

1 10 20 30 40
QUERY S Q I Q F T R H A S D V L L N L N R L R S R D I L L T D V V I V V S R E Q F R A H
UniRef90_C3ZIE5 H F H A D W H S K N V L S L L N K L R R G N Q R E F C D D V V T I R V S S S L F P V H
UniRef90_UPI0003EAA6B S P T S Y X N S Q E M L E K L N L A L R R K S E N T F C C D D V T I R V D K K L F P M A H
UniRef90_UPI0002B4321F S Y X N S I L N A M N A L R R K S E N T F C C D D V T I R V D K K L F P M A H
UniRef90_R4GID3 I P F P D H S S D I L S S L N E Q R R N N G L L C D D V V I V V E G Q E F P T H
UniRef90_UPI0004403235 M E I A S H Y R H L L H E L N D Q R R Q H G I L F C C D C C V V V E G Q V F K A H
UniRef90_H3B913 M E I A S H Q S R R L L Q Q L L D E Q R R Q D L F C C D C C S I L V E G G K V F K A H
UniRef90_F6ZSA7 M E F S S H H I R L L Q Q L L D E Q R R Q D L F C C D C C S I L V E G Q M F K A H
UniRef90_V8P8N5 M E I S S H Q S H L L E G L N S Q R R Q D L F C C D C C S I L V E G G K V F K A H
UniRef90_C3YC40 F K E S N H P I Q I L E G L N S Q R R Q T G S F C C D V S L C V D G L E F P C H
UniRef90_A2BIA1 S P S H S Q E L L D K L N T L R S E G S H F C C D V T I R V Q G G Q L F S A H
UniRef90_W5LKW1 S E R H A R L L S H M N R L R S D F C C D V R L V V G G R V F Q V H
UniRef90_UPI00029D7331 M E I A S H Y R H L L R E L N E Q R R H G V L C D D V V L V V E G K V F K A H
UniRef90_UPI0004421ACA F K D H D F S S D L L R Q L N G L R R Q S R I L T D V S I C T G D W E V P C H
UniRef90_UPI0003509747 I P F P N H S S E V L C G L N E Q R R H D A L L C C D V I L I V D Q D E Y R T H
UniRef90_C3YEU4 F S S S R H S G E V L R Y L N T R T D A G L L C C D I T L I V D G K E I P A H
UniRef90_UPI0003598ED2 Y K H A Q H A H K A F E S L N E M R R M G L L C C D V C L V A G D L E L H C H
UniRef90_I3JAQ6 M E V P C Y L S K L L F E L N E Q R R K R D F F C C D C S I L V E S G R V F K A H
UniRef90_C3YT0 H A S S L L K G L Q E L R S D N L L T D V I L C V I S G K E I P C H
UniRef90_W5UF32 M E F P D H S R H L L Q C S Q Q R H Q G F L C D C T V L V G A A R F R A H
UniRef90_UPI0003B76A9A S H Q N L L K Q L N E Q R R Q E L F C C D C S V L V E G Q L F R A H
UniRef90_UPI0003EAE7B9 S P F S S D K H A Q L L A Q L N K M R N G Q H F C C D V Q L Q V G G R V F K A H
UniRef90_UPI0003F0E2B2 L Q L Q R H A V S M L S F M H G L R E R A E L C C D V T L S V K G K C F P A H
UniRef90_A7RPP2 Y K N N E H C N K A F Q V M N S L R R Q M L C C D V V L K A G S I E I P A H
UniRef90_B4I5F0 Y S N E Q H T A R S F D A M N E M R K Q K Q L C C D V I L V A D D V E I H A H
UniRef90_UPI00035A0C00 F K D D S F S S D L L R Q L N D L R Q S K T L T D V N I C S G A W E V P C H
UniRef90_G1T1Z0 F K D P D F S S D L L R Q L D G F R Q N G L L C C D V S I C A G A G E V L C H
UniRef90_UPI0003C15738 K H P R Q T L E V I N L L R K H R E L C C D V V L V A G T K K I Y A H
UniRef90_UPI0003F079A7 E F E N R I H A S I L L E G L M E L Y E N Q Q F L D V T L I V E D Q L F S C H
UniRef90_W4YL69 E V S G H A R M V L R E M H S L Q Q H G H L C D D V V L R V D G H K V K A H
UniRef90_UPI0004438103 N P R H M R K A F K V M N S L R S Q S L L C C D V T I V A E D V E I A A H
UniRef90_W5Q642 S A M E F P E H S Q Q L L Q S L R E Q R S Q G F L C D C T V M V G S T Q F L A H
UniRef90_UPI0003D6FD8E Q L E I P D F S N S V L S H L D A M R K Q R V L T D V T L R A G G R S F P C H
UniRef90_H3CGP7 S P F H Q P S H P D R V L S H L D A M R K Q R V L T D V T L S V D G I E F N A H
UniRef90_UPI000383247A Y Q N P D H C A S S F P T F E H I R R R Q G K L C C D V T I S V D G I E F N A H
UniRef90_K7JA67 S C I Q F T R H A S D V L L N L N R L R S R D I L L T D V V I V V S R E Q F R A H
UniRef90_W5MD15 I Q F T R H A S D V L L N L N R L R S R D I L L T D V V I V V S R E Q F R A H
UniRef90_T1KCP5 K H P K Y T L E A L H S L R K R R E L C C D V V L I V S K R K I L A H
UniRef90_G3PGU1 I P F P E H S A D L G S L N K Q R L S G L L C C D V L V A E D R E F P A H
UniRef90_H3DCV1 S S H S D G I L Q V F N E F R D C T R L F T D V V I S V Q G R E F P C H
UniRef90_UPI0004443A09 F R F P G Q A L E V L R G F S D Q R Q Q T R F C D V V L V A A G R R F Q A H
UniRef90_H2TMI8 I P F P N H S S D V L C S L N E Q R R N G L L C C D V V L I V R D Q E I P A H
UniRef90_C3YGC6 R H T A R F Y K R L Q E L R S E G H L V D V L C A E G K E I P C H
UniRef90_UPI0003AFED51 F H K A S H P D C V L A H L N T L R K H R M F T D V T L W A G D R A F P C H
UniRef90_UPI000331636D M E M Q S Y C A K L L G E L N E Q R R K R D F F C C D C S I V I V E G R I F K A H
UniRef90_UPI0002C550D9 S V Y R W A D S T V L Q R L N E Q R R L R G L F C C D V V L V A D E Q R V P A H
UniRef90_UPI0001CBB4BC K F D D E A H A Q F L H L H L N I L R E E S C L T D V T F R V I G D H V I Q C H
UniRef90_K1RDN4 F E D I R R Q G K L C C D V T L K V V D G E R K F T A H
UniRef90_C3ZPM7 H A L R L T E S D E L R R Q R K E L C C D V I L S V D G E Q E M P A H
UniRef90_M3ZNP7 S K R H Y H D S F V S M N R M R Q R G L L C C D I V L H V S N K E I K A H
UniRef90_F1NA60 F T S N T H S S V L Q G F D Q L R V E G L C C D V T L V P G D E V F P V H
UniRef90_H2SU70 F H C V D Q S V E I L Q G F N E Q R Q H R Q F C C D V I L V A D N Q R V A H
UniRef90_A0A023F591 T P Y R N Q V H T Q R A F E V L N E M R K Q H L L C C D V R L V A E S V E I S A H
UniRef90_E7FB71 H F S V A D L P A R G Y A V M E I L R Q G K L C C D V T L K V V E H K F S A H
UniRef90_H2LUX2 F S A P S H S A T L L Q G L S L R A Q G Q L L D V V L A V N E E H F Q V H
UniRef90_K1RBX5 E L F E V L Q S L R K L E F C C D V K L E T D D K K I T F A
UniRef90_J9JKY7 M L A G L Q T L R R N S K L C C D V T L C V D G R E F P C H
UniRef90_G1KJ98 F K D Q D F S N E L L K Q L N S Q R L K N Q F S D V G L V V G N T V I R A H
UniRef90_UPI00046CF8E5 F R S S Y A P K V L R N L N S Q R L K N Q F S D V G L V V G N T V I R A H
UniRef90_S4RNT4 F R S S P A L E L L P Q M N E F R L Q G V L T D L S L R C G A A E F R C H
UniRef90_C3XWW6 S T F E A R S L F K D S F K L R Q L Y E E E E L C C D T M L K V G E K A I H C H
UniRef90_H2YWD3 E F E N T K H P M E V L L C F N Q L R E R G L F T D V I L S A G N R E F P C H
UniRef90_F1P6F7 R V E F K D F S S T I L K Q L Q R Q Q G Q L C C D V S I V I Q G H I E R A H
UniRef90_E3LKA5 E F E N Q D P S E I M R Q M Q L R E D E E L C C D V E L S V I D G F V I R A H
UniRef90_F6VSM1 F K D P S H P V D F L D A F R T F Y H D G L F T D I A L Q C S G V T F H C H
UniRef90_T1GBR0 F C I K N Y P S R T L R M M S I M R Q H K M L T D V T L E V D G E K F H A H
UniRef90_M3XHE3 S H M D I P C H A E E I L Q V L N I Y R Q S G I F T D V V L Q V D G K D F P C H
UniRef90_UPI000441EF5E F C L P S H P Q S V L E G L Q T L R S N P K L S D V T L I V G G H E F P C H
UniRef90_J9K8H5 T N F R N S H S V R I L E K L Q S L R K N K V L C C D I R L E T D D G T I V F G
UniRef90_M4A298 F K C W S H F S L M G G L D S T L R Q S G T L F D V V L V E G R P I Q A H
UniRef90_E1BHF9 S F P K A A F Q C F E E L R R Q G L L C C D V T L V V K G V C F K A H
UniRef90_E5SDD4 S F P K A A F Q C F E E L R R Q G L L C C D V T L V V K G V C F K A H
UniRef90_UPI0003317AEF Y E S T V H C T N I L L G L N D Q R K K D L C C D V T L V E R K S F R A H
UniRef90_C3ZLA1 W V R H Q I E L L Q R I S R Q R E E D K Y T D F T L K S K G K E F R V H
UniRef90_G3PDC9 F Q S A V H S D V L Q C L D D Q R Q Q D V L C C D V T V V V G S R S F R A H
UniRef90_H2SSN8 M D F P G H F E Q I F Q Q L N Y Q R V H G Q L W D C V I V V G S R H F K A H
UniRef90_UPI00026581FD S S I Q F K V P E C A L S E N L G E L F E S Q K F S D V M L A V N G K E F Y A H
UniRef90_Q8C3F7 F H L P S H A Q D M L E G L R L R S L P K L A D V T L V V G D Q E L P C H
UniRef90_Q17A34 Y H M S N Y A K E A L K M M F M M R S H H M L T D V T L V I E K E T F Q A H
UniRef90_UPI0002652F35 T R Y S D S N H G S V V L T Q L H S L R S E G L L T D V S L Q V N A D L F P C H
UniRef90_W4ZFN1 H S E Q L L Q G L N L R S E G L L T D V S L Q V N A D L F P C H
UniRef90_M3Z4W6 Q F K V P E C K L S E D L G N L F D N E K F S D V T L S V G G R E F Q A H
UniRef90_B4NFQ5 P S D I A E H L G K L R E K D G T D V V L E V G G R E F P A H
UniRef90_M8BQ29 F E D S V F A G C L Q D G L H S L C L E D S L T D V I L N V Q S S F K C H
UniRef90_B8JJT0 F E Q D N L F S K A F S K L N K V R R D G I F C D V T L N V H G K C L K A H
UniRef90_E0VUD7 H F V N H S Y N L L K F A N E A R Q D G R F N D I T I H F E K K L I R A N
UniRef90_F7A5P0 S H S R M L S F O S L R E D R M C D I L L E A E G K E F L A H
UniRef90_W5KKZ7 Q F E P T N S E Q Q L I E D Y Q R L F S Q E L L C C D F A I N V N G K I R A H
UniRef90_Q94420 M R E I R R Q G K L C C D V T L K V V D Q S F S A H
UniRef90_A0A034WNS8 M D F P W H S G K V L G Q L N E Q R Q G L L C C D C T F V V D G V D F K A H
UniRef90_E7F500 F C D G E H A A E L L E A L R H F Y M R G L F T D V T L Q C G G Q V F H C H
UniRef90_M3ZRQ4 F C D G E H A A E L L E A L R H F Y M R G L F T D V T L Q C G G Q V F H C H

QUERY K T V L M A C S G L F Y S I F T D Q L K R N L S V I N L D P E I N P E G F N I L 80
UniRef90_C3ZIE5 R A V V L A A C C S P Y F A A M L G G G M S E A E D K R F Q V E L H A V V E P D S T F F N M L
UniRef90_UPI0003EAA6B6 K V L V L A A C C S E D Y F R C A M L V G S E K P L D E E D K K P V L D L H H H T V S G T F P L
UniRef90_UPI0002B4321F R I V L L A A C C S S D Y F R C A M L T V G S E L D S E K D K P C V D I Q Q G L V L
UniRef90_R4GID3 R S V L L A A C C S Q Y F K K L F T S G L V V D D Q Q N V Y E I L D F L V S A D A L S A L
UniRef90_UPI0004403235 K N V L L G S S R Y F K T L Y C Q V Q R K A S D G Q Q A T V T H L D I V S A D A Q F K A I
UniRef90_H3B913 R N I L F A S S S G Y F K M L L S Q S Q N A R E D G Q Q P T A A S F F E V F S D T F T A I
UniRef90_F6ZSA7 R N V L F A S S S G Y F K M L L S Q S Q R D M G Q E P T A T A T F D V F S D T F T A I
UniRef90_V8P8N5 R N V L F A S S S G Y F K M L S Q S K E A E S Q P T T A T F Q A F S P E T F S V I
UniRef90_C3YC40 R A V L A A S F S P Y F K A M F S N E L A E A S H Q E K V T T I N G V F E A P M I L L
UniRef90_A2BIA1 K V V L A A C C S D F P A E E D P V I V G E E D N K E H V L D L Q H V T V A G F A P L
UniRef90_W5LKW1 R L V L A A S S G Y F S A L F S G G M S E A R Q E E E V Q I T G V V D A E V F Q V L
UniRef90_UPI00029D7331 K N V P G P S R Y F K T L Y C Q V Q K T S E A R Q A T V T H L D I V V D A E Q G F K A I
UniRef90_UPI0004421ACA H S V L A A S S S P Y F R A M F C S N F R E D S R Q E P K V Q L K G L V D S A T L E R I
UniRef90_UPI0003509747 R S V L A A C C S K Y F K K L F T T G T L T D P Y V Y E I D F V K P P S E A L S A I
UniRef90_C3YEU4 K N I L A A S S S D Y F R A M F T T R G M R E C N Q D T V E I K G V V K P Y S G L E N V
UniRef90_UPI0003598ED2 K S V L A A C C S Q Y F F A M F T N E M S E S K A S R I V L L E I D P S A L S L L
UniRef90_I3JAQ6 R N V L F A G S S G Y F R A V H Y L Q D S G S Q R Y E S T A S L D I V V T S T A D A F S I I
UniRef90_C3YT0 R N V L A A C C S Y F R A M F S N E L A E A S H Q E K V T T I N G V F E A P M I L L
UniRef90_W5UF32 R A V L A A C C S M Y F H L F Y R D Q L D T H D V V R L N S D I V V T A P A F S L L
UniRef90_UPI0003B769A R N V L F A S S S G Y F R M L L S G G P D G L P E T V N A T F D V F A P E T F T V I
UniRef90_UPI0003EAE7B9 R L V L A A S S P Y F A A L F S G G M K E S S K D V V P I L G I E A G I F Q L L
UniRef90_UPI0003F0E2B2 R I V L A A C C S P Y F N A M F T S E V R E K S G E T V I V L Q D L E P N A V E A I
UniRef90_A7RPP2 R V V L A A S S S P Y F F A M F T S G E L S E S R Q A T V V T L Q K E I D D A R A L E E L L
UniRef90_B4I5F0 R M V L A S C S P Y F Y A M F T S F E S R Q A R I T L Q S V I V S A R A L E L L L
UniRef90_UPI00035A0C00 R N V L A S S S P Y F K A M F C S H F R E S T E A K V W L R G I D S A T T L E E Q V
UniRef90_G1T1Z0 R N V L A S S S P Y F R A M F C S H F R E S T E A K V Q L K G I D D E R A T L E E Q I
UniRef90_UPI0003C15738 R V I L A A C C S P Y F R A M F T G E L A E S R Q T E V V I R D I D P R A M R P I
UniRef90_UPI0003F079A7 R N I L A A C C S P Y F K A M L T N D L L E S E R K T E I T I N D V D P R A M R P I
UniRef90_W4YL69 R A V L S G C S P Y F K A M F T G N L C E S E K E E I D L K S V D G K T A I N V L
UniRef90_UPI0004438103 R V V L A A G S S P Y F H A M F T G E M T E S R A K R V R I K E M G W T L G L L
UniRef90_W5Q642 R A V L A A C C S P F F Q L F Y K E R E L D K R D L V C I H N E V T A P F G L L
UniRef90_UPI0003D6FD8E K V V L A A S S S P Y F R D H M S L N E M S T V S I S V I K N P T V I E Q L L
UniRef90_H3CGP7 R A V L A A C C S Q Y F Q A M F S G G N E S L D Q D V D F R D S V I H P E V L E L L
UniRef90_UPI000383247A K N I L C S C S H Y F R A L F T S S W N T A E K K V Y K I P G I S P E M M R L I
UniRef90_K7JA67 R L V L A A A T P Y F N G M F L N D M A E S K Q K N I T L Q G F D S T A L E A F
UniRef90_W5MCD15 K T V L M A C C R F Q Y F T I F T D S L K C N L N A I S L D P K V L D S E G F A V L
UniRef90_T1KCP5 R V V L A A C C S P Y F H A M F T G E L Q E S R Q Q A E V E I K D I D E H A M E L L
UniRef90_G3PGU1 R S V L A S C C S S Y F H K L F T S G A A A D Q Q N V Y N I D F V A A E A L G A L
UniRef90_H3DCV1 R A V L S A C C S S Y F R A M F C N D H R E S R E M L V E I N G I L A E A M D S F
UniRef90_UPI0004443A09 R A V L A A C C S P Y F Q A M F T L G M R E E L Q P E V Q I V G V S S V G L E A V
UniRef90_H2TMI8 R S V L A A C C S P Y F K K L F T V T D H H E K A A A V Y E I D F V A P E S L E A I
UniRef90_C3YGC6 R F V L S I C C T D Y F R A M F S G S H S E S K K D K V E L L G G V N G E A L E M L
UniRef90_UPI0003AFED51 R A V L A A S S R Y F E A M F S H G R E S H D D T V N F Q D N L H P E V L E L L
UniRef90_UPI000331636D R N I L F A N S G Y F R A L L T H Y I L Q D S G R K H S T A S L D L V Y T E A F S T A I
UniRef90_UPI0002C550D9 R N L L A V C S D Y F N S M F T I G M R E A F Q K E V E L V G A S V I G L K A V
UniRef90_UPI0001CBB4BC K T V L A S A S S Y F K A M F T H M L I E N E L D H I T I K E T D P Y I F D S L
UniRef90_K1RDN4 R I V L A A S S P Y F H A M F T H D M V E S K Q N E I T M Q G D D P S A L E E A L
UniRef90_C3ZPM7 R V V L A A A V S P Y F N A M F T H Q V K E S R E Y I V E L K D M E A N A I E E A I
UniRef90_M3ZNP7 K V V L A A C C S P Y F H A M F T N E M S E S R Q T H V T L H D I D P Q A L E Q L
UniRef90_F1NA60 R A M M A S A S D Y F K A M F T G G M K E Q D L M C I K L H G V N K I I G L K K I
UniRef90_H2SU70 R A L L A V S S P Y F H A M F T L G M K E E R Q E E V K L S G I S H I G L N T V
UniRef90_A0A023F591 K M V L A A C C S S Y F H A M F T S F E E S R Q E R I V L Q G V D P Y A L Q L L
UniRef90_E7FB71 R I V L A A S S P Y F H A M F T N D M V E C K Q D E I V M Q G M D P S A L E A L
UniRef90_H2LUX2 K A V L A A C C S D Y F R A M F T G G M R E S S Q Q D T I E L K G L S A R G L K H I
UniRef90_K1RBX5 R C V L A A F S S Y F E A M F S G N V I E S S Q Q N K V T I N G I E S S T L E K L
UniRef90_J9JKY7 H K V L A S A S P Y F H A M F T N F A E K N Y D L V T M R Q L N S T C L Q C L
UniRef90_G1KJ98 R N V L A S S S P Y F K A M F C N N F A K E S H Q E T V N L Q G I S S I L H C I
UniRef90_UPI00046CF8E5 R S V L A A S S A Y F N A M F T G G L V I E E Q Q E L V E I H S I S E N I L S I L
UniRef90_S4RNT4 R V V L A A C C S P Y F R A M F A H G F R E G L Y Q D S V R L G S V R L A S L
UniRef90_C3XWW6 R V V L A A C C S P Y F F S M F A S G M G E C Y Q D T V T I K D I D S Y A L E Q I
UniRef90_H2YWD3 R A V L A A G S K Y F R A M F C N D H K E S R E M L V Q I N G M Q P H I M D L L
UniRef90_F1P6F7 K A V L A A S S P Y F C D Q V L L K N S R R L V L P D V M N P R V E F E N I
UniRef90_E3LKA5 R Y I L A A A S P Y F K A M F T N R M A E M K K M T I E L Q D I I P N R E S V E L L
UniRef90_F6VSM1 K A V L A A C S N Y F K A M F T A D M K E K F K D K I K L S G I S H A T L E G L
UniRef90_T1GBR0 K V V L S A A S P Y F K A M F T G G L K E C R E M S K V N I L Q G V S P T A M G F R I
UniRef90_M3XHE3 R A T L S A N S L Y F K A M F T G L K E C Q Q D T I E I K Q V S A S T M E F L
UniRef90_UPI000441EF5E R S I L A L I S S Q Y F N A M F A G D F M E S F S A R V E I K E V D P V I M E S L
UniRef90_J9K8H5 H K N I L V A A S P Y F C S M F S T F N E S D K D L V N M R E F D S D V L Q L L
UniRef90_M4A298 R V L L A A S C D Y F R C M F A G G L R E M Q Q N E I P I H G I S Y T A M E K I
UniRef90_E1BHF9 K N V L A A F S Q Y F S R S L F Q N S S G Q K N D V F H L D I K N V S G I G Q I
UniRef90_E5SDD4 R I V L A A T P Y F K A M F T H D M A E K S L H Q I T V Q G V N E D V L E S L
UniRef90_UPI0003317AEF R A V L A A C C S P Y F F W A Q A L V G Q T K N D L V V S L P E E V T A R G F P L
UniRef90_C3ZLA1 R N V L A A C C S P Y F D T L F Q T N M M E Q Q S G M A T L N F T S A E V M E E L
UniRef90_G3PDC9 C C V L A A S C S E Y F H S R L A N G D T R P N P I T L P D E V T I G G F E A L
UniRef90_H2SSN8 R S V L A A C C T H F R F T V A E G D A S M N M L Q L D S E V V T A E A F A A L
UniRef90_UPI00026581FD K A I L A A R S P V F N A M F E H D L E E K K T S R V E I S D M D E D T L K E M
UniRef90_Q8C3F7 R S L L A L N S P Y F H A M F A G D F T E S F L A R V E L R D V E P T A M V G Q L
UniRef90_Q17A34 K V V L S A A S P Y F K A M F T S G L K E S E M S R I E L Q G V C P T A M A R I
UniRef90_UPI0002652F35 R I V L A G C S P Y L R A M F T N G M L I E S A K S H V E I R G I D P V A M E I I
UniRef90_W4ZFN1 R S V L A A C C S P Y F K A M F T G G M S E H Q E T V A L Q D V E S S S L Q A L
UniRef90_M3Z4W6 K V V L A S I L S P Y F K A M F T G N L S E K E N S E V F Q C I D E T A L Q L L
UniRef90_B4NFQ5 K A I L A A R S D V F A A M F E H E M E E R K L N R V A I T D V D H E V L K E M
UniRef90_M8BQ29 K I V L A M R S P V F K A E L Y G E M R A K H E D M S C I T I G D M Q P A V F E L P
UniRef90_B8JJT0 R V V L A A A S H Y F R A M F C N D L R E K H E E N V N I K G M Q D A D T M R L L
UniRef90_E0VUD7 K I V L I A T P F F Q A M F T S G M M E T T S R E I F I I G V E F E A L E A L
UniRef90_F7A5P0 K M V L S C Y S E Y F N A M F N T E L D E K Y K D D V E V H G V E P E S F E K L
UniRef90_W5KKZ7 R T L L A C S S D Y F N A M F Q D H T L E S G A H T V S L P A L T S V G L E Q V
UniRef90_Q94420 K A V A R S P V F N A M L T H Q D T D E A K S S M M Y I N D M D Y D V I Y E M V I
UniRef90_A0A034WNS8 R I V L A A G T P Y F Y A M F T N N M A E S R I K E I T M K E I E P N A L E S L
UniRef90_E7F500 K A V L A A C C S Y F R T L F L D N Q K D V V H L D I S N A A G L E Q V
UniRef90_M3ZRQ4 R A I L A A R S S Y F K V M F T A D M R E R S D S V I K L S G V D C A V L G S L

QUERY UniRef90_C3ZIE5 UniRef90_UPI0003EAA8B6B UniRef90_UPI0002B4321F UniRef90_R4GID3 UniRef90_UPI0004403235 UniRef90_H3B913 UniRef90_F6ZSA7 UniRef90_V8P8N5 UniRef90_C3YC40 UniRef90_A2BIA1 UniRef90_W5LKW1 UniRef90_UPI00029D7331 UniRef90_UPI0004421ACA UniRef90_UPI0003509747 UniRef90_C3YEU4 UniRef90_UPI0003598ED2 UniRef90_I3JAQ6 UniRef90_C3YZT0 UniRef90_W5UF32 UniRef90_UPI0003B769AA UniRef90_UPI0003EAE7B9 UniRef90_UPI0003F0E2B2 UniRef90_A7RPP2 UniRef90_B4I5F0 UniRef90_UPI00035A0C00 UniRef90_G1T1Z0 UniRef90_UPI0003C15738 UniRef90_UPI0003F079A7 UniRef90_W4YL69 UniRef90_UPI0004438103 UniRef90_W5Q642 UniRef90_UPI0003D6FD8E UniRef90_H3CGP7 UniRef90_UPI000383247A UniRef90_K7JA67 UniRef90_W5MD15 UniRef90_T1KCP5 UniRef90_G3PGU1 UniRef90_H3DCV1 UniRef90_UPI0004443A09 UniRef90_H2TMI8 UniRef90_C3YGC6 UniRef90_UPI0003AFED51 UniRef90_UPI000331636D UniRef90_UPI0002C550D9 UniRef90_UPI0001CBB4BC UniRef90_K1RDN4 UniRef90_C3ZPM7 UniRef90_M3ZNP7 UniRef90_F1NA60 UniRef90_H2SU70 UniRef90_A0A023F591 UniRef90_E7FB71 UniRef90_H2LUX2 UniRef90_K1RBX5 UniRef90_J9JKY7 UniRef90_G1KJ98 UniRef90_UPI00046CF8E5 UniRef90_S4RNT4 UniRef90_C3XWW6 UniRef90_H2YWD3 UniRef90_F1P6F7 UniRef90_E3LKA5 UniRef90_F6VSM1 UniRef90_T1GBR0 UniRef90_M3XHE3 UniRef90_UPI000441EF5E UniRef90_J9K8H5 UniRef90_M4A298 UniRef90_E1BHF9 UniRef90_E5SDD4 UniRef90_UPI0003317AEF UniRef90_C3ZLA1 UniRef90_G3PDC9 UniRef90_H2SSN8 UniRef90_UPI00026581FD UniRef90_Q8C3F7 UniRef90_Q17A34 UniRef90_UPI0002652F35 UniRef90_W4ZFN1 UniRef90_M3Z4W6 UniRef90_B4NFK5 UniRef90_M8BQ29 UniRef90_B8JJT0 UniRef90_E0VUD7 UniRef90_F7A5P0 UniRef90_W5KKZ7 UniRef90_Q94420 UniRef90_A0A034WNS8 UniRef90_E7F500 UniRef90_M3ZRQ4

