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                           1           10          20          30          40
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UniRef90_UPI000366BDE9 T I Y D C I I D L Y G R G E P A D P I M V S A E L E R R G E L N R V G G G A Y I
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UniRef90_N0E0R9       S I F E A I L D L F G R G E P A D A I T V A D E L T K R G D L S R V G G A S Y L
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UniRef90_H5UT08       L I F E A I L D L Y G R G E P A D A I T V A D E L T K R G E L P R V G G Q S Y L
UniRef90_S3ZTT1       T I F R A I V R M R A S S E P V D P I T L A A E L S R T R E L Q K V G G P T Y L
UniRef90_K2D0N6       Q V F A A L S L L I N S G K P A D V I T V Y E Q L Q S S G K A E E I G G L H Y L
UniRef90_UPI00046D2EE7 L I F E A M L D L S E R G A P I D L V T I I T E E L R K K G V L E K A G G A A Y I
UniRef90_E1W123       S I Y E A I V D L Y G R G E P A D A V T V A D L L T K R G E I S R I G G A A Y L
UniRef90_E8LFF0       V I F S A M L E L Y N K N E A V D M V T V T E I L K R D N K L E D I G G I A Y I
UniRef90_C7MGJ1       M I Y E A I I D L Y G R G E P A D L V T V S D E L S K R G E L A R V G G G A Y L
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UniRef90_F2JRZ3       Q I Y A A I M E L Y T T G N P L D L I T I G D K L V Q K G V L E Q I G G L S Y L
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UniRef90_D0I8P7          A E L A K N T P S A A N I V A Y A D I V R E
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UniRef90_F6B6B3          A T L A N L V P T A A N A E Y Y A R I V E E
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UniRef90_K0C923          S E L A R N T P S T A N I N A Y A E I V R E
UniRef90_D8KBJ2          T N L A R N T P T A A N I K A Y A E V V R E
UniRef90_F6CKP2          A S L V N V V P T A A N V E Y Y A R I V E E
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UniRef90_G8N0V5          S E L A D S V P T A A N V E Y Y A R I V E E
UniRef90_K9DHB5          N A M A Q N T P S A A N I R R Y A E I V R D
UniRef90_UPI00035F26BD   G E I A K N T P S A A N I I A Y A E I V R E
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UniRef90_UPI00046D2EE7   G G L T D Q V P S A S N A E H Y A R I V R E
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UniRef90_E8LFF0          T S L A N V V L T A A N V K Y H A E I V A E
UniRef90_C7MGJ1          A D L I D M V P T A A N A G Y Y A E I V V E
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UniRef90_A6F6Z5          G D I T K N T P S A S N I T A Y A N I V R E
UniRef90_UPI000374B81F   A K L A N A V P T A A N V D Y Y A Q I I E E
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UniRef90_UPI000305D78B   A E L A Q A V P T A A N V V Y Y A K I V Q E
UniRef90_UPI00047E432D   A K L A G A V P T A A N V E Y Y A Q I V E E
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UniRef90_UPI000476ADFD   A Q L V N V V P T A A N V E Y Y A H I V E E
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UniRef90_L0D8T4          S E I V E S V P H S A N A R Y Y A D I V R Q
UniRef90_F2JRZ3          A E L A S S V P T S A H I K Q Y A K I V E E
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UniRef90_UPI00047D1B33   H T L V Q V V P T A A N A R Y Y A E I V A E
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UniRef90_W4RR45         P P Q N M E A E Q A V L G A I F L E P S A L T L A S E I L L P E D F Y R V A H Q
UniRef90_UPI0004716D1E  P P Q N I E A E Q S V L G S I F L D P E K L V D I L E F L S V D D F Y R K N H Q
UniRef90_UPI00036B0151  P P H S I E A E Q A V L G G L L L E N S A Y D R I A D I L S E E D F Y R Q E P H R
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UniRef90_U2EL72         P P H S I E A E Q S V I G G L L L S E R A W D E V A G R I N E E D F Y R E D H R
UniRef90_D2S810         P P Q D V A A E Q S V L G G M L L S K D A I A D V V E V L A G L D F Y R P A H Q
UniRef90_UPI0003B33828  P P Q D V A A E Q S A I G A M L L S K D A I G E C S E I V K A P D F Y R P A H E
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UniRef90_E6JZ31         P P H D S E A E K A V L G G M L M S K E A V G E V S E M I K S D D F Y E P Q N Q
UniRef90_D6ZB13         P P Q D A V A E Q S V L G G M L L S K D A I A D V L E H V Q G K D F Y R P A H Q
UniRef90_R6ML91         P P Q N I E A E Q A V L G A M L I S K E A I A E S A Q I L N P Q D F Y R E A H R
UniRef90_M1GG80         P P H N V E A E Q A V L G G I F L R N T V F H T L I D I V R A E D F Y I P S H Q
UniRef90_O30477         P P Q A V E L E Q A V L G A M L I E P E A I P R A L E I L T P E A F Y D G R H Q
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UniRef90_UPI00036024B9  P P Q D I N I E Q V V L G A M M I D K K G V D D V I D V L S P E V F Y R K Q H Q
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UniRef90_K1Y8M9         P P Q N I E A E Q A V L G S I L L K A D V F G T V L E I L K T A D F Y K D S H R
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UniRef90_Q1JY45         P P Q N L E A E M S V L G G I L L E N D A L N K A L E L L I P D D F Y R E S H R
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UniRef90_Q8D255          L I F K E M Y K L F E I G K P I D L I T V S E S L E Q K G Q L K L I G G F A Y L
UniRef90_X2H664          L I F S E M H S L I S K G T P I D L I T L S E S L E S K D L L T D V G G F A Y L
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UniRef90_D9CH43          V I F R T M S E L A T S G Q P F D L I T L S E H I E K T N N I E A L G G F A Y L
UniRef90_M1UWA4          L I F Q A L I D L F S D N K D I D P V I V S G R L D R T N D L E R V G G G A Y L
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UniRef90_UPI00036024B9   L I Y Q A I F E L F Q Q S Q P I D L L T V M E Q L R K N G N L E A V G G E F Y L
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UniRef90_UPI00036B0151   I S V A Q N T P S A A N L R R Y A E I V R E
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UniRef90_UPI0003B33828   H Q L I A Q V P T A A N A A Y Y A E I V A E
UniRef90_I3I8X6          V E M A N N T P S A A N I A A Y A K I V R E
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UniRef90_T4W8Z3          T S L S T I V P T T S N V K Y Y A D I V K E
UniRef90_F9UEK7          G T I A N E T P S A A N I K A Y A K I V R Q
UniRef90_UPI000479D12F   H D L I Q A V P T A A N A S F Y A E I V A E
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UniRef90_C0VXX7          Y S L I S S V P T A A S A N F Y A R I V S E
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UniRef90_J3HA51          A E L S K N T P S A A N I L A Y A R I I A E
UniRef90_D2RN27          T A L S N A V P T A A N V V Y H A K I V E E
UniRef90_UPI0002EE85B2   M E L A S A V P T A A H V E Y Y A R I V K E
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UniRef90_C1MEB0          A E L S K N T P S A A N I I A Y A Q I V R E
UniRef90_UPI0003B5398F   H S L I S S V P T A A N A G Y Y A K I V H D
UniRef90_W5X112          H S L I N K T P T S A N V G Y Y A D L V K E
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UniRef90_UPI0003C7F807   H T L V A G V P T A A N V D Y Y A A I V H E
UniRef90_K2CZG9          A E L V N M V P T S A H V L S Y A R I I A E
UniRef90_R5XGM9          T S L S T V V P T T S N I K Y Y V N I V K E
UniRef90_UPI00040286AE   S D L A N S V P T A A N I E Y Y V K I V E E
UniRef90_B9KYY3          T E L L S V V P S A V H V E Y Y A R I V
UniRef90_UPI000479CAA8   T D L A N A V P T A A N I D Y Y C Q I V E E
UniRef90_F3ZYJ2          T A L S A S V P T T A N V D Y Y I R I V E E
UniRef90_C7LWN5          A S L A E S V A S A S N A V F H A Q I V R D
UniRef90_K1Y5X3          A D L T N A V T T A A N I S S H A E I V R
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UniRef90_UPI00036E3118   G W L A K N T P S A A N I V T Y A N I V R D
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UniRef90_UPI00036024B9   I Q L T Q R V S S S A H I E F H A R I I M Q
UniRef90_I0UVB7          H T L I A A V P T A A N A Q Y Y A D I V K E
UniRef90_N4W6W2          S D L A N A V P T A A N I V Y Y C R I V E E
UniRef90_U2PTC2          I D L M Q S V S I A A N A G Y Y A Q I V H D
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Position markers: 1 ... 10 ... 20 ... 30 ... 40

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UniRef90_R1CMW4        P P H S I E A E Q A V L G A M I L D K E A I I I A V E I I G E E D F Y K E A H K
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UniRef90_UPI000372CCD0   V I Y E A I V D L F N D S E P V D L L T V T N Q L R K R G K L E F V G G P F Y I
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UniRef90_UPI00035E633F   L I Y Q A I M D L Y S Q G S E I D P L I V S G R L D R F N E L E R A G G A P Y L
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UniRef90_R6LT36          E I Y E T I Y T M F N F S E K I D P V T V L D K M K E R G V Y D E A H S Y D Y I
UniRef90_N2BAN0          V L F E S M I E L F N Q N Q P V D F I T L Q N K L K E K D L P P E I S S L E Y I
UniRef90_UPI00037C8E63   T M F Q M M T Q M Y E E G V P V D L V T F V E R L K R D N L L D G V G G Q D Y I
UniRef90_F7TFC1          I I F Q A I S S L L H Q G Q P V D L L T L E Q K L K E G K N F Q E N G I L A Y I
UniRef90_R5HTB0          K I F T V I K E L N E N N Q A V D M M T V T E S L K K R K W L D N V G G I E Y L
UniRef90_W9H1N2          R I F E T I H L I Q R G E V A D P I T L K R Y F E G D P A L D S V G G V G Y L
UniRef90_K2GDU8          S I F E S M L S L Y E E R D P I D V L S I S N K L E E V G K L E E V G G S S Y I
UniRef90_C7M1G7          E L F R V L A D L Y A R G E T T D P V S V G D E L R R L G I E E A L G G Q E G L
UniRef90_A7MI64          R I F A A L Q G L N A K G K A L D M L T L S D A L E M Q G E L E Q V G G F A Y L
UniRef90_H3K547          T I F K V M L D L N T T K K A I D I I T L T D Y L T H I S K L E E V G G L A F I
