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                               1         10        20        30        40
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UniRef90_UPI00046C2173 D E Y L H Q V G A S H R R I P G F K V E Y F W K I E K P F L T A V E T T L G D R
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UniRef90_UPI000258F143   F T P E V A E A W N K T L D V
UniRef90_B3F9U2          F T P Q V H V A V D K F L A Q L A L A L A E K Y R
UniRef90_H2MRF9          W T T E L E K A W Q T L F Q F V T A L M K Q G Y
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UniRef90_Q2QAI6          F T P E V Q A A W Q K L V G V V A S A L S R K Y H
UniRef90_M3ZD79          F T P E V H V A M D K F L S A V A L A L S E K Y R
UniRef90_UPI0003EDF27D   F T P Q V Q G A F Q K V V A G V A N A L A H K Y H
UniRef90_UPI0003959284   F T P A C Q A T W Q K L V G L V A H A L A R K Y H
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UniRef90_F6RIV9          F S P A T R E A W T R L Y T A M V H A M S R G W
UniRef90_B3RYV6          F T P E V H E A W S K T F D M I T A A M K S G
UniRef90_P02015          F T Y A V Q C S I D K F L H V T M R L C I S K Y R
UniRef90_F7A3H3          F P A E T Q R A W A K V R S L I Y T H V T A A Y
UniRef90_A0A059AMU3      W S P E M K S A W G E A Y D Q L A A A I K S
UniRef90_G3ICM7
UniRef90_L8HVQ9          F P P E T Q R A W A K L R G L I Y S H V T A A Y
UniRef90_UPI0003C4848F   W T P E L Q E A W Q
UniRef90_P06640          L T C A N H R S V D K F L S C V K N V L T S R Y R
UniRef90_Q9NPG2          F T P A T R A A W S Q L Y G A V V Q A M S R G W
UniRef90_W4XLX6          F T D D V R Q A W E T V F Q L I V D V M S A K
UniRef90_W4XLX6          F T D D V R Q A W E T V F Q L I V D V M S A K
UniRef90_W4XLX6          F T D D V R Q A W E T V F Q L I V D V M S A K
UniRef90_W4XLX6          F T D D V R Q A W E T V F Q L I V D V M S A K
UniRef90_W4XLX6          F T D D V R Q A W E T V F Q L I V D V M S A K
UniRef90_B8LND3          W S P E M K I A W D E A Y T Q L A E A I K S
UniRef90_UPI0001CBA21B   F T P A V K N A W L K M K S V I V G S L E E A Y
UniRef90_UPI0003F0C79F   F T T E V E E S W K L L F F Y K D C L K E G Y
UniRef90_W4YI83          Y N N D V E K S W L A V L Q V I V D T M S A
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UniRef90_E2C8N8          Y T Q E V Q E A W K K M F D Y L F L I L
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UniRef90_R7TFF7          F T D E V S V A W K T V F D F I M S Q L Q D G Y
UniRef90_B6VRV0          P A G Q Q A M R N V M A V V I A D I E A N Y
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UniRef90_V5IFC5          M S P A A V A A W E K T L R L V V T V T A D V Y
UniRef90_U5D5B6          W T V E M K D A W A E A Y T Q L A F A I K E
UniRef90_P02206          M T G P M Q E S F S K V F T V I C S D L E T L Y
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UniRef90_V7AEC3          W S P E M K N A W E E A H D Q L A D A I I S
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UniRef90_S4XMC7          F S S E V E A A W K E V Y V A D V M
UniRef90_Q9DGI9          A G G Q T A L R N V M G V F I A D M D A N Y
UniRef90_UPI000383DBD0   F M V E M Q A A W D K F L T G V A V V L T E K Y R
UniRef90_B3DUZ7          F T E E A K A A W T K V Y G I A A Q V M T A
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UniRef90_S4XEM3          V T P E V A E A W D E V Y Q L M A D V L
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UniRef90_X5DV37          V T P E V A E A W D E V Y W L M A E T L S E M Y R
UniRef90_UPI0003F0AB64   F T P D V G Q V W H K L F D F I I N C I K D G Y
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UniRef90_A5EIC9       M L T A E E I A C V R S S F D M V N A T D M T T T F Y Q R L F E L A P E C R S M
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UniRef90_Q7T044             A D F D M V L K C W G P V E A D T H G S L V L T R L F T E H P E T L K L
UniRef90_H1QLS3       M L S E Q S V P V V R A T L P A V G A G D I A D V F Y R K L F D A H P D L L R N
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UniRef90_W9G373       M L S D T S A Q V I R D T L P V G A G E I T P L F Y Q K M F S A H P E L I R D
UniRef90_V8P9P7       V L T A E D R K Q L Q V S I G K L G C E D I G A D A L N R L L I V F P Q S K T Y
UniRef90_UPI00039922E5        A S L R T S T A K L R L E G A G P   H G E L F D L D P D L L P L
UniRef90_S9QGF4       M L T Q G E I K A I R A S W L L V A A N E L G E R F Y K N L F R A A P E V R P M
UniRef90_H8H3G1       L L T D I E R A H I R R T W R L V E Q E T A T K I F Y D D L F A T H P E Y R D Q
UniRef90_D6ZBY8          L S D Q A K S V L R A T A P A V G A D E I A P L F Y D R L F A A H P E L L R D
UniRef90_W5TEG7          L E P Q H T D T V R A T L P V I A A D D I T A E F Y R R L F A A H P D L L R
UniRef90_UPI000467746D M L S E Q A A P V I R A T L P A V G L D E I T E R F Y A R L F A A H P E L L R
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UniRef90_O97381          L T G R Q K E A I K A S W S V A R T D L L G Q E L F M R M F N L N P E Y Q S L
UniRef90_O97381          L T G R Q K E A I K A S W S V A R T D L L G Q E L F M R M F N L N P E Y Q S L
UniRef90_A7RJ19          L T E R Q I K L V Q D T W R L L S Q K K T A M I F Y L K L F T L D P I F K E V
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UniRef90_B4WU25            R Q V E L V Q R S F A K V E P E Q V G K L F Y E H L F E T R P D F K P L
UniRef90_B8HCM7       M L S D K S R P V I E A T L P L V G I G D I T P K F Y A R L F A A H P E L L D
UniRef90_P02215          L Q P A S K S A L A S S W K T L A K D A A G A T L F S L L F K Q F P D T R N Y
UniRef90_U7G1C8          M T P E Q I A R V Q D S W T Q V E A D Q A A A L F Y D R L F T Q D P A L K P L
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UniRef90_A0A044U5A6      L T Q K Q K Y L L T K N W K G I D R E A A G V E M F L K M L S T H P E Y Y K M
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UniRef90_UPI000255EBC8   L S P E H A E T I R A S L P A V N I Q E I T R L F Y S T M F S K H P E L
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UniRef90_W7QB62       M L T H E Q E Q L I E A T A P V V H L D A I T Q R F Y P L M F T R Y P E V K P L
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UniRef90_E0VN13          L T T R E K E L L E T W K E L N I A K V G V I T F V S L F E T H P D V Q E S
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UniRef90_H1QLS3       L F N R G N Q A N           G E Q Q R A L A G S I A A F A G M L L E H P D E R
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UniRef90_I3IZ26                                       M A A V T D A V S K T D D L
UniRef90_M0SSS5       F S F L R D A       D V S L D K N P K L K A H A M A V F T M A C E S A A Q L R K V
UniRef90_W9G373       L F N R G N Q             A Q G D Q P L A L A G S I A A Y A T M L V T D N P H P
UniRef90_V8P9P7       F S H F             N L S P G S K D I I H Q G E K V G K A L D S A L K H L D D I
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UniRef90_H8H3G1       F P K L S G Q I T K L A K T L D F A V K S L D W D S G D W Q G G A V E R N S D L
UniRef90_D6ZBY8       L F N R G N Q             A Q G D Q P K A L A G S I V A F A G L A L A G D E D R
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UniRef90_B5JNZ7       F T S                 D I K E Q G R K L M T M I T T A V R G L N N L
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UniRef90_R7TFR3       F P   F K D M P N E D L H R N S L   F K G H A T R F M K S V E F T M Q N L D A L
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UniRef90_V4ABF4       F L P F R G L   T V D E L Q H S A R L R E H G L R V M L T V E K C I A R L D K P
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UniRef90_UPI000305D9F9  E A I V V Q Q L G V K H I D Y G V K E H F P I V A D A L L W T L E Q G L G D D
UniRef90_F5SW36         V E R I A Q K   H T S F D I Q P E Q Y Q I V G H H L I E T L R E L A P D E
UniRef90_A3WZM3         V P T I E D L G R R H A Q   F G V T D A H Y E T V G A A L L W T L E Q G L G S E
UniRef90_R7TFR3         D P T L V S I G N K H V H I K G F H P D Y L D T F Q T A L I D I W D E D L G K K
UniRef90_K0T1L2         I P I L E D L G A K H A T D W K V Q K E H Y D A V G E C L L W T L E T G L G D A
UniRef90_V4ABF4         E Q D L L H D L G Q K H V E F N T K V D Y I D M V G P Q F I Q A I R P V V K S D
UniRef90_W4RPS1         E A I L V N Q I A H K H R S L G I L P E H Y P I V G K H L L I A I K E V L G D A
UniRef90_Q9FUD6         L D S K L Q K L A A T H I N A G V T D D Q F E I V K E A I L Y A I E M G V P E L
UniRef90_UPI00047BD293  E A I L P V Q I A H K H R S L G V K P E H Y P I V G E N L L A A I K E V L K E A
UniRef90_UPI00040BC6A2  E T L L V K N I A H K H R S L Q I K P E H Y P I V G E N L L A A M Q E V L G E A
UniRef90_W2T026         N D L A L Q M N R K A H I K W N V H R K H V I H M L E P V L D L V E E C N D G K
UniRef90_UPI0004653751  P A E M L S R I G H K H A S L G V T A D Q Y P I V E E H L F A A I V A V L G A D
UniRef90_UPI0003F6041F  E A L L V Q K I G H K H K S L D V K P E H Y P I V G Q H L L E A I E I V L G D A
UniRef90_L1M9D6         P D E M L A R I G H K H V S L G I T K D Q Y Q I V H D H L F A A I A E V L G S V
UniRef90_UPI0003FF27C9  P E A M L S R I A N K H T S L G I A E D Q Y Q V V Y T H L F G A I A E E L A D V
UniRef90_C1AE78         M P A V Q A L G R R H A T   Y G V Q D A H Y D L V G A A L L D T F A D I L G D A
UniRef90_UPI0002557E95  P A L L P V A A D L A A R H Y G V Q P A H Y E A V G A S L L R T L E A G L G E D
UniRef90_UPI00021929A5  P E G M L S R I A H K H V S L G V V V V H D H L F A A I G E V L G D A
UniRef90_W6FEV1         K S I V D E M L N N M A R S H G L T R E Q F A Q F A P V L F D S I G
UniRef90_U6PE83         S E F H M K R I A K A H V K W N V H R G H V E H M V D P V L E V V K E C N D D
UniRef90_UPI0004245EE8  P V E M L S R I G H K H V S L G I K P E H L F E A I V E V L G D A
UniRef90_Q7M455         E D V C R K F A V N H V N R G V L D V K   F A W I K E P L A E L L R R K C G Q T
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                                      130                 140
UniRef90_I0JWE7          W T K E L E Q T W I K A Y E A L A Q V M I E
UniRef90_A6YH87          W S A E L E S A W G E A F D Q L A A A L K A
UniRef90_A5EIC9          W T A E V E Q A W R K V Y E I I S
UniRef90_A7IIA0          F T P E V K A A W A D A Y G L L S S V M
UniRef90_Q7T044              A A G Q T A L R N V M A I I I T D M E A D Y
UniRef90_H1QLS3          V T P E V A R A W D E V Y W L M A N A L I A
UniRef90_UPI0003F4CB53   V T P E V H A A W S E V Y W L F A T L L I A
UniRef90_F2Q9X0          F T E E V Q G A W G T A W G F F V I H L K Q G
UniRef90_I3IZ26          F T P E V H V A I D K F L T A L     A L S E K Y R
UniRef90_M0SSS5          W C P E M K D A W G Q A Y D H L A A A M K E
UniRef90_W9G373          V T P E V A S A W D E L Y W H M A D D L I R
UniRef90_V8P9P7
UniRef90_UPI00039922E5   F S P D V Q E A W S K L Y G A V V K A M E R G W
UniRef90_S9QGF4          M P N G A T D A W T K A Y Q A V A S A M
UniRef90_H8H3G1          F T P E V K T A W T K V Y G L I A Q T M
UniRef90_D6ZBY8          V T P E V A S A W T E L Y W L M A G E L I A R E R
UniRef90_W5TEG7          V T P E V A A A W D R V Y W L M A D T L
