

1 10 20 30 40
QUERY F Q K V V E Q K Q M K D F M R L Y S N L V E R C F T D C V N D F T T R K K S L L T D K K Q
UniRef90_W5G1L5 M S A M I E Q L Q Q M R D S L R M Y N S N L V E R C F T D K N D C C V N D F F T R R K K S L L T D K K Q
UniRef90_UPI0002C2DD13 L A N V I E D M L Q Q L K R E F F L K M Y S N S L V E R C C C F F D D C C V N D F F T T R R K K S L L T D K K Q
UniRef90_W9WH35 L N A R M E A K Q Q L K R E F F L R M Y N S N L V E R C C C F F D D C C V N D F F T T R R K K S L L T D K K Q
UniRef90_B8LM74 M T K M I E Q F Q L K R E F F L R M Y N S N L V E R C C C F F D D C C V N D F F T T R R K K S L L T D K K Q
UniRef90_UPI0000E493C0 E L F K E F F L G T Y N N K V L T E A N E N F F S D C C C V N D F F T T R R K K S L L T D K K Q
UniRef90_UPI0003AFA4BC Q L K E F F L G T Y N N K V L T E A N E N F F S D C C C V N D F F T T R R K K S L L T D K K Q
UniRef90_X8JQE5 M T K I I E K K Q M Q D F F L K L Y S G L V E R C C C F F N S D C C V N D F F T T R R K K S L L T D K K Q
UniRef90_Q4WIQ2 L A S R M E R K Q Q L K N E S F M T M Y S N S L V E R C C C F F N E C C I I N Q N F F T T R R K K S L L T D K K Q
UniRef90_C5LZG5 K E M Q D M Q V N E S F L Q T Y N S G L V E R C C C F F N E C C I I N Q N F F T T R R K K S L L T D K K Q
UniRef90_W1PJC6 M T T M I E Q L Q Q L R D S L R M Y N S N L V E R C C C F F N D C C V N D F F T T R R K K S L L T D K K Q
UniRef90_N1QIH9 L Q G R L E K K Q M K E F F M N M Y S N S L V E R C C C F F T T D C C V N D F F T T R R K K S L L T D K K Q
UniRef90_F0U7N2 L A N R M E K K Q M K E F F M T V Y S N I V Q R C C C F F T E D C C V S D F F T T T K S L L T D K K Q
UniRef90_U4LPH0 F Q N I V E R R Q M K D F M T M Y S N S L V E R C C C F F D D C C V N D F F T T S K A L V S V K
UniRef90_M5E7X0 M Q R L I E K K Q M K D F M N L Y S N S L V E R C C C F F D D C C V N D F F T T S K A L V S V K
UniRef90_S2IY08 A A M I E H K Q M K D F M N R L Y S N S L V E R C C C F F D D C C V N D F F T T S K A L V S V K
UniRef90_E3KEE6 L N R L I E K K Q M K D F L K L Y S S L V E R C C C F F S S D C C V N D F F T T S K A L V S V K
UniRef90_U9U2H7 K L I E K K Q M R D S F M K F Y S N L V E R C C C F F N D C C V N D F F T T S K A L V S V K
UniRef90_A0A058Z5C2 F M A M M E E K Q M K D S D F I K M Y S G I V E R C C C F F L D C C V N D F F T T S K A L V S V K
UniRef90_UPI000441610F L Q K V I E K K Q M T D F I K M Y S G I V E R C C C F F M S C C C V N D F F T T S K A L V S V K
UniRef90_B8CGK4 F M Q N L E K K Q M K D S L T M Y S N N L V E R C C C F F Q T C C C V N D F F T T S K A L V S V K
UniRef90_UPI000444A2D8 M N R I L E K K Q M K D F L R M Y S N S L V E R C C C F F T S C C C V N D F F T T S K A L V S V K
UniRef90_M7SKN3 L E Q R M Q K R Q Q K E F F L G L F S N S L V E R C C C F F V S C C C V N D F F T T S K A L V S V K
UniRef90_UPI0003F4A318 M T K V L E K K Q M K E F F M K L Y S S L V E R C C C F F M T C C C V N D F F T T S K A L V S V K
UniRef90_C5PES1 L Q K R M E K K Q M K E F F M G A Y S M I V N R C C C F F D D C C V N D F F T T S K A L V S V K
UniRef90_A0A024JHT0 F Q K L V E R K Q M K D F M H L Y S N S L V E R C C C F F S D C C V N D F F T T S K A L V S V K
UniRef90_UPI00034FDD6C Q E T H A S E K F R E F L G T Y N K L T E T C C C F F L D C C V N D F F T T S K A L V S V K
UniRef90_G3AAVA1 F Q Q I V E A Q K Q M K D F M N L Y S G L V V V R C C C F F D D C C V N D F F T T S K A L V S V K
UniRef90_N6TLJ8 Q I K T F K D F L T S Y N K L T E M F F L D C C V N D F F T T S K A L V S V K
UniRef90_W7HRE4 F Q A V V E K R Q M K E F M T M Y S N S L V E R C C C F F S D C C V N D F F T T S K A L V S V K
UniRef90_B0WVB3 I E L R N L K D F L G L Y N R V L T E L C C C F F S D C C V N D F F T T S K A L V S V K
UniRef90_UPI0002658F0D Q I K Q L K D F L T S Y N K L T E M F F T D C C V N D F F T T S K A L V S V K
UniRef90_B5DL92 N L R N M K D F L T L Y N K R V I S E N F F N R C C V N D F F T T S K A L V S V K
UniRef90_C3YA79 I L K Q F R D F L Q T Y N R I S E N F F V D C C V N D F F T T S K A L V S V K
UniRef90_S3D441 F Q S R M E R K Q M K E F M G M F S G L V N H F F E S C C C V N D F F T T S K A L V S V K
UniRef90_C5FXE6 L A K R M E K K Q M K E F V M N A Y S N V V Q R C C C F F E D C C C V N D F F T T S K A L V S V K
UniRef90_R9ARL6 L N Q Y I K K E M K D F M Q L Y S N S L V E R C C C F F E D C C C V N D F F T T S K A L V S V K
UniRef90_A8NR54 M N K I I E K K Q M Q D F L K M Y S N I V E K C C C F F M T C C C V N D F F T T S K A L V S V K
UniRef90_U5H2U9 F E A M M Q K Q M K D F M N L Y T S N S L V E R C C C F F T S C C C V N D F F T T S K A L V S V K
UniRef90_A0A059DEH3 M S A F V D R L Q A R D S L R L Y N S L V E R C C C F F F T S C C C V N D F F T T S K A L V S V K
UniRef90_M7NWD4 L Q G L L E A K Q M K D F M K M Y S N S L V N K C C C F F S D C C V N D F F T T S K A L V S V K
UniRef90_B7G5E1 F M K E M E H M Q L K D S L R M Y N S L V G R C C C F F D G C C V N D F F T T S K A L V S V K
UniRef90_V7AMC0 M S T M V D Q L Q F R D S L R M Y N S V L V E R C C C F F N E C C V N D F F T T S K A L V S V K
UniRef90_Q9P7K0 L T Q V L E A K Q L K E Y L N M Y S T L T Q N C C C F F S D C C V N D F F T T S K A L V S V K
UniRef90_G7JUHO M T T M V E E L Q Q T R D S L R L Y N S L V E R C C C F F N N C C V N D F F T T S K A L V S V K
UniRef90_W7U416 F M R T L E E L Q V K D S L R L M Y N R L V E R C C C F F K E C C V N D F F T T S K A L V S V K
UniRef90_F0Y4A4 F M R S L E T M Q M K D S L K M Y N N L V E R C C C F F A H C C V A S F R S K A L V S V K
UniRef90_V9KTN7 Q M R N L R D F L T V Y N K M T E I C C C F F N K C C V I S N L N Y R S V R V Q
UniRef90_A0A026X3S3 I L K S F R D F L T S Y N K L S E I C C C F F I D C C V N D F F T T S K A L V S V K
UniRef90_B2W7G0 L Q S R M E K K Q M K E F M N M Y S N S L V Q Q C C C F F D H C C V N D F F T T S K A L V S V K
UniRef90_W3WVZ8 L E Q R L Q K R Q M K D F M N I F G N L V D H C C C F F V S C C V N D F F T T S K A L V S V K
UniRef90_UPI0004547BE3 Q L R D F L L V Y N R L V E L C C C F F F E R C C V D S L H C C V N D F F T T S K A L V S V K
UniRef90_I0Z597 L M Q K I E E M Q V R D S L R M Y N G L V E R C C C F F K D C C V E S F R R K K D L D S S K
UniRef90_D8QP64 M I D A L Q A R D S L R M Y N A L V E R C C C F F G H C C V D S F F R R K K D L D S S K
UniRef90_G6DBX3 M T E A D Q L K T F K D F L R Q M Y N K L S E L C C C F F N D C C V I H D F F T T S K A L V S V K
UniRef90_I2JZP3 F T K V V E Q K Q M S D F M R L Y T S L V D R C C C F F N D C C V N N F T T S D K L T D R
UniRef90_W9X9Q1 L S S R L E K R Q M N E F M T T F T G L V Q T C C C F F A D C C V N D F F T T S K A L V S V K
UniRef90_UPI000180D06F Q V K Q M K E F L R M Y N S L V E R C C C F F N D C C V D T F K H C C V S L Q K Q
UniRef90_W9S284 M T A M E V S M Q V R D S L R M Y N S L V E R C C C F F N D C C V D T F K H C C V S L Q K Q
UniRef90_C1EG03 Q Q E D I K V F K D F L R S N Y N K L S E I C C C F F G D C C V W D F F T T R K K V S G A
UniRef90_C1C1M9 M N K V I E K K Q M Q D F L R L Y A N I V E R C C C F F S S C C C V N D F F T T S K A L V S V K
UniRef90_E2LP09 Q I T K S F R D F L T S Y N K L S E I C C C F F V D C C V W D F F T T S R T T S K S A
UniRef90_E9GYJ3 L P Q L Q Q V D Q L K T F L T T Y N K L A E T C C C F F L D C C V I H D F F T T S R T T S K S A
UniRef90_T2M2M7 M M A V L Q E L Q I Q D S M R L Y N E L V Y L C C C F F N N C C V D S F F R S S K L E A K
UniRef90_M1VL90 Q R E L A L L Q L R D S M E T Y N G L V Q R C C C F F N E C C V D S F F T T S K A L V S V K
UniRef90_U6KSZ9 L D O R L Q K R Q V K E F M S V F G N L V D N C C C F F T A C C V D S F F T T S K A L V S V K
UniRef90_Q8J1Z1 L E Q R L Q K R Q V K E F I G L F S N S L V D N C C C F F L D C C V I T E F T T R K V S T N T
UniRef90_F0XGX3 Q I K S F S D F L T S Y N K L S E A C C C F F I D C C V I T E F T T G R T V S S D K
UniRef90_V3ZYF8 Q I K S F S D F L T S Y N K L S E A C C C F F I D C C V I T E F T T G R T V S S D K
UniRef90_Q7QE81 Q I K Q F K E F L G T Y N K L L G T Y F L D C C C V K D F T S T R E V S K P E
UniRef90_UPI0003C9158A Q I K Q F K E F L G T Y N K L L G T Y F L D C C C V K D F T S T R E V S K P E
UniRef90_R4XFQ8 K E Y M R M Y N S L V E R C C C F F S D C C V N D F F T T S K A L V S V K
UniRef90_T0R2V1 L M K H F E E K Q L E S L A M Y N R V L V A T C C C F F N E C C V Q S F R S K K L S D D K
UniRef90_B3S0F2 L E Q R M Q K R Q V K E F F L A S Y N K L S E S C C C F F S D C C V H D F F T T S K A L V S V K
UniRef90_G0RRX4 Q I K Q F K E F L G A S Y N K L S E L C C C F F T S C C V I D D F F T S K A L V S V K
UniRef90_S4RN59 Q I K S F R E F L T S Y N K L S E I C C C F F T D C C V I M D F N S R D V Q T K
UniRef90_K7IPB3 L A N E A N Q R G L K D F L T L Y N T I T E Y C C C F F N K C C V N S F N S A S G Q
UniRef90_UPI0003599E75 L M M M L E D M Q I K E Q V L V E R C C C F F N N C C V T S S F R S K T L D D R
UniRef90_A2AX41 E A Q L Q R R Q V S D F I S L Y N R L V T E Q C C C F F N A C C C V N E F T S R K L T G Q
UniRef90_F2TXM6 M T S E Q N I Q T F R D F L T Q Y N L V A E Q C C C F F N E C C V N E F T S R K L T G Q
UniRef90_Q17754 E R L N Q I Q Y Q D M D T Y N G L V E R C C C F F N E C C V T G F R S K D L D K
UniRef90_L1LFG2 M Q D F V R M Y N H L S E R C C C F F S D C C V N D F F T S R T T T T K
UniRef90_E9C700 Q M R L F K E F M I D F N R L A E Q C C C F F N D C C V N D F F T S R T T T T K
UniRef90_T1KD72 K Q F R E F L G A Y N K I T E Q C C C F F M A C C V H D F F T T R R K V T S A
UniRef90_J9Q4J8 Q F R E F L S Q Y N K I T E Q C C C F F S E C C V E D M R S K A L T T A G K
UniRef90_UPI00035A059C L A G A L E Q M Q V R D S L K M Y N K L V E R C C C F F S E C C V E D M R S K A L T T A G K
UniRef90_A8HQS2 M L E R L E E M Q V R D S L R M F N G L V E R C C C F F S E C C V E D M R S K A L T T A G K
UniRef90_R1B8S4 L E A T I A K R Q M H D F F K L Y S G L V E R C C C F F N T C C C V N D F F T T K A V T S K
UniRef90_UPI0003502350 Q I K Q F R E F L G T Y N K L T E T C C C F F L D C C V K D D F T T R E V L P E
UniRef90_W9C578 Q Q A K C L N M F S N L V T H C C C F F D A C C V D D F T T K S L J A R
UniRef90_UPI00032A37E9 N L R N L K D F L T L Y N K V T E L C C C F F S R C C V E T L Y E R D L T N S

QUERY
UniRef90_W5G1L5
UniRef90_UPI0002C2DD13
UniRef90_W9WH35
UniRef90_B8LM74
UniRef90_UPI0000E493C0
UniRef90_UPI0003AFA4BC
UniRef90_X8JQE5
UniRef90_Q4WIQ2
UniRef90_C5LZG5
UniRef90_W1PJC6
UniRef90_N1QIH9
UniRef90_F0U7N2
UniRef90_U4LPH0
UniRef90_M5E7X0
UniRef90_S2IY08
UniRef90_E3KEE6
UniRef90_U9U2H7
UniRef90_A0A058Z5C2
UniRef90_UPI000441610F
UniRef90_B8CGK4
UniRef90_UPI000444A2D8
UniRef90_M7SKN3
UniRef90_UPI0003F4A318
UniRef90_C5PES1
UniRef90_A0A024JHT0
UniRef90_UPI00034FDD6C
UniRef90_G3AVA1
UniRef90_N6TLJ8
UniRef90_W7HRE4
UniRef90_B0WVB3
UniRef90_UPI0002658F0D
UniRef90_B5DL92
UniRef90_C3YA79
UniRef90_S3D441
UniRef90_C5FXE6
UniRef90_R9ARL6
UniRef90_A8NR54
UniRef90_U5H2U9
UniRef90_A0A059DEH3
UniRef90_M7NWD4
UniRef90_B7G5E1
UniRef90_V7AMC0
UniRef90_Q9P7K0
UniRef90_G7JUHO
UniRef90_W7U416
UniRef90_F0Y4A4
UniRef90_V9KTN7
UniRef90_A0A026X3S3
UniRef90_B2W7G0
UniRef90_W3WVZ8
UniRef90_UPI0004547BE3
UniRef90_I0Z597
UniRef90_D8QP64
UniRef90_G6DBX3
UniRef90_I2JZP3
UniRef90_W9X9Q1
UniRef90_UPI000180D06F
UniRef90_W9S284
UniRef90_C1EG03
UniRef90_C1C1M9
UniRef90_E2LP09
UniRef90_E9GYJ3
UniRef90_T2M2M7
UniRef90_M1VL90
UniRef90_U6KSZ9
UniRef90_Q8J1Z1
UniRef90_F0XGX3
UniRef90_V3ZYF8
UniRef90_Q7QE81
UniRef90_UPI0003C9158A
UniRef90_R4XFQ8
UniRef90_T0R2V1
UniRef90_B3S0F2
UniRef90_G0RRX4
UniRef90_S4RN59
UniRef90_K7IPB3
UniRef90_UPI0003599E75
UniRef90_A2AX41
UniRef90_F2TXM6
UniRef90_Q17754
UniRef90_L1LFG2
UniRef90_E9C700
UniRef90_T1KD72
UniRef90_J9Q4J8
UniRef90_UPI00035A059C
UniRef90_A8HQS2
UniRef90_R1B8S4
UniRef90_G7E4S7
UniRef90_UPI0003502350
UniRef90_W9C578
UniRef90_UPI00032A37E9

50 60
E Q T C I M K C S E K F L K H S E R V G Q R F A E Q N A A
E E S C V R R R C A E K F L K H S M R R V G M R F F A E L N Q G G
E E K C V R R R C A E K F L K H S M R R L G M R F F A G E L N Q G A
E E E C V M R R C V D K F L K G S M R R L G A R R F A G E Q N A A
E E E T C V Q R C A E K F L K H S M R R V S M R F F A E L N Q G
E E Q S C S E S F N C M E K Y L K M T Q R I S M R F F A E Y Q
E S S C S E S L Q K Y L K M T Q R I S M R F F A E Y H
E D T C I S E S C V E K F M K H S E R V G A R F F A E Q N A
E E G C I M R R C V D K F M K A S S Q R R L N E R F F A E Q N A A
E E T D C I K R C V G K Y M T Y S S Q R R V G T R F A E K N Q
E D T C V R R R C A E K F L K H S M R R V G L R
E E G C V M R R C V D K F S L K S A E R R L G E R F F Q E Q N A
E E Q G C I N R C V D K F M K K S S E R I N Q R F F Q E Q N A
E E T T C V T K C V D K F L K T S E R R L G Q R F F A E Q N Q A
E E T T C V A N C T D K F L K H S E R V G A R F F A E E N A
E E E G C V N K C A D K F L K H S E R V G A R F F A E L S Q
E E E S C V N N C A D K F L K H S E R V G A R F F A E H N A
E E E T C I Q R C T D K F L K Y S A R I G Q R F F A E Y N Q A
E E E A C V N K C C A D K F L K H S E R V G Q R F F A E Q N T A
E E E T C V Q N C A D K F L K H A E R V G A R F F A E Q N A G
E E T S C V E H C A S R Y I K M T Q R V G L R F A E
E E Q C M T N C A D K F L K H S E R V G A R F F A E Q N A
E E T G C V S R C V Q K H M S M S Q R L S E R F F Q E H N A
E E E T C V Q N C V D K F L K T H S E R V G A R F F S E Y N A G
E E G C V N R C F D K F M K T A E R V N Q R F F Q E Q N A A
E E E S C I T K C S Q K F L K H S E H V G K R F F Q E Q N A A
E E T C S E H C L Q K Y L K M T Q R I S M R F F Q E Y H
E E T S C I A K C S E K F L K H S E R I G Q R F F Q E Q N Q
E D K C S L N C L A K F L K V N Q R R L S Q R F F Q E F Q
E E G C I N C C V D K W L K G S E R M G Q R F A E Q
E V R C A E N C V G K F T N T N Q R L M Q V Y M D V Q
E E K C S L W C M E K Y L K M N Q R I S Q R F F Q E F Q
E D T C V D R C V T K F A R F N Q R I M K V Y V D A Q Q
E E D T C A S H C L A K Y M K V T Q R I G Q R F F Q E Y Q
E T G C V T R C V K K F M A G S E R I G Q R F
E I G C T N R C F D K F I K A S E R V S L R F F Q E Q N A A
E K T C S E N C V G K F L K H S E R I G A R F F A E Q N A
E D Q C I S N C A E K F L K H S E R V G A R F F A E A N A
E E A C C V S T C A D K F L K H S E R V G L R F F S E M N A
E E E R C V L H C A E K F L K V S A H V G M R L A E L N Q A
E E T C V I R C A N K F L K H S E R V G Q R F F T E L N
E E T S C I E H C A D R Y L R K M T Q R V G L R F F A E H Q A
E E E T C V L R C A Q K F L R L S T Q V G L R F S D L N Q
E E S E C V I A K C A D K F L K S E R V G Q R F F A E F N A
E E E T C V L R C A E K Y L R F S H V G V K F S D L N Q G
E E L S C V S K C A E K Y L K L T S R A G F R F A E F Q S
E D E C I C R C A E K Y I K L T Q R V G F R F A E H Q A A
E E H C V S S C A G K Y I R T N H R L M G T Y V Q L
E E E K C A L N C M E K Y L K M N Q R V S Q R F F Q E F Q
E E S C V M R C V D K H M K G S Q R L G D R F F Q E Q N
E T G C I T R C V Q K Q M A Q S R L S E R F F A E H N A
E E A C L D S C A G K F V R S N H R L M A A Y M Q L
E E E K C V E R C C Q K F M K H S A R V G A R F F A E L T S A
E E E T C V K R C A E K F L K H A M R V S M R F F Q E L N
E D K C T V N C M E K Y L R T N Q R V S Q R F F H F Q
E T S C L N C C A E K F L K H S E R V G Q R F F Q E Q N Q
E Q G C V S K C F E K Q M K A T E R I G E R F F Q E Q N A A
E L D C S L H C L Q K Y L K T T A R I S L R F F Q D H
E E S C V R R R C A E K F L K H S M R V G M R F F A E L N Q G
E E E R C V T K C C E K F L K H S A R V S L R F F A E L N Q
E D R C A S N C A E K Y L K M N Q R I S T R F F Q E F Q
E E Q C I S S C T E K F L K H S E R V G S R F
E N S C A V N C A E K F L K A N Q R I S Q R F F Q E F Q
E N T C A I N C T E K F L K M A Q R L G L R F F Q E V Q
E E A C V T K C A Q K F L K L A A R A G Q R F F A E Q Q Q
E Q G C V I A C V R K F L A F S A R R L G Q R F F A E K N V G
E S G C I S R C V L K S M S T Q T R L G E R F F G E L N A A
E T G C I T R C V Q K T L A T Q Q R L S E R F F Q E H N A
E E T C A F N C L E K F L K V T Q R I S Q R F F Q E H Q
E D K C A L N C M E K F L K M N Q R I S Q R F F Q E F Q
E I T C S E H C L Q K Y L K M P Q R L S M R F F Q E N H
E E G C L E K C A E K F L K H S E R I G Q R F F A E E N A
E E G C I N K C T E K F V K H T Q R V A T R F F Q E A Q A A
E I G C A L N C T E K Y L K M T Q R I M L R F F Q E H Q Q
E T G C L E T C V L K W M A T Q R V S E R F F Q E H N A
E N N C T E T C M Q K Y L K M T Q R I S Q R F F Q E Y H
E E K C T L N C M E K Y L K M N Q R I S Q R F F Q E F Q
E R S C I E V C T D N Y V F N Q R F M F N F V D H Q
E E K C I T R C T T K F L K A S A R A G O A F Q
Q K S C V E N C V G K F F V A S Q R I G Q R F F Q E A Q A
E E S C A N N C L D K F L K M T Q R V S Q R F F Q E H Q
E T Q C V E S C V K L F F E F S Q R V G M R F F G E K Q A
E Q G C V G R C V Q K F V Q L S Q R V G Q R F S
E E K C A E D N C V Q K Y F K V L S K R F F Y E L H A
E L C A L N C L E K Y L K S T Q R I S T R F F Q E H H
E D T C S I N C L E K F M K M T N R I S Q R F F Q E H Q M A
E E Q C V S K C C A E K F M H V T A R V G M R F F Q E F
E E K C V T T C A N K Y L K H S G R V G Q R F F Q E L S
E D E C I K N C S D K F L A H S N R V G L R F F A E H N A
E I T C S E C L S M R F F Q E
E T G C V T R C V Q K F M A G S E R I G Q R F F Q E Q Q A
E S A C I D R C V T K F A R F N Q K M N V Y V E V Q

