniRef90_D6Z2I0           L Q G Q F L I A T P Q M S D P R F M E T V I Y L C A H N D E G A M G L I I N K
UniRef90_B3QT15             G I L L I A G A Q L I D P N F K R S V V L L C E H N E E G T F G L I L N K
UniRef90_UPI00047A1824    L S N H F L I A A P A L D E G P F A G S V V Y V C E H N Q E G A M G V I I N K
UniRef90_Q31EK4           L E H H F L I A M P N L T E S W F D K T V I V E D N E H G T M G L V I N K
UniRef90_UPI00037FC5DB   F L V G Q I L L A M P G I G D P R F E H A V I A M C S H D E S G A L G L I G A
UniRef90_C6VZV0            K G S L L I A K P F L G D P N F E R G V I L M C E H S E D G A L G F G F V L N Q
UniRef90_I3U9K7          M A N Q F L M A M P S Q T A D I F E G G V V Y V C E H S E D G A L G L L L N R
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UniRef90_A5UAI5           L Q G K F L I A M P H L D D   Y F N R T V V F M C E H N E Q G S M G L V I N Q
UniRef90_C8PUL9           L T N H F L I A S P N I D G G I F Y Q S L V Y I C R Q D Q Q G T L G L V N K
UniRef90_UPI00026CABEE   F L T G Q F L L A M P G I G D S R F D H A V I A M C A H D E E G A L G I G V G T
UniRef90_UPI0003621C5B      K G D L L I S E P F L P D P N F Q R T V V L I C E H S N E G S F G F V L N K
UniRef90_J1JZJ2          F L N N H L L I A M P S M A D E R F K R A I I Y I C A H D E D G A V G L V L N K
UniRef90_A0A031I7I4      F L S G Q F L L A M P G M R D P S F D H A V I A I C A H D A E G A V G I G I G A
UniRef90_UPI0003B3DD96   F L N G Q F L L A M P G M T D E R F A R S V I Y I C A H S E Q G T M G F I I N Q
UniRef90_UPI0003724E61      G S L L I A E P F L G D S N F E R S V V L V C E H S D E G T F G L V L N Q
UniRef90_F1Z6A1         Y L A G N I L I A M P G M G D P R F A H A V I A M C V H D E N G A L G I G I G A
UniRef90_B3QMC9             A G K L L I A S A N L L E S N F K R T V L M C E H N D E G S I G F I L N K
UniRef90_G4RB38           L K G Q F L V A T P D I G D E R F A E A V I Y L V H G D D G A M G L V V N Q
UniRef90_A0A059DYV6       L T G Q F L I A L P G L G D P R F S R S V L V C A H S P E F A M G I V I N K
UniRef90_D0MCZ3             G I L L I A P P M L E D P N F W R T V V L C A H G E D G S F G L I L N R
UniRef90_UPI0003B44B09   L A G R L L L A M P G M M D P R F D H A V L A L C L H D A N G A L G I G L G E
UniRef90_Q5FQY8           L T G K L L V A A P A L A E T F F E R T V I Y L C A H S E D G A M G L I V N R
UniRef90_K1YQ73          L A G T F L V S T P Q M P D P R F E H V I Y I C A H N E A E G A M G V A I N Q
UniRef90_Q83A18          L S N H F L I A D P Q L N D F T F T K A V I Y L S Q H D A K G A L G L I V N R
UniRef90_UPI00036060CB      G K L L I A D P F L R D P N F M R S V F M C E H K D E G S F G F V L N R
UniRef90_Q60BQ2            S G Q F L V A H P K M P A N I F A H S V Y V S H N A D G A M G L I V N R
UniRef90_M4R9D2           L Q G Q F L I A T Q D M D D D Y F D R A V I Y I C D H N E Q G A M G I M I N S
UniRef90_J4TU91           L Q G Q F L L I A T P Q M P D P R F D H S V I A L C A H N E D G A L G I G F L N K
UniRef90_A0A023BZY7        K G H L L I A E P S I G D V S F N R S V V L L A D H S E Q G S I G F I M N K
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UniRef90_A0A024KCW7      S V D M S F A D I L E E L S L L P A G V R N R E V L R G G P V E K G R G F V L   H
UniRef90_UPI0004642697   P S D L D M G D L F A R V D L S L G D L A H Q P V F H G G P I Q V E R G F V L   H
UniRef90_E1W1M4          P T D L S I A E L Y S K M N F M M K N D R T F S V L A G G P V H S E R G F I L   H
UniRef90_Q21YP2          P C D I D M K R L F E K V E L P M A D L S N T P V F L G G P V Q T E R G F V L   H
UniRef90_U4TEB5          P I G L T L G E L L N Y V D I S C P K D S Q L E V V A G G P M Q Q E S G F I L   H
UniRef90_UPI0002E05CE5   A I E N S F D D L L K Q L D V A P P P Q R R I A L H A G G P V E G G R G F V L   H
UniRef90_Q1LSZ6          P V E Q F V A S V L H K L K I I P S V Q L N Q P V F L G G P L A D D R G F I I   H
UniRef90_M4S7W1          L M P R R L H S L L A Q L D I D P G E A P D V P I H V G G P V E P Q R G F V L   H
UniRef90_UPI00035F93FF   K I D H D M P D L L S Q L G I D P L K D S K I Y L R Y G G P V E T S R G F V L   H
UniRef90_A4BI12          P L N L N L E V F E S S E L S S P R T G S K P V Y H G G P V A Q E G G F I L   H
UniRef90_UPI000312EA26   P H D L R L H D L L Q Q L D I D P G V V P D A P V L E G G P V E P G H G F V L   H
UniRef90_U2YQU0          R P D M G F H D L L K D V G I D P G M S P D C P V H H G G P V E T S R G F V L   H
UniRef90_UPI0003B6F929   P S E L R F D Q L L R D I R L P P L K P P E Q P V L M G G P V H P E L G F V L   H
UniRef90_B9KNE5          P V D L S F A G M L E Q L N I P A P N G R D I R V H L G G P M E R G R G F V L   H
UniRef90_G8TCS0          V F G H T L N E L M N D L D E L           K L P V F Y G G P V Q M D T I H F L   H
UniRef90_UPI0003FE4DBF   P S E W S L P E V L P Q V S D E           R F G I Y I G G P V A N N T L H F L   H
UniRef90_E8RBQ6          P N E I T M V D V L H G S N L S I P E G P L P A V Y M G G P V E V D A G F I L   Y
UniRef90_K2AF31          L M D L S F T G L L E H L N I P A A Q G R D I R V H F G G P V E R G R G F V L   H
UniRef90_Q2GAJ3          R E G I T L H G L L E D V G I D P G L A P D M P V L N G G P V E T A R G F V L   H
UniRef90_V4NGV0          P I G L N F G K M I R E L G I D S G D R A P Q K I F R G G P V Q N D R G F V L   H
UniRef90_UPI00035C49FA   P M S L R L P M L L E Q L G V E A K I A P D K P V L A G G P V E K D R G F V L   H
UniRef90_UPI00036B728D   P I N T K V G V L L E G L D I E V E N E T I M Q P L E G G P V F P E V G F V L   H
UniRef90_L8JR73          V S A V T L E E I M E D V N         S F N E P V Y I G G P V Q Q D T L H F I   H
UniRef90_R7IMC9          Q T E L M L S D V L E Q S K V I A K G S P R L P V F I G G P V D P Q R G F L L   H
UniRef90_B4WCC1          P A G V D L K T V L D K L D P A P E D S V G R V L M G G P V E R E R G F V L   H
UniRef90_UPI0003B31526   V A G I T L H G L M E Q L D I D P G V A P D A P L F M G G P V E P N R G F V V   H
UniRef90_M2TKY8          R G D V D A H G L L E K L E I E V G D M P K A P V F A G G P V E P A R G F V L   H
UniRef90_M1PTM8          P N P I D L E E V L L T N N L P V P P G F S A P V Y M G G P V E Q N S A F I L   Y
UniRef90_R9XNY8          P T D L S V M E L L A K M D F L M A N E R N Y T V L S G G P V G Q E R G F I L   H
UniRef90_L1NKB4          P S P I P M E A V F S A S D P V P E R F K N R P I L V G G P V Q I N R G F V V   H
UniRef90_C6AQK1          P T D L S I A E L G A K M N F M M V T D R T Y N V L A G G P V N I D R G F I L   H
UniRef90_UPI00047E5E06   Q V A F Q L S D M L S N I G I E G D K V A D T P V L E G G P V D I D R G F V L   H
UniRef90_W0AFE3          R V G V G L H L L L N Q F E I A T D G V P D A P V H A G G P V E P Q R G F V I   H
UniRef90_Q9A311          P V E G T V F E L L N R L G V R S E I Q A P D L V L L G G P L E R E R G F V L   H
UniRef90_A0A059F895      P M A H R L P Q L F E Q L D V P I E D V P D T F V L D G G P V S S D R G F V L   H
UniRef90_UPI000288AA1D   T L G V G L H A V L E Q L E I D P G V A P N A A V H I G G P V E P R R G F V V   H
UniRef90_A8ZZX8          I Y P A T A K D I F E E L K M K V P E T G P L P V Y N G G P V H T G D L F V L   H
UniRef90_M1LSS9          P T E F T L G N L F E K L S L E I S T I R D K I V F F G G V V Q S D C G F I L   H
UniRef90_V7IFC7          P S P L P L R Q I L S Q Q H T A P Q L I F F D D Y I F L G G P V Q V D R G F V L   H
UniRef90_V9H609          P S P I G M E I V F A G M K Q I P A H F M N E F V M M G G P V Q P D R G F V L   H
UniRef90_UPI00035F9C9A   P M D D T L P Q L L S Q L G I E Q N I I P E D A V L S G G P V G T D R G F V V   H
UniRef90_C1DI78          P G E L D L G Q V L A Q L R P D S P P R E D R P I Y T G G P V Q T D R G F V L   H
UniRef90_L2F861          P H N N C I A K L F E E L G V V V T T T N L H K A L K S G P V S P E V G F V L   H
UniRef90_I2ES50          L T N L K L D D V I E N I             Y A E L P L Y L G G P V E Q N T L H F I   H
UniRef90_D9QMF6          P A G V A L K G V L T K L D V A P D R T A A T P V L V G G P V E R E R G F V L   H
UniRef90_A8PPF4          P L H V N L A E I V Q E I T E S N T A G A N F P I L C G G P I H P E R G F V I   H
UniRef90_UPI000463F242   P H K L S V A Q L L E H F K L E I Q T D S P E S V L M G G P V D V E H G F I L   H
UniRef90_I2GBY4          Q T N L H L S D V I E D I             Y A D V P L F V G G P V Q Q N T L H F I   H
UniRef90_Q0I1B4          A T D L S I A E L C A K M N F M M A D E R E Y S V L L G G P V N L E H G F I L   H
UniRef90_UPI00022604C0   R S Q P G F D D L L L Q L D I A P T P P R R I L C A G G P V E A G R G L V L   H
UniRef90_Q8D336          P I H K Y I K N I L N K L K I N I E D K L N H P V L F G G P L S D D R S F I L   H
UniRef90_E7C2U0          P L H Q D L E E V I S Q M D L N E I D T K E I S F L Q G G P V G L D R G F V I   H
UniRef90_C5WDJ6          P L E T T V K N F L Q K L K I K S V D R L E K I V F V G G P L A A D R G F I L   H
UniRef90_UPI0003A06138   T A D G V L D D L F D T M G L P L P D L A G S A V L W G G P V Q P E R G F V L   H
UniRef90_UPI0004791E59   R L S Q P V D D L L L Q L D I A P A P P R R R S L C A G G P V E S M R G F V L   H
UniRef90_Q9CJX1          P T D L S I A E L C A K M N F M M K T D R T Y L V L A G G P V N I E R G F I L   H
UniRef90_T0GDF6          E M G V G L R D L L E S F D I D A S G V P D R R V L R G G P I E P R R G F V L   H
UniRef90_I2NKX8          P T D L S V L E L L T R M D F Q M A N Q R D Y K V L S G G P V N Q D R G F I V   H
UniRef90_W1NCR4          P T D L T L E A L F E Q L E I E A G P N R L A P V Y F G G P V H K D R G F I L   H
UniRef90_UPI0003B39B7C   P L D A T L S D V I E G F             F V N D P T I Y L G G P V Q R D T L H Y V   H
UniRef90_D6Z2I0          P L D V Q L E D I F R N A E I P L P S S P L G P V Y L G G P V E T S H V F V I   Y
UniRef90_B3QT15          P L D I N I S E A I E D I E D       W D I A L H A G G P V Q P N T V H V L   H
UniRef90_UPI00047A1824   P S P I P M Q A V F A G N G D T P E R F A E D F V L F G G P V H P E R G F V V   H
UniRef90_Q31EK4          E H N L T V P E L L D H F E L T P E N Y A D Q P V L M G G P V D L E H G F I L   H
UniRef90_UPI00037FC5DB   Y V G I G L H A L M R Q L D L D P G E A P D A P V E P N R G F V L   H
UniRef90_C6VZV0          T T D L F L G D V L E E         T I Y Q D I T L H L G G P V E K N T L H F I   H
UniRef90_I3U9K7          P T D L S V E Q L L E R L E L E V A D L A A Q T V F Y G G P V Q T D R G F V L   H
UniRef90_F8ECZ6          T T N L R L N D V L K E         P V V N N L P L Y L G G P V E Q N T L H F I   H
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UniRef90_A0A031I7I4      T I E G G L H D L L D Q F D I A H G A A P D V P I H F G G P V D P R R G F V V   H
UniRef90_UPI0003B3DD96   L Q P L E F P D L L I R L G I L P E K A R S L M V R R G G P V E T G R G F V L   H
UniRef90_UPI0003724E61   T T N L N L S D V I D D V         Y A E Y P L L G G P V Q Q N T L H Y L   H
UniRef90_F1Z6A1          H S G V S L H G L L T D V G I E I G V A P D V P I H V G G P V E P Q R G F V L   H
UniRef90_B3QMC9          P M E F K V C E A I S G F D E I D E           P L H M G G P V Q V D T V H F L   H
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UniRef90_Q83A18          P L A L T L H G L H L E I P Q I A N H P V L M G G P I Q V D T L H F I V   H
UniRef90_UPI00036060CB   K Y D Q I L G E L I T D L E         S F D F P V Y Y G G P V Q V D T L H F L   H
UniRef90_Q60BQ2          L A G G P L G K L E A F G L A S K A Q R E I K L Y L G G P V G I G Q G F V L   H
UniRef90_M4R9D2          P T D L S V M E L L A K M D F L M A N E R D Q L V L S G G P V A Q E R G F I L   H
UniRef90_J4TU91          P T D L S V L E L L T R F Q M A N Q R D Q M V L S G G P V M N Q D R G F I L   H
UniRef90_A0A023BZY7      P L E Y F L A D L V P E I E M E         F K I Y N G G P V E Q D N L Y F I   H
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                              90            100           110          120
UniRef90_A1ZFZ1          R T P D L F D N T V E I A K G I F W G G D Y E Q L K A Y L R V G K L Q D I R F F
UniRef90_A0A024KCW7      S S D Y F R D G S Y E V S E E V Y L T A T L D I L R S M A F G N A P A E A I F A
UniRef90_UPI0004642697   D V M P T E E S T L A I P G G L E M T T S R D V L E A L A Q G A G P R R V Q V M
UniRef90_E1W1M4          K K A K E F E H S Y K I T D E M F L T T S A D I V E T F G S E D A P D K Y L V A
UniRef90_Q21YP2          P A E S V Y A S T M V I P G G L E M T T S K D V L E A I S I G A G P R K V L V S
UniRef90_U4TEB5          P T E E V W Q T T L H I N E H I A V T S S R D I L E A I A L G Q G P Q H L L P A
UniRef90_UPI0002E05CE5   T A D W S S E G S L Q V D P E L A L T A S V D I L K A I A G G G G P R R G L L A
UniRef90_Q1LSZ6          T P K D G F G A S I G I S P Q T M I T T S K D V L E T L G T H N Q P D D I L V A
UniRef90_M4S7W1          G L D W G G Q D T L Q V G E S W A L T S T L D V L R A I A E G R G P S R W L V A
UniRef90_UPI00035F93FF   T D D V M Q K D S L P I D K G I V L T S T A D I F D D L A K G Q G P K E S I L A
UniRef90_A4BI12          P P T E Q T W I S S L S N E Q L V T T S R D M L E A I A Q D E G P E R F L F C
UniRef90_UPI000312EA26   E A D Y A A S G T I R V G N A W A F T S T L Q A I A R G D G P K R W H M V
UniRef90_U2YQU0          S S D W G G E G T I E V V P F G G L S G S L D V L R A I A E G R G P E R W L I A
UniRef90_UPI0003B6F929   H G H G P W T S T L N S S D A L A V T H S R D V L D A I S Q G S G P A Q F L V S
UniRef90_B9KNE5          S P D Y S V G A T M L V S G K F T M A T V D I L E A L A R G Q G P S S A L M A
UniRef90_G8TCS0          Q Y P D L I P G S Y E V L D G I Y W G G D F E T A I T L I K A G S I D K I R F F
UniRef90_UPI0003FE4DBF   N Y P E I K D C Q E I I P N L Y W G G D Y E Q L A T L I N L G Q P E R L R F F
UniRef90_E8RBQ6          S T A T P D R Y S V E V K P G V Y L S R D S R L L E D I S L G Q G P Q C Y L F M
UniRef90_K2AF31          S S D Y G G P A T M Q I E G G Y S M S A T L D V L E A I A Q G T G P D Q A L L A
UniRef90_Q2GAJ3          S D D W G G E G S V T V N G L C C L S A S L D I L R A I A E G R G P S R F V I A
UniRef90_V4NGV0          S L D Y Q I D K T L E L G A G V G L T A S R D I L V D L S S G T G P A R S V I A
UniRef90_UPI00035C49FA   T C D Y L C E G T L P I A A G I G L T A T R E M L D V L P S A D A P R R A L M A
UniRef90_UPI00036B728D   T G Q P T W A S S F A I S E N V C I T T S K D I L E R I A A G Q G V E H Y Y L C
UniRef90_L8JR73          R A N Y L E G G V E V S P G L Y W G G N F Q G L M I L I D T K Q I E D F R F F
UniRef90_R7IMC9          E K A G E Y A A S R E I S P T L C V T L S A D V L S R M C R G E G P R R R L F L
UniRef90_B4WCC1          T D D W S G D D T L P F G D G L A M T G T R E A L A A M T D A A G P R R S A L L
UniRef90_UPI0003B31526   S D D W E G E G S I D V A G L W R L T S T L D V L R A I G E G R G P R K W L A A
UniRef90_M2TKY8          S T D Y E G Q G T L S V A G R W A L T A T L D I L R D I A R G N G P A R W M I A
UniRef90_M1PTM8          Q S D Y V T E H H L E V S P T V Y L T R N T S V L E D I S R E R G P E K F L F A
UniRef90_R9XNY8          T T D Q L F L H S Y P T A D D L M L T T S G D I L D T F G R Q D A P A D F I V C
UniRef90_L1NKB4          C P A G E W S S S F S V G G E N A V T T S R D I I D K L G D S G A V E K A I V T
UniRef90_C6AQK1          T N T P N F D H S Y K V N D N L V L T T S A D V V D T F G T M G E P E K Y L V T
UniRef90_UPI00047E5E06   S S D Y F T E T S L K L T D T L H L T S T K D V L E A L V Q D N A P T K A M L A
UniRef90_W0AFE3          S R D W S G S E S I D V A G R W A L T A T V D A L R A I A S G S G P S K W I V A
UniRef90_Q9A311          T D D F S P D S T L P V A D G V A L T A T R D A L D A M A S A K R P R K S L L A
UniRef90_A0A059F895      T D D Y N E G A S L P V E G D I C M T A T R D I L H A M G S A H P P R R S V L A
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UniRef90_V7IFC7          S P A G N W M S S I V I G D N L A L T S S G D I L P H L H D E Q S V K Q A M L F
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UniRef90_UPI00035F9C9A   T G D F H C E G T L D I N E D F C L T A T R D V L V A L A S D D A P R E S V M A
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UniRef90_L2F861          T G Q V W A S S F V I Q E N I C I T M S R D I L H H I A S G Q G V Q H I E L C
UniRef90_I2ES50          R L G D E I E G S V E L G N G I Y W S G D F E Q V K T L I N I S K I S D I R L F
UniRef90_D9QMF6          T D D W M V D S S S P V S E G L A L T A T R E A L A A M T D P A G P R R A V L L
UniRef90_A8PPF4          A P S G A W Q S S L K M N S E I S V T T S K D I L L A I A K Q Q G P E K F I F S
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UniRef90_I2GBY4          R R P D L I D N S I R I M E G L F W S G D F D E I K R A V N L G T L R D A R F F
UniRef90_Q0I1B4          K K T Q E F Q H S Y K V T D Q I Y L T T S A D I I N T F G T A Q S P E K Y L V T
UniRef90_UPI00022604C0   S T D W D G D G T L T V N N D I S L S A N L E V L K D I A A G D G P R D A L L A
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UniRef90_E7C2U0          N S G L W K N T T E V N E N T F I T S S R D I I D D I I D G Q G P N H S L F I
UniRef90_C5WDJ6          S A Q S S Y A S S I Y I S E N T V I T T S N D V L E T I G T I K Q P E N L L V A
UniRef90_UPI0003A06138   H R L E D P D S S L S L P D G L Q V T T S R D I L Q D M A E G G G P P Q L L F T
UniRef90_UPI0004791E59   S S D W S G D G S M T V D E G V S L T A S L D I L K D I A A G S G P R D A L L A
UniRef90_Q9CJX1          T K T Q T F K S Y K V T D Q L S L T T S A D I I D T F G T A Q A P E K Y L V A
UniRef90_T0GDF6          S L D W A G Q E M I Q V G R K W G L S G S L D I L K A I A A G T G P S R Y L V A
UniRef90_I2NKX8          T K T Q S F L H S Y K V T D D I M L T T S G D V L D T L G T T D A P E H F I V C
UniRef90_W1NCR4          G Q A D E W D S S L Q V T E E L A L T T S M D M M Q A L A R G E G P E Q F I V C
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UniRef90_D6Z2I0          S V D Y Q I I G N Q L R V S S T I S L T R D P L F Y D L A A G D G P Q H Y L V T
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UniRef90_UPI00047A1824   T P A G E W Q S T L K V N D D N G V T T S R D I V E N L G D E E K V A K A F L T
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UniRef90_I3U9K7          H P A G H Y R S S V V L G D M A L T T S R D V L E D L A R G E G P Q Q I F I T
UniRef90_F8ECZ6          R L S F I E D A V P V G E D L Y W S G D F E Q I T S L L N V G K I R D L R F F
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UniRef90_A5UAI5          K N T N A F Q H T Y K V T E L S M T T S A D V V E T I G S T F A P E K Y L V A
UniRef90_C8PUL9          T G Q P D W V S S F A I T E N V C I T T S K D I L Q S I A N G Q G V E H F E L C
UniRef90_UPI00026CABEE   T L D W A G Q D T I E V I G G W G L S G T I D V L K A I A E G R G P S R W L V A
UniRef90_UPI0003621C5B   R Q V D G I S G L D V G N E L H W G G N F E Q L L L L M E S G A V Q D F K F F
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UniRef90_UPI0003B44B09   T P D W G G E G S V T V N P L C T L S A S M D V L R A I A E G R G P S R W L V A
