

QUERY	10	20	30	40
UniRef90_H3KHP2	I D E A L F D A E E K M E K A	V A V A R D D L S T I	R T G R A N P G M F S R	I T
UniRef90_M5E5U2	I A D I L L K Q A E H K M G R T	V V E T L R E D F T K I	I R T G R A S T G L L D H	I K
UniRef90_V5WHS8	I N D I K K D A E E R M A K S L	G A L V D A F K R K V	I R T G R A N P S L L D S	V M
UniRef90_UP10002DD4EEA	M D S V L K S H E D R M K K S V	E K N L E E F N N L	I R T G R A S A S L L F D	K I R
UniRef90_UP100046A16CA	I N E I K T D A Q E R M E K S V	E A L K N N L T K I	I R T G R A H P S L L A G	L S
UniRef90_UP1000395CFAC	I N D I K K D A E E A R M K K T I	V E S L G A A F S K I	I R T G R A H P S I L L D A	G V T
UniRef90_Q9KA66	I D E I K K D A K T R M E K S L	V E A L K H T L G K I	I R T G R A H P S I L L E G	L T
UniRef90_K2JF23	I K E V L N D A E Q R M T K A T E	A L G R E L A K L R	I R T G R A N P A M L D R	I T
UniRef90_J3BYM3	I N E I K A D A K T R M E K S L	E A T K S Q M A K V	I R T G R A H P S I L L D S	I V
UniRef90_UP10003718245	I I E D I K Q D A E Q R M Q K S I	E A L K H D L A K I	I R T G R A H P S I L L D Q	V T
UniRef90_F5L4K9	I N D I K D D A K A R M E K S V	V E A L K S Q L N K V	I V R T G R A H P S I L L D G	I Q
UniRef90_Q485G7	V V E V I Q N A R E R M D K A V	N Q L K T E L A S L	R A G R A T P A L L D K	V V
UniRef90_M8DL13	I D E I I I E D A Q D R M G K S I	E A L K T S L L T K I	I R T G R A H A S S L L D N	I V
UniRef90_E1QEX9	V L K D M E E R M S K A I	S T L K K D L A S L	R A G R A N P A I I L D K	I V
UniRef90_UP100028855F7	I D D T K N E A K E R M H K A I	E A L K R D F S R V	I V R T G R A T P T I L D G	V R
UniRef90_UP10002F04320	K Q I I D Q A K E R M T K A I	D A L T R A F A S I	R A G R A N A S S L L D R	V T
UniRef90_UP1000415B0AB	E A V L K D A K G K M Q K S L	E S L Q R D L A A I	R T G R A N P S I L L D K	V Q
UniRef90_E1JX1	Q E T I N Q A K E R M D K S I	E S L R K E L A T I L	R A G R A N P S I L L D G	I R
UniRef90_U1X3Y2	M Q A V L K D A E D R M Q K A L	A S L L D K E F A R L	I R T G R A T T S L L D R	V T
UniRef90_C8W4R5	Q Q V L K E A E E R M D K A I	S S L K R E L S T L	R A G R A T P P S I L L D K	I N
UniRef90_UP100039B1199	K E I L E D A E D S M K K T V	S V L K K D F A S L	R A G R A T P P G L L D K	I V
UniRef90_UP10004020BDF	N D N D N R R M E G A L	G A L K H E F G G L	R T G R A S A S S L L D N	G I
UniRef90_UP100045E8992	I N E I K K D D A Q T R M T N K S I	E S F K S Q L A K V	I V R T G R A H P S I L L D H	V M
UniRef90_U9VXX3	I N D V E S A M Q K A V	E A T K R S F N T I	R T G R A N A S S L L D R	I S
UniRef90_D1C4K4	I E D V L A D A E G R M T K T L	D N L Q R E L A G I	I R T G R A S P G L I E R	L E Q
UniRef90_G8QPE0	I I S E V K K K N T E A K M Q K S I	E A L K N D L L A K V	I R T G R A H T G L L D H	V Q
UniRef90_U5T3V5	I D D I T S D A D Q R M D K S I	E S L S R Q D L L Q K I	R T G R A N T S S L L D Q	V T
UniRef90_UP100035BCE0C	M N Q V K N Q A Q D K M D K A I	Q V L K K D L L T L	R A G R A N P A I I L D K	V M
UniRef90_UP1000262C9BD	I N E I K K A D A K S R M D K S I	V E S L G H A F A K I	I R T G R A H P S I L L D A	V R
UniRef90_D3HT52	I N E I K Q D S E R R R M K K T I	E A L R I D M M S K I	I R T G R A N V G L L D H	V Q
UniRef90_UP100035F85B5	D A T L K D A R E R M D K S L	E A L R N E L S K I	I R T G R A H P T I L E H	V H
UniRef90_UP10003610FF4	K E L I I A E E A N M M K T V	E V V K K E F A S I	R A G R A T P A L L D K	I T
UniRef90_Q0AYK1	I K D I L S D T E E R M M K K T I	E E H L R K D L A S L	R A G R A N P A M E E K	I M
UniRef90_UP100037D0160	M S T D Y N D L Q R R M E G A I	N A F K H D L A S L	R T G R A S S S N L L D P	I H
UniRef90_UP1000376E1AE	K D V I Q D A N S R M E K A V	Q A L H K E L A T I	R A G R A N P A I I L D K	V Q
UniRef90_UP100036E227D	M Q D L M K N M E E R M D K A L	A N L K K E F V T I	R A G R A N P A I I L D K	V V
UniRef90_W9UY83	I N E I I I R D A E V R M M K K S T	E S L V D N F K K I	I R T G R A H P S I L L D S	I I
UniRef90_F7UZC9	V N D I I L E Q A E G R M Q K A I	L S S L G D A F G S G V	R T G R A N A M V L D R	I K
UniRef90_UP1000374FCB	D I R K S A D S R M T K S L	L E T L K S N L A K L	R T G R A H P S I L L D H	V V
UniRef90_H8GHH8	I S D I I Q Q D A A S R M G K S I	E A L K H E F S K I	R T G R A S P S I L L D G	V M
UniRef90_UP100025562AD	I N D I I K K S S A K E K M M N K A C	T N V M R D N F S K I	R T G R A S T S L L D H	V Q
UniRef90_U2E866	I D E I I Y S D A Q Q R M D K T I	E S L S N N L A K I	R T G R A S P G L L D H	V T
UniRef90_UP100035E14AC	E I I K S T E N R M G K S I	V A A L Q K E F V S L S	R T G R A S T T L L D P	V Y
UniRef90_W2E4J6	N A E D R M Q M K A V	V E T L R K E F G G L	R T G R A S T T L L D P	V Y
UniRef90_B6ISU8	I D D I K S F E R R R M D G A V	V Q A L H N E L A K I	I R T G R A H P S I L L D H	I K M
UniRef90_G2DAH2	I D D I K S D A A T R M D K S I V	K A L L E E E F A A I	I R T G R A S T A L L F D	K I M
UniRef90_H9UKJ5	K D A E S R P R M K K S I	V K A L L E E E F A A I	I R T G R A H P S I L L D H	I Q
UniRef90_L0GUA9	I D D I V K K D T T E R M K M Q K S I	V E A L R H E L A K I	I R T G R A H T G L L D H	I Q
UniRef90_F5RAD6	I P E L K K K N T E Q K M Q K T L	E S L S K T D F G K V	R T G R A S S S S M L D R	I Q
UniRef90_UP1000372B356	Q S I I K K N A E E R M G K A I	E S L S K R D L A T I L	R A G R A S S S S M L D R	V Y
UniRef90_UP100040C5787	I I I I K D T N D K M T Q A V	Q A F S K N L L A T I V	R A G R A N P S I L L D S	V Y
UniRef90_E8N050	I K E T L K E A E T R M K G A I	Q A L E E N L A G I	R T G R A S P A L L V E R	L R
UniRef90_B5SLE5	D V K K S A E E Q K M Q K S I	D A F K A D L A K V	R T G R A H A G G L L D H	V V
UniRef90_A0A059DX22	K K K D L E R R R M E G A L	A S L S T E F S G G L	R T G R A S V N L L D S	V M
UniRef90_C3P5M6	Q Q V L K F S N E K M E K A V	V A A Y S R E L A T I V	R A G R A S A S S V L L D K	V Q
UniRef90_F4HDJ5	I K T I I K D E A Q Q R M E K S V	E A L K H E F S K I	R T G R A H P S I L L D G	I H
UniRef90_Q2JHW2	L A J A E E L E M N M K A V	Q A T Q R S F N T I	R T G R A N S S S L L D R	I Q
UniRef90_W4LDE3	L D D V Y Q E V E H K M E R S I	E A L R R D L A R I	R T G R A S L A L L D G	I R
UniRef90_W6LYL5	D N L K K E A T A R M A K S I	I D S L L K Q E L S K I	R T G R A H A S S L L D H	V V
UniRef90_C7MPE3	V E D I I M L E A E E R M E K A V	D S L L G E A F S N V	R T G R A N A M V L D R	I R
UniRef90_E0RTL8	M E Q I I K I D A E T R M M K S V	H A L K D Q L A T I	R T G R A T P A L L F E K	I T
UniRef90_C1DSU3	I N E I K K D A Q A R M M K K S L	E S L E H A F A K I	I R T G R A H P S I L L D G	V V
UniRef90_C8XB9	I D E E I L F D A E E K M E K A V	S V A K D D L A T I L	R T G R A N P N M F G R I	Q
UniRef90_Q5FPZ4	L N D L L I A D L T R R M D G A I	E S L R R D L S G L	R S G R A S P N L L E P	V
UniRef90_D9I3A3	D Q R I I T E A A R R M D G A I	E V L N R E F S G G L	R T G R A S V N L L D A	I K
UniRef90_UP100030E365C	N N V Y E Q A K E K M M N K S I	A A F T R E L A S I	R A G R A N A S S L L D R	I T
UniRef90_G9Y9M8	I N E I K K D A E T R M D K C V	V E A F K S N I S K I	R T G R A H P N L L D G	I S
UniRef90_T0BZL1	E A V I I Q N V Q E R M E K A L	Q N L R E F A S I	V R A G R A T P A M L D K	V M
UniRef90_K0K9U4	I D E T I I L L D A E E K M E K A V	S V A K E D L A A I	R T G R A T P S M F S R I	V
UniRef90_R5ANS5	E I I L D S T R E R M S K T I	I S V L E Q E L L N G L	R A G R A N P Q L L D R	L M
UniRef90_M2WED1	I D E A L I F D A E E K M E K T V	V A S A K D D L G G I	R T G R A N P G M F N R	I A
UniRef90_R5IE87	L I K E F Q R K M E K T L	D V L A S D F A A V	R A G R A N A Q V L D R	I T
UniRef90_R5VYJ9	L S Q Y E E K M Q M K S I	D N L E E A E Y A T I	R A G R A N P N I L N K L	R T
UniRef90_UP10002C36FC2	I E K D A K G R M E K T I	I E T V R S N F N S I	R T G R A S P A M L D K	V T
UniRef90_UP10001C36E8F	M K E T I I N Q A K E K M T K C I	I N S N L G N E F A S I	R A G R A N P S V L L D K	V F
UniRef90_UP10002485DD9	I D D T I L L E A E D H M S R S V	E H V R E D L T T I	R T G R A T P A M F N G	V F
UniRef90_W2EQI5	I I D E T I L L E A E E K M D K A V	R T V A K D F D A S I	R T G R A V T P S M F S K I	S
UniRef90_K7AF48	I I D E I N D D A R Q R M E K S I	I N V L K G Q L S K I	R T G R A H P S L L D N	I M
UniRef90_A1WX18	I E D I I Q E D A D R R M D G A V	V E S L K H D L A R I	R T G R A H T S L L D Q	V
UniRef90_A8TUK4	D L D L D D I I E R R R M D G A V	V V A L R A E F S G G L	R T G R A S A S L L D P	I Q
UniRef90_B8INK3	L A D L K R R M M Q G A V	V N A L K H D L G G S I	R T G R A S P T L L D P	I T
UniRef90_A7INR3	M S D L L K R R M M Q G A V	G V L R D E L G G I	R T G R A S A S S L L D P	I T
UniRef90_I2JL15	I N E L K E D A K V R M A K A V	E A L G S N F N K I	R T G R A H P S L L D G	V R
UniRef90_UP10002625E0B	I D E T I L L D A E E K M E K A V	S F A K E D L S S I	R T G R A N P G M F A R I	I M
UniRef90_UP100041267FC	I I K D A K N R M E K M S V	E A L S V A L G K I	R T G R A H V S I L D H	I E
UniRef90_UP1000372851A	L N E I I A E D A Q D R M G K S L	E A L A T N L K K I	R T G R A H P S I L L E T	V Q
UniRef90_B4RBZ1	K P V L S K Y R D R M D K A V	A A L K E E F G G S I	R T G R A S A S S L L D Q	I H
UniRef90_I4X915	K S V M N D T K S K M T N A I	Q A F S R D L S S I	R A G R A T P S I L L D K	L T
UniRef90_K9UHQ6	F A D V E G H M Q K A V	E S V G R G S F N T I	R T G R A S T S L L D R	V T
UniRef90_Q11629	I N D I K K D A Q E R M G K S I	E A L G R N R L A S I	R T G R A H P S I L L D S	V K
UniRef90_B4WMD1	L G E V E S A M Q K A V	E S T K R A F N T I	R T G R A S A S S L L D R	I M

QUERY	50	60	70	80
UniRef90_H3KHP2	D Y Y G A A T P I T Q L A S I N V P E A R L V I K P Y E A N Q L R A I E T A			
UniRef90_M5E5U2	V D Y Y G C P T P I N Q V A Q I G V G D A H T L T V Q P W E K S M I K V V E K A			
UniRef90_V5WHS8	V N Y Y G T P T P L T Q I A N V T V E D G R A L A V S P W E R N M V P E I E K A			
UniRef90_UP10002DD4EEA	V E Y Y G A P T P L N Q V A N V V A E D A R T L S I T V F D R E L A P K V E K A			
UniRef90_UP100046A16CA	V D Y Y G S Q V P L N Q V A N I T T E D A R T L T V V P W E K P M V Q K V E K A			
UniRef90_UP1000395CFAC	V E Y Y G A Q T P L N Q V A N I S V P E A R L V I A S V Y D K Q V T Q A V E K A			
UniRef90_Q9KA66	V E Y Y G A E T P L N Q V A N I T A E D A R T L A I T V F D R N M I Q A I E K A			
UniRef90_K2JF23	V D Y Y G A A S P L K Q V A N I G T E D A R T L K V T P W E K P M A S K I E K A			
UniRef90_I3BYM3	V D Y Y G S E V P L S Q V A N I G T E D A R T L K V T P W E K P M A S K I E K A			
UniRef90_UP10003718245	V S Y Y G A D T P L R Q V A N I V S I E D S R T L S I S V F D K S L V Q A V E K A			
UniRef90_F5L4K9	V D Y Y G T Q T P V P N Q V A N I S A P E P R L T I Q P W D K S A L D A I E K A			
UniRef90_Q485G7	V E Y Y G G M D T P L N Q V G N I V S V P D A R N L S I T V F D K S M I S A V E K A			
UniRef90_M8DL13	V D Y Y G T P T P I S Q L A N I S V P E P R M L T I Q P W D K S S L K E I D R A			
UniRef90_E1QEX9	A D Y Y G Q P T P L N Q M A G I S V P E A R L I V I Q P W D P K S C E I E K A			
UniRef90_UP100028855F7	V E Y Y G A P T P L N Q M A S I S V P E A R L I V I Q P Y D K T I L G E I E K A			
UniRef90_UP10002F04320	V D Y Y G A P T P I N Q L A G I A V P E A R R M L T I T P Y D K G S V D D V L K A			
UniRef90_UP1000415B0AB	V E Y Y G G M M T P L N Q L A T I S V P E A R R M L T I Q P F D K S S L A D I E R A			
UniRef90_E1JX1	V D Y Y G T P T P L D Q M A S V I S T P D S R T I T I A P W D R K A F H D V E K A			
UniRef90_U1X3Y2	V E Y Y G S P V P V N Q V A N I S T P E P R L I V I Q P W E K T M L G P I E K S			
UniRef90_C8W4R5	V D Y Y G T P T P L N Q V A N I S V P E A R L I V I Q P W D K S V I P A L E K A			
UniRef90_UP100039B1199	V E A Y G A Q T P L S Q I G S V N V P E P R M L T I N V W D K S M V G A V E K A			
UniRef90_UP10004020BDF	V P Y Y G S N T P L R Q V G N I V S T E D A R T L T T V F D A T L I A A V E K A			
UniRef90_UP100045E8992	V D Y Y G S D V P V N Q V A N I V T L L D A R T I T G V Q P W E K N M L S K V E K A			
UniRef90_U9VXX3	V E Y Y G S P T P L K S M A N I S T P D P S T L M I Q P Y D A S L S Q I E K A			
UniRef90_D1C4K4	V D Y Y G T P T P L N Q V A G I S A P E P R L I V I Q P W D R S A M S A I E K A			
UniRef90_G8QPE0	V D Y Y G S M V P V N Q V A N I T L V D A R T I G V Q P W E K G M G A K I E K A			
UniRef90_U5T3V5	V S Y Y G T E V P L H Q A A S V T V S D A R T L M V T P F E K S M V S P I E K A			
UniRef90_UP10003B5CE0C	V E Y Y G S E M P V N Q T A N I S A P D P R T L L I Q P W D K S V L N E I E R A			
UniRef90_UP1000262C9BD	V D Y Y G S E V P V S Q V A N I S V E D A R T L A V T P W E K P M V G D I E K A			
UniRef90_D3HT52	V D Y Y G N L T P L S Q V A N I V T A S D S R T I L V T P W E K S M V S A I E K A			
UniRef90_UP100035F85B5	V E Y Y G Q M D V P I N Q V A N I N A E D A R T I S V P Y E K D M V G K I E K A			
UniRef90_UP10003610FF4	V N Y Y G T P T P L N Q L A N I T V P E A R L I V I Q P W D K S A L P E I E K A			
UniRef90_Q0AYK1	V D Y Y G Q P T P I N Q L A N I T V P E P R M I S V S V W D K S M V G A V D R A			
UniRef90_UP100037D0160	V M A Y G S P M P L N Q V A T V S V P E P R M I V I A P F D K S S I G D I E K G			
UniRef90_UP100037E1AE	V S Y Y G M D T P L N Q L A T V S V P E A R M L V I T P W D K G A L G E I E R A			
UniRef90_UP100036E227D	V E Y Y G S T M P I N Q L A S V M V E D A R M L T I V P W E K K M V P E I E K A			
UniRef90_W9UY83	V S Y Y G S P V P I Q Q V A N V M V E D A R M L T I V P W E K K M V P E I E K A			
UniRef90_F7UZC9	V D Y Y G V P T P V N Q M A G I K T P D A H M L V I E P W D K G V L G A I E H A			
UniRef90_UP1000374FCB	V E Y Y G S P V P V G Q V A N L T L V D A R T I S V Q P Y E K P M L Q P I E K A			
UniRef90_H8GHH8	V S Y Y G T D S S L S Q V A N L A V E D A R T L T I T P W E K N M V P V I E K A			
UniRef90_UP100025562AD	V D Y Y G S Q T P I R Q L G S V T A E D A R T L L I T V F D R G A I S A V E K A			
UniRef90_U2E866	V D Y Y G S E V P L N Q A A N I S L E D A R T I T I Q P W E K N M I S V V E K A			
UniRef90_UP100035E14AC	V D Y Y G S M V P V S Q V A N V N V I D A R A L S V Q P W E K N M I S V V E K A			
UniRef90_W2E4J6	V E Y Y G G M T P L N Q L A N V T G V P D P R T L L I Q P W D K S S L G A I E K A			
UniRef90_B6ISU8	V D A Y G S S S P L N Q V A T V G V P E P R L I T V Q V W D R S L V K A V E K A			
UniRef90_G2DAH2	V D Y Y G S E T P L N Q V A N I N I E D A R T L A V T P W E K T M V Q A V E K A			
UniRef90_H9UKJ5	V E Y Y G T P T P L N Q V A T V S T P E A R L V V I Q P W D K S A L G D I E K A			
UniRef90_L0GUA9	V S Y Y G S E V P I K Q V A N I T A E D A R T L A V T P W E R R N L V Q A V E K A			
UniRef90_F5RAD6	V D Y Y G S L V P L S Q V A N I V T L I D A R A I G V Q P W E K K M L S V V E K A			
UniRef90_UP1000372B356	V E Y Y G A P T P V N Q L A N I V N T P D S R T L M I Q P W D K T S L G A I E K A			
UniRef90_UP100040C5787	V D Y Y G A N T P L N Q L A T V S A P E A R R L L V I T P F D K S A T A N I E K G			
UniRef90_E8N050	V E Y Y G V P T P L M Q L A S I S A P E P R V L I T P F D T S S L R I E K A			
UniRef90_BS5LE5	V D Y Y G S M V P I S Q V A N V G L A D A R T I S V Q P W E K K L V S A V E K A			
UniRef90_A0A059DX22	V P A Y G S T V P L N Q V A S V T V S D N R M L S V N V W D K S V V G A T D R A			
UniRef90_C3P5M6	V D Y Y G A P T P V Q Q V A N I T V P E A R R L L V I Q P Y D K T S I G D I E K A			
UniRef90_F4HDJ5	V E Y Y G Q Q A A T P L R Q V A N V V A E D A R T L A I T V F D R S L I S A V E K A			
UniRef90_Q2JHW2	V E Y Y G V P T P L P K A L A S I T T P D S S T L L I Q P F D P S T L A A I E R A			
UniRef90_W4LDE3	I D Y Y G A A T P L D Q M A T L S V P E S R L I T I Q P W D K T Q I G V I E K A			
UniRef90_W6LYL5	V S Y Y G N E M P L N Q V A S V G L A D A R T L L V T P W E R R N M V G P I E K A			
UniRef90_C7MPE3	V D Y Y G V P T P I N Q M A A I K T P D A H M L V I E P W D K G T L G A I E H A			
UniRef90_E0RTL8	V N Y Y G Q Q T P L N Q V A S I S A P E P R L V I Q P W D K S V L Q E I E K A			
UniRef90_C1DSU3	V S Y Y G A D T P L R Q V A N V V A E D A R T L A I T V F D K S M I Q A V E K A			
UniRef90_C8XB79	V D Y Y G A P T P I T Q M A A I N I P E A R R M A V I K P Y D S S Q L H A V E K A			
UniRef90_Q5FPZ4	V E A Y G S E V P L S Q V G S I A V P E A R R M L T V S V W D R T V V G A V E R A			
UniRef90_D9I3A3	V D A Y G S P T P V N Q L A G N I S V P E A R R L L V I T V P W D K S V L N K A V E K A			
UniRef90_UP100030E365C	V D Y Y G V P T P V R Q V A N I S V P E A R R L L V I T P Y D K S I L S E I E K A			
UniRef90_G9Y9M8	V E Y Y G S A T P L R Q V A N I V V A E D S R T L A I T V F D R S L S A A V E K A			
UniRef90_T0BZL1	V E Y Y G A Q M P V P N Q V A S V G T S P E P R Q L V I S P W E K S M L G E I E K A			
UniRef90_K0K9U4	V E Y Y G S P T P L N Q L A S V A I S P E A R R M A V I K P Y D A S Q L N Q V E K A			
UniRef90_R5ANS5	V D Y Y G T P T P I Q Q V A N I S T P E P R M L I I S V W D Q K A I P A V E K A			
UniRef90_M2WED1	I E Y Y G A M T P I S Q V A S I T V P E A R R L L V I K P Y E A S Q L G P I Q N A V E K A			
UniRef90_R5IE87	V E Y Y G Q Q P S P I N Q V G T V S S S P D P R T L V I Q P W D G S L L K A I E K A			
UniRef90_R5VYJ9	V E Y Y G V P T P M Q Q L A N I T V P E A R L M I S A P W E P S L V K E I E K A			
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UniRef90_UP10001C36E8F	V D Y Y G A P T P I N Q L A A V I S V S E G R T L V I S P W E K P Q L K A I E K A			
UniRef90_UP10002485DD9	A E Y Y G V R T P I T Q M A T I S V P E P R M L I I R P Y E M S V L G E I E N A V E K A			
UniRef90_W2EQI5	V D Y Y G S P T P I Q Q L A S F H V P E A R R M V L V I Q P Y D K G S L N A I E K A			
UniRef90_K7AF48	V P Y Y G T D T P L K Q L A N I I A E D S R T L A L T V F D K S S A K A V E K A			
UniRef90_A1WX18	V E Y Y G M E V P I K Q A A N I S V E D S R T L A V T P F E K H M V P A I E K A			
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UniRef90_B8INK3	I E A Y G A V M P M A Q V A T I S V P E P R L L S V V W D R G M V S A V E K A			
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UniRef90_UP10002625E0B	V E A Y G S T M P L N Q V A G V I N P E A R R M V V I K P Y D Q G Q L G A I E K A			
UniRef90_UP100041267FC	V E Y Y G S M V P L S Q V A N I T V Q D S R T L G I S P W E K T M V G P I E K A			
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QUERY	90	100	110	120
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UniRef90_E1JX1	Q K A D L G L T P S N D G N I I R I T I P A L T E E R R R S E L L V K L V R R Y S			
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UniRef90_H9UKJ5	Q K S E D L G L N P N N D G K V I R I N I P P L T E E D R R R K E I V K S A K Q I A			
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UniRef90_UPI00040C5787	Q K A D L G L S P S S D G N V I R I N I P A L T E E R R R K D L V K V V V G K Y S			
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UniRef90_B5SLE5	R E A D L G L N P A T M G D V I R V P M P A L T E E R R R K E L L T K V V V K S E G			
UniRef90_A0A059DX22	R D S G L G L N P V T D G Q N I R I P I P P L T E E E R R R R E L L Q K V A G K Y A			
UniRef90_C3P5M6	L K A D L G L N P S N D G T V I R I A F P A L T E E R R R R D L L T K V V V K K Y A			
UniRef90_F4HDJ5	M A S D L G L N P A S A G T V I R V P L P P L T E E R R R R E L L V K V V V R A E A			
UniRef90_Q2JHW2	V I A S D L G L T P S N D G K V I R V T P P L T E E R R R K E L L S K Q V A K L A			
UniRef90_W4LDE3	Q S S D L G L T P T N D G A L I R L S I P A L T A E R R R R E L L V K Q V K K I G			
UniRef90_W6LYL5	L K S D L G L N P A S A G T T I R V P L P P L T E E R R R R D L M V K I V R H E G			
UniRef90_C7MPE3	N N S N L G L T P T N D G N L I R L S I F P T L T E E R R R R E L L V K Q C K A Y A			
UniRef90_E0RTL8	Q S S D L S L P V N D G K V I R I N I P P L T E E R R R K E L L V K L A K N V A			
UniRef90_C1DSU3	M T S D L G L N P A T A G T T I R V P M P A L T E E T R K G Y T R Q A R A E A			
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UniRef90_G9Y9M8	M A S D L G L N P M S A G A V I R V P L P A L T E E E R R R K D L L V Q V R K L A			
UniRef90_T0BZL1	Q K S D L G L N P S N D G S V I R I L V I P A L T E E E R R R Q E L L V Q V R K L A			
UniRef90_K0K9U4	R D S D L G L N P S N D G A V I R V V I P Q L T E E E R R R R Q E L L M V K V A K S K G			
UniRef90_R5ANS5	Q K S D L G I N P S N D G R V I R I L V F P E L L T E E E R R R K E L L V K V V R K R G G			
UniRef90_M2WED1	R N S D L G L V N P T D D G T L I R V S V P Q L T E E E R R R R E L L V K Q S K A K G			
UniRef90_R5IE87	Q T S D L G L N P Q N D G R V I R V F P Q L T E E E R R R R E L L T K Q V R K Y A			
UniRef90_R5VYJ9	M N S D I G I T P N N D G R N I I L N F P E L L T E D R R R K E L L V K D I K K K G			
UniRef90_UPI0002C36FC2	V I A S D L G M T P N N D G E V I R I R L T L P Q L T S D R R R K E L L T K V V S K Q A			
UniRef90_UPI0001C36E8F	Q A S D I G I N P T N D G N V I R I R L T F P Q L T E D R R R K E L L L A K E E L K G L Q			
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UniRef90_W2EQI5	R D S D L G L V N P G N D G A V I R V V F P Q L T E E E R R R R E L L V K Q S K A K G			
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UniRef90_B8INK3	R E S D L G L N P M T E G Q T I R I R L R I P M E L T E E E R R R R E L L M V K V A H K Y A			
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QUERY

