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                          1              10                  20            30                40
QUERY                     P T E V P I L S N E P F I R D R S L Q G L A L R D I N L S V L N A I I S H K M D
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UniRef90_R6RZ21           P A L V P F T C A E E D V K     K L Q G L S L K N V E V T V K K V I W K E F G E
UniRef90_G8LUT0           P S L V P L V V S E K W V     G E L Q G L S L K N V S I T L G K K V Y S D F G E
UniRef90_R9N6I3           P A L V P F T T K E D W C M     K L Q G L S L K N V A V T L K K T I Y Q G F G E
UniRef90_F5LQS7           P T E V P L T S A E P F I K S R E L Q G L S L R N A A L T V W K K L I T H Q G D
UniRef90_R5TGF8           P A L V P F V V K E P V V K E     L Q G L S L K N I E A A V K K V I Y R E F G E
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UniRef90_G7ZPE8           P T E V P I T S T E S F I K S N R L K G L S L R D V A L S V G K K R I S H Q M D
UniRef90_W7BF12           P T E V P I T S R E S F I K S K V L Q G I S L R D V A L S V G K P I I T H Q M D
UniRef90_UPI00047BFCBE    P T E V P I T S N E P F I Q E K I L Q G L S L R N V A L S V G K A I I T H K M D
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UniRef90_R6V9H1           P S L V P F E I R E D F C R     Q M Q G L S L K L R K I L Y E E L G E
UniRef90_R4KAT7           P A L V P L V T G E G W V K D     L Q G L T L K N V S I K A N Q I K A E Q F G E
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UniRef90_W6N2B4           P A L V P I E V Q E W I R D     L Q G L S L K N V T L D I K K I L Y S E F G E
UniRef90_R7KWV8           P S L V P L V S E E D W C R D A     M G L S L T L K D N E Y S E L G E
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UniRef90_R7MCC0           P S L I P L T A Q E S L E I C K E L Q G L S L I N V S I K L N K I I Y D D F G E
UniRef90_S0JH82           P A L V P F E A G E S W V     T E L Q G L S L R N V R V R I K K I F Y E E F G E
UniRef90_U1EN56           P T E V P I T S P E P F I K S K Q L K G L S L K N V G L S V G K Q R I T H Q M D
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UniRef90_K1VRN0           P S L   F T F N I A D K P L Q E L A G I S V D S V N L K L T G T P L T Q T G P
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UniRef90_R6QTP6           P S L V P L E S I E S Y C     C D M M G L S L R N I K I K T E K T I Y S D F G E
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                                        50         60         70        80
QUERY                M L F T H F G L S G P A A L R C S Q F V V K A L K K F K T N T I Q M S I D A L P
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UniRef90_R7NBZ0      M L F T H F G V S G P V I L S A S S Y T T A I L R K     R P L K L V I D L K P
UniRef90_A3DDB4      M L F T H F G V S G P I I L S A S R H I L     D Y D Y K N V K L V I D L K P
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UniRef90_G8LUT0      M L F T H Y G V S G P L I L S A S R H I L     D Y D F K G     I T L I I D L K P
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UniRef90_I7ILZ5      M L F T H F G I S G P A A L R C S Q F V Y K E Q K S Q K Q E I Q M Q L D A F P
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UniRef90_R6V9H1      M I F T H F G I S G P L V L T A S C Y Y T K     P E D D L T V H L D L K P
UniRef90_R4KAT7      M I F T H F G L S G P I I L S L S S L I K E Y I N T P A N K Q L R L S I D L K P
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UniRef90_S2XPV2      M L F T H F G L S G P A I L R C S Q F V V K E R M K N G E S P V D M V I D S L P
UniRef90_UPI00030CAC4B M L F T H F G V S G P A A L R C S Q F I Y K E Q Q S Q K K N E I I Q M S I D A F P
UniRef90_W7Z5M9      M I F T H F G I S G P I A L R C S Q F I R Q V T R K F D T K K A E M A I D L F P
UniRef90_D8GJN3      M L F T H F G I S G P I V L S G S R V V E     N K H N L K A V I N L K P
UniRef90_R7MCC0      M L F T H W G V S G P I I L S G S A H L L R Y E E L L K E G K I E L S I N L K P
UniRef90_S0JH82      M L F T H Y G V S G P L I L S A S S L V T D C M E Q L     P L S M E I D L K P
UniRef90_U1EN56      M I F T H F G I S G P A A L R C S Q F V Y K E Q Q N Q K K T D V A M E L D V F P
UniRef90_T0PC82      M V F T H F G I S G P L V L S A S S V K K Q     N P Y K I I I N L K P
UniRef90_R6PDT4      M L F T H Y G V T G P V I L S A S S V V G K T L R K     K E L T L H I D L K P
UniRef90_R6YIW9      L L F T H F G L S G P T I L S A S A H     L H P M E P G K Y T I H I D L K P
UniRef90_I8AJ57      M I F T H F G I S G P A A L R C S Q Y V V K A L K K F K T T T I S M A V D A F P
UniRef90_D4J8B3      M M F T H F G I T G P V V L S G S T R I A P Y L K K     G T V T A E I D M K P
UniRef90_K1VRN0      L L I T H W G I S G P A V L K L S A W G A R F L Q E C R Y K T   P L I I D W L P
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UniRef90_R6V9H1        A L S E K Q L D E R I L R D F G A N K N S Y F K N S L N K L L P S K M I P V I V
UniRef90_R4KAT7        A L E A E Q L D A R L Q R D F N K Y S G K H L K N A L D D L L P Q K M I A I V L
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UniRef90_W6N2B4        A L S N D E L D K R I Q K D F N K Y C N K D F K N S L D D L L P K K L I P I V I
UniRef90_R7KWV8        A L D E K T L D A R L Q R D F A D N S N R D F I N S L G K L L P A K L I P V I V
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UniRef90_V6IXK9      D Q I G L S P D R N F H E L S K E D I R Q M A K M L K G F P V R I S G T L S I E
UniRef90_F9DW73      Q K A E I A E T E I G A D I P K E A I R K L A H L L K T F P V H V T G T Q P I E
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UniRef90_S7J5K0      D Q A G I A A A C P V N Q I S R E Q R Q D L V D T L K A L S L T V T G T R P I E
UniRef90_UPI000470E23A  E K S D I D G N A Q S A T I S Q E R I R I L A E N I K H F Q F K V N G T L S L E
UniRef90_R6PQQ0      R L S G V D E T K K V N S I T K E E R A K L L K N L K S L T L T I I D T T G Y N
UniRef90_UPI000479AB76  K L S N I D E E K K V N S I T K E E R K E L V N L M Q H L D M S V K G L R P I A
UniRef90_R6I723      S L S G I P M D T K V N S V T R E Q R A K L V Y L L K H F T V T I T D F R P I E
UniRef90_I7ILZ5      E Q A Q I S D D L T A H H I S N A Q I N K L V E L F K G F T F T V N G T L P I D
UniRef90_UPI000366339A  E R A N I D L E T P G N Q V A D S A I R E L A S L M K S F R I A V N G T L S I E
UniRef90_I8SIL7      D L A H I D P D K F V H Q I T K S E R V R L Q E Q I T K L T F T I T A T R P V S
UniRef90_H6CEG2      Q Q A G L R E D L T Y D H I P K Q Q W Q E L A H R I K A F P I R V N G T L S L K
UniRef90_UPI0003FA91FD  K L S G I D P E K P L N S I T K K E R A D F V A L I K D L R L T V T G T R N F N
UniRef90_R6R9Q2      E R S G I D A Q C R V N E I T R D K R Q G L V K L I K N F D L T L T G L R G F N
UniRef90_F7NQG4      D L A Y L D P D K P V H Q L A K A E R I R L R E T I A R L T F T L K G T R P I S
UniRef90_UPI00047C0DD7  E H N G I D P S E Q G S T F S N E K I R S F T K S C K H F P I K V N G T L P L E
UniRef90_UPI00047B3F6E  E R N Q I D P S E T F S S L S K D R F R A F V K D C K E L T V S V N G T L S L D
UniRef90_D3EE17      S K S S I D S D M I C S G I S K A A Q E N L A S V L K K F T F R A S G T R S L K
UniRef90_J4J341      N A A G L S P E R F A Q Q I S S K E R E R L V Q T L Q A L P L T V T G T R P I A
UniRef90_UPI000289C57A  N L S G I D E N K K V N S I T K D E R K I V D I I N F T L N V K G L R D I K
UniRef90_UPI0004251CA4  E Y L D I E M D N S G H H V S N Q E R Q K I V E F F K R F R F T V N G T Q S I E
UniRef90_H0DKE8      E Q A D I P H D L T G H H L S N M Q L Q A L V S Q L K H F E F S V N G T L P L D
UniRef90_UPI0003662EB9  N L L S I P E D K F V H Q I T T E E R E E I I S L L T N L E M T I I G T M G F R
UniRef90_G7ZPE8      E K S G I N E N T T A H H L S N Q Q L N D L V N M F K G F E F K V N G T L P I D
UniRef90_W7BF12      E R A D I D S D T D C I S V A Q K K W Q A F I E T L K K F T F Q V S G T L D F E
UniRef90_UPI00047BFCBE  E K N E I D P L I T Y D N L S N E K L R F F V K D C K Q F Q F E V H G T L S I E
UniRef90_R5N718      S L S G I S E D K V N N I T K E E R H K L V Q L L K K I D I K I T G F R G V E
UniRef90_R6V9H1      E L S G I A P D K P V N E V T K E E R R K L A L L K N V E M H I S G L R G F S
UniRef90_R4KAT7      R L S G L D I H K Q V N Q I S K K E R S I L V Q T L K N I T L T I T G T R P L N
UniRef90_F7K9Q8      Q L S G I N P E K K V H E L T R E E R K F F I E C I K G L T L T V T G T R G F E
UniRef90_M8DFF5      S M A G I S E E T T L S H M R K Q Q W R E F A Q L I K A F P L T I T G T L S L Q
UniRef90_UPI0003701047  I R A E L D D M L T H D N I P K A K W T E L A K L I K A F P I P V N G T L S I E
UniRef90_A0A037ZAG0  N L S N I C E N K K V N S I T K E E R K R L V Y L L Q N L E L K V K G L R P I D
UniRef90_W4Q6E0      D K L S L D T Q T P A S T V S H D T W R D L V S H C K H F K I E V N G T L S I E
UniRef90_W6N2B4      Y R C H I N P D K K V N S I T K L E R H N L V D C I K K F T L S I K G L R P I E
UniRef90_R7KWV8      K L S G I D G G K K V N Q I S R K E R I T L M Q L K D L T V K D F R P I D
UniRef90_S2XPV2      N R A G I E S N E I G A N L S N E K V R A L A S L L K S F T M K V N G T Q P I E
UniRef90_UPI00030CAC4B  E Q S E V D I D V T Y H H L S Q Q A I K T F V Q N L K A F T F T V N G T L P I D
UniRef90_W7Z5M9      S R A E L D G D A T F A H L P K Q A W I T L L E Q L K R F S F H V V G T R S L A
UniRef90_D8GJN3      N L S N I D P N K K V N S I T K L E R H N L V N L L Q N L S M N I K G L R P I A
UniRef90_R7MCC0      R M S G I D E N K K V N S I T K Q E R K N L V K L L Q D F R I K I N G F R P I N
UniRef90_S0JH82      A L S G I H P D K K I N E I T R E E R R N F A A L I K S L P M T L T G L R D F K
UniRef90_U1EN56      E Q A E I P S D I T A H H L S N K Q L L T L A N L F K G F T F T V N G T L P I D
UniRef90_T0PC82      K L S G I D E N Q K V N T I T R E Q R K S L V N L I Q N L T L T V K G L R P V E
UniRef90_R6PDT4      E L S E I E P E K K V N E I T K E E R Q R L V H L I K D F T M T L T G L R S Y N
UniRef90_R6YIW9      E R S G I P G E T R C H S V T K E Q R R A L L G L L K D F P V E V E G F R P L A
UniRef90_I8AJ57      E K A G L S P D V T G E H L P K Q H F R D F V T L L K K F T F E V N G T L S I E
UniRef90_D4J8B3      R L S E I D P Y M I V H D V T K Q Q R Q K L I H T M R H L T M T V T G V R G F N
UniRef90_K1VRN0      I R V G I N P Q Q P W A E L S K K H L N Q L I E E L K R S R H Q I T G K G V F K
UniRef90_UPI000308E721  E R A N I D A S K S C A E I S Q E H I R K L A H E L V S F T M D V H G T L P L E
UniRef90_N9WGQ6      K L S E I D E N K K V N E I T K I E R K R L N L L K D F R M K V K G L R P I E
UniRef90_B8FPI5      Q W S Q I P P E K A V N S I N K E E R H L V H V L Q E L P L T I K E T L P L A
UniRef90_D5DN37      E Q A S I D S Q A L A G Q L Q H E K L R E F A R L C K R F E F A V N G T L S I E
UniRef90_R7L0T5      E I S N I N P N K Q V N E I T K K E R D L V N I L K K F E I T I K G F R P I E
UniRef90_R7I6K0      E L S G I D P N K P I H S V T K E E R H R I V S L L K N L E L H V E C L R G Y N
UniRef90_A5N8H6      D L C N I K L D K K C N S I T R D E R Q D L A G L L Q N F T M H I K G L R P I E
UniRef90_UPI0003B4650B  N L S T I D A D K Q V N D I S R E R L D F V K L I K P M T I V S K R S F N
UniRef90_R8W9E5      E R S G I D P R V K V H S V T K A Q R Q A L V R L L K A F P V E I T G A R P I A
UniRef90_Q4L799      N Q A Q I D E N T T Y H H L S N Q Q L K Q L V D C F K A F T F K V N G T L P I D
UniRef90_R6QTP6      S L S G I S E H K K C N E I T R A E R H E L L K L I K A F P I T I K A F R P I A
UniRef90_W4EFR4      A K S G L D G E I T Y H H M P K Q L G A L A A L V R K M P V Q V H G T R S L A
UniRef90_H3SJ06      Q Q A G I E E S V T R D H I R K Q P L Q E L C R L I T S F P V K V N G T L S L E
UniRef90_R5NL50      E I G G I P G E K P V H E I S R E E R Q A F G R L L K A F P F T I T G M G E F K
UniRef90_W8YXI5      A R A D I N P M T T Y D N L N R A A W L E F A R L L K Q L P V M V D G T L S I E
UniRef90_UPI000289C6BA  Q L S G I D E N K K V N Q I T K E E R K K F V D L H T L T Y K G L R P I E
UniRef90_R5DLZ2      K R W G V P F D K K C N S I T K E E R H A L C E I L K C F T V E I S G F R P I E
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ID					
QUERY	K	A	F	V	T
UniRef90_B0ND27	E	A	I	I	T
UniRef90_R7NBZ0	E	A	I	I	T
UniRef90_A3DDB4	E	A	I	V	T
UniRef90_R6ZNW7	E	A	I	I	T
UniRef90_R6XUP7	E	A	L	V	T
UniRef90_J8QD24	K	A	F	V	T
UniRef90_F3B9V5	E	A	L	I	T
UniRef90_C5D6D4	K	A	F	V	T
UniRef90_R6RZ21	E	A	I	I	T
UniRef90_G8LUT0	E	A	I	V	T
UniRef90_R9N6I3	E	A	L	I	T
UniRef90_F5LQS7	E	A	F	V	T
UniRef90_R5TGF8	E	A	I	I	T
UniRef90_UPI0003710353	E	A	F	V	T
UniRef90_S2YRH1	E	A	I	I	T
UniRef90_UPI00036CA989	E	A	F	V	T
UniRef90_R5UJ64	E	A	I	I	T
UniRef90_F5SAA1	K	A	F	V	T
UniRef90_UPI0003FA1DCF	E	A	I	I	T
UniRef90_UPI0003813441	E	A	F	V	T
UniRef90_C4Z5R9	E	A	I	I	T
UniRef90_UPI00037FF262	E	A	F	V	T
UniRef90_UPI0002EBE7C5	K	A	F	V	T
UniRef90_R6CWR2	E	A	I	I	T
UniRef90_R6NBK0	E	A	I	V	T
UniRef90_V6IXK9	K	A	F	I	T
UniRef90_F9DW73	K	A	F	V	T
UniRef90_R5I0Z3	E	A	I	I	T
UniRef90_S7J5K0	E	A	I	V	T
UniRef90_UPI000470E23A	K	A	F	V	T
UniRef90_R6PQQ0	E	A	V	V	T
UniRef90_UPI000479AB76	E	A	I	V	T
UniRef90_R6I723	E	A	V	V	T
UniRef90_I7ILZ5	K	A	F	V	T
UniRef90_UPI000366339A	K	A	F	V	T
UniRef90_I8SIL7	E	A	I	V	T
UniRef90_H6CEG2	E	A	F	V	T
UniRef90_UPI0003FA91FD	E	A	I	I	T
UniRef90_R6R9Q2	E	A	I	I	T
UniRef90_F7NQG4	E	A	L	V	T
UniRef90_UPI00047C0DD7	K	A	F	V	T
UniRef90_UPI00047B3F6E	K	A	F	V	T
UniRef90_D3EE17	E	A	F	V	T
UniRef90_J4J341	E	A	I	V	T
UniRef90_UPI000289C57A	E	A	I	V	T
UniRef90_UPI0004251CA4	K	A	F	V	T
UniRef90_H0DKE8	K	A	F	V	T
UniRef90_UPI0003662EB9	Q	A	I	V	T
UniRef90_G7ZPE8	K	A	F	V	T
UniRef90_W7BF12	K	A	F	V	T
UniRef90_UPI00047BFCBE	K	A	F	V	T
UniRef90_R5N718	E	A	I	V	T
UniRef90_R6V9H1	E	A	I	V	T
UniRef90_R4KAT7	E	A	I	I	T
UniRef90_F7K9Q8	E	A	L	I	T
UniRef90_M8DFF5	E	A	F	I	T
UniRef90_UPI0003701047	D	A	F	V	T
UniRef90_A0A037ZAG0	E	A	I	I	T
UniRef90_W4Q6E0	K	A	F	V	T
UniRef90_W6N2B4	E	A	I	I	T
UniRef90_R7KWV8	E	A	L	V	T
UniRef90_S2XPV2	K	A	F	V	T
UniRef90_UPI00030CAC4B	K	A	F	V	T
UniRef90_W7Z5M9	E	A	F	V	T
UniRef90_D8GJN3	E	A	I	I	T
UniRef90_R7MCC0	E	A	I	V	T
UniRef90_S0JH82	E	A	L	I	T
UniRef90_U1EN56	K	A	F	V	T
UniRef90_T0PC82	E	A	I	V	T
UniRef90_R6PDT4	E	A	I	I	T
UniRef90_R6YIW9	E	A	L	V	T
UniRef90_I8AJ57	K	A	F	V	T
UniRef90_D4J8B3	E	A	I	I	T
UniRef90_K1VRN0	E	E	F	V	T
UniRef90_UPI000308E721	K	A	F	V	T
UniRef90_N9WGQ6	E	A	I	V	T
UniRef90_B8FPI5	A	A	I	V	T
UniRef90_D5DN37	K	A	F	V	T
UniRef90_R7L0T5	E	A	I	V	T
UniRef90_R7I6K0	E	A	I	I	T
UniRef90_A5N8H6	E	A	I	V	T
UniRef90_UPI0003B4650B	E	A	I	I	T
UniRef90_R8W9E5	E	A	L	V	T
UniRef90_Q4L799	K	A	F	V	T
UniRef90_R6QTP6	E	A	L	V	T
UniRef90_W4EFR4	E	A	F	V	T
UniRef90_H3SJ06	E	A	F	V	T
UniRef90_R5NL50	E	A	I	I	T
UniRef90_W8YXI5	E	A	F	V	T
UniRef90_UPI000289C6BA	E	A	I	V	T
UniRef90_R5DLZ2	E	A	I	I	T

Multiple sequence alignment (positions 1–40):

```
                          1         10         20        30         40
UniRef90_B2TIA3           P A L V P M V V K D     A K T K E L M G L   S L K N V E V T I K E N D Y K N F G E
UniRef90_UPI0004792E5C    P T E V P L L S S E K F I K E K K L Q G L A L R D V D L S V N K P I I T H R M D
UniRef90_D2RKK1           P A L V P L E S D D P E I R     A L Q G L S L R N V R G T L S R V L G Q E F G E
UniRef90_W4BSR5           P T E V P I V S G E S W I Q S K E L Q G L S L R D I A L S V G K T V I S H R G D
UniRef90_G5GFN4           P S L V P L V L S E H D C     T R L Q G L S L K N V N A A V Y K R I Y E G F G E
UniRef90_Q2LVB6           P A L V P I E T E G S L A     G R M Q G L S L K N V K A L V W K K L K E E F G E
UniRef90_U5LGV3           P T E V P V T S S E P F I K N K V L Q G L A L R D A A L S V G K P L I T H K M D
UniRef90_K2GLE9           P T E V P L L S K D A F I K D K L Q G V S L R D V N V S V S K P I I T H K M D
UniRef90_M1Z566           P S L V P M E L E E D W V K D     I Q G L S L K N V K L V A N N E V H E E F G E
UniRef90_UPI0003681BE4    P S L V P L E T E E H W P R D V     Q G L S L R N V R V K L G R E R Q E M F G E
UniRef90_G7WAL7           P A L V P L K T A E T W V K E V     Q G L S L R N V E G S L W K R Q G A E F G E
UniRef90_C0GDV5           P A L V P L E V A E K W V P E     L T G L A L K N V S A R V G R L A A E E F G E
UniRef90_C4GBD7           P G L V P V T V A E D D L L     T L Q G L S L R N V S F K V G K K L Y E A F G E
UniRef90_R6INR9           P A L V P L V C D N N F I P E     L Q G L S L R N V E I R V N K E V Y T D F G E
UniRef90_Q5WE10           P T E V P I T L A D P F I G D Q S L Q G L S L R G I E L T V G K K I I R H E G D
UniRef90_R5P4V5           P A L V P M N V K E E F A K E     L Q G L S L K N V D I S F K K P V Y E E F G E
UniRef90_F9N675           P S L I P L E T K E H W V K D     L M G L S L K N V E V S I D K V Q T K Q F G E
UniRef90_V9H3P2           P S L V P I E I K N N W V K D     L S G L T L K N I E I S V K K P L Y K D Q G E
UniRef90_D9TTA6           P A L V P F V T A E D     V S G M M G L S L K N I N A K L D K F I K E E F G E
UniRef90_R6XC64           P S L V P L T S S D K C C     T E L M G L S L K N V S V S F Y K E L Y H D F G E
UniRef90_W3Y5V2           P S L V P I V T D E T W V K D     I M G L S L R N V E V S V N K I Q A K Q F G E
UniRef90_W7CHR6           P T E V P I L S D E P F I L D K T L Q G I S L R E I D L T V N K V V V T H K M D
UniRef90_U1YDI5           P T A V P L N A N D A Y I K K A K L Q G L S L R D V T L S L W K K V C T E E G D
UniRef90_E4LAM4           P A L I P L V C K E S Y C K     A M Q G L S L R N V N L V I K G K K K K K S F G E
UniRef90_F4LUW5           P S L V P L I S K E K W I K E     L Q G L T L R N V E A T A Y K K L A S E F G E
UniRef90_UPI0002E01FDF    P T E V P L V A S D P F I R D R V L Q G L S L R E V V L T L Y H P K G T Q T G D
UniRef90_R6LV68           P S L V P F N I D S D I P K     R L Q G L S L R N V K V T L G K V L Y E E L G E
UniRef90_R6C225           P S L V P L T A E E S L N I C K Q M Q G L S L R N V Q I K L N K T I Y E D F G E
UniRef90_D9S3D7           P S L V P I T K E D W V K N     L Q G L T L K N V E V T A Y C Q G Y C E F G E
UniRef90_B1YKH2           P T E V P I L L N D T F I Q E K T L Q G L S L R D V A L T V D K P I K T H T G D
UniRef90_W3AKG8           P T E V P L L S K E P F I V G R E L Q G L A L R D A A V S V G K V L V T H Q M D
UniRef90_L7VNZ3           P S L V P L L V K E S W V R     K L Q G L S L K D V S V E F L D R K G S R R G E
UniRef90_D2QH88           P S L     F T F N V P D N P F L S L A G V S V P D A K V S I I G T K Q E Q R G P
UniRef90_B7KGI5           P S L F T F N I R D S     R L K D L A G V S V D N V S L R L G K I K L E Q N G A
UniRef90_R6HCP4           P S L V P L E S N S D H C     S K M Q G L S L K N V S L E L D K V I Y K D F G E
UniRef90_R9LT24             S L V P V I T R E N W C     A E L M G L S L R N V T L T L G K T V F S E L G E
UniRef90_R5XQM0           P S L V P L H T K E D Y I P E     M A G L S L K N V E L T V K N G K Y R D F G E
UniRef90_R7CSA8           P A L I P L V C K E S Y G K E     L Q G L S L K N V S F S I G R R K A S E F G E
UniRef90_W9A734           P T E V A L T S N E R F I Q E K A L Q G L S L R D V S L S V S K P I I T H Q M D
UniRef90_UPI00042524F0    P T E V P I T V N D A F I Q S K E L Q G L S L R Q V T L T V K D P K K S H T G D
UniRef90_D5X793           P A L V P L E T R E D W V K     G L Q G L T L Q N V L I K V G K P V G E K S G E
UniRef90_E9SG51           P S L C P I V T A E     R E E C A E M M G L S L K N C T L S L R K P L Y E E L G E
UniRef90_UPI000288ADA1    P T E V P L T S S D S L I V S K E L Q G L S L R D A T V T L G K K I Q S H R W D
UniRef90_G8TMD5           P S L     F T F N M P G N A I T Q L M G V S V P E A A V K I A G S N L A A K G P
UniRef90_UPI0003806E4A    P S L F T F N L K D P     R L Q G L A G L S V E S V T V T L G K T K F S Q T G P
UniRef90_UPI0004757469    P S L     F T F D I T D Q R L Q D L A G I T V E V S L R L G K N K L E Q T G P
UniRef90_UPI0002881EB4    P T E V P L L S N E T F I R S K E L Q G L A L R D A E V S V G K A I I T H K M D
UniRef90_B4VMZ7           P S L F T F T I S D P     R L Q D L A G V S V N D V H I K L G K T V K E Q T G P
UniRef90_R5QGG3           P S L V G L C S G D R A C P     A M Q G L A L K N V G V T I G K V I Y R D F G E
UniRef90_J9HCZ5           P T E V P L E D E P W I I S R K L Q G L S L Y G V E I S I W K R L T T E S G D
UniRef90_UPI00040EFB50    P G L V P L N T K E D W P R D     L Q G L A L K N V V L T L Y K K T K S M L G E
UniRef90_R6H6T5             S L V P L E V P G D D C P     A M Q G L S L R N V A V R L G K C L Y R D F G E
UniRef90_UPI0003F6416D    P S L V P F E V R E K W     P L A L Q G L S L K N V G L K M Y K N I Y E G F G E
UniRef90_UPI0003617ED0    P A L V P L E C D L T Y I K E     L Q G L S L K N V A A K L G K V V A G E F G E
UniRef90_B6FYR0           P S L I G L E I Q E D F V H     K L K G L S L R N V A I K V N K K I Y D D F G E
UniRef90_K8E2Q8           P T E A P I L S D E P F I L D K T L Q G L S L R D V A L S V E K K V I T H Q M D
UniRef90_E0UHX9           P S L     F T F N I P D P H L D L A G I S V E N V H L K L G K E K F E Q Q G P
UniRef90_U2DAV3           P S L V P L R C G E Q W C K N C     Q G L S L K N V T L T V E E V G K R E L G E
UniRef90_F6B730           P A A V A I T C T D P W I V Q R E V Q G L S L A N V N I T V D K R L A T E T G D
UniRef90_R6ICV7           P S L V P L E S D D E Y C     A Q M Q G F S L K N V T L S A Y E N D F R E L G E
UniRef90_D5WET8           P A L V P L T F A P D W E P F A A L S G V S L E     V Q L S T G N K K A E F T E D
UniRef90_UPI00036DCF9A    P S L F T F N T K D K     R L Q D L A G V A A N P V N V K I K G Q N L Q A K G P
UniRef90_K9VJS3           P S L F T F N I S D S R I K D     L A G I S V P N A K V K L P G A K L E Q S G P
UniRef90_Q474B9           P A L V P L T F D G A W Q P F V P L A G V S L E D I S T G A G K T A G A F R E D
UniRef90_R6TT30           P S L V P L V A A G K L C     A G M Q G L S L R N V G L R I Q K S V Y E D F G E
UniRef90_T0BSY0           P T E V P L T S D E P F I V E R K L Q G L S L R G I D A T V W K R L T T E H G D
UniRef90_R3BIV9           P T E S P I I S E E P F I L D K T L Q G L S L Q D V N L T V G K P L V N H Q M D
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UniRef90_R6M0Z1             S L V P L V     E K G Y D C K Q M Q G L A L K N V A L R L G K T V F E E F G E
UniRef90_C8WZL4           P A L V P L E T A G D T A     A R L Q G L S L R N V E V S L W K K T A Q A F G E
UniRef90_C4UN18           A L V P F T L H P L L H L Q T L S G I S V P T V V T A     E N G V S F R E S
UniRef90_D4TUR2           P S L F S F K I N D P     K L Q S L S G I S V N N V S L T L G K S V L K Q M G A
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UniRef90_D9TTA6          M L F T H F G L S G P V I L   T L S S Y I       K N I N K S N V V I K L D L K P
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UniRef90_D2QH88          L L I T H W G F S G P A I L   R L S A W A A R D L A E L D Y Q   F T L R N W T P
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UniRef90_B6FYR0          M E F T D Y G V D G P I I K   S A S C I       M R D L S K E S Y K I S L D L K P
UniRef90_K8E2Q8          M I F T H F G V S G P A A L   R C S M F V H Q T M G R D K S D F V T M T L D V L P
UniRef90_E0UHX9          L L I T H W G L S G P A V L   K L S A W G A R V L H D H R Y K   L S L M I N W L P
UniRef90_U2DAV3          M L F T H F G V S G P L V L   S A S C H M E D A       P G R Y R L H I D L K P
UniRef90_F6B730          I I F T H W G L S G P G A L   R V G R A V A L E R Q R E P D A P I R G A L D L F P
UniRef90_R6ICV7          M L F T H F G V S G P L V L   S A S S H       M R N F G S A K Y R L S I D L K P
UniRef90_D5WET8          L L L T H R G L S G P G V L   Q I S S Y W Q P G E       P I H I N L L P