UniRef90_T1JAV5
UniRef90_A0A016VT47
UniRef90_UPI0003593165
UniRef90_T1G4X9
UniRef90_F0VIC8
UniRef90_K7IVG8
UniRef90_A7AS04
UniRef90_UPI00022C9556
UniRef90_T1H778
UniRef90_W2S538
UniRef90_S9R0S5
UniRef90_A0A024NFK8
UniRef90_Q17146
UniRef90_S2JKL9
UniRef90_UPI00038E998F
UniRef90_I7JC32
UniRef90_UPI0003C392B7
UniRef90_Q6GR66
UniRef90_B4G7R1
UniRef90_UPI000392E19E
UniRef90_UPI00022B575F
UniRef90_R7TWR3
UniRef90_R7QJV4
UniRef90_D7G618
UniRef90_C5K6N5
UniRef90_H2VV96
UniRef90_A0A044SIM6
UniRef90_K4CKG0
UniRef90_H2WQ08
UniRef90_M8CET9
UniRef90_W4Y805
UniRef90_C3YS86
UniRef90_T1KMG9
UniRef90_B6AEM1
UniRef90_B3VTC6
UniRef90_M7AX10
UniRef90_G4N7B1
UniRef90_B7F8R2
UniRef90_A0A024J8E6
UniRef90_UPI0001CBAF25
UniRef90_A0NBC3
UniRef90_E5S8H9
UniRef90_R7V5B7
UniRef90_W9C8V9
UniRef90_UPI0003EAE191
UniRef90_L2G0G8
UniRef90_W1PF51
UniRef90_E2BX27
UniRef90_J9JRL1
UniRef90_UPI0001DED0EB
UniRef90_T2M2T0
UniRef90_H2XWM7
UniRef90_UPI000258D9E8
UniRef90_U1NVI9
UniRef90_UPI0002B4D00B
UniRef90_A7RVQ3
UniRef90_E9GKY1
UniRef90_K3YKL9
UniRef90_C1L639
UniRef90_A0A022RSI6
UniRef90_UPI000203B475
UniRef90_F4NXV3
UniRef90_N6T228
UniRef90_A6NA11
UniRef90_E4YTG4
UniRef90_E9IXV7
UniRef90_K7GFB0
UniRef90_I1IRN4
UniRef90_Q8ID24
UniRef90_B3RXC7
UniRef90_F4WR12
UniRef90_M0UC27
UniRef90_F2QRH4
UniRef90_L7IPE1
UniRef90_A9P2B4
UniRef90_S3CAP7
UniRef90_H9KE11
UniRef90_V9LHG0
UniRef90_B5XAD8
UniRef90_UPI0002659659
UniRef90_M0T4K8
UniRef90_U6PYP2
UniRef90_V3Z0A6
UniRef90_M7ZRC3
UniRef90_B4NUR5
UniRef90_Q2F5V6
UniRef90_E0VHD2
UniRef90_L8H0G3
UniRef90_S7S4T0
UniRef90_G1XRF0
UniRef90_F1LTU8
UniRef90_UPI0002B4BD64

1 10 20 30 40
M E D V A L R N F R D F L T L Y N Q M T E L C F S R A C V D S L N Y R Q L V S P
K T F R D F L M Q Y N N V T E E Q C F F G A C C I T D M T Y R R R T L V S E K R
R Q Q L R S L R E F L L V Y N R R M T E E Q C F F R H C C V C H D L N T Y R R T L V S E K R
F K E F L S S Y N R R L S E E Q C F F V D C C V H D L N T Y R R T L V S E K R
M K E L N H L H I K D T M D T Y N S Q V V E R T C C F F N E C C T T N T F F T T R A R K D I L D D L D
M D Q I L R N F R D F L R L Y N N G M V E K R C C F F N E C C T T N T F F T T R S K E L I D E K L D
H L N E L Q Y R D T L E T Y N G M V E K R C C F F L D C C C I N E F F T T R S R N V L Q A K K
Q I K S V R D F V L A S Y N R L V E T C C F F L D C C C V N R D F F T T S Q K
F Q D F L L T S Y N R L S E I C C F F T D C C C V N R D F F T T S Q K
M N T Y S N L V Q R C C F F E D C C C V N R D F F T T S K S L V G D S K
F A Q V L E A K Q I K D Y T N M M F N L S Q Q C C C F F N D C C C I V D F F T T S S K V G D S K
D L K T F K D D F L T Q Y N A V A E E Q C C F F T S C C C V T D D F T T S S V S N S G D
E L R N L K D F L T L Y N Q V T E L C C F F T S C C C V D N D F T T G R E L V S S G D
A M V E Q K Q V T D F M N M F T G V V D R C C F F K E C C A N D F T T T K R A V K T G R E
Q T K Q F R E F L G T Y N K P T E T C C F F L V D W D F F T T T K R A V K T G R E
M A E F D K V Q Y Q D T M E T Y N G I T Q R C C F F N E C C V T S F F K S K R D L A K K R
N L R N L K D F L T L Y N K V T E L C C F F N R C C V D N M N E R S D L A K K H
Q L R N L R D F L L V Y N K M T E L C C F F S R C C A K N L N Y S R L V T K M E T
Q L K T F S D F L I S Y N R K T E M C C F F K D C C V R D F T T S H E V T K E T
L R D F L L V Y N R M T E L C C F F R H C C V S N L N Y S R L V T K M E T
Q I K Q F E E S L G T Y S K H T E T C C F F L D C C C V K D D F T T R E V L K P E S
Q F K E F L L T S Y N K L V S E A C C F F T D C C C A H D F T T S R K K V L E S
D S L R M Y N E L V E R C C F F G H C C V E T F F R S R K R L D D G K
D S L A M Y N N L V F R C C F F D E C C S K S F R F R R L D D D A E
D S M A N T Y N N M V N R C C F F A T C C L R S F Q E K K V N N G E
M N S I Q N I Q Q L R E F L T V Y N T L S E R C C F F N A C C A R D Y T T S T L N K D
L I K F I N T F Q L Q V E L T V Y N T L T D S C C F F R A C C I R E F N H H Q L L K K
M A A L I D Q L Q V C D S L R M Y N T L V E R C C F F T D Y A D S F F R K R K L N K D
M A N E Q N I Q T F R D F L T Q Y N L V A E Q C C F F N S C C V N E F G S R S T V N A K S
F Q A L L E E E K K A M M M I A K L T D T C C F F W D K C C V I T G S I G S S F S N S
A R R N L R D F L S M Y N Q F T E T C C F F T R C C V Q N L N Y R V L T P A
L R D F L A V Y N R L T E H C C F F S R C C V S N M N Y R Y L T R E
I L S E Q Q I A Q V N A Q V H K L T E Q C C W E K C C V I T D K L S R F D G N
L I S E L E I Q D S M N T Y N N G L V Q R C C F F N E C C I T I L R S K N L D N N
L D A I A D G L Q T R D A M R L Y N W L S H R C C F F S D C C V V S F Y R R A L L G R R E
L R D F L L V Y N R M T E L C C F F L R C C I S N L N Y S R A L L T R E R
L E Q R M Q K R Q V K E F F V N I F S K L V D H C C F F M S C C V I D D F S S K A L L N S R
M E A V A D K L Q T R D A I R L Y N W V S H R C C F F S D C C V T T F Y R R T L L G K K
F Q Q L V E R K Q M K D F M R C C F F S D C C V N D D F T S N T L T T R E
Q D R A A A R N F K D F L T Q Y N K F T E S C C F F G H C C I A N L N Y R L L S Q E
E L R N I K D F L Q L Y N K I T D M C C F F N S C C V D N L F G R D L L T T R E
L R Q F L I L Y N S R L T E S C C F F S R C C A Y N F N G R Q L L T D N
N I N N L K D I L S T Y N N R I T E S C C F F S R C C A Y N F N G R Q L L T D N
L Q Q F I N E T Q K T Q I Q Q A V H S L T D V C C W K K C C I T N I R S G K L D K G
Q L R N L R D F L L V Y N K M T E I C C F F Q R C C T S N L N Y R T L L T M D
V K E F M N L Y N K M L V D H C C F F T S C C I D D D F T S K S L L S S R
L Q R F L Q E K Q K A M F S E M V G K L T S V C C W D K C C I S G S P G S K F S S S
F K D F L L L Y N Q I S E T C C F F K R C C A N T F L T R E I T A N E
Q L A S V K E I F K S Y N K L T E L C C F F M D C C A T D F T I G D L T S S E
Q T K Q F K E F L G T Y N E L T E S C C Y L D C C V K D F T T T E V L K S S
M E S M A M Q N Y R E F I G L Y N R I A Q N C C F F E S C C V T D M S H K S S Q E
Q L R N I K D F L I Y N S L T E R C C F F T R C C V T N M S H R Y P T K D
R N I K D F Q L L Y N Q I S E T C C F F K T C C V S T F I S R D V S I D
L K E F L T V Y N T L T E R C C F F G S C C V R E F T N H N Q S L V Q E
M N F I N E E K Q R A M V A E M V A K L T S V C C W D K C C I T G T P G S K F S S S
Q E L M I E E Q K A K F Q M Q V H K F T D T C C W D K C C M D K P G N K L D G K
K D F L L V F N K M S E T C C F F T R C C V N T F Q T R E L T E D
M Q R F L Q Q E Q K A M M G M V G K L T S V C C W D K C C I T G T P G S K F S S S
L Q T F V Q I Q Q R A E F Q N H V N H L A S I C C W D K C C A T G Y P G S K L D A K
L Q D F I Q E K Q K A M V N E M I G K L T A A C C W D K C C I T G T P G S K F S S G
R D F L L V Y N R M T E L C C F F R R C C V P G L T Q R G L D G S
L M S T L E A Q Q M E Q A M Q F N T H L I E H C C F F N A C C I N D F T S K V V S K K
R N F K D F Q Q L Y N E M T E M C C F F Q R C C V N H V R K L D A E
M Q T F L A I E Q Q K Q F Q A Q V H R L N E I C C W D K C C I D K P S S K L D G R
R D F L K S Y N K T T K I C C F F D D C C V R N F T S S G E L L S A D
L Q R L V A E Q Q R A Q F T A Q V N N F M E V C C W D K C C V D K P G S K L D S R
L Q Q L L E Q E K E K M M M N I V G K L T N E C C W D K C C I T A T P E S K F R S G
K K I N E K A E Y E D T M N T Y N S I V E R C C F F N E C C I T S F R S K E L D N N
L Q R I E M E Q A R F Q A L V H N L T D V C C W E K C C I D R P A A K L D D S R
L M V E K Q K A Q F N A Q I H E F N D F C C W D K C C V D K P G S K L D D G R
L Q A F L Q E G Q K A M I G M V G K L T D Q C C W D K C C I S G T P G S K F S S K
Q A K I Q E A E L D M V T G M F N Q L V D I C C H K K C C I T S Y N A S D L D K N
L Q F V N N E Q Q R T K V Q S Q T H N L T E V C C W K K C C V T S K G N G L E K S S
L Q S F L Q E K Q K A M F N E L V G K L T D V C C W D K C C I T S A P G S K F S S S
L E Q R L Q K R Q V K E F I G L F S N L V D N C C F F T A C C A D D F T K A V T N R
M D A M V I R N M K D F Q L L F N Q M S E T C C F F K T C C V N T F M S R D I S T E
L Q E M V A E Q Q K A Q F Q A Q V H N F T D V C C W E K C C V D R L T A R L D S R
L Q R M I A I E Q Q K Q F Q A Q V H N F T D V C C W D K C C M E G S P S S K L D S R
M D T E S A L R N F R D F L T I Y N K M S E Q C C F F A H C C V N D L G Q R Q L L T E S
L Q R F L Q E K Q K A M V S E M V G K L T N E C C F F W D K C C I T G T P G S K F S S S
F M N I Q D I N Q L R A E F L G V Y N L T E K C C F F N S C C I R E Y T N N S L T S A
N T R N M R D F L L Y N Q L T E Q C C F F D R C C V Y N M S R N S L V S N R
L Q R F I E Q E K K M M V F E M I G K V T S E C C S A D A W I S H P A R P G G Q
N L R N L K D F L T L Y N K V T E L C C F F S A D A W I S H P A R P G G Q
L I Q E K Q K A Q F Q A Q I H E F N S F C C W D K C C I E K P G A K L D S R
L M I E K Q K A Q F N A Q I H E F N D F C C W E K C C I S D K P S K L D G K
M Q V M M A S M Q M Q D Y L T M Y N S T T E K C C F F K K C C V F N L R T P Q L V E K
E L A T E Q L D M I T D V Y N R L V D S C C H S K C C I S R Y T E S D L N K G
A E A E L M V T D M F N R L T S S C C F F K K C C V K K D Y R E S E L N K G
R N L R D F L L V Y N R M T E L C C F F Q L C C V P S L N H R A L D A E
M A E K E M E Y R V E L F N K L T Q S C C F F N K C C V D R Y K E S E L N M G

UniRef90_T1JAV5
UniRef90_A0A016VT47
UniRef90_UPI0003593165
UniRef90_T1G4X9
UniRef90_F0VIC8
UniRef90_K7IVG8
UniRef90_A7AS04
UniRef90_UPI00022C9556
UniRef90_T1H778
UniRef90_W2S538
UniRef90_S9R0S5
UniRef90_A0A024NFK8
UniRef90_Q17146
UniRef90_S2JKL9
UniRef90_UPI00038E998F
UniRef90_I7JC32
UniRef90_UPI0003C392B7
UniRef90_Q6GR66
UniRef90_B4G7R1
UniRef90_UPI000392E19E
UniRef90_UPI00022B575F
UniRef90_R7TWR3
UniRef90_R7QJV4
UniRef90_D7G6I8
UniRef90_C5K6N5
UniRef90_H2VV96
UniRef90_A0A044SIM6
UniRef90_K4CKG0
UniRef90_H2WQ08
UniRef90_M8CET9
UniRef90_W4Y805
UniRef90_C3YS86
UniRef90_T1KMG9
UniRef90_B6AEM1
UniRef90_B3VTC6
UniRef90_M7AX10
UniRef90_G4N7B1
UniRef90_B7F8R2
UniRef90_A0A024J8E6
UniRef90_UPI0001CBAF25
UniRef90_A0NBC3
UniRef90_E5S8H9
UniRef90_R7V5B7
UniRef90_W9C8V9
UniRef90_UPI0003EAE191
UniRef90_L2G0G8
UniRef90_W1PF51
UniRef90_E2BX27
UniRef90_J9JRL1
UniRef90_UPI0001DED0EB
UniRef90_T2M2T0
UniRef90_H2XWM7
UniRef90_UPI000258D9E8
UniRef90_U1NV19
UniRef90_UPI0002B4D00B
UniRef90_A7RVQ3
UniRef90_E9GKY1
UniRef90_K3YKL9
UniRef90_C1L639
UniRef90_A0A022RSI6
UniRef90_UPI000203B475
UniRef90_F4NXV3
UniRef90_N6T228
UniRef90_A6NA11
UniRef90_E4YTG4
UniRef90_E9IXV7
UniRef90_K7GFB0
UniRef90_I1IRN4
UniRef90_Q8ID24
UniRef90_B3RXC7
UniRef90_F4WR12
UniRef90_M0UC27
UniRef90_F2QRH4
UniRef90_L7IPE1
UniRef90_A9P2B4
UniRef90_S3CAP7
UniRef90_H9KE11
UniRef90_V9LHG0
UniRef90_B5XAD8
UniRef90_UPI0002659659
UniRef90_M0T4K8
UniRef90_U6PYP2
UniRef90_V3Z0A6
UniRef90_M7ZRC3
UniRef90_B4NUR5
UniRef90_Q2F5V6
UniRef90_E0VHD2
UniRef90_L8H0G3
UniRef90_S7S4T0
UniRef90_G1XRF0
UniRef90_F1LTU8
UniRef90_UPI0002B4BD64

