```
                 1              10             20             30             40
QUERY            G P N G N I M T A R A N H M W N P T G A H Q S S I P A L G I D A W D N S D S S V
UniRef90_A1ZK73  G N N G N V M T A R A N H M W H P T G T K Q S T I P A M G I N D W D N A S N P V
UniRef90_E2Q0N2  G H N G N V M T A R A N H L W D T V G A Q Q S T M P V L G I D D W N N P T H P V
UniRef90_R4TF40  G T N G N V M L G R A N H A W D V G G S L Q S G M P A L G I D A W D D P V N P V
UniRef90_A4FNG2  G T N G N V M L G R A L H S W D R T G S V Q S G M P A L G I D N W D D P V H P V
UniRef90_UPI000369A96A  G P N G N T M V G R A N H I W D T T G A N Q A T M P V M G I D D W S N T D N P V
UniRef90_UPI000363D2A1  G T N G N V M T G R A N H M W D T V G A N S T M P V M G I D D W S N A A N P V
UniRef90_D2PYB3  G T N G N V M T A R A N H A W D P T G S L Q S T I P A V A I D N W D D P V H P A
UniRef90_G2P3X8  G G N G N V M L G R A N H V W H P T G A R Q S T I P V M A I D D W S N T A N P V
UniRef90_UPI0003615822  G T N G N V M F G R S N P L W D P T G A W Q S T I P V V G I D D R D N P H G P V
UniRef90_M3BGF7  G P N G N V M A A R A N H G T D P T G C H Q S T V P A L G I D D W D D P R H P V
UniRef90_U5EAF3  G N N G N V M V G R A N H M W D A T G S L Q S A M P C L G I D N W A D A G G P A
UniRef90_I0V595  G P N G N V M T A R A N H A W D R T G A T Q S G M P A L A I D A W D D P R H P V
UniRef90_UPI000475CF4D  G H N G N V M L A R A N H I W D P T G I K Q S T I P T L G I N D W N H P T R P V
UniRef90_M5E8G3  G N N G N I M F A C S T R F W N G T G V A Q S T M P V M G I D N W D D P E H P V
UniRef90_C0ZRH0  G H N G N V M V G R A N H M W D A T G A K Q S A I P V M G I D N W A D T S A P V
UniRef90_D3PWH5  G P N G N I M A G R A N N A S Q P T G A R Q S A I P V L A I D D W D N E A A R V
UniRef90_UPI000475C541  G N N G N V M V A R A N H I W N T T G A L E S G M P A M G I D N W A D S A G P V
UniRef90_A0A024YX52  G E N G N V M C G R A N H M W D P T G R L Q S T I P C S G I D N W D A G G A
UniRef90_C7QF61  G D N G N I M V G R A N Q I W D P T G S K Q S T V P C G G I D N W T K G G A
UniRef90_W5W442  G D N G N V M T A R A N   W K P T G C V Q A S M P T L G I D A T N D P V   P V
UniRef90_D7VYA1  G N N G N F M T G R V K P L S G G T G A K Q S T I P V G G I D N W D D P E H Q F
UniRef90_M2WHP2  G T N G N V M V A R A N H A W D T T G K N Q S S I P T M G I D A W D   T N G V
UniRef90_F5SQH4  G P N G N I M T G R   N F V H A A G E A Q S T I P V K G I N M W D G S K Y K I
UniRef90_C6WL12  G E N G N V M V G R A N K A S D P T G A L Q S C I P T G G I D N W A A G G A
UniRef90_G2EAQ7  G N N G N V M T G R N S N Y S T G T G S E Q S T I P V S G V D N W E D K K H A F
UniRef90_F0P237  G N N G N F M T G R V K A F S G G N G Y L H S T I P V G G I D N W D D P K Y P F
UniRef90_UPI00047684BB  G N N G N F M T G R V Q T F S G G T G T K Q S T I P V A G I D H W D D E E H S F
UniRef90_G7CD92  G N N G D V M V A H H L S P A D P A G T Q Q S L M G M I N V D G R D D P D N P V
UniRef90_K1ENT2  G P N G N V M L A R T N L L G S N A G A H Q S G I P A Q G V M A W D D S A S S V
UniRef90_W9AYZ2  G N N G D V M V A H N T G A A D P V G T K Q S L L G M I N L D G R N D P D N P V
UniRef90_I4A0Y4  G P N G N I M T G R   N F V N S T G V N Q S T I P V K G I D M W N D F E Y K I
UniRef90_UPI0003670920  G N N G D V M V G H N L A K S D P A G T T Q S L M G M I N I D G R D D P D N P V
UniRef90_UPI000313071C                M L S R R L T W G T A T G S L Q S G M P A M G I S H W N D G P T S V
UniRef90_X5KT13  G N N G D V M V S H M L D N H D P A G T Q Q S L M G M I N L D G R T D P D N P V
UniRef90_UPI0003617FC3  G N N G D M M V S H W L K K S D P A G T Q Q S L L G I N L D G R A D T E N P V
UniRef90_UPI000367E8D6  G T N G D R I Y A   W T N L R E D F G S E Q G G P V V F G S K A W D D P A T A N
UniRef90_W7IBU3  G S N G D R I Y T   W T N F A D D F G A P Q G G P V I Y G S K E W D D P A T A N
UniRef90_H6N4U1  G T N A D R I Y I   W N A P T A D F G A A Q G G P V V Y G S L N W S D P Q H A F
UniRef90_UPI0001FFF0E5  G T N G D R I Y C T   W T S L T D D F G S P Q G G P V V Y G S K D W S D P A T A N
UniRef90_H5X8G7  G S N G D R I Y F   W T N L A D D F G A P Q G G P V V Y C S K E W D D P G T A N
UniRef90_UPI000464C05B  G T N A D R I Y V   W S D P T E N F G A E Q G G P V V Y G S K N W Q D P D A A F
UniRef90_W8GU53  G T N A D R I Y V   W T S L E E E F G A P Q G G P V V Y G S L N W D D P A T A V
UniRef90_Q5Z338  G T N G D V V L A R G     A S S L T G L G Q G V P S A S R I Y     D E T D A P V
UniRef90_R7XVW0  G T N G D R I Y A W T N L Q T D   F G T   Q G G P V V F G S K D W A D P A T A N
UniRef90_W5TJ07              D R I F T   W T S L S D D F G T E Q G G P V V S G S K E W D G P A L P N
UniRef90_UPI0002628583  G S N G D Q I Y T   W T S L A D D F G S P Q G G P V I Y G S K E W D D P A L A N
UniRef90_UPI00037C1EDD  G S N A D R I Y L   W T N L E E E F G A V Q G G P V V Y G S K N W D D P N S A Y
UniRef90_G7GUD8  G T N G D R I Y S W V S P A S D   F G P V Q G G P V V Y G S K N W D D P K K A F
UniRef90_T1VQ09  G T N A D R I Y I   W S D L A E N F G A T Q G G P V V Y G S R N W D D P H N A F
UniRef90_V9XMV6  G T N G D A V L V R S F A L T E G F G G D Q G A P S A S R I   V D E S G L P L
UniRef90_W5T714  G T N G D V V L A R S   A S Q L A G L G Q G V P S A G R I   F D E S E M P L
UniRef90_H6R8T1  G T N G D V V L A R G   A S S V A G F G Q G V P S A S R I   F D N S A V P V
UniRef90_W8B1C3  G T N G D V V L A R S S S A L A S T G G   G V P S A S R I   F D D S G M P L
UniRef90_UPI0003697B31  G T N A D R I Y T W T C L D A D   L G A V Q G G P V V Y G S L N W D D P A R A A