UniRef90_UPI00036DCF9A   L L I T H W G M S G P A I L   R L S A W G A R A L A D V N Y Q   F E L V V N W T A
UniRef90_K9VJS3          L L I T H W G L S G P A V L   K L S A W G A R F L H D R H Y K T   S V L I N W L P
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UniRef90_R6TT30          M M F T H F G L T G P M L L   S A S A H       L R D L A P G K Y E A W I D L K P
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UniRef90_R3BIV9          M L F T H F G I S G P A A L   R C S S F I N Q E L T R N G N Q P V T V A L D V F P
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UniRef90_E3GP01          M L F T H F G V S G P L V L   T M S A F M       K P P Y E D Y T L T I D L K P
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UniRef90_C8WZL4          M V F T H F G V S G P V V L   E L S Q Q A V D L L R N G E C P E     L C I D L K P
UniRef90_C4UN18          I L F T H R G L S G P A I L   Q L S S Y W Q P G E       Y V S I N L L P
UniRef90_D4TUR2          L L V T H W G L S G P A I L   K L S A Y G A R L L Y E K R Y Q G   K L Y I N W L P
UniRef90_R5IS41          L L F T H F G L S G P V I L   S A S A H M A R G E A       G Y T V R I D L K P
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UniRef90_W4BSR5          E L S L G A L E A Q L Q Q V L E Q E S R K A V K N I L K T W V P E R M I P L M M
UniRef90_G5GFN4          A L D K N V L D A R I L R D F E K Y K N K S L K N A L G D L L L Q S L I P V I I
UniRef90_Q2LVB6          A L D E Q K L D A R L Q R D L N E N G K K H L D N M F K D W L P A K M I P V F I
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UniRef90_C4GBD7          A V S E Q E L D A R L Q R E I R D K I N K S Y K N L Y G G L L P S K L I P L V I
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UniRef90_R5P4V5          A L S K E Q L D D R I L R E F T N G I N K D I V N V M D N L L P K K L I P V M L
UniRef90_F9N675          A L T K E V L D K R V Q R D F S E S Q N K Q L V N V L K G L L P S K L I P V I C
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UniRef90_W3Y5V2          A L T P D V L D K R V Q K D F D L Y S K K Q L T N G M K D L L P Q N L I P V V I
UniRef90_W7CHR6          D L K L K D L E E D I M Q R V K N D P K K Q V K N A L K G L I Q E R L L L F F I
UniRef90_U1YDI5          D K T T D N I E R E T Q N M M K E P K K A V K N V L R T Y I P E R L L H L I L
UniRef90_E4LAM4          A L S Q E V L D K R I L R E F E K F H L K Q I S T V M K E L L P H K M I D I V L
UniRef90_F4LUW5          A L T E Q E L D K R L I R D F H L Y K N K I F K N A M N D L L P K K M I P V F I
UniRef90_UPI0002E01FDF   D K T Q D E I F A E S W S R M A D Q P K K A V K N V M K G F L P E R M I P L L L
UniRef90_R6LV68          A L S K E Q L D E R I L R D F S E N R N S Y F K N S L S R L L P A K M I P V I V
UniRef90_R6C225          A L Q Q E K L D N R I Q R D F L E G K N K E F K N C L N N L L P Q K M I D T V V
UniRef90_D9S3D7          A L D R E R L E N R L K R D F Q K Y S R K H I K N A L D D L L P K R L I P V F I
UniRef90_B1YKH2          E E S I G A L T E R F Q A A L A A N P K K T V R N A L K G F V P E R L L D L L F
UniRef90_W3AKG8          E E N A E S A F Q L L H N M M K D E P K K A V K N V W K S I T Q E R W L L F L M
UniRef90_L7VNZ3          D L T E E G L D I R I Q N D F Q E N P R K M F K N S L N K L L P S L L V P V I A
UniRef90_D2QH88          D L N E N Q L R V A L Q D F R Q Q N G R K Q V I S Q N P F A L P S R L W Q M M A
UniRef90_B7KGI5          E Y N S E S L R Q E V L K T K E Q Y S K R K I Y R F C P F N L P K R L W Q R L L
UniRef90_R6HCP4          A L N L E Q L D K R I V R D F D K F K N K N F S N S L D N L L P K K L I P I I V
UniRef90_R9LT24          G L E E Q Q L D T R L L R D F E E A R N R D F S N A L D L L P R K L I P V A V
UniRef90_R5XQM0          A L T P E Q L D A R I L R E F E S G K N R Q F K N V I S V L F P S S L T P V M L
UniRef90_R7CSA8          A L T E D V L D K R V L R D L E T Y H L K Q M A G A L Q D L M P H R M I D V I L
UniRef90_W9A734          S T K E H V L L D E T L K A M K E H P K R S I K T I L K G L V P E R F L D Y L L
UniRef90_UPI00042524F0   E E S A G Q L A E S L K A K M K D A P K K A L K N A F S G M L P E R L L P V T L
UniRef90_D5X793          A F T Q E Q L D N V I L R D F E K N R R K Q L N N S L G E L L P G S L V P V I I
UniRef90_E9SG51          A L S K E Q L D A R I L R D L G D F P N R E F G N S L G K L L P A K M I P V I V
UniRef90_UPI000288ADA1   D R T L D E V S A D L L K R T E S A G K K E L G S I W K G I V P E R Y L R C L M
UniRef90_G8TMD5          R F N E Q T L R E H L Q Q L R F E M A A Q K I V N R N P F D L P Q R L W Q Y L L
UniRef90_UPI0003806E4A   E F N P E T L R Q H L L A T K Q A T P K R K I S N Y C P V D L P K R L W Q R F L
UniRef90_UPI0004757469   Q Y N N E T L R Q H L L E I K T Q Q P K R K I I A N C P F D L P K R F W Q K I V
UniRef90_UPI0002881EB4   D Y N A E S A F Q L L M K K A K D D P K K A L K N A W K G I V P E R W L L F L M
UniRef90_B4VMZ7          Q Y T Q D Y L R Q L L L L S V K S Q L P H R H I S T S C P I P I P K R L W Q S L I
UniRef90_R5QGG3          A L D E Q T L D R R I M S D F E K Y K N K D F A N A L C D L L P A K M I P V I V
UniRef90_J9HCZ5          S M K Q D E W L H S L L A D R A N H P R R A V R T E L E L T F P E R L A A Y I A
UniRef90_UPI00040EFB50   A L S L E Q M D A R I Q R D F L K Y Q N K D F G N A L G D L L P S K M I P V M V
UniRef90_R6H6T5          A L E E G K L E A R V L R D L E Q Y K N R S M G N A L T D L L P R S M I P V I L
UniRef90_UPI0003F6416D   A L S H E M L D K R I I R D F E D G R R K E F R N V L G G L F P S K L I P V I I
UniRef90_UPI0003617ED0   A L D L Q T L E N R I Q R E L K D E S K K Q M A S I L R S L M P A S L I P V V L
UniRef90_B6FYR0          A L D H E K L D K R V Q R D F Q K Y I N K R F E N S L S D L L P S K M I P V V V
UniRef90_K8E2Q8          T F S S G Q L N Q K F Q Q L I K N E G D K S L K N A L K G L V P E R Y L L F A F
UniRef90_E0UHX9          E Y N S E T L R Q A L L K V K S S E P K R K V F S Y C P F N L P K R F W Q R L V
UniRef90_U2DAV3          G L T R E A L D R R L L R D F E E Y R N K N L Q N A L G K L L P Q K L I G S Y V
UniRef90_F6B730          T R S S E E L A R E L G K L A Q A A P K K S V K N L L I M L V P E R L V K V L L
UniRef90_R6ICV7          A L D E K K L D A R L L R D F E K Y A N R D F A N S L C D L A G K T M I P V L V
UniRef90_D5WET8          E R D A A A A L I D A K N G W N A Q I A N L L S E W V P Q R L A H V W L
UniRef90_UPI00036DCF9A   E Y T H D E I I E E L L A F K Q E H P K K T I S K Y P Q H H I P N R L W H S L V
UniRef90_K9VJS3          Q Y N A E V L R Q Q L L A V K S Q L S H R L I V S S C P F P V R R L W E R L T
UniRef90_Q474B9          G E D A A G W L L E Q K A G S R K H L A N L L S Q R L P A R L A D A W C
UniRef90_R6TT30          A L D E K T L D A R L L S D F G R Y A N R E F D N A L H D L L P A K M I P V L V
UniRef90_T0BSY0          T S P R P A L E Q T L A A G R K H H P R R S I A T H L G E M F P E R L V D F I L
UniRef90_R3BIV9          T K S F E E V L K N V D Y M I K E Q P N K V A K N A F H S L I P E R L L T F Y L
UniRef90_UPI00040BBC97   A L D E V A L D K R L Q K D F Q G A L N K A F K N S L D A L L P Q K I I P I I I
UniRef90_B0C725          H S S Y E D L R Q Q L G Q T R T A V A K R A I A N H C P V D L P Q R L W Q K L I
UniRef90_UPI00047A7C62   E R S L Q E L V D E L F H R K S A Q P K R H L S N V L S D L L P E R L A H V V L
UniRef90_F8IFG9          D Y T F E D W M A L L K S A R E H P K R R L R T E L E R H V P D R L A A F I L
UniRef90_V6SK50          E T D F E E A V A H L K G L K E E N A K K L I M K F C P F E F P K R L W E S L V
UniRef90_A0A018RTJ1      D L S L E D V L N E Q R N A H P N Q S L K N T L A M H L P K R L V E C L Q
UniRef90_UPI000372EE37   K Q N P E Q L R Q E L T A V R N Q I P Q K T L A A N C P V M L P R R L W E R L T
UniRef90_E3GP01          A L S M E Q M D V R L Q R D F E K Y H N K H F I N G L V D L L P S K M I P V M V
UniRef90_R6M0Z1          A L D E Q K L D L R L L R D F E K F Q N R D F E N A L V E L L P R S M I P V I V
UniRef90_C8WZL4          A L D E T K L D A R L L R D I Q H K G K K Q I A N W L R D L L P T S L I P I C L
UniRef90_C4UN18          D T D L D S F L N N E R Q A H P N Q S L K N T L A Q L L P K R L V E C F
UniRef90_D4TUR2          D L S L E E V K Q K L L D V K Q E W G K K A I A L H R G V D L P H R L W Q Y L I
UniRef90_R5IS41          A L D E K T L D A R I L R D F S A A Q N R D F E N S L S A L L P R S M I P V V I
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UniRef90_UPI000316967A   D V D V A E S L V A G K N S I K K N L G N V L A Q W L P A R L A E G W L
UniRef90_UPI0003FF5BE5   D I D S E D A E K I L K E L L S K K T V S K K S P F E F P N R L W E S L V
UniRef90_X0U758          A L D F K K L D K R I Q R D F Q E F K G R M F K N S L I L P L S M I P L I I
UniRef90_R5Z9T9          A L S N E K L D L R I L R D F E K E K N K L F R N S L D E L L P Q K L I D P V I
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UniRef90_R7BV15          A L D E N T L D K R I L R D F D E R K N Q D I K N V T R A L L P E R L N A Y V L
UniRef90_R5XP43          A L T Y E K L D S R V L R D F N A E K N K L F R N A D N L L P K K L I E P V I
UniRef90_L8DAW0          E K N V A E L I A T W K V Q S P Q K S L K N A L G D L L P K R F V E I L G
UniRef90_H1C7E0          A L D E E K L D R R L L R D F E E N A N R D F H N V L E G L A P R L M V P V L V
UniRef90_C6C675          G Q D V A A L L D A E R Q A H P N Q S L K N T L A Q W L P K R L V E S L Q
UniRef90_UPI00036C645B   D V A L E D Y L V E H K P G N R Q H V A N V L A H L M P R K L A E F W V
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UniRef90_UPI0004792E5C   Q K N D I S L E N R A A N I S R E K F S R F I S D L K Q F R F S V N G S Q P I E
UniRef90_D2RKK1          D A A C L K P E Q E K V N Q I T R K E R Q R L V E T L K A F M V P L S G T R P L A
UniRef90_W4BSR5          K R A E I S D D L T F H H F P K G M L S N L C G L M K A F T F R A D G T R S L K
UniRef90_G5GFN4          D R M N I S P E T R V N E I K K E H R H R L V N I L K D F E F T I T G M R G F D
UniRef90_Q2LVB6          D L L Q L N P D K E C H Q V T S K E R R K I L L L M K D M R F R V T G H R S F K
UniRef90_U5LGV3          D W N E I D P S A Q G G T I S H E K I R L F V K S C K A F Q F K A D G T L P I E
UniRef90_K2GLE9          E E N G I T P E E T N A H L S K E Q F H S F L K N L K Y F H V S V H D S Q P I E
UniRef90_M1Z566          D I A S I N G T K A I H Q I T K E E R L K I V E T I K N L P L T F K D F R P I K
UniRef90_UPI0003681BE4   D A A Y L D G E K F V H Q V T Q E E R H R L A E A L K H L V L T V A R T R P L T
UniRef90_G7WAL7          R L S E I N P D K A V H Q V S R E E R R T F L K L L Q G L T L T I T E T L S I E
UniRef90_C0GDV5          R L S G I S G D V P V N Q I T K Q Q R I K L A E T L T A L T N V T A M R P L R
UniRef90_C4GBD7          A R T G I D Q D K K M H D L T R E D R E R I M R C L K H F P L T L T G T R S F S
UniRef90_R6INR9          R R S G L E P G K K V N Q I S R E E R H A L V R L M K D F A V H I T D F R P V E
UniRef90_Q5WE10          Q S L E I D S S E M C A N T P H D A F R K L A S A L D A L P L H A N G T L S I E
UniRef90_R5P4V5          D Y C E I I E S H K K V N S I S K E E R N R M V E A F K G L K L T I T S L R S F N
UniRef90_F9N675          Q L A E L E G T K A I H D I T K E E R L R L V D A I Q H M R L T V H K P R P I A
UniRef90_V9H3P2          E L S E I S E N K K V N E I T K E E R K N L V N L I K G I K L K V M K L R P I E
UniRef90_D9TTA6          K Q S G I N P D K K V S E V S K L E R N A L V H A L K E L V F H V I S K R P I K
UniRef90_R6XC64          K R S G I D P Q K Q V N A I T K D E R K R L V Q L M H S F E I N L N G T R P L D
UniRef90_W3Y5V2          R L A E L D P A K P V N Q I T R D E R Q R L C H V L Q H M T L T V K G L R P V E
UniRef90_W7CHR6          E R L E I D P E E M C V A I S P K K W V Q L A S V L K D F R F V V K G T Y D F D
UniRef90_U1YDI5          E M A D I E E N T T Y A H I S H T K W R E M A Q L M K Q F P V T I I T G T L P L E
UniRef90_E4LAM4          E L S G I D K D L P V S E V K K A A Q R I S L V K T M K A F P L T I T G T R P I E
UniRef90_F4LUW5          N Y T E I D P E K P V N Q I S Q D D R K K I R D C L R N F Q I T I S G C K E K
UniRef90_UPI0002E01FDF   K L A D I P E E M T Y D H L S K R H W Q K F S A A I K R F P L T I T G T L S L S
UniRef90_R6LV68          E L S E I D E K K Q V N N I T K E E R N R L V N L L K G L T F K V E S L R G F N
UniRef90_R6C225          E L S K I N P Y K K V N E I T R E E R N R L V K L L K N F T I T I S G F R P I E
UniRef90_D9S3D7          D V C R L D P E K P V N Q L T R E E R N I I L E K L T D F R V T V I G C M E K
UniRef90_B1YKH2          A R I G F G D E V C T Q I K K Q D F T Q L L A T L K R F P L Q A V G T L D F D
UniRef90_W3AKG8          E R A G I D P Q A I G A E L A S D K V R L L A Q Q L T A F S M S V T G T Q P I E
UniRef90_L7VNZ3          E L S G I L P E K S A N Q V T R N E R Q R L V N L L K N L K C E I T G S R S F D
UniRef90_D2QH88          T E A G I A E T Q R W A D L P A K P L N R L T E R L T N N Q F Q V M G K S T F K
UniRef90_B7KGI5          S L T G I N E D S P W A D L S K K A L N Q L V Q E L N Q G V Y Q I E G K G V F K
UniRef90_R6HCP4          N M S G I P E N T K C N Q I T K E L R L N L A K L I K S F T I D L K G C R P I D
UniRef90_R9LT24          R L S G I P A D T K V H S V T K E Q R R S F V R L L K A L P V T P A G F R P V D
UniRef90_R5XQM0          K I G G I S P E K P I H E I S R E E R L R F G A L V K A F P F T I N G F G E F K
UniRef90_R7CSA8          S L A G I E R D L T V S D L K K A Q R I A L V K T M K A M P L T V T G T R P I S
UniRef90_W9A734          Q A N G I S P E Q N G A N I S H E A I R S I I A D M K N F T F N V Q G S L P L E
UniRef90_UPI00042524F0   Q L C G L S E S A V C T E T P H D S I D T L A R V W K E F P L T A T G T L S I E
UniRef90_D5X793          R L S N I P G D K P V H Q I S K R E R L R L L A L I Q G L T I T I S R S R P L R
UniRef90_E9SG51          K R S G I P S D K R V N Q I T K E E R R D L V E L L K K L T Y K V D R L R S I D
UniRef90_UPI000288ADA1   N R A D V S P T L T V S Q L S K E K V R S V A E G L K A F P V R I N G T L P I E
UniRef90_G8TMD5          Q Q S G I D E D K R W A D L P A K E Q N K L I A N C C A Q E F K I Q G K T T F K
UniRef90_UPI0003806E4A   T T V G I E E E R I W T E L T K A A L N A L V Q E L T G G E Y H I L G K G V F K
UniRef90_UPI0004757469   S Y V G I S P D K P W A E L A K K E L N K L I Q E L N Q G C Y K I Q G K G V F K
UniRef90_UPI0002881EB4   Q Q A T I D E A S T G A D L S N E L A R Q L A K E I T S F E M K V N G T Q P L A
UniRef90_B4VMZ7          S Y V G I D P N K R W A E L S K K A L N Q L V Q E L N Q G H Y L I Q G K G V F K
UniRef90_R5QGG3          S R C G I P P S Q K V N S V T K E Q R R A L L S A L R H F R I E I S G F R P I E
UniRef90_J9HCZ5          H V V N V P A D L Q L A H L T R V Q M N E L G Q T I K R C P I H V T G T L P L E
UniRef90_UPI00040EFB50   T L S G I D P A A K V N Q I T R E Q R Q K L V E C F K Q L K I G I A G L R D F T
UniRef90_R6H6T5          R R T H I P E D L P A H S L T R Q Q R H S L V Q E M K N F T L E I S G K R P V E
UniRef90_UPI0003F6416D   E L S E I N P D K K V S E I D K A E R T R L V N I T K D L T M T V T G T R G F N
UniRef90_UPI0003617ED0   D V A F V T G D T V A S Q L P K A A R Q R L I E T I K G L S F N V T G T R P F A
UniRef90_B6FYR0          E L S G I D P A T P V N S I T K E E R R N L V D T I K N I E L H V K R Y R P M E
UniRef90_K8E2Q8          D R L G L L E T M P L K Q C T P D Q I Q A L A E F F K D F R F T A N G T Q P L E
UniRef90_E0UHX9          S F C E I N S E V P W A E L S K K G L N L L V Q E L T Q G V Y K I E G K G V F K
UniRef90_U2DAV3          A L T G I P G E K V N Q L T Q A E R G E M V R V M K D L P L T V S G F R P A A
UniRef90_F6B730          E L A G M P P E T P G G P L N K T Q L A K L A D L L K A L P V H I K G T R P I E
UniRef90_R6ICV7          E L S G I P A E E K V N S I T R Q Q R H D L L R L F K E F P V S I S G P R P I D
UniRef90_D5WET8          D T H Q V A A E A R V A D L P D K S L R R I G E A L S R W T L T P N G T E G Y R
UniRef90_UPI00036DCF9A   Q A S G I A E T L I W A D A N K K Q L Q Q L A E Q M T Q C T F Q I H G K S I F K
UniRef90_K9VJS3          S S I G I D E Q K R W A D L S N K T L D R L L Q E L V Q G E Y Q I A G K G A F K
UniRef90_Q474B9          A A A G V D G S L P L H D I A D K A L R R L G A S L N D W Q V V P S G T E G Y R
UniRef90_R6TT30          E L S G I D P H K K V N L V T R E E R R H L A E L F K C F R I P L L R T R P I A
UniRef90_T0BSY0          H K A S V P A S T Q L A N L S K V H L D A I T A S I K A C P H I T G T L P L E
UniRef90_R3BIV9          E K L A I E E V P A K Q L T E K Q L S F V E L L K D F Q F T V T K T L P L E
UniRef90_UPI00040BBC97   K L S E I D E N K K V N E I T K V E R R T L V T L L K N L T M T I S G L R P I D
UniRef90_B0C725          A A A G I S P Q Q R W A D L S K T H L R S L L Q E L T Q G K F H V L G K G V F K
UniRef90_UPI00047A7C62   E T L G I A R D I P M T D I Q N V K L E E V A K Q T K R F P V A I T G T L P L A
UniRef90_F8IFG9          H E A Q V D G E V P M A Q A S H A S L T R V S R A L K R L V I P V T G T L P L E
UniRef90_V6SK50          T A S G I S A E T K W A D L S K K Q L T D L A N Q L T N G Q F Q V N G K S T F K
UniRef90_A0A018RTJ1      Q L G H I P D V S L R Q L N V R D Q Q A L V D T L T A W Q V Q P N G T E G Y R
UniRef90_UPI000372EE37   E A V G I Q K E R R W A E L S N K T L N Q L I Q E L M Q G S Y Q I S G K G V F K
UniRef90_E3GP01          K C S G I P E D K R V N Q I T R E E R N H L A E L F K G L A L H V T S L Q D I N
UniRef90_R6M0Z1          R R S G I P A E E K V H S I T R E Q R R A L L E L M K R F P V E I A C K A P V E
UniRef90_C8WZL4          E A T G L D G S L Q A G Q M T A R Q R R N L K M W L K Y F P L P L T G Y R G F E
UniRef90_C4UN18          Q L L G Q L P D V T L K Q L N P P Q Q A A L V Q M L Q A W R V Q P N G T E G Y R
UniRef90_D4TUR2          D R V N I S V E D R W A E I N N K V L N Q L A Q E I H G G E Y V I T G K G E F K
UniRef90_R5IS41          A R S G I D P M Q K V N S I T K Q Q R R A L L E T I K C F S V P I A C K A P V E
UniRef90_I0GSB3          D A A F L E M D K P V H Q I T V E E R H R L G Q T L Q H L P L T I T K A R P I A
UniRef90_UPI000316967A   L A N G F N A D A K V A E L P D K Q L R K L G E S L N R W T I T P N G S E G Y R
UniRef90_UPI0003FF5BE5   L A S G I S E E T K W A D L S K A Q L N Q L T N G Q F Q V N G K S T F K
UniRef90_X0U758          K L S A I E P E K K V D Y I S R E E R N K L V H L L K E L E L T P T G L L G F N
UniRef90_R5Z9T9          H L S G I N P N K K V N E I S K K E R M Q L L K I L K E F C I T I S G F R P V E
UniRef90_UPI00047318C0   Q L K G F R A D A R I A D M T D K Q L R L L G E S L N A W V I T P D G S E G Y R
UniRef90_R7BV15          K C A N I A E S K K V N E I T K Q E R A K L V E T I K N L R F D V S S L A P F S
UniRef90_R5XP43          E L S G I N E N K K V N E I T K E E R K E I V K I L K E F T I T L K A F R S I D
UniRef90_L8DAW0          E Q Q Q L P D K A L N Q L L H A E I E S V A K T L H Q W Q L K P N G T E G Y R
UniRef90_H1C7E0          E R T G I P A A E K V H S V T K A Q R R R L L E V L K C L R I D I Q G P R P V E
UniRef90_C6C675          A L E Q L P D I T L K Q L N K P Q L T Q V E T T L Q Q W R F Q P N G T E G F K
UniRef90_UPI00036C645B   T N A G L E G K H M A D V S D K A L R S L A N S L K H W K I T P N G S E G F K
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UniRef90_B2TIA3           E G I V T
UniRef90_UPI0004792E5C    K A F V T
UniRef90_D2RKK1           E A I V T
UniRef90_W4BSR5           E A F V T
UniRef90_G5GFN4           E A V V T
UniRef90_Q2LVB6           E A L I T
UniRef90_U5LGV3           K A F V T
UniRef90_K2GLE9           K A F V T
UniRef90_M1Z566           E A I V T
UniRef90_UPI0003681BE4    E A I V T
UniRef90_G7WAL7           A A I V T
UniRef90_C0GDV5           E A I V T
UniRef90_C4GBD7           E A I I T
UniRef90_R6INR9           E A L V T
UniRef90_Q5WE10           K A F V T
UniRef90_R5P4V5           E A I I T
UniRef90_F9N675           E A I V T
UniRef90_V9H3P2           E A I V T
UniRef90_D9TTA6           E A I I T
UniRef90_R6XC64           E A I I T
UniRef90_W3Y5V2           E A L V T
UniRef90_W7CHR6           K A F V T
UniRef90_U1YDI5           Q A T V T
UniRef90_E4LAM4           E A I V T
UniRef90_F4LUW5           E A L V T
UniRef90_UPI0002E01FDF    E A F I T
UniRef90_R6LV68           E A I I T
UniRef90_R6C225           E G I V T
UniRef90_D9S3D7           E A L V T
UniRef90_B1YKH2           K A F V T
UniRef90_W3AKG8           K A F V T
UniRef90_L7VNZ3           E A V V T
UniRef90_D2QH88           D E F V T
UniRef90_B7KGI5           E E F V T
UniRef90_R6HCP4           E A I I T
UniRef90_R9LT24           E A I I T
UniRef90_R5XQM0           E A V I T
UniRef90_R7CSA8           E A L V T
UniRef90_W9A734           K A F V T
UniRef90_UPI00042524F0    K A F V T
UniRef90_D5X793           D A M V T
UniRef90_E9SG51           E A I I T
UniRef90_UPI000288ADA1    K A F I T
UniRef90_G8TMD5           E E F V T
UniRef90_UPI0003806E4A    E E F V T
UniRef90_UPI0004757469    E E F V T
UniRef90_UPI0002881EB4    K A F V T
UniRef90_B4VMZ7           E E F V T
UniRef90_R5QGG3           E A I V T
UniRef90_J9HCZ5           K A T V T
UniRef90_UPI00040EFB50    E A I I T
UniRef90_R6H6T5           E A I V T
UniRef90_UPI0003F6416D    E A I I T
UniRef90_UPI0003617ED0    E A I V T
UniRef90_B6FYR0           E A L V T
UniRef90_K8E2Q8           K A F V T
UniRef90_E0UHX9           E E F V T
UniRef90_U2DAV3           E G I V T
UniRef90_F6B730           E A T V T
UniRef90_R6ICV7           E A I V T
UniRef90_D5WET8           K A E V T
UniRef90_UPI00036DCF9A    E E F V T
UniRef90_K9VJS3           E E F V T
UniRef90_Q474B9           K A E V T
UniRef90_R6TT30           E A L V T
UniRef90_T0BSY0           Q A T V T
UniRef90_R3BIV9           K S F V T
UniRef90_UPI00040BBC97    Q A I V T
UniRef90_B0C725           D E F V T
UniRef90_UPI00047A7C62    Q A T V T
UniRef90_F8IFG9           K A T V T
UniRef90_V6SK50           E E F V T
UniRef90_A0A018RTJ1       T A E V T
UniRef90_UPI000372EE37    D E F V T
UniRef90_E3GP01           T A I I T
UniRef90_R6M0Z1           E A I V T
UniRef90_C8WZL4           E A L V T
UniRef90_C4UN18           T A E V T
UniRef90_D4TUR2           E E F V T
UniRef90_R5IS41           D A I V T
UniRef90_I0GSB3           E A L V T
UniRef90_UPI000316967A    K A E V T
UniRef90_UPI0003FF5BE5    E E F V T
UniRef90_X0U758           
UniRef90_R5Z9T9           E A I I T
UniRef90_UPI00047318C0    K A E V T
UniRef90_R7BV15           E A I V T
UniRef90_R5XP43           D A I I T
UniRef90_L8DAW0           T A E V T
UniRef90_H1C7E0           E A L V T
UniRef90_C6C675           T A E V T
UniRef90_UPI00036C645B    K A E V
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                              1         10        20        30        40
UniRef90_C8NIL4           T E V P L T S S E E F I Q K G E L R A L S L R N V A L S V G K A V V T H Q M D
UniRef90_UPI00047E993F   P S L V P L A I S E D W I K N   L M G I S L E H V R I T A N K K K I I S E G P
UniRef90_A0A024PJQ8      P T E V P L L S N D S F I K N K T L Q G L S L R D V D V S V G K K I V T H R M D
UniRef90_N4WI03          P T E V P I I S N E H F V K E N T L K G L R N I A L T V D K K V T T H Q M D
UniRef90_UPI0004769544   P S L   F T F N I R D E N F R E L A G V S V E S V R L T L D K P R I E Q V G P
UniRef90_UPI00041F92EE   P S L F T F N I K D P R I K D   L M G V S   A L A T V K V K K S K L E A S G P
UniRef90_R5SMF1            S L V P L R A D G       C A E L Q G L S L R N V G L T V G K K I Y T D F G E
UniRef90_V6Q4T4          P T E S P I K L N N P F V A K K T L Q G L S L Q D V A L S V G K T Q V T H R M D