50 60
E[V]S[C]V[D]K[C]A[S]K[H]V[N]I[N]H[R]M[M]S[L]Y[M]E[V]Q
E[E]K[C]S[L]N[C]L[D]K[Y]L[K]M[T]Q[R]V[S]L[R]F[Q]E[H]Q
E[E]S[C]L[D]S[C]A[A]R[L]V[R]A[N]H[R]L[M]M
E[G]T[C]A[L]N[C]M[D]K[H]L[K]I[T]Q[R]I[S]Q[R]F[Q]E[F]Q
E[Q]Q[C]V[R]R[C]V[R]K[F]M[L]F[S]Q[R]V[G]L[R]F[A]E[K]N
E[A]N[C]V[D]T[A]Q[K]F[I]H[T]N[S]Q[R]V[M]E[V]Y[M]E[V]Q[A]A
E[N]A[C]V[E]S[C]V[K]M[F]F[E]F[S]Q[R]I[G]O[R]F[A]E[K]Q[Q]
E[E]T[C]A[L]N[C]M[D]K[Y]L[R]M[N]Q[R]M[S]E[R]F[E]E[F]Q
E[E]N[C]S[L]N[C]M[E]K[Y]L[K]M[N]Q[R]I[S]Q[R]F[Q]E[F]Q
E[E]G[C]V[F]R[C]V[D]K[Y]M[K]G[Q]T[R]L[G]E[R]F[Q]E[M]N[A]
E[S]A[C]L[T]R[C]A[D]K[F]F[K]H[T]Q[R]V[G]Q[R]F[A]E[N]N[A]
E[E]Q[C]C[S]N[C]L[D]K[F]L[K]M[T]Q[R]M[S]L[R]F[Q]E[H]Q
E[I]R[C]T[D]N[C]V[G]K[F]S[S]V[N]Q[R]L[M]Q[V]Y[V]G[V]Q[S]
E[A]A[C]V[Q]R[C]A[D]R[F]L[K]H[A]E[L]V[S]N[K]F[A]E[L]S[Q]
V[I]T[C]S[E]H[C]L[Q]K[Y]F[K]M[T]Q[R]I[A]M[G]F[Q]D[Y]H
E[T]E[C]V[G]N[C]V[K]K[F]L[A]Y[S]Q[R]V[S]M[R]F[G]E
E[E]T[C]V[N]R[C]V[N]K[F]A[L]F[N]Q[N]M[M]K[V]Y[V]E[V]Q[S]
E[E]Q[C]L[D]S[C]A[S]K[F]I[R]A[N]H[R]L[M]S[A]Y[V]S[L]
E[V]K[C]S[L]N[C]M[E]K[Y]L[K]M[N]Q[R]V[S]Q[R]F[Q]E[F]Q
E[E]M[C]L[D]S[C]A[G]K[L]V[H]S[N]H[R]L[M]R[A]Y[V]A[L]
E[I]T[C]S[K]Y[C]L[Q]K[Y]F[N]M[M]Q[R]I[S]M[R]F[Q]E[S]H
E[S]S[C]A[L]N[C]M[E]K[Y]L[K]V[T]Q[R]L[S]Q[R]F[Q]E[F]Q
E[E]A[C]I[R]K[C]S[E]K[F]V[K]F[A]A[R]A[G]E[R]F[Q]E[H]Q
E[T]K[C]I[N]V[C]A[E]K[F]I[K]L[T]S[R]V[A]L[R]F[Q]D[L]Q[Q]
E[M]D[C]T[K]R[C]V[T]K[F]V[G]Y[S]Q[R]V[A]L[R]F[A]E[H]N[A]
E[G]V[C]V[S]Q[C]I[D]K[Q]M[L]V[N]R[R]F[M]L[V]F[A]E[Q]
E[A]E[C]I[S]K[C]I[D]K[Y]M[R]T[N]Q[R]L[M]L[I]F[A]E[Q]
D[K]N[R]V[R]R[C]A[E]K[F]L[K]H[S]M[R]A[E]L[R]F[A]E[L]N
E[E]S[C]A[N]N[C]L[D]K[F]L[K]F
E[T]S[C]L[S]N[C]A[K]R[F]I[D]V[K]M[L]T[M]Q[R]
E[D]S[C]T[S]N[C]I[S]K[L]I[N]V[N]H[R]E[I]S[T]Y[M]E[I]N
E[E]V[C]L[D]G[C]S[G]K[L]I[N]A[N]H[R]I[I]Q[K]F[A]E[I]
T[E]T[C]L[T]N[C]V[E]R[F]I[D]A[S]V[V]I[A]Q[R]F[S]
E[K]T[C]V[N]S[C]V[A]K[F]M[F]S[R]R[L]G[L]R[F]A[E]K[S]Q
E[E]E[C]V[R]S[C]V[R]K[Y]L[L]S[A]T[T]A[A]R[F]
E[E]A[C]L[D]G[C]A[G]K[L]V[H]S[N]H[R]L[M]G[A]Y[V]Q[L]
E[S]G[C]I[Q]R[C]V[I]K[D]M[A]A[Q]Q[R]L[G]E[R]F[Q]E[L]S[A]
E[E]D[C]V[R]S[C]V[R]K[F]L[L]S[A]S[A]A[R]F[A]H[L]
E[E]T[C]V[M]R[C]A[E]K[F]L[K]H[S]E[R]V[G]Q[R]F[Q]E[Q]N[A]A
E[E]A[C]L[D]K[C]S[S]K[L]I[N]I[N]H[R]M[I]G[T]Y[M]E[L]N
E[V]S[C]A[D]N[C]V[L]K[F]T[N]V[N]Q[R]L[L]K[V]Y[V]G[V]Q[S]
E[R]Q[C]V[A]R[C]V[E]K[N]I[R]G[N]E[R]I[L]A[T]F[M]
E[N]D[C]V[M]S[C]A[S]K[F]I[N]T[N]Q[R]M[M]T[F]M[D]I[Q]
E[E]S[C]A[M]N[C]V[D]R[F]L[D]S[S]Q[V]V
E[E]R[C]L[D]S[C]A[G]K[L]I[R]S[N]H[R]L[M]
E[T]G[C]I[S]R[C]V[Q]K[M]F[S]Q[R]L[S]E[R]F[Q]E[H]N[A]
E[S]T[C]L[N]N[C]A[Q]R[Y]L[E]M[S]Q[L]I[L]R[R]F[Q]
E[D]F[C]I[A]S[C]A[Q]K[Y]I[H]A[N]H[K]L[M]E[V]F[M]E[V]Q
E[V]R[C]A[E]N[C]T[S]K[F]L[K]A[S]E[R]M[T]Q[R]F[Q]E[Y]Q
E[E]X[C]S[E]H[X]R[R]K[Y]L[R]M[R]K[S]I[S]M[R]F[Q]E[Y]H
E[E]L[C]V[E]S[C]A[D]K[M]L[A]V[N]H[R]L[M]S[V]F[M]E[I]
E[T]S[C]I[H]S[C]A[E]R[F]Q[K]G[N]Q[R]F[M]K[Q]F[M]K[M]
E[D]Q[C]I[E]N[C]S[G]K[H]I[N]A[N]H[K]I[M]E[I]F[M]E[V]Q
E[E]D[C]T[W]R[C]I[D]K[Q]M[N]V[S]R[R]L[M]L[I]F[A]D[L]
E[S]N[C]L[S]N[C]A[Q]R[Y]M[D]M[S]I[I]M[K]R[F]Q
T[E]T[C]L[V]N[C]V[E]R[F]I[D]T[T]L[L]I[T]K[R]F[G]E[L]Q
E[D]K[C]V[E]M[C]S[T]K[N]I[R]V[N]H[K]I[M]S[V]Y[M]E[V]Q
E[T]T[C]L[T]N[C]A[Q]R[F]L[D]M[S]V[L]I[A]K[R]F
K[A]N[C]I[E]N[C]T[E]R[Y]L[D]V[S]M[L]L[R]S[R]F[Q]
E[T]T[C]L[T]N[C]A[Q]R[Y]M[D]M[S]L[L]I[M]K[R]L[Q]Q
E[E]S[C]L[E]G[C]A[G]K[L]V[R]S[N]Q[R]L[M]A[A]Y
E[N]T[C]V[T]R[C]V[D]K[F]T[N]Y[S]K[R]L[S]L[R]F[Q]E[S]Y[Q]
E[T]T[C]V[D]G[C]V[Q]K[F]I[T]Y[S]N[K]L[M]Q[N]F[V]R[A]Q[S]
T[E]T[C]L[T]N[C]V[D]R[F]I[D]T[S]L[A]I[T]N[R]F[A]Q[L]
E[K]S[C]G[Q]R[C]V[S]K[Y]L[E]Y[S]A[R]V[A]K[E]F[M]Q[R]N[N]
E[V]S[C]V[N]N[C]A[Q]K[Y]I[H]A[N]H[K]I[M]E[V]F[M]E[V]Q
T[E]G[C]L[A]S[C]V[D]R[F]I[D]T[T]L[S]I[T]N[R]F[A]Q[L]
E[T]T[C]L[S]N[C]A[Q]R[F]L[D]M[S]M[I]A[Q]R[F]
E[N]N[C]I[L]N[C]V[K]K[F]S[L]F[S]Q[R]I[G]M[K]E[T]Q
S[E]S[C]I[V]N[C]V[E]R[F]I[D]T[S]N[F]V[V]N[R]L[S]D[I]S
T[E]T[C]I[N]N[C]V[D]R[F]I[D]V[S]L[F]V[T]N[R]F[A]Q[L]
D[S]A[C]L[G]N[C]A[R]R[F]M[D]M[S]M[L]I[M]K[K]L[Q]S[M]Q
E[S]L[C]V[D]R[C]V[A]K[Y]F[D]T[N]L[K]V[G]D[S]M[Q]K[V]G[Q]
E[E]Q[C]L[A]S[C]V[D]R[F]L[D]V[N]L[A]T[M]Q[H]L[S]
E[T]A[C]L[T]N[C]A[Q]R[F]L[D]M[S]A[I]I[I]R[R]F[Q]S[M]H
E[S]E[C]V[S]R[C]V[Q]K[F]M[H]T
E[V]Q[C]I[E]N[C]S[G]K[H]I[N]A[N]H[K]I[M]E[I]F[M]D[V]Q
T[E]G[C]L[V]S[C]V[D]R[F]V[D]T[T]L[A]I[T]N[R]F[G]Q[M]
T[E]T[C]L[V]S[C]V[D]R[F]I[D]T[T]L[S]I[T]N[R]F[T]Q[M]
E[E]V[C]V[D]K[C]V[N]K[N]I[K]L[N]H[R]M[M]E[I]Y[M]K[L]Q
E[S]A[C]L[T]N[C]A[Q]R[Y]M[D]L[S]M[L]I[M]K[K]F[Q]S[M]Q[Q]
E[D]S[C]V[S]R[C]I[D]K[Q]M[R]V[N]R[R]L[M]
E[N]D[C]I[S]M[C]A[D]R[Y]V[A]F[N]Q[K]T[M]H[V]F[V]E[Y]Q[N]
E[T]S[C]L[S]N[C]A[Q]R[F]I[D]M[S]E[M]L[A]K[R]F[G]A[H]
E[D]L[C]V[D]R[C]V[T]K[F]A[R]F[N]Q[N]M[M]K[V]Y[V]D[V]Q
T[E]T[C]I[T]N[C]V[E]R[F]I[D]T[S]L[L]I[T]N[R]F[A]Q[M]
T[E]T[C]L[N]N[C]V[D]R[F]I[D]V[S]L[F]I[T]N[R]Y[A]S[Y]
E[E]V[C]L[N]R[C]I[E]K[M]S[H]Y[N]L[R]F[Q]K[V]G[A]E[S]A[A]
E[S]V[C]V[D]R[C]V[A]K[F]F[E]V[N]K[K]V[G]E[K]L[Q]
E[S]V[C]L[D]R[C]V[A]K[F]F[E]V[N]V[K]V[S]E[Q]M[Q]S[Q]A[A]
E[E]A[C]L[H]S[C]A[G]K[L]I[H]S[N]H[C]L[M]A[A]Y[V]H[L]
E[N]S[C]I[D]R[C]V[S]K[Y]W[H]V[T]N[L]I[G]Q

UniRef90_I0Z5U3 1 Q F L L N E Q A K A Q M Q Q T V A R L T D T C W D K C V G T P G R S L G S R 40
UniRef90_T0QWL0 MA K V E M A M Y T D L F N R M A E E C F K K C N Y R D F H S D G A L L N V G
UniRef90_Q6C6U1 Q K L L A E A E L D M V T D M F N R L V E S C F H E D C I K T D Y F Y H S D G A L L N V G
UniRef90_I1HMT8 VR L Y N W L S Q R C F S D K C I V T T F Y R K A L L N G A N G
UniRef90_M1VG23 L A R R E M S F Y A D L F Q K M T D S C F R K C V V T R Y H D G S G A L L Q T G R
UniRef90_E2AGI1 L M V E K Q K A Q L N A Q I H E F N D I C C F W D K C V S D K F P G S G A L L D T G M R
UniRef90_G3QB66 M E P E Q Q L R N L R D F L L V Y N R M T E I C F Q R C V S S N F N Y R N L L T G R M D
UniRef90_C5DDH7 D M F N K L V D N C H K K C V T S F Y S R S E G D L L N K N
UniRef90_K3WQ80 M E E H M E M R V S Q T L A Y F N R T V E L C F S E C H S T S F S R S K K F S S D D A S
UniRef90_UPI0002C35469 Q E Q Q R A M I N E M V G N K L T S A C C C W D K C I I M G T P G S G K F S S S S
UniRef90_G3XRT9 A E T E V E M V T D M F S R L T S E S C I K K C I I N D Y R E E G D L L N K G
UniRef90_D5G9U9 A E Q E L E M I T D M F N R L T R S C H N K C I I T D T S T P G S G A L L N K G
UniRef90_K4A2Q6 Q E K E Q L M A K Q M V S K L T S V C W D K C I I T S T P K G S K F S S T G
UniRef90_D3B9Y0 I N K M Q M K E V I N T T F Q I T N H F E A I I N N F R L R K T L D N D R
UniRef90_M0WF56 L A A I A D R L Q A R D S V R L V T W L S H R C F S D C C V T T G T P R K T L G K S R S
UniRef90_M0ZZ14 L Q Q L L Q E K E R A M V N E V V A K L T S S C C W D K C V T T F Y P G S K F S S R S
UniRef90_F0JAC9 L V H R L N E I C W D K C V D K P G S K F S S G R
UniRef90_W518H3 L M Q E K H K M M M S E M V T K L L T N V C W D K C I T S T P G S K F S S G
UniRef90_T1IQX1 E Q Q R A M I N E M V G N K L T S A C C C W D K C I T E K P G S Q K F S S G K
UniRef90_M2Y0K8 A K T E M N F Y A D M F N K M A D Q C F K K C I P K Y N E G D L L N T G D
UniRef90_Q4TBU9 Q I K Q F K E F L G T Y N R V T E N C F M D C V A K D F T P S R S K F S S P D
UniRef90_C6T2D2 E K E K A M A N E L V A K L T H I C W D K C I A S T P G S K F S S S
UniRef90_UPI0003599765 A S F I Q M E Q K A E L Q A Q V H K L A D V W E Q C V D R P R T D K L S S R
UniRef90_K1QVR3 M F K D C V H D F T R K F S S N A
UniRef90_U5GXZ0 L Q A F L E Q E Q T K A R L Q T I H T F T D M W D K C I I T G S I R G R F S S R G
UniRef90_UPI00032ABD42 M Q Q F S Q E Q Q M A M V N E M V A K L T S A C C C W D K C I I T G T P G S K F S S S S
UniRef90_G7J3B9 E E Q Q R A M I N E M V A K M T S Q C W D K C I I T G T P G N G F S S S G
UniRef90_R4G4L5 M Q L V Q D L E M M A D M Y N R L T N T C H K K C I P K Y P E G E L A K G
UniRef90_U6HD40 M T D Y L N Q M Q I K E T S D L Y V Q C S T V C F S R C V M N F T A R T K L L N D K
UniRef90_W77541 Q L K M A K A E V K M Y S D L F N K M C S L C F E K V A R Y N G E D T D L N L G
UniRef90_H8X6V6 L A E I Q F Q A M H T F N K L L R R C E A K C V H E Y N G E L L T K G
UniRef90_E9CCL6 M A E Q E L E A F S D L F S R M T H G C W T K C I N N Y A D G S L A K G R
UniRef90_H2M2R0 L Q R M I A E Q Q K A Q F Q A Q V H T F T D V C W D K C I D T P G S K L D H R
UniRef90_M9LYL7 E L E M V T D V F N R L V S S C H A K C I T R Y A E P D L L N K G
UniRef90_UPI00035A120B M Q Q F V N R E Q R Q R F Q G L I H E M T G R C C W D N C V G N P G T K L D S K
UniRef90_UPI00046C0839 R N F K D F L Q L Y N Q M T E R C F Y K C I E S T N S R E L L S P N
UniRef90_K0KH99 D M F N R L V D N C H Q K C I S S Y N E G D L V N K N
UniRef90_K1WBT2 L Q Q F L N E S Q R A Q I Q Q T V H T L T D L C W K K C V T T I K S G A L L D K N
UniRef90_H6QSR2 E L E M V S D L F N R L V R S C H G K C I I N R Y S E A D L L T K G
UniRef90_X8JNL3 Q I E M A T A E L E M V I T D V F N R L V S S C H S K C I I T R Y S E P D L L N K G
UniRef90_W519S7 I L L Q Q E K H K M M M E M V T K L T N V C W D K C I T S T P G S K F S S S G
UniRef90_M5FS26 E L D M I T D V F N R I V S S C H S C I I N R Y A E A D L L N K G
UniRef90_K1S4T4 L Q Q F I Q S E Q Q K Q F Q A T V N E L T E E C F D F C I T N S P A G N K L G S S
UniRef90_M4E1W0 Q F L S Q E K E R A M A N E V V A K I T S S C W D K C V D K P G S K F S S S
UniRef90_B4UMZ9 D M F N R L V S N C Y T K C I I N N Y N E A G D L L N K N
UniRef90_M1VTV0 E M R M M A D T Y N R R L V Q K T C C Q K C I I T D Y R E A G E L L N K G
UniRef90_G3ASY2 L A E V Q F T A T A H T F N K L L Q S C A N K C V H E Y G E A G E L L S K G
UniRef90_A9RTV9 M A Q Q E M E Y R V D L F N K L T Q T C F D K C V E R Y K H E A D L N V G
UniRef90_G3W1B8 M T E L C F Q R C I T R Y D T S D L E A G E
UniRef90_H2YG14 Q K L A A E L E V E M M A D M Y N R M T N S C H K K C I T R Y D T S D L E A G E
UniRef90_V7BZ30 M A E K E M E H R V E S F N K I T D T C F N K C V N R Y K E S P E I L N M G
UniRef90_M4G2Z1 L Q F V N H E T Q R S K V Q M Q T H Q L T E T C W N K C V K S V N G P S L D A T
UniRef90_J3NB32 L Q A M L E E K R K A M A N E V V A K L T D V C C W D K C I T G S I G S S S F S N S
UniRef90_D8PN71 A A L T E L D T T D F Y N R M V A A C H N K C I L Q R Y T D G E L L N T G R
UniRef90_W5UC94 L Q Q F I E I E Q K Q R F Q Q L V H Q M T E V C W E K C M D K P G P R K L D S R
UniRef90_F6UBY7 L Q S F I E E T Q R Q R F Q Q L V H Q M T E L C W E K C M D K P G P R L D S R
UniRef90_G8C1C4 D M F N K L V D N C H K K C I T N Y A A D G A L L D K N
UniRef90_UPI00035A2B3C L R R F V E E T Q R Q R A Q Q L V H L T E L C W E K C V D K P G P R L D R R
UniRef90_B0CPB2 M A V T E L D T I T D F F N R M V Q S C H S K C I T R Y A E D D L L N K G
UniRef90_R4G2V9 L Q Q F L V E R E K A K I L Q A Q I H E F S D I C W D K C M D K P G S K L D S R
UniRef90_R1CW10 L Q G F M E T E Q Q K A I Q A I N K L T E T C F D K C V T K P G A K L D S S
UniRef90_W1NRQ9 F Q R L L E Q E Q Q R A M V N M V A K L T D V C W D K C V T G S V G S S F S H S
UniRef90_UPI000258DAF9 L Q E F V Q E K Q K A Q F Q A Q I L H E F N D I C W E K C V D K P G V K L D S R
UniRef90_UPI000333176A L Q H F L D E T Q K Q R A Q R I L H Q M T E L C W D K C V D R P G P R L D D G R
UniRef90_M3B2W0 N M F N Q L V D T C T K K C I N T Y R E G E L L N K G
UniRef90_M9LSL1 M S R I I E Q K Q M K D F L K L Y T G L V E R C F E S C C N D F T S K A L S S K
UniRef90_UPI0003C26208 V A A E Q K R A Q F T A Q V H D F M E V C W D K C V D K P G S K L D H R
UniRef90_B6SYU6 L M A E K Q K A Q L S A Q I H E F N D I C W D K C M D K P G S K L D S R
UniRef90_Q1HR12 L Q R F I A E S Q R Q R F Q Q L V H G L S E M C W D K C M D K P G P K L D S R
UniRef90_V9LCB7 Q F Y T Q E R Q I A M A N E M V A K L T S T S W D K C I L T G T P G G K F S S S
UniRef90_K7KS68 Q L M Q E M E I E M M S D L Y S R M T Q A C H K K C I P K Y A D S E L L S K G
UniRef90_T1E892 E L E M M T D M F H R M T A A C H R K C I P K Y T S E L L S K G
UniRef90_H9KCX6 Q E K Q K A M V N E L V G K L T D V C W E K C I T G T P S G K F S S S
UniRef90_D8R0F1 L Q H F V E V E T R K Q A Q L L V H H M T E L C W E K C M D K P G P K L D S R
UniRef90_UPI00038C1D63 E T Q K Q R F Q Q L V H Q M T E L C W E K C M D K P G P R L D S R
UniRef90_L8HQ29 L Q Q F V E I E Q Q K A F H A Q V H K F T E M C W D K C I D K P G N R L E A K
UniRef90_E9C729 M D E E V Q L K N I K E F L Q N Y N K I T D D C F S Q C V Y T L S Q S R L T G E
UniRef90_C4WTQ0 L Q R F M E E V Q K Q R V Q L L I H H M T E L C W E K C M D K P G P R L D D G R
UniRef90_Q4FZG7 V A I A E V K G M A D M F K R I Q D V C W N K C I S S T K D A M L N P G
UniRef90_I71939 Q Q R A G F Q S R I S H L T S I C W D K C V S G Y P A A K M D S S
UniRef90_G7YFW4 Q E N Q K A V Q A V I A K L T E L C W D K C V S Q K P G S K L S S G
UniRef90_M1VC70 L K E A M E L F N E M V R H C V D K C V E E P K G D K L D D V
UniRef90_D2V843 K F V N E L E M M M V D M Y N R M T A A C Q K K C I P K Y K E A D L L S K G
UniRef90_UPI000359FE34 M A E Q E V E M M S D F N R L V M T C H K K C I S K Y Y E A D L L T K G
UniRef90_Q9UTE9 Q Q T I N E Q Q N V A A V T E T F N R I V D S C F K K C I P K Y I E A G E L L N K G
UniRef90_U9SQA0 A E L E F E M I T D M V N R L N A A C M K K C I P D Y R E G D L L N K G
UniRef90_C5P0R1 Q F I M N E S Q K A R I Q Q S V H S L T D V C W K K C V T S I R S G K L D K S
UniRef90_A7E402 L A K F L E M Q Q A E V R M N T Q H K F T S M C W D K C I T G S I G G R F S R G
UniRef90_G4TPX0 M A E K E M E Y R V E M F N K L T H T C F K K C I N K Y K E S E L L N M G
UniRef90_UPI0003D29335 D T F N R I V S A C H S K C I N S Y G D S D I T K Q
UniRef90_UPI000440EBEB A E A E L D M V T G M F N Q L V D Q C H S K C I N S Y G D S D I T K Q
UniRef90_Q9P335 A E A E L D M V T G M F N Q L V D Q C H S K C I N S Y G D S D I T K Q

