

QUERY 1 10 20 30 40  
UniRef90\_E1L7K6 MEK K L D L S S K S T V V A E L L V D K H P  
UniRef90\_G5F190 M D H K L D L E K S T S V V Y D L L V Q Q E Y P  
UniRef90\_E1QVU9 M S D K T I D L D R S T S V V H D D L C C R D L P  
UniRef90\_G1WC55 M D K K I D L D S K P V V Y D L L V K S Q Y P  
UniRef90\_UPI00037AB6C3 M T N T I D F R N Q T V V A E L L A S H P  
UniRef90\_H1HVG9 M D K I I D F R N K T V V Y F E L L A T Q E Y P  
UniRef90\_U2QL95 M G K K I D L S K T V V F E L L T Q E Y P  
UniRef90\_D2MN40 M K V I D L E A T V F T E L L V A G E Y P  
UniRef90\_R5PJY4 M A K C I D F N K T V V Y F E L L A G E Y P  
UniRef90\_J5GFS3 M S K T I D L N K T P V V F E L L A K E Y P  
UniRef90\_K9CGR8 M E K V L D L L K R T V V A E L L V D G S H P  
UniRef90\_D4YGI2 M E N Q V D L L N K P V V K Q V L D S H P  
UniRef90\_X8IRT1 M A V K T I D M K K S V V Y D L L A T E F P  
UniRef90\_F5T3T7 M D K K L D L D K S T V V A S D L L T K E Y P  
UniRef90\_H1HNT5 M G K K L D L S R S V V Y D L L T K Q Y P  
UniRef90\_C6SQC5 M N N T I D L S K P V V A F E L L T K E H P  
UniRef90\_F7V1T6 M T K K I D L L T R T I F E D L L V K E Y P  
UniRef90\_U1WCC3 M T K K L D L S R T V I H D L L T E D Y P  
UniRef90\_UPI00035F0D07 M S K V I D L S K T V V Y E L L T S A D P  
UniRef90\_V2Y5N1 M S K K I D F S K T V V F E L L T N E D P  
UniRef90\_C4G9Q8 V H M V R V L D F N K K V A F E L L A K E D P  
UniRef90\_F8N7C5 M A K Q I D L N K T V V A E L L T S E Y P  
UniRef90\_Z4WZE4 M A K V I D L S S S V V Y E I T C C K K Y P  
UniRef90\_U2VNR4 M D K T L A L S S S V V Y D I T C C K K Y P  
UniRef90\_D7NEH2 M G K K I D L S R T V V Y D L L T T Q E Y P  
UniRef90\_D4JAM2 M A K K L D L N K T P V V F E L L V Q E Y P  
UniRef90\_C9LWU9 M K K E L D F N K T V V A E L L V E E F P  
UniRef90\_D3HDP5 M N N T I D L S K P V V A E T I K E H P  
UniRef90\_E9SFA8 M A K K I N L K K T V H D L L V K E E Y P  
UniRef90\_M7E765 M T N T I D L S R P V V A E I L L K E H P  
UniRef90\_UPI0003B389F3 M D K K I D L Q K S V V A F E I C T Q Y P  
UniRef90\_J3JPN8 M N N T I D L S K P V V A E L L T Q E H P  
UniRef90\_E6MTP2 M S K K I D L L K R S V V A E V L T Q Y P  
UniRef90\_A4VVE6 N T I D L N L P V V A E I I N Q H P  
UniRef90\_C9KPN8 M T M K K L D L K K S V V A E L I R E Q H P  
UniRef90\_UPI00035D2B06 M Q N Q V D L S L P V V A K T I E Q H P  
UniRef90\_E5V521 M E M D N T I D V S I L P V V A Q V I V D K H P  
UniRef90\_A3CPV1 M D N V I D L S L P V V A E V I E K Q P  
UniRef90\_UPI0003806566 M N K T I D L T K S V V Y D L L C T S Q D P  
UniRef90\_E6TV36 M K K E I N L N K S V V Y D L V T Q F P  
UniRef90\_Q38YH1 M A K Q I K L S Q S T V V Y E D L C K A Y P  
UniRef90\_S0FIW6 M E K V I D L S N K S V H D L C T A E N P  
UniRef90\_U2WJ14 K T L D L S K S V A E L V R Q Y P  
UniRef90\_UPI000378C4F0 N T I D L S I L P V V A E V L Q S H P  
UniRef90\_UPI00035E6C96 M N N T I D I N L P V V A E I L V K Q N P  
UniRef90\_D3LX09 M K K T L D L K K S V V A E L I Q E Y P  
UniRef90\_UPI0003631E6B M T K T I D F S Q T V V C D L A N K E Y P  
UniRef90\_V6Z070 M D N C I D F S H P H D L C T A E N P  
UniRef90\_UPI00042347CA M E K R I N L K K S V V A E L C S E Y P  
UniRef90\_R2RRT3 M T K T I D V G R S V Y E V V Q A Y P  
UniRef90\_UPI0002193905 T T L D L Q Q S L Y E L V T A H P  
UniRef90\_R2XG78 K K L D L S K S L Y E L V T L Y P  
UniRef90\_H1PJQ6 K P L D L S R S V Y E D L V K E Y P  
UniRef90\_S0NR14 D L T K S V V Y E I V T L Y P  
UniRef90\_UPI00037F4B34 M S K K L S L E E S V F E L V N R H P  
UniRef90\_S0KG87 K E L D L N L S L Y I D L V Q S N P  
UniRef90\_M3HLL1 M N D T I D I N L P V V A E I L R Q N P  
UniRef90\_W0E5D7 M S K T I D L S K T V V A E I C T E D S P  
UniRef90\_UPI00037DD06D N E T I D L T K L P V V A Q V V E N Q H P  
UniRef90\_X0PF82 M T E T I D L S K S V V A E V T O H P  
UniRef90\_UPI00047C2A1C M K K T I D L N E S V V Y E L C T Q H P  
UniRef90\_C3ASX6 M T K K I D F H Q T V V Y D L T Q Y P  
UniRef90\_F7NHG5 M T K Y I N L T D T V Y D V T T E K Y P  
UniRef90\_C2UUN6 K V I D M N Q T V V H D L A S Q H P  
UniRef90\_H1D071 K L I Y L N T K S V H D L A S Q H P  
UniRef90\_G5KGF8 D L N L P V V A Q L I K E H P  
UniRef90\_W1Q2U1 M D N W I D L N L P V V A T T L K A H P  
UniRef90\_H3NHF6 M L D N R I N L D Q S V V F K M I Q D H P  
UniRef90\_D4CQT4 M E K R I N G R A S I F E L V E E Y P  
UniRef90\_UPI000249344B M S Q K V I D F E V P I H Q L A Q E Y P  
UniRef90\_G4L551 D F S T K S V Y D L V L K A Y P  
UniRef90\_U4TQG0 K A T T S V V Y D L V Q E Y P  
UniRef90\_E4KPF7 M I D L D Q S V V F Q T I E T H P  
UniRef90\_UPI0004790AD8 M E M K T I D Y N K S V V Y E L T H Y P  
UniRef90\_U2SZG9 M D E S T V D L D R T V L E N A N A C P R F V N V  
UniRef90\_L0F7U6 K T I D L S K S V V A E I C S M Y P  
UniRef90\_UPI000375F136 M H N T I D F K K P V A D I L S K E H P  
UniRef90\_UPI000471D75F M Q K T L S I N E P I A F L V S R D P  
UniRef90\_I6RYY1 R E I D F N S T I L F E L V T E Y P  
UniRef90\_R9BZH2 M T K V L D L N R T I L E L T T Y P  
UniRef90\_T0U9U5 K E A D F S K N L F E D L V S E H P  
UniRef90\_E4KWQ4 K N I N L D E P V A S L I E K F P  
UniRef90\_A4J4X9 M T K T L N L D Q S V L F E L V K R H P  
UniRef90\_V7HTZ8 M E K V V D F E C P I Y E M A K D N P  
UniRef90\_J0N615 M N M N Y F K L T D T V Y D I T E K Y P  
UniRef90\_R4RL17 K V I D F N L P I K N Q L A D Q Y D  
UniRef90\_L0X4Q7 N T N E T I Y K N L C A D Q Y P  
UniRef90\_R9TXZ0 K K I D L N D S V Y E L C C T L H P  
UniRef90\_R5LXJ6 K L I N S N K N V Y Q L C K E Y P  
UniRef90\_C2CJJ9 K I D I N K N V Y D L V T E N P  
UniRef90\_E4SVM2 K E I N L H Q P I K T F A D Q Y P