UniRef90_UPI000467746D   V T P D V A Q A W D E V Y W L M A N A L I A
UniRef90_UPI000374B524   V T P Q V A A A W D E V Y W L M A N A L I A
UniRef90_Q8AXX7          D         K S A C D K F L N E V A V A L I S
UniRef90_K1RMF6          F T P D I A R A W T H V F D Y L
UniRef90_P0C227          V A G D T K A A W D K A L N A M A N I I
UniRef90_Q42831          W G P E M R N A W G E A Y D Q L V A A I
UniRef90_P21199              A S F E K L M S I I C I L L N S A Y
UniRef90_UPI0003A4765B   A T D E V L G A W E V Y W L M A E S L I A R
UniRef90_UPI000479C563   V T D E V A A A W D E V Y W L M A N V L I N Q E R
UniRef90_V9XKM6          V T P E V A K A W D E L Y W L M A N T
UniRef90_UPI0002D348F1   A T D E V A A E A W T E V Y W L M A N S L
UniRef90_O97382          L T V L G R E S L N K G F K L M H G V I E E G
UniRef90_O97382          L T V L G R E S L N K G F K L M H G V I E E G
UniRef90_O97382          L T V L G R E S L N K G F K L M H G V I E E G
UniRef90_V9G8F0          A T D E I L D A W K E A Y G V I S D A
UniRef90_D3D7N7          V T P E I A A A W D E V Y W L F A C Q L I A
UniRef90_B9EAY0          A T P E I V E A W T E T Y G V I A D V
UniRef90_O97381              A A G V E A W K I F F D V S I G V I A Q G
UniRef90_O97381              A A G V E A W K I F F D V S I G V I A Q G
UniRef90_O97381              A A G V E A W K I F F D V S I G V I A Q G
UniRef90_A7RJ19          F N D E I G E A W Q A M Y D L M S G A M I S G
UniRef90_M5THT3          F T D D V K E A W L L T Y S T L S A A M L S G
UniRef90_G3UIL0
UniRef90_UPI000022287E   L D D E T R Q A W T V L Y Q V I A N     L I E V F R
UniRef90_C9Z355          V T P E V G A A W E E V Y W L M A N A L I A
UniRef90_K0RES8          W T E D V A D A W S W V Y G V I A K T M
UniRef90_A0A010R9F8      L T P E I A E A W T L A Y G Q L A Q V
UniRef90_F4APZ0          F T P D V E Q A W N E A Y G A L A E V
UniRef90_Q3MQ26          F T A     A A W T K T L K V V A D V I
UniRef90_B4WU25          F T P E V K R A W E V A F Q F L S K I M
UniRef90_B8HCM7          I T P E I A E A W T E V Y W L M A D A L I K
UniRef90_P02215          A S G D V K G A W D A L L A Y L
UniRef90_U7G1C8          F D E D T E A A W T A A Y T L L A T T M I E
UniRef90_Q7SDB4          M T P E V Q T A W T K A Y W M L A K M L
UniRef90_S5T506          V T E D V A D A W S T V Y W L M A D V L
UniRef90_Q3C1F3          W S L E L K D A W A I A H D Q L A S A I I A
UniRef90_A0A044U5A6      Y T D N M Q S I Y K T V I V I I L S E L E K G
UniRef90_P18979
UniRef90_UPI000255EBC8   V T P E V A E A W D R V Y W I M A D V L V S
UniRef90_D6K4E0          V T P E V A A A W D E V Y W L M A G A L I A R
UniRef90_B5JNZ7          F T D E T E E A W I A T Y T L L A T T M
UniRef90_W7QB62          V T P E I A D A W S T L Y E E L A G L L I E
UniRef90_J3LLQ0          W S P A M K N A W G E A Y D H L V A A I K Q E M R
UniRef90_T1KR38          I M D K A T T A W T K V N V I T E T V K R
UniRef90_E0VN13          W D E E L D D A W T H L F K I I E F V M V S
UniRef90_UPI00030E4F0A   A T D E I M N A W E E A Y G E I A S V
UniRef90_I2G907          S Q D E V A S A W T K M M E G V A S N L S K G
UniRef90_UPI00045E9D13   F T P E T R E A W V E A Y G I L S S V M
UniRef90_D5UDE2          V T P E V A A A W D E V Y W L M A Y A L I H Q E R
UniRef90_UPI000255F3AE   V T E E V A A A W T E V Y W L M A D A L I K
UniRef90_UPI0001CBB479   W S D E M Q D A W T V L F D I I I Y H M T
UniRef90_B7QBW9          M N H Q A V G S W Q K F F A F V V R V
UniRef90_B6ZIV9              G D T L T A W D K T V T F
UniRef90_UPI000305D9F9   W N D E V K E A W V T A Y T I L A T T M I E
UniRef90_F5SW36          F T D D V A E A W I K A Y Q L L A T V L I D R
UniRef90_A3WZM3          W T P E V K G A W S S A Y T L L A D I M
UniRef90_R7TFR3          F S K E T K E A W I K I F A L I
UniRef90_K0T1L2          W T G D V A E A W T W V Y G V I G S T M S
UniRef90_V4ABF4          W T P E V E D A W E D F F K L L I Y F M K E
UniRef90_W4RPS1          A T D E I N N A W A E A Y G V I A D A
UniRef90_Q9FUD6          W S P E L K S A W G D A Y D M L A A A V K A E M H
UniRef90_UPI00047BD293   A T E E I I E A W T K A Y G V I A D A
UniRef90_UPI00040BC6A2   A T D E V I T A W E E A Y N V I A D V
UniRef90_W2T026          L D Y E T K E A W T T L Y N V I A D L I E I Y R
UniRef90_UPI0004653751   V T E D V A A A W D R V F W I M A N T L I A L E H
UniRef90_UPI0003F6041F   A T E E I L Q A W A E A Y E E I A R V F I E
UniRef90_L1M9D6          V T P E V A E A W D A V Y W M M A D T L V R
UniRef90_UPI0003FF27C9   I T A E I A A A W T E V Y W L M A N A L
UniRef90_C1AE78          F T A D A R S A W A T A Y G A L A T V M
UniRef90_UPI0002557E95   F T P E V K R A W V T A Y T T L S G A M
UniRef90_UPI00021929A5   V T P E V A E A W E E V Y R L L E E V L
UniRef90_W6FEV1          V S G A A R D A W M K Y Y N K I A D G L F A K
UniRef90_U6PE83          F D E E T K E A W T T L Y D I L A E V I E I Y R
UniRef90_UPI0004245EE8   V T P E V A A A W D E V Y W I M A D V L
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                            1              10             20             30             40
UniRef90_UPI0002EA395B  M L S Q K T I D I V K S T V P V L E K H D I T K H F Y K R M F T N H P E L K N V
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UniRef90_L7L323         M L S D T Q R A T L A A T L P A V E G A E I T P R F Y R G L F D A H P N L L D
UniRef90_S6F2N4         M L D T K T I D I I K S T V P S L K A H E I T Q T F Y K T M F E N N P E V K T L
UniRef90_Q127H5         M L T A Q Q R A I V K S T V P L L E S E A L T T H F Y Q I L L T E H P E V R P F
UniRef90_E9GCI5               D H S I I R N T W D Q A K K G E F A P Q V L L R F I K A H P E Y Q Q M
UniRef90_P08054           L T E K Q E A L L K Q S W E K Q N I P A H S L R L F A L I I E A A P E S K Y V
UniRef90_W4CVN4         M L D Q Q T I E I I K S T V P Q V H G K T I T T F Y R M L F E N H P E L L N I
UniRef90_M7XWG2         I S A T Q V E R V Q A S F A K V R A D T A A D L F Y E R L F A I A P Q V R P L
UniRef90_I3NH32             E P E L I R Q S W R A V S P L E H G T V L F A R S L E E E G D F L Q G
UniRef90_C5ZVT2         M L D S H T K E I V K S T I P A L K Q E D I T K V F Y R E L F G R Y P Q V Q
UniRef90_V4HJT2         I S Q R Q K Q L V Q A S F V K V P E Q A A D I F Y T T L F E Y D P S L K S L
UniRef90_C5EZQ3         M L D I Q T K E L V K S T I P K S Q G E D I T K V F Y R E L F T R Y P Q V K S M
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UniRef90_UPI000441A106                     V E A G E R S C L G R F F T G H P E S K Q Y
UniRef90_H2YFM6           L T T E E V I T L R T T W S K L G N A T V G L A V L H R L F N D C P E V R P F
UniRef90_E8SF45         M L T Q E E K G I I L E T V P V L K E K A I T S N F Y H R M F N Q H P E
UniRef90_A0A059MLX0     M L S V E S A D V V R A T L P V V G A G D I T P I F Y R R M F A A H P E L E R D
UniRef90_R6FQS7         M L D Q K T I D I I K S T V P A L K A H E I T T T F Y K N M F A N N P E V K P L
UniRef90_K6VH56           L S P E S E A I V K A T A G V V H A E D I T K V F Y P D M F A A H P E L M R V
UniRef90_UPI000359DC2C                                           L F H T H P E A I E S
UniRef90_Q07A26         F T E A Q E V L V N S S W E K Q N L P H N S I L F Y T F V L E K A P A A K D L
UniRef90_F7EB40           L S G P Q K E L I R E S W Q T V S Q D Q L H H G T I F Q L K S G L Y W S S E V
UniRef90_W1YVY0         M L S D K T I E I V K S T V P L L A Q A V V T E H F Y K R L F S H N P E L K N I
UniRef90_W7E6F8         M L T E N Q K S I I K A T V P V L A E H A L T S H F Y E R M F A Q N P E L K Q V
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UniRef90_V9XEY9         M L S S T S R S I V E A T L P V V G A E T I S R V F Y N R L F R A V P S
UniRef90_Q9RC40           L S Q E T K Q L V K A T I P I L H G E A I T K H F Y K R M F S H H P E L L
UniRef90_G6D625           L T K R E V Y A I Q Q S W A P V N S V A N G T E L L K R L F R A Y P E T K E F
UniRef90_UPI00035D5ADC  M L S T E Q K A I I Q Q T V P I L E A E A L T G H F Y R I M L R D H P E V R P L
UniRef90_M5TCL4         M L S D K T I R I V K E I T P L V N A E T I I T R R F Y E R M F E S N P E V K V F
UniRef90_UPI00047DF566  M L S E K T I Q I I K S T V P V L E K H E I T K R F Y R N M F A A H P E L L N I
UniRef90_C5QR69         M L T E K E K S I V K E T V P V L K G V E I T S H F Y K R M F K Q H P E L K
UniRef90_P02240           L T E S Q A A L V K S S W E E F N A N I H T H R F F I L V L E I A P A A K D L
UniRef90_E0IEV8         M L S E Q T I A T I K S T V P V L A E H A I T Q Q F Y K R L F Q Q H P E L L N V
UniRef90_Q7UIY1         M L S E K T I R I V K E I T P L V N A E T I T R R F Y E R M F E A N P E V K A F
UniRef90_T5AGV5           L T V E Q I A L V K S T A P V I H G K A I T T T F Y R R L L G A H P E L K N Y
UniRef90_Q2SM91         V L D S N T L A T I K A T I P V L E S G A I T E H F Y R R L F S H N P E L L N I
UniRef90_K1Q9R1           L T T R D K Y Q I I K S W K G I D L H T T G V T M F L R M F Q E H D D L R K F
UniRef90_A4BSQ2           L S E H Q T Q L I K A S I P A L H G E S L T R H F Y Q L M F R D Y P Q V R A L
UniRef90_UPI0003BD75A6    L S A E S R E A I R S S W R E I Q E D I V G V I M F V R L F E T H P E C K D A
UniRef90_I4X1Z5         M L S Q E T R T I I K S T V P V L E E H A I T T V F Y E N M F E A H P E L L N I
UniRef90_W6S202         M L D Q K T I E I V K S T V P A L K E H E I T K T F Y K N M F E N N P E V K R L
UniRef90_F8ELZ1           D Q Q K K L V Q T S F A R V K A E Y A A Q L F Y K R F F E L A P E V E S L
UniRef90_B1ZVJ7         M T S R E I V L V Q E S F S K L A A D Q A A A L F F V R L F E L D P S L R R
UniRef90_G6CW33         L T A K Q Q Y C M L A S W K G V Q V E K T G I L L F V K L F E E N E E L L H L
UniRef90_D2AQM5             D I G L I R R S W S L V E A D Q V T Q H F Y G R L F A N Y P H I R E M
UniRef90_UPI0004561B81    L T S Q Q V A L I Q A T V P K Q H G E H I T T T F Y R H L L E E N P A L K N V
UniRef90_A0A058ZPU3     M N E T Q I D M I Q A S F A K V A A E T A A D I F Y T R L F E I A P E V K P M
UniRef90_A0A016U3Y1         Q R E L I R T S Y Q S L E A E K N G L G L F V R L F A E F P S Y K A I
UniRef90_B1KM75           L T Q R Q I Q L V Q H S F S L V E P E Q A A D L F Y D S L F K I D P S L K P L
UniRef90_S9QZE0         M L N A Q Q R A I V K A T V P L L E S E A L T T H F Y R I M L G E Y P Q V R P L
UniRef90_S6IHZ6         M L N A S D R A I V K S T V P L L E S E A L T T H F Y K K M L S E Y P Q V Q P L
UniRef90_B2L5U3                     H G D K F G G E A L Y R M F L V N P K T K T Y
UniRef90_F7A367           L T T E E I E L L R S S W K T I G M K E L G L L I F H R L F S D V P R I R K M
UniRef90_P42511         F S E K Q E S L V K S S W E K Q N V P H H S A V F Y T L I L E K A P A A Q N M
UniRef90_UPI00046B07CD    L S T D S E V I V R A T A G V V H A D E I T A L F Y R R M F E A H P E L L
UniRef90_H9JFD7                                       F A R L F E E N Q D L L D M
UniRef90_C0Z6G4         M L S Q K T I E I I K S T V P V L E V H A I T K R F Y Q M M F A K H P E L L H I
UniRef90_I9CP50           M T P D Q V R L V Q D S F A K V R A G T A A D L F Y G R L F E I A P E V R P L
UniRef90_D9WHF6         M L S Q K S A D T V R A T L P A V G A A I I T D L F Y R K L F E A H P E L L R H