UniRef90_I3D9U4            S L V P F T W K E S D K P F A T L S G I A L P     V T A S N D R I S F S N Q
UniRef90_X8K6H9          P A E V P I V C R N Y G D F L S E L S G I S L Q D V K L S V Y N K K N S H E G D
UniRef90_G8X7I3          P S L F T F N I K D E R I K D   L M G V S   A H A S V R V K G T K L K A S G P
UniRef90_UPI0004713A0D   P S L   F T F N S P D N P L L E L A G V S V K N C E V K I I G S K L A Y K G P
UniRef90_R2R678          P T E S P I Y L I D S F V A E K T L Q G L A L Q D V K L S V N K T V T S H E M D
UniRef90_UPI00037B0658   P S L F T F N I L D Q   K L R A L A G V S V N P V Q L Q L G K T Q L E Q N G P
UniRef90_K9T8B6          P S L F T F N I D D P   R L Q N L A G V S V E N A C V Y L G K N R L E Q T G A
UniRef90_R5SZH5          P G L V P L A S L D N T C K     A L Q G L T L K N V G F K L R K V L Y S D F G E
UniRef90_C0BGY8          P S L   F T F N I P K N T I T E L M G V A V E N A K I K L K G H N I E T E G A
UniRef90_E1SHJ1            A L V P F T L H K P L L Q L Q T L S G V A L E     T T I D A Q D G T R F K E A
UniRef90_L2ECX5          P A L V P L T F D E A W A P F S Q L S G L S L P S I E T G G K K D K T A F L E D
UniRef90_A7HY96          P A L V P F V F D E K L   K S R L E G L A G V A D A T V A C G K T R F A E A
UniRef90_R5B469          P S L I S L E T E E E W P K E   M M G L S L K N V T L N A Y N K K Y S E L G E
UniRef90_B7JUT2          P S L   F T F N I K D N R L Q D L A G V A V E N V A V C L G K K E Y Q Q T G A
UniRef90_UPI000469D9E0   G L V P F T L H K P L L Q L S S L S G V S V P S V L A A   E T G T T F K E A
UniRef90_G4KPQ6            S L V P L   Q E E G V C A E L Q G L S L R N V G L A V F E N D R K D F G E
UniRef90_D6SQM4          P G L V P L E T A G D T A P M   M Q G L S L R N V Q A G I G K K Q A Q D F G E
UniRef90_G0IWI8          P S L   F T F N A P T S K I I Q L K G L S V P N G H V R F E G S Q L Q Y S G P
UniRef90_B2U927          P A L V P L T F N E H W A P F S A L S G V S M E   V D V T V A Q P P G K F R E D
UniRef90_UPI00035CB4E6     A L V P F T L H E K D Q R F S E L S G I S I D S   L V T A E N G Q S F R E N
UniRef90_D0Z0V6          G L V P F T L H E D K D A F A D L S G I A I P A V V E T   E N G V S F K E N
UniRef90_H0P094          P S L   F T F N I P N A Q L T D L A G V S V E N A L V S L D K G I Y C H Q G P
UniRef90_UPI000400CE66   P S L F T F N S K D D R I K D   L P G I A L   D A E L E I P E A R L S S D G P
UniRef90_A3U764          P S L   F T F N I K D Y R I K D L M G L A T E A S V K V L D T N N L E A S G P
UniRef90_E1W1F7            S L V P F T W R E S D K F Y S A L S G V S L D   V A A T N Q H K T F T H Q
UniRef90_UPI000466558E   P S L I G I E V Q E K F V S L   L E K L L K N V S I D V N K K V Y T D F G E
UniRef90_D7DXK3          P S L F T F N I A D P   A F R A L A G I S V N P V N L R L G K P V L Q Q T G P
UniRef90_K9UWT5          P S L   F T F N V P D E K L R E L A G V S V N P A N L R L G Y P Q L E Q N G A
UniRef90_UPI00029A4BC2   P S L   F T F N M P Q A P V T R L M G L V V E D V K V G V E G S R L N A E G P
UniRef90_UPI00035CE7AE   P S L   F T F N M P K E P I K D L M G V V A E P V S A K V M G T K L S S E G P
UniRef90_B1XZ35          P A L V P L T F D Q T W A P Y A A L A G L A L P V I S T G S G K Q R T V F Q E D
UniRef90_UPI00036CE944   P S L   F T F N T P D N P L L A L A G V S V P N A L V S V Q G T N Q R Q S G P
UniRef90_K9S7D6          P S L   F T F N V P D P A L R A L A G V A D A A R L S L G T Q K F E Q T G P
UniRef90_X2H1P0          G L V P F T L H K P L L E L S A L S G I A V P   V E V S N E R I R F K E N
UniRef90_UPI000395C1DA   P G L V P M T F D G S W A P Y A Q L A G L A L P V V I T G S K K T R M T F N E D
UniRef90_L0MMJ4          G L V P F T L H K P L L E Q S Q L S G V S V P A S L T A A D G T L   F R E A
UniRef90_L7ELV7          P A L V Q L L H L K Y K N L K   A L S G I K F N G Y S H V M D K K K R S E F G E
UniRef90_K6IID7          P S L F T F K I V D P   R F E G L S G L A F E K A E C S L V E F G Y S Q F G P
UniRef90_C6W7N8          P S L   F T F N T P D N Y L L P L A G V A V K D A G V K I I A G T K H E W R G P
UniRef90_UPI0003478E2F   P S L F T F N I R D D   R L Q G L A G V S V P E V N L K L N K T K L E Q S G P
UniRef90_UPI00034B318E   P A L V P L T F D D A W A P F A P L S G I A L E   V E V T T N P S G A R F R E D
UniRef90_M2TN16          P A L V P L T L G G D E V L F R D L S G V S S E V V A A A   G K A R F R E A
UniRef90_E1TGB0          P A L V P L T F A A A D W A P F A L S G V S L E V R L A T G N K K T A Q F E E D
UniRef90_Q5LU70          G L V P F T F P E S   R F A P L A G L S L P   A R L S N A R A T F D E A
UniRef90_UPI00046E7068        P I I S E D F F I K E K T L Q G L S L Q D V S L S V G K V I V A H Q M D
UniRef90_UPI00041D2B91   P S L   F T F N V P N S P L K E L P G I S V A N A R V K I A G Q P L E N E G P
UniRef90_UPI00035E644A   P G L V P L T F D G A W Q P Y A Q L A G L A L P V A E T G A K K S R G H F L E D
UniRef90_UPI00046805D5   G L V P F T I T E P Q L K C S E L S G T S V E D C L V S C N G Q   S F R E N
UniRef90_UPI000465EBB8     A L V P F T L S G Q W L E I R S L S G V S L P     V T V E C G E Q R F A E A
UniRef90_D0J3L2          P G L V P M T F D E G W Q P Y A G L A G L A L P E I S T G S K E R M S F H E D
UniRef90_L1N9J1          P S L   F T F N I A D K R L K E L M G T V V E S V T A T I P G T K L R A D G A
UniRef90_U1LPM0            A L V P F T L H D D K A R F D G L A G V S L C T A Q S   E D G T S F K E N
UniRef90_R2QY60              P I L S D D G F I K D K T L Q G L S L Q D V S L S V G K V V V E H Q M D
UniRef90_K9YMB4          P S L F T F K I N D P R I K N   L A G I S S D N V H I Q L K G N K L E Q S G P
UniRef90_K7VTV6              L L S D E S F I L D K S L Q G I S L R E I K L S V G K T V I S H Q H D
UniRef90_A4J6M1          P A A V S V T C N D P W I S N R Q A Q G L S L Q D V S I M I Y N H R A S E V G D
UniRef90_C5TB84          P G L V P L T F D D A W A P Y A Q L A G L A L P E I S T G A K K E R M S F H E D
UniRef90_Z5XME9            A L V P F T L H H D K D R F D G L S G I S I P C V V T S   E D G T Q F K E N
UniRef90_Q0TM34          P A I V Q L K L S H N   K L K A L S G I K F N G Y A L C D G K S I R K E F G E
UniRef90_I0DU44            A L V P F T L H K P L L   E T L Q V L S G V S V A A T V T S A D G T F K E N
UniRef90_F4KY24          P S L F T F N I K D P   R L S D L L G V S V P L A E A V I E G S K L S S V G P
UniRef90_S1R0A9          P T E S P L I S E A D F I Q E R T L Q G L S L R D V Q L T V G K T V T S H T M D
UniRef90_Q0F177          G L V P F T F E T G K E E R L Q Q L A G I S L D   V S V S C N H R V F S E A
UniRef90_U5DJ20          P S L F T F E L A D P   Q L L T L A G V S L E T V R L R L G K Q R Y E Q T G P
UniRef90_UPI0004799E28   P S L   F T F N I K D A R L K D L M G L S T   F A S V K V K K S K L E A F G P
UniRef90_R9NM36          G L V P F T L H K P L L Q L T L S G V A L P S A I A A Q D G T V   F K E A
UniRef90_UPI0003B396EB   P S L   F T F N V P E S P L R E L P G V S V P H V R V R V A G E K L E Y E G P
UniRef90_Q1N3Q1          P G L V P F T L D A D L A P L K N L S G V A   I D A M V S C R D M S F R E N
UniRef90_UPI00037DE831   P G L V P L T F D G P W E A F A P L A G I A L E   V E V E T G N K R G H F R E D
UniRef90_G7MBH9          P G I V P L K L D Y P Y L K   A L S G I K F D G S A L I D D Q I I R T E I G E
UniRef90_E1KQV8          P S L F T F N I R E K   A F C N L M G A V V T P V Q L S I P S T K F R S Q G A
UniRef90_UPI000468B537   G L V P F T L Q E D K A R F E G L S G I S L P V I A K A   E C G K Q F R E A
UniRef90_A2TV59          P S L F T F N I K D K   R I E G L M G V A K D V T I K V L G T K Q K S E G P
UniRef90_K2NZJ9          P S L F T F N I K D P R I Q D   L M G L A T D A Q V S L L N Q E T T S S G P
UniRef90_R5TLL6          P A L V Q L K C K G K F   F Q S I A G V R I Q C V S L V D D G D C V R D T G E
UniRef90_W0Q616            S L V P F T W K E T D K Y F T E L S G I A I P   T V S Q N G K S F S N Q
UniRef90_G0JL48          P G L V P L T L S G S H A H Y K D L A G V T L P G V E A S V A R Q   R F R G G
UniRef90_A0A024KE34      P A L V P L T F A E Q L A P L K E L S G V S T N A V   V S H G K T R F E E A
UniRef90_L1QNP6          P A L V P L K L D Y P Q L K   A L S G V K F D G Y A L D D Q I K K K D G P
UniRef90_T1CW29          P A L V P L A L E E T L R Q F G D L S G L   E V E V S C R K G R F R E S
UniRef90_Q65RJ3            S L V P F T Y R E N D K F L T A L S G I S L P   V R V T A Q N G   K S F S N N
UniRef90_R1H0A7          G L V P F T L H D K D A A F A D L S G I A I P V T I T T E S G V L   F K E N
UniRef90_V4UX06          G L V P F T F K I A D S   Q L T E L S G V S F P K V V A K L K S P Y L T Q V G P
UniRef90_F0T7N7          P G I V P V L T H E F W V R E   L L S G L Q L E S A A A V I K K G K V K L E G D
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Multiple sequence alignment (positions 50–80).

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                                      50          60          70         80
UniRef90_C8NIL4          MI FT H FGI SGP AVL R C SSF V H Q V QEKENKKE  VVMS L NA L P
UniRef90_UPI00047E993F   MI FT H FGL SGP TIL  EMSSY LNQY LIE    KSVKL T L DL I P
UniRef90_A0A024PJQ8      ML FT H FGL SGP AVL R C SQF VVKE FMKGR   KLVTI EI DA L P
UniRef90_N4WI03          MI FT H FGI SGP AVL R C SQF IVKE LKAG  NQAVKL MI DA L P
UniRef90_UPI0004769544   LL IT H WGL SGP AVL KLSAWGART LH SNNYK   ATL H IN WL P
UniRef90_UPI00041F92EE   LL IT H WGM SGP GIL RLSAWGARE LFDKSYQ   FAL QV NW LN
UniRef90_R5SMF1          LL FT H FGV SGP LVL SSSA H MR H FDKKS      YRL EL DL KP
UniRef90_V6Q4T4          ML FT H FGI SGP AAL R C SMF VNQGLEKH  GAPVQL RL DA L P
UniRef90_I3D9U4          ML FT H RGL SGP AML QISNYWQMGEA      VDI DL LP
UniRef90_X8K6H9          LI FT H FGL SGP IAL R C SGF VNSIMRKDRLET VRL SL DL L P
UniRef90_G8X7I3          LL IT H WGL SGP GIL RLSAWGARDLFELKY C FV  LQV NW LN
UniRef90_UPI0004713A0D   LL IT H WGF SGP AVL KLSAWGARYLSDLGYRF V C  KIN WL P
UniRef90_R2R678          LL FT H FGI SGP AAL R C SSF VNQLLRSQ   KTVTL TL DS F P
UniRef90_UPI00037B0658   LL IT H WGM SGP AVL KLSAWGARVLHDSHYQ   ATL L VN WL P
UniRef90_K9T8B6          LL IT H WGL SGP AVL KLSAWGARVLYEHRYQ   MSL I IN WV P
UniRef90_R5SZH5          ML FA H FGL TGP VVL SSSSV LNRIEEKLKKKSIVAL I DL KP
UniRef90_C0BGY8          LL IT H WGM SGP AIL KASAFGAPALAGC QYN   FEIQV NW I G
UniRef90_E1SHJ1          ML FT H RGL SGP AVL QISSYWQPGE      FVTI DL SP
UniRef90_L2ECX5          LL FT H RGL SGP GVL QISSYWQEG       TPIRL NL AP
UniRef90_A7HY96          LL FT H KGL SGP AIL QISSYWAPGRE      IIIDL AP
UniRef90_R5B469          ML FT H FGV SGP LVL SASSRIAD     DPAGARL TI DL KP
UniRef90_B7JUT2          IL IT H WGL SGP SIL KLSAFGARILYDNKYQ  MIL GIN WAF
UniRef90_UPI000469D9E0   LL FT H RGL SGP AVL QLSSYWQPGE      FVTI DL SP
UniRef90_G4KPQ6          LL FT H FGV SGP LVL SASA H MR H FEKK   AYRLEI DL KP
UniRef90_D6SQM4          ML FT H FGV SGP IVL TLSREAVQALNRN  QEVKL VI DL KP
UniRef90_G0IWI8          IL IT H WGI SGP AVL KLSAFGAEWLHEKEYKAIAL  I KW RD
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UniRef90_UPI00035CB4E6   IL FT H RGL SGP SIL QISSYWRAGQS      VTI NL LP
UniRef90_D0Z0V6          LL FT H RGL SGP VIL QASSYWLPGQA      VTI DL LP
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UniRef90_UPI000400CE66   LL IT H WGF SGP AIL KLSAWGARALHELQYK  FSVKV N WI P
UniRef90_A3U764          LL IT H WGM SGP AIL KLSAWGARILNDKNYQ  FKIA VN WRT
UniRef90_E1W1F7          ML FT H RGL SGP AIL QISNYWQPGES      I HLDL LP
UniRef90_UPI000466558E   ME FT K FGL DGA II KSASSR     MKDTTKENYT IVDL KP
UniRef90_D7DXK3          LL IT H WGV SGP SVL KLSAWGARILHDTRYQG  KLYI N WL P
UniRef90_K9UWT5          LL IT H WGL SGP AVL KLSAWAARMLHEKHYQ  ANLTV NL TP
UniRef90_UPI00029A4BC2   LL IT H WGM SGP AVL KLSSVAARFLNERNY  DFNI HI N WV G
UniRef90_UPI00035CE7AE   LL IT H WGM SGP AIL KLSAFGARILHELDY  SFKVL IN WT G
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UniRef90_UPI00036CE944   LL IT H WGF SGP AIL RLSAWAARDLAGVDYR  FTLRI QW LG
UniRef90_K9S7D6          LL VT H WGL SGP AVL KLSAWAARSLHEC RYQT  TLQI N WL P
UniRef90_X2H1P0          LL FT H RGL SGP AIL QISSYWQAGES      IIIN L L P
UniRef90_UPI000395C1DA   LL FT H RGL SGP AIL QISSYWTPGTS      IDI N L VP
UniRef90_L0MMJ4          IL FT H RGL SGP AVL QISSYWQPGE      YVSI NL LP
UniRef90_L7ELV7          IL FT D YGI SGP PIL QISGIASKALQDG  KSVDI TI D ML P
UniRef90_K6IID7          LL VT H WGV SGP PIL KLSAKGARELFDKGYET  TLRVD FV P
UniRef90_C6W7N8          LL IT H WGF SGP AVL KLSAWGARDLAEKDY H  FTC RIN WL P
UniRef90_UPI0003478E2F   LL VT H WGV SGP AVL KLSAWGARALHDSHYR  AQLSI H WL P
UniRef90_UPI00034B318E   LL FT H RGL SGP AIL QISSFWQPG       TPIVV NL LP
UniRef90_M2TN16          AL FT H RGL SGP AIL QASSYWRNGEA      VTVDF LP
UniRef90_E1TGB0          LL LT H RGL SGP GVL QISSYWQPGE      PIHI NL LP
UniRef90_Q5LU70          LL FT H RGL SGP AVL QLSSYWREGEE      IAI DL AP
UniRef90_UPI00046E7068   LL FT H FGL SGP AAL R C SSF VNQELAKDEDKPVLL QLDI F P
UniRef90_UPI00041D2B91   LL IT H WGF SGP AVL KLSAWGARLLQDINY H FTAL  IN WI P
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UniRef90_UPI00046805D5   IL FT H RGL SGP AIL QISSYWQPGD      TVHI DL LP
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UniRef90_Q0F177          ML FT H RGL SGP AML QISSFWRPGD       TLSI DL LP
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UniRef90_C7M631        P S L F T F H T S T Q W T K E     L S G I A V N A S V R L K S L K I T E T A P
UniRef90_UPI000468DBA2   A L V P F T L T S Q W     K E R L S P L S G L A C D V S V T A G K G Q Y R E P
UniRef90_UPI00047549D2 P G I V Q L K L D S P Y L K E     L S G V K F E G H I L V N G E V I R S E Y G E
UniRef90_R6HLW2          A L T S I E L K D D     V S S L Q G L S L K N V K V S V S D G S K T W T G E
UniRef90_D5BAI9        P S L F T F N I K D T R I K N     L A G I S T     F A E V K I P N S G L E S E G P
UniRef90_UPI0002E02DEF P G L V P F T L S D V W A R A E T L S G L S V P     V S V S C G Q G R F N E P
UniRef90_A1RQ91          G L V P F T W H E D K I R F E P L S G I A V P S R I T A K D G T S F S E A
UniRef90_UPI000373CAD5 P G L V P F N L L D     M D P I L N D L K L K N V K A T V T G D D S E A F G E
UniRef90_A3WE21        P A L V P L T L G G D D V L F R E L S G V S A P     V Q A R A G K T A F D E A
UniRef90_K9H2V2        P A L V P L T A R P D D L A L R P L S G V S L D A V A     C G K T A F R E N
UniRef90_C5VPS1        P A L V Q L K L N     Y K K L K A L S G V K F D S A K L Y L D K Q L V Q E S G E
UniRef90_H0HRR3        P A L V P L T F D Q T L A R L A P L S G V A V D A V V S C G K T K F A E A
UniRef90_K6U936        P G C V P L R V R E K W V H     Q L K G V T L E D V G L R I G Y G G K R I S G N
UniRef90_A4F1D6          G L V P F T F T D G     R F K A L S G T A L P     A R L S N Q Q T S F D E A
UniRef90_T0CS33        P S L I G L E T I E D     V K S L E K L A L R N V E I R L G K C I Y E D F G E
UniRef90_G0AIS8        P G L V P L T F D A A W Q P F L P L A G I A L P E V E T G D K K N R G E F K E D
UniRef90_UPI0003FEDCB4 P S L     F T F N I A D K N F R D L M G A V V E P V V L G I P G T K F R A N G P
UniRef90_R7K908        P A L V G F K A E N T     A A L S G L T L K N V K L S Y G K T V Y S Q F G E
UniRef90_R6VF77          S L F T L T I N D R     R L Q S M M G T V V N P V T V S I P S T K F K A E G P
UniRef90_UPI00046A198E P G L V P L I F A P Q     Q L A G F S G I P G V A L D A V V S C N G A R F R E N
UniRef90_UPI0004226B5E P S L     F T F N T P G E P I R E L M G L A V P D G L V K I E G T K L N Y R G P
UniRef90_L8XF55          A L V P F T L D G R E K G L T E L T G T A L P     V R I S C N N K E F L E A
UniRef90_M9RTZ2          G L V P F T I T D Q L K E L C A L S G T S     V D C R V S C N G Q A F R E N
UniRef90_V4NM00          G L V P F T F G G D     R L A A I D G L S G V S L T A R V S C G K T R F T D G
UniRef90_UPI000234F272 P S L F T F K I A D K     R L S D L S G V T F T R V K A K L M A P E L T Q T G P
UniRef90_B9XMX6        P G L V P L T F Q G D E Q S F G Q L S G I S I D A I A I A     E D V S F R E A
UniRef90_A4EJN6        P G L V P L T F S D E     K F K P L A G V A A P     A R V S A G D A S F D E A
UniRef90_N6XSM0        P A L V P L T L P E T L A L L A P L A G I S L E V E A Q C R G P V   F R E A
UniRef90_A0A017HN83    P A L V P F T F G G E     R F G P L A G V A V P     V R A R A N G P A F D E A
UniRef90_F1ZB01        P A L V P L T L P G D E A L F R G L A G V A S P V I A R C G K A S F D E A
UniRef90_R5CSY0        P S L F S L C L P H S D I     T K L Q G T V V K N V T L G L C G T K I R A V G A
UniRef90_R5Z516        P G L V S I H S K D     V I D L A G L S L E K V Q I Q V K K K V L Y K E T G P
UniRef90_K2KSM1          A L V P F V F D P D L A R T G E L S G I S V D A V V Q C N K K Q F R E G
UniRef90_F6DRP9        P A A V A I T C S D G W I K G R A V Q G L S L E N V N L T L G K L A A E S G D
UniRef90_B5JKE3        P S L F T F H I D H P L L K D     L Q G L S P Q V R V S Y P T A K L A Q S G P
UniRef90_I5AYI6        P G L V P F T F Q G D K A V L A P L A G I S V K     A R V R T G S A S F K E Q
UniRef90_UPI00037CC57C P A L V P F T L S G P L E E L E G L S G V A L D T V T T A G G M G   F R E N
UniRef90_V4N369          G L V P F T L G D E     K L A V L G G L S G V S L E A A V T A G K T K F G D G
UniRef90_M7PDL9          G L V P V V L D D H K L K L V E L S G I S V D T V T E T D S C   S F R E N
UniRef90_UPI0000E105E0   A L V P F T L H T H D     K D V L A E L S G V S V E A A T T C A N T R F N E G
UniRef90_A5PBK4        P A L V P L T L G G E E V L F R E I S G V S A P V V A     N A G K A S F P E A
UniRef90_E6LCD5              P L L S D E A F I H S K E L Q G I S L R D C L L Q V G K L V T E H K M D
UniRef90_D1PHB5        P S L     F T F N I K N L M G T V V E P V Y T S I P G T K L K A E G P
UniRef90_F7S140          G L V P F T L H D T D E A F A D L S G V A S D V V A     N N D R A S F R E A
UniRef90_UPI00036B61B1 P A L V P L T L G G E E A L F R S L S G V A T E V V A K S G K T S F R E A
UniRef90_B0UVK5          G L V P F T W R E I D K F Y T A L S G I S L P C V T A K C G Q   S F S N N
UniRef90_UPI00037F7DD8   G L V P F T L Q E D K S K F S A L S G I A V P C V I S N K I R S F S E N
UniRef90_UPI00047B5116 P A L V P L T L D Q     A Q L A K L A V L A G V A D A E V R F G K A A F R E A
UniRef90_W8RW98        P A L V P L T F D E T     R K A A F A D L P G T A V D T R I T C N G A S F D E A
UniRef90_N9XKM2        P G I V Q L K L D Y P H L K     A M S G I K F D G V N L T V N G K V I S E V G E
UniRef90_UPI00046852AC P A L V P F T F P     D G R F A E I S G V A V P S     R I H A D G P T F E E A
UniRef90_UPI0002260567 P G L V P L Q A N D D L G W M P A L S G V S L P     V R V Q N G K T A F E E A
UniRef90_UPI0003B4BA46 P G L V P F T L Q P K D K K N L Q P L S G I S V D A K V S C P S A V F T E K
UniRef90_G4D6P6        P A L A P I L L N     I D C S D L S G L G L K N V E L S G N K K I S S E F G E
UniRef90_W6N5Z6        P S L V Q L K L H K N     R L K A L S G I K F N G T I F V D K K S M R K E Y G E
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                                        50             60           70          80
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UniRef90_UPI0002559E9A    L L L T H R G L S G P S I L Q I S S F W K P G D E       I E T I N L V
UniRef90_C9QC09           L L F T H R G L S G P S V L Q I S S F W K A G E K       I V T I N L V
UniRef90_E1X402           L L F T H K G L S G P A I L Q I S L Y W N V G E S       V T I D F L P
UniRef90_R7I9D8           M L F T H F G I S G P L T L T M S C H L P E N L A E     A N V T L D L K P
UniRef90_K9YSC3           L L I T H W G L S G P A V L K L S A Y G A R V L H D H N Y Q   L G L W V N W L P
UniRef90_UPI000471C2F3    L L F T H R G L S G P A I L Q I S S Y R A E G Q A     L Q L N L A P
UniRef90_R5T4H8           L Q F T D Y G I S G I P V F Q V S R F A S R A L N E G   K K V T V R L D L M P
UniRef90_R5XEM0           M E F T K Y G L D G P I I K S A S C R       M G D L S K E N Y K I V L D L K P
UniRef90_R5LJM1           L L F T A Y G V G G P T I L S A S A H I P     A M E P G K Y S V V I D L K P
UniRef90_UPI000427558B    L L I T H W G F S G P A I L K L S A W G A R D L A E S D Y   E F T A L I S W G A
UniRef90_UPI0003751B27    L L V T H W G F S G P A I L K L S S H A A R Y L H E N N Y N   V D I S V N W A N
UniRef90_A6GWE8           L L I T H W G M S G P G L L R L S A W G A R E L A N K K Y Q   F A I L V N W L N
UniRef90_I0TBR7           L L V T H W G V S G P A T L K L S S Y A A R F L A E K A Y H S   P L A I S W T G
UniRef90_L8MYG4           L L I T H W G V S G P A V L K L S A W A A R E L H D C K Y Q   A K L A I N W L H
UniRef90_D8ML09           L L F T H R G L S G P A V L Q L S S Y W L P G E       F V T I N L S P
UniRef90_C7BU41           I L F T H R G L S G P A I L Q I S S Y W Q P G E       F V S I N L L P
UniRef90_H5WKL6           L L F T H R G L S G P A V L Q I S S Y W Q P G T A       V T L D L T A
UniRef90_UPI00047ADDEF    I L F T D Y G I S G P P I L Q L S R V A G V N L     L H G Q E V T L V V D M M P
UniRef90_UPI00047DAD15    L L I T H W G M S G P A I L K L S A W G A R E L N E L N Y N   F K I G V N W L P
UniRef90_L9U781           M L F T H R G L S G P A M L Q I S S V W Q P G E S       I S I D L L P
UniRef90_R2PT08           L L F T H F G I S G P A A L R C S S F I N Q E L   K Q S G E P V T V L L D C F P
UniRef90_D3I1V9           L L V T H W G A S G P A V L R L S S H A A R H L A E Q G Y R   V A M A V N W M G
UniRef90_UPI0003601D4F    L L F T H R G L S G P A V L Q I S S Y W N P G Q A       V Q I D L A P
UniRef90_L8LQ53           L L I T H W G L S G P A V L K L S A W G A K I L F D H H Y Q   M S L L I N W L P
UniRef90_F2LNS9           L L L T H R G L S G P G I L Q I S S Y W K P G E       P I H V D L L P
UniRef90_F7YIB5           L L F T H R G L S G P A V L Q I S S Y W K A G Q K       V S I N L V P
UniRef90_K1LE12           M V F T H F G Y S G P A V L R C S G H V N L W L M K H P Q T V A Q L R L D L T P
UniRef90_G2IUQ7           V L F T H K G L S G P A I L Q A S S Y W T P G Q E       L V L D L L P
UniRef90_C9ACP9           L L F T H F G L S G P A A L R C S S F V N Q E L K K Q   Q P V T V V L D C L P
UniRef90_UPI0002B40EEF    M L V T H W G L S G P V I L R L S A W G A R D L F A S D Y K G L L V D F T P
UniRef90_X4Z3E9           L L F T H R G L S G P A I L Q I S S Y W K P G       T I I D I D L A P
UniRef90_C7LSE6           M L F T H F G L S G P L I L T L S K A A V R A V D Q R K K T E   I L I D L K P
UniRef90_K8E791           I L F T E Y G I S G P P L F D L S R T A A R W L Q K G H     R V H L K V C M L N
UniRef90_I3BVH6           M L F T H R G L S G P A M L Q V S S Y W H K G E       T L E I N L L P
UniRef90_C7M631           L L F T H T G F S G P A V L R A S A W G A R V L A E C N Y Q E V N F T A N L T E
UniRef90_UPI000468DBA2    M L I T H R G L S G P A M L Q A S W W T P G Q       P L D I D L L P
UniRef90_UPI00047549D2    V L F T N Y G A S G P P I L Q L S R K A A Y Q L A R G E M   V T L S L D L M P
UniRef90_R6HLW2           M L F T A T G V S G P C I L T L S S L I N R     I K G N I E L N I D L K P
UniRef90_D5BAI9           L L I T H W G M S G P G L L K L S A W A A R E L N D C D Y Q   F S I F V N W V P
UniRef90_UPI0002E02DEF    M L F T H R G L S G P A M L Q I S S V W Q P G S A       I T I D L L P
UniRef90_A1RQ91           L L F T H R G L S G P A I L Q I S N Y W K A G E       T I E I N L L P
UniRef90_UPI000373CAD5    F Y F T E W G A D G S V I L R L S R D V K E E I Q E D Y   L T L H V D L K P
UniRef90_A3WE21           A L F T H K G L S G P A I L Q V S S Y W R H G E       E V G I K F L P
UniRef90_K9H2V2           I L F T H R G L S G P A I L Q I S S Y W Q P G G A       I T L D L L P
