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              1              10            20             30            40
QUERY         I N V K E V R L S P T I E E H D F N T K L R N A R K F L E K G D K V K A T I R F
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                              50            60            70            80
QUERY                K G R A I T H K E I G Q R V L D R L S E A C A D I A V V E T A P K M D G R N M F
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UniRef90_M2YE21          M V L  G P L K
UniRef90_D3LKI0          M V V  A P
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UniRef90_L0B4D1          M M L  S P K K
UniRef90_B2UGJ7          M M L  A P K K
UniRef90_D1C2Z1          M M L  S P K
UniRef90_D6CSV5          M V I  S P K K
UniRef90_G7Z5P7          M V L  A P R
UniRef90_E6SIU6          M V L  A P R P Q
UniRef90_A5PAM7          M V L  A P K
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UniRef90_R6PPM8          M F M  A P K S
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UniRef90_F3YW52          M M L  V P
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UniRef90_C9RBQ6          M I L  A P K
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UniRef90_D3F0H9          M M L  G P S K
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UniRef90_W4LQR2          L V L  S P R
UniRef90_Q5X1H4          M V L  S P K K
UniRef90_B8DPN1          M M L  A P
UniRef90_R6MY94          M F L  A P K
UniRef90_C8N8I8          M V F  A P K K
UniRef90_A3JS36          M M I  G P
UniRef90_C8W0F6          M I L  A P K Q E
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UniRef90_R5EWK2         V Q V K E I K F R P G T D D G D Y Q V K L R N A K V T L R Y
UniRef90_R6NRZ2         I N I K E V Q L S P S I D T N D F N T K C N H A I K F L K K G D K V K V I V R F
UniRef90_R5ADS2         V D V K E L R L S P S I D T H D V Q V K K A N E F L K D G D K V K I S I R F
UniRef90_R5LPQ6           K E Y R L S P V I D V G D F E T K L R N A S K Y L E K G D R I K L T I R F
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UniRef90_R6QYM5        R G R E L A H V N S S K G I L D E F A K A L D D V A T V D K R P K F E G R S M I
UniRef90_A0A024KA63    R G R E M Q E L G M E L L L K V R D L M E A K V E S A P R S E G R Q M V
UniRef90_R5CKA7        R G R S I L F K E Q G E V L L L R F A N D L E E Y G K V E Q M P A L E G K K M F
UniRef90_R4YT80        R G R E M A H Q H L G M Q L M L R L E K D L E A Y G T V E Q R P K M E G R Q M I
UniRef90_K2ARE4        R G R E M T H P E L G I K L M E R I I V D L A T V G V V E Q R P K M E G R Q M V
UniRef90_A4SX34        R G R E M A H Q E I G V R M L E R L K L D L V E Y G Q V E Q F P K M E G R Q M V
UniRef90_V6Q6F1        R G R A I T H K E I G H E V L T R F A D E T K D I A D V E V R P K M E G R S M F
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UniRef90_L7VYL5        R G R E I P E L G R R L D R V A E A D V G K V E V M P K Q D G R N M F
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UniRef90_A0A024KA63        M V L A P K
UniRef90_R5CKA7            L Y L S P K K
UniRef90_R4YT80            M V L A P V K
UniRef90_K2ARE4            M V I A P K K
UniRef90_A4SX34            M V L A P
UniRef90_V6Q6F1            L M L A P K T E
UniRef90_W6K515            M V L A P R
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UniRef90_N8V9A7            M L L G P K K
UniRef90_UPI0003B433A5     M M I G P K
UniRef90_UPI0004776F5D     M V I A P K
UniRef90_U2WTD9            M V L A P R
UniRef90_R5V3S6            A V L A P K K
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UniRef90_U1WP62            M L V S P I K
UniRef90_K6Y9R4            M V L A P L K
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UniRef90_UPI00037334BF     M V L A P R
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UniRef90_F2I654            L Q L A P K E D
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UniRef90_U4KRP2            A I L A P S K Q
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UniRef90_W6M3V4            M T I A P
UniRef90_T0ILF3            M I V A P K P N
