Multiple sequence alignment (positions 1–40)

```
                          1         10         20         30        40
QUERY                  I P V K K V E Y V F I E L D K M K H E Q L V Q R E L E D F I E S V T G S G I F
UniRef90_U7K214          Y R E V P V G Q I S P N P K Q P R T V F D A D D L A E L V H S I K E F G L L
UniRef90_D6YAM2          Y Q E I P I S A I S P N P R Q P R E V F D E E R L E E L A A S I K E V G L L
UniRef90_W4HJ70            R F V P I E H I V P N P D Q P R R T F T Q D Q L E E L A A S I R A K G I I
UniRef90_A3K2X5        P D R L L P I E Q L R P N P D Q P R R T F T Q E H L D D L A N S I R T K G V I
UniRef90_K0URU1          Y R E I D P N L I Q P N P R Q P R Q V F D E E A L S E L V H S I R E F G L M
UniRef90_D0L9C5          Y R E I P P A Q I E P N P R N P R T V F D E D A L L A E L V H S I T E F G L L
UniRef90_G2IS22          V Q F L P V S R I A P H P E Q P R Q F D E Q A L D E L A E S I R A R G V I
UniRef90_H5U0N8          Y R E L T P T L I Q P N P H Q P R S V F D E E A M A E L V H S I K E F G L M
UniRef90_A3SKT5        P D R M V A I D L V L P N P D Q P R R R F D E E K L E D L A N S I A E K G I I
UniRef90_UPI0003940466   E I S I T H L R P G V Y Q P R K D V S P E T L E E L S A S I Q A Q G I I
UniRef90_K2JN87          L R R L P V E W L R P G K Y Q P R R D M A P D A L E E L A S S I R A Q G V I
UniRef90_U5EFN2          Y R E V P A D Q I V P N P K Q P R Q V F E E E A L S E L V H S I R E F G L M
UniRef90_K2BNG0            Q L P V G Q I K R G K Y Q P R R D M D P Q A L E D L A N S I R T Q G I I
UniRef90_A1U7I2          L R E I P V D L I Q R G R Y Q P R R D M D P A A L Q E L A D S I R Q Q G V M
UniRef90_R4VMY9          L R D L P L D Q L E G G R Y Q P R R E F D P A A L Q E L A H S I R A Q G V V
UniRef90_I3TR69          V R M M P V E R L R P G R Y Q P R R H F D E E A L S Q L A A S L R E R G V V
UniRef90_U3GWU9          Y E E L P I G A I A P N S K Q P R Q V F D E A A L E E L I H S I R E F G L M
UniRef90_B9JV49          R M V P I E F V S R N P R N P R R Y F D E T V L Q E L A G S I R Q H G I I
UniRef90_H2GZH3          Y R E I P V G M L V P N E K N P R S V F D E D D L S E L V H S I K E F G L L
UniRef90_F8I2Z9          R E V A V D L I D R N P F Q P R R D F A E D E M A Q L V E S V R I H G V I
UniRef90_UPI0003A553BA  I S L L P L T V L R P N P D Q P R Q H F D P E G L Q E L A D S I K A Q G I I
UniRef90_B8KLK0          L R E P V D L I Q R G Q Y Q P R R D F D P F A L Q E L A D S I N A Q G V M
UniRef90_R6BA36          V V T L R L S Q I E P N R E Q P R K V F N E E A L N E L A D S I R E H G V I
UniRef90_A0A013XTS0    V Q N I E V S L I Q P H P E Q P R R H F D E G A L Q E L A D S I A K R G V I
UniRef90_U2JKM1            K T L R V S E L E P N R D Q P R K Q F S D E A I Q T L A D S I Q Q Y G M I
UniRef90_UPI00037DA56D   Y R E V P V E S I T A N P K Q P R Q V F D E D A L A E L E H S I R E F G L M
UniRef90_R5Q0K2          V N T V A L S S L E P S P F Q P R V F D E N A I N D L V E S I K T K G V L
UniRef90_UPI000317E086    K L S V K S L K A G K Y Q P R T R M D E G A L G E L A E S I R T Q G I M
UniRef90_B7S285          L K E L P V D L I Q R G K Y Q P R R D M V P E S L Q E L A D S I K A Q G V M
UniRef90_D0DA58        P D R L V P I E S V V P N K D Q P R R T F T E D H L R E L S E S I R A K G I L
UniRef90_A0LWW6            E I P V D E I R P N P R Q P R Q I F D E T S L A E L A Q S L R E V G F L
UniRef90_UPI0002E98A90   R A V P I E F L R P N P R N P R K V F D D E A L D E L A N S I R E R G L I
UniRef90_UPI000405EB3E   L R K V A I D L I K A N P K N P R R L F K E E E L D E L A G S I R Q H G M I
UniRef90_B3Q8A4          R K V P I E F I K A N P R N P R R T F T D A E L G E L S D S I K Q H G V I
UniRef90_A5E8H1          R K V P I E F L K N P R N P R K T F S D S E L A E L S A S I K Q H G V I
UniRef90_UPI0003689877  L R K I P V E C L Q P G K Y Q P R K D M S P E A L D E L A S S I K A Q G I I
UniRef90_G7Q6W1            L P L D A I R P N P E Q P R R T F E P G A L A E L A A S I K G Q G L L
UniRef90_R5E6D7            L K I S E I E P N R T Q P R K E F D E Q A L S E L A E S I S Q H G L L
UniRef90_K2AEA6           M L P V E K I I P N P D Q P R R D F Q P E A L N D L A N S L R Q K G V I
UniRef90_UPI000225C163   N I D I H L I K P G K Y Q P R R R F D D E Q L A S L I D S V K M K G I I
UniRef90_R6QZ87          M V P I L K V E P N P N Q P R R Q F D D D S L Q E L A D S V K Q Y G I L
UniRef90_R6MZH6           L K I S E L E P N Q D Q P R R E F D D E A L A E L A D S I A Q H G V L
UniRef90_G6YHS5          K V P I E F V S P N P K N P R R H F G E A E L T D L A Q S I R E H G V V
UniRef90_H1D0A0         V M E I A V R D I S P N P W Q P R R D F P K E S L T A L A E S I K E N G L I
UniRef90_Q2L2R6           L P I D R L R A G K Y Q P R T R M D E G A L N E L A E S V R T Q G I M
UniRef90_E3GR84           L Q I N K I R P N A D Q P R K K F N R E K L E E L A A S I K E H G I I
UniRef90_Q1GCL6            V P I E K V Q A N P D Q P R R Q F L Q E D L D D L T A S I K E K G V L
UniRef90_H3RMR0         V V E I P V A A I V P N Q Y Q P R K V F D Q T E I Q E L A Q T I S E H G L L
UniRef90_UPI0002F4015D  V E Q I P I E R I H S S P F Q P R R H F A E N E L N E L S A S I R V H G V I
UniRef90_L0GT78        I V Q L P V D L I Q R G R Y Q P R R A F D P D S L R E L A D S I A V Q G V L
UniRef90_Q1MZ49        L K Q L P I E Y L P G R Y Q P R K D M H P E A L E E L A A S I R A Q G I M
UniRef90_D5EUW2           E I A I E L I E P N P D Q P R H E F D E N A L N E L A Q S I R E I G I I
UniRef90_E8SHT3        V Q R L A L T E I R P N P Y Q P R K T F D A E K L T E L A Q S I A Q H G V L
UniRef90_U7V761           L N I S D I H P N R K Q P R V D F D E H D M D E L V H S V K E I G V L
UniRef90_L8DAM5           L P I E F L Q R G K Y Q P R K D M S E E A L E E L A S S I R A Q G V I
UniRef90_R7CH60          V K I S S V E P N V N Q P R K Q F D E D A L L E L S E S I K Q Y G V L
UniRef90_UPI00035FB3AD   R K V P L A F L R A N P R N P R R T F A E G D L D D L A A S I R E R G I I
UniRef90_K7QWM3        V V R L P L S A L K P N P H Q P R R R F S E E S L K E L A D S I R E K G L L
UniRef90_E3C661        V Q D V K L S L I R P N P Y Q P R R T F D S A A L Q E L A D S I K E T G V F
UniRef90_D5BUE5        V I D I P V E W I N S G P W Q P R L K F D K T A L A E L A E S I R Q K G I M
UniRef90_K7A0B8        L Q K I P L P G K Y Q P R K D M S S E A L E D L A S S I R S Q G I I
UniRef90_D4JZH0        I E T L P L R E V E P D P G Q P R K T F D D E T L A E L S A S I A E H G L L
UniRef90_K4LQE3        I V E L P L E R I T P S R Y Q A R Q D F D E D S I R E L A S S I K E H G V M
UniRef90_E8N945        L V H I D P K S I V P N P R Q P R T H F D P E D L A E L V H S V R E F G V L
UniRef90_UPI000255BAD8 L K E L P I E F L Q R G R Y Q P R R D F P Q E S L Q E L A D S I R A Q G I M
UniRef90_K0CGN8        L R H P V E F M Q R G R Y Q P R K D M S A D A L E E L A E S I R A Q G V M
UniRef90_G8MB13           L S L D K L Q A G K Y Q P R T R M D E G A L Q E L A A S I R A Q G L M
UniRef90_R7NLN7           L N I S E I E P N K D Q P R M D F D D E S L A E L A E S I S K H G I I
UniRef90_C5C6N1           E I P V D A V A P N A A Q Q P R R V F D E D D L E E L A G S I R E V G I L
UniRef90_Y5PDX3        V Q H I K I S S I K V N P Y Q P R T F D E E K L Q D L A D S I T T H G I L
UniRef90_B7V799        L Q Q I P L D L M Q R G K Y Q P R R D M D P Q A L E E L A G S I K A Q G V M
UniRef90_R6CFA2        V Q T M R I S L I E P D K N Q P R S E F D A E R L R E L S E N I A Q H G V L
UniRef90_UPI000418CB24    E L P V E I I V P N P R Q P R Q V F D E D D I T E L A A S I K E V G L L
UniRef90_V8QTX3            V P L T L I R A G K Y Q P R T H M D D A A L N E L A E S V R S Q G I M
UniRef90_UPI00036400D5 T V M V P V E F L Q S G R F Q P R T Q F D Q E A L N D L A D S I R E K G V L
UniRef90_UPI00046F07FD V S S L P V E A L V P G P F Q P R Q D M Q P E A L E E L A Q S I R E R G I L
UniRef90_F9N5I3           E I D I T K I R P N P N Q P R K F T E E D M E T L V A S I Q A H G L I
UniRef90_R5W3Z8        V V N L A L L D I D P N R E Q P R K N F D E A L N E L A E S I R T Y G V I
UniRef90_W9ABG0        L R Q I A V T A L T S G Q Y Q P R K A M A A D A L T E L A D S I R A Q G I I
UniRef90_D4J4Y7           V K I D E I E P N R S Q P R Q N F D E D A L Q E L A D S I K L H G I I
UniRef90_B6GDN3        P D T E M S I E D I V P N P N Q P R T H F N E S A L E E L S E S I R E N G V L
UniRef90_D7GRR5           Q T L K L N L I E P N S E Q P R R E E S L Q E L A D S I K Q Y G I L
UniRef90_B0K5M8        V E T I N I A Y I H P N Q Y Q P R K Q F D E D S L K E L S E S I K Q H G V I
UniRef90_A8DJK8           E L D I E R I I P N L D Q P R T A F P E E K L E E L A Q S I R E H G V I
UniRef90_K2KM18           K T A P I E Y L E P G P F Q P R R L F A A E D M E S L I D S I R D K G V L
UniRef90_UPI0003B570ED    V P I D K I E R N K K Q P R K F E D E A L A A S I K E H G I I
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UniRef90_R6WVL9        V L R I P V D L I E P N P Y Q P R M A F D N E A L A D S I R T F G L I
UniRef90_H5SEN9        V V Q E L D I D L I D P S P Y Q P R T R Y D E Q R L E E L A D S I R T H G L I
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                          50              60              70              80
QUERY                 WK P MLL AK I P GTDEY L I VDG HH RWAG LQKL GAKRAP SV I L
UniRef90_U7K214        Q P I VV R P A    EDGF E L I MGERRWRAAS RAGL ST I PA I VR
UniRef90_D6YAM2        Q P VVV R P VEG  DRY E L VMGERRWRAAQ LAGL ER I PA I VR
UniRef90_W4HJ70        Q P I V R A R P GEGT YE I I VAGERRWRAAQ LANL HEM PVL VR
UniRef90_A3K2X5        Q P L I V R QD P DDSMY E I I VAGERRWRAAQ MAQL HEV VL VR
UniRef90_K0URU1        Q P I VV R EENGET RY QL I MGERRWRAAQ EAGL ES I PA I VR
UniRef90_D0L9C5        Q P I V R P T P EG V RF QL VMGERRWRAS QEAGL EA I PA I VR
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UniRef90_H5U0N8        Q P I VV R P T P DG VL YQI VMGERRWRAS QEAGL EA I PS I VR
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UniRef90_UPI0003940466 Q P I VV R P I DNGN YE I I AGERRWRAAR HAGL KQV P C L VK
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UniRef90_U5EFN2        Q P I VV R V P G V DKF QL VMGERRWRA C QEAGL AT I PA I I R
UniRef90_K2BNG0        Q P I I V R P V  GDKY E I I AGERRWRAAQ LAGL TEV PA I I R
UniRef90_A1U7I2        Q P VVV R P VS  EGRY E L I AGERRWRAT QLAEL DR I PA I I R
UniRef90_R4VMY9        Q P I VV R P L P GGERY E I I AGERRWRAAEL ET I PA I VR
UniRef90_I3TR69        Q P I LV R P V DDGG FE I VAGERRWRAAQ LARL HEV PV I VR
UniRef90_U3GWU9        Q P I VV R R A P H  GTY E L I MGERRL RAAT KAGL KR I PA I VR
UniRef90_B9JV49        Q P VVV R T I A  TGRY E I I AGERRWRAAQ LAGL VE I PV I VR
UniRef90_H2GZH3        Q P I VV R R VKEDERY E I I AGERRWRAS SKAGL PT I PA I VR
UniRef90_F8I2Z9        Q P VVL R A V  GGRF QL VAGERR VRAAR MAGL RSV PAVVR
UniRef90_UPI0003A553BA Q P LLV R P KSDGT TY QI VAGERRWRAAR LAGL AQV PV F VR
UniRef90_B8KLK0        Q P I VV R P I ANE RFE I I AGERRWRAVQ LAGMDS I PVL I R
UniRef90_R6BA36        Q P LLV R P L P G  G V YQL VAGERRWRAS RMAGL QEV PVV I R
UniRef90_A0A013XTS0    Q P I I V R P H  GGGF QI VAGERRWRAAQ RAQL HR I PA I VR
UniRef90_U2JKM1        Q P I LV R P L  GLNY QI VAGERRL RAAR ML GMDEV PVV I R
UniRef90_UPI00037DA56D Q P I VV R VL GDDRF E L VMGERRL RAAQ QAGL DV I PA I VR
UniRef90_R5Q0K2      Q P LL V R R KNGEENKY E I I GGERRWRAS QMAGL SE I PVL I K
UniRef90_UPI000317E086 Q P I LV R P L GQAGSY E I I AGERRF RAAQ LAGL SEV PVL VR
UniRef90_B7S285        Q P I VV R P I SD  RKY E I I AGERRWRAT QLAGL DT I PAV I R
UniRef90_D0DA58        Q P I I V R P A P GEGQF E I VAGERRWRAAQ LAQL HEV PVL VR
UniRef90_A0LWW6        Q P VVV R P H DHG  YE L VTGERRWRAAMQ AGL DR I PA I VR
UniRef90_UPI0002E98A90 Q P I VV R AV P N V D V FE I VAGERRWRGAQ RAGL HEV PVVV I
UniRef90_UPI000405EB3E Q P VVV R P A P GGNGY E L I AGERRWRAAQ KAGL HE I PVV I Q
UniRef90_B3Q8A4        Q P I VV R P VKGADRY E I I AGERRWRAAQ RAGL HEV P I V P V
UniRef90_A5E8H1        Q P I VV R P VKGQDRY E I I AGERRWRAS QAAGL HEV P I V P V
UniRef90_UPI0003689877 Q P I VV R E I A  SDSY E I I AGERRWRAAQ LAQL EL I P C L VK
UniRef90_G7Q6W1        Q P VL V R P V ADAGT HE I VAGERRWRAAR LAGL TE I PVL VK
UniRef90_R5E6D7        Q P LLV R P L TL GG  YQI VAGERRYRAS RMAGL TEV PV I I K
UniRef90_K2AEA6        Q P L I V R Q I GQEDRY E I VAGERRWRAAQ LAGL HE I PV I VR
UniRef90_UPI000225C163 Q P L I V R P L V VDGRY E I I AGERRWRAAR TL GL EKV PVV I R
UniRef90_R6QZ87        Q P L I VKK H DKF  YE I I AGERRWRAAK LAGL KEV PVL I R
UniRef90_R6MZH6        Q P LLV R P I AGGG  YQI VAGERRF RA C RMAGVQEV PVV I R
UniRef90_G6YHS5        Q P VVA R P S P QAGRY E I I AGERRWRAAQ RAGL TE I P I I VR
UniRef90_H1D0A0        Q P VVV R QK  KNGTY E L AAGERRWRAAK LAGL ET I PAV TQ
UniRef90_Q2L2R6        Q P I LV R G LA I P GQY E I I AGERRF RAAQ LAGL KEV PVL VR
UniRef90_E3GR84        Q P LVV R P  ENNGY T I I AGERRWRAAT MAGL KEV PV I VK
UniRef90_Q1GCL6        Q P L I V R P RDG  G I YE I VAGERRWRAAQ AAQL HE I PVL I R
UniRef90_H3RMR0        Q P I VV R E  F R P GEY E I I AGERRF RAVK LL QWEK I PA I VE
UniRef90_UPI0002F4015D Q P I VV R P SSTGGGY E L VAGERRYRAAK SAQMDK I PA I I R
UniRef90_L0GT78        Q P I VV R P I E  SGRY E I I AGERRWRAAQ QAGL GD I PVVVR
UniRef90_Q1MZ49        Q P I VV R P I SADT RY E I I AGERRWRAAQ I AEL HEV PV I I K
UniRef90_D5EUW2      T  P I T V REM P  SGHY QI I AGERRWRAS QLAGL KA I PAY I K
UniRef90_E8SHT3        Q P I I V T QA I KG  YH I VAGERRYRAS L EAGL TD I PA I VK
UniRef90_U7V761        Q P I VV R P EKGHEKY E L VMGERRWRAT QRAGL PT I PA I VR
UniRef90_L8DAM5        Q P I VV R P V  GENRY E I I AGERRWRAS Q I AKL D V V P C I I K
UniRef90_R7CH60        Q P LLL V  SDKKDYY E I I AGERRWRAAK LAGL KE I PV I VK
UniRef90_UPI00035FB3AD Q P I VV R Q VA GEEAY E I I AGERRWRAGQ RAG I HEV P I VVV
UniRef90_K7QWM3        Q P LLV R P K  GEGY E VVAGERRYRAAL LL AGL AEV PAL VK
UniRef90_E3C661      Q P V I L R Q P DAA V ERY E L I AGERRF RAS KMARQET I PA I VR
UniRef90_D5BUE5        Q P VL V R QS ADNQRY QL I AGERRWRAAQ I AQL HT V PA I L R
UniRef90_K7A0B8        Q P I VV R Q I S  EDKY E I I AGERRWRAAQ I AGL D V I P C I I K
UniRef90_D4JZH0        Q P I A V R P K P SGG  YL I VAGERRWRAS RMAGL TEV PV I VK
UniRef90_K4LQE3        Q P VVV R P V  GED L YE L V VGERRWRA C RQAGL ET I PAV I R
UniRef90_E8N945        Q P VVV R  DKGDGT YE L I MGERRT RAS REAGL ES I PAVVR
UniRef90_UPI000255BAD8 Q P I VV R P V  GERKY E I I AGERRWRAAQ L AEL DKV PAL VR
UniRef90_K0CGN8        Q P I VV R P L  GENRY E I I AGERRWRAAQ MAEL DS I PA I VR
UniRef90_G8MB13        Q P I LV R S V  GDDH YE I I AGERRF RAAQ LAGL DEV PVL VK
UniRef90_R7NLN7        Q P LLV R P L LY GG  YQI VAGERRWRAS RMAGL TEV PVV I R
UniRef90_C5C6N1        Q P VVV R E GS P RY E I I MGERRWRAS RL AGNDT V PA I VR
UniRef90_Y5PDX3        Q P I VL R KT  I NGYY I VV GERRF RAS KL AGL EEV PA I VK
UniRef90_B7V799        Q P I VV R P I A  NGRY E I I AGERRWRAS QQAGL EK I PAL VK
UniRef90_R6CFA2        Q P I LV R P M  GED V YR I VAGERRWRAAR MAGL TE I PVVVR
UniRef90_UPI000418CB24 Q P I VV R R V DDEEGY E L VMGERRL RAAK EAGL KT I PAVVR
UniRef90_V8QTX3        Q P I L I R P I AGDEKY E L I AGERRWRAAQ LAGL AEV PVL VR
UniRef90_UPI00036400D5 Q P I LV R I L P EDNRY E I I AGERRWRAAQ I AQR HT V PV I I R
UniRef90_UPI00046F07FD Q P I LV R P D P DQGQY QI I AGERRWRAAQ LAQ C HD V PV H V R
UniRef90_F9N5I3      A P I A V R K V  DDYY E I VAGERRWRA C QKAGL TK I PVVVR
UniRef90_R5W3Z8        Q P I VV T P V  GKRF M I I AGERRF RAS R I AGKT E I PA I I R
UniRef90_W9ABG0        Q P I VV R R L  DNQRY E I I AGERRWQAAR QAGL E V V P C I I K
UniRef90_D4J4Y7        Q P L I VQKK  DDFYT I I AGERRWRAAR LAGL TE I PV I I K
UniRef90_B6GDN3        Q P LLV RKH DS  KYE I I AGERRYQAS K I AGL TKV PV I VK
UniRef90_D7GRR5        Q P L I VQKK  GNH YE I I AGERRWRAAK LAGV TDV PVL I K
UniRef90_B0K5M8        Q P I I V RK V DSG  YQI VAGERRWRAAK I AGL SE I PA I VK
UniRef90_A8DJK8        Q P I VV R R H  GEMF QI VAGERRWRAAQ RAGL HR I PVV I R
UniRef90_K2KM18        Q P I VV R R H P DP T RY QI VAGERRWRAAAQL HEV PV I VK
UniRef90_UPI0003B570ED I P LLVVS R  GLRY E I VAGERRWRAAQ LAGL LK I PV E VK
UniRef90_UPI0004220300 Q P I VV R E I  GKDRY E I I AGERRWRAAQ MAR L EDV P C L VK
UniRef90_R6WVL9        Q P I S V RK L  KNGRY QI I SGERRF KA C KRAGMD I I PAY I K
UniRef90_H5SEN9      V Q P I LV R R R  GLRY E I I AGERRWRAAQ LAGAL K I PAY I R
UniRef90_UPI000372ABB1 Q P I VV R P SRDGGAY E L I MGERRWRA VQ AGMS T I PA I VR
UniRef90_K1LJY0        Q P I I I R R ST I KG  YE L I AGERR VRAS KL AGKT T I PA I I R
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                                         90            100           110           120
QUERY                    D Y F D E G V K V Y T W Y P A F K G D V N K V I E R L K A E G L E V I E D E K A
UniRef90_U7K214          Q T T D D A L R D A L L E N I H R V Q L N P L E E A H A Y H Q L L E
UniRef90_D6YAM2          K T Q D E M L R E A L I E N I Q R E Q L N P L E E A A Y Q Q L L                Q
UniRef90_W4HJ70          E F T D E V L E V A I I E N I Q R A D L N A I D E A S G Y K Q L M F K
UniRef90_A3K2X5          D F N D E V L E I A I I E N I Q R A D L N P M E E A A G Y R Q L M F K
UniRef90_K0URU1          E T A D D S M R D A L L E N I H R V Q L N P L E E A A A Y Q Q L L D
UniRef90_D0L9C5          E T P D D M L R D A L L E N I H R A Q L N P L E E A A A Y Q Q L L D
UniRef90_G2IS22          D F S E E T L E I A L V E N I Q R E D L N P I E E A Q A Y R R L I D
UniRef90_H5U0N8          E T P D D M L R D A L L E N I H R A Q L N P L E E A A A Y Q Q L L E
UniRef90_A3SKT5          E F N D E V L E I A I I E N I Q R A D L N P V E E A A G Y A Q L M E K
UniRef90_UPI0003940466   H V E D R A I A M A L I E N I Q R E D L N A L E E A Q A L E R L Q D
UniRef90_K2JN87          D V P D D A V A I A L I E N I Q R E D L N A M E E A V A L K R L M                S
UniRef90_U5EFN2          D T A D S M L R D A L L E N I H R V Q L N P L E E A A A Y Q Q L L E
UniRef90_K2BNG0          R I P D E A I A I A L I E N I Q R E D L N P I E E A I A L Q R L                I E
UniRef90_A1U7I2          D V P D E A I A M A L I E N I Q R E N L N P I E E A F A L Q R L Q D
UniRef90_R4VMY9          D I P D E A V A V A L I E N I Q R E D L N P L E E A T A L H R L                I E
UniRef90_I3TR69          H M A D D A L E I A L V E N I Q R Q D L T P L E E A D G Y R R L M                G
UniRef90_U3GWU9          E T D D D M L R D A L L E N I H R V Q L N P L E E A H A Y Q Q L L E
UniRef90_B9JV49          D V D D R A L E L A I V E N V Q R A D L N P L E E A M G Y E Q L                I A
UniRef90_H2GZH3          Q T D D D M L R D A L L E N I H R V Q L N P L E E A A A Y Q Q L L E
UniRef90_F8I2Z9          E L S D D A M E I A L V E N L Q R A D L N P I E E S Q A Y A R L I D
UniRef90_UPI0003A553BA   E L S D K E M A A L I E N L Q R E D L N P I E E A L A L Q G L R D A L E
UniRef90_B8KLK0          N V S D E A I A M S L I I E N I Q R E D L N P I E E A Y A L E R L Q D
UniRef90_R6BA36          E M D E E Q M E I A L I E N I Q R E D L N A I E E A S G Y K L L M E R Y
UniRef90_A0A013XTS0      D F D E E T L E I A L I E N I Q R E D L N P I E E A E A Y R K L                I G
UniRef90_U2JKM1          E L T D E E M A V A L I I E N I Q R E D L N P L E E A N A Y A Q L M D M
UniRef90_UPI00037DA56D   N T A D E A M R D A L L E N I H R V Q L N P L E E A A A Y Q Q L L D
UniRef90_R5Q0K2          T F S D E A L E V A L I E N I Q R Q D L N P L E E A E G Y R R L M E
UniRef90_UPI000317E086   E V A D E A A V M A L I I E N I Q R E D L N P L E E A H G V K R L L D
UniRef90_B7S285          D V P D E A I A M A L I E N I Q R E D L N P I E E A A S L Q R L Q                Q
UniRef90_D0DA58          D L D D E T L E I A I I E N I Q R A D L N A I E E A A G Y K Q L M F
UniRef90_A0LWW6          E T S D D A M R D A L L E N I H R E Q L N P L E E A A A A Y Q Q L L E
UniRef90_UPI0002E98A90   E A D D R A L E I A I I E N V Q R A D L N P I E E A V G Y E Q L M                A
UniRef90_UPI000405EB3E   D V T D E A L E I A I I E N V Q R Q D L N P L E E A M G Y D Q L                I Q
UniRef90_B3Q8A4          D V S D A A L E I A I V E N V Q R E D L N P L E E A L G Y Q A L A                A
UniRef90_A5E8H1          D V S D D A L E L A I I E N V Q R E D L N P M E E A Q G Y H A L A                N N
UniRef90_UPI0003689877   D I P D E A V A I A L I E N I Q R E D L N A M E E A V A L N R L M                N N
UniRef90_G7Q6W1          E V D D E Q L A L A L I E N L Q R E D L N P V E E A A A L N L L L T
UniRef90_R5E6D7          E L T D E T M E I A L I E N L Q R E D L S P V E E A L G Y K A L I D
UniRef90_K2AEA6          E F S D E V L E I A L I E N I Q R A E L N A I E E A L A Y K Q L M                Q
UniRef90_UPI000225C163   D Y S D E A L E T A I I E N I Q R D D L T P I E E A E A Y Q R L M K
UniRef90_R6QZ87          D Y E N E I V E I A L I E N I Q R E D L N P I E E A L A Y K R L M E
UniRef90_R6MZH6          E L S D G Q M E L A L I E N L Q R E D L S P I E E A Q G Y Q T L M E H Y H
UniRef90_G6YHS5          D V N D R A L E L A I I E N V Q R A D L N P V E E A Q G Y Q Q L I D
UniRef90_H1D0A0          D Y D D R S M E M A L V E N L Q R E D L N P V D E G L A Y Q K L M D D Y
UniRef90_Q2L2R6          D V A D E N A A I A L I E N I Q R E D L N P L E E A Q G V R R L L D
UniRef90_E3GR84          D L A K D V M E L A L I E N V Q R E D L N A I E E A E A Y G A L M E H
UniRef90_Q1GCL6          D Y S D E M L E V A I I E N I Q R S D L N A L E E A Q S Y K Q L M D K
UniRef90_H3RMR0          K M T D E S A S L A L I E N L Q R A Q L S P V E E A Q A Y K Q L M E F N H
UniRef90_UPI0002F4015D   S M S D E A M E I A L V E N L Q R S D L N P M E E S W A Y H K L                T Q
UniRef90_L0GT78          E V D E P A V A I G L I E N I Q R D D L T P L E E A N A L H R L L D
UniRef90_Q1MZ49          D V P D E A I A M A L I E N I Q R E N L N P M E E A R A L H R L Q E
UniRef90_D5EUW2          T T D D K T M E M A L I V E N I Q R E D L N A I E I A L A Y Q R L S E S T G M T Q
UniRef90_E8SHT3          P F S D E M R E L A I I E N L Q R E D L N A L E E A E S Y Q Q L M                Q
UniRef90_U7V761          D T D N D L L R D A L L E N L H R S Q L N P I E E A A A Y Q Q L M E
UniRef90_L8DAM5          D V A D E A V A I A L I E N I Q R E D L N A M E E A I A L Q R L I D
UniRef90_R7CH60          E F S E Q E L E I S L I E N I Q R E D L N P V E E A M A Y K R L I D
UniRef90_UPI00035FB3AD   E V D D E A L E I A I I E N V Q R A D L N P V E E A A G Y Q S L A D
UniRef90_K7QWM3          D L T D E A L E I A L V E N L Q R E D L S P V E E A R G Y Q V L L G M