QUERY R N T V G R K V S 50 60 70  
UniRef90\_E1L7K6 L H S V G K I M T I P K G G A K M K G I S M M D I V R T L E A N G Y E V I G L D  
UniRef90\_G5F190 L Q T M G R L M T I P K G G C K A K G I S D L D E V V S G L R K A A G F T S V E G D  
UniRef90\_E1QVU9 L N S M G R M M T I P K G G C K V K G I S D L D E V V S G L R K A A G F T S V E G H E  
UniRef90\_G1WC55 L N S V G K F M T I P K G G A A M R G I A M T D I V M A L L Q T K H G F E V L A G E  
UniRef90\_UPI00037AB6C3 L N S A G K I T S L K K G G S R L T G I S L E E T I V A R T L E T S K G G Y E V V S G G D  
UniRef90\_H1HVG9 L L A S A G K V M T V P K K G A A R M T K G I S M E K I V K A F E S K K G F E V S G A D  
UniRef90\_U2QL95 L R S V G K I M T I P K K G A Q M K G I S M A D V I G S L Q E K H G F E V I A G  
UniRef90\_D2MN40 F N T M G K I M T L K K G G A K V K K I P L D D Q I K T A F R E E K G F E V T G V D  
UniRef90\_R5PJY4 L N S M G R F I T I N K G A E M K G I P L E K V I K E V F R E E H G Y E I V G D  
UniRef90\_J5GFS3 L N S M G R F I T I N K G A A V K G I D L N K V I A A F E E H G Y T V V G D D  
UniRef90\_K9CGR8 L N V M G R I M T L P R G G A A V K G I P L E Q L V N E A A F E Q W N G Y T V I G G D  
UniRef90\_D4YGI2 R Q S V G K V M T L K K G G C K L N L D M T S V I A M F E D K G F E I I N  
UniRef90\_X8IRT1 L N T M G R V M T I P K G G S K L K G I D M T S V I A M F E D K G F E I I N  
UniRef90\_F5T3T7 L A S V G K L M N L K K G G A Q M K K I P L E E I V R A F R E K G F E I L E G E  
UniRef90\_H1HNT5 L N S V G K L V T L S K G G A A M R G I D M T T I V T T L F M A H G F E I L E G E  
UniRef90\_C6SQC5 L N T V G K V T T L L A G S K M A R N I P L E K I K Q T L E F N G Y E V I G D E  
UniRef90\_F7V1T6 L H S V G K I M T I P K G A K M K I S M A D V I A A L L E M K N G F E V T G E D  
UniRef90\_U1WCC3 L N T V G R V M T I P K G G C A I K E F K L D E V I A A L L E M K N G F E V T Q E D  
UniRef90\_UPI00035F0D07 L Q S A G R F M T I P Q G G A R L R K V I D M E S I I A A F R A N G Y E I E  
UniRef90\_V2Y5N1 R N S M G K I M T I P K K G A M V K G I P M P D I I A A F F M A H G F E V T G E  
UniRef90\_C4G9Q8 L K L M G K V M T V P K K G A A V K G I P L E R I V N R F E A G F R V I G D  
UniRef90\_F8N7C5 R N S A G R L M T I P R G A K L K G V D I L D I L T R L Q E N G F E I I G D  
UniRef90\_Z4WZE4 L Q T M G R F M T I P K G G C E H K G I D L E E L K A I F R S H G F T I L G D  
UniRef90\_U2VNR4 L Q S V G R F M T I P R G G C Y K E L A L S D I I A A F V E A G F T I L G D  
UniRef90\_D7NEH2 R N S V G K L I T I P K G A G M H G I L E M K A V I D A L E Q A G F E V L G D  
UniRef90\_D4JAM2 L N S V G R I V M T I P K K G A K M R N I S M M K V V P A L E M S N G F E I I G D  
UniRef90\_C9LWU9 L N V M G R I M T V P K G G V A I K G M K L E D V V R E L E A R G F T I K Q D E  
UniRef90\_D3HDP5 L N T V G K V T S L K A G A K L A N I I S L E K I Q R T L E F N G Y E V I G D  
UniRef90\_E9SFA8 L T L G R V M T I P K G A G M M K I P M E T V I N A F A E K N G Y E V I G D  
UniRef90\_M7E765 L K T L G R T T S L K A G S K L A K I P L E K I K Q T L E F N G Y E V K G D  
UniRef90\_UPI0003B389F3 M Q T A G C V M T L L N G A K L K G I D L K L I V E A L L Q K A G F E V E G D  
UniRef90\_J3JPN8 L N T V G K V T S L K T G S K M A G I S L D D I K K T L T F N G Y E V I G D  
UniRef90\_E6MTP2 R N S V G K L I T I P K G A G M H G I D M N T L L S T L K R H G F E V E  
UniRef90\_A4VVE6 L N T V G K V T S L K T G S K M T K I P L D R I Q Q V L E C N G Y E V I G G E  
UniRef90\_C9KPN8 L Q L M G R I M T I P R G A A V V K G I P M E K I R A T L E A K G F T I T G A E  
UniRef90\_UPI00035D2B06 R N T V G R V M T L K A G A K M V G V P L E K I V S A L E A N G Y D V I G D  
UniRef90\_E5V521 R N T V G R K T S L R M G S K L A G I K L E T I I S T L E M N G Y E V V G L D  
UniRef90\_A3CPV1 R N T V G R V V S I K K G A G M N G I D L N K I K Q T L E L N G Y E V V G  
UniRef90\_UPI0003806566 L N T A G R V M T I P K K G A K A R G K D L N H I I G T F R E R E G Y H V I G K E  
UniRef90\_E6TV36 L Q T A G R V M T I P K G G C R M K E I P L E K V I E E F E K H G F T V I A D D  
UniRef90\_Q38YH1 L N T A G R F M T I P K G A Q M K Q I P L S Q I V A T R E L E N D F S I K  
UniRef90\_S0FIW6 L N T A G R F M T I P K G A V M K G I D L G R I K R E L E N G F S I K  
UniRef90\_U2WJ14 L K M M G S I M T I P R G A A V V K G I P I E K I R A D L E E A G F T V I G G E  
UniRef90\_UPI000378C4F0 R Q T L G R A V S I K K G A K M K G I D M A K I K Q N L E W N G Y E I K G D  
UniRef90\_UPI00035E6C96 L N T V G K V T S L K K G S K L A G I S L D K I V K T L E F N G Y D V I G V E  
UniRef90\_D3LX09 Q H T V A K V M T I P Q G G A A I K H I A L G H V I R A F R K A G F A I E G R E  
UniRef90\_UPI0003631E6B L N T A G R V M T I P N G C R M K G I S F D V V K K T F E N N G Y E I K  
UniRef90\_V6Z070 L A T V G K V T S L K T G S R L A N I P L N D I K A T L F A N G Y E V K  
UniRef90\_UPI00042347CA L N T I G R V M T I P K G A I V K G I D M I D V V L A L K N N G F V L E G  
UniRef90\_R2RRT3 L Q T A G R Y M T I E K G A K L K K I P L E Q V V A A F Q A A G F E I  
UniRef90\_UPI0002193905 L N T M G R F M T I P K G A A M K V P L A Q I V A K L E A K G F E V I N D  
UniRef90\_R2XG78 L Q T A G R Y V T I P K G A K M K H I P M D Q I I Q T F E A N G F E V E G E  
UniRef90\_H1PJQ6 L H S V G K I M T I P K G A K M K G I S M L D I I S T L T S K G F K I V G E  
UniRef90\_S0NR14 L Q T A G R Y M T I P K G A R M K K I P L E E I V A T F K A N G F T V K G E  
UniRef90\_UPI00037F4B34 L Q T A G R F M T L S K G V K L K R M D L E T V R Q A F W R H G F E  
UniRef90\_S0KG87 L Q T A G R Y M T I P K G G A R L K K I P L E E I I A A F E E A G F T V K G  
UniRef90\_M3HLL1 L N T V G K I T S L K K G A K L A G I S L E K I V S L E L N G Y R V V G A E  
UniRef90\_W0E5D7 L N T A G R F M T I P K G A A M K K I S L D K L K E G F E S K G Y Q V K  
UniRef90\_UPI00037DD06D R H T V G R R V S I K K G A K L N G L D L G V I Q Q T L E Y N G Y K V I G G E  
UniRef90\_X0PF82 L N T M G R F M T I P K G A A M K H V P L D Q I I T E L Q N Q G F E V  
UniRef90\_UPI00047C2A1C L E T A G R I M T I P K G A R M K Q I D L T L V L D K L K A H G F D P V  
UniRef90\_C3ASX6 L Q T A G R I M T I P N G C R M K G I S L D T V K E S F K N N E F H I  
UniRef90\_F7NHG5 R K T L G R K T I T E T A L R S K K I N V E L F V Q K L E D A  
UniRef90\_C2UUN6 L Q T A G R V M T I P N G C R M K G I S F D F V K H T F E T N G F K I K  
UniRef90\_H1D071 L N T L G R F M T I P K G A M M M H I D M G K V I S T L L A H G F T L G G  
UniRef90\_G5KGf8 L N T L G K V T S L K A G S K L A K V P L N D I K T M L E C H G Y E V I G E E  
UniRef90\_W1Q2U1 L K T V G A V T S L E R G A S L I G L D L Q V L I Q E L H H N G Y L V K G V D  
UniRef90\_H3NHf6 L Q S V G R V T S L R E K G A K L I N K P L A S I E N L E W N G Y Q I I  
UniRef90\_D4CQT4 L K S V G R V M N L E K G S R M K G I P M E K I K E S F R A H G  
UniRef90\_UPI000249344B L N T V G K I I N L K K G S K A M G I P Q D K I A Q A F E E R G Y E L K N Y D  
UniRef90\_G4L551 L Q T A G R Y M T I P K G A K M K K I P L E E Q V V E A F A H G F E V K G V E  
UniRef90\_U4TQG0 L N S V G R F V D L T K G A R L M G I P F S T I Q E A F A G Y E V I T D D  
UniRef90\_E4KPF7 L N S V G K I T S L R S G C K L I R L D I K K L I Q T L H N N G Y Q V K G V E  
UniRef90\_UPI0004790AD8 L Q T A G R V M T I P K G C R M K G I P F D R V K E T M K A H G F  
UniRef90\_U2SZG9 M Q T A G R V M T P R K G A D V K G V D V A D M V R A F R E A G L T V V I G  
UniRef90\_L0F7U6 L N T A G R F M T I P K G A A M K K I D M G Y I K E T F A E K G F E I  
UniRef90\_UPI000375F136 V N T V G K V T S L K A G S T L A H I P I E K I R E T L I M H G Y D I E  
UniRef90\_UPI000471D75F L Q T A G R F M T L A K G I K L K K I D I D T V K Q T F R R H G F I I  
UniRef90\_I6RY11 L Q T A G R Y M T I P K G A Q M K K I P L E Q I V T A F E T S G F I V K G  
UniRef90\_R9BZH2 M Q T A G R I M T I P K G G C R M K K I S I E T V K Q A C I D H G F T I M E E  
UniRef90\_T0U9U5 L Q T A G R Y M T I P K G A Q M K K I P L E K I I Q S F E N Q G F L V K G V D  
UniRef90\_E4KWQ4 L S T V G K M V S I K K G A K I K N I D L D L I K E K L R E E G F N I V D E E  
UniRef90\_A4J4X9 L N T A G R V M T I P K G A A L K K I D L D T I K Q T F Q E K G Y I I K N  
UniRef90\_V7HTZ8 L T S V G R I V N L K K G S R A M G I D L Q E I K A K F E A H G Y E V K N  
UniRef90\_J0N615 R K T M G R T I S L E T A L K S R K I N P E L F E Q K L  
UniRef90\_R4RL17 L E S V G R L V N L N K G C R A M G I D K D K V V A T F R D H G F E V I N H D  
UniRef90\_L0X4Q7 F N T V S K V M T D K A I K M K S I D I E K L R V K F N E H G F D F E N D  
UniRef90\_R9TXZ0 L E T A G R I V T I P K G A R M M Q I E W P H V L D I L K A H G F D P V  
UniRef90\_R5LXJ6 F N T V A K V M T I D K A S K I K N I D M K E I I K K F E E K G F I E N D  
UniRef90\_C2CJ9 F N T M A K M S I K R G A K M L G I E N I K E K L E A G F E V I  
UniRef90\_E4SVM2 L D T V G R L M T L P M G C R A M G F D L E E V K E K L R L K G Y E V I