UniRef90_H3KHP2
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UniRef90_KOK9U4
UniRef90_R5ANS5
UniRef90_M2WED1
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UniRef90_I2JL15
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UniRef90_I4X915
UniRef90_K9UHQ6
UniRef90_Q11629
UniRef90_B4WMD1

	130	140	150	160	
QUERY	V S V R N I R R K A M E E L H R I R K E G E A G E D E V G R A E E K D L D	R I R K E G E A G E D E V G R A E E K D L D	G E D E V G R A E E K D L D	I Q	
UniRef90_H3KHP2	V A V R N I R R D A N T H I D R L L K D K E I I S E D D D Q R R A E E T E I Q	R D A N T H I D R L L K D K E I I S E D D D Q R R A E E T E I Q	D Q I Q	D I Q	
UniRef90_M5E5U2	V S V R N I R R D A N G T L K D L L K D K E I I S E D D D Q R R A E E T E I Q	R D A N G T L K D L L K D K E I I S E D D D Q R R A E E T E I Q	D Q I Q	D I Q	
UniRef90_V5WHS8	V A V R N I R R D A N G D I K S L L K D K D D I V S E D D D Q R R A E E T E I Q	R D A N G D I K S L L K D K D D I V S E D D D Q R R A E E T E I Q	D Q I Q	D I Q	
UniRef90_UP10002DD4EEA	V A V R N I R R D A N S D I K A L L K D K E I I S E D D D D H R A Q D D I V Q	R D A N S D I K A L L K D K E I I S E D D D D H R A Q D D I V Q	D D I Q	D I Q	
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UniRef90_UP1000395CFAC	V A V R N I R R D A N N D I K A L L K D K E I I S E D D D D S R R A A D D I V Q	R D A N N D I K A L L K D K E I I S E D D D D S R R A A D D I V Q	D D I Q	D I Q	
UniRef90_Q9KA66	V A V R N I R R D A N D D I K K L E K G G T I S E D D E S R R H Q E E T I Q	R D A N D D I K K L E K G G T I S E D D E S R R H Q E E T I Q	D D I Q	D I Q	
UniRef90_K2JF23	V A V R N I R R D A N E M L K E F K K E G E I I S E D D D A F R G Q E E I Q	R D A N E M L K E F K K E G E I I S E D D D A F R G Q E E I Q	D D I Q	D I Q	
UniRef90_I3BYM3	V A V R N I R R D A N D V N D F K K A E K A G D I I T E D D D L R G Y G D D I V Q	R D A N D V N D F K K A E K A G D I I T E D D D L R G Y G D D I V Q	D D I Q	D I Q	
UniRef90_UP10003718245	V A V R N I R R D A N D E F K K M E K D G D G I I S E D D E L R S Y N D D D V Q	R D A N D E F K K M E K D G D G I I S E D D E L R S Y N D D D V Q	D D I Q	D I Q	
UniRef90_F5L4K9	V A V R N I R R D A N E S I L K K I E K E G G I I S E D D D H H Q A E D S I Q	R D A N E S I L K K I E K E G G I I S E D D D H H Q A E D S I Q	D D I Q	D I Q	
UniRef90_Q485G7	V A V R N I R R D A N S D F K K S L L K E K E K E I I S E D D D D S R R H Q E E T I Q	R D A N S D F K K S L L K E K E K E I I S E D D D D S R R H Q E E T I Q	D D I Q	D I Q	
UniRef90_M8DL13	V A V R N I R R D A N D D I K K L E K G G T I S E D D E S R R H Q E E T I Q	R D A N D D I K K L E K G G T I S E D D E S R R H Q E E T I Q	D D I Q	D I Q	
UniRef90_E1QEX9	V A V R A A R R D A N E M L K E F K K E G E I I S E D D D A F R G Q E E I Q	R A A R R D A N E M L K E F K K E G E I I S E D D D A F R G Q E E I Q	D D I Q	D I Q	
UniRef90_UP100028855F7	V A V R N I R R D A N D V N D F K K A E K A G D I I T E D D D L R G Y G D D I V Q	R D A N D V N D F K K A E K A G D I I T E D D D L R G Y G D D I V Q	D D I Q	D I Q	
UniRef90_UP10002F04320	V A V R N I R R D A N D E F K K M E K D G D G I I S E D D E L R S Y N D D D V Q	R D A N D E F K K M E K D G D G I I S E D D E L R S Y N D D D V Q	D D I Q	D I Q	
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UniRef90_E1JX1	V A V R N I R R D A N D A L K K K N D K A I S E D D D D M K H N Q D L V Q	R D A N D A L K K K N D K A I S E D D D D M K H N Q D L V Q	D D I Q	D I Q	
UniRef90_U1X3Y2	V A V R N I R R D A N D S I K K L E K N G D I I T E D D D M K H N Q D L V Q	R D A N D S I K K L E K N G D I I T E D D D M K H N Q D L V Q	D D I Q	D I Q	
UniRef90_C8W4R5	V A V R N I R R D A N D L L K S E Q K D G D G I I T E D D D S R R H Q E E T I Q	R D A N D L L K S E Q K D G D G I I T E D D D S R R H Q E E T I Q	D D I Q	D I Q	
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UniRef90_UP10004020BDF	V A V R N I R R D A N G D F K K E L L E K E K E I I S E D D Q R R G Q D D I V Q	R D A N G D F K K E L L E K E K E I I S E D D Q R R G Q D D I V Q	D D I Q	D I Q	
UniRef90_UP100045E8992	V A V R N I R R D A N N E F K N L L K D K S I I T E D D D E A R D Q D Q V	R D A N N E F K N L L K D K S I I T E D D D E A R D Q D Q V	D D I Q	D I Q	
UniRef90_U9VXX3	V A V R N I R R D G M D F A K K Q E K S G D I I T E D D D E A R D Q D Q V	R D G M D F A K K Q E K S G D I I T E D D D E A R D Q D Q V	D D I Q	D I Q	
UniRef90_D1C4K4	S R V A I R N I R R D A L A Q V K E M L Q E K L I G E D D E R R A E Q Q V	R D A L A Q V K E M L Q E K L I G E D D E R R A E Q Q V	D D I Q	D I Q	
UniRef90_G8QPE0	S R V A I R N I R R D A N N S L K E G V V K S K E I I S E D D D E R R R T Q D D I V Q	R D A N N S L K E G V V K S K E I I S E D D D E R R R T Q D D I V Q	D D I Q	D I Q	
UniRef90_U5T3V5	S R V A I R N I R R D A N G D F K Q L K D K E I I T E D D D Q K Q G E D R I V Q	R D A N G D F K Q L K D K E I I T E D D D Q K Q G E D R I V Q	D D I Q	D I Q	
UniRef90_UP10003B5CE0C	S R V A I R N I R R D A N D E L K K M E K N G D I I P E D D T S R R G Q E E I Q	R D A N D E L K K M E K N G D I I P E D D T S R R G Q E E I Q	D D I Q	D I Q	
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UniRef90_D3HT52	G K V S I V R N I R R D A N N Q L K D L V K D K S I I S E D D D E R R A A E A I Q	R D A N N Q L K D L V K D K S I I S E D D D E R R A A E A I Q	D D I Q	D I Q	
UniRef90_UP100035F85B5	H A R V A V R N I R R D A N N A F Q K L V K D K E I I S E D D D E H K A Q E L I V Q	R D A N N A F Q K L V K D K E I I S E D D D E H K A Q E L I V Q	D D I Q	D I Q	
UniRef90_UP10003610FF4	G R V A V R N I R R D A N D A L K K A E K K E G E I I S E D D D E L K R S Q D E V Q	R D A N D A L K K A E K K E G E I I S E D D D E L K R S Q D E V Q	D D I Q	D I Q	
UniRef90_Q0AYK1	G R V A V R N I R R D S N E L L K S G E K E K I I S E D D D D N K K G M D D I V Q	R D S N E L L K S G E K E K I I S E D D D D N K K G M D D I V Q	D D I Q	D I Q	
UniRef90_UP100037D0160	A K V A T R H V R R D G M D A L K K A E K K D G D I I S Q D D Q R R V Q S D D K V Q	R D G M D A L K K A E K K D G D I I S Q D D Q R R V Q S D D K V Q	D D I Q	D I Q	
UniRef90_UP1000376E1AE	A R V A V R N I R R D A N D E L K K Q E K N G D D I I S E D D E A R K F Q D E T Q	R D A N D E L K K Q E K N G D D I I S E D D E A R K F Q D E T Q	D D I Q	D I Q	
UniRef90_UP100036E227D	A R V A V R N I R R D A N D E L K K Q E K N G D D I I S E D D E A R K F Q D E T Q	R D A N D E L K K Q E K N G D D I I S E D D E A R K F Q D E T Q	D D I Q	D I Q	
UniRef90_W9UY83	A R V A V R N I R R D A N D S F K D A L K G K E I I S E D D D D R R R G Q D L V Q	R D A N D S F K D A L K G K E I I S E D D D D R R R G Q D L V Q	D D I Q	D I Q	
UniRef90_F7UZC9	A R V A V R K A A R Q D A N A A L I R A V V K E E S L P E D D D E R R A Q A D D V Q	R D A N A A L I R A V V K E E S L P E D D D E R R A Q A D D V Q	D D I Q	D I Q	
UniRef90_UP10003742FCB	A R V A V R N I R R D A N A A I K A L V K D K T I I S E D D D D R R R A Q D D V Q	R D A N A A I K A L V K D K T I I S E D D D D R R R A Q D D V Q	D D I Q	D I Q	
UniRef90_H8GHH8	G R V A V R N I R R D A N H D L L K D L V K E K M I I S E D D E R R G Q E E K I V Q	R D A N H D L L K D L V K E K M I I S E D D E R R G Q E E K I V Q	D D I Q	D I Q	
UniRef90_UP100025562AD	Q I K V Q V R N I R R D A N A E V K A L L K D K E I I S E D D E D R K A Q E E I Q	R D A N A E V K A L L K D K E I I S E D D E D R K A Q E E I Q	D D I Q	D I Q	
UniRef90_U2E866	D G R V A V R N I R R D A N S T L K E L V S E K E I I S A D D Q H G G E A R I V Q	R D A N S T L K E L V S E K E I I S A D D Q H G G E A R I V Q	D D I Q	D I Q	
UniRef90_UP100035E14AC	D A K V A V R N I R R D A N E A L K K M E K D G D I I S E D D E E R R Y Q E V V Q	R D A N E A L K K M E K D G D I I S E D D E E R R Y Q E V V Q	D D I Q	D I Q	
UniRef90_W2E4J6	D A K V A V R N I R R D S N E S I L K K M E K T I I S E D D E S R R R H Q D D I V Q	R D S N E S I L K K M E K T I I S E D D E S R R R H Q D D I V Q	D D I Q	D I Q	
UniRef90_B6ISU8	Q A R V A V R N I R R D G M D M L K K L L K D G D D I I S E D D E Q K T W A D K V Q	R D G M D M L K K L L K D G D D I I S E D D E Q K T W A D K V Q	D D I Q	D I Q	
UniRef90_G2DAH2	G A R V A V R N I R R D A N H D L L K D L V K E K M I I S E D D E R R R G Q E E K I V Q	R D A N H D L L K D L V K E K M I I S E D D E R R R G Q E E K I V Q	D D I Q	D I Q	
UniRef90_H9UKJ5	Q A K V A V R N I R R D A N D Q L K K Q Q K D G E I I S E D D E R R G Q E E M I V Q	R D A N D Q L K K Q Q K D G E I I S E D D E R R G Q E E M I V Q	D D I Q	D I Q	
UniRef90_L0GUA9	Q S R V A V R N I R R D A N N E E L K K M E V K E K M I I S E D D E R R R A Q D D V Q	R D A N N E E L K K M E V K E K M I I S E D D E R R R A Q D D V Q	D D I Q	D I Q	
UniRef90_F5RAD6	Q A R V A V R N I R R D A N N A I K A L V K D K T I I S E D D E R R R A Q D D V Q	R D A N N A I K A L V K D K T I I S E D D E R R R A Q D D V Q	D D I Q	D I Q	
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UniRef90_UP100040C5787	S R I A V R N I R R D M V K D L R D F E K K I I S E D D E D R K A Q E E E I Q	R D M V K D L R D F E K K I I S E D D E D R K A Q E E E I Q	D D I Q	D I Q	
UniRef90_E8N050	B S S L E 5	S R I A V R N I R R D A N E Q F K Q F K L V K D K A I I S E D D E D R L H S L S D E V Q	R D A N E Q F K Q F K L V K D K A I I S E D D E D R L H S L S D E V Q	D D I Q	D I Q
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UniRef90_W6LYL5	E G A K V A I R N I R R D A N N Q L K T L L K D K K I I T E D A E R R Q T Q D E V Q	R D A N N Q L K T L L K D K K I I T E D A E R R Q T Q D E V Q	D D I Q	D I Q	
UniRef90_C7MPE3	E A R I A V R N A R R D A N S A V E K A V K N D G L P E D D E Q R R S E E A D I Q	R D A N S A V E K A V K N D G L P E D D E Q R R S E E A D I Q	D D I Q	D I Q	
UniRef90_E0RTL8	Q S R V A I R N I R R D A N E A L K K A E K N G D I I S E D D E R R R A Q D D V Q	R D A N E A L K K A E K N G D I I S E D D E R R R A Q D D V Q	D D I Q	D I Q	
UniRef90_C1DSU3	S A R V A I R N I R R D A L A Q V K D L V K E K E I I S E D D E E R R A A D E V V Q	R D A L A Q V K D L V K E K E I I S E D D E E R R A A D E V V Q	D D I Q	D I Q	
UniRef90_C8XBT9	D A K V S I V R N I R R R K K C T Q V L D K L V K D G E E V G E D D V T R A E K E L V Q	R D K C T Q V L D K L V K D G E E V G E D D V T R A E K E L V Q	D D I Q	D I Q	
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UniRef90_G9Y9M8	Q G R V S V V R N I R R D A N D K V K V L L K D K E I I S E D D E D R K S Q D E V V Q	R D A N D K V K V L L K D K E I I S E D D E D R K S Q D E V V Q	D D I Q	D I Q	
UniRef90_T0BZL1	E A R V S I V R N I R R D G N D E L K K A E K N G E I I S E D D E A R R L M D K I I V Q	R D G N D E L K K A E K N G E I I S E D D E A R R L M D K I I V Q	D D I Q	D I Q	
UniRef90_K0K9U4	E A D A K V S I V R N I R R D A K A E E L D R L V K D G E V G E D D D G S R G E K E L I V Q	R D A K A E E L D R L V K D G E V G E D D D G S R G E K E L I V Q	D D I Q	D I Q	
UniRef90_R5ANS5	E A A K V A I R S I V R N I R R D A N E Q T K K Q Q K D N L L T E D D Q K R L E E K I I V Q	R D A N E Q T K K Q Q K D N L L T E D D Q K R L E E K I I V Q	D D I Q	D I Q	
UniRef90_M2WED1	E A A K V A I R N V V R R K A M D E L N R I Q K D G E A G E D E V G R A E K E L I D Q	R D A M D E L N R I Q K D G E A G E D E V G R A E K E L I D Q	D D I Q	D I Q	
UniRef90_R5IE87	D S K V A V R N I R R D A V D Y V K K A Q K G K G E L T E D D D Q K K A E K D I I V Q	R D A V D Y V K K A Q K G K G E L T E D D D Q K K A E K D I I V Q	D D I Q	D I Q	
UniRef90_R5VYJ9	E A A K V A I R N I R R D A N D A I K K M E K S G D I I S E D D E L A D N E D D K I I V Q	R D A N D A I K K M E K S G D I I S E D D E L A D N E D D K I I V Q	D D I Q	D I Q	
UniRef90_UP10002C36FC2	E E G K V A L R N I R R D A L K A Y E K L Q K E K K I I S E D D E S T D L K D F S S D D L V Q	R D A L K A Y E K L Q K E K K I I S E D D E S T D L K D F S S D D L V Q	D D I Q	D I Q	
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UniRef90_W2EQI5	E S G R V S V V R N I R R R H A K E V L D K L V K D G E V V H R A V V K E E L D Q	R D H A K E V L D K L V K D G E V V H R A V V K E E L D Q	D D I Q	D I Q	
UniRef90_K7AF48	E Q G K V A I R N I R R D A N D S D K E L L K E K E I I S E D D E D S R R G E D D D V Q	R D A N D S D K E L L K E K E I I S E D D E D S R R G E D D D V Q	D D I Q	D I Q	
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UniRef90_A8TUK4	E S A R V A V V R N I R R R D G M D H L K K A E K D G D D V S Q D D D E K R Q A D Q V	R D G M D H L K K A E K D G D D V S Q D D D E K R Q A D Q V	D D I Q	D I Q	
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 M K A V L D E A T R M T Q M K S L E A F E N N I A A V R T G R A N P A I L N R I Q S
 D A V M K M D T Q E R M K K A E Q A Y V V R E L L G G I R A G R A N P S L L N R I S
 I K L Q L E D A N D S M Q K A I I S H T E S E L T K I R A G K A M P S M L D G I N
 L N E L R D N M K K T I I D A T Q R S F N S L R T G R A S A A L L D R I T
 E I K T N A N Q K M E K S L E A L K T N L V K V R S G R A N P G I L E H I H
 I D E I Q L D A E E R M S N S V D H T R D E L Q T I R T G R A N P S M F N G L V
 L D D I K K D A R E R M G K C V Q N Y Q A D M K K L R T G R A T A P N L L D I V H
 L I K E A E Q K M D K S V E S L Q Q E L S G F R T G R A T P S L L D R I H
 I E E T L L E A E E K M E K A V V V V A K E D F A S V R T G R A P G A T F N K I
 M S D L T Q Q M T E D M K Q S V Q S F S R T L A T V R A G R A N P A I L D P V K
 I A E I L K K N T E T K M G Q S I E A L K N N L A R V R T G R A N P A L L D A I H
 N D T A E K S E A R M Q K T I D S V I K S A F N V S V R T G R A S P S L L D R I Q Q
 M E S I F T D A K K R M E M K A I T N L E K E F S R L R T G R A S A S L V D G I
 M S D I I K D T K A R M K K S I D S L L S R E L L A N I S A G R A N S A N L L N G V
 I S D L K K N T E S R M Q K S V V S S L S E S S L Q S I R A G R A N T S L L D K I F
 I D E T L L E A E E K M E K A V V S V G K E D F A S I R T G R A H P S L F N K I V
 I I D E I K K D A T A R M Q K T V D G L K Q A F S K S I R T G R A S A A I L D H V R
 I Q E T L L T E A R Q K M D K A I V E T Q E Q F G T V R T G R A N P A L F S N L T
 L I D D L K A N M Q K S V E R T Q Q D F N T I R T G R A N A S S L L D K I M
 L D E I K K D A D V R M Q K S I E A L K A A F V K V R T G R A H P S L L D H I T
 I P E L L K K T A E G K M Q K S I E A L R L D L Q K V R T G R A S A S L L E P I T
 I D E A L L D A E E K M E K A V A H R D D M A S I R T G R A N P A M F N K I V
 L N K Y K D R M D K S V T A L K D D F G G L R T G R A S A G L L E G I T
 I P E L L K K T T E Q K M Q K S I D V L K A D L L A K V R T G R A H T G L L D H V M
 I D E T L L E A E E K M E K A V M T K S Y N N L E S E F T T I R A G R A N P H I L D K I T
 M N E V Q S N C E E K M K K A V A A L K S E F D M L R T G R A S S A I F D K I V
 E L K S D T A S R M E K A V E A L K K D F S G L R T G R A S T A L L D G I M
 D L R K D I V R M D S A V E V L K K D F S G L R S G R A S T N L L D P V V
 I L K E F D K K M G K S I D S L L A S E Y T T I R A G R A N P H I V
 I D E T L L E A E E K M E K A I E H A K E E F G A I R T G R A N A A M F S K I I
 E F E S K M K K T A E V L K T Q L A S I V R A G R A N A A V L L D Q I T
 L A E A E S T M K K S I I E A T Q R S F N T I R T G R A N S S L L D K I V
 D V K K N A Q E R M T K S L I E T L R A D L L A K V R T G R A H T G I L D H V
 V D D M F N Q G E E K M Q K T I I A E T K R E F S G I R T G R A N P M I L D K I M
 D Q L L K D L K Q R M K K A E E S L E Y E L G G I R A G R A N A S S L V D R I T
 M A T V V E D A Q S M E K T I I E S T K E N F V G I R T G R A N P A L F N G L T
 I D D V M L E A E E K M E A A L D A A K R E L L A A I R T G R A N P S M F N S I V
 I D E I L L E A E E K M D K A I E A T K E D F A S I R T G R A N A A M F N R I T
 I N D L K R R M E G A V N A L K H Q E L G G L R T G R A S A S L L E P I T
 M Q K S I I E A M K R S L N T I R T G R A N A S S L L D R I T
 I K I Y E E K M E K S I A A L E A D Y A T I R A G R A N P H I L D K I K
 I D D L K R R M Q G A I G V L K Q D L A G L R T G R A S S S M L D P V T
 E Q L V K E T R E K M D Q A V K A Y S K N L S T I V R A G R A N P A I L D N V T
 N A I I E S A K E R M S K A G D A L R R E L L G N I R A G V A N P S I L R N I T
 D F D L K E Y R K R M D G A V S S L L Q S E F S G L R T G R A N A G I L L D G V
 I N M I L L D D T N E R M T K T I I E S F Q R D L L S S V R T G R A N P N M I D R I V
 M D N L L K D S E R K M K A T I D H L H Q E F G K V R T G R A S A V A L V E D I K
 I N M I L L D D T N E R M T K T I I E S F Q R D L L S S V R T G R A N P N M I D R I V
 K S D L E R R M G A V E A L K G D L S G L R T G R A S T V L L D P V Q
 I N E V L E E T R D R M G K S E K A F E T E L G K V R T G R A S Q S M I D N V R
 K D M Y A V Y E D R M M N K S I D N L K E N L N S V R T G R A N P H I L D R I T
 I D E L L A E A G E R M N A A I A A A Q N T F G G S V R T G R A S P S I L D R I M
 M N E V I E N I K P K M Q K A I E S L S H E F N K V R T G R A N P S I L D S V K
 I N D L K K D G E S R M M N K S I E A L S H E A G F A K V R T G R A H P S M L N G I M
 L D D L E R R M D G A L A A L K Q E F S S L R T G R A S A A M V E P I N