UniRef90_E3C661          N M T D E Q M E V A V L E N L Q R E D L T P L E E A Q A Y Q T L M D K L S
UniRef90_D5BUE5          D I S D E A Y E L A L I E N V Q R T D L T V I E E A L G Y Q N L                I S
UniRef90_K7A0B8          D V P D E A V A I A L I E N I Q R E D L N A M E E A Q A L K R L M V
UniRef90_D4JZH0          D V T D E Q M E L A L V E N L Q R E D L D P V E E A A G I R E L M T R C D
UniRef90_K4LQE3          R V D D R S G E M M L V E N I Q R E D L N P V E E A L A Y R R L                I E
UniRef90_E8N945          E T D D E L L R D A L L E N L H R S Q L N P L E E A S A Y Q Q L L E
UniRef90_UPI000255BAD8   E V A D E A I A M A L I E N I Q R E D L N P V E E A V A L K R L Q D
UniRef90_K0CGN8          E V P D E A I A M S L I E N I Q R E N L N P M E E A L A L S R L                K D
UniRef90_G8MB13          N V P D Q A A A M A L I E N I Q R E D L N P L E E A Q G I Q R L L D
UniRef90_R7NLN7          E L D D E T M E I A L I E N I Q R E N L T P V E E A K G Y K T L M D T Y
UniRef90_C5C6N1          E T A D L L R D A L L E N I H R V Q L N P L E E A A A Y Q Q L L D D F S C T H
UniRef90_Y5PDX3          S L S D D M M E L A I I E N I Q R E D L N A I E E A E S Y Q K L M                N
UniRef90_B7V799          D V P D E A I A M A L I E N I Q R E D L N P I E E A A A L Q R L Q Q E F Q L T Q
UniRef90_R6CFA2          E L S D E A A Q I A L I E N I Q R E D L N P I E E A K A Y K R L M E D Y
UniRef90_UPI000418CB24   Y T E D Q D L R D A L L E N L H R V Q L N P L E E A A A Y Q Q L L D D F S C T H
UniRef90_V8QTX3          E V A D E N A A I A L I E N I Q R E D L N P L E E A H G V K R L L D D F Q F T H
UniRef90_UPI00036400D5   D F S D D A A E V A L V E N L Q R R D L S P L E E A E G Y R R L Q E
UniRef90_UPI00046F07FD   D L D E D A M A A A L V E N L Q R A D L N P V E E A         E G L N R L Q E D Y
UniRef90_F9N5I3          D Y T T E E V E I A L I E N L Q R Q N L N P I E E A F G Y Q Y L M D T
UniRef90_R5W3Z8          N Y T P Q E I E I S L I E N L Q R E D L S P I E A A R A I R T L M T
UniRef90_W9ABG0          N V D D R T V A I A L I E N I Q R E D L N A I E E A R A L E R L Q                Q
UniRef90_D4J4Y7          D Y T P E S M E I A L I E N I Q R E D L N P I E E A I A F Q K L I D
UniRef90_B6GDN3          D V D D Q A M E L A L I I E N I Q R S D L N P I E E A K G Y R Q L I K A S
UniRef90_D7GRR5          E Y D K Q Q M E L A L I E N V Q R E D L N P I E E A Q A F Q Q L                I Q
UniRef90_B0K5M8          D F D D L Q M E I A L I E N I Q R E D L N P I E E A K A Y K A L                I E
UniRef90_A8DJK8          E V P D E Q L E L A L V E N L Q R E D L T P I E E A Q A Y R R L M D
UniRef90_K2KM18          E F D D R A L E V A L V E N I Q R Q D L T P I E E A E G Y R R L M E
UniRef90_UPI0003B570ED   E L S D E I A E I A L I E N I Q R E D L N A M E E A Q A Y K S L                K D
UniRef90_UPI0004220300   A V P D E A V A I A L I E N I Q R E D L N A M E E A T A L Q R L L E
UniRef90_R6WVL9          T A D D Q M L E M A I V E N I Q R Q D L D P I E E V A M S Y Q R L M D
UniRef90_H5SEN9          E V P D E Q L E L S L I E N I Q R E D L N P I E E A Q A Y Q Q L                I E
UniRef90_UPI000372ABB1   E T A D D L L R D A L L E N I H R A Q L N P L E E A E A Y Q Q L M E
UniRef90_K1LJY0          D L N E E A M E I A V I E N L Q R E D L S P L E E A E A Y A M L M E N L R
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                              130           140           150           160
QUERY              E E K A E K G E I A F A L I G E K S F A I P G G L E E Q K K V S K V L D E M D Q
UniRef90_U7K214    E F G V T Q E Q L A D R L G R S R P V I T N R L L R L P V D V Q R R V D A G V L
UniRef90_D6YAM2    E F G A T H E A L A K K V G K S R S H I T N   T L L N L P P N V Q     L R L
UniRef90_W4HJ70      F G H T Q E K L A E A L G K S R S H I A N R L L N L P D D V Q T L V A D G A L
UniRef90_A3K2X5      F G H T Q E K L A E A L G K S R S H I A N R L L N L P E S V Q G M V S E G T L
UniRef90_K0URU1    E F E V T H D E L A A R I G R S R P L I S N M L L R L P I A V Q R R V A A G V L
UniRef90_D0L9C5    E F G V T Q E E L A A R L G R S R P L I S N M L L K L P I P V Q R R V A A G V L
UniRef90_G2IS22    Q F Q H S Q D A L A R I V G K S R S H I   A N L M R L L D L P D D V Q D L V
UniRef90_H5U0N8    E F D V T H E E L A T R L G R S R P V I T N M L L K L P I P V Q R R V A A G V L
UniRef90_A3SKT5      F G H T Q D K L S Q A L G K S R S H I   A N T M R L L Q L P P A V Q G     F L
UniRef90_UPI0003940466 E F K L T H Q Q V A D A I G K S R T T V T N   L L R L N Q L D E V V K S L V A
UniRef90_K2JN87    E F E L T Q H Q E V A D A I G K S R A A V T N   L L R L N S L N D D V K R L L E
UniRef90_U5EFN2    E F D V T H E E L A T R I G R S R P V V T N M L L K L P I P V Q R R V A A G V L
UniRef90_K2BNG0    E F G M T H Q Q V A E A V G K S R T S V T N   L L R L L A L P E E V     K H M L
UniRef90_A1U7I2    E F G L T Q A Q V A E A V G K S R T T I T N   L L R L L T E D V R V M L E
UniRef90_R4VMY9    E F G M T H Q A I A D A V G R S R V G V S N   L L R L L D V S A T V K S H I A
UniRef90_I3TR69    E F S Y T Q E E L G R V I G K S R A H V A N M L L N L P D A V K E M L D D G R L
UniRef90_U3GWU9    E F G V T Q T E L A D K I G R S R P L I T N M L R L L Q L P V Q R K V A S G V I
UniRef90_B9JV49    E H G Y T Q N D L G E I   G K S R S H V   A N S L R L L K L P D P V R D M L A D
UniRef90_H2GZH3    E F G V T Q N E L A D R L G R S R P V I T N M L L G L P V D V Q R K V A A G V L
UniRef90_F8I2Z9    E F G W T Q E E I G A R V G K S R S H V   A N Y L R L L Q L E S S I Q E L L R
UniRef90_UPI0003A553BA   L T Q E E L A A R L G K S R P   A I A N A L R L L Q L S P A A R D     D L
UniRef90_B8KLK0    E F D M T Q Q Q V A D A V G K S R S A V A N R L M S L Q S D V R T L L E H G D L
UniRef90_R6BA36      N M T Q E Q V A K R V G K S R P   A I A N A L R L L N L P E P V L E M V
UniRef90_A0A013XTS0 D F Q H T Q D A L G R I V G K S R S H I A N R L L D L P P S V Q Q Q V M E Q K I
UniRef90_U2JKM1      F H L T Q E E V A K R V G K S R S A V A N S L L K L P E D V K T L V E D G G L
UniRef90_UPI00037DA56D E F G V T H E E L A S R I G R S R P   V I T N T I R L L R L P L P V Q R R V A A
UniRef90_R5Q0K2    E F S N T Q E D L A K A V G K S R S H V A N M   M R L L G L P D K V     K E S L
UniRef90_UPI000317E086 E F G L T H E Q A S Q A I G R S R S A T S N   L L R L L N L T E P V Q T M L L
UniRef90_B7S285    E F E L T Q Q E V A D A V G K S R S T V A N   L L R L M S L Q E D V R K L V E
UniRef90_D0DA58    R F G H T Q E K I A E A L G K S R S H I A N   L L R L L N L P E G V Q E H V R
UniRef90_A0LWW6    D F G V T H E E L A R R I G R S R S Q V T N R L L N L P P S V Q R K V A A G V L
UniRef90_UPI0002E98A90 E F Q Y S Q N D L A Q V I G K S R S H V   A N T L R L L R L P D S I K S K V N D
UniRef90_UPI000405EB3E E F E Y T Q N D L A A V I G K S R S H V A N R L L K L P E P V K Q Y L N D G A L
UniRef90_B3Q8A4    E F N R S Q E E I A K I V G K S R S H V A N M L I K L P D D V K S L I A S G E L
UniRef90_A5E8H1    E F K R N Q E E I A K I V G K S R S H V A N M   M R L T K L P A E V Q G F I A T
UniRef90_UPI0003689877 E F S L T H Q Q V A D A V G K S R T A I S N   L L R L N S L Q A D V K T L L E
UniRef90_G7Q6W1    R F G M S Q D A L A K K V G K S R P   A V A N A L R L L Q L S E P M L A     D L
UniRef90_R5E6D7    E H G F S Q E E V A K S V G K S R P   A V A N A L R L L K L P D N I M   E Y L K
UniRef90_K2AEA6    R F G H T Q E K I A E A L S R S R S H I A N R L L V L P E D V Q Q M V K G G K L
UniRef90_UPI000225C163 E F D Y T Q E E L A R S I G K S R S H V A N M L M N L P E N I K D L I N E G K I
UniRef90_R6QZ87    E F S L K Q D Q V A A K V S K S R A   A I T N S L R L L K D Q R V Q N L     L
UniRef90_R6MZH6      F T Q E E V S R S V G K S R P   A I T N A M R L L R L P E E I I H M V
UniRef90_G6YHS5    E H G Y T Q A D L G Q V I G K S R S H V   A N T L R L L K L P D   V I R D M L V
UniRef90_H1D0A0      G L T Q E D I S R K V G K S R P Y V A N M   V R L L G L P E E V     K D F L
UniRef90_Q2L2R6    E F G L T H E Q A A Q A I G R S R S A T S N   L L R L L N L A V P V Q T M L L
UniRef90_E3GR84      F N L T Q G E I G I R I G K S R A   A I T N T M R L L N L P D K V R Q E V L D
UniRef90_Q1GCL6      F G H T Q E K M A E A L G K S R S H I A N R L L H L P E D V Q S L V L D R K L
UniRef90_H3RMR0      L T Q A T L A K G M G K S Q S F V   A N K L R L L K L I K P V Q N A I L D
UniRef90_UPI0002F4015D E L G W T Q E Q I G E R V G K S R S H I   A N Y L R L L S L E P E I Q Q     W V
UniRef90_L0GT78    E F G L T H Q Q V A E A V G K S R T S V T N L L R L L D L N D D     V K A Y L S
UniRef90_Q1MZ49    E F A L T Q Q Q V A D A V G K S R V T V T N   L L R L M N L N E D V R T L L E
UniRef90_D5EUW2    E R M S E         R L G K S R T S I T N R L L K L P A Q I Q M A L K N R D I
UniRef90_E8SHT3    H L T L T Q Q E V A A R L G K S R P Y I A N M   L R L L R L P V K I R T L I R
UniRef90_U7V761    E F G T T Q D Q L A K R I G R S R P Q I S N R L L K L P A L V Q R R V A A G V L
UniRef90_L8DAM5    E F A L T H Q Q V A D A V G K S R T T V T N L L R L N N L N D D     V K I L L E
UniRef90_R7CH60    E F H L K Q D E I A E R V G K S R   T A V T N A M R L L K L S E K V Q Q M     L
UniRef90_UPI00035FB3AD Q F G Y S Q S D L A R V I G K S R S H V   A N T M R L L R L P E T V     K Q F L
UniRef90_K7QWM3      G L T Q E E V A R R V G K A R P T V   A N A L R L L Q L P E E V L E A     L
UniRef90_E3C661      L T Q A Q V A N R L G K S R P Y I A N R L L G L P P L I K E A L N E G R L
UniRef90_D5BUE5    K H K Y K Q E Q L S E L I G K S R S H I   A N L L R L L S L P S D V M T   M V A
UniRef90_K7A0B8    E F E L T H Q E V A T A V G K S R P R T T V S N L L R L N N L N D D     V K L L L E
UniRef90_D4JZH0      L T Q E Q A A R K L G K S R S   A L A N S L R L L S L P E T V L   E L L K
UniRef90_K4LQE3    E F H L T Q E E V A S R V G K S R S F I A N S L L Q L P E G V R S L L G Q G K L
UniRef90_E8N945    D F G I T Q E E L A T R I G R S R P Q I S N   T I R L L K L P V P V Q Q R V
UniRef90_UPI000255BAD8 E F E L T Q Q Q V A E A V G K S R   T A V T N L L R L S L T D E V     R T F L
UniRef90_K0CGN8    E F G L T H Q Q V A D A V G K S R A M V T N L L R L L E G D V K K L L E H G D L
UniRef90_G8MB13    E F S F T H E Q A A E S V G R S R S A V S N   L L R L L N L A T P V Q T M L L
UniRef90_R7NLN7      G F T Q E Q V S E S V G K S R S   A V A N S L R L L N L P E E V L     I L L
UniRef90_C5C6N1      D E L A S R I S R S R P Q I S N R L L K L P P L V Q R R V A A G V L
UniRef90_Y5PDX3    D L G L T Q D Q K V A E A R L G K S R P Y I A N M   L R L L N L P S D I A K     L
UniRef90_B7V799      Q Q V A E A V G K S R A T I T N   L L R L I G L P E E I     K T L L
UniRef90_R6CFA2      G M T Q E E L S K T V G R S R A   A I A N A V R L L N L P E S V Q G Y V A E
UniRef90_UPI000418CB24     A E L S K R I A R S R S Q I S N R L M K L P P L V Q R R L A A G V L
UniRef90_V8QTX3    E Q A     A Q A I A R S R S L T S N   L L R L L N L A Q P V Q T F L L
UniRef90_UPI00036400D5 E F Q H T Q D D L S K A V G K S R S H V A N M L L A L P D P V K E M M R G G S L
UniRef90_UPI00046F07FD   N L T Q E D L A K A I G K S R P H V A N M L L R L P E A V R T E L K T G N L
UniRef90_F9N5I3    F K K T Q E E I A T I V G R S R S Y V A N R L L Q L P E F L Q E E L E V G A L
UniRef90_R5W3Z8    E F N M T Q E V A A D R I G K S R S   A V A N T L L R L L T L H D D V I K L I
UniRef90_W9ABG0    E F S L T H Q Q V A D A V G K S R A A V S N   L L R L N Q L S D S V K Q L V E
UniRef90_D4J4Y7    E Y G L K Q E E A A E K V S K S R   T A V T N S L R L L K L D N R V K Q M I V D
UniRef90_B6GDN3      G M T Q E A L S K A V S K S R S T I T N   S L R L L D L P E Q V Q Q M M Y
UniRef90_D7GRR5    E F H L T Q E E I A N R V G K S N R A T I T N S L L R L D I R V Q D M L L E G K I
UniRef90_B0K5M8    Q F N L T Q E E I S K K I G K S R S V I A N S L L N L D D R V Q E M L V K G D I
UniRef90_A8DJK8    E L G L T Q E Q I A V R I G K D R T T V A N R L L R L P S D I Q K L V E D Q L L
UniRef90_K2KM18    E F G H T Q E A L A Q V I G K S R S H I A N M   L R L L A L P D Y V R D A V
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UniRef90_UPI0004220300 E F Q L T H Q E V A D A V G K S R A T V T N   L L R L N N L E Q E T K T L L E
UniRef90_R6WVL9    E C N L T Q E M M A Q R V G K K R A S V   A N Y L R L L K L P T K V Q     H D L
UniRef90_H5SEN9    R L G L T Q E E V A R R V G R D R T S I   A N S L R L L R L P Q E V Q A L V
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                                              170              180              190            200
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UniRef90_A3K2X5          S A G H A R A L         I T A P N P E V L A K T I V D K G L S V R D T E K
UniRef90_K0URU1          S A G H A R A L L A L E G G A E K Q E E L A A R I V A E G M S V R A T E E A V T
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UniRef90_H5U0N8          S A G H A R A L L S L E T G S D     Q Q E A L A A R I V A E G L S V R A T E E
UniRef90_A3SKT5          S E G Q L S A G H A R A L I T S D D A E K     L A K Q V I S K G L S V R Q T E A
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UniRef90_K2BNG0          E R G M L E M G H A R T L I T L P E S V Q L E T A K L I V S R N M S V R E T E N
UniRef90_A1U7I2          H G D L E M   G H A R A M L T L P P E Q Q M Q V A R Q V V A K S L S V R Q T E A
UniRef90_R4VMY9          N G E L E M   G H A R A L L S L D E A G Q A E A A R Q I V A R G L S V R Q T E A
UniRef90_I3TR69          S M G H A R A   I A T A D D P S A L A K R         I V D R G L T V R E A E T
UniRef90_U3GWU9          S A G H A R A L L G L K A G A Q A Q E A L A D R I V A E G L S V R A T E E A V V
UniRef90_B9JV49              G S L S A G H A R A L V S T S D P N S     L A R Q I V S K G M S V R D A E R
UniRef90_H2GZH3          S A G H A R A L L G V K E D T Q A E L A Q R I I A E G L S V R     A T E E A V T
UniRef90_F8I2Z9          R E L I S V A H A K V L L S I D G P R R V E L A E R C G Q E G W T V K Q L E G
UniRef90_UPI0003A553BA   R D G N I S A G H A R C L L A V T D M D A A E L R Q R I I S H A L T V R D A E E
UniRef90_B8KLK0          D M G H A R C L L T L D A D     Q Q I Q L A R R V V A K G L S V R Q T E A
UniRef90_R6BA36          E E G E V S P G H A R A L L S F D D P Q R M D V A Q K V R T G K Y S V R D I E R
UniRef90_A0A013XTS0      S M G H A R A L I G V P   D C E T L A R Q V E         Q K G L S V R D T E Q
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UniRef90_R5Q0K2          E Q G K L T S G H A R A L L N A K N P E Q     L A E I V I S K G L N V R Q T E K
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UniRef90_B7S285          H G D L E M   G H A R A L L A L E G G D Q S H A A G Q V V G K A M S V R Q T E A
UniRef90_D0DA58          N G E L   S A G H A R T L V T A R D P E T M     A Q Q I M D K K L S V R Q A E A
UniRef90_A0LWW6          T A G H A R A L L A L N D     A T A Q E E L A Q R I V A E G L S V R A V E E
UniRef90_UPI0002E98A90       G V L S A G H A R A L L S V S D P E     A I A E R V V A Q G L N V R D V E R
UniRef90_UPI000405EB3E   T A G H A R A L I A A P D P V         A L A K R I V D E G L T V R S A E T
UniRef90_B3Q8A4          T A G H A R A L I G L P D     P S T I A K R I V A E G L N V R Q T E A
UniRef90_A5E8H1          G E   I S A G H A R A L I N L P D P L T     A A K K I I A E G L N V R Q T E A
UniRef90_UPI0003689877   H G D I E M   G H A R C L L A L E G E Q Q I E T A R L V A A K G L S V R D T E K
UniRef90_G7Q6W1          A S Q A M T A G H A R A L L S L A D E E R Q A L W Q R I V A T G M S V R E A E E
UniRef90_R5E6D7          D G K I   S A G H A R A L L T L E N E E L M E L A D E I V A K D L S V R Q V E K
UniRef90_K2AEA6          T A G H A R A L V T T N     N A T E L A L Q V V G R G L S V R E T E D
UniRef90_UPI000225C163   S A G H A R T L         I K S P N M D E M V V Q S I L T E G M N V R E A E K
UniRef90_R6QZ87          S E E M I T T G H A R A L L A I E D P D Q Q E T A M K V F D E K L S V R E I E K
UniRef90_R6MZH6          S G G K L S A G H A R T L L A F E S E D Q L Q A A Q L A V K Q G L S V R E L E K
UniRef90_G6YHS5          D G E L   S A G H A R T L V T A E D P A G     L A K R I V D G G L S V R Q A E A
UniRef90_H1D0A0          S K G Q L T A G Q A R P L L G L S D A E K V Q L A R R I V K E G L S A R R V E E
UniRef90_Q2L2R6          A G D I D M   G H A R A L L A V D A A T Q I I Q L A N L I I A R R L S V R E A E K
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UniRef90_D5EUW2          D M G H A R A L L S L   E S P S A Q L K F K D V H R N G Y S V R K V E E M V Q
UniRef90_E8SHT3          E G Q L S G G H G R T L L A L K T P E T M V H A L A I R E S W S V R Y L E Q
UniRef90_U7V761          S A G H A R A L L M L T D Q A     Q I E T L A Q K I V N E G L S V R A V E E
UniRef90_L8DAM5          H G D I E M   G H A R S L L A L E G H L Q S E A A N L V V A K A L T V R E T E K
UniRef90_R7CH60          I D E M I T A G H A R A I L S I A D K E K Q E I A M K I F D E K L S V R E T E A
UniRef90_UPI00035FB3AD   A D G R L S A G H A R A L L T Q D D P E     A L A Q A I V A Q G M N V R A I E A
UniRef90_K7QWM3          E E G R I S A G H A R A L L M L P E E K R L W G L R E I L E K G L S V R Q A E A
UniRef90_E3C661          S M G Q A R T I L G L K D     K K Q L V G L A K R A M D K N L T V R Q L E E
UniRef90_D5BUE5          D G Q L T M   G Q V R P L I G H E D A     S A L A E E I I S K N L S A R Q V E A
UniRef90_K7A0B8          H G D I E M   G H A R A L L A L Q G E A Q N Q A A Q I V S G K G L T V R D T E N
UniRef90_D4JZH0          S G F I T   I G H A K V V L G L P A P E Q E K A A Q M I A D N Q L N V R Q A E A
UniRef90_K4LQE3          S V G H G K V L L G I P D P A G Q E M L A R E I V E K G L T V R D A E K A V Q R
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UniRef90_UPI000255BAD8   E R G D I E T G H A K A L L G L A G E D Q K A T A R Q V V D R G L T V R Q T E A
UniRef90_K0CGN8          E M G H A R A L L A G D     K Q V E A A R V V A K G L S V R Q T E V
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UniRef90_R7NLN7          A D G R I S S G H A R A L L S L E N V D M L T I S Q E I I L D K D L S V R Q T E K
UniRef90_C5C6N1          S A G H A R A L L G L S D G A     A M E R L A Q R I V A L S V R A T E E
UniRef90_Y5PDX3          V R E H R M S G H G R T L A L K D V N T M K I G K Q A I K E G W S V R Y L E K
UniRef90_B7V799          S H G D L E M G H A R A L L G L P A E R Q V E G A R H V V A H G L T V R Q T E A
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UniRef90_UPI00036400D5   T A G H A R A L L N A D D P A T         L A T Q V V K K G L N V R Q T E A
UniRef90_UPI00046F07FD   S A G H A R A L L S H P N P V         A A A A E V I S R G L S V R Q T E A
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UniRef90_W9ABG0          Q K Q L E M   G H A R A L L D D Q Q Q L A T A Q I I I N K L T V R E A E K
UniRef90_D4J4Y7          E M I S S G H G R A L L A I T D P E Q Y T L A M K I F D N K L S V R E T E R
UniRef90_B6GDN3          E G K L T A G H A R A I L A V P E E A R I K L A E K V V A E G L S V R A T E N
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UniRef90_B0K5M8          T I G H A K V I L S L P N K N L
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UniRef90_A3K2X5      L V K S G
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UniRef90_D0L9C5      A V
UniRef90_G2IS22      L V K R E G R S P R E E T
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UniRef90_I3TR69      L A R
UniRef90_U3GWU9      L I N R G D E P A K K A K R
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UniRef90_H2GZH3      L L N R G E K P A P K K
UniRef90_F8I2Z9      W A K R P E V P P P P T
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UniRef90_A0A013XTS0  L V R R M K T
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UniRef90_UPI000317E086  L V S R Q L R
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UniRef90_A0LWW6      L V A L G D A T P R S R T R R V A S P I A P A V S E L A H R L
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UniRef90_B3Q8A4      L A H E E G V P E R K
UniRef90_A5E8H1      L A H D E G V P E R K
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UniRef90_G7Q6W1      A A G Q A K
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UniRef90_K2AEA6      L V R K S A V S P A K
UniRef90_UPI000225C163  L A K Q K K M
UniRef90_R6QZ87      L V K Q
UniRef90_R6MZH6      L A K K A
UniRef90_G6YHS5      L A M P A G P T P P K A
UniRef90_H1D0A0      I I R Q G
UniRef90_Q2L2R6      I V K E G E A T S P K K
UniRef90_E3GR84      K V K   L L K N P P K
UniRef90_Q1GCL6      L V K K
UniRef90_H3RMR0      A V A Q M L G K P
UniRef90_UPI0002F4015D  H A
UniRef90_L0GT78      L V R R L Q L A A
UniRef90_Q1MZ49      L V S K
UniRef90_D5EUW2      M V K N G D T L
UniRef90_E8SHT3      R V A E
UniRef90_U7V761      L V A A A S G A E D K K Q R   K E P R P Q K H R E R L D
UniRef90_L8DAM5      L V R K M L E P A P
UniRef90_R7CH60      L V K R   M L E P P K T
UniRef90_UPI00035FB3AD  L A Q E L N V A K A E A
UniRef90_K7QWM3      L K E R L K E K A P K
UniRef90_E3C661      I V A Q
UniRef90_D5BUE5      L V K R
UniRef90_K7A0B8      L V R R L L E P A K E K T P V K E D P D V Q R L Q T K L S E
UniRef90_D4JZH0      L C K K
UniRef90_K4LQE3      L L K E G
UniRef90_E8N945      A A K M P G V S P A R
UniRef90_UPI000255BAD8  L V R Q A Q A G K P K P K K A P V D P N I R R L S E K L A E
UniRef90_K0CGN8      L V R E F E K Q K P
UniRef90_G8MB13      L V A A T T K E A P A T
UniRef90_R7NLN7      I
UniRef90_C5C6N1      I V A L G E D E P
UniRef90_Y5PDX3      V V K K E K L N T P S K P K F I
UniRef90_B7V799      L V R Q W T H A P G K
UniRef90_R6CFA2
UniRef90_UPI000418CB24  L V
UniRef90_V8QTX3      L V N Q A
UniRef90_UPI00036400D5  L A E K G G V K A R K V
UniRef90_UPI00046F07FD  L V Q K A L
UniRef90_F9N5I3      L Q S G K K R L T P K A T
UniRef90_R5W3Z8      S V R
UniRef90_W9ABG0      L V K T L L N P P A
UniRef90_D4J4Y7      L I K N
UniRef90_B6GDN3      L A S V G E T   P R A P R P V T P
UniRef90_D7GRR5      L V K M M N R   P P K
UniRef90_B0K5M8
UniRef90_A8DJK8      L V R R T L R G E P
UniRef90_K2KM18      L V Q R A K
UniRef90_UPI0003B570ED  L V K T F R S K P K E K T K N D F S A Y Q L Q Y D
UniRef90_UPI0004220300  L V   R A T L E P K K A
UniRef90_R6WVL9      K V H K
UniRef90_H5SEN9      T A R K
UniRef90_UPI000372ABB1  A V A L S D G L K R Q S T R R K A P
UniRef90_K1LJY0      K V
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Multiple sequence alignment (residue positions 1–40).