UniRef90_UPI00047BCCE4  G S N G D R I H T   W T N L A D D F G S P Q G G P V V Y S S K E W H D P A S A N
UniRef90_L7LC63  G T N A D R I Y T   W T S P T E D F G A R Q G G P V V F G S R N W S D P S R A H
UniRef90_M3ULB4  G T N A D R I Y V W S N P E L D   F G V K Q G G P V V F G S L N W D D P R T A H
UniRef90_T1VQP0  G T N G D A G M V R S F G F S D   G T A Q A A P S A S R I   V D E S G M P L
UniRef90_U5DW62  G T N A D R I Y V W T T P D R E   F G V A Q G G P V V Y G S L N W D D P A T A H
UniRef90_M7AMA2  G T N A D R I Y V W N N P A A Q F G A A Q G G P V V Y G S P N W S D P A T A H
UniRef90_L7KZZ8  G T N A D R I Y T W T S P R I D   F G A V Q G G P V V Y G S P N W N N P K S A F
UniRef90_UPI0003120212  G D N G N R M A F R Q S L F G L P Q G G P Q A S P S P S A I Y V K D H G E S P I
UniRef90_K5V1U6  G D N G N R M A F R Q S L F G L P A G I A Q A S P S P T A I Y V D E A G R S P V
UniRef90_W0L9L3  G S N G D T I V T R S   F S A I K G L Q Q G S P S A S R I H D R   N A G L P V
UniRef90_D0LDL7  G A N G D F L T A R   T A L S D D Y G A V Q G G P G F G R V Y E D D M P G G P V
UniRef90_H6QY89  G T N A D R I Y V W T N P A A D   F G P A Q G G P V V Y G S L N W S D P N S A C
UniRef90_UPI00035C72A3  G S N G D R I Y L   W T K P A S G F G T P Q G G P V V Y G S R N W N S P T S A Y
UniRef90_K6W2Z2  G A N G D F L T A R   T A L S D D Y G A V Q G G P G F G R L Y E D D L P G G P I
UniRef90_L7KZR4  G T N G D F L T I R T N   P S D G P G L V Q G G P G Y A R I D R L S E T P M S M
UniRef90_V8CYF7  G S N A D R I Y V   W T N L E T E F G A V Q G G P V I Y G S K N W D D P N A A H
UniRef90_M2WK96  G T N A D R I Y V   W S D P A N E F G P S Q G G P V V Y G S L N W D D P A R A H
UniRef90_UPI00036BD2E7  G T N G D A S M T R S   L G P A A G V P Q A A P C A S R I   V D D S G L P L
UniRef90_UPI000423F225  G T N G D R I Y A W T N L Q E D   F G E E Q G G P V I Y G S K D W G S S A T A N
UniRef90_UPI000475590B  G T N A D R I Y V   W T D I V N G F G P Q Q G G P V V Y G S L Q W D D P N A A F
UniRef90_M0QNW0  G T N A D R I Y T   W T N P D E S F G A T Q G G P V V Y G S L N W D D P A T A H
UniRef90_A0A022LMR5  G T N A D R I Y T   W T D P T A G F G A V Q G G P V I Y G S L N W S D P T T A H
UniRef90_UPI0004674F82  G T N G D V V L A R V D N S L A G T G   Q G V P S A S R I A   D D S G L P L
UniRef90_J9SF89  G V N G D F L T I R A N P R E D   F G A V Q G G P G Y A R I Y E D D L P G G P V
UniRef90_L8D9T2  G T N A D R I Y V   W S S I E Q Q F G T P Q G G P V V F G S L N W D D P R T A H
UniRef90_K6VP64  G T N A D R I Y V   W S D V T D R F G A E Q G G P V V Y G S L N W S N P D L A H
UniRef90_UPI000379116B  G S N A D R I Y   M W T D L G D F G S P Q G G P V I Y A S K A W D D P A T A N
UniRef90_D0L8E4  G T N G D F L I V R   T A L R D P Y G P L Q G G P G Y A R I R E D R L P G G P V
UniRef90_UPI000476E272  G T N G D V V L A R G E S T L S R L G   Q G V P S A S R I A D E S G P   P L
UniRef90_UPI00030CA88F  G T N G D A V G A V I T   T G Q T N P T Q G G P A V G V I E D F N N P I A P I
UniRef90_UPI0004641BB6  G T N A D R I Y V   W T D L E R S L G V Q G G P V V Y G S L N W S D P A T A S
UniRef90_M0QM34  G T N A D R I Y T   W T S P D D D F G L V Q G G P V V Y G S K N W S N P S S A F
UniRef90_A4X855  G N N G D F L V T R I N L R K D   V G Y A Q G G P G N V K Y I D E D N P Y A P T
UniRef90_M9ZUZ4  G T N G D A L S A V I N K Y   P T N P S Q G G P A T S V I E H F D N P I A P V
UniRef90_F1TJ70  G N N G D R M V T R A L   D S P G A W Q G G P A C V G V K D D N P I A G A L
UniRef90_W9DJ78  G T N G D F L M I R T N   P S D D F G L V Q G G P G Y A R I Y E D R L T E T P M
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                                      50         60         70         80
QUERY                  F A E I A P M P A G L E T W V S L Y L A I T K N P Q R G T F V Y D A A T D R A K
UniRef90_A1ZK73        F A E I A P L P T G F E T W I S L Y L A I T K N P E R G H F E Y D A T K Q Q A V
UniRef90_E2Q0N2        F A E I A P L P M G L E H W I S L Y L A I T K N P E R G H F T Y D A A T D S A R
UniRef90_R4TF40        F A E V A P V P A G V E T W L S L Y L A I T K N P E R G H F T Y D A A S D S A R
UniRef90_A4FNG2        F A E I A P L P A G L E L L T S L S L A I T R N P E R G S F S Y D P A A D A A R
UniRef90_UPI000369A96A F A E I A P L P I G F E T W V S L Y L A I T K N P Q R A S F T Y D S A S G T V K
UniRef90_UPI000363D2A1 F A E I A P L P T G L E H W I S L Y L A I T R N P E R G F T Y D P A T D S A R
UniRef90_D2PYB3        F A E I A P L P T G L E T W A G L Y L A I T A N P E R G R L S Y D H A T D R A I
UniRef90_G2P3X8        F A E I A P L P A G L E T W V S L Y L A I T R N P E R A T F T Y D A A K D A A V
UniRef90_UPI0003615822 F A E S V P L P A G V E T F V S L H L A I T E N P E R G R F V F D P A S D S A R
UniRef90_M3BGF7        F A E V T P V P A G T E T W I S L Y I A I T R N P E R G F T Y D R A T D R M G
UniRef90_U5EAF3        F A E V A P F P S G L E T Y V S L Y L A I T K N T N R A Q F T F N S G T G K V D
UniRef90_I0V595        F A E V A P M P A G V E L W V S L Y L A I T R N P E R G H V V Y D A T S D R A V
UniRef90_UPI000475CF4D F A E I A P M P A G M E T W I S L Y L A I T K N P E R G T L Y Y D S T T G K L G
UniRef90_M5E8G3        F A E I A P F P T G I E T W T S L F L A I T K N P E R G Y F T Y N A A A D S V D
UniRef90_C0ZRH0        F A E I A P F P A G T E L W V S L Y L A I A K N P Q R A Q F Q F N S A T G K V G
UniRef90_D3PWH5        F A E I A P V P A G F E T W I S M Y L A I T E N P E R A S F R Y D P A T D R A V