UniRef90_C5VPS1           I L F T D Y G I S G P P I L Q L S R N A S R G I Y D G   K K A T L K V D M M S
UniRef90_H0HRR3           M L F T H R G L S G P A I L Q I S S Y W R E S D E       I G I S M L P
UniRef90_K6U936           L L L T H F G I S G P V I D M S Q M I V D T M D K H   G D L K L Y I D F K P
UniRef90_A4F1D6           L L F T H R G L S G P S V L Q L S S Y W R E G E H       I H V N L T P
UniRef90_T0CS33           M E F S N V G I E G P I I R S A S C R       M K S L E N E S Y K I I L D L K P
UniRef90_G0AIS8           L L F T H R G L S G P A I L Q I S S F W       K S G A S L Q L N L L P
UniRef90_UPI0003FEDCB4    L L I T H W G M S G P A T L K L S S V A A R Y I S D H D Y H   F E V A I N W L G
UniRef90_R7K908           A L F T H E G I S G P A A L T L S L A A R K D V D G S E   L V F D L K P
UniRef90_R6VF77           L L I T H W G V S G P A V L K L S S Y A A R F L H D A D Y H S I   L A V N W I N
UniRef90_UPI00046A198E    L L I T H R G L S G P A I L Q I S S Y W R P G L     P L H V D L L P
UniRef90_UPI0004226B5E    V L V T H W G I S G P A V L K L S A F G A D W L H E H Q Y Q A R A I   I N W N A
UniRef90_L8XF55           L L F T H R G I S G P S V L Q I S S Y W N P G D S       V T V D W L P
UniRef90_M9RTZ2           L L F T H R G L S G P A M L Q I S S Y W Q P G D     T L E I D L L P
UniRef90_V4NM00           F L F T H R G L S G P A V L Q I S S Y W K P G Q S       V E E V D L L P
UniRef90_UPI000234F272    M L V T H W G L S G P V V L R L S A W G A R E L Y Q E K Y Q   A K L M V D F I P
UniRef90_B9XMX6           I L F T H R G L S G P A I L Q V S S Y       Q Q E K G G I A I N L F P
UniRef90_A4EJN6           I L F T H R G L S G P A V L Q A S S Y W H E G E A       V S I N L I P
UniRef90_N6XSM0           A L V T H R G L S G P S L L Q V S S Y W Q Q Q A Y D A G D W A P V S L D L L P
UniRef90_A0A017HN83       M L F T H R G L S G P A M L Q A S S Y W R E G E D       L A V S L L P
UniRef90_F1ZB01           A L F T H R G L S G P A I L Q I S S Y W Q N G E A       I G I D F L P
UniRef90_R5CSY0           L L I T H W G M S G P A I L R L S S Y A A R L L H E Q N Y K   A D M S V N W M E
UniRef90_R5Z516           I L F T H Q G L S G P T I L N A S N F L I K K D C K S     L Q I D F V P
UniRef90_K2KSM1           L L F T H R G L S G P S L L Q I S S Y W N E G D S       I T V N L N P
UniRef90_F6DRP9           V I F T H W G L S G P G A L R V G R V V A L E K Q R D P A A V L Q G K L D L F S
UniRef90_B5JKE3           V V F T H W G L S G P G V L K L S A W G A R V F S Q L D Y Q   C E L L V N W T G
UniRef90_I5AYI6           L L F T H R G L S G P V I L Q A S S F W Q P G       A R L T I D L F P
UniRef90_UPI00037CC57C    L L F T H R G L S G P A V L Q A S S Y W E E G Q A       V M I D L F P
UniRef90_V4N369           F L F T H R G L S G P S V L Q I S S Y W D L G Q       P V T V D L L P
UniRef90_M7PDL9           I L F T H R G L S G P A I L Q A S S Y W P G D A       L K I D M F P
UniRef90_UPI0000E105E0    I L F T H R G L S G P A V L Q I S S Y W E A G D       T V E I D L L P
UniRef90_A5PBK4           A L F T H R G L S G P S L L Q I S S Y W K P G E A       I A I D F L P
UniRef90_E6LCD5           L L F T H F G L S G P A A L R C S S F V N Q L L E S Q P D V T V V L D C F P
UniRef90_D1PHB5           L L I T H W G M S G P A I L K L S S H A A R Y L H E N N Y Q   I K I S V N W V H
UniRef90_F7S140           M L F T H R G L S G P A M L Q I S S F W Q P G E       T V A V N L L P
UniRef90_UPI00036B61B1    A L L T H R G L S G P A I L Q I S S Y W R H G E S       I G L D F F P
UniRef90_B0UVK5           L L F T H R G I S G P A I L Q I S N Y W Q V N E N       I E I D L L P
UniRef90_UPI00037F7DD8    L L F T H R G I S G P A I L Q I S S Y W H P G E E       I S I N L L P
UniRef90_UPI00047B5116    V L I T H R G L S G P A I L Q I S S Y W R E G     A E I L L R L M P
UniRef90_W8RW98           M L F T H R G L S G P A V L Q I S S Y W R E G D S     L S V C L R P
UniRef90_N9XKM2           V L F T D Y G I S G P P I L Q V S S T A S R A L N K G H   E V I I E V D S M P
UniRef90_UPI00046852AC    M L F T H R G L S G P A I L Q A S S Y W R E G E       T V T L D I L P
UniRef90_UPI0002260567    M L F T H K G L S G P A I L Q I S S F W K P G Q S       I R I D L L P
UniRef90_UPI0003B4BA46    L L F T H R G L S G P V I L Q I S S H W Q P G Q       T I F I D L L P
UniRef90_G4D6P6           M L F T H N G I S G P V L L R M S S L I N R     K N N I K L F L D L K P
UniRef90_W6N5Z6           L L F T D Y G I S G P P I L Q I S G I A S R N L     I N K K E V S L N I D L F P
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                              90             100            110            120
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UniRef90_E4KXR2         A L T S D K L D K R I L R D F D E N Q N K N L E N V M K N L L P R D L I P Y V L
UniRef90_UPI0002559E9A  Q L D       L D A W L K E Q R Q Q R P K A E L R T L M A Q H M T K R L A Q T L C
UniRef90_C9QC09         E A D I D E L L Q R S L E       K H P N Q S L K N T L A K V L P K R L V E V L L
UniRef90_E1X402         T E N S D D L I S Y     K K S H P K R S I D T F L K S R L P K K F V E Y W C
UniRef90_R7I9D8         G L T A Q Q L D T R L Q R E L A E D S R R Q L R N V L P H L L P A S F A E I F P
UniRef90_K9YSC3         S E N L E T I K Q Q L M A Q K E Q T P R R Q V V S F S P V S I P R R L W E K L A
UniRef90_UPI000471C2F3  E L Q L D       K E L V E A K A A S R R Q L G N E F A A R L P Q R L A A A W L
UniRef90_R5T4H8         V M D K Q E L F H F L T E R V R R L G Y R P G E E F L N G V L N K K L H Q V L L
UniRef90_R5XEM0         A L D E D K L D K R I Q K D F Q K Y A N K N F E N S L N D L L P K Q L I P T I V
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UniRef90_UPI000427558B  E N T E N S V R E E F A N Q K K L H P K K V I Q S N A M L G I P S R L W K K L C
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UniRef90_L8MYG4         K L K A E E V K Q I L L N A K T E Q P K K F I S N Y C P V D V S L R L W E Y L L
UniRef90_D8ML09         E R       E L G T F I N E E R E G H A N Q S L K N T L A K V L P R R L V D S   L
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UniRef90_UPI00047ADDEF  N Y S P E E L R L F L E N H L G T F S Y R S I F D C F I G L I N K K L I P V L L
UniRef90_UPI00047DAD15  G Y S E M E I L E V L K E M K F S N S K Q L V A K R A Q L D L P K R L W Q S N V
UniRef90_L9U781         N       E N V A E S L R H A R Q E T P K R Q L S T W L G E R F P K R F A Q A L L
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UniRef90_D3I1V9         E G T V A D V E A A L A R L L A D N H A K Q L S S V H P E G L T S R V W L F L L
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UniRef90_V4NM00         G T D T F E A L Q T H R K D R P     K Q T L G N A F A E F L P R R L S D R I L
UniRef90_UPI000234F272  D I H I E D V K R I L F Q H Q H D Q H A K N K V N N S F P F G M V K R F W R F L L
UniRef90_B9XMX6         E V N V K E L L     L R S R Q S A K E L K N L L A E H L P Q R F T Q E W C
UniRef90_A4EJN6         T D N L A K L Q N Q R Q S G G R K A L T T V L S Q H L P A R L V D H L S
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UniRef90_A0A017HN83     G T D       W A Q A L R E A K R E A P K Q S P K T A L A R H L P A R L A D H L A
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UniRef90_F6DRP9         E R T A R N L E E D L Q Q C I S A A A K S V K N L I S S L P E R L V K L L L
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UniRef90_UPI000234F272    E Q E S L D G D M H W A T I P K N H L N A I A L Q L K Q W M F E V V G K G Q F K
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UniRef90_A4EJN6           A E L K L S G N I A D Q S D A K L N Q L C E N L S D W T L T P A G S E G Y R
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UniRef90_A0A017HN83       S E L H L S G N L A G L S D A R L D A L A R S L S D W R L K P T G T E G Y R
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UniRef90_W7QBV2	L L F T H R G L S G P G M L Q I S S Y W L P G D E L E I D L L P
UniRef90_E4R8F9	L L F T H R G L S G P A I L Q I S S F W E A G D T V E I N L L P
UniRef90_A1WWP6	L L I T H H G L S G P A A L Q A S S Y W Q P E V P L S L D W L P
UniRef90_M8K521	M I F T H F G V S G P G V L K L S S Y I N K A L N D G E V E I K L D F M S
UniRef90_UPI0003B4C60E	L L I T H W G M S G P G I L K L S A W G A R I L A E K K Y Q F A I S V N W L N
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UniRef90_A0A037ZLU6	M L F T H R G L S G P A I L Q I S S F W R E G E A I T V D L M P
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UniRef90_T3GSP5	M L F A H F G I T G P C V L I M S S Y I N K L I E K E K V E L N I D F L P
UniRef90_T0PMY1	I L F T D Y G I S G P P I L Q L S R I A S K G I Q N N K S I S L K V D M M D
UniRef90_UPI00036EB347	M L F T H R G I S G P A I L Q I S N Y W H P G E E V E I D L F P
UniRef90_UPI000237A070	L L F T H R G L S G P S V L Q L S S Y W R E G E V I R V N L I P
UniRef90_I4ACK0	I L F T E Y G I S G P P I F Q L S R T A A E K L R M K N E V W L K V V L L P
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UniRef90_I4YV42	M L F T H R G L S G P A L L Q I S S Y W R E G D E I V L S M L P
UniRef90_Q2G7U9	A L F T H R G L S G P A M L Q V S S Y W Q H R T P I A V D F L P
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UniRef90_UPI000366D58F	A F F T R E G I G G P I I L D L S A V V R D A L K Q G V V S L S L D L K P
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UniRef90_M5DFX1	L L F T H R G L S G P A I L Q V S S Y W P G V T I H I H P
UniRef90_N2ABJ6	I Q L T G Y G I S G I P V F Q V S G A A A A A L H E R K S V K A V L D F M P
UniRef90_U7G383	M L V T H R G L S G P A M L Q V S S Y W Q P G D E L H I N L L P
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UniRef90_G8R5U0	I L I T H W G F S A P A V I K L S A W A A I D L F D K S Y Q F P I L I N W I
UniRef90_S6GJ66	M L F T H R G I S G P V M L Q A S S Y W K S G E F I S I N L F P
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UniRef90_K6YAY6	I L F T H R G L S G P A V L Q I S S F W Q P G E H V E F D L F P
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UniRef90_J9Z2M3	M L F T H R G L S G P S I L Q I S S Y W K L K H E I Q I N L S P
UniRef90_R6XQG7	V Q I T A Y G L S G I P I F Q I S R C A A K A L Y Y H K N A V V H I D L I P
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UniRef90_H2BRU6          N F T S E E I L E K L T A L K F D H A K Q Q T S K Y A Q F E L P K R L W Q S L V
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UniRef90_M8K521          D K S K E E L S E I I R         S N P N K T A L N N L K G I L P Q N F L K E I F
UniRef90_UPI0003B4C60E   D T D L A E A E L L L K S L K Q E H S K K I I S K K S P F D F P N R L W E K L V
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UniRef90_I4YV42          G V N       L F E E L R A A R A Q N G R Q A L Q T A L S A F L P K R L A Q L V A
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UniRef90_A1U2G0          G Q P I Q E         D L L A L R K Q K P Q S T L A Q Y L N Q H L P K R F A Q A F N
UniRef90_UPI000366D58F   A L D S E T F D R R L Q R E F A E N A N R N F A N S L D G L L P K A L I P I F L
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UniRef90_F0Z1C2        P S L V Q L K C R E N F   Y K S V S G V R V G S V S I Y V G E C Q A K D T G E
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UniRef90_S2VKY4        P S L F T F A S K D T F V   E G L A G V S   K Q V G V K L L D S Q G T L I G A
UniRef90_D6YUR7        P S L F T F N V P E F P L E H F A G V S V T P A K I A I Q G T K L E Q T G P
UniRef90_D1VSI3          A L C G A L T N E P L     D L S G L S K N V E L S E G K L I A K E F G E
UniRef90_R7LHQ5                        M G T V V E N A T T T L C G T K L K A G G P
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UniRef90_D5ARI6        P G L V P L T F A E D L A R T A P L A G I G L P   A R V S L G K R S L E E D
UniRef90_W8VZX7        P S L F T F N I V D K A I   T E L A G I A L E   A R V E I P Q L K L E S Q G P
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UniRef90_W8VZX7           L L I T H W G F S G P A I L K M S A W G A V E L N S S G Y K   F D L V I N W L N
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UniRef90_W6TT41           I L F T H W G L S G P A I L Q I S S Y W R R G E E             I N I D L L P
UniRef90_E7GSW9           I Q L T D Y G I S G I P V F Q V S R Y A S R A I D R G   E K V T A V L D F Y P
UniRef90_R6RUK6           L Q L T D Y G I S G I P V F Q V S R Y A S E A L D R   K K R V L A V L D F F P
UniRef90_Q8DVS5           L L F T H F G L S G P A A L R L S T F I Q G G E T A Y           L D L L P
UniRef90_H1YB41           I L F T H W G L S G P A I L Q I S S Y W R P G Q         W I E L D M L P
UniRef90_W0BHE8           I L F T H W G L S G P A I L Q I S S Y W N P G E         Y V V I N L L P
UniRef90_R4YKY6           M L F T H R G L S G P A V L Q I S S Y W Q A G Q           P L T I N L L P
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                                          90            100           110           120
UniRef90_E4TC48          G I S P N D A E T L I Q E F K Q N H P K K T L S Q G K P F E V T N R F W Q S V L
UniRef90_UPI0003C7DF89   K L N V Y D L L E E K R K L         N P K F D I L N I V S E I L P K R L A Q I I C
UniRef90_M4VH78              Q A D V W A W L K D Q R K K Q P K S M L H T V L G D I L S K R L A Q K I A
UniRef90_A5VCX9          G A D A A A L L I A A K Q A R P     K A E P R T I L R E H F P D R L A D V L A
UniRef90_H2FZI3          A G S L A Q A V A         E S P N Q E L K T W L A R H L P K R L V E A L L
UniRef90_W2UII9          N Q G L E E A L E E L K L V K A N N G K K L V V N I K P F E I L P K R L W F S L L
UniRef90_UPI000369F50B       E E D L L E K L R L E R A N K P N V Q L K N F I A T C F A R R F A E T L L
UniRef90_U2ZBC6          G     A E V F E T L K A A R A E N G R Q A V H T A L G R I I P A R L A E S I A
UniRef90_B0T8G8          G V D     V F A V L K A A R T A T P K R A L A T V L S E M L P K R L A Q L I A
UniRef90_F4GQZ6          Q Q D L E         H E L L A A K Q G G R Q Q L S T V L A S L W P K R L A E Q W L
UniRef90_UPI000477464C   K I N V A E     E L T K A H E R P K A T I A N L L S D F L P K R F S Q H I V
UniRef90_UPI000374F069   N L D     L Y A E L I N S Q Q S R P D L A L K T L L S Q Q L P K R V V E C L L
UniRef90_W1PW00          N L H F D         N K Q K V H N S S P P Q G L V K R F W N Y L L
UniRef90_R5IVT8          G W D D N E S F R L L K K R A L L L A Y K P A E E L F T G M L N R K L A Q A L L
UniRef90_R6EHY6          D M T E E S Y E N M K K T R R M L Q E K R T A E E F F T G I L N K K L M S V F L
UniRef90_UPI0004634C30   E I N     V A A E L V A A K R Q N P R Q Q I A T A L G D L L P K R L A A Y F A
UniRef90_UPI0003757883   G T D A     Y D S L V Q A R H E T P R R Q L S T W L A E R L P K R L A Q A L V
UniRef90_UPI0004674770       E G T L Y E R L R A A R A T S G R R N L T T V L A H H L P A R L V D H L A
UniRef90_UPI0003B79042   D D N A G D     W L L T A K Q Q H P R S L L R S V L A Q K L S K G L V A E L Q
UniRef90_F5SNM3          N V D I S D L     L L E A K A N H P K Q L I R S V L T E Y F P K K L L L A L Q
UniRef90_U2FJR6          N E T N L S I I D E I K S R R Q E S P N K K I K N V L S N L S Q S R Y L E F L Y
UniRef90_F3B945          E F T G E E L T L F F E K R I R Q N G E K K A G E F L V G L L N K K L V P I L L
UniRef90_UPI0002559085   G A D P     F A T L R R L R A E A G R R S L L R S L D A L M P A R L A D F L G
UniRef90_Q0A7W6          D T D     L A G H L E A M R E R P R L T L K K L L G E Q L T R R V A Q R W C
UniRef90_Q1GS29          D A A P G W L     L G A K R A R P R A T L A S A L A     L P D R L A Q T L A
UniRef90_I4AMI5          D T P K N A L     K I L K A H R E E W R K K Q I G T L C P F E I P N R L W R K L I
UniRef90_F0Z1C2          D F T E E Q F L A F L Q N R I A A R P M K T A E E F F V G L F H K K L S E L W L
UniRef90_R6PEY8          E D D D N E F C I L M E E R K R Q H A D R T A E D F F V G I F N R K L S E L F L
UniRef90_G0L395          E Y N F E G L M G L F S E I K E I A K K T V L R T K A V E V P R R L W T N L V
UniRef90_S2VKY4          E V D E Q D A L S I L Q E E K Q Q H P R K E L Q N H C P F S L A K K L W N K L L
UniRef90_D6YUR7          E F S I Q K F K E E H         S S H P K K L L R Q A N P P S L P K K L W C A L L
UniRef90_D1VSI3          G L T Y D E L D K R I L R D F D K F P N K D I R N A L I N L L P R D L I F Y V L
UniRef90_R7LHQ5          G L K E N E V K D L L I D L A Q Q H S S K Q L Q S V Y P E V L N A R L W H F L L
UniRef90_H5T7K4          G     D D F G A F L N E S I S T Q P N V S L K N L L A T K F A K R F A E T F I
UniRef90_T0I573          D R A E G W L R E     A K R E R P R T S L R K V L G E G L P E R L V D V L C
UniRef90_UPI0002001C46   G R S Q Q Q L E E L F A A C R R D Q A K R Q L S N A R P W P L S R R L W Q H L L
UniRef90_R5B962          D S G E E D V R G M I T S L S K D N S Q K L I Q N T H P S E L P S R L W S Y L T
UniRef90_Q2BI86          E F D     L L S W L K E Q R E A R P K A E I T T I M A Q Q M S K R V A Q V L C
UniRef90_K5XXW2          G Q N L E E A L P A A K R S R A K A G L K A     V L G E I L P A R L A A H L A
UniRef90_Q3A2W6          A L D E Q K L D R R L L R D I D A R G K E P L D S L L R G L L P R Q M V P V C L
UniRef90_D3F967          D R D A L E W L Q A Q Q A A R P     N S E L K T V L A E V F T K K M A A L L T
UniRef90_UPI0004055420   D F D I T E L     L L T H K K Q H P K Q L I R T V L S E N L P K K L L V A L Q
UniRef90_H0A3A5          G Q D P A A L     L L A G K K A R P R A E A R T V L A E F L P Q R L A Q A L A
UniRef90_Q0FYG7          D R D A A E     R L K A A K R A M P K A G L K A A L S E L L P N R L A D A L A
UniRef90_C6X360          G I E T E E A A E I F T Q Y R R Q N P K K T I G A S K I F D V T T R F W H R I L
UniRef90_K2FMM0          Y L T F E Q L D E I V R T D F E R N A D K K L A N C L A D V F S P K L L D F L L
UniRef90_UPI0002DA179A   D Y S K D G L I D F L E S H F A M F S H R S I S E N L V G I I N K K L I P I I L
UniRef90_Q26FU0          H I S R Q D C Y E T L V A Q R S S     K R Q V G N E W L F D L P K R L W K F L V
UniRef90_Q0FT08          G     Q D L A A A L K T A R S E N G R R A V T T A L G H L L P K L V A H L S
UniRef90_M1Z616          R K T E E E L Y N Y L I Y R F G F M A K K T I E I G L I L N K K L I L P I L
UniRef90_N8ZT39          S T D     L H A L F K Q K K N T Q P K V L L R T I L S E M Y P K S V I T E L Q
UniRef90_L0WDY3          A V     A D P R A A L I D E R Q Q H P N R S L E R W L R Q Y F S Q R L A A A L V
UniRef90_A9E2Y7              E G T L L G A L R D Q R Q Q S G R R N F T T I L A Q H L P S R L V E Y L G
UniRef90_UPI0003B3A5FC   Q T D A G     A H L R E M R G Q A G R I A I R T A L A Q I L P E R L A R Y I E
UniRef90_W1ERM8          D V D L E T     F L N E Q R N A H P N Q S L K N T L A V H L P K R L V E R L Q
UniRef90_E1YE34          A L D E K K L D A R L Q R D I D S R G K E Q I G S L L R G L I P R E M V P V C L
UniRef90_W8TFS8          G M D E A E L S     R E I R K N P N K S I A N N I K E V I P Q S F A R C L L
UniRef90_D5ARI6          G R D     I A A E L R A E T G R I A L H T A L G R L L P D K L A A L A V
UniRef90_W8VZX7          H L S T D D C Y E M L L A K R D D S     K K Q I S N D R L Y E I P K R L W S Y L V
UniRef90_UPI00026C81C5   E I D     L L D Y L K K V R K E K P Q K Q L N S I L S L H L P K R V I E Q F I
UniRef90_UPI00035FB726   Q T D     L V A Y L V S Q Q Q A H P E Q E V K T A L L G L L P K R L V E K L L
UniRef90_UPI000360DC2E   R P T N K I V N V L N L K K Q P K Q V I V R S P F E E I P K R L W E R F V
UniRef90_A4AA27          D C D A G     A W L L D A R E R N P Q Q R L M T V L K T Q L P N R L V D L M F
UniRef90_W6SER7          E W S R E K L S     K Q M K S N L N K S L I N N L K G I L P Q N F L K E I L
UniRef90_UPI00036D9A17   E V D     L S S A L R E L R G Q G G R V A P G T A L A R W L P A R L A E A I C
UniRef90_A3VDT8              P G L L D T L K A Q R Q T Q G R H A L T T E L S R H L P A R L V E F L A
UniRef90_B1ZSU3          P H T R E S L S S E L A R V R A A N P K K H I A T W S P L P M P Q R L W E R L V
UniRef90_UPI000475DA3B   N R T V E E V T R F L E T N W G L F A H R T V A E S F I G F L H K K L V N V L L
UniRef90_UPI00036E9907   A M R P V D V E E Q L E D L K Q T E A I R Q I A A R A Y L D L P I R L W K S L V
UniRef90_Q4FMS6          K L D V D     K F L N D R K I S S P K Q D I G I I V S E L P K R L A H I I C
UniRef90_Q1YJA2          V K D A A E M L R A A K R R M P R A H M K A     A L A E R L P N R L A D A L A
UniRef90_S6D800          G     Q D L A A L L M G L K K A G S K A K A P A A L A R W L P Q R L A A A L A
UniRef90_M1WM82          Q K S V A D L V E T H R T     N N S R F R N L L A R E L P K R L V P Y L V
UniRef90_R6MNR5          E Y S E D E L Y N M I S V R M Y Q N P K L T L E N F F V G I F N K R V G Q A L L
UniRef90_UPI0004777E97   T L N Q E E T L L I L Q E T K E K Q A R K M L Q N T P L F Q L P K R L W G N L L
UniRef90_UPI00047DB227   S Y Y E G S I I N K L Q Q I K E L E G K K T V L R T K C F D L P K R L W S S L V
UniRef90_E6QXG4          H L D V G A W L N     A Q R H S K L T L A A L L S E H L P K R F A Q E W C
UniRef90_A4CJ45          E Y H K G S L P D F L E Q V R Q A D G P R L V S R S R A S G L P S R L W A R L V
UniRef90_M2W3S8          D I H V E Q V N S I L M E K K L Y W K T K Q V T T V C P F R L S K N L W R N I V
UniRef90_D5RIJ6          G R D A     A A L L L A A K Q A R P R A A A R T V L A E L L P Q R L G H A L A
UniRef90_W5QTB2          S K     E N E V Q E Q L A T M R Q Q H A Q K Q L T A I R P F D L P Q R L W T Y L T
UniRef90_A2BY82          D L E Y K E L K E K I D N L K F N Q L K L I N L R P L P L P K R L W V F L L
UniRef90_UPI0002DEFC68   K L S Y S D L N E N L N Q L R Q F N G K S N L Y N S R P P Y I T K R L W I F L L
UniRef90_UPI0004158EDC   G     E S L E Q G L R A A R E D T P K R Q L R V L G E W L T R R V A R H W L
UniRef90_G2EAE9              Q T P E D C L V Q L K E L K Q Q L A K K T V Y K S A Q L E L P K R L W R K L V
UniRef90_W6TT41          G K D I T H L I E     E E R R M N G K S L L S T L F N R F Y P K K L T D A M S
UniRef90_E7GSW9          D A T F E K T R R M M E G R K L S C S S K P M E D F F T G W F H K K L A A L F I
UniRef90_R6RUK6          S L K D E E L F L L L K E Q R M Y L S D R K A E G I F H K K L A A L F L
UniRef90_Q8DVS5          Q L T K E A L     L K K I E T T R E K S L K N A L K T F L P E R L A A F L S
UniRef90_H1YB41          H Q N V L E L I E     A E R L Q N G K R P L G G L L A S L Y T R K F A E A L A
UniRef90_W0BHE8          K V N     L F E E L V A A R V A M P Q K Q L N S F L S M F L P R V V D L F I
UniRef90_R4YKY6          D I D L A Q V L R E T Q H E R P     K L S L K K F I A Q W L T Q K M S E Q L V
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                              130           140           150           160
UniRef90_E4TC48          A V S R I N S E K Q W A H L S A K E T Q T I T E N L C K K K L S V T G K S T F K
UniRef90_UPI0003C7DF89   S E N K V N G N     I S E L S N K I L K Q L S E N I N S W L I N P T G S E G Y R
UniRef90_M4VH78          E D V A V D G     R M A D L S D K L M T V A T R I S D W R V K P S G S E G Y R
UniRef90_A5VCX9          D R L G L S G P M L G H     K D Q A L A T A G R R L N G W P F T P N G S E G F A
UniRef90_H2FZI3          A R G E L S   S K P L K Q Y T P R E L A T V E A L L A A W P L Q P G G T E G Y R
UniRef90_W2UII9          N A S G I T D Q M R W A E V S K Q Q L M T L A S Q L T Q S V Y D V D G K S T F K
UniRef90_UPI000369F50B   S V L N L   P N V P L K Q L N D Q V N D I A E Q L H H W R I Q P A G T E G Y R
UniRef90_U2ZBC6          L R E G L A G N     L A D Q P D K A L R R L D Q A V N A W T V K P V G S E G Y R