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                          1        10        20        30        40
UniRef90_C0ZA59          V K E V S I N E I I R P N P Y Q P R K E F E Q S A I E E L A Q S I K E H G I I
UniRef90_U1Y1Q0          I R N I P V T R I V P N P Y Q P R T V F D D D K I D E L C E T I K V H G V I
UniRef90_UPI000470B90F       L P V E A L V A G P F Q P R Q D M E P A A L E E L A A S I R E R G V I
UniRef90_G7QPG8          L R E I K I S E I R P N P G Q P R K T F S E E S L K E L S E T I K A H G V I
UniRef90_R6T7U6          V L R I P V D M I E P N P F Q P R M S F D Q E A L E E L A L S I R T F G L I
UniRef90_R7MEM0          I K N I R L D E L R S N P Y Q P R K V F D P E G L N E L A S S I K E Y G V F
UniRef90_UPI00037CEC57   I I E L E L D F I E V N P F Q P R T S F N E E E L E G L A S S I Q E L G V I
UniRef90_A0A011VWW9      I T M V K V T L L E P N K D Q P R V I F D D D K L S E L A D S I K E N G V L
UniRef90_M2XW01            E V P V G S I H P N R K Q P R Q V F D E D E L A E L A Y S I G E L G V L
UniRef90_F9P9F1          Y Q Y I T L N D I Q T N P Y Q P R K E F S E E K I A E L A N S I K E H G I I
UniRef90_C1A3J2          L R Q L S L S Q I R A N P F Q P R Q E F R P E E L A D L E G S L R V N G L L
UniRef90_T1ZH06          Y Q Y I T L N D I Q T N P Y Q P R K E F S E D K I T E L A N S I K E H G I I
UniRef90_S0EVB2          V R E I D I S E V L P N P Y Q P R T L F D P V A L E E L V Q S I R E H G V L
UniRef90_A6W3T6            Y L P V E W L S K G K F Q P R R D M N P A Q L E D L A S S I R T Q G I M
UniRef90_UPI0003B2E43F   L V E L N V Q D I G P N L Y Q P R T V F D T D E L E E L A A S I K E V G V L
UniRef90_Q5KU60          V R H P V K S I I P N R F Q P R T M F D E E K I D E L A L T I R T H G I I
UniRef90_X0RRB7          V K Q I A I A D I V P N R F Q P R T V F D Q D R I E E L A Q T I R T H G V I
UniRef90_Q0ADD9          L Q N L A V D L L Q A G K Y Q P R T R M D E A S L H D L A E S V K A Q G V M
UniRef90_R2PJC7          V V E I P L S E I R P N P Y Q P R K T F E E A S L Q E L A S S I S H S G V F
UniRef90_R6GU17          V V D I N I D E I R S N P Y Q P R T H F D E E S L S E L A A S I K E H G L L
UniRef90_X8K2P1          V K Y I N I N D I K P N H G Q P R K T F D P E K I S E L A R S I E E H G I I
UniRef90_UPI0003F5E024     E L P V G D I H P N R K Q P R T V F D E D D M A E L V H S V R E I G V L
UniRef90_M4REY7            E L R L D D I G P N R E Q P R T I F D E D E L R E L A E S I R E V G V L
UniRef90_R5YY02             V N I N D I E P N R E Q P R K N F D K D A L E E L A E S I K I H G L L
UniRef90_B5ER50          R E V P L D V L Q R G R Y Q P R G L I S A E S L E E L T A S I R S Q G V V
UniRef90_I4M3A9          L E Y L D P S D I V P N A H Q P R T I F D E E E L Q E L S A S I K E V G V L
UniRef90_UPI00036F9BFC   L R Q I P V E Q I R R G K Y Q P R L H I R P E A L E E L A A S I R A Q G V V
UniRef90_UPI0003760BDA   I S T S K V S I K D I N R N K F Q P R K Y F D K D S L E E L T N S I K Q Q G V I
UniRef90_I0R1N5          Q L N L D Q I T P N P Q Q P R T V F E A E A F A E L V H S I R E F G V L
UniRef90_G2KU08          V Q T L K L E N L I P N P Y Q P R K K F D K R A L N D L T E S I K V S G V F
UniRef90_UPI000463641E   L S L D S I R A N P E Q P R R A F A D E A L A E L A D S I R V Q G V L
UniRef90_Q49UL4          I Q K I A M T V K A N P Y Q P R K T F D E E R L N D L A K S I K L H G I L
UniRef90_F8I0L1          I E N L N V N F I I A N P F Q P R H S F D E N A L R E L A N S I K E N G I L
UniRef90_Q2Y5B7          L Q S I K V S L L Q P G K Y Q P R T R M D K E S L G E L A D S I K A Q G V M
UniRef90_K7T7X4        P V Q Q L P I D V L E P S P F Q P R Q D M N P E R L E E L A N S I R S R G V L
UniRef90_N8ZRS9          L K Q V D V A T L R P G Y Q P R R F I N E Q D L Q E L A A S I K K H G V M
UniRef90_D4IP26          E I E I A D I I P N P T Q P R T Q F D E E A L D E L A D S I R Q L G V I
UniRef90_A0A010YBZ6      I N E I S I D Q I E A N P N Q P R R F D E E A L Q E L A N S I R E I G I I
UniRef90_UPI00037361F3   V V M I P V A Q I I P N R F Q P R Q R F D P T A I S E L A Q T I E E H G L L
UniRef90_F6CF12          I Q D L E L D K I V P N P Y Q P R R E F S D N S I K E L A K T L D Q D G L L
UniRef90_I4VNC8          L R N L P I Q Q I Q P G K Y Q P R R H W N E D A L D E L A A S I K A Q G L I
UniRef90_K2E020          Y I P T S K I V S S I N Q P R K T F S K E A L D E L A A S I K E H G I L
UniRef90_J9DG45          V E A L V P G K F Q P R R E F D K D A L K D L A N S I R E K G I L
UniRef90_H1HU48          L R I E E V H G N P D Q P R K H F E P E A L Q E L T D S V R H F G I L
UniRef90_R5V3Z7          I V E I P V S F L T P N R F Q P R M K F D D E K L K E L A D S I K K H G V L
UniRef90_R6PV20          Q L V N I N K V E P N H E Q P R R H F E E D S L L E L A D S I K Q F G V L
UniRef90_G3IWU3          L Q T L P I E Y M Q R G K Y Q P R K D M N P E K L Q E L A D S I K V Q G I I
UniRef90_Q2RFJ2          I T R I A I D R I V A G K H Q P R K D F D N A K L E E L A Q S I K V H G V I
UniRef90_G4SWW1          L Q K L P I E W L Q P G K Y Q P R K D I D P E R I K E L A D S I K A Q G I I
UniRef90_UPI000366D389   E K V P I H F I Y P N A S Q P R K N F N Q D L L N E L S E S I K E Q G I I
UniRef90_Q040U3          I T E I P L D E I R P N P Y Q P R K T F D N K S L K E L S E S I K E N G V F
UniRef90_UPI0003B53085   V R L I P V S S I A P H P D Q P R R H F D E A A L D E L A A S I A Q R G V I
UniRef90_E6MIL5          E V A I D K I R P S K G Q P R K Q F D K Q A L E E L S V S I R E H G I I
UniRef90_J9G3E5          I N E V S I G L I R A N P N Q P R R D F D P V A L D E L A E S I R Q I G I I
UniRef90_A1ALJ5          P I E M I R P N K S Q P R K S F A A D K L E E L A D S I R E Q G I I
UniRef90_UPI00037B1482   L A V D K L Q P G K Y Q P R T R M D A G S L E E L A A S I R A Q G V M
UniRef90_A6EPG0          I V E L E L T S I E M N P F Q P R T S F N E E A L R E L A A S I K E L G V I
UniRef90_A8FJF4          V E E I K I K D L R P N P Y Q P R K T F D E D A L S D L K E S I Q Q H G V L
UniRef90_X1G8J2          D L E I E Q I K P N P L Q P R L K F D K K S I D E L A R S I K E S G V L
UniRef90_W0EUP3          I H E I E L S K I V P N P D Q P R R E F D Q E A L E E L A A S I H E L G I I
UniRef90_S2WUH1          I D V D L V V P N P K Q P R E I F D E F E L A E L S E S I K E I G V L
UniRef90_Q2S6N2          L K E L P V I Q R G Q Y Q P R R D M D P E S L E E L A Q S I R Q Q G V M
UniRef90_K2NQU8          R S V P I E F I S P N P R N R Q F A E A E L G D L A Q S I R E H G I V
UniRef90_UPI00034C1F67   L V E I D V A S I R P N P R Q P R Q H F D E E A L E E L R A S I A E V G L L
UniRef90_D7UV41          V Q N I E L K L L I P N P F Q P R K N F D K A A I N E L S D S I K I H G V L
UniRef90_R5R528          Y K Q I D I E K I S A N E N Q P R T V F D D E K I E E L A N S I K E N G L L
UniRef90_UPI00036CAFB5   I S I S L I E R N P N Q P R Q Y F D P V K M V E L E R S V K E K G V L
UniRef90_R5VIQ7          L K I N D V E P N K N Q P R R T F N E D S L I E L S E S I K Q H G I V
UniRef90_UPI00037F555C   M L D M T E I R R N P Y Q P R T E F D P E R L R E L A D S I S E H G I I
UniRef90_Q1PZX9          I I Q L N P N D I K P N S M Q P R N L F K E A E M H D L M A S I K K H G I I
UniRef90_S1N2S2          V L E L G L N E L R P N P Q P R K T F D E H S L K E L A N S I E R S G V F
UniRef90_UPI00041A01D7   I H N I P I D E V V P N R Y Q P R T V F D D S K I S E L A Q T I R T H G I I
UniRef90_L1QPK6          V E L I N I N L I K S T D N Q P R K Y F D D E K I M E L A E S I K H N G I I
UniRef90_R5HVG5          V T M I S P D Y I S P N P D Q P R R Y F D P D G L T E L A E S I R V H G I I
UniRef90_U5N0M7          I P I N K I K G D K D Q P R K T F D S E K I A E L T E S I K A H G I I
UniRef90_X0PDY5          V L E L P L D Q L R P N P Y Q P R Q E F E A Q A L S E L S A S I A Q D G V F
UniRef90_A4CPZ8          I V E L D I R S I E V P F Q P R S N F N D E A L D E L A S S I K E L G V I
UniRef90_C6XFX5          I S I H S I V P N P H P R N Y F E S E G L E D L C Q S I K S H G I I
UniRef90_UPI00037C1A75   I I E L S F I D V N P R T S F D E S I E E L A S S I K E N G L I
UniRef90_R5QEJ8          L K N I D I N K I Q A N E N Q P R T V F N E E K I R E L A S S I K E N G L L
UniRef90_B3EN06          L P V E K V R V N P F Q P R K D F D E N A L E E L K N S I L E N G V I
UniRef90_V6S795          I I E L P V E K V I P N P F Q P R T N F N E E S L Q E L A D S I R E L G V I
UniRef90_E3I9J4          I K E V D I H Q L H P N P Y Q P R K T F H P E A I E E L A K Q S I L Q H G V I
UniRef90_UPI0003643085   I E N L P V D R L V S S P Y Q P R K T F T E E A L A G S I R E R G I L
UniRef90_UPI0003684818   I D E I V P N P L Q P R K H F N D Q Q L E E L N S I R E H G V I
UniRef90_UPI000362C719   V V D I P L N Q L R A N P Y Q P R K V F E E E A I K E L A E S I R Q H G V I
UniRef90_R7ETW4          I S E I P L N K L E P N P E Q P R T V F D Q E A L E L L G I I
UniRef90_R6NRY5          V L K V K L T Q V E P N R K Q P R K Q F D E D A L L E L A E S I K Q F G V L
UniRef90_N1ZRH6          V V E L K I D I R S N P Y Q P R K I F D E T G L L E L A E S I K Q Q G V F
UniRef90_E8UFE3          V I N I S L K K L Q A G K Y Q P R K I M D E E A N L E E L A A S I K D Q G V M
UniRef90_R1AQM4          I V S L D I S L L E P N P Y Q P R T F D E Q A I T K S I E A H G V I
UniRef90_B8I3R9          Q L R I N E L E P N I G Q P R K H F D D E K L V Q L A E S I K Q H G I I
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                                50              60              70              80
UniRef90_C0ZA59         Q P L I V R K S I K G     Y E L V A G E R R L R A A K L A G L K E V P V V V K
UniRef90_U1Y1Q0         Q P I V V R E R     G G A F E I I A G E R R W R A V T R L G M E K I P A L I K
UniRef90_UPI000470B90F  Q P I L V R P D P N K G Q Y Q I I A G E R R W R A A Q L A Q C H E V P V H V R
UniRef90_G7QPG8         Q P I V V K Q L D S G   Y E I I S G E R R Y R A C K L A G F I K I P A I V K
UniRef90_R6T7U6         Q P I T V R K K S D   N R Y Q I I S G E R R F K A C R M T G M T M V P A Y I R
UniRef90_R7MEM0         E P I I V K K S I K G     Y E I I A G E R R S L A K K A G L S E I P A I V R
UniRef90_UPI00037CEC57  Q P I T V R K I   G F N K F E L I S G E R R F R A S K L A G L K T I P A Y V R
UniRef90_A0A011VWW9     Q P I L A R P L E N G G   Y Q I I A G E R R W R A S R L A G L T E V P V Y I K
UniRef90_M2XW01         Q P I V V R P E P D G Q P Y E L V M G E R R W R A T Q R A G L D T V P A I V R
UniRef90_F9P9F1         Q P I I V R K S P I I G   Y E L L A G E R R F R A A K L A G L T N I P A I I K
UniRef90_C1A3J2         Q P I T V R P A P N G Q G F E L I A G E R R F R A A T R L G W T R L P A L V R
UniRef90_T1ZH06         Q P I I V R K S P I I G   Y E L L A G E R R F R A A K L A G L T N I P A L I K
UniRef90_S0EVB2         Q P I L V R E T E   S G K F E V V A G E R R L R A A Q R A G L T R I P A M V R
UniRef90_A6W3T6         Q P I V V R P   S G H N Q Y E I I A G E R R W R A A K L A D L K Q V P V I V R
UniRef90_UPI0003B2E43F  Q P I V V R E R P A D Q K Y E L V M G E R R W R A S Q L A G F T M I P A I V K
UniRef90_Q5KU60         Q P I V V R E C G N G R F E I I A G E R R W R A V Q K L G W T E I P A I I K
UniRef90_X0RRB7         Q P I V V R K R   D G K Y E I I A G E R R W R A V T S L G W E H I P A I V K
UniRef90_Q0ADD9         Q P I L V R P L V A G G   Y E I I A G E R R W R A A R I A G L E Q I P A I V R
UniRef90_R2PJC7         Q P I I V R K S A V K G   Y E I I A G E R R F R A S K L A G K E T I P A I I R
UniRef90_R6GU17         E P I I V K K S I K G     Y E L V A G E R R T K A S K L A G L T T I P A I V K
UniRef90_X8K2P1         Q P L V V T K A E V G     Y E I V A G E R R W R A A R E A D L K K V P C L V R
UniRef90_UPI0003F5E024  Q P I V V R K S A E N G A Y E L V M G E R R W R A T Q A A G L T T I P V I V R
UniRef90_M4REY7         Q P I V V R K R P Q S R P Y E L I M G E R R W R A S Q L A G L E T I P A I V K
UniRef90_R5YY02         Q P I I V Q K K   E D Y Y E I I A G E R R W R A A K I A G L K E L P V V I K
UniRef90_B5ER50         Q P I V I R A I   G G G R Y E I I V A G E R R W R A A Q L A G L S H I P A V V R
UniRef90_I4M3A9         Q P I V V R K I K D N A H Y E L I M G E R R W R A T Q L A G L K K I P A I V R
UniRef90_UPI00036F9BFC  Q P V V V R P M   G Q G Y E L I A G E R R W R A A Q L A G L H E V P A V V R
UniRef90_UPI0003760BDA  Q P I V V R P K S T E G K Y E I I A G E R R W L A S Q N A G L H E I P V V I L
UniRef90_I0R1N5         Q P I V V R P L   G A G Y E L I M G E R R L R A S K E A G L V S I P A V V R
UniRef90_G2KU08         Q P I I V R Q P N K K E N K F E I L A G E R R F R A S K A A G K E T I P A I V R
UniRef90_UPI000463641E  Q P V L V R P V S G P G Q H E I I V A G E R R W R A A R L A G L T E I P A L V R
UniRef90_Q49UL4         Q P I V L R K T I S G   Y H I V V G E R R F R A A T I A G L T E I P A I V K
UniRef90_F8I0L1         Q P I I V R A K E S K D K Y E I I A G E R R W R A T Q L A G N E T I P A V V R
UniRef90_Q2Y5B7         Q P V L V R P V   G G G K Y E I I A G E R R W R A S Q L A G L G E V P A L I R
UniRef90_K7T7X4         Q P L L V R P D P A N E R Y Q I I A G E R R W R A S Q L A G L H S V P V H V R
UniRef90_N8ZRS9         Q P I I V R P V E N E Q D Y E I I A G E R R W R A A Q L A G L T E I P A I V R
UniRef90_D4IP26         Q P V T V   K K G D G G K Y V I I S G E R R W R A A Q R A D L K T L P A Y I R
UniRef90_A0A010YBZ6     Q P I T L R Q V A   E N R F Q I I A G E R R W R A S Q I T G L K S I P A Y I R
UniRef90_UPI00037361F3  Q P I V L R Q Y E   T D H Y E I I A G E R R F R A V N S L K W T E V P A I V E
UniRef90_F6CF12         Q P I V V R   E D G D Q Y E I I A G E R R Y R A A K S L G W D T I P A I V K
UniRef90_I4VNC8         Q P V V V R A I   G K D K F E L I A G E R R W R A A Q A Q M S E I P A L V K
UniRef90_K2E020         Q P I L V R K K   E D R Y E I I A G E R R Y R A A K M V G I E T I P C M V E
UniRef90_J9DG45         Q P I L V R S N P D E G A Y E I I V A G E R R W R A A Q I A Q L H D V P V I V R
UniRef90_H1HU48         Q P L L V Q R D E K L G G Y Q I I A G E R R Y R A A Q A A G L K E I P V L V R
UniRef90_R5V3Z7         T   P I I V R E I   G Q D Q Y E I V A G E R R T R A S I L A K K E T I P A I V A
UniRef90_R6PV20         Q P L I V Q K R   N D Y Y E I I A G E R R K M A G I K E I P V I I K
UniRef90_G3IWU3         Q P V V V R K I A P E   K Y E I V A G E R R W R A A Q L A G L Q Q V P V V I K
UniRef90_Q2RFJ2         Q P V V V K P   A G S G K Y E I I A G E R R W R A C R Q A G L K E I P A I I K
UniRef90_G4SWW1         Q P I V L R K I   G D E R Y E I V A G E R R W R A A Q L A G L K E V P V V V K
UniRef90_UPI000366D389  Q P I L V R K K S   E D K Y E I I A G E R R W R A A Q L A K V H E V P V I V L
UniRef90_Q040U3         Q P I I I R K S V     N G Y E I I A G E R R F R A S K L A K K E T I P A I I R
UniRef90_UPI0003B53085  Q P I I V R P H G Q D     F Q I V A G E R R W R A A Q R A R L H E V P V V V R
UniRef90_E6MIL5         Q P L V V   K P E D K G Y S I I A G E R R W R A S R I A G L K Q V P V I V R
UniRef90_J9G3E5         Q P I T L R Q M E D   G T Y Q I I A G E R R W R A S Q L A G L H T I P A Y V R
UniRef90_A1ALJ5         Q P L V V T K K   E N C Y E I V A G E R R W R A A Q K A G L R E V P V V I R
UniRef90_UPI00037B1482  Q P I I V R P V   G E N R H E I I A G E R R W R A A Q I A E L D E V P V I I I
UniRef90_A6EPG0         Q P I T V R K L S   F N K Y Q L V S G E R R F R A S K L I G L E T I P A Y I R
UniRef90_A8FJF4         Q P I I V R K S I K G   Y D I V A G E R R F R A A Q A G L T T I P A I V R
UniRef90_X1G8J2         Q P V I V V     P E G N Y Y R I V I G E R R W R A A Q K I G L R K I P S L I R
UniRef90_W0EUP3         Q P V S L R Q L A G G D   Y Q I I A G E R R Y R A A Q M A G L E T I P A Y V R
UniRef90_S2WUH1         Q P I V V R E I D G T T K F E L I M G E R R L R A S K L A G A E T I P A I V R
UniRef90_Q2S6N2         Q P I V V R E I S   P N R Y E I I A G E R R W R A T Q I A G K D K I P V I I R
UniRef90_K2NQU8         Q P V V V R S G E A P G R F E I I A G E R R W R A A Q R A G L T D I P V I L R
UniRef90_UPI00034C1F67  Q P V V V R K L   G A G Y E L I M G E R R W R A S K E A G L N R I P A I V R
UniRef90_D7UV41         Q P I I L R   N A K K G Y Q I V V G E R R F R A S K E A G L K E I P A V V R
UniRef90_R5R528         Q P I I V R K Y   N R G Y Q I V A G E R R Y R A S K L A G L K T V P C V I K
UniRef90_UPI00036CAFB5  Q P L L V R P S K G K T R Y Q I V A G E R R Y Q A A L K A G L D Q L P A M I R
UniRef90_R5VIQ7         Q P L V V A K Q K   D Y Y E I I A G E R R W R A A K I A G L K E V P V I I K
UniRef90_UPI00037F555C  Q P I I V R K S V K G   Y D I V A G E R R F R A S S L A E K E T I P A I I K
UniRef90_Q1PZX9         Q P I I V T P T A H G   Y M L I A G E R R W R A A K E L G M K K V P A I V R
UniRef90_S1N2S2         Q P I I V R R   S Q V K G Y E I I A G E R R F R A S K L A G K T T I P A I I R
UniRef90_UPI00041A01D7  Q P I V V R   M F E E G Q Y E I I A G E R R Y R A M Q M L G W E E V P V I I K
UniRef90_L1QPK6         Q P I I L K K   D N S E F V I V A G E R R W R A A K L A H I K E V P A I I M
UniRef90_R5HVG5         Q P L S V R R K   G G G R Y E I I A G E R R L R A A M I C G L E Q V P C L V L
UniRef90_U5N0M7         Q P L I L R K E T D E   Q Y I I A G E R R F R A A G L A V K D V P A I V M
UniRef90_X0PDY5         Q P I I V R P S I Q G   Y E I I A G E R R F R A S G L A Q Q K T I P A I V R
UniRef90_A4CPZ8         Q P I T V R K L   G F D K Y Q L V S G E R R Y R A S Q R I G L E S I P A Y I R
UniRef90_C6XFX5         Q P L I V R A I   D N G L Y K I I A G E R R F R A A K M A S L S E V P V I I R
UniRef90_UPI00037C1A75  Q P I T V R K L E G   N K F Q L V S G E R R F R A S K L I G N T T I P A Y I R
UniRef90_R5QEJ8         Q P I V V R K V N G I     Y Q I I A G E R R Y R A C C S L N M K Q I P C I I E
UniRef90_B3EN06         Q P V T V S R   D G D G Y Q L I S G E R R L R A V R K A G F K F I P G Y I I
UniRef90_V6S795         Q P I T V R K   D T F N K Y Q L I S G E R R L R A S K L I G L K T V P A Y I R
UniRef90_E3I9J4         Q P L I V R K S I K G   F E I V A G E R R Y R A A K E A N L E T V P V V V R
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UniRef90_UPI000362C719  Q P I I V R S V L K G   Y E L I A G E R R F R A S Q Y C G N T T I P A V V R
UniRef90_R7ETW4         Q P L S L R M L A G G G   Y Q I I A G E R R W R A A R Q A G L D T V P V V V R
UniRef90_R6NRY5         Q P L L V K Q K   G D Y Y E I I A G E R R W R A A K L A G L R K I P V I V K
UniRef90_N1ZRH6         Q P L I V R S S S V M G   Y E L I A G E R R Y R A S K L A G K K T I P A I V R
UniRef90_E8UFE3         I   P I L V R P L A K   D K Y E I I A G E R R F R A A S M A G L T E I P A I I K
UniRef90_R1AQM4         Q P I I V R K K   G K G Y Q I I A G E R R W R A A K L A G L T N V P C L V R
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                                                  90              100             110             120
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UniRef90_UPI000470B90F  D L S E D A M A A A L V E N L Q R A D L N P V E E A E G F N R L M D D Y S
UniRef90_G7QPG8         N V S E N Q M E M A I I E N I Q R E D L N P I E E A I A Y K T L S E K
UniRef90_R6T7U6         D A N D Q M L E M A I V E N I Q R E N L D P I E V A M S Y Q R L I D E C S L T Q
UniRef90_R7MEM0         D L D D E M M S I A L L E N I Q R E D L N A I E E A L A Y K     K M I E
UniRef90_UPI00037CEC57  I A D D E S L T M A L V E N I Q R Q D L D P I E I A L S Y Q R L     I E
UniRef90_A0A011VWW9     E L D D R Q M Q M A L I E N I Q R A D L S P I E A K A Y K N L M D S Y R
UniRef90_M2XW01         D T D D D L L R D A L L E N L H R S Q L N P L E E A A A Y Q Q L L E
UniRef90_F9P9F1         E V D D E M M K Q A L I E N L Q R E D L N P I E E A Q S Y Q Y L I D
UniRef90_C1A3J2         N V D D K T L T L A M I E N L Q R A D L D P I E E A D G Y Q R L I D
UniRef90_T1ZH06         E L T D D E M I T A I I E N L Q R E D L N P I E E A Q S Y Q Y L I D
UniRef90_S0EVB2         S C S D E M L E V A I V E N L Q R E D I T P I E A A K A Y L R M M R
UniRef90_A6W3T6         H V E D D A V V L A L I E N I Q R E D L N P V E E A L A L Q R L     V E
UniRef90_UPI0003B2E43F  T T A D D M L R D A L L E N L H R V A L N P L E E A A A Y Q Q     M I D
UniRef90_Q5KU60         N L N D E T A S V A L I E N L Q R E E L T P I E E A M A Y A K L I E L H D
UniRef90_X0RRB7         E F N D S Q T A I A L I E N L Q R E G L T A I E E A I A Y A K L I D L H
UniRef90_Q0ADD9         E V P D E A L A L S L I E N I Q R E D L N P L E E A T G I Q R L     I E
UniRef90_R2PJC7         E F D E E A M Q I A V L E N L Q R E D L T P L E E A E A Y E M L M K N L Q
UniRef90_R6GU17         D F D D K Q M E L A L I E N L Q R E D L S A I E E A K A Y K K F M D N M
UniRef90_X8K2P1         T L T D E E M L L A I I E N M Q R E D L N P I E E A E G     L E K M I K
UniRef90_UPI0003F5E024  E T N D D N L R D A L L E N L H R S Q L N P L E E A A A Y Q Q L L E D F G T T H
UniRef90_M4REY7         T T S D E M L R D A L L E N L H R V A L N P L E E A A A Y Q Q     M I D
UniRef90_R5YY02         E Y T P Q E M E I A L I E N I Q R K D L N P I E E A I A Y K S L     V N
UniRef90_B5ER50         E C S D E Q L A I G I I E N I Q R Q A L N P L E E A Q A L Q R L L D
UniRef90_I4M3A9         T T S D E N M R D A L L E N L H R V A L N P L E E A A A Y A Q     M I D
UniRef90_UPI00036F9BFC  D I P D Q A A A M S L I E N I Q R E N L N P I E E A G A L H R L     I Q
UniRef90_UPI0003760BDA  D I D D K S L E F A I V E N V Q R A D L N P I E E A S G Y Q R L     I N E
UniRef90_I0R1N5         E T A D E N M R D A L L E N I H R A N L N P L E E A S A Y K Q     M L E
UniRef90_G2KU08         D A T D E Q M E I A V M E N L Q R E D L N P L E E A K A Y E M L M T H L D I
UniRef90_UPI000463641E  D V D D E T F A L A L V E N L Q R E D L N P M E E A A G Y Q L L Q         S
UniRef90_Q49UL4         S L T D E D M E L A I L E N L Q R E D L N A I E E A E S Y R K L M D
UniRef90_F8I0L1         A Y D D T M M Q A A V L E N L Q R E N L S P I E E A L A Y K Q M M D V L H
UniRef90_Q2Y5B7         E V P D E A L A M S L I E N I Q R E N L N P L E E A L G I Q R L I R
UniRef90_K7T7X4         Q L D D D A M A A L V E N L Q R A D L N P I E E A E G L Q R L I N D Y T
UniRef90_N8ZRS9         D L S D Q A I A L A L I E N I Q R Q D L N P I D Q A L A L Q R F H E
UniRef90_D4IP26         E V D D E N L A M A L V E N I Q R Q D L N A I E I A L G M Q R L I D
UniRef90_A0A010YBZ6     T A K D E S M E M A L V E N I Q R E D L N P V E I A L A Y E H L L E D S S M T Q
UniRef90_UPI00037361F3  E M S D D E T A M A L I E N L Q R E G L S A I E E A H A Y Q Q L M T L N H
UniRef90_F6CF12         N M D D D Q A A L A L I E N L Q R E D L N P I D E A K A Y T N L M K L N D
UniRef90_I4VNC8         E V A E A A V A M A L I E N I Q R Q D L T P L E E A D A L K R L V E D F D L T H
UniRef90_K2E020         D I S D E V A S V A L I E N I Q R K D L N I I E E A D A F N R L I E L Y
UniRef90_J9DG45         E M T D E A L Q I G I I E N V Q R S D L N P I E E A E A F Q R L I D
UniRef90_H1HU48         D Y S S Q Q V E I S I I E N V Q R A D L N P I E E A M A Y Q M L I R D Y
UniRef90_R5V3Z7         D F N D Q Q M E L S L I E N I Q R E N L N G I E E A R S Y Q A     M K E
UniRef90_R6PV20         E Y T R E A V E I A L I E N I Q R E N L N P I E E A M A F K R L L T
UniRef90_G3IWU3         E I D D R A M A I A L I E N I Q R E D L N P L E E A E A L R R L L D
UniRef90_Q2RFJ2         T L D D D R A A E I S L I E N L Q R E D L N P L E E A E A Y E A L I T
UniRef90_G4SWW1         D I D D K A M A L A L I E N I Q R E D L N P L E E A D A L R R L L E
UniRef90_UPI000366D389  D V D D K S L E F A I L E N I Q R T D L N G I E E A L G Y D N L V K
UniRef90_Q040U3         K F D E A Q M E V A V L E N L Q R E D L T P L E E A Q A Y E M L Q K N
UniRef90_UPI0003B53085  D Y S D E T L Q I A L L E N I Q R Q D L N A I E E A R A Y Q R L L D
UniRef90_E6MIL5         D L A R D V I E L A L I E N V Q R E D L N P I E E A M A Y E H L T K A Y H
UniRef90_J9G3E5         T A T D E N M Q M A L V E N I Q R E D L N A I E I A L A Y Q N L I E R Y Q
UniRef90_A1ALJ5         E A S E N A L E L A L I E N I Q R Q D L N A I E E A Q A Y R S L     V E
UniRef90_UPI00037B1482  E I P D E A L A M S L I E N I Q R E N L N P L E E A L G I Q R L I D
UniRef90_A6EPG0         I A N D E S L E M A L V E N I Q R E D L D P I E I A L S Y Q R L I D
UniRef90_A8FJF4         E F S E T L M E I A L L E N I Q R E D L S P L E A E A Y A S L L D H L S
UniRef90_X1G8J2         S M P K Q Q L E I S L V E N L Q R E D L N P L E I A L A Y Q K L     T Q
UniRef90_W0EUP3         T A E D E T M E M A L I E N I Q R E D L N A I E I A L A F Q K L I E L Y Q L T Q S
UniRef90_S2WUH1         N T D D E L L R E A L V E N L H R T Q L N P I E E A N A Y A Q L M         S
UniRef90_Q2S6N2         D V P D E A I A M A L I E N I Q R E N L N P I E E A M A L Q R L Q D
UniRef90_K2NQU8         E V D D K A L E L A I I E N V Q R A D L N P L E E A R G Y Q Q L I D
UniRef90_UPI00034C1F67  E T D D D L L R D A L L E N L H R Q Q L N P L E E A A A Y Q Q L L D
UniRef90_D7UV41         D M T D E M M E L S V I E N L Q R E D L S P M E E A E S Y Q F L M S N L E
UniRef90_R5R528         D I D D K Q V T L A I I E N I Q R E N L S P I E E A N A Y K T L I D T Y D
UniRef90_UPI00036CAFB5  E L S D E V L E I G V V E N V Q R A N L N P I E E A S A Y R N L M D
UniRef90_R5VIQ7         D Y S P Q E M E V A L I E N I Q R E D L N P I E E A K A Y K N L I D
UniRef90_UPI00037F555C  E L S D R Q M E F A I I E N I Q R E N L N P L E E A G S Y R E L M D
UniRef90_Q1PZX9         K T D D E S L E I A L I E N I Q R E D L N P I E K A L G F R E L V K K
UniRef90_S1N2S2         E F D E E M M Q I A V L E N I Q R E D L N P I E E A E A Y D M L M K N L D
UniRef90_UPI00041A01D7  D F N D E T A S V A L I E N L Q R E E L S P I E E A M A Y A R L L E L H E
UniRef90_L1QPK6         D L T D K Q L E V S L I E N I Q R E D L N S I E E A V A Y K K L         I E
UniRef90_R5HVG5         E V S R E S S L L S L I E N L Q R R D L D F W E E A K A L E R L         I S N
UniRef90_U5N0M7         E L S R D I L E I S L I E N I Q R Q D L N P I E E A L A Y K N L         I N
UniRef90_X0PDY5         Q I S D A Q M E T A V L E N L Q R E D L N P L E E A Q A Y E T L I K
UniRef90_A4CPZ8         I A N D E T L E M A L V E N I Q R Q D L D P V E I A L S Y Q R L I D
UniRef90_C6XFX5         N V D N K S L E I A I V E N V Q R K D L N P L E E A L G Y E Q L         I S
UniRef90_UPI00037C1A75  L A N D E M L E M A L V E N I Q R K N L D P I E I A L S Y Q R L I D
UniRef90_R5QEJ8         D Y D D K Q T Q L A I I E N I Q R E D L S P L E E A K A Y Q A L I K
UniRef90_B3EN06         E A G E D A L E M A L I E N I Q R E D L N A I E I A I A L K S L V T T C
UniRef90_V6S795         L A N D D S L V M A L V E N I Q R H D L D P I E I A L S Y Q R L I D E I Q L T Q
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UniRef90_UPI0003643085  P A S D E M L E L A L V E N L Q R S D L P I E E A R G Y A L L Q E
UniRef90_UPI0003684818  E T T D E S L E L A L I E N L N R Q D L P I E E A D G Y A R L A K
UniRef90_UPI000362C719  S F S D Q Q M E L A L I E N L Q R E N L N A M E I A V A Y Q G L M E
UniRef90_R7ETW4         K A S D A E I M A L I E N L N S I E V A L A L R K L I D T Y A