UniRef90_F9Z7Y7          K I F R A I H K L L N D D P V D L L T V S E A L K Q S G E L E Q V G G Y Y Y L
UniRef90_E8R1M4          I I F R S I R R L Y D Q G K A I D L I T L G E D L R K A D L M E A V G G D Q A L
UniRef90_R6HU64          E I Y E T I Y A M F N F S Q V I D P V T V L D K M Q E R G V W Q D R   S I E Y I
UniRef90_Q83FI8          E I Y K V M L D L Y A A S E P T D M V S V S E S L R K N H R L E H T K G F E Y L
UniRef90_UPI0002D41ECE   H I Y R A M G I L S E N H E N I D V V T L I D Q L K S M E Q L N T I G G P R Y L
UniRef90_V9H5A4          V I F K A I R E M F S Q D M A V D L V T L L E Y L K S T D N L D K A G G V T Y I
UniRef90_A1ZIE4          E V Y Q A L L E L F A Q A N P V D M L T V T Q Q L R Q T G K L E M A G G P T F V
UniRef90_UPI000346CB21   E I Y Q A M L T L N S K G K S T D F M S V S T Y L S D R D L L E K I G G I T K L
UniRef90_B9E914          H I F E A M M T L S E K N E I V D I V T V A D Q M T S D G T L E A A G G E M Y L
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UniRef90_E1L7H8          I I Y D A I L N L V K S N K T V D F I T L S E E L E R R K K L D T V G G I A Y I
UniRef90_C4XT64          M V W E A M V G L W R D N K P V D L I T L A A A L T A A G Q L D P A G G P A H L
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UniRef90_R7FYA6          E I F D A M C E L F N K N R N I D I V T L I N I L T E R G V Y S A D E C K K Y V
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UniRef90_R7N1S6          V V F D A M V E L N D E G K P V D V V T L S D K L K E K D V P P E V S S L E F L
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UniRef90_R5T3U4           R D I I T T V P T S A N V K S Y A N I V R E
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UniRef90_R6MXB4           L Q L A Q I V P S V S N V E T Y A G I V R D
UniRef90_R7G2U8           T E L A R T T P S A A N Y Q Y Y L D I V K
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UniRef90_UPI00047CAD18    S N I V Q S V P T S A N I K Y Y C D I V R
UniRef90_K9UVW3           A S L V E R T V S A I N I D A L A Q L V M D
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UniRef90_UPI000370EC9A    N S L A Q N T P S V S N I R T Y A E I V R E
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UniRef90_D9SPB4           S T L S T S I A S T A N V H S Y I K I V K D
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UniRef90_R6LT36           S Q L L Q I T P T A A N V K Q Y C A I V H D
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UniRef90_W9H1N2           A E L A G S V V S V V N S E H Y G R I I H D
UniRef90_K2GDU8           A S L V N T V P S A S H V V H Y A K V V Q
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UniRef90_E1L7H8           T S L A N E A T G Y N I E E H A R I I V E
UniRef90_C4XT64           A E L A G C V V S A A N I L H H A G I V R
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UniRef90_D1XWS6           V E I S S Q V A S S A H I E Y H A R L L A Q
UniRef90_M3BB66           A E L S K N T P S A A N I L A Y A N R V K D
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UniRef90_K9HQ13           T T L V N S V V T I I N A G D Y G R Q I Y D
UniRef90_H3VLQ2           A E L S N N V P T T R N I E Y Y R N I V
UniRef90_K0NPU2           S E I L A A T P T S F A K D Y A R I H Q
UniRef90_UPI0003619160    T E I Q D I V S S A N I E T H A Q L V I E
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UniRef90_R5A9V6           T Q L A Q L V P S I S H V E T Y A R I V R D
UniRef90_K7YQT3           V K L A A S V V T V I N A S D Y G R E I R R E
UniRef90_R6V2C5           K I I A E I V P S A A N V K D Y A K I V R D
UniRef90_K9VYQ0           V Q L V E R T V S A V N V D A L A V K V I E
UniRef90_X8MIB3           A E L C R I P S A A N I V N Y A R I V R D
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UniRef90_X1IU08          P P H S V D A E E A V L G S I L I D G L S I E K V A D T T R S N D F H T E R N R
UniRef90_K1HPE9            P N N L M A E Q N V I G G L L L D P Q S D N A I F S L L K P E D F Y A R H H Q
UniRef90_K9UQF1          P P Q N I E V E E A I L G G I L L D P E A I G R V A E K L I P E A F Y I P T H T
UniRef90_W2C5F5            P Q A R D L E A V L G A L M L E Q D A F F K V N E T L K P E S F Y E N A H R
UniRef90_R5T3U7          P P H N I E A E R A V I G S M I M D R D A I L V C S E M L T A E D F Y Q G Q Y G
UniRef90_C1D7Q5            P M S M E A E Q G V L G G L L L D N R K W E L V A D L V T A D M F S A E S H A
UniRef90_R6CBP8            P H S M E A E Q G V L G G L L L D M Q E A I I K A S E I I S G D D F Y Q H Q Y G
UniRef90_E1X8V8              S I E A E S A V I G A L I I D N D K F D E I A T L L R S D D F Y V S A H K
UniRef90_UPI00034BAD94   P P Q N I E A E E I I L G S I L F D P N V M G K I I D I L P L E A F Y V N A H R
UniRef90_H5SUB6            P K N R E A E Q V I L G A A M L E P E T I P Q L L Q S L Q P D D F Y W K A H Q
UniRef90_UPI00047EC878   P P Q H I E A E R H V L G A M L M S S E A V A E A L E I L D A R D F Y K R E H Q
UniRef90_R5XE64             Y N L G A E Q S V I G A I L I E P E L V S V G N Q F L S V Y D F F H P Q H Q
UniRef90_R5M876            P Q N L D A E M S V L G V C F L D D K V V S K V L E E V N E D M F Y S D A N K
UniRef90_H1ZA63          P P Q V T D F E E A V L G A M M I D K K G I D E V I D I L Q P E A F Y K E G H K
UniRef90_UPI000463A4C3     P Q S I E A E Q Y V L G A L M L N N D A V D R V   G A L K A E H F F R G Y H R
UniRef90_R5KF91            P H S V E A E Q A V L A S M L M N R E A V N V A D M L M K D D F Y Q V Q Y G
UniRef90_J4Y129          P P H N L N A E Q A V I G G L L L D N G A I D R M G D   L K A E A F Y R S E N R
UniRef90_D4TGG9          P P Q N I E A E E A I L G G I L L D P E A M G R I R D R L L P Q A F Y V N A H R
UniRef90_Q0TM16            P Q S I E A E Q S V L G A M I I D R T T I A Q A A E V L N K D S F Y R D A H K
UniRef90_H0KF62             Y S L E S E Q A V L G S L L L K N S C F D E I S G L L Q A E D F Y P W G H Q
UniRef90_UPI0000397D67     P H N T M A E Q S V L G S L L L N T T E S D Q V F A K L K P E S F Y T F S H N
UniRef90_B9XIE7          P P Y S P E A E Q G V L G C I L L S N D C I G E C V E K L K P E S F Y D L R H Q
UniRef90_R7K6R8            P Q N L E A E Q C L L G C I L L D D N L A Q E L V P T L K A E D F Y A P S H R
UniRef90_V5R9D2          P V H D V V A E Q S V L G A M L I S R E A I P D I A D I L D G G D F Y R P A H E
UniRef90_Q7VMK2          P T Y S T E A E A A V L G S I L K N E A F D E I S T L L C A D D F F N H Q H K
UniRef90_E3DGT3              S R D A E Q C V I G G L M L D N D S W D D V A M L I S A E D F S Y S V H R
UniRef90_V6JDI2          P P Q D L D A E Q S V I G S L L L S G S S H R F F A E T L T A G D Y Y R P A H A
UniRef90_R5SJA7          P P Q N I E A E M A V L G A M L L D K D A I E V A E N M L H P E D F Y R E Q D A
UniRef90_U2K459          P P Q A P D F E E A V L G A I L E K D A Y A R V S E K I R P E T F Y V K A H E
UniRef90_C6X2X7          P P N A V D F E K L V I G T F L I D K K G L D Y S I D L L T P E V F Y D P R H Q
UniRef90_B0SWK7            P H N L E A E Q A L L G V L L Y D N A A Y E R L T D S L Q G R H F Y E P F H A
UniRef90_UPI0002EFB1C7   P P N C I E A E A I L G G I M L D P L A M T R L I D I L E P A D F Y I E S H Q
UniRef90_A7HYU1            P H N I D A E Q A L L G A M L V N N E S Y D R V A S F L E P S H F F D A V H Q
UniRef90_D4L7J4            P Y S P E A E Q A V L G A I I L E S D T F D K V V D T L K P D Y F Y V S L H K
UniRef90_R5C762            P H N L E A E M S V V G A M L M D Q Q A I G S V M E L L T P D D F Y S R Q Y G
UniRef90_E0UM88              N P E A E E L I L G G I L F D P R A I A R V A D I L S P E H F Y V R A H A
UniRef90_UPI00035EDEB2      D I A A E Q S V L G A I F L D Q N A L D R I M   F L E P R D F F V D R H Q
UniRef90_N1ZAV4          P P H D D T A E Q A V L S C M F L D R E A V A A A L E I L R A D D F Y R P D N K
UniRef90_G4ADT5                    L G S I L L N N F Y W D D V A E N V V K E D F Y R F E H R
UniRef90_U2D717            P H N I E A E Q W V L G A M L K E R T S I A Q A V E V L K S E D F Y R D A H K
UniRef90_D1AJH4            P Y N I E A E A I L G S I F I K P D V L S E I I E L V T E D D F Y K N N Y K
UniRef90_F7SS35          P L A S H E A E Q S V I G A C L Q R P A L I D R L A D Q L R P H D F Y N H T H Q
UniRef90_A0A023S0F1      P P H N L A I E Q A V L A A L M T V A E S F E Q V S D L L K E N D F Y A T R H K
UniRef90_F5ULN4            P T N I E A E E A I L G G I L L D P E A I S R I A E L L R P E F F A I T A H Q
UniRef90_B1X4E5          P P R S L E A E E Y V L G G I L L D P D A I T R V A D I L Q P E A F Y E N S N K
UniRef90_UPI00041A64A4     P H N I E A E Q A L L G A I L V N N D A F D R V S D F L R P E H F S E E I H R
UniRef90_C8WIP9            P Q N I E A E K S V L A A C M L N Q E A I E E V A P K L V K E N F Y R I A H Q
UniRef90_D9PDR3             Y S V D A E S S V L G G L L L D N S L F D E I I V D V I I P N D F Y L H A H Q
UniRef90_UPI000375F2F5     P G N I E A E Q A L L G A V L V N N D A F Y R V S D F L K P E H F Y E P L H R
UniRef90_D8K015          P P H D I A A E A V N G S L L I D G K V I Y D I A T F L K P Q D F Y S D A G R
UniRef90_G7LPY5            P H N S A A E Q A V I G G M M L D E E R R H S V M A L L K P E S F Y L R T H Q
UniRef90_E8RS73            P H N L E A E Q A L L G T L M F D N G A Y E R L Y D G L S A R H F Y E P F H Q
UniRef90_U2PZG6            P Y S I E A E A I L G S V F I N V I G D I L V T V E D F Y K N N Y K
UniRef90_K0YIY4            P S N I E A E K S V L A A C M L N P D A I D E I A T K L A P E N F F R P A H Q
UniRef90_D4J7H6            P H S I D S E K A V I G S M I M D A D A I V A A S E M L T G D D F Y Q R Q F G
UniRef90_D9TFU5              E A E K A V V G S M I I N Q D V I Q E V E K V L S K E D F Y N A N L S
UniRef90_K9R8M1          P P T N L E A E E A I L G G I L L D P L A I S R V C D Y L V P D A F Y I S S H N
UniRef90_C6L931            P H S P E A E Q V I G S M I M D T D A I L T A S E I I T S D D F Y Q K Q Y G