UniRef90_B0T8G8          E D A G A Y S N     L A D C S D V L L R G V A A T V N A W T F K P V G S E G Y R
UniRef90_F4GQZ6          A H A D I A E A R R L A D V P D R L L R Q L A A Q I H G W S L T P S G S A G Y K
UniRef90_UPI000477464C   E H L G M R E Q K     L A D L S K K T I Q I C E D Y L H R H P F M P G G T E G Y R
UniRef90_UPI000374F069   A A A E I     E S L P L K Q Y N E K Q L K Q V S E L F H H W S P Q I N G T E G Y R
UniRef90_W1PW00          D R E G I D G D V M W A C I S N H T L I S I A S L L K H C N F K V N G K G K F K
UniRef90_R5IVT8          K L A G I D P N T S C G S L T G K Q L E K I R K E L K E Y E A V V M S V N P F A
UniRef90_R6EHY6          K I A G I K P T T P A V E I P E D K I N T F Y E L C R C F R L H I T E S N P Y E
UniRef90_UPI0004634C30   Q T N G W S G     P L G E T S D K K L T E I G Q L I Q G W E I F P I G S E G Y R
UniRef90_UPI0003757883   E W H G     S E G I L A E Q S N R E L E A W S E R L G Q W R I K P A G T E G W R
UniRef90_UPI0004674770   P S L G L A G N     L A D Q P D T R L A Q I V G A L T E W R L K P T A T E G Y R
UniRef90_UPI0003B79042   P L W W A H S E T P L A E F S D K A L R N I G E Q L N Q W R L K P S G T E G Y R
UniRef90_F5SNM3          D L H W S E R D K E L A N I K D E N L I A I G D K I N N W T I K P S G T E G Y R
UniRef90_U2FJR6          E H L T I N Q E Q K I A N M S N N Q I D D F V Q A L K G L V I N I H D V R P I K
UniRef90_F3B945          R A S G V R E R T L I S E V E K E R L E R L I D K C K G F E I E I T E T N S F E
UniRef90_UPI0002559085   V E W G L S G N     L A D Q S D K A L G A L A E R L T D W R L L P S G S E G Y R
UniRef90_Q0A7W6          E L W L     P D R R L E Q L T G E D I R R L Q Q A C Q P W T V W P D G T E G Y R
UniRef90_Q1GS29          D R L A L P G E     L G A Q T D R K L A D A E A R L K R W T F R P N G T E G F A
UniRef90_I4AMI5          E A A Q I D S K T N W A S L S N K E L E S L A N E L T K G I F H V N G K S T H K
UniRef90_F0Z1C2          K L A H L D R T R P V G E W T K E E I Q N L T N L I Q H F F T E V T E T N S F E
UniRef90_R6PEY8          K Q A Y I P L H I K A S E I R S D K W E K L F S L C K H F Q V E I E E T N P F E
UniRef90_G0L395          R A S D I S E T D K W A D I T K S Q L E K L A R Q L T E C E L K I D G K S T F K
UniRef90_S2VKY4          E R A G V L P H Q L W A E L N K G Q L H A L A K E L T A S T F S I E D K A P F K
UniRef90_D6YUR7          K K A G V G D E T V F A G F G K E K S A A L A Q V L S K D L Y N V R G K T T N K
UniRef90_D1VSI3          K K S N I S S Y K K V N Q I T G Q E R D R L K S S I K K F D L D Y K C L E D I N
UniRef90_R7LHQ5          A E A G L D P T R R W A G M N D K S L S R L A A K L T N H Q L P V E G K N R F K
UniRef90_H5T7K4          D L H K F     E N V P I K Q L S H K E Q A R L V D L V H N W N I R P D G T E G Y R
UniRef90_T0I573          A R L G L S G E     L G A L S D K A L A A A E A T L A R W P F V P D G S E G F A
UniRef90_UPI0002001C46   D Q Q G V E P D R R W A D L A K R Q Q L G L L E A L R R S R F P V A G R G P F G
UniRef90_R5B962          A K S G V R V D A R W A E L G S K G M N R L V N T L I N D E Y Q I R G K S R F K
UniRef90_Q2BI86          Q M F G F S G     I M G N H S N K D L E A I N K A F R E W K V K P S G T E G Y R
UniRef90_K5XXW2          A     P Y P G N L A D L P D K A L R A L G A G L H Q F A F Q P S G T E G F A
UniRef90_Q3A2W6          D L V D L P A K R T A A T L N A K E R Q R L R L W I K D F R L D V T G F R P F S
UniRef90_D3F967          D R W F     T S Q P M K Q Y A P A G L R D I A D K L G A W Q V V P A G T E G Y R
UniRef90_UPI0004055420   T M L W E D K E I E L A N I K D E R L T Q I G Q A I N G W Q L K P S G T E G Y R
UniRef90_H0A3A5          E A F L     P P V E M A N Q P D K G L R A L A E R L R A M S L T P S G T E G Y A
UniRef90_Q0FYG7          G R I G L     E K R L G D C A D A E L E H A A E S L T A L T F R P S G T E G Y A
UniRef90_C6X360          W I S K I N L D K N I S T L T S K E V Q S M L G G L C A N E M K V T G K S T Y K
UniRef90_K2FMM0          R Y S G L D L E K H A A K I S R K E R H L L V N L F K N L E M N F D G L F G F E
UniRef90_UPI0002DA179A   K E A G V D I H S I T Y N V T Y D I R Y K L Y N L L K E W D F S V C G T N S F D
UniRef90_Q26FU0          A S M N L T     E K N W A D C S N N D L Q N L A T I L T A S T F S I N G K S T F K
UniRef90_Q0FT08          E S L P L A G N     L A D L S D R R I A E L A E A L Q G W H L R P Q G T E G W R
UniRef90_M1Z616          K E L G I N K N K Q I A H L S N D E V S R L S K I L T D W R F K I S G S K S F K
UniRef90_N8ZT39          Q L I W S D A E T A I G Q L S D E K L K T I A E R L H A F E L K P S G T E G Y R
UniRef90_L0WDY3          A Q F G W Q G N     L Q Q F S N D R L G D V A A T L K G W Q F K P S G T E G Y R
UniRef90_A9E2Y7          Q E F D L S G N     L A D W S D A R L T N F V D A L Q N W Q L H P G G T E G Y R
UniRef90_UPI0003B3A5FC   D I S A T T G N     L A D Q S N A T L D R I A G L V H G L E M R P V G T E G Y R
UniRef90_W1ERM8          Q L G Q I     P D V S L K Q L N V R D Q Q A L I S T L T D W R V Q P N G T E G Y R
UniRef90_E1YE34          D L T R I C G E H P A S G I S A K E R V R L R T W L K D F R L E V S G C R P F A
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UniRef90_D5ARI6          A Q S G L S G     R L A D H G N A L A Q L A A Q V Q A W Q V R P V G S E G Y R
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UniRef90_G2EAE9              D  E  F  V  T
UniRef90_W6TT41              K  A  E  V
UniRef90_E7GSW9              N  A  Q  I  C
UniRef90_R6RUK6              K  A  Q  V  C
UniRef90_Q8DVS5              K  S  F  V
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UniRef90_A0A024HEV1    G L V P F T I T D P Q L K C S E L S G T S V E D C R V S C N G Q     S F V E N
UniRef90_D4CLM1        P A L C A L R C E E S F     Y R E L S G V R C D A A L L V S G R E K G R E R G E
UniRef90_U2UU79        P S L V P L L V E E G D C R F     L Q G L K L R N A G L S I R D E Y Y E S F G E
UniRef90_R5IVQ7        P S L V Q L K A D E P Y F K N W S G I R T D V K V N L L I D H K V I K N E T G E
UniRef90_UPI000471D144 P A E V P L V S N D T F I H D K T L Q G L S F K D V I S V K K I K K T I T H D
UniRef90_UPI000464F1CA P S L V G L Q T Q N T Y     N G K L Q G V K K E N V S L Y V N G N F E Q F G D
UniRef90_D1AFQ9        P A L V Q L K T E K D P V K     G L H G I K V N A K I T A Y Y K S S E G E
UniRef90_UPI000478BC54 P A L V G F T V Q K E Q F W F K N L S G V S L     N V K V L V N D K E I L     G D
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                                50            60            70          80
UniRef90_F3KPY7         L L F T H R G L S G P A V L Q I S S Y W Q E G              T P L H I D L L P
UniRef90_A0A024DGB1     L L F T H F G L S G P A A L R M S S F V          K G G E V L S L D V L P
UniRef90_UPI00031F3A0B  M L L T H R G L S G P A M L Q I S S Y W Q P G            G I L E I D L D A
UniRef90_C1F7V7         M L L T H R G L S G P A V L Q I S S Y W R P G            A S L T L D L A P
UniRef90_UPI000475F7CD  I L F T H R G L S G P G I L Q I S S F W E P G N D          I H V Q L M P
UniRef90_UPI0003B686A8  M L F T H F G F S G P A V L N M S R H W I R H Q A A K T M S D A R L S V N F L P
UniRef90_D9R196         L Q F T D Y G I S G I P V F Q I S R Y A V R G I D A G      Q Q V T A E L D F L P
UniRef90_UPI000255B0D6  V L I A H W G L T G P A I L R L S A W G A L V L N Q M N Y Q    F T I Q I N W L P
UniRef90_A4AU19         L L I T H W G L S G P A I L K L S A W G A I L L N D F K Y H    F P I R I N W L P
UniRef90_T2KRR8         L L V T H W G L S A P A I L K L S A F G A L E L A K R D Y K    F E V E V N F V K
UniRef90_N9WGA9         M I F T H F G I S G P G V L K L S Y I N K A L E        N D D I T L T L D F L S
UniRef90_F2JYX9         M L F T H R G V S G P A I L Q I T N F W Q P G E          P L K I H I A P
UniRef90_UPI00035DE212  L L I T H W G L S G P C I L K L S A W G A R T F Y      G L N H Q F Q M R I N W L P
UniRef90_A3SX48         L L F T H R G L S G P A V L Q A S S Y W T E G            A P I T V N L L P
UniRef90_G5JRC2         L L F T H F G L S G P A A Q R L S S F V S G G E V A H
UniRef90_A0A059DVV3     M L F T H R G L S G P A I L Q V S S Y W H P G E A        V M L T L L P
UniRef90_UPI0004717FFE  L L F T H R G L S G P A L L Q I S S F W R A G Q          P I S L D L V P
UniRef90_U4T142         V L F T H R G L S G P A M L Q L S N Y W Q T G E          I I S I N L L P
UniRef90_F7JIV2         I Q L T N Y G I S G I P V F Q V S R F A A K A L Y E    K K P V K A V L N F M P
UniRef90_H6L5Y7         L L I T H W G L S G P G L R L S A W G A R K L F D L D Y R  F N L R V N W L G
UniRef90_I0ID66         T L V T H R G L S G P A P M D L S R H I E A A R R S E P G G R L R V Q I G F W P
UniRef90_UPI00036C0574  L L F T H F G L S G P A A L R I S S F V R G G E          T I F I D F L P
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UniRef90_D5BQI6         L L F T H R G L S G P S I L Q I S S Y W D V G Q          T L S V N L A P
UniRef90_E4SRE6         L L F T H F G L S G P A A L R L S S F V          K G G E I A H L D F L P
UniRef90_M2ZV33         L L F T H R G L S G P A V L Q I S S Y W L T G Q S        I M V D L L P
UniRef90_S8DMM1         M L V T H W G F S G P V I L R L S A W G A R E L S S S G Y K G A  L L V D F V P
UniRef90_L8UFX6         M L F T H R G L S G P A I L Q I S N Y W Q P G E S        I H L D L L P
UniRef90_M1FGS8         M L V T H R G L S G P S M L Q I S S F W Q P G D E        L Y I N L L P
UniRef90_A6VYE5         M L F T H R G V S G P S I L Q I T N F W Q P G E          V L N I N I A P
UniRef90_K5CBH8         I L I T H W G L S G P A A L R L S A W E A R N L F E E S Y K    V D L S I N W I G
UniRef90_D1B046         L L F T A Y G L S G S A I L E I S R K V S        L A S V R G E K V H V L D L M P
UniRef90_M5UBY2         W L F T H F G F S G P A A M D V S G V M T A C E S I R D R R    L Q L D L V P
UniRef90_A5FP72         L M I T H F G L G G P L T M L M G L P V A E A L E Q      G A V S V A I D L K P
UniRef90_T0DSQ1         M I F T H F G I S G P G V L K F S S Y I N K A L D      N G N V E L S L D F L P
UniRef90_S7V755         I L I T H W G I S G P A V L K L S A F G A A W L H E N H Y E A T A L    I K W Q E
UniRef90_UPI000365F821  L L I T H W G M S G P A I L K L S A F G A R I L A E K K Y Q    Y N V E V N W L S
UniRef90_R6CD46         M Q F T D Y G I S G I V T F Q L S R L A S Y A V A A G K K T E A Y      I D L F P
UniRef90_UPI00037320A1  I L F T H R G L S G P S V L Q A S S Y W Q P G            G P L E I D L F P
UniRef90_W0AG78         A L L T H R G L S G P A I L Q I S S Y W R H G E          P I L L D F L P
UniRef90_E6WZR5         L L F A H R G I S G P A V L N A S L W W E R G E          I S I D F L P
UniRef90_V2USG6         L L F T H R G L S G P S S L Q L S N Y W Q V G E S        F Q I N F F P
UniRef90_K2BP05         F V F T H K G V S G P A V F A L S S M T A        F D N P T Q L T I D F A P
UniRef90_G9QVX3         L L F T H R G I S G P A I L N A S L F W Q K G            R I C I N F L P
UniRef90_F5WU52         L L F T H F G I S G P A A L R A S F Y V M R I L D K      E N P V N L S I D F L P
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UniRef90_UPI00036C8B54  I L F T H K G L S G P G I L Q A S N Y W Q L G E A        I E V N L L P
UniRef90_E0NMH9         I L F T D Y G I S G P P I L D L S R Y V S E G D Y K L      R F S I V N D L M T
UniRef90_F2JR18         L L F T H K G L S G P A I I N S S R W M K S G D A        L Q V N F L Y
UniRef90_J0S0J9         L L L T H N G L S G P V I L N A S R F I L P G D E        V R V S F L P
UniRef90_F0JGE8         L L F T H R G I S G P A V L Q A S S Y W R E            R P V A I D F L P
UniRef90_R6V5X5         L Q L T E Y G I S G I P V F Q I S A C V A R N L S E N G Q G S V    V L D F M P
UniRef90_R6LWG2         L Q L V S T G I S G I P V F Q I S R Y I S R Q L E K      T K R A Y I E A D F L T
UniRef90_V2TSQ2         L L F T H R G L S G P S A L Q V S N Y W Q H G E S        L T I N F F P
UniRef90_UPI00035CF1EB  I L F T H R G I S G P V I L Q V S L H G D S              L K I N L L P
UniRef90_H0UIR8         M D F A P F G V T G A T A M D M A A R I G E L L      P Q G K L R L R I D L K P
UniRef90_UPI0003B39090  M L F T H R G L S G P A I L Q A S S Y W H P G E A        I T L E Y L P
UniRef90_R7R7P6         L Q L T D Y G I S G I P V F Q F S R I A A R A L S E Q      R Q C Q V K I D F L P
UniRef90_A3CY60         L L L T H T G L S G P G I L D L S R S I R P R D E        L K R V T F L P
UniRef90_F2I9M6         L L I T H W G M S G P A V L K S A F G A R I L E G K G Y N S    Q I S V N W T G
UniRef90_E4TWA5         I L F A A Y G I S G L A I L D I S Q K A S Y A L      L N K Q R V S I S L N L L P
UniRef90_U2VKD4         L L I T H K G L S G P A A L T L S S Y A A R Y L A D C R Y R S    P L Q I N W V G
UniRef90_UPI00047C944B  I L L T H K H I S G P G I L N F S R Y V N P N D          V I K I N F I G
UniRef90_A5EX33         M L F T H R G L S G P A I L Q I S S Y W Q K G            A A L E L N F L P
UniRef90_A3TZB5         L L F T H R G L S G P S V L Q V S S Y W R E G E A        V A F D L L P
UniRef90_R7QVQ8         V Q L T D Y G I S G I P V F Q V S R F A A K A L A A G      K E V C A Y L D F F P
UniRef90_K2B783         L V F T H Q G I S G P A V F A L S A Q V A F E Q Y      N R A Q P L P V L I D F L P
UniRef90_UPI00046FC30A  M V F T H R G I S G P A I L Q I S S Y Q N G P L D A P        L I D M M P
UniRef90_A0A023D558     M V F T H R G I S G P A I L Q I S S Y          R S G D G P P L E L L P
UniRef90_E0UTU5         L I F T N S G I R G P V V L D F A R E V T P L L K K      Y G E V P L L L N L T K
UniRef90_U2ER40         L L F T H R G L S G P A M L Q V S S Y W Q P G D          T V A I D W F A
UniRef90_I2K9Q1         L L F A H K G V S G P A V L D A S L Y W E K G            K I E I D F L P
UniRef90_J3CXT7         L L F T H R G L S G P A I L Q I S S F W R E G Q          P I H I N L A P
UniRef90_UPI00046E5211  I L F P H R G L S G P A I L Q I S S F W Q A G E          Y V S I N L L P
UniRef90_Q0FCG4         L L F T H R G L S G P S L L Q I S S Y W D Q G D E        I S V N L L R
UniRef90_UPI0003710D86  V L F T H R G L S G P A S L Q I S N Y W Q M S E          P I F M D L F P
UniRef90_T1A5N0         M L V T H R G I S G P A I L Q I S S Y W Q P G D D        L R L N L L P
UniRef90_M1A9M3         M L V T H W G L S G P V V L R L S A W G A R Y L S S S N Y K G    T L C V D F T P
UniRef90_UPI0004662EEF  L L F T H K G I S G P A V L D A S L F W R S G            P I A I D F L P
UniRef90_Q1IUN2         M L I T H R G L S G P S I L Q I S S Y W R S G E          T I T L D L A P
UniRef90_B9DVQ5         L L F T H F G L S G P A A L R L S S F V N G G E          I A E L D L L P
UniRef90_A0A024HEV1     I L F T H R G I S G P A I L Q I S S Y W Q P G D          T I S I D L L P
UniRef90_D4CLM1         L Q L T D Y G I S G I P V F Q L S R Y A S Y G I      L R G E E V F A E L D F L P
UniRef90_U2UU79         I D F L P D A L S G P I L S A S A E L T E L L H S E E A K R G L L H I D L K P
UniRef90_R5IVQ7         I Q L T N Y G I S G I C I F N L S G K A A K A L N Q N      K N V I I S I N F I P
UniRef90_UPI000471D144  L L I T H F G L S G P A A L R G S F Y V L N L L E K S      D E P I N L S I D F I P
UniRef90_UPI000464F1CA  V L F T A Y G V S G F A I L D I S Q R A V        L A L T N F S D V E L R I N F F P
UniRef90_D1AFQ9         L L F T D Y G I S G P V V F N L S Y L T A            L Y D N L I F R A D L M P
UniRef90_UPI000478BC54  L L F A H K G C S G P A I L T T S L Y W K K G            K I I I D F L P
UniRef90_Q30R66         L I F T K N G I R G P V V L D A A R D L T P L L D K      Y G E V P L L N L T K
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                                       90                    100                   110                    120
UniRef90_F3KPY7         G Q D I         A A H L A E A K Q Q S R K L L S K E L A H L L P T R L A E T W T
UniRef90_A0A024DGB1     Q L S E K D L V A F       L E E N R E K S L K N A L K T L L P E R L A E F L V
UniRef90_UPI00031F3A0B    K N E W A S H L S Q R K R L A P Q I R L K H C L E Q V L P K R V V A T L I
UniRef90_C1F7V7         R A N I T A       P L L A Q P Q R D I S K A R A A L R E H L P Q R L A D R L I
UniRef90_UPI000475F7CD  D L D L E S T L K Q W     R Q E A P N K T L E Q M L S Q S L S K R L A Q V L C
UniRef90_UPI0003B686A8  E F R E D N F R E K L A E V G R K T P S R L V K N S V S E K L P E R L S G V L M
UniRef90_D9R196         S M N I D N T R Q F L S E R V K R L G Y R R A E E F L N G V L N H K L N G I L L
UniRef90_UPI000255B0D6  D Y T S S S L L A Y F K V C R E Q E P K K T I L K S K V V D M P K R L W N S L V
UniRef90_A4AU19         D Y H K G S I F S L L M E I K E I E A K K T V L R T K A V E I P R R L W T N L V
UniRef90_T2KRR8          Q S T A A I L E Q L K Q V K L D S A K K T V F K F S Q F D L P K R L W Q Q L V
UniRef90_N9WGA9         D K S R E E I R N I I R       S N P Q K T V I N N M K G L L P Q N F L K Q I I
UniRef90_F2JYX9         E L T L E S L V       K T R E E Q P K K T V E N Y L A N E L P K R L V E L M R
UniRef90_UPI00035DE212  Q H N V E S V K S L L E D L K D S Q P K T F L Y P N P T E G I P K R L W Q S L L
UniRef90_A3SX48         D       S D L L A K L R S Q R Q T Y G R R N L T T E L S H H L P A R L V D H L S
UniRef90_G5JRC2         K L T A D E L A T L L E Q E R       E K S V R N A L K T L L P E R L A D F L T
UniRef90_A0A059DVV3     G T D       I A G Q K E I K R D R P M Q A L A T A L E G F F A K R L A D L I L
UniRef90_UPI0004717FFE  G       Q D M G A A L A R L K K T G V R T Q A P A T M G R W L P Q R L A Q A   L
UniRef90_U4T142         D T D       V T A L L L D R K K S H P K Q L I R T V L A D S L P K K L L A A L Q
UniRef90_F7JIV2         D I S E N T C F A F L K E R I S T R P E K T L N T F L V G L F P N K L G D L L L
UniRef90_H6L5Y7         W E R Q T L A E E L Q L L K K D W A K K Q L S K T S P F S E I P N R L W R R L L
UniRef90_I0ID66         G A T F D E A D T R L R E A A E A E P R A A V R S F L K W T I P Q R L A E A L L
UniRef90_UPI00036C0574  Q E T K E N L       R T Y L K E N R E K S L K N A L K Q F F P E R L A D F L A
UniRef90_R9A0C0         S E S T Q N V E N F Y W K Q K E S S P G E K I S A N P N W K L P S R F F D W I L
UniRef90_Q5FTW5         G Q N A L N V L L K V K K D R P       K A L P P S L L E A L P Q R L A R V L A
UniRef90_D5BQI6         A H D       M R N V M T D K K R S H P K Q D A Q T I L S E F M P K R L A S L F C
UniRef90_E4SRE6         N Q C Q E N L       K T Y F E E N R E K S V K N T L K G L V P E R V A E F L
UniRef90_M2ZV33         G Q D A A       A R L L E R K G Q R P N A Q V E T I V G E L L P A R L A R A L A
UniRef90_S8DMM1         D L H I E D V K S L L T Q H K A K F A K Q K A I N S F P S E L V K K L W R Y I L
UniRef90_L8UFX6             Y Q D I R H Y L D E L R Q S S P K L Q L K T A L A R L L P K K L V E L W L
UniRef90_M1FGS8             Q Q Q V E Q D L L S L R K L K P Q S T L E H Y L N A H L P K R F A Q A F N
UniRef90_A6VYE5         T L S L D D L       L D V R H S S P K K S Y E G F L S N I L P K R L V E   L V
UniRef90_K5CBH8         G G K A Q N I E E I Y L S K K E K S P A E K L T P D P D W K L P S R F W E W L L
UniRef90_D1B046         T L S K E A L Q S L L Q K R V A T A Q G K S L S L W L E G M I P K K L A L L I I
UniRef90_M5UBY2         D V S E S E L R E L F S R R S G D S G K R T V A S V V A E W L P S R L V N E V V
UniRef90_A5FP72         A L S L D K L R L R L Q R D F D T F G K R S F Q N L L S E L L P Q K M I R P F V
UniRef90_T0DSQ1         N L S K D E I S       K I I R E N P N K N L L T N L K G L V P Q N F I K E V L
UniRef90_S7V755         N F T E D G L R A E L L S Y K G M H P L K K I S T N P L F G L P K L W E F L T
UniRef90_UPI000365F821  R P T D K V L N V L L N L K K K E P R K T V I L K S P F A E I S K R L W E R F V
UniRef90_R6CD46         R M S G E T F A Q T M R R E K N G S D A M T A E E F F T G L L N K K V T Q L F L
UniRef90_UPI00037320A1  G L D       L A A H I R E V R A R R P G L A L R T L L A E R L T R R V A R R W C
UniRef90_W0AG78         D A D A P A L L R A A K R A R P R A G       L A S V L A E H L P Q R L A A A L A
UniRef90_E6WZR5         G F D L N E I R S E       R K N L S T L L P       L P K R A A L A F L
UniRef90_V2USG6         T H D       L C A W L K Q K K L S Q P K S L L R T L L S E L A A K S V I I E L Q
UniRef90_K2BP05         D M T F P E F E A A F K K E V V D N P K K L F R N T A S M F M P K S V A D V L C
UniRef90_G9QVX3         K F S E K N L V       N G K K Q L S S V L P       L P K R F V L E F L
UniRef90_F5WU52         K I S L E Q L Q A Q E D W E A F V Q E       Q G I P K R L L A Y F K
UniRef90_D2UCU0         G Q D A A       A W L R A Q K R L R G A A E L R T V L G D A L P R R F A Q R L C
UniRef90_A1SZ97             D L D L F A E L L H A Q K N H P D Q A L K T V L A Q Q L P K R V V E C L L
UniRef90_UPI00036C8B54  T E S V L D V L K       K L K Q S G Q S L P K W L N Q F W P K R F T Q V W L
UniRef90_E0NMH9         E E D K N E F L E Y F Y R T   I S S K D M T L E R F L I G I L N K K F I H Y V L
UniRef90_F2JR18         P K S Y E N I K A Y F A S E V A K R G K E E I I T F L K F E L P R T L Y Q A L C
UniRef90_J0S0J9         E E Q R D D L V Q T L T G C G A T R V N T A L S T       F H L P E R L Q K R L V
UniRef90_F0JGE8         D L A L T D F L A D N R       S S N Q Q L R N L L A R V L P K R       L P P L
UniRef90_R6V5X5         D F T I E E V E A L L R E R Q E N C S Y K N L K E L L I G L F P A K L I P I L V
UniRef90_R6LWG2         E F S K D E L L G E I L R R R Q D E Q E L E V S Y I L E G I M N N K L V D A I L
UniRef90_V2TSQ2         T L D       L V K I F Q D K K C E Q P K V L L R T I L S T Y T T K S I T H E L Q
UniRef90_UPI00035CF1EB  E K I A S D       Y I K E L K T N N P K Q L L K S I L T P L M P K A L V A E L E
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UniRef90_UPI0003B39090  A       E R V R S E L T H A R N T D P K K R V T D W M V E Y L P G R L T A D I F
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UniRef90_U2UU79           E A I I T
UniRef90_R5IVQ7           H A Q V C
UniRef90_UPI000471D144    A A F V T
UniRef90_UPI000464F1CA    H A E
UniRef90_D1AFQ9           N A Q V T
UniRef90_UPI000478BC54    K A E V T
UniRef90_Q30R66           M A M I T
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                              1              10                  20                  30              40
UniRef90_T0L3S8          P A M M P L H T K E G W V K N C R A D T I   A K A E L R V D M K K Y K K L K A G D
UniRef90_F5ZK42            A E S P L L T D F P H     K A L Q G I D L D D V T L S Y D K H V I T H     D
UniRef90_A2C1G0          P S L F S F S T V D S S L K D C     S G I T L D D V V K L N V N N K K Y F E K G P
UniRef90_R7MKG2          P A N A P L K V N P T D L K G L K G V R I R G K A S A Y S D G K K L D E E Y G E
UniRef90_R6UG07          P S L V Q V P C S N K C L A N     L K G L R A K G I S L V I G D K I I K E A G E
UniRef90_UPI0003807072   P G L V P L V F S E D R D H W C D L A G V S A E V V A A R T R Q G R G T F R E K
UniRef90_R5WZS9          P S L V P L E T S M P D R E F     L Y G L H L R N I S A K L G T A V A E E F G E
UniRef90_R6NYJ9          P A L V P L V A A D P   A E V R P L K G I R A A N V S R L G G K S A S S Q G E
UniRef90_E6X3L7          P A L V A L E S E E A W P K K A A G V K V R A R V R L A A S G Q T V K E K D G D
UniRef90_UPI00016C47AB   P A L V P L T V Q P E W V     G E L R G I T L P D V N L K V G K A L T Q R R G S
UniRef90_R6DHY7            A L T S I V L E G N F M K       K W S G I R I H G V F L Y D Q D D E A K D R G E
UniRef90_R5V7I3          P A L C F L K T K T E L V R     A L K G I R L A K V S L Y E N G G L K R E R G E
UniRef90_N9A419            G L V P F T F S D Q F K E T T R L S G N A L D   A T L S N H K N S F T E A