UniRef90_R6NRY5         E L T E E T V E I S L I E N L Q R E D L N P I E E A A A Y R R L L D
UniRef90_N1ZRH6         Q L D E E M M E I A V L E N L Q R E D L T P I E E A Q A Y N T L M E N L H
UniRef90_E8UFE3         D V N D E Q A S I A L I E N M Q R E D L K P I E E A K G I R K L I D
UniRef90_R1AQM4         E L E Q S K S T E I A L I E N L Q R E D L A Y N G L M D K Y D
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                                        130             140           150           160
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UniRef90_UPI000470B90F     L T Q E E D L A K A I G K S R P H V   A N T L R L L K L P A G V L G A   L
UniRef90_G7QPG8        L N L K I T D I S A R V G K N R S T I S N   L I R L L Q L P D V V Q D L I K
UniRef90_R6T7U6      E Q M       A D R V G K K R A S V T N Y   L R L L K L P A K V Q       H D L
UniRef90_R7MEM0    H M G L T Q E E L A K K V G K S R S H I T N G I L K L P K D V Q N M V L E N K I
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UniRef90_M2XW01      E F G A T Q E E L S R R I G R S R P Q I S N R L M R L P P L V Q R R V A A G V L
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UniRef90_T1ZH06        K G L T H K E I A L T I G K S R P Y I T N S L L N L P S N I I E A V K E G N I
UniRef90_S0EVB2      E F G L T Q E Q V A Q R V G K T R   T A I A N A L R L L Q L P E E V Q E S I
UniRef90_A6W3T6      D F H L T Q Q E V A D T V G K S R S T V   A N L L R L L G L T P E V   R R L L E
UniRef90_UPI0003B2E43F  E F G L T Q M Q L A K S V S K S R P Q I A N R L M N L P A S V Q K D V I A G K L
UniRef90_Q5KU60        L T Q E A L A Q R L G K G Q S   T I A N K L R L L K L P Q E V Q E A L L Q
UniRef90_X0RRB7        G L T Q E S L A Q R L G K G Q S T I A N K L L H L P E V V Q N A I L S R V I
UniRef90_Q0ADD9      E F G M T H Q T A G Q A L G Y S R S A I S N L L R L L N L A A P   V Q D L I M
UniRef90_R2PJC7        L T Q A Q V A E R L G K S R P Y I A N R L L T L P K L V K E M V Q D E R L
UniRef90_R6GU17        G Y T Q E M L A N R F N K S R T Y I T N L L G L L K L P S L   V Q D M V I
UniRef90_X8K2P1      V Y G F T Q D K V S K S V S K S R P Y I T N   A L R L L N L P E S V R K E V
UniRef90_UPI0003F5E024  E Q       L A D R I G R S R P Q V S N R L L K L P A A V Q R R V A A G V L
UniRef90_M4REY7      E F G L T Q A Q L S K S V S K S R P Q I A N R L M N L P A S V Q K K V A A G V L
UniRef90_R5YY02      E Y N L K Q D E L A K K M S K S A   A I A N S M R L L K L A E D V Q E M I
UniRef90_B5ER50      E F G L S H E A L A E S L G R S R A   A I S N Q L R L L R L C P D L     H P H V
UniRef90_I4M3A9      D F G L T Q I I Q L S K S V S K S R P Q I   A N T L R L L N L P A S V Q K H I
UniRef90_UPI00036F9BFC  E F E M T H Q Q A A E A V G R S R T G V T N   L L R L L E L G E A A R T L L D
UniRef90_UPI0003760BDA  D F S Y N Q E K V S Q F I G K S R S Y I   A N S L R L L S L P E E V L S Q G D L
UniRef90_I0R1N5      D F G T T Q D Q L A D K L G R S R P Q I T N   T L R L L K L P M D V Q D K V
UniRef90_G2KU08        T Q V E V S R R L G K S R P Y I   A N Y L R L L N L P A E V   K E M L Q
UniRef90_UPI000463641E  R F G L S Q D A L A K K V G K S R S   A V A N A L R L N A L D E P V R Q     D L
UniRef90_Q49UL4      D L N L T Q Q D V A Q R L S K S R P Y I A N M   L R L L N L P Q T V S N   M V R
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UniRef90_UPI0003B2E43F   I V E S D Q P K K P K A N R H
UniRef90_Q5KU60          L L E A G E R K P
UniRef90_X0RRB7          L L E T D E S E P K K A T R K S Y S K
UniRef90_Q0ADD9          L L K R
UniRef90_R2PJC7          L V E K K D V K K P V P T P K E K P Y Y L
UniRef90_R6GU17          I S R E E E I P K R K Q I K H   E E K D L K L K I
UniRef90_X8K2P1          L A S T E K Q K R N K A L K R V K P K E I L S V E N E L K D I Y
UniRef90_UPI0003F5E024   A V
UniRef90_M4REY7          I V
UniRef90_R5YY02          L V K N     I L K P K Q I R M E I P
UniRef90_B5ER50          L V A E G R I K A P K A
UniRef90_I4M3A9          I V
UniRef90_UPI00036F9BFC   L V Q Q
UniRef90_UPI0003760BDA   L V R Q
UniRef90_I0R1N5          I V S G A K V K P G K A T
UniRef90_G2KU08          L I A A L N P K E D K K K K S N S F R K S P Y L K E S E D R L
UniRef90_UPI000463641E   A A
UniRef90_Q49UL4          Y V
UniRef90_F8I0L1          L V N E
UniRef90_Q2Y5B7          L V Y Q I E
UniRef90_K7T7X4          L A E K S E K K P A S K S R
UniRef90_N8ZRS9          L V R E
UniRef90_D4IP26          L V R S L S E A P G K
UniRef90_A0A010YBZ6      M V K N G E T L
UniRef90_UPI00037361F3   L I A K Q K Q P K R K V T K Q S V S G
UniRef90_F6CF12          I A
UniRef90_I4VNC8          A A R R A Q T A P K G K A K S V     S R D P N I D A L E R E L
UniRef90_K2E020          L V K K
UniRef90_J9DG45          L V
UniRef90_H1HU48          L V K Q A
UniRef90_R5V3Z7          I L L S       Y K P K V V T H
UniRef90_R6PV20          L I
UniRef90_G3IWU3          L V K Q A E H K T P K T
UniRef90_Q2RFJ2          I I K K
UniRef90_G4SWW1          L I R D L Q T E P L K
UniRef90_UPI000366D389   F V K K E Q A F
UniRef90_Q040U3          L V
UniRef90_UPI0003B53085   L A S Q D K H G S S   A A R A P S P S R P A S V
UniRef90_E6MIL5          K V Q A     L K N P K K P R P K I E R D P Y I V D V
UniRef90_J9G3E5          M V K
UniRef90_A1ALJ5          L V R R L K L N P           H P L P G K R P
UniRef90_UPI00037B1482   L V H A Q L D P K E K S
UniRef90_A6EPG0          I V R K K N N E S A T T K K K V V P K F
UniRef90_A8FJF4          L V Q Q L N E N V P R E T K
UniRef90_X1G8J2          M V H K L K Q T I P R Q K R Q I P D P D L M
UniRef90_W0EUP3          L A K
UniRef90_S2WUH1          I V A L G E V
UniRef90_Q2S6N2          L V R K E K E N P K E K I K K V L D A D V R K L Q E S L A E
UniRef90_K2NQU8
UniRef90_UPI00034C1F67   L I T L G E T D D E P Q T R
UniRef90_D7UV41          N V S R E T V K A P R V P I F I
UniRef90_R5R528          L I S K P V K T K P K
UniRef90_UPI00036CAFB5   M V R R L K K G Q P L Q P R
UniRef90_R5VIQ7          L V K Q I N R P P P K P K K E L K N
UniRef90_UPI00037F555C   Y V K S
UniRef90_Q1PZX9          M V E K N L R K P E K
UniRef90_S1N2S2          L V S E N E A K E Q K K L P R L M K E K P Y Y L R E S E E R L
UniRef90_UPI00041A01D7   I V K
UniRef90_L1QPK6          L I K K M K S E N G K T T K
UniRef90_R5HVG5          Y V E E V L R D Q A K E K K V R R P L F I R D V R F F L N T L
UniRef90_U5N0M7          L I K R
UniRef90_X0PDY5          M V
UniRef90_A4CPZ8          L V R S L G N K P A S K T
UniRef90_C6XFX5          L V Q E
UniRef90_UPI00037C1A75   L V K N G V V V K P K     R K I V P P Y I
UniRef90_R5QEJ8          L I
UniRef90_B3EN06          L V N R M F R D E P K
UniRef90_V6S795          L V K S L K P A P A K A K R T I T N F F G A K V D V K
UniRef90_E3I9J4
UniRef90_UPI0003643085   L V E K
UniRef90_UPI0003684818   E V N
UniRef90_UPI000362C719
UniRef90_R7ETW4          M A K Q
UniRef90_R6NRY5          L V K E F L N P I P K K
UniRef90_N1ZRH6          L V S E
UniRef90_E8UFE3          L V S R Y L E G S R A S T K S N K N K K
UniRef90_R1AQM4
UniRef90_B8I3R9          Y V K K
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Multiple sequence alignment (residue positions 1–40)

UniRef90 ID	Sequence
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UniRef90_A0A011A3Z0	L K L S S I E P N H N Q P R M E F R E E S L M E L A E S M K E Y G V L
UniRef90_T1C6D8	H L P I E Q L T P G R Y Q P R R G M N P D A L A E L A Q S I R S Q G V L
UniRef90_G6CDP1	V I K V P V S A I V P N R F Q P R K V F N A D N I A E L A S T I E Q H G L L
UniRef90_D3Q5N5	Y R L V P L A E I D T N P K Q P R Q V F D E E G I E E L K V S L S E V G L L
UniRef90_UPI0003B56F57	L K I E R I V Q A A Y Q P R Q V F E P E A L A E L A Q S I R E K G V L
UniRef90_A0A059KGJ3	I A L D Q L L P N P Y Q P R T R M D E G S L F E L A E S I R S Q G V M
UniRef90_D7CKC7	E L D I G L V Q P R G R Q P R K K F E D E S M A E L A A S I R E H G V L
UniRef90_UPI00030E2B24	V Q E V E L K D C R P N P Y Q P R K V F D T E A I E E L K D S I V E H G V L
UniRef90_UPI000406DF8C	E I P I E S V T P N P R Q P V E F D P D L Q A E L V E S I Q E V G L L
UniRef90_UPI0004787AF5	D I D I N L I E P N E K Q P R R D F D Q K T L Q E L A K S V L Q H G V L
UniRef90_C9KQD8	V Q E I A A D E I R A N R Y Q P R Q N F D E A A L E D L S E S I R Q Y G I L
UniRef90_W7LAW5	V K K I P I D Q I V P N R F Q P R T V F D D E K I E E L S R T I H T H G I I
UniRef90_E4L9P2	I Q E I P V N Q I D A N P N Q P R K A F N E E T L K K L E Q S I K K Y G V V
UniRef90_K0YV42	E I P H D L I V P N T R Q P R E V F D E D D L A E L R D S I R E V G V L
UniRef90_F0RH45	I I E L D L D L I E V N P F Q P R S H F N E E A L V E L S T S I K E L G V I
UniRef90_J1FJV0	I A D I A I E H I Q T N P Y Q P R T H F D Q T A L E E L A E S I R I Q G I I
UniRef90_A8FJF7	I Q E L P V D T I M P N R F Q P R T I F S E E K I H E L A T T I H T H G I I
UniRef90_UPI000255838D	I I E L S L D Q I E V N P F Q P R T F F D E E A L K E L A D S I R V L G V L
UniRef90_H0KNR2	I V E V S I D D I Y P N S S Q P R T Y F D E K A L N D L A Q S I L A L G I I
UniRef90_C4L003	E R L P L K F I R P N P N Q P R K Q F E V E K L E E L R Q S I E R Y G V L
UniRef90_R5SL21	T E S I S I S L V V P N E W Q P R R E F E P E S L N A L A E S I K E H G V V
UniRef90_R5YBF6	V M M D I T K V E P N R E Q P R Q K F D E D A L L E L A E S I K Q F G V L
UniRef90_E4RTP5	V K E V E V D R I V V G S S Q P R K S F D E S A L R E L A D S I K L Q G L L
UniRef90_G8NZP6	E I P V E L I D R N P F Q T R T H F D E A K L V E L A G S I A S S G V V
UniRef90_UPI000249192F	V T E L A L D D I R P N P Y Q P R K I F D E A S L S E L S V S I K K S G V F
UniRef90_F5SHC2	V R Q L E V G L I R P S P Y Q P R S I F D D D R L N E L C E T I R T H G V I
UniRef90_UPI000428C775	I V E L D I N S I E I N P F Q P R T N F N K D T L N E L A T S I K E L G V L
UniRef90_F4L3W0	T P M I P I E Q I A P N P A Q P R N Q F D E E A L D E L A N S I K V H G L L
UniRef90_UPI0003B4A2EC	V R L I P V A D I R P H P D Q P R R H F D E E K L D E L A Q S I A E R G V L
UniRef90_UPI00046FE713	V R E I K I K E I R P N P Y Q P R K V F E E E A L H E L K E S I L Q H G I L
UniRef90_F5YQI2	I P L D K L K A N P D Q P R K R F E E E S L R E L A D S I A Q L G I I
UniRef90_A0PX82	I L K I D M N L I P N I D Q P R K N F D E A K I I Q L A D S I K E H G I I
UniRef90_UPI0004793D66	V L E V K V N E L P N P Y Q P R K T F S D E A I N E L K E S I L N H G I I
UniRef90_UPI00047DFAFE	I N K I P I D H I V P N R F Q P R T V F D E E K I E E L A R T I H I H G I I
UniRef90_Q1YE40	R H I P I D A I S P N P N N P R R T F H E A D L D D L T A S V R N H G V V
UniRef90_UPI000348DD99	E I L L T D I E T N P Y Q P R T H F D Q E A L E E L A E S I K I Q G I I
UniRef90_UPI0003678858	K L A V N C L Q P G K Y Q P R G E M E E A P L N E L A E S I K K Q G L L
UniRef90_UPI00036AAA4F	I E E V E L S K C R P N P Y Q P R K V F E A D A I E E L K E S V L Q H G I L
UniRef90_F0RZV8	V L E V S L E N V R A N P N Q P R K D F N Q E S L Q E L A Q S I K R E G V L
UniRef90_Q65CN8	V E E I K L Q D L R P N P Y Q P R K T F D D Q S L K D L K E S I L Q H G V L
UniRef90_W7D995	V E E L P L A Q I I P N R F Q P R S M F D E E K I A E L A E T I K E H G L I
UniRef90_R7NI73	I I E I P L D E I R S N P Y Q P R V I F D S E A L E E L A N S I K E H G I I
UniRef90_UPI00030183D8	H V S L E Q I I P N K Q P R K H F S Q K T L L E L V Q S I R T Q G I L
UniRef90_G0GG70	L R E V E V E R L V P Q E G Q P R K H F D E A A L E D L A R S I K E K G V L
UniRef90_UPI00047985A2	L Q H I D V N Q L Q R G I Y Q P R R E I A N E Q L T E L S D S I K K H G I M
UniRef90_A0A023VSR1	Y K K I A I K D I V A N P Y Q P R L H F N E D E L K E L A A S I S L N G I L
UniRef90_I7HP62	L S K I Y P D Q N Q A R K F F S D A S L E E L A S S I R Q H G I I
UniRef90_F3LM98	L R L E Q L E P G R Y Q P R T R M D E G S L Y E L A E S I K G Q G V M
UniRef90_F7Z751	V Q E V N I K E L R P N P Y Q P R K N F E P E A L N E L K E S I L Q H G V L
UniRef90_UPI0003A4634C	E L P L D A I I P N P R Q P R E V F D E D A L A E L V T S I K E V G L L
UniRef90_E6XC53	I V E L D L V A I E V N P F Q P R S N F N D E A L H E L A S S I R E L G V I
UniRef90_D2Q820	V Q E L R L S D V G P N L H Q P R T I F D E D D L R E L A D S I Q E V G V L
UniRef90_A6DAR6	V S E I D V L K I K S N P F Q P R R E F N E E S I N E L A E S I K K H G L L
UniRef90_UPI000478E9BF	I A P D M I S P N P D Q P R Q Y F D P Q G L T E L A D S I R I H G I L
UniRef90_W1SAJ1	V Q E I K L K D L P N P Y Q P R K T F Q Q E S I D E L K D S I I E H G I L
UniRef90_UPI0002894589	V V K L P I S K I H P N R Y Q P R T I F D S A K L E E L A Q T I Q L H G V I
UniRef90_W6S619	I D I N R I K P N S K Q P R K N F E E E K I S N L A K S I K D N G I I
UniRef90_D7CWD5	I E Q L P L E A L R V S A F Q P R K R I D P A A I A E L A S S V A Q K G V L
UniRef90_I0JTL5	V M Q V P V D H I Q P N R Y Q P R A I F N D E K I S E L A Q T I H T H G M I
UniRef90_K4IHS3	I V E L S L G A I E V N P F Q P R T S F S E D T L K E L A S S I R E L G V I
UniRef90_A0A023D1W8	L P I E Q L E P S P Y Q P R Q E M D E G R L A E L A D S I R S R G V L
UniRef90_G8UND3	L T Q I E P N P D Q P R S I F E E D T L N E L A Q S I R T Y G V L
UniRef90_UPI000249139B	V I R V S L D K I V P N R Y Q P R T D F D E K S I T E L S Q T I S E H G L L
UniRef90_E7GAN8	Y K F I D I H D I E A N E K Q P R T H F E K E K I Q E L V S I Q Q N G L L
UniRef90_X2GYD9	V E E L Q L K L I V A N P F Q P R T I F D E E T L Q E L A D S I Q E H G I L
UniRef90_K2B363	I V E L P I D Q L Q A N P L Q P R G T I I P E S L T D L V E S I R T H G I I
UniRef90_E4U1I3	V E E I A V A K I R P N P Y Q P R K H F D S E S L A E L A E S I K T H G L L
UniRef90_W9AGJ7	I E E V S I S E C R P N P Y Q P R K T F H A D A I E E L K E S I L E Y G I I
UniRef90_UPI00041E6DCD	V E E I Q L S L L L P N R Y Q P R K V F E P A K I Q E L A V T I Q E H G I L
UniRef90_W0EBU8	V R Q I S M D K I S P N P D Q P R K D F D S E S L I E L A D S I R I H G L L
UniRef90_E0NJQ3	L K N I A V E L I T A N P D Q P R K Y F D E D I L R E L S K S I E E L G V L
UniRef90_B5YBX9	I E K I P I E K I V P N P Q Q P R E T L N P E T L Q E L V E S I K Q L G L L
UniRef90_D9SPD0	I G I N K I K A N S E Q P R K S F D D E K I G E L A K S I K E Y G V I
UniRef90_V1CNN2	R I S L N D I K R N E N Q P R K V F N E E K I D E L A E S I R E H G V L
UniRef90_H1CJF1	L P I A A I S P N P D Q P R T C F S R E G L E E L A A S I Q E L G V L
UniRef90_F4EEV2	L R T L N I S E I H P N P Y Q P R I H F D E K E L L E L A Q S I K E N G L L
UniRef90_B4RCZ7	V R E I P I E L I H R N P D Q P R V H F A E A E L A E L E A S I R D K G V L
UniRef90_D9THT2	I E D I P V E K V L P N P Y Q P R S N F D E K L I E E L A S I K T Y G L L
UniRef90_E1NT96	I I T D I D L D N I V P N R Y Q P R R A F N D E T I A Q L A Q T I Q E Q G L L
UniRef90_R6XUT0	I M N V D I S L I D T N P Y Q P R K V F D K A A L E E L A A S I K T F G I I
UniRef90_Q4L2Z5	V E S I Q I E R I V P N P Y Q P R Q V F D S S K I T E L A E S I D E H G L L
UniRef90_K0HLH4	L P I S E L V P G V V P R T R M D E G A L Y E L A E S I K A Q G V M
UniRef90_UPI00046F5226	L R N I K L S E I S A D P H Q P R R T F D E I A L D E M A I S I A E H G V L
UniRef90_UPI00036329AD	M Q D L A A S I R Q H G I V
UniRef90_W7YIG1	V K Q I P V E D I T S P Y Q P R T L F D E D K I D E L C Q T I K T H G V L
UniRef90_UPI00047E091F	I R K I D L S L I K P N P Y Q P R K I F D E D K I S E S I K T H G V L
UniRef90_UPI0003749460	V K Q I P V A N I T T S P F Q P R T I F D D A K I D E L C Q T I K T H G V L
UniRef90_V7PWF2	I D V E K I K P N P F Q P R R E F D E A R L K D L A D S I R Q Y G V L
UniRef90_UPI00036168C6	Y K L I P I E I V K P G P W Q P R K R F D K K K E L S K S I K N Q G I I
UniRef90_Q60CS2	L R K L P I E L I K P S P Y Q P R D S A K L E E L A A S I S A Q G I V
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                                    50                  60                  70                  80
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UniRef90_A0A011A3Z0     Q P L L V Q K K     G D F Y E I I A G E R R W R A A K L A G L K E V P V V I R
UniRef90_T1C6D8         Q P V I V R R L E G D H R F E I I A G E R R W R A A Q L A G L L E I P A V I R
UniRef90_G6CDP1         Q P I I L R E Y E D Q   K Y E I I A G E R R F R A I Q T L K W A E L P A I V Q
UniRef90_D3Q5N5         Q P I A V R E T     G D G Y E L I V G E R R T R A A R E L G W E T I P A I V R
UniRef90_UPI0003B56F57  Q P L L V R P R     G D A F E I V A G E R R W R A S Q L A G L T E L P V I I R
UniRef90_A0A059KGJ3     Q P V L V R P V E P R D G Y E I I A G E R R W R A A R L A G L S E V P V L V R
UniRef90_D7CKC7         Q P I V V R P V E   A G K Y E V V A G E R R L R A A G M V G L E R I P V V I R
UniRef90_UPI00030E2B24  Q P I I V R K A I K G   Y E I V V G E R R F R A S K E A G F T T I P A V V R
UniRef90_UPI000406DF8C  Q P V V V R P L P G Q   R F E L V M G E R R W R A S K E A G K T A L P A I V R
UniRef90_UPI0004787AF5  Q P I I V R K K N G G   Y E I I A G E R R W K A S K I A G L R K M P C I I K
UniRef90_C9KQD8         Q P L I V R R L P   E K G Y E L I A G E R R L R A A R K A G L E K V P A L V R
UniRef90_W7LAW5         Q P I V V R E F E D   G Q F E I I A G E R R Y R A M K K L G W E E A P A I V K
UniRef90_E4L9P2         Q P V I V R K K D N G N   Y E L I A G E R R L R A A K N A Q L E K I P V V I K
UniRef90_K0YV42         Q P I V V R P I K P N A R F E L I M G E R R L R A S E L A G L E A V P A I I R
UniRef90_F0RH45         Q P I T V R K L E   F N K Y Q L V S G E R R F R A S K L L G L E T I P A Y I R
UniRef90_J1FJV0         Q P I T V R Q L   D Q N S F Q L I S G E R R Y Q A A K M A G L T T I P A Y I R
UniRef90_A8FJF7         Q P I V V R P T E E E G K Y E L I A G E R R W R A V Q T L Q W E K I P A I I K
UniRef90_UPI000255838D  Q P I T V R R V D H   K F Q L V S G E R R Y R A S K L V G N K T I P A Y I R
UniRef90_H0KNR2         Q P V T L R K   D G D K F E L I S G E R R F R A S K I A G L K T I P A Y I R
UniRef90_C4L003         Q P I V V R K A T G   Y Y E I I A G E R R F Q A A K L A G K E D I P A L V V
UniRef90_R5SL21         Q P V I V R K K D S G   Y E L I A G E R R L R A A Q L A G L V E I P A L V R
UniRef90_R5YBF6         Q P L L V Q E K   D D Y Y E I I A G E R R W R A A K L A G V K K I P V I I K
UniRef90_E4RTP5         Q P I T V R E T S   E G K L E I I S G E R R F R A S K L A G L T R I P A Y I R
UniRef90_G8NZP6         Q P I V V R Q   G K D G R Y T L I M G E R R L L A S K K A G K A T I P A I V R
UniRef90_UPI000249192F  Q P I I V R K S S V K G   Y E I I S G E R R F R A S K L A E K K N I P A I I R
UniRef90_F5SHC2         Q P V V V R R I     Q D Q Y E L I A G E R R L R A V K K L G M E R I P A L V R
UniRef90_UPI000428C775  Q P I T V R K L   D F N K Y Q L I S G E R R L R A S K I I G L E T V P A Y I R
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UniRef90_G9WL38           K L L K I S L I Q A N P S Q P R K R F S D E E L K E L S E S I K Q F G V I
UniRef90_R6CZU0           V R Y I P I N D I R P N P Q Q P R R R F D S E S L Q E L A A S I A A Y G I L
UniRef90_H3KBC5           I E L P I A E L H A G R Y Q P R T D W A E E P L E E L A A S I R R E G V I
UniRef90_K2E357           I I Q L D I N Q L Q P N P L Q P R G A I T P E S L V D L V D S I R E H G I L
UniRef90_R7FDZ8           I V E V D V S E I V P N P H Q P R T G F D P A D I Q S L A E S I A Q N G I L
UniRef90_K0B3A6           V V Y L D I Y S I S P N K D Q P R K K F D K E A I D S L S D S I K N H G V I
UniRef90_R5EC41           V V F L P A R S I V P N P A Q P R K I F R P E A L D E L S D S I R Q H G L L
UniRef90_W6EBB1           V R D I A I E R I T P N P Y Q P R T H F N E V A L K E L S E S I K R H G L L
UniRef90_G2DG78           V R Q L D V D L L R P G R Y Q P R R R F T S E A L A E L A E S I R T E G V V
UniRef90_S4XT92           I E K I V P Q K G Q P R Q H F D E A E L E E L T G S I R E H G L I
UniRef90_UPI000410D77E    E I L L S E I Q V N P F Q P R V H F D K D S L Q E L A D S I L V Q G I I
UniRef90_R4KIX3           I P I N L I K P N N D Q P R K N F D D E K I I M L A Q S I K Q H G I I
UniRef90_C1F5L6           Y R N V P L F L L N P S R T N P R R T F D D E A A L K E L A A S I R A Q G V L
UniRef90_I8TBV2           P V R L I P V D L I R P G S Q Q A R R R F D P D T L A D L A E S I R A S G V V
UniRef90_L1QRA0           V Q R A P I E A L K P N P D Q P R K I F A K T D L D E L T A S I R D K G V L
UniRef90_D9SPD2           V Y Y V S P Y E I V P N L Y Q P R K F D E V G I N E L A Q S I S I F G I I
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UniRef90_R6BPN9           P E Y K I K P N P Y Q P R K V F D E E K I E Q L A T S I A Q Y G L L
UniRef90_I0IS07           M I P V T D I Q G N P Y Q P R K T F R E E E L L E M M D S L A N H G I L
UniRef90_A6TXE2           E I A I D S V I P N P Y Q P R K T F S Q V S L E E L S Q S I K A Y G I L
UniRef90_I3C2L3           L Q I Q N L P L G K I K P D P E Q P R K T F N E D A L K Q L S E S I E K H G V L
UniRef90_F4DKH8           I E I A I D A I R V S P F Q P R R V F S N E E I D E L I A S L K S V G L I
UniRef90_B0S3U7           I V K I E L S K I I R R E D Q P R T H F E K D K I R E L A N S I K E Y G V I
UniRef90_U2PZE9           L P A A E I R P N P M Q P R R T F E E T G L R E L A E S I R R H G I L
UniRef90_R6KME3           I V S V V L A D I P Y S N Y N P R K N F D V A S L A E L A E S I R Q Q G V L
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UniRef90_C7REY2           I E K I D I D L I Q A R S D Q P R K N F E N I E E L A A S I K E Y G I L
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UniRef90_W5SIR5           K M V D I N L L D I D K L Q P R K S I N L A E L E E L S I S I K E N G I L
UniRef90_K9ZRJ6           Q V K L Q D I H L P P Q Q P R R Y F D P Q A L T E L V A S V K Q H G I L
UniRef90_X0XRK7           L Q E I S V D A I S P N P Y Q S R T V W N E Q E L T D L A E S I R A N G I I
UniRef90_E0QH40           I T R L K L S E I T A D S S Q P R K I F E E T Q I D D L A E S I K R Y G L L
UniRef90_UPI000381C3A1    V R E I N V Q N I S E S N S Q A R T T F D E N K L N E L K N S I Q K N G L L
UniRef90_D6GSW8           M E L Q T I E L Q K I I P D P C Q P R K F F D L A A L E E L A S S I E Q Y G L L
UniRef90_R7F707           E E I D I N S I Y P N Q E Q A R K E F N E T E I N E L A K S I K H Y G L L
UniRef90_B2UDC1           V K L G Q I R P G K N P R K Y F D P A K M A E I T E S I R E D G V I
UniRef90_F9ZRY5           Q V Q I S Q I Q P G N N P R K Y M D P L E E L E E S V R S L G I L
UniRef90_T2JZE2           I P L E Q I H L P S E Q P R R Y F D E A A L Q K L V A S I K Q H G I L
UniRef90_K9VSS8           V S I H K I V L P Q Q Q P R R Y F E P T A M Q E L V E S V K Q L G I L
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UniRef90_K9ZPP0           I S I D S I K L P N S Q P R R Y F D P E K L E Q L V I S V K E H G I L
UniRef90_G1Y2H9           E L Q V D H I A P D P E Q P R K L F S E E E L D G L A A S M A E Q G G Q L
UniRef90_G9XEE5           M E I Q K L N I N L I R Q D E N Q P R K I F D K A Q I E D L A K S I K K F G L L
UniRef90_UPI0002FE7F13    I A I T Q I K L P P S Q P R R Y F D P Q K L E E L S R S I K E L G I L
UniRef90_W6FG38           I V M L D V G L I D P N P A N P R R D V G D V S E L A D S I R V Q G I
UniRef90_H0BVJ0           R I P L D T I D P D P R Q E F D E Q S L L E L A E T I R E R G V
UniRef90_UPI000467AA80    V V R L P I S Q F H M F R N H P F R V V D E K M E E T V K S V K Q Y G I L
UniRef90_UPI0003B5E6EC    Y R S L P L V Q L Q E S P T N P R R R F D A R G L E E L A A S F R S Q G V L
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UniRef90_K1XC68           R Q I P I K Q I V I S K V Q P R K Y L S E Q G I N K L A A S I K S S G
UniRef90_G5HB95           P C Y E I P L E L I D P N P N N P R K Y F G D E L L Q L A A T I E R H G V I
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UniRef90_Q1J3M4           T R R V A L S E I R P H G G Q P R R Y F T P S E L E A L T Q S V R E R G V I
UniRef90_F2LSP8           V K L G R I K L G R N P R T Y F D D K A M A E M K A S I T A R G V D
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UniRef90_W6LU49         E P   L V A R L L A D G S Y E I L L A G H M R W R A A Q Q A G L K Q V P V M V R
UniRef90_I5BU33           Q P I T V R R L     E E D T Y Q L I S G E R R F Q A S K L A G L E R V P A Y V R
UniRef90_X5H2U5           Q P I V V R R K     G N R Y Q L V V G E R R L K A A K K L G L K V I P G I I K
UniRef90_E3CX21           Q P L L V R P V     E D G Y E L V A G E R R L R A A K E A G L E T V P A L V M
UniRef90_X1V9P2           Q P I V V R K M     A N G Y E I V A G E R R L K A A K E I G L R K I P A I I K
UniRef90_U4TRU0           Q P I I V R K S V         G E R R L R A S K I A Q K L T I P G I V R
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UniRef90_I2FAR4           Q P I V V     Y D N G D G D Y V L I A G E R R L R A S K L A G L S N I R A I V A
UniRef90_W7DJA7           Q P I V R E Y E P E     K F E I I A G E R R F R A V S S L D W D T I P A I V Q
UniRef90_C2CJM2         N P I V L T K K C       E R Y E I L A G E R R Y R A S I K L K K I D A I V R
UniRef90_G9WL38           Q P L L V K K     Q G P I Y E I I A G E R R F R A A K L A G L T E V P V L V R
UniRef90_R6CZU0           Q P L T V R Q     Q G A V Y E L V A G E R R W R A A R I A G L R Q V P C L L A
UniRef90_H3KBC5         S P V I V R P S     G L G Y E I I A G E R R T R A A K L A G L D R V P A I V R
UniRef90_K2E357         E P L V V A K T P A G     F Q I I A G E R R W R A S K L A G L T H V P V I V R
UniRef90_R7FDZ8           Q P L T V R R     G E G C Y E L V A G E R R L R A A K L A G M Q A V P C I I L
UniRef90_K0B3A6           Q P I I V R Q K     E N G Y E I I A G E R R W R A A R V S G L T K I P S I V K
UniRef90_R5EC41           Q P L S V R R S     G N G Y E L I A G E R R L R A A E L A G I T D I P C I I M
UniRef90_W6EBB1         Q P I V V A K     D D G Y M L L A G E R R L R A S K L A G F T K I K A I V A
UniRef90_G2DG78           Q P I I V R P L P D T T R Y E I I A G E R R W R A A Q L A G L Q H I P A L V R
UniRef90_S4XT92         E P L I V R R T Q A G N D S F E L I A G E R R W R A A Q R A G L R E V L V V V K
UniRef90_UPI000410D77E    Q P V T V R K L A   P N E Y Q L I S G E R R F Q A S K I A G L T Q I P A Y V R
UniRef90_R4KIX3           Q P L I L K K I     N D F Y I I V A G E R R W R A A K S I G L K E L P A V I M
UniRef90_C1F5L6         S P L L V R P L T   E N G F E I V F G E R R Y R A A Q I A G Q D T V P V R I R
UniRef90_I8TBV2           Q P I V L R T R V W G     F E L L A G E R R W R A A Q Q A G L H D I P A I V R
UniRef90_L1QRA0           Q P I L V R S Q P G E G V W Q I I A G E R R W R A A Q A A R L T Q V P I V V R
UniRef90_D9SPD2           Q P L S V R R L     G E N R Y E L V A G E R R L R A A K K A G L G E V P V I I R
UniRef90_M7NAD5           Q P I V V R P I E D     G K F E I I A G E R R Y R A M K K L K W T E V P A I I R
UniRef90_Q9Z7M0         H P P V V R E I C T G D R Y E L I A G E R R W R A M Q L A G A T T I P V I L K
UniRef90_E3BH80           Q P I V V R Q V E     N D K F E I I A G E R R W R A A R K A G L K Q V P C V K N
UniRef90_UPI00047A5F1A    Q P L S V R Q I     G D N K F E L I A G E R R L K A A K I A E L E T V P A I V R
UniRef90_R7NGX0           Q P L V L R R I     E D K Y E L I A G E R R Y R A A T L A G L K T V P A V I A