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

QUERY	A S
UniRef90_C3ZIE5	S
UniRef90_UPI0003EAA8B6B	S S
UniRef90_UPI0002B4321F	S
UniRef90_R4GID3	
UniRef90_UPI0004403235	A A
UniRef90_H3B913	S S
UniRef90_F6ZSA7	S S
UniRef90_V8P8N5	S S
UniRef90_C3YC40	K
UniRef90_A2BIA1	S S
UniRef90_W5LKW1	S
UniRef90_UPI00029D7331	A A
UniRef90_UPI0004421ACA	S
UniRef90_UPI0003509747	
UniRef90_C3YEU4	S
UniRef90_UPI0003598ED2	A
UniRef90_I3JAQ6	S S
UniRef90_C3YZT0	N N
UniRef90_W5UF32	E
UniRef90_UPI0003B76A9A	S S
UniRef90_UPI0003EAE7B9	G
UniRef90_UPI0003F0E2B2	S
UniRef90_A7RPP2	A
UniRef90_B4I5F0	T
UniRef90_UPI00035A0C00	S
UniRef90_G1T1Z0	S
UniRef90_UPI0003C15738	R
UniRef90_UPI0003F079A7	R
UniRef90_W4YL69	A
UniRef90_UPI0004438103	
UniRef90_W5Q642	A
UniRef90_UPI0003D6FD8E	G
UniRef90_H3CGP7	G
UniRef90_UPI000383247A	S
UniRef90_K7JA67	S S
UniRef90_W5MD15	S S
UniRef90_T1KCP5	R
UniRef90_G3PGU1	
UniRef90_H3DCV1	
UniRef90_UPI0004443A09	Q
UniRef90_H2TMI8	S
UniRef90_C3YGC6	E
UniRef90_UPI0003AFED51	K N
UniRef90_UPI000331636D	S S
UniRef90_UPI0002C550D9	Q
UniRef90_UPI0001CBB4BC	Q N
UniRef90_K1RDN4	K S
UniRef90_C3ZPM7	K
UniRef90_M3ZNP7	S
UniRef90_F1NA60	S
UniRef90_H2SU70	E
UniRef90_A0A023F591	S
UniRef90_E7FB71	Q
UniRef90_H2LUX2	S A
UniRef90_K1RDX5	Q N
UniRef90_J9JKY7	T
UniRef90_G1KJ98	
UniRef90_UPI00046CF8E5	E
UniRef90_S4RNT4	R
UniRef90_C3XWW6	A
UniRef90_H2YWD3	A
UniRef90_F1P6F7	G N
UniRef90_E3LKA5	
UniRef90_F6VSM1	
UniRef90_T1GBR0	R
UniRef90_M3XHE3	E
UniRef90_UPI000441EF5E	Q
UniRef90_J9K8H5	T
UniRef90_M4A298	
UniRef90_E1BHF9	S A
UniRef90_E5SDD4	Q S
UniRef90_UPI0003317AEF	T
UniRef90_C3ZLA1	
UniRef90_G3PDC9	
UniRef90_H2SSN8	
UniRef90_UPI00026581FD	D N
UniRef90_Q8C3F7	Q
UniRef90_Q17A34	R
UniRef90_UPI0002652F35	S
UniRef90_W4ZFN1	K S
UniRef90_M3Z4W6	S
UniRef90_B4NFK5	V N
UniRef90_M8BQ29	E N
UniRef90_B8JJT0	
UniRef90_E0VUD7	E
UniRef90_F7A5P0	
UniRef90_W5KKZ7	D S
UniRef90_Q94420	E N
UniRef90_A0A034WNS8	S
UniRef90_E7F500	
UniRef90_M3ZRQ4	R

UniRef90_UPI0004573578
UniRef90_F1RE12
UniRef90_J9JSS8
UniRef90_UPI0003513942
UniRef90_UPI00045719F3
UniRef90_C5YG83
UniRef90_W5LRM8
UniRef90_G1KD72
UniRef90_UPI0002C45166
UniRef90_H2TEZ5
UniRef90_H3D8W4
UniRef90_S4RVH6
UniRef90_S4RIM4
UniRef90_E1ZVV1
UniRef90_V4B2M3
UniRef90_F7B713
UniRef90_UPI000393FA32
UniRef90_F1RDL1
UniRef90_K7F2M9
UniRef90_G3RJK2
UniRef90_F2D118
UniRef90_Q4T2F4
UniRef90_UPI0004442991
UniRef90_UPI0001CB9AD3
UniRef90_UPI0001A62DF5
UniRef90_A7SZP9
UniRef90_W5M7S1
UniRef90_Q9NPC7
UniRef90_U6PNP9
UniRef90_UPI0003B5E6D1
UniRef90_UPI0002A4C91F
UniRef90_UPI0004401045
UniRef90_UPI0003BC6C2E
UniRef90_W5KY49
UniRef90_M4AM67
UniRef90_T1HH60
UniRef90_H3BB67
UniRef90_UPI0003F08887
UniRef90_A7RF18
UniRef90_F6RKZ0
UniRef90_E2BJ92
UniRef90_G3HVC6
UniRef90_H3ASU1
UniRef90_E4XSM0
UniRef90_M1BSC3
UniRef90_G3UC76
UniRef90_O60662
UniRef90_UPI000394251F
UniRef90_E4WVV5
UniRef90_UPI0003ACBF11
UniRef90_A7RKJ4
UniRef90_UPI00033176EE
UniRef90_V8NPM1
UniRef90_H2UW72
UniRef90_T1GX08
UniRef90_W5LCE3
UniRef90_W5G466
UniRef90_W5UD57
UniRef90_UPI0002659BD2
UniRef90_W9QT29
UniRef90_H2UE07
UniRef90_P97302
UniRef90_UPI0001CB9FC9
UniRef90_X1WN78
UniRef90_UPI0000E25080
UniRef90_UPI0002B47C1A
UniRef90_I3KAJ6
UniRef90_W5M8P8
UniRef90_UPI0000F1E612
UniRef90_J0XF90
UniRef90_C3ZFT8
UniRef90_Q53GT1
UniRef90_B5DFZ5
UniRef90_T1G5K5
UniRef90_UPI0001757FE5
UniRef90_M8C2B4
UniRef90_B4JY11
UniRef90_Q2R115
UniRef90_H2Y9X1
UniRef90_B8AQN4
UniRef90_C3XXN6
UniRef90_G3NWE6
UniRef90_H2S4K4
UniRef90_G3VZM8
UniRef90_T2MHF2
UniRef90_M8AHM8
UniRef90_R7TLO8
UniRef90_Q5NBZ2
UniRef90_Q297R6
UniRef90_UPI00046C1608
UniRef90_H3D1P7
UniRef90_J9K0M5

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

UniRef90_UPI0004573578 R N V L A S S S P Y F R A M F C S N F K E R L Q S R L H L L G I C V D V L G Q I 70 80
UniRef90_F1RE12 R N V L Y G S S G Y F R M L L T Q S G A K D T V N D S V S A S F D V F P D I F T I I
UniRef90_J9JSS8 H K N V L A A S P Y F R A M F S S N F D E S N K D L I R I R E L N S T T L Q L L
UniRef90_UPI0003513942 K N I L V T A G S R F F K T L Y C V S N K D S P N Q N N T T H L D I V Q G F S V I
UniRef90_UPI00045719F3 R S V L A L C S L Y F N A M F T G D F V E S I S A R V E I K E V E P V I M E T L
UniRef90_C5YG83 R C V L A F R S P Y F R A E L C G V M K E K A S A R N R I R I L D D M E P A I F E A L
UniRef90_W5LRM8 R A V L A A S S P Y F R A E L C D Q V L L K N S A R V V L P D V M H P C V F E R L
UniRef90_G1KD72 R V V L A A A S N Y F R A M F C N D L K E K Y E E K I V I K G V D A E T M Q I L
UniRef90_UPI0002C45166 R A V L A A A S V Y F H L F Y R D R P A G G R D A V R L N G D L V T A P F A R L
UniRef90_H2TEZ5 K A V L A A S S P Y F R D F S A L S T M S G L S I S V I K S P A V F E Q L
UniRef90_H3D8W4 R V V L A A A S Q Y F R A M F C N G L R E S H E E R V E I K G L D S E T M S V L
UniRef90_S4RVH6 R A V L A A A S S R Y F E A M F A G G R E S R D G R E V D F H E A I H P A V L E L L
UniRef90_S4RIM4 R A V L A A A S S P Y F R A M F A G G P L R R E S R E Q T V Q Q E V S A G S L S L L
UniRef90_E1Z WV1 R L V L S A G S E Y F A A M F T S S L R E S A Q N E I E L M D V V D G D A L W A L
UniRef90_V4B2M3 R N I L S A C S P Y F R A L Y F K N Q E G N N K R I E V T L P G V S P G I M N E L
UniRef90_F7B73 K N I L V A G S S R Y F K T L Y C F T N K E N L P N K E N H N Q T T V T H F S V I
UniRef90_UPI000393FA32 K T I L S S C S S Y F C T L F T G A W A T P E K R M Y T I P G V S S E M M D V I
UniRef90_F1RDL1 K L I L C G C S P Y F R M L F S T Q W T K P K Q H F N F P E M S S D T T M S L I
UniRef90_K7F2M9 K A V L A A A S S N Y F K A M F T A D M K E K S K N Q V I K L P G V S D T I L E A L L
UniRef90_G3RJK2 K A I L A A R S P V F S A M F E H E M E E S K K N R V E I N D V E P E V F K E M
UniRef90_F2D118 K I F P A M R S P V F K A E L F G P M K E K K M R R L T V K D L Q P A V F S K A L L
UniRef90_Q4T2F4 R A V L A A A S Q Y F Q A M F G G G L R E S L D Q D R V D F R D S V H P E V S P L L
UniRef90_UPI0004442991 K S I L A A R S P V F N A M F E H E M E E S S K K N R V D I S D V D P D V F R E M
UniRef90_UPI0001CB9AD3 R T V L A A V H S E Y F R A M F T T G M V E S R T K E I D I Q G I E N K S L E T L L
UniRef90_UPI0001A62DF5 K A I L A A R S P V F R A M F E H D M Q E S R E N R I E I H D L E P Q C F R A M
UniRef90_A7SZP9 R V V L A A A S P Y F R A M L T T G F A E T F M S T I P L H E C D P V G V Q S T
UniRef90_W5M7S1 R S L L A A C S S D Y F R S L F K D Y T R E S K A S L I K L Q V V T A T G L G H I
UniRef90_Q9NPC7 R N V L A S F S E Y F G A I Y R S T S E N N V F L D Q S Q V V K A D G F Q K L
UniRef90_U6PNP9 K V V L A A S I P Y F R V M F T T E M L I E A N Q T E V V L Q D L N Y D T L E Q L
UniRef90_UPI0003B5E6D1 K N I L V A G S S R Y F K T L Y C L T K S E A Q D Q A T V T H L D V V Q G F S V I
UniRef90_UPI0002A4C91F R V I M A S C S D Y F K A M F T G G M R E Q E M R E I K L H G L T K T G L K N I
UniRef90_UPI0004401045 K L V L A C V I P Y F R A M F L S E M A E A K Q T L I E I R D F D G D A I E D L L
UniRef90_UPI0003BC6C2E R A V L C S P F F H M F Y S D S P G L G N G T S S S V T L D S D I V T S A A F G L L
UniRef90_W5KY49 R C V L A A S S P Y F H D Y V L L K N V T T V S L P S V M D P L S A F E S V
UniRef90_M4AM67 K A V L A A A S E Y F E S V F G R Q A E G E G D A K E E M H T I S P K V F K D I
UniRef90_T1HH60 K V V L A A A S P Y F K A M F T G G L R E S H S P T V T L H G V C P A V M S R L L
UniRef90_H3BB67 R A V C S E Y F E S V F S S Q G E A G E A G E S K L E M H T I S A K V F R D I
UniRef90_UPI0003F08887 K V V L A G C C P Y L R A M F T N G M L E T D K N Y I E I Q G V D P M A M E L L
UniRef90_A7RF18 K L V L A S F S D Y F S A M F Q D M A E T S Q N S V H L T D M D P A A V Q A L L
UniRef90_F6RKZ0 R C V L A A C S D D F F R A M F Q A D M R E R D G G S V T L G N L P R A V R A F
UniRef90_E2BJ92 K V V L S A C S P Y F E G L L S E H Y D K H P I F I L K D V T F N E L K A M
UniRef90_G3HVC6 K N V L A A S S A Y L K S L V V H D N L L N L D H K D M V S P A V F R L V L D F I
UniRef90_H3ASU1 R I V L A A I S P Y F R S M F T S G L T E S T Q K E V R I L G V E A E S M H F V
UniRef90_E4XSM0 R S I L A A N S D Y F L S L F R N S D D Q T N F V L A G V P A R G F A V L
UniRef90_M1BSC3 R I C L A S S D A F R A M F D G G Y R E R D A K D I E L P N I P A W N V F E L M
UniRef90_G3UC76 R N V L A A A C P Y F K S M F T G G M Y E S Q Q A S V T M H D V D A E S F E L L
UniRef90_O60662 R L I L S A C S P Y F R E Y F L S E I D E A K K E V V L D N V D P A I L D L I
UniRef90_UPI000394251F C A V L V A C S G F F Y S T M Y S R S G E Q L M T V S L P T T L D P S S V S L L
UniRef90_E4WVV5 K I V L A A A S P F F Q T M F Q S G M R E S T S N R V E M P Q I K D Y E T A L S L L
UniRef90_UPI0003ACBF11 Q N V L A S C S L Y F K D L I Q R S V Q D G N Q C G R E K S N L Q A D V L E L L
UniRef90_A7RKJ4 R A V L A A S G G F F A G L F A S N M Q E N S Q N I V N L G E I D P E V T E D V
UniRef90_UPI00033176EE R S L L A C S D Y F R A L F K S H T R E S R E R V I H L H V P S A A G L Q R L
UniRef90_V8NPM1 K A L L A T Q S D Y F R I M F T A D M R E R D Q D K I H L K G L T A T G F S H V
UniRef90_H2UW72 R I V L A A S F S S Y F Q A M F S T D L E S K Q E R V A I N G V E P Q M I G M L
UniRef90_T1GX08 K M V L S A C S P Y F Q F Q A L F Y E N P C Q H P I V I M R D V K W P E L K A V
UniRef90_W5LCE3 R N I L A A A S P Y F K S M F T G G L Y E S T Q S K I T I H D V D P D S M A V I
UniRef90_W5G466 R S V L A A A R S P V F K A E L F G D M R E K A G D P I E I D D I E A D V F N S L
UniRef90_W5UD57 R C V L A A A S S P Y F H D Q V L L K N M S T V S L P A V M D P L S A F E R V
UniRef90_UPI0002659BD2 K M V L S A C S P F F Q S L F I Q N P C E H P I V I L K D I R F V D L K A L
UniRef90_W9QT29 K L V F G P M K D Q N T E M F I K L E D M E A P V F K A L L H F L Y W D S L P D V
UniRef90_H2UE07 R A V L A S C S P Y F H M F Y S D N S T S S V T L D C D I V T A A A F G L L L
UniRef90_P97302 R S V L A A C S S Y F H S R I V G Q T D A E L T V T L P E E V T V K G F E P L
UniRef90_UPI0001CB9FC9 R A V L A L C S P Y F N A M F S N G M Q E S R V E S T I M L K G I D P K S L G I L
UniRef90_X1VN78 K N V L M A A S P Y F R A I F K S R K I C K T G N S T V N R K L D S T V L Q I L
UniRef90_UPI0000E25080 K V V L A A C S D Y F R P L F P K P D H S W L A K T P L S H C E P H V V F R H I
UniRef90_UPI0002B47C1A K V V L A A S S A Y F Q A M F T I G M C E E K K R Q I P L N D V D P K K A L S V L
UniRef90_I3KAJ6 R V V L S A F S P Y F R V M F T C G L R E C N N R E I F L R N D V P A D S L A L L
UniRef90_W5M8P8 S L V L A C A S R R L E G L L T R P G P Q R C S L D F L S P R T F Q Q I
UniRef90_UPI0000F1E612 C A V L A C S G F F Y T L F S R R V A G I C G G E Q G F P E G L D A G S V S L L
UniRef90_J0XF90 K A V L A T R S P V F A A C F H K M S E S Q S D R V I I D D V E P D V M K E M
UniRef90_C3ZFT8 R L V L S V R C P Y F R A M F S S D M A E S R Q K T V V L Q D M D A D V F E E T
UniRef90_Q53GT1 R I L L A A S S D Y F R G M F A G G L K E M E Q E E V L I H G V S Y N A M C Q I
UniRef90_B5DFZ5 R L V L A A S S P Y F K A M F L S N L E E G G K E I V L K D V E P S G V M A M I
UniRef90_T1G5K5 R C Y L A A C S Q Y F Y S M F T K D F A E K M Q A Q V E L K A V S A L G L R A L
UniRef90_UPI0001757FE5 K M V L S A C S P Y F Q S L F F E N P C G H P I V I M R D L K W P E L K A A
UniRef90_M8C2B4 K I L L A M R S A V F N A E F Y G A M R D K G A Q D I T V D D M Q P A V F R A F
UniRef90_B4JY11 R I V L S A S S E Y F L A M F A G S L R E S K E H E V T L G E V H G D A L Q L L
UniRef90_Q2R115 R C V L A A R S P V F M F G P M A T S R H N D R E T I R V H D M E P R V F E A M
UniRef90_H2Y9X1 K I V L A A A V I P Y F T T M F T T D M A E A N V N E I J V I N S I D D H A L E H L
UniRef90_B8AQN4 R C V L A A R S P V F S A E L F G S M K E S D T T V V I R I D D M E A Q F F V Y
UniRef90_C3XXN6 R L V L S A A S P Y F R A M F T S G M A E S R Q E T V V L Q G L D A D A G M F E E T
UniRef90_G3NWE6 R A V L A A C C S L F E F F N S D V A E P H G V S H V T F E D L D P E A V E V L
UniRef90_H2SAK4 K V V L S A F S A Y F Q A M F T C G L R E T Q G A E V L L R D V P A K C L Q L L
UniRef90_G3VZM8 R L V L A A C S P Y F R A M L L K D L G I Q E I S L E E V S P E V M G K V L
UniRef90_T2MHF2 K I V L A A T T P Y F S A M F T N K M I E S S P K I Y I H G V D S K S L Q A L
UniRef90_M8AHM8 R C V L A A R L P V F S A E F G G M K E G D T A G V V R I D E M E A E V F K S L
UniRef90_R7TL08 R C Y L A A C S P Y F Y S M F T E D F Q E R N Q R V E L K G V T A S V G L R V L
UniRef90_Q5NBZ2 R A V L A A C S E Y F G A A A P G G A G G S R E L E M H T I S A K V F G D I
UniRef90_Q297R6 K M V L S A C S P Y F N A L F I N H P E K H P I V T L K D V P Y S D M K S L
UniRef90_UPI00046C1608 R A V L A A S S P Y F H D Q V L L K N M T S L V L P N V M D P G A F E T V
UniRef90_H3D1P7 R V L L A A S C D Y F R G M F A G G L R E A E Q T E V S I H S V D S F T A M K L
UniRef90_J9K0M5 H K I V L V I S A C P Y F R T M F T K F A E A D K Y V V N I R D I D S N I L Q L L

UniRef90_UPI0004573578 V D Y A Y T G E I L I N G S G N V L S L V 100 M E A A D L Y Q Y P K V L E A C S L Y I K 120
UniRef90_F1RE12 L D F I Y T S G Q I E L N S Q G N V L S L V M S A A S Y L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_J9JSS8 L D D Y I Y T S G Q I E L M F T T S Q G N V L S L V M S A A S Y L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_UPI0003513942 V D F I Y S T G N L V L T T S Q G N V L S L V M S A A S Y L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_UPI00045719F3 I D F A Y T G K L V L T T S Q G N V L S L V M S A A S Y L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_C5YG83 L Q F A Y T G R L P D S Y C G S G E V V A F L T A A S F L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_W5LRM8 L L S C Y T T G A L S V P S G E V V A F L T A A S F L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_G1KD72 L D Y T Y T S K V L L T T K E N V V Q K I L L E A A S F L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_UPI0002C45166 L D F M Y T E G R L D L R G L L P V L L T A A S F L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_H2TEZ5 L A F C Y T T G H M S L V T N G E N A E S P L L R A A D L L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_H3D8W4 L D Y T Y T S R A H L T T H K N V V Q S R I L L E A A S F L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_S4RVH6 L D F A Y T A K R V M I V T N G E N A E S P L L R A A D L L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_S4RIM4 L D F A Y T G R V C I E L Q E D S V E T E L L A T A C L L L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_E1ZVV1 V L Y C Y T T G C I E L Q E D S V E T E L L A T A C L L L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_V4B2M3 I D E F A Y T G R D L S L K I N S P E N V A I E E V M S V A S Y L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_F7B713 L D F L Y T S G S L S L K I N S P E N V A I E E V M S V A S Y L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_UPI000393FA32 I N Y A Y T K S V P L I T E D N V V P I L L A A A D Q Q F L V P G I I R A A C C C S F Y L K E E
UniRef90_F1RDL1 I N H A Y A R S P V Q K I T T E K N V V Q C E L L L Q A A D Q L L S G L T T E K A C C C C C Q F L K E E
UniRef90_K7F2M9 V N Y S Y T S A R V M I V T N G E N A E S P L L R A A D L L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_G3RJK2 M C F T Y T G K A P N L D K M A D D L L Q A A A D K Y A L E R L K V M C E E D A L C C
UniRef90_F2D118 L H F L Y T S D A P D D D N C E M L R S L L E A A D M L Q Q F P D R V R D A A A A F L G E
UniRef90_Q4T2F4 G P E P C S A P E T L N E E N A E S P L L R A A D L L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_UPI0004442991 M G F I Y T G K A P N L E K M A D N L L A A A D K Y A L E R L K V M C E E A L C C
UniRef90_UPI0001CB9AD3 I G Y M Y T G K S L D T T H K E T V Q D L L T A A C M L Q Q L E D V K D V M C E E S N S A L C C
UniRef90_UPI0001A62DF5 M G F L Y T G K A P D L L K S M A D V L L A A A D K Y G L E R L K V M C E E S N S A L C C
UniRef90_A7SZP9 V E Y F Y S K R L T I T K E N T E G L L S A A S L F E I P S I L V H E C E G E F I Q
UniRef90_W5M7S1 L D F I Y T S W L S L P D T L E K E T L L E A A S Y L Q Q V L E A I Q L E C S Q Y M I
UniRef90_Q9NPC7 L E F I Y T G T L N L S D S W N V K E I H Q A A D Y L Q V L E A I T K K I K M E
UniRef90_U6PNP9 V S F A Y C G E L N L S A G N V V Q S I M I G A N F L Q Q L D G V A E T K S A E Y L Q K S
UniRef90_UPI0003B5E6D1 L D F L Y T S G N L L T S G N V A I E E V M T V A S Y L Q Q M N D V V N R A T A C C K A F I K Q R Q
UniRef90_UPI0002A4C91F I E F I Y T S K V V L L D M G N L Q D T L E A A N F L Q Q V M P V L S F N A Q L L S
UniRef90_UPI0004401045 V K F V Y S S R L T L T V D N V V Q P L L Y A A C I L L Q Q V E L V A R A C C E Y M K Q
UniRef90_UPI0003BC6C2E L D F V Y E G Q L Q L E E S P V E D V L A A A S F L H M N E H I V V D K K T R L Q K
UniRef90_W5KY49 L N S A Y T G Q L S I V R D D I V N Y V T V A S F L Q M W H I V D K I E I Q Q E V I K K
UniRef90_M4AM67 L D F A Y T S R I V V R L E C F P E L M T A A K F L L M R S V I E I C Q Q E V I K K
UniRef90_T1HH60 L S F I Y T G D I H I T E L A V C P Q L L P A A A M F Q Q A D A I K A C C M F I K Q
UniRef90_H3BB67 L D F A Y T S R I V V R L E S F P E L M T A A K F L L M R S V I E I Q Q E V I K K
UniRef90_UPI0003F08887 L E F M Y T G K I E I T V L E S V Q G V L L A G A S M L N L A S I R N V C S S F L Q
UniRef90_A7RF18 I S Y S Y T S E I T R V D D N V E N L S V A C I L Q I D E V K S E A C C G D F
UniRef90_F6RKZ0 V D Y A Y T A G E T Q I R V D D N V E M F F Q L S F L Q I P S D L Q V A C C K R L K
UniRef90_E2BJ92 M D Y M Y R G E V N I G Q D Q L T P L L K A A S S L Q Q I R G L S D
UniRef90_G3HVC6 Y T G R L T D S V E A T E P S L G A V L A A A S Y L Q Q I P S D L Q V A C C K R L K
UniRef90_H3ASU1 L D Y A Y T S K V L L T E V N V T E V Y R A A S N L N F S H I T S A C C K V L N
UniRef90_E4XSM0 I E F C Y T N S F T L E P S N V T E V Y R A A S N L N F S H I T S A C C K V L N
UniRef90_M1BSC3 M R Y I Y T G S V D V N S M D V A Q R D L L R A A D Q Y L L E G L K R E C C
UniRef90_G3UC76 V D Y C Y T G R V A L N S E A N V E R L L Y A A S D M L Q L E Y V R E A S F I Q
UniRef90_O60662 I K Y L Y S A S I D L N D G N V V Q D I F A L A S R F Q Q L P S V F T V C V S Y L Q
UniRef90_UPI000394251F L D F M Y T S R L P L T P S I V S G V L A V A V Y L Q Q F H M L A E T E C R D S F M Q
UniRef90_E4WVV5 V E F A Y C G K Y G I T T A E N A Q N L L E A A D C Y Q Q F H M L K E N E T E R D S F M Q
UniRef90_UPI0003ACBF11 L E F V Y T G S L V I D S A N A K T L L E A A S K F Q Q F H T F C K V C V S F L E
UniRef90_A7RKJ4 L T F I Y T G Q I E L T T E N A V A L L E A A S F L L Q V T E T L K S P V D S F L A
UniRef90_UPI00033176EE L D F I Y T A W L P L S L D T L E D T L L E A A S Y L Q V T E A L G L G R Y F M E
UniRef90_V8NPM1 L Q F M Y Y G T I E L S M S T V H E I L L Q A A M Y V Q L I E V V K F C C C S F L
UniRef90_H2UW72 V E F A Y T S E V Y I S K A N V Q A L L A A A N L D V V M A V R E A C C C R F M E
UniRef90_T1GX08 I E F M Y K G E I N I D R E K I A P L L R V A E M L Q D I R G L A E V
UniRef90_W5LCE3 I D Y C Y T G K V T I T E G N V Q R L Y A A A N M L Q L E Y I R H A C C A D F M
UniRef90_W5G466 L H F I Y T D S L P E S T N T A S H L L V A A D R Y G L L K L C C E E K L C
UniRef90_W5UD57 L S C A Y T G Q L Q M L R E N D I V N Y L T I G S V L Q M W H I V D K C C T E L L K
UniRef90_UPI0002659BD2 V Q F M Y R G E V N V S Q D Q L P T L L K A A E T L K I K G L A E V
UniRef90_W9QT29 E E L T G L N S K W A S T L M A Q H I L L A A A D R Y G L E R L R L L C E S S L C Q
UniRef90_H2UE07 D F V Y E G V L Q L E D H T P V E D I L L A A A S F L H M N E I V R V C C K R R L C Q
UniRef90_P97302 I Q F A Y T A K L I L S K D N V V D E V C R C V E F L S V H N I E E S C C C F Q F L K
UniRef90_UPI0001CB9FC9 V E F L Y T G C I D I S E H N A Q S I L L E A A S L F Q Q L S D S F L E S A S V F F M K
UniRef90_X1WN78 V D Y I Y T G E I M V T S K E N V Q G L L P E A A N L L Q L S F V E S A V I E F F L K
UniRef90_UPI0000E25080 I D F A Y S A E V T L D L D C Y Q Q D V L G A A V F L Q Q M L P V V E L E E F F L K
UniRef90_UPI0002B47C1A V D Y A Y T G I S I D D R N V V Q Q L L K T A D L L Q Q F S T A K A L Q C K F I
UniRef90_I3KAJ6 L N Y M Y C S A L P L T N G N V Q G I S I A A F L L Q Q M D D V F T R Q L H M M
UniRef90_W5M8P8 L D Y A Y T D T L E A P V E D L R V L L Q A A Q L L Q Q M D Q L W D Q C H M H L Q Q
UniRef90_UPI0000F1E612 L D F M Y T S C L P L T P S T P D G V L T A A T Y L Q M E H V A D T E R A F L C Q
UniRef90_J0XF90 L R F M Y T G T A P N L D R M A P D T L L A A A D K Y Q L D R L K V M C E E Q A L C
UniRef90_C3ZFT8 L S Y F Y S G T I Y V S L D K V K S L Y Q A A D L L Q L D Y V K I A K K Y M V
UniRef90_Q53GT1 L H F I Y T S E L E L S L S Q E T L V A A C Q L Q Q I P S I F H F V C D F L M
UniRef90_B5DFZ5 L R Y I Y T S E I N L T E S N V Q D I F M V A N M Y Q I P S I F S V C V S V L Q R
UniRef90_T1G5K5 L E Y S Y T G S I V I N D A N L Q D D V L E A A D H L Q F N E V L T F A R H L R
UniRef90_UPI000175FE5 V E F M Y K G E L N P S S Q E Q I G P L L K V A E S L K R G L A D V
UniRef90_M8C2B4 L H F I Y T D S M P M R E M V K H L L V A A D K Y A M E R M K R L C E S M L C
UniRef90_B4JY11 V Q H C Y T G S I E L H K D T V E T L L T A K M L Q L T S V T T C C C N F L C
UniRef90_Q2R115 I L H F I Y N D S L P K V D D M A Q S H L L V A A D R Y G M E R L K L M C E A N F L C
UniRef90_H2Y9X1 L N Y A Y T G K I T V N V N T V Q S V M I G A N F L Q Q L Q V K D F A N F M K
UniRef90_B8AQN4 T D S L P E T K K E D E Y A M C Q H L L V A A D R Y N M E R L K L M C E E R L C
UniRef90_C3XXN6 L S Y I Y T G T V R M S L D K V Q P M Y Q A A D L R L Q L D Y V R D T S S Y M V
UniRef90_G3NWE6 I D Y S L S V L K A D K E L V K E V Y S A A K R L Q Q M E R V K Q I L C S G D Y L
UniRef90_H2S4K4 L D Y M Y Q G N L P L D N D N I Q A V A A A A F L L D V D G A F R I L Q N H M E
UniRef90_G3VZM8 L H Y L Y T S E I D L N E D N V Q D L F A A A N L F Q Q I P S I F T L V S F L Q
UniRef90_T2MHF2 V D F I Y G E N L Y V R I D N V H N L L S A A S L M Q I N C I V K D A I N Y L Q
UniRef90_M8AHM8 L C F A Y T D S L P V T E K M C Q H L L V A A D R Y N M E R L K S I C C E E R L C
UniRef90_R7TLO8 L E Y A Y T G T I I N D N N L Q D V L E A A D H L Q F M E V L S S A Q Y L R
UniRef90_Q5NBZ2 L D F A Y T S R I V R L N E S F P E L M T A A K F L L M R S V I E I Q Q E V I K
UniRef90_Q297R6 L D F M Y R G E V S V D Q E R L T A F L R V A E S L R I K G L T E V
UniRef90_UPI00046C1608 L G S A Y T G K I S M A S D E I V N F L T V G S V L Q Q M W H I V D K C T E L L K
UniRef90_H3D1P7 L D Y I Y T S E I E L D L E C V Q E L V A A T L L Q Q L D V I S C E F
UniRef90_J9K0M5 I D Y I Y T F K I M V T E E N V M G L L S A A F L Q L D Y V K G V C V K F L Q

