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UniRef90_B5JWK9
UniRef90_U1LZ38
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UniRef90_Q5P4Z6         F A T R I A Y V V K S G P     R Y E L Q I A D A D G M N A Q T A L A S R E P
UniRef90_I8HXG4         F N T K I A Y V A S S G G P S R T Y Q L L I A D A D G F N P R T I A S S R E T
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UniRef90_A5G2K7
UniRef90_UPI00034572A9        T L A S A S W D K T I K L W N V G T G K Q I A S L T T G H Q S G
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UniRef90_K9Z911                      G D V N G E I C V W S L Q E N R L I S I F G H A G W
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UniRef90_R4I0V4
UniRef90_B5JWK9
UniRef90_U1LZ38
UniRef90_E4PQS9          I L S P A W S P D G E K L A Y V S F E T G K P V I F V H E L A T G N R T K V A D
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UniRef90_K9QC24          V W G V A W S P D G Q N I V S A S K D K T V K I       W Q R D G K L L H T L T G
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UniRef90_F4XNH8          V T D I A F S P D G K Q I L S G S       D D R T V R L W D T E T G Q L I H T L E
UniRef90_K9TJ23          V N A V A I S P D G Q R V V S G S W     D N T L K V W N L A T G E E E R T T G
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                              90              100             110            120
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UniRef90_M5DH71        F R G S N S A P A W S P D G K R L A V V L S L V G G S Q I F L I N T D G S G L Q
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UniRef90_B4R9Z7                                                   M D Q D G A N P S
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UniRef90_Q28TS0                                                   M D Y D G A N V Q
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UniRef90_A3JY15                                                   M D Y D G A N V Q
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UniRef90_K9Z911       Q T L N G H N S Y V W S V V I S P D G K Y L A S G S E D K S I K I W Q L D T T G
UniRef90_A7EU93       Q T L E G H S N W V S V A F S G S I D Q T I N K L W D T T G
UniRef90_UPI000406992F R L T G E G T Y N A S P A W S P N G A M I A Y V S R F E G K F D L F I Y K L G E
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                              170         180         190         200
QUERY                  G A P Q R I T W E G S Q N Q D A D V S S D G K F M V M V S S N G G Q Q H I A K Q
UniRef90_UPI00047B622F G Q V R R L T F E G E Q N L G G T W T P D G Q Q L V M V N R T R G N Y H I A K Q
UniRef90_C9QJP5        G E R E K I S S Y P R H N G A P R F S P D G S K L A L V L S K T G S L Q V Y T L
UniRef90_UPI000463A87D G I T Q R L T W D G K Q N P S V S P D G K F V T M I T T L P N G Q F I N R Y
UniRef90_I8UBT1        G R R T I L T A F P G I N S S P R W S P D G R K M A M V L S K D G N A E I Y V M
UniRef90_R4I0V4        G E I R Q I A S F P R H N G A P A F S P D G S R L A F A L S K S G S L N L Y V M
UniRef90_B5JWK9        G K E Q K L S G F D G I N G A P Q F S P D Q M L A M A L S R S G N P D I Y V L
UniRef90_U1LZ38        G K R E I L T S Y P G I N G A P Q F S P D Q M L I V L S K D K G G A T E V Y L I
UniRef90_E4PQS9        A E P R R I T F G S R Y N A R P R P D N D G N Y V Y Y V H Q R D R A F H I A R T
UniRef90_UPI000373C21E G T T R R L T F E G E M N L A G A Y S P D G S T I V M V N R T Q G Q Y H I A K M
UniRef90_J3HQE9        G N A Q R V T F N G T Y N I S P R V S P D G K T L A F I A R R D G R F Q L Y A L
UniRef90_Q5P4Z6        G S A Q R V T F E G N Y N V T P R L S P D G R S L A F I T R N N G R F Q V A V M
UniRef90_I8HXG4        G D A Q R I T F Q G K Q N L R A S F A P D G K S L A L V N V E N S S Y R I A L L
UniRef90_B7S0I0        G T T E R V T F E G G Y N A R A R V A Q D G R N V V L V H Q Q N G Q F H I A L L
UniRef90_E7RUG5        G Q R K A V A K F K G S N S A P A W S H D G R S L A V T L T R D G G S Q I Y Q V
UniRef90_UPI00037F4218 G R R D L V A S F P G I N G S P A F S P D G Q R L A M T L S K D G N A N I Y T L
UniRef90_UPI0003958B26 G S A E R V T F S G S Y N I S P S I S P D G K T L A Y I T R A G G G Y K L Q V M
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UniRef90_R4YUI5        R K P K R I T F E G D Y N A R A R I T P D G R K M V M V H R N G G D F H I A T Q
UniRef90_A6FES8        Q K R E L I E P Y K G S N I F P V F S P D G S K L S M I L S K S G Q A D V Y V V
UniRef90_N9CU90        S S Y N R L T F R G A F N A R G T L S A D G K K L A L V H R P S G N Y K V A I Q
UniRef90_N2JHJ0        G G A E R V T F V G N Y N A N P K L S A D E K T L V M V H R Q E G N F Q I G A Q
UniRef90_M5DH71        R M A E R L T F E G S Y N V S P E Y S R D G K S F T F I H R N G D R F N V A T Q
UniRef90_A3JPX8        G E P K R I S F G A G R Y G T P V V S P R G D Y I A F T K Q N K G R F H I G V M
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UniRef90_Q492W9        G L V N N I V S F P G H N G A P S F S P D C K K L A F S L S K T G S L N L Y I M
UniRef90_B4R9Z7        G R R E S L G N F Q G M V F A P R F S P D G G R V A F S V E R G G N S D I Y V M
UniRef90_Q1JZI0        G Q V R R L T Y N G K Y N A T P A W S P D G K R I V F S R L E G G A F N L F S I
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UniRef90_W8IBG7        S G Q R R I S F G D G S Y S T P V W S P R G D L I A F T K Q S G G K F S I G V M
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UniRef90_R6I2X4        G R Q E L L G N F P A P R F S P D S S K V V L S Y A S N G K S D I Y E M
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UniRef90_UPI000366F0DB G K Q R L V V Q S A A T T F A P R F S P D G R W I L F S R A D G G N T D I Y R V
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UniRef90_B4W8E2        S G Q R P I S R G G G T Y T A P A W S P T G N L I A F T K S G G G R F S T G V M
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UniRef90_C7RS72        Q E I R S F A G H Q D W V T S V A F S P D G R R L L S G S H D H T L R L W D A
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UniRef90_K9QC24        K R Q K T L N R H N S P V N G V A W S T D G K I L A S A S I D S T I K I W S R
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UniRef90_Q2GV04        A H R Q T L E G H G H W V S A V A F S P D G N T L A S A S D D T T I R L W D T
UniRef90_I4I5Q3        E F C T L A G Y S G W V W S V A Y S P D G R Y L A S G N G D K T I K I W E V
UniRef90_F9ZTH9        G G V R R L S F N G G Y N V S P A I S P N G R W I G F I H A D A G I L S L A V M
UniRef90_A0ZAZ6        K E L E T L Y G H T D A V N S V A F S P D G T S I A T A G S D R T A K I W R F N
UniRef90_S9PCE9        R E L R C L S G H T D K V F S V S W S A D G R R L A S A G G D G T V R L W D A
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UniRef90_X0RCE0        G R T T K V S S S G Y A T S P Q F S N D G S Q I A F L S G R S A A I M
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UniRef90_K9TJ23        E E E R T L I G H G S W V S A V A I S P D G Q R V V S G S G D N T L K V W N L
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UniRef90_A0D039        L E I R K L E G H S A P V H S V A F T P D S Q L L A S G S F D R T I I L W D I
UniRef90_V5DZH9        P L G P P L I G H V S Y V R S V A F S P D S T R L V S G S D D K T L R L W D V N
UniRef90_E3FJZ6        T N A R R L T F Q G N Y N Q T P D W S P R G D L I A F T A R D E R N F D L F T V
UniRef90_K9UE38        L I R D L W Q E R K S P I Q S V A F S F D G G Q R I V S G S D D L T I R I W D A K
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UniRef90_K9ZCX6        K L I T L L G H G S A V N W V S F S P D G K L L A S A S D D N L V K I W R N
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UniRef90_K9Z911        K C L R T L K G H T L W I R T L A F S G D G T I L A S G G G D R I I K I W D W
UniRef90_A7EU93        E S L Q T L E S N W V S S V A T S P D G T K V A S G S I D Q T I I W
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QUERY                    D L A T G G V Q V L S S T F L D E T P S L A P N G T M V I Y S S S Q G M G S V L
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UniRef90_C9QJP5          D L K T R K L T Q I T R G R S N N T P F W H P D G K S L V F T S D R G G K P Q I
UniRef90_UPI000463A87D   N F D T G S Y Q I L T D T F L D E T P S P N S T M I I Y S S T E G L G S I L
UniRef90_I8UBT1          D I A T K A L T R I T H R A I D T E P S W S P D G Q E I V F S S E R G G N P Q L
UniRef90_R4I0V4          D F S S G N I S Q I T D S R S N N T P T W F P D G Q T L A Y T S D Q G G R P Q I
UniRef90_B5JWK9          D M K T R Q L K Q I T R G Y S I E T P S W S S D G D T L Y Y T S G R T G S P Q I
UniRef90_U1LZ38          D L E T R K E R R L T H R S I D T E P T W H P N G K E I V Y T S E R G G N A Q I
UniRef90_E4PQS9          E L K T G E E T I L T R T E S D E S P S V A P N G R M L I Y A T R Q N G S N V L
UniRef90_UPI000373C21E   D R Q S R F L Q V L T K T N L D E S P S I A P N G S M I I Y S T M H G S S Q V L
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UniRef90_Q5P4Z6          D L A T R Q T T I L T D S S R D E S P S F A P N G R M L Y A T E S G G R G V L
UniRef90_I8HXG4          D L A S G N L R I L S D G N M D E S P S F A P N G A V I I Y A T Q K S G A A E L
UniRef90_B7S0I0          D L V T N R L Q V L T S T Q L D E S P S I A P N G S M V L Y G T K H A G R G I L
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UniRef90_N2JHJ0          D L Q R G S V R V L S N T S L N D S P T V A P N G T M V I Y A S R Q Q D R G V L
UniRef90_M5DH71          D L A T R Q V Q L L T D S K F D E S P S F A P N G R I I L Y A T E V K G R G I L
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UniRef90_Q474K8          D L T N G D V T S L T D T S N D E A P S F A A N G K Y I L Y A T R V G G R G I L
UniRef90_Q492W9          D L E S G E I T Q L T K N R N N T P S W F P D N Q N I A Y T S D Q G G S P Q I
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UniRef90_UPI0004675260   D L R S R T T T R L T N S N A D T S P T Y S P D G A R V A F T S D R G G R P H I
UniRef90_R6I2X4          D L K N R R S K Q L T N S N P S Y S P D G S Q I V F N S D R G G N Q Q L
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UniRef90_UPI000379B501   S F G E Q L Q T L S G H R N W W S V A F S P D G K I L A S G S R D N T V R L W
UniRef90_S4XYT6          D G A G E P I V L R G H D D R V Y A A A F S P D A A R I V T A S A D R T A R
UniRef90_B8MUZ3          A T G T L Q Q K L E G H S N S V D A V A F S P D S K V V A S G S G R T V K
UniRef90_C7RS72          E S G Q E I R S F A G H Q G W V L S V A F S P D G R L L S G S D D Q T L R L W
UniRef90_A8P965          S G K A L F E P I Q G H T K K V T S V A F S P D G S R I A S G S R D N T V R I W
UniRef90_K9QC24          D G Q L L N D I P G D G D S F I S V N F S H D S K T I V A A S D D K L
UniRef90_A7EJN8          A T G E S L Q T L E G H L D A V Y S V A F S P D G T K V A S G S G D W T I R L W
UniRef90_UPI00034C7E2A   T G F C L D T L T R G H T A A I R S V A F S T D G K L L A S G S E D E N I Q L W
UniRef90_D5QJ87          D L S S M S R H Q I T A S G A D T S P C Y S P D G S Q I V F N S D R G G S P Q L
UniRef90_Q2GV04          A T G A H R Q T L E G H G D S V R A V A F S P D S N T L A S A S D D K T I R L W
UniRef90_I4I5Q3          A T G K E L P T F T G H S S V V L S V V Y S P D G R Y L A S G S S D K T I K I W
UniRef90_F9ZTH9          D R Q G G D L R V L Y A G A N C E R P S F A P D G R M L L F N T H Q G G R K V L
UniRef90_A0ZAZ6          S P N S I I V R G H E D E V F D L V F S P N G K Y I A T A S W D K T A K L W
UniRef90_S9PCE9          E S G R E L R S F P G H K G R V W T V S W S V D G R R L A S A G E D G T V R L W
UniRef90_UPI00034C056E   R N G E C L K I L S G H N N Y V S V V A W S P D G Q T L A S G S G D Q T V R L W
UniRef90_X0RCE0          N S G G A V T T N L G N T G I D E A P S V F S P S G R N V I Y A S K G Q G K G K L
UniRef90_UPI00047EAC18   S K G T C I K T F H G H K N W V W S V C F S S D G Q T L A T G S Y D S S V R L W
UniRef90_UPI0004678F42   S P E G G T P Q R V V D G P G D R N P S W S R D G A W L Y F E S N R S G Q W Q V
UniRef90_UPI0003B3CE53   S F D E P V T R
UniRef90_Q8Z0R1          K T G Q C W Q I F E G H S K K V Y S V R F S P D G Q T L A S C G E D R S I K L W
UniRef90_F4XNH8          E S G Q L H T L Q G H A N H V T S I A F S P D G N K I L S G G D D N S L R L W
UniRef90_K9TJ23          A A G E E E R T F T G H G S G V N A V A I S P D G Q R V V S G S D D N S L K V W
UniRef90_D6TQG2          A T G K C V R I F K G H I N W I W S V A F S P D G S C L T S G G D D N S V R L W
UniRef90_A0D039          K S G K E L K K L T D H D D G I W S V A F S I D G Q F L A S A S N D T T I R I W
UniRef90_V5DZH9          T R Q P I G Q P L R G H D G A I I S V A F S P D G A R I A S G S D D N T L R M W
UniRef90_E3FJZ6          N V D T G K I T R L T Q D S N N E E P V F S P N G R L I L F S S T R T G T P Q L
UniRef90_K9UE38          T G L P I G K P L F L K G H R N Y S V A F S P D G Q R I I T G S K D S T V R I W
UniRef90_K9VGI2          H S Q T E L I T L T G H S N Q V Y S V A F S P D G K T L A S A S G D N T I K L W
UniRef90_UPI000345A0BC   K G K L L A S L S G H N D R I H S V C F S P D G Q T V V S A S G D S T I M F W
UniRef90_D2SB14          S G Q P H G E P L R G H T N T V L S V A F S P D G R L L A S V A D D R T L
UniRef90_B0DF85          D V Q T V A F S P D G R H I V S G S D D K T V R V W
UniRef90_K9ZCX6          D G K F L Y D L T G H T R R V N G V A W S P D G Q T I A S V S I D S T V R
UniRef90_UPI00034A6E6A   S S G E C L A T L Q G H R H W V V S V A F S P D G R T L A S G S D D I K L W
UniRef90_J3NFF6          A T G A C L Q T L K G H S S W V R S V A F S P D G Q R L A S A S Y D E T V K
UniRef90_W4JUB2          M H S S V G N L L E G H A S S V A F S S D G K W I V S G S G D R T I R V W
UniRef90_K9Z911          Q T G K C L K E L H G H T Q R I R S L A F H P E D N L L A S G A G D H T I R L W
UniRef90_A7EU93          D L S G R Q V V R M T E L P G C Q S P K W T
UniRef90_UPI000406992F   D L S G R Q V V R M T E L P G C Q S P K W T
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UniRef90_UPI00047B622F   A L V S V D G R F K A R L P A R E G E V K S P S W S P F L R
UniRef90_C9QJP5          Y Q V D L A N G S T S R I T W Q G S Q N L G G Q I T P D G R
UniRef90_UPI000463A87D   N L V S A D G R F K A K L P A T D G Q V K F P A W S P Y
UniRef90_I8UBT1          Y T V N I A T G D T R R L T F E G E M N L A G T F S P D G Q
UniRef90_R4I0V4          Y K I S A S G G V S Q R L T W E G S S N Q N S K V S F D G K
UniRef90_B5JWK9          Y A V S A R G G T P K R V S F E G G Y N A S A A A S P D G K
UniRef90_U1LZ38          Y K L N L D T G R S R R V T F D G D M N L A G S I T P D G K Q
UniRef90_E4PQS9          T V I S A D G G A A Y S L P A S E G D V R E P A W G P
UniRef90_UPI000373C21E   A L V S M D G R F K A R L P A I D G Q V K S P A W S P F
UniRef90_J3HQE9          A L V S V D G R F K Q R L T T Q V G D I R E P T W G P F M K
UniRef90_Q5P4Z6          A A V S S D G R V K Q R L S V Q A A D V R E P S W G P
UniRef90_I8HXG4          A T V T T D G R V K Q R L R Q P G D V R E P A W S P L S R
UniRef90_B7S0I0          A A V S V D G G V K F R L P S R D G D V R E P A W S P Y
UniRef90_E7RUG5          Y R M P S N G A A S R V T F G S S Y N V S P R I S P D G Q Q
UniRef90_UPI00037F4218   Y R M A A S G G A A E R I S A E G D Y N A R A S Y A P D G K
UniRef90_UPI0003958B26   M T T L D G K I K A R L A G Q S G D I R E P D W G P Y
UniRef90_UPI0003A7178F   G S V S R D G Q V H Q R I A A R E G E V R E P A W S P
UniRef90_R4YUI5          A A V S L D G E V K F R L P S K Y G D V R E P A W S P L L L
UniRef90_A6FES8          Y Q I N L E S K K I K R L T F E G N A N L N P S I S P D G K
UniRef90_N9CU90          S I M S L D G R F R M N L P S E Q G E V R E P A W A P
UniRef90_N2JHJ0          M L V S I N G R V R I T L P T T Q G D V R E P S W S P Y L N
UniRef90_M5DH71          S A V S S D G K T R Q Q L S T Q A G D V R E P A W G P L P R
UniRef90_A3JPX8          Y S V D L T G R N L K R V P T P L G A S D P A W S P
UniRef90_Q474K8          A A V S T D G R T R Q V L S L Q S G D V R E P S W G P F M Q
UniRef90_Q492W9          Y K I N V K T T E I Q R L S W L H T S N Q N P N V S S D G
UniRef90_B4R9Z7          Y V M G A D G S N P R R I S F G Q G R Y T T P V W S P T G E
UniRef90_Q1JZI0          Y V M R A D G S G Q R R I S T L D A D C S H P A W S
UniRef90_Q28TS0          Y I M P A D G G E A R R V S A G T G R Y S T P V W S P R G D Y
UniRef90_W8IBG7          Q L Y S I D T G Y N E Q A V P T Q G F A S D P A W S P
UniRef90_UPI0004675260   Y T M G A D G S N P T R I S F G D G S Y S T P V W S P R G
UniRef90_R6I2X4          Y V M N A D G S D V H R I S F G S G R Y A T P V W S P R G D Y
UniRef90_R5YM27          Y S V D I T G T N E R L V L T P G D G S D P A W S P
UniRef90_UPI0003696EF9   A V S S A N G K A Q Q T L S A S Q G D V R E P A W S
UniRef90_Q2CIC2          Y V M P V T G G E P Q R I S F G E G R Y G S P V W S P R G
UniRef90_UPI000468E0A3   Y I M P A T G G E A T R I S F G E G R Y A T P V W S P R G
UniRef90_A3PM58          Y S V D I S G R N L K K V P L S V P A S D P A W S P
UniRef90_Q62I10          Y S V S S T G T G L R R L T R S S I D T E P F Y S P D G K W I Y
UniRef90_A3JY15          Y V M P A S G G E G T R I S F G E G R Y G T P V W S P R G D R
UniRef90_L8MZP2          K L W N L E G K V L R T L T G H S N W V N S V A F S P D G K
UniRef90_UPI000366F0DB   Y V M N A D G S N Q Q R I S F G G G R Y A T P V W S P R G
UniRef90_UPI00035D5F29   Y V M G A G G G G A R R I S F G G Q H Y S T P V W S P K G D Y
UniRef90_UPI0002FD5102   R L W N L K G E P L K T L T G H S G Y V E S V A F S P D G K
UniRef90_B4W8E2          W T V D L S G R V V A Q A G Y N G R G T D P A W S P
UniRef90_K9PFT4          L W N L Q G Q V L Q T L K G H S S E V N S V A F S P D G K
UniRef90_M1LSN9          E K V N L D G S S N Q I Y I D A D S S I I E I A W G P F
UniRef90_Q7ND80          D V P S G R C V R T L T G H G S W V W S V A F S P D G R
UniRef90_UPI0001F2A43F   D P A T G A L Q Q T L K G H I D W V E T V A F S L D G R
UniRef90_B2J0I0          L W N R N G Q L L Q T L T G H S S S V R G V A F S P D G Q
UniRef90_Q00808          D T A S G T C T Q T L
UniRef90_Q3MB32          R
UniRef90_A8YMC6          E V A T G R E L R T L T G H L G V Y S V T Y S P D G R Y
UniRef90_A5G2K7          F V M N A D G S N V Q R I S Y G H A R Y A E P D W S P R G
UniRef90_UPI00034572A9   H V G L M T D K Q I A S L T G H E Y R V N S V V F S P D G R
UniRef90_UPI000379B501   D V A T G S K L R Q L S G H G N L V C G V A F S P D G K
UniRef90_S4XYT6          V W R A D G G E P I V L R G H T D Q V Y S A A F S S D G E R
UniRef90_B8MUZ3          L W D P A T G T L R Q T L Q G H S G S V H A V A F S P D G K
UniRef90_C7RS72          D A E S G Q E I R S F A G H Q G P V T S V A F S P D G R R
UniRef90_A8P965          S A H S G E A L L E P M K G H T D G V R S V A F S P D G T R
UniRef90_K9QC24          K L W N R D G T L L I A L K G D K D E L T S V T F S P D G K
UniRef90_A7EJN8          D A A T G K S L Q T L E G H S N A V Y S V A F S P D G T K
UniRef90_UPI00034C7E2A   D V
UniRef90_D5QJ87          Y V M P A T G G D A K R I S Y G H G H Y G S P V W S P R G
UniRef90_Q2GV04          D T A T G A H R Q T L E G H G H W V S A V A F S P D G N
UniRef90_I4I5Q3          E V A T G K E L P T L T G H S R E V M S V V Y S P D G R Y
UniRef90_F9ZTH9          A E V A I N G K G L H F L Q L P G Q A N E G S W
UniRef90_A0ZAZ6          S I V G D K L Q E L R T F K G H K G R V N K L S F S P D G Q
UniRef90_S9PCE9          D A E S G R K L R S L S G H K G W R S V S W S K D G R R
UniRef90_UPI00034C056E   D S I S G E C L N I F R G H Q T V I W S V S W C P D R K
UniRef90_X0RCE0          T I K S L S S G Q S F D I P V Q G I A R S P I W S
UniRef90_UPI00047EAC18   N V K L G T C V K I F G H T D E V Y S I T F S L D
UniRef90_UPI0004678F42   Y A Q P A A G G E A V A V T P G A G S N A R E S V D G R H
UniRef90_UPI0003B3CE53
UniRef90_Q8Z0R1          D L Q R G E C V N T L W G H S S Q V W A I A F S P D G R
UniRef90_F4XNH8          D T E S G Q L I H T L Q G H T D F V N D I A F S P D G N K
UniRef90_K9TJ23          N L A T G E E E R T L T G H G W S V S A V A I S P D G Q R
UniRef90_D6TQG2          D V A S G R L L W T G S E H N K R I Y A V A F H P Q G H
UniRef90_A0D039          D V K S G K N I Q R L E G H T K T V Y S V A Y S P D G
UniRef90_V5DZH9          D T S S G K T L G Q P L S G H T D S V T S V A F S H D G K
UniRef90_E3FJZ6          F V M T A E G N N P L A L P M G K G G G L T P D W A P
UniRef90_K9UE38          E I R T
UniRef90_K9VGI2          H L E S Q K P I A T L T G H S N S V L S V A F S P D G Q
UniRef90_UPI000345A0BC   Q S R N G K L I N T L K G H R S E V Y G I C Y R P D G Q
UniRef90_D2SB14          R L W D V A T G Q P H S L T G H E N E I R G V E F S P G G R W
UniRef90_B0DF85          D A Q T G Q S V M D P L K G H D
UniRef90_K9ZCX6          L W N A D G S L L R A L P G N G D S F I S V I F S P D G K
UniRef90_UPI00034A6E6A   D V R T R E C R A T L Q E H T E R V F S V A F S P Q G K
UniRef90_J3NFF6          L W D A A T G V C L T T L D G V T S T L S F D K T G S Y L H
UniRef90_W4JUB2          D A T T H A A V G S P L E G H A S S V H S V A F S S D G K W
UniRef90_K9Z911          D W Q Q G T C R K T L H G H N S R L G A I A F R G D G Q
UniRef90_A7EU93          D T I T G E S L Q T L E G H S R S V G S V A F S P D G T K
UniRef90_UPI000406992F
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Multiple sequence alignment (positions 1–40)

Identifier	Sequence
UniRef90_UPI000311C94F	I L A T A S F D K T V K L W D T A T G K E I K T L S G H T N E
UniRef90_M2RD71	T R I A S G S D D R T I R I W D A K T G E P S M Q P L E G H S G R
UniRef90_G4THC0	S R I V S G S D D K T I R L W D A S T G Q P V G E P L Q G H E E V
UniRef90_M2PLA9	I K G H T S W
UniRef90_U9VLM4	S A S D D N T I R I W Q L Q S R D I P S L W G H H G I
UniRef90_W4JU56	T S V A F S P D S G S S D L T I R L W D A A T G A A M G D P L E G H T D R
UniRef90_X6ML19	S S D N T I Q I W D A A S G K Q L Q I L E G H S N S
UniRef90_Q3M8V4	R L W D L Q G R Q I A E L Q G H E N V
UniRef90_D7BXH8	F V R S V A F S P D G R S G S D D K T V R L G N V A T G E L R T T L T G H N F
UniRef90_UPI0001584B68	T A V V F S P D S A S D D H T V R L W N A T S G A H Q Y T L E G H S G G
UniRef90_UPI0003641D57	T A S A D K T A R V W D A K N G Q Q I A T L T G H Q G A
UniRef90_F5YNI8	L A Y S P D S G G A D N S V R V W N A E T G Q E L W T L T D H S S V
UniRef90_B6GXB6	A S G S G D K T V R L W G T T T G A L Q Q T L E G H L G S
UniRef90_B0E2M6	I A Y S P N S G S S D K T I R L W D A L S G Q S I M V L F R G S D P
UniRef90_D5G210	S S V A F S P D S G A G D R T I K I W D P A S G Q C L Q T L E G H R G W
UniRef90_A9GC88	T A S E D R T V R V R N A D G T G T P L I L R G H E G R
UniRef90_K9U0K8	
UniRef90_UPI0003490B52	S S S S D T S I R L W N L S L G S C T Q V W H G H S R K
UniRef90_B2WKK2	V A S A S Y D S T V R L W E A T T G M C R S T L E G H S R E
UniRef90_B4W111	T L A S G S G D N T I K L W N L E T G K A I S T L T G H D S G
UniRef90_B4VXA1	V Y Q Y G F R E R N R L V G H K Y G
UniRef90_G4TSD5	G L P R A L G A H N G S
UniRef90_S9P7U0	A F S P R L A T A H A D G T A G V W R L G G E P V L L K G H G A E
UniRef90_I7A3S4	D G K M L A I S N H D K D G L S R I Y V L P G D G G I P Q L V T R K G P S
UniRef90_Q10VX7	L K H Q S D
UniRef90_F4L7M0	S G S H D C T V K E W L V A S G E C L Q T L Q G H S D P
UniRef90_M2RC35	D D K T V R L W D A A T G R P A M Q P F E G H G D H
UniRef90_UPI0004127753	I F T K N F S R
UniRef90_B0D207	
UniRef90_R7S181	A F S P K E N R Y V A S G S S D Y T V R V W D V E T G T C I A G P F H G H A G P
UniRef90_E0ULM4	
UniRef90_UPI000363B937	E R N R L D V D A G E
UniRef90_UPI00030C4D3B	V A F S P D T G S D D K T I R L W D M Q T R Q C L K T W Q E H T N Q
UniRef90_Q8YTC2	I L A S G S N D K T V K L W D W Q T G K Y I S S L E G H T D F
UniRef90_UPI0003B364D2	L W I V A A Q A E N I H T L V E H T A A
UniRef90_K9TGT5	A S A S W D K T V K I W S L E P G R T T E A V T T G H G D R
UniRef90_F8PD52	I A F S P D S G S S D K I I R I Y D V S S G Q L V A G P F Q G H T M W
UniRef90_UPI0003683204	K V A F S P D S A L G D G T V R L W D P S A G A A V R T L E G G
UniRef90_W7X802	V A F S P D T S S F D Q T Y K I W N I E K G Y D L V N T I Q G H T D K
UniRef90_A9FTS8	A T G H G D G S V R L W D V V S G R A I R G I A G H L G P
UniRef90_D0LUU7	V V T A S F D K S V R I W N A D G T G D P M I L R G H D D W
UniRef90_UPI0002FA04AE	A F S P Q D D F L V S G S F D R M V R L W S V G T G E C L K I F Q G H S A A
UniRef90_X6LDC5	S G S A D K T I R L W D A T G K L I Q S L E G H S E R
UniRef90_W9X896	T A V A F S P D S A S V D Q T V R L W D A S T G Q E V R K L E G H T D F
UniRef90_F4Y1I4	I A S G S R D D N T V K L W N P K E E I R K L T L Q G H Q G F
UniRef90_UPI000344B4A1	V F A E T F G G
UniRef90_UPI000316416B	A S S S A D H S I R L W E P D T G K C L K R L Q G H S C W
UniRef90_M2QWD6	S S V V F S P D G T S G S S D H T I R I W D V R T G R P V P L E G H S D A
UniRef90_E0U5G7	G G I E D K T I R V W N L A S K N I W E L K G H W N T
UniRef90_A5UUK1	G R I V F A A S R G D G G A F D I F S A D L A G E R V V N L T A D P H P
UniRef90_Q8YZ23	A F S T S I A T A G N D K T A K I W K L N S P N S I I V R G H E D E
UniRef90_B4WUJ3	S A S N D G T I R L W E T H S G K C V H V F E G Y T N G
UniRef90_D0LUU6	A F S P D G A H V V S A S M D K S A R I W P S H S S D E L V V L R G H L D Q
UniRef90_K9X8J6	Y S S K I W S I A C S S D G S S N K T V K L W D F T G H N F K I L T G H N H E
UniRef90_X0KUP7	T L A S A S E D M T V K L W D T T T G E E R Q K L K G H D S A
UniRef90_Q228B1	I V F S E D G G S E D N T C K I L N V E N N F E Y I N T I Q G H T N S
UniRef90_F4KU47	V A F S P D G R T G S W D H T V K V W D L T G Q A L L S L Q G H S S W
UniRef90_B2WNC1	T A V A F S P D S A S E D S T V R L W E A G T G T C R S T L E G H C N V
UniRef90_UPI0002F51E73	G S H D K T A K I W N L D G S L V K N L T G H L D K
UniRef90_A0E7C7	I I A S G S D D K S I R L W D V N L G Q Q K A K L D G H N S G
UniRef90_R7RZU7	A F S P D G K Y I V S G S R D G T M R I W D A Q T G Q T E T R P L R G H T S E
UniRef90_B0DG97	V A F S P D G N D D C F I I R F W D A L K S Q S M L S L E E N C E G
UniRef90_Q7NMP0	S G S V D K T V R L W S R E G V L L S S L H G H T G R
UniRef90_M3FP52	V F S V A F S P D S A G S D G T V R L W D V A G H K A K K L T G H G G Q
UniRef90_UPI00037E38D2	A T G S A D R T V R L W D L S G N L I V E L K G H Q D E
UniRef90_UPI0002FF3A09	T G G R D N L V K L W T R E G E F L G D L R G H E G F
UniRef90_A7ERN6	L Q T L E G H S S W
UniRef90_R7SRG3	S G S E N G S V L I W D V K T H G I V A G P F V G H S S Y
UniRef90_M2QWJ9	A S G S A D K A I R L W D T R T G Q Q V A N P V R G H G N W
UniRef90_UPI000308D0EC	I L A S G S E D Q S V K L W D L S S G E C L K T L G H H N W
UniRef90_A0A010YLD1	A F S T R I A S G S G D S T I R L W N V E D R S Q I G E P L T G H T G T
UniRef90_UPI00047EA655	T L A S G S G D R T I K L W N Y H T G K C I K T Y T G H T N S
UniRef90_M2QW77	
UniRef90_Q8YTD1	T R V K F S P D G A S A S W D K T V K I W Q R D G K L L H T L R G H T D A
UniRef90_UPI0002D9A337	I A F S N D T G S E D N T I K I W D V E T G E C L Q T L R E H Q Q R
UniRef90_M1WRI7	S G S R D H T I K I W R P D G T L L Q T L N G H N G A
UniRef90_K9QWT8	T L A S A S A D T T I K L W D V T T G Q C S K T L Q G H V G M
UniRef90_D8FTG5	T M T G H L D S
UniRef90_UPI00036815B0	V S F R G K V N G Y W E I F V S D F D G Y N A R Q V T R D S S N
UniRef90_UPI000360B3FB	
UniRef90_Q2U9S0	S G S D D N T V R L W D P V T G T L Q Q T L K G H T D P
UniRef90_F5UAS8	R I A S A G S D G R V K I W N R E A K L L L N L K V D N S K
UniRef90_K9TDW0	S R D N T A R L W D L A G N P L A T L N G H S D S
UniRef90_D4ZY98	Q K T L M G H S N S
UniRef90_F5UF34	T L A T A S D D K T V K L W H K Q G K F L Q T L S G H Q E S
UniRef90_UPI00038079AD	T K I Y Y V S S R S G V K E I W A M D Y D G Q G E H A I T H L G E V
UniRef90_D2QTF9	I S F V S A R Q A T K G Q I W L M D R R G E G E A K K L T D L K T Q
UniRef90_B2IUC6	T I A T A S A D R T A Q L W N L Q G Q L L Q E F K G H Q N V
UniRef90_K9RBY5	I I A S A S F D K T I K L W Q V S N G K L L R T L K G H R E R
UniRef90_UPI0004409883	G S Q
UniRef90_W4JW78	V V F S P D G S S G S R D S T I R V W D T G T G T A V P L E V G T L G
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                                        50                60                70              80
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UniRef90_G4THC0         V W A V T F S P D G S R I V S G S L D S     T V R L W D V E T G E Q V G G P L
UniRef90_M2PLA9         I V T S V S V S S D G T R I A S G S   I D R T I R V W D A R T G E E V T K P L T G
UniRef90_U9VLM4         I W D L C W Q P N G S Q L V S A G A D Q T L K V W Q S S D G Q N H L L H S I H G
UniRef90_W4JU56         I V N S V A F S P D G L R I V S G S     D D L T I R L W D V V T G A A M G D P L
UniRef90_X6ML19         I V T S A Q F S R N G T K I V S G S W   D K T I R T W D T L S G K Q L Q S L K G
UniRef90_Q3M8V4         V S S A T F S P D G Q R I L T A S P       D K T A R L W D L Q G R Q I A E L Q G
UniRef90_D7BXH8         V D S V A F S P D G R T L A         G G G E G K I R L W E V A T G E L R A T T G
UniRef90_UPI0001584B68  V R A V V F S P D G K I I A S A S       D D K T V R L W N A T T G A H Q K T L G
UniRef90_UPI0003641D57  V W V A E F S P N G Q Y I L T A S         D K T A R V W N A K T G Q Q I A T T G
UniRef90_F5YNI8         V R A V A Y S P D G R F I L S G S A D N T L K I W D T E T G L A L R T S G
UniRef90_B6GXB6         V H A V A F S P N S Q L L A F G L     D D N T V R L W D L A T G V L K R T L E
UniRef90_B0E2M6         F Y T V A F S P D G K H I V C A T Q C     H I I R F W N A L T S Q C I L S P L
UniRef90_D5G210         V Y S V A F S A D G Q R F A S G A     G D D T V K I W D P A S G Q C L Q T L E
UniRef90_A9GC88         I F S A T W S P D G K H I V T T S     E D Y T V R V W S A D G T G T P L I L R G
UniRef90_K9U0K8
UniRef90_UPI0003490B52  V W S V A L H P Q Q Q I L A S G S E     D N T I R L W D L T T G A H I K T L P
UniRef90_B2WKK2         V R V V A F S P D G Q L V A S A S Y D S     T V R L W E A T A G T C R S T L E
UniRef90_B4W111         V I S V S F S P D G K T L A S G S       G D N T I R L W N L E T G E V I A T T R
UniRef90_B4VXA1         V W G V R F S P D S K M V A S A S       G D R T V K L W S L D G R E L A T L N G
UniRef90_G4TSD5         I I Y S V S F S P D S S R I V C G S   T D K T I R I W D A D T G Q L L G E P L R G
UniRef90_S9P7U0         L R T V A F S P D G Q R V V T A S     E D K T A R V W R V D G K G E P V V L R G
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UniRef90_Q10VX7         V Y A V A F S P D G K I I A T A S L     D K T A R L W D T E N G N V L A T L N
UniRef90_F4L7M0         V M S V S Y S A D G K K I L S G S V     D C T V K E W L V V S G E C L Q T L R
UniRef90_M2RC35         V W S V G F S P D G S T V V S G S G   D K T I R L W S A D V M A A L P S T Y A A
UniRef90_UPI0004127753  I S A V A F S P N K K I L A T S D A H G N I I L W Y E L T L D D G E Q F L T C Q