UniRef90_R6E575            L F L S Q K
UniRef90_Q2JNY5            M I L S P K K
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UniRef90_Q28RH7            M M I N P
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UniRef90_Q11UK2            L M L T P K
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UniRef90_E3DR62          M F L T P E S D
UniRef90_E8MZU7          M V L S P A K
UniRef90_UPI0003B691BC   M V M A P
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UniRef90_K2CYC6          V E L K E I W L S P R I A E H D L N V R L K R A E E F L E D G D K I M F R V K F
UniRef90_R5QS33          V T L K E T Q L S V T I D T H D K N V K L K R T L K W L E E G N K V K V A I R F
UniRef90_E8QZE3            L K E I R V R P K T G E H D I E F K V K Q A R G F L A D K D K V Q L V V Q F
UniRef90_UPI00047167AA   V K L K E I K L S P T I D K H D F N T K L K S A Q K F I D G G D K V K V S L R F
UniRef90_R5RTG0          I V I K E I R F G P N T D E H D F Q F K L K H A Q E F L S E G S K V K A S V F F
UniRef90_C2BE87           Q L K E T R F S L N I E D N D L Q T K A N Q T K K F L N N G D K V K V S I R F
UniRef90_H5SF52           K L K E I R M T T Q I E K H D F E T K L R H I R K F L T D E D K V R V T V I F
UniRef90_X1KCQ0            L R E V R L R P K I G D H D F E A K A R I A K K L L A N G D K V K V T I M F
UniRef90_M9WV17             I K E I K L G P N I G D H D Y G T K L R Q A R D L L A H G H K I K V T M R F
UniRef90_D2MPU7           E V K P L R L S P V I D Q H D F E T K L K K S R E W L E D G L K V R I D M R F
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UniRef90_R6QEL7          V E V K E I K I R Y K I D V H D Y N V R I K N I K K F I A Q G D K V K I V I M L
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UniRef90_I0R312          R G R E Q S R P E M G V K L L R N L A D Q V T E F G T V E S N P S I D G R S M V
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UniRef90_R6QEL7          R G R E M Q H T E L A F D L A N R F I A D L E E P I N I E K K P S M E G R N L I
UniRef90_I0YR56          K G R E M Q F Q E I I G K D L F K K F V E D V G E N A V V I Q D A R M M G N Q M T
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UniRef90_E1NK92          R G R A I T H N E L G K E V L E K M A E Q A K D L S S V T A S P T M E G R S M F
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UniRef90_S5R0P0          M I  L  S P R K
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UniRef90_D8IBJ2          A V  L  N P M K
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UniRef90_Q8D3B9          L I  L  V P K K
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UniRef90_H6LA76          V T  L  S P K K
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UniRef90_H1XPD3          M V  M T L K
UniRef90_R6BDA6          M I  L  A P K
UniRef90_K2E784          M L  V I  P G K Q
UniRef90_UPI000466223F   L L  V T P K K D
UniRef90_M4X3M6          M M  L T P K K
UniRef90_X1B026          L V  L  M P K
UniRef90_C7H0T2          M M  L M P R S E
UniRef90_A0A037Z5D5      M V  L  A P K
UniRef90_A6DHL4          M Q  L  S P
UniRef90_B1C875          M T  L  S P I  K
UniRef90_R5XT43          M F  V  S L K S
UniRef90_I4BW90          I  M  L  V P
UniRef90_C8PPJ5          M T  L  A P K S
UniRef90_D0U627          M V  L  S P
UniRef90_UPI0002556542   M V  L  S P K K
UniRef90_E8V271          A I  I  A P T K
UniRef90_B0VGI7          M V  V S P K K D
UniRef90_S3EHD7          M L  L  S P K K
UniRef90_UPI00035CC6EE   M F  I  T P T S D
UniRef90_A6C9Z5          M V  L  A P R S
UniRef90_I4AFX4          I  M  F T
UniRef90_A6Q167          M L  V I  P K K E
UniRef90_R6EQC6          M F  L  G P K S D
UniRef90_K2CYC6          V I  I
UniRef90_R5QS33          A I  L  A P K K
UniRef90_E8QZE3          A I  V  A P K
UniRef90_UPI00047167AA   A I  V  A P A K E
UniRef90_R5RTG0          M M  I  A P I  K
UniRef90_C2BE87          M F  L  E P N D E
UniRef90_H5SF52          M L  L  V P G K
UniRef90_X1KCQ0          I  I  L  A P
UniRef90_M9WV17          L A  L  V A K
UniRef90_D2MPU7          V V  Y S P K K
UniRef90_F8KWR9          V V  L  A P K K E
