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                              1         10        20        30        40
QUERY                    I E Y S L K T S N D D Q F I D I T N L V K K A V D E S G V S D G M A V V F C P H
UniRef90_A5IL70              L T V R T S S R T Q F V D I T S E I   V K F I E E S K V R N G I C V V F V F V P H
UniRef90_K0NQN3      M Q I S   K T N A R T Q M V D I T S Q V R D A V I E S G I K D G L V H F S M H
UniRef90_F0S129          E I S L K T G R T Q L V D I T R Q V E S I L Q S G I T K G I C I V Y V P H
UniRef90_R7RSY8      M E F S I R T S K Q E E F I N I T N L V R E A V K K S G V K D G I A V I F V P H
UniRef90_A3DBL5          L S I R T S A R T A M I D I T S K V Q Q V V E R S G V K S G I C T F F V P H
UniRef90_I7LG60      M E F N V K T N K R E E F I N I T S Y I K G A V K E S G V K S G I A I I F V H
UniRef90_E1R8G5          L N I K T S G R S D M V D I T D K I I T S A V Q E S G V R N G I C M V Y I P H
UniRef90_B7IGH8          L E V P T K T R N E F I D I T H K I E E T I S K S G I K S G I C V V F V P H
UniRef90_I3IJT9      K I P V K T Q G R T E F V D I T V D V N R I V Q K S G A Q E G V C Y V Y V P H
UniRef90_A5D3M9      F T I E L S T S K S T Q M V D I T G E V E R L V S Q S G V K E G T C H L F T P H
UniRef90_M1ZEP8      M E Y T I K T S R P E E M I E I T D M V R Q E V R K K G V K D G I A I L Y V P H
UniRef90_F8EYS8      M Q F T I R T D R E A Q L I N I T D M V A R A V E E S G V E Q G V T V V F V P H
UniRef90_Q8R842          I N T P L R E V M L D I T K E V E E E K K S G V K E G I C V V F V P H
UniRef90_C0QSZ8          I E V V T Q K R T H F E D I T D A V Q E V I D E S G I D E G I C C V Y V P H
UniRef90_X1G7V7      E I T I Q T N T Q T Q L D I T A Q V Q K V V E S G I T E G L C C V F V P H
UniRef90_D9TST0          L K I N T H S R E S M I D I T E E V K S A I K S S G I K D G I C T V F V P H
UniRef90_R7KRH9      K L R L S T P K   E G F I K I T R D V E S L V A E S G I K E G I C V V F C P H
UniRef90_H5SI59      K L Q I K T Q A K Q E I I E I T D R V A R A V R E S A L S D G L C T I F V P H
UniRef90_B2V8Z3      I T I N L R T K S H T D F I D I T D L I S Q A I S E S K V D S G I C T V F V P H
UniRef90_Q2LUY6          F T V K S D E R V E M I D I T A R I R A A V K E S R V R N G I C Y V F V P H
UniRef90_Q3ZA70          L E I P S R S Q T E F I D I T S R I S S L I T Q S G V T S G L C Q V F V P H
UniRef90_I5B3R0      M Q F S I K T G A R T Q M M D I T A Q V R D I V R Q S G V R N G L V H F S M H
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UniRef90_Q58481      F K Y Q I K T N K R E E L V D I T P Y I I S A I S E S K V K S G I A V I Y V P H
UniRef90_R4K8P0      M K Y E I K T T K S Q E L V D I T N I V R E A V R K N D V N D G I V T V F I P H
UniRef90_UPI0003730E4A   E F Q L E T P   R E D Y I N I T G Q V R T A L R K S G I Q D G M C I V F C P H
UniRef90_M5DXJ6      K L S I K T N D K V E L I D I T T E I Q N A V K K A G L K K S G L V Q I H I P H
UniRef90_W7UBS9      F N F K L S T P A   E G L V D I T N E V S E A V K E S G V L E G I C I V F C P H
UniRef90_Q39XQ5          L E I R S R A K A E F I D I T S M V R E Q V R G S G V T C G I C H I F V L H
UniRef90_I3E8J9      K F T I R T N K R D E F Y E V T S E V E K A V K N S G I K E G V A I V Y C P H
UniRef90_C0EH44              T T D A Q N F H N I T R Q V E A V R E S G V E D G I C V V H C P H
UniRef90_D9S214          I N V E T T A R T Q M V D I T Y E V R K A I S E F G V K D G L C F V F V P H
UniRef90_W8TJF9      M D Y S I R T G K S Q E F I D I T H V I R E E V S R S G V R D G I A V V F V P H
UniRef90_E4RJF1          E L S I E S K D R V E F I D I T Y K I K K I V E N S G V E S G I L Q I H I P H
UniRef90_B8I297      Q F S L S T   E R Q N F Y N I T S K V A E S I S Q C G I T D G A V I V F C P H
UniRef90_B8FMV5      M Q F T V S T R T E M V D I T S R V Q D F I R E E D V Q D G A V M V F V P H
UniRef90_R7FEG9          Y T L D T P A   E D F C P I T A Q V Q G A V A E S G V Q D G I C L V Y C P H
UniRef90_C0GCG3      K F Q L S T N N R S Q M L N I T Q K V Q E A I G E A G A K E G L V T I Y C P H
UniRef90_D3T4F9          F E I N T P V R E V M V D I T D M V M Q E I R K S G I V D G A C V I F V P H
UniRef90_UPI00047C0033 I E L E L A T R Q R E E M I N I T G M V R E E L K K H G V Q D G I C Y V F V P H
UniRef90_A8ZTY3      I S F S V E T R Q R K E M T D I T A E V R R A V S S A G M E N G A V V V F V P H
UniRef90_D1YZG7      E V G V P T S M R A Q M V D V T S Q V V S E L A S S G I K S G M C Y V Y V P H
UniRef90_F6CIW9          L T V N T T A R S Q L V D I T S Q V R K I V Q A E K I P E G C C H L F V P H
UniRef90_X0ZW59          L N I K T S S R I E M V D I T D K I A S L I S K Q N I S S G I C Y L F V P H
UniRef90_O05243          L Q I K T T K R D E M I D I T R E V E A F L Q E T G I T S G A A L I Y C P H
UniRef90_UPI00037BB708 Q Y S L D T P   Q E G F V D I T G Q V Q K A V R E S G V S E G T A M I F V P H
UniRef90_E6UBJ8      K Y S I R T D   R E G L Y N I T S Y V R Q T L N E S G V E S G I A V I F C P H
UniRef90_U2DV72          F Q L S T G E H   S F H D I T S Q V R E Y I R E T G V R D G I A V V F T P H
UniRef90_D9SUN7      F Q F S V S T S K F Q E F V D I T Y L I K D A I D K S A I E E G I A V I Y C P H
UniRef90_K4LEV3      I E F P V R T T K R V E M V E I T P T I N N I C K E R G V N E G L C C I F V P H
UniRef90_A9BJ61      Y S L K T H N R E E M L D I T S Y I Q Q S V E N S K I E E G I L I V Y V P H
UniRef90_C7N2D5          F Q L S T S A   F S F H D I T A Q V K Q A V R E S G V R E G L C T V Y C P H
UniRef90_UPI0003B59D25 E I I V Q T S S R S Q L I D I T K E L K R L I R K N E W K D G L L A V W T P H
UniRef90_R8VUI9          F T L H T D   R Q G Y Y N I T A A V K K C I S D S G V R S G L C V V F C P H
UniRef90_I4BZ94      M A H T L R T K A R E E L I D I T R T V E E D V S F S G I K E G L C V V Y V P H
UniRef90_X1FJ55          I N I N T P Q R E I L M D I T R E I N N I V S E S N I Q N G V C R L F V P H
UniRef90_C4XLT9      M E L E L R T P R R E A L V R I T P A L T D L I A A K G W Q D G A V V V Y C P H
UniRef90_D5DPC1          F T L K T N K R D E M I D V T S Q V Q A V L R T E G L K E G A V V V Y C P H
UniRef90_D3PCK9      I K F N V K S T K R E Q L I D I T T E I K K I I N N E G W D D G I L L I Y T P H
UniRef90_I9MHR5      E F T I H T P   R E G F I D I T G Q V A D L L R Q H Q G E K N L C Q V F V S H
UniRef90_F4A249      K L D V V T T Q R Q Q F I D I T N E I Q T L V D R S D I T N G I C M I Y V P H
UniRef90_D7CNK0      F T V S V K T R Q R T E I I D I T G N I E Q L V A S S G V V T G V V T V F V P H
UniRef90_F4LVS2      K I A I K T D R R N Q M L D I T S I V Q K S V S E S G V K N G I C Y I F V P H
UniRef90_UPI000289A572 F T L H T K Q R D E M I D I T E Q V R S F L R E E G L E N G L A I I Y C P H
UniRef90_UPI00034BDF0F L H L K T S S R D Q M I D I T D Q I E E W I H E I G I Q D G L L V V S S L H
UniRef90_L0K8D1          F T V Q T N Q H S Q L V D I T L Q I Q E V I D Q T Q V N E G I C V V F I P H
UniRef90_D7EA27          F N L N T K S R N E M V D I T S E V K N A L K E L N A D N G I A T I Y C R H
UniRef90_UPI000366B391 F T I T T S K R T Q F I P L D S Y I E Q F I Q E T G R K N G I V C V Y V P H
UniRef90_E6U4S0              Q R E F I D I T R T V E L F V Q E T G V R E G L C L V F C P H
UniRef90_UPI0003B3E91B Q F S V Q S A R R E F I D M T A R V S E L K C K D G I C V V F T P H
UniRef90_B4RG56          L T V Q T P G Q G   L H E I T R E V A A F V A D E G M A T G L L T L F C R H
UniRef90_F8E611      M E I K I N S T E N K Q L I D I T S K V T S I V D K A G F L E G A V F V Y T P H
UniRef90_UPI0001E8925F L N L Q R T H R K D E W Q D I T A K V E S L V Q K S G V K E G H V M V Y C P H
UniRef90_D3DJL5          F S V R T T K R T S I V N I T S Y V K E E V K K S G I R S G F C V V V V P H
UniRef90_U5SEM6          F E L L T E E K Q T F V N I D E Y L Q Q V L C K S G V K N G L M L V F C P H
UniRef90_C8WZ50      L E I T V S T S K R E E F V D I T E Q V R R V C G D K G W Q D G V V L L H C A H
UniRef90_UPI0004788ED1 Q L R T S R R D E M I D I T R Q V A S I V S R A G A D E G I A L V Y C P H
UniRef90_E0R9L7          L E L S T T R R D E I R D I T R E V A S L I E K S G V Q Q G T A L V Y C P H
UniRef90_UPI000363FCEE L S I Q S S H R E E L I D I T G W V N R L L A E Q G E I D G L C C L F V P H
UniRef90_A6CJN3      Q F E I S T S K R D E M I D I T E D V Q G W I D E Q G I Q D G I V I V Q S M H
UniRef90_UPI00037FBB28 M E L E L R T T R E E L I D I T S R V Q A V S E K N W Q D G A L L L F C P H
UniRef90_B8DN04      M E L S L R T T A R E Q L L D I T N E V Q E L V A R K G W T D G A L V L F C P H
UniRef90_E6U1Q5          L K T N T R D E M L D I T N E V Q N F V N E Q G V H S G V V Y I Y C P H
UniRef90_UPI00047A5A01 K M T V N T K K H D E M V D V T S D V Q Q F V Q N Q K L E N G I V I V Y C P H
UniRef90_E5WMQ6      K F T V N T S E R D Q F L E I T S E V Q A Y I N Q C G I A E G A A L V Y V Q G
UniRef90_G0GF61          I T L S T H R R E E L I D I T R E V E V A V A R S G V Q S G L C N Y Y V Q G
UniRef90_Q2RID6      F T F D L Q T Q A K E A M I D I T H L A A K T V K E A G I F C L V F C P H
UniRef90_UPI000364E7F9 I E L T I K T S S R R A S I D I T K Q V E D A V R S A G V S E G I C T I F V P H
UniRef90_C8W5G1          L E L K T S Q Q I Q F L D I T S Q I N T I I N E Q T I S E G I C Y I F V P H
UniRef90_K2E5G4      K I T V K T Q K K N D L I D I T S E I K G M V E A L N V Q D G L C L V F C P H
UniRef90_I9X0P0          L T I A T P G Q G   F T D F T G A V A E V R D G L T L F C R H
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                              50          60          70          80
QUERY                 T T A G I T I N E N A D P D V T R D I L V N L D K V F P K V G D Y K H V E G N S
UniRef90_A5IL70       T T A G I T I N E N A D P S V R Q D I M N T L N K L V P P S A G Y T H L E G N A
UniRef90_K0NQN3       T T A A V T I N E N A D P A V E T D I L N T I N K V I P W D D H F K H E G N S
UniRef90_F0S129       T T A G V T I N E N A D P D V K K D I K S M L D K L I P W R E S F Y E H E G N S
UniRef90_R7RSY8       T T A G V T I N E N A D P D V V R D M I V T L D K V F P K V G D Y W H V E G N S
UniRef90_A3DBL5       T T A G I T I N E N A D P D V V S D I L T E I N K I V P F E D G Y S H G E G N S
UniRef90_I7LG60       T T A G V T I N E N T D P D V T I D M I N G L N E I V P N L K K F R H I E G N S
UniRef90_E1R8G5       T T C A V T I N E N A D P A V K H D I M A E L D K I V P W K D A Y H H M E G N S
UniRef90_B7IGH8       T T A V T I N E N A D P S V K S D I V K T L N K V I P A N W D Y T H I E G N S
UniRef90_I3IJT9       T T A A V T V N E N A D P S V Q R D I I S E L N K I V P W D G R Y S H T E G N S
UniRef90_A5D3M9       T T A G L T I N E N A D P T V T A D I L M E L N K I I P F D D G Y R H T E G N S
UniRef90_M1ZEP8       T T A G V T I N E N A D P D V V H D I L L G L K K A F P E N I G Y R H A E G N S
UniRef90_F8EYS8       T T A G V T I N E N A D P D V V H D L L L G L D R A F P K S P A Y R H G E G N S
UniRef90_Q8R842       T T A G I T I N E N A D P T V K E D I L S A L D K I I P N I S F K H L E G N S
UniRef90_C0QSZ8       T T A G V F I N E N A D P D V K W D I E K T L D K L I P W E D Q Y S H V E G N A
UniRef90_X1G7V7       T T A G V T I N E N A D P S V K Q D I V M E L N K I I P F D D N Y S H S E G N S
UniRef90_D9TST0       T T A G V T I N E N A D P D V K D D I I R G L D E I I P N I R F K H M E G N S
UniRef90_R7KRH9       T T A G I T I N E N A D P D V V R D L T Y A M N I T S P D R P E Y R H A E G N S
UniRef90_H5SI59       T T A A V T I N E N A D P A V K E D I L S A L G R L V P A G P H Y K H A E G N S
UniRef90_B2V8Z3       T T A G V F I N E N A D P D V V Y D V K N H L E K L V P W M N N Y K H I E G N A
UniRef90_Q2LUY6       T T A A V T V N E N A D P A V P R D I L M G L S K I V P F G D P Q Y R H M E N S
UniRef90_Q3ZA70       T T A G L T I N E N A D P D V I T D I K A Q L E R I V P A V T P F L H S E G N S
UniRef90_I5B3R0       T T G A V T I N E N A D P A V P V D I L S C I N K V I P F D D N F K H M E G N S
UniRef90_D5X889       T T A G I T I N E N A D A S V T R D I L Y E L D K M V P W N D G Y R H M E G N S
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UniRef90_UPI0003730E4A T T A G I T I N E N A D P D V V E D M L F A M S K M Y P D R L E Y K H A E G N T
UniRef90_M5DXJ6       T T A A V T I N E N A D P D V K A D I K K E I N K I V P F D D N Y A H L E G N S
UniRef90_W7UBS9       T T A A I T I N E N A D P D V Q T D F I K G M D R F F P D L Q I F R H A E G N S
UniRef90_Q39XQ5       T T A G L T I N E G A D P A V Q R D L L T Y L D R L V P R D P Y F T H K E G N S
UniRef90_I3E8J9       T T A G I T I N E N A D P D V K R D M I R R F D E I Y P W H H T L D R H M E N T
UniRef90_C0EH44       T T A G L T V N E N A D P D V V S D L L Y A L D K T F P D R P E F R H I E G N T
UniRef90_D9S214       T T A G V T I N E N A D D D V K T D I I N A L N R L I P Q R G D Y R H V E G N S
UniRef90_W8TJF9       T T A G I T I N E N A D P D V V H D I I S S L E K A F P E K G D Y R H F E G N S
UniRef90_E4RJF1       T T A A V T I N E N A D P S V K S D I K K E L N K I V P F E D N Y S H L E G N S
UniRef90_B8I297       T T A G I T I N E N A D P D V V R D M L Y G L D K A Y P D R T E F R H Y E G N S
UniRef90_B8FMV5       T T A G V T I N E S A D P D V A R D I I M A L N I L V P D N L D Y R H A E G N S
UniRef90_R7FEG9       T T A G I T I N E N A D P D V V T D L L L A Y R K A F P D R P E F R H A E G N S
UniRef90_C0GCG3       T T G G I T I N E G A D P D V V R D I L L H L D K L Y P W D S P D F R H E G N S
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UniRef90_UPI00047C0033 T T A G V T I N E N A D S D V K R D I L S G F K A M V P D I P Y R H V E G N S
UniRef90_A8ZTY3       T T A G V T I N E N A D P D V R R D I L A H M A T L V P E D T P F A H S E G N S
UniRef90_D1YZG7       T T A G V T I N E N A D P D V V T D I L N G L E R L V P L K G N Y R H A E G N S
UniRef90_F6CIW9       T T A G I T I N E H A D P S V A Y D I L S E L D R L V P R E G N Y R H L E G N A
UniRef90_X0ZW59       T A A G I T I N E N A D F T V Q L D I N S K L S K L I P P G N H Y S H L E G N S
UniRef90_O05243       T T A G I T I N E N A D P D V K K D M L R R F D E V Y P W E H E L D R H M E N T
UniRef90_UPI00037BB708 T T A A V T V N E N A D P D V L H D L R L A L A A L V P K L P Y R H G E G N S
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UniRef90_U2DV72       T T A A I T I N E N A D P D V L R D L S T G L D K T F P L R E Y R H F E G N S
UniRef90_D9SUN7       T T A G I T I N E N A D P D V V R D M I V T L D K V P I K G D Y R H F E G N S
UniRef90_K4LEV3       T T C G I M V N E H A D P S V V H D I A G T L E K L I P F E A D Y R H T E G N S
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UniRef90_C7N2D5       T T A A I T I N E N A D P D V Q R D L K F A L I D A F R D R P E F R H A E G N S
UniRef90_UPI0003B59D25 T T A A I T V N E N A D P D V P A D I T S F L N N K I P K N W G F S H M E G N S
UniRef90_R8VUI9       T T A A I T I N E N A D P D V R H D L V M G M D G A F P I R S G F Q H A E G N S
UniRef90_I4BZ94       T T A A V T I N E H A D P D V R Q D I L K Q L K V L V P K D C D Y S H L E G N S
UniRef90_X1FJ55       T T A A I T I N E N A D P S V K K D I I N F L G K L I P Q N A G F R H A E G N S
UniRef90_C4XLT9       T T A G L T V N E D A D P D V A T D M V M A M N R L I P R E A G Y R H A E G N S
UniRef90_D5DPC1       T T A G I T I N E N A D P D V K T D M I R R F D E V Y P W E H K L D H M E G N T
UniRef90_D3PCK9       T T A A I T I N E N A D P T V K D D I I S F L N K K I P I D Y P F R H L E G N S
UniRef90_I9MHR5       T T A G V T I N E N A D P D V I K D M L L A L N H M V P E L D Y Q H G E G N S
UniRef90_F4A249       T T A G V T I N E N A D P D V M A D V A E Y L N K A V P R Y G H Y A H V E G N S
UniRef90_D7CNK0       T T A G I T I N E N A D P T V K Q D I L A T L A Q I I P A K T G Y Y Q H E G N S
UniRef90_F4LVS2       T T A A V T I N E S A D T D V A N D I L E T L S K L I P Y K D S Y R H V E G N S
UniRef90_UPI000289A572 T T A G I T I N E N A D P D V Q H D V L L R L D E V Y P W K H P R Y H A E G N T
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UniRef90_L0K8D1       T T A A V T I N E N A D P T V K G D I L T K L E N L I P W N D N Y K H L E G N S
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UniRef90_UPI0001E8925F T T A G I T I N E N A D P D V I K D V V M R L D E V Y P W E H P K Y R H M E N T
UniRef90_D3DJL5       T T A A V F I N E G A D P D V V R D I A Y M L E R L I P W E D H T Y H S E G N S
UniRef90_U5SEM6       T T A G I T I N E N A D P D V K K D L S L G L D Q T F P N K K E Y V H M E G N S
UniRef90_C8WZ50       T T A G L T V N E S A D P S V C R D I L A H L R Q S V P H M A G Y E H G E G N S
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UniRef90_A6CJN3       T T A G I T V N E N A D P D V K T D F L M R L D E V F P W N H K K D R H R E N T
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                        90        100       110       120
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UniRef90_F8EYS8         H A H L K A S A M G S S V T V M V E A G R L K L G T W Q G I Y F C E F D G P R Q
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UniRef90_D9TST0         D A H I K S A L V G N S A N L I V E N G E I Q L G T W Q G I Y F C E F D G P R S
UniRef90_R7KRH9         H A H M K A L M T G S S V T V I I S G G K L L L G R W Q G I Y F A E Y D G P R S
UniRef90_H5SI59         H A H I R A S L L G H S V T P V E A G R L V L G T W Q G I L F C E F D G P R Q
UniRef90_B2V8Z3         A A H I K S I L T G N S I N I I E N G R L L L G T W Q G V F F A E F D G P R N
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UniRef90_Q3ZA70         A A H V K T S L M G S S L N L I I E E G R L L L G T W Q G I Y L A E F D G P R R
UniRef90_I5B3R0         A A H I K V S L F G P S E T V G L E N G N L V L G T W Q G S L F F C E F D G P R T
UniRef90_D5X889         A A H I K A S M M G F S Q M V I I R N G D L Q L G A W Q G I Y F C E F D G P R N
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UniRef90_UPI0003730E4A  T A H L K A G S I G S S V T M I D Q G K L I L G T W Q G V Y F C E F D G P R S
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UniRef90_W7UBS9         D A H I K S S A V G A S E T L I I T G G K L L L G T W Q G D I Y F C E F D G P R T
UniRef90_Q39XQ5         D A H I K S T L T G T S L T V F F N E G K L L L G T W Q G S I Y L C E F D G P R Q
UniRef90_I3E8J9         A A H M K A S T V G A S Q Q I I I S N G E L L L G I W Q G I Y F C E F D G P R T
UniRef90_C0EH44         T A H L K A S C M G N S V T L P V E R G R L V L G T W Q G I Y F C E F D G P R S
UniRef90_D9S214         D A H I K A T L V G S S V V L A I E D G R P V L G T W Q G V L F C E F D G P R K
UniRef90_W8TJF9         H A H I K A S L T G S S C N L I I E N G K L K L G I W Q G V Y F C E F D G P R S
UniRef90_E4RJF1         A A H I K S S L I G V D Q N L I I Y N Q Q L K L G K W Q G I Y F C E F D G P R R
UniRef90_B8I297         S A H I K A S A V G S S Q Y I F E E G K L L L G T W Q G I Y F C E F D G P R N
UniRef90_B8FMV5         P A H I K S S M M G S S V L M E V S G G R L V L G T W Q G V Y F C E F D G P R T
UniRef90_R7FEG9         S A H A R A S A V G S S A M I P V K N G R L V L G T W Q G V Y F C E F D G P R R
UniRef90_C0GCG3         A A H L K A S T V G P S Q T I P I T N G E M V L G T W Q G S I Y F C E F D G P R T