UniRef90_P49852         M L D N K T I E I I K S T V P V L H G E T I T G R F Y D R M F Q D H P E L L N I
UniRef90_W3WSE3           L S Y E Q T R M V K G T I P T L H G E H I A T V F Y K T M L K E H P D L N N Y
UniRef90_Q0K2N2           M T P Q E I T L V Q S S W Q K V V P E K A A E L F Y G K L F E M D P S L R P L
UniRef90_W7D677         I T E E Q K Q I V K S T A P K E H G K E I T S I F Y K K M F A A H P E L L N Y
UniRef90_X1XCE5                                           L F E H Q E L L Q L
UniRef90_E9HNB1         V L N S V N V A A V Q S T W A V I K S D I N T P Q F Y V A L L T A H P E Y Q A M
UniRef90_W7ATG7         M L D E K T R E I V K S T I P F L K G T E I T G I F Y Q N M F K A H P E L L
UniRef90_UPI0003723B40  M I A E A K R Q I I K E T V P V L E E H E I T T V F Y K R M F E A H P E L L
UniRef90_K9Q0C7               Q V E L L E S S F E Q V K A N E F A S S F Y E N L F T D Y P A A K P L
UniRef90_J9E103         M L S T E T K S I I L S T V P V L K E K A I T G R F Y H I L F S E H P E L L N L
UniRef90_Q9M3U9           F S E E Q E A L V K E A W E K E D I P A L S L Y F F T Q V L E I A P A A K G L
UniRef90_L5N6T1         M V T K A E K R T I K A T V P V L H G G T I A G V F Y R N L F Q E H P E
UniRef90_M3VFP5         M I S D D S R T M L E A T L P A V E L G A I T E N F Y R R M F D A H P E L
UniRef90_F9SX37         I S N R Q K Q L V Q N S F S K V E A E Q A A E I F Y Q T L F E F D P S L K P L
UniRef90_E0RL52         M L S E Q T I A T I K S T V P V L E V H T I T K R F Y Q M M F E A H P E L L N I
UniRef90_X7EAF4         M L S Q Q H I D T V K A T I P L L A S P A I T E Y F Y K R M F T H N P E L Q
UniRef90_E9FXJ6         L L S T Q E R A I I R T T W N K A R K D D V A P K L L F K F L K A Y P E Y Q K K
UniRef90_UPI00047BCAEB    L D P K K L E I I K A T L P V I H G E A I T K Q F Y R A M F K Q H P E L L
UniRef90_E3HL11         M L S P Q I R A L V K G T A P V L K T H A L T K H F Y A R M F K H N P E L K Q V
UniRef90_A0A014MS30     M L T D R Q R A I V K S T V P L L E T E A L T T H F Y Q L M L S E S D E V Q P L
UniRef90_G1NJL7
UniRef90_UPI0003496A77  M L T Q A Q E Q I I E T T A P V V H L D A I T Q R F Y P L M F E R Y P E V A S L
UniRef90_R8BN99                           H G E R I T T I F Y R N M L R D H P D L N N Y
UniRef90_M2X4A5         M L S P A S A A V I R A T L P V V R A H E I T G E F Y S S M F S A H P E L L D L
UniRef90_UPI000262A1FA    L D P A H E E T V R A T L P L V H I E D I A P T F Y D R M F A A H P E L L R
UniRef90_U2GJB1           L T P E N E I V K A T V P I V G I E D I A P V F Y R T M F G K H P E L
UniRef90_F0LYA5         M L N N H T I A V I K S T I P L L E S P A L T Q H F Y Q R M F H H N P E L K
UniRef90_H2ZPV1         F T D E E L D L I R T S W G K L G T K E V G I Q I F T R L L N D A P K L R S H
UniRef90_G7D4G4           M T S E Q I A L V Q Q S F S K V A P E A A A V L F Y D R L F E V A P S V R A M
UniRef90_F8I6Y7                       V K A T V P L L E G I G T R F Y M L F A E Y P E L Q N V
UniRef90_D0IUY8         M L T E R Q R E I V K A T V P L L E T E A L T H F Y Q T M L G E Y P E V R P L
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ID	Sequence
UniRef90_UPI0002EA395B	F NQSNQREGRQPQALAASVYAAAANIDNL
UniRef90_I2G908	FTHLHQSGKSLYEGDRFQHHVMSSINKVIERLNSGDTA
UniRef90_L7L323	NLFNRTHQKSGEQPQALAGSVAAFARLQLEPDVRR
UniRef90_S6F2N4	FNMDRQNS GEQPKALAMTILAA AQNIDNLEAL
UniRef90_Q127H5	F NQAHQANGDQPRALANGVLMYARH IDKLEQLI
UniRef90_E9GCI5	FGKFASVPHYNLLR NGDFLAQAYTISAGLNVVIQSLQEL
UniRef90_P08054	FSFLKD SNEIPENNPKLKAHAAVIFKTICESATELRQK
UniRef90_W4CVN4	FNH ANQREGKQQTALANAVLAAAAMNIDQL
UniRef90_M7XWG2	FP ADMTVQKRKLMAMLALAVANLDKP
UniRef90_I3NH32	CT RPLSASRVARASLSLLSLPWQVMLVIDTAVTNVEDL
UniRef90_C5ZVT2	GMFDMEKQKNGKQPKALAMAILN AANNIDDL
UniRef90_V4HJT2	FKN SMKSQGGQKLMATLKVAVNSLDDL
UniRef90_C5EZQ3	F DMQKQKDGSQPKALAMAVLN AAKNIDNL
UniRef90_X5MB92	FK GDMDD QGRMLMSMLASVVAGLNDL
UniRef90_UPI000441A106	FKTIPTEGDLMMIPEVGFHGRRVMVTLNQLIQSMGHW
UniRef90_H2YFM6	FGSMSELSDMDSLKSNPKVVDHASRVALSINNIIQLLENT
UniRef90_E8SF45	LRNMFNQTNQKKGFQSTALAQSVLA AAMNIEDL
UniRef90_A0A059MLX0	LFNRGNQAQGDQQRALAGAIAAYATLLVSEN VPQ
UniRef90_R6FQS7	F NMDKQASGEQPKALAMTILA AAQNIDNL
UniRef90_K6VH56	F NKANQAIGEQPKALAASVVAYAVNLIDPDAPD
UniRef90_UPI000359DC2C	FLAFKDYSTVRDIEQSVVLKAHALRVMQTVDKCVTRLDNL
UniRef90_Q07A26	FSFLKN SDGVPKNNPALQAHAEKVFGLVRDAAVQLRTV
UniRef90_F7EB40	PRECLIRVVHQDCLSSAEFTEHIRKVMTVIDAAVSSLDCL
UniRef90_W1YVY0	FNMTNQNTGRQQFALFNALAAYAQNI DNLLAVL
UniRef90_W7E6F8	F NRGHQEAGKQQHALAGAVLAY AQNIDNPTVL
UniRef90_I1FJ81	FP FRDV PYEELEDSESFLKHSLQVMETIDLAITEMEKL
UniRef90_V9XEY9	LRDTFNRTNQANGAQQRALADSVAAFASLLVTHAPTD
UniRef90_Q9RC40	NIFNQTHQKQGRQPQALANSIYA AAEHIDNL
UniRef90_G6D625	FKMVR KSSEDEFIGNPQFRAHVINLMSSLNLAVGNLNQV
UniRef90_UPI00035D5ADC	F NQAHQASGEQSRALANAVLNY ARHIDQL
UniRef90_M5TCL4	F NQAHQHTGGQQKALAGAICAYFTH IDNPAVL
UniRef90_UPI00047DF566	FNH ANQSQGRQQTALANVVYAAAQHIDKL
UniRef90_C5QR69	NMFNQTNQQKGLQSTALAQSVLAAAVNIDHLENI
UniRef90_P02240	FSFLKGTSE VPQNNPELQAHAGKVFKLVYEAAIQLQVV
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UniRef90_Q7UIY1	F NQAHQHSGGQQKALAGAICAYFTHI DN
UniRef90_T5AGV5	F SLRNQQSGAQQAALAEAVFAYAA LIDDLPRL
UniRef90_Q2SM91	FNSSHQHSGGQQVALFNAIAAYAKHIET
UniRef90_K1Q9R1	F KFGDYKESSDLLQNKIFQNHVMLVMHTLDEAICSMGDV
UniRef90_A4BSQ2	F NQTHQSDGAQQRALAGAILAYHIEQPEILNDA
UniRef90_UPI0003BD75A6	FFTFRDLNDVNTLRASKELKAHGLRIMYIIEKTVARIDDR
UniRef90_I4X1Z5	FNH ANQKQGRQQAALANTVYA AAVHIDNL
UniRef90_W6S202	F NMDRQASGEQPKALAMTILAA AQNIDNLEVL
UniRef90_F8ELZ1	F NSELKTQGIKLFQVISFTVCSLDNM
UniRef90_B1ZVJ7	CCQGEREQQGRGLVRLLASSIHRLARLERL
UniRef90_G6CW33	FEKFRELRTKEAIVSSAELAEHATQVMHTLDEGIKGLADM
UniRef90_D2AQM5	FPPAMDLQRDRLL HALTQVVLNLEDGAGLND
UniRef90_UPI0004561B81	FGM TNMLTGRQPKALAHGLLAYASHITEPAVLADF
UniRef90_A0A058ZPU3	FK GDLSE QGKKLMTTLGVVVNGLKDL
UniRef90_A0A016U3Y1	WPQFRAIPDSSLIA SDKLRNHATVYMAGLKRIVAVLDDN
UniRef90_B1KM75	FRN NIKVQGRKLVAMLKAAVDGLDDL
UniRef90_S9QZE0	F NQAHQASGAQPRALANAVLRYARH IDELEQL
UniRef90_S6IHZ6	F NPAHQASGAQPKALANGLLMYARH IDELEQL
UniRef90_B2L5U3	FPSF DFHHNSKQISAHGKKKVVDALNEAANHLDNL
UniRef90_F7A367	FYNLELPDDETAMRSNQKMSRHATRIATSISTYLKLVDQP
UniRef90_P42511	FSFLSNGVDP NNPKLKAHAEKVFKMTVDSAVQLRAK
UniRef90_UPI00046B07CD	NVFNRAHQVQGDQPKALAASVVAFAVHLIDPDAPD
UniRef90_H9JFD7	FEKFRQCKTKEEQINSMELAEHANNVMNTLDEGIKGLDDM
UniRef90_C0Z6G4	FNH ANQKQGRQQAALANTV YAAALYIDKLETL
UniRef90_I9CP50	FPD DMAEQKKKLMAMLGLAVANLGHP
UniRef90_D9WHF6	MFNRGNQ AAGIQRQALAGAVAAFATALVEHPEVR
UniRef90_P49852	F NQTNQKKKTQRTALANAVIAAAAHIDNL
UniRef90_W3WSE3	F NAVNMKNGSQPRALTKLILAYASNISHISEL
UniRef90_Q0K2N2	FK GDTVEQGRKLMAMINAVVTKLDQL
UniRef90_W7D677	F NLTNQEIGTQPLALANTVYLAAENIERLEVL
UniRef90_X1XCE5	FTKFGELKTRDAQANSMELAEHANKVMTTLDEGIKELDDL
UniRef90_E9HNB1	FPTIANVPSGQLLNNALITLSVNVTKLSEIIDSLGNP
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UniRef90_J9E103	F NQTNQRGKQQTALANAVYAAAAHIDNL
UniRef90_Q9M3U9	FSFLKDAEE IPQDNPKLKSHAVKVFKMTCEAIQLREKG
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UniRef90_M3VFP5	LSDLFNRTNQKNGSQPMVLAGSIAAFARLQCEPDLEL
UniRef90_F9SX37	FKS GMKEQGRKLMAILKVAVNELDNL
UniRef90_E0RL52	FNH ANQKQGRQQGALANAVYAAAQHIDRL
UniRef90_X7EAF4	DVFNMTHQKTGRQPAALFNAIAAYATH IDNLEVL
UniRef90_E9FXJ6	FSKFADVPQSNLLSNGNFLAQAYTILAGLNVIVQSLQEL
UniRef90_UPI00047BCAEB	NIFNMAHQITGHQPKALADAVYGAAANIEDFSQI
UniRef90_E3HL11	F NQAHQAGGEQQHALAGAVTAYAEHI DDPSV
UniRef90_A0A014MS30	F NSVHQQTGAQPRALARSVLMY AKHIDDL
UniRef90_G1NJL7	SPEFLDHIRKVMLVIDAAVSHLEDL
UniRef90_UPI0003496A77	F NQAHQQDGGQPRALAGAIL AYVKLRQT
UniRef90_R8BN99	F NSVNQKNGRQPRAL TAVILDFAANINHMAEL
UniRef90_M2X4A5	F NQGNQADGRQQLALASAVVGFAEYLITEAGEA
UniRef90_UPI000262A1FA	DTFNRGNQAQGAQQKALAASATYATLLVDPDGPS
UniRef90_U2GJB1	ISDLFNRGNQRSGEAQPKALAASIATFASMLVTPDAPD
UniRef90_F0LYA5	DIFNMTHQKTGRQSVALFEAIAAY AKHIENL
UniRef90_H2ZPV1	FYSIDIADDEELSLEVMREKKHATRIAVAISKFVDFLDKP
UniRef90_G7D4G4	FP EDMTEQRKKLMGMLAAVVGGLSKL
UniRef90_F8I6Y7	FNH AHQATLKQPRALAESVL GAAENIDNATYL
UniRef90_D0IUY8	F NQAHQQSGAQPRALAHSVL MYAKNIDNLENL

Alignment (positions 90–120)

ID	Sequence
UniRef90_UPI0002EA395B	E S I L V H L I A H K H R A L G I L P E H Y P I V G E N L L A A I K E V L G D A
UniRef90_I2G908	T K T L K D M G V K H K K L D V H R K H F E S F V P F V V D S M V N V R M S M
UniRef90_L7L323	Q R F I L D R I A H K H A S L G V T A D Q Y K V V H Q H L F A A I V E V L G D A
UniRef90_S6F2N4	I P A V R K I G E K C D K L I K A E H Y P I V G S N L L I S I K K V L G D A
UniRef90_Q127H5	G G L V A Q I I N K H V S L Q I E P A H Y P I V G A C L L R A I R E V L G A E
UniRef90_E9GCI5	L A A Q F N L L G S A Y Q P R G V T P A M F E E F S V I L E Q V L E E T L G S T
UniRef90_P08054	G H A V W K R L G S I H L K N K I T D P H F E V M K G A L L G T I K E A I K E N
UniRef90_W4CVN4	G N I L V K Q I A E K H R A L G V L P E H Y P I V G E T L L A A I G Q V L G D A
UniRef90_M7XWG2	E A L V S A V L G L R H R G Y G T H E A H Y E A V G A A L L W T L E Q G L G A D
UniRef90_I3NH32	S E E Y L A G L G R K H R A V G V K L S S F S T V G E S L L Y M L E K C L G P A
UniRef90_C5ZVT2	E K I S V E S I G K T H V S L N V L P E H Y P L V G E C L L V A I K E V L G D A
UniRef90_V4HJT2	D A L V L Q K L A E R H V N Y G V K P E H F T L V G N A L L Y T L K K G L G S D
UniRef90_C5EZQ3	E K I R P E S I G K T H V R L N V R P E H Y P L V G E C L L V A I K E V L G A
UniRef90_X5MB92	A T L L A E S L A I R H R D Y G V V P E Q Y E T V G T A L L W T L E Q G L G E D
UniRef90_UPI000441A106	K Q A C K L I E R L H K N T H K I P A A M F Q F L F Q A I L C V F Q D L L R E E
UniRef90_H2YFM6	D E L Y L S F L G K V H G E R S I P A K H F S D M G P V L L A V I S A V L R E D
UniRef90_E8SF45	T P I L V K E I G Y K H C A L Q V L P E H Y P I V G E N L L A A I Q E V V G I D
UniRef90_A0A059MLX0	P D D L L A R I A N K H A S L G I I A D Q Y E I V H K H L F E A I V E V L G E A
UniRef90_R6FQS7	P A I L V K K I G E V H C N S G I Q A A H Y P I V G K N L L L T I K E V L G D A
UniRef90_K6VH56	F G P V M R R I A H K H V S L G I R A Q E Y T I V G H H L L K A V K T V L G D A
UniRef90_UPI000359DC2C	D K M V I T A L G R R H V D Y R A N I K I V P I I G Q Q F V S A I E P K L G D M
UniRef90_Q07A26	T L G D A S L G G V H V Q K G V V D P H F V V K E A L L Q T I K E V A G G S
UniRef90_F7EB40	S S L Y L T S L G R K H R A V G V K L E S F N T V G E S L L F A L E S C L G D A
UniRef90_W1YVY0	K E A L A R I N H K H T S L N I L P E H Y P I V G A H L I G T L K E L I P E Q
UniRef90_W7E6F8	Q G A L V H I A N K H V S L G I R A E H Y P I V G A H L L A S I K E V L G E G
UniRef90_I1FJ81	V E A L V D L G M A H A M Q G L K P E D F D H V G E A L V H A L G V A L G K E
UniRef90_V9XEY9	I D P I M E R I A A K H A S L G V Q A A H Y G I V R T H L F A A I A E V L G D A
UniRef90_Q9RC40	E A I L P V V S R H K H N I K P E Q Y P I V G E N L L A A M R E V L G D A
UniRef90_G6D625	V S A M M N K L G E S H G R R K I Q E K H F H D L K D V I V K M F I E V L K L D
UniRef90_UPI00035D5ADC	E S L L V G Q I V N K H V S L Q V Q P E H Y P I V G G C L L Q A M R E V L G E A
UniRef90_M5TCL4	M P A V E L I A Q K H C S L G I Q P E H Y P I V G S N L L E A I K D V M G E G
UniRef90_UPI00047DF566	E T L L V K Q I A H K H R S L G V K P E Q Y P I V G E N L L R A I K E V L G D A
UniRef90_C5QR69	M P V V K E V A Y K H C A L Q V P P A G Y D I V G E N L L A A I K E V V G L D
UniRef90_P02240	T D A T L K N L G S V H V S K G V A D A H F P V V K E A I L K T I K E V V G A K