UniRef90_UPI000475C541 F A E I A P F P A G T E L W I S L Y L A I T K N P N R A A F S F D S S T G G V G
UniRef90_A0A024YX52    F A E V A P L P T G I E T Y A S F Y L S I T K N P H R A E F T W N A A A G R A D
UniRef90_C7QF61        F A E V A P I P I G I E T W A S L Y L S I T K N P H R A Q F T W N A A T Q K V D
UniRef90_W5W442        F A E I A P I P A G V E T F A S L Y L A I T K S P E R G S F G Y D R A S G T V S
UniRef90_D7VYA1        F T E I A P L P M G M D V A T A L Y L L I N R V D K K G E V T Y N K A S Q S L T
UniRef90_M2WHP2        F A E I A P F P A G A E L W V S L Y L A I T K N P E R A S F Q Y N S S T G G V G
UniRef90_F5SQH4        F A E I A P L P L G F E T W T T L Y L A I T D N P E R G N Y Y Y D K A S G T V K
UniRef90_C6WL12        F A E V A P L P T G V E T F T S F Y L A I T A N P R R G R F T W N P E A G R V E
UniRef90_G2EAQ7        F A E I S P L P M G M E V Y T A L Y L I I N K V P I P G H I S Y D P A L D D I R
UniRef90_F0P237        F A E I A P L P M G M N V A T S L Y L I I N K L D K Y G E V T Y H P T E D K L D
UniRef90_UPI00047684BB F T E I A P L P M G M N V A T A L Y L M V N P L K K Y G T V S Y D K S K G I Q
UniRef90_G7CD92        Y A S I F S L P L P V E T F A L G Y Y V M V R T D D R A D I R Y D R A T D S I S
UniRef90_K1ENT2        F A E V A P L P V G F E T Y S N L Y L A I T N N P N L G S F T W D T A R D R L A
UniRef90_W9AYZ2        Y A S M F S L P L P V E T N A L G Y Y V M V K T G D R S E I T Y D K A S D S I R
UniRef90_I4A0Y4        F A E I A P L P L G I E T W T T L F L S I S D N R E R G N Y Y F D K A S K K V K
UniRef90_UPI0003670920 Y A S M F S M P L P V E T L L G Y Y V M V D T G D R A D I T Y D R Q S D T A T
UniRef90_UPI000313071C F A E I A P F P T G I E M R T N V Y L A I T D N D N L A S F T W N K D T Q D V E
UniRef90_X5KT13        Y A S M F S I P L P E E T F M L G Y Y A M V K T G D R A D F S Y D R P T D S I S
UniRef90_UPI0003617FC3 Y A T M F S L P L P V E T F M L G Y Y V M V K T G D R A D I L T Y D R T S D S I T
UniRef90_UPI000367E8D6 T V I Q A S L P L G L D A R T T M L V G F G V S A D R G R F D Y D A A T D S V S
UniRef90_W7IBU3        T V I Q A S L P P T P N L R T T M L V G Y G V S Q G R G R F V Y D S A K D D A V
UniRef90_H6N4U1        T V I Q A S I P I P V N T H S T M M V A Y G V S A G R G H F T Y D A A T D Q A V
UniRef90_UPI0001FFF0E5 T V I Q A S L P P L P D L R T T M T V G Y G V S E G R G R Y R W D P V R G E A V
UniRef90_H5X8G7        T I I Q A S I P P L P D L R S T M L V G Y G V S E G R G H F V Y D S T R D D A V
UniRef90_UPI000464C05B T A S I P P L G I G M D P H S T M L V G Y G V S A D R G R F T Y D H A R G E A V
UniRef90_W8GU53        T V I Q A S M P L S F D A R S T M L V G Y G V S D G R G S F V Y D S A T D D A V
UniRef90_Q5Z338        T L E S W Y I P G P V E T G A L A S L G M V L D P T R T R F G Y N A A D G R V G
UniRef90_R7XVW0        T I I Q A S M P V G L N L R T T M L V G F G A S P D R G H F A Y D G A T D T V G
UniRef90_W5TJ07        T I I Q A S I P S G V D A H S T M M V G F G I T K G R G H L A Y D A A T D D A K
UniRef90_UPI0002628583 T V I Q A S I P P L P N L R T T M L V G Y G V S A G R G H F V Y D P A K D D A V
UniRef90_UPI00037C1EDD T V I Q A S I P G G I D M R S T V L V G Y G V S E G R G H F V Y D A A R D D A V
UniRef90_G7GUD8        T F I Q A S M P T A V E T G A T T L V G F G V S K G R G R I V F D S A K G E A V
UniRef90_T1VQ09        T V I Q A S F P V A F D A H S T V M V G F G V S S D R G R F V Y D A R G E A V
UniRef90_V9XMV6        S L E N W F V A T A K D V G M L A S L G M T L D P T R A D F A Y D P G A D R A V
UniRef90_W5T714        S L E S W Y I P G P V E T G G L A S L G L V I D P T R A T I T Y D A A R D A A A
UniRef90_H6R8T1        T L E N W Y I P G P F E T G A L A S L G M V L D P T R T R M G Y D R G T D S V G
UniRef90_W8B1C3        H L E N W Y V P G P V D T G A I A S L G I V L D P T R A R F G Y D R A S N G V G
UniRef90_UPI0003697B31 T V I Q A S I P M G M D A H T T M L V G Y G V S D A R G R F V Y D A A A D D A T
UniRef90_UPI00047BCCE4 T V I Q A S L P P L P N L R T T M L V G Y G V S P D R G R F H Y D P H V D D V V
UniRef90_L7LC63        T V I Q A S I P L G A D L H T T M M V G F G V S K G R G R F V Y D S G R G D A I
UniRef90_M3ULB4        T V I Q A S I P F G V N V H S T M M V G Y G V S E S R G R F R Y D A S T G D A R
UniRef90_T1VQP0        S L E N W Y V P L P V N I G M L G T L G M T L D S Q R A D F D Y D G G S D R V V
UniRef90_U5DW62        T V I Q A S I P L S V D V H S T M L V G Y G V S D G R G R F D Y D P A R G D A V
UniRef90_M7AMA2        T I I Q A S I P L P V V H S T M M V A Y G V S A A R G H F V Y D S A R D E A S
UniRef90_L7KZZ8        T I I Q A S L P I P V Y A G T T M M V G F G V S S G R G V I D Y D S A A G D A I
UniRef90_UPI0003120212 V A E N W A N A A I A D V G V S M S L A V T A D N N R G Y F Y Y D A A K D D A V
UniRef90_K5V1U6        A A E N W A N A G I A D V G I S M M L S V T A D K N R G H F Y Y D A S I D D A V
UniRef90_W0L9L3        T L E N W Y V P V P V N L G I I G S L G M A F D E N R G D F V Y D K A R G K V N
UniRef90_D0LDL7        V Y H S T P V P A P L G K T L T T N L I Q A H T E E R G T I D Y D H A T R S A V
UniRef90_H6QY89        T L I Q A S I P M P V D P K S T M V G Y G V S A G R G S F G Y D T A S E Q A V
UniRef90_UPI00035C72A3 T V I Q A S I P L A V D A R T T V M V G F G V S S S R G R F A Y D A A T D N A T
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UniRef90_V8CYF7        T V I Q A S P L S F D A R S T M M V G Y G V S T G R G R F H Y D S R D D A I
UniRef90_M2WK96        T L I Q A S I P L A M D L R S T M M V G Y G V S R D R G H F A Y D A G A D E A R