UniRef90_D3T4F9         D A H I K A S L M G S S V T L I I E N G K P L L G T W Q G I Y F C E F D G P R R
UniRef90_UPI00047C0033  D A H I K A S L V G A C V S V F V E K G E L V L G T W Q G I Y F C E F D G P R R
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UniRef90_F6CIW9         D A H I K A S L V G S S L T V L V T G G Q L V L G T W Q G I F F C E F D G P R Q
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UniRef90_C4XLT9         D A H V K T T L V G P S L T L I V S S G R L Q L G T W Q G V V Y L C E W D G P R T
UniRef90_D5DPC1         A A H L K A S T V G S S Q H I I V H D G Q L L L G T W Q G I Y F C E F D G P R T
UniRef90_D3PCK9         D A H I K S S V I G C S E Q V I I E N G K M V L G T W Q G I F F C E F D G P R N
UniRef90_I9MHR5         R A H V K A S M I G S S V T I P I V N G S L Y L G T W Q G I Y F C E F D G P R K
UniRef90_F4A249         D A H I K S S F F G C S Q I V P I V D G K L K L G R W Q A V Y F C E F D G P R P
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UniRef90_D7EA27         D S H V K S S I I G T S E Q V I I E E G K P V L G R W Q G I F F T E F D G P R N
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UniRef90_E6U4S0         D A H M K S S L T G A S E T V I H G G R L L L G R W Q G L Y F C E Y D G P R T
UniRef90_UPI0003B3E91B  P A H I K S T L V G C S E Q L L V E N G K L V L G T W Q G I Y F C E F D G P R N
UniRef90_B4RG56         P A H L R T A L T T V Q L S V P V V G G R L A L G T W Q G I Y L F E H R R P H R
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UniRef90_D3DJL5         A A H I R S A I I G N S R V I P V E N G E L L L G R W E S I Y F L A E F D G P R E
UniRef90_U5SEM6         D G H M K S S V I G A S E T L I V S K G Q L I L G T W Q S V Y F C E F D G P R K
UniRef90_C8WZ50         D A H I K S S L M G C S Q Q V L V A N G R L A L G T W Q G I F F T E F D G P R Q
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UniRef90_E0R9L7         A S H L K S I T T G P S Q T I I I H D G K L L L G R W Q G I Y F C E F D G P R N
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QUERY                    R K V F V K I I
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UniRef90_R7RSY8          R K F Y V K L I
UniRef90_A3DBL5          R E V Y V K I
UniRef90_I7LG60          R K F Y L K I I
UniRef90_E1R8G5          R T V S V Q I
UniRef90_B7IGH8          R K V F I K I L
UniRef90_I3IJT9          R E V F V Q A M
UniRef90_A5D3M9          R K V L V K V V
UniRef90_M1ZEP8          R Q V Y I K I M
UniRef90_F8EYS8          R Q V Y V Q V L
UniRef90_Q8R842          R K V Y I K I I
UniRef90_C0QSZ8          R K V I I K V L
UniRef90_X1G7V7          R K F Y V K I I
UniRef90_D9TST0          R K V Y I K V I
UniRef90_R7KRH9          R E V I V K I M
UniRef90_H5SI59          R E V W V
UniRef90_B2V8Z3          R K V Y I K I I
UniRef90_Q2LUY6          R K V L V K I L
UniRef90_Q3ZA70          R T V Y I K V L
UniRef90_I5B3R0          R K I N V T I V
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UniRef90_Q39XQ5          R K V A L K I V
UniRef90_I3E8J9          R T F Y V K I I
UniRef90_C0EH44          R T F F V K V M
UniRef90_D9S214          R K V F V K
UniRef90_W8TJF9          R K I Y I K V I
UniRef90_E4RJF1          R K I I V T I L
UniRef90_B8I297          R K F Y V K I I
UniRef90_B8FMV5          R K V R V
UniRef90_R7FEG9          R T F L V T V M
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UniRef90_D1YZG7          R K M L I G I
UniRef90_F6CIW9          R K V L V K V V
UniRef90_X0ZW59          R D L Y I K L I
UniRef90_O05243          R T C Y I K M M
UniRef90_UPI00037BB708   R Q V V V Q
UniRef90_E6UBJ8          R N F Y V K I V
UniRef90_U2DV72          R T F Y V K V I
UniRef90_D9SUN7          R K V F V K I I
UniRef90_K4LEV3          R R V C L K I
UniRef90_A9BJ61          R N F I V K I I
UniRef90_C7N2D5          R R F F V Q I V
UniRef90_UPI0003B59D25   R K V W V K F I
UniRef90_R8VUI9          R R Y Y V K V M
UniRef90_I4BZ94          R R F Y V T L
UniRef90_X1FJ55          R K L H I Q L
UniRef90_C4XLT9          R K V W V Q W L
UniRef90_D5DPC1          R T Y Y V K I L
UniRef90_D3PCK9          R T V I L K Y I
UniRef90_I9MHR5          R K V Y V T I L
UniRef90_F4A249          R Q V L V T V I
UniRef90_D7CNK0          R Q V W V K I L
UniRef90_F4LVS2          R N L I I K I V
UniRef90_UPI000289A572   R T C Y V K F I
UniRef90_UPI00034BDF0F   R K C M L K V L
UniRef90_L0K8D1          R K V Q V K L V
UniRef90_D7EA27          R K V H V K F
UniRef90_UPI000366B391   R K F Y V E V I
UniRef90_E6U4S0          R K F L I K V L
UniRef90_UPI0003B3E91B   R Q V I V K
UniRef90_B4RG56          R E V V L H L L
UniRef90_F8E611          R E V Y L N F L
UniRef90_UPI0001E8925F   R K I Y I K V M
UniRef90_D3DJL5          R K V I V K V I
UniRef90_U5SEM6          R T F F V K I I
UniRef90_C8WZ50          R R V W L Q W I
UniRef90_UPI0004788ED1   R E Y F V K I L
UniRef90_E0R9L7          R Q Y H V K I M
UniRef90_UPI000363FCEE   R Q V Q V H I I
UniRef90_A6CJN3          R K F I C R L
UniRef90_UPI00037FBB28   R K L W L K F L
UniRef90_B8DN04          R R L W V Q W L
UniRef90_E6U1Q5          R H I Y M K I M
UniRef90_UPI00047A5A01   R S I Y M K A M
UniRef90_E5WMQ6          R T F Y V K I
UniRef90_G0GF61          R R V V V T V L
UniRef90_Q2RID6          R K V H V K V
UniRef90_UPI000364E7F9   R K A Y V Q I
UniRef90_C8W5G1          R K I L L K I
UniRef90_K2E5G4          R E I W I Q A I
UniRef90_I9X0P0          R E I V V S V I
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                          1          10             20           30           40
UniRef90_F8I5G1         V E L R I   E T H R R E E L V N I   T E R I A R I   V T T S G I Q N G I   L V I Q S P H
UniRef90_Q8TL50         M K L K I   E T S K R I E L I D I   T Q E A Q E E V R I S G I Q E G I   C I L I S A R H
UniRef90_I0ID46         M E F T V   D T P G R D G M V E I   T D R V A Q A I   S R S A R R G G V   A Q I F V M H
UniRef90_H3NCE8           K F E L   Q T S Q K Q A F V N I   D E F L F E A I   S R S G V K S G L   A V V Y C P H
UniRef90_UPI0003710773     T L   R T S R R D E M I D I   T R Q I I S L V R Q E D I   R D G L   A V I Y S P H
UniRef90_C6BW85         M E L Q I   R T N S R E E M I D I   T E S V R R M V K D N G W Q S G A L   L L L Y C P H
UniRef90_B8DYS6         E I S V   S T P Q K I A L V D V   T E K I E E T V K E S K V R N G I   C F I Y V P H
UniRef90_UPI0003B79086     I T V   K T N R Q T E L V D I   T P K V A E A I     S G V Q E G I   C F I Y C P H
UniRef90_UPI00046E6991  F E I T L   S P Y L R G   Y H L I   T S E I Q R Q L P E L P   K A G L V H L L I K H
UniRef90_E8WQT7           L T L   K S R E R T E L I D I   T A R V E E L I   S A S R A N S G   C C D V F V L H
UniRef90_W9ADF8           F S I   K T T R H A D M L D I   T S K L E E W I   Y E T G V E E G I   L V V S S L H
UniRef90_I7DNE0         E F T V   T T R G G Q   L Y E I   T D Q I A P W V   Q D S G H S Q G L   L T L F V Q H
UniRef90_B8FVB3           L N L   Q T Q K R N Q W I D I   T S L I E G F L Q N F Q F K D G V   A I I Y C P H
UniRef90_B6WUD2         M E L S V   A T R S R C E M R D I   T A Q V R D L V R Q Q G R R N G A L   L L F S P H
UniRef90_UPI00047A9A7F    K Y T I   E T H Q R D Q M I E I   T H I V Q A F V N E Q Q M K D G Q V   L V Y C P H
UniRef90_D8IBZ5           I N V   K T N S R F D I V D I   T E E V R R C V   L E E K A E S G I   A V I F T P H
UniRef90_UPI00047E8D79     S L   N T D R R D S M I E I   T R E V R K F I R E Q R V E R G A   V V I Y C P H
UniRef90_H8MP95         E L T V   S T R G R G   L V D I   T G E V R K A V K G T G I R E G L   C T L F L H H
UniRef90_I0QNG4         E I K L   K Q R T R G   F H L I   T D E I L Q Q L P E R Q L S I G L   C H V F I Q H
UniRef90_UPI0003B5C965  E L S I   R T G E R E Q M I D I   G G E L R G L I R E Q G W S D G A L   L V Y C P H
UniRef90_W4C7J4           N I   S T S T R D E M K D I   T W D V K Q V V Q S S G V Q N G T   V L I Y C P H
UniRef90_I3CE65         Q L T I   R T H Q Q G   L Y N I   T A Q V A Q A V R E S A I V D G L   C T V F I Q H
UniRef90_F2NDR9           L E V   K T N A S T E L L D I   T A A I R D L V A R H G P M D G V   C F L Y S P H
UniRef90_Q07H82         K L S V   R T Q G   T G F V D L   T P E V A K F V A E T A A R D G A V T L F V R H
UniRef90_I0JLF9           F D V   K T D N H D Q M I D V   T S K V E Q W I K D E G I T D G V V I   V S S K H
UniRef90_A0A011Q8I1     Q M H L   K T S Q K Q D L Y K L   D S Y L K E A L K D S G V R D G V   M T V Y C P H
UniRef90_V7I8T5         E I E I   K T S K K E E L V D I   T E K I R S F V K E T G I K S G L   L N V F S H H
UniRef90_W4QMZ2           F H V   K T K T R D Q M I D V   T R D I Q T W I S E Q Q I E E G F V I   V S S L H
UniRef90_L1QPR3         K H S L   K I D N R Q T M L D I   T S I I E E D I K N S G V E E G I A I I Y C P H
UniRef90_V5SFJ0         E F T F   S T K G Q G   L Y E I   T R D A Q A F V A A S G I A L G Q L T A F C R H
UniRef90_X1KTL7           F G V   S S K Q R N Q T I D I   T S K V G A I V S Q A G I   T D G D A I I Y C P H
UniRef90_UPI0003B61F2F  M E I T V   K T H K K V E L I D I   T E E V L K R L P     P K D G I   C V L Y V P H
UniRef90_E3HDG9         M E I E L   K T S G K C E M V D I   T K R I K E A V Y K N R W N D G I   L V V F S M H
UniRef90_G7WGF7         K I H L   K T R K R D E M L D I   T Y E V E K L L V Q E N V Q E G L   V V I Y S S H
UniRef90_A6Q123           I Q L   K T S H K S E M L E I   T E I V K E A V I R S G V S N G S   C I V Y S P H
UniRef90_C0BWU1         F E H S I   S T K G T E Q M S K V   T D M V R G D I K K S G V E Q G I   V V V Y S P H
UniRef90_UPI000379C662    L A I   D T R G R G   F T D I   S R R V N E V L A A E G A G D G L   A T L F I R H
UniRef90_G7LX02         I Q Y E I   R T P K A R G F H L I   T D E V L A Q V K A R Q I K V G L L   H I F I K H
UniRef90_D0LRN5           L T V   G T R G R G T   V D I   T A Q L G D A V R E A G I D T G L   C H F V H H
UniRef90_A8FGT3         K I N I   Q T N R R D E M I D V   T S E V H Q V V K E T G S Q N G S   V I V Y C P H
UniRef90_UPI0003F69E00     F Q V   K T N N H S Q M V D I   T D E L E A W I R Q E N V D E G I   L I V S S L H
UniRef90_Q1K195           I E I   T S Q H R D Q M I N I   T S L I A K H I R E Q G Y I D G V I   V L F V R H
UniRef90_J9DT86           L T V   E T R G   T G F V E I   T D E A A R F V A E A G G R D G T   L V V F V R H
UniRef90_UPI00035FC5DA     I S V   A T G G R G   L V D V   T R A V A S L L S E A G A G D G L   A T L F V R H
UniRef90_M5DQH9           I T L   K P Y A R G   F H L I   T S A I E Q Q L P E S Q I Q A G L   L H V F I Q H
UniRef90_UPI000405F697     F S I   A S K K H S E M I D I   T A Q L K S W V G E N N I R D G I   L V V Q S M H
UniRef90_B1QTN1         F E H S L   I I N K K Q T L I D I   T S Y I N D D I S L S K I Q D G I   V I V Y C P H
UniRef90_UPI0003B4F2A3  K L E V   S T N E H A E M V D V   T E K V R T Y I K E E G L D H G A V   I V Y S P H
UniRef90_UPI000370877E  L S V   S T R G R T   Y D I   T A E I A R L V R G S G L H T G L   C H C F L Q H
UniRef90_S7V632          L R V   T T E R H E E M V D I   T S E V R R A V R D N D W R D G A L   L V Y C P H
UniRef90_H3ZQ74         F E I D I   P T R E E F E L I D I   T P L V N E K I R E S G I K E G I   A I I F T R H
UniRef90_E8T286           L T F   N T K R R R E L I R I   T D T V K E A V K E S G V K E G L   C L V S A M H
UniRef90_B1ZKL4           T V A   T P G Q G   F T D I   T E A V A A F V A E S G L R T G L   V S V F C R H
UniRef90_G1US24         K L E F   T T N A R C E M R D I   T P E L R A L V R E R G W R Q G A L   A L F C P H
UniRef90_Q30WH7         I T F H V   Q T H R R E E L V D I   T A H I R R L A G E Q G W R H G A L   L V Y C P H
UniRef90_E6W5G1           L T L   H S H E R T Q F I E I   T R S L H E A V R E N G W K D G I   L L A F T P H
UniRef90_E3DQ01         Q L T I   K T N K K I D F V D L   T A E I K K K I S D S K I K S G L   I Q I N I P H
UniRef90_UPI000373ED99     T V S   T P G Q G   F T D I   T A S V A D F L R R S G I G Q G L   L T L F C R H
UniRef90_UPI000306D19C    L K V   H T Q G K   S F H D I   T A Q V Q S V V A Q S G I E T G L   C T L F V R H
UniRef90_Q1AWP6         E V S V   R T G R R Y E F V S I   T E E V R R A V A R S G V R E G V   C V V S S S H
UniRef90_R5V4W6             T T   P V S K T G L I D I   T A Q V K G A V A E S G V Q S G I   C V V Y C P H
UniRef90_E4TXB0           L K F   P T S H K T Q L M D I   S A E V R E A V I M S G I K E G I   C V V F T P H
UniRef90_F6D6N3           L D V   K T N E R V E I L D I   T P Q L K A A L T K T G I K T G L   V T I F S R H
UniRef90_T2JCD7           L S I   Q T R G K   D F H R L   T R D V E N V V S E S G I S T G L   C T I F V R H
UniRef90_K9H3V3           L E I   A T R G   T G F V E I   T R Q V D G A L A E A G I G Q G L   V T L F I Q H
UniRef90_K9YG49           L T V   K T T G K C L H K I   T S K V A S I V A Q S G V E R G L   C T V F V R H
UniRef90_F3Z485         M E L Q I   R T H N R E E M L D I   T G Q L R N L I Q A N G W S D G M L   L L Y C P H
UniRef90_A3XMG5         E I R L   Q A K S R G   F H L I   T Q E I E Q N L E A T N I K V G Q L Q V F I K H
UniRef90_M1RKF3           I K V   K T A K H T S V V N I   T Q R I R E I V E A S F I D N G L   C I V Y V P H
UniRef90_K0J805           F H L   R T H A H S E M I E I   T D Q I Q Q W L N E E G V T D G I V I   V S S M H
UniRef90_D6Z3R1           L E I   H S P G R G   L Y D F   T G K V R A F A A E S G M R D G L   L T V F C R H
UniRef90_UPI0003B64AEE  Q L M I   A T R G Q G   L V E V   T R E V A A W L D Q Q G V A D G L   L T V F C R H
UniRef90_UPI0003689342  E I S L   K P R A R G   F H L I   T D E I E R A I A D L G I K I G L   L S V F I K H
UniRef90_Q3A6X7         I T L E V   N S R Q R E E F L D I   S A Q V R Q A I R N A G V N R G I   A C L H V P H
UniRef90_UPI0004794051     F T V   H T R G R G   F S E I   T D K V T E A V M A S G V H T G I   A H V F T T H
UniRef90_Q1J1R4                 P R G F H L I   T R E V L A A V P E A R V R V G L   L H V F I K H
UniRef90_E1QUU3         E I T I   Q S R R R R E V I N I   T S H I E D F I K S S G I R N G I   V L V F L P H
UniRef90_UPI00035E29D4  E F R L   K A R P R G   F H L V   T D E V L S A I P E R S I R C G L   L L N I L L K H
UniRef90_R7CVD4         V E F A L   R P R P R G   F H L V   T D E V L R Q L P E L P   R T G L   L H L F I K H
UniRef90_I0AKT3         E I T L   K S R S K G   I Y L I   T S E I I S E I P E K N I R V G I   A N I F L K H
UniRef90_C7LV71           I Q I   K T G S R E A M I D I   T A R L E E L L R N Q G T T T G L   M T I Y T P H
UniRef90_F0R645         V E F T V   R P K R T R G   F H L I   T Q E V M S H L P E L P   E T G L L H L F I K H
UniRef90_D3P9B0           L W F   N T N R V E I Q D I   T D E V Q K A V D E S G V K E G L   C L V N A M H
UniRef90_U6ED83         E F S T   S Q R V E I Q D I   T Q K V K T V L D N S G V K E G L   L N V Y S P H
UniRef90_R6QL15         F E H H L   N H T G R E D M I K I   T S F L K E D L R I S G I R D G I   A V I H S P H
UniRef90_K8NVP0           L T V   K T P R R G   F F D I   T A E A R D F L H E A Q A A G G A L   T L F V R H
UniRef90_I3RDZ9         M E L K I   T T N K R E L I D I   T S K V R E A V I E N G V A V V F C P H
UniRef90_UPI0004785DA2     R V   R T E H R L Q F V D I   T A Q I E T L V A Q S G L T E G T   L V L Y C P H
UniRef90_C5CDK3         E L W F   H T R K R R E F I N I   T P L V E E C V R E S G V K E G L   C L V N A M H
UniRef90_C1CZ39         E L T L   R P V R R G   F H L I   T D R E V V Q A I P E A Q V R A G L   L H V F M R H
UniRef90_L0GU18           F Q V   S T R G R G   Y D I   T R R I A E V V Q A S G I R T G T   C H V F I Q H
UniRef90_L8J3Q6         I Q L   K P R S R G   F H L I   T D E I E Q Q I P E Q Q Y Q V G L   C F I Q H
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                              50         60         70         80
UniRef90_F8I5G1          T T L G L T A N E N A D P A V V R D L L G H L R T L V P P D A P F Q H Q E R N S
UniRef90_Q8TL50          T T A G I I I N E N E S G   L K E D I L N L L E R L V P P G A G Y K H D R N N A
UniRef90_I0ID46          T T A G L C V N E N A D P D V V H D L L K E F D R L F P W Q P F H R H A E G N T
UniRef90_H3NCE8          T T A A V T I N E N A D P D V K R D L N K G L D D T F P N H D Y Y V H F E G N S
UniRef90_UPI0003710773   T T A G I T I Q E N A D P D V K L D V L M R L D E V Y P W E H P K Y R H E G N T
UniRef90_C6BW85          T T G A I T V N E G A D P D V V R D I T V N M R K L V P Y R G D Y Q H M E G N S
UniRef90_B8DYS6          T T C G I L I N E N Y D P S V I R D I L N A Y E R I V P Q N L P Y A H L E G N S
UniRef90_UPI0003B79086   T T A G I I I N E G A D P A V A E D I L S V F N H V I P W K F S Y K L E G N S
UniRef90_UPI00046E6991   T S A A L S L N E N A D P S V R D D F E S F M N K L V P E N D P V F T H V D D M
UniRef90_E8WQT7          T T A A V T V N E G A D P A V K R D I A N C L D R L V P D A H Y F T H A E G N S
UniRef90_W9ADF8          T T A G I T V N E N A D P D V K T D M L M R L D E I Y P W D H A K D R H E G N T
UniRef90_I7DNE0          T S C S L L I Q E N A D P E V Q G D L L A Y L S R L V P Y L R H T Y E G P D D M
UniRef90_B8FVB3          T T A G I T I N E N A D P D V C R D L L R R L D E L C P W M A Q D R H G E G N S
UniRef90_B6WUD2          T T C G L T I N E G A D P D V R R D M V R F F S A M V P Q D A G F D H A E G N S
UniRef90_UPI00047A9A7F   T T A G I T I N E N A D P D V M I R R F D E M F P W K V V K D H A E G N S
UniRef90_D8IBZ5          T T A G V G I N E N A D S N V L F D M K N A F N K V V A Q H D N Y R H A E G N S
UniRef90_UPI00047E8D79   T T A G I T I N E N A D P D V K Q D L I R R Y D E L Y P W T N S A D L H E E N T
UniRef90_H8MP95          T S A S L I I G E N A D P V V Q R D L E A F F S R L V P L F Q H D A E G P D D M
UniRef90_I0QNG4          T S A G L T I N E N A D P T V R Q D F E G F N R A V P W Y Q H D Y E G S D D M
UniRef90_UPI0003B5C965   T T G A V T V N E N A D P D V V R D M L V N M R R L V P H R G D Y R H A E G N S
UniRef90_W4C7J4          T T A G I A I N E N A D P D V K H D I L L R L D E V Y P W E H P E Y R H E G N T
UniRef90_I3CE65          T S A S L L I Q E N A D P D V C Q D L N N W L N R L I P E G D A L Y T H T D D M
UniRef90_F2NDR9          T T A G I T I N E N A D P S V K A D I L M V L N K I I R A D E P Y R H A E G N S
UniRef90_Q07H82          T S A S L T I Q E N A D P T V L A D L G S V L Q K L A P E S A P W R H G P D D M
UniRef90_I0JLF9          T T A G L T V N E N A D P D V K T D M L R R F R E V Y P W M A E D R H A E G N T
UniRef90_A0A011Q8I1      T T G A V T I N E N A D P D V Q T D L K K A L N D T F P H H D Y F V H A E G N S
UniRef90_V7I8T5          T T G A I T V N D G S D G D V A R D L L L G L S K A F P E D K S F M H M E G N S
UniRef90_W4QMZ2          T T A G I T I N E N A D P D V K T D F L R R L D E L Y P W E H Q K D H A E G N S
UniRef90_L1QPR3          T T A G I T I N E N A D P D V V R D L I Y G F E K V Y P T N D K N Y K H F E N S
UniRef90_V5SFJ0          T S A S L V I Q E N A D P D V Q R D L L A F F R R L V P E C D P L F V H P D D M
UniRef90_X1KTL7          T T A A I T I N E N A D P S V T H D I L L T L S E L I P H H R P G Y R H S E N S
UniRef90_UPI0003B61F2F   T T A G I I I N E G A D P A V K I M A F E R I A P E T L P Y K H L E G N S
UniRef90_E3HDG9          T T G G I T I N E S Y D P D V Q H D L I R A L D K M V P D L N F R H M E G N S