UniRef90_B0D207                                       Q M D H W S E K C V L R L A
UniRef90_R7S181         V R T V S F S P D G H R V A S G S V D Q T I C V W D L Q V N G S G D D A P Q A G
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UniRef90_UPI000363B937  V K A A C F S P D G Q T I A T A     G R D G I V R I W S L L N F K Q V K L Q G
UniRef90_UPI00030C4D3B  V W Q V S F S P D G Q T L V     S G G E D Q A V K L W D V A S G H C L T T I T S
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UniRef90_UPI0003B364D2  V N S V A F S P D G K T I A A S V G D S N F I R M W D V T L D R G S S R Y R S F
UniRef90_K9TGT5         V F G V S F S P D G R A I A S V S Q     D C T V K I W N A S N G T L L K T L V
UniRef90_F8PD52         I S S I S F S P D G R Q L A S G R     D Q T V R I W D V A S G R M I P F Q G
UniRef90_UPI0003683204        A F A F S P D G R L L A S V S E     D I T V R L W D P A T G A V V R T L E
UniRef90_W7X802         I T Y I T F S S N S K L L A T A S Y     D K T C K I W Q V E K G F E L I I S I
UniRef90_A9FTS8         V N S V A F S P D G R T L A S G S     D D S S V M L W K V E S G R V L R V F D G
UniRef90_D0LUU7         V T S A V F S P D G Q R V A S A S F   D K S I R I W H A D G S G D P V V L L G
UniRef90_UPI0002FA04AE  L F S V V F N P Q D E F I V S A S E     D Q T A R L W N I J Y T G E C L K T L Q
UniRef90_X6LDC5         V N S V Q F S P D G N R I V S G S W     D T T I R L W D A S S G K L I Q S L E
UniRef90_W9X896         V S A V A F S P D G S L L A S A S A     D R T V R L W D V S T G Q E V Q K L E
UniRef90_F4Y1I4         V N G V D F S P D G Q L I A T A S     N D K T V K L W N R Q G K L L H T L A G
UniRef90_UPI000344B4A1  V S S V A F S P D G K L L A T A   D T G G E I H L Y Q V S D W K H L L T C K G
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UniRef90_B4WUJ3         V L S V T F S P D S M L V A S G S E E T N L V R L W D I Q R C Q C V H L F E G
UniRef90_D0LUU6         V W S A D F S P D G Q R V V S A S L   D G S V R I W N A D G T G T P V V L R G
UniRef90_K9X8J6         I R S V S F S P D G Q T L A S A     G E D H T V K L W D L K T G Q C L R T L R
UniRef90_X0KUP7         V W A V T F S P D S K T L A S A S     D D K R V W L W D A A T G K E R Q K L K
UniRef90_Q228B1         I S S V A F S P D G K Y L A T G S Y D N T C R I W I V Q N E L Q M I D T V L E
UniRef90_F4KU47         G Y S L A F S P D G Q R L A S S S     D K M A K L W D L S M G Q V L L S L E G
UniRef90_B2WNC1         V T A V A F S P D G Q L I A S T S W D K T V R L M L E                             G
UniRef90_UPI0002F51E73  V R S V A W S P D G E L I A S A S Q     D K T I K L W N R D G K N V K T I S G
UniRef90_A0E7C7         I I Y S I C F S P D G A T L A S G S L   D N S I R L W D I K I E Q Q K A K L D G
UniRef90_R7RZU7         V Y S V S F S P D G K R L A S G S M     D H T M R L W D V Q T G Q Q I G Q P L
UniRef90_B0DG97         I S T V A F S P D G K Y I L S A S D F G     I R V W D A A T S H T E V D Y L
UniRef90_Q7NMP0         V N S L D F S A D G R I L A S A S     D D K T L L L W R L Y G P P L T A F R G
UniRef90_M3FP52         V F S V A F S P D G R T L A     S A G S D H T V R L W D V A G R R Q L A V L R G
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UniRef90_R7SRG3         V R A V S F S P D G R H V V S C S D D M T I R I W T E K S T S V E S P G D V S P
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UniRef90_M2QW77
UniRef90_Q8YTD1         V W S V N F S P D G K M L V S A S R     D K T V K V W R V E D G Q E I A T L T
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UniRef90_M1WRI7         V T S L S F S P D S K T L A S A S L D N T V Q I W S R N P T T G G F I T R P K V
UniRef90_K9QWT8         V T G V A Y S P D G R F L A S T S Y     D K A S Q L W D A A T G Q L L D T F
UniRef90_D8FTG5         V T S V A F S P D N Q T L A S G S     G D N T I E I W K L D T G N R W Y T L R G
UniRef90_UPI00036815B0  V A A P T W V P D Q L A L Y Y T T Y K V G G P N I I S H D L R S G N R Q R I T R
UniRef90_UPI000360B3FB           T R V V F S S N R T G N K E I W T M N W D G T D E K Q L T H
UniRef90_Q2U9S0         V N S M V F S P D G R L L A S G S     D D N T V R L W D P V T G T L Q Q T L E
UniRef90_F5UAS8         V N A V S F S P D G N T I A S G S     D D N T I K I W G L D G G L Q T R L K R
UniRef90_K9TDW0         L W T V T F S P D G T L A T G S R     D R T A R L W D L A G N L P L V T L N G
UniRef90_D4ZY98         V Y S V A F S P D N Q T L A S G S     S D K T I K L W D V T T G K L R E T L T G
UniRef90_F5UF34         V S G V S W S P D G Q I L A S A S     G D K T V K L W S K Q G K L L N S L T G
UniRef90_UPI00038079AD  S L S P H V S P D N S R V A F A S L G R T G W T I R M Y S L V L G R M V S F P S
UniRef90_D2QTF9         L E E Y V W S P D G K K I A M V L R D P D Y A D S A K T K V R K P Y V L D R Y H
UniRef90_B2IUC6         V S S V T F S P D G K K I A T A S W     D C T A R L W N L Q G Q L L Q E F K G
UniRef90_K9RBY5         L W S L R F S P D G L A S S F D S T V K L W N V A D G T L K K     T I F G
UniRef90_UPI0004409883  V C S V A Y S P S G R W I V S G S     D D K T I R I W D A E T G A P I R E P L
UniRef90_W4JW78         V Q S I A F S P D S R I V S G L D N G T L R V W D T E T G A A V S E A T F M G
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                              90              100             110          120
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UniRef90_G4THC0         L G P Q D S V W T V R F S P N G S Q V A G F Q D S T I Q L W D A D T R E P I V
UniRef90_M2PLA9         H T G W V Y S V A F S P D G H I T     S G S D D K T I R I W D A R T A E E V V
UniRef90_U9VLM4         H D S S I Y S V D W S P D G K L I A S A S A     D H T V K L W T A T G Q P V H
UniRef90_W4JU56         E G H T S W V T S V A F S P D G L R I A S G S L D R T I W L W D V V T G A A M G
UniRef90_X6ML19         H S G S V Y S V Q L S P D G T K I V     S S S F D K T I R L W N E S S G K Q I H
UniRef90_Q3M8V4         H K G W L F S A I F S P D G Q R I     L T A S     D D K T A R L W D L Q G R Q I
UniRef90_D7BXH8         H S D F V G S V A F S P D G R T L A G G G E R K I R L W D V A     T G K Q R
UniRef90_UPI0001584B68  H S D W V T A V V F S P D S K T I A S A S D D H T     V R L W N A T S G A H Q Y
UniRef90_UPI0003641D57  H Q G T V W A A K F S A D G Q R I I T A S A     D N T A R V W D A N T G Q E V A
UniRef90_F5YNI8         H G A P V N T L A Y S P D G L Y I A S G S E     D A S I K I W E A E T G L E L
UniRef90_B6GXB6         G H S R W V R S V A F S P D G R L L A S S S     D D H T V R L W D P A T G A L Q
UniRef90_B0E2M6         E D D E G S V F R V A F S P N G K H I L S R C G D N I I K V W D A L T G H T K V
UniRef90_D5G210         G H R G S V S   S V A F S P D G Q R F A S G A G D R T V K L W D P A S G Q C L Q
UniRef90_A9GC88         H H E R V N F A A W S P D G R R I V S A S D     D L T A R I W N A D G T G E P
UniRef90_K9U0K8                                                                      W Q V A D W K K L
UniRef90_UPI0003490B52  G H Q D W I K S I A F S A S G V L A     S G S L D K T I R L W D V E N K V C I G
UniRef90_B2WKK2         G H S S V V N A V A F S P D G Q L V     A S A S G D K T V R L W V A A T R T C R
UniRef90_B4W111         Y N L W V N S V S F S P D G K T L A F G S D     D N T I K L W N L E T G E V I A
UniRef90_B4VXA1         H N R Q V N S V A W S P N G Q T I A T A S N     D Q T A K L W S L D G K E L A
UniRef90_G4TSD5         H E N S V F A V A F S P D G S R I   V S G S M D H T I R L W D A D S G E P L G E
UniRef90_S9P7U0         H E G G V V S A A F S P D G Q R V T A S W     D K T A R V W R V D G K G E P
UniRef90_I7A3S4         A E G L D D G P E F S P D G K Y I Y F N S E R T G K M K I W R M D A D G G N Q T
UniRef90_Q10VX7         H Q S S V N A V A F S P D G K T I A T A S     Y D K T A R L W D T E N G K E L
UniRef90_F4L7M0         G H D N V V S S V S Y S A D G K   K I L S G S S D K T V K E W L V A S G E C L Q
UniRef90_M2RC35         P S D T V L H D G T A L Q G S R L A V L D D D E H P T P D T N V K P Q N T P S E
UniRef90_UPI0004127753  G Q H I S W V R A I A F S P D G S T I G S G A D Q N V K L W D T S N G E C L L
UniRef90_B0D207         G H N D K V A S V A F S P D G R H I V S G S W D K T I R V W D A Q T G Q S V I D
UniRef90_R7S181         H T D S I T S L A F S P D G N Q L V T G S I D H N I I Q W R L D G T A E D T P V
UniRef90_E0ULM4                                       F L V I G D T N N D I Y L Y S I K E E R H K
UniRef90_UPI000363B937  H K G G V L G G V N D I S F S P D G G K I A S A G G D S T V R L W D I S G K Q L
UniRef90_UPI00030C4D3B  H R N W V A A I A F S P D G R T L Q I R L W D V E S G L C T K T Q P G H R D V V
UniRef90_Q8YTC2         E H T D W V Y A V V F H P Q G K I I     A T G S A D C T V K L W N I S T G Q C L
UniRef90_UPI0003B364D2  G N E N V A F S P D G K T I L L S R C G Q S V I C L R D A A T Y T E I S T L E I P
UniRef90_K9TGT5         D P N L T S D P S K H S D C P V E S S H S D R I Y D K T V K I W R I D G T L L K
UniRef90_F8PD52         H S A W V S S V A F S P D G K Q V V S G S G D N T M R V W D V M T V G E T A K S
UniRef90_UPI0003683204  R Q G Y T V Y G V A F S P D G R L L     A S A L G N D T V R L S D P A T G A A L
UniRef90_W7X802         E T G T D W I P Q L S F S T N G K Y L A G C S N D K T C K V W N L E N H F E L Q
UniRef90_A9FTS8         H G V G V R S V V F S P D G R T L A S G A     G R A M R L W K V E S G H V L
UniRef90_D0LUU7         H T A Q I L S V S F S P D G R R V A     S A S W D K T V R I W N A D G S G E T T
UniRef90_UPI0002FA04AE  G Y N Q V F S V V F S P D G K T L A S G S R D C S     V R L W D V I T G Q I L Q
UniRef90_X6LDC5         G H L G S I L S V E F S P D G H     K I V S G S D D T T I R L W D V S A G T L I R
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UniRef90_UPI000344B4A1  H T N W I P S V A F S P D G R I L A S G S     D Y T V R L W D V G T G R C L
UniRef90_UPI000316416B  H T A W V W A V A W S P D S Q F L A S G S G D L S     I R V W D V K Q G N C I R
UniRef90_M2QWD6         H S T Q V L S V A F S P D G A R I V     S G S A D A T I R L W N A R T G G A A M
UniRef90_E0U5G7         K H T N W V Y C V A C S P D G R L I     A C G G S D H L I H V W D S V Q N R E V
UniRef90_A5UUK1         H P A Y D G E P A W S P D G R Q I A F T S M R D G Q L D I Y T L D L D S G D L R
UniRef90_Q8YZ23         H Q G R V N K L S F S P D G K Y I A T T S W     D K T A K L W N L D G T L Q K
UniRef90_B4WUJ3         H T K W V W S V A F S S D G K       F L A T G S A D T T I R L W N I S N K E C V
UniRef90_D0LUU6         H E N E V L S T R F S P D G K R V V     S G S M D K S V R I W N S D G S G R P T
UniRef90_K9X8J6         G H I R W V W S I T F S P D G Q T L A S G S G D H T V K L W D V K T G Q C L Q
UniRef90_X0KUP7         G H D G R V W A V T F S P D G K M L A S A S D D R T V R L W D T T T G E E R Q K
UniRef90_Q228B1         H T E M I S S V A F S P D S K Y L A T G S     L D N T C K I W D L N K L Q H I
UniRef90_F4KU47         H S E A I W S V I F S P D G Q R L A T G S R     D N T A K I W D L S T G Q A L L
UniRef90_B2WNC1         H S D L V T A V A F S P D G Q L V A S I S R     D T T V R L W E A G T G T C R
UniRef90_UPI0002F51E73  H N G W V N N V A W S P D G K I L A S A S D     D K T V K L W H R D G T L L K
UniRef90_A0E7C7         H S N Y V M S V C F S S D G T K L A     S G S L D N S I R L W D A N V G G Q Q R A
UniRef90_R7RZU7         R G H T S L V L C V A F S P N G N R I V S G S A D M S V R L W D A Q T G Q A I G
UniRef90_B0DG97         R G H Y D G I S V A F S P N C K H I V S G S N D A T L R V W D T L T G L S I V
UniRef90_Q7NMP0         H G Q W V S C V G F S P D       S Q A F A T A G G D G T L D L W D R Q G
UniRef90_M3FP52         H E D F V N D V A F S P D G R T L     A G A G D D L T V R L W D V A G H R E L
UniRef90_UPI00037E38D2  H Q G P V W S V C F S P D G R F L A T G S R D R T A Q V W K L P P L S K G G Q G
UniRef90_UPI0002FF3A09  H E D W V T D V Q W H P E F P L L     A T A G R D R T V K L W T P Q G T V L Q
UniRef90_A7ERN6         G H S G S V W S V A F S P D G T     K V A S G S H D N T I R L W D A V T G E S L Q
UniRef90_R7SRG3         D T S N P A V T S V A Y S P D G R R I I S G S I D G T I N G W D A D T G K S I G
UniRef90_M2QWJ9         E G H S D T I W S V A I S P D G T Q I V S G S A D T T L Q L W N A M T G E R L G
UniRef90_UPI000308D0EC  H A D R M W A I A F S P D D Q M V A T G S H     D A T I K I W N I I T G Q C I
UniRef90_A0A010YLD1     G H A G D A Y G V A F S P D G R T I A S S G G D K T V R L W D V A S Q K Q I G R
UniRef90_UPI00047EA655  R Q T N E V C C V A F S P D N Q       T I A C V S L D Q T M R L W D Y R N G Q C L
UniRef90_M2QW77                                 K T F W P K F R N V P T Y D V T G I H R S R G P L
UniRef90_Q8YTD1         H Q N W V A C I G F S P D S K T V     A S M E W N G T M R L W N L Q G Q E L K
UniRef90_UPI0002D9A337  G Y S N W I L S L A F S P D G Q T L A S S S Q D Q K I R L W D M K T G T S T L T
UniRef90_M1WRI7         T L N A H E D W I Y S V N I S P N G R E L A T A S K D G T I K L W N L D G K L L
UniRef90_K9QWT8         P V H L G M S V A F S P D S T K L A F G S F     D Y T V N I W D I T T K Q C Y
UniRef90_D8FTG5         H S D W V N C V A F N P N G Q S L V     S G S R D K T I Q M W D L K K G K W W Y
UniRef90_UPI00036815B0  N S G L N T S A A L S K S N R L A M I L S K S G S P D L Y V A N K D G S A K I
UniRef90_UPI000360B3FB  F G T I S A F P S V S P D G A K V A F T S W L R E S P R I M I F S L V T N R E L
UniRef90_Q2U9S0         G H T G W V K T V A F S P D G R L L V S G S     D D N T V R L W D P V T G T L Q
UniRef90_F5UAS8         H Q D Q V R S V N F S R E G Q T L A S A S A     D G T A L L W S L K G K E P I
UniRef90_K9TDW0         H S D S V G S V C F S P D G Q T L A T S S     R D G T A C L W D L E G N Q L V
UniRef90_D4ZY98         H S D W V S S V A F S R D G Q T L C     S G S G D N T I K L W D V T T G K L R E
UniRef90_F5UF34         H Q E G V S G V S W S P D G Q I L A S A S G     D K T V K L W S K Q G K L L N
UniRef90_UPI00038079AD  P G G T T I S P A W S A D G A H I A F S S D R S G D P E I W V S D A N G G G A H
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UniRef90_K9RBY5         H K K T P V R S V D F S P D G K I L A S S D S R G W I K L W N P E D G T I P A H
UniRef90_UPI0004409883  R G H D D W V R S V G F S P D G R H I V S G S N D K T I R I W D A E T G V P I C
UniRef90_W4JW78         H A G S V H S V A I S P D G R Y L     S G S F D K T I V R V W D A T T G A S V D
UniRef90_A0ZIJ6         H S E W V S V A I S P D G R T L A S G S D     D K T I K L W N L Q T Q G E I
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UniRef90_G4THC0         E P L R G H R S A V C A V A F S P D G S L M A S G S D E T I R L W D L E T S R
UniRef90_M2PLA9         K P L T G H D I V Q S V V F S P D G T C V I S G S S D C T I R V W D V R T G R
UniRef90_U9VLM4         T F E G H H N A V W A V K F S P D G T Y L   A S A G S D R N I R L W Y A N G
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UniRef90_X6ML19         S L K G H S N S V T S A Q F S P D G T K I I S C S W D K T V R L W D V A S R K
UniRef90_Q3M8V4         A E L G H K G W L F S A T F S P D G Q R I L T A S S D S T A R   L W N L Q G
UniRef90_D7BXH8         I T L T G H T E P V D S V A F S P D G R T L A S G S Q D T T V R L W   N V A T G
UniRef90_UPI0001584B68  T L E G H S S W V T A I V F S P D G K T I A S A S N D H T V R   L W N A T T G
UniRef90_UPI0003641D57  T L T G H Q S S V S A A E F S P N K Q R L I T A S A D N T A R V W D A N T G
UniRef90_F5YNI8         R T L R G H D S W I I N L A Y S S N G R Y I I S G S M D R T M K V W D L E S G E
UniRef90_B6GXB6         K L I D G H L D R V W S V T F S P D S Q L L A S G S D D Y L I R L W   N S T T G
UniRef90_B0E2M6         D H V R G H E D A I R S V A F S P D G K H I V S G S N D A T L R I W D A L T G L
UniRef90_D5G210         T L E G H R G S V S V A F S P D G Q R F A     S G A G D R T I K I W D P A S G
UniRef90_A9GC88         L V L R G H E L L V K Y A S W S S R R V V T A S Y D N T A R V W N A D G T G
UniRef90_K9U0K8         L T L K G H T N W I W S V M F N P D G S V L A S A S D D K T V R L W   D T R S
UniRef90_UPI0003490B52  V L A G H L H G I L A I A F V G D S D I L A S C G V D   C T I R L W D I T T
UniRef90_B2WKK2         S T L E S H S D D V T A V A V S P D R Q L V A S A S G D K I V R L W E A A T G T
UniRef90_B4W111         T L I G H N S G V I S V N F S P D G K I L A S G S G D N T I K   L W N R E T G
UniRef90_B4VXA1         T L N G H N H Q V K S I D W S P D G Q F L A T A S E D E   T V R L W S R D G
UniRef90_G4TSD5         P L R G H G S S V W A V S F S P D G L R I V S G S K D N T I R L W D A D T G A
UniRef90_S9P7U0         V V L H G H T K Y L R S A A F S P R G E R V V T A S D D G T A R V W R A D G H G
UniRef90_I7A3S4         Q I T A D E F N D W F P H P S P D N K Y I V F L S Y A P D V T G L N L Q D G S I
UniRef90_Q10VX7         A T L N H Q D W V N A V A F S P D G K I I A T A S Y D K T A R   L W D T E N
UniRef90_F4L7M0         T L R G H D S G I E S V S Y S A D G K K I L S G S S D H T V K E W L V A S   G
UniRef90_M2RC35         S P Q G H S G R V L C V A F T P D G T Q I V S G S E D K T
UniRef90_UPI0004127753  T L R K H P K R V Q A V A F S P K G D I L A C G D D Q T V S L W D L N T   S
UniRef90_B0D207         P L K G H D D R V T S V A F S P D G R H I V S G S N   D K T V R V W D A Q T G Q
UniRef90_R7S181         R S C E G H T D G V T T I A Y S P D G Q F I A S G S E D N T I R I W S A A G G Q
UniRef90_E0ULM4         F I Y K E H F G W I W S L K F S P K G N L F A S S S V D K T I K L W D V E T G
UniRef90_UPI000363B937  A Q M E H Q T V V N T V S F S P D G Q R F A       S G D D Y G V V R L W D T S
UniRef90_UPI00030C4D3B  T A I A F R G G G P G G R G A S G A E R I L A T G S D D H T I K L W N A Q T L D
UniRef90_Q8YTC2         K T L S E H S D K I L G M A W S P D G Q L L A S A S A D Q S V R L W D C   C T G
UniRef90_UPI0003B364D2  S H W V N I A V F S P D G R T L A I R D V G Y Y G D Q G R G E I V R L W D V D T
UniRef90_K9TGT5         V L E G H S E R V N S V A F S P D G R L I A S G S D D K M V K L W S K E G E L L
UniRef90_F8PD52         T A Q K H Y K W V N S I A F S P D G K H L A S A S   G D D T V R L W D K V T G Q
UniRef90_UPI0003683204  R T L E G H G S L V F A V A F S P D G R L L A S A L G D K T V R L W   D P A S G
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UniRef90_A9FTS8         R V F E G H G N W N V N S V V F S P D G R T L A S A S D D M T V R L W E V E S G
UniRef90_D0LUU7         I L G E H E D T V R W V S F S P D G Q R V A S A S W   D Q S V R I W N A D G S G
UniRef90_UPI0002FA04AE  T L W I H R G G I R S V I F S P N G Q T L     A S G G E D Q T V K L W D I K T
UniRef90_X6LDC5         T L E G H S K G V N S V Q F S H D G N R V V S G S A D N T I R L W D V T S   G
UniRef90_W9X896         R K L E G H T D F V S A A V A F S P D G S L L A S A S A D R T V R L W V A F S T G
UniRef90_F4Y1I4         T L A G H T D A I N R V S F S S D G Q L I A S A S N D K     T V K L W K Q D G
UniRef90_UPI000344B4A1  Q T F Q K H T N E I W S V A F S P D G N T L V S G S N D C T I R L W S V S T   G
UniRef90_UPI000316416B  I L Q G H H N W I W G L A W S P D G N T L A S A S Y D Q T I R     L W D S R T G
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UniRef90_E0U5G7         I C L N G H T D P V S S I A F S A D G K F L I S G S W D T V R M W D V   V T G
UniRef90_A5UUK1         R I T S H P S A D S Q P T W A P D G R R L A F T S W R D S N Q E I Y I T D V E G
UniRef90_Q8YZ23         T L T G H K D T V W S V N F S P D G Q L I A T A S E D K     T V K L W N R D G
UniRef90_B4WUJ3         F T F E G H T N W V R S V A F D P S S H Y L A S S S E D A T V R L W H L H N R E
UniRef90_D0LUU6         V L R G H Q S W V T A T S F S P D G Q R V L S T S A   D Q T V R I W E L D G   S
UniRef90_K9X8J6         N L H A E N H G V L S V T F S P D G F T L A S G S Y D H T V K L W N V K   T G
UniRef90_X0KUP7         V E G H K E F D V W S R E E I Q K L Q G N I A F S P D S Q T L T S V S Y D W T G
UniRef90_Q228B1         Q T I G E H T S G I S Q V A F S P D N K Y L A T V Y Y D N T C K I W N A E N E F
UniRef90_F4KU47         S L E G H S D A V R S V A F S P H G Q R L A T G S W D H T A K V W D L S     T G
UniRef90_B2WNC1         S T L E G H S G L V T A V A F S P D G Q L I A S A S S D K T V R L W E A G T G T
UniRef90_UPI0002F51E73  T L T S H D S W V L G T S F S P T D K I I A S A G W D N   T V K L W D W N G
UniRef90_A0E7C7         Q V D G H A S S V Y S V C F S P D G T T L A S G S N D N S I C L W D V K   T G
UniRef90_R7RZU7         E P L R D Y S D S V W S V A F S P D G K H I A A G S S D G T I R L W N T E T G K
UniRef90_B0DG97         G P L K G H D D M V Q S V A F S P D G S Y I A S G S A D C T V R I W D A L T G Q
UniRef90_Q7NMP0         R L E N R V I P P A T I F A L A Y S P D G T I I A S G G N D R A V R L W T R H G
UniRef90_M3FP52         A A L T G H S G A V R G V A F S P D G R T L A S S G N D G T V R L W D V R S R R
UniRef90_UPI00037E38D2  G N A S G N Q I A A I L T G H Q D A V T S V C F S P D G R L D R T A R L W D L S
UniRef90_UPI0002FF3A09  T L A G Y N A R V N T V A F S P D G R F L A A G S     D D S T I Q L W Q I D P H S
UniRef90_A7ERN6         T L E G H S N S V W S V A F S P D G T K V A S G S Y D K T I R     L W D A M T G
UniRef90_R7SRG3         R H P E G H S N R I N R I R F S P D G G R F V S A S G D H T L R V W D S T T L Q
UniRef90_M2QWJ9         G P L K G H S D W V F S V A F S P N G A R I A S A S R D N T I Q L W D A R T G D
UniRef90_UPI000308D0EC  Q T L Q G H N N W I W C V T Y S P D S L I L A S A N S D Q T I K L W N V K T G
UniRef90_A0A010YLD1     P M T G H T D E V Y S V A F S P D S L I L A S G A D D   T I R L W D V A T R T
UniRef90_UPI00047EA655  K T W Y G N T D W A L P V R F S P N G Q I I A S G S N D K T V K L W D W Q T H K
UniRef90_M2QW77         L Q M S G H A G D V F S V A F S P D G T R V V S G S R D K S V R I W D A R T G D
UniRef90_Q8YTD1         S F P T H K A P V V A V H F S P K G N M I A T A S R D G T A K     V W S L D G
UniRef90_UPI0002D9A337  L E G H D N L I S T L A F A P V I L G G D C L L A S G S D N T I K L W N Q Q G
UniRef90_M1WRI7         Q T I G G H K D W V N W V S F S P D G K L L A S A S E D E T V K I W Q R D     G
UniRef90_K9QWT8         R T I S G H H N W V W W V A F S P D G R T L A T G S S V E R I I K L W D V E T G
UniRef90_D8FTG5         S L V G H S D R V Y T V A F S A D G Q S L V S S S R D K T I R L W N L Q K G
UniRef90_UPI00036815B0  R L T R T R E V E A C P C W S P D G K T L C F T S G A Q G G A R L F T M P A S G
UniRef90_UPI000360B3FB  P F Y N Q R A S M N C C F S P D G K H V I F S S T A A G G P A Q L Y I A N P D G
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UniRef90_F5UAS8         T L K E H K N R V L S V A F S P D G Q T I     A T A G D D T T V K L W S S R G
UniRef90_K9TDW0         T F K G H Y S P I W S V M F S P D G Q I L A T A S Y D G T A C   L W D L E G
UniRef90_D4ZY98         T L T G H P D W V R S V A F S R D G H T L A S G S F D K T I K L W D V   R T G
UniRef90_F5UF34         T L S G H H E A V R R V S W S P N G Q T L A T A S R D K   T V K L W S K Q G
UniRef90_UPI00038079AD  R V T T F R G D V S P C W N P K S N S Q L A W V S G R T G L P Q I Y T M E A D G
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UniRef90_G4THC0         A V G E P L R G H R D T V C A V A F S P D G S R I  A S G S E D W T I R L W D V D
UniRef90_M2PLA9         E V M E P L A G H T R M I T S V A I S P D G S R I  A S G S G D R T V R V W D M A
UniRef90_U9VLM4         T P I G Q L S G H G G T V W T V T F S P D G R Y L I S G S E D G T L R R W D L T
UniRef90_X6ML19         Q L Q T L K G H S G S V V N S V Q F S P D G A T I I S G S F D K T I R I W D V
UniRef90_Q3M8V4         R E I A K F Q G H K N L V I S A S F S P D G Q R I L T A S S D K T A R L W E L
UniRef90_D7BXH8         E L R T T L T G H S D F V N S V A F S P D G R T L A S G S S D K T V R L W K V
UniRef90_UPI0001584B68  A H Q K T L E G H S D W I R A V F S P D G K I A S A S D D K T V R L W N A
UniRef90_UPI0003641D57  Q E V A T L T G H Q S S V G A A E F S P N G Q H V V T A S A D N T A R V W D A
UniRef90_F5YNI8         A T D T L E G Y S E Q Q S G M A L S P N G R F I A A T T G D S R T I R I R D A
UniRef90_B6GXB6         A I H Q T L E G H S G Q V Q S V A F T P N G E L L A S G S A D K T I C L W N L
UniRef90_B0E2M6         S V M G P L R G H D A M V T S V A F S P D G R Y I A S G S H C T V R V W D A L
UniRef90_D5G210         Q C L Q T L E G H T G S V S V A F S P D G Q R L A S G A V D D T V K I W D P
UniRef90_A9GC88         E P V V I A R H E A F L S A A E W S P D G K R V V T A S T D K T A R V W N V
UniRef90_K9U0K8         G E C R C I L P H T H R I W S V A F S P D G K T I A S G S E D S T V K L W H W
UniRef90_UPI0003490B52  K Q C L K T L Q G H L N S I D A I A A H P Q G T I L A T G G D D F S L R L W D I
UniRef90_B2WKK2         C R S T L E G H S Y Y V W A L A F S P D G Q L V A S A S G D K T V W L W E A
UniRef90_B4W111         E A I A T L T G H Y F S V N S V S F S P D G K I L A S G S G D N T I K L W N R
UniRef90_B4VXA1         K L L K T F Q G H N N A V Y S V S F S P D G Q T I A S A S E D E T V R L W S R D
UniRef90_G4TSD5         P L G G P L V G H S G W V K A V I F S P D G S Q I A S S S D D C T I R M W D A K
UniRef90_S9P7U0         E P V V I H G H T A R V V A A A F S P D G A R V V T A S D D G T A R L W R A
UniRef90_I7A3S4         E T I A E L F G G Q G T I N V P S W S P D G K R F A F V S Y R
UniRef90_Q10VX7         G K E L A T L N H Q S S V I A V A F S P D G K T I A T A S S D K T A R L W D
UniRef90_F4L7M0         E C L Q T L R G H T Y R V E S V S Y S A D G K K I L S G S A D G T V K E W L V
UniRef90_M2RC35         V S L W N A Q T G A P V L D P L Q G H D G E V I A S G S I D A T V R L W N A A
UniRef90_UPI0004127753  K C H K V L H E H T G R V L S L A F S P R G K T L A S A S S D E T V K L W K I
UniRef90_B0D207         S V M D P L K G H D A Y V T S V R F S P D G R H I V S G S D D S T I R V W D A Q
UniRef90_R7S181         L V G K P L E G H N Q P V Q S L M F S S D S Q M L V S G S F D E T V R I W N V G
UniRef90_E0ULM4         K S I Q T L Q G H K G G V W S I A F S S D G C L L A S S S E D K T V R L W D V
UniRef90_UPI000363B937  G R E K A K L E H P G G V N R I S F S P D G K I A T A G K D G T V R L W N Q
UniRef90_UPI00030C4D3B  C V K T L Y G H D G W V S A I A F S P D G Q T L V S G S D K T V K L W N V
UniRef90_Q8YTC2         R C V G I L R G H S N R V Y S A I F S P N G E I I A T C S T D Q T V K I W D W
UniRef90_UPI0003B364D2  D T E I I L W G H I D N V N S L S F S P D G R T L A T A G S V D A T V R L W D V
UniRef90_K9TGT5         Q T L S G R Y P H Q S Y V T S V T F S P D G Q R V A S A S W D N T V K I W N L
UniRef90_F8PD52         I V R G P L Q G H T K Q V S S V A Y S P N G K L L A S G S H D E T I R I W D I T
UniRef90_UPI0003683204  G A V R T L E G H G D G V I A V A F S P D G R L L A S A S W D N T V R L W D P
UniRef90_W7X802         K L A Y N I E T Q Q Q Q I L S I A F S P D G K Y L A S S S Q D H T C K I W N A V
UniRef90_A9FTS8         R A L R V F E G H G L M V T S V A F R P D G R T L A S G S R D M T V R L W E V
UniRef90_D0LUU7         E P V L L R G H E G L V L S A E F S P D G Q L V A S A S M D K T I R I W R A
UniRef90_UPI0002FA04AE  G Q V V Q I F Q H R A A I W S I A F S P N G Q T L A S G S E D Q T V R L W D I
UniRef90_X6LDC5         K L I Q S L E G H S D S V K S V Q F S P D G N K I V S G S E D K T I R L W D A
UniRef90_W9X896         Q E V R K L E G H T D F V N A V A F S S D G S L L A S T S N D R T V R L W D V
UniRef90_F4Y1I4         T L I T T L P G D R K L S S V S F S P D G K R I V A G A A G G S I V I W S R Q
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UniRef90_UPI000316416B  K C L Q V L Q G H T Y W V E A V A W S P D G Q L L A S A S S D Q T I R L W D A
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UniRef90_E0U5G7         K P L R F W Q G H Q N L I K S V A S S N K R F I A S G S W D K T V R I C D L S
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UniRef90_D0LUU6         R D P V V L R G H N N L V V S A S F S P D G Q R V A S A S R D G T V R V W N A
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UniRef90_UPI0002F51E73  K L L K T L L R G Y S D V N S V T F S P N G E V L A A A G W D S T V K L W S R E
UniRef90_A0E7C7         Q Q Q A K L D G H S N H L S V C F S P D G T T L A S G S S D K S I R F W D V
UniRef90_R7RZU7         P A G D P F R G H D R W V S V A Y S P D G A R I V S G S G D K T I R I W D V Q
UniRef90_B0DG97         S L L E P P I L S D Q V S S V A V S P D G R H I A S G S H N R T V T V W D V C
UniRef90_Q7NMP0         S Y L S Q F D K Q G A A V T S L S F S P N G N L I A A G G P D G L V W L W
UniRef90_M3FP52         F E T A L S G H S G A V R G V A F S P D G R T L A S S G N D R T V R L W D I
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UniRef90_A7ERN6         E S L Q T L E G H S W S V A F S P D G T K V A S G S Y D K T I R L W D A
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UniRef90_UPI000308D0EC  E C I Q T L K G H T S S V S V A F S P D G S M L A S G S Q D Q T V K L W D L
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UniRef90_UPI0002D9A337  E C L Q T L R G H S A W V Y A V A F S P G G E L L A S G S S D N T V R L W D W
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UniRef90_K9QWT8         E C L H T L Q G H E D M L W A I A F S P D G S T L A S T S S D N T I K L W D V
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UniRef90_K9RBY5         S L L K S L T G H R G T V R S V D F H P E N L I L A S A G E D G T I K L W D I
UniRef90_UPI0004409883  P I C E P L R G H E D S V V S V R Y S P D G R R I V S G S R D N T I C I W N A E
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UniRef90_G4THC0         T G Q P L G E P R Q G H Q G V I T S I G F S P D G T R V V S G S Y D E A I G L W
UniRef90_M2PLA9         T G K E V T E P L K V H D N W V R S V V F S L D G S K I I S G S D D H T I R L W
UniRef90_U9VLM4         D L A A S G I P I T G H T G S V W A V A V S P D G E T I A S A G S D N T V R L W
UniRef90_W4JU56         S M I G E I G G S Q V T L R S D T N S H N T P
UniRef90_X6ML19         S S G K Q L Q C L E G H L A S V N S V H F S S D G S K I V S G S Y D K T I R L W
UniRef90_Q3M8V4         Q G R E I A K F Q G H E G D V I T A I F S P D G Q R I L T A S R D K I A R
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UniRef90_B0E2M6         T G Q S A M D P L K G H D K G V I S V A F S P D G K Y I A S G S W D K T V R V W
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UniRef90_A9GC88         D G S G E P V I L A G H D N D V L R A V W S A D G K R I L T A S R D G T A R
UniRef90_K9U0K8         Q T G E C Y Q T L F G H T N W I R S I A F S P D G K T L A S G S V D C T V R L W
UniRef90_UPI0003490B52  T T G E C I R T L Q G R N N W I Q S V A Y S P T E D L I A S G S A D G T V R L W
UniRef90_B2WKK2         A T G T C R S K F E S P S G Y I T Y I D F S P D G Q V L
UniRef90_B4W111         E T G E T I D T L T I Y N L W V N S A S F S P D G K T L A S G N E D K T I K L W
UniRef90_B4VXA1           G K L L K T F Q G H N N A V Y S V S F S P D G Q T I A S A S G D N T V K