UniRef90_I0Z5U3
UniRef90_T0QWL0
UniRef90_Q6C6U1
UniRef90_I1HMT8
UniRef90_M1VG23
UniRef90_E2AGI1
UniRef90_G3QBG6
UniRef90_C5DDH7
UniRef90_K3WQ80
UniRef90_UPI0002C35469
UniRef90_G3XRT9
UniRef90_D5G9U9
UniRef90_K4A2Q6
UniRef90_D3B9Y0
UniRef90_M0WF56
UniRef90_M0ZZ14
UniRef90_F0JAC9
UniRef90_W5I8H3
UniRef90_T1IQX1
UniRef90_M2Y0K8
UniRef90_Q4TBU9
UniRef90_C6T2D2
UniRef90_UPI0003599765
UniRef90_K1QVR3
UniRef90_U5GZX0
UniRef90_UPI00032ABD42
UniRef90_G7J3B9
UniRef90_R4G4L5
UniRef90_U6HD40
UniRef90_W7T541
UniRef90_H8X6V6
UniRef90_E9CCL6
UniRef90_H2M2R0
UniRef90_M9LYL7
UniRef90_UPI00035A120B
UniRef90_UPI00046C0839
UniRef90_K0KH99
UniRef90_K1WBT2
UniRef90_H6QSR2
UniRef90_X8JNL3
UniRef90_W5I9S7
UniRef90_M5FS26
UniRef90_K1S4T4
UniRef90_M4E1W0
UniRef90_B4UMZ9
UniRef90_M1VTV0
UniRef90_G3ASY2
UniRef90_A9RTV9
UniRef90_G3W1B8
UniRef90_H2YG14
UniRef90_V7BZ30
UniRef90_M4G2Z1
UniRef90_J3NB32
UniRef90_D8PN71
UniRef90_W5UC94
UniRef90_F6UBY7
UniRef90_G8C1C4
UniRef90_UPI00035A2B3C
UniRef90_B0CPB2
UniRef90_R4G2V9
UniRef90_R1CW10
UniRef90_W1NRQ9
UniRef90_UPI000258DAF9
UniRef90_UPI000333176A
UniRef90_M3B2W0
UniRef90_M9LSL1
UniRef90_UPI0003C26208
UniRef90_B6SYU6
UniRef90_Q1HR12
UniRef90_V9LCB7
UniRef90_K7KS68
UniRef90_T1E892
UniRef90_H9KCX6
UniRef90_D8R0F1
UniRef90_UPI00038C1D63
UniRef90_L8HQ29
UniRef90_E9C729
UniRef90_C4WTTQ0
UniRef90_Q4FZG7
UniRef90_I7I939
UniRef90_G7YFW4
UniRef90_M1VC70
UniRef90_D2V843
UniRef90_UPI000359FE34
UniRef90_Q9UTE9
UniRef90_U9SQA0
UniRef90_C5P0R1
UniRef90_A7E402
UniRef90_G4TPX0
UniRef90_UPI0003D29335
UniRef90_UPI000440EBEB
UniRef90_Q9P335

50 60
E E A C L S D C A K R F I E T T Q F I T Q R F Q Q K A S A
E M S C L V D R C V G K Y M Q A H H Q V G E T M Q R V Q N
E G L C L D R A C V A K Y F D V N T K V G E V
E G D C L V R A C V R K Y L L V S T A S A A R F A E V T A
E G V C L V R A C V F K Y M G A V Q R I G E L L Q E G Q
T E T C L I N N C V N R F I D V S V F I T S R F G Q Y I N A
U N I R E F 9 0 _ G 3 Q B G 6 E E R C A D N C A G K L I R S N H R L M G T Y V Q L
U N I R E F 9 0 _ C 5 D D H 7 E S S C I D R C V A K Y F E T N V K V G E N M Q K M G N A
U N I R E F 9 0 _ K 3 W Q 8 0 E A S C L V N N C A E K F L R Y T M R S S V R L Q E S Y A
U N I R E F 9 0 _ U P I 0 0 0 2 C 3 5 4 6 9 E T A C L V S N C A Q R Y L D M S M L I M K R F Q N M Q
U N I R E F 9 0 _ G 3 X R T 9 E S V C L I D R C V G K F F E V N M K V S E K M Q E A N Q
U N I R E F 9 0 _ D 5 G 9 U 9 E S V C L L D R C V S K F F D V N I K V S E A M Q S Q S Q A
U N I R E F 9 0 _ K 4 A 2 Q 6 E T T C L S N C A R R F L D M S M I L A K R F Q
U N I R E F 9 0 _ D 3 B 9 Y 0 E E L C L V Y K C I E K N E K F A M V L A E H F A E Q Q Q
U N I R E F 9 0 _ M 0 W F 5 6 E G D C L V R A C V R K Y T L A T N A S A A R F
U N I R E F 9 0 _ M 0 Z Z 1 4 E Y N C L S H C A Q R Y M E M S M L I M K R V Q S M Q
U N I R E F 9 0 _ F 0 J A C 9 T E T C L S N C V E R F I D T S L S I T N R F A Q L
U N I R E F 9 0 _ W 5 I 8 H 3 E T A C L I T N C A Q R Y L D M T V I I A K R F
U N I R E F 9 0 _ T 1 I Q X 1 T E A C I S N C V D R F I D T S L A I T T R F A Q L
U N I R E F 9 0 _ M 2 Y 0 K 8 E M V C L V D R C V A K Y F E V T Q K V G E V L Q
U N I R E F 9 0 _ Q 4 T B U 9 E
U N I R E F 9 0 _ C 6 T 2 D 2 E T T C L T N C S Q R Y M D M S M I T M K R F Q S M H
U N I R E F 9 0 _ U P I 0 0 0 3 5 9 9 7 6 5 T E T C L V S N C V E R F I D T S L T V A T R F Q K L I Q G
U N I R E F 9 0 _ K 1 Q V R 3 E E S C S I N C L E K Y L K S T Q R I S T R F Q E H H
U N I R E F 9 0 _ U 5 G Z X 0 E N S C L V N C V D R F L D T S L F I V K
U N I R E F 9 0 _ U P I 0 0 0 3 2 A B D 4 2 E S T C L S N C A H R Y L E M S I L I M K K F Q S M Q
U N I R E F 9 0 _ G 7 J 3 B 9 E T N C L T H C A Q R Y V E M S M L I M K R F Q S M Q
U N I R E F 9 0 _ R 4 G 4 L 5 E S V C L I D R C V A K Y L E I H E R V G K K L T Q L S
U N I R E F 9 0 _ U 6 H D 4 0 E L D C L I E K C T Q K F A K M N Q R L T I R L F E L N
U N I R E F 9 0 _ W 7 T 5 4 1 E M S C L V D R C V G K Y L E S H M K V G E V L
U N I R E F 9 0 _ H 8 X 6 V 6 E S E C I D R C V S K Y V K A N L V V G O H F Q N Q
U N I R E F 9 0 _ E 9 C C L 6 E T V C L I D R C V A K F A E V H T R I G Q S L A E M
U N I R E F 9 0 _ H 2 M 2 R 0 T E T C L V S C V E R F I D T T L T I T N R F T Q M
U N I R E F 9 0 _ M 9 L Y L 7 E S L C I D R C V E R K F F A V N G K V N E L M Q S M G Q A
U N I R E F 9 0 _ U P I 0 0 0 3 5 A 1 2 0 B T E N C I K N C V E R F L D T S N Y V V N R L
U N I R E F 9 0 _ U P I 0 0 0 4 6 C 0 8 3 9 E L E C L T E K C A T K F I R F N N K L M M N F V R R Q N
U N I R E F 9 0 _ K 0 K H 9 9 E S L C L D R C V S K Y F E V N V K V G E N M Q K L
U N I R E F 9 0 _ K 1 W B T 2 E E S C A K N C V D R Y L D A N F A I T K R L N G M N A
U N I R E F 9 0 _ H 6 Q S R 2 E S T C I D R C V D K F F N V N T K V G E R I Q A K G A A
U N I R E F 9 0 _ X 8 J N L 3 E S V C L I D R C V A K F F E V N R K V G E K L Q N M G Q
U N I R E F 9 0 _ W 5 I 9 S 7 E T T C L T N C A Q R Y L D M T V I I A K R F
U N I R E F 9 0 _ M 5 F S 2 6 E S V C I D R C V A K F F E V N K K V G E R M Q
U N I R E F 9 0 _ K 1 S 4 T 4 V E Q C I K N C V D R F I D T T N F V A N R L Q
U N I R E F 9 0 _ M 4 E 1 W 0 E T S C L S N C A L R Y M D M T M L I M K R F Q Q Q
U N I R E F 9 0 _ B 4 U M Z 9 E A N C L D R C V A K Y F E T N V K V G E N M Q K L G Q
U N I R E F 9 0 _ M 1 V T V 0 E S V C L D R C T A K F L D T S M K V S E
U N I R E F 9 0 _ G 3 A S Y 2 E Q E C I D R C A A K Y V R A N F L I G K H F Q E Q
U N I R E F 9 0 _ A 9 R T V 9 E N S C I D R C V A K Y W Q V T G L V G Q
U N I R E F 9 0 _ G 3 W 1 B 8 E E A C L D S C A G K L V H S N H R L M A A Y V Q L
U N I R E F 9 0 _ H 2 Y G 1 4 E A V C L I D R C V A K Y L D I H E Q I G K K L T D M S Q
U N I R E F 9 0 _ V 7 B Z 3 0 E N S C I D R C V S K Y W Q V T N L I G Q
U N I R E F 9 0 _ M 4 G 2 Z 1 E A G C L A N C V D R F M D V N N L T M K H L S S L
U N I R E F 9 0 _ J 3 N B 3 2 E A S C L S N C A K R F L E L K M L T M Q R F S
U N I R E F 9 0 _ D 8 P N 7 1 E S V C I D R C V E R K F T E V Q K K V G E A L Q Q R Q A A
U N I R E F 9 0 _ W 5 U C 9 4 T E V C F L N C V E R F I D T S Q F I L N R L
U N I R E F 9 0 _ F 6 U B Y 7 T E S C F V N C V E R F L D T S Q F I L N R L E H Q Q
U N I R E F 9 0 _ G 8 C 1 C 4 E A S C L D R C V A K Y F E A N V K V G E N M Q K M G Q
U N I R E F 9 0 _ U P I 0 0 0 3 5 A 2 B 3 C A E V C L V N C V E R F I D T S Q F I L N R L E Q T H R A
U N I R E F 9 0 _ B 0 C P B 2 E S V C L V D R C V A K F N D V Q K K V G E K L Q S R G A A
U N I R E F 9 0 _ R 4 G 2 V 9 T E T C L V N C V D R F I D V S L L I T N R F S Q M
U N I R E F 9 0 _ R 1 C W 1 0 E A S C I S N C A G R Y L D S S V F V V S R M M Q
U N I R E F 9 0 _ W 1 N R Q 9 E V T C L S N C A Q R Y M E L S M L T V Q R F
U N I R E F 9 0 _ U P I 0 0 0 2 5 8 D A F 9 T E T C L S N C V D R F I D V S F L I T N R F E G Q V
U N I R E F 9 0 _ U P I 0 0 0 3 3 3 1 7 6 A A E A C L V N C V G R F L D T S H F I L S H L E H L Q Q
U N I R E F 9 0 _ M 3 B 2 W 0 E S V C L D R C V S K F F E V N I K V S E K M Q G E A A A
U N I R E F 9 0 _ M 9 L S L 1 E
U N I R E F 9 0 _ U P I 0 0 0 3 C 2 6 2 0 8 T E S C L A S C V D R F I D T T L S V T Q R F S Q L
U N I R E F 9 0 _ B 6 S Y U 6 E S T C L T N C A Q R F L D M S V L I A K R F
U N I R E F 9 0 _ Q 1 H R 1 2 T E T C L N N C V N R F I D T S L F I T T R F A Q
U N I R E F 9 0 _ V 9 L C B 7 T E A C F V N C V E R F I D T S Q F I L N R L E Q T Q
U N I R E F 9 0 _ K 7 K S 6 8 E S T C L S N C A H L Y I E M S V L V M K R F Q
U N I R E F 9 0 _ T 1 E 8 9 2 E S V C I D R C V A K Y L E V H E R I G X X L T A M S A
U N I R E F 9 0 _ H 9 K C X 6 E S V C L D R C I A K Y L D V Q E R I G K K L Q Q S
U N I R E F 9 0 _ D 8 R 0 F 1 E T N C L T N C A Q R F M E A S V L I L R K M Q
U N I R E F 9 0 _ U P I 0 0 0 3 8 C 1 D 6 3 A E V C F V N C V E R F I D T S Q F I L N R L E Q L Q K A
U N I R E F 9 0 _ L 8 H Q 2 9 A E A C L V N C V E R F I D T S R F I V K R L E Q T Q
U N I R E F 9 0 _ E 9 C 7 2 9 E E A C L T Q C V E R F L D S T H F I V N R L D E I
U N I R E F 9 0 _ C 4 W T T Q 0 E A L C A S N C V Q K S K F V D T Q K M Q A F L E H Q Q
U N I R E F 9 0 _ Q 4 F Z G 7 A E L C L V N C V E R F I D T S Q F I L N R L E Q T Q K A
U N I R E F 9 0 _ I 7 I 9 3 9 E A S C L D R C V F K Y I S V H Q M T G K H L Q E Q S Q A
U N I R E F 9 0 _ G 7 Y F W 4 K E T C L Q N C V D R Y M D V S V L L R T R F Q D M
U N I R E F 9 0 _ M 1 V C 7 0 E T E C L S N C A E R F L D A S L F I M Q R M V K K Q
U N I R E F 9 0 _ D 2 V 8 4 3 E K A C I T K C G V K Y I K H N M R V T E R F Q
U N I R E F 9 0 _ U P I 0 0 0 3 5 9 F E 3 4 E S V C I D R C V A K Y L E V H D R I G K K L T A L S Q
U N I R E F 9 0 _ Q 9 U T E 9 E S V C I D R C V S K Y F E A N Q S L S O H M Q K R G Q
U N I R E F 9 0 _ U 9 S Q A 0 E S V C I D R C F S K Y I D V T T K I G E A L T K K G Q
U N I R E F 9 0 _ C 5 P 0 R 1 E S V C L D R C V S K F F E V H M K V S E K M A Q M Q
U N I R E F 9 0 _ A 7 E 4 0 2 E E T C T M N C V D R F L D S S M A V
U N I R E F 9 0 _ G 4 T P X 0 E E A C L V N C V D R F L D T S L A I M K R L Q N Q Q
U N I R E F 9 0 _ U P I 0 0 0 3 D 2 9 3 3 5 E N S C I D R C V S K Y L T V S N G N G L A F S E Q
U N I R E F 9 0 _ U P I 0 0 0 4 4 0 E B E B E S V C I D R C V A K Y F E A N K K V G E R L Q
U N I R E F 9 0 _ Q 9 P 3 3 5 E A L C L D R C V A K Y F D T N V Q V G E H M Q K L G Q