UniRef90_G7WGF7          T T A G I T I N E N A D P D V Q K D F L Q R L D E I Y P W N A S D R H F E G N S
UniRef90_A6Q123          T T T G V L L F E N V D P N L Q R D Y L A H M S R L V P K S D R Y A H G T N A
UniRef90_C0BWU1          T T A G F T I N E N A D P D V V H D M L C G M E R A V P A D A D Y Y R H V E N S
UniRef90_UPI000379C662   T S A S L T I Q E N A D P D V R T D L L A A F D R L A P E N A P Y V H T M D D M
UniRef90_G7LX02          T S A A L T I N E N A D P T V R Q D F E R F F N R L V P E D E P Y Y Q H V D D M
UniRef90_D0LRN5          T S A S L I V C E N A D P T V R S D L E R F M A R L V P D G D P L F E H P D D M
UniRef90_A8FGT3          T T A G I T I N E N A D P D V K R D M L R R L D E V F P W E H P K D R H M E N T
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UniRef90_Q1K195          T T A A L T I N E N A D P D V V T D L L V T L D K K I P W S D N Y H H A E G N S
UniRef90_J9DT86          T S A S L T I Q E N A D P D V R T D L V T A L D R L A P A D A G W V H G P D D M
UniRef90_UPI00035FC5DA   T S A S L T I Q E N A S P E V L D D L A D A L D R L A P R D A G W R H G P D D M
UniRef90_M5DQH9          T S A S L T I N E N A D P T V R G D F E R V F N R L V P E N Q P Y Y Q H N D E G
UniRef90_UPI000405F697   T T A G I T V N E N A D P D V K S D M L M R L D E I Y P W N H V Q D K H V E N T
UniRef90_B1QTN1          T T A G I T I N E N A D P D V V D D L I Y G Y E K A Y P S I D S N Y K H F E N S
UniRef90_UPI0003B4F2A3   T T A G I T V N E N A D P N V Q H D M L M R L D E V Y P W D H D K Y R H E G N S
UniRef90_UPI000370877E   T S A S L L L C E N A D P S V R R D L E S F L G R L V P D G D P R F E H P D D M
UniRef90_S7V632          T T A A I T V N E G A D P V V Q R D L T T L R R L V P L E G D Y R H S E G N S
UniRef90_H3ZQ74          T T T A L F I N E N E S G   L L E D V R E F L Q S L V P K G K G Y R H D R S N A
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UniRef90_G1US24          T T C G L T V N E G A D P D V R R D M L A F F S R L A P E Q G D Y R H A E G N S
UniRef90_Q30WH7          T T G A I T V N E G A D P D V A R D I T A N M N K L V P R H G D Y R H A E G N S
UniRef90_E6W5G1          T T A A L T I N E N A D P D V A V D L Q H F L K S R I P A D P S F R H M E G N S
UniRef90_E3DQ01          T T A A V T I N E N A D P D V K E D I K K E I N K L I P F Q D D Y A Q H L E G N S
UniRef90_UPI000373ED99   T S A S L T I Q E N A D P D V R S D L M T A L D G L A P R L P H A A E G P D D M
UniRef90_UPI000306D19C   T S A S L V I Q E N A D P D V L R D L S H F F A K L V P E D G K S Y I H P D D M
UniRef90_Q1AWP6          T T A A V T V N E D Y D P D V A R D L T A A S E A L I N A L D V S F E H E G N S
UniRef90_R5V4W6          T T A G I T I N E N A D P D V Q R D L L L A Y A E A F P D R K A F R H A E G N S
UniRef90_E4TXB0          T T G S I F L F E N A D Q N L R R D L S A L S K V I P S D A Q Y A H V G S N A
UniRef90_F6D6N3          S T S G I V I N E N E S G L V   E D F K N A L E L V P T S K S Y K H N D N N A
UniRef90_T2JCD7          T S A S L L I Q E N A D P D V L V D L A N F F S K L V P E D S K L Y I H D D D M
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UniRef90_F3Z485          T T G A V T V N E G A D P D V V R D I I V N L R K I V P P Q G D Y R H S E G N S
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UniRef90_M1RKF3          T T A A V F I N E N A D P D V K D I L N T L D R L I P W T N D Y S H M E G N A
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UniRef90_I7DNE0         P A H I K A A L L P V S L S I P V S G G R P A L G T W Q G I Y L F E H D A P H S
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UniRef90_V5SFJ0         P A H V K S A L T Q T S I T I P I S N G R L L L G T W Q G L Y L F E H R A P H A
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UniRef90_A8FGT3           R H F Y I Q V
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UniRef90_J9DT86           R E I L L Q F
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UniRef90_UPI000405F697    R R L H A K V I
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UniRef90_UPI0003B4F2A3    R T F Y I K
UniRef90_UPI000370877E    R R V L L T L M
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UniRef90_E8T286           K R V I I K I I
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UniRef90_G1US24           R S L W L Q W L
UniRef90_Q30WH7           R T V W V Q F M
UniRef90_E6W5G1           R Q V Y L Q F
UniRef90_E3DQ01           R L V N L K I I
UniRef90_UPI000373ED99    R D I V L H V
UniRef90_UPI000306D19C    R Q V V I H V
UniRef90_Q1AWP6           R T V R V A V L
UniRef90_R5V4W6           R T F Y V K I L
UniRef90_E4TXB0           R E V I I K V I
UniRef90_F6D6N3           R K V T L T F I
UniRef90_T2JCD7           R E I V I H I
UniRef90_K9H3V3           R R V V V H V L
UniRef90_K9YG49           R E L V V H I
UniRef90_F3Z485           R T L W V K F M
UniRef90_A3XMG5           R K V V L T L
UniRef90_M1RKF3           R E V V V S I V
UniRef90_K0J805           R K Y V V K V I
UniRef90_D6Z3R1           R K V Q L H L L
UniRef90_UPI0003B64AEE    R T L A L H V I
UniRef90_UPI0003689342    R H I V I T V
UniRef90_Q3A6X7
UniRef90_UPI0004794051    R K V T V T V L
UniRef90_Q1J1R4           R Q L V L T L
UniRef90_E1QUU3           R R V V L
UniRef90_UPI00035E29D4    R S L V V T V
UniRef90_R7CVD4           R R V V A T I L
UniRef90_I0AKT3           R K L V I T L I
UniRef90_C7LV71           R T V W V K I L
UniRef90_F0R645           R R I V A S I L
UniRef90_D3P9B0           K R V L I K I I
UniRef90_U6ED83           R R L I I T I M
UniRef90_R6QL15           R R F Y V K I V
UniRef90_K8NVP0           R D V V L Q F V
UniRef90_I3RDZ9           R E V Y V K V
UniRef90_UPI0004785DA2    R Q V L V R L
UniRef90_C5CDK3           K R V L V K I I
UniRef90_C1CZ39           R R L L L T L
UniRef90_L0GU18           R R V L T V V
UniRef90_L8J3Q6           R R V V L T I
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UniRef90_UPI00046694CD                 G F I D I T G E V A R L L R E V R A G E G V V T L F I R H
UniRef90_A5D4S3             L W F N T K K R R E Y I N I T G E V E E A V R E S G I R E G M V L V S A M H
UniRef90_I0KBR1               P R G F H L I T A P V E R A L P L R S V R A G L L H F I Q H
UniRef90_I3BQ31          E L R L K A K P R G F H L I S D E I L H Q L P E L G I N I G L M N I F I Q H
UniRef90_E0RPM2          E L W F N T P S R V A F I N I T P Q I E E A V R E S G V K E G L C L V N A M H H
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UniRef90_UPI000344D8F2   F Q H T L T P P K R R G F H L V T R E I V D A V P E A Q V R V G L L H V W I Q H
UniRef90_UPI00034A3123     L N I R T S G K S F S P V T S E V A E L V E A S G I E S G I C T L F L R H
UniRef90_L8M9V9           L R V Q T T G K S L H K I T N K I E R I V A E S S I E T G L C T I F V R H
UniRef90_Q20WZ4                  G F V D V T S E V A K F V A E A E A R E G V V G L F I R H
UniRef90_D2R1Q0          Q I T L   T P R R R G F H L V T S E I E A A I P E A D F S V G L A N L F L L H
UniRef90_UPI00040E2237   Q L E V Q T A G V G F F D I T S E V A A F L R E A H A R E G A V T A F I R H
UniRef90_I0JWF3          E L E I R S A K H S Q F L S L T D K I E E E I Q H R G W Y D G L L H I F I P H
UniRef90_U5AAJ3          Q I Q L R P R P R G F H L I T D E I E Q H L P Q K A L N V G L L H L F I Q H
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UniRef90_A0A017SZ34        L E V R T S G Q G F V D I T A E V A I V A E A G K K T G L C T V F L Q H
UniRef90_K6SVV8          F K H S I S I N P R Q A M M K I T S Y V K E D I K V S G I K N G I V V V Y C P H
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UniRef90_UPI0003B3C6EE     L T L H T P G P G L H D F T R E T A Q W A A A Q G M D S G L L T L F C R H
UniRef90_A1RXS8          E I S L S T R R K L E L I D I T A Q V E V A L E A S G I R N G V C L V F A P H
UniRef90_D8DUI6          I Q L F L K P C R G F H L V T S E I L S Q L P T L P K V G L L H L F I Q H
UniRef90_A6EDC3            L S L R E R K R G F H L I T D E V E R A M P E R E F Q T G M C H V F I Q H
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UniRef90_A1HTD4          E F E I N T P A E G F I D I T D L V A A A V E A A A V Q Q G L C Q I F V P H
UniRef90_A0A059EBG5      Q L T I Q S R G S G L Y E F T R D A A E F V A G A G   D G L L T L F C Q H
UniRef90_D8JZG0            L W F E T R H R R E Y I N I T D Q V E Q L V V K S D I R E G F V L V S A M H
UniRef90_H5YCX5            L T V Q T P G R G F S D L T A E A A R F I A D V H A R D G V L T L F I R H
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UniRef90_K9SC86            L R L S T S G Q S L V K I T S K I E A V V A E S G I Q Q G L C T L F L R H
UniRef90_E6WY82          K I T L E T S Y K T E M I D I T E A V A H E V M R L G I R D G L C T V F T P H
UniRef90_K0VWY3            L T L S T R G Q G L Y E F T D E A D A F V S A S G R D E G L L T V F V R H
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UniRef90_C5CMV9             R G L L E I T E A V A Q W V A S T G F Q T G L L T L F I R H
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UniRef90_K9SKH3          I R L G T S G K T L Q N I T S A V Q N A V Q K S G I Q T G M C T L F L R H
UniRef90_H0E601            L D L R P P R P R G F H L V T D E V L A A L P E L P V Q V G L L H V F C T H
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UniRef90_R6CJV2          V E F S L R P L P R G F H L V T N E V M R N L P A L P K T G I L N L F V R H
UniRef90_A0A059IQE2        F T L T T Q G A G L Y E I T A Q V A R W L A G T T V Q E G V L L L F V R H
UniRef90_R7GV14          Y Q I R T P E E N W I P I T A Q V N G A I A E S G I Q S G I C V V Y C P H
UniRef90_UPI0002E6410E   K I A L S A K S R G F H L V T S E V E A K L A E S Q V N I G I C H L M L Q H
UniRef90_UPI0004678623    I R F K T E H K S Q I I D I T D D I K E I I I K S G V K N G V V S V F C P H
UniRef90_B2A200          M E I T V T T S K K I E F I N I T E E V K K A L S Q M E L P Q G N V H L F I P H
UniRef90_B1XKJ9           L Q I Q T Q G K S L H K I T A K I E S Y V A E S G I K M G L C V V F V R H
UniRef90_X0UV26           I A I Q S K G N C D I I D I T P Q V A K D V E S G I N S G I A T L F I V G
UniRef90_L0FX12          K L S L R P Y S R G F H L I T G E V E A G I P E K D I Q A G Q L Q V F I Q H
UniRef90_R6VS66          V E F A L A A K H R G C H L V T R E I I D R L P K P L P K A G L L N L F V K H
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UniRef90_R7ECU9          E F T L   T P R R R G F H L I T E E I I R N L P P L P S A G I L H I F I K H
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UniRef90_L0DZK1               S S G Q G L Y E C T D E V R R W V R A T G I R E G L L T L F V Q H
UniRef90_M0S3P9             P P Q R R G C H L I T S K I L K E I E Q S G Y K C G L A H L F L Q H
UniRef90_UPI00037823B9   E I A I R V Q G A G L Y E F T D Q V T D W V S C Q G A R E G L C T L F V R H
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UniRef90_K2JGS5            L T L A P R P R G F H L I T D E V L A A L P A L G V N T G L L H V F V R H
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UniRef90_UPI000348F3F8     L R V Q T P G K S L S N I T A Q V D T L V R E S Q V T T G L C T V F V R H
UniRef90_K2GPS9          F Q N Q I K I S K R R G S H L I T N E V I R C S Q Q T I K V G M C N V F L M H
UniRef90_R5MRN8          E F T L R P R A R G F H L I T D E I I R N L P R L P Q A G L L H L F I K H
UniRef90_M5E5Y5            F T L A S R S K G C H L V Q D E V E R E V R D R G V V Q V G L L T L F I R H
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UniRef90_UPI00046694CD    P A H I K T M L T A T S L Q V P V L D G A M A L G T W Q D I L I E H R R P H R
UniRef90_A5D4S3           D A H L K S I L V H H Q V I V P V T N G K L D L G P W Q Q V Y Y A E F D G Q R R
UniRef90_I0KBR1           P A H I K A S L L G S S V S V P V T D G Q L N L G T W Q G I Y L C E H R N G G A
UniRef90_I3BQ31           P A H L K G S I L G F S L N I P I S N G R L N M G T W Q G I Y L C E H R N G G A
UniRef90_E0RPM2           D A H L K R Q I M G R E V V V A I T D G R L D F G P W E Q I F Y G E F D G R R P
UniRef90_B7K7I1           P A H I R S V L T Q T A Q Q I P I A Q N R L M L G T W Q G I Y L W E H D R S H H
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UniRef90_UPI00034A3123    P A H I R T A L T S T S E H I P I A N G R L A L G T W Q G I Y V W E H D R P Y T
UniRef90_L8M9V9           P A H I R S A L T H T S E Q I P I A D S R L V L G I W Q G I Y L W E H R R S H Q
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UniRef90_D2R1Q0           P A H V K A S L L G C S L T I P I A R G E L V L G T W Q G I Y L C E H R N G G A
UniRef90_UPI00040E2237    P A H I R T M L T S V S L T I P I A G K L A L G T W Q A I Y L V E H R A P H R
UniRef90_I0JWF3           A A H I K T A L L G N S V H C N V K E G R L R L G R W Q G I F L C E F D G P R T
UniRef90_U5AAJ3           P A H I K S S L L G C S V S I P I C N G R L A L G T W Q G I Y L G E H D H G G A
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UniRef90_A0A017SZ34       P G H L R S A I T R S S E V I P I V G G R L G L G R W Q A L Y L W E H R R A H V
UniRef90_K6SVV8           H A H L K S S T V G A S Q T F I L N N G N L L L G R W Q D I Y F C E F D G P R D
UniRef90_L0A4M6           P A H L K A A L L G S S L T V P V S R G R L A L G T W Q G L Y L C E H R N A G A
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UniRef90_F0L8D0           P A H I K S A L T A V S I G V P I S D G R L T L G T W Q G L Y L F E H D R P H R
UniRef90_W6KCZ5           P A H I K C A L T D T S L A V P V A E G Q A L F G T W Q G I Y L F E H R R P H S
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UniRef90_A6EDC3           P A H L K A A L L G N S V M I P I R N G H L A F G T W Q G I Y L C E H R N G G S
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UniRef90_A1HTD4           L A H V K S S L L G C S V T V P I V A G R L W L G R W Q G I Y F C E F D G P R R
UniRef90_A0A059EBG5       P A H I K A A L T Q T S L S I P V T G G R M A L G T W Q G I Y L F E H D A P H K
UniRef90_D8JZG0           D A H L K S L L V H H Q V T I P V T D G R L D L G P W Q Q V Y Y A E F D G C R R
UniRef90_H5YCX5           P A H I K T M L T G T S L Q V P V L N G R L A L G T W Q A I L I E H R R P H R
UniRef90_T0MJG4           D A H L K N L M H H Q V I V P I T S G K L D L G P W Q Q I Y Y A E F D G Q R K
UniRef90_K9SC86           P A H I R T A L T H T S E Q I P V A Q G R L V L G T W Q G V Y L W E H R R H R S
UniRef90_E6WY82           P A H I K A T L C G P R I V V P V K D A Q L Y L G P W Q A I F F C E F D G P R E
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UniRef90_UPI0004639B2A    P A H I K A A L N A V S L S V P V M G G R L A L G T W Q G I Y L F E H D R P H R
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UniRef90_K9SKH3           P A H I R T V L T S T S E N I P I A Q G R L V L G T W Q G I Y V W E H D R G R T
UniRef90_H0E601           P A H V K A S L L G P D L T I P V S G G R L A L G T W Q G I T L C E H D S G G P
UniRef90_V9F2M9           P G H I K S T L I G A S V N I P I T N G K F N L G T W Q G I Y L C E H R N G H Q
UniRef90_O26865           D S H L R A V L L G G S Q T V P V I N G S M D L G T W Q S I F F A E L D G P R N
UniRef90_UPI00037685C3    P A H I K S S M L G S S V S I P I T N G R F N L G T W Q G I Y L C E H D Y A S G
UniRef90_F0RJ11           P A H L K A A L L G P S L T L P V R A G R L H L G T W Q G V Y L C E H D R G G A
UniRef90_A3YBX8           P A H I K A S L L G A S Q S L P I S N G K L N I G I W Q G V Y L C E H D H G G P
UniRef90_R6CJV2           P A H A K S S M V G V S L T I P I T N G R L N L G T W Q G I Y L C E F R G G G S
UniRef90_A0A059IQE2       P A H I K A A L L P V S L Q I P V T D G R L A L G T W Q G L Y L F E H D A P H R
UniRef90_R7GV14           A A H A K A S A V G N S V T L C V E Q G R A L L G P W Q G I Y L C E W N G P R I
UniRef90_UPI0002E6410E    P A H I K S S L F G V S L T I P I S Q G R L A L G T W Q G I Y L G E H D F A G S
UniRef90_UPI0004678623    R A H L K A S L L T S N L T L I V E N A K I M L G K W Q S V F L V E F D G P R E
UniRef90_B2A200           P A H F L S S L V G P D I M V P I R K N T L D L G R W Q G I I F C E F D G P R R
UniRef90_B1XKJ9           P A H I R S V L T K T A E Q I P I A N G R L V L G T W Q G I Y L W E H D S R H T
UniRef90_X0UV26           H S H V R A S T L G A S L I I P F V N K R L T L G T W Q G I V F V D F D N P R S
UniRef90_L0FX12           P A H I K S S L F G S S V T I P I S K G K L A L G T W Q G I Y L G E F D H G G S
UniRef90_R6VS66           P A H A K S S L F G V S L S I P I T D G R L N L G T W Q G I Y L C E F D Y G G P
UniRef90_C7PV48           P A H L K A A M L G S S V M I P V R N G N F A F G T W Q G I Y L C E H R N G G N
UniRef90_V2Q2F3           D A H L K R Q V M G R E V V V A V T N S K L D F G T W E Q I F Y G E Y D G M R D
UniRef90_UPI00036045B5    P A H A K S I I T G A S I N I P I T N G K L N L G T W Q G I Y L C E F R N G G S
UniRef90_B3PEW1           P A H L K A S L L G A S V N L P V T N G Q L N L G T W Q G I Y L C E H R N G G S
UniRef90_A0A011NXL8       A A H G R N I L A G C S V S V P V A G G A M L G T W Q G I Y L W E H R T S H R
UniRef90_F2NN13           D A H L K T L F T G N A Q L L P V G G R L A L G R W Q Q V F L A E F D G P R T
UniRef90_UPI000349E18D    P A H I R A A L T K T S E N I P I A R G R L V L G I W Q G I Y V W E H D R G R T
UniRef90_F8J7I1           P A H I K S A L T Q T T L T I P I A N G R L M L G T W Q G I Y L F E H R H P H D
UniRef90_G4MUS6           P A H I K S A L T Q T S L T I P I S N G K L A T G T W Q G I W Y L E F R A K H Q
UniRef90_A9FR25           D A H L K S I L V H H Q V I V P I T A G K L D L G P W Q Q I F Y A E F D G G R R
UniRef90_UPI000478EE76    D A H I Q A T L T G S S V M I P I E S G R L L L G R W Q G V F F M E F D G P R N
UniRef90_UPI000265936F    P A H I K S L L F G S S L S I P I T D G R L N L G Q W Q G V W L C E H R N A G S
UniRef90_B3U4V3           D A H L K R Q L M G R E V V V A V T D G K L D F G P W E Q I F Y G E F D G R R R
UniRef90_R7ECU9           P A H A K A T L S G T S L T I P I T N G R L N L G T W Q G I Y L C E F R N G G G
UniRef90_F3KDD0           P A H I K S S L L G C S V T L P I T Q G R F N L G T W Q G I Y L G E H D Y G G A
UniRef90_L0DZK1           P A H I R G A L T Q T Q L S L P V T S G A P A L L G T W Q G I F L F E H R R P N E
UniRef90_M0S3P9           P A H I K S S M F G C S L T I P V D G R L N M G T W Q G I W L C E H D H A T A
UniRef90_UPI00037823B9    P A H I K C A L T A T S L S I P V Q G D R L M L G T W Q G I Y L W E H R R H H D
UniRef90_K2LB44           P A H I K S A L T D V S L T I P V S N G R A V L G T W Q G I Y L F E H R R P H H
UniRef90_K2JGS5           P A H I K A S L L G A S L S I P V G N G R L L L G T W Q G I W L G E H D Q G G S
UniRef90_W9DU56           D A H L K A V L L G S S E T L P I I D G N L H L G T W Q G I F F A E M D G P R T
UniRef90_UPI000348F3F8    P A H I R T A L T H T S E T I P I A N G R L L L G T W Q G I Y L W E H R H Q H S
UniRef90_K2GPS9           P A H A K C S M F G C S L N I P I R E G D L C L G T W Q G I Y L N E H D N G G S
UniRef90_R5MRN8           P A H A K S T L T G N S L S I P I T D G R L N M G I W Q G I Y L C E F R N G G G
UniRef90_M5E5Y5           D S H S K S S L L G P S V T I P I T N G R M N L G T W Q G I Y L C E F R R K H A