QUERY

UniRef90\_E1L7K6  
UniRef90\_G5F190  
UniRef90\_E1QVU9  
UniRef90\_G1WC55  
UniRef90\_UPI00037AB6C3  
UniRef90\_H1HVG9  
UniRef90\_U2QL95  
UniRef90\_D2MN40  
UniRef90\_R5PJY4  
UniRef90\_J5GFS3  
UniRef90\_K9CGR8  
UniRef90\_D4YGI2  
UniRef90\_X8IRT1  
UniRef90\_F5T3T7  
UniRef90\_H1HNT5  
UniRef90\_C6SQC5  
UniRef90\_F7V1T6  
UniRef90\_U1WCC3  
UniRef90\_UPI00035F0D07  
UniRef90\_V2Y5N1  
UniRef90\_C4G9Q8  
UniRef90\_F8N7C5  
UniRef90\_Z4WZE4  
UniRef90\_U2VNR4  
UniRef90\_D7NEH2  
UniRef90\_D4JAM2  
UniRef90\_C9LWU9  
UniRef90\_D3HDP5  
UniRef90\_E9SFA8  
UniRef90\_M7E765  
UniRef90\_UPI0003B389F3  
UniRef90\_J3JPN8  
UniRef90\_E6MTP2  
UniRef90\_A4VVE6  
UniRef90\_C9KPN8  
UniRef90\_UPI00035D2B06  
UniRef90\_E5V521  
UniRef90\_A3CPV1  
UniRef90\_UPI0003806566  
UniRef90\_E6TV36  
UniRef90\_Q38YH1  
UniRef90\_S0FIW6  
UniRef90\_U2WJI4  
UniRef90\_UPI000378C4F0  
UniRef90\_UPI00035E6C96  
UniRef90\_D3LX09  
UniRef90\_UPI0003631E6B  
UniRef90\_V6Z070  
UniRef90\_UPI00042347CA  
UniRef90\_R2RRT3  
UniRef90\_UPI0002193905  
UniRef90\_R2XG78  
UniRef90\_H1PJQ6  
UniRef90\_S0NR14  
UniRef90\_UPI00037F4B34  
UniRef90\_S0KG87  
UniRef90\_M3HLL1  
UniRef90\_W0E5D7  
UniRef90\_UPI00037DD06D  
UniRef90\_X0PF82  
UniRef90\_UPI00047C2A1C  
UniRef90\_C3ASX6  
UniRef90\_F7NHG5  
UniRef90\_C2UUN6  
UniRef90\_H1D071  
UniRef90\_G5KGF8  
UniRef90\_W1Q2U1  
UniRef90\_H3NHF6  
UniRef90\_D4CQT4  
UniRef90\_UPI000249344B  
UniRef90\_G4L551  
UniRef90\_U4TQG0  
UniRef90\_E4KPF7  
UniRef90\_UPI0004790AD8  
UniRef90\_U2SZG9  
UniRef90\_L0F7U6  
UniRef90\_UPI000375F136  
UniRef90\_UPI000471D75F  
UniRef90\_I6RYY1  
UniRef90\_R9BZH2  
UniRef90\_T0U9U5  
UniRef90\_E4KWQ4  
UniRef90\_A4J4X9  
UniRef90\_V7HTZ8  
UniRef90\_J0N615  
UniRef90\_R4RL17  
UniRef90\_L0X4Q7  
UniRef90\_R9TXZ0  
UniRef90\_R5LXJ6  
UniRef90\_C2CJ9  
UniRef90\_E4SVM2

UniRef90\_U4QY50  
UniRef90\_J7IY67  
UniRef90\_I7L9J0  
UniRef90\_H3RSE4  
UniRef90\_E0RF98  
UniRef90\_F4BQ43  
UniRef90\_M5P8D2  
UniRef90\_C7RF04  
UniRef90\_Q1PXM7  
UniRef90\_E6LQK2  
UniRef90\_C7MLH3  
UniRef90\_V7ICB9  
UniRef90\_UPI0002E285E8  
UniRef90\_C0QVF4  
UniRef90\_A8MIV4  
UniRef90\_R9KA69  
UniRef90\_C8NEK3  
UniRef90\_UPI00046D5EFA  
UniRef90\_I5AVQ2  
UniRef90\_D6XYM1  
UniRef90\_I7JZI6  
UniRef90\_I0GST4  
UniRef90\_K7VWZ9  
UniRef90\_K0NXH2  
UniRef90\_I7KTR6  
UniRef90\_D4YH56  
UniRef90\_H3NDE3  
UniRef90\_F0GW26  
UniRef90\_M1ZKJ8  
UniRef90\_UPI000475CA01  
UniRef90\_D9QCZ5  
UniRef90\_N2ALX3  
UniRef90\_B6WAA0  
UniRef90\_UPI00036F76A3  
UniRef90\_I3IN68  
UniRef90\_K2NV14  
UniRef90\_UPI000465003C  
UniRef90\_UPI0004798A01  
UniRef90\_UPI0004799097  
UniRef90\_UPI0004120850  
UniRef90\_C8PRV0  
UniRef90\_F5IWU8  
UniRef90\_UPI000362194C  
UniRef90\_D0GP17  
UniRef90\_Q5LZV4  
UniRef90\_W4V612  
UniRef90\_R5J233  
UniRef90\_E7MPR8  
UniRef90\_U4KTC7  
UniRef90\_A8MFS5  
UniRef90\_U6R115  
UniRef90\_M2CJ50  
UniRef90\_D1CH32  
UniRef90\_S5ZWX6  
UniRef90\_G5GF82  
UniRef90\_U2KPE9  
UniRef90\_O30068  
UniRef90\_A9B4L6  
UniRef90\_F2NQR3  
UniRef90\_I7LBE1  
UniRef90\_U2SW04  
UniRef90\_S3K2D2  
UniRef90\_D8IF14  
UniRef90\_C7NDM7  
UniRef90\_UPI00036D56BB  
UniRef90\_G8ULS3  
UniRef90\_W4UN00  
UniRef90\_D5U9T2  
UniRef90\_F8X1Z6  
UniRef90\_I4EE83  
UniRef90\_B4UMT0  
UniRef90\_I6Z5B8  
UniRef90\_C2BFQ1  
UniRef90\_UPI00036F6EBA  
UniRef90\_B3E634  
UniRef90\_E8N0W2  
UniRef90\_G2H638  
UniRef90\_D1C1F6  
UniRef90\_E4KVC1  
UniRef90\_F9MNA8  
UniRef90\_UPI000255CAB3  
UniRef90\_X1E3U3  
UniRef90\_D7JFY1  
UniRef90\_F8E521  
UniRef90\_A6Q606  
UniRef90\_E4RN44  
UniRef90\_E6W5W9  
UniRef90\_D9SQC7  
UniRef90\_D4H2F4  
UniRef90\_K7QWS6  
UniRef90\_Q023D5  
UniRef90\_A1VB65

1 10 20 30 40

MSK[V]L[DL]S[K]S[V]H[D]I[C]K[E]F[P]E[M]I[V]V[L]K[E]M[G]F[E]N[L]A[A]P[G]M  
MTQ[P]V[L]D[L]S[T]R[S]L[Y]D[L]L[T]E[D]Y[P]E[L]I[Q]I[L]H[E]M[G]F[E]N[L]A[A]P[G]M  
UniRef90\_U4QY50  
UniRef90\_J7IY67  
UniRef90\_I7L9J0  
UniRef90\_H3RSE4  
UniRef90\_E0RF98  
UniRef90\_F4BQ43  
UniRef90\_M5P8D2  
UniRef90\_C7RF04  
UniRef90\_Q1PXM7  
UniRef90\_E6LQK2  
UniRef90\_C7MLH3  
UniRef90\_V7ICB9  
UniRef90\_UPI0002E285E8  
UniRef90\_C0QVF4  
UniRef90\_A8MIV4  
UniRef90\_R9KA69  
UniRef90\_C8NEK3  
UniRef90\_UPI00046D5EFA  
UniRef90\_I5AVQ2  
UniRef90\_D6XYM1  
UniRef90\_I7JZI6  
UniRef90\_I0GST4  
UniRef90\_K7VWZ9  
UniRef90\_K0NXH2  
UniRef90\_I7KTR6  
UniRef90\_D4YH56  
UniRef90\_H3NDE3  
UniRef90\_F0GW26  
UniRef90\_M1ZKJ8  
UniRef90\_UPI000475CA01  
UniRef90\_D9QCZ5  
UniRef90\_N2ALX3  
UniRef90\_B6WAA0  
UniRef90\_UPI00036F76A3  
UniRef90\_I3IN68  
UniRef90\_K2NV14  
UniRef90\_UPI000465003C  
UniRef90\_UPI0004798A01  
UniRef90\_UPI0004799097  
UniRef90\_UPI0004120850  
UniRef90\_C8PRV0  
UniRef90\_F5IWU8  
UniRef90\_UPI000362194C  
UniRef90\_D0GP17  
UniRef90\_Q5LZV4  
UniRef90\_W4V612  
UniRef90\_R5J233  
UniRef90\_E7MPR8  
UniRef90\_U4KTC7  
UniRef90\_A8MFS5  
UniRef90\_U6R115  
UniRef90\_M2CJ50  
UniRef90\_D1CH32  
UniRef90\_S5ZWX6  
UniRef90\_G5GF82  
UniRef90\_U2KPE9  
UniRef90\_O30068  
UniRef90\_A9B4L6  
UniRef90\_F2NQR3  
UniRef90\_I7LBE1  
UniRef90\_U2SW04  
UniRef90\_S3K2D2  
UniRef90\_D8IF14  
UniRef90\_C7NDM7  
UniRef90\_UPI00036D56BB  
UniRef90\_G8ULS3  
UniRef90\_W4UN00  
UniRef90\_D5U9T2  
UniRef90\_F8X1Z6  
UniRef90\_I4EE83  
UniRef90\_B4UMT0  
UniRef90\_I6Z5B8  
UniRef90\_C2BFQ1  
UniRef90\_UPI00036F6EBA  
UniRef90\_B3E634  
UniRef90\_E8N0W2  
UniRef90\_G2H638  
UniRef90\_D1C1F6  
UniRef90\_E4KVC1  
UniRef90\_F9MNA8  
UniRef90\_UPI000255CAB3  
UniRef90\_X1E3U3  
UniRef90\_D7JFY1  
UniRef90\_F8E521  
UniRef90\_A6Q606  
UniRef90\_E4RN44  
UniRef90\_E6W5W9  
UniRef90\_D9SQC7  
UniRef90\_D4H2F4  
UniRef90\_K7QWS6  
UniRef90\_Q023D5  
UniRef90\_A1VB65