UniRef90_A4JD21            P H S V E A E Q A V I G I L L N D N D A I D R I G D L R T E H F F R G D H R
UniRef90_R9MHP9            P H S V E A E Q S V I G A M L M D K D A I L A A S E I I G G Q D F Y Q N A Y G
UniRef90_UPI000364D4B0   P P S N V D A E Q A L L G A L L T N N K A Y D R V S D F L T G A H F A N R V N Q
UniRef90_Q03UT6            P Q D G D A E Q A V L G S I F F S E N A M V E A S A I L V P D F N K L A N Q
UniRef90_UPI00040BC5F9     P Q S I E M E E A V L S A C L I E T T A M S M V S N K L R A E M F Y D P K H Q
UniRef90_X1RGJ0            H D I D A E E A V I G S L L I E G T A I Y K I A V F L N Q S D F Y S E Q N Q
UniRef90_D0LPW3            P S N V D A E A S V L G G I L L R D N D V L S R L D T L E A D F Y D P R H A
UniRef90_K1M989          P P N A I D Y E K L V I G L L I D R K G L D Y T I E L L T P D H L Y D P L H A
UniRef90_N0BB56          P P N S L E A E E A I L G A I L V N N E A L D R V S G F L T S P D H F F D P L H G
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UniRef90_R5DZZ3            P N N V E A E Q S V I G C M L M N R N A I V D V A D I L T R D D F Y H S Q Y G
UniRef90_UPI0004211933     P H S I E A E Q A A L G C I I N Y K N Q L A L A E D V L F D F Y W D K H K
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UniRef90_UPI000375766C   L I F Q A I M N L A L N Q H P V D M L T V T E E L R R L G E L E T V G G P S Y I
UniRef90_E3PVX6          E I F H C M M D L Y K K S E P I D L I T L S E G L K K R S S L D M V G G I T Y L
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UniRef90_K2GDG8          F I F K A M L D L Y L K N K P I D L L T V R E V L D D K W Q L D T I W W N L Y L
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UniRef90_UPI00035ECAA5   T I F E A M K D L F D S G K P I D S V T V S E T V F K D N K N T T S L K T S S I
UniRef90_UPI0004798797   R I Y A A A L R L A E Q N R V A D P I S L K Q Y F E N D N E L E G V G G A Q Y L
UniRef90_Q3AQ62          T I F R A M M Q L Y H K R Q A I D I I T V S E E L L R M G E L E V V G G R H Y L
UniRef90_UPI000308CADA   S I Y K V I L E L Y Y Q D K P I D L M T V T T W L S D Q K L L K K I G G A K L
UniRef90_UPI00034AABCF   D I Y Q A C A A L A A K H K P T D L L S V T S W L A D N G L L E R I G G R N K L
UniRef90_UPI0004245589   D I Y Q A A Q R L H W S G K P T D L L S V T N W L A N Y N L L T R I G G R N K L
UniRef90_C4GC54          V L F E C I A E L Y N A G Q P V D V V T L Q D K L R Q K E V P P E L S S L D Y V
UniRef90_B3ELK2          L V F K A M L E L Y Q K R Q A I D L I T V S E E L S S M N E L A N I G G R Q Y L
UniRef90_K2MK58          R I F E A C G K L I E R G Q L A N P V T L S A F F R Q D E H L A E I G G A Q Y L
UniRef90_I0INN9          K I Y Q V M R E M A E V Q H P I D P V T L S D R L K K K G W D G L T G A P Q Y I
UniRef90_K1Y8A1          A I F E A L R D L F E K N Q L G D L V I L E D H L S K Q G K L E S A G G T N Y I
UniRef90_R5DR16          V M F Q T M V D M N N E G R P V D I V T L Q E R L K E K N V S A E V Y S L E F I
UniRef90_M4XL30          A L F K G I T D L I E V G K P A D I L T L D E Y L K Q K N L L K E I G G F A Y L
UniRef90_X1IU08          Y I Y E A C L S L Y Q R E L A V D Q I T I A E E M N N R G R L E E S G G A A Y L
UniRef90_K1HPE9          I I Y L T L R E M Y T Q R M P I D I M T V T D C L A S K G R I N Q S G G F A Y L
UniRef90_K9UQF1          D I Y K A C L A L N G Q G K P T D L L T V T D W L I D Q K Q L E R I G G Q A K L
UniRef90_W2C5F5          L I Y Q A I V D L A A R Q Y P I D M L T V T E Q L K K N G D L E T I G G P L Y I
UniRef90_R5T3U7          I L F E A L L D L F R G G I G T D L I T L Q N K L R E K E A P P E L C S V E Y I
UniRef90_C1D7Q5          D I F E T I K S R I D A G E P A D V L T V S E S L D A A G G H R T I A Y L
UniRef90_R6CBP8          I V F D A I V E L Y N D G K P V D L I T L Q N L L R E K D V P P E I S S L E F V
UniRef90_E1X8V8          V L F E G V S H L L T Q G K P A D I L T L E Q Y F K D K K L I D Q I G G L A Y L
UniRef90_UPI00034BAD94   H I Y E A A R N L Y F Q G Q P I D L M T V S T W L N D H N L L E K I G G T P K I
UniRef90_H5SUB6          I I Y R V I L E L F E G G K P A D L I T V G N R L D E L N K L D D V G G R A Y L
UniRef90_UPI00047EC878   V L F D A L Q D L A E R G E P V D V I T V T A K L Q K E G A L E A A G G T Q Y I
UniRef90_R5XE64          I I Y K H M Q K L Y E R N E K I D P V T L S S E L T N H D Q L D K V G G V A Y L
UniRef90_R5M876          K I F L A I K N L H D A G I P I D Q T T I A D E L D K T K S M G A I G G V S Y L
UniRef90_H1ZA63          Y I F E A I D Q L F V G N Q P I D L L T V S A Q L R K N A K L D M A G G D A Y L
UniRef90_UPI000463A4C3   A I Y S E I T A L L G A G V G A D V L T V F E R L H A K G Q A Q D C G G I P Y L
UniRef90_R5KF91          V I F E A M V E L Y H E G A S I D M I T T E R L K E K G V P E N V Y S I E V M
UniRef90_J4Y129          A A Y E Q I T R L L A Q A K P A D V I T V A D A L R Q A G S D V S L Q Y L
UniRef90_D4TGG9          E I Y Q A A I I L N N Q N K P T D L L S L T E W L T N N D K L S R I G G R N K L
UniRef90_Q0TM16          V I F Q S I I E M Y Q R D Q A V D Q L T L L E Y L K S T D R L E K A G G I S Y V
UniRef90_H0KF62          C I F K A I T T L L S K G Q P A D L I T V E Q E L Q R I K Y A Q D G T F G Y I
UniRef90_UPI0000397D67   K I F D Q M A Y L A K N N Q P I D L I T L E E R L R T E G I L Q D V G G F A Y L
UniRef90_B9XIE7          V I F E N L V E M Y D K R E A I D L I T L Q Q R L K D K A K L D E V G G L V Y L
UniRef90_R7K6R8          I L L S A M Q K V L N E S K P I D F V T V A D A L D R S G Q L A A A G G I N Y L
UniRef90_V5R9D2          T I Y R T I L D V H A A G N P V D A I T I N D A L S K M G E I Q R V G G H I Y T
UniRef90_Q7VMK2          I I F E G I S R L L Q L G K P V D L I T L D Q Y L T D K K L V D D I G F G Y L
UniRef90_E3DGT3          V I F H E M T R L V S A G R P I D L V T L A E S I E S R G K D D Q I G G F A Y L
UniRef90_V6JDI2          T I H R A V C D L R A A N E P V D V I T A A A E L T K R G E L A R V G G A S Y L
UniRef90_R5SJA7          I I Y Q A V L N L S R A G K S A D I L T V T E E L R R M G R L D D V G G I M Y V
UniRef90_U2K459          L I Y T A M V T L A M A Q Q P I D M L T V T E E L R R M G V L E E V G D A S Y I
UniRef90_C6X2X7          E I F R A I L K L Y E G N H P V D L M T V I Q E L K K N E K L G F A G G D H Y I
UniRef90_B0SWK7          R L F S A I E T H I R K G Q L A E P I L L A D E F K H D P A F D E L G G L R Y L
UniRef90_UPI0002EFB1C7   K I Y Q A A L Q L F E L S K S T D L L M L T S Y L T D I G M L N G I G G R N K L
UniRef90_A7HYU1          R I Y E A A A K L I T Q G H L A S P V T L K N F F E R D A A L A E I G G P Q Y L
UniRef90_D4L7J4          L I F A Q M Q E M I G F G L S I D F V T L L E K L K Q N K A F D E T T G K T Y L
UniRef90_R5C762          L M Y E S I L E L E Q S G M A V D P V T L Q E K L K E K N L P P E M Y D A R T L
UniRef90_E0UM88          T I Y Q T A L E M Y R E G L P I D L M T V K H R L E E K G L L E Q V G G I C R L
UniRef90_UPI00035EDEB2   K I F E V M K Y L H D Q N K P V D V V T V T D E Y Q K F N R V N D M G G V S Y I
UniRef90_N1ZAV4          M V F E A A E A L F S S G I P V D V V T I K N K L E E K Q V F E Q I G G L P F I
UniRef90_G4ADT5          L I F E E M E K L I A Q Q A P V D L I T L E Q A L K S R E V I E Q V G G F A Y L
UniRef90_U2D717          V L F S T M V E L Y Q K D T P V D L I T L T E A L K S S Q K L E S V G G I T Y I
UniRef90_D1AJH4          I I F M E M K E I Y R S S A V I D S L L L I N S L N R K G V L E D I G G E Q L I
UniRef90_F7SS35          M L W A E M N R L S A S G Q A V D L L T L T D S L A D N G Q L E S A G G M G Y L
UniRef90_A0A023S0F1      Y I Y R A I E K L A Q E N S P Y D A V L V N D W L L K Q N L L D A I G G E E Y L
UniRef90_F5ULN4          V I Y R S A L G L F L Q G Q P T D L M T V T T A L T D R N Q L E Q V G G L T K L
UniRef90_B1X4E5          E I Y R T A L M L Y S Q G K P T D L T C M R A W L S D N G S L E K V G G Y S R L
UniRef90_UPI00041A64A4   R I Y D I A S Q L I R A G K L A S P I T L K T F L G D H D L G G V T T P Q Y L
UniRef90_C8WIP9          R I Y E S M M D L Y V R H I P I D H I S L A D N L K A M G Q L E A V G G K A Y L
UniRef90_D9PDR3          I I F K G I S S L L S N A K P V D I L T L E Q Y F K E Q G I L E Q L G G L A Y I
UniRef90_UPI000375F2F5   Q I F E V A G Q Q I R M G K T S N P V T I K T F L P A D E K V G D I T V A Q Y L
UniRef90_D8K015          Y I F E A A L S L F Q G R A I N Q V T V A Q E L E R Q N K L E T V G G A A Y L
UniRef90_G7LPY5          M I Y R R L I D L A R S D K P T D L I T L G E L L E S N G E L E V V G G F A Y L
UniRef90_E8RS73          K L F A T I E E Q I R I G H L A E P I V L L D K F K T D Q A F N D L G G I R Y L
UniRef90_U2PZG6          L I F S E M I K A Y N M G K L I D V L L I E S L K K Q E L I D E I G G E D L I
UniRef90_K0YIY4          R I F E G M L E L N L R H I P I D Q I S L A E R L S A E G Q L E A V G G R P Y L
UniRef90_D4J7H6          I L F E T M V E L Y N E G K P V D V L T L Q E R L K M K D V P E E F A S I E Y I
UniRef90_D9TFU5          I I F E A I I S L Y K S K S P V D I I T V T E E L K K R N L L E V V G G Q E Y L
UniRef90_K9R8M1          E I Y Q A L L R L H H N G K P T D L L T V I D W L K D R D L L M K I G G R N K L
UniRef90_C6L931          V L F D T M V E L Y N G K P V D L V T L Q D R L Q Q K D V P P E I S S L E F A
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UniRef90_UPI000375766C  A G L  T M K V A S T A N L E F H A K I L S Q
UniRef90_E3PVX6         T G L  S T A P D F T R H V S K Y A E I V K E
UniRef90_S9YGP0         A E L  C K N T P S A A N I V A Y A H I V K
UniRef90_K2GDG8         I E L  T N S V F S S A N I Y Q Y A Q I I K
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UniRef90_UPI0004798797  T D L  A A S V V S V M N A E D Y A Q T I Y D
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UniRef90_K1Y8A1         S E V  I N Y V T T S A N I E Y Y L K I I N E