UniRef90_UPI0004573578	
UniRef90_F1RE12	S
UniRef90_J9JSS8	K
UniRef90_UPI0003513942	
UniRef90_UPI00045719F3	Q
UniRef90_C5YG83	
UniRef90_W5LRM8	
UniRef90_G1KD72	
UniRef90_UPI0002C45166	E
UniRef90_H2TEZ5	S
UniRef90_H3D8W4	K S
UniRef90_S4RVH6	K N
UniRef90_S4RIM4	
UniRef90_E1ZVV1	K
UniRef90_V4B2M3	
UniRef90_F7B7I3	
UniRef90_UPI000393FA32	
UniRef90_F1RDL1	A N
UniRef90_K7F2M9	
UniRef90_G3RJK2	S N
UniRef90_F2D1I8	K S
UniRef90_Q4T2F4	G
UniRef90_UPI0004442991	N S
UniRef90_UPI0001CB9AD3	
UniRef90_UPI0001A62DF5	K
UniRef90_A7SZP9	G
UniRef90_W5M7S1	S N
UniRef90_Q9NPC7	
UniRef90_U6PNP9	T
UniRef90_UPI0003B5E6D1	
UniRef90_UPI0002A4C91F	S
UniRef90_UPI0004401045	
UniRef90_UPI0003BC6C2E	R
UniRef90_W5KY49	R S
UniRef90_M4AM67	Q S
UniRef90_T1HH60	R
UniRef90_H3BB67	Q S
UniRef90_UPI0003F08887	S
UniRef90_A7RFI8	
UniRef90_F6RKZ0	K S
UniRef90_E2BJ92	
UniRef90_G3HVC6	R
UniRef90_H3ASU1	S
UniRef90_E4XSM0	S
UniRef90_M1BSC3	
UniRef90_G3UC76	
UniRef90_O60662	K
UniRef90_UPI000394251F	
UniRef90_E4WWW5	S T
UniRef90_UPI0003ACBF11	K
UniRef90_A7RKJ4	S
UniRef90_UPI00033176EE	R
UniRef90_V8NPM1	
UniRef90_H2UW72	R
UniRef90_T1GX08	
UniRef90_W5LCE3	
UniRef90_W5G466	N N
UniRef90_W5UD57	E
UniRef90_UPI0002659BD2	
UniRef90_W9QT29	E
UniRef90_H2UE07	K
UniRef90_P97302	
UniRef90_UPI0001CB9FC9	
UniRef90_X1WN78	K
UniRef90_UPI0000E25080	A A
UniRef90_UPI0002B47C1A	
UniRef90_I3KAJ6	E N
UniRef90_W5M8P8	S
UniRef90_UPI0000F1E612	H S
UniRef90_J0XF90	
UniRef90_C3ZFT8	T N
UniRef90_Q53GT1	S
UniRef90_B5DFZ5	E
UniRef90_T1G5K5	
UniRef90_UPI0001757FE5	
UniRef90_M8C2B4	K S
UniRef90_B4JY11	
UniRef90_Q2R115	S
UniRef90_H2Y9X1	S
UniRef90_B8AQN4	S
UniRef90_C3XXN6	M S
UniRef90_G3NWE6	S
UniRef90_H2S4K4	A N
UniRef90_G3VZM8	K
UniRef90_T2MHF2	
UniRef90_M8AHM8	K
UniRef90_R7TL08	E
UniRef90_Q5NBZ2	Q S
UniRef90_Q297R6	
UniRef90_UPI00046C1608	E
UniRef90_H3D1P7	
UniRef90_J9K0M5	K

UniRef90_C3Z693 1 10 20 30 40
UniRef90_J9JJ8 T K Y K N S S H M G R V F Q F L Q F Y R N G G V L C D I K L E T D D G K I T L G
UniRef90_E1C8X2 Y R D S S H P V E C L L D A F R A F Y L D G L L E T D I A L Q A S G V L L H C H
UniRef90_UPI0003F07C4B F A E E L I C G L N L H E D K L L C D I T L K V G T K E F K A H
UniRef90_UPI0003593805 P K S V L E R N R H M L V S Q M S C D V M F V V G E K K E R Q G
UniRef90_UPI00044316DA E F T R H A S D K V L W N L N E L R L R N G T L T D V T L L V G G R A L R A H
UniRef90_UPI0002B8E07B Q F R N D V H T S D V A F A S M N A L R K S R N V L C D V L T V A G D L E I P V H
UniRef90_J9JM47 C L R W N N Y Q S N M T S V F H Q L L R N E S F V D V T L A C N E S T L K A H
UniRef90_M8AYY7 N L Q D H L H Q M W K E G Q G A D V T F S V S G Q L F S A H
UniRef90_UPI0002B46BEB S N L K V P D S N L A A N M T L L E Q Q F S D M I L K I A D T S I P V H
UniRef90_M3ZZ50 Q H G S F L L R Q L A R M R A A E E L T D V V L L A E G I S F P C H
UniRef90_C3XWQ3 K H P E F L L R G L N S L R E E D V L C D F T L V S E S S S F S L H
UniRef90_I3JXB5 S K V S D P Q H S Q R L L R V L R T F W Q E Q S F H D A L L V V D G E E L P V Q
UniRef90_A0A034WDP3 C L R W K Y H H S N L Q T M F S Q L L D R G C F C D V T L A C E G Q L I R A H
UniRef90_UPI0002ADAA5F I P F P D H S S D L L S G L N E Q R T Q G L L C D V V L V E G R E F P T H
UniRef90_M8C9G6 P S N M C R D L G G L E S M D G A D V T F H V V G G Q K F S A H
UniRef90_Q7XEB4 P S D M N Q Q F G D L L E T E K G A D V V L E V V G G Q T F A H
UniRef90_B4LQP6 S D H A L N V L N E L R E A N L L C D A Q I S V E N S F N V H
UniRef90_UPI0002235CFA M E L P S H S K Q L L Q L N Q R T K G F L C D V I I M V E N S I F R A H
UniRef90_V3Z9J7 N F S D C L L N G I D A L W R Q K L M C D V L L I V E G K N F L A H
UniRef90_UPI0001CBB436 S V K V L S R L N E Q R D K T M F C D M L V T V D G H E F N A H
UniRef90_W5KE14 E F N S T D H G N A I L Q G L D H F R C D K T L C D V T L V P G D E T F V H
UniRef90_U6PFU1 E F E S E V H N R S L V A K L A E L R D D C H F C D V T L I A E G I R I N A H
UniRef90_H2LI05 F E S T V H S S H V L H R L D E Q R C R D T L C D V T V M V E G Q S F R A H
UniRef90_C3Z954 M R S E G L L V D V T L C V E G K E I P C H
UniRef90_V4B634 F K R E D L P S T A F P V I T A D I R R R Q G K L C D V G D Q R F S A H
UniRef90_UPI0003F073F0 S S G V L S H L L N D Q R K K V L C D M T I V V D N G H D F R A H
UniRef90_UPI000333FC77 V H S A T H S D V L S L E D D Q R K K G F L C D I T L I V E N V H F R A H
UniRef90_K1R5L4 D H I N T F F M G L K R L W L S G D H S D V T I Q V Q N E T F L C H
UniRef90_C3Z1U6 Q S L L S R L N Q M R N G E L C D V T I V E E Q Q F R C H
UniRef90_H3B896 M Q H S H H C K Q L Q L N K Q R E T G F L C D C T V V I G Q S Q F K A H
UniRef90_UPI0003345DF9 F V Q H S V R V L Q E L N K Q R E K G Q Y C D A T L D V G G L V F K A H
UniRef90_W4WPPW9 F C M A N Y L K E T M K M F M M R S H H M L T D V I L E V G T E L F A H
UniRef90_Q6YCH2 C T L E N D V G E L W E N P L F T D C S L V A G H E F R A H
UniRef90_J9IXU8 L V E D F K Q L L N N Q E L S D V T F I V E G K K L Y A H
UniRef90_E9H5G8 R L N W E N H S N K L L N V F G R L F S N E S F T D V T L A A Q G R S I R A H
UniRef90_H3BC68 Q L S S N S Y L V N K V L E G V R N L R A Q N A F C D V T V E A E G S F P A H
UniRef90_T1FW14 R D L W E A Y N E F R Q K G M F C D V V L V V N G R R F P V H
UniRef90_W2SX24 F E I D A D Y S K V E S S Q R L Q S N G Q L C D V E I L V R N G T V H A H
UniRef90_H3D7Y3 H I S S Q R T G L L S G F Q R L R S L R M C D V V L E A G G V S F P C H
UniRef90_V9KGS8 E L E D A A H A R A L L R E L K S F Y D A R L L V D V T L E V I G G R R F L C N
UniRef90_UPI00032B0D17 Q H S V S L L H K V K S M R E Q A E M V D V V L I A E A E E F P C H
UniRef90_K3Z7C9 A S D L H R H V L G E L R S E A G A D V T F A V I S G K S F A H
UniRef90_A7S474 I E N P K H G G E I V D G L Y K Q F K A R R F C D V I L L F E K T E V K A H
UniRef90_UPI0003F09EC1 F C D V N H A R A I L L S L N E M R H Q P K L T D T V I F E V A G K Y F Q C H
UniRef90_M8BE87 P S D I T D H L L G K L L Q G K E G T D V I F E V Q G E A F P A H
UniRef90_U4UCW7 L R W N D F H S S I I S S F G H L R D A E D F V D V T L A C E G Q S F E A H
UniRef90_UPI0002B45AF0 P S D L G H F G K L L E S G K L T D V N F E V D G E T F S A H
UniRef90_J9KU70 E V L Q V L R Q D R F F C D I K L K A D D N K I V I A
UniRef90_Q6P6L4 R F Q L P G H E A A T L R N M N Q L R A E E R F C D V T I V A D S L K F R G H
UniRef90_Q2R136 P S D I G A Q T L G R L L A A G H G A D V A I H V V G G E T F A A H
UniRef90_A7RV90 H P L E F L Q T L D K M R V S G E G C D V T L K V T N Q S F P G H
UniRef90_UPI0004440E9D V E V P G H G G R V L G R L R A Q R E R G F L C D C W V Q V G P A R F P A H
UniRef90_F7AJJ3 D A S H H V D F L E A F R T F Y K E G L F T D V T L V S S G E I F R C H
UniRef90_T1HUJ4 C L R W N N H R S N L L T V F D Q L Q N E A F T D V T L A C S G T S V K C H
UniRef90_A0A023F0E7 C L R W N N Y Q S N M V S E L D M L R T E E Y L V D V T L C C E G H K F R A H
UniRef90_E1C1B9 Y Q V S R H S A D M L H S L N Q Q R K N G R F C D V L R V R G D E S F P A H
UniRef90_UPI0003314968 F K D Q D F S S D L L R Q L N G L R Q Q L L T D V R V C A G G T E L P C H
UniRef90_Q7XEB3 P S D M N Q Q F G D L L E T E K G A D V V F E V V G G Q T F A A H
UniRef90_M8C262 Q S N L H K H F L D M L K S G G E G A D V T F T V A D S K S F L A H
UniRef90_R7UCR3 F K D A N R N A C L L R G F K E L H E S L L F D V T L I V A D S K E F E C H
UniRef90_B3RP20 H F N D N R H L T I N V V H S L D K L R I Q Q E L C D I Q L V A D D G K V N A H
UniRef90_C5YNW7 S N N L Q Q H L G E L L A S K A G S D V T F T V S N G E S F P A H
UniRef90_X1XUQ5 K F T D E G M K S N V L Q S L S T M R K N R L F C D V V L L V D N T E I H A H
UniRef90_U6H6K6 L L H G L E E C R Q K Q L Y T D V I L C A S D E E F P C H
UniRef90_L1JE83 D P L F H S H R S K E L V S L W E S R E L C D V D V V V E G T R F Q A H
UniRef90_W5MFN0 E L E D A S H A G S L L K E L K L F Y D S K L L V D V T I E V E G K L F Q C N
UniRef90_E2AEB4 C L R W N N H R S N L L S V F E D L L Q T E A F T D V S L V A D G Q I V K C H
UniRef90_H3A1P2 T E V S D S S Y G S T L M E G L S R M R Q D D F L C D L T L G T K T K S N V H
UniRef90_I1J211 D L Q G H L R Q M W K D E Q G A D V T F S V G G Q L F S A H
UniRef90_C5Y168 P S D I G S H L G L L L D C A E G S D V S F V V D G K K F P A H
UniRef90_UPI0003331608 Q I E F P Q H S S S L L E T L N R H R L E G K F C D V S L V V D G R E L R A H
UniRef90_D2A5R5 C V R W N S Y Q S N L Q N A F P K L L N S E H F V D V T L A C E N E M L K C H
UniRef90_J9K3Y2 T E I Y K V L Q T L H Q N K V L C D I K L E T D D G G V V F G
UniRef90_X1XKT5 E L F Q I L Q S F L K D E V F C D I K L E T D D G G S L F G
UniRef90_UPI0003F0AB44 M Y D S Q D L V D V T L C V E N S Y P C H
UniRef90_K3Z2C6 A Q V H F P L S D M G R C F K E L L S L G I G C D I T F E V G D E K V R A H
UniRef90_UPI0004572B4F S H T A A A F T I M N E M R L S Q Q L C D V T L K V Q D E E I L M A H
UniRef90_H2M3P2 S E S H G L Q L C L L Q S F R E Q G L L F D F T I K V Q D H S F P C H
UniRef90_H0WGF6 F E R S S H W S E L L C W R Q N E Q R R L G L Y C D I T L C A G G P E F R A H
UniRef90_A7RK65 D Y C R E L L H T L N E F R L E N H L C D V E L I V G N N R F A A H
UniRef90_M4AHA6 Q M A I P N F G N N V L E C L N E Q R L Q G L Y C D V S V V G K H A F K A H
UniRef90_H0W071 Y Q Q T L L Q D L K D M L D H G K F L D C V V R A G E R E F P C H
UniRef90_F7B8D7 S Q F V F P L Q V A L N L R E M N L M R E S S L T D V T I T A E D R E F E C H
UniRef90_UPI0003F08081 K L Q S T N H P N N L L K E L N K C R L S E T M C D I T L V V E S R F F P A H
UniRef90_L8GLW0 T F H T D L Q R F V K C S Q F A D V T F A V E G E L I P A H
UniRef90_M7YN33 S L G H D L A M M W D K Q D L T D V S F D V G E S F S A H
UniRef90_F2DU82 A S T L Q S D L K Q M F N N P L S D D V S Q L T V E G T P I S A H
UniRef90_V8NHH9 Q H S L N L L D Q I K C M K D L T K M I D V V L V A E E K K F P C H
UniRef90_Q05CJ2 L A S E D H G Q K L S L L Q Y S F R E Q N V F Y D F K I I M K E I T P C H
UniRef90_N6JULL2 F H C S E L S S T M F H V L Q Y E Q K R M N R F C D T L Y V N N K L K A H
UniRef90_UPI000258F8AF C L R W N S Y H S N M Q N S F P S I L L D S E Q F V D V T L A C E G R S L K C H

UniRef90_C3Z693 R A V L L A S C S P Y F R G M F T S G Y A E E S K Q E R V S I Q D V S E V A M A T I 80
UniRef90_J9JJ8 H K V V F I S A S S Y F F R A M F T L S E E V K K D H I N I R L P E I V D S F K V L Q L L
UniRef90_E1C8X2 R A V L L A A C S S Y F R A M F T A D M K S K S K N Q I R L P E I V D S F K V L Q L L
UniRef90_UPI0003F07C4B R V V L L A S E Y F R A M F T V Q L K E S K E D V I E L K D I S I L T P E S F Q C L
UniRef90_UPI0003593805 A H K Y V L I S S R S D V F R H M F A G P E G I K T E F E V P D L S G D H F W E M
UniRef90_UPI00044316DA K A V L L A C S S G F Y S I F R G R A G L G V D L S L P G G P D E A G G F A P L
UniRef90_UPI0002B8E07B R L V M A S S G S P Y F F M A M F N G G F P D R V K L N G G I P D G A K G L Q L
UniRef90_J9JM47 K V V L S A C S S Y F Q K L L M D N P C K H P T I L P Y D V C F N D L K F I
UniRef90_M8AYY7 R Y L L A A R S P V F K A E L F G S M K E S V V J E S I K I Y D D L E P P I E E A L
UniRef90_UPI0002B46BEB K A I L L A A R S P V F A A M F G H D L E E N K K G V V T I T D D L D P D V L K E M
UniRef90_M3ZZ50 K V V L S A F S P Y F Q A M F T C G L K E T R G G E V P L R D T A A Q S L E L L
UniRef90_C3XWQ3 R A I L L A S C S D Y F K A L L T S A L T D D G K Q D K V E L E G G V T S M A E G V R C L
UniRef90_I3JXB5 K N I A A S P Y I R T K L N Y N P K E D G S T Y R I E L E G G V T S M A I M K Q I
UniRef90_A0A034WDP3 R V V L C A C S S F F D T V L T N Y A S E R D P I I M K D V T F A D V K C L
UniRef90_UPI0002ADAA5F R S V L L A A C S S Q Y F K K L F E T S G A V V D Q Q N V Y E I D F V S A E A L T S L
UniRef90_M8C9G6 R S V L L A A R S V F K A E L F G S M M E N G G D P V E I G D M E S D V F K S L
UniRef90_Q7XEB4 R C V P V F R A E L Y G L M K E G D T A G V V C I E E M E A Q V I F K V L R F L
UniRef90_B4LQP6 R A I M C S S S Y F R A Q F T G F N S N D E S R V V H I P G I S A S I M N C V
UniRef90_UPI0002235CFA K N V L L A A S S I Y F K S L V L H D N L I N L D T D M V S S T V F Q Q L L D F I
UniRef90_V3Z9J7 K L V L A T C S D F F F E K F S D G K D K P G S N Q I E L E D V K A S T I Y S I
UniRef90_UPI0001CBB436 K C M L A A C S D P Y F E S L F R S N L M E A R T G K V D L Q C T S V T E G M Q S I
UniRef90_W5KE14 R V I M A S A S D Y F K A M F T G M K E Q E L Q E I K L H G V T S K T G L K N I
UniRef90_U6PFU1 R V V L A A Y S D Y F K A M F T S E M I E S R Q Q E I E I F D V V E A P A L D A L
UniRef90_H2L105 R S V L T S A C S S Y F S L R I S S L M Q H G A V V T L P P E V T V I E G F E A L
UniRef90_C3Z954 R V V L S A C S S E Y F Q A M F T S G N H S E S K K D K I E M G G V I S A E A L Q L L
UniRef90_V4B634 R I L L A A S S I P Y F N A M F T H D M V I E S K Q G E I C M Q G I D P S A L E S L
UniRef90_UPI0003F073F0 K C V L A A S S P Y F E S L F R S N M K E S Q T G K V E L Q C T L S A E G M E A I
UniRef90_UPI000333FC77 K A L L A A S S E Y F S M F F A D E G E M G Q S L Y M L E G M L A D T F S I L
UniRef90_K1R5L4 K A V L A T M S S Y F D S M F G S D M K E S L T G S V V I E E M E P R T F K K A
UniRef90_C3Z1U6 R V V L A A F S S Y F Q S L F D V L N R K G F V V S D G D K H L K A S A F A Q L
UniRef90_H3B896 R N V L A A F S E Y F G A F Y K T T S D N T V V F L D Q S Q V F K A D G F Q K L
UniRef90_UPI0003345DF9 W S V L A C C S H F F Q S L Y G D G S G G S V V L P A I F A E I F G L L
UniRef90_W4WPW9 K V I L A A A S P Y F K A M F T G G L K E C E M T R V K L Q G V C P T T M A R L
UniRef90_Q6YCH2 K A I L A A R S P V F R A M F E H E M E R L T N C V E I H D L D P Q V F K E M
UniRef90_J9IXU8 R C I L M A R C E P L E R M V N G H M R E A F D L Q I Q I E D T S Y Q C F Y D T
UniRef90_E9H5G8 K M V L S A S S K Y F E K L F L J E H H M E S T C S P G P M I V T M A T E D L S C I
UniRef90_H3BC68 K I I A S S Y C R A L F V G N A S T G K A E T S R V K L K Q V S A T G L K H V
UniRef90_T1FW14 K A I L A A H S S Y F F A L F T N G M K E S M E D V V H M Q G L E T E S M E I I
UniRef90_W2SX24 K V V L A A A V T P Y F K T M F T G N M K E A R S Y Q I C K V I D H D T L V Q L
UniRef90_H3D7Y3 R A F L A S S S E Y F W A L F G E T T A E R F A G C I R L P A L T P E G L E A I
UniRef90_V9KGS8 R N V L A A A S S P Y F R S M F T G G L Y E S K Q K K V T I H D V D S D S M A L I
UniRef90_UPI00032B0D17 R L V L A A F S P Y F K A M F T C G L L J E C T Q R K V V L H D L D T A E S V S V I
UniRef90_K3Z7C9 K N I L A A R S P V F K A E F F G D M E E K T S Q R V E I K D M E P I V F E A L
UniRef90_A7S474 K V V L A S A S S R Y F D A M F S D H F S D C E Q E K V E L P A L D D K T G P A L
UniRef90_UPI0003F09EC1 R A V L A S G S D Y F K A M F T N E M Q E K K C N H V K L N E V N P R I V F K I L
UniRef90_M8BE87 K L V L A M R S P V F K A E L Y G A M R E K D M S R I T I N D M Q P A V F E A L
UniRef90_U4UCW7 R V V L S A C S P Y F R E L L K A N P C Q H P I I L W D T H R K D M D S L
UniRef90_UPI0002B45AF0 K L V L Q N T A S C P Y F E D M G G G G G R G V F Y X A L L H F I Y W D A L P D M
UniRef90_J9KU70 K Q K V L A S A S P Y F H S M F T N F S E R N H D V V V M R E I D S T A L Q L L
UniRef90_Q6P6L4 K V I L A A C S P F L R D Q F L L N P S S E L Q V S L M H S A R I V A D L L L S
UniRef90_Q2R136 R C V L A A R S P V F R A M F F G P M A M S R K N N E E T I R V H D M E P R V F
UniRef90_A7RV90 K L V L A A N S T Y F R A M F G E G F V E S S K N D V V L H D L D P K G V N A V
UniRef90_UPI0004440E9D R A V L A A C S G Y F Q L C Y R D R P A G A R D A L R L N C D V V T A P F G R L
UniRef90_F7AJJ3 K A A L A A C S H Y F K V M F T A D M K E K S K N Q I K L S G I D H A L L D S L
UniRef90_T1HUJ4 K M V L A A C S S Y F Q C L F T E L P C R H P V V V L K D V F P E D V E A L
UniRef90_A0A023F0E7 K V I L S A C S P Y F R N V F K E N P C E H P V V I L K D V F P E D V E A L
UniRef90_E1C1B9 R A V L A A C S S E Y F E S V F S A G P G D G A A G G G E M H T I S S K V F G D I
UniRef90_UPI0003314968 R N V L A C S S P Y F R A M F C A G F R E S R E A R V Q L Q G L E P A T L G Q L
UniRef90_Q7XEB3 R C V L A A R S P V F R A E L Y G L M K E G D T R V E E M E A Q V I F K V L R F
UniRef90_M8C262 R C V L A A R S P V F K A E L F G S K M N E T L A Q R E S I K I D G M E P S I F E A L
UniRef90_R7UCR3 R S L L A S S S D Y F R C E M F T S K L A E R D Q R E S V S I S G M V D A T S M E L V
UniRef90_B3RP20 R I L L A A V S S G Y I K Q M L R D E D T A D L S S Y R V E G V D K L S L E T I
UniRef90_C5YNW7 K N V E K S S G R V E I L K E M E A P V F G A M L R F I Y T D V V P E L D D V K
UniRef90_X1XUQ5 R N V L A C V S P H L M E L F S T D S D C K L P C Y R L N G L I T K H G L M F L
UniRef90_U6H6K6 K V V L A S S S R Y F S A M F M T P F S E Q Q T S R V N L K Q I S P W A L R Y L
UniRef90_L1JE83 R V V L A A G S P H F R A M F T K N F S E S K A R E V L H E I T A E G F Q G V
UniRef90_W5MFN0 R N I L A A A S P Y F R S M F T G N G L Y E S K Q K V T I H D V I D A E G S M S L I
UniRef90_E2AEB4 K T V L A A C S S Y F Q S L F I A L P C L H P T I I L K D V K Y S E L R A I
UniRef90_H3A1P2 K V V M A S C S D Y F Q N L L K K D P S I R R V D L N D S S P I G L A T A V
UniRef90_I1J211 R C L L A A R S P V F K A E L F G P M K E K S I Q P V K I D D I E P L V F E A L
UniRef90_C5Y168 R N V L A A R S P V F K A Q L M G S M A D A N M S S I T L H D I V P A T F K V M
UniRef90_UPI0003331608 K A V L L A A S P Y F H D K L L L G D T P R L T L P S V L E A D A F E G L
UniRef90_D2A5R5 K V V L S A C S T Y F E K L L L D N P C Q H P I I F M K D M K F D Q E M Q S L
UniRef90_J9K3Y2 Y K V V L A S A S P Y F L A M F T N F S E K N Q D Q V T I R Q L D S S A L Q I I
UniRef90_X1XKT5 H K V V L A S A S P Y F H G V F T N F K E N N Q D I F V I K N L D S T A L Q L L
UniRef90_UPI0003F0AB44 R I V L A S C S P Y F H A M F T H D L T E S R Q N K I R I N G V E A S A M R L I
UniRef90_K3Z2C6 K W I F G P I G K P D L H R V V V E D V I E P V V F K A M V N F I Y A D E L P S I
UniRef90_UPI0004572B4F K I V L A S C S P V F R A M F T A G L R E R G M E V I P I E G L C K V M Q R L
UniRef90_H2M3P2 R C V L A A C S D V F R A M F E V D M R E R G D G S V T L G N Q C S A V S S F
UniRef90_H0WGF6 R S V L A A A T K Y F Q F A E S R S G R V E M R D W R C E P G P E P A T V E A V
UniRef90_A7RK65 K N V L C A S S I Y F N G L F S S M R E R Q S E T V N L K Q F P V N I M E D L
UniRef90_M4AHA6 R A V L A A S S S Y F R D L F N A G G K S S V V E L P P A V Q P Q S F Q Q
UniRef90_H0W071 R L V L A A C S P Y F R S R F L A E P E S A G E V R L E E V S P D V V A Q V
UniRef90_F7B8D7 R V V L A S C S P Y F K A M F T Y D L R E S T E R K V T L H G I E A T S F A Q I
UniRef90_UPI0003F08081 K A V L A X T A G Y F Q N L F L N T R L D A A R T Y V V D F I T P A N F E K I
UniRef90_L8GLW0 K A I L C G R S E H F R A M F T S G M R E S Q A E V I D V H D L T L P A F N A L
UniRef90_M7YN33 R L V L A T R S P V F R A E L Y G V M A E S K M A S I T I H D M E A S T F R S M
UniRef90_F2DU82 R A L L A A R S E A F K A M L L N E M S E S T M K T I T L K E I K A F D T L N L
UniRef90_V8NH9 K L I L A A F S P Y F K A M F T C G L M E C A Q R E V V L H D I A A E S V S V L
UniRef90_Q05CJ2 R C V L A A C S D F F R A M F E V N M K E R D D G S V T I T N L S S K A V K A F
UniRef90_N6JLL2 R N V L A C S S P Y F D S I L K H H K V V K E Q L T V N C L D S S E I F N H V
UniRef90_UPI000258F8AF K M I L S S C S D Y L A D L L R E N P C Q H P I I L M K D L K F W E I E A L