	50	60	70	80
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UniRef90_Q0G6D6	V D A Y G T Q M P P V N Q V A N I S V P E P R L V S T V W D K Q M V G K V E R A			
UniRef90_K9RWX9	V D Y Y G I E T P P L R S L A S I S T P D A T T I T I Q P Y D R S S L T Q I E K A			
UniRef90_UPI0002260599	V E A Y G G E V P P L T Q V A T I A A P E A R R M L T V Q V W D R S L A G L V E K A			
UniRef90_F7Z445	I D Y Y G A R T T P P V T Q N Q L A S I S V P E A R L M V I Q P Y D K T V L G E I E K A			
UniRef90_G8SJN3	V D Y Y G A P T P P V T Q M A S V G V P E P R M V I V K P Y D N T Q L G P I E R A			
UniRef90_A5G1L3	V E A Y G T L M P P L N Q V A T V A V P E S R M L T V Q V W D R G M V N A T V A A			
UniRef90_U2NP59	V D Y Y G S M C P P L S Q V A S V S A P E P R L L M I T P W E K S L L K D I E K A			
UniRef90_I3TLI0	V D A Y G S E M T V S Q V A T I S V P E P R M L S V Q V W D Q S L A K A V E R A			
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UniRef90_UPI000374B8AF	A E Y Y G T Q T P P I N Q V G N V S V P E P R M A V V T P F D K S S L R A I E Q A			
UniRef90_A3UCS9	V E A Y G A L T P P I N Q V G N V S V P E P R M I T I S V W D K N L A G A V E K A			
UniRef90_F9ZC13	V D Y Y G S P T P P L S Q V A N I T A P D P R T I A V Q P W E K N M L G P I Q K A			
UniRef90_K2EJZ6	V D A Y G N R M H N Q V G N I S V P E P R L L T V H V W D E S L A P A V E K A			
UniRef90_F6DCZ9	V D Y Y G S E V P P L S Q V A N I N I E D S R T L A V P W E Q P M L Q K I E K A			
UniRef90_A5EK52	V E A Y G G S H M P P L N Q L A T V S V P E P R L L S V Q V W D R T M V K A V E K A			
UniRef90_E8LGD5	V D Y Y G S P T P P V T Q V A S V T V P E P R M I V I Q P W E K N I L K D I E K A			
UniRef90_UPI000381E4EF	I D Y Y G T P T P P L P Q M A S I S V P E P R M V I I K P Y D A S Q L G S M E R A			
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UniRef90_G5ZY10	V D A Y G S K M P P L N Q V S N I S V P E S R L L T V T V W D A G L T E L V E K A			
UniRef90_UPI00036D48AF	V D Y Y G S L T P P L N Q L A T I S V P E A R M I V I Q P W D P Q S V S P I E K S			
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UniRef90_D0MK06	V E Y Y G T M T P P L M Q L A S I T A P Q P D L L I V Q P W D R S A L G A I E R A			
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UniRef90_F4GLE8	V D Y Y G Q G E T P P L N Q V A S I S P E A R M V V I Q P W D K G L L G P E K A			
UniRef90_UPI000377B73C	A D Y Y G S P T P P Q Q L A G F Q V P D P R T V L I S P Y D K G A M V A E K A			
UniRef90_F9ZJC2	V D Y Y G T Q T P P L S Q V A N I N L I D A R T I G V I P W E K K M G N V I E K A			
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UniRef90_F4C160	V D Y Y G T P T P L S Q V G N I N T P D P R S L V I Q P W E K N L L S A I E R A			
UniRef90_K9PW69	V E Y Y G A D T P P L K S L A S I T T P D S S T I M I Q P F D K G S V S D I E R A			
UniRef90_B1XTU6	V D Y Y G N P T P P L S Q V A S L G L A D A R T I N V Q P F E K T M V A I E K A			
UniRef90_X2H210	V E Y Y G S M V S V S Q V A S L T T L D A R T I G V K P Y E S K M A A V I E K A			
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UniRef90_T0YRZ5	V E Y Y G S E V P P L Q Q V A S I A V E D G R T L I S P W E K G A V Q A V E K A			
UniRef90_UPI0003645950	V D A Y G S K M K I N Q L G N V T V P D S H L I V I D L W D K S L I G A V E K A			
UniRef90_UPI00034801DF	A E Y Y G A Q T P P I N Q L A S F S V P E P R M V V I Q P F D K S S L Q A I E R A			
UniRef90_UPI0004011C9C	V D Y Y G M A T P P L N Q L A S I S T P D A R L L V I T P F D K S A I N E I E K A			
UniRef90_D0J272	V E Y Y G S M V P P L S Q V A N V S L D S R T I S V Q P W E K N M A A K V E K A			
UniRef90_Q7XY97	V N Y Y G A D T P P L N S L A T V V S S G T S T L V V E P Y D K S C I S D I E R S			
UniRef90_C8X4K5	V S Y Y N T P T P L N Q L A S I S P D A R T I A Q P W D R S S F E N I E K A			
UniRef90_H0DIU3	V D Y Y G A P T P I Q Q L A S L S A P E P R L L A I Q P W D A N L I P D I E K A			
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UniRef90_UPI000479594F	V D Y Y G A L T P P V N Q L A S F H V S D A R M I T V Q P Y D K G S L A A I E R A			
UniRef90_UPI0003B780F5	V D Y Y G S E S P P L S Q V A S V S V E D A R T T S I A P W D R N M I G A I E R A			
UniRef90_UPI00032902B	V D Y Y G A P T P I Q Q L A S F Q V P E P R M I T L T P Y D R G S L G D I E S A			
UniRef90_K9YKR8	V D Y Y G A D T P P L K T I A G I S T P D A T T T L I Q P F D R G S M A Q I E K A			
UniRef90_UPI0003725966	V D Y Y G S P V P P L S Q V A N V S A E D A R T L T V T P W E K P M V A V I E K A			
UniRef90_Q47F89	V D Y Y G S M V P P V N Q V A N V T L V D A R T I G V Q P W E K G M L Q K V E K A			
UniRef90_A0A024KJM1	V E A Y G A R M P P L T Q V A T V T V P E P R M I S V Q W D R S M A S A V E R A			
UniRef90_F1YIC2	I E Y Y G A M T P I T Q V A G I N T P E P R L V V I K P Y E Q S T M N D I E T A			
UniRef90_E8RSL3	V D A Y G S A M S I L S C A A I S V P E P R M I S V N V W D K G L V V S V E K A			
UniRef90_Q5NZH2	V E Y Y G S M V P P L S Q V S N V T L I D A R T I G V Q W E K P M M Q K V E R A			
UniRef90_D4IV3	V D Y Y G A P T P L Q Q V A N V S V P E P R L I Q P W E P S L V K E I E K A			
UniRef90_S6A1F4	V N C Y G Q P T P L N Q V A N V S I P E P R L V V I Q P W D K S L L T E I E K A			
UniRef90_R5Q2G5	V E A Y G A M T P P L V Q I G T V V S V P E S R M L S V Q V W D R S M V K S V E K A			
UniRef90_H8FRB0	V E A Y G Q T M P P L S Q C G T V V G V P E P R M L T V Q V W D K G Q V K A V E K A			
UniRef90_R5S7A8	V E Y Y G T P T N Q V A N V S V S E A R T I V V I Q P W E A S L I K E I E K A			
UniRef90_A8M6B4	I D Y Y G S P T P P L P Q M A S I G V P E P R M V I I K P Y D N S Q T N A M E K A			
UniRef90_R5CTT3	V D Y Y G V P T P I Q Q V A S V S V P D P R S L L I Q P W D A S V L K G I E K A			
UniRef90_K9R6D6	V N Y Y G D V D T P L K S L A N I G T P D A T T I T Q P Y D Q S S L G N I E K A			
UniRef90_UPI00037C25DA	V E Y Y G A P T A L S Q V A G I N L I D A R T I G V Q P F E K R M A S T I E K A			
UniRef90_K2EZ3	A D Y Y G T P T P L R Q I S N I S Q D G Q T L V I Q P Y D K S A I S A I E K A			
UniRef90_H3NF06	V N Y Y G A D T P P L N Q M A N I S V P E A R V L L I S P Y D K S T L G D I E T A			
UniRef90_J0X0L2	V D Y Y G A P T P L K A L A S V G V S D N R T L A I T P F D V S Q C A I E K A			
UniRef90_C0W7B2	V D Y Y G A P T P L Q Q L A S F Q T P E A R T I L I I P F D K S A I S E I E K T			
UniRef90_E3B979	V D Y Y G A P T P L Q Q L A S F Q T P E A R T I L I I P F D K S A I S E I E K T			
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UniRef90_B0CDY7	V E Y Y G T E T P L R S L A T I S T P D A S T I T I Q P F D P S S L T D I E R S			
UniRef90_R6R2A3	V D Y Y G T P S P L Q Q V A N V S V P E A R M I Q I Q P W E S S L I K D I E K A			
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UniRef90_C5RC87	V E Y Y G A E T P P L N Q L A S V T V P E A R V L L I T P F D K S V L K G I E Q S			
UniRef90_UPI000411D7C3	L N A Y G S D V P L N T V G S V T V P E S R M L M N V W D K T Q V Q A V D K A			
UniRef90_M1YX83	V E F Y G N P T P L N Q T A T L S T P D S R T I S A P W D P T M L P V I E K A			
UniRef90_R5RP49	V N Y Y G S P T P V N Q I A G I S V V E G R Q L V I K P Y D K S S I K D I E H G			
UniRef90_M2U9B9	V E V Y G A K M P P L N Q V A T V T A P E P R L L S V N V W D K S N V N A V D K A			
UniRef90_I5B532	V D Y Y G T Q T P L P Q M A T V S V P E S R M L T V P W D A S V I N E V E K A			
UniRef90_D3R242	I S Y Y G A E T P P L N Q V A N I Q V P E P R M I T I S P W D P S S L S I E K A			
UniRef90_UPI00047CC439	V D Y Y G A M T P V K Q L A T V N V P E A R L I T V Q P Y D A A S I K A I E K A			
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UniRef90_K6GHL4	F D Y Y G N L T P P L N Q Q A N I Q V P E P R M I T I S P W D K S L I A E I E K A			
UniRef90_UPI00047AAAC9	V S Y Y G S D V P L N Q V A N I G V D D A R T L V V P F E R S M T S T I D K A			
UniRef90_A0A058ZPP5	V D A Y G S M T P L N Q V G T V N V P E P R M V T I N V W D K S L V A K V E K A			

	90	100	110	120
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UniRef90_W7D711	F A S D L G L T P S N D G E V I R L T I P A L T E E R R R K V L A K Q V K A E A			
UniRef90_Q0G6D6	R E S N L G L N P V T D G T T L R I P L P E L N E Q R R K E L V V V A Q Q Y A			
UniRef90_K9RWX9	Q M S D L G L N P A G E G Q T I R V P I P Q L T E E R R N E L A K A A G R Y S			
UniRef90_UPI0002260599	R D S G L G L N P A N N D G S V I R L S I P P Q M T T E E R R R E L V K L I K K E A			
UniRef90_F7Z445	L K S D L G L T P N N D G S V I R L S I P P Q M T T E E R R R E L V K L I K K E A			
UniRef90_A5G1L3	R D C G L G L N P Q D G Q L I R V H L P P L L T T E E T R R N E L A R A A G K Y A			
UniRef90_U2NP59	L K S D L G L N P S N D G S V I R L L V P E L T T E E T R R N E L A R A A G K Y A			
UniRef90_I3TLI0	R D S G L G L N P I G E G A V I R V P I P E L T T E E T R R R E M G K V A S R Y G			
UniRef90_UPI00034C215C	R E S D L G L N P A S Q G D L I R V P M P A L T T E E R R R E L T K V A R G E G			
UniRef90_UPI00041B08DA	Q M A D L G V N P T S D G T L I R I S I P Q L T T E E R R R E F V K D A R K E G			
UniRef90_UPI000374B8AF	R D S D L G V N P S N D G S I R V V F P Q L T T E E R R R D Y I K V A R G K G			
UniRef90_A3UCS9	R N S S L G L N P V S E G E T L I R I P I P P L N E E R R R N E L A K T A G A Y A			
UniRef90_F9ZCI3	M N A N L G F N P D N N G E V V R I N V P P L T A E R R K E L V K Q S K G V G			
UniRef90_K2EJZ6	R E A G L G L N P S T A G T V I R V P I P E L S E E R R R K E L V K V A G K Y A			
UniRef90_F6DCZ9	M M S D L G I N P V T T G N M M R I R V P M P M L T E E R R R E F A K L A R S E A			
UniRef90_A5EK52	V I D S N L G L S P A T E G Q V I R L R I P E L N Q E E R R R K E L V K V A H K Y A			
UniRef90_E8LGD5	M K S D L G L N P N S N D G C I R L N L P Q L T T E E R R R K D L V K V V H K K A			
UniRef90_UPI000381E4EF	R D S D L G V N P G N E G T V I V V P P M T T E D R R R K E D M I K V V R S K G			
UniRef90_R6RXD5	Q T S D L G L N P N N D G S C I R L I F P E L T E D R R R K E L A K D V K K K G			
UniRef90_UPI000465118B	R N S D L G F N P S N D G A L I R I S V P Q L T E D R R R E F A K Q A R G K G			
UniRef90_K4LTH2	L K S D L G I T P V S D G N V I R L R I N I P P L T Q E E K R K D L V K I I N K K A			
UniRef90_G5ZY10	R E S G L G L N P Q T E G N V I R V P P D L S E E R R R K E M V K V A G K Y A			
UniRef90_UPI00036D48AF	Q Q T G S G L N P V V D G S V I R I A I P P L T E D R R R K D L V K V V H K K A			
UniRef90_UPI00034D3518	G M S D L G L T P N N D G K L V R L N I P P L T E E R R R K Q L V K M V G K M A			
UniRef90_UPI0002D9A681	L R D S D L I G A N P A N D G N V I R V V M P E L T E E R R R K E Y V K V V S T K A			
UniRef90_W8KT05	M N S D L G L N P S S V G T V I R V P M P A L T E E R R R K E L T K V V R A E G			
UniRef90_A1VN43	I R D S D L G L N P A S Q G D L I R V P P M A T M E T E E R R R K E L T K V V R A E G			
UniRef90_B4W7X6	R N A N L G L N P I V D G Q T I R I P V P P L T E E R R R K E D L V K L A G K Y T			
UniRef90_D0MK06	I N A N L G L N P S N D G N I I R I P I P P L S E E R R R K E E L V R A A R I R A			
UniRef90_H5TB67	M Q S D L G L N P M S A G A S I R V P L P P L T E E R R R K E S L I K V V R N E V			
UniRef90_F4GLE8	Q K K S E L G L N P N N D G K L L R I I N F P P L T E D R R R K D L V K S S K A T A G			
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UniRef90_F9ZJC2	R E S D L G L N P M P V G E T I R V P M P A L T E E R R R R D L I K V V K Q E A			
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UniRef90_B1XTU6	R D S D L G L N P V S Q G T V I R V P M P A L T E E R R R R E L T K V V K S E G			
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UniRef90_C8X4K5	M Q S D L G L P V N D G K I I R I N I P A L T E E R R R R E L V K I A K K H T			
UniRef90_H0DIU3	N A A N L G V N P T S D G E V I R I T V P A L T E E R R R K E D L T K L T K Y A			
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UniRef90_Q5NZH2	I L N S D L G L N P N S A G T T I R V P L P P L T E E R R R R D L V K V V R G E A			
UniRef90_D4IV3	R D S D L G I V P T N D G K I I R I V F P E L T E E R R R R E I A K D V K K H G			
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UniRef90_R5Q2G5	I R D A G L G L N P M N D G Q L I R I P I P P L N E E R R R R R E I L T K I A S K Y T			
UniRef90_H8FRB0	I A N A G L G L N P Q A D G Q L I R V P I P P L T E E R R R R E L L Q V A G K Y A			
UniRef90_R5S7A8	I L T S D L G L T P N N D G K V I R L T F P E L T E D R R R R E D L V K D V K K K G			
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UniRef90_K9R6D6	S M S D V G L T P N N D G S I I R I N I P P L T E E R R R R E F V K L A A K Y A			
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UniRef90_H3NF06	Q K S D I G I V P P S N D G D V I R L V I P A L T E E R R R R E I L K R V G Q E E			
UniRef90_J0X0L2	I R D S D L G V N P R R D G N V I R H V T L P E L T E E R R R R D Y V K L A R E F A			
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UniRef90_UPI0003F7496C	R E S N L G L N P I T E G T L R I P I P E L N T E E R R R R E Y I K Q A R T E A			
UniRef90_K6GHL4	M S S D L G L N P S T S G D L I R T M P A L T E E T R R R R E Y I K Q A R T E A			
UniRef90_UPI00047AAC49	R E S D L G L N P I T A D I R V P L P A L T E E R R R R E M Q K L A R G E A			
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170 180

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UniRef90_Q0G6D6	K M T D D A V S E I D R T L A T K E Q E I M Q V
UniRef90_K9RWX9	K L T D K Y I A K I E S H L S E K E R E I K Q V
UniRef90_UPI0002260599	K I T D Q Y V K K I D E A L S E K E R E I K Q V
UniRef90_F7Z445	K I T D Q H I Q K I D K M T K T K E Q E I M E V
UniRef90_G8SJN3	D T T H R Y V S V V D E L V K H K E A E L L E V
UniRef90_A5G1L3	K L T D A T I K K I D E L L V E K E K D I R Q V
UniRef90_U2NP59	K V T D S Y V K E I D K I I A D K E K E I M S I
UniRef90_I3TLI0	T V T D E R I K Q I D D L V A A K E K E I M Q V
UniRef90_UPI00034C215C	K L T D R T I A E I D K T V Q A K E A D I L A V
UniRef90_UPI00041B08DA	K L T D K H I A E I D V M C Y N A K E K D I L E V
UniRef90_UPI000374B8AF	D T T H K Y V A Q V D E L L K H K E S E L L E V
UniRef90_A3UCS9	K L T D A K V S A I D A L L K T K Q E E I T Q V
UniRef90_F9ZCI3	K I T D S Y N K K I D E L L T A K E K E K D I M T I
UniRef90_K2EJZ6	K A T D E F I K K V D E A L S H K E K E I L H V
UniRef90_F6DCZ9	K L T D K H V A Q I D S L L S D K E A S L E I
UniRef90_A5EK52	K A T D S V I S E I D Q L L A A K E K E I L T V
UniRef90_E8LGD5	K L T D K V M K E I D A A A A N K E K E V M E V
UniRef90_UPI000381E4EF	E L T H K Y T G H I D E L V K H K E A E L L E V
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UniRef90_UPI00036D48AF	K V T D S Y V N Q I D A L G A E K E K E V M E V
UniRef90_UPI00034D3518	K L T D N Y V K K I D E I T K E K E K E I L S V
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UniRef90_B4W7X6	K E T D A A I K R I D E A L K T K E Q E I M Q V
UniRef90_D0MK06	K L T D T D Y I E K I V N Q L L E R K E A E I M E V
UniRef90_H5TB67	V L T N D H I K H I D G T L A D K E K E E I M E V
UniRef90_F4GLE8	K L T D S F I V N S L A T D K E K E I M E I
UniRef90_UPI000377B73C	G M T K K Y V D S I D Q L L K H K E A E L L E V
UniRef90_F9ZJC2	K L T D R Y I T E I D K I L H I K E T E L M A V
UniRef90_D7CV62	R L T D E F V G Q I D K R V K S K E E D I M A V
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UniRef90_F4C160	K L T D N F I A K V D K L A E A K E K D I M T V
UniRef90_K9PW69	K I T D E F T S K I D E L L K V K E K E I M T V
UniRef90_B1XTU6	K M T D K A V D I D K I I A E K E K E I M T V
UniRef90_X2H210	K T T D K Y I A E I D K M L A T K E A D L M A I
UniRef90_UPI0003B51357	K I T A N Y I E Q I D E L M E N K E N E L M E V
UniRef90_T0YRZ5	K L T D K H I A D I E Q L L A A K E K E K E I M Q V
UniRef90_UPI0003645950	E T T H K Y A A E V D E L L K H K E S E E L L E V
UniRef90_UPI00034801DF	K A T D K H I A D I D E L A K N K E Q E I M E V
UniRef90_UPI0004011C9C	E T T D K H I A D I D E L A K N K E Q E I M E V
UniRef90_D0J272	K I T D K H I A E V D T L V A A K E Q D I M A V
UniRef90_Q7XY97	K L T D K Y V K T I E S V Y K Q K E E E D I M K V
UniRef90_C8X4K5	K L T D E F V D K A E K T L T E K E K E I M E V
UniRef90_H0DIU3	K A T D D S I K E I D Q L V D D K E E E D I M S V
UniRef90_UPI00028945A4	K L T D K Y I K E I D K V A E S K E K E E L M E V
UniRef90_UPI000479594F	S V T K S Y V E Q I D E L L K H K E A E L L E V
UniRef90_UPI0003B780F5	K L T D Q F V V A K E E V M V K V K E E E L L S V
UniRef90_UPI000312902B	D V T K A K T D E I D R L L A A K E A E E L L S V
UniRef90_K9YKR8	K V T D M F T G K I D E L L A V K E K E E L T S V
UniRef90_UPI0003725966	K V T D Q Y I K E V D V V L E R K E Q D I M A V
UniRef90_Q47F89	K L T D R Y I V E V D V D K M L A T K E A E L M Q V
UniRef90_A0A024KJM1	K A T D S A V A E I D Q I V A T K E Q E I M Q V
UniRef90_F1YIC2	T T T R T Y T D A V D E L V K N K E A E L L E V
UniRef90_E8RSL3	K F T D E A I K R I D E M L K V K E A E I M Q V
UniRef90_Q5NZH2	K L T D R N I I A E I D K L L A Q K E Q E I M Q V
UniRef90_D4IV3	K M T D K F I A E V D K A V F A K T K E I M T V
UniRef90_S6A1F4	K L T D S Y I A E I N K V L E V K E K E I M E V
UniRef90_R5Q2G5	S M T D Q S I K N M D E M L K V K E Q E I K Q V
UniRef90_H8FRB0	V V T D E T I I K K I D D L L T S K E K E I I Q V
UniRef90_R5S7A8	K L T D E F V A K V D N M V D E K S K E I M T V
UniRef90_A8M6B4	D L T Q R F V G V V D E L I K H K E A E L L E V
UniRef90_R5CTT3	K L T D D Y I K E V E G I A D K K E K E E L F E V
UniRef90_K9R6D6	K L T N K Y T S K I D D L L G E K E K E I T T V
UniRef90_UPI00037C25DA	K L T D K F I A D I D K M V A E K E K E E V L T V
UniRef90_K2EZ3	K M T D K Y T R E I D T V V A E K E K E E V L A V
UniRef90_H3NF06	K L T D E F T K R A D K A A R V K E D E I L T V
UniRef90_J0X0L2	K V T K K A S D E I D S L L E T K E K E I L S V
UniRef90_C0W7B2	A L T K K F V E S I D A A T A K E A E L L S V
UniRef90_E3B979	A M T K K R V D T V D A L L K G K E A E L L E V
UniRef90_B2S608	K L T D D T I A E M D D K I V A V K E G E I M Q V
UniRef90_B0CDY7	G L T D K Y T G Q V D K I L A E K E T E I T T V
UniRef90_R6R2A3	K L T D K Y I A D I D K A V F A N K T K E I M T V
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UniRef90_C5RC87	K A T D A A I K N V D E I A A E K E K E E I L L T I
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UniRef90_M1YX83	K M T D K Y V E E V D K I A E S K E K E K D I M E V
UniRef90_R5RP49	K L T D K F V K E I D E I A K V K E K E I L E V
UniRef90_M2U9B9	K M T D A R I I S E I D D V M A A K E K E K E I I M V
UniRef90_I5B532	D F T D A S I K K L D D F A A K E K E K E I L E V
UniRef90_D3R242	K I T N R F T A K I D E I V A A K E K E K E E D L M E V
UniRef90_UPI00047CC439	K L T D A K I A D L D V L L K G K E E E I L E V
UniRef90_UPI0003F7496C	K I T D E A I S E A D R M L A A K E K E Q E I M Q V
UniRef90_K6GHL4	K E T D H F I G L V D S L K K K E E D L L E I
UniRef90_UPI00047AAAC9	K L T D K Y V A D V D K M L A A K E A E L L I Q V
UniRef90_A0A058ZPP5	E L T D A H I A K V D A A L E N K Q Q E I M Q V

