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                         1                   10                  20                  30                  40
QUERY                    M K K A V I N G E Q I R S I S D L H Q T L K K E L A L P E Y Y G E N L D A L W A
UniRef90_UPI00028A1773   M N E I R I N G R A I T S R E Q L H S Q L K E Q L G L P D H Y G R N L D A L W D
UniRef90_K5A638          R V V E L D G K A I S S R N A V H D V L S E V L E L P D Y Y G R N L D A L W D
UniRef90_U1Y9A9          L K K I I V D G K A I T S M D E L H N T L H L Q F G F D Y Y G R N L D A L W D
UniRef90_R0MP02          M K K I V V D G K D F E N K E G L H D V L K D K L D L P D Y Y G K N L D A L W D
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UniRef90_UPI0037220C7    M R T I T I D G T Q I E S A Q M H L K E A L G L P D Y Y G G N L D A L W D
UniRef90_UPI00036565BF   M K E V I L D G A D M T T L A D L H T Q L A E R L E L P D H Y G A N L D A L W D
UniRef90_A0A059NB93      M K K V Q L D G A A C R S Q E E L H D Q L K T V L H L P D Y Y G K N L D A L W D
UniRef90_T5HB73          M K Q V T L K G E K I R S V S D L H K E L K E Q L E L P D Y Y G E N L D A L W D
UniRef90_E8LEH3          M R T I T L D L E R M T S V P A L H K Y L R S A L A L P V Y G A N L D A L Y D
UniRef90_F8FC13          M R S V T L D G T R M A T K E E L H R E L K E K L G L P E H Y G N N L D A L W D
UniRef90_M1KGA9          M I V V I I D G K D I T S T E A L H R I L K D Q L D F P D F Y G E N L N A L W D
UniRef90_A8FBQ0          M K K V Q L D G A L C R T Q E E L H D Q L K T V L H L P D Y Y G K N L D A L W D
UniRef90_E3DSA7          M N K I I I N G E Q I R D V K N L H R Q L K Q D L E L P E Y Y G E N L D A L W D
UniRef90_UPI000312BC37   M R T I I L D G H H Y E T R D Q L H D A L K E K L E L P D Y Y G C N L D A L W D
UniRef90_C2STR8          M E I V K L D G R K F T S K E V L H Q T L K K Q L D F P S F Y G E N A D A L W D
UniRef90_F0K917          M K I T I D G K E F K D K D N L H R I L K K E L K F P E Y Y G K N L D A L W D
UniRef90_UPI000477BCCB   M K T V I L D G D F S T I E E L H R T L Q Q V L D L P D H Y G G N L D A L W D
UniRef90_UPI000248D8D6   M R D I L L D G R E I D N V G Q L H A V L K E A L E L P E Y Y G N N L D A L W D
UniRef90_R5YGX9          M K Y I S L D G N L F K D V A I T H K I L K E K L E L P D Y Y G E N L D A L W D
UniRef90_UPI0003625ACA   M E I I Q L D G R K F T S K E V L H K I L K E K L D L P N Y Y G E N A D A L W D
UniRef90_M1WX21          M S S V E L N G K K M R S I Q S L H W E L K K K L D L P D Y Y G E N L D A L W D
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UniRef90_UPI00030C29E3   M K I V E I P G E R I G T E Q E L H D F L K S E L D F P S Y Y G G N L D A L W D
UniRef90_W8THF5          V V I I N G N N I H G K E E L H D T L Q A Q L G L D Q T Y G R N L D A L W D
UniRef90_UPI000365F580   M R T V W I N G E D F S T I Q E L H E Q L K S K L E L P E F Y G G N L D A L W D
UniRef90_J8MSW5          M E T I Q L N G R K F T S K I L K N K L D L P N Y Y G E N A N A L W D
UniRef90_UPI0003B5EB09   I V R L L G A Q M T Y E T L H A H L K E R L G F P D Y Y G E N L N A L W D
UniRef90_N2AIC7          M R I C I L D G E T I L D K D M L H D T L A A A L D F P D W Y G R N L D A L Y D
UniRef90_W4C7V6          M N T V I L D G E D F A S S A E L H Q Q I K D K L K L P D F Y G G N L D A L W D
UniRef90_Q39SD8          K H C T I S G R A V H S L D E L Y D E I A R Q L P L P D Y F G R N L D A L W D
UniRef90_V7I4J4          M R K A I L N G K R M I S R E V A H A Y L K R K L G F P D Y Y G R N L D A L W D
UniRef90_O07938          M R K I I I D G R D F E N I E V L H D D L K D K L D F P D Y Y G R N L D A L W D
UniRef90_UPI0003F9BD48   M K R V I L N G E E F S S T A E L H E L L K Q K L E L P D F Y G A N L D A L W D
UniRef90_S9UEU7          Q I I E L D G R L L T S I T K L H D V L S E V L E L P N Y Y G R N L D A L W D
UniRef90_W8YXZ6          N I L L D G S K L A T I E A F H E A L S R G L H F P D Y Y G R N L D A L Y D
UniRef90_UPI00047E25D3   M N I I E L S G E E F K T K T D F H R I L K K R L D L P D Y Y G S N L D A L W D
UniRef90_R8QBN8          M E I L R L D G R K F T S E E I L H K V L K K E L D L P N Y Y G E N A D A L W D
UniRef90_R6IE72          M K T V T L A L A R M Q S I R Q L H K Y L R A E L E L P D Y Y G E N L D A L Y D
UniRef90_W4BLK9          M S I I Q I N G D H S K E E L H Q I L Q N Q L E L D E S Y G G N L D A L W D
UniRef90_R6AQA0          K N I R I D F T A I A G I T D A H L R I A E A L Q F P D H Y G K N L D A L F D
UniRef90_A6LRA1          M N K V V I Q G S K L T D R N M L H Q I L K Q E L K L P A H Y G E N L D A L W D
UniRef90_B9Y2Q3          M K R A L I D G R S C R D K Q T L H Q Q L K D Q L I F P D Y Y G K N L D A L Y D
UniRef90_I2BM89          I K I D L T R I Q N P K E L H A T L G T S L N F P T W Y G Q N W D A F W D
UniRef90_D9SN76          N I V I L D G S Q F T S K E R L H D I L K S E L A L P D Y Y G N N L D A L W D
UniRef90_V9QZ09          V N I D L S G V S S S E E L H C V L K D A L G F P G W Y G C N W D A F W D
UniRef90_Q4KE44          H I D L S Q V T S T A E L H L V L R D A L G F P H W Y G C N W D A F W D
UniRef90_X8LQ28          K T V V F D F R E I D S L E E F Y R Q F Q Q Q F S L P K W F G H N L D G L W D
UniRef90_U4LWX3          V I R I N E N V T S A S E L H A L L M E S L G F P G W Y G R N W D A F W D
UniRef90_I4L1P5          Q L V Q I D L S G V M S T D E F H S T L S D A L R F P G W Y G R N W D A F W D
UniRef90_UPI00034AD424   T V R I D L S G V A D A D G L H R L L K R E L G F P A F Y G R N W N A F W D
UniRef90_E3GMY3          M R T I T L D G Q R M V S I Q E T H A Y I E K K L H D Y Y G K N L D A L W D
UniRef90_Q8GEC1          Q L V E V D L R V I T S A E E L H S L L M E S L N F P G W Y G A N W D A F W D
UniRef90_A3Y7H3          I D L S K I T T E R E L H E L L A R C L S F P S F Y G Q N W D A F W D
UniRef90_D1P1W7          N N V I F D F C Q I R D L E D F Y C Q F Q Q K F S L P S W F G H N L D A L W D
UniRef90_E3IHA7          K Q V T L D V S T I Q D S M E L H S L L K K E L L P D F Y G M N W D A F W D
UniRef90_C6PYI0          L N K V I L E G S K F I D K E A L H E I L K S E L K L P S Y Y G E N L D A L W D
UniRef90_W6RU95          M N S V F F N G E D F K T K E I F H E I I K D K L N L P S Y Y G N N L D A L N D
UniRef90_X6PQR3          M S I V R F D F R T I R T T D D F Y Q Q F S D K F Q L P Y F G C N T D A L W D
UniRef90_UPI0003F814EC   E K I T L D V S N I Q D S N E L H N T L K E N F E F P D F Y G M N W D A F W D