UniRef90\_U4QY50 L N T A G R I L M T I P K G A A M K G I E L Q K L K E T L A G K G F S I K  
UniRef90\_J7IY67 R K T V G R K L P V A E G L K R H G I S L E E A K R K L E A K G F C V V S E D  
UniRef90\_I7L9J0 L D S T V G R V M T I P L N R G A Q A M H I D L D A K I K K A F F E D K G Y K V I  
UniRef90\_H3RSE4 L D T V G R F V N I P N R G C L A M N I D L D K H L V I D T F K R N G Y E V I N H D  
UniRef90\_E0RF98 L Q I A G R F M T I S K G I A L K K V A M E T V E R T F L Q H G F T I K  
UniRef90\_F4BQ43 L E T V G R Y M T I P K G A R M K N I D L Q V I I D Q L E Q L G F T I K  
UniRef90\_M5P8D2 L E T A G R I M T I P K G A R L K N I D L T H I L T I L R E Q G F P V G D E  
UniRef90\_C7RF04 L K S M G K K T S L K R G A S L M G I D L E N L E D K L E K N G Y E V C  
UniRef90\_Q1PXM7 R N T M G R V A T I L D M A A K M H N V D R E K F I Q S L N D  
UniRef90\_E6LQQ2 R K S M G K L L S I E A A L K S K N I N V D V F E R Q L V E A  
UniRef90\_C7MLH3 R D T V G R M M T P A K G A M V K D V P I E T M V A A F Q E A G F V V E G F E  
UniRef90\_V7ICB9 L Q T A G R F M T I P K K A S A M R K I P M E R I I E E F K N K G Y E V E  
UniRef90\_UPI0002E285E8 L S S V G K F I S I P K K G A G I K N I G L D I I R E K L K E G G F N I E D E  
UniRef90\_C0QVF4 F N T V S K I M T I L S K A A K M K N I D N N E L R K K L N E Y G F E L I K  
UniRef90\_A8MIV4 L N T A G R I M T I S P K G A L M K G I E M D V I R K E F E D R G F Y I K  
UniRef90\_R9KA69 L A V M G K V M T I P N G A A I K N I P M D K V F E T F E K H G F E V K T E  
UniRef90\_C8NEK3 V Q T V G R I T S L K K G S K I A K I P L T T I V E T L E A N G Y I V K  
UniRef90\_UPI00046D5EFA R K T M G K V A T I L E N A A A L A G I P V D D L V R T L R Q A  
UniRef90\_I5AVQ2 L K L I G R S R S L L K E E A D R R N I L P E E L I K K L K L G C Y E A V D R D  
UniRef90\_D6XYM1 L Q S M G R I M T I P K G C R A K G R D L G D V I R Q L E E M G Y D V V  
UniRef90\_I7JZl6 L Q T V G R V M T I L E L G A K A M K L D L A K V K N D L R K R G Y E  
UniRef90\_I0GST4 L K V M G N I M T I P R A A A M K G V E L G K V V E A L K A A G F S V M N V  
UniRef90\_K7VWZ9 L Q T A G R M A T I P M G A K M K H I D W D K I V H V F A E A G F E  
UniRef90\_K0NXH2 L N T V G R V M N I K L G S Q A M G G F D L A E F K Q K L E E K G Y Q V  
UniRef90\_I7KTR6 L N T V G R V M T I P K G A M L R G F D I E K I K N E F I K N G F E I I  
UniRef90\_D4YH56 R Q S I G Q F V T L N R G A K I A G V S V A F I C Q Q L I Y N G Y Q P I G V  
UniRef90\_H3NDE3 L H T V G R M V S P K K G A K Q I G I S V E T L V R K K L E D L G Y E V K G H E  
UniRef90\_F0GW26 F N T M A K K M S I K R G A K M L G I S E D V D K K L E D N G Y E V I  
UniRef90\_M1ZKJ8 R K L M G K T T S L E M A L K S K R V N V D L F T E K L I E  
UniRef90\_UPI000475CA01 R R T M P R L V T L A Q A A R I G G L E P G A L I E R L N R A G L E V A G E  
UniRef90\_D9QZC5 R N S L G K T V T L E M A L S M R K L N Q A L F I E K L E E  
UniRef90\_N2ALX3 L N T V G R V M N I L E L G S K A M G F D I E D V K K K L E E K G Y K  
UniRef90\_B6WAA0 L K T I G K K M S I R R G A K M V G I D N V E K K L E D L G Y E I V N  
UniRef90\_UPI00036F76A3 L Q T A G R L M T I L E K G A A L K R I S H E Q M R Q V F A Q H G Y T L C  
UniRef90\_I3IN68 R N T L A R T T S L G Q A V Q I N P V N L E D L L K A L N D A  
UniRef90\_K2NVl4 L Q T A G R M V T I P V G A K M K H I D W D E L V R V F A A N G F E F T D E  
UniRef90\_UPI000465003C R N T I G K T V T L E M A L S M R K M N A E A F L A K L D E  
UniRef90\_UPI0004798A01 R K T V A K V A S L K Q V A E V G N L D L S V L I T T L R A A G L S V S G E D  
UniRef90\_UPI0004799097 L Q V M G N I M T I P R A A A M Q G V A M E A V I A A F R K R G F S V V N G E  
UniRef90\_UPI0004120850 R K T V A R V T S I P K Q V A E V G I P P V D L I N R L R E A G F S P F E T D  
UniRef90\_C8PRV0 R K L M G K K I T L E K A F L S K K L D V D E L V E I I E Q N  
UniRef90\_F5IWU8 R R T I A K V T S L Q Q A A G V A G L S P P L L I Q K L R K A  
UniRef90\_UPI000362194C L Q T A G R Y M T L N K G A M L K K M D V D T V R Q A F A M Q G F  
UniRef90\_D0GP17 F E S M A K N I N L N M A L K A K K I N P E L F E E K L  
UniRef90\_Q5LZV4 L N T V G K V T S L K A G S K L S N I P L S K I K  
UniRef90\_W4V612 R K T V S Y M I T L E Q A A A F K G M H V D E L I R I L I E  
UniRef90\_R5J233 L E M M G K K V S L S M A L K L K M N V D L F E E R L  
UniRef90\_E7MPR8 E N P H T K V M T I P L M A A A N H G V E P S M I V K A F Q D A G F T V I N  
UniRef90\_U4KTC7 I Q T V G R F M S I N Q G S S L R K I D I E V I K E R F K S Y G Y Q I K G D  
UniRef90\_A8MFS5 R K S L G K S I S L D M A C T S K K V N V E L F E Q K L V D A  
UniRef90\_U6Rl15 R R T V A K V T S I Q Q A A K I A G I S P S V M V Q T L R K A  
UniRef90\_M2CJ50 R K I M G K K T S I L E K A L L T K N L D I G E L I E V I E Q N  
UniRef90\_D1CH32 R K V Q S R L V T V E Q A A R I A G M D P D D L V R R L N A  
UniRef90\_S5ZWX6 R K M M G K K I S I E K A L L S K K L D T E K  
UniRef90\_G5GF82 R K T I G K T I S I E L A L K S K H I D T E L F K E M L E  
UniRef90\_U2KPE9 R S L M G K K I S L E N A L L S K K L D V S  
UniRef90\_O30068 R K T L A K T I T L G R A K M L K K L S D E E F E E M L R K  
UniRef90\_A9B4L6 R R V L A R M V T L E Q A A Q I A Q L E P A S L V Q A L N Q A  
UniRef90\_F2NQR3 R R T M P R L V T V A Q A A R I A G M P P E T L V S Q L N A A  
UniRef90\_I7LBE1 V S T V G R M M T L R L G A K A M G F E L E K V K A D L I E K G Y Q  
UniRef90\_U2SW04 F D T M G K T I R I D M A L K S K K I N P E L F E E R L  
UniRef90\_S3K2D2 R E L M A K Q I S L Q T A L L S R G L D T A E I V A V I E K T A E E A E N R D  
UniRef90\_D8IF14 F N T I A K K I T I K K A L E I K N I S E V E L I K K F K E N G F Y I F N  
UniRef90\_C7NDM7 L E V M G K N I K L R M A L M S K K I N Q E L F V E K L E  
UniRef90\_UPI00036D56BB R N T V A K V T S L Q Q A A K V G N V N V D M V N T L R E A G M P E L G E D  
UniRef90\_G8ULS3 R R T V A K V T S L R Q A A K V G N A N I V E M V N S L R Q A A G Q S I S D E  
UniRef90\_W4UN00 R R T I A K V T S L Q Q A A S I A K I P P A Q V F L R E A  
UniRef90\_D5U9T2 F N T I S K F M T I N N A L K M K D I D I K D I K D K L N E Y G F D I  
UniRef90\_F8X1Z6 R R T V A K V T T L Q Q A A K V A G L S P L L L L E T L R Q A  
UniRef90\_I4EE83 R K V Q S R L V T V A Q A A E V I A G M D P T E L V R S L N Q A  
UniRef90\_B4UMT0 R R T V A K V A T L R Q V S V V G G V P L A T L I E R L R T A  
UniRef90\_I6Z5B8 R K T V A K V A T L K Q A A Q L I A G M P V A M L I N K L R  
UniRef90\_C2BFQ1 V K S L A K K V S L K R G A K M M G L S D Y K E K L E A L G Y E L C  
UniRef90\_UPI00036F6EBA R E G Y G R L V T L E Q A L T M K R I D A E T F I G L L E Q  
UniRef90\_B3E634 L A G V G G F L A T L E R A A L T K N Y D L D N F L G L L Q Q K  
UniRef90\_E8N0W2 R R T I G Q L A T L E K V A Q I G N V T V L E L V N T L R R A  
UniRef90\_G2H638 R N T L G R V A T L E Q A A D I A G L E V N  
UniRef90\_D1C1F6 R R V Q S R L V T V E Q A A A L G G M E P A E L V R A L N R A G I E V  
UniRef90\_E4KVC1 R K S V A P R T P K L A A Q M G G V D L A L L V N T L R Q A  
UniRef90\_F9MNA8 L N V V K I S D I A A K K N I P L G H I R K L R K H G Y E V E G N E  
UniRef90\_UPI000255CAB3 R K T I A K V T T L Q Q A A A V G N V K V Q D L V N R L R  
UniRef90\_X1E3U3 R K T V A K V A T L K H I A A S V G N V P L N E L I N K L R Q  
UniRef90\_D7JFY1 R D T V A K A T S L Q Q L A K A G G Y D I A E M I N T L R E A  
UniRef90\_F8E521 L K S V G K I L K L E S A L K S K Y D V E T Y I N M L E D K  
UniRef90\_A6Q606 R R T V A K I L A S V K Q A A A V G G M D P V D L V N Q L R  
UniRef90\_E4RN44 R K V F G S K I T L K Q A A A L K N I D L D K L V E L M E E  
UniRef90\_E6W5W9 V Q T I G R F L K L Q S L A K Q G N Y D L D A L I G L L E E A  
UniRef90\_D9SQC7 R K V F G K S I S L E A A L K K K I N V E T F M A E L I E K  
UniRef90\_D4H2F4 L N T V A K I M T I E A A C H M K G V N L E N F L N A L N S A  
UniRef90\_K7QWS6 R R T M P N I V T V A Q A A E M G G L E P G T L V A R L N R A  
UniRef90\_Q023D5 R R T V A K I A T L E Q V A A I G G V N L Q S M M L K R A A  
UniRef90\_A1VB65 R N T L G R V A T L Q Q A A D L A G L E L T G L M A H L A R A