UniRef90_R5DR16         R D L  L A A V P T S A N I R Q Y A G I V K D
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UniRef90_K9UQF1         I Q L  L E R T V S A V N I D S L A V L V M D
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UniRef90_C1D7Q5         A E L  A Q N T P S A A N I A F Y A R I V R D
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UniRef90_K0YIY4         V E L  A N N T L A L T N W K S H T E I V K
UniRef90_D4J7H6         S E L  V D S V P I S T N I R Q Y A Q T V A D
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UniRef90_R5DZZ3         V E I  A S A V T V T V H A K E Y A H I A Q D
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UniRef90_C9RMX7         P A D V E A E R C L L G G I L R D P E V M G V A V M A I S D D D F Y L E R H Q
UniRef90_UPI00047D95E7  P N Y L K A E Q A V L A S V F L D N K I M N E V N D K L L V T D F F D S R H R
UniRef90_F2I2D8         P Q N L E A E Q T V L G T I L L S N E I F D E I A D I N E D F F F N P I N K
UniRef90_V4YWF0         P Y S L E A E H G V L G A M M Q R P E L I D V L A D E L T P E S F Y F A D N A
UniRef90_A0A023E063   P P Y N L E I E Q A F L S I L L R N N S V F E E I G E A L H Y E H F Y T S L H Q
UniRef90_K2C3A6                   A E R A V L G A L L H D N T T W D D I G D Y L Q T E D F S L H L H Q
UniRef90_Q68WJ2        P S N I Q A E Q M L L G A I I T N N E L L S Y V S E F L R N E H F F E P I H Q
UniRef90_U4KQM3        P S H Q D A E R A L L G S L F L D T R T I P V A L D G L S E Y D F F N L N H Q
UniRef90_D0RPH8        P K N I E A E Q T I L G S I L E N N E L F D E I T D E I N E G H F Y D T I H Q
UniRef90_A0A023HAN7    P H H F L A E K M I L S C L L I N P E A I E I T L R T I S I E V F Y F K N H Q
UniRef90_UPI00036CF61B P P H D I A A E Q I A L G A L L V E N A V F G A V V D A M S T T D L Y R P A H Q
UniRef90_K2IWN1        P P H S L E A E Q S V L G G L L D N Q A W D R V A E A V V E Q A D F Y S R A H R
UniRef90_L0FFF5          H S L E A E H G V L G A M L R Q P H L I D V I S D E L A A D A F A W D D N A
UniRef90_Q6MA65        P H S K E S E M M V I G C M L T S I N S L N I A S D S L D D S D F Y F N E H K
UniRef90_R5FGV9        P Y N S A N E A A L L G C F L I D G E V C N D L V S G I N A N Y F F I E A H K
UniRef90_Q8R6E4        P H S L E A E R A L I G G I F Y N Q D L F D E I R D I V N A G D F Y K I E H S
UniRef90_R5PD57        P H N E K A E Q G I V G T M L V N R D A I S D L V D M L T G E D F Y N K Q Y G
UniRef90_B1XQ85        P P Q N L D A E E M I L G G I L M G G A A A R V K H I L E P E A F Y V S A H R
UniRef90_U2CSD2            N Q E A E M Q V L G A V F L D N K V Y K D I I I D L L T S E D F Y S A A N G
UniRef90_F3WXS8        P R N I E A E A A L L G A M M I D N R L A D D L V D R L D P D H F F E P V H Q
UniRef90_E3YBK0                            A S E I L M P D D F Y R T G H Q
UniRef90_A0A015C7M7      H D V N M E Q C V L A A L M T T A L S L E T I G Q E L D A E C F Y S D R H Q
UniRef90_M4SRR6          H N I D L E K S V I A S L L S I E G S L D H V S T I I D H E D F A A D R H K
UniRef90_R6TQE3        P Y N N D A E M Y V L G S I L L E N N V I N Q M I G K L T A D D F Y N P Q N A
UniRef90_T0KE25            N L S A E Q S V G A V F L D A N V L D E I S F L E E R D F H N P V H Q
UniRef90_A0A022IY29       N L Q I E Q S V L A T L M T V V D S Y S Q V E G K L C E E D F F A T R H K
UniRef90_X0R3V2           N D I E S E Q L V L G S V L L D S T T L D E L I F L E E R D F A R K N H Q
UniRef90_D3Q400       P P H E Q L A E Q S V L G A M L Y S A N V I A E L V P E L T G H D F Y D P K H Q
UniRef90_UPI0002FED838   H N I E A E Q A M L G A A L I N N A A Y D V V S N F L K P E H F F D D R L H Q
UniRef90_UPI0002DDC7A7 P Y H L E A E Q A I L G I I F L E S S Q I V N V V D R L E A E E F F N I N H Q
UniRef90_W0J3D7       P P H S V E A E E Y L L S C C L L D G D V I S R C L E K V L A K S F Y V P A N Q
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UniRef90_UPI000237DD9B P T N V E A E K A L L G A I L T N N K A F A R V E E I L E P E H F Y I P L H G
UniRef90_G9RYU1        P Y S M E A E Q A V L G A A L L D A D I I P K M V E T L R P E M F Y A R Q N G
UniRef90_V9HT74        P Y N T E A E K A V I G G I F L K Q N A L T D I A E F L S P D D F Y N K D L K
UniRef90_R4RQW3             I E A E R A L L G T L L K P E K K D Y V I N S V N T N N F N D S K H R
UniRef90_I4MXU0        P Y S L E A E H G V L G A M L K S P E L I D T L S E D L S P E A F Y F A D N A
UniRef90_L6Y0Z8            D L Y A E K S V I G G I M L G A D S A T D A I E G M G E E H F T V R P H K
UniRef90_N1ML46        P R N V E A E A A L L G A L M I D N R L A E D V Q L K I K A E H F F E P M H G
UniRef90_M4I280                                   E R V I C E D F F S K P H Q
UniRef90_X0UTE0                                   D N F Y S E I H R
UniRef90_I0H2U0        P M S D A A A E Q A V L G M M M T S A K A I D E V V D H V A A R D F A D P R H I
UniRef90_M4I284                           D R I V A D D F F T Q S H K
UniRef90_A0A023HB96    P H N F L A E K I V L S S L L D S Q M I E L A I R K L P S E A F Y F K N H Q
UniRef90_E3I2D6        P H N I E A E Q A L L G A V L I N N E S F D R V S G F L E P N H F Y E P L H G
UniRef90_R6XCX1        P Y N N D A E M Y V I G S V L L E N K I M N S L V G K I N P E D F Y N P Q N S
UniRef90_R9LUW6        P N S Q K I E Q A L L G S L M V Y S S V M S V C M E L L D A R E F Y L P A H E
UniRef90_UPI0003127D1A P N N I E A E A L L G A V L V N N A A Y D V L P P G L D S R H F F E P L H V
UniRef90_K2P0I3        P H N I D L E A E L L G C I L M N N D C Y D L V S R S L Q P E H F Y E Q V H Q
UniRef90_UPI0001744C6A P F S D D A E R G V L S C M I C R H D V A L E A Q L E L K D E H F Y H P A N R
UniRef90_Q73I29        P H N L E A E Q M L I G A M I R D N R I C D A V E D T I T A E N F Y D P L H Q
UniRef90_B7I2X4            Q N M T I E Q S V L V A L M T V S H S L E V V A N D L T E E H F Y A G R H K
UniRef90_UPI0003FD1576     E A E R S T L G A A M L A A D T V P A I A A A V D A A S F D V P R H G
UniRef90_A0A023HBL1    P H N F L A E K I V L S S L L N S S E A L D L T L N H L T I E T F Y F K N H Q
UniRef90_W7DB13            E A E Q A V L G A V F L E P S I F P E L R L K P E Y F Y T E F H Q
UniRef90_V4INR3        P H D L T A E Q I L L G A M L R T P N T V T E V V E D L D G S R F Y R P A H E
UniRef90_D1J713        P Y N L L A E K L V L G S L L T I P E A I L L V S E K L P I E A F Y L E T H Q
UniRef90_Q05074            E A E D A V L G T L R P E A R D L V P D L L A P T D F R E P R Y G
UniRef90_V9R6E5        P C N I E A E Q I L L G S M L R D N R I C D A V E D I I T S D V F F D T L H R
UniRef90_R6X5C9        P Y S L E A E Q A L L G A I I I D P A L L T E A V T L R A D D F Y I E H H K
UniRef90_C2RX13                           M I L D P D K I K D I N L Q P E Q M Y R P Q H V
UniRef90_UPI00047203D3     Y S L E A E Q A A L G I L L Q P D L I Y E S I L T A E E F Y H G P H Q
UniRef90_B3R0J9        P F H F E A E Q A I L G I I F L Y P Q K M H F I Y D V L Y V E D F F E I K H R
UniRef90_UPI00047EF7D7 P P Q N L R A E Q D L L S G I F Y N P K I M V Q A V N E L K A N D F Y L T K H Q
UniRef90_UPI0003092E69 P R N I E A E A A F L G A L L I D N R I A E E V G A R L K A E H F F E S V H Q
UniRef90_T4HY32            Y S L E A E Q N I L G S I L I N D S I G Y K I R E L K E N D F Y F E S H K
UniRef90_F0IGC5            D I D I E S I V L G G M L I E A Q G F P R F T D A I E V N V F G D Q R H A
UniRef90_D7PJ07        P H N F L A E K M V L S C I L F N Q E A L E I T R Q N L V V E A F Y F K N H Q
UniRef90_F4ELZ6         Y N I D A E Q S F L G A L L L E P Q L I K D S R I K P L H L S Q F K H R
UniRef90_I3YIP5        P E S P E L E R A V L G A L E P D Q L S D V T E I I V G I S A F S D P N N G
UniRef90_B1XL13                        M D P E A M G R V V D V L V I N A F Y R A H R
UniRef90_U2BZ21           D P A A E Q S V L G S I L L S P A C L P T V E R S L R P A D F R L A S D R
UniRef90_I2B9T5            A E Q C V L G A I Q L S G D D Y S D A A E G L S E S D F S V A A H H T
UniRef90_M1N7V8        P Q D I R V E Q E L L G S I M Q N P D L I V K A V E I L K A E D F Y K T S H Q
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                                                  50            60            70          80
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UniRef90_UPI00047E43E3   R I F D S I A I L I E R G N L A D A I V L K N R F S Q D E T L V D I G G V E Y L
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UniRef90_UPI0003A0D78A   T I F R A M M E I Y S E G K T I D P I L V N E I A K K I D K F V G I S V E E A L
UniRef90_I4KU15          A L F Q V M T E L H A T G E P V D P V T L H N F   K P V L P S G G T T I A Y A
UniRef90_F3PRE3          E I F A A L L S M H R E G K S I D I I T V K N E L A V R G K L D F V G G P C R L
UniRef90_B7IZ06          I V F E C I L S L H Q E N S P I E L V S V T T K L Q E M N Q L G N V   S V G V L
UniRef90_A5VDN3          R V Y E A I L R M L D R N M L A T P V T L R P M F E G D A S M R E L G G P A Y L
UniRef90_B3CQ53          K I Y K S I N L I I S K G I S A T V I S L K N M L G N E P S F D E I G G V D Y L
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UniRef90_D3Q397          I I W Q V I T D L H N T G E P T D S T A V L Q R L M E S E K E L N K V G G G A Y L
UniRef90_T1WAT3          R I Y D A I S T M V G D N R L A T P V T L R P L F A A D A A M K E L G G P A Y L
UniRef90_F5WV57          K I F S H M L E I I E R G R V L D A T T L I T R L K D Q H E I D S V G G V E Y L
UniRef90_B2XTA9          Y I Y R A A L V L N A N N Q T V D L I T L S N W L Q D N N L I E K I G G L G T L
UniRef90_UPI000472C422   M I F Q V M R W L Y D Q D R P V E I A S I A E H F H K R G K L E E Y G G V T Y L
UniRef90_C9RMX7          L I W N A L C S L N K S V T P I D P V T L S A E L T K M D K L D I V G G R E Y I
UniRef90_UPI00047D95E7   F I Y T A M L D L Y N D N Q S I D Y A S V F S R L E Q A K T T G K A G G I E Y L
UniRef90_F2I2D8          K I Y K I I S D L M A K G L L A N P I T L K N F F S N E D E L N E I G G S E Y L