UniRef90_U7DCW2          P A L T G F T L L P P Q K W L T T L S G L S L E   A E I T V G K K I L   R G N
UniRef90_Q2QLK5          P S L   F T F K I T D K R L A D L S G V T F P I V K A K L K L D G I K R S G P
UniRef90_V6Z381            A E S P L L T D F P H     K P L Q G I S L D D V T L S Y D K H I I T H     D
UniRef90_D1B355          P A L V G L T L Q K E Q F W M K E L S G I A L P   V A L H V E G K T F S E N
UniRef90_UPI00046FD68E   P A L V G L T V Q K P E F W M K S L S G V S L K G   T L K V G S R I L D   G E
UniRef90_F5T5B6          P S L C P I Y T E E K F V K   A W A G V R V   D T E L S L F K L L F K D R G E
UniRef90_R5DQ50          P A L C P V K V K S D V L K I   L K G L R V T G K A Q L Y G E H I K E E T G E
UniRef90_F7KAR5          P A L V Q L R C A G N F   W K G L A G V R T E A I E G K G K K E E Y E E Q G E
UniRef90_U7UEF7          P G L T Q L K L K S D F L K H L S G T K V I G E C K L I K D G K V V D K K Y G D
UniRef90_L8H1B0          P A L T P L T   G P H P G G N Q L A G V S L   N V G V T A E A R T D A H R T G
UniRef90_UPI00047DB436   P A E V P L V S N D S F I M D K T L Q G L S F K D V V L K I G K V I K E I K H D
UniRef90_J4WE57          P S L V S I   E T I Y D Y S N L S G I S I K N V S V R A N I D G K K Y S G D
UniRef90_R9JB23          P A L V Q L R C K D H F L K I T   A G V R C E E K K G G I R E L L Q E E E G E
UniRef90_B8DL83          P V L V P L V M A P Q W   P L H G L A G I A L P   A R V T T A G T A F T L P
UniRef90_R7HYQ0          P A L V G L K T A E D F   S S L S G V S I N                           D
UniRef90_C4XKB7                            C R D L S G V S L P V A I R G A G E A A         G S
UniRef90_U7VDS6          P A L S P I Y V R D Y F   F Q E L S G I S F Q N V K I T I W K E N I E K K G A
UniRef90_G1UNL9          P A L V P L R L D P D S A A L L E L S G I S L P N V G L E R A W P E H T W E D D
UniRef90_R5UKE6          P A L C G F E A E G   M E F S V S G V R T   D A L L G Q N C K Q E R G E
UniRef90_R7IN10          P A L T A L E C G Q K D F F Q K N S G V R T D G K I T V L D H I L A E D T G E
UniRef90_A0A029RT42        G L V P F V F N E D Q Q K F G Q L R G I S     I F C R I S N H Q A S F D E N
UniRef90_B6BIH2          P A L V G L T V Q K D Q F W M K E L S G L S C Y   V N I K V D D R I L D E   D
UniRef90_R6ZCF5          P G L V S L R S D A S F C K   A L A G V S Q A K I S L R I D G Q E A S E T G E
UniRef90_K7S3J1          P A M M P L R T R E T W V A E C R A D T I P K V E I R I D L P K K N I R A F G D
UniRef90_R5ECC1            L S P I Y M N D P D L R Y A K G V R I D G T V T L Q Q N K E Q S W R E S G Q
UniRef90_UPI00047CEF28   P A L V G F T V Q K E Q F W F K E L S G L S M P   V N I F V E D K K I V G N
UniRef90_E3GLH8          P V L T G I C C E D     L P E A L K G I R V K G K L S L D K V V F S E H G E
UniRef90_R9KIP0          P A L V Q L R C A G S F   F K S V S G V A Q A G I T L Y I D N T K A A F E G E
UniRef90_B6BNR6          P S L V Q F H L D S S I A H     K M S G V K V G D V T L L I N K K D I S T N G D
UniRef90_A6Q8H7          P A L V G F T V Q K E Q F F F K E L S G T S T E V V     I N V N G Q T C E G S
UniRef90_Q30SJ8          P S L V Q L H L D S K I V K K M S G A K V D G E V T L F I N S K K E L T C N G D
UniRef90_A1VC61          P V L V P L V M P E G W   Q L G G L Q G I S L     E A G I S T G G V S F V R D
UniRef90_R6HXS4          P S L V Q L T S   P D K Q L R Q L K G M R V H D A V I S A A G R   T S R G E
UniRef90_R5X3I6          P A L T G L K C Q N S S L S L W   A G V R T E A V Q L F I G N L S G K E T G E
UniRef90_UPI00047C68C7   P A L V G F K C D D D E I L P E N G V R C T A E I S F L L G N E A I A T E Y G E
UniRef90_R7EEA0          P S L C G I R G K D N Y Y A K W A G S R M D G R I T L E I D G E T V G E E Q G E
UniRef90_UPI0004688F7E   P A L V G L T V Q K E Q F W M K S L S G I S F   N A K L S V E D K V L E S   D
UniRef90_K2EQ57          P D I V P L T T D A A W V H   S L S G L D W S F M Q L S F D K I K L K K L G K
UniRef90_I2K904          P A M M P L K T K E T W V E N C R A D T I   A K V A M H V N M K K Y R L S A K G D
UniRef90_U2KX57          P A L V P F L T K P V L L R L L K G I R L S A E V T A I S E N G T V L A D T G E
UniRef90_A6Q3Z6          P A L V G L T V Q K E Q F W F K E L S G I A F   E A T V R V G K K E F R D N
UniRef90_Q311R9          P A L V P L V M P A H W   P L H G L S G I S L P   A A V T C G G K T F T E P
UniRef90_UPI00041C1F57   P A L V A L N A E D D T L P K D   S G V A L A N V T F Y I G D E V I A E Y G E
UniRef90_UPI00046F5F05
UniRef90_C4GB39          P A L V S L K S E W P L L E D   L A G L R L A G I Q L L I D G R E A A D Q G E
UniRef90_E0RUL0          P A L V G F K C D Q N E Q M P E N G V R C T A E I S F M L G T E A L A V E Y G E
UniRef90_K1Y0E7          P S L T A L M     P N G Y D S K L E S L L L K N V T L K L K E L I Q E E F G D
UniRef90_Q3B3U7          P A L A P L Y L I N P   P G S E L S G I A L R S V T I S S G K E K S S R N G D
UniRef90_D2BGC3          P S T V P L V V K D P L C H L L Q G Q R I I A R A Q S R I R G K A G T P V D G E
UniRef90_G5GGJ6          P A L C P L F C   E N K R F F K V S G V R V R   A E L N L D K F V F S D I G E
UniRef90_R5RCZ0          P A L A S L K G K G N Y   F S K W A G A R M E G I Q L E I G K A G K K E R G E
UniRef90_D5V156          P A M L P L I S K E K W V A S C K A D T I A K A E L R I D L P K A K K K A V G D
UniRef90_E3DNS6          P A L A P V I I K N   Y K F K K L S G I S L R D K E I S L W N L L K T W S A D
UniRef90_UPI0003B688BB   P A L V S L S E D E T L P T E   S G V A L A R V T F M I G D G E I K E Y G E
UniRef90_F4GJK7          P A L T S L I V   E N Y G F T A A A G T S V Q D A S I R V N K A W F K A Q G D
UniRef90_R5NXD4          P A L C A V M T E E N   T E A V K G V R V A C S A W E E G N T E W K Q S G E
UniRef90_UPI0003741C79   P A L V G F E L S A P D A E L C R L A G T A L P   A R I E T G G T V H L D D
UniRef90_R7LLT4          P A L A G L K T K E D F   S S L S G V C L N D V
UniRef90_R5X8R8          P A L V Q L K S S S R   H T R A I S G T R A K C I A L E L D G N I V E E T G E
UniRef90_UPI00040E1FB8   P A L V G L L S E D D T L P A K   S G V A L A N V T F L I G D E V I S E Y G E
UniRef90_A5GPW1          P S L F T L R V Q A P W L N   A L A G L S Q S P V A L S V G E E R F R Q Q G I
UniRef90_Q9FLE1          P S L F T F K I N D P L L   T E L A G I S F S K V Q A K L K L D N L V Q I G P
UniRef90_C2BGX5                      K T A N P L S K K A K G V R V S A R A R L F V D G K F I E E S T D D
UniRef90_UPI000478FACF   P A L V G F K V D P E E V M P Q G   G V R M A E I A F S L G N E I I S E Y G E
UniRef90_X1FPQ7          P A L N P V K T S G K W V K E   L Q D L S L K N V S L K L F Q N G K E R F G E
UniRef90_R5NK87          P A L C G M E V K K D K P P I K Q F A G V R W K N A S L Y I D N D R I T E S G D
UniRef90_G4D3K6          P A L T Q V T S E S K D L K   S I S G V K V K P R L Y I D D E L V Q E E E G E
UniRef90_UPI000289F6CA   P A L T Q I K L D S K Y L K H   L S G T K V I N V K F Y K E D K K I D E R G E
UniRef90_T0J2Y3          P S L V Q L H L N S T I A H K M S G V K T Q G E V T L L V N N K K D I S I C G D
UniRef90_H1LTZ6          P A L C G I K L D D K   P F F K V T S G V R A K G I A V Y C N K K I A S D F G E
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UniRef90_A7I835          P A L S P   V I A E P F   P F S S L A G I T F P A L P F S L W R N I M E G N G D
UniRef90_C1MRP5          P A L V P L T G A H P     G G E M M P G V S V   D V S L E C K K K S K A S R E G
UniRef90_D8U814          P A L T P L T R V G A H P   A G G Q L A G V S M Y G I E L S R R P K F E S E R T A
UniRef90_R6GYK3          P S L V Q L K T D M S K I K     G L K G I K V A A S V R R C C G V V E N G D
UniRef90_UPI0003021ED7   P S L T P L V S L H P     Q L R E L H K L L L R N I R A T L G E A V R E E F G E
UniRef90_J0EL23          P T E V P I T S S E T F I K S N R L K G I S L K D V N L S V G K K R V S H Q M D
UniRef90_R6EZM1          A L T A I E V R D L     R E L R G V R V K S   A V S L G D L V Y R E E G D
UniRef90_B4SH80            A L A P L Y T L N   A P P A S L S G L A L R S I S L T S G G R S V E R R G D
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                                                  50            60            70          80
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UniRef90_F5ZK42        L L F T H F G L   S G P A A L R L S S F V S G G E                 I A T L D F L P
UniRef90_A2C1G0        I L I T H K G F   S G P V I L R L S A F S A R N L Y D N K Y K   A E L R I N W L C
UniRef90_R7MKG2        I Q F N E N A I   S G I C I F N L S             Y L Y S E H E N D F S V S L D L T P
UniRef90_R6UG07        I Q F A K G A L   S G I C V F Q L S W Y V S K Y F S R K N K D N I A F Y L D L M P
UniRef90_UPI0003807072 M L V T H R G L   S G P A I L Q V S S Y W R P G E A         I E V D L A P
UniRef90_R5WZS9        M S F S P R G V   E G A V V L R M S R T A V D A L I E G H     R V E L S V D L L K
UniRef90_R6NYJ9        I L F T D S G I   S G I A A M E L A S H I A D         K Q K A F T H I D F I P
UniRef90_E6X3L7        L L F T D Y G V   S G L A V L D L S R E A S L R L A E     W E P C D L L I D L L P
UniRef90_UPI00016C47AB M L F A H F G L   T G P A P L D V S R A V S         G H A E P R S L T L E A D F L P
UniRef90_R6DHY7        I Q M V A Y G I   S G I P V F Q V S R F A A V E L Q Q K R K P     Y L V L D S M P
UniRef90_R5V7I3        V Q F T E Q A L   S G I C I F N L S A Y C         D K L S H A T Y T V A L D L P
UniRef90_N9A419        L L F T H R G L   S G P S S L Q L S N Y W E S G E N             F Q I D F F P
UniRef90_U7DCW2        I L C A H R G L   T G P A A M N A S L Y W E K G             P I H I N F L P
UniRef90_Q2QLK5        M L V T H W G L   S G P V V L R L S A W G A R E L H Q Y N Y Q   A K L T V D F I P
UniRef90_V6Z381        L L F T H F G L   S G P A A L R M S S F V R G G E             I L S L D V L P
UniRef90_D1B355        L L F A H K G I   S G P C V L S G S L Y W K K G             N L C I D F L P
UniRef90_UPI00046FD68E L L F T H K G I   S G P V A M N A S L F W Q K G E C E         L N F M P
UniRef90_F5T5B6        L Q C T E Y G I   S G I V V F Q C S R L H E L L E K N     G K A M L S L S F F P
UniRef90_R5DQ50        I Q F T E N S L   S G I C V F N L S L F A K P N D K         I V L D L L P
UniRef90_F7KAR5        L Q L T D Y G I   S G I P V F Q L S R F A S A A L S Q G R K   V K A T I D F L P
UniRef90_U7UEF7        L L F T D Y G I   S G P P I F D L S Y Y V S         L S N E K F F I E L P L I N
UniRef90_L8H1B0        F L F T H R G Y   S G P S I L D L S H H A V E G L R E A A D G T T A I T V N W C
UniRef90_UPI00047DB436 L L F T H F G I   S G P A A L R A S Y E V S K I L E K     E K E A K I L I D F I P
UniRef90_J4WE57        M L F T Q K G L   S G P A I M D M S S Y I V K F Q D T Y K G K N L Y I S I D F M P
UniRef90_R9JB23        V Q F T D Y G I   S G I P V F Q L S R Q A A Y L I E E G     K A A A V S I D L L P
UniRef90_B8DL83        L L F T H R G I   S G P A A L Q A S C Y W Q P G Q         P V E I D F L P
UniRef90_R7HYQ0        I L F T H K G I   S G P E V Y K I S S         L R A R D K F P Y K L T F D F V G
UniRef90_C4XKB7        L L F T H K G V   S G P A L D A S M F W R E G         A L A I N F L P
UniRef90_U7VDS6        V L L T H T N F   S G P G I L D N S R F V             E S E S Q L E I N Y I P
UniRef90_G1UNL9        L L F T H D G L   S G P A A L K A S L F W R P G         A P M R L D F L P
UniRef90_R5UKE6        L Q L A D Y G I   S G I P V F Q V S S P A S K A L     Y Q K K Q A E L T I N F L P
UniRef90_R7IN10        L Q L T A Y G V   S G I P A F Q V S R Y A A Y A L R Q   K K P V Y A Q L D F L S
UniRef90_A0A029RT42    I L F T H K G L   S G P A I L Q I S S Y W N S G E S         I E I D L S P
UniRef90_B6BIH2        L L F A H K G I   S G P A V L S A S L Y W K K G         N I S I D F L P
UniRef90_R6ZCF5        V Q F T D Y G V   S G I P V F Q F S R Q A A Y A C S T G Q K T E V     V L D F F P
UniRef90_K7S3J1        L I F T Q N G I   R G P V L D V A R E I T P L I E K     Y G S V P L M I N M T K
UniRef90_R5ECC1        I Q F N E T N V   S G I V I M N L S C H L P Y F T E A E C H N A     L H I D C L P
UniRef90_UPI00047CEF28 L L F A H K G F   S G P A V L T A S L Y W T K G         K I K I D F L T
UniRef90_E3GLH8        V Q F T D Y G I   S G I C V F N L S R Y L   K Y L G E E K L E P Y T I V L D L A P
UniRef90_R9KIP0        L Q L T D Y G I   S G I P V F Q F S R M A A R A L D     C G K L C E A G I N F L P
UniRef90_B6BNR6        V L F T N Y G V   S G F A I L D I S Q R A S V A L M E     Y A K V D I S I N L L P
UniRef90_A6Q8H7        L L F A H K G V   S G P A V L D A S L Y W E K G         K M E I D F L P
UniRef90_Q30SJ8        I L F S D Y G A   S G F A I L D I S Q A S V A L M E R L H     V S I S I N L L P
UniRef90_A1VC61        L L F T H R G V   S G P A A L L A S C H W L P G M         P L Q F D F L P
UniRef90_R6HXS4        L L F T D Y G L   S G I A A M E I S A D I A K A A K R S     P V S A S D L L I P
UniRef90_R5X3I6        V Q L T E Y G I   S G I P V F Q L S R Y V A R A L A E     K K Q V Q L S V N F L P
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UniRef90_UPI0004688F7E L L F T H K G I   S G P V V L S G S L Y W K K G         K I S F D L P
UniRef90_K2EQ57        I L F T H F G I   S G P L V L N S A H E V K K L L A     T G P V T A S I D L F P
UniRef90_I2K904        L I F T K G G I   R G P V V L D F S R E I T P L L S K F     D E V P I L A N F T K
UniRef90_U2KX57        V Q F T E R T I   S G I C V M N L S A         A C V G Q E P A A I C L R L L P
UniRef90_A6Q3Z6        I L F A H R G I   S G P A I L N A S L Y W E K G         A I E I A F L P
UniRef90_Q311R9        L L F T H K G I   S G P V T L Q A S S Y W K P R Q         P V C I N F L P
UniRef90_UPI00041C1F57 V Q I T S K G I   S G I P V M Q A S G V V A G H L S K G   R P V T A S I N F F P
UniRef90_UPI00046F5F05                   S Q F L R Q V Q R K T G K E S V E M S I D L F P
UniRef90_C4GB39        I Q C N R D G I   S G I P V L Q V S R D A S Y A L N E G S L V S A R L L I     L P
UniRef90_E0RUL0        L Q F T R D G I   S G I P V M Q A S S K I V K F L A E G   K P I Y A S I N F F P
UniRef90_K1Y0E7        I E F T N N G I   E G P L G L R I S R K A V K A L     Q N G E K V S V S I D L K P
UniRef90_Q3B3U7        V L F T H R G L   S G P A A L S I S R D V A R I M   Q T T G S C M M T A D L F P
UniRef90_D2BGC3        L L F T K Y G L   S G S L L D I S Q E I S L A I N R L D K D V S L E I D L L P
UniRef90_G5GGJ6        V Q L T D Y G I   S G I P A F Q L A R F V S K A L S K G E K T E     L S M N F L Y
UniRef90_R5RCZ0        I L F T E Y G I   S G I A V F Q L S G T A V R A   A R T G H T V T C C L D L M P
UniRef90_D5V156        L I F T S K G V   R G P V V L D F S R E I T P Y L E K     Y G E V P I L I N M I R
UniRef90_E3DNS6        L I L T H R G L   S G P G I I N Y S R Y L K K G D         L I K I K L L K
UniRef90_UPI0003B688BB V Q I T S K G I   S G I P V M Q A S G T V A E H L S K G   R P V T C S I D F F P
UniRef90_F4GJK7        V L F T H D G L   S G P A I L T M S R W         C H H G D I V R I S L I G
UniRef90_R5NXD4        L Q I T E Y G I   S G I M L F N L S S E L G R I L S E     E S S V K L Y V D F L P
UniRef90_UPI0003741C79 L L F T H K G I   S G P A P M Q A S L H W K P G         A P L I V D F L P
UniRef90_R7LLT4        L F T H Q G V   S G P A I Y K I S S         I R A R D N F P Y K L K F N F I G
UniRef90_R5X8R8        V L F T D Y G L   S G I A V M N L S Q A A A K N F A K K E P Q K C I A V L D L V P
UniRef90_UPI00040E1FB8 V Q I T E K G V   S G I P V M Q A S G I I A E H I S K N   R P V T C S I D F F P
UniRef90_A5GPW1        V L L T H W G L   S G P G V L R L T A F A A R A L Q Q Q R Y   L A E L R L N W C G
UniRef90_Q9FLE1        M L V T H W G L   S G P V I L R L S A W G A R Y L F S S K Y K G   H L I V D F L P
UniRef90_C2BGX5        V I F Q A Y G L   T G T A I L D L S N H I S Y A L     L D K K E V W V S L D L L E
UniRef90_UPI000478FACF L Q F T K D G I   S G I P V M Q A S R E I V K F I E E     K K P V F A I I N F F P
UniRef90_X1FPQ7        M F F T H F G V   S G P I V M D M S K N I G A L L K     N G P V K L I L D L K S
UniRef90_R5NK87        L Q F T N Y G I   S G I V I F Q L A A M V S R A L E N N R K   A T V L I D F L P
UniRef90_G4D3K6        V L F T D Y G L   S G P P I L N L S K A V N   I K S G N K Y I K F S L V N
UniRef90_UPI000289F6CA I L F T N Y G I   S G P P I L D L S V N V T         E N N F I E V P I I N N V D
UniRef90_T0J2Y3        I L F T N Y G V   S G F A I L D I S Q R A S K A L L E     Y A K V G I S I N L L P
UniRef90_H1LTZ6        L Q F A D S G I   S G I P T F Q V S R Y V S K L L Y E R   K S V S V R L D M F S
UniRef90_UPI0004736AEC I T H W G F   S G P A V L K L S S I A A R E L Y S Q K Y K   F N L I I K W S
UniRef90_A7I835        L L F T H T G L   S G P G I L D C S R D I R A G D E         I R I A F S G
UniRef90_C1MRP5        F L F T H R G Y   S G P S V L D L S H N V V R P L A R L A R E G G A S E R D L V V
UniRef90_D8U814        F L F T H R G Y   S G P S V L D L S H Y A V K A L A R G H G A A A A I H V N W T H
UniRef90_R6GYK3        V L F T E Y G V   S G D A I F R L S A Y         R P S E I N I D L L P
UniRef90_UPI0003021ED7 I I G F S E R G I   E G A V A L R M S R D A V D A L I D G   R R V K L S L D L K P
UniRef90_J0EL23        M I F T H F G I   S G P A A L R C S Q F V Y K E Q K N Q K K K N I H M Q L D V F P
UniRef90_R6EZM1        I Q F R E D C V   S G I C I M N M S L K T G E K D A L A C R I T V N F V P
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                                   90              100             110             120
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UniRef90_F5ZK42         K M T Q D D L V H Y         L E D N R D K S L K N A L K G L V P E R V A E F I A
UniRef90_A2C1G0           M N E N E A R L K I D L Y K L E N G K K L V P F D L P R S L W K S F L
UniRef90_R7MKG2         D K S F A E L I D I L S E L R K I N E H N T A E N Y L T G F F N K N M A H Y L I
UniRef90_R6UG07         N F T I Q E C F A L L K S R A N S L H W Y K L S N F F D G F L H K R V A A A L Y
UniRef90_UPI0003807072  D I         L V T A P L L A R N A R R D S A A A V L A L R A V L P A R M A E R W V
UniRef90_R5WZS9         A L D E A T L R E R I G R E T G E G P E A P M A D L L R R L V P E L V M P I A
UniRef90_R6NYJ9         E L D L K A L I E Y I E N L R N I R G E R T L D D L L S G I L V K Q L G V Q I C
UniRef90_E6X3L7         Q W S K E R L T A F L T K R I D P H R R L P I D L W L E G V L H R K L V P I I L
UniRef90_UPI00016C47AB  T E P E Q A F N D F L Q A E S L A S G K K Q L A V V L A D K L P R R L A D Q L L
UniRef90_R6DHY7         D Y S E E W I V K Q I V R R V E W N P K Q S F G D L I E G L L P D K L G L V L L
UniRef90_R5V7I3         D W D L E Q V Y A F L W E L Y A L R G T L S V E E F F T G V F Q R R V G L Q V L
UniRef90_N9A419         S H D       L I D F F K K K K Q Q Q P K V L L R T L L S E L A A K S I V L E L Q
UniRef90_U7DCW2         A T P L S Q C I S             K A G N R S I S T A L P       L P K R F V K A F L
UniRef90_Q2QLK5         D I H I E D V K R I L F L H K D H H
UniRef90_V6Z381         K M T I D D I S Q Y         L T G N R D K S I K N G L K G L I P E R L A E F F S
UniRef90_D1B355         H I S S M E           A L F K T H A K K Q I T T A L G     L P K R F S K A F L
UniRef90_UPI00046FD68E  N F N L K N I               R N S R K Q L V S V L P     L P R N F I K A Y L
UniRef90_F5T5B6         E F K E E E F L R F L L K R K E E R S A Q Y G R D F L L A L L P D K L V S V L F
UniRef90_R5DQ50         D Y S E N E L I K I I R Q H I S L F S D L P C E Q L L T G I F Q K R I G Q A I L
UniRef90_F7KAR5         A F K D D D W Q A L I K K K C R D C R Q R S M E V L F N G L V N K K I I Q T M W
UniRef90_U7UEF7         E V D K N F S D F Y F S C I Y M N P D F S I E R F L T G L V N K K F I H Y L L
UniRef90_L8H1B0         D M S E E S W R G L F L S A L A K G G S A T R S N M L G E R M P H R L A L A L C
UniRef90_UPI00047DB436  S V N I K D I V E D D Y K                     H L P E R L I K Y L E
UniRef90_J4WE57         Y I S K N Q L E D I       I F D S S K K A L K T K L S A Y L P E R M L K F L L
UniRef90_R9JB23         Q M D R Q E F E E M C G Q R M E N A Y D R T L E E F L L G L A N K K I N L M M I
UniRef90_B8DL83         G E N L D E           R L R A P E H G K L L V R T L L G R L L P D R L A E R L V
UniRef90_R7HYQ0         E I D L Q S           E L N S N P H K S I K N L L G E Y V P K S L A E F C L
UniRef90_C4XKB7         G C D V E A A L A         E N P R L E V K N A L A R L L P K R L A L A L A
UniRef90_U7VDS6         G K E Y E I L N K E L I E E M N K D G K K T I K K V L S Y Y L P E R F I K T I L
UniRef90_G1UNL9         G R D V A A L L D         A P E A G R Q T P R A L L A R H L P Q R L A D A L L
UniRef90_R5UKE6         D F S E D M L A Q E L Q R R F R D A G I Q D A A E S L R G L L N H K L I P V L L
UniRef90_R7IN10         E F S F V E L Y D K I Q I V R K R Y P E S K I S D V L S C I F N R K L A E S F L
UniRef90_A0A029RT42     N I       K I T D F L N N K K D Q G T K T T L K N T L T E L L P K N F V A T F F
UniRef90_B6BIH2         N K N I H E L I N           G S K K L V S S V I P     L P K R L S V A I L
UniRef90_R6ZCF5         E Q E P K V F Y Y N C R L R F E A L G D L T I E E F F T G M L H K K I N M V L L
UniRef90_K7S3J1         G L N E E Q L R A H I K K A I D K N P E Q P I L T H I M T L L P E S L C R A L C
UniRef90_R5ECC1         A W S W N E L H D Y L L Q Q A C S A P Q E S I R T L L Q G I F P N G F V T Y L L
UniRef90_UPI00047CEF28  N N N L E K L               L S G N K N I S T A L     L L P K R F T Q E F L
UniRef90_E3GLH8         E R S F A A M L S S W R R D T V L G E K A C V D A V S G I I K P P L A D L L L
UniRef90_R9KIP0         Y V E D R A S F F K K N A S L K W D K T V E S L L S G M V H K K L A A M I C
UniRef90_B6BNR6         S F N A Q K L S T H I S N L A K A I P D F S A L D V L A G L V P L K I A Q G L L
UniRef90_A6Q8H7         G F S W E S I R K S P             K Q L S S L L P     M P K R V T K A F L
UniRef90_Q30SJ8         A F N A Q K L S S H I S S L A Q N M P Q F T I L D I L A G L V P L K I A Q A L L
UniRef90_A1VC61         G V D I P A L C E S           P D H R R Q L V R T M L T R L L P E R L A T R L I
UniRef90_R6HXS4         S M G E R E I A D F L S G L G G K         C E D M L I G I L P R T V G A A V I
UniRef90_R5X3I6         E Y T E E I L K Q L M K K R K E L C P Y K T E E E L F A G L L P D R L V R L L M
UniRef90_UPI00047C68C7  D Y D D E D Y S S L V K E M M R F R D D R T L L E F L N G Y H N S N V N E M V I
UniRef90_R7EEA0         Q L T K E E L V K L L L D R Q Q A G S Y K N T Q E L L I G L L P R K M I D V L V
UniRef90_UPI0004688F7E  N I D L S K L L E K K S K Q I S S L             I P L P K R F M T E F L
UniRef90_K2EQ57         D T P D H E L D K R I L K L F E K N T N S K V K N V L P E L I F K N I C L E I L
UniRef90_I2K904         G M N E E Q I R D H F K Q E L L K D P H R N T L Q L L Q T L L P E S V S L E L C
UniRef90_U2KX57         E I P E Q R L L P L L W E L Y G V R T N W K L E D W L T G L L P K K A G I Q L L
UniRef90_A6Q3Z6             K R L P R F V P H K Q I S S Q I P     L P K R F V K R F L
UniRef90_Q311R9         H E D T A A L L R R G G K G K       T G N L L C R L L P E R L V T S L L
UniRef90_UPI00041C1F57  G Y N D D E F D N L V K T M L E L P G E R K L G E L L D G F C N S N I N E M I L
UniRef90_UPI00046F5F05  D L R L H E T E A K L R D K L E A E P K K A I R N A L L G L L P E R L I P R L L
UniRef90_C4GB39         W L A M E Q R K E K L S E I L F G R Q K E S L E S C L Q G I L P G R L L G L L K
UniRef90_E0RUL0         D Y D D E D F L S L E K E M L R L R D D R S L K E F L N G F Y N S N I N D M I V