UniRef90_UPI000381D5C9    P A H I K A S T L G S S I S I P I C A G R L A L G T W Q G I Y L G E H D H G G S
UniRef90_UPI000289E9F0    P S H I R S A L T K T S E Q I P L A G A K M L L G T W Q G I F L W E H R R G H S
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UniRef90_A6DD19          R N V L L K V I
UniRef90_UPI00041A4A89   R E V V M Q F M
UniRef90_M1PQ69          R R V I C T I I
UniRef90_UPI00046694CD   R E I V L Q F I
UniRef90_A5D4S3          K R V I I K V M
UniRef90_I0KBR1          R T L V L T L I
UniRef90_I3BQ31          R S I V V T V
UniRef90_E0RPM2          K R V L V K I I
UniRef90_B7K7I1          R E V I I H I
UniRef90_UPI000344D8F2   R R L V L T L
UniRef90_UPI00034A3123   R E L L V H A I
UniRef90_L8M9V9          R E I V V H I
UniRef90_Q20WZ4          R E V V L Q F V
UniRef90_D2R1Q0          R R L V V T L
UniRef90_UPI00040E2237   R Q I V L Q F
UniRef90_I0JWF3          R K V Q L T F L
UniRef90_U5AAJ3          R R I I A T I
UniRef90_UPI00036C9D6F   R R I V V T V M
UniRef90_A0A017SZ34      R R L V V T V L
UniRef90_K6SVV8          R M F Y V K I L
UniRef90_L0A4M6          R S L V L S L
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UniRef90_UPI00039A72E7   R T V V V T V L
UniRef90_F0L8D0          R E I V L H I
UniRef90_W6KCZ5          R R V V L H L I
UniRef90_B1KEC1          R H L I A T I
UniRef90_UPI0003B3C6EE   R Q I V L H L V
UniRef90_A1RXS8          R K V V V E V M
UniRef90_D8DUI6          R K I I A T I M
UniRef90_A6EDC3          R Q L L I T
UniRef90_L8N409          R E V L V H I
UniRef90_A1HTD4          R K F V V N I V
UniRef90_A0A059EBG5      R R V V A H F L
UniRef90_D8JZG0          K R V V L K V M
UniRef90_H5YCX5          R E V V L Q F I
UniRef90_T0MJG4          K R M I I K I M
UniRef90_K9SC86          R E L V V H I
UniRef90_E6WY82          R E Y V V Q V I
UniRef90_K0VWY3          R E I V L H L
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UniRef90_A0A024GMR8      R K I V V T I
UniRef90_UPI00036CB33B   R T F W I K L I
UniRef90_U5QL25          R E V V V H V
UniRef90_UPI000462FC1D   R T L W L A F
UniRef90_K1Y150          K R L L I K V M
UniRef90_UPI0004681E29   R K L S I T I L
UniRef90_C5CMV9          R Q V A L H L I
UniRef90_UPI0002897135   R R I V A T V I
UniRef90_K9SKH3          R E V V V H I
UniRef90_H0E601          R R L V L T L
UniRef90_V9F2M9          R K V V V T I
UniRef90_O26865          R R I R V S V
UniRef90_UPI00037685C3   R R I V V T I
UniRef90_F0RJ11          R T L T L T L
UniRef90_A3YBX8          R K I V V T L
UniRef90_R6CJV2          R H L I A T I I
UniRef90_A0A059IQE2      R E V V A H L
UniRef90_R7GV14          R T V Y V K V I
UniRef90_UPI0002E6410E   R K I I A T I
UniRef90_UPI0004678623   R S V Y A K V I
UniRef90_B2A200          R K V K I
UniRef90_B1XKJ9          R E V V V H I
UniRef90_X0UV26          R K I V I Q V L
UniRef90_L0FX12          R R L V M T A M
UniRef90_R6VS66          R R I V A T I
UniRef90_C7PV48          R R L V I T V
UniRef90_V2Q2F3          K R L L I K I I
UniRef90_UPI00036045B5   R H I V A T I I
UniRef90_B3PEW1          R S L V L T L
UniRef90_A0A011NXL8      R R V V V T I V
UniRef90_F2NN13          R E L W L
UniRef90_UPI000349E18D   R E I M V H I
UniRef90_F8J7I1          R Q V I V H V I
UniRef90_G4MUS6          R K I V A T I
UniRef90_A9FR25          K R V V V K A I
UniRef90_UPI000478EE76   R E F Y I K V I
UniRef90_UPI000265936F   R K L V I T I
UniRef90_B3U4V3          K R V L V K V I
UniRef90_R7ECU9          R R I V A T V I
UniRef90_F3KDD0          R R I V V T L
UniRef90_L0DZK1          R R I V L H L I
UniRef90_M0S3P9          R K V V I T L
UniRef90_UPI00037823B9   R R V I L H I
UniRef90_K2LB44          R K V T L H L I
UniRef90_K2JGS5          R H L I L T L
UniRef90_W9DU56          R E V T V T V L
UniRef90_UPI000348F3F8   R E V V I H V L
UniRef90_K2GPS9          R T I V V T L
UniRef90_R5MRN8          R K I V A T V I
UniRef90_M5E5Y5          R R I V A T V L
UniRef90_UPI000381D5C9   R Q I I I T L
UniRef90_UPI000289E9F0   R N V V V H I
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Multiple sequence alignment

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UniRef90_A0A031LK27      E F S I K T N S R F E S I D I  T D T V E K A I I E M G T T D G I V V V G V K H
UniRef90_UPI00036B423E   E I T L H S R K R G   F H L I  T D E I L S Q L P E N N I S C G I L H F L F Q H
UniRef90_B7K5E4          L V L K T R G K   D F H R I  T R E I E E I V S E S G V K M G L C T L F V R H
UniRef90_B9XRB8          E F S V A T R G R G   F Y E I  T R Q V S A W I G D C A V Q Q G L I T L H L R H
UniRef90_G6ECM5          L S I D T P G R G   L T E I  T R A V A E W L A A Q G V D E G L L T L L C R H
UniRef90_M4Z110          L T V Q T A G R G   F T D I  T R E V D A F L R G V S A R E G A V T V F I R H
UniRef90_U4KA06                 T A K R R G F H L V T  D E I E Q H L P Q R Q Y S I G L L H L F I Q H
UniRef90_UPI00042065E4   E I R L P A V K R G   F H L I  T D L L V A Q L P E E G I S V G L A H V F I K H
UniRef90_D8FUU8          I R I Q T A G K   S L C N I  T S K V E D A V K S G V K I G L C T L F L R H
UniRef90_A0A022R8M5  M T V T L P A Q R R G C H L I  T S K I L R D I G Q S G F K C G L A H F F L Q H
UniRef90_D1JBZ9          E L H F D T Q G E V E I I D I  T E K V N G K L R E S E I E D G I V T V F V P G
UniRef90_W6M7R8          I L L K T Q Q S Q T L I I D I  T E R V R T I V K E S G I Q N G L L N V Y A Q G
UniRef90_W6ZKQ7          E V K I S P K K R G   F H L I  T D E I V R Q V S E S Q V S V G L A H I F I K H
UniRef90_A4BU49             E F A T P G R C I Q E I  T A D V A S V V R E S G I R S G L C Q L F I I H
UniRef90_D7CY98             A P K P R G V H L I  T D E V L A Q L P E R A L R V G L L H L F I Q H
UniRef90_M5TWK8          E L R L P A K S R G   F H L I  T S A I E E L V D L S R V R V G L L H C F I L H
UniRef90_F8EWU0          E L W F E T R K K R E F I N I  T P Q V A D L V R E S G V Q E G L C L V N A M H
UniRef90_D1YWI2          F S F Q S K G R D D M I D I  T S N V Q D S L T A S G L T S G I V I V F V P G
UniRef90_M2YXD4          F T L P P H S R G S   Y L I  T D T I L S S L P E K S Y K I G L L H L F Q H
UniRef90_A7HJ07          L W F N T Q K K K E L V H I  T P K I E G I V E K S G I K E G F C L V S A M H
UniRef90_B3Y5R3               K R G C H V I  T R Q I V Q Q I P E S G F E V G M A N F F I Q H
UniRef90_R5W7G7          F T L R A R A R G   F H L V  T D E V L S H L P A L P   K T G L L N L F I Q H
UniRef90_UPI000472F7E7   L T L R A R S R G   F H S I  T D D I R R L L G N L P I E V G I C Q I F I Q H
UniRef90_J9GSH3        Q I T F R P R K R R G C H L I  T Q E V L Q H L P Q P L P Q A G L L N L F V Q H
UniRef90_S6A5K3          E I Y L S T K E R I E L V D I  T N K V E E A V Q E S K I R N G I C L V Y A P H
UniRef90_B0VI89          E L H F R T D K R R D F I N I  T P L V R N V L H E S G I K D G L C L V N S M H
UniRef90_UPI00037367C4   E I R L K P K T R G   F H L V  T R E V C Q N L P E E S I K V G V M H L F I H
UniRef90_E1ZL41          E L T L P A F K R G C H L V  T S H I V R E V S G S G V K V G L A H I F I Q H
UniRef90_Q0W1C9          L S L E S K G Y S N M I N I  T D Q V E Q V L A S G G I N E G I A T I F V P G
UniRef90_A6W1R2        I E F Q L P A M R R G   F H L I  T D Q V E A A L S K T P V S I G L L H V Q L L H
UniRef90_UPI00047E94EE   F E V A T S G R G T   R N I  T E T V A R A V A Q S G L Q A G T A H V F V Q H
UniRef90_T1JPK3            H R G C H L V  T D E I L K A I P E Q Q F S L G L C H V Q I L H
UniRef90_V3TKG7          E I R L T L K A R G   F H L I  T D E V L A Q V G E R Q I N I G L M H V F I K H
UniRef90_A3SMU7          F T I T T R G P G   L Y E I  T R E L S A W V R G Q G I E T G L L T L F I R H
UniRef90_Q01Q59          L Q I P T R G K G   L Y E L  T P I A G W L A G V K V R S G L L T V F V Q H
UniRef90_F7ZH35        Q F E F Q T D G P G   L Y E F  T D Q V A A W L R P R G   D G L L T L L V Q H
UniRef90_UPI00040DB273        K R R G F H L I  T G D I L N A M P Q S L L A T G M C Q V F I Q H
UniRef90_N9VQE2          I T L K P C S R G   F H L V  T D E L L A Q L P E A G Y R V G L V H L L L Q H
UniRef90_A0A031I7C5      L R I D T R R R G   L L D V  T P D V L R W V A A Q G M T T G L L T V F C R H
UniRef90_G4SZ59        Q I K I S S K K R G   F H L I  T P E I R Q G L P E I G I K C G L L H F F I Q H
UniRef90_UPI000363AAC9   E F A L D T G G R G T   V E I  T R R V A D V V S E A G A G D G L C H V F V R H
UniRef90_A5UV84          E L W F N T P T R V A F V R I  T D Q V A A A V R K S G V R E G L C L V N A M H
UniRef90_R5QLA0          F A V Q T E G   G H F T N I  T N A V Q N A V R Q S G I T T G L M T L F I K H
UniRef90_UPI0004717690   L S I R T R G K G   M T M I  T A P V L D W V A S T G I E D G L L T L W C R H
UniRef90_F2LXJ1        Q I K T Y T R K E A I E I  T S I V Q K Q V E K   I K S G V A V I Y V P H
UniRef90_E7QSP2     M E F E V T T S K R V D I V D I  T D R V A E H V P E A A   D T C T V F V P H
UniRef90_UPI00037BB1AA  I E F S L P A Y S R G   Y H L I  T P K V L A Q L P D L P   K T G L L S I F I K H
UniRef90_M2LIW5          I T L P S H S R G T   H L I  T D T V T S S L P E A S Y R V G L L H L F I H H
UniRef90_C6T275          I T L P P L K R G C H L I  T S K I V K E V R Q S E Y Q C G L A H L F L H H
UniRef90_V4RMC8          L T R R T P G P G   F H D L  S S E V D A W L S G E G A L S G L L T V F I R H
UniRef90_UPI000287ED0A   E L T F D T P G Q G   L H D C  T R A V N R W V E A T G I Q T G L L T V F V R H
UniRef90_I3YG54          F S I R T E G R G T   Y D I  T R E V Q R Q A R A S G L Q F G L C H L F V H H
UniRef90_H6L6G7          I A L R A K S R G   F H L I  T A E V L Q Q L P A L P   Q N G L L Q L F I Q H
UniRef90_F2KNN7          I E I R T G K R T E I I D I  T A D V R K V V E E S G G G   G I A V V Y T L H
UniRef90_W2UP30          E I K I E S Y P R G   F H L I  T N K I L D A I P E T T L T V G Q L Q V F I K H
UniRef90_K2BP95          L E L T T T G R   E L I N I  T G Q V S K I V S L S L I S S G L C N V F L L H H
UniRef90_Q1PV39          L T F N T K K H R E L I N I  T K E V E R I L L G S G M A L V S A M H
UniRef90_I4C6D6          E L W F N I P K R R G F I N I  T P Q V E G A L H D S G V R E G L V L V N A M H
UniRef90_H4F5L1          I E L S T H G Q G   L Y E F  T E K A A R F V S E E G S D D G L L T V F V R H
UniRef90_UPI000255876C   E I K L K A R K R G   Y H L I  T E E V I S A M P E S T I I K G Q L Q V F I K H
UniRef90_UPI0003653792   L E V E T D G R G   L V E I  T E Q V R E F V D R Q S G V I D G V L T L F C R H
UniRef90_I7ZGJ4        I E I R L K P R P R G   F H L V  T D E I Q A Q L P E R A I E I G L L H L L L Q H
UniRef90_D5EAC5          Q L S T S K S V E I V D I  T D K V S D V V R S S N I N E G M C T I S T S H
UniRef90_C5ALG8          L V I E T R G R G   L V E F  T S R V R A F I D Q Q S I R D G L L T V F C R H
UniRef90_K1WBV2          L K I K T Q G K   S L A K I  T R Y I Q E A V E T S Q I Q T G I C T V F I R H
UniRef90_A3JWM6        I E F S V S T H G A G   L Y E I  T R S V Q N W L A N E Q T K D G L L T V F V R H
UniRef90_Q3ADM8     M E I K V S S S R K I E L I D I  T A R V A E K V P E A K A   L M L F V P H
UniRef90_D1AKJ8     M I L K I N S S A K N E F I E V  T A M V K N T I Q E N K W R N G I L F L N V L H
UniRef90_L0D8S8          L T L A T R G R G T   Y E I  T R Q I Q Q V V G N A A I E R G L C T V F V H H
UniRef90_A7C584          I S V H A P H Q G L F   F T Q Q V A N V V R E M G F Q E G L C T L F V Q H
UniRef90_UPI00034542AA   E I K T S G K C L H S I  T S Q V M T V V K K S G I Q T G I C T V F I L H
UniRef90_A0B7Q7        I E L S T N R G C E I V D I  T P Q V Q R A V R D S G V I D G I C L V Y T L H
UniRef90_F3ZTY6          E F R L K A R S R G   F H Y I  T S E V L E Q L P S L P D V G M L N L F I K H
UniRef90_W5YQU0          I E L K P Q S R G   F H L V  T N E I A Q A P A L Q N C Q V G L L H L F I Q H
UniRef90_UPI00045E9CCC   E I R L K A R P R G   F H W V  T E D I L R Q L P E E K V S V G M L N V F I K H
UniRef90_R6MEY2          E H Q I A T N A S Q Q M T K V  T E M V R E D I E R S G V R E G I A V I F S P H
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UniRef90_J9ZFG0          F Q T K N R R D Y L R I  T D K V R S A V R K S G I Q E G M V L V S A M H
UniRef90_UPI000344CD38   I E V E T G S G I S I Y N I  T P Q L L Q L L E A S G V K N G Q L L V F S R H
UniRef90_UPI00036513A5   E I R L V P K S R G   Y H I I  T Q E I L K E I P E S K I S T G L L A H I F I Q H
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UniRef90_D1JEA1     M E I Q I Q T K G N S E V M D I  T G E I V K G I V K R K G V D S G I C V I F T R H
UniRef90_F7U7Z2          K M T I A T Q G Q G   L Y E F  T A E A S R F V R D T G M L Q S G L L T V F V R H
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UniRef90_W6ZKQ7          T S A S L T I N E N A D P T V R D D F E S F F S R A V P E D E P Y Y K H I Y E G
UniRef90_A4BU49          T S A S L I I C E N A D P A V R E D L E H F S Q R L V P D G D P L F T H R D D M
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UniRef90_B0VI89          I T S S V F I N D D E K G   L H S D F E T W L E K L A P E K P Y S Q Y R H N G F
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UniRef90_E1ZL41          T S A S L T L N E N A D P D V R V D M E T F L N R V V P P W V H T D E G P D D M
UniRef90_Q0W1C9          S T A S I T T I E F E   P G L Q Q D L P R A L E R L A P S D A S Y E H D L K W G
UniRef90_A6W1R2          T S A S L T I N E N A D P S V R R D M E K H F S Y M V P E D Q P Y Y E H I Y D I
UniRef90_UPI00047E94EE   T S C S L L I T E N A D P D V R R D L E T V L A R V A P D G D P A Y R H D D D M
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UniRef90_K2BP95          T S A S L I L C E N A D P S V Q V D L N N F M S H L V P D G D P H Y E H I Y D M
UniRef90_Q1PV39          I T A G V F I N   D A E S G L H R D I E E W L Q K L A P E G P D Y F H R T N G
UniRef90_I4C6D6          I T A S V F I N D D E S G   L H Q D Y D R W L E E L A P H A P H N R T G E D N G
UniRef90_H4F5L1          T S C S L L I Q E N A D P S V Q V D L K A F F R R L V P Y I I H R D E G P D D M
UniRef90_UPI000255876C   T S A S L T I N E N A D P T V R Y D F E T H I D K M I P E N M P Y Y K H N Y D M
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UniRef90_W5YQU0          T S A S L A I N E N A D P D V R G D L E R H F N V M V P E N A P H Y E H T M D M
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UniRef90_W6M7R8        D A H L K A G L V G P S E T I P I I D G Q L G L S T W Q G I F F C E F D G P R S
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UniRef90_Q1K0T8          E L W F E H P Q R M G F I N I T N E V S H C L R Q S G I R E G L C L V N A M H
UniRef90_U1ZCV3            L R P R S R G F H L V T D E L L A A L P E A Q L R V G L L H L W L Q H
UniRef90_UPI0003628A09 V N I T L P E L G R G F H L I T S Y I T S E L P R L P E K G L V N I F L Q H
UniRef90_A4AWS8          E I R L K A F S R G F H L I T N E I L E D I P E K S L S K G M L Q V F I K H
UniRef90_B8N2Z8          F S L P P Q A R G S Y L I T D Y V E T Q L P E K N Y K V G I L H L F I K H
UniRef90_Q15ZA7        F Q L S L R A K P R G F H L I E I G K Q L E L T T V N I G I L H L F I Q H
UniRef90_K4MIU3        M S I Q I Y T S Q R T E L I D I S T Y V K K H V T D S G I Q E G I C I V S T N H
UniRef90_W0TRU0            T S N G R G T I N L S R D I A F L V D G S G I Q T G L C H L F V K H
UniRef90_A9HIP5          L S I A T H G K G L V M F T R D V L H W V A D T G I E T G L L T L W C R H
UniRef90_UPI0004099663   F T V G T Q G A G L Y E V T P R V R E W L R G Q G D G V L T L F V R H
UniRef90_F2K203          E I Q I P K K S R G F H L I T A H I E S A I K E I R H A N G L L H I Q I L H
UniRef90_G4QI85          Q V K L R A R K R G F H L I T D E L I K A C P D L P V N C G L F N A F I Q H
UniRef90_I4YXP4          S V G T R G P G L T E I T D A V A E W V S G T G I R S G L L T V F C R H
UniRef90_UPI00035FF0D1   L T L T T K G R G T Y S I T A Q I E Q L I R Q S G I Q I G L C H V F I Q H
UniRef90_K2PNK9          E I R L N P K K R G F H L I T D E V K N F P E L K K I K V G Q L Q V F I K H
UniRef90_K9UIQ0          L T I P S T P K S F V K I T P Q I G N L V T Q S G I Q T G L C T L F L R H
UniRef90_D1C1D7          E I Q T R G G G E M H D L T P R V E S A I A A S G C Q D G I V T V F V A H
UniRef90_H5SCD7          L T M H L P Q R Y G F V N I T P Q V A E A V R Q S G V R E G L C L V N T M H
UniRef90_G9EMB0        F S M T V E T V G R G T T D I T A E I A A V L A N A T I Q Q G L C L H V F V Q H
UniRef90_H8Z0T1          Q L K I A T R G R G L Y R L D D Q L G R T V R E S G I R T G L C H V F V Q H
UniRef90_B1ZTH7          L S I R T N G Q G T Y E V T E A V A R E V A R S K L T R G V V T V F C Q H
UniRef90_D8TK94              R R G C H L V T D K I L K E I G S S G Y K V G L A N I F I Q H
UniRef90_UPI00035E9E98   K L S T S T K G L Y N I T R E I V L V T W Q Q K F S T G L L T L F V P H
UniRef90_N6VNF4        M E L K V K S T K K N E M I D I T S D I Q E M I N R E N L K E G H I I V Y V P H
UniRef90_UPI000378B309     P R G F H L I T S H I E E F T D L R R I K V G V Q V Q F I Q H
UniRef90_UPI000365302C Q I T I S T K G H G D M H D I T G Q V S E I I K K S G I K V G T V N V F N V G
UniRef90_M7NYL5          L S I Q T A A R T T H N L T R E V Q S I V Q G T Q T G T C H I F V Q H
UniRef90_A5UJV6        I E I N L D T N K T F E I I D I T S K I N E L I A N S N L S N G V N I F S K H
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                              50            60            70          80
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UniRef90_R1E5B2          N T A C I I I Q E N D E T I F K D I E E F F D R I L P L N T K Y H N Y E N A
UniRef90_L0HLN6          S T G A V T T I E Y E P G L K K D L P A A L E R L I P Y E H E K T W H D G N G
UniRef90_UPI000395AD1C   T S A S L T L N E N A D P T V R Q D M E S H F N H S V P E C A P Y Y R H T Y D M
UniRef90_F8ACQ7          S T A G V T T I E Y E P G V L S D L C R A L E K I A P Q D I P Y E H D K A W G
UniRef90_Q2BGV9          T S A S L T I Q E N A D P S A K D L E N W L V P E N D R L Y T H I F D M
UniRef90_F7VSD7          T S C A L S L N E N W D P D V R L D M S D A L D R I V P E Y R H S D E G P D D L
UniRef90_R9GMK4          T S A S L T I N E N A D P T V R K D F E M Y F S K V V P E N D P K Y L H P D D M
UniRef90_E5AC27          T S C A L S L N E N Y D Q D V R A D M T D A L D R I V P E Y R H D E G S D D M
UniRef90_R7IJQ2          T T A G L T I T S F W D P A G F E D L Q D E I C R L I P T R I D F K H Q H D T P
UniRef90_S8EI61          T S A G L T I N E N Y D P D V R R D M D M A L D K I V P N W A H T D E G P D D S
UniRef90_Q96YV5          T T C A I I I N E A E S G L M K D F L N W A K K L V P P D G E F E H N D N N G
UniRef90_Q0AX53          I T A G V Y V N D N E S G I I M D M D Q M L E S L A P F G P D Y F H R D N G
UniRef90_A0A024KB27      T S C S L L I Q E N A D P D V Q V D L K G F F S R L V P E H M P W I T H P D D M
UniRef90_E3GXZ3          S T A G L L I N E N E K G L I N D F K K L L E R I V P V D G N Y E H N R N N A
UniRef90_Q0AMR7          T S C S L V I Q E N A D P D V Q R D L Q A F F A R L V P W L A H T A E G P D D M
UniRef90_W0EQ43          T S A A L T I N E N A D P D V R N D F A S F D R I V P D G A P Y F R H V Y E G
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UniRef90_UPI0004560191   T S A A L T T Q E N F D S D V R K D L D M A L D H I V P E S L P W R H T D E G P