UniRef90_C3Z693	
UniRef90_J9JJ8	K
UniRef90_E1C8X2	R
UniRef90_UPI0003F07C4B	Q
UniRef90_UPI0003593805	A N
UniRef90_UPI00044316DA	A
UniRef90_UPI0002B8E07B	S
UniRef90_J9JM47	
UniRef90_M8AYY7	D S
UniRef90_UPI0002B46BEB	S N
UniRef90_M3ZZ50	A
UniRef90_C3XWQ3	
UniRef90_I3JXB5	S
UniRef90_A0A034WDP3	
UniRef90_UPI0002ADAA5F	
UniRef90_M8C9G6	T
UniRef90_Q7XEB4	K
UniRef90_B4LQP6	R T
UniRef90_UPI0002235CFA	R A
UniRef90_V3Z9J7	E
UniRef90_UPI0001CBB436	
UniRef90_W5KE14	S
UniRef90_U6PFU1	
UniRef90_H2LI05	
UniRef90_C3Z954	
UniRef90_V4B634	
UniRef90_UPI0003F073F0	
UniRef90_UPI000333FC77	
UniRef90_K1R5L4	
UniRef90_C3Z1U6	N T
UniRef90_H3B896	
UniRef90_UPI0003345DF9	
UniRef90_W4WPW9	R
UniRef90_Q6YCH2	R S
UniRef90_J9IXU8	K S
UniRef90_E9H5G8	
UniRef90_H3BC68	D S
UniRef90_T1FW14	A S
UniRef90_W2SX24	
UniRef90_H3D7Y3	
UniRef90_V9KGS8	
UniRef90_UPI00032B0D17	
UniRef90_K3Z7C9	
UniRef90_A7S474	
UniRef90_UPI0003F09EC1	
UniRef90_M8BE87	K N
UniRef90_U4UCW7	
UniRef90_UPI0002B45AF0	E
UniRef90_J9KU70	S
UniRef90_Q6P6L4	
UniRef90_Q2R136	S
UniRef90_A7RV90	
UniRef90_UPI0004440E9D	A
UniRef90_F7AJI3	
UniRef90_T1HUJ4	
UniRef90_A0A023F0E7	
UniRef90_E1C1B9	Q S
UniRef90_UPI0003314968	G
UniRef90_Q7XEB3	K
UniRef90_M8C262	R S
UniRef90_R7UCR3	
UniRef90_B3RP20	S N
UniRef90_C5YNW7	
UniRef90_X1XUQ5	S
UniRef90_U6H6K6	R
UniRef90_L1JE83	
UniRef90_W5MFN0	
UniRef90_E2AEB4	
UniRef90_H3A1P2	
UniRef90_I1J211	E
UniRef90_C5YI68	
UniRef90_UPI0003331608	E
UniRef90_D2A5R5	
UniRef90_J9K3Y2	A
UniRef90_X1XKT5	A
UniRef90_UPI0003F0AB44	K
UniRef90_K3Z2C6	
UniRef90_UPI0004572B4F	
UniRef90_H2M3P2	G T
UniRef90_H0WGF6	K
UniRef90_A7RK65	Q
UniRef90_M4AHA6	
UniRef90_H0W071	K
UniRef90_F7B8D7	K
UniRef90_UPI0003F08081	
UniRef90_L8GLW0	K
UniRef90_M7YN33	C N
UniRef90_F2DU82	K N
UniRef90_V8NHH9	
UniRef90_Q05CJ2	K S
UniRef90_N6ULL2	
UniRef90_UPI000258F8AF	

1 10 20 30 40
UniRef90_P34568 P C R L A D D M Y G L F D N K Q F S D F T L V C K S Q T F H I H
UniRef90_K7ITQ5 H T S A L A N D L R T L Y D N Q D F S D F T K L V A R D T R S G V F H A H
UniRef90_X1Y326 L K W N D F G S S I L S S F R K L R Q D E K V L D V T I A C A D T R S S F T A H
UniRef90_R7UE29 E N P K F Q M K V L S Q S F S K L Q R E K V L C D L I A E G V K F D V H
UniRef90_I3KEF8 F T D R S H S S R V V K S I M D L L E D G L F A D V T I T V D S K E F H L H
UniRef90_E5S3E4 T T M D V D S S R S V L G A G L A K Q R K R K D G R F C D V H F S V T G R R V S A H
UniRef90_X1XG64 S H I V G V F E M L Q S Q R K D K V L C D I E L K T D D G T I V F A
UniRef90_H3A388 K M D S S S H A T Q L L L H L N N Q R G C G F L C D V V V V V E N S L F Y A H
UniRef90_W422A6 Q Y Q C S E H S N D I L N Q L H Q L W K Q R I L C D D G N I I A N G N H F A V H
UniRef90_X1WIW3 K I F K V L K S L R K D E V L C D D T K L K T D D G R V I C G
UniRef90_UPI0003D0C555 L V N D I G E L W E N S L F T D C S L V V A G G E F R S H
UniRef90_M8C7Y3 P S D M H H H L A R L L S A G E G S D V T F E V G S G E T F P A H
UniRef90_A8PFD1 P A E I Y A R D L E A I Y K E A G R L A D F T I V A S G R E L P A H
UniRef90_E9I3H2 F S I T S E T E D L A R T N L A E L Y T S M N N S D V I F A V G N K E F P A H
UniRef90_K7J5V4 F S I T S E T E D L A R T N L A E L Y T S M N N S D V I F A V G N K E F P A H
UniRef90_J9LFZ7 E Y K Q S S Y A E I F K V L Q S L R K Q Q L F C D I K L R T D D G G V I C G
UniRef90_I3KX17 L L Q Q L Q E Q R I Q G L L C D C M L V V K G V C F K A H
UniRef90_W5F2M2 P S D L H R H L G D L L K S N D A A D M T F Q V V D G Q R Y S A H
UniRef90_A0A044V614 P H F M G R D L K S L L D N G D F S D F T L H V D G R R S F K C H
UniRef90_A4QNP8 H I E I P N F G N T V L G C L N E Q R L M G L Y C D V S I V V K G Q S F K A H
UniRef90_C3XYB2 D E S Y S G R F L A S V H G L W K S E S L A D V V L E V E G R S F A C H
UniRef90_H3BGT6 Q L Q N T N H P T A L L H K A N Q M R L A G T L C D V V I L V D S Q E F A H H
UniRef90_UPI000359F476 C I E V I D D S K A F V A R F A V L F N S A D F S D V K L R V G D V S F F G H
UniRef90_S4RS56 V D F P H F S E A V V H R L N Q Q R L E G Q L C D L S V G V G R T F R A H
UniRef90_A8JIB4 P T L A D I S F L V E G R R F Y A H
UniRef90_T1KUS9 L K W N N H L S N L S D V F S N M L I S E N L V D V T I A C E G A S L K A H
UniRef90_H3AQ92 E L E D A D H A R S A L L K E L K E F F Y D N K Q L T D V T I E V V S G R L F S C N
UniRef90_W5KK14 H M E I P N F G S A V L D S L N E F Q R L L G H C D V A I M V N G Q A F S A H
UniRef90_F6TZ14 I H L Q N F S K S L L E T L N A Q R L G G H F C D V T V H I H D A T L R A H
UniRef90_K4A2F4 Q S D M A G H Y A K L F E E K V G V D V T F S V G G E E F A C H
UniRef90_S4RIR2 S V S Q A L L A L F E K E Q L C D V T I K V G A K R I P C H
UniRef90_M4JBV8 C L R W N N H Q S N L T T V L L L E D E K L C D V T L A C D N G I V K A H
UniRef90_F6QW61 N Y N S F N L T Q K L N K Q R K E F W D M A L T V D H H I Y A H
UniRef90_Q9NJZ3 C L R W N N H P S T V L G V L T S L L Q R E A L C D V T L A C E G E T V K A H
UniRef90_B4NIN4 N H S K P V T R E L I N L I Q N G L L T D V V I N V R D R E F Q C H
UniRef90_E9GSL2 K H V L R H L K L W N E K P L A D V T F K F K S K V I K A H
UniRef90_A3BPA6 D L S R H L G E L L E D G V G A D V T F D V R G Q P F A H
UniRef90_W5NLK4 L T D S S H F Q T V L C C L N D Q R I Q G M F C D V T I V V E D I K F K A H
UniRef90_G1KKG1 E F P E H Y K V I L D R L N E Q R E Q D Q F T D I T L I V D G R H F K A H
UniRef90_Q8IXQ5-4 K K T L C D V L L M V D G E R K I P A H
UniRef90_UPI0001CBB1AA E W I T N D R Q I L D S F G R L Y N N P E I S D V T L H V E D T T Y Y A H
UniRef90_S8DU60 S S S I S K D L E R L L E F G S G C D V T L V V D V H K F N A H
UniRef90_M8C6Y9 L A I P A P S S N I L Q E D F A R M L K E D E E G A D V T F I V D G K S F R A H
UniRef90_N6UQA0 C L R W N N H Q A N L L G V C A Q L L R D E R L V D V T L A C E G R C I R A H
UniRef90_W5E686 M H R H F G R L L S S G D G A D V T F E V D G S T F A A H
UniRef90_A2Z018 S L L A H R L A T M S N R R D L T D V C F D V D G K S F A V H
UniRef90_L8HGA8 P S P L S A L S A D L R G L L E Q E T Y K D V S F V L E D K V I R A H
UniRef90_C5X1J3 P S N L H L N F G D L L S S K Q G A D V T F L V A G E T F F E A H
UniRef90_K3YE34 P Q D L S R H L G D L L A A G H G A D V T F Q V A G E T F F R A H
UniRef90_U3K5E1 P A H A V S L L R G L S A L R A E R S L L D V T V V A G G R E F G A H
UniRef90_E3LQC7 P V E V T K D L E N L F R S G K H S D F T F I V E G R E L R A H
UniRef90_T1LFL4 P S D M Q Q H F S D L L A E E G T D L A E E G T D V T F K V V G S E T I A H
UniRef90_I1IKF5 Q S D T H Q H L G A L L S D S E G A D V S F E V G G E T F A H
UniRef90_UPI000387082E I H L Q N F S R S L H E T L N G Q R L G H F C D V T V R I R E A T L R A H
UniRef90_K3ZLU6 Q Q R V T V P P S D L H Q D L N G R L L S G K G G D V V F E V G G E R F T A H
UniRef90_M0VXR0 P S D L H Q H F G D L L E N K D A A D L A F Q V G G E I L S A H
UniRef90_J9JZ43 D I Y E V L Q S L R N D E V F C D V K L V T E D N N I T F A
UniRef90_UPI000440E48D H S Q F L L E R L R K Q R E R G F L C D C T V T I G E A N K Y E A H
UniRef90_UPI00046C17DA L C W D N F H K N M S T G M N S L L E N E D L V D V T L A V E G K Y L K A H
UniRef90_W4VTG1 R F K W N N Y Q N H L S N V V R Q E L J E E D C M V D V T L S A D G Q R I H A H
UniRef90_UPI00045713EC I N L H N F S S V L E T L N E Q R N R G H F C D V T V R I H G S M L R A H
UniRef90_K7IM53 L E N H G H L P Q L Q S D L E A L F N D P K F S D V T V I S E G A S L K L H
UniRef90_G3Q586 L Q S L K K L W A D G V G C D V I L K V D D A K E Y K A H
UniRef90_H2Z146 M Q L K V P E C R L S K D F E S L L D E S H F T D C I F A V E G K E Y K A H
UniRef90_H3AGZ5 H Y T L Q N H T K Q A F A V M N E L R L S R Q L C D V T L R L R Y N D F V A H
UniRef90_D8FT05 C L R W N N Y Q S I T S A F E N L R D D E A F V D V T L A C E G R S I K A H
UniRef90_H2SG58 L H S D S H K Q S I L S K F N K L R K D L L C D I T L V V E D V H F K A H
UniRef90_U9UJZ9 S T Q F F S K L S Q N Y I E L L K D D E Y Y D I T I E V G E K I F R A H
UniRef90_UPI0004576357 R F K F T S Y G D S M L Q K M N V L R Q Q N R F C D V T I K L N N V A F V H
UniRef90_UPI00034FFCBE L R W N D F H S N S Q S F H A L L E G E D L V D V T L A A G G Q Y V H A H
UniRef90_A0A015JJC2 T Q F F S K L S Q N Y V E L L N D N E Y Y D V T I E V D N V K I P S H
UniRef90_D8L7V5 C L R W N N P Q S K N L T D V L S G L L Q R E V L V D V T L A C D G E T F R A H
UniRef90_UPI000234F2C8 W S S F P S D L R R D L G R L L S S G A G A D V A L E V R G E T I A A H
UniRef90_R7TDW4 S H M K T F M A C L H K M R E N D V M T D V T L K L D G S S V S C H
UniRef90_N6WBX2 L R W N N H Q N H I L R A F D A L L Q S K T L V D V T L V C A E T S I R A H
UniRef90_M8C3M5 P S D L H R H L G N L L E S M D G G N V T F L V G D K F L A H
UniRef90_H2ZW75 Q S R S H K D A V L A A L N Q Q R N D G I L C D V T L V A E E Q K F H A H
UniRef90_L8GRG9 N H S L G A D L G A Y V G S A R Y A D I V F E V E D V R I P A H
UniRef90_UPI0003940284 L N H V R K Q S S L C D V T L V V G G R R A H
UniRef90_C5Y178 P V P P S N I G S D L G C L F D S N V G T D V S F I L K G E T V Q A H
UniRef90_A0A026WP14 L R W H N H Q A H I L Q A F E A L L Q A E V L V D V T L I C A E S S F K A H
UniRef90_R1DQR3 S L R A G L A K L W R A G T C C D V E L V V E G R S F S A H
UniRef90_E9GMR4 L E W K N Q S A F L V Q A L S K L R Q N D T L T D C T L A A D G R H I K A H
UniRef90_I3KT83 L S K H S Q T M L D K L N E Q R S L S N Q F C D I T L L T E G E E Y R A H
UniRef90_UPI0003D0CFC8 Q S N S H N D A V L A A L N Q Q R S D G I L C D V T L I A E E Q K F H A H
UniRef90_W4WM09 S V L E C L G N S F D D E H T S D L T I Q V E D Q S I F V H
UniRef90_UPI000350AC3E L A T L L E S G R R A D V T F A V E A S R F D A H
UniRef90_E2BNS1 C L R W N N H R A N L L N V F D E L L A K E A F T D V T I A E A G G T I K C H
UniRef90_Q0IXL6 P P D L R R H L G G L L E S G D G A D V T F H V A G E E V R A H
UniRef90_W514K1 P P N A L Q H F R K M L E D T S A D A D V T F D V S Q Q E T F A H
UniRef90_N6U6X0 C L R W N N H L K N L T D V L T K F L R E Q V L C D V T L A S N G Q V F Q A H
UniRef90_K3Y3B7 E V P V P P S D L S D N L G K I L V G K K G A D V T F K V I G G E A F P A H

UniRef90_P34568 K A I L A A R S S R V F S A M F E H H M Q E S D T N M T T V D D I E P E V M R E L 80
UniRef90_K71TQ5 K N I L A A R S S S V F A A M F R H K M K E N V E N T V P I K D V V G R T S K D V L K E M
UniRef90_X1Y326 K V I L A A S A C S D Y F R S M K L L K A N P C E H P L V L L K D V V V T S D K G L E N K
UniRef90_R7UE29 K V I L V S A A C S D Y F R S M F T S N L K E S S H Q K E I E L K G V L R K D V V S A T V F Q L L
UniRef90_I3KEF8 R L V L S A Q S S S F F R S M F T S N L K E S S H Q K E I E L K D V V V S A T V F Q L L
UniRef90_E5S3E4 R C V L A V R A C A Y F D T D V P A Y S N D K D P I P V S C T T L V D S T V L F Q L L
UniRef90_X1XG64 H K N V L V S A S S P Y F F H K M F T S L D E C N K N L V N I T E L V D S T V L F Q L L
UniRef90_H3A388 K N V L A A C S S G Y F R P L V A T E D L I H L D Q V G V T A T V F S Q Q L L N F M
UniRef90_W422A6 R A V L A S S S E Y F R A L I Y L F E N D N V R Q D F V Q L H S N I S D S K E S L E Q L L
UniRef90_X1WIW3 H K V V L A S S S A S P Y F F H A M F T N F S E K N Q D D F V V I R N I S D S L A L Q L L
UniRef90_UPI0003D0C555 K A I L A A C S P V F R A M F E H E M L I E S L T N R I E I H D L H L Q V V F K E M
UniRef90_M8C7Y3 R Y K L A A R S S S V F R A E L L G P M K E K T A T R I Q I N N M D A K V V F R A L
UniRef90_A8PFD1 Q I I L A A R S S P V F A A M L E P H T E E A K N S R V V F P D I T A S L A L Q L L
UniRef90_E9I3H2 K A I V G A R S S P V F T A M F Q H D M T E A A L N R V E I V D L E P E I F Q A V
UniRef90_K7J5V4 K A I L A A S A S P V F L A M F K H D M K E K N E N D I V E I R D M D S T V L F Q L L
UniRef90_J9LFZ7 H K V V L A S A S P Y F F H E M F T N F E E K N Q D I V L I K H F D E R V T T L L H L
UniRef90_I3KX17 K N V L A A F S S Y F R S L F Q N S P S Q K N D V F N L V I Q D V S G I L G Q I
UniRef90_W5F2M2 R C V V A A R S S V F K A E L L G A M E E S S S G S T I V I R D M E A D V F E S L
UniRef90_A0A044V614 K A I L A A R S P F F Q A M F R D Q T N Q E S S G E V N L E D T A A E T M A Y V
UniRef90_A4QNP8 R A V L A A S S L Y F A S M F T G G F S E A K N S Q T V S L Q E I S D A S C M K E I
UniRef90_C3XYB2 R L V L A A C S P Y F A S M F T G G F S E A K N S Q T V S L Q E I S D A S C M K E I
UniRef90_H3BGT6 R T V L A C T S K M F E L L F H R N S Q H Y T L D F L S P K T F Q Q I
UniRef90_UPI000359F476 K F I L A S A S K V F K A M F G N S S A W E E S R Q Q E I R L V C Q A V F Y D F
UniRef90_S4RS56 R A V L A A S S P Y F C D Q V L L K S C S R V V L P D V M S A R A F E A G V
UniRef90_A8JB4 R I A L A A S S E A F R A M F S G G Y R E K D A D C V L D P N I T W A V F E A M
UniRef90_T1KUS9 K M I L S A C S P F F Q S L F M T N P C K H P I V T C K D I R F I D L K A T
UniRef90_H3AQ92 R N V L A A A S S Y F K S M F T G G L Y E S K Q K K V T L H D V D A P E S M A L I
UniRef90_W5KK14 R A V L A A S S L Y F R D L F S D S S Q A L F E L P S S V A P S C F Q Q I
UniRef90_F6TZ14 R C V L A A G S P F F H D K L L G Y S E I E V P P V V P T Q V V Q Q L
UniRef90_K4A2F4 K V V L A T R S P V F K A D L Y G P L R E A G A V P I T I E D M Q Q L D V F R E L
UniRef90_S4RIR2 R V V L A S A V P Y F R Q M F L S D M L E T R Q G E V S L Q D M Q Q L E E V R E A L
UniRef90_M4JBV8 Q A I L S A C S P Y F E Q I F V I E N K H P H P I Y L R D V E S V S E M R A L
UniRef90_F6QW61 R V V L A A V S V V K N I I S G N D V K T T F I T I D P S Y L S P A T V D Q L
UniRef90_Q9NJZ3 Q T I L S A C S P Y F E T I F L Q N Q H P H P I Y L K D V R Y S E M R S L
UniRef90_B4NIN4 S I V L H I Y S K R L K P Y L H N P L I I K S S K L T P R G F S L A
UniRef90_E9GSL2 M M I V S S G S P V F C A M F Q N D F R E K L E R T V E I Q D L Q P N V F E H L
UniRef90_A3BPA6 R I V L A M R S P V F M A S L Y G S M R E H R A P R I A V D D M E P E V F D A L
UniRef90_W5NLK4 K N V L A A S S F Y F K N A F S S Q E F W V S G Q V L E L L D L K S D T F A G I
UniRef90_G1KKG1 K A V L A A C S F Y F K A F F Q D F T Q E P L V E I E G V S N M A F R H L I E F
UniRef90_Q8IXQ5-4 R V V L A A A S H F F N L M F T T N M L E S K S F E V E L K D A E P D I E Q L
UniRef90_UPI0001CBB1AA K V F L A A A S D V F K V M L T S R D W Q D S S K P D I Y L D E P Y A T F G E F
UniRef90_S8DU60 K F I L A A R S T V F D A M F F G P S S D P N L K C A T I P D M D P N I L K A M
UniRef90_M8C6Y9 R H V L A A R S P A F R A E L L D P T K A D P V K V D D M D P V I F E A L
UniRef90_N6UQA0 K V V L S A C S A Y F R A L L F V D H P A R H P I V I L K D V R F S D L R T I
UniRef90_W5E686 R C V L A A R S S V F M A E L F G P M K E N T D A S V R I T D M E A K V F K A M
UniRef90_A2Z018 R L I M A R Q S E V F R A E L L G S M A E S K M E C I T I S D M S A S T F K H M
UniRef90_L8HGA8 R C I L A A R C P V L R A M L E S G M A E S G A E V I P I R D L P Y A G F Y A L
UniRef90_C5X1J3 R C V L A A R S P V F K A E V F G R M K E S T R G A V R V E D M D A H V F R A
UniRef90_K3YE34 R Y I L A A R S S V F K A Q V L G A M R E S N V S Q A Y P I R M A D M E P Q V I
UniRef90_U3K5E1 R A V L A A A S S G Y F R A M F G G A L R E S R A E R V R L H G V E P E C L G R L
UniRef90_E3LQC7 R A I L A A R S P V F A A M M E S H T S E S Q N S R V I M E D L Y M D V V E A L
UniRef90_T1LFL4 R C V L A A R S A V F K A E L F G T M K I Q V D D M D A Q I F R A M L G F I Y S
UniRef90_I1IKF5 R C V L A A R S S V F K S G L F G P M K E K T A T S V K I D D M D P R V F K A M
UniRef90_UPI000387082E R C V L A A G S P F F H D K L L L G H S A L E V P P V V P S G A V R Q L
UniRef90_K3ZLU6 R N I L A A R S S V F G A E L F G P M K E K T A A H I Q I Q D M E S N V F R A L
UniRef90_M0VXR0 R C V L A A R S S V F K A E L L G S I E E T S A S P I E I R D M E P D V F N S L
UniRef90_J9JZ43 H K V V L A S A S P Y F F H A M F T K F A E R N L D L V V I R D I N P T A L L L L
UniRef90_UPI000440E48D Y N V L A A F S D F F S T Q S I D V G K G E T T I T L P E L V T C A V F E K L
UniRef90_UPI00046C17DA K M V L S V C S P Y F R E L F K V N P C K H P I V F M K D V S Y V A M S D L
UniRef90_W4VTG1 R I V L C A C S I L F Q E V L S Q V T E D Y P T I E I P S D I S P Q D I K S I
UniRef90_UPI00045713EC R C V L A A G S P F F Q D K L L L G Y S D I E I P S V V S V Q S V Q K L
UniRef90_K7IM53 K S I L A K R S S V F A G M F D A E M R E T L E N A V E I T D I K Y D V L V I E M
UniRef90_G3Q586 R V V L A A S S D Y F R G M F T C G M R E S N Q T C I A L P F L S P S E L D A L
UniRef90_H2Z146 K A Y S R S P Y F R A M F E H E M E E S K L N R V E I S D I P H P V F K E M
UniRef90_H3AGZ5 K I V L A S S S P V F K A M F T N G L K E C G M E V V P I E G I H P K V M E R L
UniRef90_D8FT05 R V V L S A C S D Y F R E L L K S T P C K H P V I L L Q D V N F M D L H A L
UniRef90_H2SG58 R A L L A A S S D Y F S L M F T A D G A K G P L Y Q L Q G M E P R M F A A L
UniRef90_U9UJZ9 T N I L C Y R S P Y L R R T I A T N K K N N D N T H I R L P K I S P E T F Q I I
UniRef90_UPI0004576357 K T I L A A C S P F L R D Q F L L N E S K E V R I S L L Q S S E V G E Q I
UniRef90_UPI00034FFCBE K L I L S V C S P Y F K E L F K M N P C E H P I V I L K D V E L Q E L R Q L
UniRef90_A0A015JJC2 K N I L C C R S P Y L R R V F S S N K N Q S N I K L P N I S F E I F K I V L R Y
UniRef90_D8L7V5 Q T I L S A C S P Y F E S L F L Q N T H P H P I R D V N Y T E M K A L
UniRef90_UPI000234F2C8 W H I L A A R S S V F A D G T T E E K T I P S S R V R I D A M D N A T A F K A M
UniRef90_R7TDW4 K I V L M A S S P F F E V M F Q S E F K E S T T Q D I P L D F A D A V T I K T L
UniRef90_N6WBX2 K M V L S A C S P F F Q R V I F A E T P C K H P V I V L K D F R G W V V Q A I
UniRef90_M8C3M5 R V V L A A C S S V F K A E L L G V M K E K A N N L V E I K E M E A D V F R C L
UniRef90_H2ZW75 K A V L A A C S D Y F R A M F S L C M V I E S G A D E V N L H G V T S Q G L K Q A
UniRef90_L8GRG9 K A L L A A R S H F R A M L T S G M R E A Q S G R I V V P E I S S A F S T V
UniRef90_UPI0003940284 R A V L A A A S H V F R A M F T N R M K E S V S P E V E L R S V E P E I L E L L
UniRef90_C5Y178 R A I L A A R S P V F R A E L F G S M D E A T A S S I T L Q D M E P A I F K A M
UniRef90_A0A026WP14 K V V L S A C S P F F E T I F A E N P C K H P V I V L K D F T R N E L S A L
UniRef90_R1DQR3 R V V L A A E S P C L A A L V C G N F A E A G M P R I E L Q E I S S I F E R A
UniRef90_E9GMR4 R L I L C A C S P Y F K E L L A D H F D K Q A T I F L N N V N Y S L L K L I
UniRef90_I3KT83 K A V L A A C S E Y F N E F F E K G A V S T H E A V V D L S G F T K A S F L P L
UniRef90_UPI0003D0CFC8 K A V L A A C S D Y F R I L L E P G A I T Q D V L A A G S H L Q L L E L S L C S
UniRef90_W4WM09 K A I L K T R C S Y F R N M F Q H D W A E N N Q S V I K L D Q F S Y V V Y K V F
UniRef90_UPI000350AC3E K L V L A A L R S P V F R A K F F G S E R D S S Q E W F R V Y D T G A P V F E A M
UniRef90_E2BNS1 K V V L I A C S S Y F Q S L F S E L Q C G H P I V V L K D V K S E I K A I
UniRef90_Q0IXL6 R Y I L A A R S P V F K A E L F G M K E S S S S N T V V N V D D M E A E V F R
UniRef90_W514K1 R A V L A A R S P V F R K Q F G E P M K E K K M S R I T I N S V E P A V F K A L
UniRef90_N6U6X0 Q I V L S A C S P Y F E T L F I Q T P N K H P I V I L K D V S P N E V K A L
UniRef90_K3Y3B7 R L V L A M R S P V F E A E L Y G P M E E K T S Q H I T V Q D M Q P D V F R A L