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UniRef90_J4TU91          T K T A N F L H S Y P V E I M L T T S G D I L D S F G T P L S P K H F I V C
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                                     130               140               150             160
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UniRef90_Q21YP2          L G Y A A W G E G Q L E S E I S E N S W L T V A A N N S V I F D T P V A Q R Y E
UniRef90_U4TEB5          L G Y C S W G A G E L E Q G I F D N L W L C V P A A T P L I F D S P F Q E R W Q
UniRef90_UPI0002E05CE5   L G Y A G W G P G Q L E E E L Q Q N A W L N V S P D E A L I F E E E N D A K W R
UniRef90_Q1LSZ6          L G Y S G W E E G Q L E H E L R A N T W L T I P A N N Q I L F A T P V S A R W Q
UniRef90_M4S7W1          L G Y A G W S P G Q L E D E M T G N A W F A T G G S P G V L F D T A V D Q R W T
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UniRef90_UPI000312EA26   L G Y A G W G A G Q L D M E M R Q H G W H L A P G D A T T V W D T P I D K R W E
UniRef90_U2YQU0          L G Y A G W G P G Q L D A E M R E H G W Y A A E G Y P A I L Y E N P A E Q R W M
UniRef90_UPI0003B6F929   L G Y A G W M P G Q L E Q E L A D N V W L T A P A S Q R V M F E L P Y E Q R W E
UniRef90_B9KNE5          L G Y S G W G P G G Q V E A E V Q R N D W L T A E A P S E L V F S D D D P G K W T
UniRef90_G8TCS0          I G Y S G W G S G Q L N D E L K E K S W L T A Q A T R K L V F H R K A D E I W K
UniRef90_UPI0003FE4DBF   A G Y S G W S A G Q L E G E L K Q N A W I H T R L G A E F I F K T A A E G F W R
UniRef90_E8RBQ6          L G Y A G W G A G Q L E N E L M D N S W L T V P A D V D V L F H T P D D Q K W R
UniRef90_K2AF31          L G Y S G W G A G Q L E A E I A R N D W L T V E P S A A L I F A E P D G G K W A
UniRef90_Q2GAJ3          L G Y A G W G G G Q L E G E M R R H G W Y A A G R P E I L F E T P T G R R W T
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UniRef90_R7IMC9          L G L A G W L P G Q L E A E I A L G S W I T V P G T E E I L F D V P P E E R Y D
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UniRef90_R9XNY8          L G C C T W K A D Q L E Q E I A R N Y W V T A P A S Y K I L F E T G Y L D R W S
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UniRef90_D9QMF6          L G Y A G W G E G Q L E E E L A E N V W L T A D A D L D L I F D T D F D T K W A
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UniRef90_UPI0003A06138   L G Y A A W D G G Q L E D E L L R N S W L T V A A S A D V L F D T P L E Q R Y D
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UniRef90_Q9CJX1          L G C A S W T V N Q L E S E I A N N D W L V V P A N N R I L F D V P Y E D R W L
UniRef90_T0GDF6          L G Y A G W T A G Q L E K E M T G D S W F L A D G D P D I L F E T P A E K R W S
UniRef90_I2NKX8          L G C S T W N S E Q L Q Q E I A Q N M W I Y S D A N N K T L F K T G Y L D R W L
UniRef90_W1NCR4          L G C A G W E S G Q L E N E L M D N A W L T V E G R P A V L F D T P P E Q R L T
UniRef90_UPI0003B39B7C   L G Y A G W S P G Q L A S E L E E H A W V V V P E A A D L I F E T P P D R L W S
UniRef90_D6Z2I0          L G Y A G W G P G Q L E A E L S V D G W L V L P A L D E I I F A T P D H K W R
UniRef90_B3QT15          L G Y S G W G P G Q L Q Q E I D Q D S W Y Q A K A T A N V V F N P V Y D R M W A
UniRef90_UPI00047A1824   I G Y A S W E K G Q L E R E L A E N S W L T V A A D N A I L F D L P A G K R Y R
UniRef90_Q31EK4          L G F S G W E K G Q L N D E I Q A N N W L T I P Y N E A L L F D V P N D Q K W Q
UniRef90_UPI00037FC5DB   L G Y A G W G A G Q L D D E M A A N G W F D V R G D E R L I F E G D A S R R W S
UniRef90_C6VZV0          I G Y S G W G G G Q L D D E I K Q D S W I I S S T S S D F L F S T P P G N F W R
UniRef90_I3U9K7          L G Y A G W S A G Q L E Q E I A A N T W L N V S A D R N I I F N K R A A D R Y T
UniRef90_F8ECZ6          I G Y S G W G A G Q L E E E L S K N A W I I S D T D A G F I F D T P V D Q F W R
UniRef90_UPI0003730DBA   F G Y A G W D G G Q L E E L H Q N V W L T I P A N H D L I F K H P V H D R Y R
UniRef90_A5UAI5          L G C S S W G A G Q L E K E I S D N A W L V V S S K D Q I L F D M P Y E D R Y V
UniRef90_C8PUL9          L G H A S W G K G Q L E E E I N Q G D W F V L P A S M G L L F D I D H Q T R W Q
UniRef90_UPI00026CABEE   L G Y A G W G E G Q L D G E M T R H G W F N V A A T P D L L Y D V A A D A R W Q
UniRef90_UPI0003621C5B   L G Y S G W G K G Q L E E E L Q N A W L I Y S A T A A D I F D T Q P D V L W R
UniRef90_J1JZJ2          L G Y S D W T K G Q L E A E V S N N V W L T S S V D S N F L F S G E I E K Q Y D
UniRef90_A0A031I7I4      L G Y A G W G D G Q L E G E L T G P G W F H V A G D T D L L F D T R P D R R W T
UniRef90_UPI0003B3DD96   L G Y A G W D A G Q I E R E I A S N D W L I C P P T T D L L F D T D I L G K Y D
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UniRef90_F1Z6A1          L G Y A G W G A G Q L E S E M R Q H G W Y A A A Q D A I L F D T P A E S R W H
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UniRef90_A0A059DYV6      L G Y S G W G A G Q L E Y E L A E N A W L V G T P N A E L V F G E S H D G K W D
UniRef90_D0MCZ3          L G Y S G W A P G Q L E A E Y E A G G W I L A P A H A A N V F E D T P E K L W R
UniRef90_UPI0003B44B09   L G Y A G W P G Q L E E E M H H H G W H A A E G S P A I L F D T P R E Q R W S
UniRef90_Q5FQY8          L G H A A W A P G Q L E E E I L R D S W F I A P A T D E I V F G T D H A K K W R
UniRef90_K1YQ73          L G Y T G W G P G Q L E H E L M A N G W L S V P G N D D I I F N R P D E F K W K
UniRef90_Q83A18          L G Y A G W G A G Q L E N E I A R N D W L V P F N R K I L F E T P L S K R W K
UniRef90_UPI00036060CB   I G Y S G W G V G Q L E E E M K S K S W I T S Q G T R K I I F T A N V D N T W K
UniRef90_Q60BQ2          F G Y A G W S P G Q L D G E I A R G D W L L A P A D T S L I F S E E P D K V W E
UniRef90_M4R9D2          L G C C T W K S G G Q L E Q E I A R N L W L V G E A D E Q I L F E T G Y L D R W A
UniRef90_J4TU91          L G C A T W Q S A Q L E I G Q N F W L V S E A S H R L L F E T P L D R W K
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UniRef90_Q21YP2        Q A
UniRef90_U4TEB5        A A A S L I G V N L Y Q I S S
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UniRef90_Q1LSZ6        A A A K I L G
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UniRef90_U2YQU0        S A W K A E G I D P A H L
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UniRef90_G8TCS0        E S L K H L G G D Y E M M A N
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UniRef90_V4NGV0        A A L A T L G V E P G H L S
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UniRef90_UPI00036B728D L A G N K L G I D F N F L S
UniRef90_L8JR73        A V L K Q L G G R Y N I Y S N
UniRef90_R7IMC9        Y A L R Q I G I S R E Q L
UniRef90_B4WCC1        R A L A R M G V D A G R L S S
UniRef90_UPI0003B31526 A A F A S G G I D V R L L S A
UniRef90_M2TKY8        T A F A G E G I D V G M L S A
UniRef90_M1PTM8        Q A A A I N G I D I S I F
UniRef90_R9XNY8        E A N A L L G I E
UniRef90_L1NKB4        A A L S K L G I E P A S L
UniRef90_C6AQK1        A A N Q L L G I D
UniRef90_UPI00047E5E06 K A L A S L G I K P E M L S
UniRef90_W0AFE3        E G F S S A G I D S R L L A A
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UniRef90_A0A059F895    H A L G R L G I D S A R L
UniRef90_UPI000288AA1D R A F G G A G I D P R L L A S
UniRef90_A8ZZX8        D A M K L M N I D P A F L S
UniRef90_M1LSS9        A A L G L L G I K
UniRef90_V7IFC7        A A M S L L N I A P E Q L
UniRef90_V9H609        A A L N K L G I N
UniRef90_UPI00035F9C9A K A L K L I G I D A A H L H S
UniRef90_C1DI78        G A A A R L G I N L A L L T S
UniRef90_L2F861        K V C Q K L G V N F D I F S T
UniRef90_I2ES50        E V L K R M G G Q Y K V L S N
UniRef90_D9QMF6        R A L A G I G V D A A R L S S
UniRef90_A8PPF4        K A M D Y L G V D V T K L A
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UniRef90_Q0I1B4        A A N Q L L G I E H V N F S
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UniRef90_Q8D336        E S A K I I G I D I R N I S S
UniRef90_E7C2U0        K S I D S L G I K S V N I S
UniRef90_C5WDJ6        E A A K T I G V N I
UniRef90_UPI0003A06138 R A L A L L G I Q S W M L S S
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UniRef90_Q9CJX1        E A N L L L G I Q H H N F A
UniRef90_T0GDF6        A S F A A A G I D A S H L
UniRef90_I2NKX8        E A N E M M G I S S G V L S A
UniRef90_W1NCR4        A S A G L L G V D L N L M T
UniRef90_UPI0003B39B7C A A M R R K G G E H A L W A N
UniRef90_D6Z2I0        Q A A L A H G V D I G L F G S
UniRef90_B3QT15        R A L R A K G G D Y A L I A N
UniRef90_UPI00047A1824 A A L A K L G I E
UniRef90_Q31EK4        V A L N T L G I S P E S L S
UniRef90_UPI00037FC5DB A G F A S A G V D V R L L S S
UniRef90_C6VZV0        E V L R S M G G E Y R S I A
UniRef90_I3U9K7        A A L A L L G I E P A A L S
UniRef90_F8ECZ6        A V L R K M G G E Y R
UniRef90_UPI0003730DBA A T L A I L G I E L S N L S S
UniRef90_A5UAI5        A A N Q L L G I H P Y N F A
UniRef90_C8PUL9        V A A Q L G V D F N K L S T
UniRef90_UPI00026CABEE A G F A T A G I D P R L L V S
UniRef90_UPI0003621C5B E C L K K M G G K Y K M I S N
UniRef90_J1JZJ2        L S L L R M G I N P N F L
UniRef90_A0A031I7I4    A A F E A A G I D P R L L
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UniRef90_F1Z6A1        A T W R A E G I D P S H L
UniRef90_B3QMC9        R T V R S K G G D Y C L V A N
UniRef90_G4RB38        A A L A A L G V T R A T L S
UniRef90_A0A059DYV6    A A L N E L G I D S G R L
UniRef90_D0MCZ3        T V L R R M G G E Y A L L A N
UniRef90_UPI0003B44B09 A T W R A A G I D P A H L A A
UniRef90_Q5FQY8        Q A L V A I D F D P L L L S S
UniRef90_K1YQ73        A A A M Q Y G I D I A
UniRef90_Q83A18        K A A A L I G I D E I N Q L S
UniRef90_UPI00036060CB E A L K Q L G G E Y V Q M V N
UniRef90_Q60BQ2        E A L K H A G L P L
UniRef90_M4R9D2        K A Y D L L G F N
UniRef90_J4TU91        E A N E L L G I
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Multiple sequence alignment

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UniRef90_E4TL95             K G D L L L S E P F L P D Q N F D R T V I L L C E H N E E G S F G F V L N K
UniRef90_UPI00036BCBA1    L K G R F L I A D P S I A D P E F A R A L I L V T A H G P Q G A M G F I V N R
UniRef90_UPI00046FBB0B      G K I L I A D P F L K D P N F M R T V V F L C D H Q G E G S F F V V N R
UniRef90_V8A4P6           L A G R L L I S S P M L G E S E F A R S V V Y V C A H S R D G A M G L I I N K
UniRef90_M4XI57           L Q G K F L I A T P E M D D D Y F E R T V V Y I C E H N P Q G A M G V V I N T
UniRef90_D5MG90           L V G Q L L V A R D E L R D P R F V H S V I Y V V H H D A G G A M G L I V N R
UniRef90_Q89A51           F K N H F L A M P G L K D P L F K N S V I Y M C K H D N N G A M G I I I N K
UniRef90_I4ANK9             A G Y F L L A E P L L D D P N F D R T L V C Q H S E E G S F G L V V N R
UniRef90_F5SQ87           L T H H F L I A S P N M P D E R F A Q T L V Y I C R H D K H G V L G L V V N R
UniRef90_UPI000378EE2D    L K G N L L I A E P S L H D D S F N R S I I L L T E H N E K S S V G F I L N R
UniRef90_W6TZQ0             G K L L I S E P F L M D P N F K R S V V L I T E H Q D E G T V G F I L N Q
UniRef90_Q2S591            G T L L I S A P M M Q D P N F R R S V V L L C E H N D E G T F G L I L N R
UniRef90_A2TWY4           L K G R L L I A E P S L N D S S F N R A I I L L I T E Y T E N N S V G F I L N R
UniRef90_E4RYZ7           M K G K L L I A K P Y L G D P N F E R A V V M V C E H S E E G A F G L V I N Q
UniRef90_UPI00046FA286      K G S L L I A K P Y L G D P N F E R R A V L I C E Y T A D G C F G F V L N Q
UniRef90_UPI00042A537A      S G N L L I S E P F L G D P N F E R S V V L L C E H D N H G S F G L V L N Q
UniRef90_W0EXE9            G T F L I A N P H L N D P N F V R T V V F L C E H G T E G S V G F V M N R
UniRef90_UPI0003784DE9    L N G K L L L A T P S L G D P F K D S V I L L C H H D E S G A M G L I I N R
UniRef90_UPI000372FDA7    L S G Q F L A M P G V D S D L F N G T V I Y L F E H S P E G A G G V I V N R
UniRef90_F3KUC8           L T N H F L I A M P G L G D A F F A K S V V Y L C E H S E R G A L G L M I N K
UniRef90_UPI00036EAAD6      S G T F L I A N P H L N D P N F V R T V V F L C E H D A G G S V G F V M N R
UniRef90_D5QHP6           L T G H L L V A T P A L M D T P F E R S V I Y L C A H S E D G A M G L V V N R
UniRef90_UPI0002559066              M P G L A D E R F A H G V I L V C A H S T D G A M G L I V I N K
UniRef90_E0MPD3           L R G H V L I A M P G M A D D R F A R S I V L L L T H T S E G A M G F I L N K
UniRef90_H8XR10             K G C L L V A E P S L N D I S F N R A V I L L T E H N Q D G S V G F I I N K
UniRef90_UPI00036BE760       H N F L I A M P S L D D S W F E K T V I Y I V E D N D H G S M G L V I N I
UniRef90_W5YI51           L T G H L L V A T P A L T D P A F A R S V V Y L C A H T E D G A M G L V V N R
UniRef90_UPI00036A7BDA      K G D V L I A E P F L N D P N F S R S V V L L C E H Q E E G S F G L V L N K
UniRef90_T0IU05         F Y G G Q F L L A L P G M E D M R F A H S V I A M C L H D E N G A L G I A V G E
UniRef90_UPI00047DCE6F      K G I L L L S D P F L K D P N F I R T A V L I C E H N E E G D V G F I L N K
UniRef90_UPI0003B60A78      K G H L L I A E P S L G D A S F N R S V V L L A D H D E N G S V G F I L N K
UniRef90_UPI000255B1A6      K G K L L I A E P S L G D V S F N R S V V L L A E H N E E G S V G F I L N K
UniRef90_C7JC19          L A G M L L V A S P M L A Q T P F A Q S V I Y I C A H A P D G T M G L V V N K
UniRef90_F6EZF4            A G Q F L L A L P G M E D A R F D H S V I A M C V H D E N G A L G I S V S D
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UniRef90_W8F1A9             G S L L I S Q P F L G D P N F E R T V V L L C S H D E E G S F G L V L N R
UniRef90_A4CKH5            K G K L L I A E P A L G D V S F N R S V V L L A E H N Q E G S V G F I L N K
UniRef90_W9UYU3           L R D H F L I S M P H L S D P H F S Q T L T Y I C D H S E Y G A M G I I I N R
UniRef90_UPI000472EBDC    L S G A L L V A T P M L G D T P F A Q S V I Y V C A H S E G G A M G L V V N R
UniRef90_F3WUH9         Y L S G Q F L L A M P G M A D S R F D H A I I A M C A H D E G G A L G I G L G A
UniRef90_M5IYF7              M P G V V S G S L A D T V I Y V C E H N E Q G A L G L V I N R
UniRef90_C0QFZ0          L K G H F L M A I P G L P D P N F A Q T V T C I C E H N K T G A L G F I I N R
UniRef90_H8MHP3          L A S G F L L A M P Q L G D P N F Y R S V L M I C E H G E T G S M G L V V N R
UniRef90_L0ET58        F F D G Q F L I S M P Q I Q N D Y F F Q S I V Y I C E H S S A G A M G F V L N R
UniRef90_UPI000262D077      G Q F L V S M P D L K D G V F D S S L V L M C E H G E T G A M G F I V N K
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UniRef90_D8PI23            K G I L L A A P A L N D P N F R Q T V V L L C E H G P E G A L G V I V N R
UniRef90_I0K4X1             N S L L I A E P F L G D A N F E R S V V V I C E H T E D G T F G L I L N Q
UniRef90_F9Q7F6          L Q G Q L L I A M P H V K D Y F E Q A V L I I C E H N A Q G A M G V M I N Y
UniRef90_R9GVT5          L K G S L L I S E P F M M D P N F K R S V L L L T E H N E E G T I G Y V L N Q
UniRef90_UPI000468571A     T G R L L I S E P F M A D P N F K R S V L L L T E H G D D G T V G Y I L N K
UniRef90_UPI00037C46E4   L R D H F L M A M P H L E D D N F A G S L T Y I C D H D D N G T L G L M L N Q
UniRef90_W0DUY9           Q H Q I L I A N P S L D N S W F E K T V I Y I A E D S D Q Q T T G L V L N K
UniRef90_H2BWW5            K G L L L V A E P S I G D A S F N R S V I L L A E H S E S G S I G F I L N K
UniRef90_A6H146            K G H L L I A E P S I G D L S F N R S V L L A D H C E G S G A M G L V L N K
UniRef90_Q1NQW6          L Q G Y F L I A T P Q M S D P R F Q E T V I L L C A H N E E G A M G L V I N Q
UniRef90_Q3AQ69           A G K L L L A S A T M L E S N F K R T V L L M C E H N E E G S L G F I L N R
UniRef90_U5BPT1            G H L L I S E P F L Q D E N F V R S V V L I C E N N E S G A F G L V L N K
UniRef90_A3J558            K G H L L I A E P S L G D V S F N R S V V L L A E H N N E G S I G F I L N K
UniRef90_S6GEU6          L K N N F L I S M P M L G Q H K H P D S V I Y I C H Q G E Y G S M G I I I N Q
UniRef90_UPI00036CBD36  Y L S G Q F L L A M P G M A D P S F D H A V I A M C A H D A G G A L G V G L G A
UniRef90_A3XII8            K G K L L I A E P A I G D V S F N R S V V L L A N H N E D G S V G F I L N K
UniRef90_A9H4F1          L T G S L L V A S P A L A D T P F A R S V I F L C A H V P Q G A M G L I V N K
UniRef90_UPI0004061566      G D L L I S E P F L Q D E N F S R S V V L L C E H N E E G S F G L V F N K
UniRef90_D5BE87            K G H L L I A E P S I G D I S F N R S V L L A E H S E R G S V G F I L N K
UniRef90_F4KRJ4            G K I L L I A E P F M L D P N F K R A A V I L C D H G G E G S I G F V I N R
UniRef90_UPI0004690658      K G H L L I A E P S L G D L S F N R S V L L A D H N E E G S I G F I L N K
UniRef90_L0G4A9            S G Q L L I S E P F L Q D E N F V R S V V L L C E S N E N G S F G L V L N K
UniRef90_F7V9V5          L T G L L L V A S P A L G D T P F A R T V I Y C A H A H D G A M G L V V N R
UniRef90_R6VFK6            G K L L I S E P F L R D A T F G R S V I L L I D H T D E G T M G L I I N K
UniRef90_UPI00047B0E2E      K G K L L I A E P S L G D V S F N R S V L L A E H S N E G S V G F I L N K
UniRef90_C8CIK8        W L T G Q L L I A A P G M T D P R F D R T V L V M V R H N S D G A M A I V I N K
UniRef90_G2ECE8          F K G N L L I A E P T I G D T S F N R S I I L L A D H T E E G S I G F I L N K
UniRef90_G8R0W6            K G S L L I A E P F L G D T N F D R T V V L L T E H N E E G S F G F V I N K
UniRef90_UPI00040A5CC8      K G H L L I A E P S I G D L S F N R S V L L A D H N P E G T V G F I L N K
UniRef90_A3U8Z8            K G D L L I A E P S I G D V S F N R S V L L A E H S I E G S V G F I L N K
UniRef90_D6YWR9            K G T L M I A T P D I E A G I F F R S V V L L C E H N P N G S F G L V I N K
UniRef90_W2US56           A G H L L I A E P S I G D A S F N R S V I L L A E H N E E G S I G F I L N K
UniRef90_UPI0003B5783C    A G H L L I S E P F M M D P N F K R S V I L I T E Y T E D G A M G F I L N H
UniRef90_UPI00036B4CFD      G N L L I S Q P F L Q D E N F A R S V V L L C A H S D E G A M G F I L N Q
UniRef90_UPI00047912DA    S G S I L I S Q P F L G D P N F E R T V V L L C R H D E E G T F G L V L N K
UniRef90_K1LC54           A G N L L I S E P F L Q D E N F V R S V V L L C E N N E N G S F G L V L N K
UniRef90_I0W8L2           A G H L L I A E P S I G D V S F N R S V L L A D H S Q E G S I G F I L N K
UniRef90_F8KY25           K G T F L I A T P E I G D I F F R A V V L I C E H N P N G S F G I I V N K
UniRef90_UPI000475AB70   L T G Q L L V A S P V L A E T E F A Q T V I Y L C A H S E G A M G V V I N K
UniRef90_F4AY16           K G H L L V A E P S L G D T S F T R S V L L L A D H N D K G S V G F I L N K