UniRef90_G4TSD5         T G Q P L G E P L V G H E D S V N A I S F S P D G S R V V S G L E D G T M
UniRef90_S9P7U0         D G H H G E S V V L R G H D Q A V V S A E F S P H G G R V L T A S L D K T V R V W
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UniRef90_M2RC35         T G V P V M K P L E G H S D T V R S V V F S P D G T R L V S G S D D N T I R I W
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UniRef90_UPI000363B937  S   G K Q L S Q F K G H G Q Q I F D V T F S P D G Q R L A T A G N D S T V R
UniRef90_UPI00030C4D3B  R S G E C L Q T L E G H T Q R V K S V A F H P Q G A I I A S G S D D H T V K L W
UniRef90_Q8YTC2         Q Q G K C L K T L T G H T N W V F D I A F S P D G K I L A S A S H D Q T V R I W
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UniRef90_F8PD52         S G Q M V A G P I Q A H T A R I N C V T F S P D G R I I A S S S G D Q A I K I W
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UniRef90_E0U5G7         T P W K G V R V L Y G H S G E V E C V A F S H D S T L V A S G S W D Q T V R V W
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UniRef90_R7RZU7         T R Q M V L G P L R G H E E A V P S V S F S S N G A Y I V S G S W D G T I R I W
UniRef90_B0DG97         T G H S M L D P F I G H N G C I S S V A Y S P D G R Y I I S G S D K T I R I W
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UniRef90_D8FTG5         A T G R S I C T L S H T N W I I A V A F S P D G K I L A S G S R D G T I K L W
UniRef90_UPI00036815B0  G T S G G E A I V L T Q G E D P S W A P N S R N L V F M R K K N G R K T L
UniRef90_UPI000360B3FB  S E G G E A Q R L T D G T G D A T N P A W S P D G T K I A F A W T R G G N F N I
UniRef90_Q2U9S0         A T G T L Q Q T L E G H T R S V V S V A F S T N G R L L A S G S R D K I I R L W
UniRef90_F5UAS8           G R L I T T L S G H T A K V L D A S F S P D G K K I A S A S M D G I I
UniRef90_K9TDW0         E G N Q L A I C S G H L E W I R S V A F N P N G N Q I L A T A S T D C T A R
UniRef90_D4ZY98         K T G K L R E T L T G H S D W V R S V A F S R D G K T L A S A S F D K T V K L W
UniRef90_F5UF34         K Q G K L L N T L S D H Q G A V W R V R W S P D G Q I L A T A S D D K T V K
UniRef90_UPI00038079AD  D I A S K R W V Q L T H D G R N D F P S W A P D G R H I V F E R Q T G R Q L E I
UniRef90_D2QTF9         S R D G G E P T S K A L D R P V R N P R W A K D G Q T I G V L V Q D D R Q T Y V
UniRef90_B2IUC6           G Q L L G P T S K A L R G H Q R G V N S P D G K T I A T A S Y D R T V K L W
UniRef90_K9RBY5         K T G E E I Q T L R S H R N P W T V Q F T H D G K Q L V S A S D S T I K L W
UniRef90_UPI0004409883  T R T P V C A S L R G H E N W V V S V G Y S P D G R H I V S G S Y D K T I R I W
UniRef90_W4JW78         T G A T L G E P F E G H T D M S V A F S P D G L H I A S G S L D G T I Q I W
UniRef90_A0ZIJ6         Q T G Q E I A T F T G H S Y V A I S P D G R T L A S G S L D G T I Q I W
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                                        250             260             270
UniRef90_UPI000311C94F   D     T A K G Q V I K T L S E H T D Q V Y G T S F S L D G K
UniRef90_M2RD71          N A V T C E   P M T Q P F E G H S D W V V S V A F S P D G T R
UniRef90_G4THC0          H V D S G E   P V V E F L R G H Q A R V N G V S F L P D G
UniRef90_M2PLA9          D A K T A E P R A   E T L T G H T G W V N S V A F A P D G
UniRef90_U9VLM4          Q         N G E L L D I L R G H H D W V R S V S F
UniRef90_W4JU56
UniRef90_X6ML19          D A S S     G K Q L C L E G H S A P V N F V R F S P D S S R
UniRef90_Q3M8V4            L W D L Q G R E I A K F Q G H E D W V N S A I F S P D G Q R
UniRef90_D7BXH8          N V     A T G K P R T A L T G H A E V Q G S V A F S P D G H
UniRef90_UPI0001584B68   N     A T T G A H Q Y T L E V H S   T I H S I S F
UniRef90_UPI0003641D57   P V E D L N
UniRef90_F5YNI8          D S V V     G R E L A Q F I G F N D D E W   I S V T P D G Y Y N
UniRef90_B6GXB6          N T M     T G A L Q Q T L E G H M Q P V S S V A F S T D S R
UniRef90_B0E2M6          N A L T G Q   S V V D P F I G H T H W I H S V S F S P D G R
UniRef90_D5G210          D
UniRef90_A9GC88            I W S A D G K E P L I L R G H A E P V Y S A E W S P D G R R
UniRef90_K9U0K8          D V     G T G E C I K T L Q G H T T Q V W S V A F S P D G E
UniRef90_UPI0003490B52   T W D V T T G K C I K I L P G H N G A V T G I A F S P D G R
UniRef90_B2WKK2
UniRef90_B4W111          N L     E T G E A I A T I T G H D S G V I S V S F S P D G K
UniRef90_B4VXA1            L W S R D G K V L K T F K G H N Q P V N S V S F S P D G Q
UniRef90_G4TSD5          Q I W D T E T G R P E S L R G H G A R I T A V A F S P D G S R
UniRef90_S9P7U0
UniRef90_I7A3S4
UniRef90_Q10VX7            L W D T E N G K V L A T L N H Q S S V N A V A F S P D G K
UniRef90_F4L7M0          L V A S     G E C L Q T L R G H D N V V S S V S Y S A D G K K
UniRef90_M2RC35          D V T P G D   S W L S S Q S G H G S T I W S
UniRef90_UPI0004127753   D A S S     D K C F K T L Q G H S K R V R S V I F A P
UniRef90_B0D207                                     D A Q T V A F S P D G R H
UniRef90_R7S181          D I E T R E T   V V G P F P A H E S W V Q S L V Y S P D G E R
UniRef90_E0ULM4          H L W D I S T R Q L A T L Q D N T H R V E C I A F S P D G Q K
UniRef90_UPI000363B937     L W D L S G K E L Q K L E G H Q G W V I A V S F S P D G K R
UniRef90_UPI00030C4D3B   D V     A T G N C V Q T L A G H T D W V L S V A F S P D G Q
UniRef90_Q8YTC2          D V N     T G K C H H I C I G H T H L V S S V A F S P D G E
UniRef90_UPI0003B364D2   D V     A T Q T E I G T L E G H T G W V N S V A F N P D G K
UniRef90_K9TGT5          S L     K D G T L L K T L Q G H T S G V L D V E F S P D G E
UniRef90_F8PD52          D V V T V Q   L V A D P F Q G H T D E V N N I S F S P D G K Q
UniRef90_UPI0003683204   S     P A T G A A V R T L E G H
UniRef90_W7X802          N   V E K G F E L I N C I K D H M G Y I N Q V A F S T D S K Y
UniRef90_A9FTS8          E V D S     G Q V L R V F E S H G H D V M S V A F S P D G R
UniRef90_D0LUU7          N
UniRef90_UPI0002FA04AE   N V     S T G E C N R T L E G H T N W V L S I A F S P D
UniRef90_X6LDC5          D V T S     G K L I Q S L K G H L S S V N S V Q F S P D G N R
UniRef90_W9X896          D V     S T G Q E V R K L E G H T S F I N A V A F S S D G
UniRef90_F4Y1I4            L W N P N G I L L I A T L K Q G S E P V E S V N F S P D G E
UniRef90_UPI000344B4A1   D L N     T G E C S E T L H G H C A P V W S S A I S P Q G N
UniRef90_UPI000316416B   D V     R T G D C L N V L E G H T N Q V W S V A W C P V A Q H
UniRef90_M2QWD6
UniRef90_E0U5G7          E V S S     T Q E V Q K L E G H S S P V L C V A F S P D G Q Y
UniRef90_A5UUK1          F S R Q G V A L F T P G L S G G T F V V A S P A W S P D D R W Q
UniRef90_Q8YZ23            I W N L D G K E L R T L R G H K N V V H N V T F S P D G K
UniRef90_B4WUJ3          N L     R T N Q C V Q V F E G H T N W V W P V A F S P D G Q
UniRef90_D0LUU6          N A H     G N G S P V I L R G H E D G I T S V D F S P D G Q R
UniRef90_K9X8J6          D V     K N S Q Y L K T L H G H T R G V L S V S F S P S G Q
UniRef90_X0KUP7          D A M     T G E E R Q K L Q G H G G R V W A V A F S P D G K
UniRef90_Q228B1          Q I W N V E N G F E Q V I T G H T D R I S S I H F S P D S K Y
UniRef90_F4KU47          D L     S T G Q A L L S L Q G H S E A V L S V A F S H D G Q R
UniRef90_B2WNC1          E     A G T G T C R S M L E G H S D L V T A V A F S P D G Q
UniRef90_UPI0002F51E73
UniRef90_A0E7C7          N
UniRef90_R7RZU7          D A E T G Q T V A G P W E A H D G R C V Q S A A F S P D G K R
UniRef90_B0DG97          D A   R T G Q S L M N P L I G H E Y H V L S V A F S P D G Q Y
UniRef90_Q7NMP0          R I W S Q T G T L L R T L R G H P D L I T D L T F S P D
UniRef90_M3FP52          D L
UniRef90_UPI00037E38D2     L W D L S G K Q I A E F S G H E D W V K S V C I S S D G R
UniRef90_UPI0002FF3A09   Q I W Q T N D Q L L K T W E A H R E R V T A I A W S P D G
UniRef90_A7ERN6          D A M     T G E S L Q T L E G H S D W V N S V A F S P D G T K
UniRef90_R7SRG3          D A   E T G H A V G E P F W G H K G W V L S V S W S M D G R Y
UniRef90_M2QWJ9          D V M P G D S         W M G S Q G G Q G S T N W S
UniRef90_UPI000308D0EC   D V N S
UniRef90_A0A010YLD1      D L     T T G K Q I   G A P L K G T G D V D A V T F S P D G R
UniRef90_UPI00047EA655   N W H     T G Q C L Q T F T G H R D K I F A I A F S P D G K
UniRef90_M2QW77          R L W D A K T G H L   H A F E G H T G D V N T V M F S P D G R Q
UniRef90_Q8YTD1            L W N R K G E E L Q V F W G H T D A V W G V N L S K D G K
UniRef90_UPI0002D9A337   D V N N     N T C L Q T L T G H E D S V C Y L V F S P D G
UniRef90_M1WRI7          N     S K N R T L V K T L K G H S D A I A S L S F S
UniRef90_K9QWT8          T I W D M N T K Q R
UniRef90_D8FTG5          R V N D G K G L L L H A I A D N S E S V F S V A F S G D G K
UniRef90_UPI00036815B0   S V L D V P T K Q V K D I R Q T A R D Q S Q P S W A
UniRef90_UPI000360B3FB   F I M D V V T R K L Q Q L T N N E G R N E N P T W A S D G A H
UniRef90_Q2U9S0          D     P A T G T L Q Q T L K G H I N W V K T V A F S R D G R
UniRef90_F5UAS8          K L W Q R D G T L I T S L S G H T A A V Y A V N F T P D S K W
UniRef90_K9TDW0            L W D L E G N Q I A T C S G H S G P L R S I C F S P D G Q
UniRef90_D4ZY98          D V     R T G Q L R H T L T G H Y G W V W S V A F S R D G Q
UniRef90_F5UF34            L W S K Q G K L L N T L S G H Q S F V W S V S W S P D G Q
UniRef90_UPI00038079AD   W S M L A D G T Q Q H A L T   H D G N N T M P G W S
UniRef90_D2QTF9          G Q Y T L D G K
UniRef90_B2IUC6          D L
UniRef90_K9RBY5          N L Q D V T N T K P Q T L K G H H G R V W S V N I S P D G K
UniRef90_UPI0004409883   D A   E T G A S I C K P L R G H E E W V V S V E Y S P D G R
UniRef90_W4JW78          D
UniRef90_A0ZIJ6
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Multiple sequence alignment

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UniRef90_X6MKC4          S K I A     S G S E D F T A R I W D V P   S G R E I Q L L E G H S N Q
UniRef90_UPI0003618F68               G G S R D K T A R L W D V T G E L K W T L T G H A D R
UniRef90_G2LFA9          V T D K A A N R V Q Y D L W V M P V S G G E A R Q L T S G P R S
UniRef90_UPI000368EA16   T S V S F T P D S A S T D K T V N F W S R D G I L L G T L K G H D D W
UniRef90_A0CQ08          T L A S G S D D K S I R L W S V N   T G Q Q K T K L N G H S S Y
UniRef90_K9TZV1          T L V S G S K D N T V K V W N L N   T G R E I K T L R G H K S Y
UniRef90_UPI0001DD04A2   S Q I A Y V R Q S N S D S T R S A I W L V D A R T G E E K P V A G Q D G N
UniRef90_UPI00037ABD43   D G R I V F S S A R S G D   V E L W V V N P D G S N L K Q L T T A Q G A
UniRef90_B0C7J1          T L A S G S A D R T V R L W D V K   T G Q C R Q T L S G H D L M
UniRef90_Q232S8
UniRef90_UPI0003646C77                                     P T T L K Q H S D L
UniRef90_UPI0004036702           S G S A D H T V K I W N A D G T L L K T L T G H Q A E
UniRef90_Q8Z020                                 A N T Q E I N R L Q G H A Q Q
UniRef90_X6LMA0                                             L K G H S D Y
UniRef90_R7RZS9                                             G H S G A
UniRef90_R4Z0P4          S T S A T D A G R W D T Q V R R L A G H D P R R L D L P L D G
UniRef90_X6NGY0                  S Y S G D K T I R L W D V A L E R K I Q L T G H L D N
UniRef90_UPI0003765372   T L A S G S G D A T V R L W D A   V T G G H K R T L T G H T D S
UniRef90_K9QGB8          T L V S G S S D K T I I I W N L   A D G S L I R T I S G H D S G
UniRef90_UPI000363032C   V A S G S E D Q T V R L W D A N T A   C L K T L R G H S N W
UniRef90_UPI000366FCD7      A T S S N D G T V R L W D   P H T G Q C Q R V L R G H G R R
UniRef90_K9QHD2          I A N V S E L A S Q S K A N K I F L   E N V L Q G Y S N Y N P
UniRef90_K1VPX5                  S A S D D H T V K L W S R D G K L L K T F I G H T D R
UniRef90_Q10Y55                  S A S A D K T I W S R D G K L Q K T L T N H K N R
UniRef90_B0BZW8          V A F S A D S G S S D R T V R L W D V D   T G Q S L R V M E G H T D Y
UniRef90_G2IJJ5
UniRef90_E4UXQ6                  S A S C D R N I K I W D A K G D C A K T L Q G H Q D W
UniRef90_K9WI60
UniRef90_UPI0004409A99           S G S L D D T M R I W D A Q T G A Q V G T S L E S H Q D W
UniRef90_D5G225          S S V V F S A D S G S D D R T V K I W D A   A T G A C V Q T L E G H G G W
UniRef90_W6Q9A6          A F D G R I L   A S G S S D K T V R L W D T   A T G V L E Q T L D G H S K S
UniRef90_M3DK62          A F S T R F A   T G G T D G T V R I W N L   V T G A T L R T L T G H T G A
UniRef90_B2JAL8          T A G A D N T A R V W   D F A G K Q V A E L I G H Q G N
UniRef90_B4VH44          S A S S D K T V K L W Q S D G T E L A T L Q E N R D R
UniRef90_R7S096                             D S K R E I R E P L R G H T N G
UniRef90_UPI0003116C17   D Q R I V   S A S D D G V I Q I W N A Q T G Q P L G Q P I Q G H D A P
UniRef90_K9V0R2          T I A S G S S D H T V K I W D T   L T G E C L K T L Q G Y T R G
UniRef90_A0CJ89          T L A S G S D D C S I I L W D V K T E Q Y K A K   L D G H Q G A
UniRef90_E0UJN6          V A F S R D G E S G S W D N T V R L W D K K G N P A E P L R G H E S T
UniRef90_K9XUL7          V A F S L D S G S H D N T I K L W D I N T Q   K C K Q V F Q G H E D G
UniRef90_U5QCX0               G G A D D G S I R L W D V S S A R L R R L R A H T G A
UniRef90_X6M0L9               S D D M I I R L W D I S S R   K E L H L W K G H T N T
UniRef90_A0YXM9          R I A     S G S S N G E V K L W A S D G T L I S T L I G H G G A
UniRef90_UPI000345C348   S S I S F S S D S G G W D N T V K L W S V E   T G K E I R T L E G H Q N W
UniRef90_D2B0U0                             V R L W D L A R R R P L P L T G H T G W
UniRef90_A0DQA0                  S G S W D K T I R L W D L Q G L E K A K L D G H S D Y
UniRef90_K9QR80                  S R D G T A K I W S Q D G R E I Q T L R G H R D W
UniRef90_UPI0004751E54   I L V S G S A D K T I K I W N L H   T G K T I R T L K D E L G E
UniRef90_X0B2T7
UniRef90_D6TK04          V V F V P N T T S T S E D D T I R W W D R R S M C L R T L R G Y T D L
UniRef90_A0YIY4          I A F S P K G D T A S G D K T V K L W K P D G T F V K T L E G H K D F
UniRef90_A0A031JD89      S R I A F A A         L G D L Y V M S S K G G V P E N L T R D G A L
UniRef90_D8G487          T Y V A F S P N S A S G S L D K T V K I W R T N G S L V K T L S G H T H N
UniRef90_X6N7D8               S S S E D K T I R L W S L L S G K E I Q R F E G H F R G
UniRef90_Q7ND85                                             V F A Q N F G G
UniRef90_D8G596          F S S Q V A F S T D A A S D K Q S L R L W Q V G E D V A E F H T I Q S Y T N S
UniRef90_K9SEZ0               S E D Q T L I L W D L S G S V I R I V Q A H A A S
UniRef90_UPI00036BCC8E
UniRef90_K9WNF6          T P V V F S P D G A S A A D D G T L K L W Q P D G T L L K T L S D I P S P
UniRef90_UPI00030F5AB5           A S G S W D E T I K L W Q V   T T G K Q I R T L T S H G N W
UniRef90_G4TIK5                                             L R G H D E A
UniRef90_B4VH43                  S A S S D H T I K L W Q P D G S L I K T L E G H S D R
UniRef90_K9W4X6                  K T E T V S T L Q Q V V T T I Q E R D R L N G H T D S
UniRef90_UPI00035D75E5
UniRef90_K3VFK8          V A S G S S D K T I R I W N A E   T G E C E R V L E G H S E D
UniRef90_A6DQI5          S Q I A F C A R V N G K K   E I Y L C D L D G N N L R K K T N F K S I
UniRef90_A0YR05                  S R D K T V K L W N P D G S L R S T L K G H T A E
UniRef90_K5W9W9               S A S W D K T V K L W D A   V T G S H L H T L E G H E D A
UniRef90_Q22D01          I A F     Q N K E I N I Y N L   A D L Q I I K N V K N D I Q N
UniRef90_K9RLA0          D S K I L   A S G S K D K I I K I W D I N   T G K C I K N L I G H T K T
UniRef90_G4TXA3          I A F S P D G A S G S I D R T I R M W D A Q T G A Q P F V G H R G A
UniRef90_E0UEV7                                 I R T L T G H S S S
UniRef90_K7VWK3                             R E R N R L E G H N D A
UniRef90_Q9XBD8          A F D G R V L A T A A G D S S V R L W D I A S R Q P L G N P L T G H T G M
UniRef90_X6M7R7               S S D N T I R I W D I S S G E Q L H L L D G H S C P
UniRef90_S4NDD8          T L A T A S Y D R T V R L W N V T D P K R P K P L T G H T S W
UniRef90_A7H870          F S T K L V A I R K L R G H W E L V M F D V D G K N P R V L L S E R T I
UniRef90_UPI0004759CCB   Q I A F A A           L G D I W L L T K G D K P R K L T S G S S M
UniRef90_I4G253          V A F S A D S G S E D K T I K I W S V E   T G E C L H T L E G H Q E R
UniRef90_UPI0004415457   A F S P N G K Y V A   S G S H D W T V R I W D A   Q T G V A V R V L R S H T N M
UniRef90_B0D5Y3                  S G L R D G T V R I W D A E T G R Q V P L Q G K E N Q
UniRef90_UPI00034BB766           S A S D I T L K I W H L E N G E E L F T L K G H T D W
UniRef90_N4UN28          A W L S V W P Q V I E D W D A C L W T L E G K C E H V L K G H S R S
UniRef90_K9WGI1          N T Q I A V S V S D D S   T V R L W N P T N P F S K V L H G H S G V
UniRef90_L8H0G0                  S T S V D T T L R V W D A T G E I V T T L E G H S K A
UniRef90_UPI0002D59BD1   V A F S P E G A S S G A D H I K L W N I N G E C L A T L T E H Q S W
UniRef90_A0YTJ7                                 H E L N R L E G H N E V
UniRef90_L1L7A5          T L A T A S Y D R T V R L W V A D P S R P K A K P L T G H T S W
UniRef90_UPI00035D643C   I V A T G D W A G A V E L W D A E T G K L I K S W T E H G G S
UniRef90_A0BQM8          T L A S G S S D Y S I S L W D V K T E Q L N A R L F G H I D S
UniRef90_UPI0004407AB6   V A S G S T E K I I Q L W D T E N G K L V G K F E G H T R W
UniRef90_K9ZPF4          L A F S P D R Q S G S E D G T L M R W N L E G K P I A I P F R H Q G I
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UniRef90_X6MKC4         I N G V Q F S P D G T K L L S Y S W     D K T I R I W D V A S G R Q L Q A L K
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UniRef90_G4TXA3           H A H G V S V A F S P D G F R I I S G S H D   E T V R F W D A E T G E Q I G Q
UniRef90_E0UEV7           H S N S V Y A V C V T P D G K R V I     S G S M D K T L K V W D L E T G K E L H
UniRef90_K7VWK3           N N Q R F R N V K F S P D N K I I A A I S A     N N T I K I W Q I N G E K L I
UniRef90_Q9XBD8           H T N T V T S I A F S S D G   R L L V T G S A D G T V R T W D I T S R T P I G E
UniRef90_X6M7R7           H S I H V S A A Q F S P D Q S K I V S C S Q     D R T I R L W D V L S G K Q L
UniRef90_S4NDD8           H D G T I Y L V A F S P D G R T L A S V G D D H T V R L W D V A D P R R P R G K
UniRef90_A7H870           I P   N A Y G G V Y S P D G T R V A F T I T D R A N S D V W V M N A D G T G A K
UniRef90_UPI0004759CCB    M A E D L H F P T W S P D G S K I A F Y Q S D P R N A W G R S T L Y T A D V T
UniRef90_I4G253           G H Q D W W Q V A F S S D G Q L L A S G S D D K T I K I W S I I E G E Y Q N I
UniRef90_UPI0004415457    D G M G G V Y E V A L S P D G S Y L V S G S G D D A L G V W N V T T G E R V G E
UniRef90_B0D5Y3           G H I K W V W S V A F S P D G K R I V S G S G D R T V R I W D V T T G G P V G D
UniRef90_UPI00034BB766    H T D W V R A V A V T P D G K R V I A S G S D S T I K I W N L E T G A E L K
UniRef90_N4UN28           H G S W V N S V V F S H D S T R V A S A S R     D R S V R I W D T E T G K C E
UniRef90_K9WGI1           A P V Y S V A F V S P T N F A K E D I S P V L A S A G T D K T I K L W Q F D G T
UniRef90_L8H0G0           V A D M S L N A C D I S P D G R R I V A A L A D C T V A V W D   V L S G E I V F
UniRef90_UPI0002D59BD1    A H T N S V Y S V A F S P Q G E I L V S G S     G D R T V K L W D C K T H T C I
UniRef90_A0YTJ7           G H Q K S I T S V S F S P N A Q M I A S S S Q D Q T V K L W D G Q D T Q I A A
UniRef90_L1L7A5           H Q G T I Y L L A F S P D G R T L A S V G E D H T V R L W D M S G L N K A R K A
UniRef90_UPI00035D643C    H T D G V N G V A F S P D G K T V A T A S S     D T R V G L W D T D T G A N R
UniRef90_A0BQM8           H R D Q V N S I C F S S D G T T L A S G S G V L N G D D N S I R L W D I K T G Q
UniRef90_UPI0004407AB6    S G W I T S V T F S P D D K K V A S G S Q D K S I R V W D V D T G K L L R E L L
UniRef90_K9ZPF4           Y S I N S V S F A L N S N Q I L F C Y G R R L G F     W T L G N S L G
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                                    130              140              150              160
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UniRef90_UPI0003618F68   T L T E Q H T G A A G V A F S P D G T T L A S G S L D Y         V Y L F D V K T
UniRef90_G2LFA9          E A S K V K A K I A D R L L Y R H W D S F       K E G R R T H I F V V P V E G
UniRef90_UPI000368EA16   I L E G H K N G V W G V S F S P D G M L A S A S T D A     T V K L W K R D G
UniRef90_A0CQ08          K F E G H S G G I L S V C F S P D G N T L A S G S A D K S I H L W D V K   K G
UniRef90_K9TZV1          T L R G H K G A V W S V A I S P D S Q K L Y     S V S D G T T I A V W N L N T G
UniRef90_UPI0001DD04A2     G A E W A E P L Q I Y D L L T Y R A D G A G Y L K P G F E K I F V I P A D G
UniRef90_UPI00037ABD43   A L T T T A G N E A H P A Y A P N G S R L L F S A E G S G A I D V W S M K P D G
UniRef90_B0C7J1          K T L A G Y I D Y S Y A L A W L P D G Q A L L S G S S N H T I R T W     E Q G
UniRef90_Q232S8          N T I Q G H S D F I F S V A F S S D G K Y I A T G S K D K T C K I W D A E K G L
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UniRef90_Q8Z020          T F P G H T D I V T D V V F S P D S K T I V S S S L D K     T I K L W R I D G
UniRef90_X6LMA0          Q S L E G H S D S V T S V Q F S P D G N L I V S S S Y D K T I R L W D V S   S G
UniRef90_R7RZS9          Q P L R G H T S L V L C V A F S P D G N R I V S G S A D K T L R L W D A Q T G Q
UniRef90_R4Z0P4          R L E G H T G G V L S V G W S P D G T R L V S G S T D G   T I R V W D A D E R T
UniRef90_X6NGY0          R L E G H L K D V N G V Q F S S D G T K I A S C S   D D K T I R I W D M   L S G
UniRef90_UPI0003765372   S L V G H T V S V Q S V A F S P D G G T L A S G S G D K T I C L W D V     V T G
UniRef90_K9QGB8          T L T S H L S S V M S L A I S P D S Q T L V S G S N D K T I K I W N L A     T G
UniRef90_UPI000363032C   Q T L K E H N D L I W S I T Y S P N G R L L A T T S S D Q M I K L W D T N T   G
UniRef90_UPI000366FCD7   R E L H A E T D H V W A E A F S P D G D L L A T A N D D D S V R I W   Y R P T G
UniRef90_K9QHD2          T L P G H S E A V R S V A F S P D G K I L A S G S E E K N S N I K L W D I D K G
UniRef90_K1VPX5          T H T K N R D S V I Y A V N F S P N G Q F I A T S G T D G T V K L W T     R Q G
UniRef90_Q10Y55            L L R T I R T K S V V K W V S F S P N G K M I A A A N A N G T V Q L W N L N G
UniRef90_B0BZW8          R V M E G H T S Y V N S V A F S A D G R R A L S G S Q D R T V R L W D V D T   G
UniRef90_G2IJJ5          K I T G L P D S P G A I A W S P D G R R I A Y T M Q V P G T G A T L G K A P E K
UniRef90_E4UXQ6          K I L P G H S N W V N S V A F S H N G K Y L A S S S N D A T I K I W     D S G G
UniRef90_K9WI60          K T L R G H S S R V W S V T I S P D S Q I L A S S S G D Q T I K L W Q L S T   G
UniRef90_UPI0004409A99   P P L E G H Q G I V W S V A Y S P D G R H I V S G S S D K T V R I W D A Q T G A
UniRef90_D5G225          Q T L E G H G G L V M S V V F S A D G Q R L A S G S G D K T V K I W   D A A T G
UniRef90_W6Q9A6          T L Y G H T D N V R S V T F S S N G Q H L A S G S N D   R T I K L W D T A T G
UniRef90_M3DK62          H T L T G H A Y A V F A V A F S P D G T R L A T G G T D S T V R I W   D P A T G
UniRef90_B2JAL8          E F K A H N A S V Y S A K F S P D G K H I V T A S A D K T A R     V W D T S G
UniRef90_B4VH44          T L D E H R S G V N D I S F S P D G E M I A S V S S D K A     V I W D K T G
UniRef90_R7S096          K P L R G H S D W V W S V A F S P D G R H V A S G S E D S T I R L W D A E T G Q
UniRef90_UPI0003116C17   Q P L R G H R A S V V S V A F S P D G L R I V S G S A D R T V Q L W N A Q T G Q
UniRef90_K9V0R2          I L Q A H T N R I K S I S F S R D G K N L A S G S S D H T I K     L W N I S T G
UniRef90_A0CJ89          A K F D G H S D A I R S I C F S P D G T T L A S G S D D T S I R L W D V   K A G
UniRef90_E0UJN6          P F R G H E S Y V T S V A F S S D G E M I V S G S W D K     T V R L W D K Q G
UniRef90_K9XUL7          K V F R G H S N V V N S V T F N P Q G N I L A S G S Y D Q T V K L W D I N T Y Q
UniRef90_U5QCX0          A L W P V H S G R V W S I G C A A D G R T I A T S G D R T L K T W A L P E   G
UniRef90_X6M0L9          Q T L E G H S N V V M S A Q F S P D G F R V V S G S S D N T I R L W   D A L S G
UniRef90_A0YXM9          T V P G H Q D Q V T G I S F S P D D T M M A S A S L D K     T I R L W Q T N G
UniRef90_UPI000345C348   T F N G H K N K V F S I N F S P T G K T L I S G S S D N T I K L W D V E S   S
UniRef90_D2B0U0          G A L K G R N G F V A T V A F S P D G R R L A T G G N D Y A T Q L W D V T T R R
UniRef90_A0DQA0          K Q L N G H D D S V Q S V C L S P D G S I L A S G G G D Y T I C L W D V   Q R G
UniRef90_K9QR80          V F R G H T D A I W G I S L S S D G Q T L A S   S G E D G T I R L W S V R H N S
UniRef90_UPI0004751E54   H         S S P V H G A A I S P D G K I I A S A S S D K K I R L W   N S R T G
UniRef90_X0B2T7                                                                     V M P E D W D
UniRef90_D6TK04          R I L R A H T H L V R S V V F S A D G S L L A S A S H D L T V C V W V V A T   G
UniRef90_A0YIY4          T L T E H E G D V L S V A F S P K G D L L A T A S A D     Y T V K L W K S D G
UniRef90_A0A031JD89      R L Q G S L G Q P G S P S W S P D G K Y V Y S N S F R E G T N Q I Y M V P T D G
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UniRef90_X6N7D8          K F E G H T A G V T E V H F S S D N R T I V S C S C D K T I R L W N V P S   G
UniRef90_Q7ND85          T L R G H I G W V R S A A F A P D G S L L A S A G Q D S T V K     L W D A A T G
UniRef90_D8G596          P L L G H T G C V   W S V A F S P D G R I L A S G S S D R T I R L W D I N T   S
UniRef90_K9SEZ0          D L S G S Q T Q P T V V W R V E F S A D G Q K L A A G D S N G Q V W I W E L A S
UniRef90_UPI00036BCC8E     L L D R R G G E A R Q Y T H V K Q G V D G F A W S P D G T K M L L T I T D A R
UniRef90_K9WNF6          A L K G H N S T V Q D I A F S P N G D T L F S A S G D G     T V K L W K L H N
UniRef90_UPI00030F5AB5   R T F T G H S F F V N S V A F S P D G Q F L A S G S A D S T I K L W   H V S T G
UniRef90_G4TIK5          P L R G H E D R V S S V A F S P D G S Q I V S G S Y   D K T I R V W D A E T G Q
UniRef90_B4VH43          T L S G H N A P V I S V S F S A D G Q Q L A S A S A D     Q T V K L W T I E G
UniRef90_K9W4X6          K T I S G H N Q T V N S V N F S P D G K I I A S S S A D Q T I K L W Q V S D   G
UniRef90_UPI00035D75E5   A G M K N N S N D H V L S C D G K M L G I C I R P T E T E A P I M Y T V P A S G
UniRef90_K3VFK8          V L E G H S N S V R S V M F L H D S K K V A S G S N D K T I R     I W N A E I G
UniRef90_A6DQI5          S L E S S P V F S P S G A Q I C Y V S S S V S S G K V S T P R L Y V M N A S K
UniRef90_A0YR05          K T L N G F D T E V W D V V L S P D G Q T I A A S S R G G I V K L W     D V N G
UniRef90_K5W9W9          L S P A H N S V V T S I R F S R T G R L L V S A S I D G A C R V W K F S S A W T
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UniRef90_K9RLA0          A L Q G C K H W V A S V T V S P D G K T I I S G S N N Q K I K F W Y I K   T G
UniRef90_G4TXA3          T L E V P I G T V T V A F S P D G R G V I S V S G D     V R L W N V E T G T
UniRef90_E0UEV7          S L T S H R S R V L A V C V T P D G K R V I S A S W D K T L K V W K L   E T G
UniRef90_K7VWK3          T L K G Q D N Q D N F M N S L C F I P D S K I L A A P S Q D N T I Q L W S I D G
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UniRef90_X6M7R7          L L L K G H S G Y I S E V Q F S P D G S K I L S G S Q D K T I R L W   D S S S G
UniRef90_S4NDD8          P L T G H K A A V R S V A F S P D G R T L A A G G D D G T I R L W D V A D P R R
UniRef90_A7H870          R L T R E P A L D L S P S W S P D G T R L A F V S D R S G T P Q I Y L M G A D G
UniRef90_UPI0004759CCB                                                               Y T A D V N S
UniRef90_I4G253          D T L E G H E S W I W S I A F S P D G Q Y I A S G S E D F T L R L W S V K T R K
UniRef90_UPI0004415457   P V R G H T P A Q V I S V A F S S D G G R V V S G S A D R T V R L W E W S P A D
UniRef90_B0D5Y3          P L R G H I D W D W S V A F S P D G T H I V S G S Y   D K T I R I W D A R T G I
UniRef90_UPI00034BB766   T L T G H I G P V R A L A V T P D G K R L I S G S F D H T L K   V W N L E T G
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UniRef90_L8H0G0          Y I R G H T R T V N A V L F S P G G S Y I L T T S D D G S L K L W S A R D   G
UniRef90_UPI0002D59BD1   K T L H K Q T N E V C C V A V S P D N Q T I A C V S L D Q T M R L W D Y   H S G
UniRef90_A0YTJ7          I P I T L R G H G D I V S S V S F S P D G Q I A S A S E D K T V K L W N L E G
UniRef90_L1L7A5          Y K T G E A G G A N R T S D A G S A E A A R D     T N R P Q A L G A P L
UniRef90_UPI00035D643C   G Y L K G H T D Q V N T V E F S P D G S A L A S A G N D R T A R L W D V A S   G
UniRef90_A0BQM8          Q K A K L D G H T D C V N S V Y F S P D G N T L S S C S Q D N S I R L W D I I E
UniRef90_UPI0004407AB6   E D G D W D A W V R S I L F S P D G R T L V S G L E N S L V K L W N L D G
UniRef90_K9ZPF4          E P L A L E S G M S P F S Y N C V F S P D G S R I A T S G S E T V K L W N L E G
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                               170            180            190           200
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UniRef90_UPI0003618F68   G E Q K Y L A G H T D S V S D V A F S P D G T M L A S E G R D   S T I R L W D V
UniRef90_G2LFA9          G A A K D L T P G D Y D A R D Y D V S P D G R E L A F A R N T D R D E A I I V P
UniRef90_UPI000368EA16   K L I N T L S K H K D A V L S V S W S P   Q N I I A S G S K D K T I R L W S Q
UniRef90_A0CQ08          E Q K A K F D G H Q Y S V T S V R F S P D G T I L A S G S A D K   T I R L W D V
UniRef90_K9TZV1          R A I R T I A G H T A D I N L V A V S P D G Q T I A T C S D D R   T I K L W N V
UniRef90_UPI0001DD04A2   G A P R Q L T F G P S H D G G P S W S R D G S T I Y F G A N R K A D W Q I Y A V
UniRef90_UPI00037ABD43   S D R K N V T K K A G R A F Y P R Y S P D S K R I T Y T L D P P G Y L A V Q V A
UniRef90_B0C7J1          R C R Q T W K A H E N W V W S V S C R P D G Q V L A S G S N A   V K L W D M
UniRef90_Q232S8          Q L I N T I Q G H H Q T I L S V A F S D D G K Y L A T S S H D Q T C K I F N I L
UniRef90_UPI0003646C77   R E I D V L K A S D D V L C L A F S P N G K I L A S G A G G Y D N T I K I W H
UniRef90_UPI0004036702   S L V M P L I G H Q D T V W G I A F S P D G Q T I A S S S L D K T I K L W T