UniRef90_C6XZB1          T S A S L T I N E N A D P T V R G D F E T F F N K A V P D Y K H D Y E G V D D M
UniRef90_D1PUT8          T S C G L T I N E N C D P D V R H D L K T I M N R L A P D G D P A Y R H R D E G
UniRef90_UPI00030CB2F8   T S A S L L V Q E N A S P D A R E D L E A F F R R I A P E A R G L Y R H D D M
UniRef90_X5JNH0          T S A S L I I Q E N A D P D V L L D L A E F M T R L V P E S T N Y I H G P D D M
UniRef90_B8HMN6          T S A S L L I Q E N A D P D V L Q D L E T F L A R L V P E G G Y Y R H G P D D M
UniRef90_Q0F3E9          T S A S L T I N E N A D P S V R S D M E N H F N Q S A P E N Q K F Y T H T Y E G
UniRef90_UPI000440DF15   T S A A L T I N E N Y D R D V R R D M D M A L D N V V P E S L N W K H T D E G P
UniRef90_UPI0004796A02   T S A S L T L N E N A D P T V R Q D F E S A F N R L V P E D G P D Y R H S D D M
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UniRef90_UPI000373DB23   A T A A I I A N E N E R G L I N D I I R K L K E E F P Q E Y N W E H D R D N A
UniRef90_G8AK41          T S A S L V I Q E N A D P S V R G D L E R F F K R L V P E D P T L Y D H P D D M
UniRef90_T0YDZ0          I T A A V F V N D A E P G L L R D I H A W A D R L A P P G D Y H H H G E T N G
UniRef90_K2H192          T S A S L A I N E N A D P D V R G D L E R H F N V M V P E N A P H Y E H P D D M
UniRef90_W0E1E9          T S A S L L L C E N A D P S V R H D L E H F L A R L A P D G D P V Y T H P D D M
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UniRef90_W8NVN6          T T T G L F I N E Y E P G L I E D I K A K M A E L V P M G A G Y A H D R I D R
UniRef90_D0MJW4          T S A S L T L N E N A S P E V R A D F E R Y F S R A V P D G A P Y F A H P D D M
UniRef90_UPI00045EA377   T S A A L T I N E N A D P T V R K D F Q T F V N E L I P E S Y P R F I H T Y D M
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UniRef90_A9U068          T S A S L T I N E N Y D G D V R D D V E T W L N L T V P P W K H T M E G D D D L
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UniRef90_UPI00047C0D9B   T S A S L S I N E N A D P D V R L D F E S F F N R L V P E G E S D Y R H N D E G
UniRef90_H2J4V7          L T A S V Y I N D Y E S G L I E D I K E W L E K L A P Q N Y P Y K H H E V N G
UniRef90_F4BY30          T T T A L T V N E A D P P L M K D I Q N L L Q R L A P E N G G H D H H D G N A
UniRef90_A0A011P894      A T C A I M I Q E N W D E S V Q M D V V S L L Q R L I P G G V W L H D G V W N G
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UniRef90_A9NDP7          T S A S L I V C E N A D R T V R K D L E R F M E R F I Q D G D K L F Q H P D D M
UniRef90_H8GHC6          T S A S L A L N E N A D P T V R Q D L E S H F N E M V P E R A P Y Y L H Y D M
UniRef90_UPI00034CF8B2   T S A S L T I N E N A D P S V R V D F R S H F D V L V P E N E P H Y T H T Q D M
UniRef90_UPI000364ABEC   S T A G I T T I E Y E E G L V K D F S E L M E K L I P S T V T Y H H D A R W G
UniRef90_UPI00039406FE   T S A S L S I N E N A D P T V R L D M E A H F N R S V P E K A P Y Y Q H T Y D M
UniRef90_I6TVT8          A T G A V I A I E H E E G L L E D F K R W L K E I V P K E R P Y L H N R F D D
UniRef90_I0A0G2          A T A T I V V N E D E Q G L K K D I I N W I D E F L D K E R K Y Y H N D N N A
UniRef90_W7Z322          T T A G I T V N E D A D P D V V T D F L R R L D E V Y P W N H E N D H R E G N T
UniRef90_U3A709          T S A S L T L N E N A D P T V R M D M E V H F N Q F V P E R A S Y Y Q H T Y D M
UniRef90_Q1K0T8          I T A S V F I N D N E S G L H A D F T R W L E Q L A P Y D A H G Y A H H Q N G
UniRef90_U1ZCV3          T S A S L S V N E N A D P A V R R D F E R F F N R L V P Q G E G G Y E H P D D L
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UniRef90_Q15ZA7          T S A S L T I N E N A D P T V R S D L E S H I N Q A I P E N A A Y Y L H Y D M
UniRef90_K4MIU3          T T T A I I V N E N E T G L V A D I L S L L A R L V P E K S G Y L H D R N N A
UniRef90_W0TRU0          T S A S L I L C E N A D P Q V R R D L E A F L T E T V P D G S P L F H H P D D M
UniRef90_A9HIP5          T S A S L T V Q E N A D P T V L E D I K R Y F E A L V P E A P G R Y I H P D D M
UniRef90_UPI0004099663   T S A S L L I Q E N A D P D V Q A D L R A F F D R L V P H A D H R S E G P D D M
UniRef90_F2K203          T S A S L T I Q E N A D P L V R E D M E R H F C H M V P E N Q P Y Y K H T Y D M
UniRef90_G4QI85          S S A S L T I N E N A D P T V R E D F E A H T N V M V P E N A P Y Y K H T Y D M
UniRef90_I4YXP4          T S A S L L I Q E N A D P D V R R D L L A A F D R L A P R N A G Y V H G P D D M
UniRef90_UPI00035FF0D1   T S A S L L I T E N A D P A V R H D L E T I L Q R L A P D A D P T Y R H D Y E G
UniRef90_K2PNK9          T S A S L T I N E N A D P S V R V D F E S H L N V M I P E G A P Y Y I H T Y D M
UniRef90_K9UIQ0          T S A S L V I Q E N A D P D V L I D L A N F L A K L V P E D G K Y I H G A D D M
UniRef90_D1C1D7          T T A A V A I S E F E P G L I E D F P A M L E R L I P A D Q G Y R H R D D N A
UniRef90_H5SCD7          I T S S V F I N D D E R G L H E D F L R W L E K L A P Y N P D P Y H N R N A
UniRef90_G9EMB0          T S A S L M L C E N A D Q V R D L E N F L L R L I P D G D P L F K H V D D M
UniRef90_H8Z0T1          T S A S L L I C E N A D P Q V G R D L E A F L A R L I P D G D P L F G H P D D M
UniRef90_B1ZTH7          T S C S L V L Q E N A D P S A R R D L E D W L N R L V P E N D P H F E H P D D M
UniRef90_D8TK94          T S A S L T I N E N A D P D V R K D M E T Y L N L S V P P W I H T D E G P D D M
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UniRef90_UPI000365302C   S T A A I G T I E F E P G L Q Q D L P Q L L N K L I P P S R E Y K H D G N G
UniRef90_M7NYL5          T S A S L M L C E N A D P F L R D L E T F M Q I V P D G D P M F R H Q D E G
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                              90            100           110           120
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UniRef90_C7LNS8         D A H M K R Q I M G R E V V A V T G G R L D F G T W E R I F Y A E F D G R R K
UniRef90_R1E5B2         T A H I K T N L L S Q S L C I P I K D G K L L I F L E L F E S R E
UniRef90_L0HLN6         H S H I R A S F L K P D L C V P I V D G T L V L G T W Q Q I V F V E L D K E R K
UniRef90_UPI000395AD1C  P A H I K A S L L G A S V T P I T Q G H L N L G T W Q G I Y L G E H D Q G G S
UniRef90_F8ACQ7         D S H V R A A I M K P S L T P V A E A R L L L G T W Q Q I V L L D F D N P R N
UniRef90_Q2BGV9         P A H I K S A L T A T T L S I P V L N G R L C L G T W Q G V Y C W E H R H A R S
UniRef90_F7VSD7         P A H V K S S L I G T S V T P I K N G K L A T G T W Q G I W Y L E F R H K H R
UniRef90_E5AC27         P A H V K S A L I G A S V T P I T N T G T W Q G I W Y L E F D M K H T
UniRef90_R7IJQ2         T G H V K C S L L G V S I P L I I D G G K L V L G G S Q G I F F L E F D G P R K
UniRef90_S8EI61         V S H T K T S L V G T S I C V P I T D G R L N L G T W Q G I Y L T E F R H P H Q
UniRef90_Q96YV5         H A H V I S A I I G N S R V V P I I E G K L D L G T W Q R I I L L E F D G P R T
UniRef90_Q0AX53         D A H L K S L L L H H Q V V P I T N G D L D L G P W Q D I F Y A E F D G Q R K
UniRef90_A0A024KB27     P A H L K A A L T Q T S I G I P V D A G S L V L G T W Q G V Y L F E H R A P H R
UniRef90_E3GXZ3         D S H Q R S V L L D S S K T L Q V V N G K L D L G T W Q R I F F V E L D G P R T
UniRef90_Q0AMR7         P A H I K A A L T Q T S I G I P V A D G R L M L G T W Q G I Y L F E H R R P H R
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UniRef90_G4RGR4         P A H I K S A L T Q T S I S I P V I D G R P V L G T W Q G L Y L F E H D A P H R
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UniRef90_D1PUT8         P A H A K S S L V G A S L N I P I N G H L A L G I W Q G I Y L C E F R H G G P
UniRef90_UPI00030CB2F8  P A H L R A A L T Q T Q L S V P V A D G R P V L G T W Q G I Y L F E H R A P H R
UniRef90_X5JNH0         P A H I R T A I T H T S E H I P I N N G H L V L G T W Q G I Y I W E H R R N N S
UniRef90_B8HMN6         P A H I R T A L T H T T E T I P I N H N R L L L G T W Q G I Y L W E H R Q H G S
UniRef90_Q0F3E9         P A H L K T T T I G N S L T I P I K N G Q L G L G T W Q G I Y L G E H R N G G S
UniRef90_UPI000440DF15  D S H T K T S L I G T S I S V P I T D G R L N L G T W Q G I Y L T E F R H P H S
UniRef90_UPI0004796A02  P A H L K S S L L G S S V M L P I S D G G L N M G I W Q G I Y L C E H R N G G S
UniRef90_D3S2C4         D S H V K S S I I G P S V I P F K N K E L M L G T W Q Q V V L I N F D R K R R
UniRef90_UPI000373DB23  Y A H L A S S F L G S K V F P I I D G K L I R G T W Q N I F L V E L D G P R I
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UniRef90_D5WHF7          L S V Q A R G R G L V E F T D D A R R F V D D T D I R T G L L T V F C R H
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UniRef90_B8INK8        P G H I R T M L T D S G L A I P V I E S R L A L G T W Q G I Y L I E H D P H R
UniRef90_D5GPM6        P A H V K S S L V G V T V T V P I V E G R L G L G T W Q G I W Y L E F R R A R H
UniRef90_B4PBK8        P A H V K A C F L G S S L T I P I T D G K L S L G T W Q G V W L C E H D Q A G S
UniRef90_X0QVX1        P A H L K S M M L G V S L T I P L V D G E L G L G M W Q G I Y L C E H R N G G Q
UniRef90_UPI00026C8119 P A H I R T V L T Q S S L S I P I H N G K L A L G T W Q G I Y L Y E H R Q P Q E
UniRef90_B5IL39        P S H I R T A L T S T S L T L S F Q S G R L V L G T W Q A I Y L W E H R Q A G Q
UniRef90_B1L4N4        Y A H L A S S F I G P S R A F P V S S G R I L R G T W Q S I L L I E L D G P R E
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UniRef90_UPI00046AFC44 P A H V K S V I T G V S L S I P I T R G R L N L G I W Q G I Y L C E F R Q N G E
UniRef90_G1X252        P G H V K S S L I G V S I T V P I T D G R L N L G T W Q G I Y Y M E F D S K H R
UniRef90_UPI00035F1431 P A H V R A A L T Q T H L A I P V A G G G P L L G T W Q G I Y V F E H R R A Q A
UniRef90_I2JVR6        S G H A K S S I I G V S L S I P I T N G R L A L G T W Q G I W L L E F R N Y R H
UniRef90_UPI00047B2787 P A H I K S S L L G Q S L T I P V T N G R M A L G M W Q G I Y L C E F R N G G P
UniRef90_C0GDT8        D A H L K N I L V G H Q V I I P V T K G R L D F G P W Q Q V F Y A E F D G R R N
UniRef90_UPI000405BE1D P A H I K S S L M G S S V Q I P I T N G Q L N L G I W Q G I Y L C E H D Y A S E
UniRef90_A1BEA0        H A H L L G L F M N S S E T I P V S D G K L M I G G Q W Q S I F F V E L D G P R R
UniRef90_UPI00038244E7 H A H L M G L F M N A T E T I P I S G G K L M L G G W Q S V F F I E L D G P R E
UniRef90_UPI0002E2F800 P A H V A A S L L G T Q L T L A V R D G R L A L G T W Q G L Y L G E H D H G G R
UniRef90_UPI00045E70E5 P A H V R T M L S D A S L S I P V R G G R P G L G T W Q G I Y L A E H R R P H R
UniRef90_A0A017H901    P G H I K S A L L P S A L Q I P V I D G R M M L G T W Q G I Y L F E H R R P H R
UniRef90_L0DCR9        D A H M K R Q V M G R E V V I A I T N G K L D F G P W E Q V F Y G E F D G R R S
UniRef90_K4MGH4        H S H I R A S L G Q S R S F P V I N G N I L D L G D N P R S
UniRef90_U4KWF3        P A H I K S A L I G A S V T V P I T N G K L A L G T W Q G I W Y M E F R Q K H T
UniRef90_A8LR71        P G H I K A A L L P T S L Q I P I I G G R M A L G T W Q G I Y V V E H D R P Q T
UniRef90_K9VRQ8        H S H L M A M T L N T S E V I P I A E G K L A L G T W Q S V L F F D L D G P R N
UniRef90_B7KDH1        H S H L M A M T M G N S E V I P I V E G K L G L G T W Q S I L F L E L D G P R K
UniRef90_E6W3V8        D A H L K R T I M G R E V V I A V T E G K L D F G P W E Q V F Y G E F D G M R K
UniRef90_G2LKT4        D A H L K R Q I M G R E V V V A I T N G R L D F G P W E Q I F Y G E F D G Y R P
UniRef90_UPI000416E5DA P A H I K T A L L G N Q L T L P V G G Q K L L L G T W Q G I Y L G E H R N H S S
UniRef90_UPI0003B7802D P A H I K S A L T Q V N L S I P V Q F G R M M L G T W Q G I Y L F E H R N P H T
UniRef90_UPI000476FC7D D A H I K R T L M G R E V V A V T A G A L D F G P W E Q I F Y G E F D G Q R A
UniRef90_UPI00035C20D0 P A H I K T V I L G S S L S I P I S D G Q L A L G I W Q G I C E H R N A G N
UniRef90_M1WBM0        P A H V K S V L V G A S V T I P I Q D G K L A T G T W Q G I Y Y L E F R S K H Q
UniRef90_UPI00035E98D3 P A H I K A A L T Q T S L G I P V Q N G A M M L G T W Q G L Y L F E H D R P H R
UniRef90_UPI00041DD5F0 P A H I K S S I L G C Q V Q I P I T K G R L N L G T W Q G I Y L G E H R N G G K
UniRef90_H1G5E0        H S H L M G L F M N A S E T I P I V D G E L V L G T W Q S I F F I E L D G P R E
UniRef90_D5WHF7        P A H L R T A L T Q V Q L S V P V E H G R M V L G T W Q G I Y L F E H R R P Q P
UniRef90_D2RFQ3        D S H V K S A I V G T S L V V P F K N G E L L L G T W Q Q I V V I N F D R R R R
UniRef90_UPI000455FE84 D S H T K S T L V G S S I S I P I T N G R L N L G T W Q G I Y L T E F R A A H T
UniRef90_K8AGA6        P A H I K S S T L G V S L M L P V R Q G R L Q L G T W Q G I W L G E H R N G G A
UniRef90_UPI000226028E P A H L R T M L T Q S G L S I P I I D S E P A L G I W Q G L Y L F E H R R P H Q
UniRef90_E4NU94        D A H M R A A L L G S S V S I P V E N G E L G L G T W Q S V M F A E C D G P R T
UniRef90_A2F8P7        P A H V K S S V M G V S L N I P I T N G Q L N L G T W Q G I Y L N E H R N G G S
UniRef90_UPI0003FE5028 P A H I K S S L M G A S L S L P I A R G R L A L G T W Q G I Y L C E R D R G G A
UniRef90_UPI000367FDF7 P A H L R A A L T Q V Q L G V P L I D G R L S L G T W Q G I Y L F E H R R P H R
UniRef90_G8PUD5        P A H I K A S T L M T G V S L Q I P V V D G D L D L G T W Q G I Y L I E H R R P H R
UniRef90_U1L7U0        P A H I K A S T L G S S I S I P I A N G Q L N M G T W Q G I Y L G E H D Y G G A
UniRef90_G7WPX7        H S H I R A S V I G P S L A V P F A G G K L L L G T W Q G I V F L D L D N P R Y
UniRef90_D3S9F6        A A H A R A M L T H N D L T V P V G R G R L I L G T W Q G L F L W E H R A A H T
UniRef90_E3KTF4        D S H T K A S L L G S T V T P V T K G Q L N L G T W Q G I Y L T E F R H P H S
UniRef90_UPI000289BD25 T S H L K S M L S G N S C L F V V Q N G K M V S G E A Q D I Y L S E F D G P K T
UniRef90_A0A024TUF5    P A H V K S T L I G A S I Q V P L T N G R F N L G T W Q G I Y L C E H R H G H N
UniRef90_B0C5S0        P A H I R T A L T H T S E Y I P I R Q G R L A T G I W Q G I Y V W E H R H G S N
UniRef90_S6BQG5        P A H I R S I L T N M D L T L P V R E G R C L G T W Q G V F L Y E
UniRef90_UPI000441598B D S H T K T S L V G T S I C L P I T D G R L N L G T W Q G I E F R H P H S
UniRef90_D8U5F4        P A H V K S T L M G P S L P I P V S R G R F A L G T W Q G I Y L N E H R N G G P
UniRef90_B8CML1        P A H I K S S L L G V S L T L P I T N G R F N L G T W Q G I Y L G E H D Y G G S
UniRef90_UPI00034AA453 P A H I K A S T L G C E L T L P I S H G Q L Q L G T W Q G I Y L G E H D Q G G S
UniRef90_C1E0X2        H S H L L S L I L I G N T L A V P V V D G E L A L G T W Q S L M L V E H R A
UniRef90_W0BCQ6        P A H I K N I L I G S S L T I P L K D N Q L W L G Q W Q G I Y L C E H R N A T D
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UniRef90_J1L4J1        D S H V R A S L V G P A L S V P V R D G A P V L G T W Q G V V L L E L D R P R E
UniRef90_Q1IPX2        D S H L K A L L I H H E V I L P V T N G K L D F G T W Q G V F Y A E F D G R R R
UniRef90_V6MLW5        P A H I K S S L L G Q S V T I P I S Q G E L N L G T W Q G I Y L G E H D H G G D
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UniRef90_U9STY0          R R V V V T L
UniRef90_F4CF97          R N L I I T V
UniRef90_A0L921          K R V L V K I I
UniRef90_G8NVE1          R E I V L H L V
UniRef90_UPI0003B645CE   R R T V I A T L
UniRef90_R6QPX8          K R V L I K I I
UniRef90_UPI00046531D3   R E I V L H
UniRef90_D5SXG6          R R L S L T L M
UniRef90_H8GSG7          R S L V L T L
UniRef90_F1ZBK0          R H L A M H L M
UniRef90_A7SX60          R H I I I T L
UniRef90_S2KFF9          R R V V V T L
UniRef90_D7CLY5          K R L I I K V L
UniRef90_UPI0002C3CFA2   R T I V V T I
UniRef90_A7HE05          K R V V L K A I
UniRef90_A4C8Q3          R K V V A T L
UniRef90_X1FP86          R K I Y C S I I
UniRef90_A3T1N4          R R I A V H F
UniRef90_N1JL59          R K L V A T I
UniRef90_K8GLM1          R E L V V H L
UniRef90_UPI00035E01E8   R Q V Q L H L L
UniRef90_UPI00036C359D   K R L I I K V L
UniRef90_UPI000413CD02   R S V I A T L
UniRef90_S2E1H6          R S I V L S L
UniRef90_UPI00035E7906   R R L V V T V L
UniRef90_A4EU65          R R V V A H L
UniRef90_UPI000348D5E7   R T V L L Q I
UniRef90_F2IXM3          R S L T L H Y L
UniRef90_B8INK8          R E V I L H L
UniRef90_D5GPM6          R K V I A T I
UniRef90_B4PBK8          R K L
UniRef90_X0QVX1          R K L V I T V
UniRef90_UPI00026C8119   R H L L I T A I
UniRef90_B5IL39          R R R L L H L I
UniRef90_B1L4N4          R N V V V T V V
UniRef90_UPI0003730E75   R E L V V A F V
UniRef90_UPI00046AFC44   E R I L I A T I
UniRef90_G1X252          R S V V A T I
UniRef90_UPI00035F1431   R T V V L H L L
UniRef90_I2JVR6          T R Y C L A T I
UniRef90_UPI00047B2787   R K L V L T V
UniRef90_C0GDT8          K R V V I K V M
UniRef90_UPI000405BE1D   R K L V V S
UniRef90_A1BEA0          R N V L V Q F
UniRef90_UPI00038244E7   R R I L A Q F L
UniRef90_UPI0002E2F800   R R I M A T L
UniRef90_UPI00045E70E5   R E V V L T F
UniRef90_A0A017H901      R E V V A
UniRef90_L0DCR9          K R V L A K V I
UniRef90_K4MGH4          R K V V V Q V
UniRef90_U4KWF3          R S I V A T I
UniRef90_A8LR71          R Q I V A
UniRef90_K9VRQ8          R T V F I Q I M
UniRef90_B7KDH1          R T L S V Q L M
UniRef90_E6W3V8          K R V L V K I I
UniRef90_G2LKT4          K R V L V K V I
UniRef90_UPI000416E5DA   R T L L V T L
UniRef90_UPI0003B7802D   R R V I A H F
UniRef90_UPI000476FC7D   K R V L V K I I
UniRef90_UPI00035C20D0   R T I I V T L
UniRef90_M1WBM0          R R V M A T I
UniRef90_UPI00035E98D3   R E I V F H F
UniRef90_UPI00041DD5F0   R K V V I T I
UniRef90_H1G5E0          R R L T V H F M
UniRef90_D5WHF7          R D I V L H L L
UniRef90_D2RFQ3          R E V I L Q L L
UniRef90_UPI000455FE84   R R V V A T I I
UniRef90_K8AGA6          R K I V A T L
UniRef90_UPI000226028E   R E V V L H L
UniRef90_E4NU94          R E L R V T T
UniRef90_A2F8P7          R K I V I T V
UniRef90_UPI0003FE5028   R R L I A T
UniRef90_UPI000367FDF7   R E V A A H L L
UniRef90_G8PUD5          R S M T L H Y L
UniRef90_U1L7U0          R T L V A T I
UniRef90_G7WPX7          R R V V V Q I I
UniRef90_D3S9F6          R T L T V T V
UniRef90_E3KTF4          R R V V C T I V
UniRef90_UPI000289BD25   R K I Y I Q I I
UniRef90_A0A024TUF5      R K I V V T L
UniRef90_B0C5S0          R E V I V H
UniRef90_S6BQG5
UniRef90_UPI000441598B   R R I V A T I L
UniRef90_D8U5F4          R S L V I T I
UniRef90_B8CML1          R N I L I T L
UniRef90_UPI00034AA453   R R I V A T L
UniRef90_C1E0X2          R T V G V Q V
UniRef90_W0BCQ6          R K I I L T V
UniRef90_UPI00047C7728   K R V I V K L L
UniRef90_J1L4J1          R T V V C T V L
UniRef90_Q1IPX2          K R V I V K V M
UniRef90_V6MLW5          R R I I V T L
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Multiple sequence alignment. Position ruler: 1, 10, 20, 30, 40.