UniRef90_D4LA98           Q P L S V R K L P D G     Y E L I A G E R R L R A A R E L G L P T V P C I V F
UniRef90_F6FCF4         H P P V V R E I R S G D R Y E L I A G E R R W R A L Q L A G Y T A I P V V L K
UniRef90_C7PCE2           Q P I T V S R I     G A K K Y Q L I A G E R R L R A S K M A G L K D I P A Y I R
UniRef90_R6BPN9           Q P I T V L P M E D G N   Y Q L V A G E R R L L A C R R L K M Q E V P A I L T
UniRef90_I0IS07           Q P I I L T K I P S G E G Y F L V A G E R R Y R A A C R L G W E T I P G I V K
UniRef90_A6TXE2           Q P I S V R K I     G E E K Y E L I A G E R R L K A A K L A R L V T I P A I I N
UniRef90_I3C2L3           Q P I T V R Q L     N D H V I V M G E R R Y R A S N L A G K K T I P C I V R
UniRef90_F4DKH8         H P P V V R E I R N G E H Y E L I A G E R R W R A M Q K A G Y A V I P V V L K
UniRef90_B0S3U7         S P I I V R K K     D E K Y E I I A G E R R F L A S L E A G L S E I P A I I K
UniRef90_U2PZE9           Q P L T V R R T A A G     W E L V A G E R R L R A A V L A G L E T V P C L E A
UniRef90_R6KME3           Q P I G V R P I A   E N R F E I I F G E R R Y R A S L M A G L E E I P A I V L
UniRef90_F9VMA7           Q P L I V     S E S N G K Y L I V A G E R R Y R A A K I I K L D K I P C I I I
UniRef90_C7REY2         N P I V L S K K     N D K Y E I I A G E R R Y R A S V L A G L K K I D A I V R
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UniRef90_K9ZRJ6           Q P L L V R P L A G     G K Y E I I A G E R R Y R A A T E V G L E E V P V V V R
UniRef90_X0XRK7           Q P I I V R P A     G S R Y Q L I A G E R R L R A A Q L A S L T T I P A L V R
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UniRef90_UPI000381C3A1    Q P L I V Q E V E   P N K Y K L I A G E R R L R A S K M V G L E K V P C L I K
UniRef90_D6GSW8         S P I I V R K     Q G D R Y I I V A G E R R Y R A M L L N K M T H A N C I V R
UniRef90_R7F707        S P I I V T K T E   E N H Y M I I A G E R R W R A C K T L N W D K I K C Q V I
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UniRef90_F9ZRY5           Q P I V V K K A E G E   R F S I V A G H R R F A A A Q A A G L T E V P V H I V
UniRef90_T2JZE2           Q P L L V R P L K S G G   E I V A G E R R Y R A A K V A E L K E V P V V I R
UniRef90_K9VSS8           Q P L L V R P I D G     N K Y E I V A G E R R Y R A A S S L G L T E V P V T I R
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UniRef90_UPI000301A99E  E P L L V R P L   N S D E Y E L I A G E R R L K A A V S A G L T E V P I I I K
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UniRef90_UPI0002377B1D    Q P I L V R P S S N G Y E L I A G E R R Y R A S K L A G L D Q I P A Y I
UniRef90_E8SRY5        K T P I S V R Q S S E E G V Y V I N H G A R R Y R A S L A G L S E I P A Y I
UniRef90_K1XC68        Q Q D L I V R P I   G G D K Y E L I A G E R R Y R A A Q I V G L E T V P A Q V K
UniRef90_G5HB95           Q P V L V H P V T G E T R F M L H G E R R T R A S M I A G K S T I P A F I R
UniRef90_UPI00047D835F S P L S V V   P N G E R Y R V I A G H R R L A A C K Q A G T G A V P C F V L
UniRef90_UPI0002485095 E P L L V R L   G E D G Q H E L V A G E R R F R A A T E A G L E K V P V V L Q
UniRef90_F0RR78           Q P I L V R P L   G E D R F E L I A G E R R A S Q E A G L T K I P A V V R
UniRef90_UPI00036A4965 E P L I V R P K   R G R Y E I I A G E R R F I A A K K L G L E E I P C I E K
UniRef90_UPI000365CCFD T P C I V R P S P Y G D G Y E L L S G H R R V A A C R L I G R K T I P A I V R
UniRef90_K1EXQ6        K Q P I T V R K V N N E   Y M I I A G E R R Y R A S I L A N K T T I P A I V I
UniRef90_A5VH26           Q P I T V P A P K N G D G L H V I R V G E R R F R A S R L V G R E T I P A I V M
UniRef90_K8RR69           Q P V I V R T L A D G G   F S L V A G G R R Y K A A L A A H G E E I P V V V R
UniRef90_Q1J3M4           Q P L L V R P A P D G S G Y E I A G E R R Y R A A L A A G L P D V P V L I R
UniRef90_F2LSP8        T P V I V R P I     D D G F Y E L I A G E R R L E T R G E D M P V N V K
UniRef90_Q1JYN0           Q P V L F T L S P D G   Q L Q L I S G E R R Y R A S K L A G L T H I P A I F K
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UniRef90_I5BU33	T A N D Q Q M E M A L I E N L Q R E N L N A L E I A H S Y Q R L L S
UniRef90_X5H2U5	E F T D Q S L E I A I I E N V Q R E D L N S I D E A I A Y N R L I E
UniRef90_E3CX21	D V D P S Q Q L L A L V E N L Q R R N L S S I E E G K C L E D L I N
UniRef90_X1V9P2	S I N N E S L E I A L V E N L Q R E D L N P V E Q A N A F K R L I D
UniRef90_U4TRU0	Q L D D S M M E A A I L E N L Q R E D L N P L E E A E A Y D M M L K R L H
UniRef90_UPI000406BCAA	D T S D D D L R D A L M E N L H R Q Q L N P L E E A A A Y K Q L L D
UniRef90_D8GJY8	D I S D E S A A I A L L E N L Q R E N L N F L E E A E A Y Y N L I K D H S
UniRef90_I2FAR4	E I E Q K K M E L A I I E N I Q R E E L N A I E L A L S Y Q E L L E E Y D I T H
UniRef90_W7DJA1	N L T D D E V A I A L I E N L Q R E E L T P I E E A K A Y Q S L L D M Q E
UniRef90_C2CJM2	D Y T K K D I I L S L I E N I Q R E D L N P I E E A R A Y K K I S D
UniRef90_G9WL38	S Y D E K S R E V S I I E N I Q R E D L N A V E E A L A Y Q S L I S
UniRef90_R6CZU0	R V D E E D A A L A L I E N L Q R R D L D Y M E E A A A I A R L L R R Y
UniRef90_H3KBC5	D V D D R A A A M A L I E N L Q R E D L N P I E E A G I K R L M D
UniRef90_K2E357	E T S P K M L E M A L V E N V Q R V D L N P L D R A K G F E R L M N
UniRef90_R7FDZ8	E I S S R N A V M A L V E N I Q R Q D L S F F D E A S A I E K L I T
UniRef90_K0B3A6	N I E E E V A Q I A L V E N I Q R E N L N P I E E G L A F K E L I D
UniRef90_R5EC41	S M D D E S G M A A M V E N L Q R Q D L D F I E E A M G I S R L L E
UniRef90_W6EBB1	D I E S K N L E L A L I E N I Q R E D L N P V E L A I A Y K E L I E
UniRef90_G2DG78	S T D D R S T L V A L I E N I Q R E D L N P V E V A R G V E R L I S
UniRef90_S4XT92	D V S K E A F E L A L V E N V Q R A D L N P I E I A E A F D R L L R
UniRef90_UPI000410D77E	T A N D Q Q M E M A L I E N I Q R E N L N A L E I A H S Y Q R L L A
UniRef90_R4KIX3	E L S N D L L E V S L I E N L Q R E D L N P I E E G L A Y K K L L E D F D I
UniRef90_C1F5L6	Q M S D E A L E A Q L V E N L I R S E I H P M E E A Q G F R A L L A L E
UniRef90_I8TBV2	D D L S E A F V L G L V E N L Q R E S L S P M E T A A G I K R L G E I F T L T H
UniRef90_L1QRA0	E M D D E V L E V G V I E N V Q R A D L N P M E E A N A Y A V L M E
UniRef90_D9SPD2	D V D D E S A A I A L L E N L Q R E D L N Y L E E A E A F Y N L I K
UniRef90_M7NAD5	D M D D E T A S V A L I E N L Q R E E L T A I E E A M A Y D K L L K L H S
UniRef90_Q9Z7M0	H V D G T A A E A T L I E N I Q R V N L N P I E M A E A F K R L I H
UniRef90_E3BH80	V E D R A A I A M A L I E N I Q R E D L N V I E E A L A L E R L Q E
UniRef90_UPI00047A5F1A	D Y N D D S A V L A I I E N L Q R E D L N F I E E A E G Y Y N L I Q
UniRef90_R7NGX0	D I D D K S A E V A I V E N V Q R R D L S A I E E A R S Y K N L L D K G Y
UniRef90_D4LA98	D V S D R S A I L S L V E N I Q R Q N L N F F D E A A A I Q R L I A
UniRef90_F6FCF4	Q V D D I A A E A T L I E N I Q R V N L S P M E M A E A F K K L I N
UniRef90_C7PCE2	Q A N D Q L L A L L E N L Q R E N L N A L E I G L S Y K R L M E
UniRef90_R6BPN9	S M D E E R S A L A L V E N I Q R C D L N Y F E E A M A I Q K L M K M
UniRef90_I0IS07	D I P E T S L E I A L V E N L Q R S D L N P V E I A V G L N Q L I E E C T
UniRef90_A6TXE2	T H D K D A A V L A I I E N L Q R E D L N F I E E A E G Y A N L I H
UniRef90_I3C2L3	T Y N N D V L E V Q I I E N L Q R Q D V E P T E E A E A I A Y L S
UniRef90_F4DKH8	R M D D V A A E A T L I E N I Q R V N L N P L E M A E A F K K L I H
UniRef90_B0S3U7	E M E D E V A E V S L I E N I Q R E D L N A V E E A V A Y K N L M E N Y
UniRef90_U2PZE9	E V D G R A S A L A L V E N L Q R K D L H Y L E E A E A I A A F L H
UniRef90_R6KME3	N V S D E A E E M A V T E N L Q R K D V T P I E E A N A Y Q R L I E S G R H
UniRef90_F9VMA7	E S T D E I L E L S L I E N I Q R D D L N P I E E A R A F K N L I D N F N I T H
UniRef90_C7REY2	D F D Q K E I I L S L V E N I Q R E D L S A L E E A Q A Y K K L I D
UniRef90_B1XR02	D L D D Q Q L A I A L V E N L T R E D L N P V E E A E G V L N L L A I E L Q L Q
UniRef90_G0DX42	T T A S E D M R D A L L E N L H R V Q L N P L E E A A A Y E Q M L N
UniRef90_E3DS74	D L S D Q E M A I A L L E N L Q R K D L S F L E E A Q A Y Q R L L V
UniRef90_UPI0002FA2B05	L N D K A A S A I A L I E N I Q R E D L N A M E E A E A L N R L V Q
UniRef90_UPI00034A5468	E L T D E A L Q V A L T E N L H R G D L N A V E E A E G I L Q L L A L K M K N A
UniRef90_M2B8E2	E A D D R L V E L A I I E N L Q R K D L N A I E K A M S F K R Y I D
UniRef90_E5C648	E A T D E Q A D L S I S E N L Q R E D V P P M E A A K A Y K R L I D T K R
UniRef90_W5SIR5	E P T R K N K F M S L I E N I Q R E N L T P V E E A Y A Y K N L M D K H S
UniRef90_K9ZRJ6	E L S D D Q A Q L A L I E N L Q R Q D L N P V E E T L L A I R L S C D V E A V K
UniRef90_X0XRK7	Q A S D K Q L E W A L V E N I H R V D L N P I E R A K A Y Q D Y L S T F S L T Q
UniRef90_E0QH40	D _ D E N A M L I S L I E N I Q R E N L T A L E E A I A I Q N I K D K Y K C T H
UniRef90_UPI000381C3A1	D I S E D A A I V G L V E N I Q R E R L N H I D E A M G Y K E I S E K
UniRef90_D6GSW8	N H I D F R E V S L I E N V Q R E D L N P L E E A E A L S S L M I
UniRef90_R7F707	N N G E E D L F I S L I E N F Q R K D L N P I E K A I A L N N V M S K Y E
UniRef90_B2UDC1	E M T E E A R R L A L I E N V Q R A D M A P S E E A V A A A D I
UniRef90_F9ZRY5	D E D I D G D A A A A E N V I R A D M S P A E E C N A A I H L L D I E E V C L
UniRef90_T2JZE2	D L N D D A L Q V T L I E N L Q R E D L N P V E E T E G I L Q L L R L N N E A A
UniRef90_K9VSS8	E L T D E A L S I A L L E N L Q R E D L N A I E E T E G I L Q L L A M K L N S
UniRef90_K9CJW6	E A G E D V L A D Q I V E N D Q R A S L S S R E L A L G V E R M L A
UniRef90_K9ECM8	E L T D A A E D A A I A E N L Q R E D V T P I E E A N A Y Q R M I E T G R H
UniRef90_UPI000301A99E	N F T D Q A L Q V A L L E N I Q R E D L N P V E E T E G I L E L L S I E D V T T
UniRef90_K9VSH0	D L T E Q Q L R V A L V E N L Q R E D L N P V E E T E G I L Q L L S H H L E
UniRef90_K9ZPP0	E L N D E A L Q L S L V E N L I R E D L N P I E E T E G I L Q L L S L R L N Q
UniRef90_G1Y2H9	E H T G D P E V L A L I E N I Q R V D L T P V E A R G L K R L I D
UniRef90_G9XEE5	D Y E N I A E I A L I E N I Q R E N L T P L E E A E A I L S L K N
UniRef90_UPI0002FE7F13	E M D D V I T Q V R L V E N L Q R E D L N P L E E T E G I L E L L A L R L E T E
UniRef90_W6FG38	D L S E E Q R E L M L V E N G Q R T D L T V I E E A D G Y Q G L L D L
UniRef90_H0BVJ0	Q T A N S A D Q F I N E Q R K G L S P L E I A L F V Q R A L N
UniRef90_UPI000467AA80	N M T D E E A V I M V D T N I Q R E D I L P S E K A K A Y K M K Y E A M K H Q G
UniRef90_UPI0003B5E6EC	E L S D E A I E A Q A I E N L Q R E E I H P L E E A L A Y K N M L D L D A A R
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UniRef90_UPI0002377B1D	E M T D E A E D A Q M E N I H R K N L T Q L E E A K K I Q R D L A R F G
UniRef90_E8SRY5	D Q D Y S L I D Q A E N I T P R E I A D V I G R L L A
UniRef90_K1XC68	E M S D E A L Q C A L T E N I Q R E D L N P I E E T E A I L R L L E L S L D R D
UniRef90_G5HB95	E M P D D E I E L A L L E N L H R V D I S E F E L A D A F R K M V Y
UniRef90_UPI00047D835F	D L D P Q Q L E A M V T E N C Q R E Q L T V L E E A D A I Q G M L D L
UniRef90_UPI0002485095	V L S D E A L Q V A L L E N L N P V E E T E G I L D L F S I E Q S I S
UniRef90_F0RR78	E F T D E A L L V G L A E N L Q R E D L N A Y E I A R A V I E L A A A E L E Q P
UniRef90_UPI00036A4965	I V E D E A M E L S L V E N L Q R K N L N A F E E A D A L K S L G E I Y
UniRef90_UPI000365CCFD	E L D D D A A T I L M V D N Q Q E N L L P S E K A F A Y R K L E A M K H Q G K
UniRef90_K1EXQ6	Q L T E A L Y A Q L N E N L H R E D L P I E K A E F I N K R I E Y L K K T G
UniRef90_A5VH26	A V V N D T L A D Q I V E N D Q R A G L T P H D L A S G I E R M L
UniRef90_K8RR69	D I D E E A K Q L A I I E N I Q R A D M S P A E E A I A A A E Q V G
UniRef90_Q1J3M4	P L S D E Q M E V G L V E N L N P L D E V E G T L R L L A L
UniRef90_F2LSP8	D V D E A A E E I A F T E N I D P G D E A V E A A R L L G R C Q G
UniRef90_Q1JYN0	K Q A S L E V A L I E N I V R E N L S P I E E A A I Q R L I D D K I C R

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                                    130          140          150          160
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UniRef90_I5BU33          E C D L K Q E E L G D R V G K R T T V   N N Y L R L L R L P P D I Q A       G L
UniRef90_X5H2U5          E F K Y T H E E V A S I V G R S R S Y I T N R I L S L P D N V K I L L R D
UniRef90_E3CX21          R T G W S Q T E L A R R L G R S Q A   A L A N K I R L L K L D D E V Q Q L V V A
UniRef90_X1V9P2          E F K L T Q Q E L A E A T G K S R A L V T N T I R L L K L N P E     I Q K N I A
UniRef90_U4TRU0              L T Q A E V S E R L G K S P Y I A N Y L L S L P A P V K K F L A D G Q L
UniRef90_UPI000406BCAA   D F G A T H E E L A E R I G R S R P H I T N R I L N L P A K V Q N R V A A G L L
UniRef90_D8GJY8              Y T Q E K L A E T I G K K Q S T I A N K L L R L D K E I R I M L L E N N L
UniRef90_I2FAR4          E         E L S K R I N K S R T Q I T N   T L R L L Q L C D E V K T M L G
UniRef90_W7DJA7              V T Q E A L A Q R V G K S Q S   A I A N K L R L L R L P E V A Q Q A V L D
UniRef90_C2CJM2          D F S M T Q E E I S K T V G K S R S Y I A N S M R L L K L N E S E     S R A L L
UniRef90_G9WL38          E Y D L S Q E E L A E R L S K K R T T I T N   S L R L L K L E E E I L N Y I R
UniRef90_R6CZU0              G L S Q Q Q A A E K L G R S Q S A V A N K L L R L E E P V A E A L H H Y G L
UniRef90_H3KBC5          E F E F T H E E A A N A V G R S S G T T N L L R L L T L E E D V     K G S L
UniRef90_K2E357          E F G L T T S E I A V R I G K S V A Y V S N   S L R L L S L P D A L     K D G L
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UniRef90_K0B3A6          Q H K L T Q E K I G K L L G K S R P Y V   A N T I R L L N L E S E V I D   L L M
UniRef90_R5EC41          D W N M S Q E Q A A R L L G K S Q S   A V A N K L R L L K H S E P V L R E A G L
UniRef90_W6EBB1          E Y K I T Q D G L S E I I H K S R T Q I T N   T I R L L S L S D Q   T K K Y L
UniRef90_G2DG78          E F R L T H Q E A A R R L G R S R D S I T H   L L R I L K L E P P V L A Q V
UniRef90_S4XT92          E H S Y T H Q T L A E R V G K D R T T I V N S L L R L P P R I R T M V I S R E L
UniRef90_UPI000410D77E   E C N L K Q E E L G D R V G K N R T T V   N N Y L R L L K L P P T I Q A A I R D
UniRef90_R4KIX3              T Q E L G K K V G K S R T V I T N R L L N L D K R V Q E Y L I D A V I
UniRef90_C1F5L6          E P K Y S I E Q I A A K V G K S P G F V   A S R L K L T D L T P A A V E A F Y A
UniRef90_I8TBV2          E Q       L G R R I G K S R E Y V S N Y   L R L L N L A P E V G A L V N
UniRef90_L1QRA0          R F G R T Q D A L A G V V G K S R S H V   A N T L R L L Q L P E A V R D H V V R
UniRef90_D9SPD2          E H S Y T Q E Q L A K E I G K K Q S   T I A N K L R L L K L D N E I R K Q L N L
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UniRef90_UPI00047A5F1A   D H G F T Q Q E L A L H L G K N Q S T I A N K L L R L R P D I K T S L L E H N L
UniRef90_R7NGX0              L T Q T E L A K K M G L S Q S   A I A N K L R L L N L D E E V Q K A L Q I
UniRef90_D4LA98          S Y G M T Q E D A A V K L G R A Q S T V   A N K L R L L K I S E A L I L K Y G L
UniRef90_F6FCF4          V F G L T Q D K V A L R V G K K R S T V A N Y L   R L F S L S E S I Q K S L Y
UniRef90_C7PCE2          E C V L T Q E Q V A D R M G K E R S T V T N Y   I R L L K L P P D I Q   V A V
UniRef90_R6BPN9              V G Y T Q Q A V A K K L G K N Q S T V A N K L R L Q E E V R E A I L E A G L
UniRef90_I0IS07              W T Q E Q L A K H L G M K R S   T I A N Y L R I L A L P I E T L G L L E T
UniRef90_A6TXE2          D H E F T Q Q E L A E H I G K N Q S T I A N K L L R L R D D I K K M L I E H E L
UniRef90_I3C2L3          E K Y A P T E I A K R L G R T D N F I R Q R L
UniRef90_F4DKH8          V F G L T Q D K V A S K V G K S V   A N Y L R L L T L S E T I Q K S I S L
UniRef90_B0S3U7              N L T Q K E L A D K L S K S R S Y I   A N T L R L L N L D E   L S L D H L
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UniRef90_R6KME3              D I Q S L A M Q F G K N E T Y I R T R L V S L I P E I A E L L E K D E I
UniRef90_F9VMA7          E C L S E K L S I   S R T S I T N K L R L L K L   S S I V Q D Y I L
UniRef90_C7REY2          D F S M T Q E E I S K S M G K S R S Y I A N T I R L L K L N N D E   R E A L A
UniRef90_B1XR02          P Q E V K S L L Y R L E N E K K G K T I T V M G S E I G E Q I Q S V F T N L G Q
UniRef90_G0DX42          D F G C T Q D E L S E K I Q R S R S Q I   A N T I R L L K L S A D V Q K R L   L
UniRef90_E3DS74          E F D L T Q K E L A A R V A K S Q S T I S N   K L R L L K L E A E V R E K I L A
UniRef90_UPI0002FA2B05   D F S L T H Q Q L A E A L G K S R T T I S N   L L R L N G L E A G V K K L L F
UniRef90_UPI00034A5468   V E K Q S E S G G A G G A V P S S S P A S E G N F E K V K E V F A G L G K M T W
UniRef90_M2B8E2          E H C K Q D D L A R R L S I D R S   T I A N L M R L L E L P Q P I V   E M V T
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UniRef90_W5SIR5              L T Q K A L S E R I G K N R S H I   A N L V R I L E Q E I L N S L H K
UniRef90_K9ZRJ6          S L L Y R M K N A S S K G E K S R R N V S P N V D D E K Q E V F E S L G L M N W
UniRef90_X0XRK7          A Q G A E R
UniRef90_E0QH40          E       D L S K L L G K T R V Y I T N K L L N A D D Y T K K L L S D N N I
UniRef90_UPI000381C3A1       F N L S P E E I G L L V G K S R A H V S N I   L R L T N L S D T V Y Q A   L
UniRef90_D6GSW8          E K H Y T Q E E L S K L I G K S R P Y I T N R L L R L D D E T K Q A L L D K K I
UniRef90_R7F707              L T Q E E L A E K L G K A R S T V T N I   L R I L D L D S R V L D   L L
UniRef90_B2UDC1          D L K G D R D E A A R Q L G W P R S   T L D R R L A L M N C S P A V L D A L N T
UniRef90_F9ZRY5          L L G W T R D K L T R R V A L S C S V   K V R E A L A
UniRef90_T2JZE2          G L V N H N V M V N S E A T P N H N V M A N S E E T P N H N V M V K S E E M T V
UniRef90_K9VSS8          T S S S V I A L L G A A A H P E R A G V D N V I H S S V S D I F A L V G K Y T P
UniRef90_K9CJW6              Q G K T Q A E I A K A L G R S K Q F V S
UniRef90_K9ECM8              T V E T L A V R F G K N E N Y I R T R L T A L I L E I A E L L E T D E I
UniRef90_UPI000301A99E   E Q V V S I L N Q A A N A K K R K L E L T E N V S R Q L V L V E S L L G R F N T
UniRef90_K9VSH0          Y D L E E V V R L L Y R M Q N D D N V I I H H E M Q I V V K V F S E L G R M S W
UniRef90_K9ZPP0          D T D N V V S L L Y R M Q N E A K G K V T Q N V L E A I E A V F D A L G M I S W
UniRef90_G1Y2H9          G K G W T Q N Q A A E A L G K T K G E I S A   T L R I L S L P D D V L S E L G L
UniRef90_G9XEE5          A K N Y T H E E L S E I L G K T R V Y I T N K L R I L T D T T K K M L K D N K I
UniRef90_UPI0002FE7F13   V V K L L Q K M D N E A K G K I T P N V S P Q G L I I E E L F A T L L R M K W D
UniRef90_W6FG38              G V G V D E A A Q R T G R S A S L V
UniRef90_H0BVJ0             Q G Q T Q A D I A R A L G K S R Q Y V T
UniRef90_UPI000467AA80   S K G E K F A D L V G E A A G E S G R T V Q R Y I R L T E L I A E L L D A V D
UniRef90_UPI0003B5E6EC         F S V A G I A E K V G K S P A Y I T Q R   L R L T E L V D S V A Q A F
UniRef90_R6ICX1             G L T Q E G L S E R V G K K R A   T I A N Y L R L L K L P A E I Q   V G L
UniRef90_UPI0002377B1D         S I D A V L E K H Q K S R P W L S K M L L H L P E Q A K R L V A E N V S
UniRef90_E8SRY5          E G M K K G Q I A E K M G K S P A F V T Q N L L P E P L A N A F N S G K I
UniRef90_K1XC68          K E S V I S L L N R I A N R K R G I T D T D V R K Q D E D A I A S V F A T L G K
UniRef90_G5HB95          D E N K E I A I V A D Q F G V S V T F V R N R I L   L L D L I T E L R D L F D D
UniRef90_UPI00047D835F         G A T A A V A H R L G R S A D Y V
UniRef90_UPI0002485095   K E L L N L S A N A K K R G Q E L T D N V V R Q L E S M Q E T L T V L G Q T T L
UniRef90_F0RR78          A D K V R K A L S S K R P E E E V L R A M D A A L G L L N K D M T L   R T
UniRef90_UPI00036A4965         G Y N H D K I A N K I G K A R S T I I S K I P D D I R L L C E K Y N I K S R
UniRef90_UPI000365CCFD   R T D L T S T Q V M S K F R S N E S V G S D S G E S R E K V
UniRef90_K1EXQ6          D E N   P R E T V C K E L G I S A S W   L S K S L A P L K L S D D L V K D Y D T
UniRef90_A5VH26          G A G V T Q A E I A R A L G R S K Q F V S
UniRef90_K8RR69          L C K G D R D E V A R I F G W S R A   T L D K R L A L M N C S T P V L D A L S T
UniRef90_Q1J3M4          R L N V T P E E A R Q R M M V A L R R P T E A D L Q I F E Q V F T L L G R E S W
UniRef90_F2LSP8              D R D E A A R R I G W S R P   T L D S R L A L L N C S K D V L   I A L
UniRef90_Q1JYN0          Q K D L P E K L G K A K S T I S E I   L S L N R L P E E I K N D C R S
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                           170         180         190        200
UniRef90_U5MY48      N K L T E R H S R A L L T I P N E E L Q L   K V V Q K V I K D G L N V K K T E E
UniRef90_W6LU49      E D G R L D A G H G K V L L G L A D A V Q L R L A E Q A A N E S W S V R E L E R
UniRef90_I5BU33      R D Q Q I S M G H A R A L V N I E D I D Q L S L Y K K I I A E D L S V R K V E A
UniRef90_X5H2U5          K K I S L G H A K L L I S V E N N E Y I A D E V V R L S L N V R Q T E D
UniRef90_E3CX21      G R L G E R   Q A R A L L P L A P E Q Q R G L A Y R A I E E D L N V R D L E R
UniRef90_X1V9P2      E G K I S F G H A K L L L S I E D E E M Q S A V C E R I I A N D L S V R D T E R
UniRef90_U4TRU0      S V G Q A R T L L G L K D K T     Q I I P V A N K T I K E S L T V R Q L E R
UniRef90_UPI000406BCAA  S A G H A R L L L R L D       T P E K Q E R A A R V I A E G I S V H S L D E
UniRef90_D8GJY8      T E R H A R A L L K L P T L E I Q N V K K T E E L I N K E L D K L T S N K K N K
UniRef90_I2FAR4        E E K I T Q G H A K M L V T L S E S E Q K L V A D S I I G Q R L S V R D T E T
UniRef90_W7DJA7      K Q I S E R   H G R S L L V L E E E Q Q V D L L A K I I E N K W N V K E T E Q
UniRef90_C2CJM2      E K K I T S S Q A R T L L S I K D E D E R K K A L D D F I N K K L K V R D A E K
UniRef90_G9WL38        E G K L K E G H G R A L L A I E G K K R L A L A R E C V E K K L S V R E V E K
UniRef90_R6CZU0      T E R H A R A L L R L E D P E Q R L A A V E H I G K N Q L N V A D A E A Y I D R
UniRef90_H3KBC5      R R G E I D M G H A R A L L G L T G A A Q S E A A V R E K G L S V R Q T E T
UniRef90_K2E357      L S G L I S E G H A R A L A A I D D S G L M I E A Y I V L K E S G S V R R A E E
UniRef90_R7FDZ8      T E R H A R A L L R L A A P E E R L A V L E K V V R N N L N V E K T E H A V E E
UniRef90_K0B3A6      N E E I T S   G H G R A I L G L K D I K Q V M L A R L I V E K D L S V R E T E K
UniRef90_R5EC41      T E R H A R A L L K L P T E E C K L A A V K E I V R Q G M S V A R T E K Y V E T
UniRef90_W6EBB1      A E G I L S Q G H A K V L V G L E P K D E E T I V N T I L G Q K L S V R E T E A
UniRef90_G2DG78      E D G R L S L G H A K L L A G L P Q P M Q R H L A D E A I H K G L S V R A L E R
UniRef90_S4XT92      S E G H A R A L L G A P S D K V   M A D V A E R T V H G K L P V R K V E A L I K
UniRef90_UPI000410D77E    Q Q L S M G H A R A L I N I E D V D K Q A I F K K A I D E E L S V R M V E A
UniRef90_R4KIX3      S E G H A R I I L S V E N N D L     Q Y E I S Q K I I D E G L S V R E T E R
UniRef90_C1F5L6      G E G H A L L L A K L P A D
UniRef90_I8TBV2        E G H L H L G H A K V I A G L P M R E H V A T A D E V I R L K L T V R Q L E
UniRef90_L1QRA0      G E   L S A G H A R A L I T A P N A E Q   L A T E V I A K G L N V R Q T E A
UniRef90_D9SPD2      T E R H A R A L L K L P       T L E A Q I K V L D T V I K K N L N V K E T E L
UniRef90_M7NAD5      S E R H A R S L I P L K E E E L Q L Q V F E E I K E H Q Y N V K Q L E A R I Q E
UniRef90_Q9Z7M0      Q G Q I T L   G H A K V I L T L E D P L R E K L N E I I I Q E H L A V R E A E L
UniRef90_E3BH80      S E K M I D M G H A R A L L A L E G E Q Q V D I A E L V A K K R M T V R Q T E Q
UniRef90_UPI00047A5F1A  T E R H A R A L L K L P D D D L R L M A L E K I     I K Y D Y N V K K T E E
UniRef90_R7NGX0      S E R H A R S L L V I P D H       E E Q R K W L K R I I N E R M T V R D L D S
UniRef90_D4LA98      T E R H A R A L L K L S S L E D R E T V L Q Q V I K R N L N V E K T E Q L I A D
UniRef90_F6FCF4      L G E I T L   G H A K V I L T L E D P N L R E I A E K I I S Q R L A V R E A E Q
UniRef90_C7PCE2      R N G Q I S M G H A R A L I A V E N V E K Q L F V F E L M R D G L S V R Q T E E
UniRef90_R6BPN9      T E R H A R A L L N L N E Q G D E L L L E A I R T I S A K E M N V S Q T E K Y I
UniRef90_I0IS07      G E L N   M G H A K I L L G I K D P Q Q K K W E N S I I E E G L S V R S L E K
UniRef90_A6TXE2      T E R H G R A L L K L P D D E L R M
UniRef90_I3C2L3
UniRef90_F4DKH8      G E G H A K V I L T L E D P A L R E       Q L N A E I I K E G L A V R E A E L
UniRef90_B0S3U7      K K G D I T S S Q A R S L L A I D D M K K R K A L L D K L L S K K T V R E I E K
UniRef90_U2PZE9      T E R H A R C L L R L E D E G E R L T A L R Q A A A K H W N V A Q T E Q Y V E R
UniRef90_R6KME3      T I S V A S E I C R Y G E D I Q R E V F D K H L K E G I M F G S W R G M K A T E
UniRef90_F9VMA7      N E D I T E G H G K I L A G V K D E H L Q I E I S N K I I D E D L N V R Q T E K
UniRef90_C7REY2      D R K I S A S Q A R T L L S I K D E E E R K K A L D G F I N K K L N V R D A E K
UniRef90_B1XR02      N W A N R L P L L N L P D D I L E V L R Q G K I A Y T K A K A I A R L Q D A E
UniRef90_G0DX42      D G E I T   A G H A R C L L A I D N P E Q V G T A N R V V D E G L S V R A T E E
UniRef90_E3DS74      A D L S E R   H S R A L L Q L N D A Q K Q L A A I K K I K E K L N V R E S E K
UniRef90_UPI0002FA2B05  G R Q L E M   G H A R A L L S L E G E S Q I E A A V L A V N K K F T V R Q I E A
UniRef90_UPI00034A5468  E S F I R L R L L K L P E D I L E A L R R G R I E Y T K A K A I A R I K D D E
UniRef90_M2B8E2      S G E L T   A G H A R A L L P I E V E V Q V A T A K K I L E E G W S V R K T E
UniRef90_E5C648      T A S A G I V I S K Y D K K I Q A E I L K D R L G E
UniRef90_W5SIR5        R E I S L G H A K L L Y L K D N Q D R Y A L Y L L I I K K K L S V R D A E N
UniRef90_K9ZRJ6      L S F T R V P L L N M P L E I L T A L R E G K L E Y T K A Q A L A R V K D
UniRef90_X0XRK7
UniRef90_E0QH40      S E G H A R A L L G       Q R D V K K R Q E L A R K I I S K G L S V R Q V E K
UniRef90_UPI000381C3A1  K E E K V S M G Q V R P L I N L E Y N L Q N S I L N E I I S L K L S S R A V E D
UniRef90_D6GSW8      S E A H G R S L I S L D N L K L R K       K L L H A I I E H H L S V R T T E
UniRef90_R7F707      K E K K L T Y K H C K T L L S I K D P E K Q Y Q K A L E L I E N D T
UniRef90_B2UDC1          R S I Q L G H A E L L A T L T K E K Q D L F L P I I L Q E K K T V A D L K K