UniRef90_H0UKC0          A M  F  A P
UniRef90_D9SM18          M V  L  A P K K
UniRef90_UPI00047E1756   G V  V  A P K K E
UniRef90_UPI00037E15CC   M V  M S T K K
UniRef90_UPI0004763233   M I  M A P R
UniRef90_L7VJP9          L I  L  V P K K
UniRef90_R6QEL7          I  I  L  A P
UniRef90_I0YR56          L L  L  S P N K N
UniRef90_R6RG35          M F  L  S P K
UniRef90_UPI000377E47D   A L  L  A P K S
UniRef90_C1MH89          M V  L  G P V K
UniRef90_B2UMJ5          M V  L  S P
UniRef90_E1NK92          L I  L  S P L S D
UniRef90_V2QCP4          I  I  I  A P K
UniRef90_E6X3D8          M Y  V T P K K E
UniRef90_G9WJQ6          L L  L  S P K P E
UniRef90_S5DM30          M V  L  A P
UniRef90_Q7N3P7          M V  L  A P K K
UniRef90_D5V509          M M  V L P K K D
UniRef90_UPI000362B20F   M L  L  S P
UniRef90_R6RW66          A V  V  A P K
UniRef90_B5Y856          F M  I  A P K K
UniRef90_Q83HH0          I  M  V S P I  K
UniRef90_D8LS76          M I  V  F P K
UniRef90_UPI00028831D2   M M  L  A P
UniRef90_Q3Z8G3          L T  L  L P K
UniRef90_B5YLD1          M I  I  A P G K D
UniRef90_K9WJ33          M L  L  S P K T
UniRef90_UPI000472A1F5   M Y  V V P K K N
UniRef90_R7K590          M V  L  A P
UniRef90_UPI000262A041   M V  M N P H K
UniRef90_S6G964          M Y  I  V P K K N
UniRef90_Q85G77          A I  F  V P K K
UniRef90_R4UIR4          M Y  V V P K K
UniRef90_F4LJI1          M T  L  S P K
UniRef90_R5SST0          M F  L  S P K Q
UniRef90_R7LVL0          L Y  L  S
UniRef90_R7DS26          A V  L  A S K
UniRef90_K2DYB3          M I  L  A P
UniRef90_S6A204          M T  L  S P K
UniRef90_M1NJV1          M F  V  G P K S
UniRef90_UPI000376B804   V T  L  S P
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Position markers: 1 ... 10 ... 20 ... 30 ... 40

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UniRef90_UPI00036A491F    V K M K E V K F R V R T E E H D Y N I K C A R A E K F L D E G N K V R V Q L Q F
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UniRef90_R5ZCM7           I E V K E V R F T P L T D L H D L K A N Q A I K F L E K G N R V K V S L F V
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UniRef90_S3YKW0           I E I K E I K L S A K I A Q N D I N Y K I K H A M N F L E G G K H V R F R V F L
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UniRef90_UPI0003790D77    V E L K E I R L S A T I E D N D I T I K A N K F L A K E N K V K V S L K F
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UniRef90_U6E165             L K E I R L S P T I N T H D L N T K L K Q V H K F L K Q G N K V K I S M R F
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UniRef90_E1R4F9                   I R M Q P K I E T H D L E F K T K H I K T F L E E G N K V K V T I R F
UniRef90_F7XUW6          V E T K E L K L R P T I A E G D Y A V K L R S L K K F I D N G N K V R V L I V F
UniRef90_D7U1D4          M D L K E L K M G Y N I D S H D Y S V R L K A A R K F L Q D G D K V K I I V N L
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UniRef90_U7D5W5          V Q N K E I K L H V K T E E H D Y N F K L K H A R E F I L K G N R V K M T L V F
UniRef90_R7L772          V K V K E I K L R P A I E L N D F M T K I R N A E K F L F Q G N K L K I T L M M
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UniRef90_D6GPX8             L R L R P A I E E N D L K T K A K M G T K F L A N G D K L K V S V R F
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UniRef90_N9VEU3          I Q N R Q I R L T V M I G E H D L K T K A R K A R E F L L D G D R L K V S L K F
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UniRef90_UPI00016B25B9     D L K Q M R F G L K I G A G D L K V K L K K I R K F L E N G H K V R I Q V V Y
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UniRef90_B1WV86            L K E V K L R Y C T D T G D L N T K L R Q A R K F L N N G S K V K F S M R F
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UniRef90_F9KEA3                   M K N G R K F L T K G D K C K V S I R F
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UniRef90_UPI0003F180EC     T K E L T F S S G I G Q H D L E T K S K Q I R K F L E K K Y Q V Q V T V R K