Accession	Sequence (residues 1–40)
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UniRef90_UPI000377B676	K L S I K V N G Q G L Q A F T P L V Q Q Q L S L C N I D E G L C T L F I Q H
UniRef90_Q6ND46	I E L A T T A P I Q L I D T D Q V R R F V T S S G I K E G L V T V S C L H H
UniRef90_UPI000379C8A1	L I K I T H K V L N F I D N S K I K N G I L N I S I L H
UniRef90_H1XW25	E V R T K G F N D I I N I T P Q V R Q F V K E K H L K E G Q L L I F I N G
UniRef90_F4B7E8	E F K V K T N E R F E S I D I T D N V E D A A K S I D S G I A Y I F V K H
UniRef90_UPI00029B3D0A	F T I E V P T G E R F Q L V D I T D E V Q R K I R E G K M K H G I A L V F T K H
UniRef90_UPI00035D0E87	E L T V P V K G R G M I E I T Q H V C D W V A S S G I R Q G L L T L F V R H
UniRef90_W7YKQ3	Q I S L P E F S R G F H L I S D F I E S H L D L P D V G L L N L F I K H
UniRef90_D3HSU3	L N T T G R S T F D I T D K I N L L S A N F P S Q N G L C H L F L Q H
UniRef90_H0UP56	L W M N T P R R K E L V H I T P L L D E I L E R S G I S D G F M L V S A M H
UniRef90_UPI00037EEE35	L E V S T E G R G T T D V T Q K V A D V V K Q G N V R L G L C H I F V Q H
UniRef90_C0PTS8	F S L P P F K R G C H I I T R Y I Y E A V P E S Q F E V G L A N L F I L H
UniRef90_C5ESX2	K F V I H T T K Y N D F I N I T D R V V D L V G Q S G I L K D G M A L V M T A H
UniRef90_UPI000475C86E	I E I E G R G R G F T E V S E A V Q R V V A A S G A R I G L C H L F L Q H
UniRef90_E5SX22	I T L T S K P R G C H L I T T E L L Q A L P E I N R F S I V Q H
UniRef90_G1C7R7	T N E V L G G L P E A D L Q V G L L H L F I Q H
UniRef90_UPI0003675096	K I V L K A R P R G F H L I T D E I E Q A L H L S D F T I G T C H L L L Q H
UniRef90_I0AI64	F N V K T K G N S D I I D I T N A I E K I V E E N N F T E G N A L I F V S G
UniRef90_C5JFY2	I A L P P R S R G S Y L I T D H I V S E L P E L R Y K T G L L N L F I Q H
UniRef90_UPI0003758614	F Q H T V H L P A Y R G F H L I T R I I E E F A A L Q T I R M G I L H V F I Q H
UniRef90_UPI0004769FE7	F D I D T R G Q G F Y E F S R E I R N W C T D Q K L Y C G L L T L F I R H
UniRef90_B7A922	M E I R V R T P K E G F V N I T K A V E A A L K G H T G L V Y L F V P H
UniRef90_I4C492	I S L R T E G F S D C R N I T E E K A V H A S G V R E G L A T V M V T G
UniRef90_UPI00029AA98C	R R G F H L I T N H V V H A L P E Q E T R I G L L H V F I Q H
UniRef90_D8JZ24	I T I N T D G V S L T E F T K T V A E I V E A S G I E A G L A H V F C R H
UniRef90_B9KYG8	F Q V A T G G R D Q M L D L T P Q V R E T V E A S G I R E G L V C V F V A H
UniRef90_E4UUT1	I T L P S R S R G S Y L V T D H I V S Q I P E S T Y K T G I L H L F I Q H
UniRef90_K2FZD0	K V N F E S T T Q I E F I D V T D R V Q D I V S K S G I R E G Q V L V Y S P H
UniRef90_G5II62	E I Q I K T D K K D D L V E L T G R I D E I V K A S G V K E G L C T V Y C P H
UniRef90_UPI0004409B42	E F S L S K R S K G C H L I T D E I I N H I R L H D V K I G L L Y L F I Q H
UniRef90_I3IHQ3	T F H T R K R R E F I N I T Q E V S R I L L K S G V Q E G M I L V S A M H
UniRef90_UPI0003596766	E V S L S P R R R G C H Y I S D E I L K A C S G S K I K V G V A N I H I K H
UniRef90_X7EE97	F Q I Q T R G P G L Y E M T R D V S A W A G P T G T T G L L T L F V R H
UniRef90_V4J9N6	I T L K P R P R G F H L I D D E L L T H I P Q S Y Y K V G L L H L F I Q H
UniRef90_K2G6X8	K I D L E S T T Q I E F F D I S K I Q D I I E K S G I R E G S V L V F A P H
UniRef90_E0MJ61	I E I A T Q G P G L I E F T R A A A N F V A K S A D G P A L L T A F V Q H
UniRef90_K9XRT5	I E L E T Q P E I N I H N L T P I V K K I L A N T S I K N G Y V I V C C H H
UniRef90_Q8KFI7	I T C Q T T R P I D I I D I T A D V R S A L E E S G L Q Q G T V T L L S R H
UniRef90_A0A023D3N8	L T I E T R G K G L T E I T R P V R L W L Q E T G I T T G L L T L W C T H
UniRef90_J2IQS4	L T L G A K S R G F H L V T D E V L D Q I R E S R V Q V G L L H L L L M H
UniRef90_UPI000468D4BB	Q L T L N A K R R G F H L I S D D I A K A L D D M P V S C G L L H L Q L L H
UniRef90_G8URT3	E L W F N I P E R M G F I N I T D K V I E C L K E S R I Q E G L I L V N A M H
UniRef90_E0SNZ3	L K V S T S S R F E L V D I T S S V E N I V R K S G I L K N G I C L V F A P H
UniRef90_A9ECD5	F S I R T G G Q A L Y E F T E D V A A W V S G Q Q G D G L L T L M I R H
UniRef90_UPI00037D95A0	L T I R T R G Q D L T D I T D A I N H W I R D T G V Q T G V L T V F C Q H
UniRef90_Q2FQY2	I T L S T R G E G D I V D I T D K V Q E I A C S S G V K T G I C H V F V I G
UniRef90_B4S903	E L W M N V A E R M G F V N I T R D V E L A L A E S G I R E G L C L V N A M H
UniRef90_B2KEP7	I N T E K R Y Q I I N I T E Q T E L A L K K S G I K E G L C L I N S M H
UniRef90_V5AY27	L T L S Q K S R G F H L I T D E V L G Q I A L K S V K T G L L H L L L Q H
UniRef90_S9PV95	I T L S R R T K G F Y I V T S E L T S K L P E K N F S M G T L N L F I Q H
UniRef90_K9QJZ7	I E I V T E P G I N I H N I T P H I K D L I A K S S I K N G Q V L V F S R H
UniRef90_D3T153	M P I E I Q T H D R V D I V D V T A E V E E T I S D D V V H G I C S V Y V P H
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UniRef90_F8D4V1	E F T V D T D A R L T T V E V T D Q I A A A V P D D L E S G T C T A F V E H
UniRef90_K7QYI8	I Q V E T P R E G F V N I T R K V E E A L S G H T G L V Y L F T P H
UniRef90_K9P3R3	Q L E I T T K G E G F D D I T A A I N G L I A A S G L Q L Q S A T I A S Q H
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UniRef90_F4B7E8          R T V N V K V   M
UniRef90_UPI00029B3D0A   R E V L V
UniRef90_UPI00035D0E87   R R V F M H L
UniRef90_W7YKQ3          R R N L I A T   I
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UniRef90_H0UP56          K R V V V K V   I
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UniRef90_UPI000475C86E   R R I V V T I
UniRef90_E5SX22          R R I V A T V
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UniRef90_R7DF75          R K L I A T I
UniRef90_I3TEF3          R S I L I T V   M
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UniRef90_U1KQU7          R T V I A T L
UniRef90_S7V7N7          R S L V L T V   M
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UniRef90_D9R9L6            T L L T T E Y N Q M I R I T G E I E K A V K E S G L R D G I V N V L S R H
UniRef90_K2KAV2          I Q L P P K A Q G   F H L I S D D I E R Q L R L A E F E V G L L H L Q L L H
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UniRef90_H5SHI6              P R G V H C I T K T I T E Q L P E H H V G Y G I A H L F L Q H
UniRef90_D7EBN0           L K Y E T E A N I D I V N I T S D V S S A I D N S G I K N G F V T V F V P G
UniRef90_UPI0002002637    L A V Q T S G   E G F T D L T A A L N R E I A S S G L Q Q G I A Q L V A L H
UniRef90_U1NNJ8            I T V D T D S R T E A I D I T D R V A T A L P D D A     S G V C T V F S Q H
UniRef90_W7TLD1       L E I S L P T K S G I S L H D I T P Q L R Q A V R E S G V V E G W V H I V S R H
UniRef90_UPI000467AB3D  M Q T T F E T T S G A G   L Y E F T R D V A S W I T G S G V     L T L M I R H
UniRef90_B3DUY4                                             H V F V P H
UniRef90_M7ZDI5                D R T T E I M H A I R S S E F K C G L A H L F L H H
UniRef90_Q468R5           E I S V T G K E D C G I V D I T E I I S E E V R K S K I R N G T V T I F C I G
UniRef90_R5KK95           I E V L T K E Y N C L V K I T D D I R Q V V E K S K I R N G V V Y Y V I T A H
UniRef90_UPI0003B65541     I E F S T H G N A E S V N I T S D L H E V L E E T G L N L L T V F V P G
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UniRef90_V5WJE6            R R K I I
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UniRef90_G1VVD1            R D V M I S I L
UniRef90_X0UE75            R R L I F Q A I
UniRef90_Q169C8
UniRef90_R9SKW9            R R V D L T I M
UniRef90_G9YDP9            R R I V A T I
UniRef90_Q2S1H8            R T V V V T V
UniRef90_Q5V367            R D V V V T
UniRef90_D0MKC3            R E I V V T V
UniRef90_R5GL05            K T V L V K I I
UniRef90_A6Q6K5            R T I I I T L
UniRef90_G9A8N6            R E I V L H L
UniRef90_I3ICW9
UniRef90_B3EEF9            R S I L L Q F
UniRef90_F4MN51            R R I V I T L I
UniRef90_D9R9L6            R T I L I Q V M
UniRef90_K2KAV2            R Q I I A T L
UniRef90_M9RQS9            R R V V
UniRef90_H5SHI6            R S I V V T I L
UniRef90_D7EBN0            R E L I L Q I
UniRef90_UPI0002002637     R Q L S L H L I
UniRef90_U1NNJ8            R T I T V R V
UniRef90_W7TLD1            R T V G I Q V V
UniRef90_UPI000467AB3D     R Q V A A H L L
UniRef90_B3DUY4            R K I Q L S F I
UniRef90_M7ZDI5            R T I V I T L
UniRef90_Q468R5            R R I V L Q I L
UniRef90_R5KK95            R T I Y I T I I
UniRef90_UPI0003B65541     R K L V L Q F I
UniRef90_A0P7W2            R R V N L H L I
UniRef90_J9VEQ6            R K V V A T I L
UniRef90_F4BXR7            R K L V L Q M M
UniRef90_I3YAD3            R T L A V Q V
UniRef90_W0HIH7            R R R I V A T L
UniRef90_UPI0003600D1D     R D I V I T V M
UniRef90_W1VEI4            R K R K C K I I
UniRef90_U1N2E7            R T V S V T I
UniRef90_UPI0003FC3871     R Q V L V Q V
UniRef90_C6A0X3
UniRef90_A5GU46            R R I A L H L L
UniRef90_I5B145            R T V L L T L V
UniRef90_G5IJK0            R T C H I Q V V
UniRef90_L8HG28
UniRef90_B4S3G4            K R S I L
UniRef90_N9VLM9            R R Y C I Q V
UniRef90_B6SNA2            R K I V I T L
UniRef90_UPI000302B796     R R I L I T
UniRef90_E9C6C2
UniRef90_Q7V2I4            R S I S V H I I
UniRef90_D3L5I0            R C F Y V
UniRef90_UPI000470F01C
UniRef90_E1Z2E4            R T V G V Q V V
UniRef90_I7D0D1
UniRef90_R7HXP9            R T V Y V Q I V
UniRef90_A2C7K6            R R V A I H A I
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UniRef90_X1D175                     V N I T P D V E T C L R E S G V E E G L V L V N A M H
UniRef90_C1E171         T V R A P R R G C H L V Q D E V D D A F P D R T N K P G L A N L L I R H
UniRef90_B0C546         L D L E T D Q G I G I Y N L S P Q I Q E F I A A S S I R N G Q V L I C S R H
UniRef90_D9Q2L9         L D V R T R D R F D V I D V T D R V R E F L Y R N N V T N G L L M I S V P H
UniRef90_X1GLZ4
UniRef90_U7TU38         E I Q L R T N K Y N Q Y I I L T S D I E K I I E K S G I L H G M V T I L T K H
UniRef90_B3ELF5         I S R E T T E P I Q I I D I T D E V R D F V V S C G L E Q G Q I T L A S Q H
UniRef90_T1JYL1         K I H L R P A L R G C H L I T D E V L K Q L P E S K F Y V G M C H I H V L H
UniRef90_W8S5S3                     A R W I A G Q G   D G V L T L M V R H
UniRef90_K1ZK53         I K L E T K S A F D F I D I T G R V E K F L K R N K M K S G I V N V Q S R H
UniRef90_G2DXM7         L S I P T S A P I Q I I D V T D R V R D V L K A H P V G N G H L I L T S S H
UniRef90_W7DJN2         L Q V Q T H G Q G T M L N V   E I S N W L K T G I V T G L L T L W C K H
UniRef90_B8KT58                     Q E G L C T L F I R H
UniRef90_E8R9L9         R F S T S T R F Q L I D I T G I V E E A V E K S G V A N G I V V I H A P H
UniRef90_T0RPY5         V N T S G   E G F Y D I T E S V K T H S K Q I D S D E G L L Y I F T M H
UniRef90_H0IZZ4             P R G F H H V T D D I A R A L P L A D C S Q G L L H L Q L M H
UniRef90_E9CSU8                     E L P E L R N Y K T G L L N L F I Q H
UniRef90_T1E143         S P R G C H L I T P K V L K E I D L S D F S C G L A H I F F A A
UniRef90_U2N1H3         Q I S L T S H G E T S F F D I T P Q V R E A I K K S N I Q N G I C V V I S P H
UniRef90_UPI00036840A8  I S L K T S D R P S Y H D I T K E V N K L V Q D S K I K N G I C V V S S P H
UniRef90_A2BPX5         K L K F I T N G   E G F I D I T Y D L N L C V E K N N F H S G I L N L T S L H
UniRef90_K8GH51         I Q I P T E S G I Q I Y D V T P Q I Q T F V T S T T I Q N G Q V L I F S R H
UniRef90_UPI0002B48606  Q K T V T L S P H R R G C H L I T P K H
UniRef90_U2DM23         K D G V V Q L T E W L R R C V R E S G V Q S G I A V L S A P H
UniRef90_M0HE79         F D I Q T D R R L Q A I D V T R Q V S K A L P S D A   D G V C T V F S R H
UniRef90_V7IB50         I K L L T K Q Y N E W I L I T E E L K G I C T E S K I R N G I M Y V I S R H
UniRef90_R5R0E8         E V P I C A D K E F E M I K I T D D V R K V V E E S G V E K G I V Y V I T E H
UniRef90_R7AFZ0         E I A S R Q E F E M V K I T D D V Q K D V A A S G I T A G V V F V I S M H
UniRef90_R9LSB8         I H I L T K V Y N E F D V I T P Q V E A L V A E S G V K N G M V T V L T K H
UniRef90_J4KFW4         K L T L E S H G K T T F I N I T E E L R A A I A E S G I K E G T A T V I S P H
UniRef90_I1KM82         R R G C H L V T S K I V K E I E Q S G F K C G L A H L F L Q H
UniRef90_R5IMK4         E N E V V T K H E F E M I N I T N E V K K A V A D S G I K N G M V A V I T K H
UniRef90_N2A221         L V F E F D E R E T I K N I T D H V E M L E E S K V R E G L V L V S A L H
UniRef90_K2HHD3                     D G I L T L F V R H
UniRef90_R7TYN1         G L C H V F I Q H
UniRef90_Q2CAS4         L A L Q T R G P G   L Y E F T D D   A A A A I S D A R G E A L L T L F V R H
UniRef90_K5XDN7         M L F L F I Q H
UniRef90_A0A024Q266     S P R R Q G F H L I T D D I T D Q L P E A S V R L G L L H L Q L L H
UniRef90_X1FEQ9         E S G I K E G L C L I N A M H
UniRef90_B3QYC4         F T V A T K G F S D I L D I T G K V H E V I R E S A L R S G L V G V C V I G
UniRef90_Q3IPY0         F T V E T D R E I Q C I D I T D R V T E A L P D D   H D G V T T V A S R H
UniRef90_UPI000344A5A4  E F V V K S K G Q S S F I D V T N E V R E F V Q Q S G V H E G I C T V A T T H
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UniRef90_X1U3T6         M I D I T R K V S T V V K E S G I A D G D A I V Y C P H
UniRef90_S0S622         E L I L E S N G R R T Y H N I T E Q V K A F V E T G V K N G L C L V Q S Q H
UniRef90_B3EQJ3         I K I T T K G F S D I I D L T H L V D D V I S Q S G I N E G I V N I S A I G
UniRef90_UPI00037C53D1  E V E Y L T D K E F Q L I P V T D K V R D F V R D T G I Q N G V V F V I T S H
UniRef90_G5KDD2         E I K L N T D N K I T Y H N I T N E I Q K I L D R S D I R D G I I T V V S P H
UniRef90_R6QVQ9         I K V Q S H G K T T I V D V T P E V K R V I E E S G I K S G L C A V I S P H
UniRef90_UPI0003C7613B  L D I T T G R R E T V H D L T D A C A A F L D E A A G R D G L L N V F T P H
UniRef90_D6Y3W2         I E I D V Y T G T R E R V H D I T R Q C A D F A R E C G   G D G L L H V F V P H
UniRef90_D8PBV6         Q V K M Q G D C R V E N L T G Q V Q A A L K Q T Q L C A G L L T L F I K H
UniRef90_W5JX00         V L H
UniRef90_B7QWS0         M F V Q H
UniRef90_A2C0V1         I D F E T T G Q G   F T D I T K D I N H W I K Y K K L K K G I L L I F L K H
UniRef90_UPI00047167B3  Q L S I S T S G Q G   F I H I T P N V A A V L A D S G L A Q G I V C L S C L H
UniRef90_F4PA99         Q I G L A N I F L Q H
UniRef90_Q017U8         I T V S A G K R G   L I D I T E D V A A V L A E S R C D T G L L H C F C E H
UniRef90_Q017U8         I T V S A G K R G   L I D I T E D V A A V L A E S R C D T G L L H C F C E H
UniRef90_D2B8Y5         I E V V T G S R E R V H N I T A E C E S F V R S C G   G D G L L N V F V P H
UniRef90_UPI0003B5ACB7  F S I N T K P A E G F V D V T P Q L R S A V S G S G   G D G V L H V F V P H
UniRef90_D0ZFE6         R P R G F H L I T A E I I A G L P A R Q V R V R L L H L L L Q H
UniRef90_A6D177         G R V S Y H N I T N E V K N I V R E S G I E N G I C V I Q T A H
UniRef90_X1I8A3         S G I N D G I V N V H V A G
UniRef90_E3GQZ2         Q I S V E S H G N T T Y I N I T P Q V R E A I A K S G I K N G T C S V I S P H
UniRef90_H1AHA1         E I N L T T A N R P S Y H D V T A D V M E A L A I S G I Q D G I C V V S S P H
UniRef90_UPI0003814FD6  L R V T T G G P E G I T D L T G E L K Q L A A G S A V A E G T L H Y Y C G H
UniRef90_U9VI35         L K F D T A D T I D L L N I T S A I Q Q Q V E V A A I R Q G H V V I F S C H
UniRef90_C4VSP9         E L T I N T D G R P S Y H M L T D Q V K A G V K E S G I Q N G M C V V Q T T H
UniRef90_B3QQ85         V R A A L E A T G L K Q T V T L S R H
UniRef90_C1MU78         T L T A P G R G A   H D V T E A I A A G L K A G G V A A G W L N L F I Q H
UniRef90_C1MU78         T L T A P G R G A   H D V T E A I A A G L K A G G V A A G W L N L F I Q H
UniRef90_UPI00046FDA88  L S F E F E E K E T I K N I T N H V R M F L E E S G I R E G V I T V S S L H