UniRef90\_U4QY50  
UniRef90\_J7IY67  
UniRef90\_I7L9J0  
UniRef90\_H3RSE4  
UniRef90\_E0RF98  
UniRef90\_F4BQ43  
UniRef90\_M5P8D2  
UniRef90\_C7RF04  
UniRef90\_Q1PXM7  
UniRef90\_E6LQQ2  
UniRef90\_C7MLH3  
UniRef90\_V7ICB9  
UniRef90\_UPI0002E285E8  
UniRef90\_COQVF4  
UniRef90\_A8MIV4  
UniRef90\_R9KA69  
UniRef90\_C8NEK3  
UniRef90\_UPI00046D5EFA  
UniRef90\_I5AVQ2  
UniRef90\_D6XYM1  
UniRef90\_I7JZI6  
UniRef90\_I0GST4  
UniRef90\_K7VWZ9  
UniRef90\_K0NXH2  
UniRef90\_I7KTR6  
UniRef90\_D4YH56  
UniRef90\_H3NDE3  
UniRef90\_F0GW26  
UniRef90\_M1ZKJ8  
UniRef90\_UPI000475CA01  
UniRef90\_D9QZC5  
UniRef90\_N2ALX3  
UniRef90\_B6WAA0  
UniRef90\_UPI00036F76A3  
UniRef90\_I3IN68  
UniRef90\_K2NV14  
UniRef90\_UPI000465003C  
UniRef90\_UPI0004798A01  
UniRef90\_UPI0004799097  
UniRef90\_UPI0004120850  
UniRef90\_C8PRV0  
UniRef90\_F5IWU8  
UniRef90\_UPI000362194C  
UniRef90\_D0GP17  
UniRef90\_Q5LZV4  
UniRef90\_W4V612  
UniRef90\_R5J233  
UniRef90\_E7MPR8  
UniRef90\_U4KTC7  
UniRef90\_A8MFS5  
UniRef90\_U6RI15  
UniRef90\_M2CJ50  
UniRef90\_D1CH32  
UniRef90\_S5ZWX6  
UniRef90\_G5GF82  
UniRef90\_U2KPE9  
UniRef90\_O30068  
UniRef90\_A9B4L6  
UniRef90\_F2NQR3  
UniRef90\_I7LBE1  
UniRef90\_U2SW04  
UniRef90\_S3K2D2  
UniRef90\_D8IF14  
UniRef90\_C7NDM7  
UniRef90\_UPI00036D56BB  
UniRef90\_G8ULS3  
UniRef90\_W4UN00  
UniRef90\_D5U9T2  
UniRef90\_F8X1Z6  
UniRef90\_I4EE83  
UniRef90\_B4UMT0  
UniRef90\_I6Z5B8  
UniRef90\_C2BFQ1  
UniRef90\_UPI00036F6EBA  
UniRef90\_B3E634  
UniRef90\_E8N0W2  
UniRef90\_G2H638  
UniRef90\_D1C1F6  
UniRef90\_E4KVC1  
UniRef90\_F9MNA8  
UniRef90\_UPI000255CAB3  
UniRef90\_X1E3U3  
UniRef90\_D7JFY1  
UniRef90\_F8E521  
UniRef90\_A6Q606  
UniRef90\_E4RN44  
UniRef90\_E6W5W9  
UniRef90\_D9SQC7  
UniRef90\_D4H2F4  
UniRef90\_K7QWS6  
UniRef90\_Q023D5  
UniRef90\_A1VB65

1 10 20 30 40

UniRef90\_D3DH38 I N E D T N V G K L L E R F P Q A L L E L L T R Y G F T P L K N N P I L A  
UniRef90\_E0RQZ2 T L T P H T K I S E L I L A A H P D M A D S L A G V A F F S L L K N N P I L A  
UniRef90\_UPI00036C5EFE M I L S F K D K I G G L I L A K K S N P P F L L D Y F V D K S G F F S K L K N E P L M  
UniRef90\_G9XGC1 V N E H T K I A A L L K H H P Q A L L E N L V S L A F F E K L R N N P L L  
UniRef90\_M7NKS2 R Y I D E S M T I L E L C E K Y P E S L L E F L E S K G F F K N L S N E T M  
UniRef90\_C3W9N7 M I N I D D K I Y D T V Q Q D E N V L L E F L K A N G F F E N L A K P N M  
UniRef90\_H2J536 K E I T L A T T I A D L L K N Y P E G M K D L T L V G L N F K N L N N E P V L  
UniRef90\_E0QGS0 M E N K I D V N E N L F E L I T K K F P S L L J A V L V N K G F F N K Q L D E D K  
UniRef90\_A6Q9V5 I T P D T K I G D F L A A H P D Q Q E A L I A R E F F A K L R N E P I L  
UniRef90\_E3DPC0 M N K Y F S I N D K I Y D T V E K N P P R A L L E F L T A N G F F S Q F M D Q S L  
UniRef90\_UPI000405677F I T P D T K I G D F L A A H P D Q Q E A L I A R E F F A K L R N E P I L  
UniRef90\_E0E4X3 M N K Y F S I N D K I Y D T V E K N P P R A L L E F L T A N G F F S Q F M D Q S L  
UniRef90\_B6YU21 I T P D T K I G D F L A A H P D Q Q E A L I A R E F F A K L R N E P I L  
UniRef90\_D7N5D1 I T P D T K I G D F L A A H P D Q Q E A L I A R E F F A K L R N E P I L  
UniRef90\_UPI00036AA6E0 M E K I D V N E N L F E L I T K K F P S L L J A V L V N K G F F N K Q L D E D K  
UniRef90\_E4TIB3 M E R V I N E N M T I L E L V T N K I Y D T V Q Q D E N V L L E F L K A N G F F E N L A K P N M  
UniRef90\_A8SMN9 M E K I N F D D K I L Y N I L V N G N E K L L Q F F L I N N G F F D Q L K N E K M  
UniRef90\_R9R9B2 Y I S K S M S I K S I V E K Y P E T I P V F K N I G F T K G L D N D E T L  
UniRef90\_F0LLP4 N S E I T P E T K I G T L L D R F P K L E K T F L E M A F K L R N E P V L  
UniRef90\_X0VJY8 K Y I N E K M L K E I L E K Y P E T I D F F T S K G F F K N L S S D A E V  
UniRef90\_E3H9V5 D I N Q T V Y K L C Q T Q N K P E T I R D F L T S K G F F N N L S S D A E V  
UniRef90\_D1VS44 L T K D T T I Y T L S Q E Y P F L L E N A L A E H N F F E K L K S N D M L  
UniRef90\_E8RBE1 L S P K T K I G A L V A A Y P F L L E Y L A A R A F E K L R N P L L  
UniRef90\_S7T2V3 I S K E M S I D I V Q Q Y P Q T V E V F A S F G L G C L G C  
UniRef90\_UPI000416D2FD I N S Q T K I S A L L V S R H P D A L E A I V A S L S F F K L R N P V L  
UniRef90\_UPI000368937D I D L T I S A D L V S R H P E T V L P V L S S N G L H L K L F V D Q Q V  
UniRef90\_A1AKV8 I Q P Q M T I K Q I L D T W P Q T L D V F T A N G F F E Q F A Q P E M  
UniRef90\_Q1JY54 L L E L G F D H F K I P N M  
UniRef90\_E3WIK4 P D M K I K K V L E L Y E G M L D V V V E L S F K R L R N P V L  
UniRef90\_S0EW70 L T K D T T I H F L T S E Y P F L I E A L H N G S F F E K L K N P L L  
UniRef90\_B8IZZ2 M I N G N I T V L E L S E A H P E A F N L F V S K G F F D N F K N E T T  
UniRef90\_D4H1N0 L S A D T R L S E L L A A H P L V K D Y L I S L T F K K L K N P L L  
UniRef90\_V5WE15 N V L D I N R H V G E V F E A Y P Q L E D I K T V S Y K N L K S N P I L  
UniRef90\_H1XVL4 R T V S L K T K I G G L L D T Y N P F L L D F L T E Q S F S F K L K S P I L  
UniRef90\_M1WPL8 I A A N T K I S A I L K A N P A A I E A I A S I N F E K L R N P L L  
UniRef90\_U2TJS7 L S A T T R I S T I L R E N P A A L E A I V S I N F E K L R N P V L  
UniRef90\_UPI0004054B74 D L N K K I A E L I T E E Y P V V I S V L V N K G F N Q L D D E T K  
UniRef90\_M5E332 M K S R I D V N K N L F E I T E E Y P V V I S V L V N K G F N Q L D D E T K  
UniRef90\_Q3A2R3 M S S K I H P E M R I A E L I T E E Y P V V I S V L V N K G F N Q L D D E T K  
UniRef90\_F0S4Y8 M E S K T K I N D N T S I S E I I K T E K A A I D A I A E V S L Q R L K I P V L  
UniRef90\_D5MIC2 I D E K T T L S K L I K H S P D V V D Y L S N G F F E K L K T P M  
UniRef90\_W3Y3M9 T I D S D S L I S E L L R Q Y P E T I P V F K N I G F K G M E N Q V V  
UniRef90\_G2FXT0 Y L S K A M S I K T I V E K Y P E T I P V F K N I G F K G M E N Q V V  
UniRef90\_UPI0003AA9CBE I G A N T R L S V I L K E R P D A L E A I V S I N F Q K L R N P I L  
UniRef90\_UPI0003FAA443 I G N P D T R V G E L L S R W P E A A E V F V R H G F Q G L A D P E H  
UniRef90\_UPI00046D6C7C N K K I D F S T P V K K Y I D K Y D D F L D L L E L G F D H F K I P N M  
UniRef90\_D6S3P9 T K T V K E I D I F P E T R E V F V S N G F P Q F T E D A K  
UniRef90\_UPI0003B51668 N T I T K D M S I E V V Q Q H P E T V D V F R N F G M G C L G C  
UniRef90\_UPI00036006A6 M A E S Y V T G E T L V G E I V S Q Y P E A I E V L L S I G M G H C L G C P A  
UniRef90\_W0FGP7 M E Q I Q L T M T I G E I I K N Y P E T R E V F L N N G F A L F A D D T V  
UniRef90\_I8SJ0 M I N K R M T I G E I I V T K H P N L I E T F E S K G F K G L N N K A I  
UniRef90\_F7PU03 L T R S S K L S D V L Q A Y P E L E E Q L T N I A F K N L K N P V L  
UniRef90\_K2D764 I T K D S N I G E I V K K Y P Y I K N F L V N L S F S K L K N P I L  
UniRef90\_U2PS07 M I T A T M R V G E L L G R Y H P E L E D W L V L N R L A R L K S N P I L  
UniRef90\_A9B3R1 I N I Y T K I K D I V D K Y P E T I S V F Y A N G F D A T K K E E L  
UniRef90\_UPI0001E300F8 L S A K T R L G P L D D K Y P F L L D F L L A K S Y S K L K N P L L  
UniRef90\_S7TWJ4 L A D W T I K D I V T K Y P E T L E V F S N N G F E V L A D A E V  
UniRef90\_T0K5R5 M E K I N E T M S V Y Q I L S E Y P F L L K I F K Q H G L G K F E T K N V  
UniRef90\_W9DU91 M I T T K D M S I T E I V G K Y P Q T A N V L R E Y G M G C I G C  
UniRef90\_A0A017RTT5 L T T K D S I T M A G L F D K Y P Y L K E F F V S L A Y A K L K N P V V  
UniRef90\_G9YJQ8 I T K E T T I G D L V K E Y P F I K E F L F N L S F S K L Q N P I V  
UniRef90\_A6TN76 J I R K D S V I A D I V N K Y P Y I R E F M P T L S Y N K I L N P I A  
UniRef90\_V9HJE1 D Q L I R P D M I V A D I V Q Q Y P Q L V D V M M S C G L H C L C  
UniRef90\_I5AUM4 I K R E M L L S D L L K E Y P F I K E F L F N L S Y S K L K N P I I  
UniRef90\_UPI00047D471D N G I N P N A T I G D L I R E N P K Y L K E F F V S V L M E M G M G C I S V D A  
UniRef90\_G4D427 K I N P T D K I G D V L K K H T E A Y E V F L A N G F K A S S V D K L  
UniRef90\_K0B074 M I N K D M T I G E I I R L K P E A A E V L M N F G F G C V G C P A  
UniRef90\_W6S1M5 M I T K D M S I T D I V E K Y P E T A D V L N H G M H C F G C  
UniRef90\_S0FLF8 M P T N I H A D L K I Y E I I Q R F P Q T R S V F V A N G L G A L V S D D A  
UniRef90\_UPI000362C6A1 M E N K V T K E M L I G E L V S K Y P E A V D F L Y D V G M H C I G C P S  
UniRef90\_UPI0004081700 N K K T L I G E I V N R Y P E T A E V L L G L G M H C I G C P A  
UniRef90\_E9SPD3 M A E N K V T K D M S I D I V Q N Y P E S I E V F A K N G L G C I G C  
UniRef90\_K2E255 M K K I I N G E M K I W D V I Q D Y P E T Y G I F R Q F G Y P D I R K G D  
UniRef90\_Q3A1B8 K I H A D M H V G D I L K T H P K A A E V L M S C G M H C L G C P S  
UniRef90\_R8W8Y5 D Q K I P A N M L G D L L K Q H P N A A S I L M Q R G M H C L G C P S  
UniRef90\_UPI00047D4BDE T I N K D T K I G D L L Q E C P E K A S L L L E A G M H C L G C P A  
UniRef90\_R5Z1N3 I T T K E T N I G G L L K K Y P Y L K D F L L S F E K L N S P I  
UniRef90\_T0N152 I T E N M R I S E V V E Q Y P Q T V A V F R D H G M G C F G C  
UniRef90\_I8SEU4 M I T K D M S I L E I V Q K Y P D T L E V F V N S G M G C F G C  
UniRef90\_U2TB65 M I T K D M S I T E V V E K Y P K A A D L L S Y G M H C F G C  
UniRef90\_I4D2W6 I T M A K V S K D M L V G E L V N T H P E L I D T L L D V G M H C L G C P S  
UniRef90\_U2UCD7 M I T G Q M K I T E I V E K Y P Q S V E V F L K H G L H C F G C  
UniRef90\_I4D3I7 M E N K V T K D M L I G E V V S K Y P E T I E L M G A G M H C L G C P S  
UniRef90\_X8K206 K I S K D M T I G E V V R N H P E C I E V L F N F G L G C V G C P S  
UniRef90\_F0K8C1 M S K V T G D M T I G E V V R M H P D A A R V L M S F G M G C I S C P G  
UniRef90\_U2D4N9 M I T K D S L I G D V L D A N P D L A E Y F F E I G M H C L G C P A  
UniRef90\_R6VV16 M I T K D M Y L G E I L A T N P A H A D V L I S C G M H C L G C P S  
UniRef90\_UPI0003B79748 M S K T I H P D M K V A D I I R Q W P E A R E V F Q A N G L G A L V S K D G  
UniRef90\_UPI0003B314A7