1 10 20 30 40

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

	50	60	70	80
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UniRef90_UPI00047222E	A D Y Y G T P T P I Q Q L A S F H I P E A R R L V I I T P Y D K N A L H G I E K G			
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UniRef90_U2XWR6	V E A Y G Q Q M P M S Q V V G T I S A P E P R L L S V Q V W D K G Q V S F V E K A			
UniRef90_B7IDI0	I D Y Y G V P T P I N Q V V A T I N V T E E R R S L I I K P W E K N L L S A I E K A			
UniRef90_R5N7G4	V E Y Y G V P T P I N Q V V A S I S V P E A R R L I V I Q P W D R S I L S Q V E K A			
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UniRef90_UPI0003F5BD00	V E Y Y G T Q T H K A L A N S T P D S T T A I Q P F D C N T L N I E K A			
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UniRef90_E0TCI4	V N A Y G S E M P L N Q V V G T V G V P D A R T L S V Q V W D K G L V S A V E K G			

	90	100	110	120
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UniRef90_A3Z5I9	A M S E L G F T P N N D G K V I R I N V P P L T E E R R K E F C K L A S K Y A			
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UniRef90_UPI000237D19B	I M N A N L G L N P D N N G E I V R I N V P P L T E E R R R Q D L V K H V K K E G			
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UniRef90_L8N0Y8	S E S D I G L T P N N D G V S I R I R I N I P P L T T D D R R K E L V K M V A K L A			
UniRef90_W2UJT5	I I V A N L G F N P M N N G D M V I I I N V P P L T E E E R R R K E L V K Q T K S E A			
UniRef90_D5EFH7	Q A S S L G I N P Q N D G E N I R I R I T L P E L T K E E R R R K E L S K V V S K Y A			
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UniRef90_A3XH3	I I N S D L G L A P Q N N G E L V I I I T I P A L T E E E R R R K E I N L V K Q A K H E C			
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UniRef90_Q1NXW5	I Q A S D I G L T P S S D D G K V I R I R L T I P Q L T E E E R R R K E L V K Q L K K L S			
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UniRef90_U2JDI7	I I D S N D L G L N P Q N D D G S I I R I R I V V P P L T T E E E R R R K E L D L V K K A K E E A			
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UniRef90_E0TCI4	I R E S G L D L N P V T D D G Q T V R I R I V P M P P M T T E E E R R R K E D A K L T G K Y A			

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		170		180																	
K	L	T	D	E	F	V	N	R	V	E	V	L	E	R	K	Q	E	I	L		
N	L	T	D	K	Y	C	A	S	V	D	Q	L	V	S	E	K	E	I	M	S	I
K	L	T	D	R	F	I	A	A	I	E	T	H	L	A	D	K	E	A	D	L	K
K	L	T	S	D	H	V	A	K	I	D	E	L	L	K	H	E	A	E	L	L	E
E	S	T	H	R	Y	V	A	Q	I	D	E	L	L	K	A	K	E	S	D	L	S
K	L	T	D	N	S	I	K	S	V	D	K	I	V	A	D	K	E	N	E	V	M
K	I	T	D	A	Y	I	A	K	I	D	Q	L	V	E	L	K	E	K	D	I	M
E	L	T	D	K	H	I	A	L	V	E	K	H	L	A	A	K	E	E	M	M	T
G	Q	T	K	A	H	T	E	T	I	D	E	L	L	K	R	K	E	A	E	L	L
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K	K	T	D	E	Y	I	K	K	I	D	V	A	I	E	E	K	S	N	E	I	M
T	I	T	D	S	F	I	K	K	D	V	D	K	V	I	E	T	K	E	K	E	V
K	V	T	D	S	Y	I	T	K	I	N	Q	V	L	E	E	K	E	K	E	I	M
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L	A	T	K	S	H	V	D	A	I	D	D	L	L	S	H	K	E	R	E	L	E
G	L	T	K	T	Y	V	E	K	V	D	K	V	M	E	A	K	E	E	E	L	T
K	M	T	D	D	L	I	G	E	V	D	S	V	L	A	K	K	E	Q	E	I	K
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K	L	T	D	Q	A	V	K	R	V	D	E	A	L	A	E	K	E	K	D	I	K
K	V	T	K	Q	T	T	D	E	L	D	A	L	E	T	K	Q	K	E	I	M	E
K	I	T	D	E	Y	V	K	K	V	D	E	V	F	D	R	K	E	A	E	I	L
Q	L	T	N	A	Y	I	K	K	I	D	D	V	L	A	I	K	D	A	E	I	M
K	I	T	D	S	A	I	K	D	V	D	G	V	V	K	A	K	E	Q	E	I	M
K	I	T	D	H	F	V	A	E	I	D	K	V	L	M	A	K	E	K	E	I	M
K	L	T	D	K	Y	T	G	I	I	D	K	A	V	A	E	K	E	K	E	V	M
K	L	T	D	A	A	I	A	Q	V	D	K	H	T	E	K	E	A	D	L	M	K
K	L	T	D	N	Y	I	K	K	I	D	E	I	F	A	V	K	E	A	E	I	L
K	L	T	D	K	F	I	K	T	V	D	E	L	L	K	A	K	E	D	E	I	L
K	M	T	D	S	Y	I	E	K	S	E	D	I	L	V	Q	K	E	K	E	I	M
K	S	T	D	K	F	I	A	D	N	K	I	L	E	D	K	E	K	E	I	M	E
T	A	T	D	N	S	I	K	E	I	D	A	I	A	E	K	E	Q	E	I	L	E
K	L	T	D	E	H	V	K	A	I	D	G	V	I	A	N	K	E	K	D	I	K
K	I	T	D	A	K	I	K	Q	I	D	E	I	K	D	K	K	E	K	E	V	M
N	M	T	D	K	Y	I	S	E	I	D	K	I	V	E	L	K	A	E	E	I	L
K	I	T	D	D	Y	V	K	Q	A	E	T	A	K	K	K	E	Q	E	I	V	L
K	L	T	D	K	Y	V	K	N	I	D	A	A	V	V	K	K	E	K	E	I	M
A	L	T	K	K	H	V	D	Q	I	D	E	L	L	K	G	K	E	A	E	I	L
K	I	T	D	K	N	I	D	E	I	D	K	L	T	D	G	K	E	K	E	I	M
D	L	T	D	K	Y	I	K	K	I	D	E	L	L	Y	T	V	K	D	A	E	I
K	L	T	E	K	F	V	K	N	I	D	K	V	T	A	E	K	E	K	E	I	S
S	L	T	D	T	Y	T	Q	K	V	E	E	I	M	E	A	K	E	K	E	I	M
D	I	T	D	D	F	I	K	K	V	D	E	V	L	K	V	K	E	K	E	I	I
M	L	T	D	R	I	I	T	E	I	D	Q	V	L	D	R	K	E	Q	D	I	L
K	I	T	D	R	H	I	A	S	I	D	Q	L	V	A	A	K	E	Q	D	I	M
K	A	T	D	E	A	V	R	D	I	D	A	A	L	A	Q	K	E	K	E	I	L
S	L	T	D	K	L	T	K	E	I	D	N	I	V	T	D	K	E	T	E	L	M
K	V	T	D	G	Y	I	E	R	I	D	V	F	K	A	K	E	K	E	K	E	I
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A	L	T	K	K	A	S	E	Q	I	D	T	A	K	N	K	E	A	E	I	L	K
K	E	T	D	A	A	I	K	Y	I	D	T	I	M	A	D	K	E	K	E	I	M
L	R	T	K	S	H	T	D	T	E	I	D	E	L	L	K	N	E	M	S	I	
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K	V	T	D	D	A	T	K	E	I	D	K	L	A	V	K	E	K	E	K	E	T
K	E	T	D	K	A	V	R	D	I	D	T	I	M	A	D	K	E	K	E	I	M
L	R	T	K	A	T	Y	E	A	Q	V	D	E	A	I	E	T	K	A	D	L	M
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T	L	T	D	K	F	I	A	T	I	D	S	R	L	E	K	M	E	S	E	L	M
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K	V	T	D	D	A	T	K	E	I	D	K	L	A	V	K	E	K	E	K	E	T
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K	V	T	D	K	F	I	A	T	I	D	S	R	L	E	K	M	E	S	E	L	M
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A	L	T	D	D	Y	V	K	T	E	A	I	D	T	L	L	A	K	E	K	E	T
K	L	T	D	A	K	V	E	K	I	D	Q	M	H	A	Q	K	E	K	E	I	M

1 10 20 30 40

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

	50	60	70	80
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UniRef90_R5B1L6	V E Y Y G S A V P L S Q V A N I S V P D A R T I A T P W E K A M F K E I E K A			
UniRef90_I3ZB17	V D Y Y G S E M P I N Q L A Q V S A P E P Q Q I V V Q P F D I G V V G L E K A			
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UniRef90_G2ECP7	V D Y Y G S Q T P L S Q V A N V N T P D G R T I T V Q P W E K N M L Q E I E R G			
UniRef90_D4YE50	V E Y Y G V P T D L R Q L A T I T I P E P R M L Q I S P Y D K S S L N D I E R A			
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90 100 110 120

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UniRef90_E0WTD7	I N E S D L G M N P S N D G N I R L N V P P P L T A E E R R R K E L L A K L V S K L G		
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UniRef90_A0Q0R7	L Q S D S D L G L N P S N D G S V I R L I I P E L T T E E E R R R K E L V L K V V K K I G		
UniRef90UPI00036919AC	Q K S D L G L N P V N D G K I R I S I P P L T T E E E R R R K E L L V K V A K K Y T		
UniRef90_C7LXX5	I R D S D L G L N P T N D G S V I R I A I V A P P L T T E E E R R R R E L L V K V V I R K R A		
UniRef90_W4TD48	I N S S N I I G L N P F S N N G E N I I L N V P P L T T E E E R R R R D L V K L A R A R A		
UniRef90_K9EJQ5	L R E S S D L G V N P S D D G N V I R I R I N V P P L T T Q E E E R R R R Q E L Y V K L A R A R A		
UniRef90_D1B9M5	I Q S S S L G V T P K T D G E S V R V V L P E L T T K E E E R R R R Q E L L S K L V N K Y A		
UniRef90_B0SDN4	F A A S L G L T P N N D G S S I R I N I P E L T G E R R R K E L L A K V V V K Q K A S		
UniRef90UPI0003663F6D	I R E S S K L G L N P V N D G Q E S V I I S V P P P L T E E E R R R R V E L V K S V K S M S		
UniRef90_A0A023BXH0	Q I A N L G F N P M N N G E S V I I S V P P P L T E E E R R R R V E L V K S V K S M S		
UniRef90_Q12NY4	M T S D L G L N P M T A G A T I R I P L P A L T T E E E R R R K D F I K V V R N E A		

170 180

UniRef90_UPI00046FFC19	K L T D R F I Q R L N T M Q K D K E K D I L S V
UniRef90_R6TZV0	K I T D K Y T A I V D K R L E D K E K E I M E I
UniRef90_K2E6L3	K V T D R F V G E I D K L A V S K E E D L M K V
UniRef90_UPI00046A1A54	D L T D K F I K A I D D Q L E T K Q A E I M Q V
UniRef90_UPI00035DC34F	Q Y T D D H V K L L G D L Q V A K E K E L M E
UniRef90_L7UH18	K E T D A G V A E V D K V V V A K E K E V M S V
UniRef90_R7DMD7	K E T D A A I K M V D E I V S E K E K E I M S I
UniRef90_W1NZP5	K V T D G Y V V K K I D S I Y K Q K E E L M T V
UniRef90_UPI0003B59904	K L T D K Q I A E I E V I G K K K E A E I M E V
UniRef90_UPI0003729F8B	Q V T D E S V K N L D L I A D D K E K E I L E
UniRef90_UPI0002DCFDF8	K L T D D I I A Q A D A A A T Q K E K E I L
UniRef90_H8MLM9	K A T D A G I K Q V D D L V A K K E K E V M T V
UniRef90_E6UBJ6	K I T D K F I K E I D G H V A E K E K E I L S I
UniRef90_H2BX79	E L T D K Y V R K V D S I F D N K E K E I M T V
UniRef90_I1YTW3	K I H D K Y I K K I D A L L A D K E K E I M T V
UniRef90_H8KZ89	K L T D R F I K D V D A V V K A K E D E L
UniRef90_XOPUV2	K I T D D A V Q G V N D L A A A K E E E I T E
UniRef90_U5Q5W8	K D T D N F N K K V D E I L A L K E K E I M T V
UniRef90_I2FAP2	K Y T D E F V K K C D D M V R H K E E E V M K V
UniRef90_G6C102	T L T D K Y I K E I D E L L A K K E K E I M E V
UniRef90_F7YXF6	D L T D K K I E E I D K L F E K K E K E I M E V
UniRef90_F2N9H1	K R T D E Y V A K I D Q M L K A K E A E V M E I
UniRef90_UPI00029B199B	K L T D A Y I V K V V D K H A E A K E K D V M T V
UniRef90_UPI0003B6BF95	A L T K R H V E A V D E V L K H K E T E L L D V
UniRef90_A6EUT8	K L T D R Y I A E I E K Q L K A K E E D L M A V
UniRef90_R6QX86	D I T D K K I K E I D S I C E G K Q K Q V M E I
UniRef90_UPI0002896A9E	K I T D E S I S K I D S V S K E K E K E I M E V
UniRef90_E1R045	K V T D D Y V A K V D Q M L K A K T A E V M E I
UniRef90_E7GD03	K L T D E Y V K I D Q L A K D K E E D L M S V
UniRef90_UPI0003665E93	K L T D K Y V A E V E R L F S D K E K D L M A V
UniRef90_A6CFB0	E L T K K F E G K V N S M A D A K E K D V M
UniRef90_A9DP08	A L T D D Y V K K I D E I F S V K E K E I M T V
UniRef90_R5B1L6	K L H D K Y L K K I D E L F A A K E K E I L T V
UniRef90_I3ZB17	Q M T D A Q I K T L D D M F K V K E K E L M T V
UniRef90_H0UK43	K E T D S F V S K V D E L V K E K E K E V M E
UniRef90_G2ECP7	K M T D I Y V T K I D A I Y E T K D K E I M T V
UniRef90_D4YE50	D L T N A A I K N V E K I A S D K E D E I M N V
UniRef90_C5BQF9	K I T D K Y V A E V D A A L A V K E K D L M E I
UniRef90_F9VJM9	K Q T D K F V K K V D E I V A N K E K E I M S I
UniRef90_M7NA39	S L T D Q N V T K L D E L F G R K E K D I M T V
UniRef90_R5RBC1	K M T D K F I K E I D K S V E V K S K E I L T V
UniRef90_Q0A713	K L T D K Y T G E V D R I L Q E K E K E L M E I
UniRef90_UPI0003B5235C	S L T K K H T D Q I D E A L T R K E A E L L E V
UniRef90_C0QB20	D I T D E F I K Q I E A V F A A K E K E I L E V
UniRef90_J9GL89	K L H D K K V K N V E E L L A A K N K E I M T V
UniRef90_R5TDA5	K L T D Q K I K D L E A V T D K V K E I L S V
UniRef90_UPI0003708354	K L T D K Y I K E V D Q V M A A K E K E I M E
UniRef90_F4L5P1	N L S K Y I G Q V D E L V K G K E K E I M T I
UniRef90_G0IX86	K M T D Q H S A K I D E L F T K K E A E I M T I
UniRef90_UPI0002E091C5	K L I K D V E A Q I A K A T E A K E K D L M A I
UniRef90_C2BCH0	K V T D K F I K T I E E M T E K K N K E I M N V
UniRef90_V71708	K K T D A F V K K I D E M L E R K E K E I M T V
UniRef90_UPI00036DAE49	K I T D K C I K E A E K L S E T K E K D V L N V
UniRef90_R6GNT3	K T L D K Y I A D V D S M L K S K D A E I L E I
UniRef90_K4KVN1	K L T D K T V K D I D E I L E K K E K E I M E V
UniRef90_F3ZSE1	K L H D K F I K K I E E L L N E K D Q E I M T V
UniRef90_B2UKL9	K L T D K Y V K E I D E L V A V K E K D I M T I
UniRef90_UPI00036CB652	A L T T R A H V A T V D E L L K H K E S E L L E V
UniRef90_UPI0003467832	K L T D K Y V K E V D A I M N A K E K E I M E V
UniRef90_I9ME90	E L A Q K Y V A T V D E L L K H K E S E L L E V
UniRef90_V7EM97	K L T D K Y V K E V D A I M N A K E K E I M Q V
UniRef90_E8X431	E L T D A E I K R L E D L F K A K E K E L M T V
UniRef90_D2R7E4	E L T K K Y E N T A G E M A K H R E A E V M
UniRef90_UPI0003605EBB	E I T D E Y I A K I D E L L E N K T A D I M E V
UniRef90_UPI00036D9281	A L T N D T N A K L D T L I A S K E K E L M T V
UniRef90_E4RUL6	K L T N Q Y I E K V D Q L L A A K E A D I M Q V
UniRef90_B8J4H2	K L T D K Y V A E V D K R C A A K E K E I M E I
UniRef90_D5STQ7	E L T K K Y E G K V N T V A E A K E K E V M E
UniRef90_A5CXD6	K I T D E Y I K K I E I N L N K K E D S L L E I
UniRef90_C5D9B8	K L T D D H I A K I D A I T K E K E K E V M E V
UniRef90_UPI0003634E02	K L T D A F I A R V D D V F V A K E K D I L S V
UniRef90_H3NXC2	K L T D A F V A K V D A A L G V K E A D L M E I
UniRef90_UPI00047EA68C	K M T D D E I I R K M E M C K R K K E A E V M Q V
UniRef90_K2HL67	E M T D A A I K R I D E A L A T K Q E E I M Q V
UniRef90_N2A2X0	K I T D D S T K K I D K L A D E K R K E I T Q
UniRef90_A4RTH1	D L T A S Y V K K V D E L T K A K E T E L Q K V
UniRef90_E0WTD7	K L T D G S I K K I D E L L F K A K E K E I M E
UniRef90_Q3JCX2	K I T D N H I T Q V D E L L A V K E Q D L M E V
UniRef90_R6XHC4	K E T D K H I K K I D E I F A A K E K E L F T I
UniRef90_UPI00047BDC42	K V H D D E I A K I D E V L L K A K E A E I M E V
UniRef90_R5PVH3	K M T D T K I A E I D E L L A K K E K E I M T V
UniRef90_E6RNM1	K I T D K F I K E M D T Q L T A K E A E L M E I
UniRef90_A0Q0R7	K I T D K Y I T E I D N I V S A K E K E V M S V
UniRef90_UPI00036919AC	S L T D D F V K K C D A L L E A K E K E I M E I
UniRef90_C7LXX5	R L T A R F V G E L D R A L E V K E H D L L E V
UniRef90_W4TD48	T Y T D K Y V K L C D E H L K T K E A E I M K V
UniRef90_K9EJQ5	T L T K K F V T D I D N L L Q A K E K E D L M E V
UniRef90_D1B9M5	D H V D G A I K K V D A L A Q E K E K E I L
UniRef90_B0SDN4	K I T D S Y I A K I G D L E K E K E K E I T T
UniRef90_UPI0003663F6D	D L T N K Y V G E I D S L T D A K E K E I M T V
UniRef90_A0A023BXH0	T L T D T Y I K K I D E M L S H K E K E I M T V
UniRef90_Q12NY4	K Y T D A H I K N V D E V L T A K E K E I M E V