UniRef90_K1Y0E7         A L S E T Q L I N R I N R E F D S N G K M R V Y E L L Q R L L P K Q L I E T Y L
UniRef90_Q3B3U7         S H E V S A L E E E L L L H A A R N G S Q M V R K F L H G T I P T A F V G C I L
UniRef90_D2BGC3         F I E P K Q L E T E L L K R R K T G L     S P D E M L T G I L P S K L C M A F K
UniRef90_G5GGJ6         F V K N Q K     E Y F K K R V N M E T L E E L A M L G N G L L N K K L W L A L L
UniRef90_R5RCZ0         D F T E E E L L A F L K E R Q S A C P Y K S L K E L M I G F L P Q K L I S V L V
UniRef90_D5V156         G K N E E E V R A H I N S E I K S N P D S T I L E N I S S L V P Q S V A N E L C
UniRef90_E3DNS6             Y N Q A E L E K N L L K R I K R E G L L V N L L I Q Y L A Q R L I Q K I L
UniRef90_UPI0003B688BB  G Y S D G E F D A L V D R M M C L S E E R K V G D L L D G F C N S H I N E M V L
UniRef90_F4GJK7         N L S R E E A C T M L M D T F G Q S P H R Q V S T V L K E G L T S T L V S L V M
UniRef90_R5NXD4         E I E E N A F V Q E S R D         V N R S L Y G Y L N A Y L P D K L A M Y I L
UniRef90_UPI0003741C79  G Q Q L T E L V E N N R G P M K L G     K L L E K H L P K R C V A L L
UniRef90_R7LLT4         D I D F Q S           A L N E N P H K S I K N L T A D Y V P K S F A E Y V L
UniRef90_R5X8R8         E I K E K E L L S H I K K             F G N L K G V L G T K L A T I I E
UniRef90_UPI00040E1FB8  Q Y S D D E F S N L I K G L I S L P G E R R L S E L L E G F C N S N I N E M I L
UniRef90_A5GPW1         G M N E S V V R D E L S Q A R Q G L A K K Q L A N G R P E L L R R R L W L A L L
UniRef90_Q9FLE1         D I N I E               T A K S V L K E H K                 L
UniRef90_C2BGX5         A Y P E E K L A R I I K N L E R R N P N K T I E E L L M G F L H A K L I I D V L
UniRef90_UPI000478FACF  D Y D E V D F T A L K N D M L R L K D E R T L S E F L N G F A N S N I N D M I L
UniRef90_X1FPQ7         A L D F K K L D K R I Q R D F Q E F R G R I F K N S L K G L L P L S M I P V I I
UniRef90_R5NK87         E Y D I N E L V N A V C M Q     Y A Y E K K S V Y D L L M G I I N S L A M E L I
UniRef90_G4D3K6             Y S D E K I K D E L Y N M Y Y M L S H Y S L K R W L T G I I D K K L V G Y I C
UniRef90_UPI000289F6CA  E N T K E M L Y S R Y         Y M F P D F S L E E F L I G I V D K K F V H Y I I
UniRef90_T0J2Y3         S Y N T Q K L S T H I T N L A K A M P N L S V F D I L I G L V P L K L A Q G I L
UniRef90_H1LTZ6         H I       G D I E K I L N S R R N I P S F I T M E D L G N G L I N S K L W L G I L L
UniRef90_UPI0004736AEC  S L S Y K E L K E K V N S L R L N K G K V N L I N S R P V P L T K R L W I F L L
UniRef90_A7I835         S V R R D A L E R E I L A A I A R S P S K A I K S L V A G G I P E R L A R L L P
UniRef90_C1MRP5         N W S G E S R E M W Q T R L T A P P G K A L V A T R L R D A L P Q R L A D A L L
UniRef90_D8U814         E S A E V D W E A R V Q Q A G G T A L V T T L L Q D I V R E R L A E A L V
UniRef90_R6GYK3         S V S K S D L V E A M R R E K D R P         L C A I V N N Q I A N S V I
UniRef90_UPI0003021ED7  A L T V E I L Q E R I R R E I A E M P E E E F A E L L R K L L P K P L V M P V C
UniRef90_J0EL23         E L N V D Q L S Q K S E K
UniRef90_R6EZM1         D F K S P E L I G F L R Q Q T G R Q E A L A E D I L E T L V K G P L I R P I L
UniRef90_B4SH80         E Q S S A E L E A E L L L Q A R R S G A Q M V R K F L Q G C I P T A L V P F L M
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                                    130             140             150             160
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UniRef90_F5ZK42          T       G Y A E K V K Q L S P N E L E E V M D K L K K M P I P I T G K M S L A
UniRef90_A2C1G0          L S L N I D S Q L K W A S L S K T K K E S L I K Y L I M K T Y L I K G R G P F G
UniRef90_R7MKG2          K R T G K G L N E S I S G M N G R Y I K Q L A A I I K S L D F K V T G S S S W Q
UniRef90_R6UG07          S E C G I D T Q R T A S T L T K N E I T K L A H C I K G W R F N P V A A G E F E
UniRef90_UPI0003807072   A L H Q P       E D W T N A S L A A M E Q L L H T W K M M P A G T E G Y A
UniRef90_R5WZS9          K A V G G H P K R L L R Q A A P E M A E T L I R T L K D F R I P V S D Y R P F E
UniRef90_R6NYJ9          K A C I L K G D R K I K T L T D G E C T A I A C K V K D Y T V A V S G V K G F N
UniRef90_E6X3L7          E K S G L K L S D E   S Q L N R K S I G R L V Y A V K N L K L A V T Q T R D F R
UniRef90_UPI00016C47AB   A L C G M A A D R K A A A L A K A D R L A L V G A T K R L R M P L R G T L G F E
UniRef90_R6DHY7          Q Q C H I D P A S K A E Q C L P K K I Q Q L V Q K I L K H N V L T I K E V S G F E
UniRef90_R5V7I3          K Q C G I K E P R L I A S C T P K E I E Q L A S F L K A W K F P V I G K G D W K
UniRef90_N9A419          Q L W S Q H A D T A I G Q L S D A V L D E I C Q Q L H A F N V K P S G T E G Y R
UniRef90_U7DCW2          H H H G M   E D I P L R S C G K K E R E   I L S T L H R F S F S P A G V F G Y R
UniRef90_Q2QLK5          A S L D G D M H W A S I P N N N L N T V A L R L K Q W M F E V V A K G Q F K
UniRef90_V6Z381          E       G F P E       K I K Q M D P K Q T E R L I H K L K E T K I P V T G K M N L T
UniRef90_D1B355          D A V R L   E D K V L S K L N A N E   K E L L T S L K A Y T F S P A G N F G Y T
UniRef90_UPI00046FD68E   K N F N L   L D K P V S R F S D S E F E   I I K N L Q S Y K F A P A G N F G Y E
UniRef90_F5T5B6          Q K A Q L   P V D K T L S E I S K E K I G E L C R L L F H F P F K A S K I A D F T
UniRef90_R5DQ50          K I S R V D L S K I C S K L S K D E V S G I C K T I K S M S F T V S G K E D F S
UniRef90_F7KAR5          K L N G L H G E D T V S S E T F P A V E K V F L M L R N F E V T V T A S N P F A
UniRef90_U7UEF7          K T L D I D K N N P L C N L T H R D Y E N L L N L I L H S T F E V T G V N S F K
UniRef90_L8H1B0          E E A G V   A H Q R M A D L T K D K R E Q L I G L L T Q Y R L P Y T G H Q G Y K
UniRef90_UPI00047DB436   T L K N N E F D L K Y                     Y L K N F S I L I Y T T R G F N
UniRef90_J4WE57          E K Y     E N T D I N N M K K E E K E K L L N I F K N Y K I A I K N F S N I K
UniRef90_R9JB23          K E A G H K P A D E A G R L G E K R L K K L L Y G Y K E L W V H I D A A N S F D
UniRef90_B8DL83          D L A G       R K I A E L S K A A R A A L H Q A V H A H T A V P T G T E G M R
UniRef90_R7HYQ0          K K L G V N P D I K C H E I N G K T R D K I L D K L R N F E S T I V G T A P   D
UniRef90_C4XKB7          D I L S L T G     P V A G L S P K A R R A L A D K L A A F P F T P A R A E G Y A
UniRef90_U7VDS6          S I L E I S E E L K M A E L S K E K R E S L V K L L T S N K M E I T K V G S F E
UniRef90_G1UNL9          P     S P L A R R K I A E L S R A A R S R I A E A V Q A R M I T P D G T A G L K
UniRef90_R5UKE6          K A A G I P V H E H T E R L S Q K Q I E T L S R Q L Q T F P V R L K K V R D F S
UniRef90_R7IN10          D E L K I E P N F P V S K M D P A R I K K L L Q H M K K F R V K I L N V K G M E
UniRef90_A0A029RT42      D   S D I   L E K R V C D L A I D E I S L I A K K I H Q W L V Y P Q T T E G Y R
UniRef90_B6BIH2          E A I G V N   D I E C K K L T N E A K E K L L   A I H N Y E F A P A G N F G F S
UniRef90_R6ZCF5          K E N G Q K P G D R I Q K L G F E R L W E I L R Q C K E F V M H I T E A S G Y D
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UniRef90_A0A059F8E9    P S N C G F T V D W S D R I R E R F A G A P V K G V Q L S A G G Q V T     R E E
UniRef90_W9UVV8        P S N C G F E C K W S I L Q D R H S G T P L K G V T L T F E D N K W Q R K G E
UniRef90_Q7NU52        P S N C G F D A G W S D F F A D K F A G E P L K S V G L A F Q G G D G R E F G E
UniRef90_A1TQH6                     E R F A G Q P F K S V A L H F R G R S F H R R G E
UniRef90_M0TQM8
UniRef90_R5RI57        P S L V Q I K T K P A Y     R S L K G V R T K C K A L V D G K L I E S Q N G E
UniRef90_T4GTM4        P S L I G I E V Q E S F T K D     L E K L S L R N V E I R V Q K K V Y S D F G E
UniRef90_W8WSQ5        P A N C G F R A D W S A H F Q E R Y A G E P L K S V A A C V R E T A S A D R G E
UniRef90_UPI00047E43FD   S N C G F E I D W K P N F I D K H E G T P L K N I T I S C D V K M   Q K G E
UniRef90_V1DAC5          S L V P I Y V     E N Y K F S G I S I A I R D V K I R T D C K K P T S I G D
UniRef90_A0A031GSL5    P A N C G F D V D W S A H F S S R H A G E P L T T V A I T I D G L R I K R Q G Q
UniRef90_J4PA61        P A N C G F D V A W T E H F R E R Y A G Q P V K S V A M S C S G G V L A R Q G E
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UniRef90_R5BMT6                     E A L R G A K L K N V N L T V G S K S E T E F G D
UniRef90_F6A8Y6        P S N C G F V A A W S P L L R E K F A G A P L K N V A L G L P D E   A P R P G E
UniRef90_UPI000411A87D   A N C G F T V A W S D V F R S R F E G Q P L K G A A W S F G P Q T I   R G E
UniRef90_Q07P04        P A N C G F T V C W S A L L R D R F E G Q P L K G I E L T F G E R R V   R G E
UniRef90_D0J223                 W S E V F A Q R F A G P F K S V V L K F A D Q Q F E R Q G E
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                                                  50            60            70            80
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UniRef90_K8D0T7                          M Q I S S Y W Q P G E               W V T V N L L P
UniRef90_C7H8H0          V Q F T D Y G L S G I C I M Q L S G H L A P G       R G P K R P A V E L D L F P
UniRef90_V5WLE1          L L F T H F G L S G P G I L N L S A R L G E L E Q E Y R G H T I R I E L D M F P
UniRef90_K8E8U5          F L F T H K G Y S G P S I L D L S H N V V K S I A D G S S S S S K L V V N W N P
UniRef90_R6RJZ1          V Q F T D G A L S G I C I F N L S A K A A E Y I N N G E     I S L D T A P
UniRef90_UPI00019130FB                   M S S Y W Q P G E               L V S I N L L P
UniRef90_R1CT29          L L V T H R G V S G P A A L K L S A F A A V E L A E A G Y A G A L K L N L L P
UniRef90_R7HFK5          L Q F T N Y G I S G I C V F N L S G Y V             K D N S N L T I K I N F L P
UniRef90_T2RE75          M I F T H F G I S G P G V L K F S S Y I N K A L D     N G N V E L S L D F L P
UniRef90_UPI000410D14E   V Q L T D G R I S G I P A M Q L S R Q A G E L M G E R P     F A E I D F L P
UniRef90_D6V5U2          I V I T K D G I E G G I Y A L S A A L R E G V A A     K G H A T L T V D L R P
UniRef90_B2KCS3          L L F T H Y G V S G P A A L Q M S L W             T Q G E E E I K I N F L P
UniRef90_R6YS95          V Q F K E D G I S G I V V M N A S R V I E R       T N E D Y K L Y L D L L P
UniRef90_S7UR77          L L F T H Q G L S G P A A L R A T L R P A F A       S A P L R L D F L P
UniRef90_D5HG85          V Q F V S G Y L S G I A V F N M S I Q C I D L M E     T G K K P Y I E L E L V P
UniRef90_UPI0004754A0C   A M I S R T G I E G G A V Y A L S A A L R E A I A S     E G E A V L S I D L R P
UniRef90_F3AZF3          L Q F S E T G I S G I P T F Q I S R Y V S L Y L N K N     K K V T I R L D I F S
UniRef90_C6WUJ3          C M I T E H G I E G S L I Y A L S A H R N T I E A     K G E A T V H L D L L P
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UniRef90_U4KT72          L L F T H F G L S G P L I L H A S E L F H E     H I T H E G S L K V S I I L S
UniRef90_G4SZJ8          F T I T Q Y G V E G S L I Y A F S S Q L R E Q I D A     T G Q A L M L L D L L P
UniRef90_Q47BP4          F N I T A T G I E G G L I Y A L S A P L R D A L A R     D G Q A A L T L D L A P
UniRef90_R5G6N5          L Q F R D N G L S G I C I M D A S N V L           K E N D V I N I D L M P
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UniRef90_F0GUJ9          L L L T K R F L T G P I T L K A Q A R A S R       D E I T D M W I D L F P
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UniRef90_H5WS63          C V I T A T G L E G S L V Y A A S A L L R D E I A A Q     G Q A T L T L D L V P
UniRef90_UPI0003B5542D   L Q I T K D G I S G I P V M Q A S S K I V R L L E E     K K P I T A V V N F F P
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UniRef90_B2JHM4          F V V T S T G I E G S L V Y A L S A T I R D R L     L A D G E A T I R L D L A P
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UniRef90_R7DPI0          V Q F K N D G V S G I V I M N T S S Y I A R L     K D P S L C H I E L D L L P
UniRef90_F0Y0I9          L L V T H R G V S G P A A L K L S A F L A R E L K D A G Y R G E L R L D A L P
UniRef90_R0GBN8          F I V T A Q G I E G S L V Y A M S A A L R E T I A S     T G S A R L Y L D L L P
UniRef90_W2BVF7          V Q F T G Y G I S G I C V F N I S K Y I V I P E G K S G F E K Y R I K I D F L P
UniRef90_R6E9Q8          I D F T D G G I E G P A G F A V S R N A V K T L     V N G G K V R L V V D L K P
UniRef90_UPI00036D3C93   A I V T R S G I E G G A I Y A L S A E L R E A V     L A N G T A M L S V A L R P
UniRef90_G0A8P5          F V I T A D G V E G S L I Y A L S A G L R D R I A A S     G S A L I H L D L L P
UniRef90_C3XMV8          V L F T N Y G I S G F G V L D L S S F F         Q T R Q N L T L M L D F L P
UniRef90_UPI00037A29BE   A I I A A E G L E G G A V Y A L S A P I R D A I H A H     G K A T L S L D L R P
UniRef90_UPI00036B7933   A V I T R F G L E G N A I Y A L S P Q I Q A Q L D K G Q K T I V F L D L K P
UniRef90_UPI0003742683   A V L T A Y G L E G G A I Y A L S Q A V R K A L A S     G S A Q L S L D L A P
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UniRef90_K0MSX2          F V V T D S G I E G S L V Y A C S A G L D A R G A A T A W L D L L P
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UniRef90_Q7NU52          C V I T Q S G I E G S L V Y A C S A L L R D E I A R A     G S A T C Y L D L I P
UniRef90_A1TQH6          F V A T A S G V E G S L V Y A A S A L L R D E I A A H     G H A T F H L D L L P
UniRef90_M0TQM8                                                      L L V D F V P
UniRef90_R5RI57          V L F S D N G L S G I C I M Q L S R L L S R       Y C G N K E I S L D L M E
UniRef90_T4GTM4          L E F T K F G L D G P I I K S A S C R         M K D T R K E N Y T I L L D L K P
UniRef90_W8WSQ5          I M L T R D G L E G G L V Y A L S P D L R Q A L D R     T G E A V L A I D L L P
UniRef90_UPI00047E43FD   T V I T E F G L E G N A I Y G L S P Q I R A Q L H Q H     K K A T I F V D L K P
UniRef90_V1DAC5          L L F T H K N L S G P A I L N I S R Y V D R D G D K     K I D F L N
UniRef90_A0A031GSL5      F V I T A G G V E G S L I Y A A L R E Q I A R     D G S A T I W L D L A P
UniRef90_J4PA61          F V V S E T G I E G S L V Y A L S A P L R D R I D K Q     G H A V A M L D L A P
UniRef90_UPI000377DC36   F V A S E H G V Q G S L I Y A L S A A L R D R I E R     D G R A V L T L D L L P
UniRef90_R5BMT6          V D F T D G G I E G P I G F Q V S R K C V K A L     M N G G K V M F S L D L K P
UniRef90_F6A8Y6          F V L T D T G I E G S L V Y A S A G I R     Q R I S C D G S C T V Y L D L P
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UniRef90_Q07P04          A M I T R T G L Q G G A V Y A L S A L R D A I E A Q     G E A V L R I A L R P
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                                      90              100             110             120
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UniRef90_A9BFS7        Q Y S L R S L V D F L I K K I R S K P E R P I K L L L V S I I D E R L I R Y F L
UniRef90_K8D0T7        D T D A A A F I D     E Q R A A H P N Q S L K N T L A M L L P K R L V E C L Q
UniRef90_C7H8H0        M L D E T A L T A L F A A R V P L L P G K A P A D F W T G L L N P K L G R A L W
UniRef90_V5WLE1        G R D E G E L D R N V V K L L G A A P K K L A A N I L D P L Y S R R Y Q E F L P
UniRef90_K8E8U5        S C D W N E V L S P G K S G S D L V V R R       L K P L L P T R L C E A L L
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UniRef90_R1CT29        A L S G A G V V G A L K A F T V D G R R K L V R N A N P F G L P G R L W E A V A
UniRef90_R7HFK5          F A E E S F I E N R M K L L E       N L S L I N A F E S I I N Y K V L K Y I F
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UniRef90_D6V5U2        D L T L P D L V A R L S R P R G K Q S I A T F L R K A L T L P P H   A I G L L
UniRef90_B2KCS3        L I N L K E L I T L A R       Q T N K T F L Q F F Q D Y L P Q R M L K T L L
UniRef90_R6YS95        S L T K D D I Q I F       F D M H V E L A L A E C L E G I L P K M M A K L I M
UniRef90_S7UR77        G E D I F D V L A L       S S G K T L A R N A L A K R L P A R L A E A L C
UniRef90_D5HG85        D I S D D M L A D R M R R F A E V N G R R R V E A M L N G I V N E K L A G Y I L
UniRef90_UPI0004754A0C D M D V A T L A S R L S R P R A K Q S L S T F L R K A A G L L P             V
UniRef90_F3AZF3        H L D I E K I L N N R T K I P S F R V M E D M G N G L     I N A K L W L G I L
UniRef90_C6WUJ3        D R P L A Q V F A D V S H P R G S R       S L S S H L Q S R L G I K G I
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UniRef90_R5G6N5        E Y S I N D L K Q L V S E R K       L K F L E N V F P K N L W N E I V
UniRef90_X8IQL0        G F N L S E W L T A A A K R A V V N R Y N K L V E V F M T V Y K E G L A V E I I
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UniRef90_M6GZ29        G M K K D E V R K K I E K E K N
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UniRef90_T4GTM4
UniRef90_W8WSQ5            E A I S T
UniRef90_UPI00047E43FD     E A I S T
UniRef90_V1DAC5            V A M A T
UniRef90_A0A031GSL5        E A I
UniRef90_J4PA61            E A I S T
UniRef90_UPI000377DC36     Q A I S T
UniRef90_R5BMT6            R C V I T
UniRef90_F6A8Y6            E A I
UniRef90_UPI000411A87D     R A I
UniRef90_Q07P04            R A I
UniRef90_D0J223            E A I S T
UniRef90_UPI0004753713     E A I
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Multiple sequence alignment (residue positions 1–40):

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                     1         10        20        30        40
UniRef90_A9DWL6      P A N V G L L V D W S S H M T R H F   G A A L K G V A W S A G     A Y R S R G E
UniRef90_Q2KWT1      P A N C G F D V A W S P H F I E R Y A G Q P L K S V A L A L S E N G P G R R G E
UniRef90_UPI00036F087B P S N C G F D V A G G W S T H S R F A G Q P L K T V A L R F T D H T H Q R R G E
UniRef90_U3HHS7      P A N C G F E V E W S Q L L K D K F A G A P L K T V A L R L D D E P P R   P G E
UniRef90_F2J114      P S N C G F A V G W S R V F R E R F A G T P L K R L A A S H D G E R I     R G E
UniRef90_UPI0004796004 P A L A P I P L       M V A R P E W E G V P L R E G S L V L G K R L A T F A G D
UniRef90_M6BRG5      P S L F T F K I V D P     R L E N L S G L T F E K T E C S L T E F G Y S Q L G S
UniRef90_UPI000361F4CA P S N C G F E T H W S E H F R S F A G E A L K N I A A S V R T A G G T R R G E
UniRef90_W8IA07      P A N C G F D V D W S D A F R E R F A G E A L K S V T A T S E A G T I P   G E
UniRef90_T0DJR7            C G F E I D W S K H F Q E K V D R G F V K N V   V V F N E T Q K A R G E
UniRef90_A4YSR6      P S N C G F S V G W S D I F R D R F E G H P L K G I A L S F G E R   S V R G E
UniRef90_E3I8D2      P S N C G F A V G F S D I F L A R F E G D P L K G V T F S F E G R   S V R G D
UniRef90_UPI00036EA2A2 P A N C G F D V D W S E H L R Q R F S G E P V K S V T A T S R V G T I P   G E
UniRef90_UPI0001D2F07D     C G V L I D W P E A F R A A F E G A P L K T I A L R H G E A R I A   G D
UniRef90_B1Y3W4      P A N C G F D I G W S A H V A E R H A G T P L K N V V L R L A S E M F E R L G E
UniRef90_R4XIH0        A N C G F E V A W S S H F R Q R H A G Q P V K S V T L R C V G D A G A R Q G E
UniRef90_I2JEV7      P S N C G F E Y P W R P D F I A E H S G A P L K T V A I S V T D C H W R Q Q G D
UniRef90_C7RL61      P A N C G F D V G W S Q H L R E R F A G Q P V K P V V L S L D R T G A R H Q G E
UniRef90_UPI000406BED5 P A N V G F D V S W S P L F R E R F A G T P L K G I A L T H G D R T V   R G E
UniRef90_U7D7H5        P L S T T Q N L E K P C R V K G     R I V L W S S T G K K I T H T G E
UniRef90_A4XYQ6      P S N C G F E V A W S D Y L R E K F A G A P L K N V A L S L P G Q A A R   V G E
UniRef90_A0A014MCR4              W S E H F R Q R F A G A P L K S V A I R F T D R S F D R R G E
UniRef90_UPI00045E5FA5 P A N V G V R V E W T G A F T D R F E G T P L K Q V G L T V R G P G P S V R G D
UniRef90_E5VHV3      P S L V G L E A E G K Y L K D T     S G V R V S N V S V Y A N N E I A K E H G E
UniRef90_UPI000472DF0A P S N C G F D I A G G W S F R S R H A G A P L K N V A L T V G G T P L T Q A G E
UniRef90_UPI00047E1D95 P A N C G F D I A W T P H F V E R F A G A P L K P V V A H W T D V H R A R R G E
UniRef90_UPI0003179AD7 P A N C G F D I E W S E V F R S Q H A G E P V K S V A I T V D G E T L H R Q G E
UniRef90_F8J6H7      P A N C G V L V S W S E V F K S R F E G L A L K R I A L S I   A S T T V R G E
UniRef90_UPI0003602063 P S N C G F M V A W S T P F A E R F A G Q P L K R I G M S F E G R R L   R G E
UniRef90_UPI00038244F6 P A N A G F T L D W S P L F R E R A A G E P L K R I A L H F E G R T A   R G E
UniRef90_S3YME7          L K T W S P F M Q   A C F G Q P L K R V N A W I Q S E Q Q T H   G D
UniRef90_N9E7T8          L K A W S P F M Q D C F   G Q P L K R V D A W V N A E N K T H   G D
UniRef90_X4Z2A7      P A N C G F D V S W S E H F K T H Y A G Q P L K R L S L A E A A P G R A G E
UniRef90_UPI0003728580 P S N S G F H I N W S D R I K N D F E G A P I K S I R A G L G Q D L I P   G E
UniRef90_I0HS01      P A N C G F D V A W S E F L R T R H A G E P L K S V A I A F G G D   R R P G E
UniRef90_I7ACN0      P A N C G F E V A W S Q H L V E K F A G A P L K T V S L A L P G E T L R   R G E
UniRef90_F0LDY8      P A N C G F D V D W S D V F R Q R F A G E A L K S V T T I   S P A G A F Q G E
UniRef90_Q5P2M9                  W S E H F R A P F A G Q P L K S V A L S F T D A H G E R A G E
UniRef90_C7MKV8      P L L G P L A C Q A     A P L R G L D K V R A K C A V T C E G V R E E G E
UniRef90_UPI000382D74D P A N C G F R V G W S S F F A E R F A G Q P L K R I A L T F D G E   T R R G E
UniRef90_K6C5J0        A N C G F V T A W S D L L R S K F A G A P L K N I A M G L Q G G Q P L R   L G E
UniRef90_A1VPB7                  W T E H F S S R F A G Q P F K S V A I H F T D S Q G R R R G E
UniRef90_UPI00034BE817 P A N C G F G V A W S A L F A D K Y Q G T P L K N V A L A F A E Q R V   R G E
UniRef90_UPI00045E7E74 P A N M G V L V P W S E V F R Q K F A G T P L K R I A L T F N G   A T V K G E
UniRef90_A6EP54        S N C G Y Q I N W D P S F I K K H E G T P L K N I A M Y C N D V I   Q K G E
UniRef90_UPI000374D809 P T N C G F E V Q W S Q Y L Q D K F A G A P L K T V S L A L A G G   A P R R G E
UniRef90_N9BNV7        S N V G V L V N W S   E Y L Q P I F G Q P L K R I Q A W V A G Q   V P Q F G E
UniRef90_UPI0003788FCF P S N C G F V P R W P Q S L S D R H E G D T L R G I R L Q Y G T H H Y   R G D
UniRef90_UPI00036A763B P A N C G F L R V W T P D F A A R F A G T P L K A I A V R T C G D D D G T R K G E
UniRef90_A0A059FTU4   P S N C G F T L D W S D R M K R D F A G T P V K G V R L S A E G D   E S R A E
UniRef90_M3J7C5      P A N C G F D V S W S E L F A E R F A G E P L K S V T I S S K A G V T   Q G E
UniRef90_D9QKD8      P A N A G F D V A W S E V V A D R F A G A V L K P V T L T F G G R S I   R G E
UniRef90_UPI00046FB896 P A N C G F N H G W S E F L S G R F A G E P V K N V L L   G H K G Q T V Q G D
UniRef90_A3VHD4      P A N A G L V V D W S   V H M A K H F G A P V K V A R L T A G D   T S V R G E
UniRef90_H0J8F0      P A N C G F E V A W S D F L K T R H A G A P I K P A A L A L P G Q P P R   Q G E
UniRef90_N9AB70        S N V G V L I N W S   A Y L A P L F G Q P L K R I Q A W V D G R   A P Q F G E