UniRef90_U2JRS1          I I L D G R Q M K D P G Q T H A Y L K K Q M N L P F Y Y G C N L D A L Y D
UniRef90_UPI00029B49A7   L Q V V G I D L S K V T S A K E L H C L L R D A L G F P D W Y G C N W D A F W D
UniRef90_U8FWZ7          Q I V T I D L R S V Q G K E A L H E Y L A Q A L K F P D W Y G R N W D A F W G
UniRef90_E3YTV8          K E V T I D L K E V S T K E E L Q I L L K Q K L D F P D Y Y G G N W D A F W D
UniRef90_N6Z5C1          M R E V R I D L A G C T D K A G V L E R F A T A L R F P D W F G H N W D A L A D
UniRef90_UPI00035E348B   V E V D L R S A E S S D E V H S T L S N A L F F P G W Y G R N W D A F W D
UniRef90_U6ZMJ5          M Q R L D I D L S A V G S S A E L H I L L R D A L G F P A W Y G C N W D A F W D
UniRef90_F2RCI7          M R T V V L D L T G V T D K A G L M D R C S V A L A L P D W F G R N W D A L A D
UniRef90_UPI0003B2FFAE   M I L D L S G I L H A F F K T Q L G F P E W Y G P S W D A F W D
UniRef90_UPI0004797A25   M K T V E I D V T A I R S A S E L H R L L K Q K L N F P S H Y G E N W D A F W D
UniRef90_H3SH67          M R N V V L E G S S I A S K E Q L H A F L Q E A L E L P E H Y G R N L D A L W D
UniRef90_E3HN28          Q E V S I V L R E V N T P R E L H E C L M N A L N F P G W Y G H N W D A F W D
UniRef90_UPI00036B477B   M T L D L T G I L H Q L F K Q L G F E E W Y G P S W D A F W D
UniRef90_R5IW04          T Y R I C R E L T S R A A A H D C F A R V F A L P A F Y G R N L D A L Y D
UniRef90_R6GMT1          V F L S L N G C K N W G T L H Q R I R K A F G F P D Y Y G E N W D A M W D
UniRef90_UPI000470744E   L Q R V D I D L S A V A S T A E L H A T L R D A L G F P D W Y G A N W D A F W D
UniRef90_I0DWB3          Q K I V F D F R Q I K T V E D F Y L Q F S Q R F S L P N W F G H N L D A L W D
UniRef90_UPI00037A646A   L Q Q I R T L D D V Y D Q L S H Q L G H F G R N L D A L Y D
UniRef90_S6ACU6          L R D I H T L V Q F Y N E L A R Q L A F P A Y F G R N L D A L W D
UniRef90_UPI0004120EF5   M K T V V I N G K D I H G K E E L H D V L Q T R L E L G Q T Y G R N W D A F W D
UniRef90_K9E5B9          V V T F D L S T I A S I R E L H E L M A K T L H F P E W Y G P N W D A F W D
UniRef90_I3UBG1          T C E L T H I H S I D V Y D Q L Q I A L P Q Y F G R N L D A L Y D
UniRef90_K8WNS6          K Q V S F D F R Q I N S L N D F Y D Q L A Q Q F S L P D W F G Y N L D A L W D
UniRef90_V8DIX4          L Q Q V D I D L N V V T S T A G L H A T L G D A L G F P G G Y G A N W D A F W D
UniRef90_H5XPR9          M G V V V L D G R K I R T L W D F H S R M S E V L D F G P Y Y G S N F D A L W D
UniRef90_A1TWM2          R V V M N G R E I L S E A D F H S E A M N F P S Y Y G K N L D A L W D
UniRef90_S2YG24          V V T L D G V T D K A G L M D R C A R A L G L P D W F G R N W D A L A D
UniRef90_C3BUZ0          T T I I D L T G V T N N R D L H L L F K E K L V F P D F Y G E N W A A F W D
UniRef90_W0F308          M K E V S F D F D R I G T E A D F Y K T A A H S L G L P D H F G D N L D A L W D
UniRef90_X5KW90          M K E V S F D F S Q I G D Y E E F Y E Q L K S K L P L P D F G D N L D G L W D
UniRef90_G2G5A8          V V T L D L T G V T D K A D L M D R C A E A L R L P G W F G R N W D A L A D
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                           50        60        70        80
QUERY              A L T G W V E Y P L V L E W R Q F E Q S K Q L T N G A E S V L Q V F R E A K A E
UniRef90_UPI00028A1773  G L T G S A G L P L T I Y W E H Y S I S E R L G E Y A S K V A Q L F R E A E E E
UniRef90_K5A638     C L T E A S S L P L T I H W S H Y A S K K L G E Y C E Q L L Q L F R D A E A E
UniRef90_U1Y9A9     M L T G G I E L P V T I E W Q S Y A S S E E G Q R L L E L L R E A E Q E
UniRef90_R0MP02     C L T G W I E L P Q T L V W R N F E S S K K L G S Y A D N T L E V L Q R A Q K E
UniRef90_W2EEI6     S L T G L I E M P L I I R W V H F Q E S E K L G E Y S R L L L E L F R D A E R E
UniRef90_UPI0037220C7  G L T G W V E L P L T I Q W E H F Q E S E K L G E Y S R R L L L E L L D A A K E
UniRef90_UPI00036565BF  A L T G G I A L P L I I R W V N F G A S R R L G N D A E R V L D L L R E A E Q E
UniRef90_A0A059NB93  C L T G E V T L P V E L T W V N F Q T S K A L G D Y A E S L R Q L F Q E A E E E
UniRef90_T5HB73     C L T G W V G M P L L I K W K N V E K S R Y L G D Q A E A Y L Q L F R E A E E T
UniRef90_E8LEH3     C L T E I A E P T Q I V P A D I T D N E K L G W Y G E Q L L Q V L Q D A A E E
UniRef90_F8FC13     C L T G E V E L P L E I D W K H Y G A A Q A L G P Y G E S T A E L F E E A V R Q
UniRef90_M1KGA9     C L T G W I E Y P L T L V W K N F E I S Q K L G S D A D D V L E L F Q E A Q A E
UniRef90_A8FBQ0     C L T G E V N L P V E L T W V N F D T S K A L G E Y A E S V K Q L F K E A E E E
UniRef90_E3DSA7     C L T G W V E F P I V I E W K H F D Q S K K L G S S A E A F W E V F Q S A R A D
UniRef90_UPI000312BC37  C L T G W I E L P L M I Q W T H F E Q S E H L G D Y S H Q L L D L F R E A E E E
UniRef90_C2STR8     C L T G F I G L P I T I E W E F L E N T Q K L G P Y A D L I L K T F Q D A Q K E
UniRef90_F0K917     C L T G E T K M P L K I V W K N F N D S K Y L G Q Y A E R T A Q V L L R V E E Y
UniRef90_UPI000477BCCB  S L T G G V E L P L Q I E W L N Y E R S R E L G P Y A E Q V L D L M E E V Q G E
UniRef90_UPI000248D8D6  S L T G W V E M P L T I R W L H F Q E S K K L G E Y S N H L L L L F R D V E Q E
UniRef90_R5YGX9     C L T G G I E L P V C I K W S N Y K A S C H L G E Y A E K L R N V F E D A A T E
UniRef90_UPI0003625ACA  C L T G W I D T P V T I E W E F F E E S K K L G S Y A D L I L E T F Q D A Q E K
UniRef90_M1WX21     C L T G W I D V P T Y I S W T N A S I V E E I P K Y Y K K L L D I L K E A E A E
UniRef90_R9TWA3     C L T G W I E R P V T I I W R D F E K S K Y L G Y S A D E V L E V F K E A Q N E
UniRef90_UPI00030C29E3  T L M A Y S S K P L T I S W R N Y Q E S E K L G K R A E K F K K L F E D V E K E
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UniRef90_UPI000365F580  C L T G M I E L P L E L R W V N Y G I S D R M G D Q A E R V R S L L E E V Q E E
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UniRef90_UPI0003B5EB09  C I R A D V E T P L T I Q W L D F A I S Q R L G E E A D R T L A L L R E A Q E E
UniRef90_N2AIC7     C L T D L A E E T E I R F R N E Q A L A E H L G N Y A G A I K K V I C T A V E E
UniRef90_W4C7V6     C L T G T I E L P L E L K W T N Y K I S E R L G N E A V R V R D L M L E V Q A E
UniRef90_Q39SD8     V L S T D I E G P V E L I W E D S E H S K R M G K D Y E R V V A L L K D L T E E
UniRef90_V7I4J4     L L A T I H E P F E I R I Y N R G S A L E K M G E Y G E R L L S T I D E A A E E