	50	60	70	80
UniRef90_H6KZ85	V E Y Y G M P T P L	N Q V A G I K T T D A R T L	V I Q P F E K K M V S V V	E Q A
UniRef90_L0B6M4	I D Y Y G S F T L I	N K I A N I N N L D A R N I	V P Y E K R M I N A I E K S	
UniRef90_UPI00037A4675	V D Y Y G T P T P L	A Q L A S V Q N Q D A R S L I	T P Y D K G A M K A I E Q A	
UniRef90_C0QWQ6	V E A Y G S S M P L	K Q V G N N S T P D S R T I	M Q P F D K G L V S D I E K A	
UniRef90_R9GQJ5	V E Y Y G T L T P I	S Q V S S I N T P D A R T I	V V Q P W E K P L L V K I E K A	
UniRef90_D1PXA6	V N A Y G E S V P L	N Q V A T V S I A D A R T I	T Q P W D R K Q I A D V E K A	
UniRef90_O83613	V D Y Y Q Q P T A L	S Q V A T V S V P E A R L I	T Q P W D K T L L A D I E R A	
UniRef90_F8HYG4	V M Y Y G A E T P L	N Q V A S V S V P E A R L I	T T P F D K T A L K D I E Q A	
UniRef90_E4TTI8	V D Y Y G N D T P I	N Q V A S I S T P D A R S I	I K P W E K N I I G E I E R A	
UniRef90_R4U5Q2	V D Y Y G T M T P I	T Q M A N I I V P E A R Q L	V I K P Y D R S I I A G I V G A	
UniRef90_C6XFU6	V E A Y G S H V P L	N Q V V A N V T V L E P R M L	V V S V W D K E M V A S S V E R G	
UniRef90_R7G1S2	V D Y Y G T P S P L	N Q V G N A V Q D G Q C	V I S P W D K S L L K E I E K A	
UniRef90_E6PXB1	V D Y Y G T P T P L	T Q V V A Q V S A P E P N M I	M A P W D A G L V K E I E K V	
UniRef90_UPI0003B4FDB1	V T Y Y G T K S P P L	S Q V V G T I T T P E P R L L	V I Q P W D K A L I T E I E K A	
UniRef90_P61304	V D F Y G N P S P L	N Q V V A T L A V P E P R T I	T T Q P W E T K M I P V I E K A	
UniRef90_W01YH4	I D A Y G S Q M R I	K D C A A M T P D A R M	V I V I Q P W D K G L V Q S I A K G	
UniRef90_UPI0002E53339	V E Y Y G T D T P L	K S L A T I S T Q D S Q T	S S Q P F D L S C L Q A I E K A	
UniRef90_A7I0C2	V D Y Y D N Q T P L	N Q V V A T V L A T D A T T	T S V T P W E K S M L K G I E S A	
UniRef90_S7TF15	V D Y Y G T P T P L	P Q I V A S I A V P D S R T	T T Q P W D R N A F S I D K A	
UniRef90_D5EQQ4	V D A Y G S T V T L	K E V V A A V T T P D A R T	T V V Q P W D K S V I R E V E K G	
UniRef90_D4KD81	V E Y Y G S L V P V	N Q V V G N I S V P E P R M I	L I V I Q P W E K P M L H E I E K A	
UniRef90_S8FBU9	V E S Y G T L M P I	I S N N V A A V T I P D A R S	A I K P W D K T M F R P I E K A	
UniRef90_A4BS25	V T Y Y G A K M P L	N Q V V A S V T V S D P R T L	S S V T P W E K G M I P V V E K A	
UniRef90_UPI00047EE274	I D Y Y G V L T P L	K Q I V A G V S V A E G T Q I	I I K P F D K S T L K A I E H A	
UniRef90_L0B5C6	I D Y Y G S P S L	T K I K A N V T D S R T I	S S V T P Y E K N M L S S I E K A	
UniRef90_V1CQG4	V K Y Y D V P T P L	K Q L A N I S T P D P R T I	A A I A P F D A S I L K E I E H G	
UniRef90_B3ETV4	I L Y Y N A M T P L	N Q V V A A I T T P D A R T L	V I V I K P W E R K C I Q E I E K A	
UniRef90_D7V058	V D Y Y G A P T P L	N Q V V A S I S V P E P R L L	V I V I T P F D K N S L E D V E K A	
UniRef90_F8N811	V M S Y G Q A V P L	N Q V V A A L S V Q P D A R T I	T T I R P W E R K A I K D I E K G	
UniRef90_E7MMJ8	V D Y Y G S P T P L	N Q V V A A L S V S E G R T L	V I K P Y D P S S I L K A I E H A	
UniRef90_M5U3K5	V E V Y G S F S T P L	K Q L A S I G T P E P Q Q I	L I I R P Y D A G T I K E I E K A	
UniRef90_UPI0004630896	V D Y Y G T L T P V	N Q V V G A I S V P E P R T L	L I V I S P W D K T A L A D I E K A	
UniRef90_C7NBL9	V E A Y G S P P T L	N Q V V G T V S A P E A R L L	V I V I D P W D K S L I P A I E K T	
UniRef90_L0FU81	V N Y Y G A P T P I	Q Q V V A S V N T P D A R T L	A A V I K P W E K N L I G E I E K A	
UniRef90_K7YR51	V N A Y G T K L S L	N Q I V S T V S V L E H R M L	S S V I Q V W D G G M N K V V E K A	
UniRef90_K0P0B2	V S Y Y H G H P T P L	Q Q L A S V A T V D P R T L	T T V Q P W E Q S A I P H E E K A	
UniRef90_A3XHR3	V D Y Y G S Q S T P L	Q Q V V A N V N T P D G R T I	S S V I Q P W E K S M I Q E I E K A	
UniRef90_UPI00046EB770	V D Y Y G N Q T P L	N Q V V A S V L T T D A T T	T T I N P W E K P M L K T I E S A	
UniRef90_UPI00037BD5C3	V D Y Y G S Q T P P M	S Q V V A N I A V A D A R T I	T T Q P W E K T M I P P I E R S	
UniRef90_J0KY44	V V Y Y G A P T P L	N Q I V A Q I S I V P E A R V	V V M V T P Y D K S S L K D I E H A	
UniRef90_F5SUU3	V P Y Y G S D V P L	S Q V V A N V G V E D S R T	T T V T P W E K D M V S V V E K A	
UniRef90_UPI000412FF0C	V D Y Y G A P T P V	N Q L A G I S V P E A R L L	V I V I Q P Y D K T V L S E I E K A	
UniRef90_K0C9K0	V S Y Y G S D T P L	S Q L A N I S V E E G R T L	V I V I S P F D K S L V P D V E K A	
UniRef90_R9KMC5	V D Y Y G T P T G L	Q Q V V A N I S V P E P R M I	L I I Q P W E P T M V R V I E K A	
UniRef90_G9ZGK0	V E Y Y G S M V P L	S Q A V A N V S V T D H R S L	S S V I Q V W E R N M I A V I E K A	
UniRef90_UPI0003FB3C81	I E Y Y G S M C P L	N Q V V A N I S A P E P R V	V I V I T P W E T T L L K D I E K A	
UniRef90_B4U9X4	I E Y Y G S R V P I	K Q V V G N V S V P E P N Q I	L I I Q V W D Q N A I S P I E K A	
UniRef90_UPI000375AE3B	V D Y Y G S M V P V	S Q V V A N V N V E D A R T L	T T V Q P W E P P M I P T I E K A	
UniRef90_B3QS58	V E A Y G Q A M P L	K Q V V G N V G T L D S R T L	T T V Q V W D K G M V A T V E K A	
UniRef90_F4LU73	V D Y Y G S P T P V	N Q V V A S V S V P E P K M I	L I I Q P W D L K M L G V I E K A	
UniRef90_R5B516	V D Y Y G T P T P V	N Q V V G N I S S P E A R M L	V I I T P Y D P S V L N P L E K A	
UniRef90_V7HW28	V D Y Y G A P T P L	N Q M A Q S V P E A R V	V I I T P Y D K S S L K D V E H A	
UniRef90_X0ZXF3	I S Y Y G T L T P L	K Q I A N S I P E S N L	V I V I Q P W D K N C L S E I E K A	
UniRef90_X8ISY4	V S Y Y G T M T P L	K Q L S S I T T P D P R T L	V I V I T P F D A G S I N D I V H A	
UniRef90_W9E284	V D V Y G Q Q M P I	N Q V V G S T T P E P R T I	T T I Q I W D V N N V P M V D A A	
UniRef90_K4IU4	V Q Y Y G A K T P I	S Q V V S N N T P D A R T L	T T Q P F E K S I I K D I E K G	
UniRef90_R5KCA2	V D Y Y G G Q P T P L	Q Q V V A N S V P E A R T L	T T Q P W E S S L I K E I E K A	
UniRef90_R5Y7X8	V S Y Y G T P T Q I	K Q L A T S V P E A R Q I	N N I K P F D K S I L G A I E K A	
UniRef90_R4KDM0	V T Y Y G T P T P I	N Q L A N T T T P E A R L L	V I I Q P W D K T A M P E I E K A	
UniRef90_F9DP82	V I Y Y G A P T P L	N Q M A G S V P E P R L I	V V Q P Y D K T T I G E E I E K A	
UniRef90_I4ANT7	V D Y Y G T L T P L	A Q V V A N S I P D V K T V	M I V I K P W E K S M V A E T R A	
UniRef90_R5Z3Y9	V D Y Y G A P T P I	N Q M A R S V V E G T Q L	V I V I K P Y D R S L V K A I V H A	
UniRef90_L7EP98	V E Y Y G S S T A L	N Q L A N V S A P E A R V	V I V I Q P Y D K S A I K D I E R A	
UniRef90_UPI0004665E8E	V E Y Y G T P T P L	N Q V V A N V N A V D A T T	T T V I Q P W D K S I M K D I E K A	
UniRef90_F4XKJ8	V E Y Y G T P T P L	K S L A N I N T P D A S T I	T T V I Q P Y D K S M L S Q I E K A	
UniRef90_F9N345	V D Y Y G A P T P V	N Q V V A N V S A P A D P R M I	L I I A P W D K T T M I G A I E K A	
UniRef90_Q1Q2J2	V E Y Y G N P S P L	K Q L A V S T P D A Q S	L I I K P Y D T T I V S N I E K A	
UniRef90_A0LJ66	A E Y Y G T P T A L	N Q L A T I T I P E P R T I	M I I Q P W D T S V I G E I E K S	
UniRef90_R6CDW0	V E Y Y G T P T P L	N Q L A T I T I P E P R T I	M I I Q P W D A S L I K E I C K A	
UniRef90_UPI000478AE70	V E Y Y G T P T P L	N Q V V G N V T V P E P R M I Q	V I I Q P F D K S A M S D I E R A	
UniRef90_C6HZ48	L D Y Y G N Q V S L	D K V V A A L N S I V D N R M I	T T T P W E T K L I S D I E K A	
UniRef90_B4S4H8	V D A Y G Q Q M P P L	K Q V V G N V G V Q D A H T L	M I V I K P W E K S M V A A T E K A	
UniRef90_Q03WX8	V E Y Y G A M T P L	N Q V V A S I S V P E A R I	V I V I T P F D K S A L E A I V H A	
UniRef90_UPI0003B558AC	V D V Y G Q L M P I	N Q L A T V S V P E A R L I S	V I V I Q V W D K V N T S I E S A	
UniRef90_D3PSW0	V E Y Y G S T M P L	N Q V V G T V S S P D P R T L	V I V I Q S W D P N M L K E I E K A	
UniRef90_B2GBM1	V E Y Y G A P T P L	N Q L A S I T I P E A R Q L	L I I S P Y D K T T L K D I E R A	
UniRef90_UPI0004144716	V E Y Y G S S T P P L	S Q V V A N V S T P D A R T I S	V I V I Q P W E K N M L Q E I E K A	
UniRef90_I7K193	V D Y Y G A P T P L	N Q L A G S V P E A R V	V I V I T P F D K T V I K D I E A A	
UniRef90_D1CCA8	V E Y Y G V P T P L	I Q L A S I S V P E P R M I A I	V I V I T P W D P N S I G P I E K A	
UniRef90_R7HH74	V S Y Y G T P T P I	Q S I A N I M V P E A R R Q L	V I V I K P F D K N A V K D I E K A	
UniRef90_K2AXD9	I N A Y G N P Q P L	K N I I A S V S V M D A Q T L	T T Q P W D K W L I R E I D K W	
UniRef90_Q3YR65	V E T Y G G R V K L	N T I S S S V S S D N K T L M	K V I W D S N N I G A I K T A	
UniRef90_R6MZY3	V D Y Y G S P T A L	N Q L A A S V T E A R T L T I	S P W D Q S V V H A V E K A	
UniRef90_H5SMG3	V P Y Y G S E V P M	S Q V V A S I A V E D A R T L T I	T T T P W E R A M V P V I E K A	
UniRef90_F2ECS8	V E T G D V K V G L	S R I A V V V S V L D S H T L S	T T P W E R A M V P V I E K A	
UniRef90_UPI0003B5C161	V D C Y G T K M P I	P Q I A T V V N I I E G K T	V I V I T M P Y D P N T M K S I E N A	
UniRef90_B0NEZ2	V D Y Y G T P T P I	Q V G N V S V P E P R M I L I	V I V I Q P W E K S M V K A I E K A	
UniRef90_A6DHK3	V D A Y G T K M R L	K E T A G I S T P D A R T I A I	Q I Q P Y D A T I L P D I E K A	
UniRef90_UPI000360715C	V D Y Y G T P T P I	N Q V V G S I S V P E P R T L M	S A W D K S A M K E I E K A	
UniRef90_UPI0003B674C9	V N Y Y G S D M P L	S Q V V A N V T V D A R T L T I	T T P W E K P M V A A V E K A	
UniRef90_J3YTK1	I E Y Y G S L T P P L	Y Q L A V V E D S C T L A I T V F D P N L V P I G K A		
UniRef90_B9MKP8	V D Y Y G V P T P I	P Q V V A S I T V P E A R M I V I Q P W E A R M L K E I E K A		

	90	100	110	120
UniRef90_H6KZ85	L Y A A N L G I T P Q S D G E V V R M V V P P L T E E R R K Q L V K Q A S G F A			
UniRef90_L0B6M4	I R E S D L G L N P I S F G D S I K V P M P P L T E E R R K S L V K V V K S E G			
UniRef90_UPI00037A4675	I R M P N L G A N P S N D G N V I R V S L P E E L T E E R R R E F F V K I V K A R A			
UniRef90_C0QWQ6	I L K A D L G F N P F N D G G N I R I V V P E L T K E E R R R E E L K K G V R H R G			
UniRef90_R9GQJ5	I D S N V G L N P Q N D G M V I R M N V P P L T E E R R R D L V K K V K E E A G			
UniRef90_D1PXA6	M D S D V G I T P E N N G E M V I L H L P Q P T E E R R R K E L L V K Q C N K I O			
UniRef90_O83613	L K S K L S L N P S N D G K V I R L V I P P L T E E T R K D L L T K E V K A E A			
UniRef90_F8HYG4	F A S D L G L T P T N D G S V I R L V I P A L T E E R R R I S T K Q A K N E A			
UniRef90_E4TTI8	I N S D L G F T P Q N D G E I V R I N I P P L T E E R R R K I L V K E M W K E V			
UniRef90_R4U5Q2	I N K S D L G I S P M A E G D L I R I N I P A L T E E R R R K I L V K E M W K E V			
UniRef90_C6XFU6	H E S D L G L N P I V E G Q V L R I P V E P T E E R R R L A L V K V A H Y A			
UniRef90_R7G1S2	V Q V S D L G I P T N D G N V I R L V F P V L T E E R R R D I V K Q V K K M S			
UniRef90_E6PXB1	L R S P E H G F N P Q S D G R Q I R V P V P P M T E E R R R D I V R Q L N K M L			
UniRef90_UPI0003B4FDB1	I A H S D L G F S T T N N D G N V I R I L V P E L T T E E R R R T E L T K I V R K I A			
UniRef90_P61304	I L N A N L G F T P S N D G K L I R I S L P P L T E E R R R K E L V K S L K T A			
UniRef90_W0IYH4	Q I A N L G F N P N V D G N L V R P P E M S R E R R R Q E F V K V A N R I A			
UniRef90_UPI0002E53339	S M S D L G I T P P N N D G K T I R I N V P P L T E E R R R K E F C K L A S K Y A			
UniRef90_A7I0C2	A A A N I G V N P T N D G E S V K L F F P P M T T E E R R R K E N A K K A K A M G			
UniRef90_S7TF15	Q T S D L G L S A V V N D G K L L R I N I P P L T E E R R R K D L V K I A K K Y T			
UniRef90_D5EQQ4	I D A N D L G F N P L V D G G I L R V P V P E L T E E R R R A E L L A K Q A G G M A			
UniRef90_D4KD81	T R S D L G L S P N N D G T V I R L V I P Q L T E E R R R K Q L S K Q C K N E A			
UniRef90_S8FBU9	I D S S L G I M P E N N G E V I R I G I P P L T E E R R R R E L I R V V K H E T			
UniRef90_A4BS25	L E S D L G I T P N T A G G V I R I P L P P L T E E R R R R E L I R V V K H E T			
UniRef90_UPI00047EE274	N A S D L G I A P Q N D G V V I R I L P A L T E E R R R K Q L S K D V E K I G			
UniRef90_L0B5C6	R E S D L G I N P I S M G G N I K V P M P P L T E E R R R K Q L S K I S K S E G			
UniRef90_V1CQG4	I N E A N I G I T P S N D G K V I R L T M P Q V T E E R R R K E L T K T V K S H G			
UniRef90_B3ETV4	I V I N S K L G I N P Q N D G E V V V R I I V P P L T E E R R R K D L V K Q A K N E A			
UniRef90_D7V058	I L K S D L G I L S P N N D G T V L R I S I P Q P T E E Q R R K E L V K Q C N K I O			
UniRef90_F8N811	I M D S D V G I T P E N N G E M V I I R I P Q P T E E Q R R K E L V K Q C N K I O			
UniRef90_E7MMJ8	C N E A D L G I A P S N D G T V I R I L T V P Q L T E E T R K E M T K K V D K M G			
UniRef90_M5U3K5	I V A G D L G I L N P Q N D G R V I R I L N V P P L S T E E V R K K M V S R I K E L S S			
UniRef90_UPI0004630896	R T A D L G I L N P T N D G E V I R I S V P P M L T E E R R R K E L A K R A S K V S			
UniRef90_C7NBL9	I L Q A N L G F N P S N D G K I R I L V V P P M L T E E R R R K E Y V K M V K K E A			
UniRef90_L0FU81	I N S D L G I L A P Q N N G E I V I L T I P P L T E E R R R K D L V K H V K N E C			
UniRef90_K7YR51	R D S D L G I L N P Q S Y G K T I H S L P D L S E E R S K Q V R R I A A K Y A			
UniRef90_K0P0B2	A E S Q L G F S S R N D G R M V M V T L P P P S E E R S K Q V R R I A A K Y A			
UniRef90_A3XHR3	M N A N L G F P M M N N G E S V I I N V P P L T E E R R R K D L V K Q A K A E A			
UniRef90_UPI00046EB770	Q A A N I G V N P N N D G E T I K L F F P P M T T E E Q R R Q E N V K K S K A M G			
UniRef90_UPI00037BD5C3	F E A N L G V T P Q N D G E L V R I S I P P L T E E D R R R Q L V K T A K E K G			
UniRef90_J0KY44	L A S D L G I S P A N D G S A I R V I P Q L T E E R R R K E I A K E V K A E A			
UniRef90_F5SUU3	M T S D L G I V P N S A G M T I R P I P P L T E E E R R R K E I A K E V K A E A			
UniRef90_UPI000412FF0C	L I K S D L G I L N P T N D G S V I R I L M I P A L T E E R R R K E L V K Q V R K E S			
UniRef90_K0C9K0	M A S D L G I L N P S T A G T V I R I L P L T E E E T R R R K D L V K V V R G E A			
UniRef90_R9KMC5	L T S D L G I I N P T N D G K V I R I L V F P E L T E E E R R R K E L A K D V K K K G G			
UniRef90_G9ZGK0	I N S D L G I L T P N T A G Q T I H N L P E L T E E E T R K N L V K N V K K A G			
UniRef90_UPI0003FB3C81	L T S D L G I L N P S N D G A V I R I L I I P E L T E E E T R K N L V K N V K K A G			
UniRef90_B4U9X4	M E Q L S L N P A R Q G N T L R T L P P L T Q E E R R R K E L V K L L H K T T			
UniRef90_UPI000375AE3B	M T S E L L G I I N P V T H G S V M R I P M P P L T E E E T R R R K E F I K L A R S E A			
UniRef90_B3QS58	R D S N L G I I N P A T D G Q T I R P V P P L T E E E T R R R K E F I K L A R S E A			
UniRef90_F4LU73	L I K S D L G I L T P N N D G K V I R I L I L P E L T A E E R R R Q E L V K L S K K K A G			
UniRef90_R5B5I6	Q K S D L G I I N P S N D G K C I R I L I F P E L T E E E R R R K E L A K T I Q K K K A G			
UniRef90_V7HW28	L L A S D L G I L T P A N D G S A I R V I L V I P Q L T E E E R R R K E L A K E V K A T S			
UniRef90_X0ZXF3	I W K S D L G I I A P S I D G N I R I L T I P P L T E E E R R R K E L V K L V K K E A G			
UniRef90_X8ISY4	I N E A N L G I I N P S S D G K V I R I L A I V P Q L T E E E R R R K E L M K Q V K K F G			
UniRef90_W9E284	I K K S D L G I I N P Q I D G Q M I R P V P E L T E E E R R R K E L V K V T K K Q A			
UniRef90_K4UF4	I M A N A L G F N P M M N N G E S V I I N V P P L T E E E R R R R Q E L V K R A K T E A			
UniRef90_R5KCA2	I L C D L G I I T P N N D G K S V R I L N F P E L T E E D R R R K E F I K L A R S E A			
UniRef90_R5Y7X8	F E A N L G I I T P N N N G E S V I I F I T I P P L T E E E R R R K E L V K Q T K E Y A			
UniRef90_R4KDM0	I L I K S D L G I I T P A S D G N I I I R L A V P P Q L T E E E R R R K E L V K V I K K K A			
UniRef90_F9DP82	I M K S D I L G I I T P S N D G S V I I R L A V P A L T E E E R R R K E L V K E V K R E A			
UniRef90_I4ANT7	I R D S N L G I I G F S P M G E A D L V R I I N V P P L T E E E R R R Q E L V K R A K T E A			
UniRef90_R5Z3Y9	V Q A S N L G I I L P Q G E A G D L V R I I Q V P T L T E E D R R R K E L A K E A Q K F G			
UniRef90_L7EP98	I L M S N L G I I L N P S N D G S V I I R L V I P E L T E E E T R K N L V K S V K K A G			
UniRef90_UPI0004665E8E	I Q E A N V G A N P N N N D G E V I V I K M Y F P P M T T E E E R R R K E F V K M A S K F A			
UniRef90_F4XKJ8	T L S D L D L I L P P N N N G E V I V R L N I P P L T T S E E E R R R K E L V K M A S K F A			
UniRef90_F9N345	I L T S D L D L G I I L N P N N N D G E V I A I R L A I V P Q L T E E E R R R K E L V K V V S K K A G			
UniRef90_Q1Q2J2	I I Q S D I L G I I L N P S V E A K T I R I V I P P L T E E E R R R K E L S V T V K D F G			
UniRef90_A0LJ66	I L K S E L L G I I T P M S D G K V I I R I N I P V L T A D R R R R E L L V K V V K K M S G			
UniRef90_R6CDW0	Q T S D L D L G I I N P N T D G K V I I R I L V F P E L T E E E R R R K D L V K E V K K K G			
UniRef90_UPI000478AE70	Q M A D M G I I L T P S N D G T I I I R I T I P T P L T E E E R R R K E L V K L V K K Y A			
UniRef90_C6HZ48	M G A N L G M T P Q N D G K C V R L L V V P P M T T E E E R R R K E L V K I L K K M A			
UniRef90_B4S4H8	R D A N L G I I L N P A A E G Q S I R V V S I P P L T E E E R R R K E L Y V K L T R K Y S			
UniRef90_Q03WX8	N V S D L G I I L N P A S D G N I V R L A I V P Q M T T E E E R R R K E L A K E V K A E A			
UniRef90_UPI0003B558AC	I Q K S E L L G I I L N P Q L D G Q M I R I R I P D L T E E E R R R K D L I K V L K N M G			
UniRef90_D3PSW0	R D S D L G I I L N P T N K G D A L Y I S I P P P L T E E E R R R K D L V K S V K Q Y A			
UniRef90_B2GBM1	I Y E S N L G I I L T P Q N D G E T I I R L V V P P Q L T T E E D R R R K E L V K D V K A E M			
UniRef90_UPI0004144716	M N A N L G F N P M N N G D V V I I N V P P L T T E E E R R R K T L L V K Q A K A E A			
UniRef90_I7K193	L N A S D L G I I I N P Q S D G N V I I R I V I P P L T T E E E R R R R S L V K M V R Q R V			
UniRef90_D1CCA8	I Q K S E L L G I I I N P S N D G K I I I R I L V I P P L T T E E E R R R R S L V K M V R Q R V			
UniRef90_R7HH74	I N E A N L G I I I N P T N N G E M V I I L T I P E L T M D R R R R E L Y V K Q A K A I G			
UniRef90_K2AXD9	I S D A G L G I I I N P Q N N W E S I M I K I V P T L T E E E R R R R D L A K F A K K L A			
UniRef90_Q3YR65	I M N S N L G I I I G F G F S C E A T T I R L T V I P E M T Q D M R K N L V K L L G K I L S			
UniRef90_R6MZY3	I Q S S D L G I I I N P Q T D G K V I I R I L I F P P L T T E E D R R R R D L V K D I K K M E			
UniRef90_H5SMG3	I R E S D L G I I I N P Q T A G N V I I R V P L P A L T T E E E R R R R D L I K V V R H E A			
UniRef90_F2ECS8	I A S S P L G I I I N P T P D G S R I I A A V P P P L T T K E T T M Q A M C V K V V T K S A			
UniRef90_UPI0003B5C161	I Q K S D L G I I I N P T S D G K T I K L V M P P L T T E E E R R R R D L I V K V A N K L A			
UniRef90_B0NEZ2	I Q T S E D L G I I I N P T N D G S A I R L V F P E L T T E E E R R R K E L V K D V K K K G G			
UniRef90_A6DHK3	L M M A N I G I I I T P M N D G Q L I R L P I P E L T T E E D R R R R D M V K D L K G G K G			
UniRef90_UPI000360715C	I R N S D L G I I I N P T N D G E V I I R I N V P P A L T T E E E R R R R D L C K K Q A K K A S G			
UniRef90_UPI0003B674C9	I M A S N L G I I I N P T N T A G Q V I I R I N V P P L T T E E E R R R R D L T K H V H H E G			
UniRef90_J3YTK1	I M K S A S L G I I I N P V C T G V I I R V P L P S L T T E E E R R R R D L I K F V R T E A			
UniRef90_B9MKP8	I Q K S D L G I I I N P T N D G K V I I R I L I F P E L T T E E E R R R K E L V K Q V K K M A			