UniRef90_UPI00036BD2E7 T V E N W Y V P V P W D L G F I G S L G M T I D P L R A N F S Y N S A T D S M S
UniRef90_UPI000423F225 T V I Q A S M P L G V N A R T T M L V G F G V S P D R G R F R Y D G R T D A V S
UniRef90_UPI000475590B T I I Q A S F P L G L D G R S T M V G Y G V S E G R G R F V Y D S A V D D A V
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UniRef90_L8D9T2        T V I Q A S L P M G F D A H S T M L V G Y G V S D G R G H F A Y D S A R D Q A Q
UniRef90_K6VP64        T V I Q A S M P G G T D V N S T M M V G Y G V S D A R G R I A Y D A V R E E A V
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UniRef90_F1TJ70        T I V L G P V P F P L D L H T T S V I G Y V V E G L G S W H D F D H A S R T A K
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UniRef90_A4FNG2    L H W S A S Q G K P S V E A A K A L F D P I N R A N G T V Y R H D L F G   D S R
UniRef90_UPI000369A96A  L G W T A A Q S A V S V A M A K K L F D R I N S A N A T I Y R S D L F G T P S K
UniRef90_UPI000363D2A1  L D W T R A Q S Q V S V A S A K K L F D R I N L K N A T I Y R Y D L F G G N   K
UniRef90_D2PYB3    L H W Q A S Q S T P S I Q A A K A L F D R I N R A T G T T Y R R D L F S G N   R
UniRef90_G2P3X8    L D W T R A Q S A P S V A A A K A L F D R V N Y A N A T I Y R Y D L F G   D T R
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UniRef90_I0V595    L R W D A S N A Q P S V Q A A K A L F D R L N A A N H T A Y R A D L F G   D T R
UniRef90_UPI000475CF4D  L T W T R A Q N Q P S V A A A K D L F D H M N R V N V T V Y R S D L F G   D T R
UniRef90_M5E8G3    L N W D A T Q T A T S Y N D S K W L F D K M N A A N R T K Y R T G L F A   D N K
UniRef90_C0ZRH0    L N W Q R S Q N Q P S I D M A K K I F D K I N K K E G T I Y R T D L F G   P V Q
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UniRef90_UPI000475C541  L N W Q T A W N Q P A I D A A K R V F D T I N K K Q V T V Y R S D L F G V N   K
UniRef90_A0A024YX52  L S W Q T A W K Q P S I T M A R T I F D K I N S K E G T I Y R T D L F G G N   K
UniRef90_C7QF61    L S W Q L A W K Q D G I T M A K S I F D K I N S T E G T I Y R T D L F G S   Y K
UniRef90_W5W442    L R W G S T Q K D F A V S A A K R V F D R I N A A N A T I Y R H D L F S G N   R
UniRef90_D7VYA1    L N W D E S N T A K M K E N A Q Y F I R K M N K A N G G T R S H L L F     N N
UniRef90_M2WHP2    L S W S Q A Q A Q K S I D L A K V V F D K I N K K E V T V Y R S D M F G S N   K
UniRef90_F5SQH4    L N W K R S Q N E Y S V N A A K E L V E K L G K A N G G R I S S L L F     T K
UniRef90_C6WL12    L D W R Q E W K Q P S V D M A R T I F D R I N S V E G T V Y R A D L F G A   G K
UniRef90_G2EAQ7    I H W E K K N Y Q H T V D N A K Y F I K K M N K A N G G T P S G L L W K G
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UniRef90_G7CD92    I D W P E E F N D N V N A R A R Q V F D R I T A A N G V D Y R D D L F G G E
UniRef90_K1ENT2    L D W D A A K H A P S V A A T K R V F D R I N S A A G S Y Y R T D L F E G   S K
UniRef90_W9AYZ2    I D W P Q S H T D H L I E R A K V V F D K V T Q A N G V D Y R D D L F     D G N
UniRef90_I4A0Y4    L N W K R S Q N E Y S V K A A K L L L K K L K E D N G G T R S R L L F     N N
UniRef90_UPI0003670920  I Q W T D A F A A N N E A R A K Q V F D K I L K A N K V D Y R N D L F S G   K
UniRef90_UPI000313071C  L G W T Q M S A P S V N A T K A V F D R I N A A N G T F Y R T D L F E G R   K
UniRef90_X5KT13    I Q W T D E H T E H L V Q R A R R V F D R V V T A N S V D Y R D D I F S G   R
UniRef90_UPI0003617FC3  I D W P A A Y T D H L T E R T R K V F D L T Q V N G V D Y R D D I Y S G E I
UniRef90_UPI000367E8D6  L H W P K D G D A D S Y R N I H R R V T R M S K G L G V L       T D T N
UniRef90_W7IBU3    L Q W P K D A D       K A L S E R I H T R I S R I A G T F G V L L D T T
UniRef90_H6N4U1    L Q W P   H E G D S I L Q N R Y I T P A V N R I A G     P D S T L I D T N
UniRef90_UPI0001FFF0E5  L H W P P D G D A     A L T R R I H E R M N R     I I G P G G V L L D T T
UniRef90_H5X8G7    L R W P F D G D V       L Y Q R I Q Q R A C D I V G P G S T L L D T T
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UniRef90_W8GU53    L C W P K D G D A V I Q N       G R I D P M V R K I A G P G S L L T D T N
UniRef90_Q5Z338    L S W D R V N R D Q V V A A A R T V D Q R I A E R A G S L V G Y G P I G Y D A N
UniRef90_R7XVW0    L H W P A D G D       R A V H D E I G A R M R A V V G S T G V L T D S H
UniRef90_W5TJ07    L F W P A D G D A D     L Q G R I A E R A H A I A G P G G T L V T D T N
UniRef90_UPI0002628583  L Q W P G H A D A K V     A Q R I H E R I T D I G G A T A   V K L N T T
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UniRef90_T1VQ09    L R W P R D G D S A I Q Q       G H I G P A A Q Q I A A G G L L   T D T N
UniRef90_V9XMV6    L N W P T G G E R E S V D A L R A V H N A M A Q A G G T I P G A S P M A E D V N
UniRef90_W5T714    M N W P R A A Q D A I V A A C R T V D R R I G E R A G A L V D Y G P I G Y D A N
UniRef90_H6R8T1    L S W S T R N R D E T V A A A R A V D R R I A E R A G A L V E Y S A L G Y D A N
UniRef90_W8B1C3    L S W P R A A Q D A V V A A C R A V D H K V A Q A G G S V V D Y T P I A Y D A Q
UniRef90_UPI0003697B31  L Q W T   H E G D A V A Q E G W I G P L V R Q V A G   P A G L L F   D T N
UniRef90_UPI00047BCCE4  L H W P H G G D A     A L A R R I D T R I G E I A G F G S V E L D T T
UniRef90_L7LC63    L R W P A D G   D S A V Q W R D I H     P T A T A I A G P G A I L G D S N
UniRef90_M3ULB4    L I W P A S G D     T R I Q W R H I H P T A L K I A G P G S V L T D S N