UniRef90\_D3DH38 R K L P Y T V S L K Q A K K I R R M S D E K F Q E M L R E  
UniRef90\_E0RQZ2 R A T L A K V A T L V E K A A A M A K I P V E D L L S R L R E R G V E V E  
UniRef90\_UPI00036C5EFE R K T L G S I A T L E T Q A A G M G N I D I G E L L L  
UniRef90\_G9XG1 L E I M G K Q I T L T T A N A K G I N R D L F E D N L N Q  
UniRef90\_M7NKS2 R K L M A G R T S I G M A A R V G G C R P A D I F R A L K P L G F  
UniRef90\_C3W9N7 K N M L G K L S L K N A A L T K K V N V E T F I E L L N E  
UniRef90\_H2J536 W N T V A K F A T F K N A A K M T G V S L C E T L H T V N K  
UniRef90\_E0QGS0 L N M M G K Q I S L R T A L N S K G I N E S L F L E N L N A  
UniRef90\_A6Q9V5 R R T F A K L A T V K Q A A I V G G M D A N D L L N Q L R T A  
UniRef90\_E3DPC0 R R N T G S K I T L V K Q A A E L K N L D L A K L L D L M E K  
UniRef90\_UPI000405677F R R T V A K L A T V D H A A R M A G L P T A E L L V R F L R E L A G E A G G D  
UniRef90\_E0E4X3 F D K M A K T V S L S M A L K L K R M N L E L Y E E R L  
UniRef90\_B6YU21 R K T L A R T V T L R Q A K K L L G M S D E K F E K M M E E  
UniRef90\_D7N5D1 F K L M A K M I K L K D A L K L K G I S A E L F V E E Y E R  
UniRef90\_UPI00036AA6E0 R K I L V A N R T S I A M A S K M V G H S V E A F F A K L K P L G F E I D G E  
UniRef90\_E4TIB3 I E S V G K F L K L S T A L S K S K G Y D I E T Y I K L I E E K  
UniRef90\_A8SMN9 L K T M G K M V S L N M A L K V R G I N K A A F E E K L  
UniRef90\_R9R9B2 L Q K L E Q N I T L E K A M M I K K E D V D A F I P M L Q Q A I S S I E R E D  
UniRef90\_F0LLP4 R K T L A K T I T L K E A K E I G N L S D E K F  
UniRef90\_X0VJY8 K K T L A R V T S L R Q A S T I A K I P L T E I I N K L R E A G I Q  
UniRef90\_E3H9V5 R D K A G K I S L K L A L S M K K L S S D T F I E M L E E  
UniRef90\_D1VS44 F N T M A K M I K L K D A L K L K N I D A E I F Q E  
UniRef90\_E8RBE1 R Q T I G R M A T I E K A A S M G N  
UniRef90\_S7T2V3 L K T V A K F I A P I S Q A A S M G N L D E T E L L  
UniRef90\_E6W1D0 A A A R F E T V A Q G A G A H G I D V D E L L E A L N N A  
UniRef90\_UPI000416D2FD R K L M A A R T S V A M A C K V A G C T I D D F R N K L E P L G F K V  
UniRef90\_UPI000368937D R K L M A G R T S I A M A S K L A G G C T P F D F F E K L L Q P Y G F E  
UniRef90\_A1AKV8 R E V F G R A L T L R T A L R A A G I N V E S F C R L L N D A  
UniRef90\_Q1JY54 I D R V G R F L K L E S A L S Q K G Y D C A A F I A L L Q E  
UniRef90\_E3WIK4 I E T V G R V M T L K Q A A Q A M K V S L P V V K E R L E S A G Y Q V V G  
UniRef90\_S0EW70 R K A M T N R I T V E Q A A R A J A G V P L A R M L Y T L N  
UniRef90\_B8I2Z2 R Q T V G R I A T V E K A A G M G N E S V  
UniRef90\_D4H1N0 L K S A G K F L K L E T A T K Q N Y D I K T F L E S L N E  
UniRef90\_V5WE15 F K T M S M A T L G M I A E R G G L N L E D F I N  
UniRef90\_H1XVL4 R K T V L K I A T L E S K V A Q V G G V D V Y H L V N I L R  
UniRef90\_M1WPL8 R K T L A K V T S L S Q A A F L G G L A P D E L L  
UniRef90\_U2TJS7 R V L A S R V T V A D A A R I G G C S E E D F Y R I L E P L G F  
UniRef90\_UPI0004054B74 R K V L A S R V T V A D A A R L G K C R V E D F Y E K L Q P L G F S V  
UniRef90\_J0LHX9 L S T M G K R I S L K S A L K A K N I A E E V F I K A F D E Y R E S I K N E E  
UniRef90\_U7UFL7 R K V F G K Q V T L K Q A A  
UniRef90\_M5E332 M R L L A P F L T L G T A L R T R G I A L D L F L N S L H Q A  
UniRef90\_Q3A2R3 R K V M A S R V T I A E A A K M G R T T V A D I V K A L E P L G F E Y E A V D  
UniRef90\_F0SA48 R E A M A P T V T L R Q A C R I H S I E L E P L L A E L  
UniRef90\_D5MIC2 V K V M A K V A T V K M I A E R G D F D V N D L I A K L L N A  
UniRef90\_W3Y3M9 L R Q I G P F I R L K T M L Q T R H I N P A I F I K L L E E  
UniRef90\_G2FXT0 L E K L A D F I S L E K A M M I K K E D V D V F I S L L K Q A  
UniRef90\_UPI0003AA9CBE R K I M A S R T T I Q M A A S L G N C R V E D F Y L Q L S A F G F Q S V N N D  
UniRef90\_UPI0003FAA443 R E I Q V G L P I T V A M A C Q R H N G V D V A T L L V E L R R  
UniRef90\_UPI00046D6C7C V E T V G R V M T L K Q A S Q A M K V S L P A V K E R L E S A G Y Q V I  
UniRef90\_UPI0003B51668 L E S F G K F L K I E T A L K T K G Y D I D T F E N L L L E R I E E I R N V  
UniRef90\_UPI00036006A6 A A A R F E N I E Q G A S A H G I D I E A L I S S L N Q A  
UniRef90\_W0FGP7 I Q Q L G V V L K L K T A L K S K N I N E E S F M K L L Q  
UniRef90\_I8SJ0 L K Q V G R L P L E T V L T N K K M N V D A F I A L L N E  
UniRef90\_F7PU03 R H T V G S L L V N L E K V A Q V G G M  
UniRef90\_K2D764 F K T M S M A T I S E M I A Q R G D F E T K D L L E K  
UniRef90\_U2PS07 R R I L S R W A T L S Q L A Q G M H L E V D Q L L M A V N Q A  
UniRef90\_A9B3R1 I E E V G E D S M L K T V L A I K G I N A E L F I K Q I E E L G F Q Y V E E  
UniRef90\_UPI0001E300F8 I N E L G A I L K L K T A L R A K Q I G A E A F L N L D E K  
UniRef90\_W9DU91 L E Q L G P L L K L K T A L S M V S V N K D S F I E L L N Q A  
UniRef90\_A0A017RTT5 F A A M G R I A T L A M A A Q R G G F E P D E L L A R I K E  
UniRef90\_G9YJQ8 F K T M S S I A T V E M I S E K G G F E V Q D L I D R  
UniRef90\_A6TN76 F N T I G K V A N L E E M I A Q R G N I N I D V L I S K I C D E I K N H E  
UniRef90\_V9HJE1 G V S Q V E T L E E A C M T H G L D V Y D M L D V L N D  
UniRef90\_I5AUM4 F K T M S S V A T I E M I S E R G G F T V E E L I N K  
UniRef90\_UPI00047D471D I D S L G K D T M L S E T A A M V H G Y D V N E I V K K L E A  
UniRef90\_G4D427 S Q M E T L E Q G A Q V H G V D V E V L V E A L N K  
UniRef90\_K0B074 M A A R F E N I E Q G A L A H G I N V E E L M K E L N A G A  
UniRef90\_W6S1M5 M R V L A P F I T L G T A L K S R F I N I E A F I E M L E G A  
UniRef90\_S0FLF8 S Q M E S I A E A A M V H G L D G D M I V D A L N E K  
UniRef90\_UPI000362C6A1 S Q A E S L E D A C A V H G V D P E S V I K A I N D K  
UniRef90\_UPI0004081700 A A A R Y E N L E A G A K V H G I D P D Q L V A D I N E  
UniRef90\_E9SPD3 T A V T S H F M K L R T A A H A Y H I D L D K L L E A L N D A I A G H D  
UniRef90\_K2E255 A Q M E S L K A E A C M V H G L N I E D V L S M L N D  
UniRef90\_Q3A1B8 A Q A E S L A E A C L V H H G L A V E D I I D Q L N Q  
UniRef90\_R8W8Y5 S Q A E T L E E A C D V H G L D V E E L V K Q L N A  
UniRef90\_UPI00047D4BDE F K T M A G V A T I E M I S A R G G F E V S D L I D K  
UniRef90\_R5Z1N3 A A A R F E N I G Q G A A A H G I D I T T L I S A L N K A  
UniRef90\_T0N152 A A S H F E N L E Q G A L A H G I D V D E L V A N L N T V I G  
UniRef90\_I8SEU4 M A A R F E N L E Q G A L A H G I D V P H L L K D L N D A  
UniRef90\_U2TB65 M A S F M E N L E D A C L V H H G L N P N E V L S A L N  
UniRef90\_I4D2W6 M A A R F E N L E Q G A R A H G I D V A K L L E D L N K  
UniRef90\_U2UCD7 M A A R F E N L E Q G A R A H G I D V A K L L E D L N K  
UniRef90\_I4D3I7 S Q M E S L E S D A C A V H G L S S D A L L A A I N E K  
UniRef90\_X8K206 A Q A E T L E E A C S V H H G M D V N E L V E A I N K  
UniRef90\_F0K8C1 A Q M E T V E Q G A M V H H G I D P E E M I E A L N N  
UniRef90\_U2D4N9 S R G E S I E Q A C R V H G V D C D A L L K K L N D A  
UniRef90\_R6VV16 A Q M E S I E D A C A V H G L D V E E V L S K L N E K G F  
UniRef90\_UPI0003B79748 L R A L A P F L S L G T A L R S R F M N P E A F T G L L  
UniRef90\_UPI0003B314A7