UniRef90_Q8Z020          S L I N T W N A H N G W V N S I S F S P D G K M I A S G G E D   N L V K L W Q A
UniRef90_X6LMA0          K Q I Q S F E G L S R G V S S V Q F S P D G S R I V S G S Y D K H S M   W D A
UniRef90_R7RZS9          A I G E P L R G H S D Y V Q S V A F S P D G K H I T S G S G D S T I R L W D A E
UniRef90_R4Z0P4          E L G R L E G H T D W V W S V G W S P D G T R L V S G S N D   G T I R V W D P
UniRef90_X6NGY0          K Q L Q V L E G H L D K V S G V Q F S P D S S K I V S C S S D K   T V R L W D V
UniRef90_UPI0003765372   E P K R T L T G H E W F V N S V V F S P D G E T L A S G S G D   A T V R L W D A
UniRef90_K9QGB8          E L I R T I K A H D D A V I A L A I N P D R E T L V S S S N D K T I K I W N L
UniRef90_UPI000363032C   E C I Q T L K G H S S S V Y S A A F S P D G S   I L G S S G Q D Q T V K L W D L
UniRef90_UPI000366FCD7   R L T A N L L D H R G R V R S I A F S P D G S Y V A   T G C D D K L V R I W H V
UniRef90_K9QHD2          K E I L T L P G H S I S V R S V A F S P D G K I L A S G S S N I N N I K L W D I
UniRef90_K1VPX5          E L L R T L Q V D E D I V F C V S F S G D G R T L A T A G S D K T V K V W   S
UniRef90_Q10Y55          K L L K T L K H N Y P V Y S A N F S P D G K R M V T A S G D Q T V K I W R F
UniRef90_B0BZW8          Q T L R V M E G H T E Y L Q S V V F S A D G H Y A L S G S Y D R T V R L W D A
UniRef90_G2IJJ5          P E G A R W A E P L E V I D K V T Y R A D G     A G Y L K P G V S Q I F V V
UniRef90_E4UXQ6          K C E Q T L R G H S W T A I C L T F S P D D Q R L I S G S S D R T I K V W D M T
UniRef90_K9WI60          K E I R T L E G H N Y W A R T L A I T P D G E I L A S G S D D   N T I K L W Q L
UniRef90_UPI0004409A99   Q M G P P L E G H Q D L V R S V A Y S P D G R H I V S G S Y D K T I R I W D T Q
UniRef90_D5G225          A C V Q T L E G H G G W V R S V V F S A D G Q R L A S G S H D K   T V K I W D A
UniRef90_W6Q9A6          A L Q Q T L R G H L D S V H S I A F S P D C L L L A S G S R D E T   L K L W
UniRef90_M3DK62          A T L H T L T G H A Y A V F A V A F S P D R T L A T G G T D   G T V R I W D P
UniRef90_B2JAL8          K L L A E L K G H T N T V W S A N F S C D D K R I V T A S D D K T A R I W D L
UniRef90_B4VH44          T V L S S W Q A D D E A I T A V T F S P D G E T I A T A S E D K M V K L W D K E
UniRef90_R7S096          P V G D P L R G H D S Y V F S V A Y S P D G A R I V S G S S D N T I R I W D A Q
UniRef90_UPI0003116C17   P V G E P W Q G H A P V N A V A F S P A S R L F I V S G S D D R T V S I W D A
UniRef90_K9V0R2          D C L N I L Q S H T D D I M S V A F S P D G Q T L A S G S N D H   T V K L W N I
UniRef90_A0CJ89          Q K K E K F D N H Q D A I Y S A C F S P D G T I L A S G S K D K   T I R L W D V
UniRef90_E0UJN6          N L I E P F R G H E D Y V T S V A F S S D G E M I V S G S W D K   T V R L W D K
UniRef90_K9XUL7          C F K T W Q G Y S   N Q A L S V T F S L D G Q T L V S G G H D Q   R I R L W D I
UniRef90_U5QCX0          Q C L R T L Q G Y T N F V W S V A C S P D G S L F A G A H E D R K V R L W A A Q
UniRef90_X6M0L9          K Q L Q L L G G H S D A V N S V H F S S D G L K I V S G S Q D K   T I R L W D K
UniRef90_A0YXM9          K P I R T L L G H L Q G V N D V S F S P E R Q L I A S A S Q D Q T   V K V W
UniRef90_UPI000345C348   E E I F T L E G H Q S S V N S L S F S P D G Q I I A S G S E D   N T I K L W N L
UniRef90_D2B0U0          E V G T G L A G H G G A V T A V R F S P D G S V L A T S S A D   G L A R L W D A
UniRef90_A0DQA0          Q Q K A K L N G H N N C V N Q V C F S P D A N T L A S C S Y D   A T I R L W D V
UniRef90_K9QR80          P L P K A M T W G E A A S G N V V F S P D A Q T F   G T T G R Y T K A K L W S
UniRef90_UPI0004751E54   E P L R T L N G H K G D V Y S V T I S P D G Q   L L F S G S A D K T I K I W E L
UniRef90_X0B2T7          A C Q A T L E G H G L G V Q S V A F S P D G R   L A S A S Y D H N V K I W D A
UniRef90_D6TK04          Q L L R R I E G I T G Y I W K V A F H P V T R Q L A C G T D D P   V I R L W D S
UniRef90_A0YIY4          T L I T T L K G H E N W V R G V T F S P K G D L L A T A S Y D   S T V K L W K P
UniRef90_A0A031JD89      V S K P F W H L P E P H M S M P A W S P D G T K M A A I Y E G L L K I W P V A A
UniRef90_D8G487          Q V K E K L T N H S S F V F S V S F S P D G K T L A S G S A D K T V K I W V V D
UniRef90_X6N7D8          R E A K K L E G H T D L V T G V K F S A D E R L I I S C S R D Q   T I R I W D I
UniRef90_Q7ND85          R C L A T L Q G H T G V V H S V A F A P D G S L L A S A G Q D   S T V K L W D A
UniRef90_D8G596          R T L K I L S D H E S W V L S V T F D P N G K F L A S S S A D Q   T I R L W D I
UniRef90_K9SEZ0          L P A N N H S G S N W D S D E I   L A A A P G E N T G T N E L   D R T
UniRef90_UPI00036BCC8E   P E P E K I D G E D K P T P W V I D R L Q F K E D G V G Y L D R Y R Q H I Y V Y
UniRef90_K9WNF6          R L L K I L R G H T A G I W G I A F S L D G Q L I A S S S S K E T I   L W R K
UniRef90_UPI00030F5AB5   Q E I R T F T G H C D A V W S V A F S P N G N L A S G S W D K   T I K I W Q I
UniRef90_G4TIK5          S L G E P F R G H E D R V S S V A F S P D G S R A V S G S Y D M N I R M W D V E
UniRef90_B4VH43          E E L Q T L T G H A G D V V S F S G D G Q L I A T A S Q D K T V K L W T I
UniRef90_K9W4X6          R L L K T L S G H N A G V I S I N F S P D G N T I A S A S E D K I I K L W Q V
UniRef90_UPI00035D75E5   G H P K R I S K   K G P S F P H C W S L D G K M L L F A G S R E G E F E I Y K I
UniRef90_K3VFK8          K C E Q V L R G H S D W V K S I V V S H D S I K V A S A S D D K   T V R I W D A
UniRef90_A6DQI5          L T T K P L F N D R S E R V S P D W S K T S N L L V Y S K K M G R Q Y V I A T C
UniRef90_A0YR05          V L L A T L E A H Q G G V K T V A F S P D G Q M L A T G S E D Q T V K L W K L Q
UniRef90_K5W9W9          C I A Q V N H P E R I F I L S I A V S P D E T I F A S G Q G H P A K D I V L H S
UniRef90_Q22D01          E Y I N T I E A H S D S I S S V A F S A D G K Y L A T G S Y D N T C R I W I V Q
UniRef90_K9RLA0          R C F R T I R G H D K W I S S V T I S P D S R I L A S G S G D R T V K I W D F
UniRef90_G4TXA3          E I D Q P L K D H T S K F I S V A F S P D G L R A I S S S N N R T V R L W D A K
UniRef90_E0UEV7          K V L H T L K G H S N S V Y A V C V T P D G K R V I S G S M D K   T L K V W D L
UniRef90_K7VWK3          Q G I K T L K G H K F P I W S I S C S L N S K N I I   T A D L G G F I I I W S
UniRef90_Q9XBD8          P I G D P L T G H T S V T N G V A F S P D G Q I L A S T S G D K T V R L W N V A
UniRef90_X6M7R7          Q Q I R L L S G H S D M I K R V Q F T P D G S K I I S Y S T D K   T I R L W D V
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UniRef90_A7H870          S S P R R L T F Q G N Y N Q T P A W S P R G D A I A F T A R D E R K F D V F V V
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UniRef90_A0YTJ7          Q L L R T I T A H Y S P L N W V S F S P K G D V I A T A G N D G T A R L L T P R
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UniRef90_X6M0L9            A S G K Q L Q I  L K G H S S S I  Y S V Q F S P D E F T I  V S G S D D N T I  R L W
UniRef90_A0YXM9            Q R D G K L L Y T L R H D D A V T S V S F S P N G R I  L A S A S R D Q T V R L W
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UniRef90_Q7ND85            A T G R C L A T L Q G H T E P I  R S V V F S P D G H R L A S A S H D R T V K L W
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UniRef90_K9SEZ0            D Q I  T Q T A T I  A A H D G D V L G L R F S P D G R S I  A T S S T D   T K V
UniRef90_UPI00036BCC8E     G G E G E P V Q V T F G D F D D S S P V W S P D G K W I  A F T S N R N T N S D I
UniRef90_K9WNF6            D G I  S Y   R R L K E P S P R F G S V A I  S P D S Q T I  A T V     G T D Q S I
UniRef90_UPI00030F5AB5     S T G S E I  C T L S G H S N Y V R S V A F S P D G G Q S I  V S G S D D D T I  K I  W
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UniRef90_B4VH43            E G E L Q T L T D H K D G I  W Q V T F S P D S Q R L A T S S K D     R T I
UniRef90_K9W4X6            S D A K L L K I  L T G H T N W V N S V T F N P D G K L I  A S A G A D K T I  K L W
UniRef90_UPI00035D75E5     S A R G G K E R I  T N T R G M D D C P E Y S P D G K Y I  Y F S S N R T G S M H I
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UniRef90_E0UEV7            E T G K E L H S L T G H S G W V R A V C V T P D G K R V I  S G S K D N T L K V W
UniRef90_K7VWK3            A N G E K I  K T W K A G N Q S I  F D V S F S P D G K T I  V T A     G G D T T I
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UniRef90_X6M7R7            S S G R Q I  L T L E G H E G D I  N G I  H L S P D G S K L V S C S E D S A I  R L W
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UniRef90_G2LFA9           I L Y E R A T G K L R R L S D K D I S F D E L A W S P D S Q
UniRef90_UPI000368EA16    L W S S D G K L L K T L S G H R D A V Y S V A W S P D G R K
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UniRef90_UPI00034A77D5  V M G V C F S P D Q R M L A T A G F D K T V R L W H R D G T L L G     V L E G
UniRef90_UPI00034CCD50  V I S V N F S S S G K E L V S G       G G N N T I K L W D V T T G K L T F S
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UniRef90_X6MAK5         V R G A L F S L D G S K I I       S Y S A D R T I R I W D V G S R N Q L K I L E G
UniRef90_G2LDA0         P S D L R W S P D G K Q L L F S M L V P D P D S P L P I K L P E A P K G A Q W A
UniRef90_B9XAV5         L R S A A F S P D G K Y I V T S       G E D G Y A R I W D A N N L E R I D D L P
UniRef90_B0CFV1         V W S V S F A H S S N L L A S G S Q     D R S V R L W N I A K G K C F R   T F
UniRef90_K9S353         V L T V A F S P D G Q Q L V S G S     V D G S L K F W R R D G H L L R T L Q G H Q
UniRef90_K9XJR2         V W S V A V S P D G Q R F A S G S     S D N T A D V W D L A T G K F L C T L A G
UniRef90_B4WRJ5         V R A V A I H P D G D R I A     S A G A D R V I K L W S L K N G L C L K T L A G
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UniRef90_Q115C0         V N S V A F S P D G K I L A S G S D D K T I R L W E V Q T L G D W G R G E Y F G
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UniRef90_D6U864          H P H A V F T L A W S P D G H L L A S F G F D G Q I R L W K R R Q S E T T T C V
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UniRef90_A8ZL84          H T D L V N T L A Y S P D G T S L A T A S R   D N T V K L W S K E G S L I T
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UniRef90_G9NQ96          W D N V V R L W E V S T G S H I
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UniRef90_A7BVK1          H E H V V E H A A F S P D G K L V V T A S W D G T A R V W N A E S G E E I S E L
UniRef90_X0EM19          H S D N V N S V V L S H D S K K L A S A S D   D K T I R I W D I E T G E C E
UniRef90_M5C8K5          D A H H S S V E S V T F S P D G K S V V T G H T S G E I C V W S V Q D G V L T H
UniRef90_UPI000441274B   G H S S A V R C V A V S P N G N Q L C S A S E D Y T I R L W D A E S G S P I G E
UniRef90_D5SQV5          P N G V V A S A R Y S P D N Q W I V T S S W   D N S V K V W K A A T G E S M V
UniRef90_Q6W219          P N S G F I G D A T F S P D G H L V A T A S S Y G R I V L W D A A K S G H E A L
UniRef90_UPI0003498F56   H T G F V F Y V T F S P D G Q T L A   S G S A D N T I K I W D I K T G Q C L R
UniRef90_K5W1J6          E H L P I S S V A I S P D D T I Y A A G L G N G A M T I L L R S T S D D H W S H
UniRef90_K9UGJ3          H T N W L R A L T F S P D S R T L G F D C T I R L W D V N T S E C L R T F A D R
UniRef90_UPI00035EEDAD   H Q G L V L L S V Q F S P Q G D R I V T S G   G D G T A Q L W D L Q G Q E L T
UniRef90_A5UV81          H T G F I G G V A F S P D G A T L S V R L W D V A S G K E I S G F S F R T A L D
UniRef90_X6NVH3          G H N K F I N A V H F L P N D N T K I I S C S   A D K T I R L W N V F S G E Q I
UniRef90_UPI000372B8FA   H T G A V L S V A W S P D G Q Y L A   S T G N D G T A R L W N T S T G Q
UniRef90_T5AJE2          H Q G D K V N S V A F F N D G R L A S G S D K T V K V W D V T G L L L W T L
UniRef90_H1Q5N2          S P W M A F S P D G T   V F A T G G D E F S P V Q L W D A R T H K R L
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                              130         140         150         160
UniRef90_UPI0003630902   D P L P G H G G T V Y L L A F S P D G R T L A S A H D D H A V R L W D V A A P D
UniRef90_UPI00037DDF5E   K P E L P Q P P P S R R L N Q L E G G Q T E P R P D P P Q T I N T R V L R S D G
UniRef90_K9TH25          K L R G H S S W V Y S L A F S P D G I T L A S G S R D T T L M L W N V H     T G
UniRef90_UPI0002D3EC77   N W E A K Q R Q V M S V S F S P D S Q R L A T A G A D G T V C L W N L Q G K K L
UniRef90_K9X6Y3          Q T L W G H S S W V H A V S F S P D G Q L L A S G S R D K T V K I W D W   Y T G
UniRef90_D4ZVZ4          T T L R A H T N Q L Y A V A F S Y D H Q L L V S A G D D R T I K L W N V R P T P
UniRef90_D4ZXP5          T L S G H S H W V L A V A P D G K R A V S A S G D K T L K L W D L E     Q G
UniRef90_D9TEL1          I E D V F T G W V W P M L T D G R R G R L V V       G D A A G V V R L Y D T R G
UniRef90_D6TBP7          L R D L D H P D T V F S G V A W S P D G E R L A S G T L L Q G V L V W D G T A R
UniRef90_Q8YL09          Q T F L G H D A C V W S V V F H P V G Q I L A T A G E D N T I K L W   E L Q S G
UniRef90_X6M0D8          Q I L E G H S D F V F G A R F S P D G S K I V S C S A D K T V R I W D F P   S G
UniRef90_UPI00034BC177   R K V Y G Y S N W I L S V A F S P N G Q M L A S S S E D Q R V R L W   D V T T G
UniRef90_K9UYF4          T L T G H K R P V F A V A W S S D G K N L A S A S I D S     T V R L W D S E G
UniRef90_H0PYK0          P A Q A D T V Y A L A F S P D G S H L A T G G F D G S A R L W D L A G C T R P G
UniRef90_UPI00037DA424   L R L T G H A D W V F S V A F S P D G K I L A S G S Q D E T V S L W   E V A S G
UniRef90_X8IUZ2          G P L K G H S H R V Y S A E W S P D G A H V V S G S A D S T I R I W D T Q T G E
UniRef90_UPI000345CA98   S L I G H Q A G V N G I A I G P D G K T I A S A S S D N     T V K I W N Q K G
UniRef90_UPI00034A77D5   L N T F G N G D W M T S V K F S P D G Q I L A A S G A N A T V K L W R T D     G
UniRef90_UPI00034CCD50   K T F S G H S D T I Y S V S F S L S G K L I V S G S A D K T I K L W D V A S   G
UniRef90_M5BLZ2          P F A G H G G K V Y S V L F S L D G T Q I I S G S Q D S M I C V W D A N Y T T S
UniRef90_UPI00006D0360   Y T I E N H P N Q I L S V I F S S D G K Y L A I G S K D S T C K I W K I K N G L
UniRef90_S7J330          I L D E T F G T Q G N P T F S P D G S R I V F V S N K D G V P R L Y I M D P Q I
UniRef90_X6NMS1          T S K I H S N V V E K A Q F S P D G Q S I V S C S R D N T V     L L W D V K S G
UniRef90_F8CA54          R L T R V P Q G C F E P A V S P D G K E V A F V C S R E G D P E I Y A A N A D G
UniRef90_X6MAK5          F L N G H S G N V T G V Q F S P D G S N I V S C S S D T I R L W D I S S     G
UniRef90_G2LDA0          T D G K Y S Y D D P E W S P D G R Q V Y V S A I R R D D W E F E I Y V I N L A T
UniRef90_B9XAV5          L I I K H G T N D V C F A A F S G D G R L I V T T G Y D Y T A R I W   D A V D G
UniRef90_B0CFV1          A H Q Q E G F V S T V A I S P D G H L L A S G G Y A Q D N K L K I W D L D N   D
UniRef90_K9S353          T I P T Q I G G I W S L D F S P D G S S L I V G G S N D L     I E E H S I R G
UniRef90_K9XJR2          R Q L L G H S G A V R A I A F S P D A Q Y L I S G S S D K T I K I W D F R T   G
UniRef90_B4WRJ5          K T L E G H K D Q T V A I A F S K D D R L L G S V S V D T T I K L W   N L Q T D
UniRef90_D5G220          Q T L E G H G G S V N S V A F S P D S K W V A S G S S D S T I K I W D A A T G S
UniRef90_D6U864          A C L S G H T N C G M G L A F S P D G S R L A S A S W D H T I K L W D V A   S G
UniRef90_UPI000364BCB5   R T L T G H S N W V R S I A F S P D G K I L A S G S F D K T I K L W   N L A T G
UniRef90_H0B486          H I L R G H E D W I G G T A W S P E S R Y L A T S S T D L T A I V W   D T T D G
UniRef90_A8ZL84          T L E G H T D A I W A L A Y S P D G S T L A T A S D D N     T V K L W S K E G
UniRef90_UPI00037C6CF0   T L D S H T D W V W R V T F S P N G E T I A T A S A D K     T V K L W S R D G
UniRef90_A0YTN5          I N A H K G G V L D V K F S P D G E M I A S S G S F D P T V K L W K I D R G H
UniRef90_Q115C0          T L T G H L Q Q V R A I A F S P D G K T L A S G S Q D N M I K I W D L S L G N T
UniRef90_UPI00031831EE   I L T G H T S S V N A V A A N S D S K Y I V S G S   R D K T I K I W E L A T   G
UniRef90_M5BNA9          G P L K G H T K T V P Y L S F S P N G S C L A S C S E D H T I R I W D S H T G V
UniRef90_UPI00034AA750   T L T G H Q E R V T C V K F S P D G K M I A A A S D D K     T I K I W N S P G
UniRef90_UPI0004407EED   G P F E G H T S L V F S V C F S P D G S H V A S G S D D E T V R I W D V E S G K
UniRef90_X6NG77          K V L G R H S R Y V S N V Q F S P D G Q L V V S S S W D S T I A I W D I   Q S S
UniRef90_UPI00035F6AC4   L A S V G H A D T V L S V A F S P D G Q T L A T A G D D H T A R L W D D P R H P
UniRef90_B0DZA3          G T Q                               I V S G S S D K S V R V W D A S A G
UniRef90_G9NQ96          R T L E G H R G V V F P V V F S P D G R I L A S A S Q D T T I R L W Q V P M G S
UniRef90_UPI00044092DD   H V L E G H T A A V W S V V F S S D G K R I V S G S N D K T I R V W D A M T G Q
UniRef90_G9NCL7          I L K G H T L W V K S V V F S P D G K Q L A S G S E D T T V R V W D I K S A A D
UniRef90_W9Y410          G H V D T V N R V A F S A A D K H N C N H L L A S C S A D T T I M L W D L A T G
UniRef90_F0XQI2          Q T L E G H T R D V Q S V A V S H D S R I I A S A S R D Y S V R F W   D P V S G
UniRef90_R7QV83          D T I T G H T D W V T S V S M S G D G K R V A S G S A D R R V R V W D A E T G G
UniRef90_X6PDL1          C K Y S H Y A T G V Q F S S D G S K V V S C S W D K T I R V W D I S V E
UniRef90_B4W4E1          I F K G H G D K I H T V A F S P D G Q I L A S G S R D G M I K L W D V R S S V R
UniRef90_E9FAY0          N A E R M G H D D Q V N S I A F S H D G Q S L A S A S N D R T V R V Y H V P S G
UniRef90_M2PAV3          A V Y R H N S W V H C V R F S A K A D R L V S G S S D N     T V R V W D L A V R T
UniRef90_UPI0003B2F01E   H K A D I R E R S S A L A F S S D S Q T L A T G W S D I S L W D V N S G
UniRef90_K9UH13          Q Y E D G I E Q D V K C I A F C V D G R T I A S G S K G T I H L W Q I Q N H G
UniRef90_K9PRY1          G G W F S P H L D S I C S L A I T P D G Q T L I S G S Q D H T I K L W N L A T G
UniRef90_UPI00036E077A   E W A K S P Q F I D R S I Y R A D G M G Y L K Q G H     T Q I F V I S R E G
UniRef90_B1WTV9          P F W G H D G E I I T S I A I S P D G Q T I V S S S W D K     T I R L W N L E G
UniRef90_UPI0003720BF1   D L E G H R N D V W G V T W S P D S T R L A S A S H D Q T A R M W D L A     T G
UniRef90_UPI000477337E   F F H G H D Y H V Q S V A F S P D G R T L A S G S V Q A E A V R L W D V A T G Q
UniRef90_M5C6Q1          A L L K G H T K D V C S V T F S P N G K H L A S G S D D K T V R L W D V Q T G K
UniRef90_B0D529          V L N G H K Y G V N S V A F S T D G T H I V S G S S D K S V R     V W D A S T G
UniRef90_E0UNY6          S L E G H S A Y G V N F S P D G K T I V S V G G D S     Q I Q L W S S N E
UniRef90_A0A024S9Q8      T L K G H T D W T S V A P L A G     G L V A S G G R D R T I K I W D V A T   G
UniRef90_X8IWN0          F P F K G H T R G V A S V A F T P D G T R L L S G S Y D R T I R V W N T S D G S
UniRef90_X8JB25          G D L Q G H S K L V L S I A F S P D G L L L A S A S G D S T V I L W D L K S R S
UniRef90_UPI0003792BCF   T L D Y H T G W V T F S L A Y S P D G Q T L     A S G G G D R A I A L W D T Q S G
UniRef90_UPI000440946F   G P F K G H T R S V W A V M F S P E N T H V A S G S K D T T I R V W D I   K S T
UniRef90_A0DXJ0          L K I R S H S N C V N S V C F S T D G S M L A S G S D D N S I C L W D F N E N Q
UniRef90_K9WE02          T L E G H S A T V W D V E F A L L A D K N G T K R P T S A D N T V K L W Q P D G
UniRef90_UPI00046D3087                                         I Y V V N G R G
UniRef90_R4SZD6          P P I T G H T K T I R S M A F S P D G R T L A S A G D D R T V R L W D L A R P T
UniRef90_W0J5B9          R L V G L R G T N T G A R F S P D G S R M A M V L S G E G N P E I Y I A D A Q A
UniRef90_X6LTD2          L L K G H S N L V I A V Q F S P D G T K I V S C S F D S T I R     L W N A V S G
UniRef90_A7BVK1          K H H N G V S Y A T F S P D G S L I V T T S W D K T A R I W E T P L K R K N A T
UniRef90_X0EM19          R V L E G N G I S S V V F S N K K L A S G S D K T I R I W   D A E T G
UniRef90_M5C8K5          G P L K A H E D R I R S V R F S P T G N S L L T A S Y D H S V Y V W D P H N G Y
UniRef90_UPI000441274B   P M T G H D G W V H C V A Y S P D G A R I V S G A A     D R T I R L W N T V T G R
UniRef90_D5SQV5          R L E G G H T S A V N M A S F S P D G E L I L T A S D D G T A K L W D W A A A P
UniRef90_Q6W219          R L N S G K A A V V N L Q F S P G S D L I A S A S D D G A A R     L W N T S T
UniRef90_UPI0003498F56   T I E G H T G W V F S V A W S P D G K A I A S G S D R C     I K L W D T S T
UniRef90_K5W1J6          T L Q G H T S K V W A L D F S P D G S T L A S G S H D   H T I I L W N I A S R
UniRef90_K9UGJ3          T Q A I R S L A F S P D G N I L V S G S D D M L A S G S D N C T V R L W D V N T
UniRef90_UPI00035EEDAD   K F E G H Q G S V Y D V Q F S P Q G D R I V T S G D D G T A R     L W D L Q Q G
UniRef90_A5UV81          P T T N L R Y W A T G V T V S P D G K T L A V G S T E G V V Y L I D A T S G Q I
UniRef90_X6NVH3          Q I F E G H S D E I N G I H F S H S N S L Q I V S F   S M D N T I R L W D I S G
UniRef90_UPI000372B8FA   C L K V L D C D I G W V L S L A W H P D S Q I L A T G N E Q T V K L W D I D T G
UniRef90_T5AJE2          E G H E S V G S V A F S Q D G W I W D A V T G A L Q R T L E G H I V W D V V M G
UniRef90_H1Q5N2          G V L D G L T G R V S D L A F N P D G D L L A T A S W D G E L R L W N V Q D R S
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                                           170           180           190         200
UniRef90_UPI0003630902  R P R E A L T G A T A A V R S V A F S P D G R T L A A G G D D E T V R L W D V T
UniRef90_UPI00037DDF5E  S V I A E L S T E K G P I F A I A I S P K D Q T F A T A S V D G A V S L W   N
UniRef90_K9TH25         K Q F F T L Y G D S G L V N A V A F S P D G Q T I V S G N F D   G S L V L W D I
UniRef90_UPI0002D3EC77  A V W G E N R N K P S S V T S V S F S P N G E L L A T A E E N S S N V C L W V C
UniRef90_K9X6Y3         E C L H T L V G H G D R V Q T I A F S Y C G R M L V S G S D D   N A I K L W D I
UniRef90_D4ZVZ4         N L I N E I N H Y P C K I F T V A F S P D S Q K I A V G G S D   N I V Q V W D I
UniRef90_D4ZXP5         R E L A T L S G H S S E V R A V A I A P D G K R A V S A S W D E   T L K L W D L
UniRef90_D9TEL1         A R L R H E W P H S A P I W G T S F S P D G R R V V V A D S A G T V R G W D I P
UniRef90_D6TBP7         S P H W L S Q Q F P P W I R R V A W S P D G T R L V G G G G D   G H V Y V W D A
UniRef90_Q8YL09         C C L K T L Q G H Q H W V K T I A F N S G G R I L A S G S F D Q   N V K L W D I
UniRef90_X6M0D8         R K I Q L I E G H S A R V T V V Q F S P D G S K I L S C S R D R   T I R I W D L
UniRef90_UPI00034BC177  Q C L R T L P G H T N L I S S V T F A P Q N S Q I L A S S S D D T T I K L W D A
UniRef90_K9UYF4         K E K K I F K S G G E S S I N V G F S P D G Q T I F T A N S E K L Q L
UniRef90_H0PYK0         V E C E P L M T H G D Y V H G L A F A P D G A R L A T A S W D G T V R L W D V
UniRef90_UPI00037DA424  K K L Q Q L T G H A R A V N S V A F S P D G K I L A S G S D D   N T V R L W D V
UniRef90_X8IUZ2         T I L G P L N G H A D S V T S A V F S P D G S L I A S G S V D K T I R L W D S R
UniRef90_UPI000345CA98  Q L L T T L V G H K D V V K G I A I A P D G K T I A S V D D K   T V K L W K I
UniRef90_UPI00034A77D5  T L L G S L S G H A D K V W D V C F S P D G E M L A T A S W D   G T I K L W   N
UniRef90_UPI00034CCD50  K L L K T F S G H S D A V Y S V S F S P S G K E L V S G S D D   N I K L W D V
UniRef90_M5BLZ2         K T S Q E N K G Q S N G I L S V A F S P D G A R I V S C S G D C T I R T W D A E
UniRef90_UPI00006D0360  E L I K T I N A Q N D K I N P V A F S I D G K Y L A T Y C M D M T C K I W N I E
UniRef90_S7J330         Q A P R L L T K K Y R N S S C P A W S P D G K K I A F C S V I K G V R Q I C C Y
UniRef90_X6NMS1         K Q L K K F E G H S N L V R C V K F S F D G Q T I V S C S D D L   T I R L W D V
UniRef90_F8CA54         S G E R R L T F F H T E D R T P K W S P D G K W L V I V S D R E G K D R L Y F L
UniRef90_X6MAK5         K Q L Q I L E G H S D V L K V Q F V P D A T N I I S C S N D   N T I R V W S V
UniRef90_G2LDA0         R E L R A L T D R R G R D A Q P K V S P D G K R I A Y V G Y D H H I S N L Y L M
UniRef90_B9XAV5         H A K A P P L R H K S W V I Y A A F S P D N E K L A T A S W D R S   A R V W E T
UniRef90_B0CFV1         R L H S N L P V S F D V T R A I T F S P D G N L A C T S   D L G D L Q L W D V
UniRef90_K9S353         P L I Q T L R E T N V G V R A V A F S P D G K T I A A G C M D N T I K L W T R D
UniRef90_K9XJR2         K V L R T L Q G H S D R I L T L A I S P D G R L L A S G S V D K   T I K I W Q I
UniRef90_B4WRJ5         Q C D R T L T G H T A P V V A I A F S P T Q P V V A S G S F D   G S I K I W D M
UniRef90_D5G220         Y T Q T L E G H S G S V N S V A F S P D S K W V A S G S G D   D T I K I W D A
UniRef90_D6U864         D V I Q T L M G H T D R V Q T V A W S P D G Q T L A S A A F D H T I W L W D M
UniRef90_UPI000364BCB5  Q Q I R T L E G H S D K V T S V A I S P D G K I L A S G S F D K   T I K L W N L
UniRef90_H0B486         T A V T T L R G H L D Y V W K V H W S P D G R R L V T G S R D R   T I R L W D P
UniRef90_A8ZL84         S L I T T L E G H T D A V G D L A Y S P D G S T L A T A S S D N T V K L W   S
UniRef90_UPI00037C6CF0  K E L K T L N G H S D K V N S V T F S P D G K T I A T A S W D K T A K L W T R E
UniRef90_A0YTN5         C E S F K Q T E D C I G V Y E V S F S P D G A I L A S A S G D R   T V K L W N V
UniRef90_Q115C0         V K N C H Y Y Q G T H Y I Y T V A F S T D G K V L A S G G R D R   N I K I W E I
UniRef90_UPI00031831EE  N L I R T L T C H T S S V N A V S S D S K Y V V S G S R D N T I K I W E L H
UniRef90_M5BNA9         P I G T E L V G H Q D C V M C V V F S S S G E R L F S C S D D R T I R V W D W R
UniRef90_UPI00034AA750  K L L Q T L E G N N N Q I N S I S F S P N Q Q L L A V A D V D G I V K I W V K
UniRef90_UPI0004407EED  T T S G P F K G H K D A V L S A A F L P D G R Y V V S G S R D T T T I A W D V E
UniRef90_X6NG77         K R L L K L I G H V N V V M N T Q F S P N G N L L V S C S W D R S   I R I W D A
UniRef90_UPI00035F6AC4  H G L A T L D G H T D T V W S A V F S P D G R T L A T A S A D R T V W N I S D L
UniRef90_B0DZA3         V E L K E L K G H T G S I N S V A F S S D G T R I V S G S R D K S   V R V W D A
UniRef90_G9NQ96         S K W T L K G H S A S V G S V A F S P D G K I L A S S S D D K   T I R L W D V
UniRef90_UPI00044092DD  A I G N P F V G H T Y E V Y S V A I S P E D R R I V S G S R D Y   T V R V W D V
UniRef90_G9NCL7         L Q T L E C D E D D V F S V I F S P N G Q L L A S S S Y D   D T I R I W D V
UniRef90_W9Y410         Q R R T T F R G H V D A V N S V A F S R D G Q M L V S C S A D R   T V R L W T T
UniRef90_F0XQI2         Q C T R T L K A H D D Y V W S V V F S H D S G R V A T A S R D H S   I K I W H V
UniRef90_R7QV83         Q I G D T M T G H T G Y V T S V S M S G N E E R V A S G S Y D K T V R V W D A E
UniRef90_X6PDL1         K Q T L L L E G H S E S I H D V Q I S P D N T K I A S C S K D K   T I R L W D L
UniRef90_B4W4E1         N D T I T L N G H D R G I Y A V I F S P D G Q W L A S G S A D W   T I K V W D M
UniRef90_E9FAY0         K L R R S F S G H E A P V R R A V F G P D G Q F I A S A S N D S T V R V W D L E
UniRef90_M2PAV3         T D E V H I G H S Q W I A C V R F S P N M K T V A T S S K D G L I N L W N T
UniRef90_UPI0003B2F01E  V V K T T L S G H T D R I R A L A F S P D G R I L V S G S R D S T V R L W D V
UniRef90_K9UH13         K Y W K M L A G H Q D G W W S V V F S P D G K F L A S G S D D T T V K I W E I
UniRef90_K9PRY1         K Q T N H L T Q N S W G V Y S L A I T S D G Q A I A S D T F E H T I K L C S L
UniRef90_UPI00036E077A  G T P R Q L T S G F D H N S S L A W S K N N D A I Y F S A N R H P D H E I R V N
UniRef90_B1WTV9         K E I I P I T T H Q Q R I E S V A F S P D G H Y F I S G S W D K   T I R L W N L
UniRef90_UPI0003720BF1  S A A V V L E G H T D F V E G V A W S P D G L S I A T G S G D H T V R I W D A
UniRef90_UPI000477337E  A V A A F T S H A G P S V T S M A F S P D G R I L A G G D G S T V R L W D V
UniRef90_M5C6Q1         P V G D P F E G H S G W V L S V S Y S P D G S R L A S A S S D G T V Q V W D P Q
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UniRef90_X8IWN0         L R T D P F W G H T K G L Y A V T V S P D G T R V A S A S D D R T V R V W K V D
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UniRef90_UPI000440946F  S T V H I L Q G H T A A V L S V V F S S D G K D K T I R V W D T M
UniRef90_A0DXJ0         Q R F K L V G H R K E V I S V C F S P N G N T L A S G S N D K S I C L W D V
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UniRef90_D9TEL1          T G K L A F E V Q E P E V V Y R V V H S P D G R L A A V G Q H G R I W
UniRef90_D6TBP7          F D G T L L Q Q L S G H Q G A V M S V A W S P D G S R L A S G S R G Q E D G E L
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UniRef90_K9UYF4          W N L K G A L K I A I K A D W D E S I N F T P D G K T I V S G N A N G E I V F R
UniRef90_H0PYK0          A F G H A G A I Y G L A F S P D G K R L A S A S L D T L T K V W
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UniRef90_K9S353          G V L R Q T L R G H D G P V Q S L A F S P D G A L M V S G S D D R T I
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UniRef90_B4WRJ5          D S G Q C I R T L Q E H S Q T V S T L D F S P N G K I L A S G G E D S V I R L W
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UniRef90_UPI000364BCB5   A T G Q Q I R T L E G H S D K V T S V A I S P D G K I L A S G S F D K T I R L W
UniRef90_H0B486          F D A T E L A V L A G H E E R V Q D V A W S P D G T C I A S V S Q D R T V R L W
UniRef90_A8ZL84          K E G S L I T T L E G H T Y A I W D L A Y S P D G S T L A T A S R D N T V K
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UniRef90_A0YTN5          Q T G K E I E T L K G H N N D V L S V S F S P D G Q T I A S G S R D R T V
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UniRef90_M5BNA9          S G T A I S Q L T D W I D C I A L S P N E D H I A S S S K D C T V R W V
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UniRef90_F0XQI2          A T G E C L H T L E G H S H E V G L L A F S H D S R L L A S P S N D L T V K L W