UniRef90_E0IEV8	G A I L V R V I A H K H R S L G I R A E H Y P I V G E N L L A A I S E V L G D A
UniRef90_Q7UIY1	P A V L M P A V E L I A Q K H G I K P E H Y P I V G S N L L A A L G D V M G D A
UniRef90_T5AGV5	A G A V D R I A H K H A S L F V R P E H Y P I V G E F L V A A F A E V L G D G
UniRef90_Q2SM91	P E A L A G A I E R I A H K H N I Q P A Q Y D I V G H H L L E T L Q E L L G D T
UniRef90_K1Q9R1	M E M L R G V G K S H R R L P E F N F M I F S R I E E P F L I A V K E T L G D R
UniRef90_A4BSQ2	I E L I V N K H V S L N I L P E H Y P I V G T C L L Q A M A E V L G D A
UniRef90_UPI0003BD75A6	L D Q L I L D G R K H Y Q V K A L P K Y Y D
UniRef90_I4X1Z5	E A I L P A Q I S N K H V S L G I K P E H Y P I V G E Y L L K G I K E V L G D A
UniRef90_W6S202	L P A V K K I G E R H C D V Q I K E E H Y P I V G A N L L V A I K E V L G D A
UniRef90_F8ELZ1	D E L L L Q D L G R Q H V K Y G A E E H H Y G Y V G E A L L W T L E K V L K E D
UniRef90_B1ZVJ7	Q P A L R R L G H R Q A A H G T R D E H Y A F S G A A L L W T L E K A L G P A
UniRef90_G6CW33	D S F F T H V G G T H R Q V P G F K A E N F M K I E Q P F L E A A K T T L G E R
UniRef90_D2AQM5	Y L G Q L A R D H R K Y G V Q P E H Y P A V G S C L V A A M R F N A G G A
UniRef90_UPI0004561B81	V E K V S H K H A S L G V E P A Q Y A V V G K Y L L A A M A E V L G G D
UniRef90_A0A058ZPU3	D K I V A Q Q L A V K H V D Y G V K A E H Y Q P V G E A L I F T L E K G L G D A
UniRef90_A0A016U3Y1	E K L I E A T A R N S H L K W H I C K Y H I E N M V P G L L E V L S I C M E G K
UniRef90_B1KM75	N T L V L Q Q L A Q R H N A Y G V K K S H F T P V G N A L L Y T L K T G L G S E
UniRef90_S9QZE0	G G L L K Q I I H K H V A L R V L P E H Y P I V G T C L L R A I R E V L G P Q
UniRef90_S6IHZ6	G D L L A K I I N K H V A L Q I L P E H Y P I V G S C L L A A I I E V L G E E
UniRef90_B2L5U3	A G S L S K L S D L H A Y D L R V D P G N F
UniRef90_F7A367	E E T F L N G L G E L H A G H N V E P E D F E Y L A P V M L A V I G G Q L N L N
UniRef90_P42511	G E V V L P T L G S V H V Q K G V L D P H F L V V K E A L L K T F K E A V G D K
UniRef90_UPI00046B07CD	F S P V M R R I A H R H V S L G I S A R Q Y T L V G R Y L L A A V D D V L G D A
UniRef90_H9JFD7	D N F F Q Y I H Q V G A S H R K I P V E Y F W K I E A P F L A A V E S T L G D R
UniRef90_C0Z6G4	L P V V K Q I G H K H R S L G V K A E H Y P I V G E N L L A A I K D V L G D A
UniRef90_I9CP50	E T V A P Q E L G R K H V A Y G T Q A A H Y A P V G A A L L W T L E Q G L G P D
UniRef90_D9WHF6	P D A M L T R I A H K H A S L G V S P A Q Y P L V H R H L S A A I A E V L G D A
UniRef90_P49852	G N I I V K Q I G H K H R S I G I K P E H Y P I V G K Y L L I A I K D V L G D A
UniRef90_W3WSE3	T P K F E R V A N K H V S L G I Q P D H Y E I C K Y L M R A F A A V L G P K
UniRef90_Q0K2N2	D D I V V Q E L G R R H V A Y G V K D E D Y D T V A G A L L W T L G A G L G D A
UniRef90_W7D677	L P Q V K T I A H K H R S L T I K A E H Y P I V G K Y L L K G I A E Y L G D A
UniRef90_X1XCE5	D N F L T Q V G A T H K T I P G F N P D Y F W K I E V P F L E A V K T T L G D R
UniRef90_E9HNB1	G A L N G K L L A N Q H K Q R G T R A H D N M A T V L L G F L A A T L G S A
UniRef90_W7ATG7	K P H V I Q I G Y K H R A L Q V K P E H Y P I V G H H L I E A I G I V L G D A
UniRef90_UPI0003723B40	E A I V P A V I A H K H R A L E V L P E H Y P I V G K Y L L A A I R E V L G D A
UniRef90_K9Q0C7	T D A L K G L G A R H V K Y G A L P E H Y P L V G N T L L K T F E Q F L G D A
UniRef90_J9E103	S V I L V Q R I A E K H R A L G V T P D Q Y P I V G E T L L K A I K D V L G D A
UniRef90_Q9M3U9	E V V V S K Y L G S V H L Q K G V I D A H F A V V K E G V L R T V E K G V G E K
UniRef90_L5N6T1	E T L L V K Q V A E K H R S L H V K P E H Y P I V G E H L L G A I K E V L G D G
UniRef90_M3VFP5	Q R T I I E R I A H K H A S L G V V A D Q Y P I V H E H L F A A I V E I L G E A
UniRef90_F9SX37	D T L V L Q K L A E R H V A Y G V Q A K D Y T P V G N A L L H T L K V G L G D S
UniRef90_E0RL52	E E I L V R Q I A H K H R S L G I K P E H Y P I V G K Y L L A A I K D V L G D A
UniRef90_X7EAF4	T S A V M R I A H K H T S F N I K P D Q Y D I V G H H L I E T L R E L A P D A
UniRef90_E9FXJ6	M A N Q L N A L G G A H Q P R G V T T T I L K E F G V I L I Q V L E E E I G S A
UniRef90_UPI00047BCAEB	M P V L E R I G E K H R S L Q I V G H H L L A A I R E V L G E A
UniRef90_E3HL11	L M P V V T R I V H K H V S L G I R P E H Y Q I V G K H L L A S I S E V L G E A
UniRef90_A0A014MS30	S G L L P A Q I I H K H V S L Q V Q P E H Y P I V G G F L L R A I R E V L G A E
UniRef90_G1NJL7	P C L Y L C N L G K H Q A V G V K V E S F S T V G E S L L Y M L E K C L G A A
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UniRef90_M2X4A5	A A P F E R I A E R I A H K H G I R A E Q Y P I V G H H L L T A V G T V L G A A
UniRef90_UPI000262A1FA	P R E M L G R I G H K H A S L G I T E D Q Y G I V H E H L M A A I V E V L G A D
UniRef90_U2GJB1	P R D M L S R I G H K H V S L G I T E A Q Y Q I V H D N L F A A I V E V L G A D
UniRef90_F0LYA5	A A L T A E R I A H K H T S F N I Q P E H Y Q I V G H H L I E T L R E L A P E A
UniRef90_H2ZPV1	E E L L L T K L G E S H A R L Q V D P G S F E Y V A P V I L A V I G G H L N L P
UniRef90_G7D4G4	E T L L A S A L A K K R H A S L G I Y G A K A E H Y P I V G A T L L W T L E K G L G E A
UniRef90_F8I6Y7	R D A I Q T I A H K H P D H Y P I V G R V L Q T L A E S L G A
UniRef90_D0IUY8	G N L P A Q I I N K H V A L Q V Q A E H Y P I V G A C L L R A I R E V L G A E

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UniRef90_S6F2N4          A T D E V I N A W G K A Y E V I A E V
UniRef90_Q127H5          I T G E V L A A W G A A Y G Q L A D I L
UniRef90_E9GCI5          F N V E A R K A W N K G M V A I I A G I S K
UniRef90_P08054          W S D E M G Q A W T E A Y N Q L V A T I K A
UniRef90_W4CVN4          A T P E I I D A W A K A Y G V I A D A F A E K Y R
UniRef90_M7XWG2          F T P E I R E A W A E T Y G V V A G L M R S
UniRef90_I3NH32          F T P A M R A A W S Q L Y G L V V A A M S R G W
UniRef90_C5ZVT2          A N D E V I E A W G K A Y G E V A D
UniRef90_V4HJT2          W N S E L R Q A W I D V F K V V A T V M
UniRef90_C5EZQ3            S D E V L E A W S K A Y G E I A
UniRef90_X5MB92          F T T D V R D A W V E A Y G A L S A A M
UniRef90_UPI000441A106   F T D D A Q L A W E K F F V V L Q E E I E A A Y
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UniRef90_A0A059MLX0      V T P E V A A A W D E V Y W E M A R A L I S
UniRef90_R6FQS7          A T D E V I E A W G K A Y G V I A D
UniRef90_K6VH56          I T P E V G A A W D E V Y W L F G T E L I A
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UniRef90_W1YVY0          F T P D V E Y A W R E A Y A L L A D
UniRef90_W7E6F8          A T D E L I D A W G K A Y E Q L A N L L I E
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UniRef90_Q9RC40          A S D D V L E A W R E A Y L I A D V
UniRef90_G6D625          G T   T L N A W G K A V D F
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UniRef90_M5TCL4          A T D E I I E A V A E A Y G F L A D
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UniRef90_Q7UIY1          A T P E I V E A V S E A Y G F L A D
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UniRef90_A4BSQ2          L T P E L A E S W E A A Y W Q L A N L L I E R
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UniRef90_F8ELZ1          F T P E I Q Q A W T D V F R V M S D T M I E A A H
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UniRef90_E0RL52          A T D E I I T A W A E A Y G V I A N V
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UniRef90_UPI000443E9E1             A A D I G S D A L L R M F A S Y P G T K T Y
UniRef90_A0A024PP82     L D K G T K D I I K A T V P V L Q E H G A E I T K R M L G N H P E L K
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UniRef90_E1X5F5       M L E S K T I E I I K S T A P I L E E H G V H F Y K K L F E K N P E V M P Y
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UniRef90_B1LUC7         S A A Q V A L V R D S F E T V Q T D A V A D L F Y G R L F D I A P Q V R S L
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UniRef90_L9TFS2       M L D A Q T I A T V K A T I P L L T G P K L T A H F Y D R M F T H N P E L K E I
UniRef90_C7FFV7       I S S E A A K I K T S W A G A N L Q A A G T G F Y V H L A A D
UniRef90_G0W9W0       M L S E Q T R T I V K A T V P V L E Q Q V I T R C F Y K N M L G E H T E L L N I
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                                          50              60              70              80
UniRef90_K1RX51        F A H F S K L E T E D D M R E N E A L E H H A T F V M T T L D E A I S N I D N V
UniRef90_U1EBY4        F                 N Q T N Q K K G L Q S S A L A M A V L A A A D N I D D L
UniRef90_W8A1R9        R F N R G N Q       K Q G G Q Q R A L A A S I A T F A T H L V D P S L P H
UniRef90_O80405        F S F L K D S A     E V V D S P K L Q A H A E K V F G M V H D S A I Q L R A S
UniRef90_K6BYF0        F             N Q A N Q A N G A Q P R A L A N A V L   M Y A R N I D R L E N L
UniRef90_P02211        F A D F K G K S I A D   I K A S P K L R D V S S R I F T R L N E F V N N A A D A
UniRef90_M2XD60        E G I F S R A N Q R T G E Q P L A L A G S V A F A T H I L N H P E S Y
UniRef90_UPI00046972F1 D V F N L A H Q H K G D Q P V A L F N A V A A Y A Q H   I D N L A V L
UniRef90_W3X6Y2        N I F N Q T G Q T T G A Q P R A L A G A V F S Y A S H   V D D L G R L
UniRef90_UPI00028A25F1 F N H       T N Q E K G R Q Q T A L A N T V Y A     A A V H I E N L
UniRef90_W1N5G4        F         N Q S H Q Q D G G Q P R A L A R S V L A Y V G   L R K Q P A E
UniRef90_A0A024JF60    F P S I K S Q A S S M A G           I L A L V I S Q L D N L P R V
UniRef90_Q2PP42        F S F L K D   S D G V P K D N P N L K A H A A K V F E L V V D S A V Q L R T K
UniRef90_A0A023D9N3    P A I R D L F N L S H Q Q D G E Q P K A L A L A V L C Y A E H I N D L G A L
UniRef90_P23216        M F I F G Y S G R T E A L K H S S K L Q H A K V I I D Q I G K A M D N A K Q M
UniRef90_Q6WKX2        F S F L R D   S D L P L E Q N P K L K P H A L S V F A M T C E S A V Q L R K A
UniRef90_UPI00031999E4 F K         G D M K Q Q G R K L M A I L H A A V S S L N A P
UniRef90_K7SC23        D P A I A E M F D P T H Q S K G T Q P R A L A M A V L A Y   A K N I D N L G V L
UniRef90_Q7S074        N I F S L T S Q A T G A Q P R A L A H A V L A Y   A T Y I D N L S A L
UniRef90_UPI0003711A7B H V F N M G N Q T N N K Q Q R A L A M A V L A Y A E H   I E D P S V L
UniRef90_K1K1W9        D I F N L A H Q R S G G Q P L A L F N A V A A Y   A K N I D N L
UniRef90_J3NI61        R L R E V F N S V N Q K S G R Q P R A L   T Q V M L S F A N N V S H T S E L
UniRef90_UPI000349F54F F       A H T N M K E Q R K H L F S S L V L V V N N L R K P D V L
UniRef90_R6ANN3        F       N M G H Q R A G F Q Q Q A L A G A V L A Y   A E N I E N L P A L
UniRef90_M2X487        F       R S D M E K Q K R L L I H M I N K G V K L L N D I D K L
UniRef90_S6CDG3        F P K F A G K E   L S A I K G S A D F A L H A T R I V S F I S E G N S A T A P A
UniRef90_M7XQB8        F P D         D M T E Q K Q K L M A M L G L A V A N L N H P E T V
UniRef90_T0BM64        F           N Q A N Q H Q G R Q Q T A L A N A V Y A A A V H I I D N L