UniRef90_P34568 L V Y M Y T G Q T 90 K Y I E Q M A Q S L I A A A D K Y Q L D R L K V M C E Q A L C
UniRef90_K7ITQ5 L H Y M Y T G S R D M K M S T A Q S D L L I V A E K Y D I L R G L K K I C G T L E
UniRef90_X1Y326 L R F M Y N G S T V H I G E A D D L I F D V I K T A A Q L L Q Q V V R G L A D V F C
UniRef90_R7UE29 L L E V V Y T G S T T K L R V E E L Q D D T Y E M A D M Y Q V L T A L F E E C C E N F L S
UniRef90_I3KEF8 I D Y L Y H G T T I K L R V E E L Q D D T Y E M A D M Y Q V L T A L F E E C C E S R F L S
UniRef90_E5S3E4 L D Y A Y D G G T I L V L N E K G N V K C E F L L T L A A D M F G H H V G V K A S Q C K T F F L K Q
UniRef90_X1XGG4 L N Y I Y T G G E I L E L T V T E K N V K V L V A A A D H H L H V G V K A S Q C K T F F L K Q
UniRef90_H3A388 Y T G D I L L S S I L F E E N N L K E V L V A V A N C L K L R D L A F L C C A S F K L
UniRef90_W4Z2A6 L H Y A Y T G S Q I E L T V T E K N V K V L V A A A D H H L H V G V K A S Q C K T F F L K Q
UniRef90_X1WIW3 V D F I Y T F G K I L V T E K N V K V L V A A A D H H L H V G V K A S Q C K T F F L K Q
UniRef90_UPI0003D0C555 M A F I Y T G K A P H S R S M A T G L L A A A D K Y D L Q E V L K G M C C E D A L C C
UniRef90_M8C7Y3 L H F I Y T D S F P E M S D E M A Q H Q L V A A D R Y D M E R L K L E T Y E E R H C C
UniRef90_A8PFD1 L L Y M Y T G R S P N L S D E M A L D L L A A A D R Y F Q L P G L K E M A D Q V L R
UniRef90_E9I3H2 L R F I Y T D Q V N L T N E N S T A L L A A A S N R Y F L N L K W K C C E E M F L
UniRef90_K7J5V4 L R F I Y T A E R V E R T N E N S T A L L A A A S N R Y F L N L K W K C C E E M F L C C
UniRef90_J9LFZ7 V D Y I Y T G R S I V L T E Y N V K V M I P A V N I L L Q V L E Q E G V K A A C C C E D A L C C
UniRef90_I3KX17 L D Y M Y T S H L D I N Q D N V Q A L L D I A Q C L Q V L P N V Q S M C C N A F L K C
UniRef90_W5F2M2 L H F I Y T D S V P L D V V M A G H I L L A A A D R Y N I G R L K N V I C C E E K L C
UniRef90_A0A044V614 L E Y I Y K D T Y S E S S K R T L V E I L A A A D R F C L G R L K N L C C Q E A L I
UniRef90_A4QNP8 L S F C Y T G K L T M A S E Q L V V M Y T A G F L Q I Q H I V I E R G T D L M
UniRef90_C3XYB2 L N Y A Y S G T V Q V N R T N A R E L L Y L A S E L L Q V I E H V R E S T C C L Q F M
UniRef90_H3BGT6 L E Y A Y T A T L Q A K V T D D D L L Y A A E L L E I E Y L E E Q C C L K L E
UniRef90_UPI000359F476 L R Y F Y S A S I D M S T D K A L P L L L A D K Y N V Q S L R N A C C V D Y M
UniRef90_S4RS56 L T S C Y T G R L S L H P D D M V A C L Q L A S F L Q M W H L V D R C C T E L L
UniRef90_A8JIB4 M R F Y T G Q L D S V T P D I A F E L L Q A S D Q V L L E V L K R L K E N A I A
UniRef90_T1KUS9 I D F M Y T G E V N V G Q E Q L P S L L K A A E T L K V L K E G L A E V T E K
UniRef90_H3AQ92 I S D Y C Y T G K V T I S E G N V Q R L L Y A A A N M L Q L Q I Q N Y V R Q T C A N F M
UniRef90_W5KK14 L S F C Y T G R M T V T A S D Q L M V M Y T A G Y L Q I Q N I V I E
UniRef90_F6TZ14 V E F M Y S G S L V V A Q S E A L Q I L T A A S I L L Q I K T V I D E C T Q I I S
UniRef90_K4A2F4 L H F I Y T D K A D A R T D M I R Q A L L V A A D R Y G M E R L T L M C C Q S L L C
UniRef90_S4IR2 V R F A Y E G R A R L A P D G V G L L L Y A A C L L Q V R E V L V G A C S T Y M Q
UniRef90_M4JBV8 L N F M Y Q G E V N V G Q H N L Q A N F L K T A E S L K V R G L T E
UniRef90_F6QW61 L D Y F Y S G K V V I S E Q S S L P E F L R G A Q S F N I P H L Q I H C S D Y L I
UniRef90_Q9NJZ3 L D F M Y K G E V N V G Q S S L P E F L R G A Q S F N I P H L Q I H C S D Y L I
UniRef90_B4NIN4 Y Q W M I A K Y G V I N A N D V T D L L R A A I Y L E M P D L L I E H C W E T L
UniRef90_E9GSL2 L R Y I Y T G D A D L D N V D V R G G L L A A S E K Y G M D S L R K E E C S L R L
UniRef90_A3BPA6 L R F V Y S G T L A L P K E M V R G L L E A A D R Y A M D R L R V I C E L L S
UniRef90_W5NLK4 L N F I Y S A K V A L T G S E D V K L L V A A K K L G I P F L E N L A G Q E K R
UniRef90_G1KKQ1 T Y T A K L M V Q G E E E A N D V W K A A E Y L Q M L E A T K A L E N R F K K
UniRef90_Q8IXQ5-4 V E F A Y T A R I S V N S N N V Q S L L D A A A N Q Y Q I E P V K K M C V D F L K
UniRef90_UPI0001CBB1AA L R Y I Y T G Q I S I N T D V A V S L L M L A D K Y N M V D L K K A C C Q S F M E
UniRef90_S8DU60 L D F M Y C D E G E L S N S V Y R L F D A A D R Y G F S R L K A Y C Q A K L C C
UniRef90_M8C6Y9 L Y F M Y T D T L P H G S D T L Q S H L F I V G V R Y G L D R L A T M C E G K L C
UniRef90_N6UQA0 V E F M Y K G E V H V E Y A Q L N R L L Q T A E S L K V K R G L A E M T Q E Y
UniRef90_W5E686 L H F I F T D S L P M D D M A Q H L L V A A D T Y N L E R L K L T C C V I E K L C C
UniRef90_A2Z018 L H Y I Y C N D L P T C L K D M A Q H L L V T A D R Y G V D T L K D L C C E D T L C C
UniRef90_L8HGA8 L Q F I Y T G T A D I T A H V A Q D V F V V A H Q Y G M E D L K D Q C C E H L V
UniRef90_C5X1J3 P D F Q S S M K K Q E E A A L A Q H L L V A A D R Y N L E R L K L T C C E D S L C C
UniRef90_K3YE34 F R Y C S S G K Q D E A A A M A Q H L L V A A D R Y G M E R L K L V C C E D S L C C
UniRef90_U3K5E1 L D F A Y T G R V R L G P D I A E R L L R A A D L L Q F P A V K E A C G A W L
UniRef90_E3LQC7 L Y Y I Y T G T C P N M G S H A L E I L L A A D R Y A L P G L K N L A E E M A M R
UniRef90_T1LFL4 D W P P E E E E G A D V M W Q E I L L A A D R Y A L R R L R L L M C C E E K L C
UniRef90_I1IKF5 L H F I Y T D S L P Q M D M M A Q H L L A A A D R Y S L A R R L R L K L I C C E H L C
UniRef90_UPI000387082E V E F M Y S G C L V V A Q S E A L Q I L T A A S I L L Q I K T V T D E C T Q I I S
UniRef90_K3ZLU6 L H F M Y T D S L P A M E M A Q H L L V A A D M Y D L R L K D Y C C L Q F I S V
UniRef90_M0VXR0 L H F I Y T D S V P L V L D V V L H L L V A A D R Y N I G R L K L I C C E E K L C
UniRef90_J9JZ43 V K F I Y S G Q I M I T E E N V L Q L F S T S N F L Q I Q E E V T E A C C C E F L
UniRef90_UPI000440E48D L D Y M Y T G S L T L T E G D E L P S I E K A S Y L G I Q E E V V V L C C T Q
UniRef90_UPI00046C17DA L Q F M Y Q G E V Q V S Q E N L S T F I K T A E A L Q I K G L
UniRef90_W4VTG1 I E F I Y H G E I C V P V S Q E A L S L L E A A R S L K I N G L T I N L
UniRef90_UPI00045713EC L D F M Y S G V L R V S Q S E A L Q I L T A A S I L L Q I K T V I D E C T R I
UniRef90_K7IM53 F R F I Y A G K V N N I D A L A G E L A V A A D K Y A L D A L K K K C C E M T M V
UniRef90_G3Q586 I S C S Y S G T L S L S W G C V I F E I S C T A L Q L Q F Q P A T S L C L R F M R
UniRef90_H2Z146 L S F L Y T G Q A S K L S D V M A S Q E L L A A A D K Y A L E R L K V M C C E E S L C
UniRef90_H3AGZ5 I E F A Y T A S I S V G E K C V L H V M N G A V M Y Q I D S V V K A C C C D F L
UniRef90_D8FT05 V E F I Y H G E V N V H Q K S L Q S F L K T A E V L R V S G L T Q
UniRef90_H2SG58 L E F I Y S A Q V N V P S A I E Q L L A I A R L M E V H E L V K V L A E L T S
UniRef90_U9UJZ9 L M Y I Y G G I L S L N G Q N V L E L L A V A D Q L Q L Q E L V D Y L Q K Y L I
UniRef90_UPI0004576357 L R S C Y T G A L E F P V K E L V N Y L T A A S Y L Q M G H I V E R C T E A L
UniRef90_UPI00034FFCBE L Q F M Y R G E V H V R Q Q E L S G F L H T A E L L Q V K G I
UniRef90_A0A015JJC2 I Y G G I L L L N E R D T L D I F K I L L A A D E L L H E I V D Y L Q K Y L I
UniRef90_D8L7V5 L Q F M Y E G E V N V S Q N L P M F L K T A E A L Q I R G L A D
UniRef90_UPI000234F2C8 L H F I Y T D S L P A T M D M A P D L L V A A D R Y D L R G L K S M C C E E K L C
UniRef90_R7TDW4 V E F F Y S G E I N V C D D N V Q T L V A A S E F L C M K D L K N H C D A F M
UniRef90_N6WBX2 V D F M Y R G E I S V P Q Q R L Q T L I Q A G E S L Q V R G L V I E
UniRef90_M8C3M5 L H F I Y T D S L P D N V V M A S H L L V A A D R Y N V E R L K L I C C E H K L C
UniRef90_H2ZW75 L D F A Y T G Q I V L E P S V T I Q D V L A A G S H L L Q L L E L L S L C C S H Y L
UniRef90_L8GRG9 L K Y L Y T S E A D V N E E N V I E L L I V C N L L Y S I E Q L Q E Q C C E N Y I E
UniRef90_UPI0003940284 L E Y I Y T S E Q I T V D S T N A E S L L N V A N O Y Q I P V K M M C V K Y I
UniRef90_C5Y178 L A Y M Y T D E M P E D D E M V R H L L A A A D R Y A L D R L K L M C A Q K L
UniRef90_A0A026WP14 I D F M Y R G Q V K I P Q D D L A G L I R A A E C H L Q V R G L
UniRef90_R1DQR3 L D F L Y L Q E C V T L S Q D D L A G L I R A A E C H F Q I A P L Q A A C E
UniRef90_E9GMR4 V E Y I Y K G C V N I D H T E L Q K F L Q T A R A L K L S G L V N Y G E E E P Q
UniRef90_I3KT83 L D F A Y T S T Q E L N S F N Y L D E L Y K L A D L F N L T L E K A V V D F L
UniRef90_UPI0003D0CFC8 H Y L V Q E L N S F N Y L D E L Y K L A D L F N L T L E K A V V D F L
UniRef90_W4WM09 L K Y L Y T G M I N L S V E K A I L D L K L A D S Y C E S N L K K H C I R I K
UniRef90_UPI000350AC3E L R F L Y T D E P P M T T A M A H G S L L V A A D L Y D L E R L R V A C E K S L W
UniRef90_E2BNS1 L E Y M Y R G E V N V A Q E H A L H S L L V A A G V L K G L V E
UniRef90_Q0IXL6 A L L V F I Y T N A L P E T K A Q H L L V A A D R Y G M E R L K L C C E E K L
UniRef90_W514K1 L H F I Y T D S L P V M Q D N F F Q H L L A A A D Q S Y G L E R L K L M C A R T L V
UniRef90_N6U6X0 L D F M Y K G E V N V S Q N L L P S F L K T A E S L Q I R G L S D
UniRef90_K3Y3B7 L H F I Y A D S M P G M E D R Y D V R R L K Q I C E G L L C

UniRef90_P34568	
UniRef90_K7ITQ5	K
UniRef90_X1Y326	
UniRef90_R7UE29	
UniRef90_I3KEF8	R T
UniRef90_E5S3E4	
UniRef90_X1XGG4	S
UniRef90_H3A388	
UniRef90_W4Z2A6	S
UniRef90_X1WIW3	
UniRef90_UPI0003D0C555	R N
UniRef90_M8C7Y3	S
UniRef90_A8PFD1	T
UniRef90_E9I3H2	
UniRef90_K7J5V4	G
UniRef90_J9LFZ7	K
UniRef90_I3KX17	
UniRef90_W5F2M2	S
UniRef90_A0A044V6I4	K
UniRef90_A4QNP8	
UniRef90_C3XYB2	
UniRef90_H3BGT6	T
UniRef90_UPI000359F476	
UniRef90_S4RS56	
UniRef90_A8JIB4	G S
UniRef90_T1KUS9	
UniRef90_H3AQ92	
UniRef90_W5KK14	
UniRef90_F6TZ14	Q S
UniRef90_K4A2F4	E N
UniRef90_S4RIR2	R N
UniRef90_M4JBV8	
UniRef90_F6QW61	K S
UniRef90_Q9NJZ3	
UniRef90_B4NIN4	
UniRef90_E9GSL2	
UniRef90_A3BPA6	R S
UniRef90_W5NLK4	S S
UniRef90_G1KKG1	E N
UniRef90_Q8IXQ5-4	E
UniRef90_UPI0001CBB1AA	R N
UniRef90_S8DU60	E
UniRef90_M8C6Y9	Q N
UniRef90_N6UQA0	
UniRef90_W5E686	
UniRef90_A2Z018	A
UniRef90_L8HGA8	S
UniRef90_C5X1J3	G
UniRef90_K3YE34	K
UniRef90_U3K5E1	
UniRef90_E3LQC7	N N
UniRef90_T1LFL4	
UniRef90_I1IKF5	S N
UniRef90_UPI000387082E	Q S
UniRef90_K3ZLU6	S
UniRef90_M0VXR0	S N
UniRef90_J9JZ43	
UniRef90_UPI000440E48D	
UniRef90_UPI00046C17DA	
UniRef90_W4VTG1	
UniRef90_UPI00045713EC	
UniRef90_K7IM53	K N
UniRef90_G3Q586	Q
UniRef90_H2Z146	S N
UniRef90_H3AGZ5	
UniRef90_D8FT05	
UniRef90_H2SG58	S S
UniRef90_U9UJZ9	E N
UniRef90_UPI0004576357	
UniRef90_UPI00034FFCBE	
UniRef90_A0A015JJC2	E N
UniRef90_D8L7V5	
UniRef90_UPI000234F2C8	
UniRef90_R7TDW4	
UniRef90_N6VWBX2	
UniRef90_M8C3M5	S N
UniRef90_H2ZW75	
UniRef90_L8GRG9	S
UniRef90_UPI0003940284	
UniRef90_C5Y178	
UniRef90_A0A026WPI4	
UniRef90_R1DQR3	
UniRef90_E9GMR4	T S
UniRef90_I3KT83	Q
UniRef90_UPI0003D0CFC8	
UniRef90_W4WM09	Q
UniRef90_UPI000350AC3E	E S
UniRef90_E2BNS1	
UniRef90_Q0IXL6	
UniRef90_W5I4K1	M N
UniRef90_N6U6X0	
UniRef90_K3Y3B7	K S

1 10 20 30 40

UniRef90_B7PJA6 L L K N L G T L L E D K S F G N V Q L T V Q R R N L Y A H
UniRef90_C5YJ00 P S D I A A D F G N L M E T M E G A D V T F S V V G G Q E F T A H
UniRef90_I118N4 A S D T I G D A L R G L L D C A D G S D V S F S V G G E T F R A H
UniRef90_UPI0003D6F22E V H S D T H S D T V L A S L E D Q R K K G F L C D I T L I V V E N V H F R A H
UniRef90_AOA015LD48 S T Q F F S K L S Q N Y I E L L K D D K Y Y D V T I E V V G E K T F R A H
UniRef90_K7TUA2 P V P S S D I A A D H L G H L L D H A D S S D V T F S V V G G K E T F G A H
UniRef90_U6P678 S I R E S N R E M W E S E L F T D C V I K V G G C K E T K A H
UniRef90_UPI0004574637 I N L Q N F S K S L L E T L N A Q R L G G H F C D V T V R I H S T A L R A H
UniRef90_I1QGN3 P S D I A A H L G K L L E S K E A A H V T F Y V G D E D T F A E H
UniRef90_B4N118 A N S V L N K I A H L Y A E Q L M S D I V L L V V D G K E Y P A H
UniRef90_F6VV18 F V Q H S V K V L S A L N K Q R E E G R Y C D A T L V V V G N F N F K A H
UniRef90_G5EGS4 E F Y Q N L N L M R C Q Q E L C D V T V L E A Y H Q H I H A H
UniRef90_M8ASC5 Q S N L Q D Q L C Q V W K D G Q G A D V T F S V V G G Q L F E A H
UniRef90_UPI0004546BEF H F K F E N Y G D S M L Q K M N K L R E E N K F C D V T V H I D D V E V Q G H
UniRef90_W8BPR1 S K F N E K L L N G L R Q F Y D E Q K L T D V T F K V S N P T V I L P
UniRef90_J9K761 L N T M R R N N Q F C D V H L V V V G G K E I S A H
UniRef90_F4X7T4 C L R W N N H R S I F E E L L H N A A F T D V T L A L E G R T I K C H
UniRef90_E9GZQ5 C L R W N D F Q S N M V N S F K H L R D E K S F T D V T L A C G Q T C K A H
UniRef90_UPI0002C6745C D Q L S E C F E D L L K K G E L S D I T F V V D N K E Y P L H
UniRef90_T1PNL4 C L R W H N H Q T S L L S T L P L L L D Q S H L T D V T I S A E G R T L R A H
UniRef90_UPI0003AFF366 Q V E I P D F G S S V L G S L N E Q R L L G H Y C D V S I L V N G G Q A F K A H
UniRef90_UPI0002C6745C N Y D S F L L G K L N E Q R K R K E Y W D M A L T V N H H V F F A H
UniRef90_U5ERC7 L K W N N F Q K N V S T Q F E K L R E E D D L V D I T F A C E G K K L Q A H
UniRef90_Q5RIH1 P S H S E H V L Q Q L N N Q R E W G F L C D C C I A I G D I Y F R A H
UniRef90_C3ZFB5 R H L R M A F D N Q E T S D L K F M V E G R V H V H H
UniRef90_U3L15 Q P P G Y F R D V F S I L M Q Q R L E E Q F C D A Q S V I V G G Q Q F Q A H
UniRef90_C3YL73 L D A L R H R H V L T D V S L L V V G G R P L L A H
UniRef90_UPI000359DD10 S N A S G L S F R L Q S L Y Q S G D M C D I Q I N V G K K T F Q A H
UniRef90_I3K7A1 C F R L P G H G D M T L K H M N S L R F R Q H F C D I T I V V G K T F R G H
UniRef90_Q16HW2 N N S K G V L K I A N L Y A E Q L M S D V C L V V A N G A N R Y P A H
UniRef90_R7VEY4 L H L S E Q G D S V L R C L N Q Q R T H G R F C D V T L V S G H S F A A H
UniRef90_UPI0003C39B63 L R W N N Y Q N T M T S V F Q Q L R E D L S F V D V T L S C E H G S L K A H
UniRef90_UPI00035939D3 S N F I Q N V Q Q F Y N Q O D I S D V I L K I G E E K Y Y G H
UniRef90_G3PKR8 M E S P S H S L F L L Q Q L N V Q R E F G F L C D C T V A I G N V Y F K A H
UniRef90_U4U558 M Q A L F E L K E N N Q L C D A T I L D G S E I P V H
UniRef90_W8AJV7 K E F V N N P E L S D V T F R V E G K I F Y G H
UniRef90_B3S2H5 M K K L V N K S E Y S D I K F I V G D Q M I Y A H
UniRef90_R7T5G6 T S L P T A F S E M R E A E Q L V D V H L V F D D G R V P C H
UniRef90_E9FZ28 C L R W N N Y H C N M T S V I N Q L L A E E A F V D V T L A C V D G A R I K A H
UniRef90_H3AG74 M L K E L N Q Q R T A K E F T D L K I I V E G K E F E V H
UniRef90_T1DQL8 L R W N N Y T H Y I A T A F D A L R Y E E D F V D V T L C C E G R K I R A H
UniRef90_UPI0003FOABCC T D L S E K M L D L Y N K E F F S D V L R V G K F E F P A H
UniRef90_G5EEX6 R E T L C D M A K F Y N N A Q F S D V N M K V G E E S Y P A H
UniRef90_T1NDR8 P S E L V Q D N L S L L E A T E G S D V S F K V K E E V F P A H
UniRef90_M8BQS6 P S G I Q Q D I S D L F L S A K E G T D V R F M V S G E K F A H
UniRef90_UPI0003595348 N Q Q C D P K G S T F I G E Y L F E L W K N Q C L C D V K L K V G S Q C F L A H
UniRef90_T2AU72 S R Y A S V L L E A V K N L R D K D A L C D V T L I T D D N V Q I R A H
UniRef90_H2TM96 I H L H N S S Q S V L E A L R T Q R R E G L F C D V T V R I H D A S L R A H
UniRef90_E3M0J9 Q E D D S D V V L V V G D R K F H V S
UniRef90_Q7YZ93 L R W N N Y L R H L T Y S L D N H R L N D D F V D V S L C V D G R R I K A H
UniRef90_Q7XEG2 L R R H L G L L E S M E G A D V T F H V A G E E V P A H
UniRef90_K7H6Z8 E V T K D L E N L F R S G K H A D F T L V V E G R E L K A H
UniRef90_B3S7E4 H I R S L A D G L Y N L M D S G E F T D T I V V E E H R F S C H
UniRef90_E2BXG5 W N S F P R N L S S D L Y T L L D E Q L V D V T L A V E G Q I L R A H
UniRef90_B9G5W0 P S D M H L H Y G D L L S S E E A T D V E F L V G G E T F T A H
UniRef90_R7VBT1 N E F L Q E M S A T L R D M R H S D E M V D V V L V F E E T R V K C H
UniRef90_AOA023IMW6 C L R W N N F Q S N I V S A L D S L K C S E D L V D V T L T C E G R N I K A H
UniRef90_W5LY84 S E V S Q P E H G A L L E E L S R M R Q E R F L T D L E L A T K T K A F D V H
UniRef90_K7J8E6 N I N D D F E K F V N N N A F S D I V L T V G R K S F A A H
UniRef90_J3MGQ0 E L R H H F G E L L Q E E T G T D V T F D V S G E S F A A H
UniRef90_C3ZKR0 F L D V V V Q V V E G R E F P C H
UniRef90_V3ZXQ4 S D F I Q R F E N L F D S S R L S D V V L C V S G R R Y R V H
UniRef90_S4RW85 N H L P D L L R E L C E L R E K G S F C D V V V E V S Q S R R Y L A H
UniRef90_R7TIF2 S G L N L D S H V K A F M A S L R K L Q E K E V M T D V T L I L P D Q S I P C H
UniRef90_R7US84 M R E A G E F V D I T L V F D E N K R V L C H
UniRef90_UPI0004574701 P D P A S M L G A D L L S L Y K E G C C S D I T L Y A E N K G F V A H
UniRef90_K3WG88 L V D D H E L F L N S S L S D L Q F L V K G H P I N A H
UniRef90_AOA015MPN4 F S K L L S Q N Y I E L L E D N E Y D V T I E V G E K I F R A H
UniRef90_K7JAF3 R D L G L L F D S A K L S D V T L V V K K I E F S V H
UniRef90_K4AKL0 P L D L H R H V G D L L V S K H G A D V T F Q V A G E T F S A L
UniRef90_H2UET9 Q V E I P D F G R S V L G S L N E Q R L L G H Y C D V S I L V G G R S F A H
UniRef90_C5LRL0 L L T N L R G L L N N P E F S D V T L I J G G R S V A H
UniRef90_Q8IGM8 C L K W N S F S S N L A I T F S N L F K S D L L A D V I L S C D G V V F K A H
UniRef90_M4AA49 T V A Q A L K K E F D N P E T A D L K F C V D G K Y I V H
UniRef90_UPI0003941197 T F L V V E G K F Y A H
UniRef90_D7FIB0 M L S M L T D P A L S D V C L V V E G I D V P C H
UniRef90_UPI00032B1F75 A S D L G E D L L K L Y L K H C C P D I D I Y I G K K F T A H
UniRef90_B8BH15 P S N M H L H Y G D L L V S K E G T D V K F L V G G E M F A H
UniRef90_R7U1E5 S S L P A S F L Q M R E A G E L V D I N L V F G D H I S C H
UniRef90_AOA023EQZ3 S L L E D Q K F T D V I L V C G K D K L K V H
UniRef90_R7T555 N F I Q N M S Q F F N Q E M L H D I L L T V D G Q Q F Y G H
UniRef90_K7J588 L I N E N K F S D V T L I S E G R A L K V H
UniRef90_UPI0003500235 E H I S H L S E H I G S L C L S S E Y S D V T L I V I G Q R I P A H
UniRef90_UPI0003C90975 T P Q I G D H K F S A H
UniRef90_UPI000224057F V H S E V H R D S V L A N F E E Q R K K G F L C D I T L I V E D V H F R A H
UniRef90_UPI0003F11BCC H A Q R V L Q T L N S Y R Q S G T L T D L V L R A G G R D F P C H
UniRef90_C3ZNV7 L Q N D G A Y Q D V I L E V D R D Q F C H
UniRef90_T1ICH5 S K Y V L T K I A T L Y A E R L M N D I C L V V G G I E Y P A H
UniRef90_S4RET2 Q L A S N K Q L S D L L R E L C E L R E R G S F C D V V V E V Q S C R Y L A H
UniRef90_A2Z710 P S D L H Q H L G K L R S E K V G A D V T F Q V R G E T F A H
UniRef90_UPI0002A4A686 H L S G H G K L L L Q R L Y Q Q R E M D F L C D I T I M V K D V E F R A H