UniRef90_O07938     C L T G W V D L P L T L V L K N F E F S N T L G S Y A D D V L E V I Q E A Q E E
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UniRef90_S9UEU7     C L T E S Q S L P L T I R W T H Y E A S K K L G N Y C D L Q Q L F E D A K V E
UniRef90_W8YXZ6     C L T D Y D G S P L T I H W T S I E D S L K L L G E T S A L L S V F K D A A A R
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UniRef90_A6LRA1     C L T A D I Q L P V T I E W V D F Q K S K D L G D Y A E N T L E I F N E A E K F
UniRef90_B9Y2Q3     M L S T T Q E E I E I G F L N R E E L H G N L G S Y A D A L L A T L Q E A A A N
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UniRef90_D9SN76     C L T G Y I K L P I S V E W T N F K Q S K E L G D Y A E A T L N I F L A A
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UniRef90_U4LWX3     A I T G L V E M P E Q L V L D G W Q Q S Q R M P E D A Q L I C K C L E D L S E M
UniRef90_I4L1P5     A I T G L V E M P V Q L K I S G W D A L K R L P K D A E L M Q K C L D D L S L E
UniRef90_UPI00034AD424  A V T G L V E T P G A L H F T G W D F T A R L P E D A E T L R S L L T D L A D
UniRef90_E3GMY3     S L T S I G T S T R L E I I H F N A A E A H L G P Y G E K L R Q V L M D A A A E
UniRef90_Q8GEC1     A I T G L V E M P S T V R F L G W A Q S Q R L P R D A V L L K E C L T E M Q G Q
UniRef90_A3Y7H3     S I S D L V S L P E K I I F T G S S A L K R L P S S Y E Q L K N C F N E L A E E
UniRef90_D1P1W7     M I S G E I E L P M T I I F S H L S L A Q Q H Q F A E I I D L M N E A E D E
UniRef90_E3IHA7     A I T G L V E P T L I F E G W N H E Q K Q P K D A Q M L I N I F K D F N E Q
UniRef90_C6PYI0     C L T T D V K L P L I I E W I D F E T S K K L G D Y A E S T L D I F R G A E K S
UniRef90_W6RU95     C L L E L S P L P L K V V W N N Y S K S K E L G N Y C D I A L K V F E T A S E F
UniRef90_X6PQR3     M L T G G I D L P V I L A F E H I T A R Q R R L F S A I I G T C R D A E E E
UniRef90_UPI0003F814EC  A I T G L V E L P K T I I F E G W D I E E K L P T D S Q T L V N I F K E F N E E
UniRef90_U2JRS1     I L T A V G E R E E I Y L F H G N R V L I N M P E Y G R N L I Q V F K D A Q E E
UniRef90_UPI00029B49A7  A I T G L V Q M P R Q L K L S G W D F S R Q L P R D A E L M Q K C L A T L Q A E
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UniRef90_W2EEI6          V D G F Q L K I
UniRef90_UPI00037220C7   V D G L H L L I
UniRef90_UPI00036565BF   L A G L L V I I
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UniRef90_E8LEH3          N E N L Q V I V
UniRef90_F8FC13          L D G
UniRef90_M1KGA9          L D G E F F I
UniRef90_A8FBQ0          L K G
UniRef90_E3DSA7          G Y D I T I V
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UniRef90_H3NMR7         L L S E K N D L T I L I M N A Q G I E Q N L G D Y G K S V L K L F D D L N S
UniRef90_UPI00034D33E6  A I T G L V E L P A A I R F T G W R H L E A S P R D A R M L R Q C L D D Y L A E
UniRef90_UPI000379E0ED  S L G D H V E Q G L L V V V R N W P Y A K A R P D E W E T A V D V F G G A V D N
UniRef90_S4NIX5         C L A D A V E R G L L V V V R G W R A A E K R P E E W Q V A E E I F A E A T D R
UniRef90_T0T303         C L V S Y I D P N L T I S W L S H D A S R K M G H D F D R I V E V F D R A K A Y
UniRef90_UPI000465B92F  V L T D N G D S W N L I F Y N Q P K S S E E F E K Y L G K L R K M C A R A A S E
UniRef90_A0B4E9         A I T A L V D M P P I L R L K G W S E E R R F P R D A K L M R D C L Q D M A R Q
UniRef90_X0P215         C L T D L S W C P V I T G W Q G Y A A A A P E D W S V V E G V L A D A V G H
UniRef90_K1MSM9         V L T A H I E L P M R M E L I E L S V D Q L E I F E D L I D T L E Q A D E D
UniRef90_T0SW06         C L T H Y I D P N I R I N W I N H E M S R K M G N D F E R V V S L L Q S A A A D
UniRef90_J2K0D2         V I T G S L E M P L D L E F V N M T V D Q L E I F E D L L T T L E D A E E Q
UniRef90_H8G7P6         R L S R D V E R P V H I R W E H A S C S R A L G E E F N K I V S I F N D L T I E
UniRef90_UPI000375264E  V I S G D I P L P L H L E F V N M S V G Q L E D F E T L L E T L E D L D T E
UniRef90_UPI0004032C46  A I T G P I D M P E K L T L I G W A Q L E K L P R D A S I M K E C L I E Y N E Y
UniRef90_UPI0003765FF3  A V T G L V D L P P E L V F T G W S F S A V L P E E A R T L R E L L E E Y L A D
UniRef90_L8PC84         A I T G L V D L P H E V T F T G W A A S A A L P A E A G R L R E L L D G Y L S E
UniRef90_S6IX73         A I S A L V E M P E Q L V F E H W P F A E R L P R E A R M I Q E C L E R L R Q L
UniRef90_UPI0003B3DD5E  V L T D V S D E W N L I F Y N S T D L K L G M E K Y F S S F E K L C R N V T K E
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UniRef90_UPI00036FC8B8  R L S R D V E R P V R V R W L H A S T S A A L G E A F A T I V D I F E S A A R E
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UniRef90_UPI000379E0ED T P E L S V V L A
UniRef90_S4NIX5        G P G L F V T L G
UniRef90_T0T303        H D C F D Y Q L
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UniRef90_A0B4E9        Y P A F
UniRef90_X0P215        W R D
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UniRef90_T0SW06        I Y E F E F V L N
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UniRef90_C1D4D8        N P D L Q I W L G
UniRef90_D2TB67        T G G F S V H I S
UniRef90_H5V5K7        L D G   Q L R F N
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UniRef90_D9T1W4        D E R F T F E L
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UniRef90_C0BYV5        V E
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UniRef90_B1W102        T E
UniRef90_E6MI19        N H K V V L E L D
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UniRef90_D9W3P5          E V V I D V G S V R S E R D L H A V L K R E L G F P S F Y G M N W A A F W D
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UniRef90_U3C9B0        K V F I N G N D I K T E I D F H K H I A Q A L N F P Y Y Y G S N L D A L W D
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UniRef90_E0RVS7       Q V F Y I D L F E V Y S K E D L Q D L L V R E L P L P D Y Y G K N L D A F N D
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UniRef90_I0QZH4      M K K V V F D F N H I P D L A A F Y A D F A R Q F G I G D H F G A N L D A L W D
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UniRef90_A1KAK2         T A E I D L A A C P D K A E V L R A F E T A F A L P D W F G H N W D A L S D