UniRef90_UPI00036E5B2D F         N M S H Q R S G K Q Q F A L F S A I A S Y A K H L D D L
UniRef90_W9VZS9        L R N I F N T A H Q E T G A Q P A A L A H A V W A Y A N N   I D N L G A L
UniRef90_V9HH89        F       N M D R Q E S G E Q P K A L A M A I L S S     A Q N I D N L
UniRef90_U2HCD6        H V F N M G N Q Q N S K Q Q T A L A M A V L A Y A E H I E N P T V L
UniRef90_X2GRE8        F N H       T N Q T K G R Q Q A L A N T V Y A     A A Q H I D N L
UniRef90_B8MAY8        L N D Y F N T T N Q L N G H Q Q R A L A G S   L Y A Y A A N I D N L G A L
UniRef90_UPI000443E9E1 F S H L   D I S P G S A H L S S     H G K K I V L A I A E G A K D I S Q L
UniRef90_A0A024PP82    N I F N Q T N Q R K G D Q P K A L A N T V Y A     A A A N I D H L
UniRef90_C7NIJ4        F       N K A N Q A V G E Q P V A L A S S V V A Y A V Q L I D P E A P D
UniRef90_M5E7R5        N V F N R G N Q K Q G A Q Q K A L A A S V A T F A S M L V N K D A P L
UniRef90_E1X5F5        F       N R A H Q E M G T Q Q E A L A G A I C A   Y A K N I D N L S A L
UniRef90_B8NAG7        F       N N A N K V N G H Q P R A L A G A L F A Y A S H   I D D L G A L
UniRef90_C6J2F4        F N H       A N Q R Q G K Q P T A L A N A V Y A A A A H I D R L
UniRef90_UPI000476541D F P     V T M E L Q R T R L L R A L       I H V V Q M V D R P D E
UniRef90_B8C6B7        F P S         D L A D Q K K K L M A M I S V A V D G L T D L E A L
UniRef90_D2A396        F E K F K E L K T K E D Q A N S L E L A E H A S T V M N T L D E G I K E L D N L
UniRef90_UPI00034D7B38 F     A K T D I G K Q E K K F I N S L V L L V E S L R Q P E I L
UniRef90_U3HM05        F       N Q A H Q A S G D Q A R A L A N G V L M Y     A R H I D Q L
UniRef90_B0UIC5        F N Q       S H H G E T G S Q P K A L A Q A V L A   Y A R N I D N L G V L
UniRef90_D6YB43        F P P A M D A H N E       H L V K A L T K I V S M L D D P D G L
UniRef90_UPI000371A6A8 F R       A P I A E Q E R L M N M L D I A V R G L G R L
UniRef90_V6Z8I1        L F N R G N Q A   A G E Q P K A L A A S I A A F A G M V L E G N G A Q Y D S V L
UniRef90_UPI0003458DAD F A N       T D M G T Q Q K K L I N S   L V L V V E S L R N P E A L
UniRef90_F5XTH5        F       N Q G N Q A T G E Q S K A L A S S V V A Y A V H L I S P D A P P
UniRef90_H3SBC5        F N H       A N Q R Q G R Q S Q A L A S A I Y A A A A H I D R L
UniRef90_P25165        F G R L G H L S T G     R D N S K L R G H S I T L M K N F V D A L D D V D R L
UniRef90_UPI000477A4C2 F K     G P M A S Q Y Q K F I D M       L S I I V A R I D R P D S I
UniRef90_G6D627        F R M L R K L   N E N E F D D N H Q F K A H V M S L M S S L N L A I   T N L D Q P
UniRef90_UPI00045E96C6 M L A A L Q N V K Y L E N I
UniRef90_F5RBQ0        F       N Q A H Q A S G D Q P R A L A N G V L M Y     A K N I D R L
UniRef90_A3VCL8        F K G N M N       E Q G M K L M G T L A V V V N G L H T L
UniRef90_UPI000376471D N V F N M R H Q E R G Q Q Q E A L A R A V   Y A Y A A N I D D P S C L
UniRef90_F3MBR1        F N H       A N Q R E G K Q P F A L A N A V Y A A A A H I D R L
UniRef90_Q49WI6        N M F N Q T N Q K K G L Q S T A L A Q S V L A     A A M N I D D L
UniRef90_G8X712        N I F N L G N Q A S G K Q Q T A L A M A V L A Y A E H   I E N P S V L
UniRef90_O04939        F S F L A N G V D P       T N P K L T A H A E S L F G L V R D S A A Q L R A N
UniRef90_UPI000361A298 A L K H I F N M S N Q S E G T Q K K A L A Q A V   Y S Y A Q H I D R L A D L
UniRef90_UPI000382B6E6 F P     V A M A A Q R D R L V K A L G H M V S N     V D R V G D V
UniRef90_R7YY07        L N D I F N T A N Q I N G H Q P R A L A G S   L F A Y A D N I D G K L
UniRef90_B1LUC7        F P D         D M T A Q K R K L V A M L A L A V S N L D K P
UniRef90_V6I8G9        F K         G D M T E Q G R K L M V M L R T L I S G L G D L
UniRef90_P04251        F A R L G D V S     A G K D N S K L R G H S I T L M Y N F I D A L D N V D R L
UniRef90_UPI000318168E N V F N V A N Q A V G E Q P K A L A A S V V A F A V Q L L D P D A P D
UniRef90_A0A016Q645    L N D Y F N T V N Q A N G R Q P R A L   T A V I L S Y A N N I N H I T E L
UniRef90_UPI00047BC838 F N H       A N Q A I G E Q Q K A L A A S V V A F A V Q L V T P D A P D
UniRef90_Q9UAG7        F N H       S N Q R E G K Q Q N A L A N T V L     Q A A I H I D K L
UniRef90_R7X262        L R N L F N M G N Q A S G A Q Q Q S L A S A V F A Y A   A N I D N A A A
UniRef90_A6GD40        F E H       T D M A R Q Q Q M L M D T L A L A V R G L D D F
UniRef90_UPI00047612D0 F P     V Q M D L Q R S R L L H A I V T A V Q T L D D P
UniRef90_C6WR47        F P A   N M E V Q R S R L L R A L V H V V Q M V     D R P D D
UniRef90_UPI00047C30DC F G K     T D M D K Q G K L L N S L I E G L R T P E L L
UniRef90_UPI0002DA83D1 F G       G A D M K A Q G Q K L M A A L G F V V G L G R K P
UniRef90_T1GF38        F Q D L K D L   P F K D L K D S P K F K F H S V R I M K A F D E A I Q S L G T Q
UniRef90_R8B8T8        L R N I F S S S S Q A N Q P R A L A Q S V L A   Y A Y I D D L P K L
UniRef90_Q6WKX1        F Y F L K D Q   N E I P R N N P Q L R S H V V K V F T M T C E S A A A Q L H K V
UniRef90_C9QFU4        F         N M T H Q K T G R Q G V A L F E A I A A Y A K N I E N L
UniRef90_U6IR81        Y N     V E F N D D D E L V I S S C A L Q Y S Q A Y I T L I D E A I R S L E D P
UniRef90_UPI00047CF7FA A L L N I F N P A N Q R S G G Q A R S L A A S I A Y A A H   I D H L D Q L
UniRef90_G9NNS6        F     S L R N Q Q T G A Q Q I A L S N A V L A A A H I I E R L Q D I
UniRef90_A1CN79        F     N T A N Q V N G H Q R A L A G A L F A Y A S H   I D D L G A L
UniRef90_A0A034WEZ5    F P   F K D V P I V D L N K   N E R F R S H V T K I M K V F D N S V N V L G A D
UniRef90_L9TFS2        F     N M S N Q R N G D Q R E A L F N A I A A Y A S N I E N L P A L
UniRef90_C7FFV7        A P A A Y A V F N L G A N P H G T K A Q A Q G L K V M Q F V D D C V K S L D D M
UniRef90_G0W9W0        F       N R V N Q K K G A Q P T A L A T T V L A A A H I D D L
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                                    90             100            110           120
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UniRef90_U1EBY4          S P I V P A I M V Y K H C A L Q V K P E H Y P I V G E N L L W A I K E V T G L T
UniRef90_W8A1R9          P R D L L A R I G H K H V S L A V T E P E Y R I V H E H L F A A I V E V L G D A
UniRef90_O80405          G E V V A T L G A I H I Q K G V V D P   H F V V V K E A L L E T I K E A S G E K
UniRef90_K6BYF0            G P L A S Q I V N K H V A L Q I L P E H Y P I V G T C L L Q A I R E V L G K T
UniRef90_P02211          G K M S A M L S Q F A H V G F G V G S A Q F E N V R S M F P A F V A S L S A
UniRef90_M2XD60          P D E L L S R V A H K H T S L G I V E G Q Y P I V E K H L L G A I A D D L G D A
UniRef90_UPI00046972F1   G E A V E R I A Q K   H T G F L I K P E Q Y A I V G K H L L A T L E E L G G D A
UniRef90_W3X6Y2          R   A L V E R I A H K H V S L M V Q P E Q Y E I V G K Y L I E A V A T V L G D A
UniRef90_UPI00028A25F1   E A I L V H Q I G Q K H R S L G I L P E H Y P I V G Q F L L A A I K E V L G D A
UniRef90_W1N5G4          A R A A M A T A I S K H V S L G I Q P D Q Y P I V G E C L M A A I G E V L G D A
UniRef90_A0A024JF60      R E V L I S L G K R H S R I I G V E V T H Y E L V G N A L L R T L S D R I Q D E
UniRef90_Q2PP42          G A V V D A N L G P V H V Q K G V T D A H F V V V K E A L L K T V K E A T G A K
UniRef90_A0A023D9N3      G G M V E R I A E K   H V G L N I L P E H Y P Y V A E A L L G A I G H V L G D A
UniRef90_P23216          A G T L H A L G V R H K G F G D I R A E F F P A L G M C L L D A M E E K V P G
UniRef90_Q6WKX2          G K V T V R E S S L K F K Y G V V D E H F D   V R F A F S R S V F S S I R D L
UniRef90_UPI00031999E4   E Q L L L Q Q L A K R H E G Y G V K K A H F T P V G N A L L H T L K V G L G D A
UniRef90_K7SC23          G G A V E R I A Q K   H V S L E I L P E H Y P H V A T A L I G A I Q H V L G N A
UniRef90_Q7S074          S E A V A R I A H K   H V S L G V E P A Q Y A I V G Q Y L I Q A I G K V L G D A
UniRef90_UPI0003711A7B   M P V V N N I G H K   H T S L D I R P E H Y S I V G R H L I A S I Q E V L G D A
UniRef90_K1K1W9            G A L A G A V E R I A H K T I Q P E Q Y H I V G S H L L A T L K E L G G S A
UniRef90_J3NI61          I P T L E K I C N K H C   S L G I Q Q A D Y S L V G R Y L I L A F A H V L G P A
UniRef90_UPI000349F54F   S D A L K G L G A R   H V N Y G I L P Q H Y P M V G G A L L K T F E S Y L G A D
UniRef90_R6ANN3          L G A V A H I A N K   H V S V G I R A E H Y P I V G K H L I A S I K E V L G D A
UniRef90_M2X487          E S A L S   S L G K R H I K Y G V K E E H F P C V G E T L L K V L K Q F L G D E
UniRef90_S6CDG3          I E T L V T E L A N N H K N R G V T K D Q F N E F R T A L T N Y V S S N A P
UniRef90_M7XQB8          V P A L Q D L G R K   H I A Y G T R A A H Y A P V G E A L L W T L E Q G L G P D
UniRef90_T0BM64          E T I L V K H I A H K H R G L G I Q P D Q Y P I V G K H L L A A I K D V L G D A
UniRef90_UPI00036E5B2D   S S L M V E R I A N K H S S L G I L P E H Y P I V G H H L I E T L R E L A A D A
UniRef90_W9VZS9          E T A V S R I G N K H A   S L D I Q P D Q Y P I V G E E L L T S I K Q V L G E A
UniRef90_V9HH89          P A I M V N R I A E I C N A G V K E E H Y P I I G S N L L F A I K Q V L G D A
UniRef90_U2HCD6          N A V     D H I G Q K H T S L D I R P E H Y A I V G Q H L I A S I S E V L G E D
UniRef90_X2GRE8          E P I V V V Q I A H K H V S L G V L P E H Y P I V G Q Y L I A A I K E V L G D A
UniRef90_B8MAY8          G P A V E N I T N K H A   S L Y I K P E Q Y K I V G T Y L L A A M G Q V L G D A
UniRef90_UPI000443E9E1   T V T L A P L Q T L H A Y Q L R I   D P T N F K
UniRef90_A0A024PP82      E V I L V K Q I A H K H R S L N I K P E Q Y P I V G K H L L L A I K D V L G D A
UniRef90_C7NIJ4          F S P V M E R I A H K H V S L G I Q G T D Y I T V G H Y L L E A V G T V L G D A
UniRef90_M5E7R5          P D H L L S R I G H K H V S L G V T E D Q Y Q I   H D N L F Y A I V Q V L G A D
UniRef90_E1X5F5          S G A V S L I A N K   H S S L K I K P E H Y P I V G V N L L E S I K E V L G D G
UniRef90_B8NAG7          G P A V E L I C N K H A   S L Y I Q P E Q Y Q I V G K F L L E A M G E V L G D A
UniRef90_C6J2F4          E E I L V R G I A Q K H R A L G I Q P E Q Y P I V G E N L L A A I K T V L G D A
UniRef90_UPI000476541D   L S I F L R Q L G R D H R K F G V I G E H Y D R V G E A L L G A L G E I A G P L
UniRef90_B8C6B7          V P A V Q D L G R R H A K Y Y K V T S P M F D T V G A A L L D T L E K G L G E G
UniRef90_D2A396          D E Y L H Q V G A S H R R I P G F K V E Y F W K I E K P F L T A V E T T L G D R
UniRef90_UPI00034D7B38   K Q I L A D L G S R   H K Q Y G T L P Q Y Y P L V G D I L L Q T F A E Y L Q Q D
UniRef90_U3HM05          E G P L V S R I V A K H V A L Q I L P E H Y P I V G D C L R S I R E V L G E D
UniRef90_B0UIC5          G G A V E R I A Q K   H V A L N I L P E H Y P H V A D A L L G A I G D V L G A A
UniRef90_D6YB43          R P Y L A   R L G R D H R K Y G V T A E H F L A A G D A L L A T V K R F A A D L
UniRef90_UPI000371A6A8   D S L L P A V Q A L G A R H L G V Q T A H Y D T V G E A L L W T L E Q G L G P A