UniRef90_T1VQP0    L N W P K N G N D A T V E A L R A V Q N K M A F A G T T L P S A L P F A K D V N
UniRef90_U5DW62    L R W P H E G D     W A V Q T G H I D R T V R A I A G P T S I V T D T N
UniRef90_M7AMA2    V Q W P   H E G D S R I Q N R Y I H P T A V K I A G   P G S T L L   D T N
UniRef90_L7KZZ8    I K W P   H E G D S E I Q T K H I D G A V R K I A G     P D A L L T D T N
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UniRef90_W0L9L3    L R W A A N G N A D I V E A A R Y V N N R I C D A N G V I P G V P I F K E D V A
UniRef90_D0LDL7    I N Y P H P E G N D L D R R G A A F A E R F R Q R A G R T T S G V P V Y S R A A
UniRef90_H6QY89    L R W P A D G D A F I Q D     N H I G P T A H R I A G P G T V L L D T N
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UniRef90_K6W2Z2    L N Y P N A L D Q R G V T F A E L F R Q R A E V H R V A S G I P I Y S R A A
UniRef90_L7KZR4    L N Y P P E G S N D V D R Q A A A F V G K F H Q R T E A R Y G R P P I Y T R A V
UniRef90_V8CYF7    L R W P T D S D A E I Q N     R H I G P T V R K I A G P G G I L T D T N
UniRef90_M2WK96    L F W P A T G D A E I Q N S A     I G P T A R K I A G P T G I L T D T N
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UniRef90_A0A022LMR5  I R W P A A G D     A G I L R G H I E P T A R A I I G P T G H L T D T N
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UniRef90_L8D9T2    L H W P A   N G D S V I Q N G S I D P T V R R I A G   S G S T L T D T N
UniRef90_K6VP64    L R W P R E G D A H I Q T R A     I I G P T V R A I A G P T G A L T D T N
UniRef90_UPI000379116B  L R W P K E A D A       G I Q Q H I H E R V T N I A G G A S F L L D T T
UniRef90_D0L8E4    L R W P A T G D E S I Q N       G H I G P A V R R I A G P R S V L V D T N
UniRef90_D0LDL8    L T Y P S T L D R R A I A F A R H F H E R T E T R H G Y P L N G I P L F D R A Y
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UniRef90_M0QM34    L H W P H E G D S V I Q N A     Q I I G P T V R K I A G P S G I L I D T N
UniRef90_A4X855    V H W P G T L E T T S E K A A V N L V T R L W W Q T E G R K G Y L L H G L P T T
UniRef90_M9ZUZ4    L F W P S A N N Q K N S Q A L Q Y T Y K L L D R A N D T T V A G P P
UniRef90_F1TJ70    L T W N Q A Y D R G L I D R I A R I E V G A G F G V S A       I D V N
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UniRef90_R4TF40           S F E N R F T Y H P L G
UniRef90_A4FNG2           A F E D R F T Y H P L G
UniRef90_UPI000369A96A    I F A D D F C Y H P L G
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UniRef90_D2PYB3           A F A A D F C Y H P L G
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UniRef90_A0A024YX52       I W N D T L T Y H P L G
UniRef90_C7QF61           T W Q D Q L T Y H P L G
UniRef90_W5W442           A F G D D F C Y H P L G
UniRef90_D7VYA1           G F G A E I C Y H P L G
UniRef90_M2WHP2           V W N E G L T Y H P L G
UniRef90_F5SQH4           G F G D N F C Y H P L G
UniRef90_C6WL12           V W G D G L T Y H P L G
UniRef90_G2EAQ7           G Y G P D I C Y H P L G
UniRef90_F0P237           G F G H D I C Y H P L G
UniRef90_UPI00047684BB    G F G P D I C Y H P L G
UniRef90_G7CD92           V F A P N   T V H P M G
UniRef90_K1ENT2           R L T D Y F T Y H P L G
UniRef90_W9AYZ2           V F A S N   T V H P L G
UniRef90_I4A0Y4           G F G D D F C Y H P L G
UniRef90_UPI0003670920    V F A P N   T V H P L G
UniRef90_UPI000313071C    A F T D Y F T Y H P L G
UniRef90_X5KT13           V F V P N   T V H P L G
UniRef90_UPI0003617FC3      F A P N   T V H P L G
UniRef90_UPI000367E8D6    S L V N S   T W H P L G
UniRef90_W7IBU3           A V A P S   T W H P L G
UniRef90_H6N4U1           A V L P S   T W H P L G
UniRef90_UPI0001FFF0E5    Y V V P T   T W H P L G
UniRef90_H5X8G7           A V Y P S   T W H P L G
UniRef90_UPI000464C05B    A L M P T   T W H P L G
UniRef90_W8GU53           A L F P S   T W H P L G
UniRef90_Q5Z338           A L     F   T A H P L G
UniRef90_R7XVW0           L I A P S   T W H P L G
UniRef90_W5TJ07           A V V P S   T W H P L G
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UniRef90_UPI00037C1EDD    S I V P S   T W H P L G
UniRef90_G7GUD8           A V   P N T W H A L G
UniRef90_T1VQ09           A L L P S   T W H P L G
UniRef90_V9XMV6           A     T F   T A H P L G
UniRef90_W5T714           A     P F   T A H P L G
UniRef90_H6R8T1           A L     F   T A H P L G
UniRef90_W8B1C3           G F     F   T A H P L G
UniRef90_UPI0003697B31    T V M P S   T W H P L G
UniRef90_UPI00047BCCE4    S L Y P N   T W H P L G
UniRef90_L7LC63           K V V   N T T W H P L G
UniRef90_M3ULB4           R F V D T   T W H P L G
UniRef90_T1VQP0               S S F   T A H P L G
UniRef90_U5DW62           A I V P S   T W H P L G
UniRef90_M7AMA2           G I V P S   T W H P V G
UniRef90_L7KZZ8           A F F P S   T W H A L G
UniRef90_UPI0003120212            F   T A H P V G
UniRef90_K5V1U6                   F   T A H P V G
UniRef90_W0L9L3           G L     N W T A H P L G
UniRef90_D0LDL7           G F G S A S T Y H G L G
UniRef90_H6QY89           A A F P S   T W H P L G
UniRef90_UPI00035C72A3    L I F P S   T W H P L G
UniRef90_K6W2Z2           G F G S G S T Y H G L G
UniRef90_L7KZR4           G F G S A G T Y H G L G
UniRef90_V8CYF7           E F F P S   T W H P L G
UniRef90_M2WK96           L V V N S   T W H G L G
UniRef90_UPI00036BD2E7    D V D D T F T A H P L G
UniRef90_UPI000423F225    A I V N S   T W H P L G
UniRef90_UPI000475590B    A L V P T   T W H P L G