UniRef90_B7PJA6 R D V L M L S S P V I F G A M F S H P T K E S Q E Q V I H L P D Q S F D A F M R E M
UniRef90_C5YJ00 R I V T R S P V I F R A Q L Y G P I R E A G T A P I V I E D V Q E A D A F R A L
UniRef90_I118N4 R A V L A A R S S P V I F K A E L F G A M A E A R M S P C I T L H M V E A P A T F G K A L
UniRef90_UPI0003D6F22E K A L L A A S S E Y V F S M M F A E E G A M E G Q S I Y M L E G M V E A D T F G A L
UniRef90_AOA015LD48 M N I L A Y R S S P Y L Q R N M F A K S R N N D N F L V H I K L P N I S P E T F Q I I L
UniRef90_K7TUA2 R A V L A A R S S P V I F K A Q L F G S M A D A E M R C I T L H G L R E S P E T F R I L
UniRef90_U6P678 R C V L G A Q H S P V I F R S M F N N E S M A I E A R E G I I D I Q D Y L R E S V R A M V I
UniRef90_UPI0004574637 R C V L A A A S P F F H D K L L L G Y S E T E V P L V I S A Q T L R R L
UniRef90_I1QGN3 K V V H A M R S P V I F K A E L F G P M R E A G A Q V L P I K D M Q P D A V F K A L
UniRef90_B4N118 R V I L C D V F H V M L M N P E W N E C S K H V I E L H E S C C S A V F P Q F
UniRef90_F6VV18 W S I L A C S S P F F Q S L Y G D G T S A N I I L H E S F S E V I G L V L D F L
UniRef90_G5EGS4 R V I L S A S S S Y F R A M F T G G L R E S T Q R L I P I K E V I D V E V L S Q L
UniRef90_M8ASC5 R C L L A A W F L V F K A E L F G P M K E K E T Q C I K I L D D I D P E I F E A L L
UniRef90_UPI0004546BEF K I V F A A G S P F L R D Q F L L N D S R E V K I S I L Q S S E V G R Q L
UniRef90_W8BPR1 A H R L I L S A A S I L Y F E N L F S S N Q V G T P L I E L S D I D S D T F E R L
UniRef90_J9K761 K T I L A S H S S Y F N N M P E W N E C S K H V I E L H E S C C S A V F P Q F
UniRef90_F4X7T4 K I V L A A C S T Y F Q T L F H Q L S G Y N H H P I I L K D V I G F P V L K A I
UniRef90_E9GZQ5 K M V L S A R S S P Y F K S L L E E N P S K H P I I L K D V I P F A H L Q A I
UniRef90_E4WQW9 R C V L A S C S S Y F R A L L F G G M R E S Q E D K V E L R D T T D A A F S K I L
UniRef90_T1PNL4 R V V L S A C S S F F L E I F R T L D N T H H P V I I P G A S F D A I V I S L
UniRef90_UPI0003AFF366 R A V F R D L F S S A A D S S S S D S S Q A V F E L P S S V I T P T C F Q Q I
UniRef90_UPI0002C6745C R I V V S S V V K N I S A N D V K T T D E L F I T I D P N Y L S P A I V D Q L
UniRef90_U5ERC7 K L V L F A C S P Y F K D L L K T N P S P H P V F F M N E V K Y E V L K S I
UniRef90_Q5RIH1 K A V L A A C S S Y F R M M F L R D Q Q G S A R F D L S N M Q L S A E C V F D L L
UniRef90_C3ZF85 K A V L K I R C E H F R S M F Q A H Q W G E D D K D V I E L T Q F S Y P V Y R A F
UniRef90_U3IL15 K V S N R F K T L M T N K T E H D S H G S K T V E I S D M K Y N I F K M L M Q Y
UniRef90_C3YL73 K A I L A A N S N F N Q Y S F T I L N K Q G S S R V E L H D S S I Q V E S F V S I
UniRef90_K7GZ20 K A V L A A C S S G F F Y S I F L G Q G G S E V S V L N P S S I Q P G G F Q A L
UniRef90_UPI000359DD10 K L I L A A S S D V F K T M L T S V R W T E A N K Q S I E D R S C E T F D R F
UniRef90_I3K7A1 K V V L A A C S P F L R D Q F L L N P S S R L Q V S M L Y S S T V V C D L L Q S
UniRef90_Q16HW2 R V I L C D V F Q V M L M N P E W N E C R E S V I E L K E D P M C S M V F P Q F
UniRef90_R7VEY4 R N V L A A C S P F F N S I F R E R K S E N E S V T L Q C K D H L L F E S L
UniRef90_UPI0003C39B63 K V V L S A C S S Y F Q K L L L E N P C K H P I I L P G D I I T D L K T L
UniRef90_UPI00035939D3 K F V L A K S S E V F R T M L Y N K N W T Q P E I V L E E T E E C Q K Y F D T F
UniRef90_G3PKR8 R A V A A F S N Y F K M I F I H Q T S E C I K I Q P T D I Q P D V F S Y L L H I
UniRef90_U4U558 R A I L C A S S S Y F R A L L E T T L L H N K E K N Q V H L P G V S S D M L Q T L
UniRef90_W8AJV7 K I V L V T A S P R Y F S M L S S K L S E G N T P T V Q I N D I R Y H I F Q L V I
UniRef90_B3S2H5 R S I L S A R C D V F D T M F H D N S V A T E N N D V P Y I D V Q P D S F L A V
UniRef90_R7T5G6 K V I L A G T C C E Y F K R M F L T N M S E S V A T E V S M K G I S S T T G P L V
UniRef90_E9FZ28 R V V L S A C S P Y F Q R V L L D N P C K H P V L L L P V G V S H A D L R A I
UniRef90_H3AG74 Q N V L A S C S L Y F K D L I K S R S R S D S K N G T M T N L N A E V L E L L
UniRef90_T1DQL8 K M L L S A C S P Y F K D V I F K E N P C Q H P V I T F K N V R Y R T D L M S L
UniRef90_UPI0003FOABCC R M V N S S E Y F Q R M F A Q N W K E K D Q K I V N L E E E G Y H K F F E G F
UniRef90_G5EEEX6 R L I L S K S S D V F D R M M S Q K W N G D K F D L E V E D E L C Q K A F A P F
UniRef90_T1NDR8 K I I L A M R S P V I F R V K E F Y G P M R D E N S R S I T V E D M Q M E A D V F R G L
UniRef90_M8BQS6 R C V L A A R S A V F K T E L F G P M K E S T V A S V I D V E D M E P A K V F S A
UniRef90_UPI0003595348 K L V L A A F S D V F C P S Q P Q I P P T V C I D V P S T T P E A L Y Q I
UniRef90_T2AU72 H K I L L S A S A S T Y F E Y M F S H D F I E K D R N V I D V C V E Y R A L T P L
UniRef90_H2TM96 A C V L A A G S P F F Q D K L L L G H S E I S V P L V P A E T V K Q L
UniRef90_E3M0J9 K Q V L S T H S P V I F K A M F H G N F N E S V M N E I P M N N V D L N A F H I F
UniRef90_Q7YZ93 K V V L S A C S S Y F K E L F K E N P H P H P V I F K F L K F E D L N S I
UniRef90_Q7XEG2 R S V L S A R S P V I F R A E L F G A M K E S V N A V V E V D D M E A D V F R A L
UniRef90_K7H6Z8 R A I L S A R S P V I F A A M L E P H T A E A Q T S R V I L K D I D Y D V V Q S L
UniRef90_B3S7E4 K A I L A A C R S N Y F K A F F N G M K E S Q S S S E I R L H G I K S Q A F D R L
UniRef90_E2BXG5 K L I L S V C S T Y F R E L F G M N S C K H P I V I L K D I S Y R D L S S M
UniRef90_B9G5W0 R L V L A A R S P V I F M V E L F G P M K E G T T V N K I H I F D M E A Q V F R Y
UniRef90_R7VBT1 R L V L A A S S S Y F R R M L Q T D M Q E R D A S E I A F K E V S S T I G L L
UniRef90_AOA0231MW6 K V I L S A C S P Y F R F R N V F K E N P C Q H P V I L L K E V S A D D I V S L
UniRef90_W5LY84 K L V M A S C S Q Y F R E L L Q K D P A V R R V E L P S L S P L G L A T V
UniRef90_K7J8E6 K I I L C R K S P A F A K L F M S Q M R A K Q E V K K R I P N L K Y D V C L E M
UniRef90_J3MGQ0 K L V L A A R S P V I F M A E F F G S M K E A A A G R V K I D D M E P A A F K A M
UniRef90_C3ZKR0 R A V L A T T P Y F K A M L S S N L T E S R S K V V R L C G I D S I S F S K I
UniRef90_V3ZXQ4 K F V T A S E V I F C A M L S D Q W Q E S K T E I Q L T E D D A C K D V I F E Q F
UniRef90_S4RW85 K A V L S S T C R Y F R S L F L D V P C S S M G P F V I D D L T I K L F H Q I
UniRef90_R7TIF2 K V V L M A A S P F F D T M F Q S G L K E G A E Q N I Q L D F A D S D I I K T L
UniRef90_R7US84 K V I L A G T C D Y F H R M F L S D M L E S T A K E V T M K E I S G S T G M S L
UniRef90_UPI0004574701 R A I L C A R S S Y F A A M L S G N W A E S F Q E D I T L T G V S S Y E V F S I L
UniRef90_K3WG88 K V V L F F R N S Y F K N M V R F G S A T S Q T A M I E V N N C S Y E V F S I L
UniRef90_AOA015MPN4 M N I L A Y R S P Y L R R L L A S N K N N D N V H I K L P N I S P E I F Q I I
UniRef90_K7JAF3 R S I L A G R S P V I F A S M F D L N M I E S K D M V E I P D I E P E V I K E L
UniRef90_K4AKL0 R Y V L A A R S K V I F K A E L F G P M K E G A S I R V D D M E A R V I F R V L L G
UniRef90_H2UET9 R A V L A A S S L Y F R D L F T S A A A D S S F S S S S S S Q V T P T C F Q Q I
UniRef90_C5LRLO K A I L A S O C S H F R A M F T G G M K E S R E R E V K L T G W S Y E A F S V M
UniRef90_Q8IGM8 K L I L A A C S K K F A D L F E N T P T N G Q C V T I L E A T T P D N M A A L
UniRef90_M4AA49 K A V L K I R C E H F R S M F Q S H W N E D M K E V I E I D Q F S Y A V Y R A F
UniRef90_UPI0003941197 K V L L F T A S N R F K T A N R P C G E N T C I E I S N V K Y Q I F Q L V M Q Y
UniRef90_D7FIB0 K A V L A A W S R P F R A M F T L P M L E S R H Q C R V V I E D E H K H L M V V
UniRef90_UPI00032B1F75 R A I L S A R S S Y F A A M L R G C W A E S T Q D Y I T L Q G L N Y I E M N I M
UniRef90_B8BH15 R L V L A A R S P V I F K A E L F G P T K K G T I D A I Q I D N M E A R V F K A L
UniRef90_R7U1E5 K V I L A G R C D Y F H R M F L T N M L E K N S T E V V M K E I N A R T G I L L
UniRef90_AOA023EQZ3 K A I L V A H S S V F R A M F N S D M K E S S T N R V E I D D L D Y E V V E Q M
UniRef90_R7T555 K F V L A K S S D V F R Y E N C W S E K S K E I T L S E A P E C Q A V F E P F
UniRef90_K7J588 K C I L A K S S L V F A A M F E A E M L E K Q D S S V E I E D I R Y D V L L E M
UniRef90_UPI0003500235 K V I L A A S S D Y F R A Y G M R E A N Q A E V E L Q A P L Q A F A L L R Y
UniRef90_UPI0003C90975 R I V L A A S S I P Y F H A M F T N D M M E C K Q D E I V M Q G M D P S A L E A L
UniRef90_UPI000224057F K A L L A A S S E Y F S A T F A G E G E V G Q S I Y V L E G M L A A T F G I L
UniRef90_UPI0003F11BCC R A A L C A G S T Y F R S L F E A G R L A M V P V V P V A P E G H R E T R
UniRef90_C3ZNV7 R L V L S A A S R Y F R A L F R S D M A E S R Q K T V V L K G L D A G M F E E I
UniRef90_T1ICH5 R L I L A S S E V F Q V M L M N P Q W S E S H E S R Q E T P C A A I F G E F
UniRef90_S4RET2 K A V L S A S T C R Y F R S L F L S A P C S M G P F V V D F L S M R T F E L T
UniRef90_A2Z710 R C V L A A R S P V I F R A Q L F G P M K E G S T D S G V I A L I D D M E P Y T D S
UniRef90_UPI0002A4A686 R N I L A A F S K Y F Y S Q A E K G E E V I T L D P D K V S R Y S L E K L L E F

UniRef90_B7PJA6 L L F I Y T G E V P N L D K V A E D L Y V A A D K Y S M G E L K T L C G D Y L G
UniRef90_C5YJ00 L R F V Y T D D S L P P S D D M I R Q H L L V A A D R Y A M E R L K L M C Q S L L C
UniRef90_I118N4 L C F I Y T D D A L P P R S D D V D K V F Q H L L A A A D R Y A M E R L K L M C Q S L L C
UniRef90_UPI0003D6F22E L E F I Y T T G Y L H A S E D E K T T E Q H L L A T A Q F L K V Y D L V K A Y A D F
UniRef90_AOA015LD48 L E Y I Y T G G L S L S D G Q D T L Q D I L V A A D E L C L Q E L V N Y L Q K Y L L
UniRef90_K7TUA2 L R F I Y T G M Q S S D I D L F Q D E V L A A A D M Y Q L D R L K L M C Q A R K L
UniRef90_U6P678 L E F M Y T G S M D T V S D S N S V Q D E V L A A A D K Y E V L P L K E Q C E T R I I S
UniRef90_UPI0004574637 V D F M Y S G S L M V S H V E A L Q L L T A A S V L Q L K T I I D E C E T R I I S
UniRef90_I1QGN3 L H F I Y T V D L S I R G E M I R H L L M A A D R Y A M E R L K L T C E C E S D L C
UniRef90_B4N118 L K Y L Y T G S H I E V T T L Q T V M L M L A S A D R Y N V R D L I D L C E V I G Y M
UniRef90_F6VV18 Y T G G E L A L T E E N V Q K V L L T S K E L E I L E A I D V C E R F M
UniRef90_G5EGS4 L D Y M Y T G R M R I D E E Q N V I Q L L A T A S D R Y L Q L L T C V R D A C E A R F M
UniRef90_M8ASC5 L H F I Y T D S M L V D E H K L H L Q V A S D R Y L Q L L T D R L K V M C E S K L
UniRef90_UPI0004546BEF L L S C Y S G T L E F P E M E L V N Y L T A A S F L Q M S H I V E R C T Q A L
UniRef90_W8BPR1 L I T F C Y T G S K T M I T D H D N A A K M L K A A N I L Q L L D D D A A V D C V N F I F
UniRef90_J9K761 L I D F L Y T T G Q L T M I T D F N V A Q E L L K M A S I V L I L L D D V K A E C E L K Y I E
UniRef90_F4X7T4 L E Y M Y R G E V N V A H E Q L S D L L K I A Q L L K V K G L V E
UniRef90_E9GZQ5 L E F M Y A G E V N V A Q D Q L P A F L K T A E R L K V K G L A E V L
UniRef90_E4WWK9 I F F I Y T G R I E L A Q D D L V L R L A H R Y G L E V S L L S K F L N
UniRef90_T1PNL4 L T F M Y S G E V N V Y E E Q I P T L L S L A E T L G I K G L A D V
UniRef90_UPI0003AFF366 L S F C Y T G R L S M A S E Q L V L M Y T A G Y L Q L Q N I V E
UniRef90_UPI0002C6745C L D Y F Y S G K V V I S E Q N V E L R G A G Y F N T P R L Q I H C N D F L I
UniRef90_U5ERC7 L E Y M Y T G E V H I T N E N L K E F I K T A E G L Q L R G L S K
UniRef90_Q5RIH1 L Q L M Y T G I A V D H Y E F E L K A S M A Y L Q M Y I P D S L E D
UniRef90_C3ZFB5 L E Y L Y T D Q V D L P P E D A I E L L D L A N S Y C E Q Q L K K L C E R I I K
UniRef90_U3IL15 L Y Y G G T E S M E I P T T D D I L L S A S L F Q L D G L Q R H C E
UniRef90_C3YL73 L I D F M Y S G R L L L Q E A S V T D V L Q T A S L L Q M H N I V T V C C N F V I K
UniRef90_K7G2Z0 L D F M Y T S R L L S L T P A S S V P A L L S A A T Y L Q M E H V V A T C H R F I Q
UniRef90_UPI000359DD10 L H Y I Y S G E L F V S H A T V G P L F I L A D K Y N I R D L I P L C R R Y M L
UniRef90_I3K7A1 C Y T G I L Q F K P E E I V N Y L T A A S Y L Q M E H I V E R C R G A L E
UniRef90_Q16HW2 L K Y L Y V G Q I K V S I Q T V M P M L E L A D K Y N I K D L V E L C V D Y M
UniRef90_R7VEY4 L E F L Y T G Q I K V D Q N S V Q A L T E Q A C E L G L E R L V A Q C V A C L E
UniRef90_UPI0003C39B63 L R D F V Y R G E I D V I T E S E L Q G L L R T A E Q L K I K G L C E T A E N
UniRef90_UPI00035939D3 L I R F L Y T A E V N I S V D S A V G L L C L A D K Y S V E S L K N L C T Q Y M
UniRef90_G3PKR8 M Y T G R C P K Q P V D P S R L Q D G M K F L H A Y Q L
UniRef90_U4U558 L V Y V Y L R G K L D L S E N S V Y S I L M A A A D Y L S I L G A L D L C S T Y L E
UniRef90_W8AJV7 M H Y L Y S G C C E V N S N S D V L E L M A A A S F F G L R D L A K I C V N F M S
UniRef90_B3S2H5 L E F I Y T N C C S L T D K N V V D V L A S A T E Y G L R D L A K I C V N F M S
UniRef90_R7T5G6 I D Y L Y S K K T E Y I T R D N A Q S G I L E A S G I L M L D T L K R N V E E F L
UniRef90_E9FZ28 L V E F I Y R G E T Y V T V D Q L S S I V R V A E L L K L K G L C E V S Q Q
UniRef90_H3AG74 L E F V Y T G S L I I D S G N A K T L L E A A N K F Q F H T F C K V C V S F L E
UniRef90_T1DQL8 L E F M Y Q G E V S I G Q D L P S F L H T A E M L A I R G L T D Y
UniRef90_UPI0003FOABCC L K Y I Y T N Q L E I S L D S V L C Y H T L A D K Y M V T S L K K V C L E F M I
UniRef90_G5EEEX6 L R F M Y S N H V V L H K D N C L P L L V L A D K Y N V T T L K K V C L D F A Q
UniRef90_T1NDR8 L H F I Y T D S L P P D E M L R H L L V A A D R Y A M E R M K Y M C E I K L C C
UniRef90_M8BQS6 L L E F I Y T D T L P D M E L L Q H L L V A A D R Y D M Q R L K A L C E E K L C
UniRef90_UPI0003595348 L M Y L Y T S E M H L T D T T L E P V L S A A C F M G I T D V D M V K S L
UniRef90_T2AU72 I N F L Y S G T L R L T S D T V D S I L V A A D Y L Q I L D A S D L A E N Y I
UniRef90_H2TM96 V D F M Y S G S L V V L Q S Q A L C I L T A A S L Q L K T V I D E C T Q I I
UniRef90_E3M0J9 L Q Y I Y M A P I E I C D E N V S Q L I L M G D Q F G V K K L V R E C E N F L
UniRef90_Q7YZ93 I E F M Y Q G E V N V Q Q E A L Q S F L Q T A E L L A V M Q R L
UniRef90_Q7XE2 L A F V Y T D E L P E T E T M A Q H L L V A A D R Y G M Q R L M R L C E E K L C
UniRef90_K7H6Z8 L Y Y I Y T G S C P S M G P H A L E I L A A A E R Y A L P G L K N F A E S I
UniRef90_B3S7E4 L T Y T Y S G G E L D L S Q D E I S D L L A V A H Q Y C F E L Q E A I C K Y L A
UniRef90_E2BXG5 L H F M Y Q G E V N I K Q E D I S F L K V A E T L Q I K G L
UniRef90_B9G5W0 T D M L P E M D Q E D E T A M V Q H L L V A A D K Y G L H R L K M I C V E I L
UniRef90_R7VBT1 V E Y L Y T G G N I E I L S E E N A Q S E L L A V S D R L L L M K L K K T V E K F L C
UniRef90_AOA0231MW6 L S Y M Y Q G E V E I L S E S K L S S F L H T A A L L Q V K G L
UniRef90_W5LY84 I T Y A Y L G R V H L S L Y T I G C T V A A A T R L Q M P Q L L Q L C A D F L
UniRef90_K7J8E6 L R Y I Y T D K A I P G L D N I A N D L L M A A E R Y A L P G L K S M C E S K S M I
UniRef90_J3MGQ0 L H F I Y T D A I P P T I T M A M H L L A G A D R Y A G L D R L R L I C E S K L
UniRef90_C3ZKR0 L D F L Y S G E I R I G K D D V Q D I L Q T A H M L Q F D K I L Q Y C C R E F I Q
UniRef90_V3ZXQ4 L K Y L Y T G S I D L A I D E T T L P I L L A A D K Y S T K T L Q K S C V I Q Y M Q
UniRef90_S4RW85 L E F V Y K G H I K A D K V E I R D L Y K A A K D L G L C L E E I C Q R
UniRef90_R7TIF2 V E F F Y T G D I E L T E G N I K E I V A G S D F L C C E H L E A H C E E Y L I
UniRef90_R7US84 V H F I Y T G R I K I S T Q N A K L L L A A S E M L I L G S L K K Q K V E E F L C
UniRef90_UPI0004574701 M N Y L Y G A L D L P K K A V C S I L L L A A D M Y N L D G L K K E V L H V L K
UniRef90_K3WG88 L R F L Y T G K V D I T P D I A V E L L Q A A S F Y C V L E L Q K R A E E V L
UniRef90_AOA015MPN4 L R Y I Y G G L L L L N G Q N L N T L V A A D K L H L Q E L V D Y L Q K Y L L
UniRef90_K7JAF3 L R F I Y T D K V E N I E Q N L G L E I F I A A D Q Y A L E D L K F E C E N A L C
UniRef90_K4AKL0 F V I Y T D T L P D D L G M D M A Q H L L V A A D R Y A L E R L K L F C E E K L C
UniRef90_H2UET9 L S F C Y T G R L S M A A S E Q L V L M Y T A G Y L Q I Q N I V E R G M E L L
UniRef90_C5LRL0 L E F L Y T G H H K L D T A S M A E V L G L A D H Y A L D N G L K H L C Q A V L
UniRef90_Q8IGM8 L E F M Y K G E V H V S Q E A L N S F L K S A E S L Q V K G L
UniRef90_M4AA49 L Q F L Y T D N V E L S P E D A I G L D L A T S Y Q E D R L K R L C Q H I I K
UniRef90_UPI0003941197 L Y C G G T E A L H I R N T D V M E L L S A A K F F Q L E A L Q R H C E
UniRef90_D7FIB0 L H Y L Y S G R I G L N D Q N V M P V S A L A N R Y E V L P L M A Q C E G Y M K
UniRef90_UPI00032B1F75 M H F I Y G G T L D I L D K S N V G Q V L N M A D M Y G L E G L K E V A I Y L L R
UniRef90_B8BH15 L G F I Y T D I W P D N V A M A Q Q L F A A A D R Y G L E O R L K F V Y E D K L C
UniRef90_R7U1E5 V R Y L Y T G L I E I T T D N A Q D L L S A C E M L L L G A L K Q D V E E F L C C
UniRef90_AOA023EQZ3 L H F I Y T D K A P K V H L M A D R I L L G A A D K Y D L A S L K I D L C E Q A L C
UniRef90_R7T555 L R Y L Y T A E V S L S T D T A V G I L L C L A D K Y N V L A S L K D L C E V G F M
UniRef90_K7J588 I R F M Y V G K V K N M D D L A G E L L A A A D K Y A L E K L M V M C E E T M C
UniRef90_UPI0003500235 V S G H M G L S M L R E D T V L D M L G L A H Q F N F Q E L E A A I S D Y L R
UniRef90_UPI0003C90975 I N F A Y N G N L A L D Q Q N V Q S L L M G A S F L Q L Q S I K A D C C T F L R
UniRef90_UPI000224057F L E F M Y T G R L R A D D R C T D Q I L A A A R L K V N D L V E A
UniRef90_UPI0003F11BCC L D A G Q T G A A A T A D E A A E V L L A S E R L G V A S G L R E A C V S F L E
UniRef90_C3ZNV7 L S Y I Y S G T L H V S L D R L H S L Y Q A A D Y L Q L D S V K A C S S Y M A
UniRef90_T1ICH5 I H Y F Y T G Q I K I N H A I I T P L L A L A D K Y N V K D L T S L C C K Y M C
UniRef90_S4RET2 V D F I Y K G R I R A S R D E M R G L Q L A A L D R Y G L E C L E E A C V P F
UniRef90_A2Z710 L D D D G D D D D D G V M A Q H L Y L A A A D R Y G L D R M K L C C E E K L R
UniRef90_UPI0002A4A686 I Y T G Q M N L S S T R Q A A V R R A A V F L G M S E A S K Y L E E F

UniRef90_B7PJA6	S N
UniRef90_C5YJ00	K N
UniRef90_I118N4	
UniRef90_UPI0003D6F22E	
UniRef90_A0A015LD48	E N
UniRef90_K7TUA2	
UniRef90_U6P678	
UniRef90_UPI0004574637	Q N
UniRef90_I1QGN3	E N
UniRef90_B4N118	
UniRef90_F6VV18	
UniRef90_G5EGS4	
UniRef90_M8ASC5	
UniRef90_UPI0004546BEF	
UniRef90_W8BPR1	E N
UniRef90_J9K761	N T
UniRef90_F4X7T4	
UniRef90_E9GZQ5	
UniRef90_E4WWK9	S T
UniRef90_T1PNL4	
UniRef90_UPI0003AFF366	
UniRef90_UPI0002C6745C	K S
UniRef90_U5ERC7	
UniRef90_Q5RIH1	
UniRef90_C3ZFB5	Q
UniRef90_U3IL15	
UniRef90_C3YL73	E
UniRef90_K7G2Z0	A S
UniRef90_UPI000359DD10	E N
UniRef90_I3K7A1	K
UniRef90_Q16HW2	
UniRef90_R7VEY4	S T
UniRef90_UPI0003C39B63	
UniRef90_UPI00035939D3	
UniRef90_G3PKR8	
UniRef90_U4U558	S
UniRef90_W8AJV7	
UniRef90_B3S2H5	D S
UniRef90_R7T5G6	
UniRef90_E9FZ28	
UniRef90_H3AG74	K
UniRef90_T1DQL8	
UniRef90_UPI0003F0ABCC	D N
UniRef90_G5EEX6	S
UniRef90_T1NDR8	E
UniRef90_M8BQS6	E
UniRef90_UPI0003595348	
UniRef90_T2AU72	
UniRef90_H2TM96	
UniRef90_E3M0J9	
UniRef90_Q7YZ93	
UniRef90_Q7XEG2	G
UniRef90_K7H6Z8	
UniRef90_B3S7E4	S
UniRef90_E2BXG5	
UniRef90_B9G5W0	
UniRef90_R7VBT1	
UniRef90_A0A023IMW6	
UniRef90_W5LY84	
UniRef90_K7J8E6	K S
UniRef90_J3MGQ0	
UniRef90_C3ZKR0	D N
UniRef90_V3ZXQ4	R
UniRef90_S4RW85	
UniRef90_R7TIF2	E T
UniRef90_R7US84	S N
UniRef90_UPI0004574701	R
UniRef90_K3WGG8	
UniRef90_A0A015MPN4	E N
UniRef90_K7JAF3	S S
UniRef90_K4AKL0	K
UniRef90_H2UET9	
UniRef90_C5LRL0	
UniRef90_Q8IGM8	
UniRef90_M4AA49	R
UniRef90_UPI0003941197	
UniRef90_D7FIB0	
UniRef90_UPI00032B1F75	R
UniRef90_B8BH15	
UniRef90_R7U1E5	S
UniRef90_A0A023EQZ3	E
UniRef90_R7T555	
UniRef90_K7J588	K N
UniRef90_UPI0003500235	Q
UniRef90_UPI0003C90975	E
UniRef90_UPI000224057F	
UniRef90_UPI0003F11BCC	G
UniRef90_C3ZNV7	M N
UniRef90_T1ICH5	
UniRef90_S4RET2	
UniRef90_A2Z7I0	R
UniRef90_UPI0002A4A686	

UniRef90_H2M938
UniRef90_UPI000258F3A2
UniRef90_UPI0003C3705B
UniRef90_E9IBA5
UniRef90_E6ZHD5
UniRef90_I1QFB9
UniRef90_I0YWA6
UniRef90_T1IY59
UniRef90_D2VF28
UniRef90_A0A015K5J5
UniRef90_UPI000331871E
UniRef90_E3MXB4
UniRef90_F1PLG4
UniRef90_N1R328
UniRef90_G3WJ34
UniRef90_UPI0003B6C554
UniRef90_I3KHC1
UniRef90_F6UNK6
UniRef90_G1KDZ8
UniRef90_S4RB58
UniRef90_A0A015IPI8
UniRef90_Q6Z0F3
UniRef90_J3N7Y8
UniRef90_A0A023F2Y2
UniRef90_T1K034
UniRef90_Q15916
UniRef90_H2RSE6
UniRef90_H2ZGJ1
UniRef90_T1EPF4
UniRef90_Q9JFS4
UniRef90_UPI000462A4C8
UniRef90_UPI0002B46061
UniRef90_E9GYL5
UniRef90_M8B545
UniRef90_S4PLX9
UniRef90_V7CUL6
UniRef90_H3ARS8
UniRef90_UPI000440AA59
UniRef90_H9JCB0
UniRef90_H9KPR7
UniRef90_B4G945
UniRef90_M0U8C2
UniRef90_E9G2U6
UniRef90_G1KDI9
UniRef90_I1MRI9
UniRef90_R7VZ67
UniRef90_H2S453
UniRef90_T1PH67
UniRef90_Q7F1J7
UniRef90_F7C7Y7
UniRef90_W5JGW9
UniRef90_H3ALM0
UniRef90_G6CQY1
UniRef90_A0A015KAG3
UniRef90_A0A023EY74
UniRef90_UPI0002C35238
UniRef90_X1X7C2
UniRef90_H2TPQ0
UniRef90_A7RPV2
UniRef90_S9XE31
UniRef90_I1G8K9
UniRef90_H2M2V6
UniRef90_K7TJ16
UniRef90_U5GUD0
UniRef90_W1PLP6
UniRef90_U6NFJ7
UniRef90_U9U6U9
UniRef90_H2Y452
UniRef90_L8HB40
UniRef90_W4FF01
UniRef90_H3A0D5
UniRef90_M3YL70
UniRef90_V9KSP4
UniRef90_M4AND1
UniRef90_E5SQE6
UniRef90_H2M2B5
UniRef90_A0A024UUP2
UniRef90_A0A015J3G8
UniRef90_G1U563
UniRef90_H2W3P2
UniRef90_UPI000457142E
UniRef90_M4AYS7
UniRef90_UPI00046D03DC
UniRef90_Q9VD04
UniRef90_UPI000234E113
UniRef90_A8WVKQ9
UniRef90_MOTZU0
UniRef90_I3T1G3
UniRef90_UPI0002B441D8
UniRef90_A0A024UIG8
UniRef90_Q6ZPR6
UniRef90_K7GEM6