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UniRef90_X6PDL1          L S G K E L C L L K G H S D E V W K V Q F T S D G S K I I S C S K D N T I R I W
UniRef90_B4W4E1          R T G Q E R Y T L K G H T D Q V R C L A F S L D S K I L V S G S C D Q T L K L W
UniRef90_E9FAY0          S R N G D P P Q I L R Q P G Y A S A V A F S P D G Q Y L A S G G V T V
UniRef90_M2PAV3          A N G R I I R T L K G H K D G V Q G V S F S S D G R Y L A S G G E T D G L I I W
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UniRef90_K9PRY1          A S E Q I W Q D F T G H T D W I W A I A I S P N G K I L A S G S Q D C T V K L W
UniRef90_UPI00036E077A   L K D G D I E Q I T E R F G P D H H P Q I S P D G K K L A Y L G F E D Q R H S L
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UniRef90_M5C6Q1          T G K I V L G P L T G H S D Y V L S A T F S L N G T L I A S G S G D R T I
UniRef90_B0D529          S T G A E L K V L N G H M E A V K S V A F S T D G T C I V S G S S D K S V Q V W
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UniRef90_A0A024S9Q8      E T G A C V R T F E G H S D W I Y S V A A S A S G S Y D K T V R I W
UniRef90_X8IWN0          D G T L V A D P F I G H T K K I L S I T Y S P D G T R V V S G S K D G T I R V W
UniRef90_X8JB25          R T G S I I H T L Q G H S G P V T T V A F S P N G S H I A S G S Y D R T I Q L W
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UniRef90_W0J5B9          P V G G G S A S R V P T S G Y C A E P D W S A D P N K I A F T V A Q N R G F Q V
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UniRef90_D5SQV5          T T G E C L Q I F Q G H E W P V L S A A L S E D G K L L L T G S E D K T A R L W
UniRef90_Q6W219          D G T L R V L A G H E K R I T A A A F S P N G R L A S E D G D T A R V W
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UniRef90_K5W1J6          Y L L T K G E Q K P T H S S V V R S A T F S P S G R I L A T G S R D S T I R L W
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UniRef90_UPI00035EEDAD   Q G Q E L T H S V Q F S P Q G D H I V T S G F D G T A R
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UniRef90_D4ZVZ4         D V       K T Q E C L A I F P G Q Q V W T Y L I S F S P D G Q
UniRef90_D4ZXP5         D L       E Q G R E L A T L S G H S S E V R A V A I A P D G K R
UniRef90_D9TEL1         I R R A T D G E L L R A P R G H E A D V Y A L D I H P D G
UniRef90_D6TBP7         L V W D A N G E Y V R I L T G H P G G V S A L T W S P N G Q
UniRef90_Q8YL09         D     R K T G R C L D T L K K H T N R I W S V A F H P Q G H
UniRef90_X6M0D8         D V S S     G K Q L V G H T G D V T G V Q F F P
UniRef90_UPI00034BC177  D W H     T G E C L H T L E G H I N Q V K T I S F S S C G K
UniRef90_K9UYF4         D T V D L E
UniRef90_H0PYK0         D     T A S G K T Q L R L A G H G N T V F R V A W N A D G S R
UniRef90_UPI00037DA424  D V A S     G R Q L Q K L E V N A H W V F G V V F T P D G N Y
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UniRef90_UPI00034A77D5  K L W R T D G S L L L C L Q G H T D M V L S V S F S P K G
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UniRef90_M5BLZ2         N L   P Y D G G A R E P L T Q H T G W V W S V D F S P D G S R
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UniRef90_G2LDA0         Y F A P V N G K A     R R I T E G T H V L S S F S L A D N G Q
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UniRef90_UPI00031831EE  E L     A T G N L I R I L N A H
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UniRef90_X6NG77         D V     A T G Q Q I Q K L G G H F N D V T G V D F S P D G K
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UniRef90_W9Y410         S L
UniRef90_F0XQI2         D     T A I G Y C V E T L Q G H T A I V E S V T F S P D S K
UniRef90_R7QV83           V W D A E T G R Q I T M T G H T A F V R S V S M S G D G K R
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UniRef90_M2PAV3         E V E S G D V V K N L R A T T E E M E C Y F V A F S P D G K W
UniRef90_UPI0003B2F01E  N L
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UniRef90_UPI000477337E  K V
UniRef90_M5C6Q1         R V Y D A Q T G Q T A P L E G H T D R V N S V I F S P D S T R L Y
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Sequence alignment (positions 1–40)

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UniRef90_UPI00047D3D08                                       H C L H T L I G S P G S
UniRef90_M2RSL0          V A F S H D S G S S D N T V K I W D V   S N G E C L S T F E G H I D P
UniRef90_UPI00034BC5CC               I W L V P A G G G K A R R L T G D L A D
UniRef90_A8ZLT0                                       Q S V F S K D F G G
UniRef90_K9WPT4          S S I A I S S D G A S G S E D K T I K V W N L T G Q L L R T L T G H S E G
UniRef90_M2S7A1          V A F S H D S A S A S G D I T V R I W D A S G A C L Q T L E D H S D F
UniRef90_UPI000367545B           N G N L N K D I D V W N I T G K I T H K L C G H G N S
UniRef90_UPI00044083DC                               T T C I K I F S G H T G D
UniRef90_UPI000347C574                           T T G Q L I R T L S G H S D S
UniRef90_M5C850          L A F S S S G T S G S R D Y T I R V Y D A H T G H T V P L Q G H T G M
UniRef90_R0K2N0          T S V A F S H E S S S A S W D R T V K I W D A S G T C L H T L E G H S G E
UniRef90_X6NZC4
UniRef90_UPI0003092743   T S V A W S K D S A S A G V D N T I K L W D T T G K R I K T L A G H N N P
UniRef90_UPI00006CDC1C   T Q V V F Q A N T A S E D Q T C K I W N I E K G F S L H H T L E G N N S E
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UniRef90_B0C3R6          V A T A H T D G I P R I W R V N   D G K L L F S C Q A H P E T
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UniRef90_A0CVR3          T L A S S D G D I L I H L W D V E   T G Q Y K A K L E G H S S A
UniRef90_M2QWU2                                           G H A G V
UniRef90_A0BGT9          S S D N S I R L W D V K   S G Q Q K A K F D G H L S S
UniRef90_B4W1D0                           V I T Q N W H C V Q T L T G H S G K
UniRef90_S4XX51          G S E D G T A R V W R I G G E G A   P V V L A G H R G R
UniRef90_X6PBI5                                           L E G H D F
UniRef90_UPI000441776A   A F S T R M A   S G S G D R S I R I W A A D T G K E I L E P L L G H T D W
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UniRef90_W0RE37          E I W L V D L D A K A P T Q V T T G G A K
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Position ruler: 50, 60, 70, 80

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UniRef90_M5C384        T L V G P I Q A H T D W V R S V E M W A D G M R F V S G S S D F S V R I W D G L
UniRef90_L8P1F8        C T N T   L T G H T G R V Q A V A I A P D G T W L A T A G T D K   T V R I W L R
UniRef90_UPI0001F29A83 G R P N I R H W H T D Y I H K L V W S P D G N Q L A S G S G D   G T V R V W N P
UniRef90_UPI00036B3ED7 G K E T Q L T N Q K T L D D P E Y S P D G K R I F F N S V R T G K M K L W K M
UniRef90_UPI0003821144 G E P R M I A T F R E F P S G L T W S A D G K R L I Y S V W N Y F N R K I L R R
UniRef90_A8ZPE2        Q C L H D L A G H T G R V K T V A Y S A D G Q L V S V T Y G Y   E I K V W D P
UniRef90_D6TX17        Q L L S T L H G H T S Y V E S V A F S P D G R I L A S G C S D   A T I R L W N P
UniRef90_UPI0003B65FFA K E I D K L T K N I W R I S G F A W M P G G D S L I L S A T D Y P Q P E L F L R
UniRef90_E3JBX1        P L G Q P L T G P T D F V L S V A F S P N S H T L A A S S S D G K V Y L W D V
UniRef90_D0MFK1        L E R R I A V E G V G A I H N L A W S P D G R T I A F S G L S G G I S D L Y L L
UniRef90_A2QX40        L Q C P H L G D S I G G Y K S V T F S P D G K L L A S G T Y S G L L C V W D L
UniRef90_X6LFT7        Q I K S L E G H L S A V T S V Q F S P D G S K I I S G S D D N T I R L W D A
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UniRef90_A0A059E5J4    Q F L Y F V E K M T P P H A S T V Y V D A N H K N F A I R R K
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UniRef90_UPI00034CC762 D P D D R D R H P V R G I A G P V L S P D G E Q V A F R A L G A L W V M
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UniRef90_R5DBE2        K T V E N I T D N P A Q D I I P M W I G D E I F F L S D R D R T M N I F V Y
UniRef90_X6MCS2        N E L K K F R G H S I I M N E I K Y F P D G Q T I V S C S K D Q   T I R L W D V
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UniRef90_B0DTX4        P V G K P L E G H D G E V K S V A F S P D G T R V V S G S D D W T I R I W D A K
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UniRef90_B1XZU7        A L F T L P A G R T D I A R L A I Y S A D G R L I V T T S D D G H A R L W R A A
UniRef90_B4WRJ3        A C L K T L K A H D E M I W S V T F S H D G R L L A T G S Y D H T A K L W D A
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UniRef90_M5CAI4        I E P I T G H R S G I R S V E F S P D G K I V S G S D K T V R I W D A Q
UniRef90_X6LVY4        Q Q I Q L L E G H T E N I N G I Q F S P D G S K I I L S Y S D D N T I R L W N L
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UniRef90_UPI0003092743   I G K L I K T L A G H S N S Y I S S V A W S V D G Q L L A S A A N D N T I K L W
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UniRef90_U7QJI1          N Y F Y Q A F T       G H N G T I W Q V E F N P N D E T I A S A S S D Y T V K F
UniRef90_K9ELU6          D V L G S F R R L E G H S S G V W G I A V S P D E Q V L A S G S R D H T I R L W
UniRef90_D7BU73          E V A T G E L T R Q D G V W E D F D P A W S P D G E R V L F V R G R L T G R T V
UniRef90_UPI00037A4019   G S G A A V R E L P E Q P G A V H A V A F S A D G S L L A T G A S D G S A R L W
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UniRef90_M5C384          T G K Q C G D D D W S H S G Y V F S V C V S P N G L Y V A S G S R D G T V C V W
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UniRef90_D6TX17          H S G T L L H I L N G N P L A V H S V A F S P D G H I L A G G C A D A T I R L W
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UniRef90_D0MFK1          D L E T N Q V R K L T D D Y A D L Q P A W S P D G R T I A F V S D R G G H E R L
UniRef90_A2QX40          A T G A I Y R T I N A H L D T I E Y L A F D P D S Q L L A S C S S D D T       M
UniRef90_X6LFT7          L P R K Q M E S L E G H S D I V S S V Q F S P D G N K I V S G S D N T I R L W
UniRef90_UPI000441339F   A T R Q L E L T L R G H S H F I R S V A I S P S E R Y I A S G S C D K T I H I W
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UniRef90_A0A059E5J4      S L E T G E I K T I V G G G A M T P S M S P D G S K M A F V R R V K D Q T M L
UniRef90_M5BWK4          T G Q L A V Q P F R E H S S S V T A V I A S P T G H L L V S A S       M G S T M
UniRef90_UPI00034CC762   P I G G R P R A I V E D G S F S S D P D W H P D G R S L V Y S S D R E G T P A L
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UniRef90_R5DBE2          N T K T K Q T D K V T D F T E Y D V K F P S A N G N M I V F G S K K P E K V N I
UniRef90_X6MCS2          Q S G C E I Q K L E G H S N D V P G V D V S P D G N T I V S G S Y D K T I R I W
UniRef90_X6N652          S S G G Q I Q S L K G H A G S L Y G M E I S P D G S K I V S C S N D R T I R L W
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UniRef90_L8X1V0          T G Q P I G D P L R G H G G G V R C V A F S S D G D K L V S G S S D D R T I R I W
UniRef90_B1XZU7          D G A A V G E       Y A H A D W I W N A A F S P D G Q R L A T A S E D G S A A I W
UniRef90_B4WRJ3          E T G E C V A V L S G H T D Q V F S V V F S P D D A L I A S T S S D G S I K I W
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UniRef90_UPI00034BC5CC   A R R D I D D T G E H P V  R G I A G         P V L S P D G R
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UniRef90_R0K2N0          D V N S
UniRef90_X6NZC4          D V L S     G K Q L Q I L  E G H S D E I N G A Q F S S N G
UniRef90_UPI0003092743   D     K T T G N L I K T L  T G H T N G V N D V A W S Y D G K
UniRef90_UPI00006CDC1C   N L   E K G F E L I K M D  E K H T Y V I S S V A F S P D G K
UniRef90_X6NSS4          D     T T S E R K I Q L T  E R N L D D V I D V R F S L D G
UniRef90_B0C3R6          R V     P T G E L L Q S Q  A T Y D R Q I W A V D F S Q N G
UniRef90_T0BXZ0          V R F H V D G S T P Q
UniRef90_L7VT54          A S I P A D G G N P A V L  S S F D E N A N L L D W S P E G
UniRef90_A0CVR3          D V     K A G Q Q K A V F  D D H S D M G Y T I C F S P D G
UniRef90_M2QWU2          D A   R T G A P I I D P L  V G H T D S V F S V A F S P D G
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UniRef90_UPI0003691496   M L V
UniRef90_UPI0004751DDC   K L W N M Q G Q L L T T L  N G H S D G V L G V S F S P D D K
UniRef90_G4TH12          D S E T G D   A L W K V V M G L N S Q V Y C L A F S P D G R R
UniRef90_M2UG93          H V S S     G K C L Q T L  K C H D H K I S S M A F S H D
UniRef90_U7QJI1               W S I D G T I K Q S V E G
UniRef90_K9ELU6          D L T S M E     C S R I L  E G H T D R V K A V V F N S D G N
UniRef90_D7BU73          A S V R A D G S G P V A V  E H T E A Q V L A P S V S P G G
UniRef90_UPI00037A4019   D A F D T S G A R L A T T  F G H A G A I H G L A Y S P D G K R
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UniRef90_G1X132          I L W N T D S R E L F Q L  R G H S D Y V W A L T F S P N G R
UniRef90_A3J6R0          F M I D I T G E N L Q Q I  T W E S E F N A F P M F S P D G K K
UniRef90_K9TF95          N L
UniRef90_K9W7D5          D L N S R     R E L F T L  I G H R S G V C S L A V T A D G N
UniRef90_K4MGY1
UniRef90_W0RE37          R A V D V A S G R E R L V  A A G A F E A G D V R W S P D G R W
UniRef90_G9N0F3          T I W D A T T G K E R Q R  L R D S S P V S P V A F S A D G R Y
UniRef90_UPI0003830945   D     T S T G R V S R Q W  P Q Q R P Y P N A P A F S P S G H
UniRef90_E0UN54          I L W D L T G K Q K E K I  E N P P Y Y F S L P K F S P D G K
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UniRef90_Q12YU1
UniRef90_S8AKB6          L L D A D T G T E L Q I I  E S Q G G G V Y S V A F S P D G K H
UniRef90_M5C384          D G Q N G K   R I L G P L  R G H T D W V F G V Q F S P D G S H
UniRef90_L8P1F8          Y S R T N S G
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UniRef90_UPI00036B3ED7   R I M P Y E G G K P R I L  Y G G Q G T I N V P S W S P D S Q H
UniRef90_UPI0003821144   W I S S D D G N N L V Q I  S D P H Y Q S G S P Q W S P D G N R
UniRef90_A8ZPE2          N L     G T G Q Q L A P L  V G H Q D Y S L G I A F S P D S Q R
UniRef90_D6TX17          H     P S S G Q F L R T L  S D H R W A V A S V A F S P D G H
UniRef90_UPI0003B65FFA   F I R S L S G K Q S R N L  T Q N D R T V S S Y C W T K E G
UniRef90_E3JBX1          D V A S S P T A V G Q P L  T G P G A A V T A L A F S P
UniRef90_D0MFK1          A L L D L E T G K V R V L  P F R N G Q Q I N P Q F S P D G R
UniRef90_A2QX40          R L W A L E E Y A L V Q I  W D I E W D G D S C G F S
UniRef90_X6LFT7          D     T L S G K Q I Q C L  D G H S
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UniRef90_A6BZA5          D     A E T G K K I K T F  K G H E W P V R E V A Y S H D G K R
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UniRef90_UPI00034CC762   W R H N L D D G T D E R L  T R L D G A Q L T P R W A P D G E R
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UniRef90_R5DBE2          T L T S D N I Y A R S E I  K D G A G Y L T E A S L S P D G E R
UniRef90_X6MCS2
UniRef90_X6N652          S T V N G T G
UniRef90_K0K3B0          D V T D P A P R Q R A V L  A G H S G V V Q S V A F A P D G R
UniRef90_F8Q9A1          D V I A     G K V I A G P  L E H N G I V T S V L F S P D G
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UniRef90_Q8YYT7          W T E V R D G S W Q Q     F A E Y Q S R R V V F S P D N K
UniRef90_B0DTX4          D A   E I G I P S G E P L  Q G H N Q P V K L V A F S L D S T R
UniRef90_UPI0004408B6E   D A E S G R   A I S G P C  E G H S K S I L S V A F S P D G R H
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UniRef90_L8X1V0          D V E S R T S     I A V L  E G H T G Y V L S V T F S P N G A Y
UniRef90_B1XZU7          D L
UniRef90_B4WRJ3          A V Q     T G Q C L K T L  T G H N G F V C S G T F Y P L G D R
UniRef90_L8M0Y1          N V     A E G E L I N S L  S G N I V E V I A I A
UniRef90_C1A4Q2
UniRef90_B0DWC8          D T L   M G Q S I M K P L  R G H N N Q V N S V F F S P D G R Y
UniRef90_X0KVS2          E     T G N E G S S Q V Y  K G H E G W V E N V V L S P
UniRef90_UPI00036A0EB7   V N P A A K W V T R E E L  K G H Q G R I R S I T F S P N G Q
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UniRef90_M5CAI4          C V W D A Q N G N L I P L  R G H T N D V N C V E F S P D G S H
UniRef90_X6LVY4          D V S S     G K Q I Q V L  E G H S S T I T G V G F
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UniRef90_G4U1B7          Q L W D A D T G Q A E P L  R G Y Q G W V S A V A F S P D G S R
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UniRef90_A1BIW6                  A S G S T D S T V R I W D A   A T G Q C L H V C K G H D T A
UniRef90_S8FGK1      I A F S P D T A S A D H T V R L W D T E H G S I I G S P M I G H S G V
UniRef90_A3IST7                                                            G H Q D K
UniRef90_UPI0003730F41
UniRef90_X6P4Y6                                                     V Y Q H S Q S
UniRef90_D6TWR0                    S G S D N N T V R L R E V   S S W R C V R T F E G H T D S
UniRef90_UPI0003722710                                              V L T S A P G D
UniRef90_K9SSB4                    S G S L D Q T V K L W N L   Q T G N C E S T L L D Q T G G
UniRef90_A0DL78             I L A S G S N D K T I R L W S I K   T G K Q M D V L E G H D E S
UniRef90_W4PJ49      S K L A F L S N D S G S S       Q L Y E M N P D G T G R R Q L T D Y D K D
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UniRef90_UPI0004414D4C  T S V V F L S N T R S A S Q D T L R I W D V S T G E M T L L L V Q P G F
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UniRef90_X6NWG9                                                     L K V L E G H E G I
UniRef90_X6MNZ9      D S K I I         S Y S N D K T I R M W D V   L S G K Q I Q L L S G H L N W
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UniRef90_R6IUQ9                  S Y Q G D I Y T V P S S G G K A R Q L T T H P A H
UniRef90_X6MVF4                                                   K T L K E N D L P
UniRef90_F0ZI44         T G S D D A T I K V W S S Q L G K E L S S H H L S N D F W
UniRef90_I2EUL1         D P S S K R Y K S A I F I L P I R G G E P R R I T P E V V S
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UniRef90_M7NDK8      R A V F V R D K E E N K Y V S N L F H A D L A S G Q V T Q W T Y G K N R
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UniRef90_UPI0003B64EC2                                              P V N A E P G R
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UniRef90_X6NM35                                                     L K I L R G H E D E
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UniRef90_X6LUQ2                                                 K L L K L F K A Y S S
UniRef90_E3FKF4         I A F T S D R G G G D N     L W I M K R D G S D S R P V T Q E S F R
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UniRef90_A7V6C0                  R D I W M Y T P G K E P Q R Q L T T F G G E
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UniRef90_UPI000455FE38                                              P F T G H T D D
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UniRef90_G4TR82                                                     P L R G H E G P
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UniRef90_UPI0003B42BC5             T V R S W D I D G N K E F M T L P H L T V
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UniRef90_L0DED9                                                     G G A
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UniRef90_G8TBP8      N G K I L L T T D   D N R S G P S S W Y I W D V Q   K N K L L T K G H L N P
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UniRef90_M2YR63               T G A G D S T A R L W D C E   T G T P R H I L K G H T G W
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UniRef90_UPI000345969B V K S L A I S S D R L I L  V S G S W      D N R I  K L W N L E N G K L I H T L K
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UniRef90_A6GGC8        V L A V D F S P D G T R I  A S A G    R D G S A R V  W D L S A E S S P V V L R P E
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UniRef90_X6MNZ9        V M K A E L S P D G S K L  V    S Y S S D N T I L I  W D I S S K K Q S Q V L P G
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UniRef90_X6MVF4        M R S V K F S V D G D K I  V S S T E N G T I R I      W D V A S G K A L Q T F K
UniRef90_F0ZI44        A N C M A F H P T K P I L  A V G A T D C T V R L  Y D V S S N T I Y R E I A K F H
UniRef90_I2EUL1        Y W H G   W T P D G K T L  A Y C G E R N G N Y D I Y T I S T E G G A E K R L T D
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UniRef90_A3WGV2        E V Q P R F S P D G T K I  A F T S D R G G G D N I  W V M N V D G S D K R Q V T K
UniRef90_M7NDK8        V S S P A W S A D G S K I  A F L S D R D G K N Q L Y V L S A A G G A E R V T D
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UniRef90_UPI0003B64EC2 E R T P S W S P D G Q T L  A F S W D G G M H Q S P Y L Q R V G Q S Q P Y R L T H
UniRef90_U1KUY1        A I R P T P S P D G K S I  A F V K R V D D G K A M Y I K N L E S G I E T E I Y A
UniRef90_X6NGL6        V N D A Q F S S D G N L I  V S C S W    D K T I R L W N V N N G E L M K L E
UniRef90_F2AY73        T T C G W I H P N G E K V  L F A S T H A D R L Q K E E L D F R A S G E S R R Y S
UniRef90_Q3JB50        D A E G V Y S P K G D K I  I F S A R T G D L E L F M M N P D G S E V E Q L T D
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UniRef90_X6ML94        I I F T A E F S P D G Y T I  A S C S S    D K T T R L  W D V N T G K E V K R I I I D
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UniRef90_Q08A43        L N S P A W S P D S Q Y L  V A R K H F T G T R E V W M F H V A G E G V K L T E
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UniRef90_X6P0R4        L A F A E A K A A R I S S N G Q T I V   T C F K D V A I L L W Q V H H P V R K
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UniRef90_UPI000455E357 H M G S I D A V Q Y S P D G T I I A S A S Y     D R L L K L W N A H T G D C I
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UniRef90_A1BIW6          N T G D T L S H A V V F S P D D     S L I A F C G R D S K I K I   L D A R S G
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UniRef90_A3IST7          N R I E G H N A G I T A L A C S P K G D Y F I T G S S D R S L K L W D F D G E P
UniRef90_UPI0003730F41   P M A L V N G I Y P V L S G D G T K I A Y C N N     D D G F K L Y I A N A D G
UniRef90_X6P4Y6          T F E G H D A A V I S A K F S S D E N T I V S G S W D G T I R L W D V N     T G
UniRef90_D6TWR0          R A L P G W E R N P R S R G G W A Q L A R H C S R         V G L R A S
UniRef90_UPI0003722710   R L T N S P C R D W V W T S D S K S M V M L D Q C T P G G P R G V V L F S L A T
UniRef90_K9SSB4          V I A D E     S E L Y T L A F S A D G K L L A T G G E N G V K F W S T H T W T
UniRef90_A0DL78          L Q N E S E V L T I S L H K D E Q L L S S G Y K D G R I V M W D I K E L R Q L S
UniRef90_W4PJ49          A W N P S S D E V A Y T C R K K T G L E Y A V     S T N S D I Y I Y D L K T
UniRef90_UPI000366E4B6   Q I S N P N H M S G S P Q W S P D G N K I V F D S R P L D R F E I D V A D V A E
UniRef90_R5S8E6          K F P S A S G N T I V F E N G G Y I Y K M D A A T R K A E K V N I T L A S D N I
UniRef90_E1ID07          H S L D G H N G A V E T L A W S P D G Q L V A S G A S D Q T L R V W   Q V K N A
UniRef90_UPI0004414D4C   E P L R E H T A E I R A L A F S S N G R R V V S G S D D H T V R L W S W S P G G
UniRef90_M2TBA4          S G G A G I Q L V E R P N E Q F Q K E L
UniRef90_UPI000345969B   L Y H K H     P V Q T V A I A P N G K L V A S G T E D G R I M I W   N L T N G
UniRef90_UPI0003606292   S T A G D T G R   Y E S V D W S D D G L L V S Q A N R G A G T N V W M I D P T D
UniRef90_R5BYP1          Y A V G T K G G R P V L F S S L A M Q E L S L S R D G S C       L L Y Q D Q K G
UniRef90_A6GGC8          A L L V L D H D H P V R A A R F S E D G T Q L I T A D E G G Q V Q L W D A T T G
UniRef90_X6NWG9          K I E E H I S R V W E V N F S P D G K Y I V S G S S D   R T I R I W D A I S G
UniRef90_X6MNZ9          Q V F K G H E L Y V L D A Q I S P D G S K V V S C S G D K T I R I W   D L L S G
UniRef90_UPI000348BFBA   T L K G H S Y W V R T V A I S P N G V T L A S G S F D   R T I K L W N I A Q E
UniRef90_F4XQ23          E L I K I L K R H T G W V N S A L F S Q D G K I I T A S E D S T A K L W D K D G
UniRef90_R6IUQ9          Y E I S T D G G R P D L Y S S L Y M E N I     A L S K D G S K L L Y N D Y K G
UniRef90_X6MVF4          K L E G H L D P V C N A N F S P D G K Y I T S C S F D G T I R I W D V D S R N
UniRef90_F0ZI44          I E K A H N D P I N C V A F S P K N E H L L I S C S D D Y S T K V W L R G N P V
UniRef90_I2EUL1          Q L T F D E N S N W F A H P S P D G K W I A Y I S Y M S D E K Q L R L M D V K T
UniRef90_UPI0002DAF54A   Y A Q D S Q S G I F A               I E R H D L A T
UniRef90_C4RND1          E L P G H R A P V W T A T F N P D G S T L     A T G D D G G V V R L W D L R T
UniRef90_A3WGV2          F S P D G E A I Y Y T R N T T P G N Q F I Y A Q D S Q T G I F A I E R H D L E T
UniRef90_M7NDK8          E K K D K N P E P V V I E K M K Y K A D G L G L L P Q D L F R Q I G I V D L E S
UniRef90_X6P0R4          K K M E G H L H W V S D V Q F S P D G N M F L S A S Y D G T I G I W E T T T C
UniRef90_E3IYH8          S S P L A H T K P V L S A V F A P N G H L L A S A S T D H L V R L W D V S N P A
UniRef90_M5C6Q6          G P M R G H E E F V L S V D Y S P S D Q Y I A S G S D K S L R I W D A N T G K
UniRef90_UPI0003B64EC2   R S L G T F S Y Y W P R F D D Q P A L D W S P D G K T S S P V R L L L L I L A T
UniRef90_U1KUY1          S L V F W A G G V F R T V N I D S K K A Q V I P T R I V A E K Q I T P A L R F A
UniRef90_X6NGL6          I K L D G H L S W V N D V Q F S P D G Q H I V S A S R D K T I K I W   E T K S G
UniRef90_F2AY73          Q I V F A S N R A A Y S R E L T E R E Q E Q F E R D P A F M I D L Y I M N A D G
UniRef90_Q3JB50          S R P E G K A L A D Y Q S L L K Q G L I R P S Q L E I F I M N L E E
UniRef90_X6NM35          R F E G H S A W I W S V N F S P D G K Y I V S G S A D K T I R I W D L     H T G
UniRef90_UPI0004751609   T T R S P N L P I I P H I S I S P D G T K I L S A L G S S T L K V W D L E T C E
UniRef90_X6M5N4          Q L H I F E G S N A F M E A K F S P D G R K M V S C S W N A S V R L W D V S S G
UniRef90_X6LUQ2          I K L K G H S Q A V T G V Q F S P D D N I I A S C S R D G T I R I W D V D S E
UniRef90_E3FKF4          F S Q D T T P G K V F E Y N K D P N G Q I Y V         I Q R L N L E T
UniRef90_B4VZ75              A S A S W D N T I K L W T R D G
UniRef90_A7V6C0          I V S D R N D K D I I R Q I K S S G A T E M A V S P D G K R G D V Y V T S V E Y
UniRef90_R6ZSW5              A H E R E A E W A P D G K Y I A Y I S D R T G E T E V W L E A A E G
UniRef90_UPI000455FE38       A P L E G H I I T P C A L Q Y S P D G N F I A C G D Q G F T L N L W D A N T
UniRef90_UPI000455E357   A T I Q H A K R M N S I S F S P N G S Y I A T G C H D Q L V R I Y D V H E H E
UniRef90_W2EY64          P H P G P V T G V V F A G A D I T S A G D G A A R R W R L P E P R L T G A Q A
UniRef90_Q9UUG8          H T D D G V T T V M F S P D G Q F I     A A G S L D K V I R I W T S S G
UniRef90_X6LTC2          L L M Y N G A A S C P K F S P D G Q F     I A S C S Y N K I I G I L H V G L
UniRef90_X6ML94          K L M G H S S G I W C V Q F S P D G Q K I V S S S K D K T V S I W D V K     T G
UniRef90_K9Q005          F V G H E Q G I R A I A F H P S G N F     V A S G G A D T L V K L W R V N N G
UniRef90_Q3AU34          A N Y D T G D R L S H A V Q F S P D D K L I A F G G R D A M V K I   L D A E S G
UniRef90_C6WS51          A L L H T A D G G L R V R D L T T G A T R A I P F E A T V E H T P H V D R P A A
UniRef90_G4TR82          E L L L G D G C V E S A A F S P D G S R I A T G S S N G R L W D A E T G Q Q L G
UniRef90_L1JA93          D L V G H E E T I T S L S W S P D G A K L A S G S W D T T L R I W K V S   T G
UniRef90_W7T561          G H R T T V D A V A F R A D G G L L A T G G L D G Y V R L W T G T T L A A E I P
UniRef90_Q08A43          V L I E G T G G A I R P T P S P D G K T L A Y I K R D G F Q S T L Y L Y D K L D
UniRef90_B2IUK9          T L T G H S G T L S S V N A L A I S P D S H T L A S G S D D K N I K L W D L N T
UniRef90_K9UFB4          T L V G H E D W I W S I A Y V G V A S R N E N A T H Q S E D R T V R L W S V S T
UniRef90_UPI0003B42BC5   T L K G H Q I A V K A L A F S P D S S T L A S M S H R S L R W D I R T S T L R A
UniRef90_D0PQZ7          Q I S D F K G E D R T P V F Y S N D S K V A Y T S E V D G T L N V W T M N A D G
UniRef90_UPI00026C9BD7   R L L P G G E K H A W P M W S R D G R S I V Y M S A R G G T E N L W R V G L G E
UniRef90_B1KI24          K L G A C Y S D T A A I D I S P D G S S L A Y I W N E G N G H H L K D K D A E P
UniRef90_K9QKN9          K V S D S I Y T V A I S P D G Q T V     A S G D N K G Q I K L W D L Q T
UniRef90_X6NSA0          S F E I N V S G E Y G I Q F S L D T S K L     V S Y E R N N E I K I W D V S S G
UniRef90_K9WMN7          R T L N G H S D T I W S I A I S P D H Q T L V S G S A D K T I R I W S L N R L
UniRef90_L0DED9          R T I P R P G E Y L S A L A V S P D G R T V A L A A W D H T I R L Y D P A N G L
UniRef90_F8WYH4          L P F G G W S P D S K S I A Y T C R K K K G L E Y A L S T N S D I Y L Y N I E S
UniRef90_B1WUP9          F T F R S H N D R V A V S V T P D G L K A V S A S R D H T L K L W D L P T   G
UniRef90_UPI000455F6DE   G P F K H D A S V R T M A F S P D S S R L V S G S   D D L A V H V W N T T T G S
UniRef90_X6LYE3          L L E G H S D S V N T V Q F S P D Y S K I V S C S E D G G I R     I W D A S S G
UniRef90_K7J2R3          K E Y E N V G E A K L V S       G S D D F T L F L W K P E K E K
UniRef90_R7NUU7          W I Y D P N N V A Q D I V P M W I G D E I F F I S D R D M T M N I F V Y N T Q T
UniRef90_UPI0003AD301C   P D G N G F R N V V L S P D G K M L     A N P G L G R E V R L S D A A T
UniRef90_UPI0004228623   I L A S S G G D G L I N L W D M K T G N L I I T I K D S T W N L G L L K D A Y F
UniRef90_K2PQ06          I E D L T V N D I P F E V D N V I N I A E T H L V Q H P V F Q D T F K A K V
UniRef90_G8TBP8          N L N D N S Y R W N I H A R F S N S R Y I I T S G T D N T A R V W I T G S E K
UniRef90_UPI000334678D   A L T G H S K W I W E P L H V N P E C R Y V A S S S K D G S V R V W   D T T A G