UniRef90_UPI00047E1E7D H Q A G S L L I S E P F M I D P N F K R S V L L V E K S E S G G D I G F V L N Q
UniRef90_UPI000369EC6E     G K V L I A E P S L G D P N F Y M V E H D D A G S V G F V L N K
UniRef90_B4S6Y6           A G K L T M A S A I M L E S N F R R T V L L C E H N E E G S L G F I L N R
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Multiple sequence alignment (positions ~45–80)

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Pos                                           50             60             70           80
UniRef90_UPI0003698D2A   P N E I K L N K I F D Q L E I S Y E K G K N F E T L K G G P L S R D R G F V L H
UniRef90_E4TL95          L S I L K V D E V L Q Q I G             S F E A E L F V G G P V Q Q N T L H F I H
UniRef90_UPI00036BCBA1   P A E R P F A E V R R E L G M R G P E P P V M S G G P V E E T R G F L H
UniRef90_UPI00046FBB0B   Q Y N K S V G E L I A D L D         G C N F P V Y Y G G P V Q L D T V H F L H
UniRef90_V8A4P6          R S H P T L E T L F E Q L D I T P S P P R I N L C M G G P M E P T R G F V L H
UniRef90_M4XI57          P T D L S V L E L I T R M D F Q M A N Q R D Y K V L S G G P V N Q D R G F I I H
UniRef90_D5MG90          P I G E V L S E L L E Q A G L E H T G I K K I R V H F G G P V E P G Q G F V L H
UniRef90_Q89A51          K I K N T I Q K I L H Q L K I N I K S S N K N P V I I G G P I L E D R G F L L H
UniRef90_I4ANK9          Q T E I S V S E A T D L L E I E             N K L F V G G P V E Q N T M H F L H
UniRef90_F5SQ87          P I E A R V G K L L E N L D I E V T D E S V M D D L A G G P I Y P E V G F V L H
UniRef90_UPI000378EE2D   P L D Y T I K D L I P E I D         C S F K I Y Q G G P V E Q D N L Y F I H
UniRef90_W6TZQ0          R S A L V L S D L I P E L D         K A D F P V Y I G G P V G T D T V H F M H
UniRef90_Q2S591          E L D V S L G D V L D E Y       V T Y D P P L Y M G G P V Q R E T L H Y L H
UniRef90_A2TWY4          P L D Y V L K D L I P D I D         S N F T V Y Q G G P V E Q D N L Y F V H
UniRef90_E4RYZ7          P T Q H F L P D F F A D I N V S V       P V G I G G P V E G N T L H F L H
UniRef90_UPI00046FA286   M T D V F L G D V         I D E S I Y Q D V P L Y L G G P V E K N T L H F I H
UniRef90_UPI00042A537A   E S N L L L A D V L D D       N I Y P D I P L Y V G G P V Q Q N T L H Y V H
UniRef90_W0EXE9          K T D Q T I G D L I P E L E       G Q L F P I Y E G G P V G M D S I H F L H
UniRef90_UPI0003784DE9   P Q E I T I R D V L E D I Q L S P N E D V L K T L Y E G G P M D S F R G F V L H
UniRef90_UPI000372FDA7   A T D I E L S D L V E R F E L E P A D Y K T I F F G G P V Q P M R G F V L H
UniRef90_F3KUC8          P T D I T L K N L F E K V D L P L G D L R D A P V F Q G G P V Q T E R G F V L H
UniRef90_UPI00036EAAD6   K T I H T L S D L V P G F E       G L D F P V Y E G G P V G L D N L H F L H
UniRef90_D5QHP6          R A Q P V L D D V L E Q L G V A P P P R R I G L C A G G P V D S S R G F V L H
UniRef90_UPI0002559066   P A D H T M P S L F R E L S I P L T P L R P A P V V A G G P V D M E R G F V L H
UniRef90_E0MPD3          P I D P T F S D V L G V L K L H E E S S K E F Q T F N G G P V E I G R G F V I H
UniRef90_H8XR10          P L T H T I N D L I P E I N         A S F I I Y N G G P V E Q D N L Y F I H
UniRef90_UPI00036BE760   S H K L T V H D L L T H F D F P S H P D S L F T V L K G G P V D M E R G F I L H
UniRef90_W5YI51          R S Q P V L D D V L E Q L G I A P P P R R R N L C A G G P M D N G R G F V L H
UniRef90_UPI00036A7BDA   P A L L S I E E L S E H L H         G N N E V F I G G P V E Q N T L H F I H
UniRef90_T0IU05          E L E G T L R D L L Q S L D I D V R D V P D R P V L R G G P V E P R R G F V L H
UniRef90_UPI00047DCE6F   K T N Q Y L G D L       V E M A E G I A L P V F E G G P V E Q H T L H F I H
UniRef90_UPI0003B60A78   P L K Y T I H D L I P E I D         A N F K I Y N G G P V E Q D N L Y F I H
UniRef90_UPI000255B1A6   P L D Y D I C D L I G D I K L P       F K V Y N G G P V E Q D N L Y F I H
UniRef90_C7JC19          R L A V S F D E L L A Q L D I Q P P P V R R I G L C A G G P V D A G R G L V L H
UniRef90_F6EZF4          E I D V T L H D L L E S F D I E P G D V P D M P V L S G G P V E P R R G F V L H
UniRef90_Q3B561          P M E F Q V R E A V A G F D E V D E       P L H M G G P V Q S N T V H F L H
UniRef90_UPI0002557F74   P L D Y S L Q D L I P E I N         C D F K V Y Q G G P V E Q D N L Y F I H
UniRef90_Q11U74          S T T L T I N S V L E E         Q L T F E Q N L F L G G P V A Q D S L F F L L
UniRef90_W8F1A9          P A T L R L G D V L E L P G G E T L P A T H I P L G I G G P V Q P D T L H Y L H
UniRef90_A4CKH5          P L N Y S M S D L V D E I Q V P       F P V Y N G G P V E Q D N L Y F I H
UniRef90_W9UYU3          P A G L L V H D L F T H I D I D Y S Q V A I A P V Y N G G P V H E D R G F V L H
UniRef90_UPI000472EBDC   R L P R P L D E L L E Q L E I G P P P R R R I G L C A G G P L D E G H G L V L H
UniRef90_F3WUH9          T I D G I F H T L L D Q F D I A H G D A P N A P V H Y G G P V E P R R G F V L H
UniRef90_M5IYF7          P T D L S L V E L L S R I E V D V E D L A A T S V Y F G G P V Q T D R G F V L H
UniRef90_C0QFZ0          I H P L L T G E L F E D L K I T C N Q A D K I A I H L G G P V Q P S G V F V L H
UniRef90_H8MHP3          G A P L T L G E L R G Q S M D I S T D R V S Q P V F V G G P V E P Q R G F V L H
UniRef90_L0ET58          L Q K H T F M D L L V H L D I V Q N N F K H V R I L S G G P I D P E C V F V L H
UniRef90_UPI000262D077   P T E F S V Q E I F E Q L N L D A A E D P D I P V M T G G P V E P Q R G F L L
UniRef90_A6LBX4          K T D L I V N S F F K E F A E F P E       I P I Y L G G P V S P N R L F F I H
UniRef90_D8PI23          P T A M S I S E A L P Q V P I L E G       Q P H V L Y S G G P V Q T N Q V M M L Y
UniRef90_I0K4X1          S T T L H V S D V I D D V       Y A D I P L F V G G P V Q P D T L H Y V H
UniRef90_F9Q7F6          P T D L S I A E L Y S K L N L M S I N N R Q F S V L T G G P V H S E R G F I V H
UniRef90_R9GVT5          K S S F F L N D V I P D         C D A D F P I F L G G P V G A D T L H F L H
UniRef90_UPI000468571A   V G N L I L N D V I Q D L       W D A K N Y I Y F G G P V A A D T L H F I H
UniRef90_UPI00037C46E4   P M E L T L E G L F E Q L E I D A S G C D E L S V L S G G P V H R E R G F I L H
UniRef90_W0DUY9          P H Q F K V S D L L D Y F S F S P A G S A E E H V R L G G P V D K E H G F L L H
UniRef90_H2BWW5          V L D F T L N D L I P E L D         K G F K V Y N G G P V E Q D N L Y F I H
UniRef90_A6H146          P L G Y T I N D L I P E I         S A R F K V Y N G G P I E Q D N L Y F I H
UniRef90_Q1NQW6          P I D V E L E D I F H N A G I P L P P G A G P S V Y L G G P V E T G N V F I V Y
UniRef90_Q3AQ69          P L E F K V R E A I H G F N D V D D       V L H Q G G P Q V N S I H F L H
UniRef90_U5BPT1          V S I L K L N E L I D E L D F L N T       E V Y V G G P V E Q N T L H F I Y
UniRef90_A3J558          P L N Y T I N D L L P E I E       A S F K V Y N G G P V E Q D D L Y F L H
UniRef90_S6GEU6          E Y D M D L A T M L A H L H I H C D N I R N Q T V Y H G G D V Q N D R G F I L H
UniRef90_UPI00036CBD36   T I D G T L H D L L D Q F E I A H G A A P P A P V H F G G P V E P R R G F V L H
UniRef90_A3XII8          P L T F T L N E L I P E I K G D E       M Q I Y N G G P V E Q D N L Y F I H
UniRef90_A9H4F1          R L P Q P L D D V L G Q L G I D P P P R R R I D L C A G G P V D G G R G F V L H
UniRef90_UPI0004061566   P S I L K I N E I I D E F E       F L D L E V G G P V E Q N T L H F V Y
UniRef90_D5BE87          V L D F T L K D L I P G L N V D       F Q I Y N G G P V E Q D N L Y F I H
UniRef90_F4KRJ4          P L N H Q I N A I L E D F       P E F E A E V F F G G P V E A D T L H Y L H
UniRef90_UPI0004690658   P L K Y T I N D L I P E I E       A R F K I Y N G G P V E Q D N L Y F I H
UniRef90_L0G4A9          L S I L R I K D L L E L E       F L D M E V F V G G P V E Q N T L H F I Y
UniRef90_F7V9V5          R L P K P L D D V L E Q L D I G P P P L R R I G V C A G G P V D E T R G F V L H
UniRef90_R6VFK6          P L P I F V N D I I K E F K       Y I N D I P L Y K G G P V A T D T L F Y L H
UniRef90_UPI00047B0E2E   P L E Y Q L N E L V T E I E I P       F Q V Y N G G P V E Q D N L Y F I H
UniRef90_C8CIK8          P L G E R M A R L Q A F G E K P D D S A T V Y Y L G G P V Q L E M S T V L H
UniRef90_G2ECE8          P L E Y T I S D L I P E I K       S T F K V Y N G G P V E Q D N L Y F I H
UniRef90_G8R0W6          P L E L T L D E V V I G F       P S F E S R I Y H G G P V Q Q D S L F F L H
UniRef90_UPI00040A5CC8   P L E Y T L T D L V P E I E       S S F T V Y N G G P V E Q D N L Y F I H
UniRef90_A3U8Z8          H S D Y E L S D L I P E I E       N T F V Y K G G P V E E N N L Y F I H
UniRef90_D6YWR9          S L D L E L P E       E I I K T E E L Q N P N I G I R A G G P V Q T N Q M M L L
UniRef90_W2US56          P L E F R L N E L I P D I K       K N F M V Y N G G P V E Q D N L Y F I H
UniRef90_UPI0003B5783C   Q S D Y L L G D V L P D V       S Y S E L A V Y Q G G P V A K N T L H F I H
UniRef90_UPI00036B4CFD   P A N V Q L S D V L T L P G G E A L P A A A T P L G L G G P V E P D T L H F I H
UniRef90_UPI00047912DA   K S N L K L S D V       L D I E Q G N G D M E L N I G G P M Q Y N T L H Y I H
UniRef90_K1LC54          L S I L K L K E L I D N I N       S L D C D V Y V G G P V E Q N T L H F I Y
UniRef90_I0W8L2          P L Q F R L N E L V P E I       S K P F K V Y V G G P V E Q D N L Y F I H
UniRef90_F8KY25          I L E L E L P E       E I I N I N N L A N P H V G I R A G G P V Q T N Q M M L L
UniRef90_UPI000475AB70   R L N Q P M E G L L K Q L E I T P P P Q R L F G L G V G G P V E P R R G F L L H
UniRef90_F4AY16          P L D V K L S D L I E G I E D       C E M P I Y N G G P V E Q E N L Y F I H
UniRef90_UPI00047E1E7D   R S D L L V S D L I P D         C W N A T F P V F V G G P V G K D T L H F I H
UniRef90_UPI000369EC6E   P L P Y T A S E L V K E L E       G V Y F P V Y N P N Q L Y V I H
UniRef90_B4S6Y6          P L E V K V S E A I S G F E D L       D I S L Y M G G P V Q V D T V H Y L H
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                                   90              100             110            120
UniRef90_UPI0003698D2A   S C S K S W E S T S K I  S E T I A I S T S K D I  L F D I A K G N G P S D  L L V I
UniRef90_E4TL95          N I D E L K E G G Q K I  T N G L Y W G G D F E I  L Q D L M Q K G A L E K S  R F F
UniRef90_UPI00036BCBA1   S E D Y E A D S S E V V  G P G L R V T S A M E A  L R A V A S G S G P H R A  L F V
UniRef90_UPI00046FBB0B   Q C P Q L I T G G L E I  T D G L Y W G G D F E D  V V K M I N N N Q V G M I  R F Y
UniRef90_V8A4P6          S A D W R R E D S L V I  N N E N C L T A S L D I  L H Q I A A G E G P R H A  L L A
UniRef90_M4XI57          T K T A D F I H T Y P I  T D K I T L T T S G D V  L D S F G T L A S P E K F  I V C
UniRef90_D5MG90          T A D Y T I E G T E V I  E G G I A V T A R S E I  L R A I A T G T G P R Q S  L F A
UniRef90_Q89A51          T F K K K F T T S T H I  S N D L S I T T S R D L  L E Y I A N L N N P N I L  M A
UniRef90_I4ANK9          T I   S Q L E E S L L I  S E N I F W G G D F E H  L Q E L A L K G E I E N I  R F F
UniRef90_F5SQ87          T G Q P T W A S S F A I  S E N I C I T T S K D I  L Q R I A A G E G V G H Y  H L C
UniRef90_UPI000378EE2D   K L P E L I P D S M Q V  S E H I Y W G G N F E S  L K I L L Q E K E I L K N  I R F F
UniRef90_W6TZQ0          R C Y D K L N D G A E I  A K G V Y W G G D F E A  V Q Q L A K G G A P D N L  R F F
UniRef90_Q2S591          T   R E D I P G G V A L  P G D M T W G G D F E A  V Q Q L A K G G A P D N L  R F F
UniRef90_A2TWY4          K V P E L I P D S I A I  S D G I F W G G N F D S  L K Q L L N S G E L S D I  R F F
UniRef90_E4RYZ7          T R G D L L D D A I E L  S P G L F W S G N F E Q  I K D Y L N M G V I K E I  R F Y
UniRef90_UPI00046FA286   R R P D L I D E G V E I  M E G L H W G G N F E K  V K I M L N M N S L S D I  R F F
UniRef90_UPI00042A537A   R R P D L I D G G Q E L  V K G L I W G G N F K Q  V K V L L N N G S P N D I  C F
UniRef90_W0EXE9          Q Y P N E L P G G K E I  T D G I Y W G G N F E T  L M A L M S A G Q I D K V  R F F
UniRef90_UPI0003784DE9   D G W H M Y E S T M Q I  T P E L H L T T S R D V  L E E L A Q G L G P E H F  M L V
UniRef90_UPI000372FDA7   P P L K T A D T S G H K  D V L L Q I S N S S D M  L Q D Y L L G K G P E D V  F I C
UniRef90_F3KUC8          P S D A V Y A S T L V I  G A A L E M T T S R D L  L E A L S N G A G P H R V  L I S
UniRef90_UPI00036EAAD6   Q Y P E E I P G G K E V  L Q G V Y W G G D F E M  L A T L L S S G A P E K V  R F F
UniRef90_D5QHP6          S A D W E G N G S M A V  N D S T V L T A S L D I  L R V I A D G A G P Q H A  L L A
UniRef90_UPI0002559066   T P D Y D A A G T L N V  S E E F S M S A S L D V  L E D I A A G C G P E L S  L L A
UniRef90_E0MPD3          T L E R T D S S S V R I  N D L A A V S G T H E I  L R A M I G D H P P E F A  F L V
UniRef90_H8XR10          N V P N L I P D S I E I  S N G I Y W G G D F E I  T K N L I N E G I I E N I  R F F
UniRef90_UPI00036BE760   H P S G E W K S S M L L  P D D L A M T V S D D F  I E A L S H N E S P E Q F  Q I C
UniRef90_W5YI51          T S D W S G D G S L P V  D R S T T L T A S L D V  L R D I A D G N G P A H A  L L A
UniRef90_UPI00036A7BDA   K F K D L   E D A I P L  R D G I Y W G G N F E Q  L K S L N L A G Q V D N C  R F F
UniRef90_T0IU05          S L D W S G Q D M M Q V  G T G W G L S G S L D I  L K A I A A G R G P S R F  L V A
UniRef90_UPI00047DCE6F   R R P D I I H E G I E I  T K G I Y W G G D F D V  A V A A L H N K E I N Q I  R F F
UniRef90_UPI0003B60A78   N I P D L I P N S I E I  S N G I Y W G G D F E S  T R D L I N A G K I H K I  R F F
UniRef90_UPI000255B1A6   K V P E L I E N S I E I  S D G I Y W G G D F E K  T I S L I N D G V I K D I  R F F
UniRef90_C7JC19          S A E W E G E N S L S V  S P N V A L T G S V D V  L K E I A A G K G P Q E A  L L A
UniRef90_F6EZF4          S L D W T G H D M V V V  G D G W G L S G S L E I  L K A I A E G T G P S R Y  L V A
UniRef90_Q3B561          M R G D L I D G S E Q I  L P G L Y W G G D R E E  L G Y L L N T G K P S E I  R F F
UniRef90_UPI0002557F74   K I P E L L P N S I E V  T K G I Y W G G D F D K  L I E L L N N G G Q V Q D I  R F F
UniRef90_Q11U74          R Q D R A I K D S V H I  K D D L Y W G G D F E H  L K T L I Q E G E L D N C  R F F
UniRef90_W8F1A9          Q Q P D L P Q A S H   L  G D Q V Y W G G S F S L  L E Q L I S G Q A P D D V  R L Y
UniRef90_A4CKH5          K V P D L L S D S V E I  A N G I Y W G G D F D T T  V A L I N E R K I S Q I  R F F
UniRef90_W9UYU3          R S T R P W I C H P I  T S D I S L T T S M D I  L E A L A L G E G P K E F  L V A
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UniRef90_C0QFZ0          G P P F D W H C L K I  N D W L G L S N T R D I  L E A V A R Q E G P E N F  I V L
UniRef90_H8MHP3            D D E S V A E K H S V  L P G L Y L S V T L D A  L G P L L Q R T S P   R V R F  C
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UniRef90_UPI000262D077   S N H P I T D D V V E I  V L D G L F L A S S P D  V L P S A I D A L N Q G D A  I F I
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UniRef90_UPI0003B60A78   E K I L E L G G D Y L I W S N
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UniRef90_Q3B561          R T V R S K G G E Y Q L I A N
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UniRef90_K0NGE2         V H P L L T G E L F D D L G I K C D K S V D K E I Y L G G P V Q P S G V F V L H
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UniRef90_R5K907         P L P L F L N D L L S E I D       C R E N I P I Y K G G P I S T D T L F Y L H
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UniRef90_F6GG70         P L D Y T I S D L I P E I E         T P F K V V Y N G G P V E Q D N L Y F I H
UniRef90_L7UAZ5         G A A L T L G E L A R G Q K L D H T D R S S H P V F V G G P V E P Q R G F V L H
UniRef90_F4C6Y5         P S S L L L K D V M S D M       P N A E Y Q L F V G G P V G Q D S I Q F I H
UniRef90_A0LVL6         P S S V P A R E A V P Q W A D I V S     A P G V V H L G G P V T P E A V V C L G
UniRef90_C2G2S7         R T Q L M L S D V F Q D V E R E A D     F P I Y L G G P V E C E A L F F I H
UniRef90_F4DJA4         T L G L E L S E     D V F S F E K T T S D N V R F C M G G P L Q A N Q M M L L H
UniRef90_UPI00047DC2F3  P S E T E V T D A V P E L D G V M D   S D E V V F V G G P V Q P A S I V V L A
UniRef90_A0M1C0         I L D F T L K D L I P E V K G D       F K V Y N G G P V E Q D N L Y F I H
UniRef90_UPI0003635AB2  M S N L K L S D V I D I Y N D S F E       A E L G I G G P V Q Y N T L H Y V H
UniRef90_R6ZQY2         N F R Y R L     Y L N Q L I P E L A E G P V I P I Y K G G P V E R N T I F F I H
UniRef90_K9EN16         P L P L C L N D V L K E F K       D V D K I P I Y K G G P L S T D T L F Y L H
UniRef90_UPI000414100F  A S N L H L S D V L Q L P V P D D S P V A Q M P L L I G G P V Q P D T L H Y L H
UniRef90_UPI000470CF63  P L T L T I G H L L E K L E L D V A D S A D M P V L Y G G P V H S D R G F I V H
UniRef90_A3HT39         P S I L K L G E L V E S L D       F L D A E V F V G G P V E Q N T L H Y I Y
UniRef90_U2DV03         Q L P L C L N D I I K E L K Y E D E     I P I Y K G G P V A T D T L F F I H
UniRef90_I5BUM2         Q S I L T L D E V L E E M       P L P H I P V F V G G P V E Q N T L H F I Y
UniRef90_F0REI3         P L E Y T I N D L V D D I K       P S F R V Y N G G P V E Q D N L Y F I H
UniRef90_R6AEB3         P L P L F L N D L L S E I N       C R E D I P I Y K G G P M S T D T L F Y L H
UniRef90_Q9Z944         T L G F E I S D D I F T F E K V S N H   N I R F C M G G P L Q A N Q M M L L H
UniRef90_S7VTU1         P L N Y N L K D L I E G T E         S E F V V Y N G G P V E Q D N L H F I H
UniRef90_G0J6B4         L S I F K L D E L L E D C E L T       N K E V V Y V G G P V E Q N T L H F I Y
UniRef90_A6L4J9         D F R Y H I     L L N D L I P E L E F A Q R V P V Y K G G P V S R E T I F F L H
UniRef90_A4SF95         P M E F K V S E A I A G F G D V E E       P L L M G G P V Q A D R V Y F M H
UniRef90_F3ZU17         P M H Q S L N D I I T D L K       G L E N I P L Y R G G P L G E D I L F F I H
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UniRef90_F3PXF7         P L P L F L N D I L Q D F N     Y Q E N I P I Y K G G P L S T D T L F Y L H
UniRef90_G6F130         H T K P T P D E L L Q Q I G I P P I P K E A H S I S A G G P I E N A H G L V L H
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UniRef90_UPI0004169EE7  P L E F T I G D L I P E I N       S S L T I Y N G G P V E Q D N L Y F I H
UniRef90_R5VLZ8         P L S Y T T S D L V T E L K       G M D F P V Y L G G P V E Q N Q L Y L I H
UniRef90_A0A010ZMZ2     A T E V Q V E D V L D G W Q D F A     A Q P Q V V F E G G P V Q P E A A I C L A
UniRef90_UPI00047C8C58  P T A T K V E A V V P       D I A S M F H G D A V V H D G G P V Q P E S L L T V A
UniRef90_S6S3I9         P Q S L T L A D V L E Q L R P E P K R C Q E I A I H S G G P V Q T D R G F V L H