UniRef90\_D3DH38  
UniRef90\_E0RQZ2  
UniRef90\_UPI00036C5EFE  
UniRef90\_G9XGC1  
UniRef90\_M7NKS2  
UniRef90\_C3W9N7  
UniRef90\_H2J536  
UniRef90\_E0QGS0  
UniRef90\_A6Q9V5  
UniRef90\_E3DPC0  
UniRef90\_UPI000405677F  
UniRef90\_E0E4X3  
UniRef90\_B6YU21  
UniRef90\_D7N5D1  
UniRef90\_UPI00036AA6E0  
UniRef90\_E4TIB3  
UniRef90\_A8SMN9  
UniRef90\_R9R9B2  
UniRef90\_F0LLP4  
UniRef90\_X0VJY8  
UniRef90\_E3H9V5  
UniRef90\_D1VS44  
UniRef90\_E8RBE1  
UniRef90\_S7T2V3  
UniRef90\_E6W1D0  
UniRef90\_UPI000416D2FD  
UniRef90\_UPI000368937D  
UniRef90\_A1AKV8  
UniRef90\_Q1JY54  
UniRef90\_E3WIK4  
UniRef90\_S0EW70  
UniRef90\_B8IZZ2  
UniRef90\_D4H1N0  
UniRef90\_V5WE15  
UniRef90\_H1XVL4  
UniRef90\_M1WPL8  
UniRef90\_U2TJS7  
UniRef90\_UPI0004054B74  
UniRef90\_J0LHX9  
UniRef90\_U7UFL7  
UniRef90\_M5E332  
UniRef90\_Q3A2R3  
UniRef90\_F0S4Y8  
UniRef90\_D5MIC2  
UniRef90\_W3Y3M9  
UniRef90\_G2FXT0  
UniRef90\_UPI0003AA9CBE  
UniRef90\_UPI0003FAA443  
UniRef90\_UPI00046D6C7C  
UniRef90\_D6S3P9  
UniRef90\_UPI0003B51668  
UniRef90\_UPI00036006A6  
UniRef90\_W0FGP7  
UniRef90\_I8SJIO  
UniRef90\_F7PU03  
UniRef90\_K2D764  
UniRef90\_U2PS07  
UniRef90\_A9B3R1  
UniRef90\_UPI0001E300F8  
UniRef90\_S7TWJ4  
UniRef90\_T0K5R5  
UniRef90\_W9DU91  
UniRef90\_A0A017RTT5  
UniRef90\_G9YJQ8  
UniRef90\_A6TN76  
UniRef90\_V9HJE1  
UniRef90\_I5AUM4  
UniRef90\_UPI00047D471D  
UniRef90\_G4D427  
UniRef90\_K0B074  
UniRef90\_W6S1M5  
UniRef90\_S0FLF8  
UniRef90\_UPI000362C6A1  
UniRef90\_UPI0004081700  
UniRef90\_E9SPD3  
UniRef90\_K2E255  
UniRef90\_Q3A1B8  
UniRef90\_R8W8Y5  
UniRef90\_UPI00047D4BDE  
UniRef90\_R5Z1N3  
UniRef90\_T0N152  
UniRef90\_I8SEU4  
UniRef90\_U2TB65  
UniRef90\_I4D2W6  
UniRef90\_U2UCD7  
UniRef90\_I4D3I7  
UniRef90\_X8K206  
UniRef90\_F0K8C1  
UniRef90\_U2D4N9  
UniRef90\_R6VV16  
UniRef90\_UPI0003B79748  
UniRef90\_UPI0003B314A7



UniRef90\_D1AJE5 L N K L T L E M A A K T K K I N L L D T L N N K V V G K D  
UniRef90\_B0TFG2 S A A R F E N I L G Q G A R A H G I D V D K L I E E L N N A K L S E V V  
UniRef90\_G9WKS7 S Q M E S T L I E E D A C M V H G L N P N A V L I A T L N N A  
UniRef90\_R7MBT9 S Q A E T L I E E Q G A C E V H H G I D V E E I I K K L N N A  
UniRef90\_H0UIQ8 A L A H F E N I I E E Q G A L A H G I D I E E G L I K V L N N D  
UniRef90\_R6HJQ9 S R G E S I V E E E A A A A H H G I D V D A L V D A L N N Q  
UniRef90\_R7MYQ9 M A A H F E T I E G Q G A G A H H G I D V D A L V A D L N N Q  
UniRef90\_Q3ABR0 A A A Q F E N I E I Q G G A R A H H G I N I D E L V A D L N N K  
UniRef90\_R6PT80 R N E T V A Q A C M V H G V N A D E L V A K L N N A H  
UniRef90\_X1D6M7 R R M L T K A L T V K T A A R V H G V P L D E F L A L L N N D A  
UniRef90\_UPI00028974F5 A Q A E T I E E A A A V H H G L D L N A L L E A L N N K  
UniRef90\_A5G6R7 A E I F G P L L K L R T L L K S H D I N P E L F C R L L N E E  
UniRef90\_D3P8U3 K S P M R L L L S I S E I K K L N L D T L I K Q L L N E E  
UniRef90\_U2RJ85 Y M I M S K V A T L D M I A M R G G F P V E E I I E K I S D K  
UniRef90\_A8SKJ0 F A M M K D I A T L E M V A I K G G F E F D E L L K E K L E N A  
UniRef90\_C0GC42 T N E T V H E A A L K H G Q D P T D D L N K L N N A  
UniRef90\_A9KP36 S Q M E T L E E A C S V H H G I D V E E L L N K L N A  
UniRef90\_R9GY60 R N M F A G F V T I E E T A C K V G N C E V T D F L D V M K K I G F M V E E D  
UniRef90\_UPI000463D683 S Q M E S L I E E A A M V H H G I D A E L L V E K I N N A  
UniRef90\_R6G5Z5 A Q M E T V I E E A A L V H H G L D I E E L L A K L N N K  
UniRef90\_R6QAB0 S R G E S I A D A C A V H H G T D A D E L V E K L N N A  
UniRef90\_UPI0003687087 A T G E S I E Q A V M V H H G I D L D E M L K A L N E K  
UniRef90\_G7WFK0 M A A R F E N I E Q G A L A H H G I D V P S L I N D L N N K A  
UniRef90\_F7NPY5 A A A R F E N I E Q G G A M A H H G I D L D A L I K D L N N K  
UniRef90\_I7J621 I A A R Y E T L E E Q G A M A H H G I N L D A M L K D L N E A  
UniRef90\_J4J355 A A S H F E N I E Q G G A M A H H G I D I D A L I E A L N N A  
UniRef90\_R1AUE4 A Q M E S L T N A Q A Q V H H G I D L D E L L K A L N N E  
UniRef90\_U7UT52 S Q Q E S L T N A C M V H H G L D P E Q V T K A V N  
UniRef90\_D5XAY6 A T A E T V A G A A R T H H G I D E T E L L T R L N S A G F G E A S D E  
UniRef90\_R7NQU8 H S R G E S I E E A C Y V H H G T D A D E L I A K I K A A  
UniRef90\_F6B3C3 A Q L E S L E K G A M L H H G I D I E A L L A E L N N K  
UniRef90\_Q1JXW7 M R V L A P F L T L A T A L R S R L I D L T S F L R L L Q E  
UniRef90\_X0WCP6 M A Q A E T I E Q G A T T H H G I N P D K L V K E L N K K  
UniRef90\_G9RPK9 A R S E T V E E Q A C Y V H H G Q D V D A L L A K L N N A  
UniRef90\_D9PK78 A M A S M E T L E E Q G A M A H H G M T P E E L V K K L N S A  
UniRef90\_S8FIL4 K L L V A K M A T V S M M S E R S G I P L E K L I K K L E E  
UniRef90\_R5QA67 S Q M E T L E E E A A M V H H G I D C G L L V E K I N N A  
UniRef90\_R6MFJ6 A A A H F E N I E Q G A G A H H G I D I D K L I E D L N N A  
UniRef90\_U6EUM1 A A Q S E T V E Q A A M V H H G L D L D K L I E A L N N K  
UniRef90\_X1F7Y0 A V A K F E N I E Q G A V A H H G I D P D K L V E A L N E A  
UniRef90\_D2RKR9 M A A N F E T I G Q G A A A H H G I D V E A L I A D I N D C I A E V E G N D  
UniRef90\_F6DKB3 E R D S L I E E K G A M L H H G M D V E A L L Q E L N N K  
UniRef90\_W8T766 A Q V E T I E E A C G V H H G L N M D E L L S A L N N A  
UniRef90\_J5H1T4 S Q M E S L A E A A M V H H G I D V N E L I S R L N Q L G  
UniRef90\_K0B1H7 I N L L G K D T M L Q T V L K V R N I N I E L F I N A L N E K  
UniRef90\_F7NN89 S S T G E A E T L A E A A G I H H G I D V E E L I E A L N N Q  
UniRef90\_S2XZE0 S Q A E T L A E A A M V H H G L D A D L L E E K I N N A  
UniRef90\_R7HZQ0 S Q A E T L E E A C S V H H G L D L E D I L A K L K  
UniRef90\_I4DA26 S S T E S L E G A A L T H G K D P D K L V A Q L N E A  
UniRef90\_UPI00047C6F57 S Q M E T L E E Q A A M V H H G I D V D A I D K L N N Q  
UniRef90\_U2STR5 K A V V S Q V D L A Q V S Q T S G I D V N T L I A K I K E  
UniRef90\_R7FA99 R E E T L E E E A C M V H H G I D V E E L L K E L N N K  
UniRef90\_X8J8P6 S Q G E S I G Q A A A V H H G I D A D Q L V N A L N N A  
UniRef90\_B1C8A1 M A A R F E T L E E E G A N A H H G I N V D D L V D D L N N E N  
UniRef90\_B9M4U4 A D F E A V H H G A S V H H K V D V D K L L H E L N N E K  
UniRef90\_R7L0X0 S Q M E T L E E A C E V H H G I D A D E L V E K L N N K  
UniRef90\_T0PGA9 A Q A E T L E E E A M V H H G L N L E D L L Q E L N N K A  
UniRef90\_R5DZY2 S R G E T I E E E A C M V H H G A D A D A L V A D L N N K A  
UniRef90\_R7M0F9 S Q M E S L N D A A F V H H G L D P Q K V V D A V N N A  
UniRef90\_K4L8G3 A T R E S V E G A A I E T H G K N P D D L V A E L N N K A  
UniRef90\_T0CMN7 S Q M E K L E Q A C E I H H G L D L E K L K E L N N E A  
UniRef90\_H1DC61 L Q I L L E A Y P L S E I M K L K K M D A S A F V N R L E E  
UniRef90\_R7LWG3 A A A R F E N I E E A G A K V H H G Y D P D A M V E D I N N A  
UniRef90\_R9N8A8 H S Q M E S L E E E G A I G H H G I D P D L L V E K L N N A  
UniRef90\_L1QHR9 A T M E T L E Q A C Y I H H G L E L E E V L N K L N E K  
UniRef90\_W2BV78 S Q A E S L K D A C F V H H G L D A D K I L E A V N N K A  
UniRef90\_K0AXR3 S Q M E S L E Q A A A V H H G I N V D D L I E A L N N K  
UniRef90\_UPI000478DDAA A Q A E T I E E A S Q V H H G I E I E K L M K A L N E A  
UniRef90\_R6QGE0 A A A R F E N L E E A G A K V H H G V D P D V M V D E I N A  
UniRef90\_R7PGK8 S Q M E S L A D A C M V H H G L N V E D V L T A V N N K K  
UniRef90\_R5Y0T5 A Q F E T L E Q A C E V H H G Q D V E D I L A K L N N K  
UniRef90\_J0N439 S Q M E S S D A C M V H H G L D P K A V L G Q L N N Q  
UniRef90\_F9N612 S S T G E P L W Q A A N I H H G M D I D E L V A K L N N A  
UniRef90\_S3JYF8 S Q M E T L G Q A S E V H H G F D I A E L E E L N N A  
UniRef90\_R7AGW1 A R G E S V G E A C S V H H G V D P D E L V A K L N N H  
UniRef90\_F7MHM6 L A V M L P S T T L K K A S E R G E V E L D T L I E K I K E  
UniRef90\_R6YM49 S Q M E T L E E A C D V H H G I D V K E V L E K L N N A  
UniRef90\_D9SPA8 S Q M E T L E E E G A M V H H G L D I N T L I D A I N N A  
UniRef90\_R5HDJ0 R N E T V E E Q A C L V H H D Q P V E E L V E K L N N A  
UniRef90\_M1E4C6 A V A K Y E T V E Q G A N G H H G I N A D A L V E E L N N K  
UniRef90\_UPI0002481AF6 F M E I G E F V K L K T I L K A R K I D E K G F L K L L E D K K  
UniRef90\_D6SA11 S Q M E S L E E E A C M V H H G L D V N Y L L E Q L N N Q  
UniRef90\_E3GLZ6 M A A R F E N I E Q G C L A H H G I D P E A M V R S I N D A  
UniRef90\_R6ERJ5 S Q G E T L E E E A A M V H H G I D V D E L M K V I E E  
UniRef90\_N9VQU7 I R E I G E E T L Q T V L Q I R E I N P E L F R  
UniRef90\_R7QVK9 S Q R E T I E Q A A D V H H G L D A D D L I E  
UniRef90\_UPI00047D29CE S Q M E S L A E A C A V H H G I D G E E I V D A L N N D  
UniRef90\_B1QZS5 S Q M E T L E D A C A V H H G L N V E E L I K K L N N K  
UniRef90\_R7L1U1 S R G E S I A D A C A V H H G T D V N A L V E K L N E H  
UniRef90\_T0U3S3 A T A E T L W Q A A E L H H G F N V Y D L V E K L E T A  
UniRef90\_R6I620 M A A H Y E P I G Q G A G A H H G I D V E A L I A D I N N A  
UniRef90\_I3I1N95 S K M E D I S F G A T M H N I D P E V I I K E L N E