UniRef90_V6Z8I1              D R I A H K H A S L G I V A E Q Y P I V Y E H L F A A I A E V L G G A
UniRef90_UPI0003458DAD   E P V L K A L G G R   H V G Y G A I P N Y Y E P V G E A L L L T F E Q Y L V E D
UniRef90_F5XTH5          F N H V L R R I A Y K H C S L G I R P E Q Y T I V G R N L M A A V G E V L G D A
UniRef90_H3SBC5          E D I M V K Q I G H K H A L H I Q P E H Y P I V G K H L L A I K D V L G D A
UniRef90_P25165          K C V V E K F A V N H I N R   Q I S A E E F G K I V G P F R A V L R I R M G D Y
UniRef90_UPI000477A4C2   A Q E L S A M   T R S H A G Y G V Q P H H Y E D V K D A L L W T L Q Q G L G A D
UniRef90_G6D627          E I V V A M M N K L S H G R R K I D E Q N F H N L K G I I V K M F I D V L K L D
UniRef90_UPI00045E96C6   A E S V V K L G E R H L V K Y G A Q I E H F D T L K Q A L L K A L A E H L G E R
UniRef90_F5RBQ0          E A L L V G Q I V Q K H V S L Q V L P E H Y P V V G S C L L R A I R E V L G A E
UniRef90_A3VCL8          D Q I V A Q A L A I R H V D Y G V Q P E H Y D K V G A S L I R T L E Q G L G P D
UniRef90_UPI000376471D   Q A V L E G I A N K   H V S L G V R P E Q Y P I V G E H L L G A I K A V L G D A
UniRef90_F3MBR1          E A I V V K Q I G H K H A L N I L P E H Y P I V G E T L L G A M K D V L G D A
UniRef90_Q49WI6          T R I L V K E I A F K H C A L Q V P P A G Y D I V G E N L L A A I Q N V L K L S
UniRef90_G8X712          I N T L K S I G N K   H V S L N I T K E Q Y E I V G N H L I A S I K E V L Q E S
UniRef90_O04939          G A V V A D A L G S I H S Q K A L N D S Q F L V V K E A L L K T L K E A V G D K
UniRef90_UPI000361A298   L P   L V E R I A H K H A S L G I L P E H Y P I V G K Y L I E A I G D V L Q D A
UniRef90_UPI000382B6E6   V P Y I E D L G   R D H R K F G T V A G H Y P A V G G S L L A T L K H F L G D A
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UniRef90_B1LUC7          E A L V A T V R D L R H A G Y G A L Q A H Y E P V G A A L I W T L E Q E L G P D
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UniRef90_B8NAG7        L T P E I L D A W A T A Y W Q L A D L M
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UniRef90_I7D426	L I R E S F A E I E A D E L A Q Y F Y G A L F V V A P D C R D L
UniRef90_F4XUI8	S Q E T I D I I K S T A P K K N G K Q I T R M Y E I M F H N H P E V K A
UniRef90_G8ZUE8	M L S E Q T R T I V K Q T V P V L N G G V I T K T F Y G N M L R D N K E L L N Y
UniRef90_R7UHS6	L L T P E E I V L V R V T W E Q L K T N L T G K K V F L R I F N L K P D I K K L
UniRef90_X5KG23	I D D I T R E F Y Q G L F G N H P E L L R N
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UniRef90_A7HVZ4	L T E Q E K Q L I E K S I E R V A A G D P A S H V Y A R L F A Q Q P E M E A M
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UniRef90_Q5TN47	M T L F E E H A D L L N M
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UniRef90_H5XQB7	E N I E R S W Q L A Q P E E V E Q E F Y R L L F H L S P S A R E F
UniRef90_L9PA49	M L S T E Q K A I I S A T V P I L E Q E A L T R H F Y L T L F R D F P E A K P I
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UniRef90_U7QFR4	S P E T I E L I K S T A P L L K K Q Q I T S R M Y E I M F K N H P E V K E
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UniRef90_UPI0002E62F56	M L S A E A R P Y I E A S V P V L R E H T I T R T F Y K N M F A E H P E
UniRef90_F4F348	L L K E S W A L V E A D R V S E H F Y A R L F L L D P E L R K L
UniRef90_F6G4T5	M L S E Q S K P L I D A S V P V L R E H T I T Q T F Y R N M F A S H P E
UniRef90_K9VX73	E I L E S S F E K I H A D E F A A S F Y E N L F I A H P E L Q P L
UniRef90_UPI0003632844	L I R Q S W A E V H A E D V S R F F Y S M L F S I A P A T R E L
UniRef90_W5FBN0	M
UniRef90_Q9FEP8	F T A Q Q E A L V G S S Y E K K N L P T N S V L F Y T V I L E I A P T A K D M
UniRef90_I7EH20	M V S A D D R T L I H R S V E R M E L D H F V P L F Y T K F F E T C P D V R T F
UniRef90_R0I5I4	V F T E K Q E A L V K E S W E K Q D I P K Y S L H F F S Q I L E I A P A A K G L
UniRef90_K7LKG1	F T E K Q E A L V N S S F E K A N L P H H S V V F F N S I L E K A P A A K N M
UniRef90_UPI0003B480DF	M L Q K E T I R L I Q E S V P L L R G H K I T A N F Y K R L F N E H P E L L N I
UniRef90_R7TKA2	T Y R Q L F N L R N S W K T V N L T E T S K D C L I R Y L K K Y P E H K A M
UniRef90_M2V0F0	L T P T Q V Q I I K S T V P V L A E H G T A I T T R F Y H D M L E A
UniRef90_U9VVN9	K P K A D E F V G S F Y N N L F T D Y P A A K P L
UniRef90_S6CDG1	L T A E E Y A Y V S G A W N K V K H S E V D I L Y A V F K A Y P D I Q A K
UniRef90_UPI0004748B06	A D H D L V L K C W G G V E A D G H G G E V L N R L F K E H P E T L K L
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UniRef90_E1G8W1	L T Q K Q I Y V L T K N W K G I D V C E A G V E M F L K L L S L H P E Y Y K M
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UniRef90_UPI00022601B5	L D D K T R S I V K A C V P A L E A H D I T Q E M Y K R L L A D P E V R D L
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UniRef90_E7B2A5	M L D S Q T I A T V K S T I P L L A A P K L T A H F Y D R M F E H N P E L K
UniRef90_A3AFU2	F T E E Q E A L V K S W A K N D S A H I G H R F F L K L I F E V A P S A R Q L
UniRef90_F0XSA6	L T Y K Q S K L V R E S I P L H G E R I S S I F Y A T M L D F H P E L R S Y
UniRef90_UPI000472638D	L D D K T R A I V T A C V P A L E A H A I T T E M Y K R L L A D P A I S A L
UniRef90_X0NDY2	L I R R T M A E I E A D K V T S Y F Y A L L F V Q H P D L R A L
UniRef90_UPI0004654DE8	M L S D Q I I Q T I K E T A P V L A E Q Q I T D I F Y T K L F A N H P E L K
UniRef90_UPI0002628C30	D T E K L A I V K S S A P V N S T E I G K R F Y E L L F T K V P E
UniRef90_G3CR06	I S A D V K K D L R D S W A A L G S D K T G V A L M S T L F N D C P E T V A Y
UniRef90_F4QUX0	L S E R T I A L V K A T V P A L E A H D I V R E M Y S R M F Q N P E L R D L
UniRef90_U3IJR6	H R M F I A Y P Q T K T Y
UniRef90_E9HXG0	E A D R T L V Q G T W R I A K K G N I A P K A F I R Y F K L K P E A Q K Q
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                              50        60        70        80
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UniRef90_I7D426         F P       V T M A T Q R S R L L R A L V V V Q M V           D R P D E
UniRef90_F4XUI8            Q F D M S A Q A N G S Q P A K L A T A V   Y S Y A T K I D N M E A L
UniRef90_G8ZUE8         F          N R V N Q A K G A Q P T A L A T T V L A A A K H I D D L
UniRef90_R7UHS6         F P   F S D V W G D D L I R H   P K F V L H S E R F M L V V D C C V Q N L E C I
UniRef90_X5KG23         L F N R G N Q     A Q G A Q Q A L A A S I A T F A T H L V D P D L P H
UniRef90_E3H505            G L F S R S S Q L E G T Q P K A L A G S I A V F A S Y I M E H P D S Y
UniRef90_W6WXD1            N V F N M A H Q E Q G Q Q Q Q A L A R A V   Y A Y A E N I E D P A S L
UniRef90_G2TLI6         F          N Q T N Q S Q G R Q Q T A L A N A V L A A A S Y I D H L
UniRef90_W4QGW9         F N H         A N Q K K G R Q Q T A L A N T V Y A A A Q N I D Q L
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UniRef90_U1LJZ1            G V F N Q S H Q A S G K Q P L A L F S A L A A Y A N     Y I D Q P E V
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UniRef90_V5YM35         F P A F V G Q    D L A A V R G S A A F A L H A T R I V S F I   S E V V A L A G N Q
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UniRef90_UPI000329137D  F Y N C R Q F S S V E A C L S S P E F L D H I R K V M V V I D T A V T N V E D L
UniRef90_UPI0002E62F56     L T N I F N M G N Q A N G A Q Q Q S L A A A V F T Y A   A N I D N P D A
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UniRef90_UPI0003632844  F P       V N M E V Q R S R L L R A L V H V V Q M V         D R P D E
UniRef90_W5FBN0         F P F L R D A G E D A P L Q S H P K L K A H A V T V F V M A C E S A T Q L R K V
UniRef90_Q9FEP8         F S F L K E S G P    K H S P L Q A H A E K V F A L T R D A A T Q L V E V
UniRef90_I7EH20         F P N       D M A G Q H E K L L T S L T Y I I E A L D H P E K L
UniRef90_R0I5I4         F S F L R D    S D E V P Q N N P K L K A H A V K V F K M T C E T A I Q L R E V
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UniRef90_UPI0003B480DF  F N H         A N Q H K G H Q P Q A L A N A V Y A A A N I I T Q L
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UniRef90_S6CDG1         F P K F A G    K N L D E I K G T S D F A L H A T R I V T F I S E V V T L S Q N T
UniRef90_UPI0004748B06  F P K F V S I P P S D L V    G N A A V A A H G A T V L K R L G E L L K A R G D H
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UniRef90_W2EJI0         F P       V S M A R Q R D R L V N A L G H V V S N V         D R V D E
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UniRef90_E7B2A5            H I F N M S N Q F N G D Q R E A L F N A I C A Y A A     N L E N L L
UniRef90_A3AFU2         F S F L R N    S D V P L E K N P K L K I H A M A V F V M T C E A A A Q L R K T
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UniRef90_U3IJR6         F P H F    D L S H G S A Q I K A H G K K V A A A L V E A V N H I D D L
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UniRef90_F4XUI8         K S M V   E V I A H R H V K T H V K P E Q Y P I V G E S L L Q A M K D V L H E A
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UniRef90_W4QGW9         E V L L V K Q I A H K H V Q V K A E H Y P I V G E Y L L K A I K E V L G E A
UniRef90_G8C1Y5         D A I M E K L G K R H A R L L G I N R V S F E L M G E V F S K T I N E R L G E Y
UniRef90_C9SVM3         G P A V E R I A Q K   H V S L G I T P D Q Y A L V G E H L I K A L A T V L G D G
UniRef90_H9JFD8         D T F L A Y I Q H V G A T H H Q V P A E N F W K I E Q P F L Q A A K T T L G E R
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UniRef90_UPI00036FBAB9  A H P L Q G L G T R   H I Q V G V L P E H Y P L V G S T L L K A L A L C L G E A
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UniRef90_UPI0002E62F56  L G P V V S R I V H K H A S V G I A A Q H Y P I V G R H L L G A I Q E T L G E A
UniRef90_F4F348         E G F F L R A L G R D H R K Y H V E A A N Y D T M G V A L L D A L R S T A G D G
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UniRef90_UPI0003632844  L T P F L Q Q L G R D H R K F G V V S E H Y E A V G T A L L A A I K R Y A G E G
UniRef90_W5FBN0         R E A T L R R L G A T H V R A G V A D A H F E V V K T A L L D T I Q G A V P E M
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UniRef90_I7EH20         S A I L K H Q G E R   H R A I R I T D A H F D G F I Y S F T S A L A E T L G P E
UniRef90_R0I5I4         A D T T L Q Y L G S I H R K S G V I D P H F E
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UniRef90_G2TLI6          A T E E V L Q A W A E A Y G S I A D V F I E
UniRef90_W4QGW9          A T E D I F N A W E E A Y G V I A Q V
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UniRef90_C9SVM3          L T P E V A D A W V A A Y G Q L A D
UniRef90_H9JFD8          Y T A N V E N I Y K L T I K F I L E N L V K G Y
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UniRef90_UPI00036FBAB9   W T P N A E Q A W A A Y S V V T E L M L S G
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UniRef90_B4EE07          V D A D T L E A W R V A Y G Q L A Q I M