UniRef90_M0QNW0           E L V P S   T W H A L G
UniRef90_A0A022LMR5       A I V N S   T W H P L G
UniRef90_UPI0004674F82    A V     F   T A H P L G
UniRef90_J9SF89           G F G S A S T Y H G L G
UniRef90_L8D9T2           A V F P S   T W H A L G
UniRef90_K6VP64             L G F P S T W H P L G
UniRef90_UPI000379116B    G M   D A T T W H P L G
UniRef90_D0L8E4           G M V N S   T W H P L G
UniRef90_D0LDL8           G F G S A S T F H G L G
UniRef90_UPI000476E272    A V     F   T A H P L G
UniRef90_UPI00030CA88F                S T A H P L G
UniRef90_UPI0004641BB6    L A F P S   T W H P L G
UniRef90_M0QM34           G I E P S   T W H P L G
UniRef90_A4X855           G L G A A N T W H P L G
UniRef90_M9ZUZ4               D S N G T T T H P L G
UniRef90_F1TJ70           A F   D T N T F T H P L G
UniRef90_W9DJ78           G F G S A G T Y H G L G
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                              1              10               20                30              40
UniRef90_B2IZE6         G T N G D G I   S A I V T         S N Q T N A T L G G P A S V V I E D F D N P I A P L
UniRef90_M2WKP8         G N N G D F L   T T R V F N R R D     Y G P V Q A G P G V A V M F D D E D P E G S V
UniRef90_H0JPW3         G N N G D R V F A V T S P L V S P       G D H Q G G P A C V G M R D Y T D P A G P L
UniRef90_K9RIL2         G T N G D I   L A S V L T S M Q       T N P T K G G P A A T V I E D F D N P I A P L
UniRef90_I0H2C2         G N N G D F L   V A R L N     L R K P V G S A Q G G P G N V K F Y D D S N P Y A P A
UniRef90_UPI0002486A9A  G T N G D R I   Y V     W S D P G A G F G P V Q G G P V V Y G T M L W D D V N H A H
UniRef90_E0TBM8         G N N G D R I F V W R P S D V S P       G P Q Q G G P T A I A L Q D W D N P G G P L
UniRef90_L8LRR9         G N D G D T F A V R S N     L S E K T N P H L G G P G A I V I M N Y E N P V Y P C
UniRef90_M6ZXN5                         T A L R D Q H G P I Q G G P G Y A R I R E E R M P G G P A
UniRef90_U5E8B3         G T N A D R I   Y V W R D P A A G F G A A Q     G G P V V Y G S K N W S D P Q A A F
UniRef90_E8W956         G T N S D R Q T V R V G M P W N       N S T Q G G P S G I V A Q D L D N P Y E P V
UniRef90_UPI000360ACB2  G D N G D A S G N R T G M P       N N P G E G G P A V A V I E H Y D N P I S P V
UniRef90_D3CSW4         G N N G D R I   Y A W I G M N G D P     G T I Q G G P A C V G G R D P N A T I Y T I
UniRef90_K9U6P8         G N D G D T Y A F R T N     L S E T T N P H L G G P G A I A V L N Y D N P I F P C
UniRef90_K9U0B0         G G N G D A I   V T R S N L L     P S V S G K G G P A C V V L E H L D N P G A T V
UniRef90_M5DMI1         G T N G D E L M G R R N     I D T S T A P I Q G G P P S I A A F D L E N P K S T G
UniRef90_UPI00034DDB4C  G T N S D S T T L M I N A       G Q T N P T Q G S P G V I S I E D L D N P I A P L
UniRef90_UPI000313F3EC  G G N G D T L G L R V G L P       P T N P S Q G G P L S A V I E D H A N P I A P T
UniRef90_UPI00041784EC  G N N G D T L G L Q V C L P       P T N P S Q G G P L S A V V E D H A N P L A P I
UniRef90_UPI00036D4DC0  G T N G D F L I L R     T P L R E D H G A L Q G G P G N V K M Y E D R L P G G P V
UniRef90_Q7ND02         G T N G D I L G T R Q G       S T P T N P T Q G G P A T A V I E H L D N P L A P T
UniRef90_M3CA90         G D N G D Q V T L R S Q P L V Q     H G A T Q G S P C A S G V F V P D G C G L P L
UniRef90_UPI00036D9B41  G N N G D R I   F A W V G M N G D P     G T A Q G G P A C V G G R D P Q A T I Y T V
UniRef90_UPI0001FFE8FC  G N N G D R I Q L R A G V P     D P A G G P A A G P M A A G I R A T D D R A E A V
UniRef90_UPI000309A28C          N G D T F S T R F G L P       P N N P T Q G G P A A Y L T H F D N P L G P I
UniRef90_A8L4C3         G N N G D R I Y L     W N G M N G D I G T Q Q G G P A C V G G R D T T S S I L T I
UniRef90_G7GUD9         G T N G D R   T F S W T G I T A D L G A P Q G G P V V Y G S E N W S N P R T A Y
UniRef90_K9R2J9         G T N S D S T T L M I N A       G E T N P T P G N P G V I A V E H L D N P I A P V
UniRef90_UPI000367893D  G N N G D R I W A W I N P T G D     A G T Q Q G G P A C V G G R D P N S S I   P L
UniRef90_H0R1T4                         T N L R D A Q G P R Q G G P G Y A R I R D D R L P G G P M
UniRef90_K9U1P4               N G D T I   A T R S N L       P P V S G K G G P A G A V L E N F D D L D R P I
UniRef90_E1VMI8         G T N G D Q I   Y L W R N P D S     A L A S P Q G G P V I Y G S Y D W S S P A N T V
UniRef90_E3J7L2         G N N G D R I   Y E W I G M S Q D P     G S V Q G G P A C V G G       S D P L S P I
UniRef90_UPI00036B7CCD  G N N G D R I   Y E W I G M L R N P     G A A Q G G P A C V G A       T D P V S P I
UniRef90_A0A011QNI4     G D N G D T F A T R     N V G T E T N P G Q G G P A S V V I K H H D N P I S P I
UniRef90_L8PLY0         G D N G D Q L N L R S Q P L A F     H G G S Q G A P S A S A A F L H R E F E L P L
UniRef90_Q3ALD8         G N D G D T F A I R   T E L D E K T N P H L G G P G A I A I L N Y E N P I R P A
UniRef90_UPI00037DC2CD  G N N G D F F L A R L N V R H D A G D D V         A L Y D D G N P F A K A
UniRef90_UPI0003620043  G N N G D N I S M R G G L P F N       N P T Q G G P S G V V I R D W A D R N A A A
UniRef90_W8A876                                                                                      I
UniRef90_V9XK91
UniRef90_H0JLL4                 G D H V V L R T G V P A P S       A A Q G G P A N A V I T D W A N P V S P V
UniRef90_R4LDH1                 G D H V V L R T G V P A P S       A A Q G G P A N A V I T D W A N P V S P V