UniRef90_W2C3U9         Q T D L I V N D F F P E L K E R P     V I P I Y L G G P V S P N H L F F I H
UniRef90_C7PSM3         V F D Q S L N E L V P E V L I       N N I R V Y Y G G P V Q I D T I H F I H
UniRef90_R6RWR6         Q L P L L L N D V I T E F K     Y L D E I P I Y K G G P V A T D T L F Y L H
UniRef90_UPI000378EAFD  P T P V D V Q D V L S S W A A L A G     R P Q V I F Q G G P V A L D S A L A L A
UniRef90_U2JAR1         R S N L L L S D V I E G I Q V D T       P I Y I G G P V Q N D A L F F I H
UniRef90_R5MGP4         D F R Y H I S     L N Q L V P N L E S A P S I P V Y K G G P V G R N T I F F I H
UniRef90_F4CXV2         P S E A D V R D V L P A W     E A L S S Q P R S V F V G G P V D A R T A L C L A
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UniRef90_UPI0003629FA1  S A Q L K A P D L F S S I D I L     K S Y N E K I I G G P V S Q A M V F Y L Y
UniRef90_A4C260         P L A Y N L N D L L P N I K       C S F K I Y Q G G P V E Q D N L Y F L H
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UniRef90_UPI00036657E1  P H Q L D V S Q L L E H F D M P I P D Y L D N T V M M G G P V D M E H G F I L H
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UniRef90_Q26C39         P L Q Y T L N D L V P E I E L E L     P I F Q G G P V E M D N L Y F I H
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UniRef90_UPI0003A9B403  P L Q T K I D D L I D D F     P E F D S E V F F G G P V Q V D S I H Y L H
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UniRef90_Q6MAC0         S L D L E L P E     E I V N S E H L I N P Y I S I R S G G P V Q T N Q M M L L H
UniRef90_L7W8F1         P L D C T L D Q L I P E I S T E L E       V Y Q G G P V D T D N L Y F L H
UniRef90_U2ZDH4         P A G V T L R T V L Q K L E M E A E L A T D Q A V L M G G P V D R E R G F V L H
UniRef90_W7Y0D8         S S N L Y P D E V I D D L       F S F K G E L Y I G G P V S G D T L H F L H
UniRef90_B9XJW1         D S G N K L G E M V     L A D L P E Q L T D N A L Y L G G P V Q L S A L S Y L Y
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UniRef90_H6L702         P M G L D I K D L V N D F     P D F S A E V H F G G P V Q T D S I H Y V H
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UniRef90_R5NQA3         V L P Y T T S D L V S E L K       K I D F P V Y L G G P V E R D T I F Y Y I H
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UniRef90_E1R4X9         P S T T V L G D A V E E L G     E T P W R E E L I F V G G P V Q Q Y F V F V L H
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UniRef90_F9Z7A0         N H A E V E D A L Q I V P G I Y W G G D F S K L T R L L Q E G Q P G E V R F F
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UniRef90_UPI00046F5843  S A E W S G Q D S L R V T D N V A L T S S M D V L Q D I A R G A G P R D A L L A
UniRef90_L0WH09         T G Q P I Y K S S F A I S E N V C L T T S K D I L E R L S Y D G L R H Y L L C
UniRef90_H1Y7L3         R C P E K I E G G I E I W D G V Y W G G D F E M V K E L A N T Y Q L N D I R F F
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UniRef90_G2YZS3         T K P E L I P D S Q E I S D G I Y W G G Q F E L V I N L I N Q K Q K D D I R F F
UniRef90_A9E6Q1         K I P H L V P N S I E I S L G I Y W G G D F S S I A K L L E D K L D D I K F F
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UniRef90_K5Z511         S L G D L V P D S V K I K D R L Y F D G D F E A L K R Y M Q N G H S G K V K F F
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UniRef90_K0NGE2         G P P F D W N E S L K V A D W L A L S N S R D I L E A I A V Q K G P K F F M I I
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UniRef90_A2TTD7         T A P E L I E G S Q E I S S G I Y W G G D F Q R A V D L I L A K K I D N I K F F
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UniRef90_F4C6Y5         K C Y D R L N S G I E I K E N L F W G G N F E A L K L L I N D R G L D E I K F F
UniRef90_A0LVL6         R V R A G V P A A G W I P L V G P F G A V D P E A E P D M I A D A L D G L R L F
UniRef90_C2G2S7         K A Y D L L L S G E H I I D D V Y W G G D I E L L L R L A K E E K I D E V K F F
UniRef90_F4DJA4         S C S E I P E Q T M E I C P S V Y L G G D L A F L Q D V A S E D E G T I V N L C
UniRef90_UPI00047DC2F3  E F D D P A E A A Y L V V G A I G L V S D R T G L D R L G D A T A R R R V Y
UniRef90_A0M1C0         T I P D L I P D S I E I A H G I Y W G G N F E V V M N L I A K E S I D Q I K F F
UniRef90_UPI0003635AB2  R I S Q L T Q A V K L G E E V Y W G G D F E M L R T M I A S G V V S D I R F F
UniRef90_R6ZQY2         T L A D L E G A F D L K N G L Y L N G N F E A L Q A Y I L E G N P E K M R F F
UniRef90_K9EN16         T L K D I E D S L Q I G K G F Y L N G D F D A I R R Y I L N E I T G K I R F F
UniRef90_UPI000414100F    Q R P D V P E A I D L G Q G V Y W G G D F Q V L L G L L L R G A P E A V R F Y
UniRef90_UPI000470CF63  R G S A S W E S S L Q V S E E I A L T T S M D M L N A I A C G E G P E E F V M L
UniRef90_A3HT39         T G E K E L E R S I Q I G T D L W W G G D Y E Q L V E K L K T G N P D R V R F F
UniRef90_U2DV03         T L P D I S G S L S I N K G L Y L N G D F D E I K K Y I L Q G N K N R I R F F
UniRef90_I5BUM2         K S K H K F P G G I R L G E D V Y W G G D F D L V V K G L L E G K I D E I R F F
UniRef90_F0REI3         K V P D L I E G S I E I S N G I F W G G D F Q K I V G L I N N N I I T Q I R F F
UniRef90_R6AEB3         T L E N I T D S L P I A N G L Y L N G D F T A I K Q F M T E G N S G R I R F F
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UniRef90_S7VTU1         K S P E L I P N S I E I S N G I F W G G D F S I V L N L I N K G K I S D I R F F
UniRef90_G0J6B4         C G E Q L L E D S V A L G D Q L W W G G D F N E L I G K Y K S G L V D N F R F F
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UniRef90_D0LIU3         A P G L G D G G T V A V G P E L R V S G A M P E L I E M F G N E P P A Q L R V L
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UniRef90_A0A010ZMZ2     R V R P G T S P D G F S R V E G V V G T V D L S A S P D A F N G S L D R L R V F
UniRef90_UPI00047C8C58  E F R D P A D A A L L V L G R V G M V R G D E A P R T P E V D R A R A Y
UniRef90_S6S3I9         P S G X N V F T
UniRef90_W2C3U9         S L G M A I P G S V E I G E D L Y F D G D F E V L K H H S D N S A Y G G Q V K F F
UniRef90_C7PSM3         Q Q P E L I R G G F E I R D G L Y W G G E F D Q V V S L I N S G R L D K I K F F
UniRef90_R6RWR6         T L E K I P G S I P V S K G L F L N G D F E E I K K Y I L Q G N K E C I R F F
UniRef90_UPI000378EAFD  V V P G G S V E G N P L G W R R V H G A D L E A P P E L L A G E L S S L R I F
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UniRef90_UPI0003629FA1  R S T K G I D D L D E V C S G V Y F G S S L E T L E S L Y L N N P N E N I R F Y
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UniRef90_UPI00035FE245  S V P G G A E P L G W R R V H G G L G L V D L D V P P E L V A A D F G S M R V F
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UniRef90_UPI0003A9B403  S V G D L L E D S V K V A K G V Y W G G D F E K L K F L I Q S D K P S Q I R F F
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UniRef90_Q6MAC0         T S S Q I Q Q Q T L M I T E G V Y L G G D L Q F L Q D A I T D Q N G P H I H L C
UniRef90_L7W8F1         N I P E L I P D S H I E D G I Y W G G D F H A V E D L L N N G L I D E I R F F
UniRef90_U2ZDH4         T S D W T P D A S L P V G E G L A I T A T R E A L A A M T D D E R P E R S V L V
UniRef90_W7Y0D8         T L G D V V P G A V K I T D S I Y W G G D F D T I K D L I N K D S A K Q V R F F
UniRef90_B9XJW1         S D T Y L P E A S V L P N V E L G H S L E T L V E L G E S F S P K R I K L F
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UniRef90_Q64UM6          E A L G K L G S K Y E T W S
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UniRef90_I5BUM2          Y I L K Y L G G E F K Q M A N
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UniRef90_Q9Z944          L V L K D L G G K Y A S L S T
UniRef90_S7VTU1          E K M L E L G G D Y S I W S N
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UniRef90_R6THP9          N S M N D L G N P Y T L W S
UniRef90_C0BN21          D S I K A L G G K Y L I W S N
UniRef90_E1R4X9          S A L R K K G G I Y W I
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UniRef90_Q6AL28            L A G Y F L V S T L Q M P D S R F A G Q V V Y C S H N S N G A L G L V I N K
UniRef90_A6ESN7              K G H L L V A E P S M G D V S F N R S V V L L A E Y N Q N G S V G F I L N K
UniRef90_I3Z7R9              S G H L L I S K P F L D P N F V R S V V L L C E N S E S G A F G L V I N K
UniRef90_F0SEM4               G N I L I A E P F M L D D N F K R S V V I L V A E D E E G H V G Y I L N Q
UniRef90_D6Y753               G R L L V A T P L L E D P N F R R S V V L I L E H D E D G T L G V I L N R
UniRef90_S9QCH4                 L L V A M P Q L T D S N F R R S V V L M L E H G E A G S M G L V I N R
UniRef90_UPI000379704A     A G T L L V A A P S L T D P N F V R T V V F V I D H R R E G T L G V I L N R
UniRef90_R6FF67              G K V L I S E P F L S D N L F G R S V V L L I D H T Q E G S M G L V L N K
UniRef90_O84213             K G S L L V A S P D I N G G I F S R S V V L V C E H S P N G S F G L I L N K
UniRef90_T0ML22            A G C L L I S E P F M L D P H F E R S V I L L C N H N E E G T L G F I L N H
UniRef90_UPI00047ED886     K G T L L I A E P S I G D M S F N R A V I L L A D Y N T E G S I G F I L N K
UniRef90_H1SAG8            L T N Q F L I A M P G M A D P T F S G S V V Y C E H N D R G A L G L V I N R
UniRef90_D2PNM3            L T G S L L V A T P L L D E P P F R R S V I L L L D H D D D G A L G V V V N R
UniRef90_UPI00029A5B6F       A G R V L I A E P F L Q G P Y F G R A I I L L I T E H N E K G T V G L V L N K
UniRef90_M7MY54               G D L L I S E P F L P D P N F S R T V V L M C E H G E A G S F G F V L N K
UniRef90_R5SJV8              G K I L I S E P F L C D K L F S R S V V L M I D H T C E G S M G L V M N K
UniRef90_B3EKS1              G E L L M A S A V M L E P D F K R T V L L M C E H N D E G S L G F I L N R
UniRef90_Q5NQN1                    P N M R D V E F Q K A V I A L C A F N E K G A L G L N I G R
UniRef90_UPI00047B90B3     L T G Q L L V A A P A L R G S T F D R A V V L M L S H D G D G A L G V M V N R
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UniRef90_T1NRT2             Q G S L L V S E P F M L D Q N F E R A V I L L C E H D D D G T V G L I L N H
UniRef90_UPI0004710055     Q G R I I I S E P F L P G N Y F N R S A V L L V E H S G E G A V G F I L N K
UniRef90_A6G4Z9            L A C H L C A V P Q L L D P N F R R S V V L M L E H D E R G A L G L V I N K
UniRef90_E8U6C3               F L V A S P H L N G G M F E R S V I L L L E H D H T G A M G L V I N A
UniRef90_UPI0003461A86     L T G R L L V A A P L L Q E D S F R R S V V F V V D D A E D G T L G V I L N R
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UniRef90_C6WSJ7              G S L L V A A P T L N D S N F R R T V V Y V I D H R G E G S L G V V L N R
UniRef90_UPI000365C736      S G N L L I S E P F L Q D Q N F V R S V V L L C E N N E H G S F G L V L N K
UniRef90_UPI000248EB13       T G S V I V A E P S I G D V S F Q R S V V L I A D H S D N G S I G F I M N K
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UniRef90_UPI0003ACFF36       G L L L V A T P Q L E D P N F R R S V V L L V E H D M D G T L G V V L N R
UniRef90_Q9RXF6               F L V A S P H L Q G S F F E G A V V L L L E H D A Q G A M G L M V H L
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UniRef90_G8WTY9           L T G R L L V A T P S L A D P N F D R A V V L L L D H D E E G T L G V V L N R
UniRef90_K1E5S3           L A G K L L V A T P D L T D D L F A R S V V L V L Q H D E D T A E G V I L N K
UniRef90_W2EQB1              G G L L V A T P L L D D P N F R R S V V L V L E H D E D G T L G V V L N R
UniRef90_E0TI70           L A G R L I V S M P Q L N D G P F A Q S V I Y I C T H D I E H A F G L I L N K
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UniRef90_Q2IGM2           L A P G F L V A A P A L A D P N F N G S L V L M A E H H A Q G A L G F V V N R
UniRef90_D6B3P4           L T G R L L V A T P A L A D P H F D R A V V L L L D H D A E G S L G V V L N R
UniRef90_UPI000376AECF       G T L L V A A P T L Y D D N F R R A V V F V I H H H E E G T L G V V L N R
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UniRef90_A0A017T5H3       L A P G F L V A S P P L G D P N F D R T V V L L A A H S D S G A L G F V N R
UniRef90_N0E5B0           L T G R L L V A T P L I D E G V H R S V I L V L Q H G D D G A Q G V V L N K
UniRef90_UPI00046A3A70     K G R I L I S S P F L M D Y N F S R S V I L L V Q H S D D G S M G I V I N K
UniRef90_V6K2B6           L T G R L L V A T P V L A D P N F D R A V V L L L D H D E G S L G V I L N R
UniRef90_UPI000427BDB7       G K I L I S E P F L V D N M F G R S V V L L I D H T I D E G S M G L V L N K
UniRef90_UPI00034BADBE   L T G R L L V A A P L L Q E D S F R R S V V F V V D D T A D G T L G V I L N R
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UniRef90_UPI00035EF427   L T G R L L V A T P A L T D P N F T R T V L L L D H D E E G S L G V V L N R
UniRef90_W8VSS7              G K L L V S E P S I G D V S F S R S V V L L T E F N D D G I V G F I I N K
UniRef90_D5UBI6              T G R L L V A T P G L R D R S F R R A V V L L D H T A E G A L G V V L D R
UniRef90_H9UIV6           L A G H F L I S E T D L V D P N F Y R T V V L I T D H S P E G A F G L V V N R
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UniRef90_R7JDJ3              G R L L I S E P F L R D A Y F Q R S V V L L V E H S G D G S M G F I L N K
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UniRef90_A0A021VQV5       L D G R L L V A S P A L G D E R F A R S V V L L L H H G D D G A L G V V L N R
UniRef90_A9GTQ2           L A P G F L I A S P P L G D P N F D R T V V L L A V H S E G G A L G F V V N R
UniRef90_W4LKJ3             G T F L V A S R R L R D P N F A K T V I F L I A Y D E R G A Q G F V I N R
UniRef90_M4EGU7             T G C V L V A T E K L D G Y R F A R T V V L L L S H P Q E G P F G V V I N R
UniRef90_D9VYC8           L T G R L L V A T P A L A D P N F D R A V V L L L D H D E Q G S L G V V L N R
UniRef90_E4NBV8           L T G R L L V A T P V L T D P N F A R A V V L L L D H D A Q G A L G V V L N R
UniRef90_R5CCD7              G K V L I S E P F L C D K M F G R S V V L L I D H T S E G T M G L V L N R
UniRef90_I0GZD0           M T G R L L V A T P T L K D P N F D R T V V L L V A H E T G G A L G V V L N R
UniRef90_A8M3R7           M A G R L L V A A P T L K D P N F D R T V V L L L E H P G G A L G V V L N R
UniRef90_D2AS22              G G L L V A T P Q L D D P N F R R S V V L V L E H D D G G T L G V V L N R
UniRef90_Q47MA0           L T G A L L V A T P L L E D P N F Y R S V V F V I D D T P E G T L G V I L N R
UniRef90_UPI00035E90A8   L T G Q L L V A T P A L S D P N F R R S V V L M L D H D A D G A L G V V L N R
UniRef90_A6E847                    D P N F K R S V V L T D H Q E E G T V G F I L N Q
UniRef90_V6UW10         Y L K H Q F L I A M P H M A D P N F A Q T L T Y I V E H N A H G A M G L V V N R
UniRef90_C7MS43              G T L L V A A P T M F D P N F R R T V V F V I D H R A E G T L G V V L N R
UniRef90_B7QS27                                      M G L I V N K
UniRef90_T0FCT3          L G G K V L I S N S S I V T D Y F N R T V I L L M V E Q D Q A G A F G L V I N K
UniRef90_Q1J1A5              F L V A S P H L R G S L F E G A V I L L L E H D E T G A M G L L L T A
UniRef90_UPI00041A295F      A G N L L I S E P F L Q D E N F V R S V V L L C E H N S E S G A F G L V I N Q
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UniRef90_F0SGT7           L R G Q L L V A T R Q L T D N F F R A V V L L E H G A M G L I L N R
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                                                    50              60            70            80
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UniRef90_I7EBU5          P S D V A V H D V L P N W G G H V     A E P Q A V F V G G P V E K K T A L C L A
UniRef90_W4V0P8          Q L P I Y L N D I I Q D L N       Y A N E I P L F K G G P I G T D T L F Y L H
UniRef90_UPI0003697CA1   P T E V Q V S E V L P H W A D L A G T P G V     L F E G G P V Q P E A A I C L A
UniRef90_Q6AL28          P C N L S F A Q V L R E M G M E V S R A E L P S V Y I G G P V S L D A A F V L H
UniRef90_A6ESN7          P L D Y K L K           D F V P E V S S S L T   V Y N G G P V E Q D N L Y F I H
UniRef90_I3Z7R9          L S I L K L G E L V D D L S F L E C D       V Y V G G P V E Q N T L H F I H
UniRef90_F0SEM4          R S N L L V K D L L V E F         T D C N F P V Y I G G P V S P D T L H F V H
UniRef90_D6Y753          P S E I A V H Q V L P S W D A L V T G P S V     L F Q G G P V Q T D S A L A L A
UniRef90_S9QCH4          G A S L T L G D L A K N Q S L A A P E R S R Q P V F M G G P V E N H R G F V L H
UniRef90_UPI000379704A   P S E V A V S D V L P T W G     P H T T R P S A V F Q G G P V E Q K T A L C L A
UniRef90_R6FF67          K M P L L L Q H L L K E F       E S L E D I P L Y R G G P L C N D T L F Y L H
UniRef90_O84213          I L E I D S P E     E I F P L D H F D E S K V R F C M G G P L Q A N Q I M L L H
UniRef90_T0ML22          K V V G C I G D L V E K I         A N C T F P L H I G G P V A Q N E V F F I H
UniRef90_UPI00047ED886   P L S F K L K D L I           P E S N S D F K V H N G G P V E Q D N L Y F I H
UniRef90_H1SAG8          P I D I D M A T L F D K I D L E I Q P V A Q Q P V Y F G G P V Q T E R G F V L H
UniRef90_D2PNM3          A A D L E V D R V L P D W S T T V N     E P G V L F M G G P V G T D S A L A V A
UniRef90_UPI00029A5B6F   S T E L Y P D E V I D D I       L S F E G E L F V G G P V S S N T L N F L H
UniRef90_M7MY54          P S L I K G S D V L E       D A D P F D A H   L Y V G G P V Q Q D T L H F V H
UniRef90_R5SJV8          L S S L S L A E I F E D L D       G K E N I P I Y W G G P L G T D T I F Y I H
UniRef90_B3EKS1          P M E I K V S E A I S G F D D L       D V P L H M G G P V Q V D T V H Y L H
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UniRef90_UPI00047B90B3   P T D V L V G D V L P A W     M S V V S E P G V V F Q G G P V S L D S A L G L V
UniRef90_UPI00036BBA7C   P T E L P V T S V L A P W N D L V   C E P D V L F Q G G P V A T D S A L A L A
UniRef90_R7ZVA1          L S L F K L G D L L D M L S E V E S D     V Y V G G P V E Q N T L H F I Y
UniRef90_T1NRT2          R S F M V L S D I V D G V E       N P N F P V Y L G G S V E Q N T L Y F V H
UniRef90_UPI0004710055   P V E F P V H E F M N E F       T N F D T Q V F I G G P V S T N M L Y F I H
UniRef90_A6G4Z9          T M N T S L S E V A E A L D L E W C G D P D A Q V R I G G P V E P V R G W F L H
UniRef90_E8U6C3          P T E L A I G E L L P         L A Q G R Q E R A W V G G P V E P Q V G W C I Y
UniRef90_UPI0003461A86   P L D T A V G E V V E A W S A Y A S E P A V M   F S G G P V G E D S G I A L G
UniRef90_D4DQV1          P S P I P M D A V F S A I D P V P E Q F R S S L V M M G G P V Q I D R G F V V H