UniRef90_E3H8Q5          V V V K E V K F K A R I D K H D F E T K A S K I E K F L S K D N K V K V T L M L
UniRef90_E3JFW4                    M R N L I R F L E D G D K A K I T L R F
UniRef90_UPI0003B5001E    Q I K E I K F R P K I S I H D Y S F K V R H V K K F L E E G N K V K I T V M L
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UniRef90_I0X9M1         R G R E L A H T E L G F E V M N E V L K R L T S A Y N I E K P A A M D G R N M S
UniRef90_S3YKW0         K G R E M A N P E V G V E L L N D V Y N S I S D V C D K D S E P K F E G R Y V N
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UniRef90_K2CLD5         T G R Q M A H P E F G H Q I M E K A I G I L S D I S K V E K E R R F E G R N L I
UniRef90_K2D5Z9         K G R E L S H F D L A V E K M N K V V N A L T E V A K V D Q P P K K Q G Y N L F
UniRef90_U7D5W5         R G R E I M Y K D M A R E M M E R V D R D L S D I A T T E R K C V L E G R N M Q
UniRef90_R7L772         R G R E M E Y K E K A F D A V N R A I S E L S H I G H A D A E P R L M G R N I S
UniRef90_D8U9E6         E G R E L Q F K E Q G K E V L L N F I S E L A S V A K V E G P L N F K T G T Y T
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UniRef90_UPI0003B646B5  R G R E T L H T E L G S N L L S R L R D D L L E V A E V E Q P P R M E T R M M S
UniRef90_K2CBE3         R G R Q K A H P E I G R E V V Q N F I Q Q V A D V A T V E S P V S Q Q G K I T
UniRef90_B9KEB2         K G R E M G S P E A G V A L L E K I W Q M V E D I A D R D K E P L L E G R Y V N
UniRef90_Q6YPI3         R G R M I N N F Q L G E T V F K Q V M Q D L K N L S Q I E T P L K L Q G N Q L T
UniRef90_W6ABK2         K G R E I V H Q E F G Q K T L E A F L K I I E D V C K V E K E P K L T S R F L D
UniRef90_B1V8Z8         R G R M I N N S Q L G E T I L K K I I K D L S N L A N T E S P L K L Q G N Q F I
UniRef90_K2BM62         K G R E I I H S E L G L A K I I T F R D A L K E V A K I D L E P K M Q G H M M N
UniRef90_Q2GI91         I G R E I L H P E V G M E I I E R L I R D T A D I A K P E N L P K K E G N I I N
UniRef90_W0J509         R G R E M A R Q E I G F E V M K R A I E E L T G M G H P D S Q P R L M G K Q I N
UniRef90_F0RWT4         R G R E L A H T E L G K V V L D K I L A Q L T E N G V L D R D A L M E G K M M S
UniRef90_F2LY08         R G R E M D K R E L V E E L I E R L K L D L V E V G N I E G K P D Y Q G R R I T
UniRef90_F4GIL7         R G R E L A H T E L G K V V L D K I L D V L G Q S Y I L E R S A K M E G R M M S
UniRef90_F0RNG5         R G R E R T H P E L G E R I L V R V A E T L Q D I G A P E S K P
UniRef90_R5FVE3         K G R Q Q A Y P E I A M G I H D F F E I V R P Y A V K E K E P K L E G R T I A
UniRef90_T0R9Q3         R G R E M A Y R E A G K E K F D V I I A G V C E E A Q V E S P S K V M G N R I I
UniRef90_UPI0004207172  R G R E M A H K E M G F E M I D K I I T L L E D D A V L E Q K P Q M A G R N L S
UniRef90_S5MAW4         K G R E I V Y Q E F G K V T L D N F F A K I E D I A K I E K E A K L N T R F L D
UniRef90_B3DYI1         R G R E I T H Q D L A L N L M N R L L K E L A H V G Q T D Q E P K L A G R N I S
UniRef90_D6GPX8         R G R E L G H K D I G F I V L D K F V E L V Q E Q G T P V G K P K M E G N S L V
UniRef90_C9RNF8         R G R E M A H M D Y G K R L M E R A K E D L A P F D D L E M D S R V E G N T M L
UniRef90_E7G065         R G R E S H D P K A G L A V L E K V A E M M K D I A N A E K E P K A E G R F V M
UniRef90_D9PKZ2         R G R E I V H P E T G Q A V L D L V S K E V A
UniRef90_T1CVY3         K Q R E I T N P Q L G Q S V L N R I T E M M E D I A Q P E K E P K T E G R F V S
UniRef90_R6WPU6         K G R Q M Q H S D L A F E V V S E F L Q M L E E S Y K V D K P A K L E G R I I S
UniRef90_Q7VJ08         K Q R E L N I P D A G M D T L G K V A V M L E D I A I A E K E P K L E G K H L N
UniRef90_W8GN66         K G R Q I V S K E I G F E K M N Q F I E K L N D I A Q I D K K P Q L N G R F Y D
UniRef90_B9L5U8         R G R E L A T P E K G F E V I N K V W D M I S D V A E K Q N E P K L E G N Y I N
UniRef90_T0UE97         K G R A I T H K E I G Q K V L D R L A E E T A D L A S V E Q K P K M D G R S M F