UniRef90_F9ZRY5      R R E I K L G I A E L L A S V P E Q A N Q D K A L E K I I A N D L S V A E V R A
UniRef90_T2JZE2      I E F V R L P L L K L P E E I L E A L R S G Q I A Y T K A Q A I A R V K D
UniRef90_K9VSS8      E S F R R L P L L N L P D D V I G A L R K G R I E Y T K A R A I A R V K D
UniRef90_K9CJW6
UniRef90_K9ECM8      T I S V A A E I C R Y G Q D I Q R E V Y E R H L Q D G N N Y N S W R G L K A A D
UniRef90_UPI000301A99E  E S F R R L P L L N L P V D V L E T L R S G Q L E Y T K A R A I A R V G D Q E
UniRef90_K9VSH0      E S F V R L G L L K L P T D I Q E A L R R G Q I E Y T K A R A I A K V K D
UniRef90_K9ZPP0      E S F V R L P L L K L P E D V L D A L R K G E I E Y T K A T A I A R V K D L
UniRef90_G1Y2H9      S R N V L V E L S R V D E P A V R E
UniRef90_G9XEE5      S E G H A R A L A E K D I     D K R K K L A Q K I I S S G L S V R D V E
UniRef90_UPI0002FE7F13  S V K N R L P L L N L P Q D T L F V L R Q G K I E Y T K A R A I A R V G D
UniRef90_W6FG38
UniRef90_H0BVJ0
UniRef90_UPI000467AA80    H K V I S M K V G E K L S Y L S V E E Q G W V
UniRef90_UPI0003B5E6EC  L E D Q I G V G H A L E I A K L Q P S E Q E R A F A A S F R E T W T
UniRef90_R6ICX1      K D K K I D M G H A R A L I P V D D P E Q L A L Y E Q I L A Q G L S V R N V E E
UniRef90_UPI0002377B1D  A D V E V I N T V K I I E K A D P A A A K K L V D D L K A T R G K S N A R E K A
UniRef90_E8SRY5      S D L T V I A L Y K K E P E A V E D L L S N E D E I T R S S V R N L K E
UniRef90_K1XC68      D S P H R L P L L N L P P E I L D A V R Q Q K M K P K T A R E I A K I Q D I E
UniRef90_G5HB95      E
UniRef90_UPI00047D835F
UniRef90_UPI0002485095  E S F H R L P L L N L P T D I L E K L R E G A I A Y T K A K
UniRef90_F0RR78      Y Q R H Y L P L L R L D P H L I E A I E H G A S Y A A V L
UniRef90_UPI00036A4965  T T L I E I A K Q R S N K E M N I L I E   E I K N R N L K R E D T R E L S R K
UniRef90_UPI000365CCFD  R R Y I R L T Y     L E E N L L R M V D E G H I A F G
UniRef90_K1EXQ6      V K K I K N L G D R K R K E A L E L I N N G E F N S K E F F S R R K K K D
UniRef90_A5VH26
UniRef90_K8RR69          R Q I L L G H A E L L A A L P K E T Q D K L L P V I I K E G K A V A E V K K
UniRef90_Q1J3M4      E S F A K N K L R V L P P E V L E A M R E R G L A Y
UniRef90_F2LSP8      N T R Q L L G H A E L L A A L S K D N Q D R V L P V I V A E K K S I A E V R K
UniRef90_Q1JYN0      N N L V P R G I L V E V A K K R K K H T M L S L Y E K Y K A R G L T R G E V R K
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                                           210            220              230
UniRef90_U5MY48            L I N K G K Q L K D K R K R N I K S A L P A K L Y V
UniRef90_W6LU49            R R A A L E A L P P
UniRef90_I5BU33            M V K A L H E P K E P T E E T K K E A I D P Y K Q Y E L N K L
UniRef90_X5H2U5            L I R K
UniRef90_E3CX21            L V E
UniRef90_X1V9P2            L I K
UniRef90_U4TRU0            L V
UniRef90_UPI000406BCAA     M I K L Q E I
UniRef90_D8GJY8            R K K I K G I F S P K T I K Q I F D K Y G L N A K Y T S E D
UniRef90_I2FAR4            L I K K
UniRef90_W7DJA7            Q I Q A L I T E P
UniRef90_C2CJM2            I G N K K D K D S K K T Q K      N G L S D I D K I L L E D
UniRef90_G9WL38
UniRef90_R6CZU0            L V A Q N Q T T Q P R
UniRef90_H3KBC5            L V R R R R E G A P Q P R R R V V
UniRef90_K2E357            L A R R M K V
UniRef90_R7FDZ8            L L G Q
UniRef90_K0B3A6            L V K E
UniRef90_R5EC41            L L
UniRef90_W6EBB1            L V K K
UniRef90_G2DG78
UniRef90_S4XT92            A A K E K E S R A A G
UniRef90_UPI000410D77E     L V K
UniRef90_R4KIX3            L I K S L Q L
UniRef90_C1F5L6
UniRef90_I8TBV2
UniRef90_L1QRA0            L A R R A A D G P P K A
UniRef90_D9SPD2            L I E K E L N F
UniRef90_M7NAD5            I L N
UniRef90_Q9Z7M0            I A K Q
UniRef90_E3BH80            L V K K
UniRef90_UPI00047A5F1A     I V
UniRef90_R7NGX0            E L K K
UniRef90_D4LA98            L L H Q Q K
UniRef90_F6FCF4            E A K K L L S G E V V T T R
UniRef90_C7PCE2            L V R K A
UniRef90_R6BPN9            A Q L Q G K E E K P K E K R
UniRef90_I0IS07            N I G K   K T F P K K A
UniRef90_A6TXE2
UniRef90_I3C2L3
UniRef90_F4DKH8            L A K S
UniRef90_B0S3U7            V S K E
UniRef90_U2PZE9            R L A A L Q T A P P A G R R
UniRef90_R6KME3            V A K N I E R
UniRef90_F9VMA7            L I Q S I F S K P K E K I N C K N D V Y I N D L K L N L E
UniRef90_C7REY2            I S N K S K
UniRef90_B1XR02
UniRef90_G0DX42            L V R Q
UniRef90_E3DS74            L I K R
UniRef90_UPI0002FA2B05     L V K K M Q
UniRef90_UPI00034A5468
UniRef90_M2B8E2
UniRef90_E5C648
UniRef90_W5SIR5            Y V K N
UniRef90_K9ZRJ6
UniRef90_X0XRK7
UniRef90_E0QH40            S I R
UniRef90_UPI000381C3A1     K V R
UniRef90_D6GSW8
UniRef90_R7F707
UniRef90_B2UDC1            A I E Q A
UniRef90_F9ZRY5            F L S K     L T Q K L E K A I F D K
UniRef90_T2JZE2
UniRef90_K9VSS8
UniRef90_K9CJW6
UniRef90_K9ECM8            V A K R I E
UniRef90_UPI000301A99E
UniRef90_K9VSH0
UniRef90_K9ZPP0
UniRef90_G1Y2H9
UniRef90_G9XEE5
UniRef90_UPI0002FE7F13
UniRef90_W6FG38
UniRef90_H0BVJ0
UniRef90_UPI000467AA80
UniRef90_UPI0003B5E6EC
UniRef90_R6ICX1            M V R N
UniRef90_UPI0002377B1D     A A V K G R V K P S K
UniRef90_E8SRY5
UniRef90_K1XC68
UniRef90_G5HB95
UniRef90_UPI00047D835F
UniRef90_UPI0002485095
UniRef90_F0RR78
UniRef90_UPI00036A4965     L K E K G E R
UniRef90_UPI000365CCFD
UniRef90_K1EXQ6
UniRef90_A5VH26
UniRef90_K8RR69            T I E Q
UniRef90_Q1J3M4
UniRef90_F2LSP8            L V E S A
UniRef90_Q1JYN0            V S R Q P R R T T P G S S
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Multiple sequence alignment (positions 1–40)

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                          1         10        20        30        40
UniRef90_UPI00036AD1D2        MIPVAKIEADPDQPRKQFTEDELAELAASMTKLGQL
UniRef90_R7B984             VQEIKLSDLHPFKGHPFKVVDDEAMQKTVESIAQFGVM
UniRef90_D3NYQ6              EVDLDAVETNPGQPRTVFDDDSLRSLADSIARHGL
UniRef90_UPI00036E125B      KLAVAEIHVADQVRKDFEDELRDLADDIAAQGVI
UniRef90_F8GY80              VPVEKIRPNPWQPRIRFDESSLTELADSIKELGLM
UniRef90_F3AEP0             EIEISRIHAFKDHPFKVLDDEKMADLVESVKTYGVL
UniRef90_UPI0002E4CB56     TRWLPVGTIKPGAFQPRQFFSEEGINNLATSFKEQGFR
UniRef90_UPI0003755C3F       IPITQIKLAPSQPRRYFDSCKLQSLVASIKEVGLL
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UniRef90_R0A1G9         E M D D D A A T I L M V D N L Q R E T I L P S E R A F A Y K M K L E A M N H Q G
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UniRef90_UPI0003D335BE  P H E G N S A S A A L M E N L M R V D L S P A E E A R G I K N L L D H N
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UniRef90_I8ANS5         D V D D D E A T I L M V D N L Q R P N L T V S E R A V S R Q K Y E A M K H A H A
UniRef90_F8XRI8         D D E K D S D T V A L V E N V I R A D M S P A E E C D R A M L L L K K N K G
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UniRef90_S3N4E9         D A N D E A S L L T L A E N L K R Q D L T D       Y E I F V G L N A L D E
UniRef90_L7LEH1         E L T D D Q I A A M L A T A R E R E P L S A A E E A A G V Q A M L D L G E S V A
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UniRef90_C0QDB9         E G L T E A A Q K S Y I L N V E R N Q L N N I E R A L H       I K K M K D
UniRef90_I0XQM3         E A S E D R Y E I A L A E N E K R K S L N P W E V G R A I Q F L R K
UniRef90_G9ZZA7         Q L S D R D L I L A G G Q E N S A R A N L S F I E R A R F A Y R L E
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UniRef90_A0A023DKL5      E G T I F V E G V S S E N K S H F L Y L E D I Q S D L L A Y W H T V V S Y Y S K
UniRef90_UPI00046A6C37   D Q W V A R     I L L E N K Q Q Y Y L Y S A R S T E N I L D R L E V W H F I V G
UniRef90_T2JYY7          T D H A Q R G N L K T E T S E I E S A H N V M G R K E I E E I F E A L G L T W Q
UniRef90_M4U0V2          G E G F K K G V I A K R L G K P         A N A I T E L L A L V D
UniRef90_G2J996          Y P E L Q K V I A K L S K S N Q Y I S R L A L L N P A W S D V V N T G M I
UniRef90_B8JFN0          K P I H T P E S I A K V A G R S P A H V Y N R   L K L T A L A P E L
UniRef90_R6QZ46          G R V K S S D E M A E A V G E S K N Q I F   R F I R L T E L I P D L L N   M V D
UniRef90_R6TTN2          F R G K T S R E I L G E Q V G E S Q D Q I R R Y I R L T E L I P E L L E M V D D
UniRef90_E9RVF1          E Q     E I V D L F A G D G D D D F D L S D A L E K A A F V E R   G D I W Q
UniRef90_A0A024DZ91      A N K R L L A K I T E A N K Q V H F L Y A R D L N S D L F N H L E I W H R I V S
UniRef90_UPI0001D2EF6C          D N A T L T A L A I D R T T L S K M L S V A S L P Q K V L E A I G P
UniRef90_F6DJ52          L L H R M R D E A R G R V     P R N V A G S S E A R R V E E L F K A L G R M S W
UniRef90_H2C8V8                        G D L C M R F   Q S I S I C S R N           V Y S L Y W R
UniRef90_H1A9E7              N G W Q Q K D V A K R I G K N T I F V S T S L L K M P D C V R E L Y D   N D I
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                                          170              180              190              200
UniRef90_UPI00036AD1D2  K K
UniRef90_R7B984         N P D V S R S A L V E L A F V E D E A E L R R L W R T A R T G G L T V G A I
UniRef90_D3NYQ6
UniRef90_UPI00036E125B  I Y G V K G L E N K A P N L A E E F V D E V A N A D S A T S S G R L R N R L K E
UniRef90_F8GY80         K K
UniRef90_F3AEP0
UniRef90_UPI0002E4CB56  E L Q T F R T K N L R T L T L P E D I K K A H L E R G L S Y S V A L E L L K V K
UniRef90_UPI0003755C3F  E Y T K A L A I S K I K N D       E K R A E V L K Q A I D E K L S L S K I K E
UniRef90_N9Y9T7         K K
UniRef90_UPI00040452DB
UniRef90_A0A022GCQ1      E R K I Q L G H A E L L A T L A K D K Q D K L L P V I I S E K K A V S E L K K
UniRef90_R0A1G9         S K N Q I F R Y I R L T E L I P E L L K K I A F N P A V E L S Y L K K E E Q K D
UniRef90_R6HV96         N E T I T
UniRef90_G7ZII0         A F A H V S R
UniRef90_UPI0003D335BE  A
UniRef90_N9YU65         K K
UniRef90_W3AJI7         K K
UniRef90_G9AJS9
UniRef90_D7BJU7         E S F V R L P L L N L P E D L R R A L E E G T L P Y T
UniRef90_D4K4N5         K K
UniRef90_V8BSY0         Q V G V E L S Y L T V P E     Q E M V E K
UniRef90_N9VV04         K K I A L N P A Y E L S F L K K E E Q R D L L D A M D S E Q A T P S L S Q A Q R
UniRef90_W6W5U4         A P E I G R R R W L E L G E R L E N V E
UniRef90_UPI0003B75692  E S F V R L P L L S L P A D L R E A L E A G A L P Y T A A L E L K K V K D
UniRef90_E5XGR8         N K D F Q L T L T D L Y E     L E K V Q D I K K R N E I L K T A V S S R E I A W
UniRef90_I8ANS5
UniRef90_F8XRI8         M R K I K L G I A E L L A S V P E A E N Q N K A L E K I I S M N L G V E Q
UniRef90_D4JDM2         T H L I P E I L E L V D N S V L K D Q E M L Q I A M A V E L S Y L R K E E Q A D
UniRef90_S0EW79         S P N R P S A G Q I T E K H A R Y L K Q Q Q Q V V E H I Q Q E R L N S E E T E K
UniRef90_I4EB24
UniRef90_D4KMN7         A K K I G I M Q A V D L S F L S E D A Q Q
UniRef90_V2QAT7         D I T L I V E I N K F L N N A E P D I Y A A A L D Y I K S I D N I S R N I I E K
UniRef90_D3NXR5                   L G D E A Q T A L R D G K I T F S Q A R T M A A P A E Q A K
UniRef90_R9MQ22         S Q G V D I S F L V     E E A Q Q W V Q E V I E E K G C N V S M V Q S A K I K E
UniRef90_UPI0004774826  A K G V G R D R W E E V K K L I L D P A R A E W A I E F V A S D Q F K D L G V E
UniRef90_W6MBL2             R H I H L G H A E L L A G L P E V T Q E G T L A K I L S D R I T V A D L K
UniRef90_UPI0003B371C1  A H G V G R R
UniRef90_F7UX91         I N E L V T A H K K A P E E V T E W L E D D T Q E V T R G S V K L L R E F L D D
UniRef90_Q1H9Z8         L L G R T A A T A F K K F L S D H L Q Q L S E A E T V L L K A W E K V K D
UniRef90_S3N4E9               H A V T L A D A E F I A T H K E Y R D E L E E K L A R R Q L I V N R V E R
UniRef90_L7LEH1         A P G V G R E
UniRef90_B3Q4F1         A K G I G R D R L K R L L L P P A K L E Q A R Q F V G E G R F Q
UniRef90_UPI000467512B  T V D D A L I I A E Y S D D P D A V E Q L E E S A G T Y N F D W
UniRef90_UPI00026C6F1A  N Y K K V L R Y I R L N H L V P E L L D K V D A
UniRef90_G5F865         E R Q I A F R P   A V E I S Y L S E E Q Q Y T L L E A M E Y N D A T P S L A Q A
UniRef90_Q1JB49         S K N Q I F R F V R L T E L I L D M V D E K K I A F A Y E L S F L T K E E Q A T
UniRef90_N2AHB8         Q K     I S R E H A L A L L R L E S Y Q Q I V L A E E V M E T G L T M V E T R D
UniRef90_X1S548         S G E L S V T Q A Q H L R R I A N P Q T Q I E L A R M I V D E G L S A A E V S Q
UniRef90_UPI0004785BBA  I K L L S F V K T K L P L I K L P D N V S D A I A A G
UniRef90_K9UCV9         A P G V G R P S W Q Q L A E L V E K A
UniRef90_L0LT28
UniRef90_A0A015M8C0     E G R I K M R P A V E L S Y L D E D C Q R D V V D E I
UniRef90_D4J495         K Q
UniRef90_R7PEN6
UniRef90_D3PF41         Q I Y R Y V L L F A F P E D C I E L V K N S S K F P V R V F D I L Y K
UniRef90_C0ZEF6         S H P V     H R L P T G M L E W P D T G     T A L I R F P P T S L A E L E R
UniRef90_C0QDB9         T K A H C I E L S K I K   D T K Q M L R T A K L A     I E N D W S S K K V G N
UniRef90_I0XQM3         S G S D L S V K N L E T L L K K K E G R G G E
UniRef90_G9ZZA7
UniRef90_R9KPS0         Q I A R Y I R L T N L I P K I L D M V D E G K I A F T I A V E L S Y L K E E E Q
UniRef90_F7ZM96
UniRef90_UPI00034577B2  G L P L T L A P E D R Q A E L L E L A Q N G A S R S R L M R A L Q S K P K I S P
UniRef90_L8F0T7         E
UniRef90_B5CRV2         S G S S V G R L L K L N D L I K P
UniRef90_UPI000418AF06  A P K V G R R W Q S F A E L L K D A A S L K R V R A V I A D P K F A E R E T
UniRef90_W8I7B4         A P A I G R R R W A E L A E L V E N
UniRef90_X1RCL7
UniRef90_C6BPY0         E R K I S L G H A E L L A A V P K N V Q T Q I L P L I I E K K I S V H D L K E
UniRef90_UPI000476C545  A P E V G R R
UniRef90_Q0FXN7         A P K I G R P
UniRef90_M6FVY4
UniRef90_W7WYM1         V N E L V T A Y K K S P D E V R E W L
UniRef90_UPI00037F1FE1  T E D P E V V L T L K E L S G L D W G G A Y W A A T R L R A G E E N R D S L R E
UniRef90_A6P0H1
UniRef90_E8QXH1         L G D H R L L C S G K P E D V D R L L N G A V I H L V N T D P P Y N V R
UniRef90_K4KS37
UniRef90_E8WU12         K E L S R G A L L K V A R I K R P T S Q R K A Y D A L V A S L G M P K K E I K R
UniRef90_N9ZNR4         N Y K K V M R Y L R L N H L V P E L M D K V D
UniRef90_A0A023DKL5     Q Y P V I R I P K E D E H L P         P K G Y V L I K Y Q P I S Y E A I E A
UniRef90_UPI00046A6C37  L Y R H Q F N G Y R I P C D A M N Q P Q E G E V     L I S Y P Q L S L D D L K Q
UniRef90_T2JYY7         S L K N R L P L L K L P G D V L E K L R E G K I A Y T K A K A I A K I K D Q E
UniRef90_M4U0V2
UniRef90_G2J996         A H A S L L E S F R L P E H K R E E L K
UniRef90_B8JFN0
UniRef90_R6QZ46         E G R I A F R P   A V E L S Y L T K E Q Q A A L L E T I S Y T D A T P S L A Q A
UniRef90_R6TTN2         K K I S M R P A V E L S Y L P K E E Q E
UniRef90_E9RVF1         V G R H R L M C A T S A E D V A A L M D G K K A N L I V T D P P Y N V
UniRef90_A0A024DZ91     L Y Q H E Y T V R R H S N D T E V W P H S N E I L M S Y P E Y S L M     E L K K
UniRef90_UPI0001D2EF6C  A K G V G R
UniRef90_F6DJ52         E S R H R L P L L N L P E D L K A A L E E G A I P Y T A A L E L K K V K D
UniRef90_H2C8V8         L E W L E E R L R G L G A K V D R D P V S G E       E P P E L T K A E I I R
UniRef90_H1A9E7         T A D T E T L N N L R L L F E L N E E R C R A V C A V A M S D G M T R K Q S R E
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                                    210              220              230
UniRef90_UPI00036AD1D2
UniRef90_R7B984
UniRef90_D3NYQ6
UniRef90_UPI00036E125B   F K D R A N K E A P K P T
UniRef90_F8GY80
UniRef90_F3AEP0
UniRef90_UPI0002E4CB56   D A S K R K S L L E K A L K G K L S F R E I R D R I K
UniRef90_UPI0003755C3F   L V E K A L L D E P K K K E K P L P S K E D V I S   R L S R L
UniRef90_N9Y9T7
UniRef90_UPI00040452DB
UniRef90_A0A022GCQ1      T I E A A
UniRef90_R0A1G9
UniRef90_R6HV96
UniRef90_G7ZII0
UniRef90_UPI0003D335BE
UniRef90_N9YU65
UniRef90_W3AJI7
UniRef90_G9AJS9
UniRef90_D7BJU7
UniRef90_D4K4N5
UniRef90_V8BSY0
UniRef90_N9VV04          L K K
UniRef90_W6W5U4
UniRef90_UPI0003B75692
UniRef90_E5XGR8          K A K Q A
UniRef90_I8ANS5
UniRef90_F8XRI8
UniRef90_D4JDM2          L
UniRef90_S0EW79          L V R V I R T D P L R A
UniRef90_I4EB24
UniRef90_D4KMN7
UniRef90_V2QAT7          L
UniRef90_D3NXR5          L V K N P G I L P P
UniRef90_R9MQ22          Y G K T G E L T L A M V R L I L T E E K P K E R K V T L K
UniRef90_UPI0004774826   A R F N A L L A Q L K K A R K P K P
UniRef90_W6MBL2
UniRef90_UPI0003B371C1
UniRef90_F7UX91
UniRef90_Q1H9Z8          K N Q Q G Q
UniRef90_S3N4E9
UniRef90_L7LEH1          L E R K A Q I A A A K K
UniRef90_B3Q4F1
UniRef90_UPI000467512B
UniRef90_UPI00026C6F1A
UniRef90_G5F865
UniRef90_Q1JB49          I K M K K Y M Q E G K L T D G V I S S I
UniRef90_N2AHB8          L M E
UniRef90_X1S548          R V R
UniRef90_UPI0004785BBA   L
UniRef90_K9UCV9
UniRef90_L0LT28
UniRef90_A0A015M8C0
UniRef90_D4J495
UniRef90_R7PEN6
UniRef90_D3PF41
UniRef90_C0ZEF6          I V S E G H V L P A G V T R F E I D G R L L N L C I P I S L L
UniRef90_C0QDB9          T V E R L K R N T N K A A K K E I P A N V P A Q G V P
UniRef90_I0XQM3
UniRef90_G9ZZA7
UniRef90_R9KPS0
UniRef90_F7ZM96
UniRef90_UPI00034577B2   L A P E Q L A K V L G S K R F L
UniRef90_L8F0T7
UniRef90_B5CRV2
UniRef90_UPI000418AF06
UniRef90_W8I7B4
UniRef90_X1RCL7
UniRef90_C6BPY0          L A S Q A L R L
UniRef90_UPI000476C545
UniRef90_Q0FXN7
UniRef90_M6FVY4
UniRef90_W7WYM1
UniRef90_UPI00037F1FE1   L V R K A K
UniRef90_A6P0H1
UniRef90_E8QXH1
UniRef90_K4KS37
UniRef90_E8WU12
UniRef90_N9ZNR4
UniRef90_A0A023DKL5      Y V T N G W M F P A G V T R F I I N G R L L N L K V P L A L L
UniRef90_UPI00046A6C37   V V D G D Q L I P A G V S R C I V E G R L L N L R I P L D I L
UniRef90_T2JYY7
UniRef90_M4U0V2
UniRef90_G2J996
UniRef90_B8JFN0
UniRef90_R6QZ46          I K M K
UniRef90_R6TTN2
UniRef90_E9RVF1
UniRef90_A0A024DZ91      V I E A K F L M P A G V T R T T L S G R L L N L R I P L H I L
UniRef90_UPI0001D2EF6C
UniRef90_F6DJ52
UniRef90_H2C8V8          V A K T G L R F P P K T T R H L Y N F I I P K L R V K L
UniRef90_H1A9E7          L L N D A K R
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Multiple sequence alignment (residue positions 1–40)

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                        1         10          20          30          40
UniRef90_J3HUT0              V V Q I E P D L I D A S F I R D R D D I N T D D F S E F K A S I E E H G Q
UniRef90_A9MDC1             V V E L D P A D L D A S F V A D R P E T D D Q E Y K D L L E A I R E R G Q
UniRef90_C7RVT3              E R I P V D L I D A N P Y N A R R I Y R P Q R I G E L S E S I V A N G Q M
UniRef90_UPI00047934F5     V V D L D P E L V D T S F V S D R L D E D D E A F Q E L L A A I R E R G Q
UniRef90_UPI00047E4F94     I L D I D P T L I D P S P V A D R A D V D D P S L E A L K A S I K A N G Q
UniRef90_UPI00040BA086  M Q I L K I D P R S L N A N P D D A R Q S K S S A Q A D A L L A T V K A V G I I
UniRef90_G2T5K0                                  H P F K V R D D A K M Q E T V A S I K A N G V M
UniRef90_E8WH05         P P L Q L P V D V I S L N P D N P R E I L    G D L T D L G A S L R D H K Q K
UniRef90_UPI000360FC24        K I D P R A L N E N P D R M R Q T K S P Q A D A L L L A T I K A V G I V
UniRef90_W0WN14                                          E L A S S I E A H G L I
UniRef90_W2BYQ8            D I P L E E I D D F P N H P Y K V K D D E D M M N L A E S I R E Y G V I
UniRef90_X0TEE3                                R L T R D A D E D R D F Q E S L R E H G  I
UniRef90_UPI0003076E89     I V E L D V A V L D Q S F I A D R I E D D D E D Y V H L R E A I R E H G Q S
UniRef90_F9DR38            L Q Q I E I E K L V P Y A N N S R T H   S E H Q L K K L Q S S L R E F G F I
UniRef90_Q120W7                            F N Y R R R F N Q A A M D E L V E D I Q R Q G I L
UniRef90_B2JUN2         V P I R A L D P K T I Q A S K W A N R Q D F G D E S F A E L K S L I A E A G G N
UniRef90_F2LSK2              L S I D D C I P N P Y N P R S F Y S P Q S I D T L A A T L Q Q E Q Q L
UniRef90_X0WLA8             I D V R K I D P S P Y Q H R R D F D E D K L R E L A A S I Q S E G L I
UniRef90_M1Y923              K M E M V E I S K L V P Y R T H S P E Q I M K L R S S L R E F G F I
UniRef90_B7C9I2         V M T I P I D K I T D F K G H P F H V T M D E D M A K L I D S I K E N D M L
UniRef90_K5DPP1         T V K V A V S K L A I D P L N A R K T F N A A K L A E L A E N I A H E G V L
UniRef90_M8A4I2                           D E E Y T E L L A A I R E R G Q D
UniRef90_H4F5C6         L A V I D L D T A L V E P S F V R D R M    P G D I D G L L S S I R E Q G Q
UniRef90_T0HVA1        M T I Q T I Q L N K L A L S D L N V R K   V K P K E I E A L A A D I Q A R G V L
UniRef90_M4S3R9             I K T I P L N K L V R S P R N V R R H A D C A A D A E L K A S I A A H G L L
UniRef90_UPI0004761EFF       D I D T L V P Y A R N A R T H  S P E Q V A Q I A A S I R E F G F L
UniRef90_F8ICN6          R V P L D A L Q D H P N R L F R D L T E E E L Q A L A A D I Q E N G L I
UniRef90_X1DNY2            I P I D K I R V S T L N I R E G F G D E E D Q A L V E N V G S F G I L
UniRef90_UPI0001FFFB91     V P L G A L A H N P F N P R A E L S E   I E E T A E S L R T R G Q I
UniRef90_UPI000381ABDC     L P I D D V I E D P D Q P R Q Q R D K E F E A W L T E N I R Q Q G V
UniRef90_J3HV34                         T T I D P   K F D Q L K A S I A E N G Q
UniRef90_F3HKF0           V L E L D P S Q I R V E K   Q V R K K F    R N I E E L A R S M K E E Q
UniRef90_UPI000479DEAD         I P I E Q I E P N R E Q P R Q T F L S E S I E S M S R S L A N D G Q L
UniRef90_U4Q364            I R E L D P L S I D P S P F P D R P D D D A A D F E A F R N S I R S E G Q
UniRef90_UPI000475DA59     I V D V D P D D V A P S T I P D R F D Y D D S A I E D I A A S L S E R G Q I
UniRef90_X1PPI5      I V V S Q I E I R D V V P N D Y N T N  V M S P D A Y R R L V E D M R E N G G A
UniRef90_A3T2A1           V Q D L D A S L I D M A G V E D R L G V D D E S Q R K L E E S L R T Y G G Q
UniRef90_D6GRE7            I Q D I E I D L L E A Y H D H P F T L Y T G K R L E D M V D S I R E N G I L
UniRef90_UPI0003725DEC   V V E L D P R L L D V S F V A D R L S D E G E E Y Q E L K Q A I K E S G G Q
UniRef90_UPI00031A82EC     P K I S I N K I K I G V N    R R P L N G E K V K D L K E S I Q A N G L L
UniRef90_UPI000375E261   V S K I D A A L I D T S F V T D R L D H K D E F E A L V A S I Q Q S G Q
UniRef90_V5AFE9        V E Y R K V A A L I P Y A R N P R T H  N D E Q V A R I A A S I V E Y G   W
UniRef90_W3RQQ9        V V E I D P N L V D P A F I R D R L N V D G D E F E A F K A G L S E D G Q
UniRef90_A7ICR3             N I P L N K L I Q W D G N V R R T G A D D G I E E L A A S I G A H G L L
UniRef90_V9WPR3        V Q D I D A A L I D D A G L E D R L G L D D A A H R Q L V E S L R T Y G Q
UniRef90_C0QPK4          E E I P I S R I K S P R F H D R S Y V S Q E R I A S L A E N I K E F G  L
UniRef90_UPI000262BFD6      K L S Q L R L S P L N Q R R  I K P S A I E S M A D D I H A H G L L
UniRef90_B0TD04         E K V N T D K L V P Y A R N A R T H  S K E Q I L Q L R A S L R E F G F V
UniRef90_H8L7V4           E M Q L V S I A K L V P Y R T H S P E Q I T K L R S S L R E F G F I
UniRef90_B3Q220        I V E L D P D L I D S S F V R D R L A D Q P L D M E E L V Q S I A E N G Q
UniRef90_C7CDK5           V D P R A L K P N P D P T R R T A A P Q A D A L L L A T I K T V G I V
UniRef90_UPI00046FB66B  I Q S I P I S K I R K F K D H P F R L Y E D E R L T D M M D S I R N N G I L
UniRef90_A0A024K6T8     V V Q I H V A E I A P H P F N P R R S Q P D P K W E D L L N G V R A S G V R
UniRef90_UPI00035F27D2  I V E L E L S A L I P F K A H P F K L Y T G E R L D N M V E S I R E N G V I
UniRef90_D4LLH8                                    L Q E S I E K Y G I L
UniRef90_H7BVX0           V A I E K L I P N P K N P N T H P D  A Q I Q A L G R I I R Q T G  W
UniRef90_UPI000363A363  L E V T Y L R T T S L K P D P R N P R  V H S D K Q V R Q I A Q S I E S F G  F
UniRef90_V5UHK8           L Q I H Y R P I D S L I P Y K Q H S D A Q I A Q I A A S I R E F G  W
UniRef90_Q0FMK8          V E V P A N Q I E D G G L Q D R L G E D P A E H E R L K A S L A E Y G Q
UniRef90_A0A016QJQ7    L V N A P I S S V H V L P F N P R D E L N S E K L Q E L V K S I R E H G V L
UniRef90_Q9ZGR8           V P L A S L I K S P L N V R T V Y S A E S V S E L A D S I K G V G L L
UniRef90_W0U7A0        V V S L P M S K I E P F S F Q P  A I D E N E I S A L A D S I S K C G L I
UniRef90_I9WV67        I V D L D P G L I D D S P I A D R A D A N D R T L P G L V E S I R E S G Q
UniRef90_V9VV04        I Q T L Q V S D I Q V V E R L   R T A S P T A V A S I V S S I H E V G S I
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UniRef90_W6W2J6        I I E L D P D R V I P S F V N D R L D I D G D R F Q A F V D G I K E A G Q
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UniRef90_L0NMQ5            I A L N K L D A D P K N V R K T Y T K E S I E S L S A S I L A N G V I
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UniRef90_F8ICN6         E V D D N R A A R M L I S N I K T R T L S P M E L A R A I R R E R E L I E E L H
UniRef90_X1DNY2         D H D E E A L D L S L I E N I H R K D V D P V T L G R A L K R R L E L S D
UniRef90_UPI0001FFFB91  D S A T D L L E T A L I A N V H R V D V P P L D Q A R A I Q Q L V G V H G
UniRef90_UPI000381ABDC  D             Q H T D W N G V I E N L I R E G L T T K D M R K K
UniRef90_J3HV34         N L T D R E L V V A G R E N L D R A D L S F I E K A L F A L R L E A A
UniRef90_F3HKF0         R S K S K S T A S Q L A E N I Q R E P L T P I E V A I A L V D L R E Q M K E E G
UniRef90_UPI000479DEAD  P E P E S L H R K A L L T S L H R E D L N P L D E A I V R E I A S N T D L E S Q
UniRef90_U4Q364         E I S D I E L A I A G I E N A D R Q D L T W I E R A L F A R R M D D A
UniRef90_UPI000475DA59  E L T D E E A I V Q G E E N A N R N D L S F I E K C A F A       L S Q E
UniRef90_X1PPI5         N V S E E A K V I N Y R K N S E R G T I N P F R E A       E L F K S E M
UniRef90_A3T2A1         H L D D H A L V M A G Q E N T A R Q D L S F V E K A S F A A Q L D A S
UniRef90_D6GRE7         E L S E E E A Y T Y V I E T N Q R S D L L P T E K A L V       L K V R Y E K I A
UniRef90_UPI0003725DEC  K L D D I T S A I A G Q E N S A R S N L S F I E R A Y F A Q N L L A S
UniRef90_UPI00031A82EC  H Y E D E Q S R L A E I E N L I R N E L E P L E R N L Q R M G L R A K A G D N Q
UniRef90_UPI000375E261  Q L S D I E L V L A G K E N S E R R D L S F I E R A L F A H E L I A
UniRef90_V5AFE9         A H L S P T Q K R A L I L A D N R I A L D A W D E E L L A L E F A E L A D A L A