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UniRef90_H5X4H3          V L D T S E H I D K D S T L D A I A T V L S F P E Y F G R N L D A L Y D
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UniRef90_A0A031GHC5     V T I D L S D I N S P R Q L H A A L A T A L A F P S F Y G M N W D A F W D
UniRef90_U2AVR9         I N L N F A G I R S E E L Y R Y L Q E K L N L P E S R G E N L D N I Y A
UniRef90_C4L195      M S Y L Y I D L S N I T S S S E L H Q I L K E N L H L P D H Y G E N W D A L W D
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UniRef90_D8P8W9         T K T I S G K K C R T K A G L L D E F S R V F S P D Y F G H N W D A L E E
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UniRef90_L7ET04      M K V E I R G S T I R S E K D L H E I L S R V L D L P G H Y G A N L N A L W D
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UniRef90_C4SW21           Y Q G
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UniRef90_C7N530
UniRef90_A1KAK2
UniRef90_B9D4F1           N E R V K F E I
UniRef90_H5X4H3
UniRef90_UPI00037D0F54    M P G L A V L L A
UniRef90_A0A031GHC5       M P D
UniRef90_U2AVR9           T E D L T I E V
UniRef90_C4L195
UniRef90_D3B9F5           L D P G Q L T F
UniRef90_A0A024YRI8       W R D
UniRef90_UPI00035D19BC    Y P S L K
UniRef90_W3ARY3           I P D F S V R F
UniRef90_X5I809           Y P
UniRef90_UPI00035F299C    N E G L R L I
UniRef90_UPI0003135815
UniRef90_T0AUT0           W A D E G I A F
UniRef90_W0HTR5           L Q G
UniRef90_W5W1H0           S D R F G Y E L
UniRef90_UPI00035E0A17    Q P G
UniRef90_I0GYG0
UniRef90_D8P8W9           W
UniRef90_UPI00036041BD
UniRef90_V6MGY6           L G
UniRef90_J3D4T5           L A G
UniRef90_W1IVJ5
UniRef90_UPI000363F1FB    M G G L T V V L A
UniRef90_K8GPG6           W K D
UniRef90_W7X4I9           W S D R K I
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UniRef90_UPI00037677BE    L E G
UniRef90_G9YED6
UniRef90_N6ZL66           T G D F
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UniRef90_U2M186           L E G
UniRef90_UPI0003C7F0AA    Y Q G
UniRef90_U1TRY5           L A G
UniRef90_L7ET04           D Q S F
UniRef90_D2ZL48           L E G   Q L R F N
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UniRef90_W9AU59
UniRef90_G7UH73           L A G
UniRef90_UPI0004770771
UniRef90_C5EHM3           Y G H C Q C I
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UniRef90_J1GID6           L E G   Q L R F N
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UniRef90_Q7N041
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UniRef90_UPI000360F090    W A E K K V
UniRef90_N6XCA6           G I T F E V V F S
UniRef90_L7EV18           W R E
UniRef90_UPI000414B6EA
UniRef90_S3I7K8           M T G E F Y I V
UniRef90_F0JSV7           L E G
UniRef90_H1S4G9           D E R F
UniRef90_F4GQ82
UniRef90_V5C265
UniRef90_C0D173           A K D
UniRef90_UPI00036217EB    W A E R K V A F
UniRef90_A0A059KRS4       W A E R K I
UniRef90_E9ST02           V E E
UniRef90_UPI0002628968
UniRef90_H0Q426           W A D
UniRef90_F5XRV1           D P P F A V V L A
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UniRef90_F0QCN9           W G D R K I A F
UniRef90_G4D220           G I E V K I
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Multiple sequence alignment. Position markers: 1, 10, 20, 30, 40.

Identifier	Sequence
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UniRef90_A4THF4	M V K V V F D F N H I P D L P A F Y R A F S Q N F A L S E D F G A N L D A L Y D
UniRef90_C6DCS5	M K L I V L D G E K H K T P N D I Y D H L S Q E L A F G P Y F G R N A D A L Y D
UniRef90_UPI000373B715	R V D L T G C G N K D E F L R R I A T A L R F P A W F G H N W D A L A D
UniRef90_UPI0003735E7D	Q V V R L D A S T W P S E A D L H R D I A A A L H F P D Y Y G H N L N A L N D
UniRef90_UPI00035D646E	L D L K D S R D Q A S L L Q L F A E T M G F P D T F G H N L D A L G D
UniRef90_U2HFG8	M N R F S V D G K A L G D W A K F H D Y F A G E F G F P G Y Y G R N M D A W N D
UniRef90_V4HYL9	V L D L A G V T D K A G F L D A C A G Q L G L P G W F G R N W D A L A D
UniRef90_R5XV14	K T I T L D L T D C K Y L G E L H E R I R T A F D F P E W Y G A N L D A F W D
UniRef90_UPI0004728371	M T I D V S L I N N S H E L H Q V L K E K L S F P D T Y S E D W D N F W D
UniRef90_E6PJM0	N L A E A T T K Q E V L E I V A R S F T F P K H F G K N L R D
UniRef90_UPI00036C8CA7	Q V V Q L D A S A W L Q E A D L H R D I A A A L D F P D Y Y G R N L D A L N D
UniRef90_A0A023V5P8	M N I Y T F D F D E I E D Q G D F Y R E F T R A F G L T R E K V V D L D S L W E
UniRef90_UPI000289FC50	R T Y V L D G T Q I H T L D D F W H T L G S A I N G P G Y F G R N L D A L V D
UniRef90_UPI0003B64BB5	T Y E L D A R N M G R R R V H D Y L I D H L P M P D Y Y G R N L D A L Y D
UniRef90_R5C5I0	M R E L W V R G K E F D S L V E H D F L K S Q L D F P E H Y G K N L S A L Y D
UniRef90_F4CZK6	R V V E V D G P A D R S G F Y A A V A A Q L D V P D W F G H N L D A L R D
UniRef90_R5H473	M R T L I I D A A T V D N M D L I H G R F Y A A F D F P E C Y G E T L D S L H D
UniRef90_E5AM28	N C A A A Q T K A E V L E T I S T S F F F P K H F G K N Y D A L Y D
UniRef90_UPI00036FC9F7	H L D G R Y V T D V P G L H C A L G E A L A G P G Y F G W G W D A F R D
UniRef90_Q5P282	V L R V D L S D C A D K G D F L A R V A A G L E F P D W F G H N W D A L A D
UniRef90_W7QLE9	M Q T F R I K G K R L K N W K T F H S E F K K E M N F P D Y Y G E N M D A W I D
UniRef90_Q2NGG8	M N I V I L D G K K L K L K T H D Y L I K K L D L P D Y Y G R N L D A L Y D
UniRef90_N0D4R5	L D G R H I V D R N S F Y C A I G E A V N G P G Y F G W N L D A L D D
UniRef90_A8AQD2	M N I Y T F D F D E I E D Q N D F Y R E F T R M F G L A R E K V G D L D S L W D
UniRef90_A0A014NNL5	M R T E I F D F D E I V D Q M H F Y R Q F S E R F A L P G G K V N D L D S L W D
UniRef90_A1KSQ3	L E I I G S K I Y T E Q D F H N Q I S K I F S I Q D Y Y G N N L D A L W D
UniRef90_B5JE33	M K K I K L D V S K I T D W D S F H D F F S E E L D F P D Y Y G R N M D A W I D
UniRef90_O68218	T Y V I D G F E I D T L E D F W D V V G Q A I G V D G Y F G H N L D A F A D
UniRef90_UPI00037A82D9	M N I S T F D F Q H I A S K E D F Y R A F S R A F G L A H R T I R D L D T L W D
UniRef90_UPI00047AF945	S D K A D A L L A A L A R E M S L P S Y F G R N L D A L W D
UniRef90_E4NAM4	Y V L H G E R I T D E P S L W A E L G R A V G A P D Y Y G R N L D A L A D
UniRef90_UPI00037B42BE	T Y H L D G S H I T D A P G F F C A L G E A V N G P G Y F G W G L D A L D D