UniRef90_A8IRU4 1 Q Q F A R E Q V A Q L Q S M S T L T E V C W D T C V Q S P G S Y L S S 40
UniRef90_V5HQB9 M T S E V C F K E C V N N L N Y R E L L S S Q K
UniRef90_G6CX22 H S C F R K C C I P K R H H P E E L L G K M G
UniRef90_I1GLF7 M A E K E M E Y R V D L F N R L T H S C F E K C C I K R R K H K E A L N M M G
UniRef90_R1C6F6 M Q R A Q Q N E L E A I T D M F N K M T E S Q C F E K C C V A T Y K E E S A L S V G
UniRef90_B5DII8 M E E F M Q E R Q K A E V T A L L H E F N E S I C W E K C C C I A S G R H R E S A K L S D Q A
UniRef90_B7FR31 F A A K T E M E M Y T D L F N K I A S S C F W E S K C C A S G R H R E S P E L L S L G
UniRef90_Q9W2D6 Q L M Q E M E I E M M S D L Y N R M T N A C H K K C C I P R Y S T E S R E L L S G K G
UniRef90_UPI00026578AF E Q Q K A Q L Q A R I H S L T D M C W D K C C M D K P S Y N D A G D L L A K K G
UniRef90_D6WFM9 Q L M Q E L E I E M M A D M Y N R L T T A C H H K K C C I P P Y N D A G D L L A K K G
UniRef90_I2H0K1 D M F N R L V N N C H H K K C C I I D N Y S A G D L L A K K N
UniRef90_W1QF35 A E A E L D M V T T M F N Q L V D S C H H K K C C F D N Y A E G S K L L T T K N
UniRef90_U5ESK5 F Q D F L Q E K Q K A Q V N A Q I H I F N E L C W D K C C V G K P G S K L L D R A
UniRef90_M2Y3A9 F Q T F I Q E Q K A A I Q A A I S K L T E T C W D K C C V G K P G S K L L D R A
UniRef90_UPI0002658544 A L V Q E L E I D M M A D M Y N R M T N V C Q R K C C I T Y T Y R G N D L L T K G R
UniRef90_G1SB00 L Q R L V A A E Q Q K Q F T A Q V H H F M E L C W D K C C V E T P G R N R L L D S R
UniRef90_L8GPU1 M D L Y N R V L G R C C W D K C C I A H Y W D K D L L T V G
UniRef90_A0A024JDZ7 A E A E L D M V T D M F N R L V D G C Y K K C C I N T Y R S E G E L L N K G
UniRef90_N1JAW6 A E Q E M D M V T D M F N R L V Q K A C M K K C C I P D Y R E P E L L T K G
UniRef90_T2MFB4 M N S L A E L E V E M M S D M Y N R L T A A C H K K C C I T K Y K E P E L L T K G
UniRef90_A9RIX9 L Q Q F L E Q E K Q K A V L N L V G K L T D V C W D K C C I T S T P G S K L L S S
UniRef90_R7TL59 L A E F V N M E Q Q K M Q G Q V H K K L T D T C W E K C C M D K P S K D L D S Y R
UniRef90_A7ARS5 Q A E L E V E M V T D M M T R L T N G C I K K C C I T D Y R E G D L L N K G
UniRef90_T1G520 L Q E F L A E Q Q K A M F Q L H I H R L T N H C W D A C C V D Q D K P S E A K L L D A G
UniRef90_B3RFX1 A A V V E I L L G M A D L Y R R I Q D T C C W T K C C V P N V K E S P T L L D A G
UniRef90_F0VL53 G M F N S L V S S Q C H H N K C C I N S Y S E A L L T T K Q
UniRef90_A5E3M0 Q A R L A E M E L E A V S D L F T R I V A S C H H T K C C I T R Y S E A E L L N K G
UniRef90_G0T0Y5 M Q Q F L E E E K R K A F N E V V A K L T E T C F E K C C V T Y A P G A K F S S S
UniRef90_A4S1U3 L Q T F I E R E Q Q A Q R Y N S T V Q N M T S M C W D K C C V T G T P G N S F S R M G
UniRef90_UPI000455F68B M E M E Y K V E L F N R L A M T C F N K C C V D R Y K E P E L L S N M G
UniRef90_B9S386 E I Q L E N M K E F F S M W T N I S V D C F Q Q C C V P A V K S K D L K A A
UniRef90_E4XDN3 M A E I Q F T A T A K T F N N I K T C E K K C C L H E Y G E G E L L N T G K
UniRef90_A3GG97 L Q R F M E I E A H K F Q Q V V H V M T E D W D T C M S G T P G S K L L D R K
UniRef90_T1EK28 L A E Q E L E M V T D L F N R I A D S C H H K K C C I T N Y D Q A D L L S Q G
UniRef90_S2JP30 A E N E L D M V T D L F T R L V D V C H H Q K C C I P S Y T D G E D L L N K G
UniRef90_M7PA31 Q A E L E V E M V T D M M T R L T N G C I K K C C I T D Y R E G D L L N K G
UniRef90_F2STI4 A E Q Q V D A F M G M F N R I M S A C Q E K C C I N N Y H E P D L L N K G
UniRef90_S2J5Y5 M A E I Q Y E A M Q T V F N T L I R T C R T K C C I E E Y A G E I D L L S K G
UniRef90_C4QCW11 E M A V A E L D M I T D V F N R L V N S C H H T K C C I S S Y A E G D L L K G
UniRef90_P0CR99 A E L E V E M V T D M M T R L S S A C M K K C C I P D Y R E N G D L L N K G
UniRef90_A6R1T1 I M I E K Q K A Q I N A Q I H G F N D I C W E K C C V P N G K P K L D K S
UniRef90_F9FX29 L Q D M C K T Y N K V T E L C F S K C C I S N M N G F R F T P D
UniRef90_B4MQ37 D M F N R L S S S C M K K C C V D D Y R E A D L L N K G
UniRef90_T1G129 M K T A L Q Q L Q Q A E F Q S Q V S Q L T S R C W D L C Y T G S P G A K F D D K
UniRef90_W2S9F4 L A E Q E L E M V T D L F N R I V D S C H H S K C C V K D T G S G E L L S Q Q
UniRef90_U6IX10 A E M E V D M V S D M F S R L V R S C S K K C C I P T Y A E G D L L N K G
UniRef90_S2J950 M Q L V Q L E L E M M S D M Y N R M T A A C H H K K C C I P K Y A K D A E L V K G
UniRef90_R7Z6N4 L Q R M I A I E Q K Q E F Q Q R I H D L T E K W D T C M L G V P G Q R L L D R K
UniRef90_E9GAU9 A Q M V A D L E I E M M T D L Y N R L T V A C Q K K C C I S K Y K E G S E V S K Q
UniRef90_R7UWA7 Q Q K L Q E A E L D M V T D G M F N Q L V E Q C H H S K C C I N T Y N S E V S K Q
UniRef90_A7RM59 K L I S D L E I E M M A D M Y N R M T G A C Q K K C C V P K Y N E A D L L N K G
UniRef90_Q6BHJ3 M A E Q E V E L S V I E I F N R M V S S C H H K K C C I A T Y K N E A E L L T K G
UniRef90_R7TYM2 A E N E L D M V T D M M T R L S S A C M K K C C I P D Y R E N G D L L N K G
UniRef90_S9Q4T9 F L I E K Q K A Q I N A Q I H E F N E I C W E K C C I G R P G T K L D H S
UniRef90_I2KOA1 E A E M K M M S D M H N R L I K A C A A K C C V T P D Y R E S E L L N K G
UniRef90_B4MQ36 N M F N Q L V D T C A A R K C C I P Q Y R E S D L L N K G
UniRef90_U7PPG3 V A A E Q Q K A Q F T A Q V H H F M E L C W D K C C V E K P G N H L D S C
UniRef90_M2MPV6 L A E K E M E Y R V D L F N R L T Q T C F A K C C I K R H K E A E L L N M G
UniRef90_UPI0000E25EAE L M A E N E R A R L S A Q I H E F N D I C W D K C C V E K P S N K L D S R
UniRef90_UPI0003509B1E L Q Q F I Q E T Q K S K L Q Q S V H N L T D I C W T K C C V T S K S G K L D K S
UniRef90_Q7Q8R2 A E T E I E M V S D M F N R L V Q S M F K K C C I T T Y R E A E L L D K G
UniRef90_L8FNQ4 L Q Q F I Q E T Q K S K L Q Q S V H N L T D I C W T K C C V T S K S G K L D K S
UniRef90_R1G8S0 A E T E I E M V S D M F N R L V Q S M F K K C C I T T Y R E A E L L D K G
UniRef90_W4VX70 T S I N Q F T D L C F R K C C I D R A D S S D L L S P Q
UniRef90_A7WPE4 L Q A M L E E K R K A M A N E F V A K L T D V C W D K C C I T G S I G S S F S N S
UniRef90_UPI00038EBDB V A E M K G M A D C F A R M T V S C Y S K C C I S N V R E E K L N V G
UniRef90_Q2RAZ9 M Q I V A D L E I E M M A D L Y R R M S S A C Q K K C C I T T Y R D P L L S K G
UniRef90_A7YXW0 L Q Q F L E I E Q K R F E F L V H G L T D R C W D L C M G K V S A R L L S G K
UniRef90_E5SXR7 Q Q M L S D L E V D M M T D L Y N R L S T A C H H K K C C I P K Y H E G D L L N K G
UniRef90_E0VLZ4 M A E Q E M D Y R V D L F N R M V S C F E K C C M D R Y K E G D L L N V G
UniRef90_I1FJW8 L Q A F L D S E Q A K A R V Q S I H Q F T D R C W D Q C C I K S S I G A S F G R G
UniRef90_I0YXR4 M E M V A G L E I E M M T D M Y N R M T N V C Q K K C C I P K Y R E A E L N K G
UniRef90_UPI00045614A9 Q Q I S Q E L A M A Q A T E L V N K L T E N C F Q Q C C I T K P T N S E Y S S S
UniRef90_B3RJD4 M A Q Q E L E S R V D L F N K M T L S C F N K C C I G S R R R E S E L L N M G
UniRef90_C4R896 M A L I E E K K R A M A N E L V A K L T F V C W D K C C V T G S V G S S L S R S
UniRef90_D8S102 Q V H S F T D V C W D K C C V T G S V G S S L S R S
UniRef90_B6SLJ2 L Q T F L D R E Q A Q A R L H S I H N L T S M W D K C C I T S T P G N Y F A R G
UniRef90_M4B094 L A Q F L E A E Q A K A V Q E T V H S M T D N C W D K C C I S K I N G S K L D R S
UniRef90_F8NT55 L T T F I E A E N S K Q K V Q M I H N F T N T C F K Q C C I N S I N G S K L D L D N N
UniRef90_S2K4X9 L G K F L E S E N A R M R L Q Q I H N F T D L C W D K C C I N S K L N S N K L D R G
UniRef90_G8BZQ0 L K S F I E G E T A K Q Y Q H L V H E L T E K C W D T C V D K P S A K M D A K
UniRef90_U9URY6 Q Q I M N E M A L A N A Q A L I N K L I N E K C F A K C C V T K P S T S L L G S S
UniRef90_B7QF84 Q F L A N E N Q K A R V Q A T V H S L N T D M C F K K C C I T G I K G G K L D R T
UniRef90_L8WKT2 M A D M L R R M R D G C W N K C C I S S V K G P Q L D A G
UniRef90_M7SX10 L Q R F L A I E E Q K A K F Q Q H V H N L T D I C W D K C C I E K S G S K L E S K
UniRef90_L1LFH3 M Q N F L A E E K R K A M F N E V V S K L A D V C F D K C C V T R P A D S L D R Y
UniRef90_T2MJ00 A E T E V E M I S D M F T R L S E S C S K K C C I P D Y R E G D L L N K G
UniRef90_C1MRW8 L A Q Q E M E Y R V A L E N K M T S S C F D K C C A D K Y K S E D L L G
UniRef90_S7ZH37 Q Q L A A E L E V E M M A D M Y N R M T N A C H H R K C C V P H Y K E A E L T K G
UniRef90_A0A059LSN6 G L V H Q M T E L C W E K C C M D K P S E L L D S R
UniRef90_UPI0003C842A9 Q Q L A A E L E V E M M A D M Y N R M T N A C H H R K C C V P H Y K E A E L T K G
UniRef90_G3Q3E3

UniRef90_A8IRU4
UniRef90_V5HQQK9
UniRef90_G6CX22
UniRef90_I1GLF7
UniRef90_R1C6F6
UniRef90_B5DII8
UniRef90_B7FR31
UniRef90_Q9W2D6
UniRef90_UPI00026578AF
UniRef90_D6WFM9
UniRef90_I2HOK1
UniRef90_W1QF35
UniRef90_U5ESK5
UniRef90_M2Y3A9
UniRef90_UPI0002658544
UniRef90_G1SB00
UniRef90_L8GPU1
UniRef90_A0A024JDZ7
UniRef90_N1JAW6
UniRef90_T2MFB4
UniRef90_A9RIX9
UniRef90_R7TL59
UniRef90_A7ARS5
UniRef90_T1G520
UniRef90_B3RFX1
UniRef90_F0VL53
UniRef90_A5E3M0
UniRef90_G0T0Y5
UniRef90_A4S1U3
UniRef90_UPI000455F68B
UniRef90_B9S386
UniRef90_E4XDN3
UniRef90_A3GG97
UniRef90_T1EK28
UniRef90_S2JP30
UniRef90_M7PA31
UniRef90_F2STI4
UniRef90_S2J5Y5
UniRef90_C4QW11
UniRef90_P0CR99
UniRef90_A6R1T1
UniRef90_F9FX29
UniRef90_B4MQ37
UniRef90_T1G129
UniRef90_W2S9F4
UniRef90_U6IXI0
UniRef90_S2J950
UniRef90_R7Z6N4
UniRef90_E9GAU9
UniRef90_R7UWA7
UniRef90_A7RM59
UniRef90_Q6BHJ3
UniRef90_R7TYM2
UniRef90_S9Q4T9
UniRef90_I2KOA1
UniRef90_B4MQ36
UniRef90_U7PPG3
UniRef90_M2MPV6
UniRef90_UPI0000E25EAE
UniRef90_UPI0003509B1E
UniRef90_Q7Q8R2
UniRef90_L8FNQ4
UniRef90_R1G8S0
UniRef90_W4VX70
UniRef90_A7WPE4
UniRef90_UPI00038EBDBB
UniRef90_Q2RAZ9
UniRef90_A7YXW0
UniRef90_E5SXR7
UniRef90_E0VLZ4
UniRef90_I1FJW8
UniRef90_I0YXR4
UniRef90_UPI00045614A9
UniRef90_B3RJD4
UniRef90_C4R896
UniRef90_D8S102
UniRef90_B6SLJ2
UniRef90_M4B094
UniRef90_F8NT55
UniRef90_S2K4X9
UniRef90_G8BZQ0
UniRef90_U9URY6
UniRef90_B7QF84
UniRef90_L8WKT2
UniRef90_M7SX10
UniRef90_L1LFH3
UniRef90_T2MJ00
UniRef90_C1MRW8
UniRef90_S7ZH37
UniRef90_A0A059LSN6
UniRef90_UPI0003C842A9
UniRef90_G3Q3E3

50 60
E S T C L E N C A R R F V E T T Q Y I L Q R
E S S C L V E H C V G K S I N V N H R M M A I Y M E V Q
E N S V C L D D R C V A K Y L D V H E R I G K K L S N M S Q G
E N S C L I D R C V S K Y W Q V T N L V G Q
E A T C C L V D R C V H K Y M T V H G K V Q E
T Q V C L S N V D R F I D T S V L I A K R F V E V
E M S C T D R C V A K Y L E S Q Q R V G E I L Q K A N E A
E M V C I D R C V A K Y L D I H E K I G K K L
T E T C L I D R C V A K F L D T S V A I A T R F T Q
E A V C L I D R C V A K F L D I H E R I G K K L G Q L S
E S A C L D R C V A K Y F E T N V K V G E N M Q K M G Q
E S L C L I D R C V A K Y F D A N V K V G E S M Q S L
T E T C L I S N C V D R F I D T S L M I A N R L A Q
E S E C I A N C A E R F L D S S S F I M Q R L M K K Q
E S V C L I D R C V A K F L D I H E R I G K K L A
T E N C L I S S C V D H F I D T T L A I T S R F A Q I
E G S C V D R C V V K Y M T V Q R T V A K R
E G L C L D R C V A K Y F E V N T K V G E H M Q K L G Q
E G V C L I D R C A A K F F D V Q L K V S E L L Q S E A A A
E S I C L I D R C V A K Y L D I H E R I G K K L
E S S C L A N C A Q R F L E T S S L I L R R F Q S L Q
T E G C I S N C V D R F M D T T V A I A G R F Q Q L M Q
E Q S C V D R C V N K F L D V H Q M V G N R L Q E
N E T C L S N C V E R F L D V S L L I S T R F Q Q M
T E N C L M N C V E R Y I D S N L M L A N R F A D
E S S C L D R C V N K Y T D V H T I V G K E L Q
E S L C L D R C V A K Y F E T N V Q V G E N M Q K L G Q
E S V C V D R C V A K Y F A V N E K V Q E R L Q L A Q S A
E S S C L T N C A L R Y L E S G Q V V L G R L Q
E A S C L A N C V D R F L D A S I F M T K T I Q D Q R A
E N S C I D R C V S K Y F L V N G I I G Q
E M S C I R N C A A R H V E A N H R I V I Q Q F T L Q N
E N C C I D R C V A K Y V K A N Y L V G S N F Q E K N
S E N C I V N C V E R F I D T S N F I L N R L
E A V C I D R C V A K F I D V N T K V G E K M Q Q M
E S V C I D R C V Y K F F E V N T K I G E H M Q T L S Q
E S V C L D R C V G K Y F E V N I K I S E K M
E Q K C I D R C V G K Y M S I Q G I L G E K M
E S S C V D R C V A K F M K A N V Q I G
E S V C I D R C T A K F F E V N K K V G E R M S A M G S A
E S V C I D R C V A K F L E V N M K V S E K M Q Q M Q
E E T C L A N C V E R F L D V N Y L T M K H L
T E A C L K N C V D R F I D T S L L I A Q R F T Q M
E T S C V D H G G K F I S S N K V L M A T F T E I Q
E S V C L D R C V A K F F E V N M K V S E K M Q S E A A
R A N C L K N C A E R Y I D V S V F L R K R F Q E Y
D Q T C I D N C V A K F F E T N S K V G E K M Q K M S Q
E S V C L D R C V S K F F E V N V K V S E K M Q
E S V C L D R C V A K Y L D I H E R V G R K L T Q M S
T E T C I G Q C V Q R F I D A S N F V V N R L E K E G Q A
E S V C L D R C V A K Y L E I H E R I G K K L
E A L C L D R C V A K Y F E T N V Q V G E H M Q K M G Q
E A V C I D R C V A K Y M D I H D R I G K K L T N I S Q
E S V C I D R C V A K Y F E S S K V L G E H M G E Q N A
Q S L C V D R C V T K Y F A A N M K V G E S M Q E L
T E T C L S N C V D R F I D T S L L I A R R F A Q M
E S V C L D R C A A K F F A V H M N V S E H M Q Q E A A
E S V C L D R C V A K F F D V N V K V S E K M Q
T E N C L S S C V D H F I D T T L A I T S W F A Q I
E N S C L I D R C V S K Y W Q A S L F L
T E T C L A N C V N R F V D T S L L I T Q R F A Q
E E T C A R N C V D R F L D A N
E S V C L I D R C V S K F F D V H T K V S E K M Q
E E L C L I D R C V Q K Y I Y T N H K I M E I F M E V Q
E E Q C L I S C V N K F L D T N I R V V K G L Q G S Q Q
T E N C L S S C V D R F I D T T L A I T S R F A Q I
E A S C L S N C A K R F F E L K M L I V Q R
E M S C V D R C V S K Y L D V H A R V G G E L Q
E A I C V D R C V A K Y L E V H D K L G K K L T Q L T A
T E G C L T N C V E R F I D T N F I V N R L E K T Q S
E A I C L D R C V A K F L E V H D R I G K K L
E A S C V D R C A S K Y W Q V T G I V G Q
E E A C L S N C V E R F L D T S L F I V K K L E E Q
E S I C I D R C V A K Y L E V H D Q I G K R L
E E T C V N Q C I G K Y M S A W N V I S R H Y
E N S C I D R C T A K Y W Q V T T I L G Q
E T S C L S N C A K R F A E V K M M A L Q R F
T E T C L Q N C V E R F I D T T L I T N R F T Q M
E E S C L A N C V E R F L D T S L F M V K V I E Q Q R Q
E E A C L A N C V D R F L D T S L F I V K R L E D M
E E Q C L A N C V N R F L D T N I R I V K G L Q S M Q
E E T C L T N C V E R F L D T S L F I V K R L E E
T E S C I Q N C V N R F M D A T T L I V D R L A K S N S A
E E T C L S R C M D R Y M E A F N V V S Q S Y
E E G C M A N C A D R F L D V S S L T M K H L Q N L R Q G
E S S C I D R C V N K Y L D I H T L V G F Q L Q Q A S Q
Q Q A C L S N C V G R F I D V S N F V I N R L S Q K S
E S A C L S N C A L R Y L E T G Q V I M Q R I G R M N Q
E S V C L D R C V A K F F D V N I K V S E K
E T T C L D R C S R K Y W Q V T G I V G Q
A E A C F V N C V E R F I D T S Q F I L N R L E Q T Q
E S V C L D R C V A K Y L D I H E R L G R K L T E L S

UniRef90_C5KHC8
UniRef90_H6BYX4
UniRef90_C9SQIU
UniRef90_J3NRU3
UniRef90_UPI0000E4636B
UniRef90_A0A023FP94
UniRef90_M5G837
UniRef90_R4XAL3
UniRef90_E9H7R7
UniRef90_W6MF64
UniRef90_UPI00042C2B41
UniRef90_Q9C0N3
UniRef90_G7DT40
UniRef90_A8D898
UniRef90_F0XPQ0
UniRef90_F4Q9J8
UniRef90_W4GYE5
UniRef90_M5ECK3
UniRef90_W4Y053
UniRef90_Q9Y0V6
UniRef90_G7YAR4
UniRef90_A0A058ZAK5
UniRef90_E3QCR7
UniRef90_B4NAK7
UniRef90_A4RTY0
UniRef90_R1FJX2
UniRef90_I1FZA2
UniRef90_I1FZA2
UniRef90_E4UV06
UniRef90_M8AJ97
UniRef90_UPI0003F49F13
UniRef90_K3YBB8
UniRef90_R8BGU1
UniRef90_C5DF58
UniRef90_K5WA16
UniRef90_B6AAF8
UniRef90_C5X1Y9
UniRef90_V2XGV9
UniRef90_G0VL12
UniRef90_L1JHQ9
UniRef90_G3JHC4
UniRef90_I1FU42
UniRef90_I4YFH7
UniRef90_UPI00017581A5
UniRef90_J9ERR0
UniRef90_V51Y4
UniRef90_K0KUU2
UniRef90_L9KUX7
UniRef90_C4WUC5
UniRef90_S7S0K7
UniRef90_L8GXS4
UniRef90_R8BU73
UniRef90_V2XGR4
UniRef90_P0CR95
UniRef90_M5C5W7
UniRef90_B6HG14
UniRef90_A5DMT6
UniRef90_UPI000456090A
UniRef90_B4NE22
UniRef90_D5GA91
UniRef90_M4DBJ5
UniRef90_UPI000454B9FB
UniRef90_I4YE49
UniRef90_H3EZ88
UniRef90_J4HVP8
UniRef90_Q6FRH4
UniRef90_T1KMP1
UniRef90_UPI0003EC0ABB
UniRef90_A0A059LM20
UniRef90_C7Z9X7
UniRef90_T1IRK0
UniRef90_W3WM41
UniRef90_A6R099
UniRef90_F0Y6Q4
UniRef90_W1QEG9
UniRef90_UPI00058Z715
UniRef90_C5M2C1
UniRef90_UPI0004407E4D
UniRef90_E1GDH0
UniRef90_G2XM33
UniRef90_W9X5U5
UniRef90_L8GZ97
UniRef90_K2R189
UniRef90_T1G2A2
UniRef90_G4NE52
UniRef90_L8X3X9
UniRef90_G6DCZ7
UniRef90_F4RE15
UniRef90_C1LIX1
UniRef90_J3LFX0
UniRef90_UPI0000D85F59
UniRef90_Q6CB56