UniRef90_UPI0002378FFC   P S E V A V H D V L P K W G Q H A S     E P Q S L F V G G P V E Q R T A I C L A
UniRef90_UPI00034B5D5E   P S R L P V A E V L H D W G A F A T D P P V M   F A G G P V E G A G L A L A
UniRef90_C6WSJ7          P S E V A V H D V L P A W G     P H V S R P Q A V F I G G P V E Q K T A L C L A
UniRef90_UPI000365C736       L S I L K V R D L L D D L E F L D L E V V Y V G G P V E Q N T L H F I Y
UniRef90_UPI000248EB13       L T Y T L A D V I P N I     T N E F R I F N G G P V E Q D S L Y F I H
UniRef90_M1YY37          K A G L M A S E L F Q K A E F L T G Y D N   E V F V G G P V A Q S Q V F Y L V
UniRef90_UPI0003ACFF36   P T E V P V G R V L P P W A E L V T G P A V   V F Q G G P V A L E N A L A L A
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UniRef90_UPI00036A88B1   K S D L L L K D V       I S E C W D A N M H I F I G G P V A N D T L H F V H
UniRef90_G8WTY9          P T P V G V G D V L E P W A R L A G     V P Q V V F Q G G P V S L D S A L G L A
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UniRef90_UPI00046A3A70   G L I Y N I     T L N D I F P D I K S K V K I P L F K G G P L A R N S L F Y I H
UniRef90_V6K2B6          P T P V G V D D V L E G W G D L A G D P G V   V F Q G G P V S L D A A L G L A
UniRef90_UPI000427BDB7   M A P I L L N D V I K D F K     D V E S I P I Y K G G P L A T D T L F Y L H
UniRef90_UPI00034BADBE   P L D T S V D E V I T P W G A Y A S E P A V M   F S G G P V G E G A G I A L G
UniRef90_UPI000364CAB1   P L N F N T F K L F D N V R L D K S T L N N K T T F F G G P V H I N Q G F I I H
UniRef90_UPI00036B30B0   P T E V P V D R I L E P W A E L V T G P P L   V F Q G G P V A L D S A L A L A
UniRef90_UPI000375A8D6   P I L D A L N E V I     L E F E D L D P I P L Y R G G P L G E D I L F F I H
UniRef90_UPI00035EF427   P T P V G V V D V L Q D W A D L A G D P G V   V F Q G G P V S L D S A L G L A
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UniRef90_D5UBI6          P L D I D A R T V L P Q W Q E H L S T P G   R L F Q G G P V A R D T A L A L A
UniRef90_H9UIV6          S A E V Y I Q D L V P E F A G V P A G S   I P V V I G G P V E Q Q V L F L L H
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UniRef90_R7JDJ3          K T E L T I N M L F P E L E H L P E T     P I Y L G G P V A S N R L F F V H
UniRef90_F8ESH3          I V D V S L H T L M R Q L D I K P G L A P D R P V H V G G P C E P Q R G M V L H
UniRef90_A0A021VQV5      P L P V R V D A V L P A W Q E V     A A P G R L F Q G G P V G L D G A L G L V
UniRef90_A9GTQ2          P A P M T L G E L L S F A G Y G N D L K D P A P V Y L G G P V Q P S S G W I L C
UniRef90_W4LKJ3          P S P I R V S R V L P K L Q K S K V P S P Y   I I Y L G G P V A Q K Q M R I L V
UniRef90_M4EGU7          P L H K N I K H M K S T K T E L A T T F S E C S L Y F G G P L E A S M F L L K T
UniRef90_D9VYC8          P T P V D V R D I L P W A P L A G D P G V   V F Q G G P V A L D S A L G V A
UniRef90_E4NBV8          P T P V D V A V L D G W A P L A G H P A V   V F Q G G P V A L D S A L A L A
UniRef90_R5CCD7          P F P L S L S D I F H D I     A G G R N I P I Y W G G P L G A D T I F Y L H
UniRef90_I0GZD0          A T E V P V A E V L G N W G E L A G D P A V   L F E G G P V Q P E S A I C L A
UniRef90_A8M3R7          A T E I P V A D V L G D W G E L A R H P A V   L F E G G P V A T D S A I C L A
UniRef90_D2AS22          P S D I S V T Q V L P T W D A M V T G P P V   L F Q G G P V Q T D S A L A L A
UniRef90_Q47MA0          P S E L G V G E V L A E W G E H V S Q P A V M   F A G G P V G Q D A G L A L A
UniRef90_UPI00035E90A8   P T P V G V S E V L E P W A E L A G D P G V   V F Q G G P V A L D S A L A L A
UniRef90_A6E847          R S T L L V S D L V P E F A G V A     L P V Y I G G P V A T D T L H F I H
UniRef90_V6UW10          P Q E L N L A D I L E Q L R P D D E P P A H I P I Y Q G G P V Q T D R G F V L H
UniRef90_C7MS43          P S E V A V R E V L P R W G D H V     A E P R S V F V G G P V E K K T A L C L A
UniRef90_B7QS27          P A G V A V S N L L E Q L D I S V E T D G N Q P V R F G G P V E T Q R G F V L H
UniRef90_T0FCT3          K M E V S L N D V I Q     G I P E S V D G T L P L Y S G G P V D P T F V S I L H
UniRef90_Q1J1A5          P I R Q R V S D L L P D L P G D E T G S     V W A G G P V E P G V G W C L Y
UniRef90_UPI00041A295F   P S I L L L S D V L E E L S F L E S     E V F V G G P V E Q N T L L H F I Y
UniRef90_X1DRG2          Q A P N I F T E L L D Q L N I L P E S L D S M A V H F G G P V E T G R G F V L H
UniRef90_F0SGT7          P S S V N V S H A L A G H F D V P   C S S D V I Y V G G P L E P S A L S M L H
UniRef90_UPI00036A2FAE   P S E I A V H D V L P S W G     P H V S R P Q A V F V G G P V E Q K T A L C L A
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                              90            100           110          120
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UniRef90_I7EBU5         A L R T G   E T A A S V P G V I A V R G P V A L V D P E A L V P K V R G V R V F
UniRef90_W4V0P8         T L K D   I P G A I P I D E G L Y L N G D F A R V K E Y I L Q G N T D R I R F F
UniRef90_UPI0003697CA1  R T R P H V A A M P G F L P I H A G V G T V D L G D P E A F G D Q V L G L R V F
UniRef90_Q6AL28         R S H P Y E G N H I D I T D N I S L S R E K E L L E L V V G E N S S R N Y L F L
UniRef90_A6ESN7         T I P E L I P N S V E I S N G I Y W G G D F N A I I E L L K N D T L K Q I R F F
UniRef90_I3Z7R9         Y G E K L L D G S I E L G K N L W W G G D F N Q L V S Y L N Q S D L D N I R F F
UniRef90_F0SEM4         S C P D K I F D G D L I R D G I Y W G G D F E M L R T Q L S L G N I E E I R F F
UniRef90_D6Y753         D E P L G W R R L Q G K T S T R L G T V D L D A P P E I L A G E   I T Q M R I F
UniRef90_S9QCH4         N N E Q V T E K   H E V V P G L Y L S L T L D T L G P L L K D P S   A H L R F C
UniRef90_UPI000379704A  R T G E D P A G T P G V V G V R G P V A L V D L D D P A A L A P R V R G L R V F
UniRef90_R6FF67         T I K   G I T D S L P V S Q G L Y L N G N F E A I K R Y M L S G N P G N I R F F
UniRef90_O84213         T S P D S A N S S I E I C P S V F L G G D F S F A G E K E G R T R D D K M L L C
UniRef90_T0ML22         S R F D L L L S G D E I R E N I Y F G G D P E L L F S L I N D H K I D E V K F F
UniRef90_UPI00047ED886  Q V P E L I P D S I E I S N G V F W G G N F E A V L K L L E A D K L K K I R F F
UniRef90_H1SAG8         D P V G I Y V S S L A V P G G L E M T T S K D V L E A V A N G S G P Q R F L L T
UniRef90_D2PNM3         E V I E S A D P P G W R E C F G R I G L I D L D V P P A L L E G A I Q R M R I F
UniRef90_UPI00029A5B6F  T L G P I V P G A V Q I T E T V Y W G G D F E H L K K M I N E G E A S S V K F F
UniRef90_M7MY54         R R V D I I E G G E P I M E G L N W G G N F E Q L L A H I R S G G V D N F K F F
UniRef90_R5SJV8         T L T D   I P H S L P L G K G L Y M N G D F E S V K E Y I R Q G K E G K I R F F
UniRef90_B3EKS1         R R G D V I D G S L E V L P G V F W G G E Q E Q L S F L M S S G S P G E V R F F
UniRef90_Q5NQN1         S R D W H S P D S M M V G Q D W A L T C T L D V L H A L S R G E G P Q H W L V A
UniRef90_UPI00047B90B3  A V D G A D E P L G V R R V R G R L G V V D L D T P A E I I E P A V S A M R V F
UniRef90_UPI00036BBA7C  E V P A E V D A E P L G W R R L Y G R L G L V D L D A A E L L A G G V R G M R V F
UniRef90_R7ZVA1         F G P K Q L E D S V P L Q G D L W W G G D F N E L T R K F N D G T L D T F R F F
UniRef90_T1NRT2         E A Y D R L R S G T H V V D N L Y W G G D F E R L I T L I N R G E I E E V K L F
UniRef90_UPI0004710055  T L G G L V P G S V K V M D G L Y W G G D F D H L K M L I T S G N P D Q V R F F
UniRef90_A6G4Z9         D Q G A W D P D A S S L V D G L W V T T S L E G V G A A G S G S E E S N F L F L
UniRef90_E8U6C3         E K P T G R A G E M R L G P N L Y A T S S L D V L D G V L C D D C   R F M L L
UniRef90_UPI0003461A86  T T P P G W A P L E G I D P G L D G L G V V D L D P P E V L G G A L S A F R V F
UniRef90_D4DQV1         S P C G Q W Q S S I A V N A D T A L T T S R D I I E R L A E N D A V G K A I L T
UniRef90_UPI0002378FFC  T L R A G   E S V G A L A G M V G V R G P V G L V D L D G D P N D L R G L R F F
UniRef90_UPI00034B5D5E  V P P P G W R R L E A P G E G P G L G V V D L D A P P Q I L G G A L G R L R V F
UniRef90_C6WSJ7         A L R P G   E D H R S L D G V V G V H G P V A L V D L D S E P E S V R G L R V F
UniRef90_UPI000365C736  R G D A A I A G S V E L A E D L Y W G G D F D V T K Y K L G Q L D L D N F R F F
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UniRef90_M1YY37         R S E L P L E G L D P I C D N I H L G M S W E P L E K V Y R E N P A E N L R F Y
UniRef90_UPI0003ACFF36  R L P G E D E P L G W R A L D G G T E V S R V G L V D L E A P P G L L Q L R V F
UniRef90_Q9RXF6         R A P V G L E G E V Q L T E G L M V S S S Q D V L H A V I A G G   Q R Y M L V
UniRef90_UPI00036A88B1  T V P E K I S G G A N L G N G L F W G G D F E E L K S Q I N A Y N I E E V K F F
UniRef90_G8WTY9         V V P G E A P G E G P A E P L G W R R V H G A I G L V D L E A P P E S L R I F
UniRef90_K1E5S3         G L P G D A E E P P G V R R L F G A I S L V D L D S P E I I W P Q V S A L R I F
UniRef90_W2EQB1         V E P L G W R R L Q G R A A V S R L G T V D L D A P P E I L A G E I S Q M R I F
UniRef90_E0TI70         S D Q F V L E D S E T I G A G L A I S T T N E A L A A L G T P L L P A Q A R L F
UniRef90_M5A1V7         T T K E P L S D D H E H L S P I S V S A D L S A D P A I V A A   S V D A V R I F
UniRef90_A6WEJ8         A V P G D E P D P V G V S V G L G S V G L V D L T P P E A V V A Q L S G L R I F
UniRef90_F0R4Q4         V L   G N L E G A L N L G N G L Y L N G D F T A L Q Q Y I L N G N P G Y V R F F
UniRef90_F3ZCN7         V V P P G A R T S P L G W R R V Y G A I G L V D L E P E L L A A A L G A L R I F
UniRef90_D3F443         A F E E P A A A G L L V R D D V G F L S A E   A D F A T S R D A T R Q L R V F
UniRef90_Q2IGM2         R P G P T A E G A V A L G G S G L A L G G S R E L L A L V R S R D P G P Y L L L
UniRef90_D6B3P4         V I P G G P G C A D P P L G W R P V H G A I G L V D L E A P P E A L G S L R I F
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UniRef90_UPI000376EC63  S R R Y H S D H A L E P C Q G V F F E P S F H I L D Y M A S E D Y L P Q V R V F
UniRef90_A0A017T5H3     V D P G L E P D G V I G D R I R I T S V D L L A A D A D A G G P R Q R A V L
UniRef90_N0E5B0         A T S A T A V S S V Q E L W P G V G L V D L D A V P A L V A S Q V E A V R V F
UniRef90_UPI00046A3A70  K L D F   I H N A I P L G D V F I N G D F N D I M N Y I D R D D Y N Q I K F F
UniRef90_V6K2B6         V V P A G G E H G T D A G G P L G F R R V F G A I G L V D L D A P P G S L R I F
UniRef90_UPI000427BDB7  T I P D   V P D A L P I S S K L Y L N G D F E V I R D Y I V K G N P G S I R F F
UniRef90_UPI00034BADBE  V P P P G W S P L E G L D Q N L G L D G D L D E S P S L L G G A L G A F R V F
UniRef90_UPI000364CAB1  S N D K Q Y S T S E T V S K E V M L T T S D E I L K D I S E G L P P T K T K I C
UniRef90_UPI00036B30B0  R L P G D D E P L G W R G L E A A E V A R V G L V D L D A L A G D L L Q L R V F
UniRef90_UPI000375A8D6  S F E   H I P K A L P I K K G L Y L N G D F E F V K S A I I A G K L S D F K F F
UniRef90_UPI00035EF427  V V P G D Q G G G V P G G E G P L G W R R V H G A I G L V D L D A P P E L R I F
UniRef90_W8VSS7         R I P E L I P N S H L I Q D G I Y W G G D F Q T V S T L I N L N K I E D I K F F
UniRef90_D5UBI6         D L P G A D A P P G V Q A L S P R L G V V D L D A P P A L V V D A V R A L R V F
UniRef90_H9UIV6         D G L D G L D P A V R P L P G L V F Q P L T E T I A A V L R E G I Q Q H I H V F
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UniRef90_W5WVL9         A L N T G Q D S T E G V I A V R G P V A M V D L D D P E A L A S K V R G L R V F
UniRef90_R7JDJ3         S G N A V I P N S F P I N D H L Y F D G D F D A L R D Y M L S E H A D K V K F F
UniRef90_F8ESH3         S R D W Q T A D S M M V G K A W A L T S T L D I L H A L S L G K G P D H W L V A
UniRef90_A0A021VQV5     T L P D G G D L H P G V S R L A G P F G V V D L D S D P G Q G P G V T G V R I F
UniRef90_A9GTQ2         L D P A L G A G V I P V G S R V R V T S S R S A F D T L A A D A D P R R R T V L
UniRef90_W4LKJ3         Q T D K P S E D M Q R V L D N V Y M S G S P D L L E Q L T T Q T T P P R F R T F
UniRef90_M4EGU7         A D K T K L P G L E E V M P G L N F G A R N T L D E A A V L V K Q P Q D F R F F
UniRef90_D9VYC8         V I P G E E G P L G W R R V H G A I G L V D L E A P P E L L A T A L G A L R I F
UniRef90_E4NBV8         V V P G E D H H A A P L G W R R V H G G L V D L A P P E V L A G V L G G M R V F
UniRef90_R5CCD7         T I   E G I P G A F P V G K G L Y V N G D F N A V R D Y I L N R T P S G T I R F F
UniRef90_I0GZD0         R T R P E V K K R V S G F H P V A L G T L D L S A D P D R M R E N V A G I R V F
UniRef90_A8M3R7         R M R H P L R R M K S F Q Q I S G A I G T L G T L D P A Q L Q D A I S G I R V F
UniRef90_D2AS22         A V P S G W R R L H A G T A A V S R L G T V D L D A P P E I L A G E I A Q M R V F
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UniRef90_UPI00035E90A8  V V P G G W R R V H G S I G L V D L E A P P Q V L A A   E V G S L R V F
UniRef90_A6E847         C Y D R L N D G Q E V A K G I Y W G G N F E A L K V L L L T G E I K F F
UniRef90_V6UW10         S N D R S Y Q A T V E G L S L S T S Q D V L F A I A A G D G P R K S L I T
UniRef90_C7MS43         A L R T G V P G V I G V R G P V A L V D L D S D P E M L A S K V R G L R V F
UniRef90_B7QS27         S P E Y Q S N S S L R V S D G F S M T A T V D V L E D I G A G Q G P A Q K L V M
UniRef90_T0FCT3         D N P K L K Q P G V E V I P G V Y L A R S F E A L V E L L E S P T K T R F N V Y
UniRef90_Q1J1A5         R T P L N L E G E V E V I A E G L L I T S V D L R A V A E S R Q P   F M L L
UniRef90_UPI00041A295F  F G E K V L E G S V S I G T G I W W G G D F E G L V G R L K T G T M D N V R F F
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UniRef90_F0SGT7         G N P S W G D R E L S V I P D V Y V G S S A E A F E A M V L N G G S E N Y R I F
UniRef90_UPI00036A2FAE  T G E D P E E V S G V I G V R G P V A L V D L D T D P D S I A P R T R G M R V F
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                              130           140           150           160
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UniRef90_I7EBU5         A G Y A G W N S G Q L A G E I E R E D W V I V P A L P S D I L A S P D G D L W S
UniRef90_W4V0P8         L G Y A G W S E Q L D D E I K E N T W I I S K E E S D Y L M S T E T K H M W K
UniRef90_UPI0003697CA1  A G Y A G W G A G Q A E G E I E E G S W L V Y D A L P G D P F M P R P D D L W S
UniRef90_Q6AL28         V G Y V G W E S G Q L E L E L R D N S W L V V P G D E Q V I F D L P D G E K W K
UniRef90_A6ESN7         L G Y S G W A N E Q L E E E L S L N S W K V V S N D K E A I I G N S N N D Y W K
UniRef90_I3Z7R9         I G Y S G W T E G Q L E A E I E D N T W I V N D N D L E S V L H S S P E E L W K
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UniRef90_O84213         F G Y S G W Q G G Q L E K E F L E R L W F L A P S S Q E I I F T D A P E R M W S
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UniRef90_H1SAG8         L G Y A G W G
UniRef90_D2PNM3         A G Y A G W S G G Q L E G E I T E G A W Y V V P S E P D D V F G L R P E G L W R
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UniRef90_R5SJV8         V G Y S G W K G Q L H E E I Q M N T W I V S Q T S N A S L M D E E S S D L W R
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UniRef90_Q5NQN1         L G Y A G W G A G Q L D Q E M K Q A D W F L S K V D D Q L L F S C P A E N R W Q
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UniRef90_R7ZVA1         I G Y S G W S G G Q L D A E L E E K T W I V C R N E T D Q I F F S D P D E L W R
UniRef90_T1NRT2         L G Y S G W S P D Q L E R E I Q Q N C W A V H N S S T D L A F I I D G E D L W K
UniRef90_UPI0004710055  L G Y S G W S D G Q L E A E I K E N S W L V A E T N V K S I M S S D   Q N F W L
UniRef90_A6G4Z9         L G Y A G W S G G Q L E G E I A A G S W V L V P V D P T F L F D T P P E H M W S
UniRef90_E8U6C3         L G Y A G W Q P G Q L D A E L R N G T W L W V E D G A H L V F D T P A E D R W A
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UniRef90_UPI0002378FFC  A G Y A G W E P G Q L A D E I E R G D W I L V V P A L P D D V I A D P G A E L W G
UniRef90_UPI00034B5D5E  A G Y A G W D R G Q L A G E I D E G A W Y V L P A L A E D V F S A D P A T L W P
UniRef90_C6WSJ7         A G Y A G W G E G Q L E G E V E R E D W I V V P G L P D D V L S P P G V D L W G
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UniRef90_UPI000248EB13  L G Y S G W S S D Q L N E E M N S N L W V E V N S N L C D M I S K P T Q D F W R
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UniRef90_Q9RXF6         L G Y A G W A A G Q L T E E A R V G T W L W V E Q D P E L L W D V A P E D R W N
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UniRef90_K1E5S3         A G Y S G W S A S Q L A D E R A R G G W Y V V D V E V A D I F D E D P A T L W R
UniRef90_W2EQB1         A G Y A G W T A G Q L E N E L R E G A W Y V V D S E P G D T F H S D P E T L W R
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UniRef90_M5A1V7         R G Y A G W G A G Q L D G E I A A G A W L V L D A E A G D V F S D D P E D L W H
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UniRef90_I3Z7R9          I I L K N M G G E Y Q V L A N
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UniRef90_E8U6C3          E A M Q L I G V K P
UniRef90_UPI0003461A86   R V L R R Q G G D L A L L S T
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UniRef90_C6WSJ7          R V L R R Q G M P T A L L A T
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UniRef90_UPI00036A88B1   E A V L N M G V K Y A H I T N
UniRef90_G8WTY9          S V L R R Q R N E L A M V A T
UniRef90_K1E5S3          R V L R R Q P G S L G W V S T
UniRef90_W2EQB1          T V L R R Q Q G D L A L V A T
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UniRef90_V6K2B6          S V L R R Q R S E L A M V A T
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UniRef90_UPI00035EF427   A V L R R Q R S E L A M V A T
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UniRef90_A8M3R7          M V L R R Q G G
UniRef90_D2AS22          A V L R R Q R G E L A Y V A T
UniRef90_Q47MA0          R V L R R Q G G E L A F V A T
UniRef90_UPI00035E90A8   A V L R R Q H G R L A L L A T
UniRef90_A6E847          E A V I N L G P R Y A H I S N
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UniRef90_B7QS27          A A L R E I G V D P L T L S T
UniRef90_T0FCT3          E A L R S K G G
UniRef90_Q1J1A5          A A L D R L G V N P G T I
UniRef90_UPI00041A295F   L L L K M M G G E F K V I A N
UniRef90_X1DRG2
UniRef90_F0SGT7          Q L L R E
UniRef90_UPI00036A2FAE   R V L R R Q G M P T A L L A T
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Alignment — positions 1–40