UniRef90_W0JE43         K G R E I E K K N L F F V L S D R I K N D L E N Y A V P E G K E T F E G R R L T
UniRef90_UPI0004639B45  R G R E N I H K E L A V D L M R R V R D D L G H V G T A D Q E I K A I G R S I V
UniRef90_N9VEU3         R G R E A A R P E L G H D T L N R F Y A L L E D I A E I T K E A T L N G K F L D
UniRef90_R7K9A7         K G R Q Q A H P E I A M D V I K E F I K L V G E D V A I E K A P I Q E G R N I F
UniRef90_UPI00016B25B9  K G R E M A H K E I G Y E L I D K V M D Q L S D D A I L E Q K P Q M A G R N L S
UniRef90_B4S3D1         L G R S I I Y K D K G F E L V E R L K E R L S N V S N P E G E A K F E G K R L F
UniRef90_D1AXE4         S G R E K L H S E T A I K V L D E F A N V F E D K A I V E K K Y G R E Q V Q K F
UniRef90_Q98QV2         K G R E I A R K E L G I D T L N R F Y E Q V E D I A K I D K E P K L Q D R F L D
UniRef90_C6JSS7         R G R E M K Y T S D G K D V L E K F T S V V S E V G V A E R Q P K L E
UniRef90_D9PMA0         R G R E M A H Q E F G L D L L K R V E A D L A E H G V V E Q F P K L E G R Q M I
UniRef90_U2RA91         S G R E K L H A E S A V K I L D A F A D S F E E T A I V E K K Y G K E Q V Q K F
UniRef90_I1IDE7         K G R E N L Y K K Q A I E L I R R F Q T D V G E L A T   E G G K N F A E R N I Y
UniRef90_B1WV86         R G R E R A F M K L G R E K L D H I V D R L S D V A S Q D G N S N Y N G H Q L S
UniRef90_C3XJT0         R G R E V S E P Q G G F E V L N K V A A M L E D V A N I E R D F K V E G R Y V N
UniRef90_UPI0003B37751  K G R E A L H T E V M N K V M D K V M Q Y L S D S A Q F E K P P Y K E G R N L V
UniRef90_UPI00042B69C5  K G R E N E F R N M A M E L I R R F Q N D V G E V A
UniRef90_S8Z2P6         K G R M I T H K E I G A T V L A E F A E A T Q D I A I
UniRef90_UPI00035C9EDA  R G R E M A H Q E L G M D V L R K V R S E I E E I A K V E S E P R L E G R Q M V
UniRef90_F9KEA3         R G R A I T H K E I G Q R V L E K Y A D E C K D I A T V E G K P K M D G R Q M F
UniRef90_K2A8F9         Q G R E I T K K E F G E K I M A Q V I S L L S E V S T L V E A P K F L G K L L I
UniRef90_Q6KH16         R G R E K T R Q E L G H E T L E K F I A L L D D I A Q V T K E A T F G G K F L D
UniRef90_E0TJE7         K G R S I I H K K K G E I L L L E C A N Y L E N F G K I E Q M P I M E G K K M F
UniRef90_Q7M9L9         K G R E M S E P Q S G V E V L K R V W E L V E D I A I M D K E P K P E G R Y V N
UniRef90_K9PTI7         R G R E N Q Y R E Q A G E L L E R I V N A L G E V G K V Q S   L D K R S L V
UniRef90_UPI00047524A3  R G R E H Q H R D R A N E L L Q R I I N D L G Q I A K V Q S   F D Q R A L M
UniRef90_D3UHR9         K G R E T S D P Q G G F E V L R R I A G M V E D I A T P E K E P R V E G R Y V I
UniRef90_UPI0003B3321B  K G R E I Q R P E F G H E T L M K F Y K E V E D I S S I A K E P T L N G K F L D
UniRef90_UPI0003F180EC  G R N A A E P D K M E V I L Q R I L Q T L P I A T F S S Q P Q K G G R A M M
UniRef90_E3H8Q5         F G R E R M H A D L G I K I L D Q I A E R F S E T A D V D K   K Y F D K Q K H
UniRef90_E3JFW4         R G R E M A H Q K I G V D V L N R V K N D L I E L A T V E Y F P K I E G R Q M I
UniRef90_UPI0003B5001E  R G R E K A K P E L A L H G I L E R V F D D I K E L G E Q D S K V R S Q S W A V S
UniRef90_B4WRG4         R G R E H Q H R D R A T D L L N R V I E D L S K V S K V Q T   F D R R S L M
UniRef90_UPI00046E70AE  R G R E I G R K D L G F A T L D K F F K T L E I S E I T K E P K L N D R F L D
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UniRef90_W5SSY9	L I I	A P K S
UniRef90_R5LKI1	I V L	S P K K
UniRef90_UPI0003632271	V I V	Q P K K
UniRef90_UPI00036A491F	M V L	S P
UniRef90_C6XHQ0	M I L	S S K
UniRef90_R5ZCM7	C Y V	N P
UniRef90_G9PYG4	I M I	A P
UniRef90_I0X9M1	M T I	S A K
UniRef90_S3YKW0	M L V	V P K K
UniRef90_R5VWU8	M F L	A P
UniRef90_K2AUQ2	M L L	S L K K
UniRef90_I0GKW0	F S L	E P N K E
UniRef90_R6HI53	M I L	V P K K
UniRef90_R5JL14	V I I	D P K K
UniRef90_UPI0003790D77	M V L	S P K K
UniRef90_T0XP77	M V L	
UniRef90_Q30UI3	M Y V L	P Q K
UniRef90_U6E165	A V L	T P S K
UniRef90_K0NI21	M L L	G P K
UniRef90_F2I445	L I I	
UniRef90_E1R4F9	M I L	S P K T
UniRef90_F7XUW6	M T F	S A L K
UniRef90_D7U1D4	I V L V	P N K