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

UniRef90_H2M938 K I L L C N S S P F F C D I F N N K P E V N V F Y F P H V S S N V M G L V
UniRef90_UPI000258F3A2 K I I L A A R S S Q Y F R A L L F G G L K E S M Q H E I E L K D A N L A A F R G L
UniRef90_UPI0003C3705B R L V L S A V C C S T Y F R K M M F T Q M P A N Q H A F V F L K D V V H T A L A K D A L
UniRef90_E9IBA5 K M L L S A C C S T Y F R R D L F K E N P C H P V I I F R K N V V K F D D L A A L
UniRef90_E6ZHD5 R S V L S A A S S Q Y F T G Q F S E S V S G R V D L K E W S S G P D P E T V E S V
UniRef90_I1QFB9 R V V L A M R S S V F F A E M L F G S P M R N N A V G A I K V G D M Q P A V F K V L
UniRef90_I0YWA6 R H V L A P Q S R V F E A R M W S N S M S E M E T A E V T I T D L S P E T V F E L L
UniRef90_T1IY59 K C I L S S R C S Y F A A M L S G W L E S S G N V I N L Q G F S F T A V H F A
UniRef90_D2VF28 K M V L G Y R S S Y F R E L F Q T T S D C V I D E K S S N L S L C N Q V F P T V
UniRef90_UPI000331871E M N I L C Y R S S Y F R R A L A S N K K K D N V A H I K F P N I S P E I F Q L I
UniRef90_E3MXB4 R C V L G A R S S T Y F A D M L D T K W K G K S V V V L R H P L I N P V A F G A L
UniRef90_F1PLG4 K H I L A Y H S D Y F R S M F V G N F K E S K S V I E L K G V D P Y D F E N Y
UniRef90_N1R328 R C V L A A C S T Y F R K L F F K L E V D S S S V I E I D F L R S D I F E E V
UniRef90_G3WJ34 R Y V L A A R S P V F R A E F F G S M K E G T T T E A I R I D D I E A H V F M Y
UniRef90_UPI0003B6C554 R A V L A A A S S N Y F R Y I F L R K D R K I Y E K R L L I K G V L S H P I H T D
UniRef90_I3KHC1 K V V L A A S S L L F R S L D S S D T I S I D T S V V S Q E F G A V
UniRef90_F6UNK6 R S V L S A A S S Q Y F M F S E S L S G R V E L K E W S S G T R P D P D T V E S V
UniRef90_G1KDZ8 Q G I L A A R S S E Y F N A M F T S K L K E G F E K R V E L K E S S K Q C I E R I
UniRef90_S4RB58 S N V L A A S S L Y F K N I F W S R A L C I S G H V L E L E D L K A E V F T E L
UniRef90_A0A0151PI8 R A V L A S A S S T Y F Y S I L L P S K G V S P T C N V K L H D A A A D L A A F
UniRef90_Q6Z0F3 M V I L A N Y R S S Y F R G L T N E K K N D G T L T N I K L P N I S P E T F Q I V
UniRef90_J3N7Y8 R C V A E L H G P A A R A M G E T Q D T D D A T T T I T I D D M E P D A F A A M
UniRef90_A0A023F2Y2 G W M L A A R S P V M H H D D A N N P P P P T T L L R V D D D M E P E V F G A L
UniRef90_T1K034 K V V L S A C S T Y F R A L F L D H P A R H P I V I L K D V C F A E L R T L
UniRef90_Q15916 R V V L S A C S N Y F K E L F L S N P F K H P I V I L K D M K M F A E D L K A I
UniRef90_H2RSE6 K V I L A A C S T F M R D Q F L L T Q S K H V R I T I L Q S A E V G R K L
UniRef90_H2ZGJ1 R F V L M S D V F R M C S K R W D N K V N E L E L N E N E Q C V P V F P R F
UniRef90_T1EPF4 H K I I V S A F S P Y I K Q Y L I N M P K M E N Q Q M N L S D L K G S A V M E I
UniRef90_Q9JFS4 H K T I L A A G S K Y F R T L F T T P M I T R D L V T R V N L Q M F D K D A V K
UniRef90_UPI000462A4C8 C C I L S A C S P F F T E R E R E M P K G H K V V L E I R G L K G T L R K L
UniRef90_UPI0002B46061 K L V L A A R S P V F E N D F V N M M E E D N D E I L I T E M E P R V F K A L
UniRef90_E9GYL5 K I I L A A S R S S Y F R A L L F G G L E S Q K S E I E L K G L S A A A F H A L
UniRef90_M8B545 R S V L A A R S S V F K A E L F G S M M E N A G N P L V E I S D M E S D V F K S
UniRef90_S4PLX9 Q M I L S L F S P Y I K N I L L S L K C S H P V I F L S N I S H Q T L C S T
UniRef90_V7CUL6 K I V L A A R S S V F K D Q F F N T E K V D R E L H F I Y K D T L I E D E E L
UniRef90_H3ARS8 R A V L A A C S A Y F H K L F I T Q P L T S S V F H L N P K Q V R P N D F D L I
UniRef90_UPI000440AA59 A L V L A W A S K N L E R Q L T S Q N P G L G Y R C S V G N V S P Q T L K Q I
UniRef90_H9JCB0 K F I L S V G S A V F D A M F N G V L A T K S N E V E L P D V E P A A F L H L
UniRef90_H9KPR7 K F I L S A R T D D F F S E S I L T E V T L L D W T N L E P N V G L
UniRef90_B4G945 K V V L S D C S P Y F A A L L P G Q D D K H P I F V L K D V K Y Q E L R D L
UniRef90_MOU8C2 K A V L A S S P V F F E S M F L H D L K E K E S S T I K I E D M S L D S C S A L
UniRef90_E9G2U6 R V V L S A C S T Y F Q E L F V S H P C Q H P I V L L K D I K F E D L H T V
UniRef90_G1KDI9 R L V L S S V S D Y F A A M F T S D V C E A K Q E E I K M E G I D P S A L W D L
UniRef90_I1MR19 R L I L S R S S Y F R N M L H G F W K E A G A P V H V D D K N V N D E A I A M A
UniRef90_R7VZ67 R F V L A M R S P V L K E E L Y G S M Q E A R P G Q C I V Q D M Q P A V F K H
UniRef90_H2S453 K S V L A A S S E Y F Q S L F T Q M D E E S L K A V N L D F C E P D S F E T V
UniRef90_T1PH67 K Y I L A T G S S V F Y A M F Y G G L A E N K N E I K V P D V E P S A F L T L
UniRef90_Q7F1J7 R A V L A A R S P V F K A E L L G S M A E A A M P C V T L H D I D P A T F K A L
UniRef90_F7C7Y7 K A V L A A S S E Y F R E F I E K G A V S S H E A F V D L S G F C K S S F L P L
UniRef90_W5JGW9 R L V L A A C S T Y F E N L L G E N P C Q H P I I L P R D I K L W A I Q A L
UniRef90_H3ALM0 K N V A A S P Y V R T K L N Y D P K N D G S L Y M I E L E G I S F T V M N E I
UniRef90_G6CQY1 K L V L S A C S A Y L E R L L L I Q N P C K H P I V L M R D M R F S E M Q A L
UniRef90_A0A015KAG3 M V I L N Y R S P Y L R R L L S T N N K N N D E N L T Y L K L P N V S P E F F
UniRef90_A0A023EY74 Q A I L S A C S P Y F E K L F L Q N Q H P H P I F L R D V T A V E M Q V L
UniRef90_UPI0002C35238 K A V L S A N S P V F R S M F S H D L K E T V S S T I D I E D M S L E S C T A V
UniRef90_X1X7C2 H K I V L M A A S P Y F S A M F S N F N E R N K D L V K I S E L D S T V L Q I L
UniRef90_H2TPQ0 K T V L S A S S T Y F Y Q L F T V A G Q V I E L N F I R A E I F E E I
UniRef90_A7RWV2 R Y V L S V S S P V F E A M F H G A M A E S S R E I S L P D C Y A E A L S E M
UniRef90_S9XE31 R A I L V A R C E V M A M F E N G N Y M E A K S V L I P V Y G V S K E T V L S F
UniRef90_I1G8K9 R V V L A A V I P V F K A M F E S H M R E K E K E I T L H N L T P T A V K L I
UniRef90_H2M2V6 K A F F C G R S D Y F K A L L E D H F S Q P S I P V I T L H N I T H E I F I H V
UniRef90_K7TJ16 K I V L A M R S P V F K A K F F D N T K D S I Q H Q F K V D D M S A T V L A A M
UniRef90_U5GUD0 K L V L S A R S P V F R S K F F D D G V E D E Q E I V I S D L E P V V F K A M
UniRef90_W1PLP6 K A I L S A S S P V F A S M F L H D L K E K E S S T I N I E D M S V E S C T V L
UniRef90_U6NFJ7 R L I L A K N S E V E D R M S Q R W N G E K K D L E M V E D A P C Q K V F P A F
UniRef90_U9U6U9 M N I L Y R S P Y L R R T N N R N N K T N D L V H I K L P N I S P E I F Q I
UniRef90_H2Y452 R V I L A A R S K Y F F G G M K E S Q P D A V I E L C D T G A P A F E V L L Q Y
UniRef90_L8HB40 K I V L A S G S P V L A A A L N S Q G E A G A K E L A L V I S D E A D E A A F H T I
UniRef90_W4FF01 K I V A A Q S E H F R R M F S S G M K E S H Q P T V V I S E W T H R A F H M I
UniRef90_H3A0D5 R L V L S A V S D Y F A A M F T N D V R E A K Q E E I K M E G V D P D A L K A L
UniRef90_M3YL70 K V L F T A S P R F K A L L S S K P T N D S T C I E T G Y V K Y P I F Q L V M
UniRef90_V9KSP4 R C V L A C R C Q L F H D M F V Q Q P V C G P Q P F V F P N V Q P D V F L A V
UniRef90_M4AND1 K A V L A A C S Q F F H K F F Q D F T Q E P L V E I E G V S N T A F R Q L
UniRef90_E5SQE6 R C M L A A R S T V F A A M L T H Q T H E T Q M G R L V I P D F D F E V I S E L
UniRef90_H2M2B5 Q V V L A A I S G Y F R K V L L T P G A T E E K L L S N M H C H D F S K F
UniRef90_A0A024UUP2 R F M L G L S S M P L N A M L T G R M R E S S Q M E V T L N D V T S A T M A Q V
UniRef90_A0A015J3G8 M V I L H Y R S T Y L R R M L S T N K K N D G V H I K L P N I L P E I F Q I
UniRef90_G1U563 K A V L A A R S T K F F K E M F N E K S A D G A R T N V H L N E V Q V D F A S F
UniRef90_H2W3P2 K G F L S F H S P F F H A L F S S N F K E N S M N E I P I V D V G Y K E F A E L
UniRef90_UPI000457142E R V I L A A R C S Q Y F R A L L Y G G M R E S H P Q A E L P L V D T T A A F S M L
UniRef90_M4AYS7 K V V F A A G S F L R D Q F L G Q D S R E V Q I S M I Q E A E V G R Q L
UniRef90_UPI00046D03DC K C I L S S R C Q Y F A A L S G G W I E S A G N I I S L Q G Y S Y N A V H F A
UniRef90_Q9VD04 K I V L A R I C S P Y F Q E I F T T N C K H P I I L K D V S F N I M M E L
UniRef90_UPI000234E113 R C V A R S P V F R A E T Y G G M A E S A D G R C V R V D D M R P E V F G H L
UniRef90_A8WVKQ9 K L Y L S S H S P Y F A T L F L G R F Q E S E K S E I E L K D V N P Q D F Q Y Y
UniRef90_MOTZU0 R A V L A A R S P V F R S M F S H D L K E K E L S A V D I C D M S F E A C Q R A S
UniRef90_I3T1G3 K A V L S A S S P V F E G L Y H H Q D V V D D E K E T S T I H M E D M S C Q S C
UniRef90_UPI0002B441D8 K A I L S V S S P V F K S M F H H D L K E K E S S I F I E D M T L E C M T L L
UniRef90_A0A024UIG8 K A I V A A Q S T Y F Q R M F S S G M R E S H Q S T L V I T E W T H Q A F L H M
UniRef90_Q6ZPR6 K C V L C A R L E Y F H S M L S R S W I E A S S C A A L E M P I Q S E L L K V I
UniRef90_K7GEM6 R A A L S R H S R Y F E A M F F G G T R E S S E K H I V I R G V E A E T F Q V L

UniRef90_H2M938 V E F F Y S Q S V Q S L T E S T V Q S L L E T A E L F K K S A Q A C C D F L Q
UniRef90_UPI000258F3A2 L E Y Y T G R M S V L T D R E H I L D L L G L A H L Y G F S E L E T S I S D Y L R
UniRef90_UPI0003C3705B I Q F M Y C G G E V N V K Q E A L P A F L I S T A E E A L L Q I T K G L T D
UniRef90_E9IBA5 V D F M Y T G G E V N V K Q E A L P A F L I S T A E E A L L Q I T K G L T D
UniRef90_E6ZHD5 I Q F M Y T G G E I R V T T A S V H E V L E L A D R F L L T Q L K N F C A E F L
UniRef90_I1QFB9 L G F Y T D T L A A M R H L A R H L F V A A D R Y D M G R L K L C C A D M L A
UniRef90_I0YW6 L Q Y C Y G C K M P T D H E V I D L F K A A D K Y D V L G L V Q E C
UniRef90_T1IY59 L C H T Y C G A T S I P K E D I L L A S L A D M L G L E G L K D V V A L T L K
UniRef90_D2VF28 I E Y L Y S G M I T L I D N T S D F L K V L A N F L D V L Q E L K C E V E N F L L
UniRef90_A0A015K5J5 L R Y I Y S G G L S L I N T S D F L K V L A A D E L R L Q E H L V E N K Y L L
UniRef90_UPI000331871E L Q Y L Y T G R L D V G V E H V S D C E R L A K Q C Q L W D L L S K C E K
UniRef90_E3MXB4 L E A L Y G K T S L I N D S T V E G I L L I A D M Y G T Q L I A D T C C T K F L E
UniRef90_F1PLG4 L N Y M Y T A K I S V K K E D V N L M M S S G Q I L G I R F L D K L C C S Q
UniRef90_N1R328 S D A L P D M K Q Q E E Y D M A Q H L L V A A D R Y G L E R L K L I C C E Y K L
UniRef90_G3WJ34 I T Y K Q S W Q P F I E R G S M S R I V A A D S L Q M F D V D A C A T F L
UniRef90_UPI0003B6C554 L E M Y T G R L P L T T A N V H E V L E L A D R F L L G Q L K T F C G G E F L D
UniRef90_I3KHC1 V Q F M Y T G G E I R V T T A N V H E V L E L A D R F L L G Q L K T F C G G E F L D
UniRef90_F6UNK6 L G F L Y S G K I E L S R Q E A V I E E T L R C A A L M Q I S P D L L Q L V A S E Y V D
UniRef90_G1KDZ8 L R Y I Y S S T V I V R Q E A V I E E T L R C A A G K K L G I S F L E D L T D K N I S
UniRef90_S4RB58 L E F V Y T G R V E V C F E Q V G R L L S L S G L M Q C A E A A C
UniRef90_A0A015PI8 L R Y L Y G G K I S L E E Y D L V K I M V A A A N E L N L H E L T P Y L E S F L L
UniRef90_Q6Z0F3 L R F A Y D D T L P E L P G N A Q H L L V A A D L Y R M D A L S Q A C C S Q
UniRef90_J3N7Y8 L H F Y T D T L P P D M T T A A R L H V A A G R Y G M E R L Q L M C E D A L C
UniRef90_A0A023F2Y2 V D F M Y R G E V N V E Y Q C R L S A L L K T A E S L K V K G L A E M
UniRef90_T1K034 V D F M Y R G E V N V E Y Q C R L S A L L K T A E S L K V K G L A E M
UniRef90_Q15916 L L S C Y T G A L E V K R K E L L K Y L T A A S Y L Q M V H I V I E K C T E A L
UniRef90_H2RSE6 I G C S Y D G M I P L S W S T S V F E I S C T A L Q L Q F Q Q A L S L C L R F M R
UniRef90_H2ZGJ1 L H F L Y H G T V Y V N T S T A L P L M L A D K Y N V V I D L K Q A C E Q Y
UniRef90_T1EPF4 I N W M Y S G V C N L T E E N A E D I L L E S A D F L C I D E I C E L C V D F
UniRef90_Q9JFS4 N I V Q Y L Y R H I S S M N V I D V L K C A D Q L L I S D D L V I T D C E S Y V K
UniRef90_UPI000462A4C8 V D F L Y T S E M E V S S R E E A Q D I V I A A A R Q L Q V S E L E S L
UniRef90_UPI0002B46061 L H F I Y R D T L P E D D E F L E A L L A A A D K Y D L P R L M C E S V L C
UniRef90_E9GYL5 L K Y I Y T G Y C N M K E E D V K D L L G L A H Q Y A F P E L E Q S V S E Y L K
UniRef90_M8B545 H F I Y T D S M P E I T R E D V V H L L V A A D R Y D V E R L L C
UniRef90_S4PLX9 L D Y V Y R G E V Q V S K E Q L E D L I Q A G K Q L Q I E G L Q I M C L N N M S
UniRef90_V7CUL6 H F S V P S T M T S L S K L Y V T K L L A A A H K Y Q L P R L K L M C E S V L C
UniRef90_H3ARS8 L Q M M Y T G K T E S P I T E P E N L R A A M L F L K F
UniRef90_UPI000440AA59 L D Y V Y S E W V E V P E G D L P E L L R G A Q H L I E V Q S L V E Q C Q
UniRef90_H9JCB0 L K F L Y S D E V R I G P E S V M T T L L Y T A K K Y A V A A L E E H C V D F L K
UniRef90_H9KPR7 L L L K W I Y T G K V L Q E N V L D L M K A A S N F Q L D L V D Q C E R Y L I
UniRef90_B4G945 M D Y M Y R G E V N V S Q D Q L D A F L K A A E S L Q I R D
UniRef90_M0U8C2 G Y I Y G T I K Q E D F W H R L A L L G A A E S L Q I R D
UniRef90_E9G2U6 I H F M Y Y G E V N I Q H K D Q L N S I L L K T A E V L H V I K G F A D V
UniRef90_G1KDI9 V Q F A Y T G C L E I K E D T I E N L L A A A C L L Q L P Q V V I E V C C H F L
UniRef90_I1MR19 L A Y L Y G H H P K L N D N N A F R V L V A A S F L D L Q D L C G I C C T D F I L
UniRef90_R7VZ67 F I Y T D S L P S S E D T E M V R L L V A A D R Y A M D R L K L V C Q S L L C
UniRef90_H2S453 L N Y M Y T C S L F I D K G S L A A I Q E L G Y S L G I P F L T N I
UniRef90_T1PH67 L R Y L Y C D E I L Q L E P D N L L A T L L V A A K K Y L V P H L A R A C V N Y L E
UniRef90_Q7F1J7 L H F V Y T D D S S T T G F F E S L L V A A D R Y A L E R L K L M C A Q K L W
UniRef90_F7C7Y7 L E F A Y T S E L V F D F C S M A E I S M L A R H L F M N E
UniRef90_W5JGW9 V D F M Y K G E V N V S Q A G L P D L M K C A E L L K I R G L
UniRef90_H3ALM0 L D Y L F S G T I K L S E D T V Q G I V Q A A D L L L T D L K V L C C E F L E
UniRef90_G6CQY1 V D F M Y K G E V N V T Q E E L P S L L K S A E A L Q I R
UniRef90_A0A015KAG3 H I V L K Y I Y G G I D T S D I I K I L V A A N E L G L R E L T P Y L E S Y L I
UniRef90_A0A023EY74 L H F M Y N G E A N V K Q D E L G G I L K T A T A L Q I R G L A D
UniRef90_UPI0002C35238 S Y W Y G T I K Q E D F L K H R L A L L S A A N K Y D M S D L K D A C E E S L
UniRef90_X1X7C2 V D Y I Y T G E L I M T K E N V Q V L L P A A N I Y L A V R F C Y C C
UniRef90_H2TPQ0 L N Y I Y T A K C R I R S D L L E E L I S A G Q I L G V K F I A N L
UniRef90_A7RWV2 L R Y A Y D E V K L T G S N A M A V M Y L A E K Y N F P G L K E K C S H Y L Q
UniRef90_S9XE31 L E Y L Y T G C C P A G I F Q A M C L L I C A E M Y Q V S R L Q H I C E L F I I
UniRef90_I1G8K9 V E Y A Y T D G Q V R V S P F H T A Q D L L V T A D K F G L T E I V S F T A R Y I
UniRef90_H2M2V6 M Y Y T Y T D E T R L M M E N V L D V L C V A D M Y L P G L K R L C G K T L A
UniRef90_K7TJ16 L H F L Y T D D D L P L P T D D M S K L L V A A D L Y D L E R L R A A C E K K L
UniRef90_U5GUD0 L H F L Y R D T L T E D V D M A T K L L V A A D R Y G M D R R L R L M C C E S H L C
UniRef90_W1PLP6 L S Y Y G G I R H E D F W K H R L A L L N A A D K Y D M G D L K E L C C E E S L
UniRef90_U6NFJ7 L R F L Y C N H V V L H Q N D C L P I L I L A D K Y N V I S L K V D Y L D F
UniRef90_U9U6U9 L K Y L Y G G I L S L N E Q D I F K V L L A A D Q L L I Q E L D V D Y L Q N Y L I
UniRef90_H2Y452 I Y T G K V K L S D V K E S Q I I D V L A L A N K Y G F E Q L E K S V S L Y L K
UniRef90_L8HB40 L A Y L Y T G K A S V A S D R V H N L L I A A H R Y G V D A L K E K G V Y L L
UniRef90_W4FF01 E F L Y T G Y I Q D L T V D T A L E L L G V A D H R Y A L Q D A L S M L C C E N F L
UniRef90_H3A0D5 V H Y A Y T G I L E L K E E T I E S L L A A A C L L Q L T Q V T E V C C N F L
UniRef90_M3YL70 Q Y L Y Y G G P E S L L T K N I M E L L S A A K F F Q L E A L Q R H C E
UniRef90_V9KSP4 L E F L Y T N R V T L S G Q I A L E V L T S A A V E Y G L D L R L K R C V H Y I S
UniRef90_M4AND1 M E F T Y T A T L A I S E E E A L D V W K A A E Y L Q M Q E A I K A L K K I
UniRef90_E5SQE6 V R F Y T G R C R R L K E L S H D L L V V A D K Y R V L D L K L R C E R V L A
UniRef90_H2M2B5 L D F A Y T G K V E V L R K K I G D V Q A M A Q F L D C E G L S N I C S E A L S
UniRef90_A0A024UUP2 L T F T Y T G E V L L A T H T V V Q T L S A A E M Y E L V G L R E L C K A F I
UniRef90_A0A015J3G8 L R Y I Y S G R I S L D T S D I I K I L I A G S E L G L Q E L I T Y I Q S F L I
UniRef90_G1U563 L E F V Y T A K V Q D E E D R V Q R M L E T A E K L G C L D L S E T C F Q
UniRef90_H2W3P2 L S S I Y P N A I P P T S E N V V N L M K L A D R F Q M E A V T N I C E S I
UniRef90_UPI000457142E L K Y L Y T G R V S L S N E K L L D F L S L S N K Y G F P E L E D A T S D Y L C
UniRef90_M4AYS7 L L S C Y T G R V L E F P E L E L Y L T V A S F L Q M G H I V E Q C T Q A L
UniRef90_UPI00046D03DC L C H I Y S G E S C I P D S S I V E L A T L A D M L C L E G L K E V I G F T L K
UniRef90_Q9VD04 L E F M Y Q G V N V K H T E L Q S F M K L G Q L L Q L K G L
UniRef90_UPI000234E113 L R F A Y T D S L P E P S D M A Q H L M E A A D R Y G M E R L K L A C E D T L C
UniRef90_A8WVKQ9 L E V L H L E N A I D D Y T V Q G I L S V A D M F D T P K I V K K C E E F L L
UniRef90_M0TZU0 L D F L Y G N F Q A D E F G H R L A L L R A A D K Y D L S D L K E A C C H E S L L
UniRef90_I3T1G3 K Y L Y G T I K H H D E F W K H R L A L L G A A N K Y G I V D L K D A C E E S L L
UniRef90_UPI0002B441D8 R Y L Y G T I T E E H F W K H R L A L L G A A N K Y G I V D L K D A C E E S L L
UniRef90_A0A024UIG8 L E F L Y T Y V E N L T V D S A L E L L G I A D H Y G L E R L A S C E D N V A L T
UniRef90_Q6ZPR6 L D Y L Y T D E A V V N V D F V C S V L V V A D Q L L I T R L K E I C E V A L T
UniRef90_K7GEM6 L E F T R S A T V L I M P H N V I T R L L E T A D F L Q F E R V K R M C E K F L E

UniRef90_H2M938	Q
UniRef90_UPI000258F3A2	E
UniRef90_UPI0003C3705B	
UniRef90_E9IBA5	
UniRef90_E6ZHD5	
UniRef90_I1QFB9	R S
UniRef90_I0YWA6	
UniRef90_T1IY59	A
UniRef90_D2VF28	S
UniRef90_A0A015K5J5	E N
UniRef90_UPI000331871E	
UniRef90_E3MXB4	K
UniRef90_F1PLG4	
UniRef90_N1R328	
UniRef90_G3WJ34	
UniRef90_UPI0003B6C554	
UniRef90_I3KHC1	
UniRef90_F6UNK6	S
UniRef90_G1KDZ8	N S
UniRef90_S4RB58	
UniRef90_A0A015IP18	E N
UniRef90_Q6Z0F3	
UniRef90_J3N7Y8	R S
UniRef90_A0A023F2Y2	
UniRef90_T1K034	
UniRef90_Q15916	
UniRef90_H2RSE6	E N
UniRef90_H2ZGJ1	
UniRef90_T1EPF4	
UniRef90_Q9JFS4	
UniRef90_UPI000462A4C8	
UniRef90_UPI0002B46061	K
UniRef90_E9GYL5	S
UniRef90_M8B545	
UniRef90_S4PLX9	S N
UniRef90_V7CUL6	K
UniRef90_H3ARS8	
UniRef90_UPI000440AA59	
UniRef90_H9JCB0	S N
UniRef90_H9KPR7	G
UniRef90_B4G945	
UniRef90_M0U8C2	
UniRef90_E9G2U6	
UniRef90_G1KDI9	
UniRef90_I1MRI9	S
UniRef90_R7VZ67	E
UniRef90_H2S453	
UniRef90_T1PH67	
UniRef90_Q7F1J7	E S
UniRef90_F7C7Y7	
UniRef90_W5JGW9	
UniRef90_H3ALM0	G
UniRef90_G6CQY1	
UniRef90_A0A015KAG3	E N
UniRef90_A0A023EY74	
UniRef90_UPI0002C35238	
UniRef90_X1X7C2	
UniRef90_H2TPQ0	
UniRef90_A7RWW2	E N
UniRef90_S9XE31	T
UniRef90_I1G8K9	
UniRef90_H2M2V6	K S
UniRef90_K7TJ16	
UniRef90_U5GUD0	K
UniRef90_W1PLP6	
UniRef90_U6NFJ7	
UniRef90_U9U6U9	E N
UniRef90_H2Y452	S S
UniRef90_L8HB40	
UniRef90_W4FF01	
UniRef90_H3A0D5	
UniRef90_M3YL70	
UniRef90_V9KSP4	S T
UniRef90_M4AND1	
UniRef90_E5SQE6	N S
UniRef90_H2M2B5	A
UniRef90_A0A024UUP2	
UniRef90_A0A015J3G8	K T
UniRef90_G1U563	
UniRef90_H2W3P2	
UniRef90_UPI000457142E	T
UniRef90_M4AYS7	
UniRef90_UPI00046D03DC	
UniRef90_Q9VD04	
UniRef90_UPI000234E113	R
UniRef90_A8WKQ9	
UniRef90_M0TZU0	
UniRef90_I3T1G3	
UniRef90_UPI0002B441D8	
UniRef90_A0A024UIG8	
UniRef90_Q6ZPR6	E N
UniRef90_K7GEM6	R

UniRef90_C5YJ10
UniRef90_G1PR18
UniRef90_J9M519
UniRef90_UPI0004628CBB
UniRef90_D7UAR1
UniRef90_M3XLF9
UniRef90_UPI0003943AD2
UniRef90_UPI0003513A7B
UniRef90_F6UC39
UniRef90_UPI000392E025
UniRef90_U9URS5
UniRef90_M8B564
UniRef90_G0MVZ9
UniRef90_UPI0004572BB2
UniRef90_UPI0003D705AC
UniRef90_R7V658
UniRef90_G1RWL7
UniRef90_G6D4M2
UniRef90_A0A015KSX5
UniRef90_UPI00032AD3E2
UniRef90_A0A015KAP4
UniRef90_K1R6T4
UniRef90_U9U5W8
UniRef90_F1KXD9
UniRef90_K7TQ65
UniRef90_S4R7M7
UniRef90_I118R4
UniRef90_A0A015KDF2
UniRef90_H2MVC8
UniRef90_V4B6E1
UniRef90_E9GSL9
UniRef90_A0A015LPR5
UniRef90_UPI000359A60F
UniRef90_A0A015IDR1
UniRef90_Q8LJX3
UniRef90_UPI00026575F4
UniRef90_UPI00022C95B7
UniRef90_A0A022QYU2
UniRef90_M4AT78
UniRef90_W5J5R9
UniRef90_C3Z9H0
UniRef90_UPI00026529B2
UniRef90_UPI0003D0EE4D
UniRef90_C1BUN9
UniRef90_A0A015KHH0
UniRef90_U6NUJ6
UniRef90_F4WVA1
UniRef90_B4JTW3
UniRef90_E2C3K1
UniRef90_UPI0002234A17
UniRef90_I1QFB8
UniRef90_U5IA21
UniRef90_UPI0003C1744E
UniRef90_V4LTX3
UniRef90_H9KBE7
UniRef90_UPI00035931B3
UniRef90_A0A015KVE3
UniRef90_H2XCU2
UniRef90_Q16HA9
UniRef90_H9K5Y6
UniRef90_UPI00046B92DF
UniRef90_A7SCQ0
UniRef90_UPI00017583FC
UniRef90_G0MW02
UniRef90_UPI00042B9980
UniRef90_B0XDY9
UniRef90_A0BMK6
UniRef90_A0A015L7H3
UniRef90_G0MD27
UniRef90_T1KTP4
UniRef90_UPI000192493C
UniRef90_I0Z0R8
UniRef90_Q641R7
UniRef90_U9U432
UniRef90_UPI000388EBEB
UniRef90_UPI0003336816
UniRef90_H2Z3Z8
UniRef90_A0A015LIN3
UniRef90_W5I212
UniRef90_H3EBB1
UniRef90_UPI00045730D9
UniRef90_E9H5E7
UniRef90_A0A026X2Z6
UniRef90_T1PNV6

```

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