UniRef90_V4YWF0          E V F R A I M A V R S A N K A V D F L T V A E Q L G A   L P S E T P A L A Y C
UniRef90_A0A023E063      H I F K T L S Y L I R K G Q I A N P I T L K H Y V E N Y L Q N E E V T S D T Y L
UniRef90_K2C3A6          E I Y R T I R D L I T K N E T A D I I C V S Q H L K T E K S E K N D G A F I E L
UniRef90_Q68WJ2          K I Y D A I E K I I E K G L I A T P I T L R S M L T Q D A L F Q E I E G V E Y L
UniRef90_U4KQM3          Y I F Q A I K E L F N D N Q N I D Y A S V G Y V L E R K H L I E K I G G L K Y L
UniRef90_D0RPH8          K I Y K V I S N L I S K G L L A N P V T L K N F F N N N E E L T E I G G I E Y L
UniRef90_A0A023HAN7      E I Y R A I I F M Y K N N L P I D I L T L I T F L Q D N G L L Q K V G G L K V L
UniRef90_UPI00036CF61B   L I M E A A L A L A D A G A P V T E V S V H E E L V R R G Q S A A T G G A P Y L
UniRef90_K2IWN1          L I F K A M T Q L M A Q N K P L D L I T V S E Q M E S D K
UniRef90_L0FFF5          D L Y R L I L E L H A D G N P V D V I T L S D   R R A E L P S G T R T L A Y A
UniRef90_Q6MA65          I I F Q I L K T A Y K K D K P A D I H L V A E E L K R V E K L S A V G G V S Y L
UniRef90_R5FGV9          N I Y D A C F S L Y K E G K P V D I V T V S D W L E K A G K L E Q S G G M E Y L
UniRef90_Q8R6E4          S I Y A A L E K V Y S E N K G I D G I L I E E E I K K S N S K N K D E I L E I L
UniRef90_R5PD57          I L F D N M V E L Y S E G A S V D P I T L V E R L R M K D I P E E V A N T V T L
UniRef90_B1XQ85          Q I Y Q E F L K L D Q K N L P I D L L T V I S T L S A K K F E T I G G T A K L
UniRef90_U2CSD2          I I F N A M K R L Y L K E S P I D V T T V V E E L G I T   L Q E V G G V T Y I
UniRef90_F3WXS8          R V F A A I K N L R A T D M L A T P V T L R P M F E A D E G M K A L G G P S Y L
UniRef90_E3YBK0          I I F E T M L D L N D H G K A V D I I T V Y E A L A A K G N L E D A G G L P Y L
UniRef90_A0A015C7M7      H I Y S A I V E L S E S N Q P Y D V V M V A N Y L K G K N V L H L M G G E E Y L
UniRef90_M4SRR6          T I F R C V R S L N E Q G L P Y D S V M V H D W L E A N K L V E A T G G E G Y I
UniRef90_R6TQE3          T I F K A M M S L F N N S I K I E T V S V T E Q L I R D K V S N I D D Y K T Y L
UniRef90_T0KE25          Q I Y V M K W L D R H E Y P V D A V T V T E Q Y V K F K K T D Q L   D T T Y F
UniRef90_A0A022IY29      L I F K A I V D L D S K N S P Y D A V L V H E Y L E S H N Q L E Q V G G E Q Y L
UniRef90_X0R3V2          Q L F K V L K Y M D E H N K P I D L A T V T E E Y M K F G S L D E L G G V Q Y L
UniRef90_D3Q400          L V F A A I C D M F A A G T P V D A V S I V D E L N K R D E L R R V G G A P Y I
UniRef90_UPI0002FED838   K V W D E I G K M I V S G K N A N P V T L K P Y I Q A D E K I D Q D T T F Q Y V
UniRef90_UPI0002DDC7A7   F I F M A M I E L Y Q K S Q Q I D F Y T V S L T L K N K N Q   K I E G S T N Y L
UniRef90_W0J3D7          V I F S K L I E L Y N K G S A I D L A V L A E E L K T S R Q L D E I G G Y A Y L
UniRef90_UPI00037D5635   H I F H A M L E V V D A D K T I D L I T V I E Q L K N E N H L E A A G G I K Y I
UniRef90_S7J2H1          V I F R V L N D A F K H D R P I D I H L A G E E L K R K N Q L S V I G G P T Y L
UniRef90_UPI000237DD9B   A I Y G A M R T L I W A G N V A D P I T L R P K F E N D P L P T D M T A G N V F
UniRef90_G9RYU1          A I F S E I V R L F T G S A P V D F V T L L A A V Q D A A V F E T E D A A K Y L
UniRef90_V9HT74          I I Y A A I L E L Y N E N K A I D P I L I L E K N K N I K N D T F Y
UniRef90_R4RQW3          Y I F E A M K Q L K M Q N R E I D Y V T V G S V L D N N   L Y K L G G I D Y L
UniRef90_I4MXU0          E V Y R A I K A L K S A G K A V D F L T V G E H I D V L P S G D R A L G   Y C
UniRef90_L6Y0Z8          L I L G A Y K R L N E A G T P I D L L T L T D E L E R T G N L A E A G G F A Y L
UniRef90_N1ML46          R I Y D A I M K L L D R D M V A N P V T L K P M L D Q D P A L K E L G G A G Y L
UniRef90_M4I280          L I F K E M Q Y L L D L G H P I D L I T L A E S L E Q K E G L K N A G C F A Y L
UniRef90_X0UTE0          L I Y E E V I N L L N K H K P I D I V T L K E E F R K K N K L K D I G G A V Y L
UniRef90_I0H2U0          T L F H T L I L M W A D N T P S D P T L V A R Q L D E D D E L E H V G G V P Y L
UniRef90_M4I284          L I F K E M Q Y L L Q S G H P I D L I T L S E S L E Q K R G K L E I I G R F S Y L
UniRef90_A0A023HB96      E I Y K A L L L L Y Q K E E K V D A L T T F L K T N G L L E K I G G L P L L
UniRef90_E3I2D6          R L F E I M G K L I Q S G K H A S P I T L K T F F D N E P P I G E I T V A Q Y L
UniRef90_R6XCX1          A I Y K A M L T L Y N Q S E K I E S M S V L E Q L K R D K I S N I E E Y K N Y L
UniRef90_R9LUW6          R I Y L C M Q E L Y D S G H P I D L N N L I T R L Q D K E E L E R A G G A D Y I
UniRef90_UPI0003127D1A   S I W D A I V D M R K A G R V A N P V T V K   M L V E D G M V G N M T V A Q Y I
UniRef90_K2P0I3          I L F E A M G K M I T I G R K V N P T T L K S Y M P E D A K I A D D L N L Q Y L
UniRef90_UPI0001744C6A   L I F Q T I K T M V A E E R P T E L P A M S V F F M D M G L M D K I G G P A T L
UniRef90_Q73I29          S I F T Q I S K T R K H G I V A N E L S L K M F F E N D Q A F T E C G G V E Y L
UniRef90_B7I2X4          I I Y K A I V E L A N A D K P Y D S V F V C K H L Q E R N L L N D I G G E E Y L
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UniRef90_A0A023HBL1      E I Y K A I I N M S K K N I S I D I L T T F L K D N G L L E K I G G L K V L
UniRef90_W7DB13          E V F Q V M Q D L H E K E Y P I D I L T V F D K L P N   P Q D L P Y L
UniRef90_V4INR3          L I Y T G I L T V Y A Q G G Q T P D P L N V R D A L A K D D L L D Q A G G L P Y L
UniRef90_D1J713          I I Y K A L L I L Y A E G K T I D I D Y I N L I T W I Q D N G F L L K I G G A N I L
UniRef90_Q05074          E L W D L L A S L W A R G T P C D P V T V S A V L R K R G D L E R I G G A V W L
UniRef90_V9R6E5          R I F E Q I V K I N K R G L V A N E V S L K M F F D N D E D L I E S G G V E Y L
UniRef90_R6X5C9          L I Y N A L K D L F S L N K N I D I V T L I N Y I N N S P K D S D F D N A R Y I
UniRef90_C2RX13          R I F R T M L E I D S G N E P V D F V T L T A R L A E K G L I E D V G G I G Y L
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UniRef90_F4ELZ6          N L L A A M I E L D S K G I P I D L V A V E Q V G R D N   I G S V G G H K Y L
UniRef90_I3YIP5          K I Y Q A M S M L E Q G N K I D L C M L S Q H P E L K G R E M V R   Y L
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UniRef90_I2B9T5          F I L R S L K R L N A A G S G I D L M T L T A D I E S A G D L K V G G F A Y L
UniRef90_M1N7V8          N I F T A I C Q L F A E G K D M N I I T L V N V I G K E N L Q S V G G V T Y L
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UniRef90_D4MKH3          V K L M E T V P S I S S V D R Y I E I V E D
UniRef90_UPI0003A0D78A   N E I T D E I T S S Y N L I E Y A Q L I K E
UniRef90_I4KU15          A E L A K N T P S T A N W K A Y A R T V T E
UniRef90_F3PRE3          A S I S S R V A S S A H L E Y H A L I L R Q
UniRef90_B7IZ06          A D L A E G V S S T A G I D Y Y I D L I K D
UniRef90_A5VDN3          A Q L T G S G A A L I G A R D F A N Q I Y D
UniRef90_B3CQ53          A K L T T L A L S I V N V N E Y G K I V Y D
UniRef90_K2DX96          A E L V N K V P T A A H V E H Y A K I V R D
UniRef90_D3Q397          S D L R M S V P S A A N
UniRef90_T1WAT3          A Q L T G N P A S L I G A R S F A D Q I Y D
UniRef90_F5WV57          F A L T E N S A T P A S V K H Y I E V V Q E
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UniRef90_UPI000472C422   S G L V A N V A S A A N V E Y Y A N L L R
UniRef90_C9RMX7          F E L M E S V A S S A N V
UniRef90_UPI00047D95E7   M E V S E H L Y T T S N L D S H I N L V L D
UniRef90_F2I2D8          V K L T K F S T S K L Q I K Y Y A N L L H D
UniRef90_V4YWF0          C E I V K N T P S I A S A S T Y A R I V H E
UniRef90_A0A023E063      A E L A G L I V P T C N A H H Y A K I I Y D
UniRef90_K2C3A6          C E I A K S H F T T G S I K S Y A E I V K Q
UniRef90_Q68WJ2          A K L I T M S M M V I N P I D Y G K I I Y D
UniRef90_U4KQM3          I S L G N M V P S A D H I E T Y I G H I K E
UniRef90_D0RPH8          L K L T K V S T T K N Q I K H Y S K L L S D
UniRef90_A0A023HAN7      I E L L S Q I P S F V K L E E Y L R L V K D
UniRef90_UPI00036CF61B   H E L Y D A V P V V V N G G Y Y A R I V
UniRef90_K2IWN1
UniRef90_L0FFF5          G E I Q A N T P S V A N A K H Y A Q I I R E
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UniRef90_A0A015C7M7      I Q L M Q D A P S S F N A E S Y V
UniRef90_M4SRR6          A E I L V T S P S T F N L K A Y A E R I R D
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UniRef90_S7J2H1          I S L A N Y A G T A A Y L E E Y I Q I I
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UniRef90_G9RYU1          T Q L A E T V P S L S H T D T Y V K I I A E
UniRef90_V9HT74            E V I E S V Q T A A N V I E Y A H I V M D
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UniRef90_R9LUW6          I Q L M D S A V S P A N T H S Y I E T I K
UniRef90_UPI0003127D1A   A H L A A E A V S V L N A P D Y A R A I M D
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UniRef90_UPI0001744C6A   A E L Y A F V P T P A H Y D Y Y R D I L K Q
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UniRef90_B7I2X4          I E L N S A V G S V H H L E Y F V
UniRef90_UPI0003FD1576   H E L C A A V P T A A N G T Y Y A D I V
UniRef90_A0A023HBL1      S E F L N Q L P N I Q Y L K E Y I K L I Q D
UniRef90_W7DB13          T E L S G K M P T A Q N V S F Y A R F I K E
UniRef90_V4INR3          N H L A H E T P R T M S W Q Q A A Q C V
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UniRef90_R6X5C9          K T L C E L G A A C T N I I T D Y I E I I K D
UniRef90_C2RX13          A Q L S E T T P S T S N I K Y Y E K I V