UniRef90_C3XHE5          A T K E I L Q A W E K A Y Q E I A N
UniRef90_F4NCQ6          A T P D I M T A W A E A Y K A I A D
UniRef90_R9TZZ3          A T E E V L G A W K K A Y D E I A K A
UniRef90_U1LJZ1          F T D E I E Q A W H S A Y Q F L A D
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UniRef90_K2HBC4          V D E E V I D A W E L A Y G E I A D
UniRef90_K4Z6M5          A T D D I I Q A W A E A Y G V I A D V
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UniRef90_UPI0002D96876   V T P E I A D A W G A L Y E E L A D L L I E
UniRef90_C8XE22          V T P E I A A A W T E V Y W L F A V I L I A
UniRef90_UPI00047AC09D   V T D E V R T A W E E V Y W L C A C E L
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UniRef90_R7TKA2          F T D P T E Q N F R K L Y Q F V I Q E M I K
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UniRef90_UPI00039BD3CD   W D H E I E A A W V S A Y T A A A N S M I R
UniRef90_V5YME9          W G D N A A A W N Q A L D N I Y
UniRef90_L8M4R4          W T P N V K Q A W V D A Y G A I S E I M
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UniRef90_UPI0004654DE8   D N D P I L E A W A V A Y D A L A
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UniRef90_U3IJR6          Y G T N P Q L A W
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UniRef90_G6CW34                                                                                       M
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UniRef90_A0A019TTI1       M L T E Q E K D L I K Q T V P L L K E K E I T S I F Y P K M F K A H P E L L
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UniRef90_G8B7N6                                             Q L Y A N L L T I A P E L E L L
UniRef90_N1PSX1           L T P E Q V E I V R S T A P V L H G N A V T T L F Y N T V L E E H P E M H
UniRef90_P14394           L T A D V K K D L R D S W K V L G S D K K G M A L M T T L F N D H Q E T I A Y
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UniRef90_J9ZAU4                   E A I K K S V D V L A P H K V T E Y F Y N Y L F R K Y P E V R P M
UniRef90_A0A059IUM5       L T E E T L A I I E A T A P A V H V D Q I V P C M Y R R L L A D   P E I R A L
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UniRef90_Q2GPL0             T E S Q I A I V K A T A P V L Q E H G V T I T T V F       Y E N L L R E
UniRef90_I1XL92           L D E Q D I T L V E H N F A A L M S D A L A E R F Y Q R L F A E Y P A I M P L
UniRef90_C4WXJ8                                                 L F E T H P D V Q Q S
UniRef90_I0DQ80           M L D S Q T I A I V K S T I P A I A A P K L T A H F Y D R M F K Q H P E L K
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UniRef90_D8Q402           L T P E Q A K I I K A T V P I L     A E H G M T I T S R F       Y A N M L R E
UniRef90_I0L4J9                   D A A R L K Q S W S L V H G D E V P L Y F Y S T L F L A H P E T R Q M
UniRef90_UPI00047BB5FF           D I P A M R A S F S K A A A D Q V P L W F Y S H L F L T H P E T R D M
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UniRef90_Q94445           L T A D Q A S L V Q S T W A Q V R N N E V     D I L A A V F T A N P D I Q A R
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UniRef90_UPI000364DB08       D P A E L K D S W A R V A S D A V A L Y F Y S H L A L C E P E I R D M
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UniRef90_C6T2Y5           F T E E Q E A L V V K S W N K N S Q E L G L K F F K K I L E I A P A A Q Q L
UniRef90_A5FW99           L S D R T I A L I K A T V P A L     D Q H G L A I T R R M Y E R N P A I A E L
UniRef90_UPI00036D3387           K Q L L E N S L M L V D L P D D G V R F Y E I L F D R Y P A V R P M
UniRef90_P02228           L D A H E V E Q V Q A T W K A V S H D E V     E I L Y T V F K A H P D I M A K
UniRef90_UPI00047B7861           D A I G T D F Y S Q L F M M A P E T R E L
UniRef90_R7TLZ3           L T T A Q R A A I Q N N W A T V N M Q E F A D S L F M R Y L S A N P G D I Q F
UniRef90_D9X005                   A D K V T S Y F Y A L L F V R H P D L R P M
UniRef90_Q7N215           M L D N Q T I A T V K S T I P L L S A P K L T A H F Y E R M F K H N P E L K N I
UniRef90_Q43789                                   L E K A P A A K G L
UniRef90_W8A583                   I E A L Q S S W Q Q V D A     I G P Q F Y D H L F E A H P E V
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UniRef90_B9WAR0                   I K S S W S K I N P K E F Y P E L Y E N L F E L N P Q         L
UniRef90_E0VN28           L T A D E L E R V Q N S W N V N A E E N G M L F K T F L L K H         N Y
UniRef90_UPI00046EF76E    M I S Q P A L T V V R D T L P V I G I G D I T P I F Y D R M F T A R P D L L R D
UniRef90_G8YKQ9                   E K T N T R K G T S S V A G S R F C L Q F Y S N L L S L E P H L E D L
UniRef90_M7NY13                   Q I E I I K Q T V P V L H G E T L T R R F Y E N M F R N N P E V K
UniRef90_Q46WA4           M L S A A S R P Y I D A S V P V L R E H A I T T H F Y R E M F A A R P E L T Q L
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UniRef90_V5YND8           L T A D Q A G V L Q S A W S N I K N S E V     D I L Y A V F K A Y P D I Q A K
UniRef90_J9JX99           L N E S Q T A L V K Q S W P M I V S N G F W T S F Y T N L F K R S P S Y Q L Q
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UniRef90_V9D8T9         V P E L K N I F N T S N Q R N G R Q Q Q A L A G A   L Y V Y A A N I D N L E L L
UniRef90_A0A019TTI1              N M F N Q T N Q K R G M Q S S A L A Q A V M A A A V N   I D N L S V I
UniRef90_V5YNC2         F P L F V   S K N L E E I K T S A D F K T H A D K I V K A I S T Y I N L L G N E
UniRef90_G8B7N6         W P S L R H Q A V S F A             Q V M K M T I A N L E D L S V L
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UniRef90_V9LL02                               H G K I V M S A L N K L I A N L D N L I
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UniRef90_A0A059IUM5     F N M       S H Q H G N S P Q H K A L A G A L V A Y A S H   I R D P G V L
UniRef90_W8H2X1         F P A A M D           E Q R D R L I S A V Q Y V I E R L E E E S G Q
UniRef90_Q2GPL0         N P D L H N V F S S T S Q V T G R Q P R A L A S A V L   G Y A T Y I D D L P K L
UniRef90_I1XL92         F                     K S V T I E G Q H K K L L A S M V L L I Q H L R D T
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UniRef90_I0L4J9         F P T N M A G Q R D R L V T A L G H I V S H V D Q V           D R L
UniRef90_UPI00047BB5FF  F P         V S M A H Q R D R L F A A L G E   V M A R       V D D L D A L
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UniRef90_UPI0004732267             N V F N R T N Q R T G R Q Q T A L A N T V Y A A A Q H   I D Q L H V L
UniRef90_A4G2W3               H I F N A G N G A N G S Q Q Q S L A S A V F A Y A N I D N Q A A L
UniRef90_E1SAS4         F           N M N N Q R N G D Q R E A L F N A I C A Y G A N L E N L A A L
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UniRef90_UPI00036A2EF5  D P A V K A M F D E A A Q E S G E Q P R R L A A A I L A Y     A Q N I D K L
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UniRef90_A0A024JHJ2     F             N P A H Q A S G M Q P K A L A H S L L   L Y A T Y I D D L G K L
UniRef90_S6BNG7         F P Q F A G   K N L D S I K N N S D F G T H A T R I V S F I T E I M S G K P D L
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UniRef90_Q14SM8         F T K F N A H Q S N A A L Q D D D E F R N Q V R A I T R G I E S F V N N V N N P
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UniRef90_U3B7I4         F           N Q A H Q A S G D Q P R A L A N G V L M Y     A K H I D R L
UniRef90_A8LZ06         F P         V N M Q Y Q E D K L L A A L G H I I T S L D D S A A       L
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UniRef90_Q2IZ95         R P L F R D         D M A N L K R K F I S T L A V I V G S L D N L
UniRef90_UPI00023B2AAF  F S F L K D S K V P L D     K N P K L K S H A M T Y F V R T F E L A I Q H R K V
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UniRef90_P02222         F P Q F A G   K D L E T L K G T G Q F A T H A G R I V G F V S E I V A L M G N A
UniRef90_Q94445         F P Q F A G   K D V A A L K D T A A F A T H A G R I V G F V S E G N E S N A P A
UniRef90_P02224         F P Q F A G   K D L D S I K D S A A F A T H A T R I V S F L S E V I S L A G S D
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UniRef90_UPI000364DB08  F P         V G M A G Q R D K F V A A L G R I V         A S V D R A D V
UniRef90_D0MR65         F N M S G A T K G G A P P G V S R Q A T A L A N A V I G F A A N   C D Q L G N L
UniRef90_C6T2Y5         F S F L K D     S T V F Q E N P K L K P H A M A V F V M V T
UniRef90_A5FW99         F N Q       S H Q D A A G A Q P K A L A L A Y A R H   I D N L A P M
UniRef90_UPI00036D3387  F Q R D G K L Q A A M L R Q A L V A V L D H     L D N S E W L A D N L G S L
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UniRef90_M7NY13               D F F N P A H Q Q A G T Q Q R A L A G A I C A Y A A N   I D N L S A L
UniRef90_Q46WA4         F           N M G N Q A N G S Q Q Q S L A A A V F A Y A A N I       D N
UniRef90_R7TQB2         F A K F R D   A N L G D L R S N A E F N K Q T K T V I D A L S K I V D N L G D L
UniRef90_V5YND8         F P K F V G   K D L D S I K G S A D F A L H A T R I V S F I T E V V N L S G S E
UniRef90_J9JX99         F D R F A H V   P F E E L E S N V H F L A H S V R V F N T A I E L L E T P D E L
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                              90            100           110          120
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UniRef90_M3UR57         E T T N L H A L G R R H A E L G V T R P M Y A A V A E C M I A A M S E I G G N R
UniRef90_G6CW34         D N F F H Q V G A S H R R I P G F K V E Y F W K I E T P F L A A M E S T L G D A
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UniRef90_A0A059IUM5     A E A L E R I A Q K H A G   L Q I L P E H Y P H V G T A L L G A V S E V L A E A
UniRef90_W8H2X1         I L A Y L A Q L G R D H R K Y G I E D A H Y V A V G N S L I A A V E Q F P S T E
UniRef90_Q2GPL0         K H A V E R I A H K   H V S L Q V T P A Q Y D V V G K Y L I Q A I G Q V L G D A
UniRef90_I1XL92         E M I Y L Q G L G V R H Q Q Y G V K Q S H Y E M F I E N W L S V V A E F S E Q E
UniRef90_C4WXJ8         L E T L L R D L G K K H Y H Y G A K Q K Y V D L I G P Q F I M A I Q P S L V D R
UniRef90_I0DQ80         I S A V E K I A Q K H A   S L N I K P E H Y P I V G E N L L A A I D E L L N P
UniRef90_UPI00037C46BB  T S A V E R I A Q K   H V G L H I R P E H Y P H V A T A L L N A I K D V L G E A
UniRef90_G2NXR9         L T D F L T R L G R H R K Y G T Q P E H Y P A V G E C L I G A L T R Y A V T T
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UniRef90_A7C4X7         E N F M S Q R I H Q R H Y E L H L K P E D Y R L A G Q A L V L S L E K Y F G D E
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UniRef90_H0DJS7         G A I A P A I M A Y K H C A L Q V Y P E H Y P I V G E N L L A A I Q E V T G L S
UniRef90_UPI00040DE505  A A H L   E R L G R G H R K Y G V L P E H Y P A V E A A L T A T L R A F A A G V
UniRef90_A0A024JHJ2     S D L V E R I V S K H V T L L I Q P D Q Y P I V G E Y L I R T M K E V L G D L