UniRef90_W5WBS6         G S N G D A F V F R     P Y T G P V G P S Q A A P I V S T A M V D Q G Y P V P I
UniRef90_UPI00037B55DE  G S N G N V V M A P W T L N S P D I G T     Q G     A A V A S R V L D E S G M P T
UniRef90_K7ZBC4
UniRef90_UPI0002E7AC82
UniRef90_UPI000346C36A
UniRef90_H6N214                                     Q Q S A V G A A G F F D T T E Q F A R V
UniRef90_H8MWS4


lupas_21
lupas_14
lupas_28
jnet
conf                    9 9 9 7 3 5 8 8 8 8 5 3 6 7 7 7 6 6 6 7 7 7 7 7 4 2 5 7 8 7 5 3 6 7 8 8 7 7 3 5
sol25                             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 B B 5
sol5                            B       B     B B                     B B B B B B B                 B B
sol0                                          B                       B     B B     B           B
jhmm
jpssm
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                                          50            60            70            80
UniRef90_B2IZE6          V I E Q L P F P V P Q G V L A P L S L A I A K   P E     G Y L T Y N T S T Q S A N
UniRef90_M2WKP8          S M S A A P L P A I A S G S T T T N L I Q A F T T E R G T I D W N P A T G R V E
UniRef90_H0JPW3          M I V T G P V P F P D D V G T T T M I G L G I V D G R G V W H Y D A G R D D A V
UniRef90_K9RIL2          V F E Q I P F P V P E G V Y T G V S L A I T K   P E     G S L N Y N A S T K T A D
UniRef90_I0H2C2          A M E S A P M P S W L P N   T T A H L I T S L V S E R G E I R Y D A A T G G G K
UniRef90_UPI0002486A9A   T V I Q A S M P M G T D I A S T M M V G Y G V S D T R G R F V W D K G E G Q A V
UniRef90_E0TBM8          T L M Q G P V P A K V D V G V S T L V G F G P V S P G G Y F T Y D E R K D D A V
UniRef90_L8LRR9          V M M R A P L P R Y P D L N A M G T F I F S M T P H R G I L S Y D K T T N T I E
UniRef90_M6ZXN5          T M Q A S P F P A P A G S L A T T H L I Q V H T D E R G T I D Y D R S T G G T T
UniRef90_U5E8B3          T V I Q A S I P L P I D P G A T M L V G Y G V S S G R G E F V Y D A G K D A A T
UniRef90_E8W956          T M I N F P W P V P D G T G A L G A L A M T T C A A E G F F S Y D A A T D G V S
UniRef90_UPI000360ACB2   T T P I W N A P E G           T L P S L S M G I P P A V G K F S Y E A A T D S V R
UniRef90_D3CSW4          I H A G S P V P T G   G N K V L T V V G L G I V D A A G T W A Y D A A K D D A V
UniRef90_K9U6P8          V M M R A P L P R F E N K N V I G S F V F A M T P Y R G N F S Y D P A S D T V Q
UniRef90_K9U0B0          F E D I P D A N A A D G T L Q L L A L G I P R     Q T G T F T Y N A S T D S V R
UniRef90_M5DMI1          F M H S P T     S A V K E F T Q L Q M G M C V P D K N S R V T Y N K Y T D K V S
UniRef90_UPI00034DDB4C   I L E I P F V P Q G I     L P V L G G Q A I S R P D     G Y L T Y N S A T Q S A D
UniRef90_UPI000313F3EC   A L Q     P Y P K W N E T R Q L Y S L G F S I G S A K G S F Q F D P F T N S V R
UniRef90_UPI00041784EC   A L Q     P F P V W K E T R Q L Y L L G F G I G S P K G R F Q F N P L T D S V Q
UniRef90_UPI00036D4DC0   A M Q A T P F P E Y A G G F S T T N L I Q T H T D E R G T I D Y D Q S T S K T V
UniRef90_Q7ND02          V L V H T P F P Q G     A L V H T G L Q P V K P E G S L S Y D A A T D T V A
UniRef90_M3CA90          R A E S W V L P G F H G L P A V V T L S M T A D D H R G A F R S D P R T G R V R
UniRef90_UPI00036D9B41   I H A G S P V P T G Q K V M T V V G L G I   V N P   V G T W A Y D S A K D D A V
UniRef90_UPI0001FFE8FC   T L T F G P A P L P F D A R V M S L P G F G A C D P V G E F R F D A A T G D A T
UniRef90_UPI000309A28C   T L T S A D W D A P E G T D A L L G Q G I P L   A R G D F K Y N A A K D S V E
UniRef90_A8L4C3          I H A G S P I P S T A G K L M T V   V G F G I V N P A G T W A Y D S A K D D A V
UniRef90_G7GUD9          T L V Q A A A P M G V D A R S T M L F G Y G V S G T R G S I G V D P L S G N P T
UniRef90_K9R2J9          I L E A F G L P V P Q G I L P V L G Q G I S K   P E     G Y L T Y N T A T K L A D
UniRef90_UPI000367893D   T V V H A G S P I Q Q G V T A L T V V G F G I V D G A G T W A Y D A A T D D A V
UniRef90_H0R1T4          I Y Q A S P F P A P L G G V A T T H L I Q V H T D E R G T I D Y V H G T R G T E
UniRef90_K9U1P4          V L E N W A S P E G     T Q Q C L G L G L P     S Q S G T F T Y D A S T D S V K
UniRef90_E1VMI8          I A S I P P L P G A A K M H A T M L V G F G V S N G R G H F E Y N A A K D R T D
UniRef90_E3J7L2          P L K I A P P A A L Q G Q R V M T V V G F G I   V P G A G T W A Y D A T T D D A V
UniRef90_UPI00036B7CCD   H A G A P P L I A G I Q R L M T V   V G F G I V P P V G T W A Y D A A K D D A V
UniRef90_A0A011QNI4      V Y P Q W D A P E G         T L T S L G M S I P Q D H G E F R Y D D R D E S V K
UniRef90_L8PLY0          L V E N W V L P T Y Q A T P A V A T F A M T V D D H R G S F R Y E P A T G R V R
UniRef90_Q3ALD8          I M M R A P L T L F P D H N A I G T F I F S N S H H R G R L T F N K D T N G L D
UniRef90_UPI00037DC2CD   A M T L A P L P A W A G   R A A A H V V T S M A P E R G E I R F N R E T S S A S
UniRef90_UPI0003620043   T L L N F P W A T A D G T G A L G T L G V A V V P A V G T F A Y R A     G Q V E
UniRef90_W8A876          R A S I P P L     S V D A H S T M L V G Y G V S D G R G E F R Y D P A A D A S T
UniRef90_V9XK91                                          G Y G V S E G R G H F V Y D A A R D D A V
UniRef90_H0JLL4          T D I Q A S I P G G I D M R S T V L V G Y G V S E G R G H F V Y D A A R D D A G
UniRef90_R4LDH1          T L L N F P L G V P A L A G V R E M L A V G M P P P L G S W R Y S R L T R K A V