UniRef90_M2YR63          A L T G H K G D V T   C V K W G G S G L I Y S S S R D R T V K I W   D A A K G
UniRef90_S4Y6G3          V L G T H D D R V G V A F S P D G T R I V T T S W N G I L R   V F E D G V P
UniRef90_X6LZG0          K Q L H R A S V R R A I F S P C S Q F V T C S Y D K I I R I W D V K S   G
UniRef90_L1J3A9          V L M G H R E S I E S I V W A Q D G R I I A S G S P H D K T V R L W E I E T   G
UniRef90_H9JDI6          K S F Q G H T N E V N A I K W D P Q G Q L L A S C S D D M T L K I W S M K Q D T
UniRef90_F0QZY7          K P F G G W S N D S K Q I A Y T C R K K T G V A Y S Q S T D S D I Y L Y D I E T
UniRef90_UPI0003795CFA   Q V T P A G G Y A F C P G W N P D G K R I F I Y N Y N L S S     V A A E G Q G
UniRef90_B6INN2          D S S K M T A K V W D R P P L M       F W D Q W L D D R E A H V Y I A A L D G
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                                              170                 180                 190                 200
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UniRef90_T2JCB6          T E L Q T I K A H E T A V S A V V F S P D G Q L I A T T S G D K   K V K L W N R
UniRef90_R0KSP1          V C L Q T L E G H T S R V N S V A F S Y D S T R L A S A S S D   N T V K I W D A
UniRef90_A1BIW6          E L L C T L E G H H D A V R S V C F T P D G T E I A S A A N D E S   V R L W D V
UniRef90_S8FGK1          A V N K A L P P H S H H V F S V T F S P D D S L I A S G G W D N C V F   L W S R
UniRef90_A3IST7          L K P   P F Q G H D G E I T S I A I S P D G Q L I V S S S W D K   T L R L W N L
UniRef90_UPI0003730F41   S N P A K V T D     F D P G H F S W S P D K S K F V F T S N G T G V N G T Y V M
UniRef90_X6P4Y6          Q M I K T M S T P A S S I Y D A Q F S P D N R L I V   S S L D D S T I E I W D V
UniRef90_D6TWR0          W H L R T L E G H R Y P V R S V S L S R D G H W L V S G S N D   N T V R L W E V
UniRef90_UPI0003722710   G Q K R C L A A G S D F A A D N A L S P D G R T V A F S H F P D S G Y S E M H A
UniRef90_K9SSB4          C L N T   L T G H S D R L W S I S F S L D G R F L A S A G D D L S   V R I W D V
UniRef90_A0DL78          T     L E G H G S N V N S L S F T R N G Q I L A S G S D D Q S   V R L W D V
UniRef90_W4PJ49          K Q T R N I I T E E N G Y D T N P S Y S P D G K Y I A W Q S M E R D G Y R L F I M
UniRef90_UPI000366E4B6   R K P R K L V T N I T G A F R P H W S R D G K W I Y F S S N E P G R A G V Y R C
UniRef90_R5S8E6          Y A R T D L K D G A N Y V T A A S L S P D G A R M V V T S R G E   V F N L P V E
UniRef90_E1ID07          A L V R S L N A H S G A I M G V S F C P Q G E R L A S V A D D   D R L L V W R V
UniRef90_UPI0004414D4C   A A L R P L V G H T S S V T C V A F S P D A R L I A S G S G D H M   V R L W D A
UniRef90_M2TBA4          G E P I Y A P D G K S I Y Y T F N I T P G P I F E Y A Q D S N T D L F N I E R Y
UniRef90_UPI000345969B   Q L K T P L A A H E K A V T S V A F S P D G K V L A   S G D Y E G K V K L W N L
UniRef90_UPI0003606292   S R P K K L T D G L F V D R N P V W I H G S R A V A F A S N R S G S P G L W R Y
UniRef90_R5BYP1          Y E D P W R K H H Q S S I T K D I W                               L C T L
UniRef90_A6GGC8          E R R G P L V G H T A P V R G L A L S P D G T L L A S A S E D E T   V R V W
UniRef90_X6NWG9          K A I K K L I G N S Y D A Q S V Q F S P D G Q M V L S L S Q N N T V V   L W S V
UniRef90_X6MNZ9          N Q L L L L E G H E E A I N E V Q F S S D G T K I I S C S N D R   T I R L W N S
UniRef90_UPI000348BFBA   K P I Q T L T P N S Q T V T S L A F S P D G K I L A S V S R D Y R K I K L W N L
UniRef90_F4XQ23          K L I K T L A G H S E P V K K A L F S P E G N N I I T V S D D   D T A K I W D L
UniRef90_R6IUQ9          Y E D P W R K H H Q S S I T R D I W                               L C T L
UniRef90_X6MVF4          E I Q L L A G H L A S V Y S A Q F S P D G Q M I   V S A S E D H   I I V I W D A
UniRef90_F0ZI44          V T L S T   E G S T N T I K H C T F S P D G K Y I A T V S R D C   T I G L Y L A
UniRef90_I2EUL1          K E I K D L F G G Q G T I N V P S W S A D S K K I A F V S
UniRef90_UPI0002DAF54A   G E V T Q V A G G Y G G A V R P A P S P D G K E L A F V R R D K D Q T Q L W V K
UniRef90_C4RND1          G R L R Q R A E A E D K L T Y W L R H D P T G T Y L A G G A E D G A L R L W D P
UniRef90_A3WGV2          G E V T T A V D G Y G G A V R P T P S P D G T E M A F V R R D K D T S Q L W V K
UniRef90_M7NDK8          E E V T Q F T E G D H Q Y G L N T V S P D G K K I V F S V N R A E N Q D L Y L A
UniRef90_X6P0R4          E K I K E L K G H S N Y V L K A Q F S P D G C F I V S C S W D K   T I R I W D I
UniRef90_E3IYH8          A P I P N P L I L P N E A W T V T F T P D G R T L A V G G A D N A V R L W N V Q
UniRef90_M5C6Q6          D M H G P M N A H S W V V S C V R F S S D G S V V V S G S Y D   A T V R M W D V
UniRef90_UPI0003B64EC2   G E R R P L T N G T S G D I D G K F S P D G S L V A L H R G G Y G D L Y I V S A
UniRef90_U1KUY1          V D V A P D S F K V K M A R W S Q L S P N G E T A L F Q A L G Y   L Y V K
UniRef90_X6NGL6          K R I H T L L G H A G A V L R A Q Y S P D G Q Y I V S C S Q D K   I I R I W D V
UniRef90_F2AY73          S N V K R L T N E P G Y D G G P F F S P D G Q R I C W R A P N G A T A E I F T M
UniRef90_Q3JB50          R K P I Q L T D N G A A N F G P Y W H P D G K H I I F S S N M H N N F D L F L I
UniRef90_X6NM35          K E I K K L E G Q P R T V F S I Q Y S P N G Q K L V S A S N D   D T I C V W D V
UniRef90_UPI0004751609   L E K E F   T S N S S Q V L A V A I A P D G K Q A I S A L A D   T T L K V W D L
UniRef90_X6M5N4          K E L Q V L D K H W D A A I G V E F S P D G S K V V S Y S L D K   T I R I W D V
UniRef90_X6LUQ2          R E I K K L V G H S G F I S D V S F S H N G Q M I V S A S Y D K   T I A I W I V
UniRef90_E3FKF4          K E L E P F I T G P G G S V R P T P S P D G K S L A F V R R V R G K S V L F S A
UniRef90_B4VZ75          T L L A T L D G H R D R V N G I A F S P D G R F L A S A S L D K T V K L W R
UniRef90_A7V6C0          K T T K Q I T N T P C Q E R T V D F A P D G R T L V Y A S E R G G L W Q L Y T Y
UniRef90_R6ZSW5          G E P I Q L T K N N D Y I R S I Q W S P D S K S I L Y T D R K N R V V T V D V A
UniRef90_UPI000455FE38   G K C I A S I E Q L D S V N S V S F S P V G I H I S I G C E D S L I R V Y D V K
UniRef90_UPI000455E357   L V R E L A G H R G P V Q C V Q Y S P H G S L I A S S S E D Y T I R L W D A S
UniRef90_W2EY64          P I F S V A F G T G N H V L T A V S D D T A R L W N V S D F R R P V P L G P V
UniRef90_Q9UUG8          T L V E Q L H G H E E S V Y S V A F S P D G K Y L V S G S L D N T I K L W E L Q
UniRef90_X6LTC2          E E F K R L R G H S A S V N G I A Y F P D G Q I I V S C S E D K   T V R L W D I
UniRef90_X6ML94          K R L K E L N G H F Y S V R R V R F S P N G Q F V V S G S W D G T I R I W D V T
UniRef90_K9Q005          E L E V E L A D H R D S V L N L A F S P D G K A I A S S S Y D L S   I K L W D W
UniRef90_Q3AU34          N M V K V M K G H G D A V R S V C F T P D G R K V S A A N D E   T V R V W D V
UniRef90_C6WS51          R P V D R K S G P V K G I A S P V L S P N G R E V A F R A L G A   L W L L
UniRef90_G4TR82          E L N P S K G N W V D I I S T V A F S P D G S R I A S I S E G T M I L Q W D A K
UniRef90_L1JA93          R K E R C F K G H A H V S A V W S P D G K T I A T A S W D K   T V R I W E V
UniRef90_W7T561          P P A G Q V A S C S A S C T D I E I S H D V A V L S Q A K   T I R L W D I
UniRef90_Q08A43          R D M Q E T W A I H G V Y P T M S W T K D N K H I V F W A K G K I N F S V S T Q
UniRef90_B2IUK9          K K V A N L S G H S Q A V K S V A F S P D G Q I L A T A S D D K   T I K L W Q F
UniRef90_K9UFB4          G K C L R I F Q G Y A N I Y A M A F S A D A R P M L A A G Y F G G G L R L W N I
UniRef90_UPI0003B42BC5   T L I D Q E D L G Q A D V L V L A F S P D G K M L A S V G R   G K V L W D A
UniRef90_D0PQZ7          S N K K Q I T Q L K N H P V R F   L S A A S N D L F C F G Y D G E I Y T L K E G
UniRef90_UPI00026C9BD7   G A D Q L T H F G D G R L L Y P S M A A N G S A I V F   E R D F G V W R Y
UniRef90_B1KI24          V R L S C A E N C G S R D R D M T F S P D G R W L A I A R R F G N I S D I F I R
UniRef90_K9QKN9          G K I R A F S A H S Q A V N S V A F T P D G T T L I S A S R D R   T I K L W N I
UniRef90_X6NSA0          K Q L Q V L E G H S I D A Q G V Q F S S D N S K I L C Y F P N K T I G I W N V
UniRef90_K9WMN7          A Q P R I L S G H S S W V T S V A I S A D G N T L A S G S T D   G T I K F W N L
UniRef90_L0DED9          E K L V L A G H E K G R A L A L A F A P D G S A L T S A G T D   G T I R V W D S
UniRef90_F8WYH4          K Q T E N L T E G M G Y D I N P V F S P D G K Y I A W Q S M E R D K N R M F V I
UniRef90_B1WUP9          K K L S S L R G H N D R V Y A C V T P D G L K A V S A S R D Q   T L K L W D A
UniRef90_UPI000455F6DE   L A F D P I R V H T G S I G A V D W S P D G T K L L T A G S H D W T I   W I W D A
UniRef90_X6LYE3          T Q L Q L L E G H V D H V V G V Y F T L N G L N I I S Y S K D K   T I R I W D A
UniRef90_K7J2R3          K P L A R M T G H Q Q L I N D V K F S P D G R L I A S A S F D K S   V K L W D S
UniRef90_R7NUU7          K Q T E K V T N Y T D Y D V K F P   S S N G E V I V Y T R Q T E K I S I T L K S
UniRef90_UPI0003AD301C   G R T V H T I T D   A T G S D V A F S P D G K T L A V P D S D   G T H S L R L Y
UniRef90_UPI0004228623   G M K N S Y K V G I A I N K S I S F N P Q E S I L A S G G W D   N L I K L W N P
UniRef90_K2PQ06                   I R N A T T S P G I L T V F     N A V G Y L W K K S
UniRef90_G8TBP8          P V M V   I R G D N G I L T D A D F S P D N R L I A   T S D D D G T A R I R D L
UniRef90_UPI000334678D   R C E R I L T G H T Q S V T C L L W G G D G   L L Y S A S Q D R T I K V W R A
UniRef90_M2YR63          T L V H N L T S H A H W V N H I A L S T D F E R L V T V S D D C T M F L W E P A
UniRef90_S4Y6G3          G E P V V L R D E R A G L L K A A F S P D G K S I V A T S G P N V K V W P A D G
UniRef90_X6LZG0          K L L E Q L E G H S D Q V Y E A K Y L S D G Q T I L S C S R D   S T I Y L W D I
UniRef90_L1J3A9          E C R Q R L E G H E G R V T C L V W G T Q G R M I   S G   T I K I W D L
UniRef90_H9JDI6          W V H   D L Q A H S K E I Y T L K W S P N M N L L L A S A S F D S T V R L W N L
UniRef90_F0QZY7          R Q T R N L C Q N K G Y D T N P K F S P D G T R I A W Q S M E R D G Y R L C V M
UniRef90_UPI0003795CFA   E I S E S P I A G M E G V N Y P Y P V V S P D G T E I L F H A T G T R P N V D L T A
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                                210          220          230          240
UniRef90_X6M6N5          I A N E K L K E L Q G H S D I V N Q A R F S P D G K F I A S C S W D       R T I
UniRef90_T2JCB6          D   G T L Y K T F S G H D D R V K T L A F S P D G K R L A S A S L D G T V N V W
UniRef90_R0KSP1          S S G A C L Q T L K G H S G S V S S V A F S H D S T R L A S A S Y D R T V K I W
UniRef90_A1BIW6          K S G K L L H T Y R G H T L E V Q S V D I S P D G R V I A S G S D D R K I K L W
UniRef90_S8FGK1          N G K C L N A S P M R H P S I I F F V R F S P D G T L L A S G D Q D G L T R I W
UniRef90_A3IST7          E G K E I I D P I T V H Q Q R I E S V A F S P D G Q Y F I S G S W D K T I R
UniRef90_UPI0003730F41   N Q D G S G L K K I   S S Y V T K D P A W S P D G Q K I A F G S D N G                I
UniRef90_X6P4Y6          K L G K K I K E L K G Y F G P V F K S Q F S P D G K F I I S C S A D K T I R I W
UniRef90_D6TWR0          N S G R C V H T F K G H T N I V T S V S L S R D G H W L V S G S K D N T V R L W
UniRef90_UPI0003722710   V P L S G E A P R R L A S G R D W Q P M W T P D S K D I V F Y S N R G N M V R A
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UniRef90_A0DL78          K T F K Q I G Y L Q G H S H F V T S L V F S P D G M V L Y S G S Q D K M I R Q W
UniRef90_W4PJ49          D L A T G E K R F A S Q A F N V D A F V W S S D A K T I Y F T G V W H G E T H I
UniRef90_UPI000366E4B6   P A S G G D A V L L S K A I D G A S P Q E S F D G K T I Y F A S H D G
UniRef90_R5S8E6          K G V T K N I T R   S P G A H D R D A Q W S P D G T Q I A Y I S D A T G E T E L
UniRef90_E1ID07          A D G A E V G S L R P L S G R V T G L A F S P D G E G L A V S G A D G A V S L Y
UniRef90_UPI0004414D4C   N A R T L K L K L E G H S G S I S S I A F A P G G T R V A S A S Y D W T V R V W
UniRef90_M2TBA4          D L E T G K V T T A I S G G G A V R P T P S P D G S K I A F V R R E N T Q S K L
UniRef90_UPI000345969B   D N G Q L F N T L D G H T N A V W S V A F S P T G K S I A S G S Y D K T L Q L W
UniRef90_UPI0003606292   D L D T G Q Y K L L V S G G Y I E S P Q C S P D G N W L V Y T D W T A N Q P S I
UniRef90_R5BYP1          D G E R T Y Q K I T Y F V G E D R E P V W S A D G R S F Y Y L S E E S G S F N V
UniRef90_A6GGC8          D L V T G E A R S T A H G Q V V Y T V A F S P D G E L L A T G T F D D E T G H
UniRef90_X6NWG9          Q S G K I L K E L K G H S D Y I L R A K F S P N G Q F V V S C S R D R T I R I W
UniRef90_X6MNZ9          L T G A Q I Q I L K A H S D R V K G V Q F S S D G S K I I S Y S W D K T I R I W
UniRef90_UPI000348BFBA   E T G T E I   P T L I G Q D N N V T T I A F S P D G K I L A S A N R D R S I K L W
UniRef90_F4XQ23          D   G N A I A K L I G H Q L S V T T A A F A P H G D K L I T A S D D S T V K L W
UniRef90_R6IUQ9          G K D R S F Q K V T T F G G E D R N P V W A A D G A S F Y Y L S E E K G S F N I
UniRef90_X6MVF4          K S G Q I L K Q L R G H L G P V T R A K F S P D G Q S I V S C S K D K T V R L W
UniRef90_F0ZI44          E S Y K L L N R L R G H T D W I N F C T F S P D S K K L V S G G W D F N I R V W
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UniRef90_UPI0002DAF54A   D L A S G R E R M W A V T G V Y P N I D W L P D S S A I V F W A        G G K L
UniRef90_C4RND1          R T G R L L H R L T G H A G P I Y T F D F H P S G R H I V S A D V T G S V R R W
UniRef90_A3WGV2          D L A T G A E R M W A V Y G V Y P N M D W T P D G R S I V F W A        G G K L
UniRef90_M7NDK8          D A E S K E E K I I D Q D G Y Y G G A M F S P D G K K I A F I G A D R T H A D V
UniRef90_X6P0R4          T S G K E V Q K L E G H T D V V C S V R Y S S D G Q N I V S C S R D S T I R L W
UniRef90_E3IYH8          D P T Q P G S P L V G H S N T V T G V A F S P D G R T L A S S S W D Y S V R L W
UniRef90_M5C6Q6          A T G Q H V M K L L E G D D W I L S V G F S P D G H K V V C G S E        T K L
UniRef90_UPI0003B64EC2   K G E T S S T P A R T D N P G L R G I A W S C D G R H V L F S S H A G G S S W L
UniRef90_U1KUY1          D I A S G K V R R L T T D H F E F Y P S Y S R D G K S I V Y T A W D D K E G S I
UniRef90_X6NGL6          K L G K G I L A K L K G H S D I V I D V K F S P D A Q T L V S C S D D K T I R L W
UniRef90_F2AY73          K T D G S D V Q R L T E N A M S W A P F Y H P S G E F L V F T T N K H G N F E L
UniRef90_Q3JB50          N V D T R E E Q I T H H P D F D G F P M F S H D G K K L V F A S N R N G
UniRef90_X6NM35          K T N E K L K Q L N G H S T S I R R A R F S P D N Q F I V S C T W D R T I Q I W
UniRef90_UPI0004751609   E A I Q K I Q K Q A G H T D W V Q A L I R H P N K M E A I S A S N D T T L K I W
UniRef90_X6M5N4          A S G E Q I Q S L E G H T G K I K S I Q L S P D G S K I V S C S D D R T V R L W
UniRef90_X6LUQ2          H S G E M I W H L Q R H S D W V Q A A K F S P D G R M V V S S S W D K T I R V W
UniRef90_E3FKF4          D L V S G A E R P W A I H G V Y P A M A W T P D S K S L V F W A        Q G K L
UniRef90_B4VZ75          D D G T L L V T L E A H G D R V Y D V T F S P D G R T L A S A S V D K T I I L W
UniRef90_A7V6C0          A T E L K E E R L T N S D A A S F Q P Q Y S P D G K E I A F L E N R S T I R V I
UniRef90_R6ZSW5          S   K T K K E I L R N P E S E F Y D V S Y S P D S Q W L T Y T K A A N Q M S V V
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UniRef90_UPI000455E357   T G D L V K G P L R G H K H F V S S V S F T C D G H R L I S S S S D E S I R V W
UniRef90_W2EY64          I T H A G G       S S P A S G A A A L T P D A R T L A V G T V D G A V Q L W
UniRef90_Q9UUG8          C V S N C K Q T F T G H K D F I L S V T V S P D G K W I I S G S K D R T I Q F W
UniRef90_X6LTC2          K T Q K E L Q I L E G H S M Y V S G V D I S P D G T T I A S C S W D A T I R L W
UniRef90_X6ML94          T     G K E L Q I I E N E Y D V N D V K Y F P E G Q M I V S C S D D N N I C L W
UniRef90_K9Q005          R S G S V K K T L L G H N Q P I Y G L D Y S P D G E L L A S S A Y D H T I K L W
UniRef90_Q3AU34          Q S G N E L H M Y R G H V L E V Q S V D V S P D G T V I A S G S D D R K I K L W
UniRef90_C6WS51          P L D G E P R A L V D D G S F A S D P D W R P D G S A L V Y T S D R T G T P A L
UniRef90_G4TR82          T H R Q L G G P L K C H N Y D I L S V A F S P D G S R I V S G S R R S S G G E I
UniRef90_L1JA93          S S G K S S Q H C C S K T A A L T S V A W S P D G K M I V T L S G E G I V A V W
UniRef90_W7T561          S T P S H P V Q L G D G T P Y R A A F A F S P D G R V L A V P E D E H V V Q L W
UniRef90_Q08A43          R D I Q P S V R F T Q N L D K D E F D Q V S P D G E K V V F E A        L G K I
UniRef90_B2IUK9          D T L K E I C T L L G H S H A V K S V A F S P D G Q I L A S G S W D K T I K L W
UniRef90_K9UFB4          E D G N R S T S L S G H N S S I R T V A F S P D G R L L A S G G S G D D P I I K
UniRef90_UPI0003B42BC5   E T H G L L S E L A R R G T R I N T L V F S P D S A M L I G C S D G T I E M W
UniRef90_D0PQZ7          E Q P K K V E I S I N S D H K V N N I S F S P N G K E V A F I        L R G D V
UniRef90_UPI00026C9BD7   D P A T G Q T R R H E Q L Q S F S R L A V S G D G Q K V A V I        G H G E V F
UniRef90_B1KI24          D I E T G K E T R L T F G L E D R G L S W H Q D N E R V I F S T E N S G V R N G
UniRef90_K9QKN9          Q S K S L V R I L K G H N N W I N A I A I N P N G Q I L A S A R D G                I
UniRef90_X6NSA0          I S G K R L Q V L E E R L N Y V S K I N F S P D G S K V V F Y S E D       R T L
UniRef90_K9WMN7          H S G E L L R T I E S Q S T E I F A V A M T P N G Q I L A S G S M        K E V
UniRef90_L0DED9          R T G R E Q R V L T G H D G S V L I V A Y D P S T K I L A S A G F D G T V R L W
UniRef90_F8WYH4          N L A T K E K T Y V T E A F D Y N T D F W S D D N Q S I Y F V S C V E A K T Q L
UniRef90_B1WUP9          T T G K E L S T F R S H N Q W E Y A V V I T P D G L K A V S A S R D H T I R L W
UniRef90_UPI000455F6DE   A T G E R V L P L E D T Q D G V R A A A F S P D G T R F V S G F M D H T L R M W
UniRef90_X6LYE3          A S G E Q I Q I L L G H T E N I N G I Q F S P D G S K V L S Y S D D N T I R L W
UniRef90_K7J2R3          N T G K Y I T S L R G H V Q A V S V A W S A D S R L L V S G S A D S T              L
UniRef90_R7NUU7          D N I L A R K E M K K V G G N L T A V S L S A D G H R V A V T A        R G E V
UniRef90_UPI0003AD301C   D V A T G R S T I A F D G D L V A N V I Y S P D G K T I A S W G H G N V I R L W
UniRef90_UPI0004228623   K N G Q L I K T L S G H Q D A I N S I A F S P D G Q L L A S G S N D N T V K I W
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UniRef90_G8TBP8          L T S K I L V Q I K A H K N S I D R V T R D G R F I A T S S Y W D G T T G I
UniRef90_UPI000334678D   H D G V L C R T L Q G H G H W V N T M A L S T D G P E R L V S G S D D F T L F L
UniRef90_M2YR63          K S T K P L Q R M V G H Q K T I N H V A F S A D G V I A S T G F D N H V K L W
UniRef90_S4Y6G3          R G A P R V L A S G Y E D R A I A A L A V S P D G S H I A I A A L D D A V R L L
UniRef90_X6LZG0          K S K S K L Q L E R F S D P V T G I D I S P D S Y T I V S C S Y D K T I T I W
UniRef90_L1J3A9          E T G E C R Q I L V G H T G V K M V A W G Q D G K F I V S C S D W T A R V W
UniRef90_H9JDI6          E K G V C I I H T L T K H T E P V Y S V A F S P D G K F L A S G S F D       K C V
UniRef90_F0QZY7          N L S T G E K T Y V T E A F G V D D Y C W A P D S E T L Y F T G V H A T S M I
UniRef90_UPI0003795CFA   P I E G Q E P T Q V I R S L E D A F P H W S P D G K T I C F Y R H E K T K S S L
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                                        250             260             270
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UniRef90_T2JCB6        N V
UniRef90_R0KSP1        D
UniRef90_A1BIW6        G I
UniRef90_S8FGK1        D V       R D G T S V C E F K S H   A W V N T A A W S P D G K K
UniRef90_A3IST7          L W N L E G T E I P P I K G H E D Y I L C V A I S P D G E
UniRef90_UPI0003730F41 Y V M S A D G S G A K Q V F A G G S V V R G P H W S S D G K
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UniRef90_D6TWR0        E V N S     G R C V H T F K G H T N I V T S V S L S R D G H W
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UniRef90_A0DL78        N V     T A T K Q D Y V L D G H L N Y V S S L S F S P D G E
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UniRef90_UPI0004414D4C D T D     T G A V V R V L V G H S R W V R C V A F S P D G
UniRef90_M2TBA4        Y I K D L E T G T E R K I Y D D L D R D V Q E T W A
UniRef90_UPI000345969B N V Q N     G Q L L K T I S G H D K A V W S L A F N P
UniRef90_UPI0003606292 W R V A S T G G A P V R I     F S E E A R H P V F S P D G K R
UniRef90_R5BYP1        W K A A A D G S E K R Q L T R H T T H V R S L T V A D D G
UniRef90_A6GGC8          L W E L A T E R H L R S F P H E G P V V G V A F S P S G R H
UniRef90_X6NWG9        H V K L     G E E L K K L E G H L F W I N D V K Y S P D
UniRef90_X6MNZ9        D V S S     G K Q I Q V L E G H N G I I N C I H L S P D
UniRef90_UPI000348BFBA D V     S T D K E I S T L Q G E T S T V T S L A F S G D G K
UniRef90_F4XQ23        D I I Q Q P V N S S F R       H S A A V N S A V F S P D G T K
UniRef90_R6IUQ9        F K K D L A G N S E K Q I T T H T
UniRef90_X6MVF4        N I E L     G T C M R I L G G H C N S V R D V K Y F P D G Q
UniRef90_F0ZI44        N V     R T Q K E T L C L K G H T S S I E K A F F T A D Q K Y
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UniRef90_UPI0002DAF54A N R V T R D G S G H A V I P F R V N D T R G V A D A P
UniRef90_C4RND1        D L P E G G G P P V R E L G R H S G A V Y R V A F S P R G
UniRef90_A3WGV2        N R I D S D G S N F A E I P F S I D D T R G I A D A P
UniRef90_M7NDK8        Y V Y D V A S G S L T V L T
UniRef90_X6P0R4        D       S K S G K E I Q I L E R Q S N W V T D V D I S S D G N
UniRef90_E3IYH8
UniRef90_M5C6Q6        H V V D R H T G N I E P I T G H S S W I R S A E F S P D G K R
UniRef90_UPI0003B64EC2 W Q V D L D H S E P K P L L S A S L D L T S P A V S P D G T Q
UniRef90_U1KUY1        R V V S A K G G K G K T I T Q Q P G H Y V S P S F S P D G K Q
UniRef90_X6NGL6        D M     K F G I E I Q T L K G H S K G I T R V D V S S D G N
UniRef90_F2AY73        Y L V R A D G G E P V R L T T T E G F D G L P V F L P N G N Q
UniRef90_Q3JB50
UniRef90_X6NM35        D V E S     G K E L K I V E G H L D A V R D V K Y F P D G Q
UniRef90_UPI0004751609 D M     E T G R E L R T L T G H T G W V E S V A I T P D G K K
UniRef90_X6M5N4        G I D N E T T E D E E
UniRef90_X6LUQ2        D L     K T G K E V L I L R G H L Q W V T D A Q F S P D G Q
UniRef90_E3FKF4        N R I D V A S K R V T P I P F H
UniRef90_B4VZ75        D L
UniRef90_A7V6C0        N L K T K D V R T K Y Q Y S Y S D G D Q W F   Q W S P D S K W
UniRef90_R6ZSW5        Y V Y N L K T G K E Y P V T E K W Y N S S E P V F S T D G K Y
UniRef90_UPI000455FE38 D A L T G T A K C   G P L E G H K S Y V N G V S F S R D G
UniRef90_UPI000455E357 D I N S G H C V F G P L Y G H G E P V H A I S C S P D Q E H
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UniRef90_K9WMN7        K L W N I D T G E L Q T L P G     C S P V V F S P D G Q
UniRef90_L0DED9        D A S S     G S P L R T I P A H S G P V L A L A F R P D G Q
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UniRef90_B1WUP9        D L     S T G K K L S S L R G H N D R V C A V S I T S D G
UniRef90_UPI000455F6DE D
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UniRef90_X6LZG0
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UniRef90_H9JDI6        H I W S T Q T G S L V H S Y K G T G G I F E V C W
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UniRef90_R4KL40                                                      H E S E
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UniRef90_K9V548                               T F S Q T W K C V Q I I T N Y A S S
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UniRef90_D9X8V0                             R I W S R S P A G H T P L A A L A H P A A
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UniRef90_R1C5C8                                             P L P L Q A H R D W
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UniRef90_B7FY04                              D V S P K E I L K L E M H Q S E
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UniRef90_UPI000455DED2         A S G A D D S T V R L W D A R T G R P V K S P F R G H R D G
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UniRef90_UPI000371D815          S G S Q D G A I K I W N L E T E D L I T I S A H N D S
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UniRef90_Q54KH7
UniRef90_Q10ZJ8          V N S V A A L P N Q R I I S A S D D N T L K I W S L K T A E E L L T I V S
UniRef90_B3QYB1          I F S V D W S P D G K M L C F I G N K T Y K S D V Y I Y D L E S K T L Q N L T N
UniRef90_UPI000373D2ED   E F E P T F S P D G T W I A F S S D R A D G R T D I W V R R D G T G L R R L T
UniRef90_T1IXE5          V T C V K W G G T G L I Y S A S Q D K T V K V W R A A D G V L C R S L E T H
UniRef90_UPI0001CBAF9C   V T S V D F N P N M K Q L A S G A M D S N L M V W N F K P Q M R A Y R F
UniRef90_UPI000455ED32
UniRef90_UPI000455DED2   V N C V A W S P D N T R I A S G S F D R E V R V W D V S T G Q A L F R G A L Y A
UniRef90_M5XLG5
UniRef90_UPI000455CFFD   A T S L A F H P T G R Q L A T I C E N D S T V L V W N V T E G G S G V L H
UniRef90_H0VTJ9
UniRef90_A2QIK5          S N L V R F S P D D K L V A L V R N D K V T L W D T A R L E K M H A L G G
UniRef90_D7JFB2          I N D F I Y S P D N K K I L F V A D V K Y G E R M I I D D L M Y K H W D E W V Q
UniRef90_F0ZZF6          F L G
UniRef90_UPI000255BA55   S I A P M P S P D G K K L A F V R R Q D F N T A L F V K D L S T G L E T P I Y S
UniRef90_K2DSJ3          N F D F A W S P D S K Q I A L A H Q P S F S Y W I D I I D I A T G Q S Q Q I A S
UniRef90_R7SIZ8          V H S V A Y S P D G Q H I V S G S T D E T V R V W D A E T G E A I L E L S
UniRef90_F0ZGW0          I R S V C F S P D G N Y L A T G A E D K T V K V W D I H S K K I Q H T F Y
UniRef90_UPI00036488B2   A E A Y W S F D D T K L V F Q S N N P G W G M Q C D Q M F L M N F E E N F R D
UniRef90_UPI0002D40EAB   I G A I A I T P D G E R F I S G A W D G T L K L W D L Q K C L L S N T T K C
UniRef90_Q756W4          V L C V A W S A D G E V I A T G S M D A T I R L W D S E D A L R G H T K W I T S
UniRef90_H2AXD0          V S C V K W G G Q G V L Y S G S H D K T V R V W D M N L G G K C I N I L K N
UniRef90_UPI000371D815   V N T I A I T P D G S D I I S G L Q D G T I K I W N L E T K E L I R T L T G
UniRef90_X8JAU5          V N S I A F S P D N T R I I S S S S D S T I R T W D P R Q G T L S D D V L K T H
UniRef90_F2PHQ1          V S C V K W G G L G K I Y T S S H D K T I K I W D S E S G S L I Q T L S
UniRef90_K9RJU1          V Q S V A F S R N G E I V A S G S A D K T L R I W N F R T G E C L N I L Q
UniRef90_I3ITY4          V F R T A F L T D S S G L L S C S E D T T I R Y W D L G S F T N T V L Y Q
UniRef90_UPI00035E66A7   D T A P A W S P A G D R I A F L R G G D G P A Q L W L L P T A G G E P E P V T E
UniRef90_B9XH67          I N G V T F S P D G N F V F T A S G E P G I Y G E V H Q W A D G S V V H R C T G
UniRef90_J4GQR0          L T C V A F F P D S K T I I S G S Y E S R I R L W N V A S G E Q L G E P L R G
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                                      90              100             110             120
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UniRef90_G9NAM1          G Q L A S G S W D K T I K I W D L G Q I A S E T W D K T I K I W D V D T G A C I
UniRef90_G1XET5          H T A G V S D V A W S P D S K T L A T G S D     D K T I I R L W E L K S G R M I R
UniRef90_D5SWE8                                        G G R R Y Q W D F D P H M D L Y T I N F D G T G M Q
UniRef90_UPI000344E32F   H R K N I Y A L A I A R D N Q T L A S G S H K        I K L W N L Q T G E P F R
UniRef90_K5WI29          G H N A V V M C L A F S P D G T Q       L A S C S D S T G I L W N V A Q R R R I
UniRef90_UPI000308B658   H S N C V T A V V L S S D G K V V A       S G S W D K T I K L W E F A S G N I I H
UniRef90_UPI00026C7A21   S D V Y V I N T K S G S K A V R L T Q S S G T E M N P E W E S S P S W N P E S T
UniRef90_UPI0004432F3C   K G H S R S V E T V S F S S N S K R L V S G G W D H K A I L W D V K K G Q M I T
UniRef90_Q5QZV2          V S E S P G S I S W S N D D T Q L A F T L S V K A E A T P F A K S V K K P T K P
UniRef90_E2BDB1          G H R H W V L C I S W S P C G S K V A S A C H T K S V T C L K W G G S G L I Y S
UniRef90_M5T1W4          D P N Y E I Y A A K L D E I Q D G T T D G L T R L T N A K G Y D A E G S Y S P D
UniRef90_K6X6C1          D Q K N I A D P A F S P D G K Y V Y F T Q D I T A G S R F N Y N R D P S G E E E
UniRef90_X0EW26          H S N R V N S V V F S H D S R K V A S A S W
UniRef90_R4KL40          G D V R D I V F A P G G E       Y F A T A S K D R T I K I W E T G T A K S V
UniRef90_S3BP97
UniRef90_U2I8Y3          T P A D A V C I S       R D G R R I L Y Q E V K T F E N E W R K H H T S S K T Y R
UniRef90_G4M196          L G Q H K G P I F A L K W N K K G N Y I L T A G V D K T T I I W E A Q T G R I A
UniRef90_K9TLA2          H S A A V N S V A F S P D R R T L V S G S E       D T S V V F W D V T T Q A D T
UniRef90_UPI0003A140C5   G H T D A V T G V T F S R D G E V L       A S G S A D K T I R L W D A E T G E L I
UniRef90_L8Y7P5          H K D A V T C V N F S P S G H L L A       S G S R D K T I R L W V P N V K G E S T
UniRef90_L8WHN0          H E D W V N S A T F S P D G K R V V S G C R D G K I R M W G S K T L S L V F D P
UniRef90_H9K6V5          H N A E V V V A K F S P I Y T K I A T G S L D M T S R I F D       I T T G E E L G
UniRef90_R7QCZ9          H A R G I S C L A I N F R S N M A A S G S Y D Q K V K L F D L T S G E T L H N G
UniRef90_D5EUV7          H K T N P V R F L T A A D N G T L C Y G Y D G E I Y T V R Q G S Q P Q R V N I N
UniRef90_E1SUL8                              K E T F R L L N S P A W S P D G Q Y L V G R K H Y
UniRef90_UPI00032ADF01   G H T A E I V C L S F N P Q S T L       V A T G S M D T T A K L W N I Q N G E E V F
UniRef90_UPI000369D84C   P V Q R D E Q E S I A P       L G V L P A M S F T P D S K H L V A S Y G G K I
UniRef90_UPI0003458A8F   H N D R V L S L A F S Q D G C Y L A S S S R D K T I R I M N L K N N D D T F I L