UniRef90_R6C6R5	K I V T L D L T D C K Y L G E I H Q R I K K A F H F P D F Y G E N W S A F W D
UniRef90_V8G384	M Q I E L K N I Q R I D D I Y T A L D Q A V E L P S Y F S K N L D A L Y D
UniRef90_U5WBM3	R T Y E L D G R H I T D V E G F Y C A I G E A V N G P G Y F G W N G A A L H A
UniRef90_G5F637	M K K V E L R E S A L G G P E E L H A L L A R E L G F P T Y Y G G N L S A L A D
UniRef90_D9XVR5	M D R C A R A L A L P D W F G R N W D A L A D
UniRef90_G9Z269	M K V Y T F D F D E I E S M D D F Y R Q F C Q T F S L D R E Q V S D L D S L W D
UniRef90_C2LPM0	M K E I T L D G N K Q K T P I E V Y Q L F S E E F D F G P Y F G N N P D A L Y D
UniRef90_UPI000371A4B0	V L D G G E V F G K R A M L D A V A A T L S F P E W A G R N L D A L Y D
UniRef90_L8F031	M A I F V L D G A S I R S L D D F W W V L M D A F D S P G Y F G R N L D A F A D
UniRef90_UPI000380CB15	F R L D G S H V T D H S G L Y C A L G E A L N G P G Y Y G S T L D A L K D
UniRef90_UPI0003B30122	Q V F Y I D L S N V T A K S E L H D T L A K E L P L P E H Y G H N L D A F Y D
UniRef90_UPI00034DC842	Q V F T V D G R S I V D R D S F Y C A I G E A I N G P G Y F G W N L D A L E D
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UniRef90_UPI0003603048	R F V E L D T T M V V D K A G L L D A I A T T F G F P A Y F G R T F D A L A D
UniRef90_I0DYJ5	M K N I I L D G N Q Q S T P L E V Y K V F C N E F D F G P Y F G N N P D A L Y D
UniRef90_T0RD58	R E I Q I S G S F I T T M E E F H Q E I S M M L S F P S Y Y G N N L D D L L D
UniRef90_X5LKQ7	M K T Y R I D G T K V A T K A D F F T E I G R A V N G G G Y F G S N L D A L A D
UniRef90_D0KD18	M K F I T L D G E K Q K T P T D V Y D Y F S K K F D F P G Y F G R N S D A L Y D
UniRef90_H3RCP5	M L R L R F D L G E L A D R D A F Y R Q F A A Q S D C S G D F G N N L D A L W D
UniRef90_UPI000374A938	V V D G S E V L N K R M M L D A V A A E L S F P E W A G R N L D A L H D
UniRef90_UPI00034BD8C2	T Y V I E G R E V T G L D R F W Q V V G E A V N G P G Y F G T N L D A F A D
UniRef90_E0WT89	K V V F D F N H I P D V A T F Y V E F I R Q F A L D D D F G A N L D A L W D
UniRef90_UPI0002E85054	Y V I D C D R A R S R S A V L R A V V K A V D F P E F F G G N L D A L Y D
UniRef90_J2M524	T K Q Q V L A I I A G A F H F P R H F G K N F D A L G D
UniRef90_UPI00037DA990	V V D G S A H A D R T G A L D A I A A A L S I P D H F G H N L D T F Y D
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UniRef90_UPI000375F321	E Y H L D G R S V T D V P G L H C A L G E A L N G P G Y Y G W G M D A M C D
UniRef90_K8APS7	M K S Y S F D F S T I A D Q N D F C Q T F A A T F G V T P E R V G D L D S L W K
UniRef90_UPI00037C5BB6	S K Q Q A L A G I A E A L A F P S W F G G N L D A L F D
UniRef90_UPI00046307E3	M N V Y T F D F D E I V D Q D D F Y R Q F A Q T F N L G K E Q V S D L D A L W D
UniRef90_K0V958	M K T Y R V D G S K V S S K A D F F A E L G R A V N G D D Y F G S N L D A L A D
UniRef90_A0LZY1	N K F Q I D A Y N I V D W K S F H K E F K N K L K F P N Y Y G K N M D A W I D
UniRef90_UPI00036BBFCC	V L L D T T G V H D K A G L L D V C A T A F D L P R W F G R N W D A L A D
UniRef90_E8RXR8	H L D A S G W T T E E A M H R D T A A V L G F P G Y Y G H N L N D
UniRef90_D6X6V8	R Y V V D G S R V R T L E D F W Q V A G E S I G C G G Y F G R N L D A F A D
UniRef90_R5AG63	L R L Y P L D A D A L H S H L Y M Q F S L P A Y Y G R N L D A L W D
UniRef90_UPI0004640163	R L V R V D C S Q I N D T A D L H D R F A Y F G F P A F Y G R N W D A L W I D
UniRef90_UPI000313B784	L R I C R I D L A G C S D K R T L L M R L A A Q L D F P S G F G G N W D A L A D
UniRef90_UPI00037AB9C1	T V T L D L T G V T D K A G L M E R A A D V L D L P E W F G R N W D A L L D
UniRef90_A0A014NQ14	N L A H A Q T K Q D A L D L I A V Q F H F P A H F G K N F D A L Y D
UniRef90_UPI00036F5E69	M K T Y V L Y G K K I D S K A E L D E L G R A V N G P G Y F G S N L D A L A D
UniRef90_UPI0003C73D59	V V I D V G A V S S D R D L H G L L K R E L G F P A F Y G M N W A A F W D
UniRef90_Q47IE2	S K A S S T E D V L A E L G S A F K F P T W Y G T N F D A L C D
UniRef90_A0A022MBH9	R V I R L D A G Q W N T E R D M H R A M A A A L D F P D Y Y G H N L D A F N D
UniRef90_G4QAQ9	M Q I K I C D L T G V K S K S K F Y D R I Y Y E L D V A D Y A A N L D A L H D
UniRef90_G0A2G8	M K K F R V E G N V L K D W E K F H D F F A K T F E F P G Y Y G R N M D A W N D
UniRef90_R4LI35	L D G S A L P D E D A V F D A F R Q A F R F P A W F G W N W D A L S D
UniRef90_UPI0003B3DB10	K V Y T I D L S M L V D K A G L L L K E K L H L P D Y C G T N L D A L Y D
UniRef90_UPI0001FFF04F	V V D G A A D R T T T L S A F G R A L S F P A Y Y G H N L D A L E E
UniRef90_UPI00037C5B69	V L D L D G V A D K A G F M D R C A A A L D L P Q W F G R N W D A L A D
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UniRef90_H0QXX0	M I R Y Q L D G S V I S S T K D F Y A E I G R S V N G P G Y F G S N L D G L A D
UniRef90_C0AZH7	L A D L S D F Y R D F A L Q F Q L D E H F G K N L D A L A D
UniRef90_D6X933	R T Y V I E G A E V T G L D S F W K A I G E A V N G P G Y F G R N L D A L A D
UniRef90_H3MSU7	M T I Y T F D F D D I A D Q Q D F Y R E F S R S F S L N R E Q V N N L D S L W E
UniRef90_E1SFM1	M K I E R F D F N E I V D Q S H F F R F R Q F S E R F A L E E R R I C D L D G L W D
UniRef90_UPI00016C4E7B	F D C E D G E W A S E A D M H H E V A A R L F P G Y Y G R N L N A L N D
UniRef90_N6X5N1	V R V E L A D C T D K A G L L R R F A E A F R F P D W F G H N W D A L A D

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UniRef90_E8UCF3      V L S T E V E G P L E I I W S D L D G S A T S M D T I N S M L E V F R C V E N D
UniRef90_A4THF4      V V T G E I A L P H F S R R H Q R R F A A
UniRef90_C6DCS5      F M T D D E C R P L I V E W R N S S V F K N S P E E F S R L L S T F R N I A R
UniRef90_UPI000373B715  C L T D M S W W P A A G H V L I L E H A D G F R R D F L T A L E I L E E A A R
UniRef90_UPI0003735E7D  C L S D V V A T G L V L V F I G Y D F S R R C P W T A Q
UniRef90_UPI00035D646E  C L G D L S W L P Y L L H L S N C A K P E R C K D D F D A L V A V L N D A A D E
UniRef90_U2HFG8      C M S D Y C Y E H G I V S L R I D D A G E R N P E I F A A L V E C S A R A T K E
UniRef90_V4HYL9      L L G D P D S L P L V L V V R G W E L A A A S P G E W E T A R A V L G D S A A D
UniRef90_R5XV14      L L S S E C D A D E V I L T G V N T M P E E L R K Y M S D I Y K I L D R K T A E
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UniRef90_UPI0003B64BB5  V L T E M E D V T L R I G H A D Q A P V S F A S V R R V L T D A A A D
UniRef90_R5C5I0      C L T D I G E D T R I V I D W E Q V E E D E L L D G L E R I A E V M Q D A Q E E