1 A A Q M A V A E M R G L A D T F S R L T E A C Y K K C I P N V K E G Q L L N V G 40
L Q T F V Q Q M Q R A Q I Q K N I H E M T E M C F K K C I L T S D N I S R E G G K L A N P K
M A E S E M R L L A D M H N R L N K A C C Q T K C C L P D D N R E G A E E L N A N K K G
E A E M K L I A E M H N R L N R A C C A K K C I L T D Y H H E G A E L N K K G
M A R F M N E A Q R Q K F S Q L V Y S L T D T A W D K C V A E L R E G A R L L E S K
Q L V A D L E I E M M S D M Y N R M T A A W Q K K C V T K S S I G G R F L S K G
L A S F L E Q E S A R Q V Q S S I H T L T D M C V G K S S I G G R F L S R G
Q A V A Q A E E L E M I M D L F Q K L G S A C C H A K C C I N K Y H E P E L L S K G
L A Q F L Q E T Q K Q R F Q G L V H S L T D S C W D I C C M E K P S S R S R L L D S K T
A E S E L D M V T T M F N Q L V D S C H K K C F K K C V D S G E L L T S K T
E N E L K V V A E M H S R M V K I E V C W D K C V D K P G S G K L L D S R G
Q G F I E E T Q K Q R F N A N V H Q L T D Q C C W D A C M D K P S T S K T L L D S R G
Q F I A N E Q Q R T R V Q S Q T H S L T E M C W F K K C V T N S T R R K T L L E K G
L M L V E M N K M Q M T E A F K N V F M V T N Q C F E A T N S F R K R K L L D N D
R V M E A K Q E A D T M H M Q D K M R Q I C F D K C V H R F R E E G D L L D M G
D V F N R L V S A C C H T K C C I S D Y A E E G D L L N K K G
A E L E V E M M A D M Y N R M T V A C C Q K K C I P T Y A K E E S L L S K G
M A Q V A E L E V E M M S D M Y R R M T N S C Q A K C I T A F R E S E L L T K G
E Q V L Q E L Q R Q R F H Q L S Q Q L T A T C C W D R C V G R I T A S L L D T K S
L Q R L L Q E R Q F E A T L H Y T S L C F D K C V G G R I T G T K L L D S K S
Q F L A N E Q Q R S Q I Q S Q T H A L T E I C W K K C V T S I R N S K L L D K S G
M S Q M K Q M A L A N A Q G Q L S K M T G K Y F K A C C I A Q P G T G G E L L N V G
M A G Q E M E Y R V G L F N K L V G A C F Y E K C I I D K N D G G E L L N V G
M K A I E E R R A L V R V N E A A D R C F G E I L D D F G T R Q L R A G G
W A F C C C L A A G S I R G N
W A F C C C L A A G S I R G N
L Q Q I L N E S Q K S T I Q Q T V H H L T D I C W T K C C I T T G K S G S T L D K N
E I A T A E L D M I R L V Y T W L S H R C F S D C V T T R Y A R K T L L G K R
E E R T K A L T N E L V A K L T L A C C W D K C V T T G S I G S S F S R S
E T E M K F L A D L H N R L N K A C C Q A K C I P D Y M N S R E G E L L N K G
M T F L E S E N S K Q K V Q M I H Q F T N I C F K Q C A T T M N S G N L S S Q
L A H F I E Q E Q N Q A R L Q S I H R L T S T C W D K C V T T G S V G N S F S R S
F K R I Q E T C W R K C I S D I S D S L L S P G
L A E K E M E Y R V D L F N R R L T H T C F D K C I K R H K D A E L L N M G
M A I T E L D T V T D F F N R M V S S C H S K C I T R Y S T D G E L L T K G
A A F L E S E N S K Q K V Q M I H Q L T N T C F K N C V S S K P D G K E L L N A Q
Q A I V G K I T D I C C W D K C V S T I G S I G S R F S R G
L Q K F L A N E Q Q R S S I Q T T H K L T Q T C W K K C V T S I K D S K L L D R T
L Q R F V Q I E Q K A R F Q A N V H Q F T D L C W D K C I D K V P N R M D G R K
L N S F V E Q E Q A K A K L Q S S H T F T E M C W D K C I T G S I G S R F S R G
Q V K T F K D F L I S Y N K L A E L C C F T D C V S D F T S R N I K G S
Q Q K E F L T V Y N T L T D S C C F R A C I R E F N S H H Q L L T Q R
M Q A F L A E Q Q K A Q F Q A Q V H R L N E I C W D K C V D K P S T K L L D Q R
Q F L E S E N S K K V Q T S I H Q F T N L C F K K C V K S I G D G Q L L N S N
L R D F L V F N R M T E L C F R C V P S L Y S A R A L L D T E
I M M E Q Q K A Q L N A Q I Q E I S E M C W E K C V D K P S T S F S S S
M Q T F I E Q R A S S Q L L Q N I A N F T N K C W D K C V S G T P S T S F S S S
A Q Q E L V A F Q S D M Y N R M Q H Q C W K K C V L R L G R E S E L S V S
Q F I S N E Q Q R T R I Q S Q T H A L T D V C W K K C V S T I G S I G S R F S R G
L A T F L E K E Q T Q A K L H T V H N F T T M C W D K C I T G T P S T R F S R S
L E S F L E Q E Q A K A K L Q S I H E L T N T C W N T C I T G G I S S K F S S S
L Q A F I E Q E Q A K A V Q A T T H Q L T D M C W T K C I T T G S I S T R F S S S
Q V L T N E A Q K S N I Q Q T V H H L N E V C W E K C I T S I T S G T L D K S
E Q I A Q E L A V A N A T E L V N N L T Q N C F D K C I G Q P G A S L S S N N
Q Q V T S E L A M A N A Q Q L I T K A T E K Y A K C I P A P G A S G L S S G K
V M L I E K Q K A Q M N A Q I H E F N E I C W E K C V G K T G N K L D H S
L Q S F I E E Q Q K A K F Q A N V H N L T D L C W T K C I T G K I T S G A V D R N
E E E Q R V M M N E A V A K L T S V C W D K C V L T S A P G S K F S P S
G Q V H H F M E L C W D K C V L E K P G N R L L D S R
E I E Q M T D L F S K L V D S C H K K C I L K S Y R D I L L T K A
L A A L Q T E T O R E K F T E Q V H T L T S R C W E V C L D S R P P S K L L D S K
L A K F V E T E Q A Q A R L H T I H M M T G M C W D K C V T G T P S T R F S R S
L A E V Q F E A M Q T T F N N I M E T C R K K C I P R F R S E S D L L T K G
L A Q F A E G M E I E I T D M F Q R M N A S C M K K C I S K Y R D A E L L S K G
E M T N A C H R K C V P H Y K E A E L L T K G
L E Q F I A Q E Q A K E I Q Q T V S T L T E E C W D K C M S S A G S S L S S R G
Q F L A N E Q Q R S Q I Q A Q T H S L T Q M C W N K C V Q S S I K N N K L L D K G
L Q H F I D E T Q K Q R F Q Y L V H A L T E A C C W D M C M E K P G T R L L D S R G
E A E M K L L A E S H T R L T R V C A K K C V N D Y R E G E L L N K G
Q Q F V A I E Q K A A F Q S H Q L T D M C W K K C I T G I S R G G N L D R N
E L M T K M T E K C F A K C C A T G K G S G Q L L D R N
L V N S L T E S C F D K C I L Q P S S S L T S V
Q T F M Q L E E M E A M T D V F N K I I S S C H T K C I T I T K Y S S S D L N K A
I A E I Q F E A M A F T F N K L L R R C E S K C C L H H Y G E G E L L T K G
A Q F L E K E Q A Q R V Q A A V H N F M T C C W D K C V T G T P S T R F S R S
Q M V A D L E M E M M A D M Y R M T T A C C Q Q C I T T R Y R E G E L L T K G
M A N E V V A K L T D V C C W D K C I T T G S I G S S F S S S
L Q S F L Q E S Q K A Q V Q K Q L H E L T E M C F K K C I T T I T S S G K L L S S K
Q M M R M Q M E D I I T H Y N R L A D T C F T Q C V G D F K S N A L L Q N
Q F V V N E S Q K A R I I Q T S I H S L T D I C F R K C C I T S I S S G K L D K Y
M K L L S D V E M E M M A D M Y N R M M N A C C Q K K C V I T N Y K E G D L L S K G
E A E M K L I T A M A R R M N A C C M Q K C I T N Y K E G D L L S K G
M A T M C W M Y R S C H S K C C I T R Y T E P D L L N K G
N E T Q K Q R F Q V L V H C L T D T C W D S C M G W P S N R L L D S R
L S S F L E Q E Q A K A R L Q T I H T F T D M C F D K C V P K A P D T R F S R S
Q E F L E T V G N K C F A K C C V T K L N S L L D S R
K C F A K C C V T K P G S S L S S G S
Q E F L E T V G N K C F A K C C V T K P G S S L S S G S
L Q K R M E K K Q I K E F M G C R S K C I P E Y G E G E I N K G
M A E L E M E S L T A L F D S L M N T C R S K C I P E Y G E G E I N K G

		50	60	
UniRef90_C5KHC8	E	M	S	C
UniRef90_H6BYX4	E	E	T	C
UniRef90_C9SQI0	E	S	V	C
UniRef90_J3NRU3	E	S	V	C
UniRef90_UPI0000E4636B	T	E	S	C
UniRef90_A0A023FP94	E	E	T	C
UniRef90_M5G837	E	E	T	C
UniRef90_R4XAL3	E	S	V	C
UniRef90_E9H7R7	T	S	F	C
UniRef90_W6MF64	E	T	T	C
UniRef90_UPI00042C2B41	T	E	G	C
UniRef90_Q9C0N3	E	S	V	C
UniRef90_G7DT40	E	E	Q	C
UniRef90_A8D898	T	Q	N	C
UniRef90_F0XPQ0	E	E	A	C
UniRef90_F4Q9J8	E	E	L	C
UniRef90_W4GYE5	E	S	T	C
UniRef90_M5ECK3	E	S	V	C
UniRef90_W4Y053	E	A	V	C
UniRef90_Q9Y0V6	E	A	V	C
UniRef90_G7YAR4	A	R	S	C
UniRef90_A0A058ZAK5	E	Q	T	C
UniRef90_E3QCR7	E	E	G	C
UniRef90_B4NAK7	E	Q	R	C
UniRef90_A4RTY0	E	N	S	C
UniRef90_R1FJX2	E	E	E	C
UniRef90_I1FZA2	T	S	E	C
UniRef90_I1FZA2	T	S	E	C
UniRef90_E4UV06	E	S	S	C
UniRef90_M8AJ97	E	G	D	C
UniRef90_UPI0003F49F13	E	A	V	C
UniRef90_K3YBB8	E	A	S	C
UniRef90_R8BGU1	E	S	V	C
UniRef90_C5DFS8	E	E	T	C
UniRef90_K5WA16	E	E	A	C
UniRef90_B6AAF8	E	L	S	C
UniRef90_C5X1Y9	E	N	S	C
UniRef90_V2XGV9	E	M	V	C
UniRef90_G0VL12	E	E	E	C
UniRef90_L1JHQ9	E	K	N	C
UniRef90_G3JHC4	E	E	T	C
UniRef90_I1FU42	T	E	Q	C
UniRef90_I4YFH7	E	E	T	C
UniRef90_UPI00017581A5	E	E	T	C
UniRef90_J9ERR0	T	E	T	C
UniRef90_V51Y4	E	E	S	C
UniRef90_K0KUU2	E	E	A	C
UniRef90_L9KUX7	T	E	A	C
UniRef90_C4WUC5	E	Q	G	C
UniRef90_S7S0K7	E	G	L	C
UniRef90_L8GXS4	E	E	G	C
UniRef90_R8BU73	E	E	S	C
UniRef90_V2XGR4	E	A	Q	C
UniRef90_P0CR95	E	A	Y	C
UniRef90_M5C5W7	E	E	A	C
UniRef90_B6HG14	D	E	G	C
UniRef90_A5DMT6	E	E	T	C
UniRef90_UPI000456090A	T	E	T	C
UniRef90_B4NE22	E	N	S	C
UniRef90_D5GA91	E	Y	S	C
UniRef90_M4DBJ5	A	E	G	C
UniRef90_UPI000454B9FB	E	G	V	C
UniRef90_I4YE49	T	S	T	C
UniRef90_H3EZ88	E	E	S	C
UniRef90_J4HVP8	E	M	T	C
UniRef90_Q6FRH4	E	S	V	C
UniRef90_T1KMP1	E	S	V	C
UniRef90_UPI0003EC0ABB	E	K	A	C
UniRef90_A0A059LM20	E	E	T	C
UniRef90_C7Z9X7	T	E	N	C
UniRef90_T11RK0	E	S	V	C
UniRef90_W3WM41	E	A	S	C
UniRef90_A6R099	E	Q	M	C
UniRef90_F0Y6Q4	E	E	N	C
UniRef90_W1QEG9	E	S	V	C
UniRef90_A0A058Z715	E	Q	E	C
UniRef90_C5M2C1	E	E	T	C
UniRef90_UPI0004407E4D	E	A	V	C
UniRef90_E1GDH0	E	A	S	C
UniRef90_G2XM33	E	E	S	C
UniRef90_W9X5U5	E	E	S	C
UniRef90_L8GZ97	E	E	V	C
UniRef90_K2R189	E	E	P	C
UniRef90_T1G2A2	E	A	V	C
UniRef90_G4NE52	E	S	V	C
UniRef90_L8X3X9	E	S	V	C
UniRef90_G6DCZ7	T	E	V	C
UniRef90_F4RE15	E	E	S	C
UniRef90_C1LIX1	T	E	S	C
UniRef90_J3LFX0	E	S	N	C
UniRef90_UPI0000D85F59	E	E	G	C
UniRef90_Q6CB56	E	S	V	C

UniRef90_Q4YCZ6
UniRef90_UPI000441769F
UniRef90_B5X5Y9
UniRef90_Q6CVH5
UniRef90_A5DPP0
UniRef90_I1GF38
UniRef90_S8AN99
UniRef90_T1KUS1
UniRef90_B2A9T5
UniRef90_A9V771
UniRef90_C6HK41
UniRef90_G7DS12
UniRef90_UPI000441D10C
UniRef90_UPI00046B9F23
UniRef90_Q9Y8C0
UniRef90_E2BQA6
UniRef90_W0TJ41
UniRef90_J9BII7
UniRef90_Q559H1
UniRef90_C5P7Y7
UniRef90_G0WHA8
UniRef90_Q6FK81
UniRef90_UPI0004449EB3
UniRef90_U7PNI9
UniRef90_M5E9D4
UniRef90_UPI000258F384
UniRef90_UPI0003956C33
UniRef90_T5BF00
UniRef90_C1FGA8
UniRef90_J7R2Q7
UniRef90_M2XLU7
UniRef90_K1PRW1
UniRef90_Q09783
UniRef90_J4HWF9
UniRef90_UPI0003C36E4B
UniRef90_J7S2Z5
UniRef90_F4IKQ3
UniRef90_B9I3V6
UniRef90_H1VZY7
UniRef90_X1WSR4
UniRef90_K4C366
UniRef90_B6QK73
UniRef90_UPI0004434DA1
UniRef90_D8PMR5
UniRef90_UPI0004623740
UniRef90_S8AQM2
UniRef90_W77JX5
UniRef90_D8LMX7
UniRef90_A0A024FTR8
UniRef90_F9XGX9
UniRef90_K8EWZ1
UniRef90_C5MHM3
UniRef90_F9X515
UniRef90_G4U2T8
UniRef90_C4Y4D1
UniRef90_C1BRV0
UniRef90_F0ZH01
UniRef90_B0CQQ0
UniRef90_X1ZGX8
UniRef90_E5AB19
UniRef90_UPI0003F0F753
UniRef90_W9YCC0
UniRef90_G8Y0V5
UniRef90_Q29DX6
UniRef90_B2AWZ6
UniRef90_B6QGS7
UniRef90_M1V6H8
UniRef90_M2MZC6
UniRef90_Q10481
UniRef90_E2B164
UniRef90_G3AS35
UniRef90_G1XFP1
UniRef90_A0A024JM38
UniRef90_M7XET6
UniRef90_D3BKA6
UniRef90_M8C1Q6
UniRef90_C0SBT0
UniRef90_UPI0002C3576A
UniRef90_K2R719
UniRef90_A0A023FQU3
UniRef90_E9H5J8
UniRef90_C0SD13
UniRef90_C8V9C3
UniRef90_V3ZE82
UniRef90_Q54NZ0
UniRef90_I6NCY9
UniRef90_A0A017SRE2
UniRef90_C1N3Q9
UniRef90_M7NLM2
UniRef90_U4L600
UniRef90_K0TCB7
UniRef90_N1QFL4

UniRef90_Q4YCZ6
UniRef90_UPI000441769F
UniRef90_B5X5Y9
UniRef90_Q6CWH5
UniRef90_A5DPP0
UniRef90_I1GF38
UniRef90_S8AN99
UniRef90_T1KUS1
UniRef90_B2A9T5
UniRef90_A9V771
UniRef90_C6HK41
UniRef90_G7DS12
UniRef90_UPI000441D10C
UniRef90_UPI00046B9F23
UniRef90_Q9Y8C0
UniRef90_E2BQA6
UniRef90_W0TJ41
UniRef90_J9BII7
UniRef90_Q559H1
UniRef90_C5P7Y7
UniRef90_G0WHA8
UniRef90_Q6FK81
UniRef90_UPI0004449EB3
UniRef90_U7PNI9
UniRef90_M5E9D4
UniRef90_UPI000258F384
UniRef90_UPI0003956C33
UniRef90_T5BFF0
UniRef90_C1FGA8
UniRef90_J7R2Q7
UniRef90_M2XLU7
UniRef90_K1PRW1
UniRef90_Q09783
UniRef90_J4HWF9
UniRef90_UPI0003C36E4B
UniRef90_J7S2Z5
UniRef90_F4IKQ3
UniRef90_B9I3V6
UniRef90_H1VZY7
UniRef90_X1WSR4
UniRef90_K4C366
UniRef90_B6QK73
UniRef90_UPI0004434DA1
UniRef90_D8PMR5
UniRef90_UPI0004623740
UniRef90_S8AQM2
UniRef90_W7TJX5
UniRef90_D8LMX7
UniRef90_AA0A24FTR8
UniRef90_F9XGX9
UniRef90_K8EWZ1
UniRef90_C5MHM3
UniRef90_F9X5I5
UniRef90_G4U2T8
UniRef90_C4Y4D1
UniRef90_C1BRV0
UniRef90_F0ZH01
UniRef90_B0CQQ0
UniRef90_X1ZGX8
UniRef90_E5ABI9
UniRef90_UPI0003F0F753
UniRef90_W9YCC0
UniRef90_G8Y0V5
UniRef90_Q29DX6
UniRef90_B2AWZ6
UniRef90_B6QGS7
UniRef90_M1V6H8
UniRef90_M2MZC6
UniRef90_Q10481
UniRef90_E2B164
UniRef90_G3AS35
UniRef90_G1XFP1
UniRef90_AA0A24JM38
UniRef90_M7XET6
UniRef90_D3BKA6
UniRef90_M8C1Q6
UniRef90_C0SBT0
UniRef90_UPI0002C3576A
UniRef90_K2R719
UniRef90_AA0A23FQU3
UniRef90_E9H5J8
UniRef90_C0SD13
UniRef90_C8V9C3
UniRef90_V3ZE82
UniRef90_Q54NZ0
UniRef90_I6NCY9
UniRef90_AA0A17SRE2
UniRef90_C1N3Q9
UniRef90_M7NLM2
UniRef90_U4L600
UniRef90_K0TCB7
UniRef90_N1QFL4