UniRef90\_D1AJE5  
UniRef90\_B0TFG2  
UniRef90\_G9WKS7  
UniRef90\_R7MBT9  
UniRef90\_H0UIQ8  
UniRef90\_R6HJQ9  
UniRef90\_R7MYQ9  
UniRef90\_Q3ABR0  
UniRef90\_R6PT80  
UniRef90\_X1D6M7  
UniRef90\_UPI00028974F5  
UniRef90\_A5G6R7  
UniRef90\_D3P8U3  
UniRef90\_U2RJ85  
UniRef90\_A8SKJ0  
UniRef90\_C0GC42  
UniRef90\_A9KP36  
UniRef90\_R9GY60  
UniRef90\_UPI000463D683  
UniRef90\_R6G5Z5  
UniRef90\_R6QAB0  
UniRef90\_UPI0003687087  
UniRef90\_G7WFK0  
UniRef90\_F7NPY5  
UniRef90\_I7J621  
UniRef90\_J4J355  
UniRef90\_R1AUE4  
UniRef90\_U7UT52  
UniRef90\_D5XAY6  
UniRef90\_R7NQU8  
UniRef90\_F6B3C3  
UniRef90\_Q1JXW7  
UniRef90\_X0WCP6  
UniRef90\_G9RPK9  
UniRef90\_D9PK78  
UniRef90\_S8FIL4  
UniRef90\_R5QA67  
UniRef90\_R6MFJ6  
UniRef90\_U6EUM1  
UniRef90\_X1F7Y0  
UniRef90\_D2RKR9  
UniRef90\_F6DKB3  
UniRef90\_W8T766  
UniRef90\_J5H1T4  
UniRef90\_K0B1H7  
UniRef90\_F7NN89  
UniRef90\_S2XZE0  
UniRef90\_R7HZQ0  
UniRef90\_I4DA26  
UniRef90\_UPI00047C6F57  
UniRef90\_U2STR5  
UniRef90\_R7FA99  
UniRef90\_X8J8P6  
UniRef90\_B1C8A1  
UniRef90\_B9M4U4  
UniRef90\_R7L0X0  
UniRef90\_T0PGA9  
UniRef90\_R5DZY2  
UniRef90\_R7M0F9  
UniRef90\_K4L8G3  
UniRef90\_T0CMN7  
UniRef90\_H1DC61  
UniRef90\_R7LWG3  
UniRef90\_R9N8A8  
UniRef90\_L1QHR9  
UniRef90\_W2BV78  
UniRef90\_K0AXR3  
UniRef90\_UPI000478DDAA  
UniRef90\_R6QGE0  
UniRef90\_R7PGK8  
UniRef90\_R5Y0T5  
UniRef90\_J0N439  
UniRef90\_F9N612  
UniRef90\_S3JYF8  
UniRef90\_R7AGW1  
UniRef90\_F7MHM6  
UniRef90\_R6YM49  
UniRef90\_D9SPA8  
UniRef90\_R5HDJ0  
UniRef90\_M1E4C6  
UniRef90\_UPI0002481AF6  
UniRef90\_D6SA11  
UniRef90\_E3GLZ6  
UniRef90\_R6ERJ5  
UniRef90\_N9VQU7  
UniRef90\_R7QVK9  
UniRef90\_UPI00047D29CE  
UniRef90\_B1QZS5  
UniRef90\_R7L1U1  
UniRef90\_T0U3S3  
UniRef90\_R6I620  
UniRef90\_I3IN95

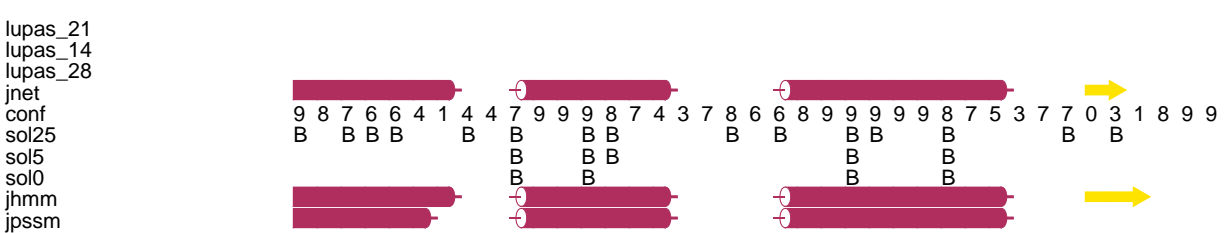




```

UniRef90_T4VX15      A Q M E T L E Q A A Y T H G I D L D E L L Q K L N E
UniRef90_UPI00047E9743 A Q G E S L E Q A A G V H G L D A D D L I E D L N E K G F
UniRef90_L7EGA7      A K F E S V E K A A A V H G L D V E E L I Y Q L N
UniRef90_V1CMV9      F K F M K K V A T V K D V S K R T G F S M E V L Q R E F
UniRef90_C6PYP5      S Q M E S L E Q A V G V H G I N L E D L L K K L N K
UniRef90_E5C5N6      R V I L P K A T I K M M S E R T G I P L E V L I E S L K S K
UniRef90_UPI000465F52C S G V E T I S D A A T V H G L D A E N L V A Q L N
UniRef90_Q0AVL8      L D I V A D K L T L K G F F R L M E L D E E D
UniRef90_W0DCI7      L D I V A D K L T L K G F F R L M E L D E E D
UniRef90_V2ZBB0      L M E S L D D A C L V H G L D S D E L L E K L N E
UniRef90_F7V252      S Q M E T I E E A A V H G I N P D E L V A R I N E
UniRef90_X1DYU6      S R G E T V E Q A C M V H G V D P D V L V E N I N E
UniRef90_I8SJ34      A A T E T I E N G A K M H N I D V E A L L K E L N E
UniRef90_G7WDX0      V N E T L A N A A Q M H H I D P N L L L E K V N S V G
UniRef90_X1DYU6      R K T L G K K A T L E M V S V I L E L P L E R I I S T V K S A
UniRef90_C0GDL4      A T A A G E T I A Q A A V V H G I D L D T L L R E L N E A
UniRef90_F0KB14      L G E T I E E A A M V H G I D A D E I I K S L N E
UniRef90_R5L473      S R G E T I E Q A C A V H G N D P D E L V K K V N E
UniRef90_UPI0002556254 S Q M E S L K D A C V I H G L D P D T V T K T L N L H

```



UniRef90\_T4VX15  
UniRef90\_UPI00047E9743  
UniRef90\_L7EGA7  
UniRef90\_V1CMV9  
UniRef90\_C6PYP5  
UniRef90\_E5C5N6  
UniRef90\_UPI000465F52C  
UniRef90\_Q0AVL8  
UniRef90\_W0DCI7  
UniRef90\_V2ZBB0  
UniRef90\_F7V252  
UniRef90\_R5MYY7  
UniRef90\_I8SJ34  
UniRef90\_G7WDX0  
UniRef90\_X1DYU6  
UniRef90\_C0GDL4  
UniRef90\_F0KB14  
UniRef90\_R5L473  
UniRef90\_UPI0002556254

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
jpssm