UniRef90_F4CZK6      V L T D L S W L P V V L V W D D A T L A A T D A D G H E R L L D V L A D A A
UniRef90_R5H473      Y L G E I N S E A E I R I L N N S A L E N S L G E E A K A L R R V L T D S A A E
UniRef90_E5AM28      C L T D V V Q P G F V I V L E G L P A T Q K F D K E A E T L L D V F R E A A E F
UniRef90_UPI00036FC9F7  C L C G G V A P P F T L I W H D A G I A R Q A L A D V E E G L S Y F E E V V Q E
UniRef90_Q5P282      C L A D M A W L P A D G Y V I I L E H A E H F R A D F I T A L E T F D E A A R E
UniRef90_W7QLE9      C V D E L T D E P T I L Q I D N G K Y L K N E P E L F N A I L E C
UniRef90_Q2NGG8      C L T S I G V K T E I H L I N S N E I S K D L Y D T F Y D A A C E
UniRef90_N0D4R5      C L R G G W G P P C T V H W D F S A R S R A R L G E F D L L L E I F E E
UniRef90_A8AQD2      A L S E V L P L P L E I E F V H L P E K L R R R Y G A L I L L F D E A E E E
UniRef90_A0A014NNL5  A I T E F M H L P V E I E F I H L G S G Q K R R Y G A L I L L F D E A E E E
UniRef90_A1KSQ3      L L S T N V E R P I T L V W K D A M F S K N L E N I F I E I V N V L E R V K K Q
UniRef90_B5JE33      C V G D L F E Q G D D L L C F E I E G M K D L K E R S K E I Y E A I N E
UniRef90_O68218      C L G G G Y G T P Y V I E W R H H E L S R R R L G C P E T V R Q L
UniRef90_UPI00037A82D9  V M S G G I P L P Q E I V F T H L S E P E R R R F G A
UniRef90_UPI00047AF945  V L T D L T E P T A V L W T G W D L A I A Q P R D W A I V L D L F S E R T R L
UniRef90_E4NAM4      C L R G G F G P P F T L V W Q R A M D S A Q A R S Y F D A V L D V L R
UniRef90_UPI00037B42BE  C L C G G A T T P L T L V W H D A A V A R R R P P T F E E L L A L L A E
UniRef90_R6C6R5      L L R S E C D A D K V I I V G E D S V S K E L G T S V Q I L K G I L K E F K E
UniRef90_V8G384      F L S T D L P P I T I Q W F D A T E S R Y L L E L F E T L I D L F T S V E E E
UniRef90_U5WBM3      C V T G G A E W P F R L I W R D A E V A R T H P A T F D E I I L Q W L A E D Q I E
UniRef90_G5F637      C L E E L A A P T R I T L E Q D G S R R G D G S W F D R A R A V I E R S G I Q
UniRef90_D9XVR5      S L S D A V E R G L L I V V G G W G A A R A R P A E W A T A Q E V F A E A A G R
UniRef90_G9Z269      V V T N A L P L P M D I E F I H I S E T Q R R R F G A L I L L F D E A E E E
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UniRef90_UPI00036EEB8C       R V A I D L D G I Q S L D F Y Q R L V A K V K L P T H T A I N L D A L H D
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UniRef90_A6T238
UniRef90_D9W5Z0          G G M Q V T L A
UniRef90_UPI0002883806 F G K P Q L W L
UniRef90_F2RBY5
UniRef90_UPI00036EEB8C R T D I T I
UniRef90_H2BXS2
UniRef90_C7QF91        W R R I G V
UniRef90_M4TX13        W A S R G L T F A
UniRef90_W7VAT9        G E T L R V V L
UniRef90_H8H3E9        Y
UniRef90_B5H8E6
UniRef90_A0A031GXX3
UniRef90_UPI0003009391
UniRef90_Q1IZH9
UniRef90_K1E002        Y P D L S I V V A
UniRef90_G8QMD5        W R E
UniRef90_UPI0002F2C5B8
UniRef90_D6XCJ4          L T V A L A
UniRef90_D7C3W6        I E
UniRef90_UPI00035F0712
UniRef90_D9VTK2          E G V E V V L A
UniRef90_UPI00036FCE28
UniRef90_UPI00035E5270
UniRef90_A4G8E5
UniRef90_X0QLU2        F G K P Q L W V
UniRef90_B4VU94        W
UniRef90_E3BDT2        H D G
UniRef90_I4ERY9
UniRef90_U4T9R8        F G K P Q L W V
UniRef90_A1R388        G R D L A V I
UniRef90_UPI0002DF7563 W Q E
UniRef90_V3FTD7
UniRef90_UPI00037939D4
UniRef90_UPI0004737F44
UniRef90_R4L4A6        W A
UniRef90_UPI0003693947
UniRef90_C2XQ89
UniRef90_V3C4P9
UniRef90_UPI000370406B N H G V T I I
UniRef90_UPI00031167DD C E D
UniRef90_W4NUJ8
UniRef90_D7CIE3
UniRef90_C6WRC8        G A E G R V
UniRef90_F2RBZ2
UniRef90_UPI0002FB2113 W A E
UniRef90_C4Z3U7        N K Y L E L
UniRef90_W6JZ20        A G Q L H V T V
UniRef90_Q46X48        A H H F D V V F A
UniRef90_M9IIR0
UniRef90_UPI0003FB4BEE
UniRef90_A0A023Y4I2
UniRef90_W8X5V2        G Q N
UniRef90_F9NU93        D E G F A V L L
UniRef90_G2P0N5
UniRef90_M3VE45        G H G F A V I L S
UniRef90_A0A011PC73    W
UniRef90_UPI00016A8376
UniRef90_H0JYY6
UniRef90_UPI000366734A
UniRef90_D9W3S9
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Multiple sequence alignment (positions 1–40)

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UniRef90_E8U921             I V L D V S R A R G R A D L M R A A R R D L P L P G Y F G D N W D A L A D
UniRef90_UPI0003B47322      L R V D L A G V R D K P G L L T K L S S V L E L P Q Y F G N N W D A L A D
UniRef90_UPI000464C444      R L N G E E M A D E M S T F Q Q F W N H F K F P D H F G W N W N A F Y D
UniRef90_S2Y0E2         R V V H F D G R A L M T E Q G I F S S F A K A L Q F P S Y F G R N W D A M V D
UniRef90_UPI00040C42AF      I D I A V G R V L D K T S L L T A L D N A L N F P D Y F A H N W D S A W D
UniRef90_A0A011NLS1         F E V S L A D C S R L D Q A L A R L G N G L D F P G W Y G H N L D A L K D
UniRef90_B4V4N1             V L R L D G R E M R D A A S V F R T F A R E L S F V G Y F G H N W M A L V D
UniRef90_N0E3A8                     E T K Q G T L E A F A E A L D F P G W F G H N L D A L A D
UniRef90_UPI0001C373EC  M R T Y I I D G N N F S D L E G F Y C E I D R I M T K G I N F G H N L N A F R D
UniRef90_UPI0002894754      E V S G A R S R T R Q D L F T E W S A A L G F P A H F G R N W D A F T D
UniRef90_C7RPA7                 T D R M D L L A T L G R G L D F P E W Y G N N L D A L K D
UniRef90_UPI0003B69C06  R V I E L D A G A W R E A M Q M H I A F A T A L Q F P S H F G R N L D A L D D
UniRef90_F1YJT5             R L S G A R M R T L D G L Y D A F A R A W S F P D H F G R N K D A F D D
UniRef90_U5N5V0             N L A T A Q S K Q E V F D V L C Q Q F G L G A T A C K N F D A L H D
UniRef90_V9C5W8         M S L L V A D C D R A R S R S A V L R A I A K A V D F P E Y F G G N L D A L Y D
UniRef90_I2EUV8         Q I I T I D G Q K A H T L R G F Y E E M A K G L Q F P E Y F G F N L D S F D E
UniRef90_UPI0003782365  K I I P L D L A G V T D Q A G F M Q R C L P A L D L P S S A A R N W Q A F T D
UniRef90_H1QH31         E I C V I D G R Q I L G E S S F Y C A L G E S V N G P G Y F G S T L D G L A D
UniRef90_UPI00037E203B  Q I F H I D L S K T S S K S A L I E A L G A A A M N F P D Y C G N N W D G L E E
UniRef90_H6R1S1             E L R G K K M R T V A G V L D E F A A A L Q F P Y Y F G A N K D A F D D
UniRef90_UPI000289DBB8      E I L G T R C R T D I D L F A E W A S V L G F P A W F G H N W N A F E D
UniRef90_R7XVM9             H V D G W L G G T K A E F L A A V G E A L G F P E H Y G Q N F D A L A D