	130	140	150	160
UniRef90_H6KZ85	E D A K V S I R N S R R D A L Q E V	K A A V K E G Y P	E D A G K R S E Q T	V Q
UniRef90_L0B6M4	E D T K V A I R N I R R E A N D L L	K K M V K D K D I	I S E D D E E K R L Q D S	I Q
UniRef90_UPI00037A4675	E D A R V A I R N V R R S G K D D L	D V L K S E I V	G E D E V A R A E K E	L E
UniRef90_C0QWQ6	E E A K I V R N I R R D E N D K I	K K E L K D K T	T E D E S K S Q E K K	I Q
UniRef90_R9GQJ5	E R G R I A I R N I R K D V N N K I	Q K L K A D G	V S E D E L K T G E I	D V Q
UniRef90_D1PXA6	E Q T K V Q I R N I R S E Y K D K L	K K A V K D G	L S S E D A G K D A E N D	L Q
UniRef90_O83613	E Q A R V A I R N V R R D A L D Q	A K R G H K E G L	L S S E D A L K A A E E A F	Q
UniRef90_F8HYG4	E K A K V A V R N V R R D A L D Q	A K K E G L	L S S E D A L K A A E E A F	Q
UniRef90_E4TTI8	E D G K I S I R N A R K D A N D Q	L Q K E G	E E L S S E D D L R K L D K	Q
UniRef90_R4U5Q2	E G F K V A V R N E R R D A N D T	I K K D G T G	T E D D D K K Y Y E G E	I Q
UniRef90_C6XFU6	E K S K I S V R N I R R D G M D H	L K K S R K S G K A	S E D M V A S L E N D	I Q
UniRef90_R7G1S2	E D A K V A V R N I R R D G M D H	L V F K K M M N K N K E	M T D D E Y A D Y E A Q	I Q
UniRef90_E6PXB1	E D H R T A L R N V R R D G N D T	L T L K K M A R D K K	L S S E D E K R A Q D E	V Q
UniRef90_UPI0003B4FDB1	E E G K V A I R N I R R D A D A V	V K K G G R S K G R G	G D K K R G S A D P	V Q
UniRef90_P61304	E D A K I A I R N I R R D A D G L	K K L E K D K K	I S E D D L K R A E K E	V Q
UniRef90_W01YH4	E E G R V Q V R N V R R D A D G L	I T V K K A K	P E D E G K R L E K K D	I Q
UniRef90_UPI0002E53339	E E G K V A L R N I R R D A D G L	D K E K K D G L	I S L D E S R D N Q Q K	I Q
UniRef90_A7I0C2	E K A K V S I V R N I R K D A N D G	V K K L E K D K S I	I S E D D E A K K A Y D E	V Q
UniRef90_S7TF15	E E T K V A V R N I R R D G N E S L	K K L E K D K E I	S Q D D L K R G Q D E	M Q
UniRef90_D5EQQ4	E D G R V R V I R S V R R D G D L	L K K S A K D D G	L S S E D D V K R Y E K E	I Q
UniRef90_D4KD81	E E S K V S V R N I R R D A A E A I	L K K L E K A K A S	L S S E D D V D A K K A Q E	D I
UniRef90_S8FBU9	E E A K M S V R N T R R D A A E A L	K K A V K N E G M	P E D M Q K D G E A K L	I Q
UniRef90_A4BS25	E Q A R I A I R N V R R D A N S A L	K A R L K D K E I	I T E D D E K R A E D D	I Q
UniRef90_UPI00047EE274	E S T K V F V R N V R R D G N D Q	V K K L E L S E D	D L E K N T L E E V	Q
UniRef90_L0B5C6	E E S K I A I R N I R R E C O N E	V K K M L K E K E I	N D E R R V Q D S I	Q
UniRef90_V1CQG4	E D A K V A L R N L R R T A N D D L	K K S E K S G E M	T E D E L K S A L D R	V Q
UniRef90_B3ETV4	E K G K I S I I R N I R K D I K E T	F K H L Q K D G	A S E D T I L K R A E E K	V Q
UniRef90_D7V058	E E A K V A V R N I R R D A N E E L	K K L E K S G E I	T E D D D L R S Y G E D	V
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UniRef90_E7MMJ8	E E C K I Q I V R N I R R D A M S V	V K K D K T M D E D	I Q K D C E N E I	Q
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UniRef90_L0FU81	E N G K I S V R N A R K E T N D A	L K K L Q K D G	V S E D E V K R A E E D	K V
UniRef90_K7YR51	E N A K I A V R N V R R D G M D I L	K K L E K D G C	I L S R D E R R L Y E Q	D I
UniRef90_K0P0B2	E E G K I V I R N L R R D Y K E I L	K A T Q K D G	I P E A D I C S N A E V	D V
UniRef90_A3XHR3	E D A K V G V R N D R K N A N N D I	L K K L E K D G	I A D I C S N A E V	D V
UniRef90_UPI00046EB770	E K A K V S I I R N A R K D A N D A I	K K V E K E	E F S E D E I K K A H D E	V Q
UniRef90_UPI00037BD5C3	E E A K V S I V R N I R R D G M D I L	F G I Q A V V K D G Y	P E D A G K R A E E D E A Q	C
UniRef90_J0KY44	E E A K V A V R N I R R D A D D F K	K A Q K G D L	L T E D D L H N L E E Q A Q	C
UniRef90_F5SUU3	E N A R I A I R N I R R D A N S T L	K K D L L K E K E I	I S E D E Q R G A E E D	I Q
UniRef90_UPI000412FF0C	E E A K I A V R N I R R D A N D D L	K K L E K N G E I	I S E D E L R R Y S D D	D I
UniRef90_K0C9K0	E H A K V A I R N I R R D A N G D F	K K D L L K E K E I	I S E D E A R R G E E Q	I Q
UniRef90_R9KMC5	E A A K V A V R N I R R D A N S F K	K K L G K T N E V	S E D E V K E L E D K V	C
UniRef90_G9ZGK0	E Q A K V A I R N V R R D A Q S V	K Q V L V N D K Q A S E	D D E D E R R A E E T E I Q	C
UniRef90_UPI0003FB3C81	E D A K I A L R S I R R D S N D K I	K K A L K K D G E L	T E D E V K K A E D N D I	Q
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UniRef90_X8ISY4	E D A K V A V V R N I R R D A N E E L	D F K K Q E K A N E	I T E D E L K S S L D S V	Q
UniRef90_W9E284	E E C K V A I R N I R R E A N E E L	L K K L K S K E I	G E D D E K S F E K N V	Q
UniRef90_K4UF4	E E A K I G V R N D R R N A M N E I	L K K A D L	P E D V Q K D T E D D I	Q
UniRef90_R5KCA2	E N A K V A I R N V R R D A N A D F	K K Q N K A S E	I S E D D E L K D L E D D K V	C
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UniRef90_I4ANT7	E E E G K I G I R N V R K N T N N A	R A I D L	G G P E D L K G A E S R V	V Q
UniRef90_R5Z3Y9	E N A K V A I R N V R R D A N D A I	K K D K E L	R E D E E K A E L E E S Q	Q
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S	V T K Q F I D Q V D D A L K R K E A E L L E V		
N	D T D S Y I K K I D D M I N T K E E K E L D T I		
K	V T D G F I V Q I D R L A E I K E K E K D I M T V		
K	L H D K Y I K N V E A I L E A K H K E I I M T V		
K	A T D A S V A D V A R Y L A E K E K E K D I L L E		
G	L T D D G V K N I E K I A A S K E E A E L L K I		
S	L T N D F T K K I D D I L E H K E K E I I M T V		
K	L T D K Y I K L I D E K A A K E K E K E L M E V		
K	I T D S T I K N I D S F F E E K K K E I I M T V		
K	L V A A A M G E V E K E K A T A E K E K E L M T V		
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Q	L T D T Y V N K I D E L T E A K E T E E L L E		
D	V T N V Y V A K V V D E V L A H K E K E E V M E V		
T	L T D K S I E E I N Q H L A S K E K E L L L T V		
K	I T D Q F I E K I D E A V K N K E E E L L K V		
K	L T D N A I K L A E Q V F A E K E K E I I M E I		
T	E H D K Y I A E I N D Q L S K K E A D I L K K V		
K	I V D K Y I K E I D I A R A E K E K E I I M E V		
K	T H D K Y I K L I D E I L A Q K S K E I I M T V		
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K	L T D S F V K K I D Q I T E A K H K E E V M T I		
K	L T D I K S I E I D R I I T Q K E S E I I M V I		
K	M T D Q G V S E I D R I V A A K D K E I I M E I		
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A	I T D E S I K R I D E I A K N K E A E I I M E V		
K	L H D K F I K Q I D A T L A A K Q K K E I I M T I		
K	L T D K Y I K K I D D L A A A K S A E V L K V		
E	L T K K F E A S V N E S A K V R E A E V L E		
K	I T D K Y I K N I D T L L A N K E K D I M E V		
K	S T D K F I I A Q V D E A L N K K E K E I I L L T		
K	L T D E F S A K I D A L F E K K E A E I I M K V		
E	L T N I Y V K K I D E A L E D K D K D I I M Q V		
D	L T D G Y I I D K I N H H L T I K E A D I L M A V		
D	L T D K Y I I K R I D E L L A V K E K E I I L L T V		
K	I T D A Y I I E K V E E T L K N K E V E L L K V		
K	L V K S Y E T K V D T H I E H K E G D I I L T I		
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K	I T D H Y I I D E I I S N L S S S K E K E I I T E		
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K	L T D S H I I K D I I D K I V S D K Q K E I I M E V		
K	L T D A S V K N I I D A I T A D K E K E I I L Q		
I	L T D E F I K S T D E L L E L K E K E I I M E V		
K	K V D K A V K D I I D A L I E E K N K E V M A V		
S	I T D D H I K I V D G K V S L K E K E I I M T I		
K	L T D S F I E E I D K I Y A S K E K E I I M T V		
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K	L T D K Y I K E I I D A L F A A K E K E I I L T V		
K	M T D D F I E E K I D Q T A K D K E N E I L E I		
T	L T D D Y T K K I D E L M E A K E K E I I T T V		
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K	I T D E F V H K I D E A L H K E Q E I I L L K		
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E	L I D K Y N K I L D E E I K I K E S E E L L L Q I		
K	F V D E E V E K V D K M L K H K E E E I M K V		
K	I T D D V M K K I I N D A F S S K E K E I I L L Q		
N	Q T D K F I K E I E S I S Q V K E K E I I M E I		
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K	L T D D Y I K K V D T V L K D K E K E K E I I L S V		
K	V T D K F V K K V D E A V E A K S K E I I M T V		
D	L T N K K I D E I I A S L S A A K E K D L M T V		
K	M T D K Y I K E I I D V L L D A K E K K D I M A V		
K	L T D K F V K D V D D T V R A K E Q E L L A V		
T	L T D T W I K N L I D N S L A K K E A D L I K V		
K	L H D K Y I E Q I E K L L S A K E K E I I M E V		

1 10 20 30 40

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UniRef90_UP10001744D83 L D T A L L T S E E N M T K A V E Y A I H E F A A V R T G K A S P A L V E N I W

UniRef90_W7IQF8 I D D T L L F E A E E K M E S T V S V A Q N E L A S I R T G R A N P N M F S R I V

UniRef90_R7LD42 I N S A L T Q T K D A M G K A V A H V R H E F E T V H R T G K A N P S M V E N V M

UniRef90_L1PK26 I D D I L L E A E D K M D K T V E A A R H E F G N I R T G R A N A G M F E Q L L

UniRef90_I6XZZ1 I A D V E K E T Q S R M Q Q A V D H A R E D L S T I R T G R A H P A M F N R L N

UniRef90_R7FN85 E I L Q E C S E K M D K A I T S Y K S T L G T I R T G S I S P M I L D K I K

UniRef90_B6GBY9 M S D C R E N M D K A L E S L K H N F A K V R T G R A N A N V L S D I T

UniRef90_G7V5C9 Q Y I T S A K A E F E K A M T H L K D E Y G K L Q V G R A H P A L V E G L L

UniRef90_K2B4Q0 V K E V A Q K I E P K M K K T I E A F Q H E L A S I R T G K A T T T L L D R I V K S

UniRef90_3BEFU4 L K D E Y K V Y E E K M M K K S I E S V M S D F D T I R T G R A N A S V L N R I S

UniRef90_R6CY17 E L I N E L K E K M E K T I S V E K D D L S V I R T G R A N P K M L D K I I

UniRef90_W8TFP1 I K D I M A T A D E K M Q K T I S V L K K D L A S M K A G R A N P A M L D K I I E

UniRef90_A0A037Z7P1 M N E A K N E F D A K M Q K T V D V V K S D F A S V R A G R A N A A A V L

UniRef90_R5XDK5 M N E Q L K V Y D D D K M T K S I N S L N S E L A T I R A G R A N P H V L D K I A

UniRef90_R5QM71 M D A R V K T F E E K M Q K T V D F L G E D F M T I R A G R A N P H V L D K I K

UniRef90_F4BQG6 N A I L E T M K E K M V K T E G A L Q R E L G T I R A G R A N A A G L L D R I N T

UniRef90_Q9ZE08 D N L K K I L Q E K M E K A I K V L G N E L K G L R T G R A S I N F I D S V T

UniRef90_UP10003B4929D I S R T L W N E G K M Q T S A E A L R R E L A T I R T G H A T P A L I D H I K

UniRef90_F9YSJ6 M D S E L K G Y Q G P L D H A V E F F R K D I Q S L R T G R P S L S L F E N V K K

UniRef90_UP1000369F438 I D I L D S T D E A M Q A A L A H D K S L S N I R A G K A S P Q M L G S V F E

UniRef90_B1C6C5 E E L I K K L I Y K M E N S F K I L N D E L L K G L R I G R A S T Y L L D P V L

UniRef90_B9KHM1 K E V Q N Q A K E M I K A V E N L Q S N L N A L R A G R A N P K M L D R I M

UniRef90_X1ERD4 D A I K E C O A R E M E K T F S M F L S I D S G I R T G R V S A S L L D G V F

UniRef90_I0IRC3 I S R T L W N E G K M Q T S A E A L R R E L A T I R T G H A T P A L I D H I K

UniRef90_L0EUJ1 M D S E L K G Y Q G P L D H A V E F F R K D I Q S L R T G R P S L S L F E N V K K

UniRef90_A3U6N2 L K F I I D S T K E D M E K A I K H L E K K D I L N R T G R A S A V I L D P V K

UniRef90_M4FH49 E I I N E L E R K M S K S I E S Y E T E L T T V R A G R A N P T I L D Q F T

UniRef90_A8SMI0 T I E T L R T S F N S I R T G R A N V A M L D K I E

UniRef90_F8L5X6 M D E T K K N M Q S A L D H L A D E L K H R T N R P N P A I L D S V V

UniRef90_UP10003C2B192 M E K V F A M V E E K M G K T V S V L S A E F A S I R A G R A N S A V L D K I K

UniRef90_R6NT55 V D R H A E L K A R M D K T V Q V F E H E L V K L R T G R A N P A M V E D V K

UniRef90_H5SB40 M K D V I N T A K D K M G K C V A A V E T E Y Y A S I R A G R A N P A V L D K V T

UniRef90_D4JSG1 K Q V L S N A E D E K M K K G I L S A F Q R E L A T I R A G R A N P S L L D R I Q

UniRef90_UP10004258E49 N S I I I D K A N D R F K H S H E S L A R E F S A I R A G R A N A S L L D R I E

UniRef90_G9WH64 M Q N I I I D A A K D R M A K A V S N L E K E F S K I R T G R A S T S L V E D L

UniRef90_T2GFX1 M K L L D T K E F E T K M Q K T L T A L S T D F E S I R V G R A N P T V L N R I M

UniRef90_R7G015 Q Q V L N Q A Q E K M T K S I N A F S R E L A S I R A G V V A N A S L L D R I T

UniRef90_F2F2T8 UniRef90_M0Y093 I D T L L G A E E K M D K A I E V A K E D F S T R T G R A N A A M F S K V V

UniRef90_T2GFX1 M N E R I K H Y D E K T M K T A V D F L A E E L A S I R A G R A N P H V L D K I R

UniRef90_UP10003F5D221 I N E I I Q K D A E S R M S K S V E A L H G S F N R I R T G R A N A A M F S K V V

UniRef90_UP10003776C2E UniRef90_V6J1J5 I D T L L G A E E K M D K A I E V A K E D F S T R T G R A N A A M F S K V V

UniRef90_UP100045EB145 M Q N E Y K H T E T K M D K T V A I L K E E L V N I R A G R A N P R I L D K V T

UniRef90_M1CLW9 I K A T A V S Q M E A A I D A S S R E L L T K I R T G R A S A G M L D H I I

UniRef90_UP10003727027 L N N I K T D A Q T R M A K S V D A L K H E L T R I R T G R A S T A L V D R I T

UniRef90_R2SHK5 UniRef90_W2C2Q5 K Q I I K D A E A K M N A A V Q H L D D E L A R I R A G K A S A R I L D N V R

UniRef90_H2C178 E S I I I N E A K S R M D R T L E N I K L K R E F F N T I R S N R A N P A M L D G L H

UniRef90_X1E935 I D D V L I D A E H R M R M K G A I K T I K Q E F S T I V R T G R A S V S L L D K V T

UniRef90_B0VJM8 M E N I I K D N T K E K M Q K S F D A M L H Q Y S K I R T G R A S A S I L L D D I K

UniRef90_K9SU59 L E E I I L T D V E A R M Q K G I E A T Q N F N T I V R T G R A S T A L L D R V M

UniRef90_L7W7G5 I N F I I L D S T K E N M D N A T I T H L E K Q L L S I R A G K A M P A M L S T V

UniRef90_K3WEP9 I L E T T K K N M N G A V L N F T R Q L L N Q M R P G K A D A G I F D D L

UniRef90_C7PER6 I I I E D A T A T M R K A I G H L E S E E L T K I R A G K A N P Q I L D G I T

UniRef90_W0P385 I N Q I N T K N Y E K M K E T C I Q F Q N N V N N M R T G R A S P T L L H G I Y

UniRef90_F9UJG6 L D L Y L T Q F M E E A K A V N H Y A F E L S K I S T G R A N P Q I I K G V K

UniRef90_R6TP79 M K L L D T K E Y E G K M K K S T A A Y E S E L G T V R V G R A N A A V L D K V L

UniRef90_R7PMV8 I L K A L T E K M D K S I R S L H T E F A S V R T G Q A N A S L L D R V F

UniRef90_UP100036C1954 M E T I K K N L E E R S R K T I S I L K E D L N T V R A G R A N P A M L G T V M

UniRef90_R6E7N4 D Y K R E A E D K M K K S I E V L K D D L L S I R A G R A N P A M L D K I T

UniRef90_E0NM42 K T V L S D M K T H M E K T V A V L K A E F Q K V R T G R A S T A I L L D S V K

UniRef90_A1AQN5 L S E I I K D Q M Q K T I V E S T Q R S F N T I V R T G R A N A S L L D R V T

UniRef90_L8LJY7 E S V L L D S E D R M D K A I G A L D R D F S R L R T G R A S T G L V D N I K

UniRef90_E5Y415 K A D D E R R M R M G A V D S L K H D L A G L R T G R A N T A L L E P V Q

UniRef90_I9C190 R M E K S L A L L S D Q L R G V R T G R A S V G L V E S I R

UniRef90_L0DLJ8 UniRef90_X4RB08 K A I G A L R N E F S K I R S G R A N P E L F T S L I

UniRef90_UP10004797DE2 M A D I L A E A E E K M D A A V A H T K D E F A G I R T G R A H P G M F N S L M

UniRef90_A9SPQ3 K E T A S R L M E A A L V N A L S V E L S K I R T G R A T P G M L D H V

UniRef90_C4GBJ3 M D S R L N P Y E E K M K K S V N A L L A E Y V S I R A G R A N P H I L D K I E

UniRef90_D1AWM6 K M E K T L V E S T K V R F S H V R A G R A N V S M V D G V L

UniRef90_UP1000421E323 V E F I L E E A K E A M E N A I V H L K K Q L S N I R A G K A T P S M L G S V M

UniRef90_K1XXH9 I L H T L E S D L K K A E Q H L H D E F A K L Q V G R A N P A I V E G I M

UniRef90_Q6A7K0 M S D I I K D A E K K M G S A V D H A R E E F A I R T G R A N P A M F N K L M

	50	60	70	80	
UniRef90_B5YGE2	V E Y Y G S T V P L	N Q V A T L G I P E P R M I T I	Q P W E Q K M I S E	E R A	
UniRef90_UP100047DF0CA	I D Y Y G A L T P L	K Q I A S I L G V I E G T Q L L I	K P F D K S T I K Q	E H A	
UniRef90_UP10003740999	A E Y Y G T P T P L	Q Q L A T F T S P E P R V I N	A P F D I T A M P A	E K A	
UniRef90_R8VYU6	V E Y Y G A P T P L	P Q V A A V S V P E A R I L Q	Q P W D K S V M K E	E K A	
UniRef90_C2KW42	V D Y Y G T P T P I	Q Q V G N V S V P E A R I L Q	Q P W D K S V M K E	E K A	
UniRef90_Q6M9Z9	I E V Y G S P M R L	K D V A S I S A P E A R Q L L	T P F D P Q N A G S	G K G	
UniRef90_UP10004663F9F	V N F Y G T P T P I	S Q T S Q N T P E P Q L I T	T P F D R S Q I S E	V G G	
UniRef90_W1Q214	V E Y Y G V P T P L	N Q L A S I T I P E A R M L L	T P Y D K G T L G D	E K A	
UniRef90_D4M884	L D Y Y G T P T P L	K Q I A N I T I P E S R T I Q	A P F D R T S L K A	E K A	
UniRef90_R5PK32	V D Y Y G T P T P L	S Q V A N I T A P D P R T I A	Q P W E K N M L A P	Q K A	
UniRef90_UP10001744D83	V N S Y G S G M T P L	K Q L A M I S T P E P R I R	E P F D P S T L K D	E R G	
UniRef90_W7IQF8	V E Y Y G A G M T P L	N Q L A S I A P E A R M A V V	K P F D A S Q L G P	E K A	
UniRef90_R7LD42	V E A Y G T T S R L	R D I D A A I T T P D S S T I R	Q P W D K G I L K D	V E K A	
UniRef90_L1PKZ6	V D Y Y G A P T P M Q Q L	M Q Q L A S F Q I P E A R T V L I	S P F D R T A T Q E	I K T	
UniRef90_16XZZ1	A D Y Y G A P T P L	Q Q L A T F N S P D P R T M L I	T P F D R S A I A A I	E K V	
UniRef90_R7FN85	I N Y Y G E D T P L	K N V A S I N V Q S A L Q M I	R P F D P S A L K L	V G A	
UniRef90_B6GBY9	V D Y Y G V A T P L	T Q V A A V K V P E A H M L V	E P W D K A L V N A I	V K A	
UniRef90_G7V5C9	V E Y Y G S M V P I	S Q M A T V S I P D P R Q I L I	A P W D K T A V K P	E K A	
UniRef90_K2B4Q0	V D A Y G I S Q P L	K A V A S V T I P D A K T I Q	T P W D R S V I S S V	E K A	
UniRef90_B3EFU4	V E A Y G Q L M P L	M Q K V G N I G M D V H T L I V	Q V W D K S M V S A T E	R A	
UniRef90_R6CY17	V D Y Y G T P T P I	Q Q L G S G S P D P R T L V I	T P W D A S I L K G I	E K A	
UniRef90_W8TFP1	V D Y Y G T P T P L	K Q M A G V S T P E P R A I L I	Q P W D A T A V R D	E K A	
UniRef90_A0A037Z7P1	V E Y Y G S V T P I	N Q V A S I S S V P E S R V L Q	Q P W D K T A I K D I	E K A	
UniRef90_A6P0N8	V D Y Y G V P T P L	N Q V G G I S S P D P R S L V I	Q P W D T K L L K D	E K A	
UniRef90_R5XDK5	V D Y Y G S P T P L	Q Q V A N V S V P E A R M I Q	Q P W E K S L L K E I	E K A	
UniRef90_R5QM71	V D Y Y G T P T P L	Q Q V G N I T V P E P R M I Q	A P W E K S L I K E I	E K A	
UniRef90_F4BQG6	V V I Y G A P T P L	K Q L A Q I S L I P E P R V L M	T P F D K T S I S D D I	E K A G	
UniRef90_Q9ZE08	V E A Y G S K V P I	S Q V A S L S T P D A R T I N	Q V W D K S M V S S V	E K G	
UniRef90_UP10003B4929D	V D Y Y G T M T P L	K Q V A Q I S V P E A T Q I A I	Q P W D I S V V P N I	E K A	
UniRef90_F9YSJ6	V D Y Y G S Q T P L	N Q V A N V S A P D S R T I T	Q P W E K S M I Q P	E K A S	
UniRef90_UP1000369F438	V E A Y G S K V P I	S Q L A T V S T P D A R S I I I	Q V W D K Q L V K N V	E K S	
UniRef90_B1C6C5	V D Y Y G T P T P L	N Q M A S I S A P E P R T L T V	Q P W D Q S A L G L I	E K A	
UniRef90_B9KHM1	L T Y Y G N K V R L	N T V A S I S V S G R T L L I	S L W D A S V I G D V	K A A	
UniRef90_X1ERD4	V D Y Y G V P T P L	N Q I A G S A P E A R L I V I	Q P W D R G S I K S I	E K A	
UniRef90_I0IRC3	V S Y Y G N M T P L	D K I A T L N I V E N R L V T I	T P W E I K L V P E E I	E K A	
UniRef90_L0EUJ1	V D V Y G S R L P L	N Q I A N V A P V D S R M L V	S V W D K S M V S A V E	R A	
UniRef90_A3U6N2	V D Y Y G S P T P L	N Q V G N V N T P D A R T I T S I	Q P F E K S M I Q E I	E K A	
UniRef90_M4FH49	V E Y Y G S P V S L	K S I A Q I S T P D G T S L L L	Q P Y D K S S L K A I	E K A	
UniRef90_A8SMI0	V D Y Y G T E T P I	K Q V A S I S V P E A R L L V I	Q P W D A S L I T P	E K V	
UniRef90_F8L5X6	V E V Y G A E M K I	R D L A S V I S I S E G R Q L I V T P F D P Q T A G P	G K G		
UniRef90_UP10003C2B192	V T T K D G K F P L	N Q L G Q S Q K S P Q R I I V N M S F P E S T A A A I K A			
UniRef90_R6NT55	V D Y Y G T P T P L	N Q M A A V S V A E A R I L T I	Q P W D V S T L H P	E K A	
UniRef90_H5SB40	V D Y Y G T H T P L	K H L A R I A A P E P D L I V I	H P F D K T Q V Q A I	E K A	
UniRef90_D4JSG1	V D Y Y G V P T Q I	N A M A M A V A V S E A R V L V I	T P W D A S T L K S I	E K A	
UniRef90_UP10004258E49	V D Y Y G A P T P L	N Q L A G I S V P E A R L L V I	Q P Y D K S A L L A D	E K A	
UniRef90_G9WH64	V E Y Y G A P T P L	N Q L A S I Q V P E A R I L L I	T P P Y D K S S L K S I	E Q A	
UniRef90_T2GFX1	V D Y Y G T P T P I	A Q V V A S V V A V P D S R T I T I	Q P W D R N A F S D I	E K A	
UniRef90_R7G015	V D Y W G V P T P I	T Q I G E V K V P D A R T L L V I	T P W E S N L L K T I	E R A	
UniRef90_F2F2T8	V D Y Y G S P T P I	N Q M A G I S V P E A R L L V I	Q P Y D K S I L G E I	E K A	
UniRef90_M0Y093	V E Y Y G T P V N L	K T I A Q V N T P D A T S L L L I	Q P Y D K S C L K L	E K A	
UniRef90_UP100041E77AD	V D Y Y G M M T P L	T G A A S I T V P E A R T I V V	K P F E R K K M I P E	V E K A	
UniRef90_D8PGS9	V D Y Y G T M T P L	K Q V A N V A T P E A R L I T I	Q P W E Q N L I R E I	E K A	
UniRef90_UP100037DBF96	V E Y Y G N L T P L	K N V A T V T P D A R T M I	T P W E K K I L K D	E K A	
UniRef90_Q67PB4	V E A Y G S E V P V	N N V N V A T I E P D P R T L V I	K P W D R S L I K A I	E R A	
UniRef90_G5JSP6	V E Y Y G A P T P L	N Q L A S I T V P E A R V L L I	S P F D K N S I K D	E R A	
UniRef90_UP100029A9472	V V I Q Y D Q E V P L	N H V A S V T V C D A R T L M	T P W D K S L V Q A I	E K A	
UniRef90_UP10003F5D221	V D Y Y G S P T P I	N Q V A S V T V P E A R I L I Q I	A P W E K T M L K E I	E K A	
UniRef90_UP10003776C2E	V E Y Y G A E M P V	S Q V A N V N E D A R T L A V I	P W E K S M V Q K K V	E K A	
UniRef90_UP100045EB145	V D Y Y G S P T P L	Q Q L A S F T T P E A R T L L V	T P F D A S S L S N I	E R A	
UniRef90_V6J1J5	V E Y Y G A E T P L	N Q V A S I T V P E A R L L V I	T P F D A S S L S N I	E K A	
UniRef90_L7NVN3	V E Y Y G V P T P I	N Q L A N I V P E A R Q I V I	Q P W D P K I L S E I	E K A	
UniRef90_M1CLW9	V D S G G V K T P L	C R M A V I S V L D P K T L S I	N P Y D P D S L K E L	E K A	
UniRef90_UP10003727027	V N Y Y G S D V P I	G Q V A N I A V A D A R S L T I	T P W E K P M V Q A V E	K A	
UniRef90_R2SHK5	V N Y Y G A P T P L	N Q L A S I S V P E A R V L M	T P F D K S T I E D V	E K A	
UniRef90_W2C2Q5	V T Y Y G D L A P L	S N V A S V T T P D A K T I L I	T P W E K S L L K E I	E K A	
UniRef90_H2C178	A E Y Y G G A D T P L	N Q L A S I S V P E A R I L L I	S P F D K S A S S A I	E K A	
UniRef90_X1E935	I D Y Y G V E T S L	N Q L A S I S A P D P R I L I V I	S P Y D P T I L E D	E K A	
UniRef90_B0VJM8	I N Y Y G G L P T P I	K Q L C N I S I P E A R R M I V V	Q P W D K T T L A D I	E K A	
UniRef90_K9SU59	V E Y Y G S P T P L	K S L A N V T T P D S T T I M I	Q P Y D R G S L N I S R A	G	
UniRef90_L7W7G5	V D Y Y G S Q T P L	S Q V A N V S T P D A R T T L S I	S P W E K G M I T E I	E K G	
UniRef90_K3WEP9	V Q A Y G Q Y V S L	S Q V A Q V A V S G T H S L L S V	T V Y D P S L L V D	R K A	
UniRef90_C7PER6	V D Y Y G S P T P L	A Q V V A N I T V A D A R T L T V	Q P W E K N M L Q P	E R A	
UniRef90_W0P385	I E Y F G S K T S L	R E V C N V V E N T N T L K I	N V F D S S I T T	R K A	
UniRef90_F9UJG6	I N Y Y G E T M T P L	D E L A N I S V P E A Q Q L I	K P F D V S S T K E I	A K A	
UniRef90_R6TPT9	V D Y Y G T P T Q I	N A M A Q I S I L E A R I M V I	Q P W D A S T L K P	E K A	
UniRef90_R7PMV8	V D Y Y G S S T P I	T Q V A S V T V P Q A R L I V I	Q P W D K S L L Q A I	E K A	
UniRef90_UP100036C1954	V D Y Y G S Q S T P L	S Q V A N V N T P D P R T L S V	Q P W E K N M L Q P	E K A	
UniRef90_R6E7N4	V D Y Y G S P T P L	K N L S I S V P D P R T L M	T P F D P K S I S E	E K A	
UniRef90_E0NM42	V E Y Y G Q V T P L	N Q V A G I S A P E A R L L V	Q P W D Q S L I S V I	E K E	
UniRef90_A1AQN5	M D Y Y G G N P T P I	S Q I A T L A I P E P R M I T	T P W E A K Q I S V I	E K A	
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130 140 150 160