UniRef90_T5KAT5          A D D F D Y A P R Y S P D G K W L V F V R N P Q M G     D L W R M P A G G G T P E
UniRef90_A5PKH9          H K D V I T S V Q F S P L G N L L A S A S R       D R T I R L W I P D K R G K S
UniRef90_UPI0003B7087F   H I R S I A A L A F S P D G G T L A S G S T
UniRef90_K9V548          F E F F A N Q S L S F S A N G K I L A G A S F H G F S A W D I I S R K E I Y T I
UniRef90_UPI00034D81FD   V K S D I A S F D L S P D Q K K I A F V S R G E L F I T D P K G K F V Q Q I F T
UniRef90_R9HCF2          D L M Y K H W D E W V E S I P H P F I A D F D G N M M G A A T D I M E G E P F E
UniRef90_D9X8V0          H T D A L Y T V A M S K D K R L L A T G G E D H T A Q L W D I S R P S H P T H L
UniRef90_A0A015MWM5      H E Q D I Y S L D F S R D G K R L F I V S G S G D K T A R V W D M V S G E L L Y K L
UniRef90_R1C5C8          L A W E P L A E S R L A S A S K D G T V R L W E R V G G R C A G T L C G H A N S
UniRef90_UPI000414C9C8   L P F S P S S L S W S P Q G D Q L A F S M H V D K D A P V A A K I P K K P K G A
UniRef90_UPI00047C9AAD   A I K N N N D H V L T F D G K L L G I S H H N Q D D N Y Y L P T N G D S N P K M
UniRef90_UPI0003319441   H T A P V R G V D F S A D G Q Y L A T A S E D K S I K I W N M Y R Q R F L Y S L
UniRef90_UPI00036CE9EB   R G T E T F E P A F S T A G E S F D V N F S P D G H T L A I V H E Y G S V W L W
UniRef90_X8JF69          R N H T R T V N S I A V S P D G T H L V S G S D D H T V Y V C E L H T G S N R G
UniRef90_D1YXV8          G P M S A V F Y C V F S S D G R
UniRef90_B7FY04          P H G T D P R D K K N K D V T T L E W S S D G S Y D G V A R V W A R N G A L M H
UniRef90_UPI0002F59341   G H Q G P S G S N V A I S T D G Q T I V S W D L D G T I R L W N R E G Q P L G E
UniRef90_UPI000380FA32   A T A C N N D H G L T P D G K T L I I S H N D K R V T A G A N S R V F T L P T E
UniRef90_UPI00045749E1   H T A T V R S V Q F S Y D G G T L V T A S D     D K T I K V W A V H R Q K F L
UniRef90_N9W173                            Y D V L D Q D V Q E T W A V T G V Y P N M A W T P D S G E
UniRef90_A9B5D0          L P Q A T N N G R E L A Y H Q A S Q L L A I S Q E Q V I Q L W D C Q R L Q L A T
UniRef90_F2UQC9          H H A G I N D V C W S P D Y T L L A T A S S D S T V R T W D A S A Y M T D E L R
UniRef90_UPI0000E37937                                          C S E D M S I R Y W D L G S F S N T
UniRef90_X6MDD1          H D Y W V N A A E F S P D G N T V A S C S Y D K T V R L W S V E S G K E
UniRef90_X6PAG6                  H W I R I L K I K L G W I N D F D K I V I N Y V K G Y E L L M
UniRef90_U9W700          D A G D S Y G V A F H P H R P L M A T A N L D G S L K L W N I A D K T L V Q T I
UniRef90_W3XBH4          E G H G G P V N S V V W S H D A T R L A T A S R D K T V K I W H A V T G Q C E L
UniRef90_Q22D00          I Q V N N Q F K S I A I S P D S L F L A T V S D I N N I E I R N I Q K N I Q L I
UniRef90_B3RVZ8          G P       V R C C C F S L D N N Y F A T S S T D R T I I L W K A T T C Q D I I
UniRef90_W7SB90          H S G P V T S V A F S P D G K T L A S V S Y D H T A R L W D V S D P A H P T L L
UniRef90_UPI00016C3894   K G V R R R Y S W D F D P H M K I       Y E A G L D G T G L K C
UniRef90_A6C5Y9          H E D E V S V V A I C P D G K T V A T G S V       D S V L L W D P K S G Q P Y D
UniRef90_A0A016PR18      H T S L V W S I A F A P D R I W E V I E R E Q Q P G T D N D T R D D T S E A S N
UniRef90_Q54KH7
UniRef90_Q10ZJ8          D N R C I F A V A V T P D G K Q A I       A C L S D Q T L K V W N L E T L E E I
UniRef90_B3QYB1          D V F S D S D P S W S P D G Q K I F F V S D R T N H L N V K P I A V E T
UniRef90_UPI000373D2ED   T D L N A R R P A W S P D G A R I A A G T D S G I V T F T A T G K K A A D F V A
UniRef90_T1IXE5          A H W V N Y       I A L N T D Y V M R T G A F D P S D A D V V Y R N I T E S N E
UniRef90_UPI0001CBAF9C   V G H K D A I M G V H F S P S G H L V A S A S R D K T V R L W I P S V K G E S T
UniRef90_UPI000455ED32                                                  W S L N T Y T N V
UniRef90_UPI000455DED2   H G D H V R S V S Y S P D G M Y F T S A D S G A P P R V Q I W D A R T G K A T L
UniRef90_M5XLG5
UniRef90_UPI000455CFFD   G P L R G H L W G A R L L C F S R D G E W L V D V S G A D T V C V W D T S T G K
UniRef90_H0VTJ9
UniRef90_A2QIK5          H P D G V T V V R P       S P T G S F L A S G S S D T T V R V W D I F T G T V Q
UniRef90_D7JFB2          S V P H P       F V A D F D G K A I S N E K D L L Q G E P Y E S P M K P F G G A E
UniRef90_F0ZZF6          H S G P V Y G C S F S P D S Q Y L L S C S E       D T T A R L W S M E T M S N L
UniRef90_UPI000255BA55   E L E R D L Q E T F G S H G N Y V Q Y       D W M P D G K S L V V W S K G K F L R
UniRef90_K2DSJ3          F D A S I R N L S W V P N G R E L L Y M K E R V G F Y Y M E E H D R E W I Q S L
UniRef90_R7SIZ8          C R S R V W G V A F S P D G R H I T V R I W N S A T G E A V C E P L R G H E V S
UniRef90_F0ZGW0          G H E L D I Y S L D Y S S D G R F I V S G S G D K K A K I W D I E K G K C A Y T
UniRef90_UPI00036488B2   S K P P M I S T G M G R T T C A Y F L P D N E H M V Y A S T H L A G K E C P E V
UniRef90_UPI0002D40EAB   H P Q A W H Q I A V T P D G Q F V L S A S S D G T V K T W D L H N C T E Q S T Q
UniRef90_Q756W4          L S W E P I H L V K P G E K P R L A S A S       K D G T I K I W D T T R R V C
UniRef90_H2AXD0          H A H W V N H L S L S T D Y       A L R R G P F D H T G T K M A S P E E A
UniRef90_UPI000371D815   H Y A S V N A V A L T P D S S V L I S A S S       D C C L K V W N L K T G K E L
UniRef90_X8JAU5          S D A V S S V A Y S P N C Q H V A S C S Y D G T V R V W D V R D D L P V A G G T
UniRef90_F2PHQ1          S H T H R V N H L A L S T D F V L R T S F N E H N Q K P P E K E E E K V K L A K
UniRef90_K9RJU1          G Y S D W V Q S I A F S A N N Q I L A S G S V D R L W N I K L G K C W K I
UniRef90_I3ITY4          G H V Y P V W D V D V       S P C S L Y F A S C S H D R T A R L W T F S R T Y P L R
UniRef90_UPI00035E66A7   L P L G A G A P V W S P D G T A I A F T A P V D R R P S P R A E A T S P P P V V
UniRef90_B9XH67          H K D A I V F T V A V S R D G T K       L L A T G S   Y D Q L L W N V E T G K E I
UniRef90_J4GQR0          H K V A V F T V A V S R D G T K       F A S G G G D G K V L I W N A A T R V Q A
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                            130            140            150          160
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UniRef90_G9NAM1         Q T L E G H S D W I R S I A S S A D G Q Y L A S A S D D M T V K I W D V A A     G
UniRef90_G1XET5         I L K G H H N Y V Y C L N F N P Q G N M I V S G S Y D E A V R I W D I R S     G
UniRef90_D5SWE8         R L T D T P G Y D A E G S Y S A D G K Q I V F T S N R D G D A D L Y L M N A D G
UniRef90_UPI000344E32F  T L F G H K Q W V Y A L A I A P D S R T V V S G S E D A     T L R V W D V M T
UniRef90_K5WI29         A R L G G H G S V L W T L A W S A D G M R L V S G A E D Q S S R V W   D A E S G
UniRef90_UPI000308B658  T L T G H K A W W K A V A L S A S G S G D S T I K I W E L S     T G
UniRef90_UPI00026C7A21  K I V Y L T T S D K S H L Y A P T Q L A I I                   G L E
UniRef90_UPI0004432F3C  E L L G H H D A I Q S S D F S S V S E Y L A T G S W D S T V Q V W D L S I L G N
UniRef90_Q5QZV2        K G A K W S D S P I I V Q E A Y Y Q R D G T G V L E P A H T Q I F V V P A E G G
UniRef90_E2BDB1        A S Q D R T I K V W R A E D G V L C R T L E G H A H W V N T L A L N V D Y P F N
UniRef90_M5T1W4        G T Q I V F A S N R E A Y S R E L T T R E Q E Q F D R D P A F M I D L Y L M N G
UniRef90_K6X6C1        R F I S G T G G A I V P T P S P D G K Q I A F I R R I K N R T A L F V K D L T D
UniRef90_X0EW26                                                    D K T I R I W D A E T S K
UniRef90_R4KL40        Q T L K G H Q S Y V L G L D F S P D G N Y I A S V G A D N F L I I W D V K T G R
UniRef90_S3BP97                                                 M Q N T L W S I P R S G
UniRef90_U2I8Y3        F V A R H D G E D R D P V Y A P T G K S F Y F L S E R D G S M N V Y L T K L S G
UniRef90_G4M196        Q Q F A F H V A P T L D V D W Q S L D S F A S C S T D T N I H V C Q L G   C S
UniRef90_K9TLA2        Q T G W G R S G A V N A I A I S P C G R F L A S G C A N R T I L L W E L P S   G
UniRef90_UPI0003A140C5 Q T L A G H T D A V H S V T F S R D G K V L A S G S K D K T V R L W   D A E T G
UniRef90_L8Y7P5        V F R A H T A T V R S V H F C S D G Q S L V T A S   D D K T I K V W S T H R Q R
UniRef90_L8WHN0        F G S Q E H T G G I N S V T F S F D G R L V A S G S S D G T I C I F D S H S G G
UniRef90_H9K6V5        I L R G H T A E I I A L H F N N D G N Q I I T G S F D G   T V S I W D T R I L T
UniRef90_R7QCZ9        I L V   G P S S H V Q S V A F S P N G G L L A C G H R N G T I A V W D T P S A G
UniRef90_D5EUV7        I V S D K T D R E L I R E V L T K G A T E V V A S P S G I H G E V Y V T A T D Y
UniRef90_E1SUL8        T A Q R S L G A G E V W M Y H I S G G K G I Q L T E R P N D Q K D L G E P A F S
UniRef90_UPI00032ADF01 T L T G H S A E I I S L S F N T S G N R I I T G S F D H T V A     V W D A E T G
UniRef90_UPI000369D84C Y K L P I A G G D A L N I P F R V E E D L V V G P R L K F D Y P I S D D P L M T
UniRef90_UPI0003458A8F G K H D G Q A H S V A F N P K R H N V L V S   G G F D E E I K L W D V N S
UniRef90_T5KAT5        Q L T N E A A E Q R G W A W L G D G R T I V F G R R V D S E V R L Y Y L D V E R
UniRef90_A5PKH9        S E F K A H T A P V R S V D F S A D G Q F L A S A S E D K S I K V W N M Y R Q R
UniRef90_UPI0003B7087F                                             D G T I R F W N T T T R T
UniRef90_K9V548        E F G T F G D E L N S A A F S F D G Q I L A T A S S R D C G S K I Q L W D V A T
UniRef90_UPI00034D81FD T P N K A V G E V     K W L S D N R T L L F T Q T A G G Y Y N W F T I A A D G S
UniRef90_R9HCF2        A P M K P F G G I E Q L A W S N D S K Q I A Y T S R K K Q D S D I Y L Y N I E K
UniRef90_D9X8V0        A D M S D H T D R V N S V S L S K D G R L M A T A G G D Y R A R L W L S D R R H
UniRef90_A0A015MWM5    A I D E P S Q K D A G V T S V A I S P D A L Y V A A G S L D K I V R V W D T R G
UniRef90_R1C5C8        V T C L R W G G E G L L Y S G S Q D R T V K V W A P D E S K H G H W V N C L S A
UniRef90_UPI000414C9C8 K         W A E A P R I T D R L H H E R D G S G Y I A P G F N H I F L I P A N G
UniRef90_UPI00047C9AAD V T K P G V G A S Y L H G W S P N N K E M I F T G D R N G A Y N I F T V N L K S
UniRef90_UPI0003319441 Y R H T H W     V R C A K F S P D G R L I V S C S E D K T V K I W D T A S K Q
UniRef90_UPI00036CE9EB N A T T G K E R H T S A L G E E R T D G T T L A T I D K N G A A H L W N V A I G
UniRef90_X8JF69        P F V G H T G A V L S V A Y S P C G T R V A S G S A D R M I R I W N V D A Q V T
UniRef90_D1YXV8                                             K V A S L S R D G A V R V W D V E T G
UniRef90_B7FY04        T L K G H N G P I F S L K W N K R G N F L L S G S Y D K T T I V W D V S G P A G
UniRef90_UPI0002F59341 P F K G H Q S F V T S V A I S T D G Q T I V S G S D N T V R     L W N R K G Q
UniRef90_UPI000380FA32 Q A P S Y W H G V S P D G K T L A Y V G E R T G A D G K R D Y D I Y T M P I T G
UniRef90_UPI00045749E1 C S L N Q H I N W V R C A K F S P D G R L I V S A S D D K T I K I W D K A M R E
UniRef90_N9W173        I L F W A G G K L R R V A A G G G D A R I I P F Q I D D D R V   I I D A T H P A
UniRef90_A9B5D0        I L T G H Q A L I R A I A F R P D G S M L A S C S   E D H T V H V W S M P H   G
UniRef90_F2UQC9        Q S R I E T G H D E S C R S C S W S P D G T M V A S G S D D R S L R V W S T D G
UniRef90_UPI0000E37937 V L Y Q G H A Y P V W D L D I S P Y S L Y F A S A S H D R T A R L W A F D R   T
UniRef90_X6MDD1          L M R L E C D S N W M W G L T F S P D G K Y I V Y L D N T T I R F L D L G S G
UniRef90_X6PAG6        V L Q G H R K S V S S V R F S A D G H K I I S A S Y D H T V R I W D V L S   G
UniRef90_U9W700        Q A H T G P A W D V T F H S D G A E F L V S     G G A D Q T V K V W D L D G
UniRef90_W3XBH4        T L E G H S D S I T S V T W S Q D A A W L A T A S N D     Y T I K V W D P V T
UniRef90_Q22D00        T T I E G F V D F V Q S L Y F S P D G K Y L A A S N D N   T Y R I F D A K G K F
UniRef90_B3RVZ8        T L K G H H R S V E V C C F S P D S T L L C S G S W D N C A I L W K I N E N K S
UniRef90_W7SB90        S S V P A S T G Q L E A V V F D P S G K M I V T S G D D H L I R L W D V R R V T
UniRef90_UPI00016C3894 L T P D A K V Y T A E G S Y S A D G K K I V Y S A G N A G N V Q L F T M N A D G
UniRef90_A6C5Y9        K L L P I N R E A E E R K Q Y S H G S R I E V L L L S P N E N Q I L T T A V D G
UniRef90_A0A016PR18    S V R K E H V S P V V R V S T S P D G K T I A S G C R D G K I C L W N G V T G A
UniRef90_Q54KH7          G H S G P V Y G C S F S P D S Q Y L L S C S E D T T A R L W S M E T M S
UniRef90_Q10ZJ8        F L L R G H T D W V S A V T V T P D G K Q V I S G S F D K T I K V W S L A T R
UniRef90_B3QYB1                                   D T S R A V R F T R E E T F D M T N Y D Y F Q K D V Y E L S L G K
UniRef90_UPI000373D2ED V T T N D A T H V D F A P T W T P F T R T T L A N G A A T G Q S I W T A P A A G
UniRef90_T1IXE5        E L A K K A Q I R Y D K V R N T S K A E R L V S G S D D L T M C L W A P E T E K
UniRef90_UPI0001CBAF9C V F K A H T A T V R S V E F S P D G Q H L V T A S   D D K T V K I W A V H R Q R
UniRef90_UPI000455ED32 V A Y R G H Q N P V W D A Q W S P M G V Y F A T G S R D R T A R L W S T D R V S
UniRef90_UPI000455DED2 P S L S D D E H A A F K E S A E R C F Y F V E E Q R R S N P G K
UniRef90_M5XLG5        C Y K G H N Y P V W D V Y H Y F A S A S H D R T A R I W S M D K I Q
UniRef90_UPI000455CFFD L A L G H T K A V T A I E Y S P D G R L I A T A S E D T T V C L W D P F T G Q Q
UniRef90_H0VTJ9        C F R G H K A A V T A V D F S P H G R H L V T A S W D T F L M   L W N L K P Q T
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UniRef90_D7JFB2        Q L A W S P D S K Y I A Y T C R K K T G I E Y A V S T N S D I F L Y D V A Q G K
UniRef90_F0ZZF6        V C Y K G H N F P V W D V S F S P F G Y Y F A T A S H D R T A R L W T T N Y I S
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UniRef90_F0ZGW0        L G N E E V G P K N G V T S V A M S P D G R L V A A G S L D N I V R L W D Q T G
UniRef90_UPI00036488B2 P L R K N G K Y V W P V Y D     S F D I F V A D L N G
UniRef90_UPI0002D40EAB V I E P N Q K I L V F F F P P H S K G Q I S T T S V K P E T G K L K L W D I I S
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UniRef90_K9RJU1        F Q E N Y G I R S V A F S P D G Q T L G I   S D S S G K I K L W N I H T S Q
UniRef90_I3ITY4        L Y A G H L S D V D C V K F H P N S N Y L A T G S T D K T V R     L W S T Q Q G
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UniRef90_B9XH67        K T L L S G H N G A I F G L A F R P D G K I L A S A S H D R T V K L W D V A T G
UniRef90_J4GQR0        T K P I Q A Y S N W V K C V A F S P D G T R L A S I A G K I V R I W   D V E T
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UniRef90_G1XET5            N C Q K T L P A H Q D P V S G V D F I R D G T M I   V S C S H D K L I R I W D T N
UniRef90_D5SWE8            S N I R Q L T N T P G Y D G G P F F S P D G Q W V I F R S D R E K E H M L Q L Y
UniRef90_UPI000344E32F     A E L R Y L T G H R A P V R S L A I D P S G Q T L   A S A S D D R   T V R L W D L
UniRef90_K5WI29            Q E L V T I N E H T G P V W S A V F S P D G A D V   A S G S F D A S       V V I C
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UniRef90_UPI00026C7A21     Q Q E Q L I A P L D L W F T Q P K W S E D G K K I   Y A L V E T S R N T H L S E I
UniRef90_UPI0004432F3C     I R K K T L E G H E G N V S C V C F S P     S G L   L A S G S W D K T I R I W N P
UniRef90_Q5QZV2            S A R Q L T D G P Y R H G G P L A W T A D N K H I   V F S G N R S E D W D L Y N V
UniRef90_E2BDB1            L E S T R N S D P L I Y A K N R Y E S I G E E L   L V S G S D D F T L F L W K P E
UniRef90_M5T1W4            S H V R R L T D E P G Y D G G P F F S P D G T R I C W R A P D G A T A E I F T M
UniRef90_K6X6C1            G T E R V L Y Q D E G Y F A Y F D W T P D S N N I   V F T G G K F H K L N V N D L
UniRef90_X0EW26            C K   R V L E G H S N R V W S V V F S H N S K K V   A S A S D D   G T I R I W D A
UniRef90_R4KL40            K V R E K G N S H Y R A V N Q V L F S P D G R Y L   Y T A S S D   S L I K I W D F
UniRef90_S3BP97            G K A R P L S V P G L E P T R P V L A P D G K T L   A V C A Y H G G G F H I W T L
UniRef90_U2I8Y3            D P V R F L S S S Q D G L L C F G Y A G E I Y T L   V P G A R E Q R V P V R I I K
UniRef90_G4M196            S P V K T F Q G H E N E V N A I K W D P N G R L   L A S C S D D M   T L K V W D M
UniRef90_K9TLA2            Q Q I G T L T G H S T G V S V A F S P D G A T L   A S G S D D T S I V   L W D V
UniRef90_UPI0003A140C5     E L I Q T L T G H T E A V H S V G F N R D D K V L   A S G G S D K I V W   I W D V
UniRef90_L8Y7P5            F L F   S L S Q H I N W V R C A R F S P D G R L I   V S A S D D K   T V K L W D K
UniRef90_L8WHN0            L V L G P L K A H R T S V Q S V V F S P D S Y Y V   V S G S V D G S V R V W R V S
UniRef90_H9K6V5            R V C V   L I G H R S E L S N C I Y N F D C S L I   A S A S M D K   T A K V W D T
UniRef90_R7QCZ9            L V H E I I R G H R S G V R C L S F S P D G R F L   A S G S E D K   T V K I W D C
UniRef90_D5EUV7            K T T R R I T D T P E L E R N L S F S P D G R S L   A Y A S E R N G C W N I Y Q T
UniRef90_E1SUL8            P D G R Y I Y F       S Q D A T P G K T F H Y S K D S V K G I Y K I Q R Y
UniRef90_UPI00032ADF01     K K V Y T L I G H C A E I   S S A L F N W D C S L I L T G S M D K T C M   L W D A
UniRef90_UPI000369D84C     V T Q           I R D G V V S P D G K Q L A F T A L N       R L Y L M
UniRef90_UPI0003458A8F     R Q V I S S R K A E H K I F S V A F H S N G Q   L V A S A G Q K D I   I K L W N I
UniRef90_T5KAT5            R T L R D     A G L D D A Q W P A V S R H G N V L A F V H R R A Q F G V F K V P
UniRef90_A5PKH9            F L Y   S L Y R H T H W V R C A K F S P D G R L I   V S C S E D K   T I K I W D T
UniRef90_UPI0003B7087F     L L P I R L T G H T E W M K A V S F F E D S S T L A S V D F N G V I T L W D L K
UniRef90_K9V548            G K E I R T I T I G D D Y Y P L T F S P D G R I L A S V W G K D G V I Q L W D V
UniRef90_UPI00034D81FD     A P E K Q I T F D Q Q N N R Q L T F N S D R S Q A V Y L S G R N E V R I M D L E
UniRef90_R9HCF2            G T T L N L C K P N G Y D T N P K F S P N G K Y I   A W Q S S D R N R L C I Y N L
UniRef90_D9X8V0            P V L I A E L L H P N Q V N G V E L S P D N R L V A T T D D D R K V R L W A V P
UniRef90_A0A015MWM5        I L L E R L E G H K D S V Y S V A F S P D G K T L   V S G S L D K   T L K L W D M
UniRef90_R1C5C8            S T D F A L R R G P F D H R G V A P A D E A E L   L A S G S D D F T V F L W A P A
UniRef90_UPI000414C9C8     G A A R Q I T S G D Y H H R G P S W S L D G G Q K I   Y F S G N R N V D W E Y A V D
UniRef90_UPI00047C9AAD     G K E E Q L T D F P T L D D G P E Y T K N G K T I   F F N S D R T G T M Q L Y S M
UniRef90_UPI0003319441     C V N   N F T D S V G F A N F V D F N P N G T C I   A S A G S D H   T V K I W D I
UniRef90_UPI00036CE9EB     R K L R T L K A Q G D D L R A P A F S P N G   T I   L A T S T P G G T V H L W D T
UniRef90_X8JF69            F G P W T I G R R T G T V C S V A F S P N G S R I   V S G L G D Y A I Y V W D S V
UniRef90_D1YXV8            K L M H T L Y D Q A D K V Y H C A F S P D G K K I   A T A S H D   G L V R I W D A
UniRef90_B7FY04            F V E Q Q F T D H Q A P A L D V D W K D D V T F     A S C S T D K T V H I C R V
UniRef90_UPI0002F59341     L L S E P F K G H Q N Y V R S V A I S T D G Q T I V S G S D   D T V R L W N R
UniRef90_UPI000380FA32     T T E T R L T T A P G L D D G P D Y S P D G R Y I   Y F N S I R S G R M Q I W R M
UniRef90_UPI00045749E1     C I H S F   Y E H G G F V N Y V D F H P S G T C I   A G A G T D   N T V K V W D V
UniRef90_N9W173            V E V A P D S F Q T Q M P R W A E V S P D G K Q V V F       E T L G K L W V K
UniRef90_A9B5D0            Q I V Q V F G C H D D W V N S I A W S Q N G S L L   A T G S A D R   T I R I W G V
UniRef90_F2UQC9            Q K I T V F R D H D D W V N S I A W S P D S G K I   V S G C G D   G V V R V W S V
UniRef90_UPI0000E37937     Y P L R T Y A G H L A D V D C V K F H P N S N Y L   A T G S A D K   T V R L W S A
UniRef90_X6MDD1            K E I Q R L E G H S N G V L C A R F S P D G K L V   T S S F D R T L I   I W D V
UniRef90_X6PAG6            K Q L I F T G H T A F V R F T A R F L P D G Y T I   V S C S G D   G T I R L W N I
UniRef90_U9W700            T L L N T L S G H Q S G V L R V V V N V T K Q L   L S T G L D N I A K V W T L D
UniRef90_W3XBH4            S Q C V S T L E D D T T F G F V G W S H D A Q W L   A S I S S H G G T I K I W E R
UniRef90_Q22D00            E L I H T I Q A H S S D V K T F S N D S K Y I A T G S Y D K T C K I W S I K
UniRef90_B3RVZ8            Q L Y T K L T G H S S C V Q S C A F S P D G D Q L   A T G S D D H T I R I W K L Y
UniRef90_W7SB90            P I G Q P L T E H T D G V S L A F S A D G K T L   A S G S Y D G S A R L W D V S
UniRef90_UPI00016C3894     T N V K R I T D V A N C Y N G P F F S P D G T R V V F R A D R K E K D R L Q L Y
UniRef90_A6C5Y9            T A K L W S L K H A E A I Y D A A F S P N G R T I   V T G S E D K   T A R L W D T
UniRef90_A0A016PR18        W C R T M E A R H T V E T A L V F S D G H K T   L I S T S V D E S A I V W S V E
UniRef90_Q54KH7            N L V C Y K G H N F P V W D V S F S P F G F Y F A T A S H D R   T A R L W T T
UniRef90_Q10ZJ8            K E I A T L V G H T G W V K A L A V T P D G K R V I S G S F D K   T I K V W C L
UniRef90_B3QYB1            S S L R R L T A T S A I D S S P I V S P D G K T L   L F V S D L N G I Y N V Y K L
UniRef90_UPI000373D2ED     G K A R A L L G D S G Y L S Q P D V S P D G K Y V T F L Q A D A S G T A I W L V
UniRef90_T1IXE5            K P I C R L T G H Q Q L I N D V K F S P D T R L F A S A S F D K S   V K L W D A
UniRef90_UPI0001CBAF9C     F Q F   S L S Q H Q N W V R C A K W S P D G R L I   V S G S D D K   T V R I W D R
UniRef90_UPI000455ED32     C   L R I Y A G H L S D V D C V R F H P N S L Y L A T G S S D W   T A R L W D V
UniRef90_UPI000455DED2       M K A G A S V L A T T W F L D G Q R F A   T A G E E P L V R I W N A
UniRef90_M5XLG5            P   L R I M A G H L S D V D C V Q W H A N C N Y I A T G S S D K   T V R L W D V
UniRef90_UPI000455CFFD     L Q K V D T H R H T K E I T A I K Y S P D G R L I A T A S E D A T V R L W D S M
UniRef90_H0VTJ9            R A Y R Y V G   H K D V V T S V Q F S P H G N L   L A S A S R D R   T V R L W M P
UniRef90_A2QIK5            L Q H T L S S D N S G V M V C M L F S P D G N L F L A I S R H K T R W D V V T G
UniRef90_D7JFB2            T V Q N I S E G M P G Y D I N P Q F S H D G K S L A F L S D K N R L V I I D L
UniRef90_F0ZZF6            P   L R I F T G H L S D C N T V K F H P N I N Y L A T G S N D K S   A R L W E I
UniRef90_UPI000255BA55       A F D V K M I R W A Q K S P D G K Q I A F Q A L G       K I Y V Q
UniRef90_K2DSJ3            P S F         D N M P S L G L I S N D S T N S D
UniRef90_R7SIZ8            S I C G H F E S H S N V I I R V R F S P D G S R F V S A S W D R T L R V W D S T
UniRef90_F0ZGW0            Y F L E R Y E G H L D S V Y S V A F S P D G K S L A S G S L D K S L K L W D L S
UniRef90_UPI00036488B2     N I V T Q L T N E P G Y D A E A T V S P K G D K I   V F T S T R S G D L E L Y T M
UniRef90_UPI0002D40EAB     K E L K T F T G H Q G W V E A I A I S P D G K L I S G A N D R   T L K V W D I
UniRef90_Q756W4            K C I N I L K S H A H V N H A L S L S T D M E E L M V T G S D D F T M Y L W N P
UniRef90_H2AXD0            K P L A R M T G H Q K L V N H V A F S P D G R Y I   V S A S F D N S   I K L W D G
UniRef90_UPI000371D815     G K A E F T L G N S D M V Y S L A A T H D G E R V I S A S Q D   G T L S I W K V
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UniRef90_F2PHQ1            K P V A R M L G H Q K E V N H V T F S P D G V Y I A S A S R D   N H V K L W N A
UniRef90_K9RJU1            C L K I L Q L G S G S W T R S I A F S S D G K F L A S G T P N A G   V G L W H L
UniRef90_I3ITY4            A S V R L F T G H R G P V L S L A F S P N G K Y L   A S A G E D Q   R V K L W D B
UniRef90_UPI00035E66A7     Q R L R Q V T D G D W H A G A P A W S P D G R S L   A F C A A R R S E T Y I V D L
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                                              210         220         230         240
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UniRef90_G9NAM1        A T G A C T H T L K C D G N W A N E L A F S A D G R Y L A S G F V D N T V K V W
UniRef90_G1XET5        T G Q C L K T L V E E E L P P V S C V R F S P N G K Y I L A S T L D S S I R L W
UniRef90_D5SWE8        A I S V D G K H E V Q L T K N N W C P Y F H P D G K S L I W S R A D S A K F K L
UniRef90_UPI000344E32F E S G Q F L Y E L S D R S H F V Q S L T F G P N G Q Y L I S G G R D A T V K V W
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UniRef90_V8NMF3                              A S G S G D S T A R I W N L N S N G S S T Q L V L R H N K D
UniRef90_Q54CB5                                                                      H S K P
UniRef90_G4QMN6            Q V A F I S D R D G       L S N V W V M D I N G E N L R Q V T K E K K N
UniRef90_UPI00041ADD21                         T A S H D G T A R V W D A D   T G K A V G E P M R H N T I
UniRef90_X6P0R5
UniRef90_UPI00016C4FDB      V A F S P D T G G E N Q Q I R V W       D A A R L R P V G Q L K G Y
UniRef90_X6PCF1                               S D D Y I I R I W E I K   S G K E I Q I F E G H V S W
UniRef90_UPI0003ACE32E       T L V S S G Y D R T V K L W E T   A S R T N I T T L T G H S G G
UniRef90_A0A010RJV4      T K V A Y V S T E N G     Y R A N I W V L D I A T G A R R N L T N T P D G
UniRef90_K9PV71                              S S D L D G V I N I W S A D G T L L Q T L A E H E D R
UniRef90_R7QLN1            V E S V S W D T S A I V W N T K T R T Q V G Q A L I D H T S D
UniRef90_J2ZNF1                         G S H D D T V R V W D A A T G Q P L L V L G P G N S
UniRef90_A8I2S8                                              R A F R F A G H K A G
UniRef90_F3ZT88           Q L A Y S V S Y Y S D K S N S E L F V I N T D G T N N K Q I T S T P F S
UniRef90_X6NN27
UniRef90_L7LX26
UniRef90_UPI00032AF9B8                                            T L T G H S D L
UniRef90_K9U436             S H D T T V K L W D V Y H E G N C L R T F M G H S K A
UniRef90_I2FQM1             Y E G D I W K A D L P S K I A T R L T A M V G N
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UniRef90_F8PHW9                                              R A Y R F N G H K D A
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UniRef90_UPI00044141E8     T T S K D K S V I I Y D A T D K F S V I H K F Y E H H D A
UniRef90_B8MBF1                          D I W K A N I N D G Q A I R L T M H D G E
UniRef90_H1XNF2         T V A S C S Y D K T V R L W D I   T T G K E L R K L E G H L D A
UniRef90_X6NUN0            Q I W T A S L K S A K P Q Q L F Q A R G E
UniRef90_UPI000365665F                                        T L K G H T A D
UniRef90_V5SBB7                                               Q T L T S H N R A
UniRef90_Q9M2Z2     A T S S R L A       T G S G D N S V R I W N T E   T G T P Q H T M T G H T G W
UniRef90_C9SA61                                R L W L F D G K A H H Q L T E D R V A
UniRef90_T0R1M8       T E V V Y V I D E K K K D Y V S N L F Y L N L K D K R P Q Q W T Y G D D R
UniRef90_A3I5X7                           N I F I W D V Q G T V V R C L S G H T A S
UniRef90_Q9TYV3
UniRef90_UPI000455F7C2                    R D V E I W N T M A G R I Q R L   N S A R S
UniRef90_A3ZNS4       G R I A Y V E E Q G G A A K I S T L Y S I R P D G S D R Q L I D Q L N G Y
UniRef90_X0RIG2                          L S L A G I T G G E R R       G G
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UniRef90_D8PQP7                           D L Y T M P I S G G N A T A I T H G L A Y
UniRef90_C0BMP9                                            T L E G H T N E
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UniRef90_K9EJT2            A S G S G D T T V R F W D L N T Q T   P L H V C K G H S N W
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UniRef90_G8ZN78           L L V L Q P D P T L E R H F K G H R D S
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UniRef90_K1LHA4            S Q Y C V E L W N I D S R S K V A D C   R G H L S W
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UniRef90_X6MJA0      D T K I L       S C S Y D R T M K L W D V E K G V P V Q V F E H T A P
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UniRef90_A0A031GYH4      K S N P V F S P D G S L I A Y S A N I D G N V D V Y V I A A A G G V P R R L T F
UniRef90_V8NMF3          V T S L D W N S D G T L L A T G S Y D G          F A R I W T E D G N L A S T
UniRef90_Q54CB5          V N S C C W S P D G T L I A S S S W D G T I K I W N P F D T I A K D R L K H V I
UniRef90_G4QMN6          I H S P K W S P D G E Y I V V        N K G I M S S R S I P A G E I W L Y
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UniRef90_X6P0R5               F S P D G S K I V S S S     K D K I V R I W D I A S R K Q I Q S C E G
UniRef90_UPI00016C4FDB   A Q H V A F S P D S S R L L T A W D W S K S A R V W D I N R G N K L L D F G P V
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UniRef90_S8E7H3          T L A L A F S P I G R D V A      A G F E N N T I V V W N V A Q N A V R H Q F S E
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UniRef90_C0BMP9          E V H P R F S P D G K S L A Y I S D K S G S D N I W L M D L S S K E D T Q I S K
UniRef90_G9NKR7          I T Q I A F S H D S S L I A S S S W      D K R I R L W R T N T G D C M Q V L E G
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UniRef90_H9GY59          L S S C S F H P S G D      F L G T T S G D T T V K I W D F A Q S R C V L S L E
UniRef90_Q1IJ32          K Y S P T W L P D G K H Y L Y V S A P T S Q D T G V F Y A S V D G K E N R F L V
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UniRef90_G8ZN78          V L G A F F S A D Q E Q I Y T V S K D G A
UniRef90_H2T4T4          V T S V D I S Y N M K Q I A T G S M D S C V M I W N M K P Q M R A Y H F
UniRef90_S9REH0          V F G V S I S P D N E Y I L S C S E D G F N R L W S K E T Q S T L V K Y A G H N
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UniRef90_UPI00041BA721   I T D P A P S P D G K H I A I A S      K G W I W L L D V S S G V A T R L T S
UniRef90_UPI0004754FBF   V K A L A F S P D S K T L V S G G A E N E G V I R L    W N L V N G D R V G T I R
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UniRef90_S8BR22          V I G T Y F S A D Q E T L Y S V S K D G A V F T W K Y T G P K K N E I E F E D D