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UniRef90_V5YND8         A N T L V S E L G N N H K S R G V S K A Q F N E F R T A I T E Y A S T H T   S
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UniRef90_W8AB70           P E F V A Q L G R D H R R F G A V G A H Y P A A G A S L L A T L A H F L G P R
UniRef90_UPI000370C764  T E Y L M Q L G   R H R K Y G T R S T H Y P A V G E C L M T A L E R F A P R T
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UniRef90_S6BNF8         K V I V N Q M G Q   N H K N R G V T K D Q F N E F K N T F F E Y M   H A S G D
UniRef90_M2Y5A3         L T T F L S Q L G A D H L R G R H Y D A V G V A L L A T L K R F L K D G
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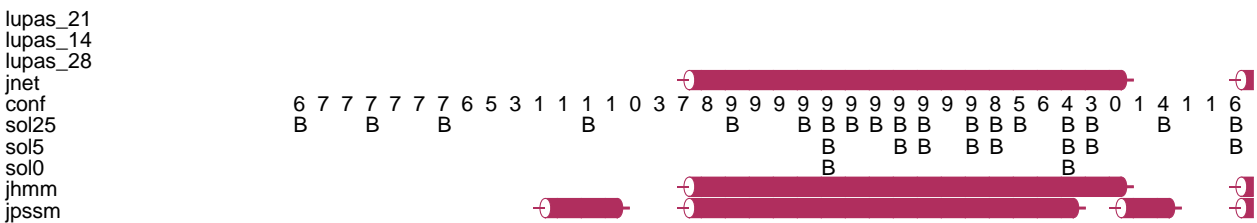
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UniRef90_M3UR57          W T D A M T E A W Q E A L G A V A G I M L D G Y
UniRef90_G6CW34          Y T P N V E N I Y K I T I K F I L Q T L V E G Y
UniRef90_V9D8T9          L T P A I L D A W T A A Y R Q I A N L M I K R
UniRef90_A0A019TTI1      E H D P V I Q A W A K A Y G V I A D V
UniRef90_V5YNC2          L T A D A E N A W N K A F E
UniRef90_G8B7N6          F T I E L E V L W I K L F L Y M A N S I
UniRef90_N1PSX1          C T P E I L D A W T A A Y W Q L A D
UniRef90_P14394          F G D K Y A N A W A K L V G V V Q A A L
UniRef90_V9LL02          F T P E I R G T W T K L F G V I Y A C L E S H Y
UniRef90_J9ZAU4          W T P E L R E S W T E A Y S V A S D V M I K A A R
UniRef90_A0A059IUM5      A T P K V L A A W G E A Y W F L A D T L I A R
UniRef90_W8H2X1          W T D E L E Q A W R D V L A V V A A T M
UniRef90_Q2GPL0          A T P E I V D A W V A A Y G V L A G V
UniRef90_I1XL92          W D D T L Q Q A W R N V L E Y V A E L M
UniRef90_C4WXJ8          W T E E M H S A W T A L F L N M A Y I M
UniRef90_I0DQ80            G Q E V L D A W G K A Y G V L A D
UniRef90_UPI00037C46BB   A T D E I L N G W G E A F W F L A N I L I E R
UniRef90_G2NXR9          W T D E A E A A W V R A Y T A I S Q I M
UniRef90_D8Q402          L T Q D I H D A W A A Y W Q L A N I M I A R
UniRef90_I0L4J9          W T D E L A Q D W A A A Y G L I A Q V
UniRef90_UPI00047BB5FF   W D D E L A A S W T E A Y G V I A D V M
UniRef90_G9ZW14          A T P Q I L A A W G E A Y W F L A D L L
UniRef90_UPI0004732267   A T D D I L A A W K K A Y G D I A D
UniRef90_A4G2W3          A T P A L I A A W A E A Y G L L A Q A L
UniRef90_E1SAS4          P G E E A L A A W G K A Y G V L A S V
UniRef90_P02214          A T D A Q K D A
UniRef90_E1SVJ2          V T D E V I E A W G K A Y G V L A
UniRef90_Q5HR68          S D D P V I Q T W A K A Y G E I A D V
UniRef90_K9XUE4          A T K E V M T A W T E A Y Q V L A E V
UniRef90_UPI000367C074   A T D A V I E A W G A A Y G Q L A D I L
UniRef90_UPI0003EAAF6B
UniRef90_UPI0002898BF1   A T P Q L L E A W T V A Y R E L A S L M S
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UniRef90_A7GMY8            P Q E V L D A W G E A Y G V I A D A
UniRef90_UPI00036A2EF5   A T D E V L S A W G E A Y W A L A E I L I G K
UniRef90_H0DJS7          E D D S V I Q T W A K A Y G E I A D V
UniRef90_UPI00040DE505   W T P E A E D A W R T A Y R S A A D T M I R
UniRef90_A0A024JHJ2      A T D E V I G A W T A A Y G D L A N L L
UniRef90_S6BNG7            G D T E H A W N Q A I D N V
UniRef90_Q47266           G Q A V L D A W G K A Y G V L A N V
UniRef90_UPI0003789CAC   A T P P L I A A W D E A Y W L L A
UniRef90_V5CFG3          F S P Q V L D A W G K A Y G V L A D V
UniRef90_Q7M421          Y N A G T K K A W D S A F N N M Y S V
UniRef90_Q14SM8          S N S D E A K S W T N L F A A F N K V L K E
UniRef90_Q14SM8          S N S D E A K S W T N L F A A F N K V L K E
UniRef90_A0A014N8A1      A D D Q V L D A W G A A Y E K L A
UniRef90_I2GZK4          A T P Q I I D A W T K A Y G E I A N V
UniRef90_Q25215          W G E N V A A A W N H A L D
UniRef90_S1STT9          W H P A L A T A W Q R A Y T A A A D V M V R
UniRef90_U3B7I4
UniRef90_A8LZ06          W T P S L K A S W A E A Y Q A V A G L M
UniRef90_W8KAI2          E T   T L K A W E E A Y K A I A
UniRef90_UPI0002198090   F T P A L H
UniRef90_T2JNS3          A T P E V M E A W T E A Y N S L A D
UniRef90_Q2IZ95          W T P A V E D A W T K L Y V F L S G R M A A A Y
UniRef90_UPI00023B2AAF
UniRef90_W0RNE9          F T P E V H D A W A E A Y T L V A S V M R R
UniRef90_P02222          W N D S L G A A W T Q G L D N V F N M M
UniRef90_Q94445          W G D N V A A A W T Q G L D N I Y G L L
UniRef90_P02224          F D G P T E T A W T L A L D T T Y A M L
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UniRef90_UPI000288F0DC   W N P E T E A A W V R T Y T T I S Q V M
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UniRef90_D0MR65          A T D E I I D A W K E A Y W F L A D L L
UniRef90_C6T2Y5          W S P A M K N A W E E A H D Q L A E A I K S
UniRef90_A5FW99          A S D E I L A A W G E A Y W F L A E L L
UniRef90_UPI00036D3387   W T K E M S A A W A E A L G A V S S L M L A G Y
UniRef90_P02228          I S H S W D D A F D K A F S V I F E V L E S
UniRef90_UPI00047B7861   W T P R Y E K A W V E A Y D H L A Q I M V S A A R
UniRef90_R7TLZ3
UniRef90_D9X005          W N E D M E A A W V R T Y T T I S Q I M
UniRef90_Q7N215           G N E I L D A W G K A Y G V L A D
UniRef90_Q43789          W S E E L N T A W E V A Y D A L A T A I K K
UniRef90_W8A583          W T P E L A Q T W T A A Y G A V A D L M
UniRef90_A0A024HJQ1
UniRef90_B9WAR0          F T S V L E L I W I K I F V F V A N L L
UniRef90_E0VN28          L P E D D L Q A W S K T L N
UniRef90_UPI00046EF76E   A T P E V V D A W T E V Y W D M A N T L I A A E R
UniRef90_G8YKQ9          F T S E L E E L W V K V Y L Y L S N T L
UniRef90_M7NY13          A N E A I I E A W T V A Y Q E L A
UniRef90_Q46WA4          A T P D L I A A W D E A Y W L L A G E L I A
UniRef90_R7TQB2            G V V A D A W R I L V A
UniRef90_V5YND8          W G D N V A A V W N Q A L D N V Y A I I F A K
UniRef90_J9JX99          G G P D L A E A W K P F L T L V I G V I
UniRef90_W8AB70          W T D E L A Q T W T G A Y Y A V A D I M
UniRef90_UPI000370C764   W G P E A E A A W V R A Y T A I S Q I M
UniRef90_K5W0S2          F K G E L Y D A W Y A A Y W Q L A H I L
UniRef90_UPI00036A91E1   A T D E I I D A W G Q A Y G Y I A D A
UniRef90_S6BNF8          L Q H A W N D A F D N L Y Y I V F S N L
UniRef90_M2Y5A3          W T P E V E A W V T A Y G I I S K I M R E
UniRef90_P02226          W N A A A E S A W T A G L D N I
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UniRef90_E9G846         L S Q M D V D I I V N S W N I L K K G N F A P K V F I R Y F K A K P E S Q K L
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UniRef90_K9PXW7                             H K T E F T Q H F Y H H L F A D Y P Q V K P L
UniRef90_G2H2H7                                 T T H F Y E R M F T H N P E
UniRef90_H8IVC3
UniRef90_UPI000374A8D0                                         L F T R W F G T D P S A R D L
UniRef90_V5YMJ3         L A S E E A I E V Q T A W N A V K     D N Q A D M L Y A V F K D Y P E I Q D K
UniRef90_B3SGL5           F T E R Q E A L V N S S W E K K N I P Q L S I L F Y T L I L E K V P D A K D M
UniRef90_UPI0003FE0E77 M L D E K S I A I V Q S T L P L L Q Q Y G P G L H F Y Q R M L S H H P E L Q A I
UniRef90_E6R2I3           L T E A Q K D I I K S T A P V L E K H T I T T H F Y K N M I L A H P E L K D V
UniRef90_N1MFW6         L S A S T I A I V K S T G P A L R Q H A I T T A M Y T R L F Q D A
UniRef90_P53857                             K V D T A L F C S Q F Y D N L I A M D P L L E E Y
UniRef90_E5SY64           F T D E E V E L L A R T W K K D D F D R I G T D I Y T C V F Q L A P E L K V F


lupas_21
lupas_14
lupas_28
jnet
conf                        9 9 5   7 9 9 9 9 9 9 8 6 1 3 0 2 7 7 7 0 1 3 3 4 4 3 4 8 8 8 7 5 0 1 2 1 1 0 1
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
sol0                                      B                   B
jhmm
jpssm
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UniRef90_L1IS81              F T K P R S Y M A V K M G D              M L S M L V S F A D S S E S M
UniRef90_B4JT49       F P   F R D V P L A E L   P T N S R F R A H A S R I I R V F D D S I R V L D D A
UniRef90_E9G846       F P A I A N V S I T D L   P T N P D F L N S A F T T C V N S L N Y K Y D H P E R C
UniRef90_P29287       F G D F K G K S I A D   I R A S P K L R S V S S R I V N R L N D F V G N A A D M
UniRef90_K9PXW7       F K               E T Q M D K Q A A K L F A S L V L V V D N L K K T D T L
UniRef90_G2H2H7           F K N I F N M S N Q F N G N Q S E A L F N A I C A Y A N N I E N I K A L L
UniRef90_H8IVC3             D L F P P E M S A Q R A A F G H A M H W V Y G E L V A R R A R E
UniRef90_UPI000374A8D0  F P A           D L S A V R A A F A Q A M S W V Y G E L V A Q R A Q E
UniRef90_V5YMJ3       F P A F A   S Q D L E A I K N S E A F T S H A K R I F G Q L S S G V D S N E E E
UniRef90_B3SGL5       F S F L K N F     D G I P H N N S T L E A H A E L I F E M T R D S A V Q L R A K
UniRef90_UPI0003FE0E77  F       N M S H Q R N G A Q R E A L F N A L C A Y A A H I         D H
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UniRef90_N1MFW6         E V K G M F D Q A A Q E S G E Q P K R L A A A I L   G Y A E N I D K L G A L
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UniRef90_E5SY64       F P Y V T E C E K K N Q S W E S S K F R T Q A L R F V Q I L G M A V E K T E S R


lupas_21
lupas_14
lupas_28
jnet
conf          6 7 7 7 7 7 6 5 3 1 1 1 1 0 3 7 8 9 9 9 9 9 9 9 9 9 9 9 8 5 6 4 3 0 1 4 1 1 6
sol25         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
sol0                                                         B                     B
jhmm
jpssm
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Multiple sequence alignment (positions 90–120)

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UniRef90_E9G846	P S F P K Q I K D N Y N E V D V K K L G S I W M M A M Q E E M G S D
UniRef90_P29287	A G M L D Q F S K E H V G F G V G S Q Q F E N V R S M F P G F V S S V A A P P
UniRef90_K9PXW7	T H A L Q G L G T R H V K Y G V L P E H Y P M V G R T L L K A M A I A L D E Q
UniRef90_G2H2H7	P A V E R V A Q K H T S L N I Q P E Y Y Q V V G E H L I A T L D E M F H P
UniRef90_H8IVC3	P V A F L A Q L G R D H R K Y G V L P H H Y D T L G R A L L A T L R S H L G A A
UniRef90_UPI000374A8D0	P V A F L A Q L G R D H R K Y G V T Q H H Y N T M G R V L Y A A L R D E L A D D
UniRef90_V5YMJ3	I K A S L E R I G E T H R N R N A T K E D F G K F R N A L T K Y V A S R V T
UniRef90_B3SGL5	G K T L E Y L G S V H V Q K G V I D L H F M V F K E A M L K T I K K A V E D K
UniRef90_UPI0003FE0E77	P A T L S T A V E R I A H K H A I Q P E Q Y A I V G H H L L K T L E E V F N P
UniRef90_E6R2I3	T P M V V E R I A H K H T S L H I T A N Q Y G I V G K H L I Q S I V D I L G D A
UniRef90_N1MFW6	N G A I A R M V A R H V E T G V K P E H Y P K V A A A L L P A I R E V L G E E
UniRef90_P53857	D D Y I V K L G K R H S R I L G I K T V G F E V M G K A F M T T L Q D R F G S F
UniRef90_E5SY64	M K D D D S H L H H R L Y K L G E T H R R F H W K G F V I A V R V A M R R A V E

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