```

lupas_21
lupas_14
lupas_28
jnet
conf

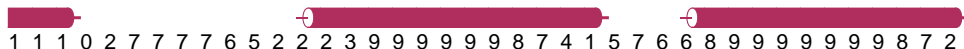


UniRef90_C5YJ10
UniRef90_G1PR18
UniRef90_J9M519
UniRef90_UPI0004628CBB
UniRef90_D7UAR1
UniRef90_M3XLF9
UniRef90_UPI0003943AD2
UniRef90_UPI0003513A7B
UniRef90_F6UC39
UniRef90_UPI000392E025
UniRef90_U9URS5
UniRef90_M8B564
UniRef90_G0MVZ9
UniRef90_UPI0004572BB2
UniRef90_UPI0003D705AC
UniRef90_R7V658
UniRef90_G1RWL7
UniRef90_G6D4M2
UniRef90_A0A015KSX5
UniRef90_UPI00032AD3E2
UniRef90_A0A015KAP4
UniRef90_K1R6T4
UniRef90_U9U5W8
UniRef90_F1KXD9
UniRef90_K7TK65
UniRef90_S4R7M7
UniRef90_I118R4
UniRef90_A0A015KDF2
UniRef90_H2MVC8
UniRef90_V4B6E1
UniRef90_E9GSL9
UniRef90_A0A015LPR5
UniRef90_UPI000359A60F
UniRef90_A0A015IDR1
UniRef90_Q8LJX3
UniRef90_UPI00026575F4
UniRef90_UPI00022C95B7
UniRef90_A0A022QYU2
UniRef90_M4AT78
UniRef90_W5J5R9
UniRef90_C3Z9H0
UniRef90_UPI00026529B2
UniRef90_UPI0003D0EE4D
UniRef90_C1BUN9
UniRef90_A0A015KHH0
UniRef90_U6NUJ6
UniRef90_F4WVA1
UniRef90_B4JTW3
UniRef90_E2C3K1
UniRef90_UPI0002234A17
UniRef90_I1QFB8
UniRef90_V5IA21
UniRef90_UPI0003C1744E
UniRef90_V4LTX3
UniRef90_H9KBE7
UniRef90_UPI00035931B3
UniRef90_A0A015KVE3
UniRef90_H2XCU2
UniRef90_Q16HA9
UniRef90_H9K5Y6
UniRef90_UPI00046B92DF
UniRef90_A7SCQ0
UniRef90_UPI00017583FC
UniRef90_G0MW02
UniRef90_UPI00042B9980
UniRef90_B0XDY9
UniRef90_A0BMK6
UniRef90_A0A015L7H3
UniRef90_G0MD27
UniRef90_T1KTP4
UniRef90_UPI000192493C
UniRef90_I0Z0R8
UniRef90_Q641R7
UniRef90_U9U432
UniRef90_UPI000388EBEB
UniRef90_UPI0003336816
UniRef90_H2Z3Z8
UniRef90_A0A015LIN3
UniRef90_W51212
UniRef90_H3EBB1
UniRef90_UPI00045730D9
UniRef90_E9H5E7
UniRef90_A0A026X2Z6
UniRef90_T1PNV6

50 60 70 80
K I V L A M R S P V F K A E L F G Q I K E A N E Q L V T I Q D M K P D V F R A L
K N I A A S P Y I R T K L N Y N P K D D G S T Y K I E L E G F S V M V M R E I
K C V L T A R S R C Q Y F A A M F S G G W V Q S A S G N V I Y L K G F S Y N T V H L T
R A I L C A R S S Y F A A M L N G S W A E S S A Q N E H I T L K G F N H V E M T V I
R A V L A S I S P V F R S M F S H D L K E K E L S T V N I L S D M S T E A C Q A F
K F V Q S E V F R V M F Y N H E L W K E A Q K S Q V T L T E D K R C V P Y F R K F
K V V L A H G S S Y F H A E L S K N P S A K T H V T L E H V E D S V F R H L
R A V L A A F S N Y F K M I F T H Q T S E C I K I Q P A D I Q P D I F S Y L
R N V L A A A C P Y F K S M F T G G L F E S Q Q P R V T M H D M D A E S L A L L
R C V L A C R C Q A F P Q G M L S Q P N I P P Q G P F I L G N V L P E V F L A V
M N I M C C R S P Y L R R L T S N K K D S D N V N I K L P N I S A E I F Q I I
R C V L A A R K A E L F G S M K E S T A S V I D V E D V E P R V F S A L L N F
K Q V L A A M Q S K A E F H T L F F G D F K E K S E E V T I G D V N C Y D F C R L
K C V L C A R L E Y F H S M L S S T W I E A S C C T S L E M P I H S D I L Y I Y
K G V L A A Y S Q F F H S L F T Q N K Q L Q R V E L S L E A L A S A S T G L Q Q I
K V I L A A G M C D Y F R R M F L T N M L E R G S Q E V V L K D I L A S A S T G V L L
K Y V L A V G S S V F H A M F Y G E L A E D K D E T R I P D V E S P A A F L A M
K L V L S V C S P Y F Q E M F K M N P T Q H P I V F L K D V S H S A L R D L
K N I L C Y R S P Y L R N K K N N D N I L S H I K L Q S T S P K I F Q I L E Y
K L V L A T R S P E F R R S T F F N S M D I D K Q E I V I T D L E P K V F K A M
M I I L C Y R S P F L R R I S R N N N N N T V A H I K L P N I S P E I F Q I I
R L V L A A A C P M L Q T M E N A A V G S H L E V R L S A E I K P E S V Q T F
S N I L S C R S K Y F N E I T E D I K K K D G K Y I I T K Q N I T P Q A F D V I
K A Y L A L Y S P V F H A M F S R F S E R D K K E I A I E D V I L E E F I E L
R I M L A A C S P V F D R Q L L S G E M R E K D M G C V L V H D M Q P V V F K A
K A V L S S T C T Y F R G I F L D T P C S N M G P F V V D F L T E K T F D Q V
R A F L A A R S R V F K E E L L A P W L R L Q C E L P L S G T T L H L L H S N
M V I L N Y R S S Y L R R L L S T N K K N D E T Y I K L P N I L P E I F Q I I
K Y V L A V G S S V F G A M F Y G D L A E G Q S V I H I P D V E P A A F L I L
R V V L A S M S A Y F D A M F T S D M K E T R E G V V Y L K N M K A H V I D M I
S H I L V A R S P V F A A M F Q H E M K E T K T G V V S I Q D I F K Q M
V I I L C Y R S P Y F R R T L T L N K K N N D D D H I K L P N I S P E I F K I L
K A V L A A S S N Y F K G F L H Q N E M L D A P K C T V T L Q D I L Y T E E F T C F
M V I L N Y R S P Y L R R I T N K R K N D G T L T H I K L P N I L P E I F Q I I
K L V L A T R S R A F M A E F F G P A G K G S S T V T R V I Q I D D M H F I Y T
R C A N F S E L K S S Y E D R S R I S R S P I T C V L V M P K V K V D E F Q S V
K L V L S I C S P Y F K N I F K E N P C Q H P V I L K D M K Y T E I E S L
R A V L T S R S P V F R A M L E N E M E E S L T G T I M I R D V S Y D T L R A F
K Y V L A V G S S V F H A M F Y G E L A E D T E E I R I P D V E P S S F L A M
H R V I L S S C S E Y F R I L F T T A L P S D K H T V S I P G I E R S A M V E V
K C V L A A F S P H F S L L L S N S D R T V V E L N T L T E V G V R A V
G A V L A A C M S P F F N E V V N R E E K R S G V K T T V D G V S A A T I E A L
K P V L A A A S L F F K T L D S T D A I S I D A S V V S P E E F A L L
K V I L S A C S F F K G I L R R V I G S P S P L I Y L R G I G S S D L A A I
M V I L N Y R S P Y L R R I T N K K N D G T L T N I K L P N I L P E I F Q I I
K F L L V A R S N H W N D L E S T D S V D I P D T S F K A F D V V Y R W M T D
K I V L C A A S P F L L D L L K S T P C Q H P V V M L A G I G A D D L E S L
K Y I L A T G S S V F F A M F Y G G L A E N K Q E L K V L P D V E P T A F L T L
K M V L A N S T F F R R L L M A N D H P M I L L H D I E A D D L K T L
R V Y L C Q S G Y F S S M F W R E T T M N M I E L Q M P D E N I D R D S L H E A
R M L A A R S P V F K A E L Y G A M K E K D A D H V I A I A D V P K A V F K A L
K V I L A A R S D Y F R A L L Y G M K E S S Q A E I V R P D A Q L K A F K V L
R V I L A A G S D Y F R G M F T S G M K E S T E S V V Q I F S T P A K Q M G N L
K I V L V S R S P V F K A M L E N E M E E S H R S I I K I N E V S Y E V L Q N F
K L I L A S N S I Y F E E L I Q M D L G Q E P V I F L K D L N F E I L K A M
C S V L S V C S P F F M E Q G R E L P P Q G C R V V L E L A G M K I G V L R K L
I V I L N Y R S S Y L R R I T N K K N D G T L V Q I K L P N I S P E I F Q I I
K A Y L A L Y S P V F Y A M F F S N F Q E R E K T Q V E L E D V A D E F R E L
R T C A S E V F Q S M F G N K R F L K I H R Y Y P L V I V S D V E P D I F L D V
K T V L M I R C Q Y F R T I F R E R T N T N N Q K K F I K H H K F S Y N V Y K A F
G C I L S A C P Y F T E H E R E R P A Q G C K V V L E L G C L K I R T L R K L
K F I L K M A S P V F K A M F E H V K D S K P I Q L P G K K F N Q V L D L M N H
K M L L S A C S T Y F R D T F K D V P C Q H P V I T L Y G V E Y S V L S D I
K Q I L A C H S G Y F K A L F Y G D V K E K T E E E L K I L E D V V H S E F V D L
G V V L A A I S S F F C Q R L A C R A T G E V D V S P L A T P C G W E A V L D F
R I I L M A R C K S F Q N M K R G E I C R I P G C P V R L P H I E A D I E R Q F
K L L L S R Y Q N F S K L F E S E Q N E Q K I Y I K D T V F E G L L L Y I Y
M I I L R Y R S P F L R R T L S S N K K S D D S D L T H I K N I S P E T F Q I I
K Q L L A R Q S P Y F H S M F F K D F K E A T M E E V P L K D V S P E D F Q C F
K V V L S S A L P Y F S A M F T P R Y I E S Q R E I L I K N I D G S A L E E I
K Y V L G T S S P V F F A M C C S E F R K D D V I N I N D C E P E P F L I E L
K I I L A S A S R Y F E A L F L G A G K H L H E M Q I Q L E A V D A E S L A C I
R A V L A A F S N Y F K M I F T H Q S E C I K I Q P T D I Q P D I F S Y L
M N I L C Y R S P Y F R K V S N K K N D G T L S H I K F P N I S P D T F E I I
K V L L K I R C E H F R S L L N N N D D D I E M S E F S Y Q V D R A F L E Y L I
R L V L S S V S D Y F A A M F T N D V L E A K Q K E I K I E G V D P Y A L N S L
K Y V L A I G S S V F F A M F N G D L A E N K D E I H I P D V E P K A F L A L
M V I L N Y R S P Y L R R L L S T N K K K H I K L P N I S P D I F Q A L S Y L I
R C V L A A R S M V F M A Q L S F G P M K E T S P V I Q I K D M I Y T D S F V M
K A I L L T M R C A Y F R S R L S K Q W S E G N G N Q I E V V D F S Y P I Y R A F
R V V L A A C S Y F H A M F T G E M S E S K A R R V R I K E V D G W T L N M L
K T I L A I R S P V F A A M F L Y H T I E L E S R R E V D D I D P D V F Q E V
K L I L A A R S E Y F R A L L F G G L K E S S Q Q E I E L K A A S L P A F K G L
K I V L C A A S P F L L D L L K N T P C K H P V V M L A G V N A N D L E A L

UniRef90_C5YJ10 L Y F I Y T Q D G E G K R G M I R H L V L V A A D R Y A V E R M K L I C C
UniRef90_G1PR18 L D Y I F S G Q I R L N E D T I Q D V L V Q A A D L L L L T D L K T L C C E F L E
UniRef90_J9M519 L R Y I Y S G A I C D F S I K N V A E G L S K L A D M L C L E G L K D N I M L Y L L K
UniRef90_UPI0004628CBB L H F I Y S G A I L D F S I K N V A E G L S K L A D M L C L E G L K D N I M L Y L L K
UniRef90_D7UAR1 L N Y I Y G N I L Q H D E F T H R L P L L L R A A D K Y D I E D L K E A C H E S L
UniRef90_M3XLF9 L S F L Y T E Q V H L T T E D A L P L H L L A A K Y N V E E L Q S R C E D F M L
UniRef90_UPI0003943AD2 L S F L Y T A E I C V V A E T A L P A L T E A A R F L D M M D I L K L L C K
UniRef90_UPI0003513A7B L H I M Y T G K G P K Q T V N Q S R L E E G I R F L H A D H L
UniRef90_F6UC39 L D Y C Y T G R V S V S E T N V Q R L Y A A A D I L
UniRef90_UPI000392E025 L E F L Y T N S V T L N S C N A L E V L T S S V E Y G L Q D L C K L C V K F L K
UniRef90_U9URS5 L K Y I Y G G T L S L D T S N I I K I M K A A D D L L L Q E I V D Y L Q R Y L L
UniRef90_M8B564 L I Y T D S L P K M E I G M L E L Q H L L R A A A D R Y A L L Q R L K A L C E E K L C
UniRef90_G0MVZ9 L N F V Y P S T Q E F S K Y N I D V T L R L R A A D R F E F W S V T E R A C E F L K
UniRef90_UPI0004572BB2 T D E A P T V K E C Q N V E F I C N V L V V A D Q L L I T R L K E M C E
UniRef90_UPI0003D705AC L N F I Y T S K L L V N A A N V H E V L S A A S E M L L Q M A D I A A S C Q E L L L
UniRef90_R7V658 L V E Y L Y S G N I D I T Q A A N Q D L L A A S E M L L L G A L K K K V E D F L L
UniRef90_G1RWL7 L K Y I Y C D E I D L A A D T V L A T L Y A A K K Y I V P H L A R A C V N F L E
UniRef90_G6D4M2 L Q F M Y Q G E I N V K Q E E L A S F I S T A E Q L Q V K G L
UniRef90_A0A015KSX5 I Y G G I L S L D E K T D S D F L K L L A T A D K L N L Q E L V D Y L Q G Y L I
UniRef90_UPI00032AD3E2 L H F I Y T D T L T E D A D M V S K L L A A A D K Y G L Q A E L R L M C E S R L C
UniRef90_A0A015KAP4 L K Y I Y G G I L S L N E Q D L K V L V A A D N L L L Q E S V T R C C V D Y F
UniRef90_K1R6T4 L K Y L Y E G F M S L T G D N Y K D V E K I A K L L Q V E S V V R C C V D Y F
UniRef90_U9U5W8 L K Y L Y T S H I N I N N K T L D I M I A S D E L K L E Q L T K L T E E F I V
UniRef90_F1KXD9 L N V Y P S H K P V S A E N V I R L L E L G D K F E I Q D R L K S I C E A F L C
UniRef90_K7TQ65 L L H F V Y T D S L V Q I E L V H L L V A A D R Y C V V
UniRef90_S4R7M7 L D F V Y K G N V S V G R E D L R E L L K A A Q S L G I E C L E E V C R V F L
UniRef90_I118R4 L D L L A A A D R Y A L L Q E L K L M C A Q S K L L
UniRef90_UPI000451KDF2 L R Y I Y G G K I S L D T L D I T K L L V A A N E L S L Q E L V P H L Q S F L L
UniRef90_H2MVC8 L K Y M Y S D E I E L E A D T V L A T L Y A A K K Y I V P A L A K A C A V S F L E
UniRef90_V4B6E1 K Y I Y K G E T S E M F P E F A V D V L Y A S L L Q I V S L Q E L C E K Y F S
UniRef90_E9GSL9 L H F I Y S G V Q V P L T E T T A Q Q L F E A A D K Y D I G D L K D E C E K D Y F L
UniRef90_A0A015LPR5 L T Y V Y G G V I S L N E Q E T S E I L A A A D Q L H L Q E L V D Y L Q K Y L I
UniRef90_UPI000359A60F L E F V Y T A E V E I E A G K L Q R M K E I A E R L E C K D L I D C E E
UniRef90_A0A015IDR1 L R Y I Y G G E L T E I E A G V D V K R L V A A S E L S L Q E L I P H L Q S F L I
UniRef90_Q8LJX3 D T L P E L H E D D D K I V M A Q D L L V A A D R Y D M G R L K L I C A D M L C
UniRef90_UPI00026575F4 L Q Y I Y T G K I H L H P A I V L E V L S L A H E F G I S E L K L T C E D H I M
UniRef90_UPI00022C95B7 L K F M Y Q G E I N I N Q E D L S T F L K V A Q T L Q I R S G L
UniRef90_A0A022QYU2 V N Y M Y T A E A C L G E N M A C D L L V L S E K Y Q V K H L K N Y C E K Y L M
UniRef90_M4AT78 L K Y I Y C D E I D L C A D N T V L A T L Y A A K K Y I V P H L A R A C V N F L E
UniRef90_W5J5R9 I Q Y A Y L R Q C D L N E R N V L E V Y A A A D F L I R S L T S Y C A R F L M
UniRef90_C3Z9H0 I D F M Y T S D F V L T Q D N I V A I S A A A W Y L Q I T E L S Q D C Q M Y L M
UniRef90_UPI00026529B2 V N F A Y T G K I E V S S E L V G E V Y H V A K E W K V P R I K K A C C A T H M L
UniRef90_UPI0003D0EE4D L E M T Y T G K L P V G K H N V S K I L V A A D S L Q M F D V A V C C K N L L
UniRef90_C1BUN9 L D F M Y N G E V N V A Q E E L N S F L S V A E D L R T E G L T Q K
UniRef90_A0A015KHH0 L M Y I Y S G G K L S L D I S D I I K I L V A A N E L S L Q E L I P Y L E S F L I
UniRef90_U6NUJ6 S L P R Y K F E I S L L L Q E V C Q I A F R F H F S G L Q S R C V Q L L K
UniRef90_F4WVA1 L E F V Y R G E V S V E P A Q L P S L L Q A A H C L S I H G L
UniRef90_B4JTW3 L R Y L Y C D E I K L E P E H I L A T L Y A A K K Y I V P H L A R A C V N Y L E
UniRef90_E2C3K1 I N F M Y C G E I Q V S E V R R L K L A E I L E V T G L R H I
UniRef90_UPI0002234A17 F G S L Y R D A V L I P P S R V I A I L A T A S M L Q F D K L I Q Q C E E V M K
UniRef90_I1QFB8 L H F I Y T D D M P P D I D M A R H L L V A A D R Y A V E R L R V I T E R V L R
UniRef90_V5IA21 L R Y I Y T G H M F L S T D V I L D T L G L A H Q D G F Q D L E T A I S D I L K
UniRef90_UPI0003C1744E I S F I Y S G I L H L G W E N I F E L T C I S M Q L Q I T G G A I L L C F D F F Q
UniRef90_V4LTX3 V N Y L Y T A E A L V D E Q M A C D L L T M S E K Y Q V A Y L K R Q C C E K F L A
UniRef90_H9KBE7 V E F M Y C G E T R I S Y Q L L S P L L T A T K K F K V D I D E C E E
UniRef90_UPI00035931B3 V H F F Y T A E L E V T Q E E V H E V L A A A R R L R V T E L E S L
UniRef90_A0A015KVE3 L R Y I Y G G E P S L D N L D I I K I M V A A S E M N L Q E L V M I Y T Q S F L
UniRef90_H2XCU2 L H V I Y C G H K P V T V E N V E Y L L E L G D K Y E I Q Y V M D E C E R F L M
UniRef90_Q16HA9 L Y I Y I Y C D E I D L S E K N V A L F Y A S A K Y Q L Y E L Q T K C V E F M I
UniRef90_H9K5Y6 V R F L Y T S E I D L H P E N M Q E D L K L A N T Y S E N C L K K Q C I Q K M K
UniRef90_UPI00046B92DF L D F L Y T S E I E V Y Q E E V Q E D V L S A A R Q L R V C E L E S L
UniRef90_A7SCQ0 I I Y P T S N N S S I T M D N V E H L S A L A A E Y Q I K A V T N S C F D Y L K
UniRef90_UPI00017583FC L H F I Y N G E V S V D T S K L D S F L K T A Q L L K I S G L T D
UniRef90_G0MW02 L N C V Y P T D F E L D D E N V S H I L K L A D W F E V Y S V L K K A E D Y L
UniRef90_UPI00042B9980 A Y T G A F A A M P G P A G E V V A A A Q A L G V P R V V E I C Q R
UniRef90_B0XDY9 I L Y V Y T A K I M L Q D S K V F E E M M T L A Q D L G V E E L K I A C C E E H V R
UniRef90_A0BMK6 T G E Q P S D Q F S T C L Q Q V K S L L S T A D Y M L E D L K S L C E K I L C
UniRef90_A0A015L7H3 L K Y I Y G G I S F N P S E I L R I L I A A D Q L H L Q E L V D Y L Q E Y L I
UniRef90_G0MD27 L E V I N L E P T A K L D C V E N V L Q L A D M Y E A K N V T R Q C E E F L
UniRef90_T1KTP4 I R W C Y S L P V E P D E T N V Q L L A G A K M L D C P E I V S I C S D F I I
UniRef90_UPI000192493C L R F I Y D Q V H L N K T N A L D I L Y L A D K Y I T P S L S K E C V N F L L
UniRef90_I0ZOR8 L S S L Y H G T V D V G E G N V E A L L L A S N Y L D V A A V K A A C C Q F L K
UniRef90_Q641R7 L H V M Y T G R C P
UniRef90_U9U432 L M Y I Y G G I L S F N T S D I L K V L V A A D E L C L Q E L V Y Y L Q S Y L I
UniRef90_UPI000388EBEB Y T D S I S L P P E D A I G L L D L A T F Y R E N R L K K L C C Q Q T I K
UniRef90_UPI0003336816 V Q Y A Y T G H L N E E T I E N L L A A A C L L Q L P V I D V C S S F L
UniRef90_H2Z3Z8 L R Y L Y C D E V C L E A D T V L P T L Y A S K K Y I V P Y L A Q A C V I F L E
UniRef90_A0A015LIN3 Y G G R L A S V G E Y A D S D I I K I L V A A N E L N L Q E L V I T L Q L S L I
UniRef90_W51212 E K D S M E A D A M E V D M S L Q D L L V A A D R Y D V Q R L K C I C E K Q L S
UniRef90_H3EBB1 L Q W C Y T D E I H V E P E Q A L G L L E L A N C Y C E M E L K A R C A A L V E
UniRef90_UPI00045730D9 I D Y V Y T A E I Q V T E E N V Q
UniRef90_E9H5E7 L R Y L Y T R S A A M D I M A P A L L A A A D K Y L L G Q L K T R C E T H L I
UniRef90_A0A026X2Z6 L K Y I Y T G R M S L R D E V I L E I L A L A H L Y G F V D L E A A I S D Y L R
UniRef90_T1PNV6 L E F V Y R G E V S V D H A Q L P S L L Q A A Q C L N I Q G L

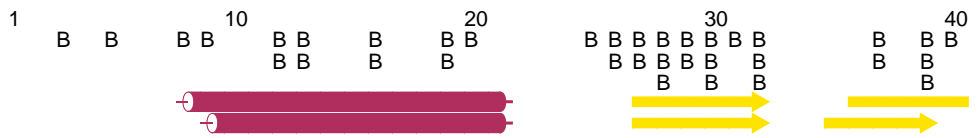
lupas_21
lupas_14
lupas_28
jnet
conf



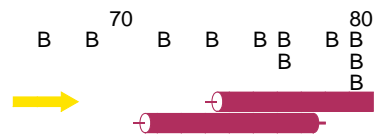
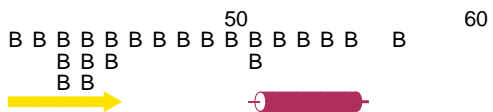
1 1 1 0 2 7 7 7 7 6 5 2 2 2 3 9 9 9 9 9 8 7 4 1 5 7 6 6 8 9 9 9 9 9 9 8 7 2

UniRef90_C5YJ10	
UniRef90_G1PR18	G
UniRef90_J9M519	
UniRef90_UPI0004628CBB	R
UniRef90_D7UAR1	
UniRef90_M3XLF9	E S
UniRef90_UPI0003943AD2	
UniRef90_UPI0003513A7B	
UniRef90_F6UC39	
UniRef90_UPI000392E025	D T
UniRef90_U9URS5	E N
UniRef90_M8B564	T
UniRef90_G0MVZ9	
UniRef90_UPI0004572BB2	
UniRef90_UPI0003D705AC	
UniRef90_R7V658	S
UniRef90_G1RWL7	T S
UniRef90_G6D4M2	
UniRef90_A0A015KSX5	E N
UniRef90_UPI00032AD3E2	K
UniRef90_A0A015KAP4	E N
UniRef90_K1R6T4	
UniRef90_U9U5W8	K N
UniRef90_F1KXD9	R S
UniRef90_K7TQ65	K
UniRef90_S4R7M7	
UniRef90_I118R4	
UniRef90_A0A015KDF2	E N
UniRef90_H2MVC8	T S
UniRef90_V4B6E1	D N
UniRef90_E9GSL9	
UniRef90_A0A015LPR5	N N
UniRef90_UPI000359A60F	
UniRef90_A0A015IDR1	K N
UniRef90_Q8LJX3	
UniRef90_UPI00026575F4	S A
UniRef90_UPI00022C95B7	
UniRef90_A0A022QYU2	S T
UniRef90_M4AT78	T S
UniRef90_W5J5R9	
UniRef90_C3Z9H0	K N
UniRef90_UPI00026529B2	D N
UniRef90_UPI0003D0EE4D	
UniRef90_C1BUN9	
UniRef90_A0A015KHH0	E N
UniRef90_U6NUJ6	
UniRef90_F4WVA1	
UniRef90_B4JTW3	
UniRef90_E2C3K1	
UniRef90_UPI0002234A17	E T
UniRef90_I1QFB8	R S
UniRef90_V5IA21	Q
UniRef90_UPI0003C1744E	K
UniRef90_V4LTX3	S
UniRef90_H9KBE7	
UniRef90_UPI00035931B3	
UniRef90_A0A015KVE3	
UniRef90_H2XCU2	S A
UniRef90_Q16HA9	A T
UniRef90_H9K5Y6	E
UniRef90_UPI00046B92DF	
UniRef90_A7SCQ0	G
UniRef90_UPI00017583FC	
UniRef90_G0MW02	
UniRef90_UPI00042B9980	
UniRef90_B0XDY9	T T
UniRef90_A0BMK6	
UniRef90_A0A015L7H3	K N
UniRef90_G0MD27	
UniRef90_T1KTP4	S
UniRef90_UPI000192493C	D N
UniRef90_I0ZOR8	A N
UniRef90_Q641R7	
UniRef90_U9U432	E N
UniRef90_UPI000388EBEB	Q S
UniRef90_UPI0003336816	
UniRef90_H2Z3Z8	T S
UniRef90_A0A015LIN3	E N
UniRef90_W5I212	E N
UniRef90_H3EBB1	R T
UniRef90_UPI00045730D9	
UniRef90_E9H5E7	R
UniRef90_A0A026X2Z6	E
UniRef90_T1PNV6	

sol25
sol5
sol0
jhmm
jpssm



sol25
sol5
sol0
jhmm
jpssm




sol25
sol5
sol0
jhmm
jpssm

B B B B
B




90
B B

B B B B B B B
B B B B B B
B B B B B B
B



B B B

110 B B B B B B
B B B B B B
B B B B B B



120
B B B