UniRef90_W5WBS6          R A E S A A V S L P G Q Q P V L H Q L S I A V D D N R G V W R S G L G   G Q V G
UniRef90_UPI00037B55DE   V L E N F A V P G V P I D V G M L V V I G L V L D E R G T F R Y D P A A G K V V
UniRef90_K7ZBC4                          H S M V Y F G M G H D R A E G R L Q L D H A   N R A V
UniRef90_UPI0002E7AC82     E A Q S L A Q G A Y T G A V T Y L V M T H D D A A G R M Y L E     S D R L K
UniRef90_UPI000346C36A                   T Q T Y L V M A H D D E S G E I R V E E     G R A R
UniRef90_H6N214          M V N S T F S L G P L D S A A A A M M G I T V D P T R G T F R Y H R D S Q Q V I
UniRef90_H8MWS4                  V E H T Q T L M V   M S H D E G K G E L R L E H     D R V R
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lupas_21
lupas_14
lupas_28
jnet        ➤➤➤➤➤➤➤       ➤➤➤➤➤➤➤➤➤➤➤➤       ➤➤➤➤➤➤➤       ➤➤➤
conf        7 8 8 6 1 5 7 7 7 7 7 7 4 0 2 7 8 8 9 9 9 7 2 6 8 8 5 6 8 9 9 7 1 6 8 8 5 5 8 9
sol25       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 B B           B
sol5        B B B B                 B B B B B B B B             B   B                 B
sol0                    B                           B                               B
jhmm        ➤➤➤➤➤➤➤      ●━➤➤➤➤➤➤➤➤       ➤➤➤➤➤➤➤
jpssm       ➤➤➤➤➤➤➤       ➤➤➤➤➤➤➤➤➤➤➤      ➤➤➤➤➤➤➤       ➤➤➤
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                                                      90             100            110            120
UniRef90_B2IZE6          L F W P K D N N Q K I T Q A N Q Y T Y Q R L N Q A N G T T F G A P L
UniRef90_M2WKP8          L N Y P G E L D R Q G M R F A G K F H E R A N V R Y G F P A S G T P V Y T R A I
UniRef90_H0JPW3          L N W D Q A Y D R E L T R A I E A R I R R I A               G P A S I V I D V N
UniRef90_K9RIL2          L V W P S A N N Q K I K K A N L D F F Q R L N Q A N G T T L A V E P
UniRef90_I0H2C2          V Y W P Y A E M E T A A D R A R D L A T R L W W A T E G S R G S L L T G L P S M
UniRef90_UPI0002486A9A   L Q W P E G G D G E L I T G I R P T A D R I I T A G G A H         G M L T D T N
UniRef90_E0TBM8          L N W D Q A V D R E L T Q R I T A         K M Q E V V G     P D D L L F D T T T A
UniRef90_L8LRR9          L H F E S D E K A K     E A A Q H L L E R M S E V N G G             D I S
UniRef90_M6ZXN5          L N Y P H P L D R R A I A F A K Q F H E R T E S R F G R P H N G I P I H D R T S
UniRef90_U5E8B3          L R W P G D G D R A I Q D         G H I G P A V A R I A G P G S T L V D T N
UniRef90_E8W956          L T W P A T G   A S A V R A T Q A V T A T V N R I N A A N P         G T S T L
UniRef90_UPI000360ACB2   L F W P S E E V Q K V K Q A A E F T Y S L L D R A N T T S S S         Q P T T
UniRef90_D3CSW4          L T W P S S G D A A L Q A L I A A K M Q Q I A Q V G G G I M R         D T N
UniRef90_K9U6P8          L N F A S D P K A K     E A A K Y L A E L L S E K N G G E V     P P I A S Q T
UniRef90_K9U0B0          L N W T Q D N A Q D A V K L T A Q I L D E K N T T S T         S Q P T S
UniRef90_M5DMI1          L N W D R D A N E T S H Q A I L H S T E K M I A T G G G E L         V D I S
UniRef90_UPI00034DDB4C   L F W P I N D S Q K N A Q A L Q H T Y Q R L N Q A N G T S L A G L P D Y
UniRef90_UPI000313F3EC   L T W P D P E I I Q L R Q A T L K T Y Q K L N Q A N T         N S T Y Q P K T A
UniRef90_UPI00041784EC   L I W P T   L D P E I V Q L R K A T L K T L N Q A N T         N S M Y Q P K T G
UniRef90_UPI00036D4DC0   L N F P H P R E N T L V D Q A W H F H E Q T E V R Y G Y P A N G L P I Y P Q A A
UniRef90_Q7ND02          L N W P T A R N A Q A V Q L T Y D I L D A A N E T A T T A P A D T
UniRef90_M3CA90          L T G W D G S A A A A R A A L A F S R R V I A A N G T L P L T V P L
UniRef90_UPI00036D9B41   L T W P T G A D A A L Q Q Q I A G K M Q Q L A Q V G G G M M         I D T N
UniRef90_UPI0001FFE8FC   L H W A P D G D A D A Q R T V R D L T R Q L N P A G A G R A A D A P G G V V D L
UniRef90_UPI000309A28C   L D W P S S E T Q A I L E A T K A I L D K S N         T D S T Y Q P R T
UniRef90_A8L4C3          L T W P S S G D A A L Q A L I A A R M Q K I A Q V G G G I M         I D T N
UniRef90_G7GUD9          I A W P L G G D A         G V S G R L N N A A H R I G G I D P V   T D L N
UniRef90_K9R2J9          L F W P   N N S A D S Q R N A Q A L Y Q R L N Q A N G T S L A A P P D Y
UniRef90_UPI000367893D   L T W P T D A D A E L Q A L I A A K M Q D I A T A G G G I M         I D T N
UniRef90_H0R1T4          L N Y P S T L D R R A N A F A N H F H Y Q T E T R H G T P N N G I V I S S R A A
UniRef90_K9U1P4          L H Y P R E   T Q L M V D T E K K T L D S K N A I S T K T P M T E M F Y T P T T
UniRef90_E1VMI8          L I W P A N G D A E I     A K C I H E R V L K I A G E         G S K V I N T N
UniRef90_E3J7L2          L T W P T G A D A A L Q S L I A T K V N N L A K A G G G S M         I D T N
UniRef90_UPI00036B7CCD   L N W P I G A D I A L Q T L I A A R M A G L A L A G G G I M         I D T N
UniRef90_A0A011QNI4      L F W P I D S P G D G V N H T Y S L M D A C I D I E A E A P D S Q D S G Q T S N
UniRef90_L8PLY0          L D W T P G K S A A A A Q A V T A Y S G R V A A A N P G T L         P V T I
UniRef90_Q3ALD8          I E Y E L D Y D A     I S A S Q A L L D R F Q Q A N G G     E I I P P D V Q
UniRef90_UPI00037DC2CD   V Y W P G V M E T K G E A A A Q D L A T R L W W E A G G R K G K L L S G L P S A
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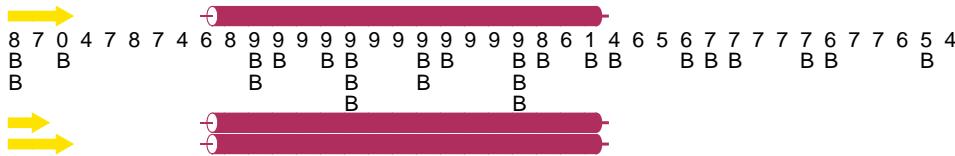
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