UniRef90_K2CLD5	S M L	S P E K
UniRef90_K2D5Z9	A I L	S P L K
UniRef90_U7D5W5	S Q Y I	P D K
UniRef90_R7L772	V S M	S P
UniRef90_D8U9E6	I M L	S P N K
UniRef90_UPI0004742F91	M F L	S P R K
UniRef90_X0Z940	M L L	A P
UniRef90_R7FQC5	C F I	S P
UniRef90_UPI0003B646B5	M I L	A P K S
UniRef90_K2CBE3	A I V	M P K K
UniRef90_B9KEB2	M L V	T P K K
UniRef90_Q6YPI3	A V L	S P L K
UniRef90_W6ABK2	V Y V	V P K K
UniRef90_B1V8Z8	T V L	S P L K
UniRef90_K2BM62	M M L	S P L K
UniRef90_Q2GI91	M V L	T A K
UniRef90_W0J509	V M L	T P N
UniRef90_F0RWT4	M I V	S P A K
UniRef90_F2LY08	V S F V	P N K
UniRef90_F4GIL7	I T V A	P G K N
UniRef90_F0RNG5		
UniRef90_R5FVE3	M N I	A P
UniRef90_T0R9Q3	S I I	A P N K
UniRef90_UPI0004207172	I V V	R S K
UniRef90_S5MAW4	M Y V V	P K K
UniRef90_B3DYI1	L T F T	P
UniRef90_D6GPX8	L M V	E P
UniRef90_C9RNF8	S I Y	G P K
UniRef90_E7G065	W L F V	P Q K
UniRef90_D9PKZ2		
UniRef90_T1CVY3	L L F V	P K K Q
UniRef90_R6WPU6	T T I	S P A N N
UniRef90_Q7VJ08	V L Y V	P K K
UniRef90_W8GN66	A Y L	S P K K N
UniRef90_B9L5U8	L L V	T P I K
UniRef90_T0UE97	L V L	S P K N D
UniRef90_W0JE43	V S F I	P K K
UniRef90_UPI0004639B45	L M L L	P
UniRef90_N9VEU3	F Y L	Q P N K
UniRef90_R7K9A7	V I F	A P N
UniRef90_UPI00016B25B9	V V I	R S K
UniRef90_B4S3D1	I Y F	E P D K
UniRef90_D1AXE4	V M L	S P K K
UniRef90_Q98QV2	M Y L H	P D K Q
UniRef90_C6JSS7		
UniRef90_D9PMA0	M V L	A P K K
UniRef90_U2RA91	V M L	S P K K
UniRef90_I1IDE7	V I L V	P N K
UniRef90_B1WV86	I I L	E P
UniRef90_C3XJT0	M L V	T P K K
UniRef90_UPI0003B37751	A V I	T P K
UniRef90_UPI00042B69C5		
UniRef90_S8Z2P6		
UniRef90_UPI00035C9EDA	M V L	A P R
UniRef90_F9KEA3	I M L	A P
UniRef90_K2A8F9	A Q V	K P K K
UniRef90_Q6KH16	V F L	
UniRef90_E0TJE7	I I L	T P K K
UniRef90_Q7M9L9	M T V I	P K
UniRef90_K9PTI7	A Q V V	P
UniRef90_UPI00047524A3	L Q V V	P
UniRef90_D3UHR9	W L F V	P K K Q
UniRef90_UPI0003B3321B	M F L	
UniRef90_UPI0003F180EC	C V L	R P
UniRef90_E3H8Q5	L M L	T P K K
UniRef90_E3JFW4	M I L	A P K K
UniRef90_UPI0003B5001E	T L A	A P I K
UniRef90_B4WRG4	V Q V V	P N
UniRef90_UPI00046E70AE	M N L	Q P N K Q

Multiple sequence alignment (positions 1–40):

```
                              1         10         20         30         40
UniRef90_E5BGB7               V K E V K V T A R I D A H D L D T K V N Q I Q K F L E K D N K V K V T L V L
UniRef90_T0C364                           P N I E A H D L E T K L K R A Y K F L E G G D K V K F V M Q F
UniRef90_U9VQR0             S V K E V K F R P N I G E S D Y L L R V K R A T T W L D K G D S V K F L V R L
UniRef90_M7P0J7          M N I K T I C V S P R I Q D N D L D T K M K K A K D F L K S G Q K V K I N M S L
UniRef90_N9UAQ6                R E I R L T P L I G Q H D L E T K A K K A R E F I L D G N R V K V S V K F
UniRef90_B0CBW1            S L K E V K L R P N V G E A D Y G V R I S R A L Q W L E K G D S V K F Q V R L
UniRef90_R7BTR7          M E I K E I R L S A T I D I G D T T R L A Q Q T A K F L A E G N K V K A S I R L
UniRef90_K2CI48            V E I K E I R F S P F I A Q G D M N S R L E R I K D I L E G G D R V K I V V K F
UniRef90_UPI0004751CB9     S L K E V K L R P N V G E S D Y Q L R I R R S V E W L S K G D S V K F L V R L
UniRef90_D6ZUY0                                     M T R F L N G G D K V K V T I M L
UniRef90_J6CZ31                    I K F R P G T D E G D Y Q V K L R S L I R F L E E G G D K A K I T V R F
UniRef90_UPI000360B23C   K V K E I R V T A A I E E H D Y D T K K R Q A E R I L S T G N S V Q L T V L V
UniRef90_UPI00047677AE      S V K D V K L R P N V G E A D Y D I R I V R A T E W L G K G N M V R F Q V R L
UniRef90_K2E2A4             E V K E I R F S P F I A E N D F N V R I G R I K E F F A D K N K V R V V V V F
UniRef90_K2G016           V E T K G V R L G F R T D D H D L G I K D Q T E K F L K K G H K V K I E I L L
UniRef90_W4CR34            K V K E L R F T A H I E E H D Y D T K L R Q A D H L R S G K P V Q L V V K A
UniRef90_UPI0004779F4B      K T K E I R L T A Q I E E H D Y E T K Q R Q I E K L L Q S G D K S A Q L V V R L
UniRef90_K1Z6J8          I D T K G I R L S V R I G E H D F N L R L D Q G K K F L S R G D K L R V E L I V