UniRef90_A0A016QLL0         E V D L S Q V R D K E S L M L A F L R G L A L T E S F G R N W D A L Y D
UniRef90_E7RFV1         E V V R F D C R E W D E E F H K E V A R K L N F P A Y Y G E N L N A F S D
UniRef90_E8JZE1         K I I D I N L L K L K T K Q N F L N T L N Q E L N F P S Y F G S N L D A L D E
UniRef90_V7IBK0             I S V D L S R I K T P H S L M Q R M Q E A F E L P A Y F S G G L D S L N D
UniRef90_UPI0002E416B0  M A T A R L N G E L I T D W D S F H S Q C A S V F G F P D F Y G N N M N A W V D
UniRef90_C6VV79             I A H I D G T K A T S V K D F H E A I A A A M H F P D Y S G K N L D A L D E
UniRef90_A0A023C110     M R I I E I S G N K F S N M N G F Y R E V E S K M E L N W K I G R N L N A F N D
UniRef90_T0DPF0             R E I E L N S N G L D T L D D Y L V E C G R L F D F P S F Y T N N I D E L Y E
UniRef90_K9CY86         M Q L I E L D A S G W A K P L D F Y L A L L P R L G A P E W H G L N L D A L Y D
UniRef90_A8SXK3             K W I F I D G R D I H T L N D F Y D Q I E Q K L I Y K T D F G R N L N A F N D
UniRef90_L9PJX5         M A T A E L N G A E I T G F D S F H A A C K A A L G F P D G Y G N T M D A W V D
UniRef90_C6AUG9             V V V M D G T R L V G H D K F H D S F A E T F G F P D F Y G R N M D A W I D
UniRef90_N8QV88         K E I L D G T Y I E S E L D L Y C H I G E E V G L G Y M G C N S A A L R D
UniRef90_H1G6F2         L R V V R V D R A P V F K D T L L H A L Y Q S C G L P A W F G F N W D A L A D
UniRef90_F2R7K5             Y E L D G R H V T D E P G L W L A L G E A V N G P G Y F G G D F H A L H D
UniRef90_L1MKS5         M T E Y T I N L S A V R T A P G F L Q L M S K E L S F P G Y F G G T F D A F E E
UniRef90_B6B1T6             V R I D C S N I T D W E T F R D E F A Q S F G F P A F Y G R N L N A W I D
UniRef90_UPI00034CB79A  M P S A I L N G S A I T D W T S F H E Q C K R A L G F P E F Y A D T M D A W V D
UniRef90_UPI0004103D0E  M R E V V V D C S G I R S P D E F W Q R Y L D A V E G A S V F G R N L D A F W D
UniRef90_A0A011QWU1                 V L A K L G R D L D F P E W Y G H N L D A L K D
UniRef90_W0UZK8         M P S A V L N G K D I S D W S S F H A Q S K T A F G F P E F Y G N S M D A W V D
UniRef90_D6A5V3                 G Q E M H D S D G V F T Q F Y E T L R L P D Y F G W N W N A L R D
UniRef90_UPI00040C7519      I A Q V D G S K A T S L K D F Y Q E I S T A M H F P E Y D G K N L D A L D E
UniRef90_M9VE22                 A D L D A V L T G F G N T L S F P S W Y G H N L D A L R D
UniRef90_L7K8A1         M R T V S     G T T A T T L G G L Y T S F A R V W D F P D H F G R N K D A F D D
UniRef90_D0L295             R V D G A E A T T L G G L Y T A F A E A W D F P E Y F G R N K S A F D D
UniRef90_V2BV87         M I T L S I D L K E I N G V I E F H N K F K Q L F G F P D F Y G N N F H A F V D
UniRef90_L8EYR3         R V Y D L D G R H I T D D I G L Y C A L G E A I N G P G Y F G G C L N A L S D
UniRef90_K6WP07         R W V V V D A A E M S T I A A L F D E F S R A W G F P G H F G R N K D A F D D
UniRef90_F7L2I6         K E V L V N C N K I N S K L E L I C S I K E A L N F P Q H C G N N W D A I E D
UniRef90_A9F0U3         M R T I V V D C D T V Q T E A D F W S A Y A A E P E G A A Y F G R N L D A F W D
UniRef90_UPI000369FE86  M A T A Q L N G A A I L D A A S F H A A C K A A L G F P D S Y G N T M D A W I D
UniRef90_UPI00036D2A05      E V D L T R V R D K E S L M L A F L R G L A L T Q S F G H N W D A L Y D
UniRef90_U5VTF2             V V I D G R F V L N E A D L Q Q R L A G A F G Y G P Y Y R H D L D D L R D
UniRef90_UPI000376D654                 Q S F H E E F A R V F G F P A F Y G K N M N A W I D
UniRef90_K4FIR7         L K K L S I D F S Y I K T A D E F H N A M K V L F G F P D F Y G M N F N A F N D
UniRef90_V9WUR1             V R I D P K I S L S E E L L S A L Y Y Q L W L P G Y F G F N W D A L Y D
UniRef90_A8L3F9         R T L H V R G S R C R T S A G L F D E L A A V L Q F P A Y F G G N W S A L H D
UniRef90_U1QJH9             E V I I D C S L L L D E E D F Y T Q L M K Q V D F G E F F G R N L D A F W D
UniRef90_UPI00046322FC      E L R G A K M R T T E G V F D E F A A A F Q F P Y Y F G E N K D A F D E
UniRef90_C2XLG6                                                                     M W D
UniRef90_W8HD54             R I D A H P W T T V A N M H T A F A K A M S F P S Y Y G R N L D A F N D
UniRef90_W9G865                 T D K E S V L D G F A T G L E L P T W F G R N W D A L L D
UniRef90_C6D8M6         K K F I I D G T K I S S Y E D F C R E F S N V L S G K H Q W N G N L D A F N D
UniRef90_A0A034UFY5     R A V H V R G Q H I A T T A E L F T E F A A A F Q F P W Y F G Q N W A A F D E
UniRef90_H5THW9             E I S G R A M T T L D G L Y D T Y A R A W D F P D Y F G R N R D A F D E
UniRef90_F0SGR1         M Q K I E I N G L S F D S L D G F Y D V F G R A V L G S T E Y G G N L D A F N D
UniRef90_F8X4R6             I K D E E Q L F T E L Y K K L E F P D Y F G N W N A V Y D
UniRef90_H0QXP8             H V D G A A M P G L A G V Y S E F A R A W E F P D Y F G A N K D A F D D
UniRef90_E4BEU3             V F H M S G G A E L E S V L A G F G R A L S F P S W Y G R N L N A L R D
UniRef90_B8HCS1                 S K R A V L E T F G E V L S F P E H Y G V N L D A L R D
UniRef90_UPI0004630897      E L R G A K M R T V A G I F D E F A A A F Q F P Y Y F G E N P D A F D E
UniRef90_H6CGU7         E V Y T L D G K Y I S D F T T F F I A L G E A I N G P G Y Y G F S L D S L A D
UniRef90_UPI000470786B      L E G V H T T A E L L L E V Y A R Q F N F P S Y F G N W D A L K D
UniRef90_E1ZM13         L V V D L R R A L S A D D F W A A M V A A C L P A W F G C N L D A W R D
UniRef90_H6MXV6             V I T G T R L T T R P D V F D E F A R S W R F P D H F G R N A D A F D D
UniRef90_U3U2X7         M R T E R F D F N E I V D Q A H F Y R Q F C E R F A L A D R T I H D L D D L W E
UniRef90_D5UUK9         R V L V A R G S R M R T K A A L L D E V S A V L Q F P L D F G A N W D A L A D
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UniRef90_UPI0004092DEF      I D I P L D E V L D K R A L L V S L A K A C D F P S Y F S N N W D S A W D
UniRef90_D7E2H4             K K I N S K E T F L K Q A A E A M F P Q F Y G N N W D A F D D
UniRef90_UPI000346E3CD  E V S L A G V R D K D G L M L A F L S G L G L T Q T F G R N W D A L Y D
UniRef90_UPI00037EC166      D C D R A R S R S A V L R A I A K A V D F P E F F G G D M D A L Y D
UniRef90_U7GYT6         K E I T L D G S Y I T S E L D L Y C Y I G E V C G V L G Y M G A N F S A L R D