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UniRef90_B3R0J9          I D L V N L I S D I K N L E T Y I E L I K E
UniRef90_UPI00047EF7D7   T Q L M T G G L H I   N P K Q Y I E I I K D
UniRef90_UPI0003092E69   A R L T G D A G G L I G A R D F A E Q I Y
UniRef90_T4HY32          T S L T T I V I T S N I D H Y I I K E
UniRef90_F0IGC5          V S L T E R V S S A A H I E E Y A R I L L Q
UniRef90_D7PJ07          L D L G N Q S L T F S Y L T E Y I R I I K E
UniRef90_F4ELZ6          S D L T E S V P T T A N I S F Y E K L I F E
UniRef90_I3YIP5          V E L T N S V G S A V N V L D H A R Q L A D
UniRef90_B1XL13          S Q L V D R T V S A V N I D H Y A L I V M D
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UniRef90_I2B9T5          A E I A K N T P S V S M L P T Y A Q K L R E
UniRef90_M1N7V8          T E L M T S G M P I N P K I Y I D L I K E
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UniRef90_B7HYK9                 Q N V E A E K T V L G S L L D G E L I K E C R L T E Q Y F S M P V H K
UniRef90_F8G5K2              P L V A M E A E H G V L G A L M H Q P D L C E D I G A F L D L A D F S T D D N G
UniRef90_K2DKA9              P P H N E E A E Q S V L G G I L L N K D A I G S V S E V I S P G D F Y N D I N G
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UniRef90_UPI00037AC4A2       P N S L D A E Q A L L A A C I V D G E V I G R C M E Q I S S D H F Y E Q A H Q
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UniRef90_Q1WDH9              P E A Q A A E M A V L S A C M N N R E N V A R A N F L R S S D F Y R P A H E
UniRef90_S5SQ30                 Y S L E C E Q I V L A C I L Y N Y S W N D I Y N F L I I E D F Y F K N H K
UniRef90_M7PKT3              P Y Y A E A E K S I L G I I F L E P K Q I I N V I G R L E V S D F F N L N N Q
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UniRef90_UPI0003B6A42C      P N D R T A E L A V I G G L F I D D S K I D L I K D I L P N G A F Y Y R A F G
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UniRef90_Q5FNI4              P Q N L A C E Q C L L G S V L I D S K T T L E V E E I L R P E H F S D P I N A
UniRef90_Q6LHP7                 Q A N A A E Q S V L G A L F L I G E A V S K I F S S L K I G N F S T V T H R
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UniRef90_F0JDX5            P P F D L L A E H A V L E G V L R N N A I F H E I I D L L N R Q S F Y H P D H G
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UniRef90_R6XN68                 Y D K R V E Q I L L G N M I V E P V A I R D V T A V L K A D D F D T A I H K
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UniRef90_UPI0003C15A06             M E Q C V L M S L M T V K D S L E I V I N D L S V E S F H A E R H Q
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UniRef90_X1FSJ1           P P H D I D A E E A V I G S L L I D G T A I Y K I A A F L N Q P D F Y S E Q N Q
UniRef90_A9BW42                 S N E A E C A V L G A I L C N G E A Y D A A A G I I T A E S F C V P L H R
UniRef90_U4QSX5             P I D I E N E K N L I S C L L L D R D D S L C L L R D S F H F Q P H C
UniRef90_B2UNF3             P Q A P G P E K G V L A L M A M D P A T Y Q C V T I G M T E D F Y H P H Q
UniRef90_A0A015YLM7             D E D A E R I V L G T I I T E R N A L E E V V E R E L L S E E S F Y I P F H Q
UniRef90_F3ZD62           P P G D P A S E R A L L A A C I H D K H H Y D E A A A L I T R D D F T V P A Y A
UniRef90_A0A009NJG5             S I P V E Q S V L S T L M T I D Q A A D E F I S Q I D A Q D F F A S Q H Q
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UniRef90_F8G5K2          T L Y A L I L A C H S K K M V P D P I T L S E I     R S E L P S G Q I T I A Y A
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UniRef90_UPI00037AC4A2   L I F E A I L L L Y K D N L E A D E I L L S D K L S D L G K L E M I G G R D F I
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UniRef90_S5SQ30          I I F S I I L E L L N S N I D F D M N H V Y N K L K Y Y K N F D F     L N Y L
UniRef90_M7PKT3          K I F Q A I Q E L F E T S K S I D Y Y S V Y T L L K N K N I H   I D G G Q N Y L
UniRef90_UPI00036D3681   D L Y D I I I N A H E S G V P T E P F A L G G Y L A D R G L N R F E G G A L F L
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UniRef90_UPI000465407A   L M F E K V G A M L L V G K G V N P V T I R S Y L P D   E K I G D M T L T E Y L
UniRef90_UPI000255A6B5   R I Y E V I R G R V A K G H I A S P V T L K M A M E G D E G L K E L G G A R Y L
UniRef90_U2YL94          R I Y E R I V T L V D R Q A V V T P V T L K P Y F E T D E A L K E L G G I N Y L
UniRef90_W4BPG5          T I F S A M R D L H N A G E Q V D I R S L V V M L N H K K S L E K V G G T Y H I
UniRef90_E5AGF0          I V F N S I K R L N H V N A K I D L L T V T A D L E Q T G E I K L T G G F S Y L
UniRef90_UPI00025565AA   I V Y T T M L E L S R Q N E P I D I I A L Q E N I P S I D V Q G I V   T P Q Y L
UniRef90_UPI0003B3854F   V I F E A I M S L A E R R L P V D L L T L Q D L L Q D Q G L L A E V G G V P Y L
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UniRef90_E4RTS6          A I Y Q A I L L L F G K S E P V D L L T V T N Q L R L T G E L E I G G P A Y L
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UniRef90_B1ZCZ5          T V F R T I A Q L V D T G K R V N A A I V H D   F A K S G D K G T S V D P D Y I
UniRef90_I2N6R0          Q L Y R A L G A L H H S G E P V D Q L T V L W E V Q R R G L T S G A L D A E R V
UniRef90_R8DIB1          I L F T I M K E L H E K E L P I E M I Q V A E D L K G K R Q F D A V G G R F V
UniRef90_Q5FNI4          Q I Y E K A L L I Y N E G R K V D P L T I M R H F M H P D E M V W V D P K E Y F
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UniRef90_B7T1U5          I I Y K G L L V L Y G E G K K V D Y V T L I T W L Q D N K F N K Y L E D L S L I
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UniRef90_K1SSZ5          N L Y A A A I S L Y D R S V K V D M I T I L E E T Q K K G L S Y D D Y A L   F I
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UniRef90_R6MMI6          L V Y K C I L Y L N D K N D K I D I V T V D S T L K T A K E Y K     G I E F L
UniRef90_N9BCY4          Q I Y N A I V E L A N E N Q P Y D V V M V E Q K L K S K N L L H V L G G E Q Y L
UniRef90_R6XN68          K I Y Q A I L N S Y S E S N K A I I N S V K R E L E S M G E L E Q I G G F E Y L
UniRef90_A5PCN7          R I Y E R V L K L I D R N S V A T P V T L K P Y F E S D E A L K Q L G G V T Y L
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UniRef90_G7M179          I I Y A A I C K L F A E G K D I D I T L L V N E I G I D N L   K N A G G I T Y I
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UniRef90_E2ZPF3          A L F Q A I K D C Y E E G I P V D P V T V G     V V R D V L P S G A K L I P Y A
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UniRef90_B2TME1          L I Y N A I C S L F A E G E D I N L T M L I N K I G K   E K I S D I G G V T Y L
UniRef90_A8ESJ9          K I F E V M V K L H D E G M P I D E D F I R N K V N S K D V D D     S I L
UniRef90_R5EHE4          I I Y R T I L G R A A T T D D F N T T V L C A D L E N K G L L D K A G G I A Y V
UniRef90_UPI000469A68F   Y I F E A M E E C E R E D L P I D E E F V K K K L K Q E E R F D E E V M L E I L
UniRef90_L5NBE4          R I Y E G M K N I H E R N E P V T I L T V T T E L K   G E I G K V G G V G Y L
UniRef90_D9SQ28          Q I Y T A M I E L Y K E E Q P I S I V S V Y S K I G   E F I K E N G G I S Y L
UniRef90_N9NTL0          E I Y K A I T D L A S E N K P Y D V V F V E Q K L N E K N S L V G V S P S E Y L
UniRef90_E8LLU0          I I Y S C I L N R A S S S D E F D P T V I C S I L E N E G L L D K V G G K A Y I
UniRef90_A6MVP6          H I F E A S K Q I Y E E Q I E V N I D T I S D R L N L S G D L E T I G G I E E L
UniRef90_UPI0004793D32   L I Y A A I C A L D R K N Q P Y D A T M V F E E I K D N G T L E L A G G E P Y L
UniRef90_UPI0003C15A06   L I F R S I L E L S N E N K P Y D V L L V E Q K L N E K K W T Q T A G G A E Y L
UniRef90_V5SXW0          V I Y S L I L A C H S K A I V P D P L S L A E A     R S E L P S G A F T L A Y A
UniRef90_H7CYU3          M I Y R A M C N L Y K N S I P F D I V V L S E K L S N     E V K N G A I T L
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UniRef90_D2MMB1          Y V F R I L K K L R E K G I P S E I P S V Q S A L E D E K L L D L V G G F H Y L
UniRef90_UPI00047DFF2F   E L F D A I N G V T S K Y N R I D L L L L L E Y L K S K D A L L K S G G I S Y I
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UniRef90_N8UP32          I I F T H V K A Q Q A K G E A F D E V T I F E L I K A N S L E A K E I N E Q F M
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UniRef90_B1BPN6          I I F R A I K E L K N N I S F D L T I L S E K L   S N D I K K Q V L T L S D L
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UniRef90_X1FSJ1          R I Y G A C L S L Y Q R N E A I N Q I T V
UniRef90_A9BW42          L V W E A A Q K L I L A G K F V D P V A V M E H R G H G V         D L V E V
UniRef90_U4QSX5          R I A Q A I L D L D A D G I V P D P G M I A N R L G L K G           P D L D Y L
UniRef90_B2UNF3          L L W R L F Q A R Y N K N E P I V S I T Q A L E D M H Q L E A V G G S A G L
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UniRef90_B7HYK9          I G L M D G V P T T S N F S Y Y E G L V R
UniRef90_F8G5K2          A E I M Y Q V P S A A N G R H Y A K I V V E
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UniRef90_M7PKT3          I Q L G E I I P S I Y H L E T Y I N L V N E
UniRef90_UPI00036D3681   H G C V A A V P L A A H A P Y Y M D R L L E
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UniRef90_UPI000255A6B5   A K M A G A S V A S Y A L R D Y A R V V
UniRef90_U2YL94          A R L T A D G Q G L L A A R E L A E Q I Y D
UniRef90_W4BPG5          S R I A S A S P T A S D I D Y F L G V I K D