UniRef90_M1E6C7              V K E V R L R P A I G G N D L L T K A K A A Q D F I D E G N K V K L S V I F
UniRef90_L8M1D0             V K E L K I G Y S T D V G D L K T K L R H A R G F L S H G N K V K F S M R F
UniRef90_R9YKW8         I Q S K E V K L T P N I R G A D F D T K L R K M V A F L T K G K L V K I T I R F
UniRef90_X8AUQ4            V K E Q K L R P K I D D H D Y E T K K G H V I R F L E A G S K V K V T I M F
UniRef90_X0YU23           Q L K E I K L R P K T G E H D L M T K I N H I K K F I E R K D K V K V T V I F
UniRef90_K8GL36             L K E V R L R P N V G E S D Y S L R I S R A V E W L G K G D S V K F Q V R L
UniRef90_K2FCI9          I E I K G V R L G L R T D T H D L D F K K A Q S E K F L R Q G D K V K I D I V L
UniRef90_M0SVN9                      Y N I D S H D Y S V R L K A A Q K F L K D G D K V K I I V N L
UniRef90_UPI000333C8D2       T K E L T F S S N I G Q H D L D T K S K Q I Q Q W I E K Q Y Q V V Q I T V K K
UniRef90_V6M3I2           K V K E I R L S A F I E D H D Y D T K K R Q A E R I L T S G D I V Q L V V R L
UniRef90_X1S2P9                             K A R S V K K L L N G G D K V K V T V M F
UniRef90_D4G7Q7                  E I K F R P N T N E G D Y Q T K L K K L I K F L K H G D K T K I T V R F
UniRef90_UPI000248CC23     K L K E I R L T P Q I E E H D Y E T K K Q Q A E R I L K S G D A V Q F V V R I
UniRef90_A0A015NVB2       K V K E L R L T P R I E D H D Y D T K R Q A Q E R V L S S G D E V L F V V R I
UniRef90_UPI0004786C63    K V K E I R L T A N I E D H D Y D T K C R Q A D K L L V S G N A V Q L V V K L
UniRef90_UPI00018B9B79      T K E V I F S S N I G Q H D L N T K S K Q I Q Q W I E K K H H V Q I T I K K
UniRef90_T0Z9I9                                     M S E G D K A K V T L R F
UniRef90_K1Z9S5          V E I K G V R I S I R M S D H D F N F K R D Q A N K F F D E G H K V R V E L I V
UniRef90_Q010Q0             I K E L R L T A K I D A H D L R T K M S G A K K F L E A G N R V T F R I M F
UniRef90_L1JHT2            L K E V R L G L N I G Q H D L D F K M K Q A K E F L A K N N K V K L Y I Q L
UniRef90_UPI00042B506F   E C K E I R F T G K I E A K D I K M K A D S V I R L M E R G Y R V K C M A M G
UniRef90_Q4A5F8         V Q N K E I R L T P F I G K A D L E T K S K K A R E Y L L K G D R I K V S L K L
UniRef90_E0IA10             K E L R L S A S I E E D Y D T K R R Q A E K L L A S G N P V L L V V R L
UniRef90_K2G0U8            E L K T I R L T Y R I W D H D L D I R R N Q S I K F A K D W H P L K V V L M L
UniRef90_UPI0003668872    K I K E I R L T A H I E D H D Y D T K K N Q A L R I L Q S G N A V M L V V K I
UniRef90_UPI0004766D75    K L K E I R L T A Q I E G H D Y D T K K R Q A E R L L S S G H D V Q L T V L V
UniRef90_UPI0003F08E17      I K E L T F S S N I G Q H D L A T K S K Q I Q Q W V E K K Y H V Q I T V K K
UniRef90_U6MJW1            K E I K L S A R I A A G D L Q Q K A R Q A R V F L E G K H Q V K F T L Q L
UniRef90_G0HIM9         V Q V K D M R F G I C V G A A D Y R I K V C K C I G I L R S G D S V R A T V H F
UniRef90_U5D0L3            K N I R F S P K T E L K D L Q M K A E M V K R L L E R G Y R V K C T A M
UniRef90_UPI0004446D09      T K E L T F S S S I G Q H D L C T K S K Q I Q Q W L E K K Y K V Q I T V K E
UniRef90_W7YRL1          K V K E V R L T P H I E D H D Y Y T K Q Q Q A L R M L N S G N A V Q L V V K I
UniRef90_UPI0003288978   Q V K E L T F S S N I G P H D L D T K S K Q I Q Q W I E K K Y Q V Q I T I K K
UniRef90_K1YYU6            E V K T I K L T Y K I G D H D L E I R K I Q A V K F A K E G H P L K I I L S L
UniRef90_J3Z232            L K E I R M K I N I D I N D F K L K I K K T N I F L L E G Y N I K V T I V F
UniRef90_UPI0003C2AE44   E L K E I R L S S V I A K H D L E T K I K Q I R Q W I D K K H H V K I S V L
UniRef90_G1NX84             T K E L I F S S N I G Q H D L D T K S K Q I Q Q W I E K K Y K V Q V T I K K
UniRef90_H2MTU7          Q V K E L T F S L G I A P H D L S T K L K Q A E S W L E K K H H V R M T V R G
UniRef90_A8WH50         V Q I K E L S F S A G I A K H D L D I K T K Q L L H W I E K K H H V R I S V Q
UniRef90_C1ECL8           Q V K E L R L S A R I S T N D L R T K A D Q A N R F L E Q G H K V T A R I E F