UniRef90_D4HCQ6                 A D L G S V L A G F G H A L S F P S W Y G H N L D A L R D
UniRef90_Z9JIZ7         L Q V T H V D L H H C R N K A A L L L H L A S Q L S F P K S F G S N W D A L A D
UniRef90_G8NS26             F D C S T W L T P A D M H D S L Q N T L E F P S Y Y G R N F N A L N D
UniRef90_UPI0003AD4BDB      V V D G H A C R T R A A F F R E A A R A L G F A A Y F G H N F A F L D
UniRef90_W9DJM0         T I S G T A A T T T G A M Y T A F A R V W D F P D H F G R N R D A F D D
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                              50            60            70            80
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UniRef90_E8U921        V L C D L W P D G A T L T V R G L A A F E H R P D M A A L L R D V L R D A C
UniRef90_UPI0003B47322 V L G D L D T K G L V L L I E H S D D R E H A R A D F K A A M E V L Q A A S Q E
UniRef90_UPI000464C444 C L R D         L Q W L S S D H H V L I I E S A E S A L P E D E D A R D E
UniRef90_S2Y0E2        C L D D L C G
UniRef90_UPI00040C42AF C L T D S D A E H L R L D L T E I E Q I N     T E D F K V F K S M I E D A Y R D
UniRef90_A0A011NLS1    C L T D L S W V E A A G Y V L F I D H A V R E P E S F A V L E E V L A V A V A E
UniRef90_B4V4N1        C L Q D W H G P G H I A I L I D H A D D L L D A D F L G M L V S V F V D A A
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UniRef90_C7RPA7        C L T D F S W C G Y V L I I S H A E A L Q A A P A A F K A L N E V F G A A I A E
UniRef90_UPI0003B69C06 C M S D G T E T G L V L I L S G F D D A Q R L P R I A D H V K Q I L
UniRef90_F1YJT5        C L G D L I G A P A T G Y L T V I T D A E Q L L S D A
UniRef90_U5N5V0        S L S D G G Y L G F I I V L E H L P C H A K F D K E A E Q L L D T F R D A A E H
UniRef90_V9C5W8        C L C D T V
UniRef90_I2EUV8        M L N D L S W E K I A I Y I T N S E E K E R N P D K L P T L L D L L D A T C E D
UniRef90_UPI0003782365 A A G D I G W G P I V I G W Q G F A K A Q     P E Q W E S A Q Q V L E S L A Q E
UniRef90_H1QH31        C L A S S A S A P F R L V W E H F S G A Q E R M G A S A S V M G V L R E
UniRef90_UPI00037E203B C L R D L K D R G W L L I F E N A D G L L G L P S D L S V F L S I L S D T V E F
UniRef90_H6R1S1        C L R D L D D Y S A E G Y V V V I R D A D Q L L A D A P Q E R A W L A E A L S E
UniRef90_UPI000289DBB8 C L M A D E S G P V T I V L R N A A L E D E G P R E L S V L L E I L E D
UniRef90_R7XVM9        C L H D I G Q A G V V L L W D G W S L A R T D E K A F N I A L S V L
UniRef90_A0A016QLL0    V L T D P D A R P F A L V L C D Y G H F R R R Q R Q G A E L E Q V L R D A A A Q
UniRef90_E7RFV1        C L S D L N N T G L L L V F T H Y S F L A K H P D L A I D V L E I I Q
UniRef90_E8JZE1        C M R D L S W I Q E K E I I L N F N N I N K L K D R N S E L Y H L I H D A S E E
UniRef90_V7IBK0        C M R D L G W L P I H I A F C G L A D L K R R P K L F A D I A D C L E
UniRef90_UPI0002E416B0 C L S Y L R D D D G M S K F I E V Q H S D K L R A A A P D I I E E L Q
UniRef90_C6VV79        M L N D L D E Q K V I I Y I G N W L S R E K S D D K V L T V I D I F D A T A E D
UniRef90_A0A023C110    V L Y G G V D E K Y I L K W H R S E K S K S E L K H F D R I I E I I R E H E
UniRef90_T0DPF0        F I Q T Y T D K N L S L Y W S N T K D A Q K L G Q D Y Y R L K E V F D L I S S Q
UniRef90_K9CY86        S L L G D V E P P F T V T I A N I D L S A E M A D F M A R V T T V F A D A R R D
UniRef90_A8SXK3        L L W G G F E E T L H I V W I Y A E K S K Q A D K Y F N K I V S I I E N H E S K
UniRef90_L9PJX5        C L S Y L
UniRef90_C6AUG9        C M S C L D D P
UniRef90_N8QV88        C L T D D T Q Y P L R I I W K N F E Y S K Q K F N Q D D     I Q Y F I D L L S Q
UniRef90_H1G6F2        T L G D D E A K S V V L V F G H F S L R Q R S P D T C D T F L D I L A D A T D
UniRef90_F2R7K5        C L G G D F G F P A T L T W R N A D V A R A H L S R A L A P E D L F A A V V D E
UniRef90_L1MKS5        C F R D L A W E H I V I H I R G L D V A A R N P M L A A S I K E S I L F C A D Y
UniRef90_B6B1T6        C L D E D D E C D V T I
UniRef90_UPI00034CB79A C L S Y L R D E D G M T Q F         L L K A D E T L E I V V R D A E A
UniRef90_UPI0004103D0E A I E G G G P G W V T L I F S H S D Q L S A L G S F L D A L K T I A N E A
UniRef90_A0A011QWU1    C L T D F S W C Y V L I I T R A E I L G A Q D P A A F H A I N E V F A A A I A E
UniRef90_W0UZK8        C L S Y L
UniRef90_D6A5V3        C L T D L R W H S A K H F L V T I D D A H A T L S G N S E E R E I L F R T L N E
UniRef90_UPI00040C7519 M L N D L E W Q K V I I Y I E N S A D W L A R E K S E E K L L S V I D D A T A E
UniRef90_M9VE22        C L A D   V E G D T A V L W T G W Q P F Q R G P Q D W G R L V D V I G Q R E D D
UniRef90_L7K8A1        C M R D L A G V P P V I V V H I S H A H R L L N S D A Q S V E F Y R D E Y R G E
UniRef90_D0L295        C M R D L D D T A P R G F L T H I R N A Q R L L T D A E A D F D W F A E
UniRef90_V2BV87        C L T S L
UniRef90_L8EYR3        C L N G G A T A P F T L R W H H P D V A R R A P D G A     V Y S L F D E V I G F
UniRef90_K6WP07        C M R D L A G
UniRef90_F7L2I6        F I Y D V I   L P K K I I L H N W N I K E K L P Q D T M I L K R I L D
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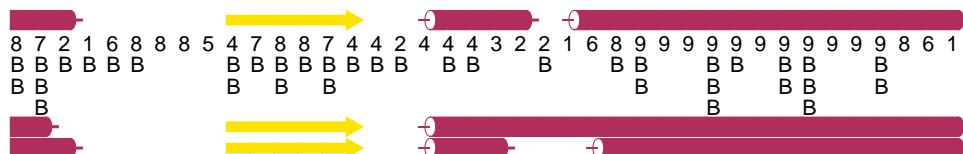
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sol0             B   B                         B         B
jhmm          →→→→→→→→→→→→→     ⊖══════     ⊖══════
jpssm         →→→→→→→→→→→→→     ⊖══════════     ⊖══════
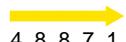```

Position markers: 50, 60, 70, 80

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| UniRef90_H0BKN4 | G I S D V I D R H L S V H V D R A G I F A A N D P A A R A L G E V F D |
| UniRef90_W0P9L6 | M L Y G G Y G A P V K L L W L N A E H S R T K L G I A A T |
| UniRef90_UPI0004671492 | G V Q W G G P G W C E L V F K N I E A L R E L K T G G K P F L E A F R Q L V A D |
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| UniRef90_T0J3D4 | M I V G D V E F P L R V D V T G V N R T N E Q A R D A |
| UniRef90_UPI0003747078 | C M L S L D W I D E R T I E I D F F H L E E L K D |
| UniRef90_UPI000360B60B | L F Y G G F G C E V R L I W K N F K E N Q Q L F G Y D F T L |
| UniRef90_UPI0001E2F5E0 | C L F G G L E A P C K I I W K N S S L S K Q R |
| UniRef90_K6X4Z8 | C M R D L D G R T P A A I I T H I T Q A H R L L E E D D A T F T W F A D S I D F |
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jpssm

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