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UniRef90_UPI00036267A3    A G Q L L I A A P D L G D P N F R R T V V F L L D D G S G S L G V V N N R
UniRef90_R5IQX4             G C L L V S E P L L T D S Y F Q R S V I F L I E H N T E G T M G L V L N K
UniRef90_V5X650           A G T L L L A E T D L L E P T F R R T V I Y I V E H N E G G T L G V V L N R
UniRef90_UPI00047BE3E3      G T L L V A T P Q L D D P N F R R T L V V E H D G D G T L G V V L N R
UniRef90_X5DLE0           K G R V L I A E P F L A G N Y F N R S V V A F S Q K G A V G F I L N R
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UniRef90_UPI0003828983    A G T L L L A N T D L L E P T F R R S V I Y I V E H N S G G T L G V V L N R
UniRef90_UPI0003459129    L T G R L L V A A P L L Q E D P F R R S V F V V D D A N D G T L G V I L N R
UniRef90_D5UP78           A G T L L V S S P E L Y E P T F R R T V V V Y I I E H N E S G S L G V I L N R
UniRef90_J7L7Q9           L T G R L L V A A P L L Q E D S F R R S V F I V D D A T D G A L G V I L N R
UniRef90_UPI0003696E8D    L K G K L L I D G G G L S G S V F G R S V V L L C Q H S T E G A F G L V L N R
UniRef90_H6RF16             G N V L L S E P F L D D P Y F G R K V V L L C E H N E E G S F G F V L N N
UniRef90_Q72UY2           S G K I L I S N S S I V M D Y F N R T V I L M V E H D N Q G A F G L V L N K
UniRef90_V4VPK4           T G C V L V A T E K L D G I R F E R T V V L L R H P Q E G P F G V V I N R
UniRef90_UPI00036A30CB      G S L L I S S T D L S E P T F R R T I I Y M I E H N E S G S L G V V L N R
UniRef90_UPI00034D7FDB    L T G R L L V A T P M L S E P E F R R S V V F V I D D D D E G T L G V I V N R
UniRef90_A7H7H6           L A P G F L V A A P A L G D P N F A G S L V L M A E H H G E G A L G F V V N R
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UniRef90_F4H707           L S G R L L V A K N R L L D P N F H R T V V L L L D H G H E G A F G V V L N K
UniRef90_A3TG37           T G R L L V S T P Q L D D G V F H R S V I L V L Q H D V N G A Q G V V L N K
UniRef90_D2S823             G S L L V A M P S L T D P T F A G T V V F V L D H N D S G T L G V V L G R
UniRef90_Q2W8Y7                                                                  M G I V V N K
UniRef90_I0RXK3           S G T L L L A N T D L L E P T F R R S V I Y V V E H N D G G T L G V V L N R
UniRef90_B1MML1           A G T L L L I A N T N L F E P T F R R S V I F I V E H N D G G T L G V V L N R
UniRef90_UPI00036B4658    K G A I L V A K P T L S N D I F Q R S V I L I T E H L E S G S I G F I L N R
UniRef90_C1MN92           K G C L L L A S E K L G Q Q Y F H Q A V I L V L E H H E K G S M G V I L N R
UniRef90_C6X421           K G K I I I S T P D I S G D I F S R S V V L V I D H N A E G A F G L I L N K
UniRef90_UPI00034664EE    L T G R L L V A A P L L Q E D S F R R S V F V V D D A A D G T L G V I L N R
UniRef90_F0RJ32             F L V A S P H L R G S F F G D A L I L L L D H T E E G A A G L V I N Q
UniRef90_E0LY17                                                                  M G L I I N K
UniRef90_G8TRB2           A G S V L I S A P S L E D P Y F D K V V I Y I T E Y N E K G A L G F V M N Q
UniRef90_K0F9S4           A G T L L V S A T E L A E P T F R R T V V Y I I E H N E A G S L G V V L N R
UniRef90_C1B7P4             G S L L V S S T D L V E P A F R R T V I Y V I E H N E A G S L G V V L N R
UniRef90_R7NP01           M K G D I L I S S P F F R G H D L T R S V V L L L E H N E E G S M G I I L N K
UniRef90_C1D0N0             F L V A S P H L Q G E V F E G T V I L L L E H D R K G A M G L I V N A
UniRef90_F0NZJ6           K G D I L I A K P T L N N D I F N R S V V I I T E H S E K G S V G F I L N K
UniRef90_E8UEU8           L S G Y F L V A M P S S G E S I F D N S V V Y I L K H N D A G S L G V V L N R
UniRef90_D0L9A1             G T V L L A S T D L I E P T F A R S V V Y I I E H N D A G S L G V V L N R
UniRef90_L7LCJ0             G S V L I A S T S L I G P T F V R T V Y V I E H D E Y G T L G V V L N R
UniRef90_F5YVR9           A G T L L L A N T D L L E P T F R R T V V Y V E H N D G G T L G V V L N R
UniRef90_J2JZ28           L T G R L L V A T P A L A D P N F D R A V L L L D H D E E G S L G V V L N R
UniRef90_UPI00038012AD  Y L K G H F L I A T E K M K D N R F S E T V I V M F E N D E N G A W G L V I N K
UniRef90_D7GD79           A G E L L V S S E A G G G F F D Q A V I F L L D N D E N G A I G V A L N K
UniRef90_K6X201             G T L L L A N T D L I E P T F A R T V I Y M M E H N E A G S L G V V L N R
UniRef90_UPI0003149D9C    L T G R L L V A T P A L A D P N F D R A V L L L D H D E E G S L G V V L N R
UniRef90_L7VRF2                    Q V A D P Y F R K S V V L L L A H E E E G S F G F I V N R
UniRef90_UPI0003B57C5A      F L V A S P H L Q G E V F A G A V I L L L E H D R K G A L G L V V N A
UniRef90_V5WKD1         F L G G K F I I S E A E L T D P N F Q F T V V L L I S H D S A A G A L G V V N R
UniRef90_C8XE74           A G M L L V A T P G L R D P H R F T V V Y L V A H S V D G T V G V I L N R
UniRef90_W6KDE1           L V G H L L V A K E D L Q G S V F G R T V L L V V A H D S D G A V A V I V N R
UniRef90_V8CY90           A G S L L M A S A D L A E P T F R R T V Y V I E H N D A G T L G V V L N R
UniRef90_W9GJK7         F H T G R L L V A T P S V E G D V F R R S V I L M L H H D D S G A Q G V V L N K
UniRef90_A9RVW3             G C L L L V A H P N E S Q Q Y H R V V F I F A H D A G G S A G V V L N R
UniRef90_M6ZY27           A G A L L I S S A D L L E P T F A R T V V I E H D A G S L G V V L N R
UniRef90_H8GT33             F L V A S P H L H G A V F G G A V I L L L E H D L G G A M G L I V N A
UniRef90_D5SVJ6           L R G K L L V A S K Q L K D S N F Y K T V V L I E D N E N G S M G L V L N K
UniRef90_UPI0003B5A2BE    L T G R L L V A T P L T G D T F A R T V L L H H G D D G A H G L L L N K
UniRef90_UPI0003B316E4      H R L L I A A P A L V D P E F F R T V F L I E H D E T G S V G V I I N R
UniRef90_U5EDP2           A G N L L V S A I D L V E P T F R R T V V Y I E H N D A G S V G V V L N R
UniRef90_E9T7P4             G T L L V S S T E L F E P T F R R T V Y M L E H N D A G S L G V V L N R
UniRef90_UPI00047AC3FF    A G R L L V A A T S I A D G I F D R S V W L L K H D E P G A V G V V L N K
UniRef90_U7JG05           A G D L L I S G S G L T T G I F A H S V V Y L L D C D E D G A L G V V I N Q
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Position markers: 50, 60, 70, 80

Identifier	Sequence
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UniRef90_D1ADY5	P L E V P V D R V L P P W A E L T T S P S V V F Q G G P V A V D T P L A L A
UniRef90_UPI00036267A3	P T E L P V A E V L V P W S G F S S S P D V V F S G G P V D G A L A L A
UniRef90_R5IQX4	P S G L V L N R L V E G L E E L T E I P V F C G G P M S G D R L Y Y L H
UniRef90_V5X650	P S E T A V Y N V L P Q W A G L A I K P K T M F V G G P V K R D S A L C L A
UniRef90_UPI00047BE3E3	P T E V P V D R V L P P W A E L V T V P S V V F Q G G P V A L D N A L A L A
UniRef90_X5DLE0	K V D F P V Q D A F P D F P D F N A D V Y L G G P V S T D S I Y F I H
UniRef90_G7GKV0	M S Q A A V H N L L P Q W T D L A G S P R A L F V G G P V K P D A A L C L G
UniRef90_UPI0003828983	P S E T A V Y N V L P Q W A K L A K K P K S M F I G G P V K R D S A L C L A
UniRef90_UPI0003459129	P L P T A V H E V V D A W G P Y A S E P A V M F S G G P V G E G S G I A L G
UniRef90_D5UP78	P S E S A V H L L P Q W H E L A A K P K A V F V G G P V N Q S A A L C L G
UniRef90_J7L7Q9	P L E L P V D E V M K G W G D H A G S P A V M F S G G P V G T D S G I A L G
UniRef90_UPI0003696E8D	C T G K T V G E M I I E D L P E E I N E Q N L S I G G P V Q S Q A M S F L H
UniRef90_H6RF16	Y V D I D V D E V M D D L P K L N A R I S V G G P V K N G N L Y Y L H
UniRef90_Q72UY2	R Q E A S I G E V I Q G I P D H V S R N L L I Y S G G P V D P T F I S V L H
UniRef90_V4VPK4	P L H K K I K H M K P T N H E L A T T F A D C S L H F G G P L E A S M F L L K
UniRef90_UPI00036A30CB	M S H T A V H N L L P Q W T D L A G S P K A I F V G G P V K Q D A A L C L G
UniRef90_UPI00034D7FDB	P S E L L V D D V L G D W S G Y A T D P A V M F A G G P V G T G S G L A L G
UniRef90_A7H7H6	P G P V T V A E V L A S V D E D A N G R A G A P V L V G G P V Q P E R L W I L F
UniRef90_UPI00036FE1F6	R S D T A L H N V F P A W E S L A P R P K A V Y V G G P V R R D S A I C L G
UniRef90_F1YL74	M S D A A V Y N V L P A W T E L A A S P R A V F V G G P V A T S S A L C L G
UniRef90_U5FXF0	P L N K K I R H M K P T N M E L E T T F A D C S L N F G G P L D A S M F L L K
UniRef90_F8A7U1	P L P V E V E A V L P G W Q T V V S W P G G L F Q G G P V G L D G A I G V A
UniRef90_M3C1T9	P T P V G V G D I L E S W A A L A G E P G V V F Q G G P V S L D S A L G V A
UniRef90_UPI00037772C1	P G E L G V G E V L E P W E D G V A A P P V L F E G G P V R T E A A L A V G
UniRef90_UPI0002888605	P T T T L V K E I L S D E M K E N I A A D I P L L L G G P V Q P E S F W A V H
UniRef90_A6C880	P S S F S I T N A L S R Y F D M P K L E D M V F M G G P V E P N G M F A L H
UniRef90_K1I407	P T P Y L L S E L V P E S N G A F T V Y H G G P V E S D R L F C I H
UniRef90_R7WHK6	P S D T A V H G V F P R W A P L S V R P A T L V F G G P V R R D S A L C L A
UniRef90_UPI00036155EF	M S Q T A V H N L L P E W T D T V A R P K A L Y I G G P V K Q D S A L C L G
UniRef90_UPI00029A40D3	R S E T D V E E I L P A W S D L C S S P P V F H I G G P V K P D T G I A L V
UniRef90_G7H6H8	P S H S A V H N L L P R W S S L A A N P K A L F V G G P V K R D G A L C L G
UniRef90_UPI00047EFB92	M S E A P V F N V L P A W S D L A A Q P R A V F V G G P V G T S S A L C L G
UniRef90_F2IBN0	T L E I D V N S I V T D F P E V K I P V G F G G P V E R S Q L F Y M H
UniRef90_H1H4K5	P L D L T L S D L L P N T E A S F T I Y D G G P V Q K N R I F Y I H
UniRef90_UPI00035CE342	P S D T A V H N L L P Q W T D L A A S P R A L Y V G G P V K R D S A L C L A
UniRef90_UPI00041F949E	K S N L L L K D I V A D C W D A N F L V H I G G P V A T D T L N F I H
UniRef90_R7DDK1	S S N L M L N T V I E G L E N V P E I P V F C G G P M E S D H L F Y I H
UniRef90_A0A022Q878	P L H K K M K H M N P T N I E L A T T F A D C S L H F G G P L D A S M F L L R A
UniRef90_A3ZQK2	P T E L T M A A M W R E I A G E E I A D E N L V F L G G P V Q G P L M A I H
UniRef90_E2SDR6	P L D A D V D D V L P D W V D S V I S P G C L F E G G P V A A D A A L A L G
UniRef90_A1SG68	P S A I P V D D V L D G W G D V A A E P E V L F Q G G P V Q G A L A V A L L
UniRef90_R4Z596	P A D T E V D E V L P A L A P T T A V P R V M F L G G P V S T Q G I I C L A
UniRef90_K6VK59	P I G V D V D R V L P G W G E Q V C S P R E L F Q G G P V S M D T A L G L V
UniRef90_A0A059MKG0	T S D T A V Q A V L P Q W T A L S A D P K A L Y V G G P V R R D S A L C L G
UniRef90_H0R2H5	M S Q T A V H N L L P R W T D L A A S P R A L F I G G P V K Q D S A L C L G
UniRef90_D3Q736	A T E V P V A E V L G D W S E L A R E P A V L F E G G P V Q P E A A I A L G
UniRef90_UPI00037955EF	P L D F N L E E L I P E I E E N F K I F N G G P V E Q E N L Y F I H
UniRef90_F4H707	P V D V D V D V V L P A W Q E A V C V P S T L F Q G G P V G L D G A I G V V
UniRef90_A3TG37	P L G A D V D S V L P G W G E H I S S P Q T L F Q G G P V Q L D S A L G L I
UniRef90_D2S823	P S Q V E I R D V L P G W C D L A V D P V V F H V G G P C E T D T A L C L A
UniRef90_Q2W8Y7	L F G G T F P E L L E Q L E I P A T P A C D E R V H F G G P V E S G R G F V L H
UniRef90_I0RXK3	P S D T A V Y N V L P Q W A K L A A K P K T M F I G G P V K R D A A L C L G
UniRef90_B1MML1	P S E T A V Y N V L P Q W A K L A G K P K T M F V G G P V K R D A A L C L A
UniRef90_UPI00036B4658	S S H I P I S I F V S E I E S G T L V F E G G P V D K E N I Y Y L H
UniRef90_C1MN92	P T Q Y N M G Y V G G D D S S P F A N N Q L Y F G G D V G D G T V S F L H
UniRef90_C6X421	K N Q N M S A R L L N I F G F R V D V Y E G G P V E N D K I F F I N G
UniRef90_UPI00034664EE	P L E L P V E E I V T A W S T Y A S S P A V M F S G G P V G T D S G I A L G
UniRef90_F0RJ32	P M D T P V S D L L P D A P D A S G T A L L G G P V Q P Q V G W C L Y
UniRef90_E0LY17	P M E N T V E G I L K K L K I S A E D R D P K P V F T G G P L A E D R G F I L H
UniRef90_G8TRB2	V F E R K F N E L T E F R T S K P F P L Y E G G P V D R E K L Y F I H
UniRef90_K0F9S4	P S D T A V H D V L P R W T E L T A A P R T L F I G G P V K R D A A L C L G
UniRef90_C1B7P4	P S E T A V H D V L P Q W A P L T A R P S A L Y V G G P V K R D A A L C L A
UniRef90_R7NP01	E F R N H I L L N E L L P P L E F A Q R V P I Y K G G P V S R E T I F F L H
UniRef90_C1D0N0	P T P Q T V A E L M A D A A G Q N R R A W L G G P V D P T L G W C L Y
UniRef90_F0NZJ6	S S N I P L H I F V S Q M N S D S I V Y E G G P V D K E N I Y Y L H
UniRef90_E8UEU8	P S P H D L T D F V E P M N P D L D D A N I H E I P K D S W G K I Q E K F I L T
UniRef90_D0L9A1	M S Q T A V H N L L P Q W T D L A A S P R A L Y V G G P V K Q D A A L C L G
UniRef90_L7LCJ0	M S Q A A V F N V L P Q W S E L A A S P R A V F I G G P V Q T E S A V C L G
UniRef90_F5YVR9	P S E T A V Y N V L P Q W A K P K T M F I G G P V K R D A A L C C V G
UniRef90_J2JZ28	P T P V G V A D I L A P W A A L A G E P G V V F Q G G P V S L D S A L G V A
UniRef90_UPI00038012AD	R L G T M P I A L L I D P F L N S S E E R N I P V F W G G P V D V K E I F I L H
UniRef90_D7GD79	P S T T P V A E V L P A W A G E L N P P S V L F A G G P V A P N G A I C L A
UniRef90_K6X201	M S Q T A V H N L L P Q W T E I A A S P R A L F V G G P V K Q D A A L C L G
UniRef90_UPI0003149D9C	P T P V D V G E I L R P W A A L A G E P G V V F H G G P V S L D A A L G V A
UniRef90_L7VRF2	R T E L K V A E I L T D L K L A W G G D E G D L A Q F G G P V Q P Q V G T V L Y
UniRef90_UPI0003B57C5A	P M R Q T V Q D L L E G A A G Q N R P A W L G G P V D P A L G W C L A
UniRef90_V5WKD1	P S N S T L G D L F P E Q F G D H S A S H I P I F V G G P V Q Q E Y I L V L
UniRef90_C8XE74	P S E T A V Q N V L P G W A S H T A R P H V F A G G P V Q T S A A M C L G
UniRef90_W6KDE1	P L P I P L S T L L T E L G I D S E Q N S E I Q G W F G G P V D P G L V M M L H
UniRef90_V8CY90	M S Q T A V H N L L P A W T D T A A R P K A L V G G P V K Q D S A L C L G
UniRef90_W9GJK7	P L E A R V D S V L P G W R V V T A P P V L F Q G G P V S T S S A L G L V
UniRef90_A9RVW3	P T Q Y S L G Q L D E F K D L M P E L S S C P L Y F G G D V G P Q C T Q V I H
UniRef90_M6ZY27	M S Q T A V H N V M P A W T D L A A S P R A V F V G G P V K Q D S A L C L G
UniRef90_H8GT33	P A P Q T V T E L M P D A P G Q D E P A W L G G P V D P S L G W C L Y
UniRef90_D5SVJ6	P S S I L V N H A L S E H F Q L P E S A E L V H V G G P V E P A A L F I L H
UniRef90_UPI0003B5A2BE	P L E A S V D V V L P E W Q P F V T A P G V L F Q G G P V G M D T A M G L V
UniRef90_UPI0003B316E4	P S H A P V G Q I L P D W Q D V M S E P S V V F N G G P V K R D A A L G L L
UniRef90_U5EDP2	P S E T P V R D V L P N W A G L A A L P T D L Y I G G P V K R D A A L C L A
UniRef90_E9T7P4	P S E T S V Q E V L P Q W A P L A A A P Q A L Y V G G P V T R D A A L C L A
UniRef90_UPI00047AC3FF	Y A E Y T L V E I L P Q W V S Q P N R V F Q G G P V S T D G A L C L H
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UniRef90_D1ADY5        R V P P L G W R A L D G D T E V G R V G D L D A P P A L I A A E I I   Q M R V F
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UniRef90_R5IQX4        T L G H L I P N A I E V G E G L Y I G G D F D I V S Y L R S G N N I E H I K F F
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UniRef90_UPI00047BE3E3 R L P P L G W R A L D G D S S V A R V G L V D L A P P A L L A P E L L Q L R V F
UniRef90_X5DLE0        K L G D K L P G S I H V M G D L Y W G G D F E V L K R D I R T G K P S D I R F F
UniRef90_G7GKV0        I L K P G M S D D E E L G R V V L I D L D A   D P E L L A D Q V E G V R I F
UniRef90_UPI0003828983 T M K V G V D A S L R H V Q G R I A M V D L D A D P E D I E G   A V E G V R I Y
UniRef90_UPI0003459129 G G P P G W T P L E G L D P E L G L D G V G V V D P P E V L G G A L G S F R V F
UniRef90_D5UP78        V V K A G Q D R G L Q P V A G R V V L V D L D S D V E M M   D E L L D G V R V F
UniRef90_J7L7Q9        R A A P D E A P P G W V G R S V L D G V G V V D L D A P P E V L G P S G L R V F
UniRef90_UPI0003696E8D S D G F L P D A   N V I P N L S L E H S I D E L V E L G S S S T T K Q I R I F
UniRef90_H6RF16        T   R E D I A E S I P V V P G V F M G G N F D Q I R D M L Q A G Q L Q D I R F F
UniRef90_Q72UY2        E D N K I S Q P G I E I I P G L Y L A R S F D T L L E L L K S S     S K F H V F
UniRef90_V4VPK4        T G Q S K L P G F E E V I P G L C F G A R N S L D E A A A L V K K P Q D F R F F
UniRef90_UPI00036A30CB V L R P G A Q S T L R P V N G R V V L V D L D A   D A D E V A E S G V R I F
UniRef90_UPI00034D7FDB   M P G T D D A P L G W R P L S N L D E D A T V P R P E I L G G A L G R F R V F
UniRef90_A7H7H6        R P G G I G E G A V P V G N G L S L G G S R E L L E A L V R A P R G D P F L L L
UniRef90_UPI00036FE1F6 V L R L G V D A E L R R V D G R V V M V D L D T   D P E S L A T V L E G I R V Y
UniRef90_F1YL74        V K Q P Q L H Q V L G P V A M V D L D A D P D E L A Q V L T G     V R I F
UniRef90_U5FXF0        S R E K K I K E F E E V I P G L C F G A S L D E A G A L V R E G K P Q D F R F F
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UniRef90_W6JSS1	P L E A E V E A I L P G W G A V A T L P A M V F Q G G P V Q M D S A L G L V
UniRef90_F6EPE9	A S E T A V H N V L P Q W T S L S A R P K A L F I G G P V K R D S A I C L G
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UniRef90_H5US02	P I E A D V S T V L P A W Q E H V V A P G R L F Q G G P V G L D T A L G L H
UniRef90_E8R5L1	P I D G T V A A I S Q T A F N H P C D W E K P I H L G G P V T G P L T I V H
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UniRef90_D6Z9H2          A G Y S G W A S G Q L A A E I S R G A W Y V V S G L P Q D V F V G A G V D L W G
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UniRef90_N1WIN9          E A L R N K G G I Y
UniRef90_K9ZZ17          K A W E L L G V D P H S L A S
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UniRef90_UPI00037016DE   E A L A Q L G V T P G T I
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UniRef90_UPI0003768572   R L I D R
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UniRef90_I0YXN7          Q V L N L I G G D L A E L S
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UniRef90_UPI00037CBE55   G V L R R Q H S S L A L V S T
UniRef90_K3XJF2          E I L Q L M G G Q Y S E L S
UniRef90_D2R140          R V V Q S I G     L A V L S
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UniRef90_Q5YN78          D V L R R Q P L P M S L L A T
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UniRef90_W5Y416          D V M R R Q P M P L P L Y S T
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UniRef90_UPI0003B41BD3   R V L R R Q Q G E L G L L S T
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UniRef90_K7S5D2          R V L R R Q N G T T A M M A T
UniRef90_S2Y9N0          D C M R R Q P W P L P L Y G T
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UniRef90_UPI00037F2B57   R V L R R Q G G E L G L Y S T
UniRef90_Q8NL65          D V M R R Q A M P L P L Y S T