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UniRef90_I0YPN3          I  F  L  S  P  K
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UniRef90_W5UJV8          C  I  L  R  P
UniRef90_Q9H2K0          C  V  L
UniRef90_M2XUK6
UniRef90_F2SRH6          M  V  L  D  K  K  K
UniRef90_J3YQ33          S  I  F  I  P
UniRef90_E3BMN6          M  V  L  A  P  K  K
UniRef90_G3TF97          C  V  L
UniRef90_M0T4L7          V  I  V
UniRef90_G3JU93
UniRef90_R8BE71          M
UniRef90_B7GER5          L  Y  L  Q  P
UniRef90_K7FYB2          C  V  L
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Sequence alignment (positions 1–40)

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UniRef90_A0A022RCB6         K E V R F T A K I K P N D L Q V K A D M A K R L M A S G Y R V K C V A
UniRef90_I1LF54           D V K E V R F S E K T E A K D L K N K A D M I K K L M E K G Y R V K C K V
UniRef90_G1NQD1             K E L S F S S A I A K N D L E T K T K Q I H W I E K K Y H V K V T I R Q
UniRef90_E1ZM83            R E V R I G C Q I A E H D L A V K M A Q A R R F L E D G S P L R L V V T F
UniRef90_M4BBE3            K E V V I G A K I A P N D L T M K V E Q L K R F L N K G H K V K V T I K F
UniRef90_X0USZ3                                                            M V N M L F
UniRef90_S2JA04            L K E I V F G W N V S E H D M E H K L N K A A Q F L D K G N K V K I D I V Y
UniRef90_M4XUI6                                                            M R F
UniRef90_H3BYR9         V Q V K E L T F S H G I A A H D L T T K V K Q M E S W L E K N N H I R V T L R A
UniRef90_Q2N2T1                                                         M Q K G D K V K V T L R F
UniRef90_K2B7R0          E L K E I R F S P F I G D A D F E V R K N R V R E F L D L G H K V K I A V V F
UniRef90_B2B5M4         I V T K E V E M N W A M A P H D L A T K I R R L K G F L E K G Y R V E V T M M H
UniRef90_A0A017SGQ7      S L K Q V E L N W A I D A H D L S H R L K Q L R S F L L K G R K V E I F M R K
UniRef90_S0E8Q2          K L K E V E M S W A I S E H D L G V K T Q Q L V G F L S K G M K V E L I L G F
UniRef90_B4VZ77           L K E V K L R P N V G D S D Y G L R I K R A L N W L D K G N L V K F Q V R L
UniRef90_M5W602          E S K E V K F S P K T E A K D L R M K A D M V K R F M E K G Y R V K C T A
UniRef90_C4JQM6           K Q V E L N W A I D P H D L S K R L D Q V E S F L A K G K K T E L V L T P
UniRef90_G5AAP5           K E V V V G A K I A P N D L K N K V D Q L K R F L N K G H K V K V T I K F
UniRef90_K4F6Y6         I Q V K E V Q I A Y N T Q D N D L G T K A K S A Q K F I S E G K H V R I V M K M
UniRef90_F7W6X0           K E L E I N W A I A A H D L G F R T R Q L Q K F L Q K G H R V E V M L L Q
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UniRef90_W9XUU3           K Q I E L N W A I S S N D L Q L K L R Q M E D F L R K G K K V E L L L A S
UniRef90_A0A024GSG5        K E I T L T P K I A T H D L D V K V R R I K S F L A K G S T V R V T A R W
UniRef90_E3QG41          I K E L E L N W A I A S H D L G H K M R Q L K G F L E K G Y R V D I F K K
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UniRef90_B0XQY8         V K Q I E L N W A I D S H D L A H R L K Q L T N F L E K G R R V E I I L R K
UniRef90_A0A010RCG5      V K E L E L N W A I A P H D M G H K M K Q M K T F L E K G Y K V E V I F A K
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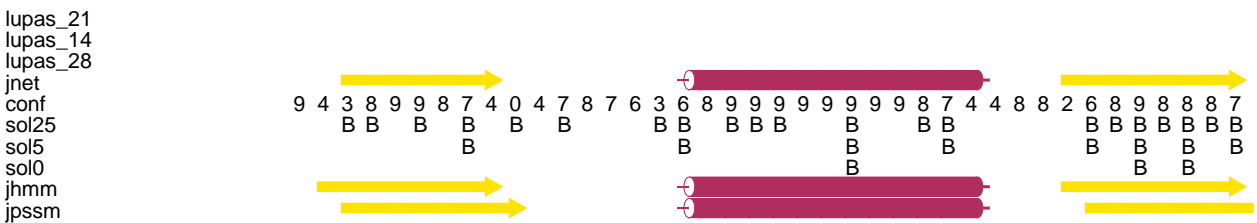
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UniRef90_Q6NLP2        D K D K H K E L E P E K L L E L R F T C F I G D   A L V E S W P E A D R K G A V
UniRef90_B0XQY8        K G K R A P T V E E I K N V M D S V L Q A T K E A N A M Q I K P   M E G
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UniRef90_J3K208        K A R K R K A T E E A Q K T L A A V K E K I Q E I G A I Q S K   K M Q G R
UniRef90_Q9PQR4        R G R M C T K D E F I V Q A Y E K F I D L I K D Y G T V V Q A N K
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sol0   B   B   B   B
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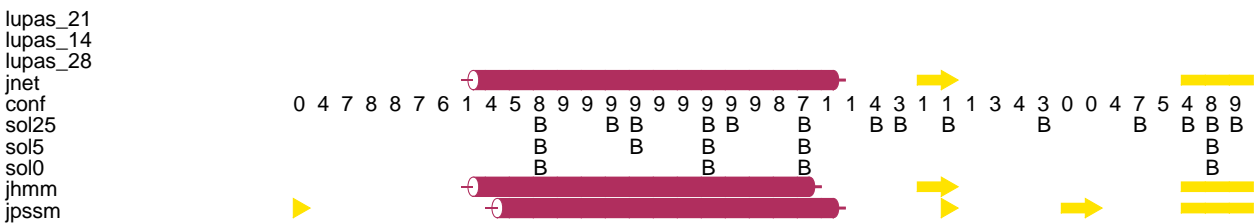
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