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UniRef90_UPI0003AB63E6   V T C L R W G G D G      L L Y S A S Q D R T I K V W R A H D G V L C R T L Q
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UniRef90_K9PV71         H S S W V T D V T F S G G G E Y L A F S G Y D N I Q V Q Q M R Y Q N N N P Q F D
UniRef90_R7QLN1         H T S G V H C V A T S S D G K H A I S G S Y         D G S T R I W D L E K S S E I
UniRef90_J2ZNF1         N G A R E L S E V V W S P D G T R L A T S S Y L S P R V L I L D A S T G D V V Q
UniRef90_A8I2S8         H T G T V R G V T F S S D G R M L A T C S D         D K T V K I W S V A T Q K F A
UniRef90_F3ZT88         V E N G I E G F S F S P D E K K V V L I S T V K V G E T T A D K H P D L P K A T
UniRef90_X6NN27                                                         C D I I T R K E F
UniRef90_L7LX26                                                         W K L Q
UniRef90_UPI00032AF9B8
UniRef90_K9U436         H K S A I N A V A F S P D S Q V L A S G S         A D K T I K L W N L S T A E E I
UniRef90_I2FQM1         S N K T P Y C L T W H P D E D K Q H I F L A G T S D K K I L Q Y D I N T H T M V
UniRef90_I2ERY4         H D A A D L V E S W T W D S Q S I Y L T S S A Y N G G T T Y K I S L N G G T P V
UniRef90_R7F463         L E N G V S C F S P T G D K V L L G S A I S A E D K D S T L Y N G L P L T T G R
UniRef90_K1KU23         H P G A D L V T G W T P D G K Y V L F T S A R E N E S K F F R I P V T G G M E E
UniRef90_F8PHW9         D C C L D I V W L D D F             T F A S C G A D R M I Y I M S L G E T K H I V
UniRef90_H3DBG7         H T A S V R S V N F S G D G Q T L V T A S D         D K T V K I W T V H R Q K F V
UniRef90_W9X714         T H W V N H L S L S T D F A L R T S Y H D H T G K A P S S T Q D K I E K A K K Q
UniRef90_UPI00044141E8  H R G G V N C V A Y S F D G T R I V         S G A A N R T V R L W D A A T G D P L G
UniRef90_B8MBF1         H H T D I V T S A A W A P D G E T F V T A S M D N K A P L C Y W G L R S R N P I
UniRef90_H1XNF2         H P G G D L V V G W H P T K N K I I F R S N R L S Y Q R F S R L F M M H E A A Q
UniRef90_X6NUN0         H H V S G V N N I Q F S P D G Q M Y L S V S G D H I I A L W N I K S G E R L K
UniRef90_UPI000365665F  G T Y S D S N P A W S P D S N H I A F V R Q P L E S E H A M R W L R D G E P W S
UniRef90_V5SBB7         G H E E G V R H A A F N A D A S L V V T A S         R D M T A R L W D A K T G R E I
UniRef90_Q9M2Z2         F T G H E N G I S D V A F S S S D A R F I V S A S D D K T L K L W D V E T G S L I
UniRef90_C9SA61         Q K W I T Q I A W Q P Y F L W T D D T P R L A S A S K D C T I R V W L A N T G K
UniRef90_T0R1M8         Y G H P V R G L S A S R Q G D L V W S W Q G E L Y R L D A G S K T P R K L A I Q
UniRef90_A3I5X7         C K N G A S T P V W S P C G E K I A F S V M L G K D E T I L D K A E D D K K E E
UniRef90_Q9TYV3         H A H W I N T L A L N T D Y A L R T S C F E P S K R C I K P D T V E E C Q K V A
UniRef90_UPI000455F7C2
UniRef90_A3ZNS4         S S N D V T S A A L V D D K L A I A         C R D A S L T I F D W K T G K P V
UniRef90_X0RIG2         A E G S N M S A S F S P D G Q K L L Y S S T V G G N A D I Y E M R L S E G K T T
UniRef90_S8E7H3         H E A A V T A L V F S P D G N K L V S G G R D G K V I L W D L I A G G S I T N K
UniRef90_R0J9F5         H T A T V R S V H F S S D G Q S L V T A S D         D K T V K V W T V H R Q K F L
UniRef90_D8PQP7         N G K I P Y T V K F H P D E D K Q N I F L A G M S D K K I I Q Y D I N S G E I T
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UniRef90_G9NKR7         H K R P I T S V A F S H D A E L L A S G S W         D G T V R L W R V S T G D C L
UniRef90_K9EJT2         I W S I S T M P D E T L L I S S G K D G S I Y F W N R D G Q R I L T N Q I I S G
UniRef90_H9J720         H K Q W V T A L A W E P Y H R N P E C R K L A S S K D G D V R I W D T V T C L
UniRef90_R1BY77         H T A E I V S L N F N N D G D K V I T G S F         D H T T K V W D V A T G E C L
UniRef90_H2Y8T1                                                 D I F D R M M D D C T G T E S
UniRef90_F1L352         G H         A H W V N T L A L N V E Y A L R T S C F D P K N Q C I A P D Q I
UniRef90_H9GY59         G H L H A T W A C S F H S C G         D F V A S C S M D N T V K V W D L N S E R C R
UniRef90_Q1IJ32         H T F S N A L F A N I F E R E R T L L A Q S F D P S T G K L S G E P K T L A E T
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UniRef90_Q5KDZ3         N G K I P N V V K F N P D G D K Q N I F M A G M G D K K I I Q Y D L R E R E I V
UniRef90_G8ZN78                 L F K W E F T P R D E E D E E D L S K Y S W R I T Q K
UniRef90_H2T4T4         N G H K D A V L S V Q F S P S G H L V A S S S R D K T V R L W V P S L K A E S T
UniRef90_S9REH0         A P V W D V C F S P Y G         Y Y F A S A S H D Q T V R L W S I E H T A P L R
UniRef90_D9PGC5         N E K V S N M I Q S L S L S P D G K R A M I E A R G E I F N V P A E N G A V I N
UniRef90_UPI00041BA721  S R G V D S R P R W S P D G R Y L A F V R D F G H D T S V V I K A L E S G E E Q
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UniRef90_UPI000455DF1E  H T T L V S D V Q Y S P D G A L I         A S G G E D G N I R V W D L E S S V I L
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UniRef90_UPI0003C126FD  D H H M M S L T A C C F D P D S Q R V A S V S F D R S I K I W D V T S Q T T L L
UniRef90_B8CAU3         H G H R V N T L A V S C D Y I C R T G P F D H Y G K I D V A S K D R D S Q E W R
UniRef90_T1KD83                                         C S E D T I R L W D L N S C K N K
UniRef90_F6Z7V4         G H T G P V K F C R F S P D G R L F A S T S D C T I R L W D V A E A K C L Q
UniRef90_G4YM64         G P V H S V C F S P T G D         V L A S A S Q D R T V R L W T P T V R G D S
UniRef90_A3HV30         D K N G D V P G A D W P D S E Y I V V A K G R R I T K L W M Y H K D G G G G I Q
UniRef90_W5NDE7         H T E Q V K C V L L D S S R L L         S W S F D G T V K V W N A T G E L I Q
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UniRef90_X6MS38         G H L R H V H R A K V S P N D V F I V S C S T D K T I R I W D N K
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UniRef90_K1LHA4         D F E Q M R E K W I N N P E T Y I T G I S V S N D G E R F L L P A K E G R I V R
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UniRef90_D6APS3         R P W G T R S A S W L P D G K D V V F L S P Y H T C G C D D F D H V Y R V T A F
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UniRef90_UPI0003AB63E6  G H G H W V N T M A L S T D Y A L R T G A F E P A E A S V N A Q D L Q G S L Q E
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UniRef90_X6P5P0                                 D H V H F H Q T C L T K V N F A N T S M N N I Y F G E Y
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UniRef90_A0A031GYH4     A T Y S P D G K R I A Y N P L A P A F K Q W K R Y R G G T N S W L W L F S S A D
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UniRef90_A0A010RJV4     E H T S G A S V K M F P Q W L A D D D D S T S D G S S S S N N I A Y L I K G G D
UniRef90_K9PV71         E P I T L K G H S D S I A N L R F S P I V P L L A T S T W N N Q L Q L W T L D D
UniRef90_R7QLN1         T K T G H T S G V R I V M V S A D G S R A V S V S G V N S I L A W D V E T G L Q
UniRef90_J2ZNF1         A L T A G E D D V N D V S W S P D S E R I L T G L G D D R A A   I W D A A R G
UniRef90_A8I2S8         F T L T G H Q N W V R C V H I S P D G R L A V S G G D D R T V R I W D L N S K
UniRef90_F3ZT88         G K V I N D L M Y K H W D E W V T D A P H P F V G D F N G S E I I N L T D M Q G
UniRef90_X6NN27         K I L N G Y S D W I N K V Q F S S D G K M I V S C S Y D Q T I R L W D V K L R
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UniRef90_I2ERY4         R I F K H F F N R T H N T W E S D N Q A Y R K G Y K G E F N P D I Q S Y N L K T
UniRef90_R7F463         V V N D L M Y K H W D E W V T T I P H P F L A D F V N G E V S G E A K D V L A G
UniRef90_K1KU23         A L P I P R A V N G R I S D D G K H I A Y Q Q I A F W D P E W R I W V V D L E T
UniRef90_F8PHW9         T L K G H T N E V N S V K C S P S K T H L A S C A D D G T A R I W D V T D I H N
UniRef90_H3DBG7         L S L N Q H I N W V R C A K F S P D D R L I V S S S D D K T V K L W D K N S R E
UniRef90_W9X714         F E E A A R Q G G E L V E R L I S A S D D N T I F L W E P S S F D P D S K A T P
UniRef90_UPI00044141E8  E P M D G H E Y G V A S V A F S P D G G C I A S G S Y D E T I C L W D S A T C A
UniRef90_B8MBF1         H V W R G G F R A Q D C A I T P D G T R L V     A S D N E D K L Y V Y D L A S
UniRef90_H1XNF2         G S F S P D G Q K I A Y N R L S R E F R T W K R Y F G G T A Q D L Y I F D F E Q
UniRef90_X6NUN0         Q L K G H S T V I M R A K F S P D G H F V V S C S W D K T I R I W D V K S     G
UniRef90_UPI000365665F  I                                     C V A D A Q S G D G R E V W R A E
UniRef90_V5SBB7         A V L G G H E Q M L E Q A E F S P D G A R V V T V P H A N T G K L W D G   K T G
UniRef90_Q9M2Z2         K T L I G H T N Y A F C V N F P Q S N M I V S G S F D E T V R I W D V   T T G
UniRef90_C9SA61         T E H V L S G H R S S V T C V K W G G T N L I F S G S Q D K T I R A W D A A K G
UniRef90_T0R1M8         P L F A N A P A E R S W M P G P I D E A L A R Q D G D E V Q G D L Y A I D T R R
UniRef90_A3I5X7         K E L K P L E I D K M K H K S D A G G F M D M       D Q H T H I A I V D L K S
UniRef90_Q9TYV3         Q T R Y E A A L E I A G G E R L V S G S         D D F T L F M W N P K E T K
UniRef90_UPI000455F7C2    F E G H S D T V F V M T Y S P D G T R I A S G S M D C T V R I W D S Q T G L
UniRef90_A3ZNS4         A E G K L D S A A L D M T W A S Q P H D Q L I A G C V D G Q L R I V S G E T A Q
UniRef90_X0RIG2         Q L T T L P S T E V Q P S Y A S D G Q S F V Y T S D R T G R P R I Y R Y N F E T
UniRef90_S8E7H3         R V H E G     T V D C V A Y S H D G K L Y A S A A G D S I V K L W N A E T G
UniRef90_R0J9F5         F S L S Q H I N W V R C A R F S P D G R L I V S A S D D K T V K L W D K T S R E
UniRef90_D8PQP7         Q E Y D Q H L G P V N T I T F V D E N R R F V T T S D D K T I R A W D F D I P V
UniRef90_C0BMP9         P L D P F F G A D G K T L Y F S Q R N G A W N Y N A Q L P Q Y Q V G T Y S M E D
UniRef90_G9NKR7         K I L E G H T E K I H S I A F S F N S E F I A S A S I D G S I R L W D T D S   G
UniRef90_K9EJT2         T L V S V S P D G R T L A I A N K N N S I D I W S Y D D F H I D I H K I Q K P E
UniRef90_H9J720         T L L S L T G H S K A V T S V K W G G N G L I Y T S S Q D R T I R V W R A D D G
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UniRef90_H2Y8T1         K S L Y G H S G T V Y S L S F S P C R S L L V S A S E D G S V R L W S L L T W T
UniRef90_F1L352         E E C R K I A Q L R Y E K A K G A S E I L V S G S D D F T L Y L W R P T T E K
UniRef90_H9GY59         C T L R G H V D S V N S V S F L P F S N I L L T C S A D K T L S L W   D A R A G
UniRef90_Q1IJ32         P Q V D A S L W R T N L S V S T N G M M I Y A S G A A A G G Q S L A W Y D R S G
UniRef90_G3PKC0         N L M D H T D I V R D L T F A P D G S L M L V S A S R D K T L R V W D L K D D G
UniRef90_A0A017NFF2     Q T Q F E D G V E C W R P N D D Q H I Y Y I Q K E T Q D S H F V I K S Y D I A T
UniRef90_Q5KDZ3         Q T Y D Q H L G P V N T I T F V D E N R R F V T T S D D K T I R G W D Y D I P V
UniRef90_G8ZN78         H F F H N E Q N K V K C V T F H P N S R I L V V G F N N G E F R L Y E L P D F T
UniRef90_H2T4T4         S F R A H T A S V R S V N F S G D G Q T L V T A S   D D K T I K V W T V H R Q K
UniRef90_S9REH0         V F V G H Q N D V D C L S F H E N A N Y I A T G S S D H T C R   F W D I R T G
UniRef90_D9PGC5         V T K T S G V A E R Y P A W S P N G K Y V A Y W S D K S G E Y E L T I R D M T D
UniRef90_UPI00041BA721    L I N S P A I D I D P E F S H N G Q H L F Y S S G E T G S L D L F Q W H L G S
UniRef90_UPI0004754FBF  S F V G H T S N V L S L A I S P D G K V L V S G A L D G I R     L W D L P Q Q
UniRef90_UPI000455DF1E  H V I D A H E D A V Q M L S I S S N G L L L A S G F D D T T A R I W D L G S Y E
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UniRef90_L8H2F9         E E A Q Q A A M Q R W L A V T Q G K P E K L V S C S D D H T L F L W E P A S S K
UniRef90_UPI0003C126FD  T I T K A H N N A I S N C C F T F S G H F L C T S S W D K T L K I W E F R N R G
UniRef90_B8CAU3         E A A Y Q T S L S K Y K A F K G S E P E R L I S G S D D F T L L L W H P T E S K
UniRef90_T1KD83         F V Y S G H L Y P V W C I D S S P L E L Y F V S G S R D T T A R L W N Y E R L
UniRef90_F6Z7V4         V L K G H Q R S V S F S P D S K Q L A S G G W D K R V M L W V Q S       G
UniRef90_G4YM64         V T I K A H A G A V R S V S F S A S G R E L L T A S D D M S L K V W T L P T R R
UniRef90_A3HV30         L N E N P G S I K T I D P F V S P D G K K V Y F S Q R S G S W Q I G T Y D F D K
UniRef90_W5NDE7         D I F C H K G A L L S C D V S P D G K K F S S A S A   D K T A K V W S F A S S G
UniRef90_X6NI80         T I A S G S R Y D M I R I W D V N S                         G
UniRef90_X6MS38           L R R E I N E A E E P S E N G E H L L L D S P T M D H S K G S N V H S W S E K
UniRef90_U4LVS4         V V Y K G H D A P V W D V S F G P F G H Y F A T A S Y E H T A R L W S C D H I
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UniRef90_UPI00027F91D8  E E Y D V L K A H Q E T V K D F R L L K N S R L L S W S F D V C V W N I I T
UniRef90_K9ULM4         Y T L D G H Q E S V M A M Q F M L N G K I L I S A G A D R T I R F W D L E H K
UniRef90_D6APS3         D G T N P P D Q L V N E N R Q V G P P T W F P P A G T V V V P R I T P D P E T V
UniRef90_S8BR22         G F S S G I F S L Y E M P D F N M I H T L S I S Q K D
UniRef90_W1RQ43                                           D G Q S D I F R A R P D G
UniRef90_UPI0003AB63E6  L K E R A L S R Y N L V R G H G P E R L V S   G S D D F T L F L W S P A E D K
UniRef90_UPI00031670DA  K A K I Y D D L M E R H W D Y W D D G S Y L H L F V A D M A G R V T T D I M E G
UniRef90_K4DGT4         N A I N A I K W D P S G S L L A S C S E D T T V K I W S M K R D V C L H N F R E
UniRef90_X6MJA0         Q F L G H S S E I W D V F S F D C Q K L V S A S H D   T T I R L W N V T T G
UniRef90_K7BTP6         Y R F T G H K D A V T C V N F S P S G H L L A S G S R D K T V R I W V P N V K G
UniRef90_UPI000388CE10  V Q G H H R S T I T R C C F D P D N E R V S S V S   S D K T I K L W D I I A Q S
UniRef90_Q4C325           F E H Y S H V L D L V V T P D S Q L V V T G S L D G     I R V W T L E P
UniRef90_X6P5P0         A Y L G H S D S E V H G I K F S L D G T K I S Y S K D K T I R I W D T S S R
UniRef90_UPI0003B78214  M L D E H P D S I T A I A L S S D S T K L     A T A G G D W V V R L W D V S T
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                                    170            180            190          200
UniRef90_UPI000455D85B  S K Y T R K V Y D R G S V S A I A W F P D G K H V A S A G N N H A V R I W D T T
UniRef90_G0U1I7         T P L G R M T G H Q G A I F H L Q F S P D G T M I A S C S A D K S V K L W H A
UniRef90_UPI000382E48B  K K T T T L L A G N Q D Y W M P T W S P D G Q W I A Y V T K D P N K T S L D A D
UniRef90_A0A031GYH4     K S I E K I P Q P T T R S N D V D P M W I G D T V Y F R S D R N G E F N L F A Y
UniRef90_V8NMF3         R P V K T F Q G H T N E V N A I K W D P S G M H L A S C S D D M T L K I W N M
UniRef90_Q54CB5         Q L T N F L I P G D C W A N C L A F S P T Q P L L A V G A T D C T V F D V S S N
UniRef90_G4QMN6         G E E E R Y I S G T G G A V V P T P S P D G K Y V A F V R R V K S K T A L F L K
UniRef90_UPI00041ADD21  G Q P K G S I R H E K S V S C A V F S P N G Q S I V T A S G D T A Q V W G T
UniRef90_X6P0R5         K E I H K F I S H S Y I V S S A Q F S S D G T M I V S S S H D K T I D I W N V
UniRef90_UPI00016C4FDB  H E R R L S Y T P W D T V K G V A F S P D G R L L A T G G I D H H R P R I W E V
UniRef90_X6PCF1         E V L R I L K N H S N C V R C A K F S P D D K C I I S C S E D K T I R I W D V
UniRef90_UPI0003ACE32E  G T L R G H D K I Y A L D L A P D G R T L A A A D Q S G A L I L W D V
UniRef90_A0A010RJV4     N E G Y N Y T S G A H P I R S P A W S P D G R F V I Y F T A R A M E K P L Y S W
UniRef90_K9PV71         T L L K S L D G H T D L I T G L D W S P D G G A I A T A S N D N T A I I W E L D
UniRef90_R7QLN1         I V G K A M T S Y T S W V Q S V A I S A D G R R T V S G C S D G S V R A W D T E
UniRef90_J2ZNF1         E R I L T L E G H S D M I T S V A W S P N G Q R V L T G S Q D G T A R I W
UniRef90_A8I2S8         K V V R T F E D P T G L T N T V S F H P D G T C I A S G S T D N S I K L W D L
UniRef90_F3ZT88         E P Y E S P L R P F G G I E Q I A W N T T G D K I A Y T S R K K T N S D I Y V Y
UniRef90_X6NN27         K E I K K F E G H F L D V L G S Q F S P D N K M I V S C S K D K T I R I W D I
UniRef90_L7LX26         N C I M S L T G H T T A V E C V K F C P A E E M V C A G S T S G T V K I W N L
UniRef90_UPI00032AF9B8  S R A Y R F S G H K D A V T C V N F S P S G H L L A S G S R D K T V R I W V P
UniRef90_K9U436         A E I H K L E G Y K L G V N A V A I S P D G Q I I A S G G A D K I I K L W
UniRef90_I2FQM1         V I K Y I A D P T M H S M P A V G L S P S G K W L V G Q S M D N Q I L T F A S D
UniRef90_I2ERY4         K A Y K R Y T E Y N G K D F W T T I D R S G K I Y F V S D E G N S E Y N L Y T F
UniRef90_R7F463         K P W E C P M K P F G G S D C F A W A P D G K T F V L V Y R A S T N S D I Y L Y
UniRef90_K1KU23         F E L K M T P Q T D M E R H T Q P I W H G N R V F F L S E R D F A N N I W S Y
UniRef90_F8PHW9         P K C V I L A G H T S C L T G I D W S P N H N E L V A T A S F D L T A R L W D S
UniRef90_H3DBG7         C I H S F Y E H A G Y A T C V A F H P S G T C I A A G S T D H S V K L W D I R
UniRef90_W9X714         K P I A R L L G H Q Q Q V L H V S F S P D G H Y I A S T S F D N S V K L W N A
UniRef90_UPI00044141E8  H L A T L R G H E D M V L S V C F L P D H I H L V S G G A D G T V R I W N V
UniRef90_B8MBF1         R A E E F C L S L K N H I T S V S V S H D S R Y V L L N L R N N Q I Q L M
UniRef90_H1XNF2         M K D E K I T D F P G T D R L P M W I G N E I Y F S S D R D G V L N I Y A L
UniRef90_X6NUN0         K E V Q I L E N C S N S I N D V K Y F S D C H T I V S C S N D T M I T L W D V
UniRef90_UPI000365665F  R G A G S I F H E T G G A S E L W W S A D G K I V F P W E R G G W T R L Y A M
UniRef90_V5SBB7         Q L I A D L A G H E G Y M T W A A F S P D S R L L V T A S A D K T A R I W D A
UniRef90_Q9M2Z2         K C L K V L P A H S D P V T A V D F N R D G S L I V S S S Y D G L C R I W D S G
UniRef90_C9SA61         T L V Q T F T A H A H W V N H I A L S T D H E R F I S A S D D F L L Y L H S P S
UniRef90_T0R1M8         E R V R Q L T R H P S E Q S S P L Y A D K E Q G L I Y L S E Q D G P A A L Y R L
UniRef90_A3I5X7         G D L K Q V T E G N E D F H L S T W S P N G S Y L T Y L A D Q S F N A D I Y L F
UniRef90_Q9TYV3         Q S I N R M T G H M Q L V N Q V V F S P D T R Y I A S A S F D K S V K L W C G
UniRef90_UPI000455F7C2  Q I G E P L K G H K G M V N A A A F S P D G Q T I A T G S S D N S V R V W D A L
UniRef90_A3ZNS4         Q V G E P F G K H N G S Y L G V A M D A D S K R L A A V S S D R K V R V W L E V
UniRef90_X0RIG2         A S A T P V L T S G Y V A S P Q L S L D G Q R M A Y L N G R K A A V M
UniRef90_S8E7H3         T L V A Q T E E H N G I I M A L A F S P D N E R F V S A C A E G T A H V W S T
UniRef90_R0J9F5         C I H S F C E H G G F V N H V D F H P S G T C I A A A G T D N T V K V W D V R
UniRef90_D8PQP7         V I K Y I A E P H M H S M P A V T L H P S N R Y F A A Q S L D N Q I L V Y S T
UniRef90_C0BMP9         G A T D V I T S R Y G S A F T P T L S K D G K W L V Y G T R F E D Q T G L I L R
UniRef90_G9NKR7         N H I H K L Q L N G T D V T S I A F S P N S A L V A S A S N D E G T I S L W C T
UniRef90_K9EJT2         S A L E D R W K H E A L I K S I H H S P V N G D R I V T A G Q D G V I K I W N S
UniRef90_H9J720         V L C R T L E A H W V N T L A L N T D Y E R L V S G S D D F T L F L W L P E
UniRef90_R1BY77         Q C I N T L R G H N D E I L D V A F N A T G T R L V T A S A D G T A R V Y N T
UniRef90_H2Y8T1         N L T V Y K G H W S V W G V K F S P H G H Y F A S C G G D R V A R V W V T
UniRef90_F1L352         K P V A R M T G H Q Q L L N Q V V F S P D A R Y I A S A S F D K S I K L W C G
UniRef90_H9GY59         L C A Q T F Y G H K H S C N H A A F N I T G D T I A S C D S F G V V K L W D V
UniRef90_Q1IJ32         K V L E S L A G L G S F Q E V Q L S P D N K K L A L T D V N T V A A N I W V Y
UniRef90_G3PKC0         N M V K V L R G H Q N W V Y C S A F S P D S S I L C S V G A G K A V F L W N M
UniRef90_A0A017NFF2     G K K V V L K H P Y D I W D I A V S P S G K Y I A Y A G N K N T N W D L F I Y
UniRef90_Q5KDZ3         V I K Y I A E P Y M H S M P A V T L H P S K R Y F A C Q S L D N Q I L V Y
UniRef90_G8ZN78         L I Q Q L S M G Q N P V N T V S I N S S G E W L A F G S S K L G Q L L V Y E W
UniRef90_H2T4T4         F L F S L S R H I N W V R C A K F S P D D R L I V S S S D D K T V K L W D M
UniRef90_S9REH0         N T V R V F T G Q N S S V S S I A L S P D G L L M A S A D D T G F V H L W D L
UniRef90_D9PGC5         E E K K L T S Y G E G Y R Y N I Y W S P N S K M L A F V D K A M D I M I Y D M
UniRef90_UPI00041BA721  G Q K Q Q V T E L R Q V E R N V R Q L H D R S A F I Y L H G S G A H R T L R L R
UniRef90_UPI0004754FBF  R P L S T L V R F E N A I D T L A I S P D G Q T L V S G D I R G V I K L W N L
UniRef90_UPI000455DF1E  A L G Q S L K H D A G V Q F V C F A P D G S Q F L S A S E D Q R V C V W
UniRef90_J9D560         K E K N G Q A D M A G Y D T N P Q Y S P D G K Y I A W Q S M E H D W N R L C V M
UniRef90_L8H2F9         K P L I R M T H Q Q Q V N I T S F S P D G R L I A S A S F D K S I K L W D S N
UniRef90_UPI0003C126FD  A C V T L M Q G H E G C V S S C H F A R D T S F L V S G G F D K T V A I W D V
UniRef90_B8CAU3         K P L K R L L H Q Q A V N H L A F S P D S R F F A S A S F D K K I K V W N G
UniRef90_T1KD83         H P I R I F A G H I L D V D V V K F H P N A A Y T A T G S S D K T I R L W E L
UniRef90_F6Z7V4         H V L R H L A G H R D S V Q S S E F A P S S S D C L A T G S W D A T I R I W D V
UniRef90_G4YM64         F R C S L T G H S N W V R S A R F S A D T R R I A S G S D D K T V K L W D T
UniRef90_A3HV30         G E L N T I T S R Y G S A F T P T L S D D D G K W M V Y G S R W E E K T G L V L R
UniRef90_W5NDE7         L L H T L T G H K A C V R S V R F S G D G A C L A T G D D H G E I R I W L C
UniRef90_X6NI80         K E I K K L V G H S S V R F S P D G Q M L V S S S D D R T I I W N M
UniRef90_X6MS38         A G M E I L K G H S S V V R D F Q F F S D G Q T I V S C S D D L T I R L W N M
UniRef90_U4LVS4         Y P L R I F A G H L S D V D T V T W H P N S T Y L F T G S A D K T A R M W D V
UniRef90_K1LHA4         M D K Q L T G H T G L R F N L T P S P D G K L A F T D L N R D L W I L
UniRef90_UPI00027F91D8  G K E K D F V C H Q G T V L S C D I S H D A T K F S S T S A D K T A K I W D V
UniRef90_K9ULM4         Q L L K T I E A H T Q T I H A L A I S R D N K V I I S G S T D R T V Q V R Q
UniRef90_D6APS3         K K P D E L L A A A Q I V T L Q D V R Q D G S D L T I L K E D P A A R T N E N P
UniRef90_S8BR22         I D F V T I N N S G D W L A F A A S K L G L L V W E W
UniRef90_W1RQ43         T G I A P I I T T D S L D A M L S P D G R T L A F V S T R D G Y R N L W L Q
UniRef90_UPI0003AB63E6  K P L T R M T G H Q A L I N Q V L F S P D S R I V A S A S F D K S I K L W D G
UniRef90_UPI00031670DA  E P W D A P L A P Y F D A S E I A W N H A G T Q L A Y T C K K S T D S D I Y L Y
UniRef90_K4DGT4         H S K E I N T V R W S P T G A G T S N P N K K L L A S A S F D S T V K L W D I
UniRef90_X6MJA0         E Q L N L E T L Q H L A P V T S A S F S P D G K F I V S S S F D N T I R I W D Q
UniRef90_K7BTP6         E S T V F R A H T A T V R S V H F C S D G Q S F V T A S D D K T V K V W A T
UniRef90_UPI000388CE10  T T I T I D E A H T N V I S D C C F S I D G H Y L C T A S W D K T L K I W D I F
UniRef90_Q4C325         P R S L Y Q L E G F G T P A F A L A M H P N G F L V A S G D N Q G I V R F W N L
UniRef90_X6P5P0         K Q L H A L E G H A D R I R A V E C S F S P D S S K I V S C S W D K T I R I W D
UniRef90_UPI0003B78214  G K F I N L K G H P G A V N V T F S P D G K T L A S G S S L R L W S A
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                                      210           220           230           240
UniRef90_UPI000455D85B  T G H E S A D P L V R S D I N V E A I D I S E N G G L L A S G E I D G L V C I W
UniRef90_G0U1I7         S D G K F I T T F R G H V A P V Y H V S W S L D S R L L V S G S R D S T         L
UniRef90_UPI000382E48B  R H A D S D V A T D V D P Y W A S P P Q W S P D S Q Q L W L T S N E S K W F F
UniRef90_A0A031GYH4     D V K T K A V R Q L T R H A D F P V L N A S A A N G K I V Y A S G Q A H K L T I
UniRef90_V8NMF3         K Q D T C V H D L Q A H N K E I Y T I K W S P T G P M L A S A S F D S T V R L W
UniRef90_Q54CB5         T I Y R E V A K L H G H T R A I T S L T F S P S G N L I A S T S E D L L I K V W
UniRef90_G4QMN6         D I K S G D E R G F G S E G Y F A Y F D W T P D S K Q I M Y W T G G K N I D D Q
UniRef90_UPI00041ADD21  E S C I P V G K P M R H D A L I N T A L F S P D G R W I V T A S W D K T V Q I W
UniRef90_X6P0R5         K S G E R L K Q L I G H S D Y I N Y A E F S P D C K F V A S C S R D K T I R I W
UniRef90_UPI00016C4FDB  S T G R E V L Q L A G H E R T V T A L A F A P G G R V L A T A D G D D G P Q T I
UniRef90_X6PCF1         E S G K E L K I L N G H S N T V N E V K Y F P D G Q N F V S C S D D N T I C L W
UniRef90_UPI0003ACE32E  P T R R R T A V L K R G R P L V K G L A F G P H G R M L A T G D D D R A V T L W
UniRef90_A0A010RJV4     D A D                 W E Y R S T D V F P Q L S L Q G R   L V I T Q K Q L G N S S I
UniRef90_K9PV71         L D R L L A K S C D W L Q F Y L R H N P K V R D G D R
UniRef90_R7QLN1         S G A Q I C S A L H G H D G D V R G V A I S A D G E W A V S G G D D E T V R V W
UniRef90_J2ZNF1         D A D T G E V I H T Y T G N W V R D V V W T Q G G P R V V T G S A D G A A H V W
UniRef90_A8I2S8         R S N V L L Q H Y R A H T G P V T H L S F H P T G N F L L S S S L D T T L K V W
UniRef90_F3ZT88         D L K N N T T T N I T E G G Y D T N P Q Y S P D G K Y I S W L S M E R D G N R L
UniRef90_X6NN27         I T G K E L K L E G H K D I V T D A K F L P D G K R I V S S S N D N I I C I W
UniRef90_L7LX26         E A A K M V R T L T G H K G N V R C M D F H P H A E F V A S G S M D T T I K L W
UniRef90_UPI00032AF9B8  N V K G D S T V F R A H T A T V R S V H F C S D G Q S L V T A S D D K T V K V W
UniRef90_K9U436         H I D T G E E S A P A L R A A V N A I A F S P D G K L L A I A T E D K L L K V W
UniRef90_I2FQM1         Q N R N K V F K G H N V A G F A C G V A F S P D G R F L       S S G D G Q G D V C
UniRef90_I2ERY4         E   G S K K T A L T N F K D A I K R P Q V S A N G E K V I F       E K D Y Q L
UniRef90_R7F463         N A D G S L V A N E G N P G Y D T D P V F S P D G K K L A W L S F E S D K K R L
UniRef90_K1KU23         D P A T G D L K Q E T F H K D F D V K N L D S N G T E I V Y       E Q G G Y L
UniRef90_F8PHW9         K T G E C L R V F M D H F K H V Y A L S F S P D G R H L A       T G G G D G W L
UniRef90_H3DBG7         T H K M L Q H Y Q A V H C G V V N S L S F H P A G N F L I T A S S D S T V K I L
UniRef90_W9X714         R D G K F I C T L R G H V S S V Y M C A W S D S R L L A S S K D T T V K V W
UniRef90_UPI00044141E8  P A R R L K L K I N A H S D L V R S I A V S P S G G Y I A S G S D D E T V R I W
UniRef90_B8MBF1         D I E T T E V V R R F D G E W I R S R F G G A G E N F V V S G S E D S Q I Y I
UniRef90_H1XNF2         D V E T K K V R Q I T R H K D Y D V R F P S A G P Q R I V Y V K N P Q P K K I D
UniRef90_X6NUN0         R S G Y E I Q K L K G H S G P V A E V S T S P D N S I I V S S S S D K T I R I W
UniRef90_UPI000365665F  P W R G G E A T L L T P G F E V D R V S F S V D R K R I V Y S S N Q H G R K H L
UniRef90_V5SBB7         A T G K P V L T L N G H T S L V S S A T F N S D G A R I F T T S S D K T G R I W
UniRef90_Q9M2Z2         T G H C V K T L I D D E N P P V S F V R F S P N G K F I L V G T L D N T L K L W
UniRef90_C9SA61         Q G T K P V A K M N G H Q K Q V N H V T F S P D G N L V A S A G W D N H I K I W
UniRef90_T0R1M8         N K A T E Q K L L A M P D A A L S K P T L S P D G K Q L A F V V D       G Q A V
UniRef90_A3I5X7         D L E T K Q S R K V T E G G S Y Y Q T S W S P N S R F L S F V
UniRef90_Q9TYV3         R T G K Y L A S L R G H V G P V Y Q V A W S A D S R L L V S G S A D S T L K V F
UniRef90_UPI000455F7C2  T H E P L F D P L Q G H T D L L S W V G Y S P D G Q R I A S V S Y D       R T V
UniRef90_A3ZNS4         D L A A G K I T H D G H S A E V N S V A F S A D G R R L V T G S S D S M V I V W
UniRef90_X0RIG2         T L A T G Q V I N L A E T G L D E P A R L S P S A Q Y A V Y L S Q V G G G G S L
UniRef90_S8E7H3         H T A T S I C D L T G H E G V I Y T I A Y S P D G K R L V T G S D D G T C R V W
UniRef90_R0J9F5         M N       R L L Q H Y Q G N A V V N S L S F H P S G N Y L V T A S N D S T L K I L
UniRef90_D8PQP7         D N F R Q N R K K R F A G H S V A G Y A F S P D G K W L     S S G D A E G N M V
UniRef90_C0BMP9         D L N T G E E S W L A Y P G V L P A M S F T P D S N A L I V S S D K T A S K I P
UniRef90_G9NKR7         E T G R R I R D L R G H S K G I I S I A F S H D S S L L A S A S A D H T V R
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sol0                                      B   B                         B
jhmm
jpssm
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sol0                                             B B B B
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UniRef90_J9VZH8          M Y T G H L S D V N C V K F H P N S L Y L A T A S T D T S C R L W D V Q R     G
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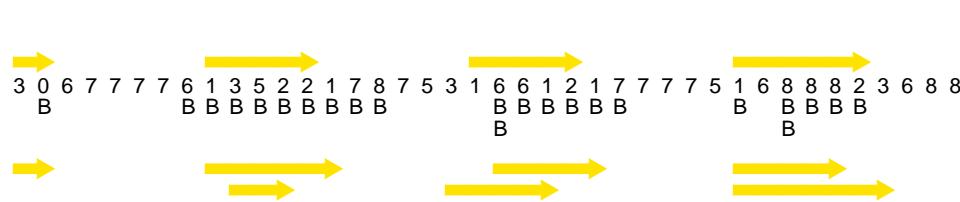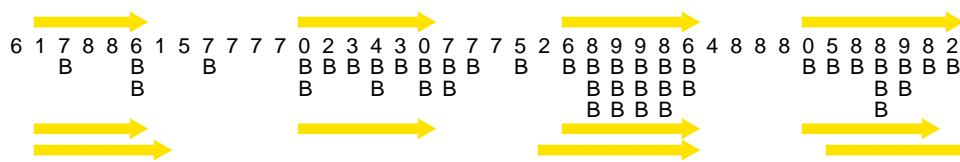
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UniRef90_J9VZH8          A C V R L F L G H T D S V T T L S I S P D G K T L A S A G L D S S I W   L W D L
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UniRef90_L8WJ80          L A L G P L K A H Q D W V R S V V F S P E G S H I V S G S D D Q S V R V W R V E
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sol5   B   B   B   B B   B B B B   B B
sol0   B B B B   B
jhmm
jpssm

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UniRef90_UPI00027F4D57   D L L L P L H E L R G H N G C V R C S A F S M D S T L L A T G D D N G E I R I W
UniRef90_J9VZH8          G S A R P I K K M E G H T G A V T S L S F S A E S S V L V S G G L D G T V R C W
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UniRef90_M2R114          N I W N P S T N E I T I A S V G A P N I S S L A L S P
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