50 60
E T S C V D R C V H K Y L E H T L V G K N L Q E S Q
E R S C L E N C V D R F L D T S M F M
T E I C F V N C V E R F I D
E E Q C L V N C V N R F L D T N I R I V K G L Q S I Q
E M C C V D R C V A K Y V K A N L E V G T A L Q
E V L C V D S C A E K L L K A N Y R L N L K A A E M
E E A C A A N C V D R W M D S Q L L I L Q K L G S M R Q
E T K C L N F C V D R Y M D A
E A S C L D R C S A K F F E A H T T I S E Q L Q K E Q A A
E S G C I T K C A D R F L E S L N V V S Q T Y Q R L Q S A
E Q M C L T A C M E K Y I Q T S R A Y G A R V Q E H K A G
E G V C I D R C V A K F F A V N E A V G K R M
T E T C L A N C V N R F I D T T L S V T S R F A Q L M Q
T E N C L S S C V D R F I D T T L T I T S H F A Q
E A V C M A D C V E R F L D V N L T I M A H V Q K I
T E T C I S N C V N R F I D V S F F V T N R F T Q L
E M T C I D R C V A K I H Y S N R L I G G F V I Q
T Q N C I N N C V E R N M I D A S N F M V E H L Q K M S A
E Q L C V Y K C V E K N M F T S A L N N H F M K L S N
E E A C A K N C V E R W M D A N L A V
D Q Q C L A N C V N R F L D T N I R L V K G L Q N I Q
E E E C L A S C V N R F L D T N I R V V R G L Q N S Q
E E S C L V N C V D R F L D T S L F M V K K I E E Q
E E G C M S N C V E R F L D L N I L T A K L L S N M Q Q
E E A C L S N C V E R F L D T S L F I
T K N C L V N C V E R F I D I S N F I A Y R L A
E C V C L D R C V A K Y L E V H E R M G K K L T E L S
E S V C L D R C V A K F F E V N M K V S E K
E S A C L S Q C A L R Y L E T G Q L I M S R
E E N C L S G C V N R F L D V S I R V A N G I Q
E E P C M R N C V D R F M D A N M T V I R H L E Q M R A
E A V C L D R C V A K Y M E I H D R I G K K L T Q L S
E E Q C L Q N C V E R F L D C N F H I T K R Y A
E S V C I D R C V A K F F E V N K R V G E K L Q S M G A
E M V C I D R C V A K Y L D I H E K I G K K L
E M C C I D R C V A K M H Y A N R L I G
E N S C I D R C V S K Y W Q V N G M V G Q
E S S C L S N C A R S Y M D M S L T I M K R F Q S M N
E E G C L A N C V D R F L D V N F L T M K H L
E S V C L D R C I V K Y F Q M H E N V G K
E N T C I D R C V S K Y Q Q V T N I G Q
E S T C L S S C M D K Y I N
A E T C F V N C V E R F I D T S Q F I L L N R L E Q T Q
E Q S C L V N C V D R F L D S S L F M V K K I E E Q
E Q S C L A N C V D R F L D T S M Y L V K K
E N A C L S S C M D K Y I N M W N A V S R S Y M
E Q S C I Q A T V A K Y L D T S E F V L G R V Q
E M S C V D R C V S K Y M E A Q E K V G
E M S C I D R C S G K Y M Q A Y S E L S V K I A Q V E Q
E E P C M R N C V D R F M D A S G A V I R H L E Q M R Q
E T A C V D R C S S K Y W Q S V G I V G Q
E E A C L R N C L N R F L D T N I K V V I E A L Q
E T T C Y T A C M D K Y M K G W N I V S Q Q Y
E A V C V D R C V G K F I E A N K V I G E K L R E
E E Q C L S N C L N R F L D T N I K V V I Q A L Q G Q Q
S E K C L K N C V D R F L D A N I L L T M N M Q K M
E A V C A E R C A Q K W M D T F K N V Q S K I N P Q N A
E E S C L V N C V E R F L D S S L H M V K
E Q K C I A M C M D R Y M D T W N L V A K S Y T Q
E E P C L R Q C V D R F M D G N M I I
T E A C F V N Y V E H F I D T S Q F I L N R L E Q
E D S C M A N C V D R F L D T N T V I L K H L E T L R A
E Q R C V D R C V A K Y V K A N Y Q V G S Q L Q
E Q R C I S Q C M D R F M D S W N L V S R T Y
E K A C L A N C V E R F M D V N M
E E S C A Q N C V D R W M D A N
E Q T C L A K C V D R Y I E S M G V V S K A M I E R Q Q
E E P C M Q N C V D R Y M D A N M L V L R H L D Q L R A
E K S C V S K C M E R Y M D A
E Q K C I A M C M D R Y M D S F N L I S K T Y G E
E E S C L K N C L N R F L D T N I K V V I E A L Q
E T T C I N Q C M E K Y M S A W N V V S R K Y I E R I Q A
E M V C V D R C V A K F F R S N L V V G
E Q A C L A N C T D R F L D A S L F I V K S L E E
E S V C A E R C T E K W V E T F K K V Q T K L Q
E G D C V R A C V R K Y Q L A T A A S A A R F
E Q S C L T S C M E K Y I Q M W N A T S R A Y Q E Q K A A
E T A C L S K C V R R Y
E S V C L D R C V S K F F D V H T K V S E K M Q
T E N C I Q N C V N R F I D A T N L I V D R L A
T E T C I V N C V N R F I D L N L L C A Q R F A Q I
E E S C A Q N C V D R W I D T S N A V
E E A C A M N C V D R W L D T N N A V L K H L Q A M Q
T E G C F I N C V D R F V D T N Q T V V S R F A
E S V C A E R C V Q K W M E T F K K V Q S K M S
E D L C L K N C V N R F L D T N I R V V I Q
E E A C A Q N C V E R W M D T N L S V
E A A C V D R C T G K Y W Q T
E E T C L Q N C V D R W L D V N
E S S C L N N C V N R Y I D A Q K T V
D A A C V N A V V C K W L D T N E F M T G R L
E E P C M R N C V D R F M D A N R L V I E

UniRef90_K2RL31 1 MQ Q V R Q E A A V A N A R Q L V E K L N E H C F E R C V P K P G T S L S K G 40
UniRef90_W3WRN8 NE N Q K A R V S Q S T I H S L T D V C F E K K C A H E Y I P K G G E Q M L S K D N G A
UniRef90_C4Y1P3 L A E I Q F S V M S A T F N R D V L A S C E W K K C A T R I T G P Y I G G E P Q L D N T G A
UniRef90_F4NSL2 L M D E Q Q K A V M F H S Q Q V S D F T K T F W D K I T R I T G P Y I G G E P Q L D N T G A
UniRef90_C5K577 Q Q M M Q L N M I T I E S Q K T M V K L T G L C C F D K V I S T P T P K G S L D S T S A
UniRef90_U6IGY6 E Q Q M R V L E I E M M Q S M F A H Q M T D S L V K V I P R Y T G T D D G L D S S K G G
UniRef90_B4N455 Q V V K Q I A V A N A Q E M L T Q M T Q K F K K V I V N K P T G T D D G L D S S K G G
UniRef90_U5HE08 M Q Q V R E Q Q I A V A N A Q E L I N K M N E K C C F A K V I L K P S T S L D S S A
UniRef90_A1C6Q3 M R Q V V Q Q E A A M A N A R S L I S K V L N A H C F D A C V V P A R G S G L D S S A
UniRef90_G2RC32 Q F F S N E E A Q R S R I Q S S Q T H S L T A L C C F W K K V V N T I R A G S G L D S S A
UniRef90_E3S2A5 L Q Q F M N E Q Q K A R I Q S S I H S L T D T C F R K V I P T V K A G S K L D S S A
UniRef90_E4UML2 L Q Q T I Q A E A A M T N A R T L M E K L N S N C F E K V I P S P S S G L D S S A
UniRef90_G7XS85 Q M L A N E Q Q K A T M Q Q T V H S K L S D I T W K K I A G I S S G R L L S E Q N
UniRef90_C1C242 Q T F V Q E Q Q R Q Q I M E Q V M K V N D V C W K M V S S V S S S L L G S R G
UniRef90_A0A010S6T5 M K Q V L Q E A A N L A N A R V L I E K L Q E N C F E K C V P K P G S S L L S S G K
UniRef90_H3GGJ3 M Q Q L I E E Q Q R A L I Q Q A V S K I T A L A W D I C S A S K P D S S E L L S S K
UniRef90_K7J0S5 M E K V K Q E I A L A N F Q E L L N T K I T E K C F K Q C I S K P T G T S L D S S K
UniRef90_D8M9E3 K K D L K K T A G M N I H Q V T E K C F C S V K D F T V S T L D S S K
UniRef90_I2H079 M S N F I E I E N S K Q K Q M I N K Q F T N T C F K Q C I I T H V N D V S T L S S K
UniRef90_K1V2K0 Q E M F H K S V A S C C K K K C V I Q R Y A E P E L L K K G
UniRef90_W9YJ6 L K D F I E V E N R K Q F Q L L V H E L T D I C W E T C M D R P S A R S L L E T A K
UniRef90_E2B8P3 M R Q L Q Q E A A M S N A R S L I G K I N K H C F K A V P T P P G T S L S A K
UniRef90_B6HHD3 L Q Q Q F V N E A Q K A K I Q S T V H Y L T D M W K R C V I T S P S G S L D S S Y
UniRef90_S8C0Q5 Q M Q M N I V Q T L T S A I S D K F E R C C V I T S P S G S L D S S Y
UniRef90_A0A058Z4T3 Q M Q M N I V Q T L T S A I S D K F E R C C V I T S P S G S L D S S Y
UniRef90_K0R6N2 Q I S Q E L A V A N A T E L V N K M A A S C F E K C L N S P Y P P S I T D R S
UniRef90_C5DRS2 Q Q V L V E S N T S N A R Q L I D N M N Q H C F E K C I P K P G P S I T D R S
UniRef90_F0XQ72 Q F D A Q N L M F K K L L S K C C N T K C I R E Y G E A D L L N T G
UniRef90_G3BCH3 M K Q L Q A E A A M T N A R A L I G K L N E H C F E R N N V K T F Y P R S S L L N
UniRef90_V5FRC7 S L G L Y N S L V E R C C F E R N N V K T F Y P R S S L L N
UniRef90_G7JUG7 M T T I K Q K I A I A N A Q E L V T K M T E K C C F K K C V G K P G Q D L D S S
UniRef90_W5JMC3 Q L Q Q E A A V K N A R Q L I G K V T E N H C F D K C I P S P G S A T L D S S
UniRef90_A0A017SL80 Q F M E A E R S A K I Q E T V I G T F T N L C W N K C I K K V N S Q S L L D S G S
UniRef90_Q6C9F7 M D Q V R Q Q A A L A N A R A L V E K L N E H C F E R C V P R P P G S A S L S S G
UniRef90_N1PP05 E L V N R L T E N F E L C C F T N P S S S M G S K
UniRef90_W6MIB5 M Q Q I K Q E V A V A N A Q E M L S K M S E K F K K V I R P G T S L D S N T
UniRef90_UPI00021A6C84 I A E V Q F E A M N V T F N N I L K T C C M E K C I D I Y S S D L L N K G
UniRef90_D8M7K7 A E Q E M D L V T D M F N R L Q K A C C L T K C C I P T Y R E A S E V N K G
UniRef90_G8ZS73 M D Q V K Q Q I A V A N A Q E L L S K M T E K F K K C V I S K P G G S L D S N G
UniRef90_M7P2C5 M S R L R E Q Q I A V A H V Q E M L S K M T S K F F N K C I S S K P G G S A L D D G T
UniRef90_K1XZ51 Q Q F M A E L E V E M M A D M Y N R M M G A H S V S P H Y K V P E L L S K G
UniRef90_V5IF85 M L A K V N M Q S Y A D L F E R M S R V C F E K C A K F K Y N D E E Q L L N V G
UniRef90_B4IZA8 Q H H K A T T E M E M Y T H L F N K M A S T C F Q K C A K F K R H C C G E D L A L G
UniRef90_UPI0004575042 L Q T E L Q T A Y L Q E F Y T T V R D K C C F E K C V T K P G T S S L L G S S
UniRef90_B8CEA7 Q I S Q E L A V A N A T E L V S K L T E N C F E K C I S Q P G T S S L L N G Q
UniRef90_I0YPG8 E R Q M Q M F E L E M M T K I F S S M T K A C C L K K C I P R Y H D G D L S S K G
UniRef90_A3GGN2 Q K Q L E E K R Q I M T L T M F T R M N R R Y D K C C L A N A Y G E E L S I D
UniRef90_U6HMT5 Y N R L N S E M C C F T D C C V R D F T S R D V V K E N R
UniRef90_L1J635 Q R F I Q E V G E Q Q K L Q Q I H Q V N D L C F N L C C I V R D P G Q R L D S R
UniRef90_D6QYX0 M V T F L D N E T S K Q K V Q M I H Q F T N T F R N V A S A N S Q R S L D S P Q
UniRef90_V4BA51 N K L N E K C F A K C C I T K P S D T L S
UniRef90_H2AW37 M N Q I R N E I A I N G A Q E L I N K I S E N C F E K C L T S P Y A T R
UniRef90_G0T0S8 Q I A Q E L A V A N A T E L V N K L S E N C F E K C L T S P Y A T R
UniRef90_UPI0004407E15 A K F I E T E Q Q K A K L Q Q I H N F T S I C W P K C I T K V N D K L G K D
UniRef90_P53299 M D Q V R N E L A I A N A Q E L I N K I N E K C F S K C I T K V N D K L G K D
UniRef90_B6K2Q8 A A I I Q Q L Q I T N A R T L M E K I N S N C F E K C I S S P P G S T F S S K
UniRef90_U9TBY7 Q I S Q E L A I A N A T E L V N K I T E N C F E K C V E Q Q A S L L S S Q
UniRef90_C5PBX5 Q I S Q E L A I A N A T E L V N K I T E N C F E K C V S D Y R E G D L L N K G
UniRef90_G8YKC2 V A E V Q F D A M A T T F N T M L N T C L E K C I D E Y G E A D L L N K G
UniRef90_M7TWM5 Q I A Q E L A V A N A T E L V N K I T E N C Y E R C C I P T P G S S L S A T
UniRef90_G8JS54 Q Q I M Q Q V R Q Q A A L A L V E K L N E H C F E R C V P K P G S S L S S G
UniRef90_A0A024J803 L Q A V V R Q K S Q A Q F A E V S L D L T D K C C W N K C V D K I G S K P I D S R G
UniRef90_M3AJV7 L Q A V V R Q K S Q A Q F A E V S L D L T D K C C W N K C V D K I G S K P I D S R G
UniRef90_F2U1C2 L Q A V V R Q K S Q A Q F A E V S L D L T D K C C W N K C V D K I G S K P I D S R G
UniRef90_G8BNH1 Q Q I M Q Q V R Q Q A A L A L V E K L N E H C F E R C V P K P G T S L S S S G
UniRef90_E5A1K7 M R Q V Q E S A M Q N A R A L V E K L N E H C F D R C V P K P G T S L S S K G
UniRef90_M3AYT7 Q F V V N E A Q K A Q I Q Q T I H T L T D T F R K C C V T S S S G Q L D D R Y
UniRef90_UPI0004624778 Q N Q L A L Q N V Q E I M N K L T E K C F T K C V I T K P G S G A L S S G S
UniRef90_L1JYP6 Y N R M L K Q C F E K C V E H Y H H A E V A L D V S
UniRef90_S8GLV2 Q V A A L A E L Q G F A D T V S R C I G A C Y T R C C I H K H A E V A L D V S
UniRef90_L0PBS8 Q I A Q E L A V A N A T E L V N K I T E N C Y E R C C I P T P G S S L S A T
UniRef90_D8PLV5 M Q S V R S E L A L A N A Q E L M N S A N K A C F Q K C I T K P G G S L L S S G
UniRef90_S3D4G3 M N R V R Q E A A M T N A R Q L I E K V N E H C F D K C V P K P G T S L S S S G
UniRef90_UPI000441160B L E Q F L E T E Q Q A R V Q S Q I H T L T G L C C F W D K C V G S I S S S F S S K
UniRef90_W9Z1S6 A A V A E Q A Q N A R I L I S K V N E V C F A N C I T N P G S S L S S G A
UniRef90_F4NSA2 Q L K Q E L A L R R F Q E L A T D L V P R F S K C C V I R P G L K L E D S Y
UniRef90_A0A026WAM6 F Q G L V H E L T G I C W E T C C M D K P R L E P K
UniRef90_C1L5X3 E R Q M Q M F E I E M M Q Q V F T S M T N S C L T K C I S N Y N D P G D L L T K G
UniRef90_E1ZJZ9 T I S R L T D E C C W A K C C I G N P P S N Y M S S K
UniRef90_U6JX01 Q Q A L E A Q S M L A S L T S R C C F T K C C V D K P G R T L S S S
UniRef90_E9FTM2 E Q V K Q Q V A I A T A Q E L L T K I S E K C F T K C C V I A K P S S T L S S S
UniRef90_F4PCM4 N R A L K N C H P K C C I N S Y H D G E L L K G
UniRef90_F0W0J4 L L E E Q Q R A L I Q H A I Q K V T A I A W D C C S S S K P D S S L S S R
UniRef90_B2AX08 Q A T L Q E T N T A N A R A L I E G I T G S C F E K C V P K P G T S L S S S
UniRef90_A5DL14 K F L E S E N S K S K V Q M I H N F T N M C F K K C C N K N I T T G N V D A N
UniRef90_G8YPH5 H N F T D M C F E K C C V P K P G T S L S S S
UniRef90_D5GLH3 Q H S N I E N A R T L I E K I N E K C F E K C C V P K P G T S L S S S
UniRef90_A8PXN0 Q R V S T E I A M A N A Q Q L I S K A T D K C C Y C C C V T W S P G Q S L S S G K
UniRef90_G0W541 I A E V Q F D A M A T T F N N I L K T C C M E K C I P E Y S E G D L T K G
UniRef90_D3PIG3 M Q S F I K E T Q R Q K I Q S V L H D I N S R C W D T C F D K P G P
UniRef90_Q4X0V2 M N Q V R Q E A A V T N A R N L I G K V N E H C F E A C I P N P G T S L S S A

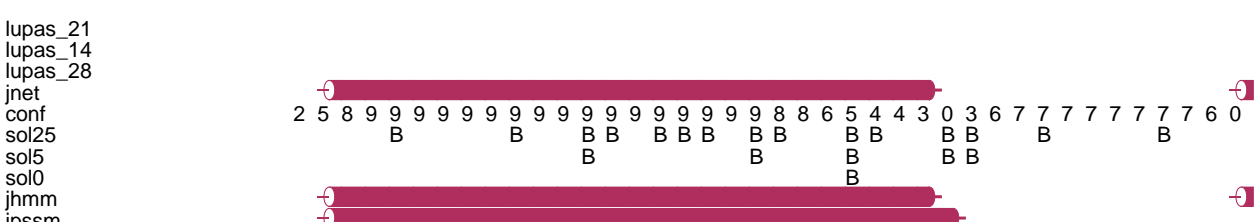
UniRef90_K2RL31
UniRef90_W3WRN8
UniRef90_C4Y1P3
UniRef90_F4NSL2
UniRef90_C5K577
UniRef90_U6IGY6
UniRef90_B4N455
UniRef90_U5HE08
UniRef90_A1C6Q3
UniRef90_G2RC32
UniRef90_E3S2A5
UniRef90_E4UML2
UniRef90_G7XS85
UniRef90_C1C242
UniRef90_A0A010S6T5
UniRef90_H3GGJ3
UniRef90_K7J0S5
UniRef90_D8M9E3
UniRef90_I2H079
UniRef90_K1V2K0
UniRef90_W9YJE6
UniRef90_E2B8P3
UniRef90_B6HHD3
UniRef90_S8C0Q5
UniRef90_A0A058Z4T3
UniRef90_K0R6N2
UniRef90_C5DRS2
UniRef90_F0XQ72
UniRef90_G3BCH3
UniRef90_V5FRC7
UniRef90_G7JUG7
UniRef90_W5JMC3
UniRef90_A0A017SL80
UniRef90_Q6C9F7
UniRef90_N1PP05
UniRef90_W6MIB5
UniRef90_UPI00021A6C84
UniRef90_D8M7K7
UniRef90_G8ZS73
UniRef90_M7P2C5
UniRef90_K1XZ51
UniRef90_V5IF85
UniRef90_B4IZA8
UniRef90_UPI0004575042
UniRef90_K3X6H2
UniRef90_B8CEA7
UniRef90_I0YPG8
UniRef90_A3GGN2
UniRef90_U6HMT5
UniRef90_L1J635
UniRef90_D6QYX0
UniRef90_V4BA51
UniRef90_H2AW37
UniRef90_G0T0S8
UniRef90_UPI0004407E15
UniRef90_P53299
UniRef90_B6K2Q8
UniRef90_U9TBY7
UniRef90_C5PBX5
UniRef90_G8YKC2
UniRef90_M7TWM5
UniRef90_G8JS54
UniRef90_A0A024J803
UniRef90_M3AJV7
UniRef90_F2U1C2
UniRef90_G8BNH1
UniRef90_E5A1K7
UniRef90_M3AYT7
UniRef90_UPI0004624778
UniRef90_L1JYP6
UniRef90_S8GLV2
UniRef90_L0PBS8
UniRef90_D8PLV5
UniRef90_S3D4G3
UniRef90_UPI000441160B
UniRef90_W9Z1S6
UniRef90_F4NSA2
UniRef90_A0A026WAM6
UniRef90_C1L5X3
UniRef90_E1ZJZ9
UniRef90_U6JX01
UniRef90_E9FTM2
UniRef90_F4PCM4
UniRef90_F0W0J4
UniRef90_B2AX08
UniRef90_A5DL14
UniRef90_G8YPH5
UniRef90_D5GLH3
UniRef90_A8PXN0
UniRef90_G0W541
UniRef90_D3PIG3
UniRef90_Q4X0V2