UniRef90_W3RQQ9         E L S D E E L V V A G K E N T D R K D L S F I E R A L F A A R L E D R G I A R A
UniRef90_A7ICR3         S E E T D A G E L S L A E N V M R V A M H P A D Q F E A F R D L V D
UniRef90_V9WPR3         Q L D D H A L V M A G Q E N T A R Q D L S F I E K A S F A A Q L Q D S
UniRef90_C0QPK4         D I D E E A L A L M I S E N A Q R E D L N D Y D K L M S H       L E Y L S F
UniRef90_UPI000262BFD6  S   K E E A I E L S L A E N L Q R E D M H P A D S I R A F A A L R D T
UniRef90_B0TD04         E H L T E A Q K R A Y I I A D N R L A L N A W D A E M L S V E L S D L Q G A I S
UniRef90_H8L7V4         D H L S E A Q K K A Y I I A D N R M A M D A W D E E L L R V E I E S L Q G M T G
UniRef90_B3Q220         Q L E D T D V V I A G I E N S A R R N L S Y I E R A V F A F N L E L
UniRef90_C7CDK5         D E T D K D A L R A L V E N V A R E G M N P V D L W R S I E R L V G L
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UniRef90_A0A024K6T8     D V D D G D L D S M A T E N L G R Q D L S D L A E G E L Y A R Y S E I
UniRef90_UPI00035F27D2  E S D H E A R L I V T I S N L       E Q R S Y S D M S P S E L A K S
UniRef90_D4LLH8         V L S D D S I L L S M V D S N L H R E R I S Y S E K A F A Y K L K N D V L K R K S
UniRef90_H7BVX0         N Y T N E A E E Y A L V A D N R I A E L A E I D N K L L A D I F A D I D T G E E
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UniRef90_V5UHK8         D H L T D T Q R R A L I L A D N K I G E N A W E D L L G I E L S E L K D A G F
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UniRef90_A0A016QJQ7     A V S D E R A E L A L I E N A H R T N P S I V D Q T L S G F K L L A L
UniRef90_Q9ZGR8         V I P Q E L A T A A S M E N G H R R D M H P A E Q I A G F R       A M A
UniRef90_W0U7A0         E V T D D N V A F D I V A N I Q R K E P R P S E S K M F N T Y L S L R K N V S A
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UniRef90_A0A013WTI9     A K A K D G R E I S L A E N Y D R L Q M S P A E D C L A F R D L I E V E
UniRef90_B9K650           T A D E A T E L S L T E N V Q R E E M H P A D Q Y V A F Q A M V N
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UniRef90_C2QE03         E     S E L I S I D S W A H Y I P N D R N F I A D L K E N P N L Y W S D V P I Q
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UniRef90_I1AXU4         S L S D E Q A I L A G H E N S Q R L D P S F I E K A L F I R E L S D
UniRef90_A0A011QU09     D H L T P T Q R R A L V I A D N R I A E N A W D D A M L R V E L L T D L E F D L A
UniRef90_B0U2B0         E L T D D Q V R V Q R A E N L Q R E N L T Q L E I A V A K E R L G T L E K V A A
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UniRef90_C7RVT3      E T         A L A G V V R K S L A N V   N R T L S I L K L S G T V L D L V G Q
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UniRef90_UPI00040BA086    G W T E E A I A V A L       S L P V R Q I R K L R L L A N V
UniRef90_G2T5K0         Q G G R L K N V A E G D I G K R S V E I V G                      E A H D M
UniRef90_E8WH05           K T Q D A L A A R L H R S Q G W V S Q
UniRef90_UPI000360FC24    G W T E E A I G V A L       S L A V R Q I R K L R L L A N V P A M L D H M A K
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UniRef90_X0TEE3         K F G Y S Q E K L A E K V G K S Q S W V S       R H L K L V E S K I E E
UniRef90_UPI0003076E89    G Q R K E T I K S A L T I D D T L M S R M L S I A E T V P P P V I E A I
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UniRef90_Q120W7         L L N G D R E E A A K R L G W S   P Q V L N S R L G I M N A T D K V R D A Y I D
UniRef90_B2JUN2         D Q L W S Q N A M A K A C G L S Q G N I S S A L L V A   E L P P E V V G A F P S
UniRef90_F2LSK2             D Q L E L A A A I G E D K G   V V N K V L L N T L P M P L L Q R M V D
UniRef90_X0WLA8         K E Y A S M G K
UniRef90_M1Y923         F D G A E L D E L F K E T V E D D K F D L T S A L E K A S F V E K     G D I W T
UniRef90_B7C9I2         R V D I N I D D V P V E Y S K S T S T Q V E Q K S K N K Y S V E L L G E Q L G L
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UniRef90_M8A4I2           G Y S R D V I Q A A L S V D Y Q T L S K M L T V P N A F G E R L I E A I G P
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UniRef90_T0HVA1         D S G K D V D D V A A S F G V S P A Y V   R R V L K L A A L H P T I L D E I G M
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UniRef90_UPI0004761EFF  F D E K E L A R L F A E E D G A E E D D F D V D A E L E K P C F S K A G D I W H
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UniRef90_X1DNY2             M S L S L Y A R R I G K P K S T L S
UniRef90_UPI0001FFFB91      S Q G K V A K R L G K T P A W V S Q R L L E L T P D L Q S A V E A G E L
UniRef90_UPI000381ABDC  E E G F K Q K D I A Q R L S R D T G W V S     K H M A L A N P P T F I Q T L W D
UniRef90_J3HV34           G F D R A T I T A A L S T D K S D V S R Y I A V A R S I P E K L A I Q I G P
UniRef90_F3HKF0         K K G   T G R E L A E Y C S K P E S W V S K A L A D L P D E L A A L I D D E I T
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UniRef90_UPI000475DA59  Q A G Y K R D I I S A S L A T G K S H I S E M L
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UniRef90_A3T2A1           G H D R Q T I A D A L T I D L P M V S R M L K V D L T F L R K I G S A P S I
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UniRef90_UPI0003725DEC    N M T K D V V R S S L A I D E A M L S K M L G V V E V V P A A I I K A L G A
UniRef90_UPI00031A82EC  Y T L K T T K D I A K Q T G F S E R T L Q Q G L Q I A K A I H P E V K Q L I A K
UniRef90_UPI000375E261    R G F E R G V V Q D A L S L H K A E M T R F L Q V V E A V P E Y I V R A I G A
UniRef90_V5AFE9         L T G F N D A E I D A L L A D E L G E A E D D G A S D P E V P V S R P G D V W L
UniRef90_W3RQQ9             A I M S A L S V P K G N L S T M I S L V R E L P E D L I I A I G A
UniRef90_A7ICR3           R G L D I A A V A R R F G I S E T L V V   K R L K L G R L S P V I L D A Y D L
UniRef90_V9WPR3           G Y D R Q T I A A A L S I D M P M V S R M L K V G T A F E L D F L R Q I G S
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UniRef90_B0TD04         L L G F D D A E L N K L M G K D D D F D V E G E L Q K P A V T K     P G D L W L
UniRef90_H8L7V4         F D E K E L A E L F A D D S G S D D F D L T A A L E K A S F V E R     G D V W T
UniRef90_B3Q220         K G F E R P V I M K A L S T D K T E L S K L L S V A K A I P A E I V R S V G A
UniRef90_C7CDK5           G W T E E S I A I A L A Q S V R Q V     R K L R L L A N V Q M A R G D M P S
UniRef90_UPI00046FB66B  S Q G   K R N D I I N E L K K K E D P T S A L I G H K L K S R D I V A N E Y G L
UniRef90_A0A024K6T8       G L S Q R A I A E R L G V D Q A T V S   R K L A L K L L A P E V R D A V D D
UniRef90_UPI00035F27D2  L K M   Q L E A A K A T G K K Q D L I
UniRef90_D4LLH8         G R K K S Q V D H K K P R K R S I D I I S E N C G D S P K Q V Q R     Y I S L
UniRef90_H7BVX0         L T G Y T D K E V E S L V T G L   A E A L H N D L T E P D E I P E T P G D L W I
UniRef90_UPI000363A363  D F D L E
UniRef90_V5UHK8         D L G L T
UniRef90_Q0FMK8           E G F E R K I I C D A L H I D K T V I S R M L S V A D T V P Q V L I E A I G
UniRef90_A0A016QJQ7     R T K M S Q E E L V R H L N G V R
UniRef90_Q9ZGR8         Q E G K T P A Q I G D L L G Y S P R H V Q R M   L K L A D L A P V I L D A L A E
UniRef90_W0U7A0           D L T V N E I S N M F G I S R K T I Y R Y A   N I S N L D N G L A E L I D
UniRef90_I9WV67         A M G V G K G D L S T L I S V A R
UniRef90_V9VV04         K R L Y E L D N P E T A R G K A G A H G R W N A T D I M S V A S N A A E V F G K
UniRef90_A0A013WTI9       G R S T A E I A K R F G I E E R F V V   G R L R L A N L A Q P I F D A L E A
UniRef90_B9K650         E G K A I A D I A A R F G
UniRef90_W6W2J6         Q G Y S R E T I S D A L G R K E A Y I S I L T N T A V L I P D D L I R L I G P
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UniRef90_UPI000369AC58  F T G F E A P E I E Q L F I K E D D F D V D V A L K K P I I S Q K     G D I W L
UniRef90_K2IGX8         T S G Y E Q A I I L A D L A V D K P M L S R M T K V A R S I P Q S V I E R I G S
UniRef90_C2QE03             K Q D F L A I I T I D G N N Y Y I Y S K F M N Q D L W K Q I V N V Y T D
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UniRef90_UPI0003694B35  F E I A E L D L L T G D L E E E R L A S R E D E Q Y E P E A P V S Q L G D L W Q
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UniRef90_R5I2E4          T  K K T D V F L I D P D G F N V R R D F D L D E L K E Q I K A K G V L
UniRef90_W1JM37      P S R D I P F N K L V L S Q S N V R R V K A G V S I E Q L A E S I A Q R T L L
UniRef90_U2GPZ4          V  K K K I D D L I P A D Y N P R K D L Q P G D V Y E K L K R S M R E F G Y V
UniRef90_UPI000368E5D2     L D P A R V R I W P G N A R T H L S E E N C R E L I D S I V A E G G Q
UniRef90_E1VA27           E  L T L D Q L R P Y D R N P R K Q R N P R Y D E I K A S I R E V G L
UniRef90_B6IXR2                          F A D T A F E Q L V Q D I L A R G Q L
UniRef90_K8RQQ4           V  E I P I S K L V E A P G R R R H M P A Q K Y A E L R E N L R R N K L I
UniRef90_R5HFN6          L  Q M I D I N L I V L K L K S L R K H S K K Q L Q K L K N A I N K V G Y
UniRef90_C9RCB5          V  S E V P V S L L K P H P K N A E Y Y S P R E A L R R S I A A E G L
UniRef90_Q4ZDB2           I  D I N K V T V G K R I R K D Y G D I T S L A D D I E D R G L L
UniRef90_Q8PKG7           V  T L E Q L R P Y E L N P R V T V N P L Y A E I K A S I R E R G L D
UniRef90_T0H608                          D V S D I L P T V R A R G V L
UniRef90_D8EW47          T  R T V D I H L L E L R Y A H C R I M N H Q A L K Q L K D I E T Y G Q I
UniRef90_C0MBJ3      M Q I Q K V S I S E I K M Y E N N A K L H P K K Q I E Q I K S S I K A F G N
UniRef90_UPI000262C589   I  Q T V K L S K L R L S P I N V R T A P D E Q Q I G P M A A S I E A K G V L
UniRef90_G8XCJ5          V  E Y V P V T A L V K S P L N V R T I Y P A E K V C S M A D S I E A I G L L
UniRef90_X1NJ39          V  P L D Q I S F G E R R R E D Y G D L D A L I N S I S K H K L L
UniRef90_H8FVB4        R D I P F N K L V L S Q A N V R R I K A G V S I E E L A E D I A R L T L L
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                                          50                  60                  70                  80
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UniRef90_C5SZF0        V P A S A I E H P T I V G D Y L L I D G H Y R K K A L A S A G Q H T I D L V I R
UniRef90_B8IRA2        Q V P I L V R P H P E A G R Y Q A A Y G H R R L R A A A E L G R P   V R A I V R
UniRef90_C7CN68        Q R P I L D E Q G Q E T G R Y E V P A G G R R F R A L E H L V K T K V P C I V R
UniRef90_F7X230        T I P L L V D E A G     E L I A G H G R A L A A Q E I I G L E L V P V M V R
UniRef90_D0D3H7          Q S L H V R P E L D A E G F E V P A G G R R Y R A L E L L V K Q K V P C I V S
UniRef90_C5D0E4        V Q P I K V R P I P V G Q Q Y E I V Y G H R R H R A C L E L G L P   V L T L I E
UniRef90_F2LSC0        T D P I I L R P D P D K A E Y L V V A G E R R F R A C A L A G I   Q V L A F V W
UniRef90_A0A028IQ80    Y   P I V V I K K     E E T Y E L V G G E K R F R A V R D L K H K T I R A I I R
UniRef90_H9YSJ8        E Y P I I V     D G D G D I I D G H H Y P Q A W T D L G R D D I P T R V V
UniRef90_D7BJI1        Q N   L L A Y A D E E G L R V V G G G R R L R A L E R L L A E G A I P V P V R
UniRef90_V7EGR8        T V P I L V R R H P T E N R Y L L V Y G R R R L E A I R A S D K K K V R A L I A
UniRef90_UPI0002379D5C Q V P I L V R K S K S D G R Y E A I Y G R R R L K A C R E L G I   R V R A N V Q
UniRef90_A0RWW5        E H P L L V R E L   R G R F K L F A G Q R R Y L A S K L I G M D P L P C R V R
UniRef90_F9TDE5        Q K P G T L R P   T K D G R F E L I E G S R R L A A V K L A K Q E Y L   A L V G
UniRef90_U2ZWP4        Q N L I G L P V A R K K G Q Y R I T A G G R R L D A V H R A I E K E L P V K V L
UniRef90_R7IKG1        R E P I L V R A A A Q G   Y I I V E G N R R L M A C R M L G W R E I P A R V K
UniRef90_J2GJ32        Q N L V V V P K D R W A D K F E V I A G G R R F Q A M Q Q L V E Q D V P C L V E
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UniRef90_K9EGF3        E P V I W N S T T G N     I V G H Q R L K V L E D L G H T D V D V I V V
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UniRef90_S9QHI5        S S   I T V R P V L D D G M Y T I P A G G R R F R A L E L L V K Q K V P C I V R
UniRef90_Q1WL75        L Q N L V R K G D K D R Y F V A G G R R L A A L E I A K D Y P V E C K E R
UniRef90_E6UPE0        E P V I W N Q K T G N     V V G G H Q R L K V L L D L G Q T E I D C V V L
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UniRef90_UPI0001D2E077 Q G L N V R P V L D A D G F E I P A G G R R Y R A L E L L V K Q K V P C V V R
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UniRef90_D9VJ68        Q N L N V M S R R A F L D R Y V V I N G C R R L E A A P L A D L P A L K C A I H
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UniRef90_J7QPD7          Q S I T V R P V L D E N G F E I P A G G R R Y R A L E L L V K Q K I P C V V R
UniRef90_F1TH31        S   P L I I R K     E G L Q T L S G H N R R N G A I E A G L N K V P C I V R
UniRef90_K2BDZ4          N P I V V Y K R   G E L Y R V V A G E R R C L A S I L A G K E E I E A R I F
UniRef90_A7IP04        H   P I T V A A P K K G E C F R L I A G L H R L S A A R Q L G W S E I A A V F V
UniRef90_D4LIA4        R K P I T V S K R S G     F V V T G H G R L E A A S M Q A S V V P V E Y Q
UniRef90_C9RC89        T P L I L A R     D Y T I L A G H Q R W E I A R E L G L S H V P A I I K
UniRef90_A0A013WUM9    V   P L I V R Q N G S P T T Y E I V A G K R R Y H A A L I V A Q E E L P C A I M
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UniRef90_R5MRJ9          N P I T V L P F K Q D E D R Y K L V D G E R R Y R A T M L A N I P Y I K A L K K
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UniRef90_H0SXE7        Q S L N V R A V L S D D G K F E V P A G G R R Y R A L R M A K T Q A V P C V V R
UniRef90_M2A3I5        K K P I T V T P K P G K D K F L L V C G Q G R Y E A Y Q T L G Q D E I P C I V V
UniRef90_D9T3H1        L S P L I V T P L G D E G P Y L I I D G E Q R Y W S A V E A K Q K W I Q V I I R
UniRef90_F3Q697        K   P I L V R E L L D   G T Y E I L G G E H W R A A I E H G M A A V P V T S V
UniRef90_A0A038GM66    K R P I T V I P D E D G P R Y G L V C G Q G R L E A Y Q V L G E Q Q I P C V V V
UniRef90_U2FCW1        Q N   L V V H E M K G G R K Y G V C A G Q R R E A A L D L L Y A Q K V P V R I V
UniRef90_B0P603        T L P I V V R P D       Y T I I D G F H R W T V A G E E P L H T V P V V V S
UniRef90_C9D4N7        Q N   L V V H A L S E T R F A V D A G G R R L K A L K L A N E G V I P A C L V
UniRef90_UPI00041B776B   Q S L V R P V L D D G G F E V P A G G R R Y R A L E L L V K Q K V P C V I R
UniRef90_A4TSV5        Q N L I V   H T L A D G Q S G V A A G G R R L T A L N L L A Q E D H T V M V K
UniRef90_UPI0003498F8B                       M I A G E R R Y R A A Q E L K F S D V P I V S R
UniRef90_Q0FXP1        Q N L G V V R   S G E D D R Y L V H S G G R R L K A L Q V L A S K L V P C L V
UniRef90_A0A059E4N7    R Q T L L V R P   E G D G Y G V V A G R R R F H A L Q V I A A E T V P C A I M
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UniRef90_A0A024RLW3    Q Q A I H V I P D D N P G T Y F V S D G Y R R V R A L K E A N K E S V K A L V I
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UniRef90_K2BVR4          N P I V V Y K R   G E S Y R V V A G E R R C L A S L L G K N E I D A R I F
UniRef90_R5I2E4          N P L T V K D E N G D K Y R L V A G G R R L R A T M M A D I P F V K A L L K R
UniRef90_W1JM37        Q S L S V R A V V D A D G F E V P A G G R R Y R A L E L L V K Q K V P C V V R
UniRef90_U2GPZ4        D   P I I W N Q Q T G H     V V G G H Q R L K I L H D E R I E E A E C V V V
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UniRef90_B6IXR2        V   P I L V R R T S A G   F E I I A G H R R V E A C R R L G R     P V L A R
UniRef90_K8RQQ4        H   P V V V R R T A D E   K F E I I S G H H R A D A Y R E I G R D S I R A V V D
UniRef90_R5HFN6            V N P V L L D E K H N I M A G E L R L L A A K E L G F T Q I P A I I L
UniRef90_C9RCB5        R D P L K V T P D       Y T V I A G H V R L E I A R E L G L P V M V L
UniRef90_Q4ZDB2        N P P V V     T P D Y E L I A G E R R L K A M K K L D Y R Q I E V R V M
UniRef90_Q8PKG7        T A P A I T R R   P G E S H Y I I N S G N T R L A I L R E L W A E T I P C L F R
UniRef90_T0H608          Q P V L V R P G C E A G H Y E I V A G C R R F H A A Q L V A A E R L P C A I L
UniRef90_D8EW47        V P A L V V T E K     D K L I V D G Y L V R A L R A C G K D Q I   C V H L S
UniRef90_C0MBJ3        N D P I A I D E S N     I I I E G H G R Y T A L K E L G Y D E V P V I K L
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UniRef90_G8XCJ5        Q N   L V V H N L P D G R C G V A A G G R R L K A L Q L L Q S E R I D A M V K Y
UniRef90_X1NJ39        H   P I V V Q S D D G E P P Y L L V A F K I M K E K E I S C C R I R Y
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                            90              100             110             120
UniRef90_E0UMR9       P L L H S T R R Q A F L A N Y H R E N L N P L D M A                     E M L V
UniRef90_A0A021WX72   P L T D D E L V L A G K E N A E R R N L S F I E R A L F A H T L
UniRef90_C5SZF0       E S D I E L Y R M S W L L N E A R N A Q S P L D N A F A W R K L I D K
UniRef90_B8IRA2       A L S D R E L V I A G K E N N E R R D L S F I E R A L F A A S L E
UniRef90_C7CN68       P A D S S A T E D S I A E N A M R E A L H P L D Q F R A F K A L                 A
UniRef90_F7X230       G W T K Q I K A Y R L A D N Q L A L N A G W D V K L L A A E L E T L P D M A A
UniRef90_D0D3H7       E A G D D I L E V S L A E N I E R A P L H P L D Q F R A F Q V L R
UniRef90_C5D0E4       D L S D A Q L F A Q M R E N R Q R E D L S P W E Q G V M Y D R             A L Q
UniRef90_F2LSC0       E M N D D Q R A I Q I A E N L H R A D L T A Q E V A V D Y E R L G T Y E K V A V
UniRef90_A0A028IQ80   D D T E K T A L I S L I D N L H R S N L S D F E             L V N A I Q K H C D
UniRef90_H9YSJ8       D D D D D N Y H R A Y R T N L L R R D L T D G T K R Q V V K Q Y L L E H P E R V
UniRef90_D7BJI1       V L P D V A L E A A L V E N L Q R E D M S P A E E I E A V A R L
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UniRef90_UPI0002379D5C D I D D A S A L L A G L E N A A R R N L S F Y E K A R F A E A I L
UniRef90_A0RWW5       L S L D D A I L L S L S E N A F T R Q M S P A D K A D A V K T L L K R Y G S K K
UniRef90_F9TDE5       D V P D A D V R E L G I I E N K H Q D V S P Y E K A K A Y Q K     Q I E R G E
UniRef90_U2ZWP4       A D A N D A V E I S L S E N F F K L A M N P A D A C R A F Q D I I E T E
UniRef90_R7IKG1       D V S D M T S A G E I F A A L R A R P M G Y L D R A E A T N R L               T A
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UniRef90_UPI00036B1915 N L T E E Q I K A Y R L A D N R V A E F S T W D K E L L T I E M G E F E T I D M
UniRef90_UPI0002F20B4D S A T E E C L V M G L V E N V A R R Q H N A L             D L L H D I D G M K
UniRef90_G2PGY1       D A T D E T L E A A F V A N F H R D D M T D L E Q A
UniRef90_A7VRY8       D L T E R E A R T Y V R E T N Q R S E M L P S E Q A A V I A E R Y E D M R S Q G
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UniRef90_V8A497       E A G S A I L A D S L A E N V Q R V A L H P L D Q F R A F R D M L
UniRef90_S9QHI5         T D G L A E E D S L A E N V Q R A P L H P L D Q F R A F Q A M R
UniRef90_Q1WL75       E   G E T A T E I S L A E N V M R E E M H P V D         Q Y E A F         D A L A
UniRef90_E6UPE0       D L D P Q E K A L N L A L N K I Q G E W         D E N K L A E     L M A E L D A G A
UniRef90_Q2GAZ9       E A S E E C L V M S L V E N I A R R V Q R P I             D I M N E I G S L R
UniRef90_UPI0001D2E077 D P A S D I L A D S L A E N I Q R A P L H P L D Q F R A F Q             A M Q
UniRef90_U7GQX2       S   D G S A R T V S L T E N V Q R E A M H P A D Q F E A F A A L R P I E D I A A
UniRef90_X6L289       D L D D A T A L L A G L E N A A R R N L S F Y E K A R F A E A I Q         A A G
UniRef90_UPI000465CEF8 D E S E L D S E L W E I E N L A R S E L S A A D R A V F R K E L Y L I E T Q H G
UniRef90_A8L7W8       D S D D Q A A E I S R I E N Q H R S A L D T R D Q V H A V G Q L               A
UniRef90_D4Z2N0       D A N S G I L E V S L V E N M E R A P L H P L D Q F R A F R A M R D
UniRef90_D9VJ68       D D W T E N Q E A M I S E N E H R K Q L N P L L L G R H L K R M V P R Y G S E
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UniRef90_UPI00037E31F5 G L S D E L M R A F V I A D N K F S E R A G W N R E M L A A E L D E L S I L L P
UniRef90_Q2K2C4       E L S D E E L V I S R I E N S E R L N L S F I E Q A L F A F N L K
UniRef90_J7QPD7       T E G T P E   E D S L A E N V Q R A P L H P L D Q F R A F L A L R
UniRef90_F1TH31       D I D Y D T A S I I V V D S N Q R D D L L I S E K A Y G Y K     M K L E A M Q
UniRef90_K2BDZ4       N E K P K G F E L K L I E N T A R E D L T   L D E R L G
UniRef90_A7IP04       G K A L E A R L L E I D E N L F H R P L S P L D R A A H Y Q E L Y P E A G A T A
UniRef90_D4LIA4       E Y A S E A E E Y A L M A D N R L A E L S E M N T S A L A D M L Q Q M D E M S G
UniRef90_C9RC89       D I D P E A V T L L I K D N L L R R Q L N D M Q V A R L I R V L K             E Q
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UniRef90_C9RC89        L N D L I P E L Q S L
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UniRef90_E8U2A8          R             E G R V L I D G G T N R Y R A A K I S G V G Q L D V K F E
UniRef90_B7QZH8          S N P I     R V E E D G D G Y Q L V Q G F R R L S A Y Q A L Y A E T I P A G L V
UniRef90_Q3L8X0          E A I S A V     Q L A D G Q I V V R D G Q R R T L A A R E A G I T S I P V I V R
UniRef90_K1Z6Y0          E P L Q V V E K     G G M R I L N G F K R Y R C A V R L G I G I V P Y S I L
UniRef90_J4SE36          K S P L H C R K V D G K D L L F V K G Q H R V L A A G K A N L H K I P V V V R
UniRef90_UPI000370A1D9   V   P L I V R P Q A G N D N H E I V A G R R W T A A L V E G I D H L P V A I L
UniRef90_H1BFH1          N N   L V R T I E D D R Y E V E L I G G E R R Y S A I L R N T Y E Y I P C K V L
UniRef90_M6W9H0          P S P L S V D     L Q E G K W T V V A G H H R Y E A V K E L I E E E I P V V E K
UniRef90_L0KW60          K R P I T V R P E A G G P Y Y D L V C G Q G R L E A Y K A L G Q Q Q V P A L V V
UniRef90_V4P1Q7          L V P L L V R P G A K S E K F M A L D G H R L L A Y R H L L A T E I P V L L C
UniRef90_D0DD26          S N P I Q V E P V     G D G Y E L V Q G F R R L R A Y R E L A F A R I P A G L V
UniRef90_W4A451          Q P G T V V S R T A G T A Q F I V V N G N R R L A A A Q K Y G R P G L D V V L R
UniRef90_A0A059DSX3      E T M I V R R E     G E K W G V V R L F A L R R A K A K E T G P C A I M K
UniRef90_E0UNG3          F P P L T V F L E P A T G N Y W L A D G H H R Y A F S R I G F K E I P V D L K
UniRef90_A0A031JSM1      Q P L I V R P C R D G G G F E I V A G A R R F H A A Q I A G E R R I P C A I L L
UniRef90_I7MZ41          D P I A I D E N N M I L E G H R Y L A L K A L G V L E I P V I R I
UniRef90_T1BGF2          V I A T E S A R R A Y L I V D G Y R R L A L E Q L G L G R D T V E A V V R
UniRef90_A6CAF1          E P I V V S R D D V G   I I I S G H R R Y A A A C R V G L T K V P V R Y Y
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                                              90            100           110           120
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UniRef90_K5XN99           T E G I A E E D S L A E N V Q R A P L H P L D Q F R A F Q A L R E   K G Q S E
UniRef90_UPI000310A048  R D G V E E   E D S L A E N T M R E A L H P L D Q F R A F K N L           H
UniRef90_B9MGX8           A T D D E     S Y T Y N N R V N R L S S I Q E H L M I R R         A V
UniRef90_M4K5M0         D A V E E D L V M S L V E N V A R R Q H R P I       D L M N E V G R L K
UniRef90_UPI00045E607B  E A D E D C L V R S L V E N C A R       R R R G A L D L F K D I Q R M K
UniRef90_S0FZ81         T L D Q E P I L Y A A Q M A I G P K Q L T E A E R N T A R R A F Q         S
UniRef90_E6U5S3         E V K I D E M E M L Y A A N F Q V R Q Y T A A E L L E H Y Q R L F Q T E D P K Q
UniRef90_M4S3W8         D T A N D P S E I S L D E N V T R T P M H P       A D Q F E R F R E L S E S K
UniRef90_E3GK82         D K P L D Q R I A S T I R H N R A R G S H D V D       L M S N I V K E L H
UniRef90_S0J510         D K S S N R M A S T I R H N R A R G S H D D L M S N I I R E         L H
UniRef90_Q835C5         D L L D K E K A L N V A L N K I R W D L N E L D D N L T G F D T E E V D S L L A
UniRef90_M5DFJ3         G   P E E A L E L S L T E N S G R E A M H P A D L V M A Y R N L T
UniRef90_W2FJH1         D L T D Q A K R I Q R S E N V Q R E G L L Q I E I A L S         L K A D K
UniRef90_G8XC14         D L V A K Q M S L V D N E R Y G E D D L Q R L I E E I Q S E       L D Y Q L S
UniRef90_X7YTG1         D T I A R D I S A A I T E N V D R Q D F D V I E E A R A V E A L V A E C G
UniRef90_UPI00045E9D76  D A D E Q D L V M S L V E N C A R R Q H R A I       D L M R D I G A L R
UniRef90_W0Z2L6         P   D A S A R T V S L A E N L L R E Q M H P A D Q F E A F A A L R P V E D I A A
UniRef90_UPI000380E071  N D L A A S L T A T A E N I E R R N Y N P I E E A R A I E E V G A R D D A A A
UniRef90_K6IZT4         D P E D E   L S Y L I R R N T I K K Q L G H K T R M R I Y K E Y E K I T I T K L
UniRef90_A0A059MFG8     G D E G D G T A A A V E R L V T Q W S E N E H R A A I T N G E R L A L F E T L A
UniRef90_UPI000466A17A  D L T P K M A E D L F F E N F Q Q R S L S D L       R F S Q R V L C V A A H
UniRef90_C1BE90         D T T D E E R A I A R I S N N H R T G L T T A Q N A A G I A E M L P V E R V S K
UniRef90_E2CN69         E N P H E L R R R E I L E N L A R L D F N A L E R C E A L F D L K R I Y E T L H
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UniRef90_UPI0004744B8C  N A S V D R F L I S L V E N L A R       R K H S N K D L L Y S I Q V L S
UniRef90_F6F0P3         G P H D D A L E A S L I E N L       L D P   D E V T Q W E T F T R L       V Q
UniRef90_H9YQH8         S F D S D L A E R A L I E N R Q R E I V N E F E E M L A I E R E R A C D R K T E
UniRef90_M4VWV3         D L S E A D A R A L R I G Y P K I I D L G E W D V T I L A E E F E I M K I D L S
UniRef90_V4PEZ8         D V E H D A H E I S L D E N V T R E A M H P A D Q F E A F Q R L A T E K G Y G A
UniRef90_M6ASL9         R F A D E N S R L A A I S E N H R R N V L P T D E A I A Y G K L V D I K R I S E
UniRef90_A0RWH8         K D I K E A K I L S L S E N I Y R E K M T R E D K S N A A A S L Y K
UniRef90_F6F304         D L S D E E A R L A D I E N R E R A D I S E L D R A R S Y Q H A V D R F Y
UniRef90_U4T845         D V D D E A A L I Q I N E N Q Y R E G L S E Y S K G I N Y S R L I N N G V L T R