UniRef90_A0LTP7         I E I P V A T G S   T L V S D V T D E V E R F C A   G R G D G L L H V F V P H
UniRef90_W7T8Q0         V E I Q I R T G S A E V V Y D L T G D C E R F L A E E G A V D G L L H V W V P H
UniRef90_UPI0003624295  K L T L T S H G R V T Y H E I T E Q V R E H V A K S E I R E G I C V V A S P H
UniRef90_L1IHW6         D I T P E I K E L I K T S G M K N G F V N V I S R H
UniRef90_UPI00032A32BC  K P R G F H L V T D E L L G P I R E A S C N A G L L H L L L Q H
UniRef90_A2C787         I T V I T E G P L A F H R I S E P L Q Q L I E Q H G Y R E G A L V L A G L H
UniRef90_UPI00037065E2  I Q L T S H G K T T F F D I T P Q V K T A I L N S K I K N G I C I V I S P H
UniRef90_U1NGG0         F E I S T N N R L S V R D I T E Q V C D A I P D E A   T G I A T V F I E H
UniRef90_V4QA14         R D S Y F D I T E V N T A L K E S G I Q N G I C L V S T P H
UniRef90_A4TBW5         L D I D T S R R R   F V D L T S A V R D F C A E R G P D A G L C N V F V P H
UniRef90_C1AXD7         E I E V R T G A E P V V Y D L T R E I E K F L A S T G A R D G L L H V W V P H
UniRef90_N6X503         S T R N H P T F H D V T K E V K A A L K R S G V K D G I A V V Y S H H
UniRef90_D3PVE5         E L T T G T K A A R D I S G E C E S F L R E H G A N N G L L T V F V P H
UniRef90_U2DN15         I E L Q T H H H K A   Y D I T A Q V K E I V E R S G V K D G I C T I F C P E
UniRef90_U5VSW5         I T V R T G D Q P V V R D I T G E A E Q F V   S G R G D G L L H V F V P H
UniRef90_C7NLY1         E Y R T G S Q D V V L D L T R D C E A F V A G Q G   D G L L N L F V P H
UniRef90_I5C4U1         L S V S T A G   T G L Y E F T D V D R F V R E A G L L T L F V R H
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                                           50              60              70            80
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UniRef90_X1D175        I T A S V F I N D D E R G   L H H D Y E V W L E S L A P H E P V S H Y H H N R T
UniRef90_C1E171        T S A S L T I N E A D P T A R G D L E N A L N I V P E E W H S T E G P D N A
UniRef90_B0C546        T T T S L A I N E Y E   E R L L E D I K V Y L H K L A P A N Q R Y L H N D L H A
UniRef90_D9Q2L9        T T A A V T I N E A E T G   L M D D I L T A V K R L F E P G G P W K H N D N N A
UniRef90_X1GLZ4                I N E D A D P N V V R D L L M E L N K I V P F S D G Y A H G E G N S
UniRef90_U7TU38        T T T G I A V N E   A L E C L V S D L D Q M L A R I I P E N H P Y V H A R M N P
UniRef90_B3ELF5        T T A F I N I N E Q E T   R L L E D M V T F L K R L A P K D G D Y L H G R D N A
UniRef90_T1JYL1        T S A S L A L N E N W D P D V R E D M E M F L S R L V P E S T P F R H G P D D M
UniRef90_W8S5S3        T S A S L V I Q E N A D P D V Q A D L M G F F D R L V P W L A H V L E G P D D M
UniRef90_K1ZK53        T S S A V F V N E N E   P L L L G D F K K N L E K I F S S R K Q Y K H D D F K I
UniRef90_G2DXM7        T T A F V A L N E R E T   M L Q Q D M L D F L S R V A P P G A G Y G H G R P N A
UniRef90_W7DJN2        T S A S F I V Q E N V D P D V R Q D I L S Y L N D L V P E N R Y Y L H G V D D M
UniRef90_B8KT58        T S A S L L I Q E N Y D D S A R V D L E N W M N R L V P E N D P L Y T H T D D M
UniRef90_E8R9L9        A T A A I V L N E N E E G L I N D I V D K L K D L T E P D S G R W R H N R D N A
UniRef90_T0RPY5        T S C A L T I N E A F D P S A K T D M E N F M K H L A P R N L S F I T H T D D S
UniRef90_H0IZZ4        T S A S L T L N E N T D P D V C L D M D A F I R R L V P D G L T Y F R H P D D M
UniRef90_E9CSU8        T S C A L S L N E N W D A D V R A D M S D A L D R L V P W K G D L Y R H T D D M
UniRef90_T1E143        Y K C F M V M S E N             D T E T F L N R V V P E G P H T L E G H D D M
UniRef90_U2N1H3        T T C S V F Y T E N G D E F L Q V D L N D V L K K I I P N Y P G E E H Y K F N C
UniRef90_UPI00036840A8 T T C S V Y F E E Y M H E Y L Q V D L N N I L E K I I P R Y P A E K W T M L N T
UniRef90_A2BPX5        T S C S L T I N E N A D P N V L R D L K K Y M Q S I V P Y Y K H Y Q E G A D D M
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UniRef90_UPI0002B48606 T S A S L T I N E N Y D S D V Q D T E T F L N K I V P W K H T L E G P D D M
UniRef90_U2DM23        T T S G I S F N P Y M K P E D H Q D I Q Q A L D R L I P M R I D Y A H Q F D N P
UniRef90_M0HE79        T T T G V C V N E   A E S R L L G D I E T M L A E S V P D D G W D H D T D G N A
UniRef90_V7IB50        T T T G V T V N E   S L E C L E S D L S D M L E R L I P E D F P Y A H A R G N P
UniRef90_R5R0E8        T T T G I T V N E   S L P C V E K D L M E C L D R I A P E D Y P Y H H N H Y N A
UniRef90_R7AFZ0        T T T A I M I N E   S L P C V E K D I E L T L E R L I P T D G D Y V H T H M N A
UniRef90_R9LSB8        T T T G V T V N E   A L E C L E S D I A V A L S F A P E D R P Y S H A R M N P
UniRef90_J4KFW4        T T C A V F F E E F G T E F L Q N D L N T V L E K I I P D Q T G W N Q Y Q W N C
UniRef90_I1KM82        T S A S L T I N E N Y D S D V R E D T E T F L N R I V P P W K H T L E G P D D M
UniRef90_R5IMK4        T T T G I M I N E   A L P C V E K D I E M Q L E R I V P K D F P Y V H T H M N A
UniRef90_N2A221        T T S A V F I N D D E E G L I Q D T L E Y L E K T I P D H K V P Y Y R H N K S
UniRef90_K2HHD3        T S C S L L V Q E N A D S D V Q A D L C D W L A R L A P W I R H R A E G P D D M
UniRef90_R7TYN1        T S A S L T L N E N A D P N V R H D M E T F S N H Y I P E N E E Y F L H I D D M
UniRef90_Q2CAS4        T S C S L L I Q E N A D P D V Q R D L L A W L S R H V P D A D H R A E G P D D M
UniRef90_K5XDN7        T S A A L T I N E N F D S D V R R D M D M A L D N I V P E S L N W R H G P E D S
UniRef90_A0A024Q266    T S A S L T L N E N A D P D V R H D M A L Y A E R L A P Q G I E G M H H P D D M
UniRef90_X1FEQ9        I T A S V F I N D N E R G   L H E D Y K R W L E E L A P H E P H N R T G E D N G
UniRef90_B3QYC4        S T A S I T T I E F E   P A L V A D F K E K L E E I A A H D R P T R H G D T W G
UniRef90_Q3IPY0        T T A A V A I N E   A E P R L L G D V E A F L R E N V A D E G W D H D A D G N A
UniRef90_UPI000344A5A4 T T C A V F L E E Y G V D Y L S V D L E R V L T K L V P R H S S K D S Y L Y N G
UniRef90_T0U109        T T C S V I F E E N G D E F L Q V D L N R I L D K L V P N Y P T D P A T I L N G
UniRef90_X1U3T6        T T A A I T I N E N A D P T V P Q D L L L T L E E L I P H S R P G Y R H F E N S
UniRef90_S0S622        T T C S V I F E E N G D D Y L Q V D M N A F L D R L I P R E L S E N T N Y R N G
UniRef90_B3EQJ3        S T A S I T T M E F E   P A L V E D F K E K L E Q L I S S R E H S R H S E T W G
UniRef90_UPI00037C53D1 T T S G I M V N E R   L D C L A I D I E E T L E R L I P T E H S Y A H S H F N A
UniRef90_G5KDD2        T T C S V F F E E Y G N D F L Q L D L N K I L E K I I P N H V S S K T Y N W N G
UniRef90_R6QVQ9        T T C S V F Y N E N G D E F L Q E D L N N A L A K I I P D H V S A D Q Y H Y N G
UniRef90_UPI0003C7613B A T A G V A L I E T G S G S   D D D L L A A L H T L L P A D D R W Q H R H G H G
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UniRef90_D8PBV6        T T A S V L I I E D E   P G I R A D T K A L W E R L I P A D P D W Q H G E D N G
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UniRef90_Q017U8        T S A S V V V G R R G V E F   E N K F E R A L N A I V P F F R H T S E G P D D M
UniRef90_Q017U8        T S A S V V V G R R G V E F   E N K F E R A L N A I V P F F R H T S E G P D D M
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UniRef90_U7TU38           R T V L V M V
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UniRef90_T1JYL1
UniRef90_W8S5S3           R R V A A H F L
UniRef90_K1ZK53           R E I S V
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UniRef90_B7QWS0           R N V V A H L
UniRef90_A2C0V1           R S L Q L H A I
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UniRef90_F4PA99           R R V V I T V
UniRef90_Q017U8           R R L T V T L
UniRef90_Q017U8           R R L T V T L
UniRef90_D2B8Y5           R Q V R L S F L
UniRef90_UPI0003B5ACB7    R T I
UniRef90_D0ZFE6           R R I V A T I
UniRef90_A6D177           R T R K F D V M
UniRef90_X1I8A3           R K I Y C M I V
UniRef90_E3GQZ2           R V R Q C K I V
UniRef90_H1AHA1           R R R K C N I V
UniRef90_UPI0003814FD6    R E L L V R L
UniRef90_U9VI35           R Q V L I Q I
UniRef90_C4VSP9           R Q R H V F I M
UniRef90_B3QQ85           R E V L V H I
UniRef90_C1MU78           R S V V L T L
UniRef90_C1MU78           R S V V L T L
UniRef90_UPI00046FDA88    K K I C I K I M
UniRef90_A0LTP7           R R V R L S F L
UniRef90_W7T8Q0           R S V R F S M I
UniRef90_UPI0003624295    R D R T C H I
UniRef90_L1IHW6           R T V G I Q V
UniRef90_UPI00032A32BC
UniRef90_A2C787           R Q V G V S F L
UniRef90_UPI00037065E2    R T R K C K I I
UniRef90_U1NGG0
UniRef90_V4QA14           R K V Q I T I M
UniRef90_A4TBW5           R S V R L S F V
UniRef90_C1AXD7           R K V R F S F L
UniRef90_N6X503           R Q C Q V Q I I
UniRef90_D3PVE5           R Q V R L T F L
UniRef90_U2DN15           R R V C V N V M
UniRef90_U5VSW5           R Q V R F S F L
UniRef90_C7NLY1           R K V R L S F L
UniRef90_I5C4U1
UniRef90_C5EI33           R K V R V Q L V
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UniRef90_S3BBH2           L R L T T G S S E T V H D L T R D C E T F L A D A Q G R D G L L N V F V P H
UniRef90_UPI00029AEC58    E L R F S T G G E I D L V D I T G E V E R A V E E S G I E N G Q V L V F V P G
UniRef90_R9MRK7                   S T G G R P S F H D I S E K V K E A V M H S G A K Q G I C T I Y S H H
UniRef90_Q0SG26           E I E V R T G A E P V V H D L T R E I E K F L A S A G A G D G L L H V W V P H
UniRef90_K4R5Y7           I E L T V E S T G L N S H Y D L T D R I A A A L Q E H G T G D G L A G V F A H H
UniRef90_W9IV61           Q F T L P A K S R G S   Y L I T D Q V V S S L P E R D Y K V G L L N L F V Q H
UniRef90_UPI00026291C7    E I E V K T G G R A V V H D L T R E A E A F L A E A D A S D G L L N V F V P H
UniRef90_UPI00035D6A66                                                           I R N G F A V V Y S K H
UniRef90_E3GNW0           Q I E L E S H G R P T Y F D I T P Q L K K I I Q E S G I K D G I C A V S S P H
UniRef90_UPI0004672E76    E I E V T T G R S E V V H D L T P Q C A A F L R E A G G R D G L L H V F V P H
UniRef90_Q05S49           L N L T T C R P F E C I A L T Q A V H D F I R V H G E R D G A V V I A S Q H
UniRef90_D9T8D1           I T V R T G S R P T V R D I T S E A E R F V   S G A G D G L L H V F V P H
UniRef90_R2PDV0           Q L S L D T Q G K V T Y L D I L Q L R K A L K Q S G I K D G F C A I T T P H
UniRef90_A0A024JY17       L E V D T A S R R   I V D L T D A V R R F C F S Y G   D G L C N V F V P H
UniRef90_S3X9E6                           S F L D I T E Q V R A A V A E S G I A N G I V A V M S P H
UniRef90_V6KY39             L E I T T G S G E S V T D L T P E C E S F L E R A A R R D G L L N V F V P H
UniRef90_F0Z2Z4                   G S R P S Y H N V T E Q V R A I A A A S G I E N G M C V V Q S P H
UniRef90_UPI00036C49E3    K I E I N T G A R E V V H D L T D R C A E F L T A A E A D E G L L H V W V P H
UniRef90_Q0I6N8           L S L R T E A S F Q C L P L T A D L R R F V Q V H G E Q D G A V V V S G Q H
UniRef90_R6V037           K I K L Q S R D R V S F H D V T E Q V K E A V K R S G V K D G I A V V Y S H H
UniRef90_G4T7Z6                   N K R K G C H L I T N E V V N A I Q D Q N V P I G I L H L F I Q H
UniRef90_Q2J8H9             L S V R T G R R E S V V D L T P D A R R F L A G S G   D G L L S V F V P H
UniRef90_L8WHW0           I T L G R R S K G   C H L V T D E I L P Q I S E R Q T P V G I L H L F I Q H
UniRef90_G4L703                   G S K V T Y S D I T D Q V R Q E I Q E A G V Q D G L C V V S S Q H
UniRef90_F8B293           S V H T G G T E C V R D L T G H A R R F V A   G R G D G L L S L F V P H
UniRef90_F1T614           T V Q T A G K P T Y V D I T D K V N E I V V A S G I K E G T V T V I S C H
UniRef90_S2T4W7           L D L T S N G R R S F H N I T D N V K K F V D S S G V K N G I C V V Q S P H
UniRef90_S3WR80           I Q V R S K G R P T Y F E I T N D V R R I I T E S G I K N G I C T V A S T H
UniRef90_X0Z897                                                               V H V A G
UniRef90_E1R9X4           V E Y S L E   G R M S K L L I D D T I K Q V V S E S G I R E G Y V M V F V A G
UniRef90_S3ZND9           L N V T T G S A E T V V H D L T H E C E S F L R E A A R R D G L L N I F V P H
UniRef90_UPI0002DC63C6    I E L E T R P K I Y F F N I T D E I K A R I A E S G I S N G T V T V Q S L H
UniRef90_UPI00024935EF           Q G R P S Y H R I T D Q V I D M V E N G G I K N G I C L V Q T A H
UniRef90_UPI00039FD725     I E V T T G G H E T V H D L T D A C V R F V S G A G   G D G L L H V F V P H
UniRef90_D0GLQ7           I V V K T S N R V S Y H C I T K E T K E L I E K S E I K N G I V V L S S S H
UniRef90_L8EV46           L D L T T G T K E A V A D I T D D C A A F L R D A D G A D G L L N V F V P H
UniRef90_J7LID5           L E L H T G G S E S I T D I T G A C G D F V A E S G   D G L L N V F V P H
UniRef90_F0Z039           L S F E F E E K E T I K N I T N H V K M V L E E S G V R E G I I V V S S L H
UniRef90_UPI0003B38008    I R V H T G H Q P Q V R D I T A D C E V F L A E A A E T S G L L N V F V P H
UniRef90_R7N3U6                   T F F D I S D K I R K A I Q N S G A K S G I C V V Y S H H
UniRef90_R8VSX7           M T K T Y K T R A H M G M I D I T E D F Q A A V R E K G I S S G T I T G F T T G
UniRef90_U2VJ01           T V E T S G K P T Y V D I T K Q V D A L V Q E S D I K E G T V T V I S C H
UniRef90_I4ETY7           V R T G G V P S I V D L T D E C A E F V R S E G   D G L F Q V F V P H
UniRef90_X0ZAG1           E I A I K T N T Q T Q I L D I T A Q V Q V K V V S E S G I A E G L C C V F I P H
UniRef90_E8W0Z0           L N V T T G R T E T V L D L T D D C T Q F L R A S H G R D G L L N I F V P H
UniRef90_UPI00037F3D7C    L R I T T G A G E T V H D L T A D C D A F L R E A D G R D G L L N V F V P H
UniRef90_S4P3V2           K L N L R P Q H R G   V H L V T E E I L K Q V P E S Q F A V G L C H I Q I M H
UniRef90_R5ZCB7           I E L Q T Q G R N S Y H D L R D A L I E T V E K S K I K D G I L V V S S A H
UniRef90_U2QQF2                           S F L D V T G Q V R G A I A A S G I G N G I V A V M S P H
UniRef90_A1SKN7             S Y R T G D R E A V V D L T E D C R G F V A   G R G D G L L Q V F V P H
UniRef90_UPI0003FA76B7    L R V T T G R R E T V R D L S S E C A A F L H E I G A R D G L L N V F V P H
UniRef90_V5HSP3           K I N L R P Q H R G G   H L I T D E V V K Q V P E S Q F A V G L F H I Q I M H
UniRef90_UPI000367C7E6    L H L T T G S T E T V T D L T S D C E Q F L A R A A G R D G L F N L F V P H
UniRef90_C6PUU8
UniRef90_UPI00036C0A87    E I E M R T G D R E V V R D L N T E C A K F L R G V N G D E G L L H L W V P H
UniRef90_R7ESI0           E L E L Q S R G W I T F H D V S K E I R E I V E E S G V K N G T V C I A S H H
UniRef90_UPI000234FA8E                                                         L N M Q H
UniRef90_E4N1J8             L D I T T G R D E V A L D V T D R C H A F L R E A D G R D G L L N V F V P H
UniRef90_UPI0003813752      V Q T G P E Q V V H D L T D L C E R F L A D T A R S D G L L H V F V P H
UniRef90_E1QXX5           G K P T Y V D V T N E V A D I V S W S G I R E G V V H C I S C H
UniRef90_D9PJP5                                                                       M H
UniRef90_B7G8P7             P P Q Q K I S V E D L T P I L Q E L L Q H S G L Q Q G V V N V I S R H
UniRef90_UPI0003509376       P P Q R R G C H L I T P K I V N E I R D A E F K C G M A H L F L Q H
UniRef90_UPI00030BEB71    L Q L T T G S T E T V L D L T H R C Q K F L A D T P G A D G L L N I F V P H
UniRef90_D4MNL3           F T I T I P S K T G Y M D L T E D V M E C V R R A N I R N G I S I S S M H
UniRef90_N9X6P4                   G F T N I T Q V E A E I Q K S G R T E G C F L V C S L D
UniRef90_UPI00036D083A    E L I V R S N G R A S Y H E I T K E V R A V I E K S K V K N G I C V I T T P H
UniRef90_X1SM03             S L Q S K G E C D I I D I T P Q V E E R V A E T N I K N G I A T L F V A G
UniRef90_B8D0P5                                                                       M H