UniRef90_E5AGF0          G E I T K N T P L A R N L P A Y S A K M K E
UniRef90_UPI00025565AA   L N L Q H F V P A T L N L R T Y A S T I L D
UniRef90_UPI0003B3854F   V Q L T E A V
UniRef90_T0SSS6          L E I T E D Q V S S V N I R H Y A Q L V K D
UniRef90_UPI00030182EC   V R L I C H V P V A G T A D Y F S E Q V L D
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UniRef90_F8K4I2          H T L I Q S C P R P A H A P V Y G R M V L E
UniRef90_UPI0003B6A42C   Y E A V S S V T S A S K I E S Y A K I I R E
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UniRef90_R8DIB1          A H I S E C V V T T A N F K H H E K I V L D
UniRef90_Q5FNI4          A K L L N A Y V S T R T A L D Y A R E I R D
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UniRef90_B7T1U5          F S F V N Q I Y I V G Y L E D Y L A L I Y E
UniRef90_B9LA24          G T A P I E A V E A Y A R E I K D
UniRef90_K1SSZ5          T E L L G C V A S S A N I I R H A L Y I K E
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UniRef90_R6MMI6          K G A I S N N P T K H N L I Y Y G K I V K E
UniRef90_N9BCY4          K I M L A E A P S S F H M E P Y I T Q L K
UniRef90_R6XN68          V D L V E I G S T D S N L K K Y I E Y I K D
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UniRef90_M4I223          A E L S K N I P S T V N I L T Y A E I I R E
UniRef90_Q04HQ2          S E V L S S D G T I A N V E N Y A K A V H E
UniRef90_G7M179          T D I A I G G L P I K A K E Y I K I L K D
UniRef90_J0PL54          A T L S R D V P S T A N W K A Y A Q Q V K
UniRef90_UPI00036AADB7   T E I Y T Y A P T A A H F E H H L G I V K D
UniRef90_E2ZPF3          G N I A R N V P S V A N W R T Y V R H V R E
UniRef90_W8KXN5          A H L V K N T P S T A N A D E Y A R I I K Q
UniRef90_UPI000471292E   A Q I M L A M V G I A N A G E Y G R A I F D
UniRef90_A0A037Z553      S Q V M A Y S I S A A N Y K T Y I N L I K
UniRef90_D6PLB4          A E L E D E V G S S V N L E F Y L N P V M E
UniRef90_B2TME1          T E L L G G M P I R P N S Y I K I L K D
UniRef90_A8ESJ9          L E I L S A N P I T N T L A Y V R E I K D
UniRef90_R5EHE4          G S L T E L T G P S S A I V E Y G Q I I I D
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UniRef90_N9NTL0          M T L M A D A P S S F N L E S Y V
UniRef90_E8LLU0          S G L I A N T A P E S V A I E Y A
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UniRef90_R8W0B9          K Q I A L V T P T S A V W P E Y A A I L R E
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UniRef90_UPI00047DFF2F   T Q I S N S I A S T V N L N N Y I D I L L E
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UniRef90_UPI000468210A   T N L A S T V P S K H A F E T Y E T L I Y E
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UniRef90_E2GLZ0          I N L N S T I G L A H F L E Q H A D Q L N E
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UniRef90_U6EVF5          S I L I T N V I S T S N
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UniRef90_B1BPN6          T E I S Y H T S R G A F D S H L S L V K E
UniRef90_C0R614          D I L S G A I V V G S I I E T H I R I I K E
UniRef90_X1FSJ1
UniRef90_A9BW42          N G I A Q S Y S T V R A V P G H A E I I
UniRef90_U4QSX5          E D L T W M V A S P S N A R H Y E G K L K E
UniRef90_B2UNF3          A E I Y T F T T T G A Y F E H Y L N V L K D
UniRef90_A0A015YLM7      R I A S N C T F D L Y Q Y A A R L H D
UniRef90_F3ZD62          H E I A D A Y S G G G S A E Y F A E A I R
UniRef90_A0A009NJG5      V N L M S R V S N A S L L V T H I K K L K D
UniRef90_Q2ST14          Y E I A A E N Y T D Q G L E E Y I D V I H
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                                1         10             20            30            40
UniRef90_A3EUF2            P I D I E N E K N L I W C L L R E P G L L R D D S L S F S V E D F H F A P H R
UniRef90_W6A8E6               D A E R M V L A T A I H S A K A S F E V M S R L K A D D F S L Q S H Q
UniRef90_V8C9U4           P Q I I S I E S T L I A S I L F D S E T F S E I I A D V L S G N D F L H T S H R
UniRef90_U2EBS8             Y D L D M E R A I L S S I L Q N N D T L G E I I F D T I K A K D F Y L K G H S
UniRef90_UPI00045EC567    P H N L A A E R A V L G A C L K S D T A F W G V A D R L R A D Q F F H P L H Q
UniRef90_UPI000472E093     Y D L D M E R S I L S S L M Q N E D A F S E V Y G L I K E S D F Y L K G H A
UniRef90_D1J8H9             I N N E T S L L G L L I R E P N C Y L T I A E I L K P E M F H F K N N Q
UniRef90_UPI0002DB97A3   P P Q S V D S E I A I L S A I L A S P S C L D G I S G L S P E D F Y V P V H K
UniRef90_UPI000237A7AC     D V A A E E A L L G A V L W N A D A A G P A L R S V P P D A W W R P I N Q
UniRef90_F3EID1            Y S L E A E H G L L G A L L L D A S L F D A I T D R L T T A D F A Y D D N A
UniRef90_X1F0P6
UniRef90_UPI00047B7635     L N I E R L V L S S I F F D Y E Q I F E V S L I L K K D D F Y L K A H Q
UniRef90_K9BS37          H S V P T E Q G V L V S L L S L T D G V D Q F V E R L T R D H F S G K H Q
UniRef90_F9S219        P P H S L E A E L N V I S G L L Y N N A A W S E V S H H L H R D M F Y G R T H R
UniRef90_A7TUU8               A E D A L L A V L T E Q P G A I G E V V A W L R P G D F A D P T H G
UniRef90_K4R6V6           A L D E E R L L A T A T A Y P A E V K D M R W L Q P D D F T L P L H A
UniRef90_X1I8D2              N I Q I E K V I I G C I L L D G D L Y E K I I G K I T A N D F T D G T Y R
UniRef90_UPI00040AFFDB       E L E E S L L G S F F L E P S L I Q E S R I E P D M M Q H V A T K
UniRef90_X1MQS5        P P H D I D A E E A V I G S L L I D G T A I Y K I A T L L Q S S D F Y S E R N S
UniRef90_Q30TM5            Y N L A F E R S I L S S I V F E P S Q F D E L S S G L K K D D F Y L P A H Q
UniRef90_W9D5C7              V H A E R V V L G A L M Y D P T T M V D A I A R L D Q A D F R L P S H R
UniRef90_Q0TQQ0           Y A I D S E K A I L G T L I Q D N D F M I K A M G S L E D N D F Y S S K N K
UniRef90_X1CW35                                                                      H R
UniRef90_W0DEE1          P T D E L A E R A V L G A M I K D P D N I P T V L E Y L R E E D F Y F E T H R
UniRef90_K4Z2X0            H N I P M E Q A V L T A L M T V D K S F D V V S N D L D V E C F F P E R H K
UniRef90_A8HTG5         P S A D L L L E Q E L L G C L I C A P E A L A A V A S S L E P E H F A Q P L H G
UniRef90_T5KPV1            D F D A E S A V L A C L L R D G A Q A Y W R I A D F L S C D D F T N A G N Q
UniRef90_E5X3A3           H D K E C E L C V L G T L V E R N A I H Q V R E L L T P N S F Y F D F H R
UniRef90_A7ZCT8            Y D L D M E R A I L S S I A N N D A L G E I F D T I N A G D F Y L K A H A
UniRef90_Q9L1W8        P P Q P V H A E Q A L L G A L L L D P H R L D D V S G I A A D S F S T A A H A
UniRef90_R6XXG0              E Q A V G A I I N D P T G S K A V I E S L E V T D F G D R R H Q
UniRef90_UPI00036D8F8C       E R E V L A C C M K D S S V I G E V V E G L R E T D F S V D T H R
UniRef90_T1DX00            M E K S V I S S I F D P S G F D D I S D Q L Q V G D F L Y P A H R
UniRef90_N1UPL7           Y E P E S E K A F L G F L L L K G A D N L I D I P V A P E D F Y V D L H R
UniRef90_F8EV15                 I D N R L A E D V Q V K L R A E H F F D P T H G
UniRef90_W8YZ35          P F D T L L E E H I L G A M V Y E P E C I A E V F E T V Q P R Y F Y H T A Y S
UniRef90_T2BG36            D L D L E R A I L S S C I M S E D A Y S S I A G D I E P K D F S L K A H Q
UniRef90_I2N7Z3              A E Q A L L G A L L L D P H R L K T I G P L A P E H F A S P A H A
UniRef90_UPI000378F559      E A E V A L L T A V L I N G A A L D D I A L T G H D F Y E P R H G
UniRef90_Q848F4           S V E A E S R A L G A C L M A T P S Y D P V A D V V R E G D W H E P A H E
UniRef90_I0QRU9           S Y D F E E Q L I G S M M L K G D H I D D I I G K L P D E A F L N F H L R
UniRef90_B9D2U3           Y D L D M E R A I L A S I I Y S A D N L S E I F D I I S P F D F Y L R A H G
UniRef90_F8D1D5              A E R L V L A C I L K D P S L I E E T M L R P G H F I D P R N H
UniRef90_D3CZ26          P Q V D P E R V V L G L M L A D I S T V K D M K D R L T A E D F S L P A H G
UniRef90_U6DZ94           N Q T V E H I L L K F L L N P K A F D Q I V N K I N I H D F N D A K V K
UniRef90_UPI0003781A9E    D P A T E M A L L G S M L L D A E T T A P A L R S V P R E A W S N P R H S
UniRef90_E7FZ69            I S M E R V V L S A L L L E S Q Q Y E E F A R E L K P S D F Y Y E A H Q
UniRef90_Q6F233             V E K M V L A I A M H S P N A L P D I M T G L V A D D F L D S T H K
UniRef90_UPI0003B528A2   P H N I E A E A A L L G A L L L D N R V A E D V Q T K L Q V H H F F E P L H G
UniRef90_UPI0004727B68     D A E C S V L A G I L I S S S N M E L V D D I L N P E A F T N E A V G
UniRef90_D9UI62
UniRef90_UPI00046F08F8     N L D A E R A V L G S L L K D H S L M D D C F L S P D D F T E E D N R
UniRef90_UPI0001FFF7ED     L S A E Q A V L G A I L L L D P G Q L A H L R W L A P E H F E R P V H Q
UniRef90_UPI000407B0AF    S Y D F E E Q L I G S M M I K G D H V D E V A G K L P A E A F E N I H L R
UniRef90_F3NPK4             A E Q A L L G A L L L E P A R L A D T G T L A A D H F D N H A H A
UniRef90_UPI0003FC85C1                       F D S I T A R V S T A D F A F D D N A
UniRef90_N2ASF7             Q V E E A V I C V L L S S E S A I W Q V A P V L K P E M F S D P L F A
UniRef90_UPI0002FAF432     D A E S A V L A C L L R D P S C Y W H I A E L L Q G D D F G D R E C R
UniRef90_D4T5Z9          D F D A E S A V L A C L F R D S S C Y W L A A D V L E P E D F K G H S N R
UniRef90_N1L7C5           S Y D F E E Q L I G S M I I K G D H C H E I T G K L P A D A F E N F H L R
UniRef90_W0SML5            N I D I E A S V I G G L L L S G L T P D D V V A T L D P E A F S V P F Y R
UniRef90_E4QE36           Y S L E A E A V V G S M I I N Q D V I G E K V L S K E D F Y N A N L G
UniRef90_B3PN54              E A T L L G L F L R D P N A F L E T A E I I K P E M F F Y K E N Q