50 60
E E T C F S Q C M E K Y M
E Q S C M A N C A D R F L D V S S L T M K N L Q T M R Q
E A S C I D R C V A K Y V K A N A F V G E K M
D R E C C V S N C L D R F L D A T E L I L Q N I S Q
E Q T C L W R C A Q N M M E T N V F M Q K R L L Q Q
E A V C I D R C A A K F M E A
E Q K C I S M C M D R F M D S W N L I S Q T Y G Q
D E S C L T Q C T D R Y L E A F N V V S
E N T C L S Q C M E K Y I
E Q T C L A S C V D R F M D V N L A T L K H L A S M R Q
E E P C M R Q C V D R F L D A N M V V
E Q T C I K T C M E K Y I T T S Q A Y S A R L R E E N
E E T C A Q N C V E R W M D S N L A I
T E G C L S N C T E R F V D T T L L I T Q R F A Q L
E K T C M T S C M E K Y M S A W N Q V N Q A Y
E K D C I K N T A L A Y I L D T S I F V V H R L N K S G S A
E Q K C V A M C M D R Y I D A Y N A V S K A Y S
E L A C I Q N C A S K Q M D L M D R T Q R A Y Q E V
E D L C L R N C L N R F L D T N I Q I V K G L Q
E A V C V D R C T M K F F E V N D K V S Q R M Q
E S V C L D R C M A K F I E V N M Q I S
V Q K C L V N C V E R F I D T T N F V T N R L
E N T C L S S C M E K Y I A M
E K P C M E N C V D R Y I D S Q M T V L K H L E Q L
E E T C V S R C T Q R F L E A R S I V A A A Y V K A S S A
E M S C A D R C V A K Y I E A Q E K V G V I L Q K A N E A
N E P C V D Q C L I K Y M R S W N I V S K A Y S R I Q Q A
E Q T C V S Q C M E K Y I H V N T T L M R R I Q Q
E Q S C V D R C A E K F F K T N R L M G E T L Q
E E S C L S T C M E K Y I S T
K L S S Q V S V K F S D I N Q G
E Q K C I A M C M D R F M D V S R S L M Q R V Q Q E Q
E E G C L S T C M E K Y I
E Q Q C F T D C V G R Y L D T N
E S T C Y T H C M E K Y M S A W N T V S K Q Y
D K K C I E Q C M Q K Y M K L S Q S Y V K R I Q E A K A A
E Q K C V A M C M D R Y M D A F H L V S K T Y S
E A S C I D R C S I K F F D V
E M C C V D R C V A K M H Y S N R L I G A L V Q S R N F A
E E T C L Q N C V D R W L D V N
E G V C L D R C A S K F F E V Q L K V S E L L Q K E A M A
E Q K C I S M C M D R Y M D S W N I V S E V
E Q R C I T Q C M D R F I D T S R T Y G N R I Q R E Q A
E A V C L N R C V S K Y H V V H E R M G W K L T E L S
E M S C T D R C A G K Y M Q A F S A L S V K M E Q V
E M S C S D R C V S K Y I E A F S A Q E K V G
E Q Q C L A R C C D R Y A E A T Q V V M R A V L E Q S
E D F C V N Q C L E K Y M R
E A V C L D R C A A K F M E A
E D K C L V S C A S K F V A T Q Q K V G E I F M Q E A Q A
E E K C S L N C M E K
S E S C L K N C V D R F I D T S N F I V N R M
E E Q C L A N C V N N F L D T K I R V V K G L Q
D H A C L M R C S D R F L E A F N I I S Q T Y V Q
E E T C L S R C M E R H M E A F N I V S R T Y
N D A C I D Q C L A K Y M R S W N V I S K A Y
E E Q C L A N C V E R Y L D C N F Q I
E Q T C V A K C M D R Y M E A
D Q T C L T A C M E K Y I
Q D G C I N L C L E K Y M R S W N V I S K T Y
E S V C L D R C A A K F F D V H M K V S E L L Q Q E S Q
E M S C I D R C I A K I H Y T N R S I G
E S Q C T K Q C M E K Y M H A
E T S C Y T A C M E K Y M A S W N T V S K Q Y
T A A C I S N C V K N F I E M Q Q V L V A K F
E M T C I D R C V A K M H F S N R L I G G F V Q
E E G C M S A C M E K Y M S A W N T V S K Q Y V G Q
E E P C M R N C V D R F M D S Q M T V
D E K C L S N C M Q Q Y L
E N V C I D R C V S K Y V S A Q E K V G A T M
E M S C T D R C V A K Y F H V H A L V G E S M
E S V C I D R C V A K F F E V N A K I G E V
E E T C L D R C L G R Y M D A F N I V A S T Y
E T T C F T Q C M E K Y M
E N T C L E N C V G R F F D A S D Y L I R R V E Q Q R A A
E K T C L N A C M E K Y F D A
E Q S C L A R C T D Q Y Q E V M Q V V S K R F
V H K C L V N C V E R F I D T T N Y L T N R
E A I C L D R C A A K F M Q A Y M Q
E Q A C M D N C A R R F L E S T Q F V V K Y F Q A K A N A
Q Q Q C L W Q C A Q R W S E V Q H F V G M R
E Q K C I A M C M D R Y M D S W N L V S K A Y S
E S V C V D R C V S K F L S V N I F I L K K F Q K S Q
E S E C I K H V T L A Y I L D T S R F V G H R L M
E K T C M S Y C V E K Y I
E E Q C L T N C L N R Y L D T N I K S S A I F A G R S Q
E E A C L T N C L N R F L D T N I K V V Q V L Q G V Q
E S T C L T T C M Q Y M Q A W N A V S Q A Y
E Q T C V E R C L E R Y F E A F N I V S A T Y V R R V A A
E I C C I D R C V A K M H Y S N R L
T E T C L K N C V D R F L D A N
E H T C L S Q C M E K Y I S F

UniRef90_A5E4D3
UniRef90_L8G186
UniRef90_UPI0003F4A0E8
UniRef90_M7PEZ9
UniRef90_J9I5Z4
UniRef90_A0A022TLY4
UniRef90_T5AL23
UniRef90_M2WUU7
UniRef90_M8A3G8
UniRef90_B5RTK4
UniRef90_W2RTH8
UniRef90_G0S506
UniRef90_E9EFJ7
UniRef90_S2JL2
UniRef90_S3CL86
UniRef90_A7TRV2
UniRef90_J3JY48
UniRef90_H8X6Z2
UniRef90_E0W168
UniRef90_R9PDL0
UniRef90_U6I3P4
UniRef90_Q5AZH4
UniRef90_F4W635
UniRef90_B6JZC0
UniRef90_A8QCS1
UniRef90_W1QBV2
UniRef90_W6MNX6
UniRef90_A5E016
UniRef90_UPI000455E36E
UniRef90_F0VGJ8
UniRef90_A0A059LJY7
UniRef90_M0RVY6
UniRef90_UPI000359E41E
UniRef90_H2XTI8
UniRef90_H2ATX4
UniRef90_G0VJW1
UniRef90_H6C3M7
UniRef90_V2Y0I7
UniRef90_W9WA83
UniRef90_W1QFM7
UniRef90_Q7XUM9
UniRef90_W7HM98
UniRef90_UPI0004410BC7
UniRef90_K1RCL2
UniRef90_J4GCS0
UniRef90_S6EDX0
UniRef90_S8DLP3
UniRef90_F1LI01
UniRef90_G3P846
UniRef90_U7PNQ4
UniRef90_F2UMC9
UniRef90_UPI000258EA79
UniRef90_N1JHT8
UniRef90_A0C4J7
UniRef90_Q6CJX3
UniRef90_G3J7F5
UniRef90_Q4N7D5
UniRef90_M2X8B2
UniRef90_B4PWE5
UniRef90_U1GIC5
UniRef90_U5EPX4
UniRef90_C3ZNS3
UniRef90_W9QLK4
UniRef90_UPI000328C677
UniRef90_A4RRX5
UniRef90_D8TNS1
UniRef90_K1R273
UniRef90_K1WUB0
UniRef90_G4TIF5
UniRef90_V9DPB3
UniRef90_UPI00044009BA
UniRef90_Q5CIP7
UniRef90_A9UUJ7
UniRef90_A9NLN9
UniRef90_T2M326
UniRef90_Q45319
UniRef90_R9AKM8
UniRef90_G2QE76
UniRef90_W7T8J9
UniRef90_Q6BHJ8
UniRef90_G4N7T5
UniRef90_Q75B83
UniRef90_G4VKK3
UniRef90_M3JZF8
UniRef90_F2SLF7
UniRef90_UPI000386FEF3
UniRef90_F2UFG5
UniRef90_I1COX5
UniRef90_B4KH11
UniRef90_J9LXM1
UniRef90_B4ND48
UniRef90_B6AJ50

UniRef90_A5E4D3 E N A C L D Q C R E K Y M R V S R A Y I N R I Q E Q Q
UniRef90_L8G186 E Q Q C F T Q C M E K Y M S A W N T V S Q Q Y
UniRef90_UPI0003F4A0E8 E E Q C L S R C M T L Y M
UniRef90_M7PEZ9 E Q T C I S K C I G R Y M D A W N I V S S R I Q K E K Q A
UniRef90_J9I5Z4 E K I C L D N C I R R
UniRef90_A0A022TLY4 E L S C A Q N C V N R W M D A N L A V
UniRef90_T5AL23 E Q T C L T T C M E K Y M
UniRef90_M2WUU7 E Q T C L A K C M D R Y L D A M G I V S K T L I E
UniRef90_M8A3G8 E N S C I D R
UniRef90_B5RTK4 E Q C C I D R C V A K Y V K A N A F I G
UniRef90_W2RTH8 E Q T C L S S C M D K Y I Q A
UniRef90_G0S506 E Q T C L S N C V D R F M D A N
UniRef90_E9EFJ7 E Q T C M T T C M E K Y M A A W N Q V N A A Y Q E Q N N
UniRef90_S2JL2 E Q A C L S K C M D R Y M E V S R A Y V A R L Q R E S Q G
UniRef90_S3CL86 E K D C M S N C A A N F I D F T
UniRef90_A7TRV2 E M E C I D R C V A K L H Y S N R L I G A Y A Q T Q
UniRef90_J3JY48 E Q K C V A M C M D R Y M D V S R T Y G M R I Q
UniRef90_H8X6Z2 E Q E T C I A Q C R E K Y M R
UniRef90_E0W168 E Q K C V A M C M D R Y L D S W N L V S K A Y
UniRef90_R9PDL0 E Q T C L T R C M E R Y F E A F N I V S S T Y
UniRef90_U6I3P4 E Q K C L G N C M D R Y M D S V N L V S K V F A
UniRef90_Q5AZH4 E S T C L S S C M E K Y I Q F
UniRef90_F4W635 V H K C L V N C V E R F I D T T N Y I T N R
UniRef90_B6JZC0 D K A C V S K C M E R Y M D A W N V V S K T Y
UniRef90_A8QCS1 E R Q C L Q R C M D R F M D A S Q T L Q K R V Q E E I A A
UniRef90_W1QBV2 E A N C M N D C L N R F L D T N I K I V E L Q K L Q
UniRef90_W6MNX6 E Q Q C L Q T C L D R F L D T N I S I V K
UniRef90_A5E016 E E Q C L L N C L N R F L D T N I K V V E S L Q
UniRef90_UPI000455E36E E E T C L A R C M D R Y M E A F S I V S R S Y Q
UniRef90_F0VGJ8 E M S C T D R C V E K Y F Q V H A L V G
UniRef90_A0A059LJY7 E Q Q C L A R C C D R Y A D A T N I V G Q
UniRef90_M0RVY6 E S S C I S R C V D R Y I E A T G I I S
UniRef90_UPI000359E41E E Q K C I A M C M D R Y M D T W N L V S R V Y A Q
UniRef90_H2XTI8 Q E T C L T H C A E R Y L E T D Q F I R Q R M
UniRef90_H2ATX4 Q P N C V D Q C L N K Y L K A W N T V S K T Y
UniRef90_G0VJW1 E M C C I D R C V I K M H Y S N R L I G G F V Q
UniRef90_H6C3M7 E N K C I N A C M E K Y F D A
UniRef90_V2Y0I7 E E T C L A R C L D R F M D T F N I V S R T Y
UniRef90_W9WA83 E Q K C L T A C M E K Y I D A
UniRef90_W1QFM7 E S S C T D R C V A K F M Q A N R I L G E R F N E
UniRef90_Q7XUM9 E S S C I S R C V D R Y I E A T G I V S
UniRef90_W7HM98 E K P C M E N C V D R Y I D A Q M T V L K H L E Q L
UniRef90_UPI0004410BC7 E Q A C L T N C V D R F L D S S L F M V K K I R E
UniRef90_K1RCL2 E H K C V A M C M D R Y I D T Q N L V A Q A F S
UniRef90_J4GCS0 E E T C L S R C M D R Y M E A F N I V S
UniRef90_S6EDX0 N E P C V D E C L V K Y M K S W N I V S K A Y
UniRef90_S8DLP3 E Q T C L S H C L Q R Y M E A F N I V S R T Y
UniRef90_F1LI01 T Q T C L S N C V N R M I D V
UniRef90_G3P846 E Q K C I A M C M D R Y M D A
UniRef90_U7PNQ4 E Q K C V S Q C M E K Y I
UniRef90_F2UMC9 E L V C I D R C V A K F L E V H D I V G K K M N D A N
UniRef90_UPI000258EA79 E Q K C V A M C M D R Y M E T Y N L V L K T Y S
UniRef90_N1JHT8 E E N C A Q N C V E R F M D A
UniRef90_A0C4J7 E E S C S K N C L S K Y L Q A Q I F L S Q K M
UniRef90_Q6CJX3 Q D N C V D Q C L A K Y M R S W N A I S K A Y
UniRef90_G3J7F5 D Q S C V T S C M E K Y M A A W N Q V N A A F
UniRef90_Q4N7D5 E I S C T D R C V N K V L
UniRef90_M2X8B2 E K E C L Q R C M D R F V E A M N L V G K T L A E K S S
UniRef90_B4PWE5 E H D C L A N C M D R F M D S V Q V V S
UniRef90_U1GIC5 E S T C L S A C M E K Y I E A
UniRef90_U5EPX4 E Q K C I N M C M D R Y M D S W N L V S R T Y S Q
UniRef90_C3ZNS3 E Q K C I A M C M D R Y M D A
UniRef90_W9QLK4 T E N S C I S R C V S K Y W H V T N L V G Q
UniRef90_UPI000328C677 E N S S L S S C V D H F I D S P L A I T G W F V Q I G Q
UniRef90_A4RRX5 E A T C L S R C T D R Y V E A T K M I S
UniRef90_D8TNS1 E N S C L D R C A K Y W Q V V A I V G Q L L G A Q N
UniRef90_K1R273 T E S C I V N C V E R Y V D T A V A I Q K R F Q E
UniRef90_K1WUB0 E T T C I S Q C M D K Y M A A W N T V S R R L Q S E Q Q
UniRef90_G4TIF5 E E T C V G R C M E L Y L Q A
UniRef90_V9DPB3 E Q K C L T A C M E K Y I D T S R T Y T A R L Q K E S A A
UniRef90_UPI00044009BA A E A C F V N C I G H F I D T S Q
UniRef90_Q5CIP7 E K L C L W N C A Q N F L E S S E F V A S R
UniRef90_A9UUJ7 T A S C M S N C V S R F L D T S E L L L Q H I Q
UniRef90_A9NLN9 E G S C V S R C V E R Y I E A T Q I I S
UniRef90_T2M326 E Q K C V A M C M D R Y M D A W N L V S Q T Y Q E H G Q
UniRef90_O45319 E K Q C L Q R C M D R F M E V S Q T L Q K R L Q E E M A
UniRef90_R9AKM8 E E G C L N N C M Q R Y M E A F N I S T T Y
UniRef90_G2QE76 E Q T C L T S C M E K Y M
UniRef90_W7T8J9 E Q N C V A M C M D R Y I E T M N V V Q H S L S E R S A
UniRef90_Q6BHJ8 Q D A C V N Q C L E K Y M R S W N V V S K S Y
UniRef90_G4N7T5 E T A C V Q A C T E K Y I Q A
UniRef90_Q75B83 E L S C A D R C I A K A H A A N R A I G
UniRef90_G4VKK3 E Q K C V G L C M D R Y V D A W N L V S K V F A
UniRef90_M3JZF8 E L T C I A Q C R E K Y M R S W N V I S K A Y
UniRef90_F2SLF7 E Q T C L K T C M E K Y I A L W N T V S Q T Y
UniRef90_UPI000386FEF3 E Q K C I A M C M D R Y M D A
UniRef90_F2UFG5 D K N C I T R C A D R Y F E A F A Q V
UniRef90_I1COX5 E Q K C I D R C V A K Y I S I Q T M L G E K M
UniRef90_B4KH11 E Q K C V S L C M D R F M D S S R T Y G Q R L Q R E Q S
UniRef90_J9LXM1 E Q K C V S M C M D R Y M E T V S L V S K S F G E
UniRef90_B4ND48 E Q S C I A Q C M D R Y L E S F N L V S R A Y G Q
UniRef90_B6AJ50 E Q A C L W S C A Q R F L E S T D F I N R R S S E

	1	10	20	30	40																																																			
UniRef90_F1LIF8	M	D	K	L	K	Q	E	L	A	M	E	N	F	K	E	L	I	R	Q	M	S	E	K	C	Y	K	K	C	V	I	I	E	Y	R	E	G	D	L	T	K	G															
UniRef90_T1KUS0																																																								
UniRef90_I2GY95																																																								
UniRef90_Q6CA05																																																								
UniRef90_F4WFJ9																																																								
UniRef90_M4C105																																																								
UniRef90_UPI00022474D0																																																								
UniRef90_UPI0003F0C2E4																																																								
UniRef90_F1MIS2																																																								
UniRef90_UPI00046B39FC																																																								
UniRef90_Q4E1C1																																																								
UniRef90_I2H7Z5																																																								
UniRef90_S9V8T2																																																								
UniRef90_U6PMA2																																																								
UniRef90_U1NRE8																																																								



```

UniRef90_F1LIF8      E A V C L D R C V A K Y L D V H E K L G K R L
UniRef90_T1KUS0     E T K C L N F C V D N Y M D A W T K I S R A Y
UniRef90_I2GY95     E Q V C V D R C V A K I F R T H M I V
UniRef90_Q6CA05     E K N C T A Q C A Q K Y I
UniRef90_F4WFJ9     L K S C V R N C M D R Y M D S F N L V S K T Y S E
UniRef90_M4C105     Q Q N C L A L C I N R Y I D T M K V V S E A M V Q
UniRef90_UPI00022474D0 T E T C L V N C V N R F I D V S L L I T N R F T Q M
UniRef90_UPI0003F0C2E4 T E N C L S S C V D H F I D T T P P I T S R E A Q L
UniRef90_F1MIS2     E S V C L D P Y A S K Y L D I H E C M G K K L T E L S
UniRef90_UPI00046B39FC E Q K C I A M C T G Y M D A
UniRef90_Q4E1C1     E V R C V D R C S Q R Y L R T H D L I A N
UniRef90_I2H7Z5     N E L C V D Q C L K K Y M Q S W N S I S K R I Q Q A S A A
UniRef90_S9V8T2     E V H C I D R C A W R Y L R T H R T I S
UniRef90_U6PMA2     D K Q C L Q R C M D R F M D S W N L V S Q T L Q
UniRef90_U1NRE8     E K Q C L Q R C M D R F M D V S Q T L Q K R L Q E L N A G

```

```

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

```

Method	3	7	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	7	2	8	9
lupas_21	[Red bar]																						
lupas_14	[Red bar]																						
lupas_28	[Red bar]																						
jnet	[Red bar]																						
conf	[Red bar]																						
sol25	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
sol5			B	B	B	B	B	B															
sol0					B																		
jhmm	[Red bar]																						
jpssm	[Red bar]																						