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

170 180

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UniRef90_R8VYU6	K I T D K Y V K E I D G V A K K G K E L A E V
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UniRef90_L1PKZ6	S A T K A R V E L D K L L A T K E S E E L L T I
UniRef90_I6XZZ1	V T T R K Y V E A I D E L L K N K E A E L S E V
UniRef90_R7FN85	K E T D K H I K L D E L L A A K E K E I I K T V
UniRef90_B6GBY9	K A T D E Y V S K V D E M L K A K E A E V M E I
UniRef90_G7V5C9	K I T D E F I K K I D E L
UniRef90_K2B4Q0	K V V D E Y N K K I D E Q E K V K V E Q I M K I
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UniRef90_R6CY17	K L T D D S C K E I D I L D N K E K E L M S V
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UniRef90_B9KHM1	K V T D T F I K K I G D A F S V K E S E I L
UniRef90_X1ERD4	K L T D S F I A A E Q I G R D K E A E L M E V
UniRef90_I0IRC3	K M D Q S V A K V D D F T H K K E Q E I I L T
UniRef90_L0EUJ1	K M T D E A I N K I D I L F E E K K E E I I M R V
UniRef90_A3U6N2	N L T D K Y I A K I D E V Y A A K E V E I I M K V
UniRef90_M4FH49	K L I D T Y M K K V E E L S K Q K E K
UniRef90_A8SM10	K V T D K F I K K V E D I T K L K E K E L M E I
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UniRef90_D4JSG1	K L T D K Y C D E M D D A A C S A K E K E I I M T V
UniRef90_UPI0004258E49	K L T D K Y I S E V D S I A G A K E K E I I M E V
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UniRef90_T2GFX1	D D T V A K L D Q T L Q K K D K E I I M E I
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UniRef90_M0Y093	K I T D E Y M K K V E A I Q K Q K E Q V L
UniRef90_UPI00041E77AD	K L T D S Y I V K V D S I F A D K E K D I I M S V
UniRef90_D8PGS9	K L T D Q Y V Q K I D D V M K K K E G E I I L E V
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UniRef90_L7VNV3	K L T D N Y I E D I D K L L E A K O K E I I M E V
UniRef90_M1CLW9	D L T K K F I K S A E D M C K S K D K E I I
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UniRef90_W0P385	K M T D D K Y I K K I D S I L S K K E I E L L M K
UniRef90_F9UJG6	K H T D E R I S H I D Q M T K V K E K E L L L A V
UniRef90_R6PTP9	D L T D R Y I R E I D A I T A K T K D I I M S I
UniRef90_R7PMV8	K L T D K K I K E V E E V T D K K I K E I I M S V
UniRef90_UPI00036C1954	K L T D T F V V K K I E E I F F I K D K E I I M T V
UniRef90_R6E7N4	K A T D K T T K E I D D I I A A K D K E I I M E V
UniRef90_E0NM42	E L T D K Y I K E V D V V T K A K E D E L L M E I
UniRef90_A1AQN5	D N T K S F E I K I D E A M T N K E K E L V M E V
UniRef90_L8LJY7	K I T N E H I T K I D E L L K V K E K D I I T T V
UniRef90_E5Y415	K L T D R Y V V A K V D E K C A K E K E I I M
UniRef90_I9C190	K L T D E V I K A L D E E F G R K E K E I I L
UniRef90_L0DLJ8	S L T K R F E S K V V N E M A E K K S T E I I L D V
UniRef90_X4RB08	V L T K R F T D Q I D T L L E G K E K E K D I I L M E I
UniRef90_UPI0004797DE2	D I T K K R V D Q I D E V L K V K E K E S E L L L E I
UniRef90_A9SPQ3	D V T K K Y V V K S V V E E A C K S K K E K E I I L
UniRef90_C4GBJ3	K L T D R Y V V K I L D Q E I D K K T Q E I I L M T
UniRef90_D1AWM6	K L T D E C I K H I D E L L A K K E K E L L L S I
UniRef90_UPI000421E323	U T N E Y I A K I D S I L L V V K E K E I I I M T V
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40

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UniRef90_K1ZZY4	K D I K D K L E K V L D H F R G E L A K L R T G R A H P S L V E D I V
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UniRef90_I0IGL1	D E T M L E A E E A M E K G V E Y L R H E L R G I R T G R A S A G L V E F V K
UniRef90_F8KUS1	L N S I R T G Q A N P G M L D G I T
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UniRef90_E4PYZ8	K A I N H L V F E L S K T S T G R A N P Q L I R G I K
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UniRef90_R6T1Y8	K E F E Q K I K K T L S N L E E T L S T I R A S L A N T S V I S K V Y
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UniRef90_R40N3	L N Q Y E E K M K K S L A N L E E E Y G A I R A G R A N P R I L L D R I L Q
UniRef90_R7C8H9	L A E V S N K M R D A I S H L K V E L A Q I R T G R A S G T L V S D I Q
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UniRef90_UPI00047C757D	M D K Y E Q Q L M Q N A V E K L R K D L G L I R M G R A N P A L L D S V
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UniRef90_V9L192	M D E R L K V Y D D K M R K T Y E H L E G D Y L G I R A G R A N P H V L D K I R Q
UniRef90_R9MZ89	D N I I S E V E L E M G I S I E H L I D E F G K I R T G R A N P S L V T G I Q
UniRef90_UPI00025D0D7	M K Q V F I N T E E N M K K C L N A L S K E Y I A I R A G R A N P A V L D K I L
UniRef90_R6GHS4	V E D I L E E V D G E M K M S V V E A L K D N F N K N L I R T S P G S L D H I T
UniRef90_G3WQG0	S L Q E R I E K S K Q V L K S D L N T V R A G R A N A S L L D K V L
UniRef90_X8K3B9	K A V V Q N Y E E K M D K T I E A L K R D F T S I R T G R A S T S L L D R V T
UniRef90_D3LV1V	M K A Q Y K E I E E K M N K T L D A L Y R E F G T I R A G K A S P S V L D R V T
UniRef90_R6BKJ2	L D E F E M K M M K A I D N L E E R Y V S I R A G R A N P S M L N G V T
UniRef90_R5MTA5	V E E L K S K T R R N M M N G A I L N F T R Q L C Q M R P G K A D G G I F D T V H
UniRef90_F0W4Y6	L N E I Y D A C E K K M K S S I E H M Q R D F K T L R T G K I T T S V L D N V R
UniRef90_B6BGV8	I E E Y L K E A E K R M K G A V N K Y K E E L L L G I R T G R A S T G L V E N I K
UniRef90_B2V8D9	M N E K V K I Y E E K M T K A F D F A Q E L L A S I R A G R A N P H V L D K L K
UniRef90_UPI0003B57CCE	Q E V K N E A K E R M E K S I A S F K E E L T T V R T G R A N T S L V N N V E
UniRef90_R5VXC1	N M Q E K I E K T K S I L K E E L N T V R A G R A N P A L L D K V M
UniRef90_W2BVX4	E I L D K T E E K M M Q V I D N L E K R R L L N I R A G R A N A S L V N G I M R
UniRef90_R5MWL1	L N D I Y K H T K E Q M M Q K S L Q A L S K D F T T L R S G R V S I S L V D H V
UniRef90_K4RJ36	L I D D N L E S Q F K N K S L A H F E K E L L R S I K T G R A S V S L V E D I L
UniRef90_K1ZAT6	E I H K N L E E K M M N K T I N A L K D E L A S I R A G R A N P A M L D R I V
UniRef90_A8MHH2	E V V A K S E E T M R K S M G F L K E D L A T I R A G K A N P K L V D K I E
UniRef90_I3S931	E V V A K S E E T M R K S M G F L K E D L A T I R A G K A N P K L V D K I E
UniRef90_UPI00030FCD5E	M S K V T R G A R H P S I L D S L V Q
UniRef90_Q5QXS3	L N E V I D Q M E H K L Q A S L D H L R L D F V E Q L S L R T S V G I L D S L Q
UniRef90_R7U9N1	M Q E V Y D F A N E K M T K S V K S L H N E Y V S M R A G K A S V S L L D K V V
UniRef90_K1TKE5	A I E T V Q S N F N T V R T G R A N P S M L D R I V E
UniRef90_M0Y091	E I L N H A E E K M K K A V A V L E E D L K T I R T G K I A H S L L D H V Q
UniRef90_R6US10	L A S I R A G R A N P H V L D K I K
UniRef90_UPI00047E6E76	Q N M R K A L E I I L I S D L A T I R T G K A A P S L V E N I A
UniRef90_UPI0002F90225	I D D V L L E A E D K M E K S V E K T R M E L A S R S G K A N P E M I S N I S
UniRef90_U7US08	D I K R D T E N K M K R T I E V F R E D L K N I R A G R A N P S I L D K I T
UniRef90_M1QBW1	M E K K M E N A V E S L Q F E L L N K V H V G Q A N P A M V E D I L L K
UniRef90_H3NN21	V D K L I K N G K V H L E E H V N K Y R E S L L N T I R A G R A N P A L V E N I I G
UniRef90_Q55G90	I S S V S S Q G D K T I E Y V S R E L L G N I R F G R V G P E L L E R I I N
UniRef90_D3L0Z6	K A I L K D M R E S M K K A V E H F K A E M T G I R A G R A H P A L V E N I I K
UniRef90_W0DF35	M E E I F K S T E E D M M K K A V Q Y F K N E I A G L R T G R A S T A L V E E I K
UniRef90_K2E6U2	D I V S T F E S Q A T K T I A S L K E D L K S I R T G R A S P N L V E N I L
UniRef90_Q8T0M6	F D G L I N S Q M Q K S V M Q M K E D F V K H H L S L P T S G A I D T L R
UniRef90_U6E0G9	K E I I L L T E K K M S Q A R E E M L K N F S D I R T G C A N P N I L N K I N
UniRef90_Q89AP1	M E R I K N F T S S K M D H C V H M F V N Q L N T L R S S R A S P S I L L D T I L
UniRef90_W5M5A0	V E D I L E E V K D E M N A V V V N L K E D Y S R N L S I R T S P G A L D H I T
UniRef90_Q83HZ5	D V S E R M M N K T I E L L K E Q F L S I H S G R V N S G Q F E K V M
UniRef90_R6YA05	L N H I E E K M M N K T I S V L Q E N F S E V R A G R A N P A I L N K I R
UniRef90_B1HQZ3	K Q V L E Q A K E K M M N K T I A A F T R E L S S I R A G R A N A S L L D R I M K
UniRef90_UPI0004659A6D	Y K T L R T G K V S V N I L D N I K
UniRef90_K2C1B9	Q N M R K A L E I I L I S D L A T I R T G K A A P S L V E N I A
UniRef90_10K064	I D D V L L E A E D K M E K S V E K T R M E L A S R S G K A N P E M I S N I S
UniRef90_C3DNM4	Y T S I M S E I S T S C Q K I I E H L D A E L K T I R T G R A S T G L V E N I L K
UniRef90_X0UMT3	L S F Y D N L K E N I E K T I A N F E K Q L L K V A V G K A N P A L I S K I I K
UniRef90_K1ZDD5	L D D I I P E S K A R F D K V L Q G L T R D F Q G L R G G K T D P G M L D N V R
UniRef90_UPI0003D04F09	E K L L K D L E R E L S L G L S A L E K K F L G L R V G R A R P E L L E N I L T
UniRef90_N9SR34	L N D I F F S C K K D M E K I L K Q L I K E E I H R L R L G S K S A S I L E E K I V
UniRef90_D7G7A5	M N S L K D A E N R M M K K S V E K I V E E Y A Q M R T G R P S P A L L E S V K K S
UniRef90_W6TE88	F S E M K I K L E G V D G L A R E Y S N I L V S R I T P E N L N R I V E Q I P
UniRef90_D0JAG2	V K A A A S S Q M E A A I D A L S R D L T K L R T G R A A P G M L D H I V
UniRef90_J2F7D2	I E K D V K A R M E K T I D T V R S N F N S I R T G R S N P A M L D K I V
UniRef90_B3RVM8	R A G R A N A S L V N R V M
UniRef90_E6L7J6	D D L T S Q M S Q A I E N M K A D F I K N L T L R S T T G S L E Q I P
UniRef90_Q6NQM0	V K A A A S S Q M E A A I D A L S R D L T K L R T G R A A P G M L D H I V
UniRef90_UPI0002B4452B	I E K D V K A R M E K T I D T V R S N F N S I R T G R S N P A M L D K I V
UniRef90_UPI00046925E0	R A G R A N A S L V N R V M
UniRef90_K7J7S1	D D L T S Q M S Q A I E N M K A D F I K N L T L R S T T G S L E Q I P

UniRef90_UPI00036BF164 | I D Y Y G **I** D T P I | S Q A A N | T V L | D A R T L | G I | T P W E K G **L** A S K | I E K A
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 UniRef90_K2GR08 | V A A Y G Q P M P L | K T L A V L | S A P D A R L | I S V Q P W D A S I I | I P D | E K A
 UniRef90_UPI00035F0854 | V D Y Y G S Q T P L | S Q V S N I | N T P D A R T L | S V Q P W E K S L L | T E I | E T A
 UniRef90_Q5FJM6 | V E Y Y G A P T P L | T Q M S S V | T P E P R V L L | I T P Y D Q N S L D D | I E H A
 UniRef90_K1ZZY4 | V D Y Y G S P T L | K Q M A S | S T P E A R V L L | Q P W D K N S V K D | V E R A
 UniRef90_X1JSH6 | V D Y Y H G A L I P I | H Q I I A T | S V P E A N L | I V T P W D R T S L | R N I | E K A
 UniRef90_V5RU96 | V D A Y G T K M M L | I E V G S | T V L D P Q N L | V I T P W D K G L | I K S | T K S
 UniRef90_I0IGL1 | V D A Y G A T S D L | R S L A M | T V P E P T Q I | L I K P F D P S T A K E | I A K G S
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 UniRef90_I3J745 | V T T Q D G K F P L | K Q L G Q | S M K M S P Q L | M V N M S S F P E V T A A T R A
 UniRef90_K2FKU8 | V D Y Y G T Y G A K T P L | K Q L G Q | N T P E P R T I | A I Q P W D R G A L A A | I E G A
 UniRef90_E4PYZ8 | I N Y Y D T L T P I | E E I L A N | S V P E A Q Q L | L I K P F D A T T V R D I | I K A
 UniRef90_F9MNF1 | V D Y Y G A A T P I | K Q V A N | V S A P E P T L | T I V P W E R N I | L G D | L E R A
 UniRef90_R6T1Y8 | F E Y Y G A E T R I | M D M A M S | V S V T D A R T I | T I T P Y D Q K T | L A A M K K A
 UniRef90_A0A24HWM6 | V E Y Y G E **L** T P L | N Q M A Q L | Q I P E P R E | L I K P F D P S T T N | L I Q S A
 UniRef90_R40N3 | V K Y Y N V A T P L | R Q L L A S V | T V E N Y H T L | V L N L F D P S F S S A I | E K A
 UniRef90_R7C8H9 | V D Y Y G T P T S L | Q G L V A N | S V P E A R M | Q Q P W D A G L | I K D | E K A
 UniRef90_K2A7R4 | V D A Y N S K M M V | K E L L A Q I | T T P E P T V | L I S P W D K S I | L T N I | V G G
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 UniRef90_UPI00047C757D | V D Y Y G A **L** T P L | N Q I V A N | S A P E P R M | L I Q P W D A N S V S E | I E K A
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 UniRef90_UPI00037CF4EA | V D S Y G A R V P L | N Q V V A G S | G I E D P R T | R I S P W D R D S L | S A I | E K A
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 UniRef90_B9S418 | V E Y Y G T P V S L | K S I I A Q I | S T P D A S S | L V V Q P Y D K S S L | K S | E E K A
 UniRef90_A3ZXS2 | V E V Y G S L Q P P I | K Q L I A S V | S V P E P T Q | L I R P Y D T G A I | K D | E K A
 UniRef90_O66928 | V E Y Y G S K V P I | K Q L I G T I | S V P E H N Q I | V I Q V W D Q N A V | P A | E K A
 UniRef90_W4GB32 | V S A Y G Q M A S | L T E L A Q | V S V V I G P T E L | A I T I Y D P S L | L T D | I R T G
 UniRef90_Q98QZ1 | V S Y Y E E L I P L | E E Q I L A S N | I S V P E P Q Q L | L I K P F D H N | I T K E | I H K S
 UniRef90_V9L192 | V T I I Q D G K F A L | N Q I L G Q | S L K I K S P Q L | L I N M S S P E A T E A A | A T K A
 UniRef90_R9MZ89 | I D Y Y G T P T P I | Q Q V L A S V | V T I P E A R R M | Q I A P W E K S L | I R E | I E K A
 UniRef90_UPI000025D0D7 | V E Y Y G V K T P P I | Q Q V L A S V | V S V P D P R L | L V V Q P W D V S V L K E | I E K A
 UniRef90_R6GHS4 | V D Y Y G A P T P I | N Q I L G Q | S L K I K S P Q L | L I N M N F P E C | T A A A I | K A
 UniRef90_G3WGQ0 | V T T A D G K F A L | N Q I L G Q | S L K I K S P Q L | L I A P F D P S S L | P E | I E K A
 UniRef90_X8K3B9 | V D Y Y G T P S P P I | K N Q I L S N | I S T P D P R T | L I V P W E R K I | L G D | I E K A
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 UniRef90_R5MTA5 | V F F Y G T P T P I | Q Q V L A S S | I T V P E A R R Q | L F I K P F D R S T L | K N I | E H A
 UniRef90_F0W4Y6 | V Q A Y G Q S V P L | P Q I L A Q | V A V T G A Y S L | S V N V Y D Q S L | L Q E | V K Q T
 UniRef90_B6BGV8 | I D Y Y G T M T S | D Q V V G S | I A T D A T T | V V V N P W E K N L | L P A I | E S A
 UniRef90_B2V8D9 | I D Y Y G T E L P P I | K Q L I A T | I S T P E P A Q I | V I Q T W D K S A V | K | L I E K A
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 UniRef90_K1ZAT6 | I D S Y G A K T P P I | R Q L I A S | I S P L P E A R Q | L I Q P W D K G L | I Q A I | N K A
 UniRef90_A8MHH2 | V E Y Y G S P T P I | K Q I I A A | I T A P E P R I | S I Q P Y D G S A L | S S | E K A
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 UniRef90_Q5QXS3 | V N Y Y G T D T P L | K Q L I A N | I T T E D S R T | L A L T V F D K S A S A A | V E K A
 UniRef90_R7U9N1 | V Q T P D G S F P L | I Q L I G Q | V V K K N P Q L F V I D M T G P Q Y T A A A R D A
 UniRef90_K1TKE5 | V D Y Y G C P T P P I | Q Q M A A | V S V S E G R N L V I Q P W D V S T I N A | I E K A
 UniRef90_M0Y091 | V E Y Y G T P V N L | K T I A Q V | V N T P D A T S | L L I K P Y D K S C | L K D | I E R A
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 UniRef90_UPI00047E6E76 | V D Y Y G T P T P I | Q Q V V G N | V S V P E A R R I | Q I A P W D K T | L I K D | E K A
 UniRef90_UPI0002F90225 | V D Y Y G T P T P I | Q Q V V A N | V N L I D A R T | S V Q P Y E K H M G S A | I E K A
 UniRef90_U7US08 | V D Y Y G Q Q T P L | N Q V V A G | I S A P E A R R L | A Q P W E A K M | P | L | E K E
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 UniRef90_Q55G90 | V E T P S G N L L | P H M A M | T I K D S L T | N T L Y D S S | L L S N V E R A
 UniRef90_D3L0Z6 | V D Y Y G A Q T P I | K Q M G T | S I P E P R Q | L I S L W D K T A I | K A | V E K A
 UniRef90_W0DF35 | V D Y Y G S K V P L | K Q L I A S | S V P E A N Q | V L Q V W D K G A V | D | V E K A
 UniRef90_K2E6U2 | V E T Y G G Q T K | R E L L A T | M T E G A S S | S I S P Y D P S V | I Q D | I E R A
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 UniRef90_U6E0G9 | I S Y Y G T I T P L | N T L S S | S V S G G N Q L | N I S P Y E K T | L I P A | I K K A
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 UniRef90_W5M5A0 | V S T K D G K F P L | N Q L I G Q | S M K S N Q V | I V N M T F P E A T A A A T R A
 UniRef90_Q83HZ5 | V D C E G A S V P L | V S L V A S | R V L N A N T | V V T P Y D S A L | L S Q | I D R A
 UniRef90_R6YA05 | V D Y Y G T P T P I | N Q V V A G | I S V P E A R R L | I V Q P W D I S L | L K E | I E K E
 UniRef90_B1HQZ3 | V D Y Y G A P T P I | N Q V V A G | V S V P E A R R L | I V T P Y D K T | I L G E | I E K A
 UniRef90_UPI0004659A6D | V D Y Y G T M T D | L S Q V V G S | V L A T D A T T | T I S P W E K N L | L G T | I E K A
 UniRef90_K2C1B9 | V S V Y N G T T K L | K E L A T | V G V Q D A H S L | V L T P F D A S I | I E E | I R K G A
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 UniRef90_D7G7A5 | I N Y Y G D S W M N | L D E I A S | I T P N G P L E | F V K P Y D M V I L | K N I | E E K T
 UniRef90_W6TE88 | V E S Y G S M T N L | A S V A Q A | S M K G P Q L | L V S V Y D P G M T K | V V E D A
 UniRef90_D0JAG2 | V E I I Y G G K Q S L | G N V V S S | I S A P Q P Q L | L V I E I W D S S | I K D | T V E K A
 UniRef90_I2F7D2 | I K C Y G S S F L | L I E V A N I | T V V D I N M N | I T H P W D R S I V S Y I | D K A
 UniRef90_B3RVM8 | V D Y Y G V P T P I | N Q I I A T | I T T E D R S | L V I K P W D R S V L S Q | V E K A
 UniRef90_E6L7J6 | V Q T N D G K V P L | K Q L I G Q | V T S T S P Q L | L V H S A A F P E V V N N A A | D A
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 UniRef90_UPI0002B4452B | V E T Y G G V K M P L | N H L A L V | S V L D P K T | L S V N P Y D P D T V K E | L E K A
 UniRef90_UPI00046925E0 | V E Y Y G S P V S L | K S I I A Q | I S T P D A S S | L L V Q P Y D K S S L | K S I | E E K A
 UniRef90_K7J7S1 | V K V D D K E Y Q I | Q E L A Q I | A R K P K L I I L N V S S F P T A I | P H | L K A