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UniRef90_D9Q5E7          D V M R R Q P M P L P L Y S T
UniRef90_UPI00034ABA25   R V L R R Q G G E L A L L S T
UniRef90_S3WRA7          D V L R R M G G E A S L L S
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UniRef90_UPI0003450CE8   R V L R R Q G G E M A L L S T
UniRef90_I4F5N1          A V L R R Q S G R L A V L S T
UniRef90_Q2BRE1          A A A S I L G I N L D L L T A
UniRef90_W2BSU7          N V L R R Q G G S L G I M A S
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UniRef90_E5XV99          Q V R R H G A R A G V L A T
UniRef90_M1NWC7          D V M R R Q Q M P L P L F S T
UniRef90_S5SY13          D V M R R Q Q M P L P L F S T
UniRef90_UPI000115225F   E L I H T F G L D I
UniRef90_S2DP55          I I L R N M G G E Y Q L M A N
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UniRef90_M4VMR0          R A L Q K
UniRef90_F7XV23          D L I K K F G I E
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UniRef90_L0DJE4          A V V S E
UniRef90_UPI00036A270F   Q M L N S Q D I
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                        1                10                  20                  30                40
UniRef90_W5XXG8              G Q L L V S A P G T M S P H F N R T V L L V V E H T D S M S F G V D L T S
UniRef90_UPI0003AADEBE     L K N K L L V A M P N M A D P Y F A E S V V L L C E D S D D G I L G L I I N K
UniRef90_C7Q9Z6            L T G K L L V A T T V L V D P N F D R T V L V V D H D D D G T L G V V L N R
UniRef90_K1LYM9              K G K L L I S K P S I S G D I F S R A V V L I I E N E E G A F G L I L N K
UniRef90_L1MC84             A G M V L V A A P G M L S D E F A R S V V L I V E H N N Q L T F G V N L A S
UniRef90_Q1Q3L0             K G S I L I A N P Q G T D P N F M Q T V V L I C E H S K R G T L G L I L N K
UniRef90_H2GZG4             G I V L V A A P S M E S E D F A R S V L I I E H S E Y A T F G V N L A S
UniRef90_M1CCU7             K G C I L I A S E K L E G H I F E R T V L L L S M G P I G P M G L I L N R
UniRef90_UPI0001984C8E     K G C L L I A T E K L D G H I F E R T V I L L L S T G P V G P T G I I L N R
UniRef90_D7G408            K G C L I V A K S S M A Q T Y F N E A V I F L A S Y D E A G S A G F I L N R
UniRef90_R7J2J9             A G A M L V A H P Q L T Q S C F N H A V I V L L D Y G D S G A M G C L N Y
UniRef90_B4CVG9           L A G S L L I A H P G L L D P N F R R S V L F I S S N D Q E G S F G L I I N R
UniRef90_R5B6M6             G A L L I S E P F L R E E Y F H H A V I A L I E Y   E F G A M G I V M N H
UniRef90_L8XV63          F R G Q F L I S M P H I D D E V F H R S V I F V L E H T D Q F V L G V I I N Q
UniRef90_UPI0002C36361     G C L L L A T E K L D G H I F E R T V I L V L S T G P M G P S G I I L N R
UniRef90_X1IGL6         Y L D G R L L I A M P V M G D S R F E R S V I Y L C A H S A E G A M G I I V N H
UniRef90_K3Z7P3            A G C V L V A T E A L D D S I F E R T V I F L L R L G S D G P F G I I L N R
UniRef90_UPI00041168FE      G M L L V A A P G M Y S D D F A R S V V L I V E H S Q Y M T F G V N L T S
UniRef90_C0XTG1             G M L L A A P G M L S P E F A R T V V L I V D H G V N S T L G V I L N S
UniRef90_A0A023DY97       L S G C V L I S F P N V R K Q D F Q K N V F V F H H S D E G A M G F L I N L
UniRef90_UPI0003B6D0C3      G M L L V A A P G M L S P E F A R S V I L L V E C S D A L T L G V D L T K
UniRef90_I1HJB3            A G C V L V A T E V L D D S I F E R T V I L L L R L G S D G P F G V I L N R
UniRef90_H6RH99         M K G K I L I S S P S L T D M I F Y K S I I L I V D Q T D E G I T G F I L N R
UniRef90_E3BE52           L T G R L L V A V P R A H D D I F T R S V V F V L H H G D D G A Q G V V L T E
UniRef90_G7L348             G C L L I A T E K L D G H I F E R T V I L L L S N G P I G P S G I I L N R
UniRef90_W0T4A6          L Q N H F L L A M P S L T D A Y F Q R S L V Y L C E H S S E G A M G L V V N I
UniRef90_B5JR88           L T G S L L L A H P H L K D P N F A S S V V L L L T R H E E S G S L G V V L N K
UniRef90_C4LGI0             A G M L L V S A P G M V S A E L T R S V I F L L D V G P D G A V G V D L T E
UniRef90_B7G677             G C V L I A N E K L G G   V F H Q T V V L I I D H H E T G S T G I V I N R
UniRef90_E4T9L9             K G K I L I S T P D V S G D I F S R S V V L I I N H D E E G A F G L I L N K
UniRef90_W7DP30                                         Q E G A M G I I V N R
UniRef90_UPI00047B2E00      G A L L V A L P G L T D P T F A G T V V Y V L D H S D T G T L G V V L G R
UniRef90_UPI0002882DE8     K G D I L L S L P S F E E L E F S R S V V L I A D Q H S E G T V G F I N K
UniRef90_UPI0002B49A0C     K G C L L I A T E K L D G H I F E R T V I L L L N N G Q L G P S G I I L N R
UniRef90_W1NRR8             G C V L V A T E K L D G A R F E R A V V L L L R V G R E G P F G V V I N R
UniRef90_V7BVK5             G C V L V A T E K L D G V R F E R T V I L L L R H H Q G G P F G I V I N R
UniRef90_A8IRU3            K G A L L L A H P L L S Q T Y F H R A A I L L E H G D N G S Y G V I L N R
UniRef90_V4UXH8            K G C L L I A T E K L D G H I F E R T V I L L L S M E P M G P S G I I L N R
UniRef90_A0A059ARB5       Q Q G C L L I A T E K L D G H I F E R A V V L L L S T G P M G P M G V I L N R
UniRef90_E1ZDS0             G C L L V A R P R P G L G M F A N T V I L L L E H D D E G S S G L V I N M
UniRef90_W4H7U7           S G V F L I A H P M L F R P   F E Q S V V L I T S H G E T G T T G F V V N I
UniRef90_UPI000363DD28    K G K L L I S T P D I S G D I F S R A V V F I T S H D E S G A F G F I L N K
UniRef90_W0J7V8            A G S L L V A H P V L R D P N F R R T V V L L S G H D G E G A L G I V L N R
UniRef90_X4ZRJ1
UniRef90_V9F625          S G V F L L A H P   L L E G I F S R S V V I L T E H R P E G S K G F I V N K
UniRef90_B9T3T4           K G C I L I A T E K L D G H I F E R T V I L L L S V G P V G P Y G I I L N R
UniRef90_I0Z4M0             G G L L I A Q P H I G D G R L W Q L V I F L V E H G P S G S V G L I L N R
UniRef90_G4CYW0           A G D L L V A S R Q I D E G V F Y E S V V Y L V D D V G L D G V L G V I I N Q
UniRef90_B8BYW5             G C I L V A N E K L G G   V F H Q T V L I I D H N E N G S T G M V I N R
UniRef90_D8UIB2            K G A L L A H P L L S Q T Y F H R A A I L L E H G D L G S Y G V I L N R
UniRef90_A0A024U4K1       S G V F L I A H P M L Y R P   F E Q T V V L V T S H S A V G T T G F I V N E
UniRef90_L1JZB5             G C L L L A T P N E F Q T Y L H R S V I F L A K H D E G G S A G F V L D K
UniRef90_D5ENI7         M A G A L L L A H P T L L D P N F R R S V V L T A H E P E G S L G V I V N R
UniRef90_V9PI96                                 I F V C A H S E D G A M G F V L N R
UniRef90_A0A024G7F3      T G T F L L A H P   L L D G I F S R S V I L I T Q H S H K G T R G L I V N L
UniRef90_E1ZTA4             G C L L L A N P L M S Q T Y F H M S V V L V W A H D S R G S A G L I L N R
UniRef90_I0IEZ1         L V G K L L L A A P S L E E A A F H R A V V L V I E H P A K G A M G L V L N K
UniRef90_W0EVA0          T G V I L K A S L L M D D D N F K Q A I V V L T E Y N E K G A M G F I V S Q
UniRef90_H0E9T6                                       M L V V D H D D D G A L G I V L N R
UniRef90_R4LQY6           A G T L L L A N T D L L E P T F R R S V I Y I V E H N D G G T L G V V L N R
UniRef90_R7QN66           A G C L L I A S P F V G E H F F A N S V V L V L H H S D K G T V G V I L N R
UniRef90_K9MZ56                               I C A H S G E G A M G F I L N R
UniRef90_E0Y2T4          L T G Q L L I A S P N L N D P N F Y K T V T L I C E N N A M G S L G I I N R
UniRef90_C3PKZ8            G Q L L V A A P D V L A P H Y N R S V I L I T E Q H A G H T Y G V D L T K
UniRef90_H9UWH8         L Q H H F L I A M P A L Q D P I F R R S V V Y I C E H N T N G A M G I I V N K
UniRef90_D9WKE4         L T G R L L V A T P A L A D P N F D R A V V L L L D H D E E G S L G V V L N R
UniRef90_M1VFG4          T G N I L V A S P K N E Q Q Y F A Q T V I L V L E H S D G T T G V I M N R
UniRef90_I7L9P6             G S L L V A A P D L M A P E F S R S V V L I L E H N P T Y T L G L T L T A
UniRef90_M4B1Z7          S G V F L V A H P   L L E G V F S R S V V L T E H N M E G S K G F I V N K
UniRef90_C7PBJ3           A G I F I N S T S L L E K S V F E S T V I Y I T E Y N E N G A M G F I V N N
UniRef90_M5SJA9           T G C F L I A S P Y L H D G N F F R S V I R H T D E G A F G V V I N R
UniRef90_M5RTK4         L S G R L L I A S P Y L G D G N F L R S V I F I I V R H D P E G A F G L A I N R
UniRef90_A0A022RUG5      K G C L L I A T E K L D G H I F E R T V V L L L S T G P I G P T G L I L N R
UniRef90_E1ZJX6            G G L L L A T P K L L G D E Y W Q A V V F I I R H D E Q G T L G L I L N R
UniRef90_J0LKE3
UniRef90_K9N0V0                                 I C A H S D A G A M G F V I N R
UniRef90_G4ZI10         S G V F L L A H P   L L E G I F S R S V V I L T E H K P D G S K G Y I V N K
UniRef90_B2UMM6         L A G H L L V A A P Y L D G A G F H H S V I F L S R A E K E F V I G H I L N H
UniRef90_B1FXP7
UniRef90_A8IT21              A P E L L K D D R L F Q L V I F L T T H G P D G S V G I I L N R
UniRef90_W6KLW0            Q L L L A H P Q L C G   F F R H S V M L V V R H A S N E S A A F V L N K
UniRef90_V4XXE4         L T H H F L I A M P G L D D E L F N K S V V Y I C E H S E K G A L G L V I N K
UniRef90_M5U008          T G C F L I A S P Y L T D G H F F R A V V I R H T D E G A F G V V I N R
UniRef90_W1PTA7          A G C L L V A T E K L D G H I F E R T V I L L L S N T R P G P F G V I L N R
UniRef90_I0ZAH9             G C L L V A R P D M G   P L H T Q S V V L L L E H D L Q G S A G L I L N C
UniRef90_W6TFB2         L S A H L L L S F P Y V R R Q D F Q K N V F V F H H S D E G A M G F L I N L
UniRef90_F0WEE4            G T F L L A H P   L L N G I F S R S V I I T Q H S E R G T R G L I V N L
UniRef90_D7SXH3         K G C L L I A T E K L D G H I F E R T V I L L L S T G P V G P T G I I L N R
UniRef90_S8DRV8         K G C V L I A T E K L D G H I F E R T V I L L L S S G P F R P I G V I L N K
UniRef90_W8A7I2                                 V Y I L E H N D G G T W G V V L N R
UniRef90_K4ADA5         K G C L L I A T E K L D G H I F E R T V L L L S A G V L G P V G V I L N R
UniRef90_R1GZA2
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                                    50              60              70            80
UniRef90_W5XXG8         R S E V A F N V L P D W    L P V I A K P Q A L Y I G G P L N Q Q S V V G L A
UniRef90_UPI0003AADEBE  P I S Q M V G A G L K N K F F K D L I S E S E K I Y F G G P V M L H E A C V L A
UniRef90_C7Q9Z6         P G S L D V E D V L E T W A P L A      A E P P T V F L G G P V A L D S A L G I A
UniRef90_K1LYM9         R N P A L S S A A T G L L H T S I D        V Y E G G P V E I G K I F F I V
UniRef90_L1MC84         R S D V A V F N V M P E W   V P Y V A K P Q A L Y I G G P L N Q Q S V V G L G
UniRef90_Q1Q3L0         T L G K K G Q E I F   V S S A N T K T K D K E I F F G G P V D T N N M F Y L H
UniRef90_H2GZG4         R S D V A V F N V I P E W   V P C V T K P Q A L Y I G G P L N Q Q S V V G V G
UniRef90_M1CCU7         P S L M S I K E M R S S V L D M S G T F A N R P L F F G G P L E D     G L F L V
UniRef90_UPI0001984C8E  P S L M S I K E T R S T V L D V A G T F S D M P L F F G G P I E E     G L F L V
UniRef90_D7G408         P T S V Q L G D L V E G N A L      R Q F Q K T P L Y L G G D V G E G N V Q I L H
UniRef90_R7J2J9         S T N F G L N D I L E N V R Y E      G V P V F G G G P V G L D R L F F L H
UniRef90_B4CVG9         P A S R T V A E L L P N K D L    G M L S R V P V F L G G P V A T D Q L V F A A
UniRef90_R5B6M6         P T G Y T L Q S L I E G I K I K T D        I P V Y C G G P V A C D R L F F V H
UniRef90_L8XV63         Q N L L S K D E I S A Q Y D I D P K D M D K L N F I S G G P V R L K E L F V L H
UniRef90_UPI0002C36361  P S L M S I K E T G S T V L D V A G T F S D R P L F F G G P L D E G L F L V R P
UniRef90_X1IGL6         P A G I D F P E L L E Q L G I L P E N A E S M K V L A G G P V D T G R G F V L H
UniRef90_K3Z7P3         P L Y T K I K H V N P S L R D Q A T P F G D S P L F F G G P V D M S M F L V R T
UniRef90_UPI00041168FE  R L D V A V A N V M P E W   L P C V A K P Q A L Y L G G P L H Q E S V V G V G
UniRef90_C0XTG1         R S E I A V D N A M P A W V D L V   A E P Q A M Y L G G P V G A T S V V G I G
UniRef90_A0A023DY97     P L Q R Q   D W P E T F K N S A L T M S D   T V L W G G G S D V D R G F L L H
UniRef90_UPI0003B6D0C3  R S E V A V F N V L P D W   M P V V A K P Q A L Y I G G P L N Q Q A V I G V G
UniRef90_I1HJB3         P L Y T K I K N V N P S F Q D Q T T P F G D C S L F F G G P V D M S M F L V R T
UniRef90_H6RH99         P S D F M I K E V E S S E K I K I D        L Y Y G G P V S S D H F Y L L
UniRef90_E3BE52         P L E T G V D S V L P G W   Q S A C S A P D R L F Q G G P V G L D T A V A L A
UniRef90_G7L348         P S L M S I K E T R S T A F D V M G T F S N S P L Y F G G P L E E G L F L V S P
UniRef90_W0T4A6         P V D M S L D T M L T K L K L S P P D T A K Q P V L Q G G P V H G D R G F V L H
UniRef90_B5JR88         G T G E R L G Q L S S E F A D    C G L G E V P V Y L G G P V N Q N Q I I L A
UniRef90_C4LGI0         R T E M A T Q N V L P Q W   T P L I T A P Q V I Y L G G P V G H N T V L A V G
UniRef90_B7G677         P M D G D L L K I A S E Q E S S L D A F S Q A R V T Y G G P V L T D E F S V L H
UniRef90_E4T9L9         K N P V L S H H F Q K S L S P N L E      V Y S G G P V G T T Q M F F I I
UniRef90_W7DP30         H T K P T P E E L L Q Q L G I P P P Q Q A Q F S V S A G G P I E N A H G L V L H
UniRef90_UPI00047B2E00  P S Q V E I R D V L P G W S D L A V D P A V F H V     G G P C E T D T A L C L A
UniRef90_UPI0002882DE8  A L D I T L N Q L M P N I T T S L T      I Y N G G P V E N D K L F C I H
UniRef90_UPI0002B49A0C  P S L M S I K E T R S T A L D V A G T F S E Q A L Y F G G P L E G G V F L V
UniRef90_W1NRR8         P L R K T I K D M K P S N P D L A T T F S D C S L H F G G P L E A S M F L A T G
UniRef90_V7BVK5         P L H K K I K H M K P T N H D L S T T F S D C S L H F G G P L E A S M V L L K T
UniRef90_A8IRU3         P S T Y F I R D I P   L K R P Q T Q F N D C R L Y V G G D V G G G E V Q V L H
UniRef90_V4UXH8         P S L M S I K E M R S T V L D A A G T F S D R P L F F G G P L E E     G L F L V
UniRef90_A0A059ARB5     P S L M S I K E S N S A V L D M A G T F S E R P L Y F G G P I E A G L F L M R G
UniRef90_E1ZDS0         P T P L L I S N L G L E E D I   A D A F R Q C P L F I G G P V T K N L L H V L H
UniRef90_W4H7U7         H S D K K   H T L W P N Y R L D A P L F G S H P L Y G G P V G G G S V Q F L H
UniRef90_UPI000363DD28  K D P I K T E E I R H K I N Q N L E V Y T G G P V E P N E F F Y M F
UniRef90_W0J7V8         P L R K S L G S L G G E F A L    G P L A H V P L F N G G P V A G R Q V L L
UniRef90_X4ZRJ1                                                     M Q T D R G F V L H
UniRef90_V9F625         I L E K P L G R A F Q V P S R V T R A F A T S T V R K G G P V F T R N A E V L H
UniRef90_B9T3T4         P S L M S I K E M R S T V L D D A G M F S D R P L F F G G P L E E G L F L V S P
UniRef90_I0Z4M0         P A S A T V G D L L S Q M D D S S G A F A D C Q V Y L G A F Y P P N R I V T L I
UniRef90_G4CYW0         P A P G T L R R Q L P G W V H L A T P P Q D   L F L G G P M S P S G A I C L A
UniRef90_B8BYW5         P F P G N L K I A S D T D T N I D A F S K A P V A Y G G P V M Q D Q F S T L H
UniRef90_D8UIB2         P S K Y L I G D V P   L S R P Q T Q F G D C R L Y I G G D V G G G S V Q V I H
UniRef90_A0A024U4K1     K A G N R   H T L W P N Y G V D T P L F G S H Q V H Y G G P V G G G S V Q F L H
UniRef90_L1JZB5         P A M Y E I G A V T D K L      P G F D K C P L Y L G G D V G S G I Q V L H
UniRef90_D5ENI7         P M G K T L G E Y   D L E L N G S E L A S V P L Y H G G P V A A D Q L L L A A
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UniRef90_A0A024G7F3     L S S D S V A R T F K V S L D V S S A F G S N P V F C G G P V S S R H A E I L H
UniRef90_E1ZTA4         L A G W P T E Y L V S R F G F L T P E F D K A Q L Y L G G D V G P D T V H L L H
UniRef90_I0IEZ1         P T P L K L A D V L A K T E T E A G D D A G F E L H Q G G P C P G P L F V L H
UniRef90_W0EVA0         R F P R Q L N E L   V E F R H S P A F P L F N G G P V D Q E H L Y F I H
UniRef90_H0E9T6         P T D T V I E V A V P D L A E M F D   A D E V V H E G G P V Q P E A L L T V A
UniRef90_R4LQY6         P S E T A V Y N V L P Q W A K L A    A K P K T M F I G G P V K R D A A L C L A
UniRef90_R7QN66         P V A A A V S E   P R L R   G A V S A A P A P L Y L G G P V A L D S L L A L H
UniRef90_K9MZ56         A Q P V K F A D V L L H L E M L P T E T R E F P V Q C G G P L E P G R G F V L H
UniRef90_E0Y2T4         P A T S S I E E I F N E L D L S V D H F S N V P I M Q G G P M G S E R G F V I H
UniRef90_C3PKZ8         R S E V A V F N V M P E W   L P V V A K P Q A L Y I G G P H N Q Q A A I G V A
UniRef90_H9UWH8         P L E N K I E G I L E K L K I T P E P R D D K P V M L G G P L A E D R G F I L H
UniRef90_D9WKE4         P T P V G V G D I L E S W A E L A G   E P D V V F Q G G P V S L D S A L G V A
UniRef90_M1VFG4         R A A Q R I S F V S S L A G T D L G R F G R E A L Y L G G P V S L D S L L V L H
UniRef90_I7L9P6         R S E V A V D T V L P A W A G F A A A P P A V Y V G G P L E P R G A L A V G V A
UniRef90_M4B1Z7         V S K N P L R R A F R A P S T V M Q T F G T S I V R K G G P V F A R N A E R V A
UniRef90_C7PBJ3         R F P R K L N E L      E E F S H G R D F P L W E G G P V D K E L L F F I H
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UniRef90_M5RTK4         P T E N R F R D L V A S T T A G G E P R D D D F I Y R G G P V E G P L L A L H
UniRef90_A0A022RUG5     P S L M S I K E I R S S A M D V S G A F S D G P L F Y G G P L E E G M F L V N P
UniRef90_E1ZJX6         P T S L H M G R G R G G L P L T V E G M E S M P L Y C G G F K A Q Q A I T L L H
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UniRef90_B2UMM6         P S G M N V G D V A R H T E I   P E S L Y A V P L F K G G P V E R N Q L I F
UniRef90_B1FXP7                                                         M L H
UniRef90_A8IT21         P T G M V L G R K P G G L P L E L G G P V P I Q V Y C G G F T A Q Q V I H I M H
UniRef90_W6KLW0         P L E N D E G T Q V P V H K I F E K Y F R M H T I M V G G P V M M D N L F L L H
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UniRef90_W1PTA7         P S L M S I K E T Q S K D L D V Y K T F S D L P L F F G G P L L G L C G E D E H
UniRef90_I0ZAH9         P S A N A R V R S C T C L P D I A G A F K Q Q L Y Q G G S V A T E R L H L L H
UniRef90_W6TFB2         P L H R   K D W P E G L K N T I F T F S   E S V L W G G A S D L E R S F L L H
UniRef90_F0WEE4         A T S D S V A R T F K V S L D V S S A F G S N S V F C G G P V A I R H A E F L H
UniRef90_D7SXH3         P S L M S I K E T R S T V              L D T G L F E E
UniRef90_S8DRV8         P S L M S I K E T R S S A L D S S G L F S N R P L F F G G P V E E C I I L L S