UniRef90_E1JR29         D L T E A Q V A R F R L L V N R S A T W A A W D E D M V A V E L G E L R E L D V
UniRef90_UPI000467C68C  P W P E R G E I I A L T E N E L H G G L T F I E R A L G I E K A R E L Y E Q E N
UniRef90_I3I5G1         E Q H Y S R A E I D T L E N V H R V D M S L W E R V E H V K K L L E S E A G I A
UniRef90_E3DGT2         P W P G K C L V G H L A E N E V R G D L A Y I E K A F G V H K A R I I Y E E Q L
UniRef90_V4NR00         T V N D P H   E I S L D E N V T R E A M H P A D Q F E A F R T L N E Q Q G M S A
UniRef90_A0A011UJX0     P W P E R G E I V A L V E N E L H G G L S F I E R A I A V E K L R E L Y E Q E D
UniRef90_UPI0003750B35  E A S E D Q F L M S L V E N I A R R P P S       N R D I L R E V R C L R
UniRef90_G7UKD2         C L V G H L A E N E V R G D L T Y L D K A L G V H N A R T I Q E E L L
UniRef90_A4TT49         G K I N D L V A M S L V D N E R Y G E D D Q V   A L Q R       L I E E I Q S
UniRef90_T0I3E1         E M T D E A L E A A I D E N E V R D D T S E T E Q A D A A V R V L         A
UniRef90_C5USZ8         K R Q Y E N I E M E A E N L L R R T P D G H E E A E A Y E I L F P T P T S E K
UniRef90_D3NTQ1         S G G L A E   E D S L A E N L Q R E P L H P L D Q F R A F H T L R
UniRef90_K2T1R6         P W P E R G E I V A L T E N E L R G G L T F I E R A L G V E K V R E L Y E K E K
UniRef90_A3VLK2         D T L D S L Y R K M V D E N L V R K D I S F A E M A Q L A V D Y A A D P G T P E
UniRef90_H1RZZ9         E D A A R V I A V S L A E N V A R E A M H I A D E L A A I L K L D K
UniRef90_Q0BZ55         H L S R D Q K A A F V L H A N K I V E E G S W D K G I L K Q E L S M L D I D L E
UniRef90_J2KQQ2         D V D E E T G H V M S I E N V A R R S P R A G E A L E Q V R S L R S
UniRef90_R7PNP4         P I   D K R M A S T V R H N R A R G S H D       V D L M S N I V K E L H
UniRef90_C5AN88         D P T G S D S D I G A F N N L M Q S D L T D Y E K       Y K G L K L I L S R Y P
UniRef90_W8TMM4         E I D Q E Q A E I V I D T N W V S R Q L S A Y E K S R K Y M I L G S K E K K A H
UniRef90_U3AX37         D K G N E E R M S S S I R H N H Q V E L T A N L V M R L R Q S E W T D E K I G Q
UniRef90_A0A024HIT1     P W P A R G E I V A L T E N E L R G G L T F I E R A L G V E K A R E F Y E E E S
UniRef90_B9JYF5         A D A V E G Q L I E L S E N L Y R N E L S K L D R A V F V L T F R E L W E E K N
UniRef90_UPI000468F495  P W D Q A R G E I H L A E N D L Q G Q L M F I E R A V G I D K A K A L Y E E E A
UniRef90_H5WU08         A I D D E     A Y T Y N N R L N R L S S I Q E H F M I R R         A I
UniRef90_G4MBM9         D I D A D A E R L A F F S N L F A P S L S D Y E K V W H F Q C L Q D E A D A
UniRef90_C3JUD4         P D T E G S D K A R A V D R I G K Q       I T A N R H R E G L T A A Q H T R G
UniRef90_D2BJ95         E L N D T E A M L Q A L N G L K G Q D D L A L K G A L L K E I L S V I P E S E
UniRef90_F6IGJ7         A A D N D A E E D S Y A E N A H R E Q L H P L D Q F R A M Q A M S A A E D I A A
UniRef90_UPI0003093FAD  E L S D S E L A L T L L T S L H R E G L N E L D L A E G       L I Q Q A K L
UniRef90_R9J2E0         D K P D Q R M A S T I R H N R A R G H N V       D L M S N I V K E L H
UniRef90_D7A4P3         V L S K P E A M R R A A E A N L K H G L   Q L K S A E L R E G Y T K D G Q K A G
UniRef90_A3U027         P D D D V T T A L S L T E N I T Q A P M N A I D E F E A F A R M M E V D G Q T P
UniRef90_S5N4T5         R V S D D L A V V A S M E N N Q R A A M H P A E Q I S G F R T L S
UniRef90_UPI0004685B2D  P H D S E A I G I I T D S N I S R G N L T E A E R I L F E E E A Q K I F V E S G
UniRef90_N1MGL2         N V S D E E A R V S D I E N S R K D I S D W E R A K E Y S R A L E E F Y
UniRef90_W0RVJ6         G P M S A V Q A A A T V L N L H R E D F T P W Q E A V L V T E V V A Q R R A D G
UniRef90_R5L2S5         G A N T E T E L D L I M L N A T Q R K Y S D A D T M R E Y E E L T R I F K E L E
UniRef90_L8MDW7         D Y T D Y D     N A K E N T K L D V S       G R Q M A R F V A R K L
UniRef90_E8U2A8         Q A P E S E V E L Y L R Y N E Q R S Q T S V I D H A L S L Q R L L D S G V V S S
UniRef90_B7QZH8         E T L Q G L Y R R M V D E N L V R R D I S F A E M A Q L A L S Y A Q D P E T S S
UniRef90_Q3L8X0         T D T T S D E P E R N I E R I T       A Q M E A N D Q R L A L T P       G Q R A
UniRef90_K1Z6Y0         S G D E A D G I V K M L R I S N N S G L N I L E Q A R F V D E L K I V Y H
UniRef90_J4SE36         D V N R A E M I I D G I V S N E G K R S S P L D L A A I A E L R D V H
UniRef90_UPI000370A1D9  D A G D D A D A L A S L L E N T R L D P D E V T R W E T F A R L V K E G R D I A
UniRef90_H1BFH1         T M S D I D A R K R L I L N N M E N D L T N A E K L E A V E E L K E I Y K A K K
UniRef90_M6W9H0         S F S S N D R L I A Q I S E N Q R R N V L P T D E A K A Y G K L I       E N G W
UniRef90_L0KW60         T A D P E D L V A S L V E N C A R       R K H Q A I D L L N D I G R M K
UniRef90_V4P1Q7         E T K D A V A A A A I T S N I A R A D L I L A V R A L L G Q K L K P E Q I A R A
UniRef90_D0DD26           A T G E A L E R M V D E N L V R R D I S F A E M A V L A M R Y A E D P G T A S
UniRef90_W4A451         D D K G E I L W A A T S E N I D R R D F D V L E E A K A       V E L M V S
UniRef90_A0A059DSX3     A P G D D A M E A S I I E N T G H       L P A T E M Q Q Y E A F G R L         A
UniRef90_E0UNG3         V G T L R E A I L Y A V G A N A S H G L R R S P A D K R H A V M M L L Q D A E
UniRef90_A0A031JSM1     D E G D D A I E A S L I E N I A R L D P D E V S R       W E C F T R L I
UniRef90_I7MZ41         D H L S A E E K K A Y I L A H N Q L T L N P I L E E L S E S L D M T D F G F S
UniRef90_T1BGF2         S L S   E A E A L F L D R S M R A G       Q A T A L L E A E M S E
UniRef90_A6CAF1         D I K R E D D L D A F V E R D Q R E D E K L R E E A T R H N P C E A H L T L L E
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                          130          140          150          160
UniRef90_E0SSJ4       V T S F E I P R I D I D I
UniRef90_A0A023C6M0   S E G D T R D I A A K A A G G N G K T Y E Q A K R V A N E A A P E L V Q A M D
UniRef90_K5XN99       E E I A A V F F V A V S V V K Q R L R L A A V S P R L L         E V Y A E D E M
UniRef90_UPI000310A048 D Q G L S I D D I A A R F F V G   A Q V V R Q R L K L A A A S P K L L D L Y V A
UniRef90_B9MGX8       E R G V T P E R L A K A L D V D I S H I   I K K L N L L D G I C P E
UniRef90_M4K5M0       E R G K T D A E I A I V I G S T A S W V N M I V G L L E R G E E K L L S A
UniRef90_UPI00045E607B I R G Y S V G E I A T K T G L H S N Y V S D I N R L F D R G E E R L L Q A V E
UniRef90_S0FZ81       D P R L T S S E I G Q A I G R S R Q A V
UniRef90_E6U5S3       R L T A K D K D K I A R F L N V T R R Q V N K Y A R I M E A L S E       G E R Q A
UniRef90_M4S3W8           G Y G A E E I G A R F G V S A R V V K Q R   L R L G A V S P K L L Q V Y R E
UniRef90_E3GK82       E F G R S D T W I A K H L G M E K D E I L
UniRef90_S0J510       E I G R S D D W I A K H M G M S K D E I L
UniRef90_Q835C5       S F N Y E   E D I E K P I I E D D   F Q V N E F I E N H H E A K T K L G Q L W K
UniRef90_M5DFJ3       E A G L S P D E I A P R F G V S   P L T V K R Y L K L T H V S P T V F K L Y A E
UniRef90_W2FJH1       E E L G T L Q A V A A E W K K S I S W V A E R L S Y L D A I E A G E V T R T A V
UniRef90_G8XC14       E I A P Y D D E L A A T L A R E S A I D L E M L E A L S R G D E E P I E K D S R
UniRef90_X7YTG1             R A D L A Q R L H R T E G W V S Q R   R A L L K L A P E L Q T A L R R
UniRef90_UPI00045E9D76 Q R G Y N D R Q I S E K I G V T P E Y V N M I A G L L E R G E E R L V S A
UniRef90_W0Z2L6       D F G V T P L V V Q R R L
UniRef90_UPI000380E071 Q F G R T P G W V T Q R L           N L L A L A E P V Q E A V A A G D I
UniRef90_K6IZT4       K E I S S K T G I T V A T L K S D L K K I R N G S T K E E T I Q S L I   E L W A
UniRef90_A0A059MFG8   D H G L T S T K I A R R T K A P R T E V E A A L T L R D T E Q R D A V Q R G E L
UniRef90_UPI000466A17A Y N V M K Q Q D L L V A R V E D D D A T S P D C Q E K L H T D A K V A E E Y E L
UniRef90_C1BE90       E L S V K R K A V K L L G A V G R R E A A R A S L E E Q G L T I E A V E T L A Q
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UniRef90_N1NGL5       Q K K I S L R E F S A L L N Q T G Y P V S A S Q I N R M E       D T V Q Y L Y P W
UniRef90_UPI0004744B8C D R G Y S T K Q I S A K T G L   D S T Y I N G I L V L L R Q
UniRef90_F6F0P3       K E G R S V E Q I G Q T F G L T D L Y V   R R I L A L G N L L P R I R T L Y   R
UniRef90_H9YQH8       A T G H R E K             F H E A E S G R A K N K A A E K V N A   D V
UniRef90_M4VWV3       T T G F D L P E I D I I L G R S E N N D K D N E I V E I A P S Q E K L G D L W L
UniRef90_V4PEZ8       E D I A A R F G V T P K I V Q Q R L K L A A V S P K L M D L Y K A   D K L S L
UniRef90_M6ASL9       E L G I K Q G E I Q K R L
UniRef90_A0RWH8       Q L K S I S A V A K A L G V K E K T V
UniRef90_F6F304       G G V Q S R M A E A L N L S N S   Q L S R L I A L A Q L P Q E V I D A F A T
UniRef90_U4T845       K E L E K N L E I S K S A V G N
UniRef90_E1JR29       D L A L T G F D V A E L D E L L G L L P L S G R T D V P E T P L T R P G D V W L
UniRef90_UPI000467C68C S K P L S Q S E L A R R L A A D Q S H I S R M Q D T V R Y L L P A I P N L Y G G
UniRef90_I3I5G1       A T S V T K   L S K I L G R S R A E   S Q R Y L V V L R Y P S P L L
UniRef90_E3DGT2       G R N V T L R E L S D L L G K E
UniRef90_V4NR00       E D I A A R F G V N I R I V R Q R L R L G A V S P R L M K L T L E Q L T A F C V
UniRef90_A0A011UJX0   G K P L S Q T E L A R R L R A D Q P H I S R M R E A I Q H L L P A I P N V L
UniRef90_UPI0003750B35 E R G Y S V S D I A R K I G M E R M Y V S
UniRef90_G7UKD2       G H S V S L R E L S D L L N L E G Y P I H A S S I S R M E D T L K Y L     Y P S
UniRef90_A4TT49       E I D Y R L S D I A
UniRef90_T0I3E1       A C K G D R A E A A W R L A W S R T         K L D R R L A L A E L T E K T A L
UniRef90_C5USZ8       I K K L K K D
UniRef90_D3NTQ1       E A G L G E E E I A A R F F V A   P G V V K Q R L K L A A V A P A L L D A Y A E
UniRef90_K2T1R6       G S P L S Q S E L A R R L
UniRef90_A3VLK2       R D P     D K V V A R L F K S A S Y S K R S Y I R S I R F V K E I A P H L S Y
UniRef90_H1RZZ9       E G R A V E N I A N T L G I S M L T A       R R R L K L V S S K L V D L L R
UniRef90_Q0BZ55       T T G F D I G E I D L V I G S D E A A V D E E P L V P P P P A Q A V P G D L W I
UniRef90_J2KQQ2       R G Y S D A E I G I K L G Y E K T W V S N V V T L L E R G E R R L L G Y I P L
UniRef90_R7PNP4       E F G R S D A W I A K H L G M D R D E I L
UniRef90_C5AN88       E   M S Q A Q L V E R T G I P K A S V S R M S F G E L A R L E E L P S L M G A
UniRef90_W8TMM4       A K G L R R D I I A Q E
UniRef90_U3AX37       E L G M D K D E V
UniRef90_A0A024HIT1   G T T L S Q S E L A
UniRef90_B9JYF5       G   K I Q R G G D K K S K G N D C P L I F A P G K E L S E Q V Q E R L G
UniRef90_UPI000468F495 G K P I S Q S E L A R R L S A S Q P H I S K M Q D T I R H L L P A I P G V L Y S
UniRef90_H5WU08       E R G V S P E R L A K A L S L D V S H I Q K K H R L L D G L C P E V I S L L
UniRef90_G4MBM9           L T R Q E L A A T V G L S D S H V S
UniRef90_C3JUD4       V Q M L E F G A S I T K V S K
UniRef90_D2BJ95
UniRef90_F6IGJ7       H F M T T P A V V R Q R L
UniRef90_UPI0003093FAD A F E I E Q E E V V K A V R       R V I A R L N A K K L L P Q L T E L V S A
UniRef90_R9J2E0       E I G R S D A W I S K H L G M D R D E I L
UniRef90_D7A4P3       A Q F M S Y A E L G A R L G K S K G T V R N A T F R K M G G V E E P W T N E G Q
UniRef90_A3U027       E
UniRef90_S5N4T5       E Q G K T P A Q I G D Q L G Y S S R H V Q R M L K L A N L A P E L L A N K L D V
UniRef90_UPI0004685B2D K Y A R L R D V I G E M I G R K D G K D V D N I R A L C S L P R E V L D L I N T
UniRef90_N1MGL2       D S N Q S E M A E H L K I S R S W   L S R L D V A R L P A E I V N A F P D
UniRef90_W0RVJ6       L P   A D V R T I G A I M G Y S H G R V S T L Q T I R R V L S D E F L T R L G D
UniRef90_R5L2S5       V K G R I R D K I A D A L N V S P A Q V D N I K H N A I P D V E Q A V K S G D M
UniRef90_L8MDW7       A G G E T K K Q I A E G L G L S Q S L V I S N L L K M P P C I E Q I Y D E
UniRef90_E8U2A8       A R E L K I P D I G G S A Q M S E S Q V S   Y Y L R V A R M P R Q V I E R M S S
UniRef90_B7QZH8       E T V E D A V A I A S A G R Q K R S Y I R H F A E L L E L I G A E L S F A E A I
UniRef90_Q3L8X0       A A A A E L L D L G L S V T K       V S K K V R E D K M W V E H A G K I G K
UniRef90_K1Z6Y0           M D T A D I A V L E K S K A W V S V R S G I M Q E M S R T V Q E H I F A
UniRef90_J4SE36       G M T V A T I C K R L N I T D Q T V V A L L E H A P A E L H Q M V R D G T V
UniRef90_UPI000370A1D9 D I S A T F G   I P E L G V K R I L A L G N L L P R I R D L Y R K
UniRef90_H1BFH1       E P G R I Q T I I A S E M G L K K S Q V A N Y E K I L N H A S E E V R E S I R K
UniRef90_M6W9H0       E A K Q I S E E L G I K L G E N R R L A L N L S P E L F N L V Q K K D K S L P
UniRef90_L0KW60       Q Q G H P I A D I A R K T G L T T E Y V H A V V K L L E K G E Q R L L R A
UniRef90_V4P1Q7             L C V E L A V A R R Y I G V A K A H N E A L V L K L I A R L S P
UniRef90_D0DD26       A D V A S A V E V A S A G R Q K R S Y I
UniRef90_W4A451       E F G   S A D A A A K K L G R S K G W V S Q R L L K L A P E L Q A A L R A G D L
UniRef90_A0A059DSX3   K T Q R S V D E I A D Y F G       V T P L K V K R I L A L A D V L P E I R A
UniRef90_E0UNG3       W N K Y S D R S I A I L T R T S H P F V A K I R N N L T G N V S S K R N R Y G D
UniRef90_A0A031JSM1   R E G R R P E D I A A T F G L P D   L A V R R V L A L G N L L P R I R D L Y R R
UniRef90_I7MZ41       T R F W E R P I L D I H S D E A D S F R K E E E E R V E T S V D E   G V I Y Q
UniRef90_T1BGF2       R F G Y D Q E E I A R R F D R S T S W V S R R M E L L P A A V Q Q Q V R D G A I
UniRef90_A6CAF1       E R N K P R   E I A I E G I K T R S E I S P A K K P M L D T L F Q V L E D
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                              170            180            190            200
UniRef90_E0SSJ4
UniRef90_A0A023C6M0        E G R A S V S G A V A L L V L P K D Q Q A S V A V G           D K K S I Q
UniRef90_K5XN99          T L E Q L M A F S V S P D H     E R Q E Q V W   E A V Q R S Y N K E P Y Q I R R
UniRef90_UPI000310A048   E E
UniRef90_B9MGX8
UniRef90_M4K5M0
UniRef90_UPI00045E607B            A G Q I P I S V A I E I A E S D D V G V Q K A L T H A Y E K K I L R
UniRef90_S0FZ81
UniRef90_E6U5S3          I M D K S M S I N K A N D L A K E R A Q K A E
UniRef90_M4S3W8          D G
UniRef90_E3GK82
UniRef90_S0J510
UniRef90_Q835C5          L G N H Y L L G D A T K L S D V E K L L Q G K K A N L V V T D P P
UniRef90_M5DFJ3          D E
UniRef90_W2FJH1          Q N G I T A D V S V V N D L A L E R L D P A A A A N V V Q R A E A D P D L N V R
UniRef90_G8XC14          E K
UniRef90_X7YTG1          G E L A I R E A R S L A R V P L E Q Q V A R W R A A Q
UniRef90_UPI00045E9D76
UniRef90_W0Z2L6
UniRef90_UPI000380E071   P L R E A R N L H A V P E D V L A E L R A G A R S A T T T P D P P S T A D
UniRef90_K6IZT4          K K K I K
UniRef90_A0A059MFG8      T I E Q A A A L A E F N D D P
UniRef90_UPI000466A17A   T R D K I S K Y C R L A T L Y R P
UniRef90_C1BE90          C Q R H S F D Y Q A R I L L A D R K E K A T R A E R T
UniRef90_E2CN69
UniRef90_N1NGL5          I P N L L G S G L G I P
UniRef90_UPI0004744B8C
UniRef90_F6F0P3          D G E I N V A S V R H L T L A T K A Q Q K A W L A L
UniRef90_H9YQH8          S G R T L E K G K K V K D K A E S D D E P D E V Q K V A E R E W Q K L Q Q V E Q
UniRef90_M4VWV3          L G K H R I L G S A T D P E S Y K I L M G D Q V A Q A I I S D P P           Y N
UniRef90_V4PEZ8          S Q V M A F T L H A R Q E E V F D G L T Q W A N E P S H I R R R L T E
UniRef90_M6ASL9
UniRef90_A0RWH8
UniRef90_F6F304          R D E L R V R Y S E L L T P L L R     Q A G Q R G R M I A E A Q L I G E Q Q Q A
UniRef90_U4T845
UniRef90_E1JR29          L G R H R L L C S S T D L A A L L G E E R P E L A V T D P P Y N V A V E
UniRef90_UPI000467C68C   L G R H Q A E R L A V L R K A A E W A W E T R A Q G K A L P T D F T
UniRef90_I3I5G1                      L D A I K T G R V G D L K S A A A L A Q L S P E Q L K K
UniRef90_E3DGT2
UniRef90_V4NR00          S E D H A R
UniRef90_A0A011UJX0
UniRef90_UPI0003750B35
UniRef90_G7UKD2          M P E L L E S G L S R T   Q V I P L L N L R S L A E K V W L K F Q L A E D T V D
UniRef90_A4TT49
UniRef90_T0I3E1          D E R R I K V G H A E L L A V I P K D K Q D T A L E T I L R L N L D V N D T R K
UniRef90_C5USZ8
UniRef90_D3NTQ1          E R
UniRef90_K2T1R6
UniRef90_A3VLK2          P T E V P R A L   G L A L V A R M D E V E G L P A A I
UniRef90_H1RZZ9          S D E I T L E Q L M A L A I S D S H A E Q E R V W F G A G Q Y Q R S P S Q L R
UniRef90_Q0BZ55          M G Q H R L L C
UniRef90_J2KQQ2          N L A V S I S R S S D S E V Q Q L L L D A Y E S G E I K G R K V L A V R K I L E
UniRef90_R7PNP4
UniRef90_C5AN88          T A G G K F A A L V R E G K E A A V V E A I E L L A T K I D E T Q A V K L A S R
UniRef90_W8TMM4
UniRef90_U3AX37
UniRef90_A0A024HIT1
UniRef90_B9JYF5
UniRef90_UPI000468F495   G L G V D R I S K L L S L
UniRef90_H5WU08
UniRef90_G4MBM9
UniRef90_C3JUD4
UniRef90_D2BJ95
UniRef90_F6IGJ7
UniRef90_UPI0003093FAD
UniRef90_R9J2E0
UniRef90_D7A4P3          T P A A P K R Y D V E V E A A R D A L A N L K R A F G D A P D Y W A R E D M L R
UniRef90_A3U027
UniRef90_S5N4T5          E Q C Q A L S L E N D P V R Q V E I Y E R V K A Q H S Y A P A H M L K R A I T D
UniRef90_UPI0004685B2D   T K T H L L N V A V R N E E V Q Q L L K I T K E F V A M L K P G L S V E D I R K
UniRef90_N1MGL2          T H G I T V R P L T S E K R T L D L M V A E S R A I V A E R D D L G M A E V A K
UniRef90_W0RVJ6          R V T V E E A L A R R L E E V A R L P D D T R R E V I L R R L L G M V E
UniRef90_R5L2S5          S             I S T A N E V A K L A P E K Q Q E I I S E K P Q I S H K E V K K
UniRef90_L8MDW7
UniRef90_E8U2A8          S A A Q L S I L Y A V S E I F P K N A E Q I E L G L Q I V D R E L T H K Q T V A
UniRef90_B7QZH8          P R A L G L D L K K R L V E D Q T A V E R L K   A V L R G A T F A S A E E E L A
UniRef90_Q3L8X0          S A A A R N A V D G E Q L D
UniRef90_K1Z6Y0          Y M Y I L R P F I R I N K I G V E E I D     E F V R L V G G R N L S I R D I E L
UniRef90_J4SE36          S G T L A I E Q I R
UniRef90_UPI000370A1D9     E K I N A A T V R H L T L A S K Q Q Q K A W L A L
UniRef90_H1BFH1          E E L P L D A A V T L V D L D E E E Q R R         F L N E H D T Y S K K A V E S
UniRef90_M6W9H0          L G V A E T I G
UniRef90_L0KW60
UniRef90_V4P1Q7          T E Q A K M A G H A R A N
UniRef90_D0DD26
UniRef90_W4A451          A V R Q A R S L A R V P L E
UniRef90_A0A059DSX3      L Y
UniRef90_E0UNG3          L G Y M E T E K I G K S H N F S D K P K T L K I
UniRef90_A0A031JSM1        E Q I D A A T V R H L T L A S K S Q Q K A W L A L A E D P D A Y A P R
UniRef90_I7MZ41          L G R H R L M C A T N P E H V A K L L D G K R I D L
UniRef90_T1BGF2          A A Q V A M R F L V P A A R M N T E E C S     R M A E G F A R H R L R S R E A G Q
UniRef90_A6CAF1
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                                    210              220              230

UniRef90_E0SSJ4
UniRef90_A0A023C6M0    Q A S K A A K A P P K
UniRef90_K5XN99        M L T E G A V
UniRef90_UPI000310A048
UniRef90_B9MGX8
UniRef90_M4K5M0
UniRef90_UPI00045E607B
UniRef90_S0FZ81
UniRef90_E6U5S3
UniRef90_M4S3W8
UniRef90_E3GK82
UniRef90_S0J510
UniRef90_Q835C5
UniRef90_M5DFJ3
UniRef90_W2FJH1        N E V R T E L K T T K A L R
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UniRef90_X7YTG1
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UniRef90_UPI000466A17A
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UniRef90_E2CN69
UniRef90_N1NGL5
UniRef90_UPI0004744B8C
UniRef90_F6F0P3
UniRef90_H9YQH8        V E A K K K V E N Q R K T
UniRef90_M4VWV3        V P N Q G H T G G R G T V K H
UniRef90_V4PEZ8
UniRef90_M6ASL9
UniRef90_A0RWH8
UniRef90_F6F304        L A R Q G D R L I P P A T
UniRef90_U4T845
UniRef90_E1JR29
UniRef90_UPI000467C68C
UniRef90_I3I5G1        L S G A P L I A P P K A S V K F S D K
UniRef90_E3DGT2
UniRef90_V4NR00
UniRef90_A0A011UJX0
UniRef90_UPI0003750B35
UniRef90_G7UKD2
UniRef90_A4TT49
UniRef90_T0I3E1        E L M R
UniRef90_C5USZ8
UniRef90_D3NTQ1
UniRef90_K2T1R6
UniRef90_A3VLK2
UniRef90_H1RZZ9
UniRef90_Q0BZ55
UniRef90_J2KQQ2
UniRef90_R7PNP4
UniRef90_C5AN88        S T K Q G K S E A P K A E T H K F
UniRef90_W8TMM4
UniRef90_U3AX37
UniRef90_A0A024HIT1
UniRef90_B9JYF5
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UniRef90_C3JUD4
UniRef90_D2BJ95
UniRef90_F6IGJ7
UniRef90_UPI0003093FAD
UniRef90_R9J2E0
UniRef90_D7A4P3        L M R S M L T
UniRef90_A3U027
UniRef90_S5N4T5
UniRef90_UPI0004685B2D  A L E E N Y I K P
UniRef90_N1MGL2        R L I R A T V A P A K
UniRef90_W0RVJ6
UniRef90_R5L2S5        I Q R Q
UniRef90_L8MDW7
UniRef90_E8U2A8        L V K S R L G E E P K Q R R
UniRef90_B7QZH8        V L K E A L K A P
UniRef90_Q3L8X0
UniRef90_K1Z6Y0        L A R
UniRef90_J4SE36
UniRef90_UPI000370A1D9
UniRef90_H1BFH1        Y K E A K H V
UniRef90_M6W9H0
UniRef90_L0KW60
UniRef90_V4P1Q7
UniRef90_D0DD26
UniRef90_W4A451
UniRef90_A0A059DSX3
UniRef90_E0UNG3
UniRef90_A0A031JSM1
UniRef90_I7MZ41
UniRef90_T1BGF2        L
UniRef90_A6CAF1
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Multiple sequence alignment (residue positions 1–40)

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UniRef90_UPI00036801FD        I V E L P L E I I V P Q K E I T K G H R K G D F Y R Q L T A S L K H I G L I
UniRef90_UPI00029CC28F          Q L D P N T I E I G R   N T R K T V V L P L A P E F I D S I G T L G V L
UniRef90_B2T1W3                 V P P D Q I H Y D P R D N V R P L D Q D R V R H L A E L M K A N G Y D
UniRef90_M3ADV9                                               I A T S I A E V G I I
UniRef90_UPI00046A79A7                          S P E D F A A L E A S I I E H G V L
UniRef90_R6LLI0               I K N I D I D H I V P A K E N   F Y S V D D I E N I K Q S I E L L G I E
UniRef90_B7T1B4            L P V V E I E V S R L S   S A Y S P R T S E D P E H V E T L L S   A E G D L
UniRef90_UPI000470FE0E                           R E N D E D H I S D I A D Y I A K G G Q L
UniRef90_UPI000299FC62
UniRef90_K6UHP5                              Q E H V Q E H V N N L A Q A   Y E A G D Y
UniRef90_B7RRD8               I A L A E I F T D D L P R D R L A L E E V A Q S D E M E E L K A S I R A R G Q
UniRef90_B9KUE8                                               M A E S L A V A G L L
UniRef90_UPI0002D35C89                       N H P L Y K H I E K Q I E E L A E Q I R D G G G I
UniRef90_D8MJG8                   L D D L C V N P D N P R K S R N P   L F D D L K A S I R A R G L N
UniRef90_H3HE39                 K K L S V H L A S I S W L K A H E H V V S D R V D G L R R A T V R W N A Y
UniRef90_M5FM25            L E V Q L T P I S E L K V S P F A S R   N H P R E K R R R L A A H V K K Y G V L
UniRef90_G5LGZ5               T Q M I S P D E L I L D A K N P R K S F N D A D L E E L I K S I S E N G Y M
UniRef90_V9QJC3               I Q W V E V S R L Q A N D Y N P N V V V T P E   F K L L K F S L L K Q G   W
UniRef90_R6Z203              V R A V P V E K V V A N S Y N P N   V V A P P E M K L L E L S I   W E D G Y
UniRef90_F9ZEH2                                               E L A L L S I K E K G I Q
UniRef90_V9QS65                     P Y D E N P R T T R N P   K Y D E I K E S I R N R G L D
UniRef90_A6V7Q9              V P L S R L V S R P R N V R K T V P R M S I P E L A A S I Q R V G L L
UniRef90_Q971R3                                            Q Y E E L K K A I K E Q G F L
UniRef90_L7HCB0                  V T L E Q L R P Y E H N P R F I R N P   L Y E D I K A S I R E R G L D
UniRef90_H8JS43                  V S I A D I T F D R F Q F R T F T D A T H V A D L A S V W E T D G K F
UniRef90_H5WBG9                  V P L P R I L P S R R T P A G L T N T R K F K Q I L A S I G E V G L I
UniRef90_B9CVT3               M L P V S E I L P T R   Q I D K H F E K S K Y Q S I L S S I Q E V G I I
UniRef90_B1GS58                  V P V E Q I Y L E P Y N I R E A   D E Q H V E Y F A Q C   W E S G Q P
UniRef90_D0KSP3           Y K E I S I E E I K   E V D E F R T F I P E N Y D K I K E D I A K N G   I
UniRef90_F6IDQ4                    E W V D P A R C R P W R H L N E E T C R D L I D A F L S A K K Q
UniRef90_C7Q5L1              V M I P L A A L I A H P G N V R K D L D L N A   A F V A S I K A E G I I
UniRef90_UPI000470B931                                     E E L A R D I E R R G L L
UniRef90_W6X5L3               I E Y V P Y G R L C R S P L N V R K K   A P T G I E A L A G T I V G N G L I
UniRef90_V8HP52              V D M V A L E A I D S W K L R D R A K G D L E L A E L V A S I R D I G   L
UniRef90_I0VAG6                     S Q L M P N D Y N P N N V A P P E K   K L L Q K S I E I D G   F
UniRef90_V7DHZ7                L S I D E V L P W E D N P R T T R N P   R Y D E L K E S I R N R G L D
UniRef90_K1ZNY0              I E D I P L S D V V T D   F A I V D S N H A Y E L G R S I K K R G Q L
UniRef90_V9HSJ6                 K Y I D I K D L I E S K E N F Y K T   N K L E D M K E S I R I L G   I
UniRef90_UPI0003631357     P A Q T I R P R L V R R D P L T P A R Y M R K E E W D R L V E N V A A D G C L
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lupas_21
lupas_14
lupas_28
jnet
conf    9 9 8 1 0 1 3 3 3 2 1 3 6 7 7 7 7 7 7 7 6 5 2 7 8 9 9 9 9 9 9 9 9 8 7 5 2 7 7 6
sol25       B     B     B         B         B B B       B             B   B B         B         B       B B
sol5                                                                    B           B
sol0                                                                                B
jhmm
jpssm
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                                                  50              60              70              80
UniRef90_UPI00036801FD      E P L V V Y P R   G P G D Y L L L E G H M R L E I M K S I G I K E A K C L L
UniRef90_UPI00029CC28F    M P V T A I R L A D   G T I S L R D G Q R R T I A A R E A G L A S I P V L V R
UniRef90_B2T1W3           R K K P L V R K V G G E D R I Y V Y E G Q H R Y H A A L L A E I D R L P C V I K
UniRef90_M3ADV9           E P L V V A R P K N G D S R Y L L L D G H L R L A V L V D M G E R K I R C L I S
UniRef90_UPI00046A79A7    V P     V E Y D E E G N     I L L D G H H R V Q V C E S L G L A D W P R F V R
UniRef90_R6LLI0           Q N L I V     E R I D R D N Y K L V A G H R R Y F A S K A L G K E E L P C K I K
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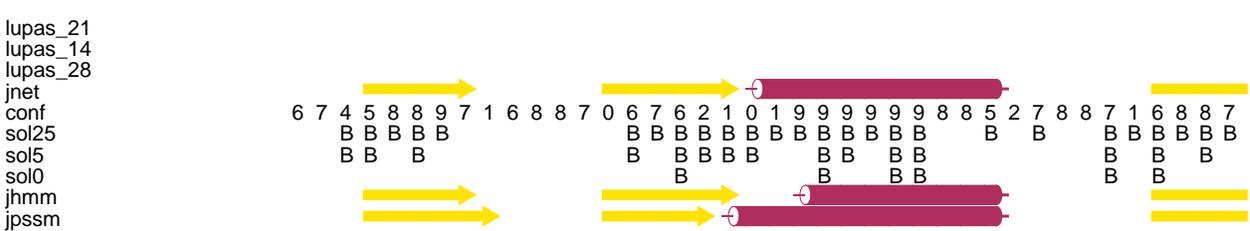
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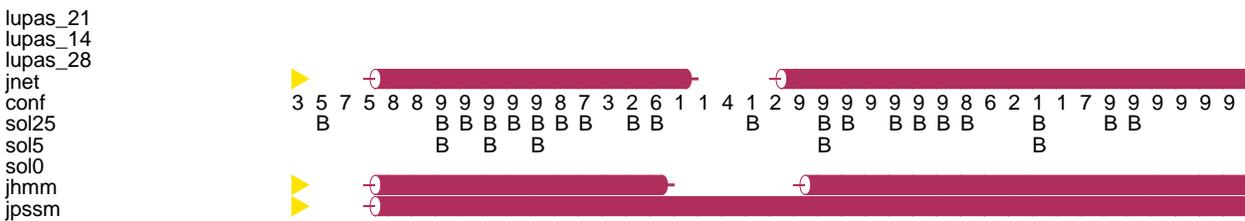
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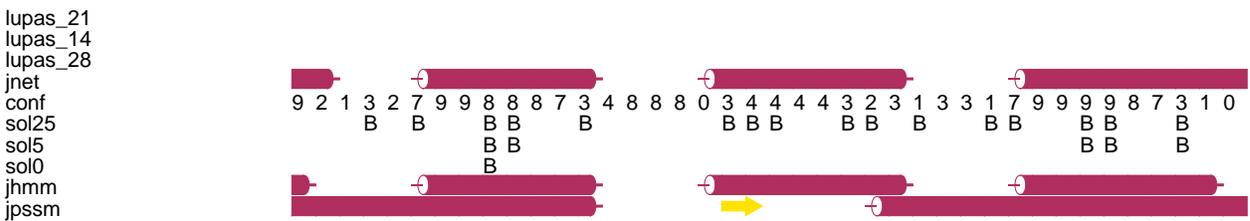
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