UniRef90_V4Q4N1      P A N V G F H V G W S A L F A D K F A G E A L K N I A V K F G G R E V K   G E
UniRef90_N8X6D1                          G Q P L K R V D A W V E P S V K T   Q G D
UniRef90_N2J7E1      P A N C G F E V Q W S D H L R S K F A G S P I K P V A M M L   K D G T R R Q G E
UniRef90_U3QE82      P A N C G F D V A W S E G F A S R F A G T P V K P V A I A L D G H P H Y R Q G E
UniRef90_T2JVX1
UniRef90_UPI000371351D P A N C G F D V A W S D V F K D R F A G A P L K A V T T T   S D A G T F P G E
UniRef90_J2H6D9      P A N V G F T V A W S A V F R E R F A G C P L K N I A L S F E G   A T A R G D
UniRef90_Q11XF1        S N C T Y Q V L W P A D F I A K H E G Q W L K N I S V A A G D Q I K K   G E
UniRef90_W0IM21      P A N C G F V V G W S G N F S E R F A G E P V K S V T A T   S E A G T F P G E
UniRef90_UPI00030E6051          W S A V L K D K F A G A P L K N I A L S L D G Q P P R   L G E
UniRef90_G9AEC1      P A N C G F D V V W S E A F R D R F A G E P L K S V I A S S G   A G A F P G E
UniRef90_Q0ASJ1        S N C G V N I D W S A I T K A R F A G A P L K T I A L S S G D E R V A   G E
UniRef90_B3R3U4      P A N C G F D V A W S A D F A A R F A G A P V K P V A I A L N D R D G H R Q G E
UniRef90_G9ZU32      P A N M G F R V G W S E I F R R K F E G T P L K R I A L S F G G R   S V R G E
UniRef90_UPI00040B2D31 P A N A G V E I A W S P H L R D R F A G S P L K R I A L T F A G R   S V R G E
UniRef90_S6AFK2      P S N C G F D V Q G P L L K D K   F A G A P I K P V T I R L G D E   A P R Q G E
UniRef90_Q5FQ89      P A N C G F L P D W P A D F A T R H E G S V L H S V G L T F G T R Q T   R G D
UniRef90_S3H7M7        A N C G F D V D W S D V L R Q R F S G A P V K S I T A T   S Q A G T F P G E
UniRef90_V2VRH7                          G Q P L K R V K A W V D H A E Q A S L G D
UniRef90_M4VFU3      P A N S G F T H P W S D H F A D R F A G Q P L K S I T L T H S G R S V P   G E
UniRef90_S2KSQ1      P S N C G F E V D W S D L L K D K F A G S P L K N I A L G V P G Q   A S R K G E
UniRef90_UPI0004769BA5  A N C G F D V P W S P H L V D R H A G A P L K T V T L G L V D A H I S R R G E
UniRef90_A6UG50      P A N C G F D V A W S G A F R E R F A G Q A L K A V T A T S G A G T I P   G E
UniRef90_Q3SI42      P S N C G F D V A G G W S E F T R F S G Q P V K T V G L R F T D Y W H T R R G E
UniRef90_B6ITG3      P S N S G F E R P W S P G F L E R A A E G Q P L K R I A V S F A G R T V P   G E
UniRef90_A6X0T7      P A N C G F D V A W S D F F A E R F A G E P V K S V I A T   S H A G A T Q G E
UniRef90_L0LSU3      P A N C G F D V T W S A T F S E R F A G E P L K S V T A T   S Q A G T F P G E
UniRef90_UPI00040C1678 P A N V G F D V A W D G L F I E R F A G T P V K S V T A T S D A G T T P   G E
UniRef90_UPI0002BC1DB9
UniRef90_V4NQS0      P S N V G F T V A W S A V F T G R H A G T P L K T I A L T F G G   K T V R G E
UniRef90_G2I1P9      P A N C G F M T D W S A D F T N R F A G T P L R G I A L T   G P N G Q T V R G E
UniRef90_A0A031LVH5                      G S P L K R V E A W V D H Q P K A   K G D
UniRef90_UPI00035FA42A  A N S G F H V A W P E D F A A R F A G T P L K R V A I A C G   A A R V M G E
UniRef90_C8RW59      P A N M G F V V D W S   P H M A R F F G A P V K G V A L C V G N R   R E R G E
UniRef90_UPI0003B68121                    P V K N C A L R V A G Q V Y R   R V G E
UniRef90_S6CKR0                                                        R E V G E
```

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                                    50              60              70              80
UniRef90_A9DWL6          A V I S A R G L E G G G I Y S I S R     G L R E G H G     L T L D L L P
UniRef90_Q2KWT1          C M I S A S G I E G S L V Y A L S A P L R D T L   L G E G E A T A W L D L L P
UniRef90_UPI00036F087B   T M L S D T G I E G S L I Y A L S A P L R D T I K A L   G S V T V L L D L A P
UniRef90_U3HHS7          F V L T A G G I E G S L V Y A L S A R I R Q R I A R   D G S A T V H L D L A P
UniRef90_F2J114          A V V T E A G I E G G A V Y A L S A P L R R T L Q A   E G E A R L V L D L R P
UniRef90_UPI0004796004   V L F T R K G I T G P A A L E L S E A V E T A R R R G R P W L G Y L L   G
UniRef90_M6BRG5          L L V T H W G A S G P A I L K L S A G A R E L F N K E Y E T   T L L R I D F V P
UniRef90_UPI000361F4CA   C L V C E S G L E G S L I Y A L G A S L R H E L L E A   G E A V L L D L M P
UniRef90_W8IA07          F V I T R H G I E G S L V Y A H A A H L R D R L E   M Q R S A A L S I D L A P
UniRef90_T0DJR7          I M L T P Y G V E G G A V Y A I S N G L R D E L E   H T Q R A Y L H I D F K P
UniRef90_A4YSR6          A V V T R D G I E G G A V Y A L S A E L R E A I A L N   G E T V L H V A L R P
UniRef90_E3I8D2          A T I T K A G I E G G A I Y A L S A A L R E A L E   H E G A A D L I I D L R P
UniRef90_UPI00036EA2A2   F V I T R H G I E G S L V Y A H A A V L R E S L A A G   Q T T T I D V D L L P
UniRef90_UPI0001D2F07D   V V V T R G G L E G G P V Y A L A S A L R R A I E R   D G A A T M L V D L R P
UniRef90_B1Y3W4          A V I T A T G I E G N L V Y A A S G L L R E A I A A H   G H V D V R L D L L P
UniRef90_R4XIH0          F V V T E S G I E G S L V Y A L L R D R I E A   G Q A V A L L D L A P
UniRef90_I2JEV7          A V I S A Y G I E G G P V Y G V S A P I R D E I A E R   G Q C T V Y W D L D P
UniRef90_C7RL61          F V L T A T G V E G S G I Y A L S A L L R D E I E A R   G S A T L H L D L L P
UniRef90_UPI000406BED5   A M I A A Y G I E G S L A Y A L G R E A V E R   D G S T M L T L D L R P
UniRef90_U7D7H5          I L F S G T T I D G P A V R R I T P F V H K E D D S   L T I D F L P
UniRef90_A4XYQ6          F V L T A G G I E G S L V Y A F S A D I R R A I E A   D G Q A L T H L D L L P
UniRef90_A0A014MCR4      F V A T A T G V E G S L V Y A V S H L L R D E I E R H   G A A T F Q L D L L P
UniRef90_UPI00045E5FA5   A M V T R T G L E G G P V Y A I G V A L R D A L D A   D G R C V L E V D L R P
UniRef90_E5VHV3          V Q F T K Y G V S G I P I F Q I S H F A I E A L R R   K K K V K I Y L N L M P
UniRef90_UPI000472DF0A   F V V T E T G V E G N L V Y S G A I R D R I A Q A V   P V T V Q L D L L P
UniRef90_UPI00047E1D95   C V V S A A G I E G S L I Y A L S A D L R D A I A R H   G S V V L E L D L V P
UniRef90_UPI0003179AD7   F V I S E S G I E G S L V Y A L S A P I R D L I D   T N G F A T I T L D L A P
UniRef90_F8J6H7          A V V T A N G L E G G I Y A L G P Q I R A A L   G D G K S A T L I V D L K P
UniRef90_UPI0003602063   A M V T A G C I E G G L V Y A F S R S L R E A V A R   D G A A T V E L D L R P
UniRef90_UPI00038244F6   A V V T A E G L E G G V F Y A L S A P L R E A I A L R   G E A V P Q L D L R P
UniRef90_S3YME7          I I I T H Y G F E S G V I Y K L G R D L R A E L S Q Q   Q N L Q L H L D L L P
UniRef90_N9E7T8          I V I T H Y G F E S G V I Y K L G R D L R D   Q K S Q K Q A L N I H L D L L P
UniRef90_X4Z2A7          C M I S A H G I E G G L V Y A L S A P L R D S L A A T G H A T A W L   D L L P
UniRef90_UPI0003728580   F V I T R N G V E S G V I Y P L T P K I K Q Q L K   N Y D T A S L T V D L L P
UniRef90_I0HS01          F V L T E T G V E G S L V Y A F S A A L R D A I A R   D G R A V F E L D L L P
UniRef90_I7ACN0          F V L T A T G I E G S L V Y A L S A D I R E R I N A   T G S A T L L L D L L P
UniRef90_F0LDY8          F V V T Q H G I E G S V I Y A H S A A L R D Q L E   H T G K A T L A V D L A P
UniRef90_Q5P2M9          C M V S A T G L E G S L I Y A L S A P L R D T L A A N   G T V E L S I D L A P
UniRef90_C7MKV8          V T F R T Y G V S G I A A F N V S R V A H P G   S I L S I D F L P
UniRef90_UPI000382D74D   A L V T G D G I E G G L V Y A F S A P L R D A I A R   D G S A I A T L D L R P
UniRef90_K6C5J0          C V L T E T G V E G S L V Y A L S A Q I R E Q I   N L S G S A S V Q I D L L P
UniRef90_A1VPB7          F V A T A T G V E G S L I Y A A S S L L R D E I A A N   G S A T F L L D L L P
UniRef90_UPI00034BE817   V I I T A A G L E G G A I Y A L S A R L R D A V   L S D G E A R L S I A L R P
UniRef90_UPI00045E7E74   A M V S A A G L E G G A L Y A L S A P L R R A L A D   G P V T L H V D L R P
UniRef90_A6EP54          A V I T T F G L E G N A I Y G L S P Q I R E Q L   L S T S K A T L F I D F K P
UniRef90_UPI000374D809   F V I T A N G I E G S L V Y A L S A E I R Q A I E Q S G C A T V M L   D L L P
UniRef90_N9BNV7          M V I S H Y G L E G G L V Y R C N R D L R E A M Q T Q S H   A I L Y L D L L P
UniRef90_UPI0003788FCF   L I L T L R G L E G A P L Y T L S P L L R D A L Q T H H   T V S L S L N L R P
UniRef90_UPI00036A763B   A V V S A D G L E G S V I Y A V S R L L R Q Q L E Q A   G A A R L L D L L P
UniRef90_A0A059FTU4      F V I T E T G V E S G G I Y A L S A P L R D A L A A N G Q   A V L T L D
UniRef90_M3J7C5          F V I T R G G V E G S L V Y A H S A A L R D D L E R   D G H A N L I L D L A P
UniRef90_D9QKD8          V V L T R Y G I E G G P V Y   G L S S A L R A A L A A D G G A L V T L D L R P
UniRef90_UPI00046FB896   F I V T H H G I E G S S V Y A L S A S L R D T I E A   E G K A V L T I D L T P
UniRef90_A3VHD4          F V V S A R G L E G S L I Y T V S R A V R V G M A   L T V D L C P
UniRef90_H0J8F0          F V L T D N G I E G S L V Y A L S A E I R T A I E R H   G Q A T L T L D L A P
UniRef90_N9AB70          M V I S H Y G L E G G L V Y R C N R D L R E A M Q S Q N S S   V L Y L D L L P
UniRef90_V4Q4N1          L M L T R A G L E G G A I Y A L S A A L R D A I H K   D G H A D L V I D L R P
UniRef90_N8X6D1          I V I T H Y G L E S G L I Y K Q G R S L R Q L I Q Q S   Q P L V M Y L D L L P
UniRef90_N2J7E1          F V L T E T G I E G S L V Y A L S A E I R T E L   L R T G S A T L Y L D L A P
UniRef90_U3QE82          F V I S A N G I E G S L V Y A L S A P I R D R L E A   E G N V V I H L D L L P
UniRef90_T2JVX1          N N Y Q M L L S I N W L F
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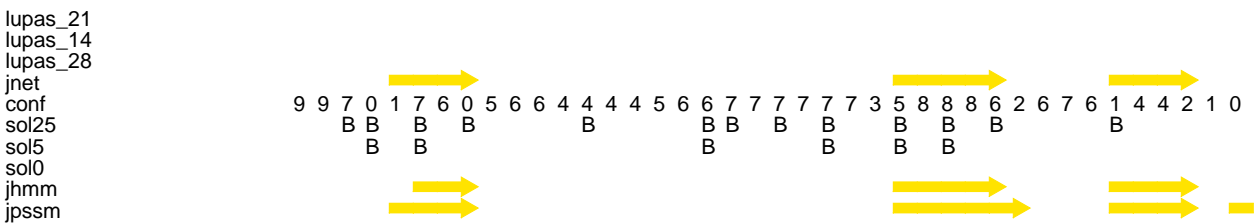
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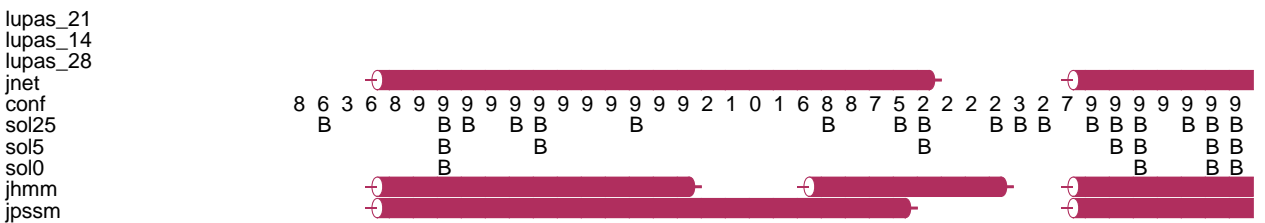
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UniRef90_R5ZML0            I L F K P D G L S G I C I F N A S I R L N P       N E L N S Y S I H L N L T K
UniRef90_A4ETZ9            A V I S A R G L E G G G I Y S I C A T V R E G E A         L S V D L L P
UniRef90_U2U6S5            V L F R S Y G L S G I A V F N L S R T A E P G D           V I E I D L V P
UniRef90_A6VS73            C I V T Q D G M E G S L I Y A F S K Y L R D G I N A S     G Q S S L L M D F L P
UniRef90_B9NLR7            A T I S A K G L E G G G L Y S L T P A I R A G             T P L Y L D L V P
UniRef90_C8W7D3            L L F R P F G L S G I M I F N L S R T A L P G D           T L L E I N L L P
UniRef90_UPI0003B3C9C8     W V I G A Q G V E G G G I Y E V S A P M R D G             A N A H V D L A P
UniRef90_V2TQ06            I V I T H Y G F E S G V I Y R L N R T L R                 V S K T L Y L D L L P
UniRef90_UPI0003721B27     L V I S E F G L E G N A I Y A L S Q K L Q E G L   L N E E R V V V H L D L K P
UniRef90_F0HPR1            V L F R D Y G V S G I A V F N L S R F A E A G D           M L R I D L L P
UniRef90_UPI0003D06BC6     M L F T H R G L S G P A I F N L A N K I Q K K I G I N N F D N F S I T I I F N P
UniRef90_UPI00037E8436     I V I T Q S G I E G G G I Y S L S P A I R K G E S         V I L D L L P
UniRef90_U4UXN3            I I V S R N G I E G G G I Y S V S R T L R T G             V P L T I D L R P
UniRef90_F6CX41            C I V T R D G M E G S L I Y A F S K Y L R D Q I N A S     G E A S L T I D L M P
UniRef90_S7U194            L L F T H Q G I S G P A V L R A S L R L A P G             A A L A A D F L P
UniRef90_B6GEI6            V L F R T Y G I S G I A A L N L S R R L Q P G D           V I D L D L F P
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UniRef90_V7ENU0            F V V S A R G L E G G G I Y A V S A A L R D G             A S L C I D F L P
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UniRef90_Q16E02            A A I T Q T G L E G G G V Y S L T P A L R A G             A P L F V D L A P
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UniRef90_V4QJP1            F V V T G N G I E G S L V Y A L S A A I R A R I E T Q     G A A D V L L D L L P
UniRef90_A0A021X294        F V I S K T G I E G S L V Y A H A A V L R D A L E T S     G A A S F L L D L V P
UniRef90_G8QFM8            F V V S A D G V E G G L I Y A L S A P L R D L I E R       D G S A T L S L D L L P
UniRef90_A2SGQ5            F V V T A T G V E G S L V Y A A S A L L R D E I A A H     G E A S L T L D L L P
UniRef90_B8H0P0            A V I A R Y G L E G G A I Y A L G G A A R D A             A L A G G A T L T V D L R P
UniRef90_G6XFZ7            L T V T T R G L E G S A L Y A L S A P L R E A I A R       T G Q A T L T L D L R P
UniRef90_C8PV04            I I L T Q Y G M E S G L I Y R L N R A M R E Q L   N H T R K V S L Q L D L L P
UniRef90_UPI0004757A00     L V I T R Y G L E G G P V Y R L G P A I R A Q D S P H     V L I D F K P
UniRef90_D0CU77            A V I S E K G L E G G P V Y P L T P A L R A G L           P L H H I D L V P
UniRef90_R7FLZ2            I L F K K D G I S G I S I F D S S                         L Y I D S N S
UniRef90_V2UMY7            I I I T H Y G F E S G V I Y K L G R D L R T Q L S Q K Q N L Q L Q L D   L L P
UniRef90_UPI0004747A66     F V V T D T G V E G S L I Y A A G A H L R E D L N R       G A A H V L D L L P
UniRef90_A4WXA9            F V I S A R G L E G G G I Y A I A R L L R E G A P L A L D L L P D L T V D
UniRef90_V7ZDM9            C V A T A T G I E G S L I Y A L A A D L R E Q I D A Q     G V A E L G L D L V P


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lupas_28
jnet
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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 7 B B B B
sol5    B B 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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UniRef90_A3STW0          D Q S R E A L V E K L A K P R G K M     S V A N Y L R K T L K               L
UniRef90_A1KC32          G R S L E R L R T E L A R P R G     H R S M A S H L Q G Q A G I K G V
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UniRef90_UPI0002E7BDB1   D W L P A R V L S E L Q H P R G A R           S M S S H L Q S R L K L K G A
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UniRef90_I4WF08          G R S E P E L A A R L A A P R G R H           S L G D W L R R R A G L D A V
UniRef90_B0VLD6          D V E L T Q L V K K L Q A S K K Q S L T N I W R K A G L D T A K I N L I R E V V
UniRef90_UPI0002DAC2CD   D L S P S H L A A R L A R P R G K Q S T A S F L R K A G G L M P
UniRef90_K0VCW0          G R P I E             R L A R D L A R Q G A K S S F S N R L R K G A G L D G V
UniRef90_C9CYW4          D L T E D D L A T R L A R P R G K A S W A N H M R R V L K I T P V K M A       L L
UniRef90_Q0FL77          D V S E E A L T A R L A K P R         G K Q S L S N H L R R A L K L S P A
UniRef90_UPI0004698C83   N M S V A E I T A K L S K P R         G K A S L A N H L R K         T V K L
UniRef90_UPI00047C6124   G R S L E R L       A R D L A R P R G K R S I G E H L R R H         A G L D A
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UniRef90_A4ETZ9          D L P L E E V Q K R L S R P R         G K A S L A N H L R K S L         K L
UniRef90_U2U6S5          E Y S E G E I G Q R I F E L G         T Q D T S Y D G I L D P A I A Q V V L
UniRef90_A6VS73          L Q S E A Q V I             K K L R N T K P K E S F S K Y L K R T L
UniRef90_B9NLR7          D M T A E A L Q T R L A G           K K A K A T L S H W L K N S L R L S P Q
UniRef90_C8W7D3          Q L T E E E V A A A V H A Q
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UniRef90_V2TQ06          H L S E D E L V L K L S Q N K K Q S L A N I W R K A G L D Q T K T A L L R E M V
UniRef90_UPI0003721B27   T M T V A Q I R A K Y K R S K L T     K V T E V L K K D L N             L
UniRef90_F0HPR1          R M D A P M L E Q L L L E R R S R L F A R T G D D V L R G M V L P A V G R G V L
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UniRef90_U4UXN3          D W T V D R V E T A L S K P R G     K D S Q T N H L R K A L K             L
UniRef90_F6CX41          E L S V Q Q L Q S K           L K N T K A K E S F S K Y L K R T L
UniRef90_S7U194          G E E V A A V L A E         A S T K A L V R N A L C A R F P A R L A A A L A
UniRef90_B6GEI6          H L S E A Q L L D L L R R R E R D L G S F A G S A P W L D G L V A R P L A A L V
UniRef90_A0A052JED1      G W S A E R V A Q A V H H P R A W M
UniRef90_V7ENU0          D L P V R D V E T R L A R M K P     G E T L A N R L R K L G L S P V A V A L V
UniRef90_UPI0003635204   G R S L E R V H T E L S Q P R K     G R T F S E N L R R Q             V
UniRef90_Q16E02          D R T A E K L A A E L A G           K S G K L R L A H W L R N T L R L S P A
UniRef90_UPI000225F355   D L G V D E L A R R F A R     A P S R L S I G N R L R R G L G D P V R A A L L
UniRef90_UPI00036A3AC7   D V T E E T L A D R
UniRef90_V4QJP1          N R S H E Q I E K A L S R P R G S     R S M A N H L R S Q L G I D G V R A G L
UniRef90_A0A021X294      G R S H A R L V A D L A R Q         G G K A S F S S R L R K G A G L D G V
UniRef90_G8QFM8          G H S A E R V L A E V R R P R G S R           S L S S H L Q S R L
UniRef90_A2SGQ5          D R N P D W V A A E V A R P R G             P R S L S T H L K
UniRef90_B8H0P0          D I P V E T L E R R L H A P R
UniRef90_G6XFZ7          A L D Q N A I L Q R L L A Q R         P R E S Q S N R L R K A L A L D G L
UniRef90_C8PV04          D V A D E K L L S N L K N P K K Q S L A N L W R K     A G L D P V K I A L
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UniRef90_D0CU77          D L S H E G L R R R L A A     T S A K T T L S R W L K N G L R L P P Q
UniRef90_R7FLZ2          N K K Y K V L V D L T K R D N F C I D K N D K S I P L D L M I N E R I A K Y L I
UniRef90_V2UMY7          D L N I E Q L E K K L Q G N K K Q S L T N L W R K A G L D N V K I N L L R E V V
UniRef90_UPI0004747A66   H K T P E Q V L S G V C W P R G S R           S L S S H L K S R L G I D G V
UniRef90_A4WXA9              D V R A R L A R G R A           G E S L A N R L R K L G L
UniRef90_V7ZDM9          G R S L E R V S A E L D K P R


lupas_21
lupas_14
lupas_28
jnet
conf                     8 6 3 6 8 9 9 9 9 9 9 9 9 9 9 9 9 2 1 0 1 6 8 8 7 5 2 2 2 2 3 2 7 9 9 9 9 9 9 9 9
sol25                      B         B B   B B       B           B       B B       B B B   B B B     B B B
sol5                               B       B                     B
sol0                               B                                                             B     B B
jhmm
jpssm
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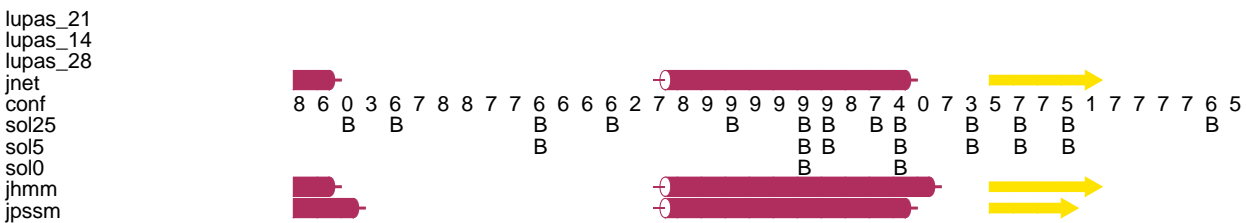
Multiple sequence alignment (positions 130–160)

Sequence	Alignment
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UniRef90_UPI00036FE870	T G V K A G L L R E C L S K E E
UniRef90_A3STW0	D V A K I A L L Q E M A R P L P A N A T D L A R L L K A L P V K H A G L R P L D
UniRef90_A1KC32	K A G L L R E L A T A E D F A D P A R L A A A I K A L P L R L V A T R P L D
UniRef90_I7EGC5	E F A R P L P V E P A A L A R L L K A V P I R H H G L R P L D
UniRef90_S6H647	K A A L L R E L A A K E A F D N P A Q L S K A L I A L P L K L L K P R P L D
UniRef90_UPI0002E7BDB1	K A A L L R E C T S A E D F R D M Y K L A Q A I K E L P V K L R A P R P L D
UniRef90_R5FF45	K L A G I K P S Q K S G D L S P K Q L K L L L G Q I K S Y E A I V M S V N P F A
UniRef90_C4FBE6	C D A V A G T E R P L N R A A S M L H R I P L R V A G T T E H A
UniRef90_UPI0004797AEA	G L S G V K S G L L R E V L E R D A L E E L A A T I K R L P L V L T A P R P I D
UniRef90_I4WF08	K C A L V F E A V D K A V L A D P T A L A A R I K A L P L R L
UniRef90_B0VLD6	D K A L W S Q P E T M A Q K M K A L Q I K L D G F R P I E
UniRef90_UPI0002DAC2CD	
UniRef90_K0VCW0	K A A L L R E L V P E R E R T D P G R L A G I I K A L P V P V L D T R P I G
UniRef90_C9CYW4	Q E F G R P L P Q D A Q E L A R V I H L P V R H A G L R P I D
UniRef90_Q0FL77	A R A L L M E C A R P L P E D P G T L A R T V K A L E L P H Q G L R P M D
UniRef90_UPI0004698C83	T Q A Q I A L L Q E M A R P L P D G L R A T A R L L K A V P V Q N A G L R P M D
UniRef90_UPI00047C6124	V R V G L L H E L P G P L R L D D P R A V A R L L K R Y P L D L L R P R P L Q
UniRef90_R5ZML0	K K S K E D S K T L N D E A S N L S F Q I Q G L Y P F K
UniRef90_A4ETZ9	G A G R M A L L Q E F G R P L P K D P A A L A A V I K A L P V K H A G L R P L D
UniRef90_U2U6S5	R M A H D A S E Q N L A H F I K H V P T V V S S L A D T A
UniRef90_A6VS73	S I T G V K A V L L H E S F P K E A F E S L A R C L K A V P V S F Y K T K P I E
UniRef90_B9NLR7	K I A L F H E M T K G A A S G Q A Q W A D A L K H L P V R Y S D L R P M D
UniRef90_C8W7D3	
UniRef90_UPI0003B3C9C8	L E W G Q P L P K D P G A L A G L I K A L P L R H D G P M G L D
UniRef90_V2TQ06	E K D L W Q Q P E K M A Y Q I K N L E I S I Q G F R P I E
UniRef90_UPI0003721B27	D R T S I G L I K Q F T D K D P D L L A K S I K S I P V I I Q S A D E L D
UniRef90_F0HPR1	K A A G L R A E G P F G
UniRef90_UPI0003D06BC6	
UniRef90_UPI00037E8436	L R E F S S N S F T K E Q L L V D L K S L R I K H E G L D E I D
UniRef90_U4UXN3	D P I K I A L M R E L T P Q L P Q D A K A L A K M V K C L F I K T L E P R P M D
UniRef90_F6CX41	G L S G V K T A L L Y E A F Q K Q R L L S L A E C V K Q V P V S F Y R T K P I A
UniRef90_S7U194	G E A G E T R V A D L G K A A L A K L A A R L K N L P V M P A A A P G F E
UniRef90_B6GEI6	C H L A N G S N D P L A R C A A V L H R L P L R V L G T A E H R
UniRef90_A0A052JED1	
UniRef90_V7ENU0	M E A G R A M G T A A A V K A L P L R L A G P R P L D
UniRef90_UPI0003635204	G I D G V K A A L L Y E H L G K Q D V A L V A R T L K Q L P L R L L R T R P I A
UniRef90_Q16E02	K I A F F F E M T A A G R P S R E A W V A T L K K L A V R Y D G L R P M D
UniRef90_UPI000225F355	M E W G R P L P L A N D E L A R R A K A L V L S H E G P M G I A
UniRef90_UPI00036A3AC7	
UniRef90_V4QJP1	L R E L S P A D T Y A D P A R L A A A I K
UniRef90_A0A021X294	K A A M L R E C I R D V S A L L P D A L A S V I K A L P V L L I R P R P I A
UniRef90_G8QFM8	
UniRef90_A2SGQ5	S R L G I D G V K L L H E L L D K E
UniRef90_B8H0P0	
UniRef90_G6XFZ7	S R A L L R N G T P K H A T P Q Q L A A A L K A L P L T L T G T D T L D
UniRef90_C8PV04	L R E I V A K T H W H D A D K M T K A I K Q L T V E F D S F R P I E
UniRef90_UPI0004757A00	I R G L Y G E V D D A L S L A A C V K R C K V P L T Q P R P M D
UniRef90_D0CU77	K V A L F Y E M T K G E P V T R A D W V G L L K A L P V R H A G L R P M D
UniRef90_R7FLZ2	D R Y K N S A Y E H L D S I E F N I S G K Y E L K
UniRef90_V2UMY7	A K H L W S D A Q Q M A Q Q I K H L K I S L D G F R P I E
UniRef90_UPI0004747A66	K V G L V H E L C S A E Q L A D
UniRef90_A4WXA9	A P A A V A L V Q E F A R P L P P I E V L A A R L K E L P V P L D G P R P L D
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Prediction tracks:

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- lupas_14
- lupas_28
- jnet
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- sol25: B B B B B B B B B
- sol5: B B B B B
- sol0: B B
- jhmm
- jpssm

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UniRef90_A1KC32	E A I	
UniRef90_I7EGC5	E A I S T	
UniRef90_S6H647	E A I S T	
UniRef90_UPI0002E7BDB1	E A I	
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UniRef90_C9CYW4	E A I S T	
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UniRef90_UPI00047C6124	E V I	
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UniRef90_B9NLR7	E A I S T	
UniRef90_C8W7D3		
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lupas_21
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