UniRef90_T1HIX4             V D I E A S V I G G L L I G G L T P T E V L A T L E A E T F E I Y K
UniRef90_E4U3S0          Y N L S F E R A V L S S I F E P S I F S S L T L N P N V F F L L E A H R
UniRef90_N8S0R7            S I P V E Q A I L S T V I G T E Q G M E D Y I E Q I D S S D F Y A A Q H Q
UniRef90_W5TRS6           Y D G T A E K A I L G A V M M G S G E L Y D L F A T I A P D D W Y V P A H C
UniRef90_F3E7J5              E K S V L V T L L D D S A L Y K E I A E V L E P T D F I S E A G K
UniRef90_UPI00037B4998      A E Q A L L G S L L H A P D V V F E I A K F L R A D D F S D P R L A
UniRef90_C9XY11           S Y D F E Y Q L V G S M L V K G D H I D E V A G K L P A E A F E N F H L R
UniRef90_F5L9D2            N I E A Q Y L G C I V L D N S L I G Q A N L Q P T D F A K G E H R
UniRef90_C9M9C7         P E A A E A E R A L L G D C L L D P E A A S R I V S L A S P E L F F D P T L S
UniRef90_UPI0003805C1A   H T A M A E R A T L G A L L L G P G H Q N Q I L R W L R P E D F A D P W H A
UniRef90_C3BGL1                                                                     M H Q
UniRef90_Q8EWJ8               S C V L N N D A D I D E I F L H L S P K D F I K P E N R
UniRef90_W6W1X0           N L K L E Q L V L G C I L L N E E N Y W H V S E I L T I E L F A S E D H Q
UniRef90_K6A4J7                                              K P E M F S R P D L A
UniRef90_X1R744            N I K A E K I L I G C M L E N E Q I A Q N I L I K L A E D F S V L M H R
UniRef90_P03006           Q D I E A S V I G G L L I G G L T P S D V L A T L E P E A F S I P L Y R
UniRef90_M4XM50             E V E Y L L V G A L L K S N S K A R D V L S W L E P E M F A T F Q L G
UniRef90_UPI00047BE17A   P P Q D H D L E Q H I L G A A L T S R Q A A E R Y A D K L T D T D F T H D H H I
UniRef90_T1VX06            A L D V E A H I L C S L L W A P E S A K R A V A A L T S A D F Y R P V N A
UniRef90_E7AA04         P P K D L D M E R M V L A A V L E G D C Y E N M A A L L K P S D F F H P I H G
UniRef90_UPI00047C513B      E I E Q D V L G T L L F G G D F R K V M G F L R E E H F I P D V H R
UniRef90_T3UWP5            D V E I E K S I L G T L L D N K L S Y K L D E L N E N M F M N D I C L
UniRef90_D1A1A8             L D I E F V I L G A V N Y T E S A K D V S R L T E E H F S A A I H G
UniRef90_F2R870             A E A Q A L L G A L L L Q P A L L P A V E D L S P S F F D S P V H G
UniRef90_M5DBN6        P P Q N Y I A E E I L G S L I V K P A L F D L I F Q S R I E C L F L E S H R
UniRef90_A0A014MIE5        S P D I E S F I I S F L L S N P R K I I N Y I D A I D P N D F S D L R L V
UniRef90_G9QPT4         P A Y I T A E R R L I A Y M L Q D P E L A Y Q I H E K L A G E T F N L D E H Q
UniRef90_D4JZ45             A E Q R L L A A M L R E P G Y I D K V S A Q L R P E Q F L Q P Q Q K
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UniRef90_A3EUF2          R I I R A I I D L D R D E I T V D P G M V R N R L E D       P S D R A Y L
UniRef90_W6A8E6          M I Y D V L M R Q Q I E G S E T S V T K I A H E L L K E K K L D R V G G I E Y L
UniRef90_V8C9U4          K I F D V C K S L H S Q G I P I T P E F V L S R L E       G A Y F V S Q A E F
UniRef90_U2EBS8          Q I Y E A M V E C L N S D D P V A V P F L K N K L G D K       Y N E A L M
UniRef90_UPI00045EC567   Q V F S V I R D I C T E G R   L S L S L V A S R L P A E D E   E G R S M M S Y L
UniRef90_UPI000472E093   D V F L A I V E C V N S D E P I D Y T F V K K R L R N R Y D E Q I F S D
UniRef90_D1J8H9          I L F K S I S E V H I A S K Q F D I A N L L S Y L N D Q K L I D H I G G S E Y I
UniRef90_UPI0002DB97A3   L V F E L M V T L R G K Q A P P D K I H V L D A V R N K K H E A E I T K A V L A
UniRef90_UPI000237A7AC   T L A T V L T G M L V R G E P I D P T T V L S Q V M A D G L L T Q V D G   A Y L
UniRef90_F3EID1          A L Y Q A I I D T H A T G Q P V D V V T V G I E Y P D   L P S G G R T L A Y A
UniRef90_X1F0P6          R I Y Q V I L G L F N K N I A V D L V T L T E E L Q N K N E L I D I G G I T Y L
UniRef90_UPI00047B7635   D I Y Q V M L A L H D E G L P I D E D F I R N R V P K E D F N D N V       L
UniRef90_K9BS37          I I F D A I Q A I H S R G E Q I D F I L V W D E I N K N P L N L N Y I D E Q Y M
UniRef90_F9S219          Y L F D S L A T L L A F H K D V S L E M L I S E L S K R E V L N N E V F D S D L
UniRef90_A7TUU8          Q L Y R C L G A L H H R G E P I D R I T L L W E A Q R R G L L T N G T S E Q L T
UniRef90_K4R6V6          A V W Q C L T A L V H N G E P V D P V T V L W E A Q H R G L L A D G L D P S D L
UniRef90_X1I8D2          K L F Q L F G K F Y K K E M K I D I A T I M D A A Y K S K L L N N W L G M S V L
UniRef90_UPI00040AFFDB   T I Y E G M V R L R E E G T G I D V M T L I D R V   N P E V L D Q S G G I E Y L
UniRef90_X1MQS5          L I Y G A C L A L Y Q R N E T I N Q I T V A Q E L D
UniRef90_Q30TM5          D I F G V M T L L F Q K D Q P I D   E E F I K K E L I K I K K F D E N V M
UniRef90_W9D5C7          V I Y R V I V E L W A A D V P P D P S A V W A E V G R R D R A T P H H G L Q D L
UniRef90_Q0TQQ0          I T Y R A M R E L F K D N I S F D L T I V A E K L   S K E I K A Q A I T L S D L
UniRef90_I4VMX0          K I Y A L I V K L A R E E A P F D A V T I       G D A E P A L A D L A L
UniRef90_X1CW35          M L Y R L F L D L N R K N D T W D I V I F R D E L K K R Q Q L E A V G G V D Y L
UniRef90_W0DEE1          L L F S L L Y K V W E K G K D W D D I V L R N Y L I K S G L H D K   I S M D L V
UniRef90_K4Z2X0          Q I F Q A I A D L A N E N K P Y D F V M V E Q Q L K Q K
UniRef90_A8HTG5          R L F E A L K A R H A S G A P S S P V T L A A A L K M D P V A D D M T V G Q Y V
UniRef90_T5KPV1          R L F R T L Q Q E I T A G R P T D A V T I G E       L D G G L A T L
UniRef90_E5X3A3          E V Y C A L L A I T D H G D R A D I V S I M P E L K K R K V E F Q P Y D I V S I
UniRef90_A7ZCT8          Q I Y K A M V D C L N G D V P I A S T F I K N K L G E S Y D D N V M A S
UniRef90_Q9L1W8          A L Y T A L S T L D P A E H A K N T K W L D R V L T A G R E Q A R G L T A T Y L
UniRef90_R6XXG0          A I F S T I K R L Y K D I F S F D N A V L L A E L K A D R I D E E A G G L E Y I
UniRef90_UPI00036D8F8C   R V F S V L I S L D A S G T P I D P V T V T G A L E R E S P K S W S S L V A D I
UniRef90_T1DX00          H I F D I C K E L H T Q N L P I T P D F I A S R L V G K R S V S Q E E F T Q I L
UniRef90_N1UPL7          R V Y R A I G D L V D K R I T I D P V S V L N F L K E N S L K D E E K E F N Y I
UniRef90_F8EV15          L I Y Q T I M R Q I D R N Q H V T P V I L Q P L L A E D P G L Q A K G G I K Y V
UniRef90_W8YZ35          K L C K R I Y E L W E E D K Q I D L T A L I P A L E E T G V       S I A K M
UniRef90_T2BG36          D V F K A I I A C V N A G E P I S I   S F L K K H K K I D E Q I       L
UniRef90_I2N7Z3          A V F A A M T G L V H A K E P A W I T A V H S R A R A Q   S P G L Q P P Y L
UniRef90_UPI000378F559   D I F D A M R R E W D Q G R P V D A F T L S E A M P N D       A A L L
UniRef90_Q848F4          L V W L A V Q R L H G A G R P T G V P A V E A Q L R S T G D L E R A G G M V G L
UniRef90_I0QRU9          S M Y K V I R A L L I K A E P V D I F T V Q D G V E       P E T K N F V
UniRef90_B9D2U3          D V Y D A M V K C L N E N L P V E T G F L K T K L G S K       F D E N V M
UniRef90_F8D1D5          E I F R L M L E A K E R N E K P D V V T L L M M V G   G D A F R L G G N D Y L
UniRef90_D3CZ26          I T F K T I C D L E G K G L P V D R A S V L V E L G K R A K A D Y A T T F A D L
UniRef90_U6DZ94          F I Y N L L L G L K Q Q K Q I W D I N K S D L F L T N I P K F K R P H I K N Y L
UniRef90_UPI0003781A9E   Q L A A L M L D M H T R G Q G V D K Q T V V G Q I A A Q G M M S T V   D P A Y V
UniRef90_E7FZ69          N L F E L C N E L Y E E K R P V D A H F L N K K V E I K G D E K   T T E A L
UniRef90_Q6F233          I I F Q G I I E L H S Q S K E V T I S S V A N Q I E K K G N L E S I G G I Q R L
UniRef90_UPI0003B528A2   R I Y G Q V L K L L D R N M V V T P V T L K P F F E Q D E A L K E V G G T G Y L
UniRef90_UPI0004727B68   E L Y R I A R E R I R A G R P C D P I T I R G E A E T N P K T A E F W K A S A A
UniRef90_D9UI62                M H S E D K P T D P I V L S H Q L R A Q D D L E R V G G V V Y V
UniRef90_UPI00046F08F8   L I Y K V L Q Y A K E N A E P F D P I V L V S R W G A R   L Q R I G G L T R L
UniRef90_UPI0001FFF7ED   A L F A S L R I L R D N A H P V P L S W I T D A V A E A S H H V R G L T E V Y A
UniRef90_UPI000407B0AF   H M Y S A I T T L L N Q A E P I D A F A V K N S V P D       P S K D F V
UniRef90_F3NPK4          N L F T A I R T L A P D D H A K D T A W L N Q V L E R A R P H A P G L N A S Y L
UniRef90_UPI0003FC85C1   A L Y Q A I I D T H A T G Q P I D V V T V S T E H P E L P S G E R   T L S H A
UniRef90_N2ASF7          F V Y K A I C S L N S R G E K A D L V T D I E M R D E K R W K E M N G I A I V
UniRef90_UPI0002FAF432   A L F E A I T A E I V A G R P S D V V T L G E R H P A I A D V A L E I     Y V
UniRef90_D4T5Z9          A L F E L I V S E V K A G R P S D A V T I       G E C D P A L A E L A L L
UniRef90_N1L7C5          S M Y K V I V A L L S K C E P I D P F T I Q D A V P D S T K G M       V V
UniRef90_W0SML5          N T F R E I S R Q A N N R G L I D S L L I A E A M G D Q H F G D
UniRef90_E4QE36          I I F E T I I S L Y K S K N P V G Y Y H S Y R R T K K E K F F R N C W W
UniRef90_B3PN54          N L Y T A I S N V H A L S K D F D I S V F I D Y L T K N K L E E K Y D P I E Y I
UniRef90_T1HIX4          R A Y E V I R K Q A R T R N M I D S L M V A E E C G D E       H F A D I
UniRef90_E4U3S0          N I F R A I Q S L N A E K P I D E E F I R I E L K I I F D E R I       M
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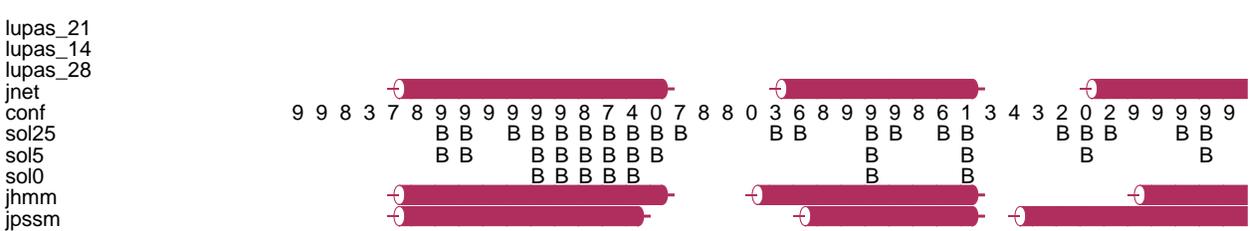
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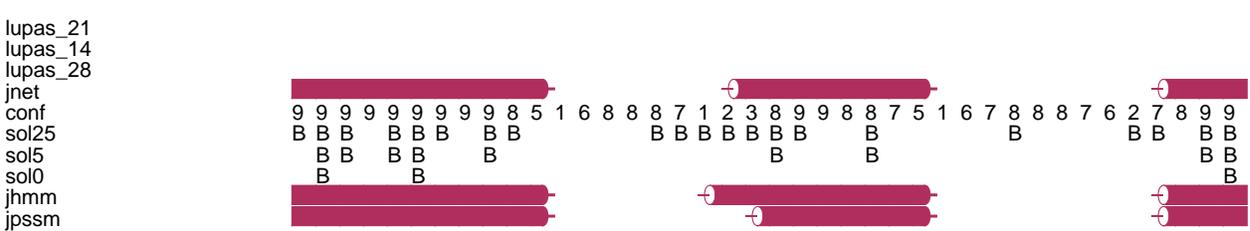
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