UniRef90_W8A7I2         P S D T A L H D V L P N W S E L A A G P R   A L Y I G G P V K R D A A L C L A
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UniRef90_H2GZG4        V T A Q G V D A S H A D N V M V N L G A D P E E I K P L V S G         M R L F
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UniRef90_A8IRU3        P H G D L   A G A V E V V K G V Y M G G L D A G R D A I D A G K Q A Q D F R W F
UniRef90_V4UXH8        S P K G G G D E V G Q V M E G L Y F G T K E T V G C A A E M V K G P E D F R F F
UniRef90_A0A059ARB5    G D G D V G R S G E E V M E G L Y Y G R S G G C A A E M V K R G G V G D F R F F
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UniRef90_W0EVA0        R R P D L I D E G Q L I G N D I F L G G N F K Q A V A A I N N G R L K D V K I F
UniRef90_H0E9T6        E F R D P A E A A L V L G R I G M V R G D D D A E R P L       V D R A R A Y
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UniRef90_C3PKZ8        L T K Q G V D   I E K Q P A L S R L A P R V A L V D L R V G P D V E G M R F F
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UniRef90_W6TFB2        S I K Y N T D E T L Q V G K E Y G V S P A E K I E D F N G L E G F P K Y A L T L
UniRef90_F0WEE4        R N S D V G G G Q A N E S S Q I Y W G G D F D A K R I K E R G K A N Q V V F F
UniRef90_D7SXH3        V M K G L Y Y G T K E       S V G C A A E M V K R N A V     A V E D F R F F
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UniRef90_UPI0001984C8E     E I I G L M G
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UniRef90_X1IGL6
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UniRef90_M5RTK4            L A V R R C G H D I
UniRef90_A0A022RUG5        E I L G L V G
UniRef90_E1ZJX6            E C M C L L G G E W A
UniRef90_J0LKE3            N I L R Q M G G K Y K V L S N
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UniRef90_M4EWA8           G C L L V A T E K L D G H I Y E K T V V L I L S V G P S D T I G V I L N R
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UniRef90_I1I4V4           T G S I L T A T E K L G A A P F D N A Q V L I V S A D H E G F H G L I I N K
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UniRef90_L1IBE4        F E R G Q F L L A H P L L S F S   L N R G I L I I L K H E E D G T L G V M V N R
UniRef90_W4UH69
UniRef90_G7JNH2           G S V L I A T E K L L G D P F D G S K I L I V A A D P T G F Q G L I I N K
UniRef90_X8CF79
UniRef90_D7FZK6           G S V L V A G A D N Y G S M T F K A V A L V Y E H G E G G S R A V C V D K
UniRef90_I0Z683         S G I L L A A S D D L E R S I F R R S V V L I Y E H S R R G A R G V I L S Q
UniRef90_K0R7Q9                     G L R Q Q Y F H K V V M L I L D H P Q E G T F G I I L N R
UniRef90_E0Y3F5
UniRef90_C0VSN8           G R F I I A A P G N T Y G F L Q R S V Q L I L L T E D G N A H T I V L G R
UniRef90_W7TEK5           G S F L L A S E K I G G S L F H R S L I L L L E H G P Q G S R G L V V N K
UniRef90_K0TCY6                          V I L L T A R D E Q G C Q A V L M N R
UniRef90_M5TVL6                                       A H D Q T P A D G   N I
UniRef90_A9T9H0          G T L L V A T P T M L S P Y Y F G T V V L L Y E H E R R G S R G I I L N K
UniRef90_M0S6X5                                                         N Y N L
UniRef90_B7G772                          V L I V V E C G E S R V R A V L L N R
UniRef90_W7T5G3        Q G Q I L V A K P W E Y N H F T S K S C L F L Y K H D E T G S R G V V L E K
UniRef90_D8R7S8          G H V L L A T E K L N S P N F A N S A V V I V S T D D Y V V G L V M N
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                                         50              60              70            80
UniRef90_K9N0U4        T Q P L R F P D L L V Q L G I M P P P T R D F V V R N G G P V D R S R G F V L H
UniRef90_S6EVH7                                          V L A G G P T N L E R G F I L H
UniRef90_K9N0Y6        P Q R L T F P D V L L H L R I L P G I T R D F Q I Q T G G P V E T G R G F V L H
UniRef90_K9N0U7        P Q P I S F T D V L L H L K L L P S D T R D F P I L S G G P V E T G R G F V L H
UniRef90_I1QTH1        P S L M S I K E V F A E T D I   A G A F S G R P L F F G G P L E   E C F F L L G
UniRef90_L1JRI2        A T A F M L Q E M A P A A F L E H   P L G E N S L F R G G S S G N D K V I M L H
UniRef90_M4EWA8        P S L M S I K E T K S T V L D K A G T F S D K R L F F G G P L E E R L F L V S P
UniRef90_D8U2P8        P A N L T L G E L L E S V P G F Q E A F G S Q R M Q L G G P L Y L D R V A L L H
UniRef90_D7FSC9        D K G E T L E E A L C E D A L P L A S D A L Q P V R V G G P V   M S R L A W L H
UniRef90_K9MZL5        S Q P V T F A D V L L H L G L L P Q H A R D F P I Q N G G P V E T G R G F V L H
UniRef90_K9MZP3        P Q Q L T F P D V L M H L D I L D E D T R D F Q I Q A G G P V E T G R G F V L H
UniRef90_G0UAW9        P L E N D E G M L M P V N A I F A K H C N H I V M V G G P V G R G S L L L L H
UniRef90_L1INF7        P T Q Y N V G D V T K K L           P M F E Q N P L Y L G G D I G E G V Y M S V S
UniRef90_UPI000366976B P S E A A V A N V L P E W A P L L S       S P G V F Y A G G I T S P E G V L G L G
UniRef90_D8U6F1        P T G M V L G R K P G G L P L E L               G G P V P V Q R V F Q D N
UniRef90_U7D779        S A R I P V R E I F S P V P Q V S Q T T R I F Q L     G G P V G E E E L H I L T
UniRef90_M2Y947        P S S S G V S K L R G E L N V E L A P L S P Q P V Y W G G P V A T N T L F V L H
UniRef90_UPI0002555DEB P L P N I Q D E L R L F D D L H L E I K N Q H K F I R R P V Y K G E S V F V L H
UniRef90_U5WDA9        P D G D I P D E F P E A W R R L L R N P A M   L F H G G P V A R D G Y I V V T
UniRef90_C1E1K3        P T N A Q L K N V V P E I D Y S A P H L A N R H V S M G G P M G T E K G L V A L
UniRef90_W1PP00        H I K W     E F L P E L D D G F R S L K S A P L S F G G P V Q G L P L M S L A
UniRef90_A0A059AC26    P I S W     D L L H E L E E G S E F L K E A P L S L G G P L V N R R L P L A C
UniRef90_K3WMC2        P T T N P L I K A F K V H P S I M R A F G S S K V R T G G P V R T E Y A E V L H
UniRef90_D0A6S5        P L E N D K G A L M P A H P L F A K H L C N H T V M V G G P V S R G T M L L L H
UniRef90_L1JFB3        A T P C T I G D F T E K L P H F D D N T I H H K A L Q G Q V A N R E L H T I H
UniRef90_B8C551        P S D Q M M D D         D V N D G V K W R V W F G G D V Q G D S L L C L H
UniRef90_I1I4V4        R L S W G     A F K N L D S S M E P I K L A P F F Y G G P V V V Q G Y H L V S
UniRef90_C5YWK1        P S L M S I K E A S E T I F A D D A D I A A R P L F F G G P L E   E C F F I L G
UniRef90_K4E865        P L E N D E G M L M Q V N S I L G K H L G N H T V M I G G P V S R G S F L L L H
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UniRef90_R6D3U1        D F R Y H I S     L N Q L V P N L E T A P L I P V Y K G G P V D R S T I F F L H
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UniRef90_UPI000234E6B6 P S L M S I K E I T A E T D I   A G V F S G R P L F F G G P L E   E C F F L L G
UniRef90_L1JQC4        P T P H L V G E V     S F A Q T H R A F L H C P L F F G G P V G   E T V H V L H
UniRef90_F0ZSB1        S I S A A P A I T Y L Q L E S D E N N T E N Q N W I F G G P L S T L Q G L I I H
UniRef90_F4QD97        P I P R H L Q E S M E Q N Q P Q P D P F S K L S W Y R G G P V K G L A G L I I H
UniRef90_B9HGN1        H L R W     D T L Q E L E E E S K L L K E A P L S F G G P V T R G M P L V A L
UniRef90_S2ZX25        M T D V P L A G M I D P W     V P L S G K P H A F F A G G M A N R R S V I G I A
UniRef90_UPI0003D779D8 H I G W     D S L Q E L E K G L D F L K E A P L S F G G P L I K H R M L V S L
UniRef90_K4B633        H I S W     D S L D E L E D G V Q L L K E A P L S F G G P V K R G M P F V A F
UniRef90_X1CIP9        P S V V K L A T V F P     D I K E L K Q R K D N I Y V G G P V A A N Q M L L L H
UniRef90_S3B387        P T P V N V G D I L E P W A A L A G   E P G V V F Q G G P V S L D A A L G V A
UniRef90_Q4QG99        P L R N R L G R V H P     I F R R H L A Q H T L M I G G P V M D D S I F L L H
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UniRef90_W9QWC2        H V R W     D A L D E L E E G L Q M L T E A P L S F G G P V Q R G M I L V A L
UniRef90_I2CSD8        R T G Y L V G D     L N V D S S G F K I Q P V H L G G T G E S D G I F M I H
UniRef90_F6HFY9        H I N W     E S L N E L A E G V D H L K E A P L S F G G P V K R G K P L V A L
UniRef90_V4LVP9        R L R W K S     F P D L G V E T V E L L K E T I L S G P V L D L E T P L L A L
UniRef90_R0G2V0        R L R W K S     F P D L G E T A E L L K E T P L S F G G P V V D P G I P L L A
UniRef90_UPI00042AFA8A Q I R W     D S L S L D E G L E F L K E A P L S F G G P V R R G M P L V A L
UniRef90_B4FVS3        P S L M S I K E I F A D D A D I A R A F A G R P L F F G G P L E   E C F F V I G
UniRef90_S8DNT2        P M S W D S L H K H E Q Y F E L L K E A P L Q   F G G P V V I R G L P L V A L
UniRef90_A4RT64        T Q S W T L A K H C P E W S L S E E V V G V G G P V G L D H S L D R S V I A L
UniRef90_L7UNH0        V         R A P D E Q P L P Q G V D R W G G P V H P T H R I T L T
UniRef90_C5BU30        Y F G K P L A D F S E Q Y E I L A S S L A S V T V H S G G P L A T E L P W I L S
UniRef90_R1EST1        R T G A L M G D     I D I D S G C V A I A P L W L G G T Q R Q N A L S A L H
UniRef90_A9S274        P L S W D Y V A K T     I I G Q D S L H E A P L G F G G P V E Q S H P F F V L
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UniRef90_R1EBH5        P S E V M V S R L R Q S G G S G P G S P A M I E W R R G G P V C G G R L G V V H
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UniRef90_L8H1L3        P     E S L L K R S G   T G T P P S Y R S Y I G G S T K G W Y W L S R F
UniRef90_W5DER2        P X T R P M K H V N P S F R D Q A T P F G D C S L F F G G P V D M S I F L M R T
UniRef90_C5L030        P V R S P I A D Y R D A A   E G P P V E L L T V R G G P V R I N E E R R I M H
UniRef90_L1IDU2        P T             L M T T K R G W R W R W Y G G D V Q G I T A V C L H
UniRef90_D8SEB1        L M P F P V D D V   P L M E P D A I R L A T C P A F V A G P H F P F S Y V H L L
UniRef90_UPI00035D3D76 P A P G     L A A T P N W P A A V R E P E V L F D G G P V E H E G Y L L L H
UniRef90_A0A022RI16    H I S W     D S V E E G F E L L K E A P L S F G G P V M M R G M P L V H H
UniRef90_R1F5R6        P T P L L G G A V D E A R R D K L G P L C E A S L H Q G G D V S P S S L L A L H
UniRef90_D2VPR5        L S N D K F E D L L D D E K T P E S E A K A K T L M D F V S Q I N R E F
UniRef90_L1IBE4        K T K L K V K R G L R E F A D C P G N V V E F H F Y L G G F V Q E S P S S L A T
UniRef90_W4UH69                                  P P Q D L F L G G P M S P N G A I C L A
UniRef90_G7JNH2        H L K W T     N L E E D L E K L K E A P L S L G G P V K T G M P L L S L
UniRef90_X8CF79                                    M K R D A A L C L A
UniRef90_D7FZK6        G L D F T I G E M S T G     D L G P L S N N R L F R G G D D G E A A I M I H
UniRef90_I0Z683        P L G P S D P R V V P S R G P A A L P P G S P Q L F L G G P V G M Q E L A V I H
UniRef90_K0R7Q9        P S D R M     L E D D V N E G L K W R V W F G G D V Q G P D I V C L H
UniRef90_E0Y3F5                                  M V G H F L K R E A L F C I H
UniRef90_C0VSN8        M T D I P L K G M I D K W V P L A G   K P H A F F Q G G L S N A N S G I G D G
UniRef90_W7TEK5        R V G G R L G R R L S E M A A L A G R L P P W D L L C G G P V Q P H V L L V L H
UniRef90_K0TCY6        R T G N L M G D L P P S L F D S S E E F M I Q P L W W A G S S S L D T G S M V H
UniRef90_M5TVL6        P A Q A H L A L I G G E E T A D K L L V G K A L F G G P L S   G P I V A
UniRef90_A9T9H0        Q A E K     A E I L K W L G V H N S A A L R H I T H G G G S H K P D D W F I L Q
UniRef90_M0S6X5        E K E F L C W D I F K E L D S D L V S L K H A P L Y Y G G P V R F Q T L P L V S
UniRef90_B7G772        R T G Y L L G D     L E Q A D P V L E K F C I Q P L W F G G D V N V S A G L M L H
UniRef90_W7T5G3        P T A F T L S E L A P P F     A A S V F A N H T V F L G G E Q G G D M A V L H
UniRef90_D8R7S8                K D M P K E E L L A V D Q R H N V K I G Y G G P L Y T R K Y I F T F
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                                        90             100            110            120
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UniRef90_S6EVH7        T S S Q T F L H S Q K L A S N L W L T T S A D V I D S L G T P Q A P E K C L V A
UniRef90_K9N0Y6        S D D Y L S E S S I P V S D D I C L T A T L D I V R A I S R G E G P S K A M M M
UniRef90_K9N0U7        T D D F V S E S S I P V S D D E I S L T A T L D I I R A I C N G R G P A R A T M L
UniRef90_I1QTH1        P R A A A A G D V V E V M P G V H Y G T R E S V G C A A E L V K G V R D F R F F
UniRef90_L1JRI2        A L E D V Q T S K P I G R H G V F A G G M Q E V K E L V S E G R A S D Q V K F F
UniRef90_M4EWA8        R N G E D N E V E R Q V M K G L Y Y G T R E S V G L A A E M V K G R S E V R I F
UniRef90_D8U2P8        R L V   G L R G S Q K I A E G M Y M G G L P D A I R L V T A G L R P Q D F T L V
UniRef90_D7FSC9        P H K E V G G V P L A E G K P V F F C G K M E K A A E L L T K G A P A D F S L V
UniRef90_K9MZL5        S D D Y T S D S S I P V S D D I S L T A T L D I V R A I S E G R S P R R A T M L
UniRef90_K9MZP3        S D D Y L S D S S I P V S D D I C L T A T L D I V R A I S R G E G P H R A T M M
UniRef90_G0UAW9        R I P D   V E E A V P L S K S I W V D G N Y D A L Q E K I E N G D V K D I M V V
UniRef90_L1INF7        S I H P G L R N A T E V S D G I Y Y G G S E H A M Q L V S E G K A A K D F R F F
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UniRef90_D8U6F1        R V Y C G G F T A Q Q L V A V I H I M H G H R L N H C V Q E G R L P S D F K F F
UniRef90_U7D779        L T E Y L P Q E E Y P F S P G V L L G I D T S L E G L I A S   G S S Y C K L F
UniRef90_M2Y947        P F   P E M E G A V A V G H G I Y M G G S S A I I D S I R K G K A H E D F L L L
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UniRef90_U5WDA9        L L R S G A P E P L R F T P V R D L G T M A L S A S P E D V S G T V D A M R V F
UniRef90_C1E1K3        S H T R L D G A T S E V F P G L W H V S D F S A V K P   E H E P S L M V F
UniRef90_W1PP00        R Y   G S H E G Y A E I L P G F Y F G G S N I I Q Q I H S G N Q T V E D F W F F
UniRef90_A0A059AC26    L T R V D K N Q Y L E I L P G I R L E T I R E I D E L R A G N G S V A D Y W F F
UniRef90_K3WMC2        S R A D L G G Q R I V T T N F L F M G V D L E S A A K A V D E N K Q S D I M F L
UniRef90_D0A6S5        R I P D   V D D A I P L S H S L W I D G S Y D T L Q Q K I E D G D P K D I V V I
UniRef90_L1JFB3        S C S E V V   G S E E I I D G V F L G A D L R H A S K L V E Q K R A K Q F K F F
UniRef90_B8C551        S L K S E A D A S V T V V K G I Q W T S F S N A K Q L V K R G A S V E D F W L F
UniRef90_I1I4V4        L S R V V F E G Y A Q V I P G L Y Y G T S R V I R G I K S G Q Q S A E D L W F F
UniRef90_C5YWK1        P R A Q S A A T A G E V M P G L H Y G T R E T V G C A A E L A K G V R D F R F F
UniRef90_K4E865        R I P D   V E D A I P V S Q S L W V D G N Y D V L Q K K L D D G T A D D I V V I
UniRef90_A2Z8P2        L S R V A F D G Y L Q V I P G V Y Y G A T A Q V T R R I K S G E Q A E N L W F F
UniRef90_R6D3U1        T T R F G G F I S S R Q W S V L K W
UniRef90_Q54HU6        P Y   S N L S G S K I R D G L Y I G G K L K E V G D K I R N K E I D K L L M F
UniRef90_UPI000234E6B6 P R R T G L F E E V M P G L H Y G M Q E S V G S A A E L V K R G D M R D F R F F
UniRef90_L1JQC4        R V   A T V K G A R L I V P G L Y H G G D L D H A G S L V E S G E L E D F R F F
UniRef90_F0ZSB1        P Y   A N I T G S K K L R K G L Y I G G N F K E I K E K I K K G E V D K L M M F
UniRef90_F4QD97        P Y P E L L G S S   K I R D G L Y I G G D F D I G E K V K N K E S P E Q C M M V
UniRef90_B9HGN1        T R R A V G G Q Y P E V A P G T Y F L G L H E I E E I S S G N Q C V S D Y W F F
UniRef90_S2ZX25        T G H G V   D L E F T R C P G V G I I R V E G D P A R Y I D T I G Q A R F Y
UniRef90_UPI0003D779D8 T R R V T K S Q Y P E I V P G V Y F A T V N E I E E L K S G N H S I A D Y W F F
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UniRef90_X1CIP9        R S T Q P P E Q S T P V T D D V Y I S S N W N V L E R L M K K K K D E R F R L F
UniRef90_S3B387        V V P S G         R G D R T D G A A G R R D P T D G A A G S G P D A G A A A
UniRef90_Q4QG99        R V   P G V P H A L P L G S N L W L D G D L D V L M A K L D A E E A E D I V V L
UniRef90_B8C1S9        S I D S N L G K S E E I I K N I F L T N Y E G A R K L I D A N E A T S Q F W V F
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UniRef90_B9S4I9        T R R A V E D Q Y P E V A P G I Y F A T L Q E I I E Q L K L G N Q S I T D Y W F F
UniRef90_A6B8F7        K P K D Y Y E S S I Q M T D D L A V T T S R D I L S V L G T E A E P S D Y L V A
UniRef90_W9QWC2        T R R A M E D Q Y P Q V L P G I Y Y A T Y R T I G E L K S G N Q S I T D Y W F F
UniRef90_I2CSD8        T Y P E L E R A T Q V T N D G L F F G G N Y T A A Q E L V R E Q G A S R F K F F
UniRef90_F6HFY9        T R R V F K D Q H P E V L P G V Y F A T V S E I I E G L K S G N E S V S E Y W F F
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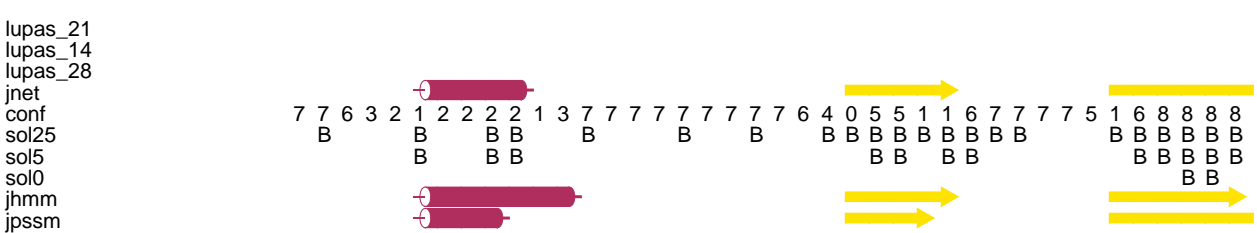
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UniRef90_K0SC95           S L N N I C Y R K A I V L V L D A G S R F I K G I V L N R
UniRef90_W9RER6           T V V L L L R S G Q E G P F S V V I N R
UniRef90_B8CDL7
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UniRef90_B8BQX9       G V V L V S P V H E Y D H F L M K A A V F V         Y A I G L D D N E
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sol0                      B B             B B B B B                           B B
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UniRef90_L1JQ53      K L D G E V R V S A K I V D G V Y F T S L N S A E S L V Q A G H A K E D F V V F
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UniRef90_B8BZN2      S T D L G V E L S D A V L P G I   L I T S F D G A Q R L V D A G E P S S F W L F
UniRef90_R1DIX8      T S R C D V P G A R R V L P G L Y S C A P D A A A R M V A I G A A A A S F D V Y
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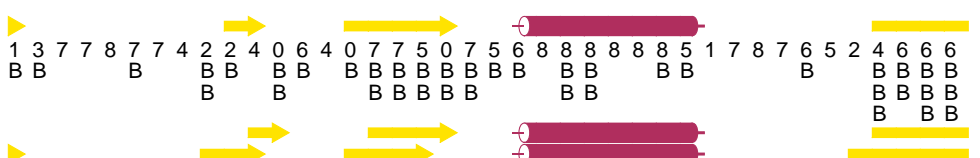
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UniRef90_R1CUD5       V G Y A G W A P K Q L Q G E V R Q H
UniRef90_L1JQ53       L G Y V G W A S G D L E A Q V D S G N W F I A S A
UniRef90_L8GYI4
UniRef90_Q7UKQ8       I G H L G W T A E Q L E N E I E E G I W H R I P A T S D L L   N S D D A M M W P
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UniRef90_B7GE41       F N Y C E F T E L E M E D L L A S D A W I S V E V D S D F V L N D G W E S R L R
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sol0                  B B
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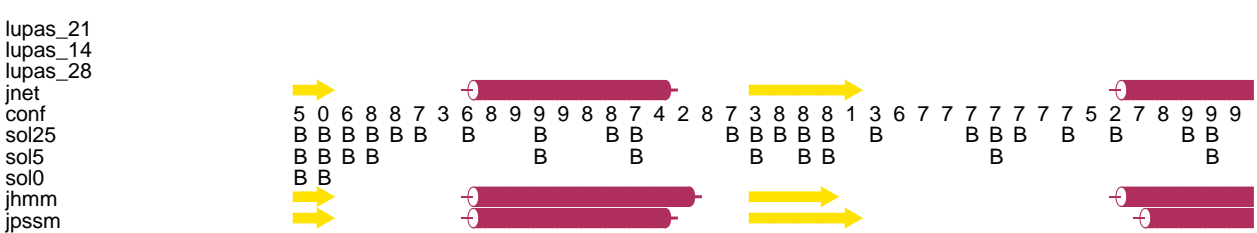
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