UniRef90_K8F4X6           F N L S P P P R K R G A F   L F T N T F T K E T R E Q N Y A T A V C H V C L V D
UniRef90_Q7VD92           E L S L K T H G   E G F T D I T N D I N S W I K K K K I R K G I L I I T S K H
UniRef90_X1TM52
UniRef90_G4KR63           E F F V T T E D E Y Y T A Y   G D T V K G F I A A S G V Q N G I V S V V T A H
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UniRef90_D2R5Q1                                                                       M H
UniRef90_E2Q997                           V I D L T A A C E D F L R S A E A R D G L L N V F T P H
UniRef90_UPI0002E95F57
UniRef90_K0TLC8           Q P R Q A V S V E D L T N S I R E F I Q S T T M K S G F V N V I S R H
UniRef90_UPI000372CAE1                                                         M N A M H
UniRef90_UPI00036FDB42               D I P R Q C G D F V A E T G   G D G L L N V F V P H
UniRef90_X1PK52           I D L Q S K G N P T Y H D V T K K V K E F V A S S G I K N G I C V V Y S Q H
UniRef90_K2CYP1           E I K F K S T D H T Y L K D I T Q D I N N A I K K A K V S I G F V F V N T K H
UniRef90_G5IJJ8                   R P G M G E I T D T V M A A I V R S G I R E G V C V V T A L D
UniRef90_UPI00042B2C4E    I T L P P H R R G C H L V T S Q I L R E I R L S E F K C G L A H L F L H H
UniRef90_K2DKQ5           E L K F E S K E H T Y I E N I T K I V N E A I K K S K I K Q G F A F I N S K H
UniRef90_K2DJ54           E I K F D S T N H T Y L I K N I T D V V N E A I K A V K D G L A L I N S K H
UniRef90_UPI00040F54C6    L Q L K A R S R G   F H L I T D E I E Q Q L P Q H E L S V G L L H L F I Q H
UniRef90_G2FZS0           E I H L Q T K N H D E M I D I T A Q I Q D F L T T Q N I K D S L V V V Y C P H
UniRef90_M8BL61                   Q R R G C H L I T P K V L R E I E L S G F K C G A H L F L Q H
UniRef90_G2IJR8             I R V R T P G R   A L V T D E I T S W V T G Q G M N E G L L T L L C R H
UniRef90_X1M3H0           I I L Q T K G N C D I L D I T S Q V M K K V E S G V S N G M V T L F V S G
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UniRef90_S3BBH2          A T A G I A I L E T G A G S D D D L L S T L R D L L P P D D R W R H R H G S P G
UniRef90_UPI00029AEC58   A T G A V V T I E H E   P G L L E D F K R A L R E L V P A G K G Y L H D D D N A
UniRef90_R9MRK7          T T C S V M I Q E Y G L E Y L Q Q D L C N L M E K L V P T C R T E G Q Y M H P G
UniRef90_Q0SG26          A T A G L V V I E T G A G S   D D D L L R A I D E V L P R D D R W I H R H G S H
UniRef90_K4R5Y7          S T I G L T V M R Y E P G A V Q   D L L R T L E R I A P Y L H E L T T A D P N G
UniRef90_W9IV61          T S C A L S L N E N W D S D V R E D M S D A L D R I A P A Y R H D A E G P D D M
UniRef90_UPI00026291C7   A T A G L A I L E T G A G S D D D L L A A L D E L L P R D N R W R H Q H G S K G
UniRef90_UPI00035D6A66   T T A A I R I N E N E   P L L L Q D M E E F L G K L A S R E E N Y R H N D F N G
UniRef90_E3GNW0          T T C A V F F E E F G D E F L Q V D L N N G L N K I F P R H G G D R T Q L F N C
UniRef90_UPI0004672E76   A T A G V A L I E T G A G S D D D L L A A L R D L L P A D D R W R H A H G S R G
UniRef90_Q05S49          T T T A V I V N E M E   E R L L I D L E Q W L S Q L A P A S A V W K H N P R N A
UniRef90_D9T8D1          A T A G L A I I E T G A G S D D D L L R A L D D L L P T D D R W R H R H G S P G
UniRef90_R2PDV0          T T C S V I F E E Y G D E F L Q V D Q N R I L D K L V P R Q Y T E S D Y L Y P G
UniRef90_A0A024JY17      A T A G V A I I E T G A G S   D D D L V D T L E R L L P R D D R Y R H A H G H G
UniRef90_S3X9E6          T T C S I Y Y D E D G T D Y L Q H D L G M V L E K I I P A Q Q D F R R N L L N A
UniRef90_V6KY39          A T A G V A V L E T G A G S D G D L L T V L R D L L P A D D R W R H R H G S P G
UniRef90_F0Z2Z4          T T C S V I F E E N G D E F L Q V D L N R I L D R I I P R E R T E D M E Y R N G
UniRef90_UPI00036C49E3   A T A G V A V L E T G A G S   D D D L L A V L E Q L L P R D F R W H H R H G H G
UniRef90_Q0I6N8          T T T A V I I N E M E   E R L L M D L K R W L S Q Q A P P G A D W K H D P R N A
UniRef90_R6V037          T T C S V I T Q E T G L E T L Q Q D L V N V F E E W I P T C R Y E G M Y L H N T
UniRef90_G4T7Z6          T S A S L T V N E N C D P D V R S D M D M A L D T I V P E S L E W T H V D E G P
UniRef90_Q2J8H9          A T A G V A I F E L G S G S D A D L L A A L A D L L P A D G R W R H A H G T H G
UniRef90_L8WHW0          T S A A L T V N E N Y D P D V R K D M S A L D Q I V P E S M P W L H T D E G P
UniRef90_G4L703          T T C S V I F E E N G D E L L Q V D L N R I L D K L I P R Y P N D L T T I L N A
UniRef90_F8B293          A T A G V A L L E L G S G S   D A D L L A T L D E L L P T D G R W R H A H G H G
UniRef90_F1T614          T T C A L F S D E Y D H D F L H A D L N D G L Q K I F P E Q K D W S T Y R W N G
UniRef90_S2T4W7          T T C S V I F E E N G D E F L L V D M S R L M D K T I P R Y K G D D G T I L N G
UniRef90_S3WR80          T T C S V F F E E Y C H E Y L Q A D L N E G L D K I F P R C M T N N Q Y Y H P G
UniRef90_X0Z897          S T G A I S T V E Y E P G L V Q H D I E E F L E K I I P Y K K N Y A H H K T W H
UniRef90_E1R9X4          C V A A L A V T E Y E P G I V K H D L D Y L F E K G M P Y K H H E T W H D D N G
UniRef90_S3ZND9          A T A G V A V L E T G A G S   D S D L L A A L H T L L P A D D R W Q H R H G H G
UniRef90_UPI0002DC63C6   T T C A I F F E E N G T D Y L Q L D L N R C L R K I F P Y Y P G P K H M N R N G
UniRef90_UPI00024935EF   T T C S I Y F D E Y M H D Y L T V D I D N L L E R I V P R Y P A E K W S M L N T
UniRef90_UPI00039FD725   A T A G V A I L E L G A G S D D D L L A A L G D L L P A D D R W R H A H G S R G
UniRef90_D0GLQ7          T T C S L F F E E Y M H E Y I Q V D I N N I M D K I V P K C P Q E K W T M L N T
UniRef90_L8EV46          A T A G I A I I E T G A G S D D D L L T A L A D L L P A D N R W R H Q H G S P G
UniRef90_J7LID5          A T A G V A I I E L G A G S D D D L L A S L D D L L P A D D R W R H K H G S Q G
UniRef90_F0Z039          T T S S I F V N D D E E G   L I K D T L E F L E Q M V P E Q K E P Y Y L H N K S
UniRef90_UPI0003B38008   A T A G I A I L A T G A G S   D E D L L A I L Q S L L P A D D R W R H R H G H G
UniRef90_R7N3U6          T T C S I M I Q E Y G L E Y L Q Q D L C N V M E K L V P T C R S E G Q Y M H N T
UniRef90_R8VSX7          G V A G L T T L E F E P G M V H H D L K A A M D R V I H Y H H H D T W H D D N G
UniRef90_U2VJ01          T T C A L F S D E F D H D F L Q A D L N D G L Q K I F P E Q K D W R T M L W N G
UniRef90_I4ETY7          A T A G I A V I E T G A G S   D D D L L A Q L D V L L P R D G R W R H R H G H G
UniRef90_X0ZAG1          T T A G V T I N E N A D P S V K Q D I V M E L N K V I P F D D N Y S H
UniRef90_E8W0Z0          A T A G I A I L E T G A G S   D D D L L T A L Q T L L P A D D R W R H R H G H G
UniRef90_UPI00037F3D7C   A T A G V A I I E T G A G S D D D L L A A L H D L L P A D D R W S H R H G S P G
UniRef90_S4P3V2          T S A S L A L N E S W D P D V R D D M E M M L N K I V P P Y R H S C E G P D D M
UniRef90_R5ZCB7          T T C S L Y F D E F G D E F L Q V D I N E T M E K L A P R M P A E K W V M L N T
UniRef90_U2QQF2          T T C S V Y Y D E W A H D T V Q H D L N R V Q T R F P P S D G Y S Y P G T R H F
UniRef90_A1SKN7          A T A G I A I I E T G A G S D D D L L A A L A D L L P A D D R W R H R H G S R G
UniRef90_UPI0003FA76B7   A T A G V A I I E T G A G S D D D L L D A L G D L L P R D D R W R H Q H G S T G
UniRef90_V5HSP3          T S A S L A L N E N W D P D V R D D V E N F M N K L V P E N L P Y Q H G P D D M
UniRef90_UPI000367C7E6   A T A G I A V L E T G A G S   D D D L L S A L H T L L P A D D R W Q H H P G H G
UniRef90_C6PUU8                                          N K T F P K S G D Y L H I E G N S
UniRef90_UPI00036C0A87   A T A G I A V L E T G A G S D E D L L A T L R D L L P A D D R W R H R H G S P G
UniRef90_R7ESI0          T T C S V M V Q E F D L E Y L Q H D L L D I M R K L V P D F R E E H Q Y R H N T
UniRef90_UPI000234FA8E   T S A S L T I N E N Y D S D V Q A D T E T F L N R I V P P W K H T L E G P D D M
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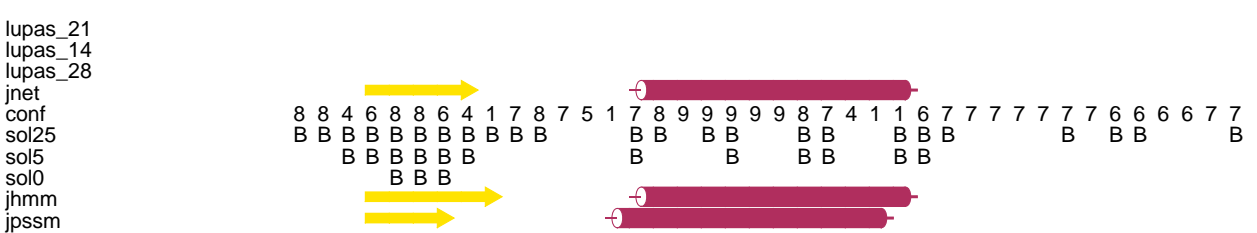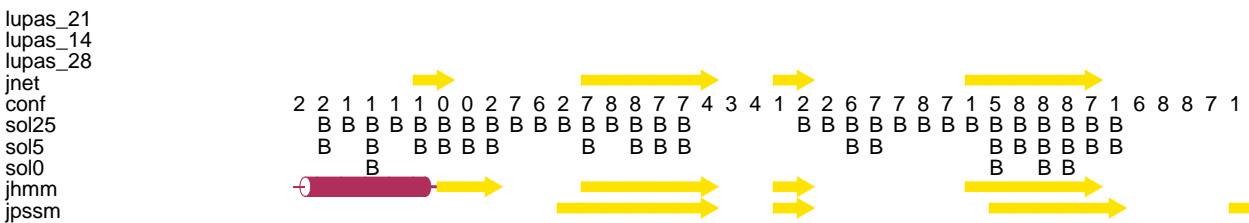
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UniRef90_X1MMD3   I T F Q T E G N C D I I D I T P Q V A G K V E E S G V N N G I I T L F V C G
UniRef90_K6YTI0   I V L S P K S R G   Y H L I T N E V I D Q L E L R Q V K V G L L H L F I Q H
UniRef90_UPI00036C8470   T V H T G R Q D R I V D L T A   A A A E F A A G R G D G L L S V F V P H
UniRef90_U5GH56   P H R R G C H L I T P K I L N E I D L S E F K S G L A H L F L H Q
UniRef90_X0YI27
UniRef90_UPI00046F7104   Q L T L   A P K R R G F H L I T R E I V D E L P E R N I S T G L M H V Q I L H
UniRef90_S2EKC5   L T F N V K T R R D F I N I T P D I R K L V L K S K I Q E G L C L V N A M H
UniRef90_J7QFW3   L R I D T S G R G   F Y E F T E A V R D F A R G A R M T Q G L A T A F C R H
UniRef90_H0ELY7   L T L P S R S R G   C Y L I T S T I T D Q V P A K D Y K V G L L N L F I Q H
UniRef90_E0SNL8   I D I T N I V E S L A N K Y K L D N G L A Y V F T P E
UniRef90_W6UN14
UniRef90_K0KGT8   K I S L K P R S R G A   Y L I D D E I N S A L P E R N Y K I G V L H L F L Q H
UniRef90_A0A024TW04   E I V L T A P S R G   F H L V T D E V Y K Q V P E R S F T V G M A T L F V K H
UniRef90_UPI00046EC7F8
UniRef90_K8YRP6   S S P S G I S L H D I T P Q L R Q A V R E S G V V E G W V H I V S R H
UniRef90_X1N2X7   I R L N T K R A G D L V N I T D K I A Q L L Q S S K L E N G N V T V F N I G
UniRef90_G0G1R2   E I E V R T G S E A V V H D L T H E A E A F L R D A D A T D G L L H V W V P H
UniRef90_UPI0003065576   I I E I E T E P G I H I Y N I T P Q I E A L L A S Y P I Q N G Q I L V F S R H
UniRef90_K7MBP3   I I T L P P L K R G   C H L I T S K I V K E V R Q S E Y Q C G L A H L F W P D
UniRef90_A3DKS7   V T D L T D Y V I S Y I I K H N I R N G M V T V Y T P S
UniRef90_D7DCB9   V N L V I R T F G P M K Y F P L R R I I E E E I E D T D T N R G V A T I H A K G
UniRef90_X7ZK67   L E V D T A R R R   V V D L T G A V R S F C G   G H R D G L C N V F V P H
UniRef90_V4ZX21   I A H I A V V S
UniRef90_M2Y266   E I E V R T G S V A V V H D L T K D A E A F L R D A D A E D G I L H V F V P H
UniRef90_C5BF03   R P R G F Y L I T A E I V G L P V W C Q V P V E L L H L L L Q H

lupas_21
lupas_14
lupas_28
jnet
conf   2 5 8 9 9 6 4 8 8 8 5 5 7 7 7 5 0 1 7 8 9 9 8 8 6 4 3 7 8 8 5 1 6 8 8 9 8 6 4 8
sol25   B   B   B   B B   B B   B B   B B   B   B B B B B B B B
sol5   B B   B B   B   B   B B B B B B
sol0   B
jhmm
jpssm

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                                    50          60          70          80
UniRef90_X1MMD3          S T A G V T T I E Y E   S R L L R D F K D M W D R M I P R S I S Y E H
UniRef90_K6YTI0          T S A S L S I N E N A D P T V R Q D L E T H I N K M V P E N M A Y Y L H D Y D M
UniRef90_UPI00036C8470   A T A G V A I I E L G A G S D E D L L A A L A T L L P A D D R W R H A H G S R G
UniRef90_U5GH56          T S A S L T I N E N Y D S D V R D D T E T F L N K I V P E I C P W K H T L E D I
UniRef90_X0YI27            T A S V S T T E Y E   P A L V E D V R Q Q L E E F I P A S K H S R H S Q T W G
UniRef90_UPI00046F7104   T S A S L T L N E N A D P D V R H D M A A F L N D R V P G N L P Y F R H T L E G
UniRef90_S2EKC5          I S A S V F I N D D E S G   L H Q D F E K W L E S L A P H E P I N Q Y K H N N T
UniRef90_J7QFW3          T S A S L L I Q E N A D P T V L R D L E A V F A R L A P E G A D Y A H G A D D M
UniRef90_H0ELY7          T S C A L S L N E N W D E D V R A D M G D A L D R I V P
UniRef90_E0SNL8          K K C S V T M I E Y E   P E L L A D L E E F M K R L K C V E L
UniRef90_W6UN14                                R D D I E M L L N R L I P E K L N Y K H G P D D M
UniRef90_K0KGT8          T S A G L S L N E N W D S D V R K D M T T A L N E L L P
UniRef90_A0A024TW04      T S A S L S L N E N C D P D V R T D M E G A I N R I V P E S W N R D
UniRef90_UPI00046EC7F8                                        H G K Y R R P Y D V H L S R N D D M
UniRef90_K8YRP6          T T T A V T I N E C E   S R L M D D I R Q F L L K L A P P Q Y P Y L H
UniRef90_X1N2X7          S T A A I T T F E F E   P G L I E D V Q E M Y E K I V P S N R
UniRef90_G0G1R2          A T A G L A I L E T G A G S   D E D L L T A L D E L L P R D G R W   R H R H G S
UniRef90_UPI0003065576   T T T A L A I N E Y E   E R L L E D I K V Y L Q K L A P E S A R Y L H N D L H
UniRef90_K7MBP3                                                                          D M
UniRef90_A3DKS7          Q Y S Y I I L T E Y E   P N L L S D L E F F L E K L I G K R V I V D
UniRef90_D7DCB9          A T P G I I V I S     K D D L D Y F D Q I I K N I I P I T G W K H G N A
UniRef90_X7ZK67          A T A G V A I I E T G S G S   D D D L V D T L E R L L P   R D D R Y R H A H G S
UniRef90_V4ZX21          P G V A I S V N E N C D P T V R G D M V T A L N L L S E K T D F P S H V V W P
UniRef90_M2Y266          A T S G L A I L E T G A G S D E D   L L T A L D D L L P R D G R W R H Q H G S
UniRef90_C5BF03          T S A S L T L N E S C D P S V R Y D M D G Y F S R T A A D A T P Y A H G D D E M


lupas_21
lupas_14
lupas_28
jnet
conf     8 8 4 6 8 8 6 4 1 7 8 7 5 1   7 8 9 9 9 9 9 8 7 4 1 1   6 7 7 7 7 7 7 6 6 6 6 7 7
sol25    B B B B B B B B B B B     B B     B B       B B     B B B     B     B B       B
sol5         B B B B B B         B         B         B B     B B
sol0         B B B
jhmm
jpssm
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	90	100	110	120

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UniRef90_X1MMD3
UniRef90_K6YTI0           P A H I K A S
UniRef90_UPI00036C8470    H S H V M P A I V P P S L T V P V L D G Q L A L G T W Q S V A L V D L N D N F E
UniRef90_U5GH56           D
UniRef90_X0YI27           D S H M R A T F M G P G I T V P L S S G K L V L G T W Q Q I I V I D H D N P R S
UniRef90_UPI00046F7104    D D
UniRef90_S2EKC5           D A H L K R Q I
UniRef90_J7QFW3           P A H I R A A L T Q T Q
UniRef90_H0ELY7
UniRef90_E0SNL8               G T C D A L I G K S V V I P I H S G K P F L G T F K R I V F I D T S N A G E
UniRef90_W6UN14           P A H A K H A I L S G S V T I P I T D G K M N L G T W Q G V W F I E H R N Q K S
UniRef90_K0KGT8
UniRef90_A0A024TW04
UniRef90_UPI00046EC7F8    P A H I K A S L L G T Q L T L A V E D G R L A T G T W Q G I W L G E H D H G G S
UniRef90_K8YRP6
UniRef90_X1N2X7
UniRef90_G0G1R2           P G H G R D H
UniRef90_UPI0003065576
UniRef90_K7MBP3           P A H I K S S M F G C A L M I P I S N G K L N M G T W Q
UniRef90_A3DKS7                       G L L G K S V V L P I I D H E L D I G V F K R I I F L D T R N S G N
UniRef90_D7DCB9           Y A H L R S T I M S T T Q T I Y Y E N K K L Y M P D N Y E V Y F V E T R P V H N
UniRef90_X7ZK67           K G H G A D H L L P R S L P L
UniRef90_V4ZX21               L L V G R S L A V P I G G A H L A L G A W Q G V Y V V D G R G G G D
UniRef90_M2Y266           P G H G R D H
UniRef90_C5BF03           P A H I V S S L L G V S L T V
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lupas_21
lupas_14
lupas_28
jnet
conf    2 2 1 1 1 1 0 0 2 7 6 2 7 8 8 7 7 4 3 4 1 2 2 6 7 7 8 7 1 5 8 8 8 7 1 6 8 8 7 1
sol25       B B B B B B B B B B B B B B B B           B B B B B B B B 1 B B B B B B B
sol5        B   B   B B B B     B   B B B           B B           B B B B B B
sol0                    B                                         B     B B
jhmm
jpssm
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UniRef90_X1MMD3
UniRef90_K6YTI0
UniRef90_UPI00036C8470   R T V R L S F L
UniRef90_U5GH56
UniRef90_X0YI27   R E V F I Q V M
UniRef90_UPI00046F7104
UniRef90_S2EKC5
UniRef90_J7QFW3
UniRef90_H0ELY7
UniRef90_E0SNL8   K S V V I
UniRef90_W6UN14   R
UniRef90_K0KGT8
UniRef90_A0A024TW04
UniRef90_UPI00046EC7F8   R R L L V T L
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UniRef90_K7MBP3
UniRef90_A3DKS7   K E V V V
UniRef90_D7DCB9   H R R T I H L I
UniRef90_X7ZK67
UniRef90_V4ZX21   V D L V L T L L
UniRef90_M2Y266
UniRef90_C5BF03

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sol25   B   B B B
sol5   B   B
sol0   B
jhmm
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