	90	100	110	120
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UniRef90_P71148	L A A N L N L Q P I V E G A T V R I N V P E P T E E Y R R E E V I K Q L K R K S S			
UniRef90_K2GR08	A A S D V G V N P R N D G K V V Y L Q L P E M S S T R R D E L L V K L L G K K E			
UniRef90_UPI00035F0854	M N A N L G F N P M N N G E V I N V P P L T S E R R E E I R R I Q L V K Q A K S E A			
UniRef90_Q5FJM6	L L A S N L G L T P A N D G K V I R L V I P Q L T S E R R E E I A K E V G K Y A			
UniRef90_K1ZZY4	L L A S K L G L N P S N E G D K I R I M L P P L V E E T R S D L T K L L G L K R			
UniRef90_X1JSH6	L K A D I G L N P L N D S N V I R V V I P P L S E E R R I Q L V K Q A K S E A			
UniRef90_V5RU96	R E S Q A S L N P V E E S D R I R I P V P S L T E E R R E E L A K I V G V K A			
UniRef90_I0IGL1	E R A G L G L N P M V D G K T V R L S V P P L S G D R R K Q L S A S V K A M G			
UniRef90_F8KUS1	E R A N L G F M P I V D G N A V R I K I P P M D E S L R K E M A K L C H K K Q			
UniRef90_I3J745	R E S S M N L N P E V D G T I I K V P V P K V T R E E H R E N L A K V A K Q L S			
UniRef90_K2FKU8	R N S D L N M N N D G V M V R I N I P M L T E E R R K K E L V K A L S K H S			
UniRef90_E4PYZ8	T N A Q L G I N P V D E G S Q I R I K F P P L T T E E R R K K E L V K A L S K H S			
UniRef90_F9MNF1	L K S D L G L N P N N D G T M I R L E I P K P T E E R R K K E L T K K V S K Y A			
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UniRef90_A0A24HWM6	L S K S N L N L N P T I D G D K I R I K L P Q L T T E E T R K S Y V K K T K E I C			
UniRef90_R40N3	M S S D L G L N P N S A G S V I R I P L P P L T E E R R K K E L V K D V K K K G			
UniRef90_R7C8H9	L A S D L G L T P A N D G K V I R L V F P E L T E E R R K K E L V K D V K K K G			
UniRef90_K2A7R4	A K A D I G L N S V V D G D I R I A I P P L T A E R R D Q F I K N M H Q I L			
UniRef90_UPI0003B5674B	R D P N L G A N P S N D G N I R I T L P E L T E E R R K K E L V K I V R S K A			
UniRef90_K2BIC7	Q K S G L N Q P I V D S T I K I S L P A P T E R R R L E L V K L V H S K L			
UniRef90_UPI0004692B7D	G E A N I G V N P N N D G E C I K L F F P P M T T E Q R K E N A K H A K V M G			
UniRef90_UPI00047C757D	L K S D L G I N P S N D G K V I R L V I P Q L T E E R R K K D L V K L L S K I N			
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UniRef90_D9QZY7	L T S E L G I I N P T N D G N V I R L V F P E L T E E R R K K D L V V K D V K K K G			
UniRef90_K1RL20	L L D S N I I G L T P S N N G E T I R L L T I P P L T E E R R K K E L V K Q V R S E A			
UniRef90_B9S418	V S S D L G L T P N N D G E V I R L S I P Q L T S E E R R K K E L V K M V A K L A			
UniRef90_A3ZXS2	V A S D L G L M A P Q S D G R V I R L L N V P A L S T E E R R K K E L V S R I K E L S			
UniRef90_O66928	R E E L N L N P T V Q G N V I R V T L P P L T E E R R K K E L V V R L L H K T			
UniRef90_W4GB32	E G L N P S F S V Q P S G A T S V V R F P K M T K E T R D E L V V K A A K K Q A			
UniRef90_Q98QZ1	L L A N L D V A I V N E G N Q I R L N F P A L I N T Q R R K E L V K S L N K F T			
UniRef90_V9L192	R E C G M N I L N P E V D G S L I R V P I P K V T R E E H R E S L L G K L A K Q L T			
UniRef90_R9MZ89	L T S D I G I I N P S N D G S V I R L V F P E L T E E R R K K E L V K D V K K K A			
UniRef90_UPI00025D0D7	Q N A D I I G L I N P A T D G D I R I P I P A L S E E R R K K E L V K D I A K M G			
UniRef90_R6GHS4	Q T S E L G I I N P Q N D G K I R I I F P A L T E D R R R E I V K D I A K M G			
UniRef90_G3WGQ0	R E S G G M N I L N P E V D G T V I R V P I P K V T R E E H R E S L L V K L A K Q N T			
UniRef90_X8K3B9	N K S E L G I I T P S N D G K C I R L L V V P Q L T E E R R K K E L T K K V S K Y A G			
UniRef90_D3LV1V	L K S D L G I L N P N N D G A M I R L E I P K P T T E E R R K K E L C K Q V S K E G			
UniRef90_R6BKJ2	Q A S D V G I I N P T D D G S V I R L V F P A P T E E R R K K E L C K Q V S K E G			
UniRef90_R5MTA5	I A A N L G I I N P T N D G N M I I I T I P A L T E D K R R E E Y V K Q A K A L S			
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UniRef90_B6BGV8	S K A N V G A N P N N D G D Q I K L F F P A M T V E Q R K E S V K Q M K G M G			
UniRef90_B2V8D9	M E A N I L G A N P Q T E G N V I R L N L P P M T E E R R K K E L V V K M I H K F A G			
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UniRef90_R5MWL1	F E A A N I I G L I T P N N N G E M I I I T I P P L T E D T R K S Y V K E A K G M A G			
UniRef90_K4RJ36	L Q E A N I I G V N P S N D G E N V I K L F F P P M T M E E Q R K E I A K D A R A M G			
UniRef90_K1ZAT6	I S E D K I I G L N P N I Q G D L I R L N L P A L L N E E R R K K E L V K V V N Q K A			
UniRef90_A8MHH2	I L Q S D L G V N P S N D G K L I R I I V P Q L T E E R R K K E L T K V A K K T S			
UniRef90_I3S931	V S S D L G M T P N N D G E V I R L S I P Q L T S D R R K K E L L S K V V S K Q T			
UniRef90_UPI00030FCDF5E	L A S E D L G I I T P S N D G K V I R L V I P V L T E E R R K K E L L L K I V K K E T			
UniRef90_Q5QXS3	I N S D L G L N P N A S A G A V I R I P L P P L T E E R R K K E L N A K N A K I L C			
UniRef90_R7U9N1	A N S G L G N L N P Q Q D G T S I F V P I P P V T R E E Y R E N L A K N A K I L C			
UniRef90_K1TKE5	Q A S D L G V N P M M N D G K V I R L L N F P P L T E E R R K R K L L A K E V G K Y A			
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UniRef90_R6USI0	Q T S D T G L L V P Q S D G E V I R L N V P A L T E E R R K R K E L A K S A H K M G			
UniRef90_UPI00047E6E76	M T S D L G I I T P S N D G A V I R L V F P E L T E E R R K R K E L A K D I R K K G			
UniRef90_UPI0002F90225	R D S D S L G L L N P V V S M G D S I R V P M P A L T E E R R R R D L T K V V R S E G G			
UniRef90_U7US08	L K S D S L G L N P S N D G K I I R L V I P Q L T E E R R K R K E L L V R V V K K N G G			
UniRef90_M1QBW1	I E S D D L S I I N P N N D G E I I R V P I P K L T S G D R R E E E L V V E V I E E K G V			
UniRef90_H3NN21	L A S N I I G I I T P S N D G K V I R L P F P E L N E S T R K N L V V K D V V K N K G S			
UniRef90_Q55G90	L T N S G L G L N P Q T F D T T I R V S L P K P T Q D L R Q K L I K Q V N T I S			
UniRef90_D3L0Z6	Q A S Q L G V M P Q V D G E N I R I T L L P E L T E E R R R R D L L S R L V K K Y A			
UniRef90_W0DF35	I I E E N L G I I T P Q K Q G N V I R L P P L T E E R R R R D L L V R M L H K M A			
UniRef90_K2E6U2	I L K S P L G I I T P T T L G A K I I R I P S L I N T E Q R E K Y I K V V G E K V			
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UniRef90_U6E0G9	L A S D L G I I T P E T D G V V V R L N F P K P T E E R R R K A L T K E V N I I A			
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UniRef90_K2C1B9	M D S G S G L I N P A S D G Q V I R I N I P P L T S E E R R R Q E L I H M M K Q K L			
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UniRef90_D7G7A5	R E C G M G M G L N P N S E G Q Q V H V P I P K P T K E S R E A V A K V V A A K H A			
UniRef90_W6TE88	R K A S Y S P N I E G N R F S V P I P S P T K E E R R R N E L I K I S F Q Y A			
UniRef90_D0JAG2	I I D A N L L G F M P T N K G E S I H I H L P I I T E E G R K N L M K K I K S Q T			
UniRef90_I2F7D2	F A S K L D L T P I N D G V N I K L N V P K M T K E Q R E K W V K I A R D N A			
UniRef90_B3RVM8	R N A G L G N L N P I V D G P S L K V K P I P K M T K E Q R E K L V K T A K S S C			
UniRef90_E6L7J6	A A A N I G V N P N N D G E S V K L F F P P M T K E Q R E E N V K H A K A M G			
UniRef90_Q6NQM0	V I A S P L G L N P K L D G Q R I V A S I P A L T K E R R R N E L I K I S F Q Y A			
UniRef90_UPI0002B4452B	V N S D L G M T P N N D G E V I R L T L P Q L T S E E R R R K S D H V I V K E			
UniRef90_UPI00046925E0	L Y T A D I G I I S P A N D G T V I R L V I P Q L T G E R E E L V K T E V G K E A			
UniRef90_K7J7S1	Q K S G L N I N P Q Q E G T T I Y L P I P K V T K E H R E N L S K N A K A I Y			

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 UniRef90_W6TE88
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 UniRef90_I2F7D2
 UniRef90_B3RVM8
 UniRef90_E6L7J6
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 UniRef90_UPI0004692E0
 UniRef90_K7J7S1

130 140 150 160

Conservation Scale: Black (High Conservation) - White (Low Conservation)

UniRef90_UPI00036BF164 K| L | T N D M I | A K A D N I | A Q D K E K D | L | M E I |
UniRef90_P71148 E | E | L T D K F | C | K Q | I | E E | L | A K Q K E A E | L | S S I |
UniRef90_K2GR08 K | V | T D T F | V | K K V E E | M A E K K K K D | I | T T V |
UniRef90_UPI00035F0854 E | M T N M Y T E K | I | D K | I | L E | V | K E A E | I | M K V |

UniRef90_Q5FJM6 K | V | D E F N A R | V | K D | V | A K K K E E | I | M T |
UniRef90_K1ZZY4 K | I | S E S F | I | N K K A N E | I |
UniRef90_V5RU96 K | I | V | K E F T D G | V | E E | I | S E T K R S E | I | L T | V |
UniRef90_I0IGL1 E | L | V | K R | H | E G Q V E T | L | V | S E K | I | E D I | S T V |
UniRef90_F8KUS1 E | L | T | D K Y | C | K | L | A | D E | I | A | A K K E K E | I | S T I |
UniRef90_I3J745 Q | M A D N | I | A A D | D | I | D | Q | L | A | A K T | K | E L | L |
UniRef90_K2FKU8 V | V | V E E | F | N | K | K | I | E E | L | R | A | K | K | E | I | M T | V |
UniRef90_E4PYZ8 K | I | V | D | K | N | I | E | H | V | D | E | L | V | S | K | K | E | K | I | M T | V |
UniRef90_F9MNF1 UniRef90_R6T1Y8 D | I | T | D | K | N | I | K | F | V | D | S | I | E | K | K | T | Q | E | I | M K V |
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UniRef90_R410N3
UniRef90_R7C8H9
UniRef90_K2A7R4 K | L | H | D | E | F | I | E | A | I | E | V | A | G | K | A | K | E | A | E | I | R | Q | V |
UniRef90_UPI0003B5674B Q | L | T | K | S | N | V | D | A | I | D | E | A | L | K | R | K | E | A | E | L | L | E | V |
UniRef90_K2BIC7 K | S | I | D | Q | Y | M | V | K | I | D | D | L | G | K | E | K | E | K | E | L | M | T |
UniRef90_UPI0004692B7D K | I | T | D | A | G | V | T | S | V | E | T | L | V | K | A | K | E | A | E | L | L | K | I |
UniRef90_UPI00047C757D N | L | T | N | K | Y | G | E | E | I | D | K | L | T | D | K | K | E | K | E | I | M | E | V |
UniRef90_F4P974 Q | L | T | D | K | Y | I | K | D | T | D | A | A | V | L | A | K | E | K | E | I |
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UniRef90_D9QZY7 K | L | T | D | K | M | I | D | K | V | E | K | S | V | E | E | K | S | K | D | L | L | T | V |
UniRef90_K1RL20 K | L | L | E | K | F | T | K | T | L | D | D | I | L | A | K | K | E | K | E | I | M | T | V |
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UniRef90_A3ZXS2 E | L | T | K | K | F | E | E | K | V | A | E | L | A | K | T | R | E | T | E | V | M | E |
UniRef90_O66928 K | L | T | D | K | Y | I | D | E | I | N | K | L | M | E | A | K | E | K | E | I | M | S | V |
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UniRef90_V9L192 Q | M | A | D | D | L | A | S | D | M | D | K | Q | L | V | A | K | T | K | E | L | L |
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 V E C **F** G Q K F **P** L | K Q **L** A A I | S S S G P R Q I | V I | Q P W D K S Y I | E P I | E K A
 V E A S G L **K** **L** P L | S Q I I A V V S V M D S K T L | S I | N P F D P N A L K N I | E T A
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 V N Y Y D A L T P L | E E L | A N I | S V P E P Q Q | L L I | K P Y D I T S | V K E | I T K A
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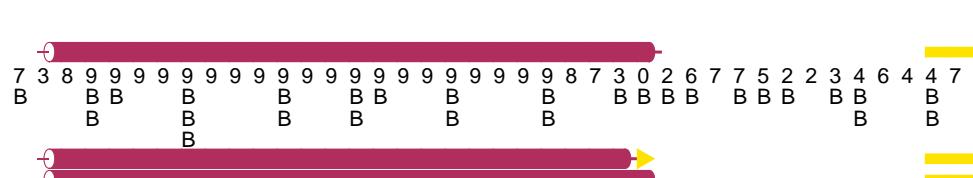
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UniRef90_X1Y4B1	E H G Q V S L R T A R R D A N E A L Q K Q L D K N K E I A E D D R F K S Q D E V [] V Q																																																				
UniRef90_Q4BV11	[] L K C [] R D R I K D A Q N Q S I K K L K K Q S N A S E D E A Y Q A Q Q Q I T																																																				
UniRef90_UP00021A714B	E E G K V [] A I R N I R R D A [] D V R K Q E K N S D I S K D E S R D L [] Q D D I [] Q																																																				
UniRef90_K2A9D4	V K C C D N V I [] C D I R N E H [] R D L K K X E G L P K D L T F K A E S Y V S																																																				
UniRef90_D4XVH3	E N G R I [] Q I R Q V R H E A M D I V K K Q F T D K E I S Q D D L T R L E K E I I Q																																																				
UniRef90_I7MJ71	E G A K I [] G I R N A R Q E V N K A I K A D E E L S E D I E K R Y [] D A I I Q																																																				
UniRef90_M4XP57	D K A K N I L R K H R Q T G Q D M I K G Y K K F E S E D F I K E A E K E V D																																																				
UniRef90_UP000333AC64	E N S K I [] Y I R N T R D I N K D I T K K [] Q T N I Y N M D E A N N L K V I L [] Q																																																				
UniRef90_E2CA31	N K A K D S L W R V R T D A M N K L K K S K D K T S E D T [] R																																																				
UniRef90_UP0003F07D54	V K C C D N V R D I R N K Q I K S L K R E E S L A K D L V F K I E G Y [] D																																																				
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UniRef90_Q9X1B9	E Q A R A G I R N I R Q Q A A Q K A S R T D L D S N L I T K D F K D N Q K A L D																																																				
UniRef90_X1HGM7	E E G K I [] A I R N I R R E I L K K K E D Q K E G L I P E D D A K R L E N E I Q																																																				
UniRef90_X0T6Y0	E E R K I V I R N L R H D A M G E L K G L E K N K D I S Q D E H K R A L D Q L [] Q																																																				
UniRef90_UP000359B58E	E K V R L [] T I R Q I R D E I K E S I E K G E E E K F I S E D D K F R F I K E L L D																																																				
UniRef90_U5F8U0	E Q S K K H L R D V Y S K Y S K I K S S K A G H S S S D D L I A A D D M V K																																																				
UniRef90_W6QIC3	E E A K I [] A V R D S R G A M H K R L Q D M Q K K K L A R P D D V R K A H D Q M E																																																				
UniRef90_G7SQH3	E Q A K I F V R T I R K K N N Q T I K K L N F S E D L S K Y G E T H [] Q																																																				
UniRef90_X8JB4N	UniRef90_K2BNS4	UniRef90_Q6U200	E D T K V K I R T S R E S G M K A L K G M G H A K H S K F A E E [] Q																																																		
UniRef90_A7S3V4	N K A K D S L R R V R S N A V T Q V K K A K E A H S E D T [] R L V E K Q [] Q																																																				
UniRef90_E6ZJG7	E Q I H Q E L R S V R R D T L Q M I K K D D H K D E																																																				
UniRef90_B8MHN0	E Q A G V G V R N A R G A M Q K K L R A M E V K K V V R P D D S K K A H K E M E																																																				
UniRef90_G7E537	L K A K E G F R R I [] Q N N Y [] S Q N V A M S P E C R V P K D K Q H H M V E E I R																																																				
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UniRef90_E6ZJG7	V K C K D S I R E V Q M K Y T K K [] N N V E K [] G S E V K F R [] T E Q [] V																																																				
UniRef90_B8MHN0	E A F K I [] R V R N E R D A M D K A K K S K E I S E D L V I K D L E T K I Q K L T																																																				
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UniRef90_G3MT24	D K A A G A I R E S R S V A H K R L Q D M Q K K K I A R P D D V R K A Q D Q M E																																																				
UniRef90_U5GVT3	E K F K V K S L A A V R S D I R T K F L K D A K S S K I G D E E T K T L D E F E																																																				
UniRef90_L0DQB9	E E I R V Q V R R Q H S T S L K R G K F E K H S I E I E E F Q																																																				
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UniRef90_G8BSJ9	UniRef90_C5DM62	UniRef90_W4JQQ9	UniRef90_W2S8R9	UniRef90_V9R868	UniRef90_A7JC1	UniRef90_D8QE6	UniRef90_B3PLW1	UniRef90_E4UXY8	UniRef90_A5E180	UniRef90_A8PX08	UniRef90_K2EYP4	UniRef90_G8ZVC0	UniRef90_M1W9D5	UniRef90_G3B3N3	UniRef90_UP0002657BA4	UniRef90_UP0003505CBB	UniRef90_F7W9B6	UniRef90_UP0004621EA	UniRef90_A9UVX4	UniRef90_C4J42	UniRef90_F4WDX6																																
UniRef90_W5UTK6	V K C K D S I R E V Q M K Y T K K [] N N V E K [] G S E V K F R [] T E Q [] V																																																				
UniRef90_B5Y8J2	E R V M N Y L R L A R Q D S H K L I K G L K K E R P D D I R K A D K Q L E																																																				
UniRef90_G3MT24	E I F K I N L R K L R N K T I K L K L N K R N S L E K D C L K Q N K I E I Q																																																				
UniRef90_U5GVT3	E N Y K Q S L G F I R G E V L K Q L K G F D K K N D S V R K V L Q D L D																																																				
UniRef90_L0DQB9	E E F K N K S L G H I R G D I L L K Q L K N D K K N D S V K K V I Q D L D																																																				
UniRef90_K5WV68	E D T R A Q I R K Q H Q A S I K G K Y G K H S I E I D E F Q																																																				
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UniRef90_Q6CTR7	E D T R V Q I R K Q M Q T S V K G K F E K H S V E L E E Y Q																																																				
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UniRef90_D8QE6	Q Q W R D K L R A E S H K R E A L H K K W K G Q G S I L E D D V K S L K T K V Q																																																				
UniRef90_B3PLW1	E D A R V Q L R K H H Q V L L K K E N I A K H S P D F S T Y Q																																																				
UniRef90_E4UXY8	E Q T K N K M R H L R S H A V S Q L G T E G L S E D D T H A M Q E Y L D																																																				
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UniRef90_K2EYP4	Q Q W R D K L R A E S H K R E A L H K K W K G Q G S I L E D D V K S L K T K V Q																																																				
UniRef90_G8ZVC0	E D A R V Q L R K H H Q V L L K K E N I A K H S P D F S T Y Q																																																				
UniRef90_M1W9D5	E Q T K N K M R H L R S H A V S Q L G T E G L S E D D T H A M Q E Y L D																																																				
UniRef90_G3B3N3	E K A S T T V K N A R A N L N K F K A A G N K K V V R P D D L H K A L E Q M E																																																				
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170 180

UniRef90_S5LTA7	K L T D K Y I S L L D Q F S K E K E K E L M K I
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UniRef90_X1Y4B1	Q I A D G F I K E A E K I M E S K Q A E L L
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UniRef90_D4XVH3	K E V D K Y M E L V N E I T K E K E S D L M K I
UniRef90_I7MJ71	N I H N K F V A E L D N L L K I K E K E I
UniRef90_M4XP57	K L T D K Y I N I I T K L L K Q K E N D L I K I
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UniRef90_E2CA31	A L S Q Q Y I S K A E Q L L E T K Q K E L L
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UniRef90_X1HGM7	K L T D S F I A D I E Q I G Q D K E T E L M E V
UniRef90_X0T6Y0	E E V G K R N D E L K D L R G K K E E E I M T I
UniRef90_UPI000359B58E	D L M H Q T I R Q V E D I T A A K Q Q E L
UniRef90_U5F8U0	K L T D E F A K K I E K E V S E K E K E I M K V
UniRef90_W6QIC3	K I T D Q G Q K E A K D A F E G A K K T L
UniRef90_G7SQH3	K I T S E Y I I Q K I E D C F I S K K K E I L
UniRef90_X8JBN4	K A T D K H I K D I D A L V A K L K K S I
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UniRef90_Q6U200	K Y T D E Y A K K I D K
UniRef90_A7S3V4	Q L T D E Y S S D T D L L V E E K T K E L L
UniRef90_E6ZJG7	A E T K K W T A Q V D Q L F E K M K Q S L L
UniRef90_B8MHN0	K L V E K A Q K D V K D T F E S A R K
UniRef90_G7E537	E L S R R H T K E V V D D I F D A A S K I L L
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UniRef90_C1BRN9	S V A N D F A H R A E E I L K T K Q E E I
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UniRef90_A1C3T1	K L T E R G Q K E V K E L F D T T R K A L E R V
UniRef90_G3AHW2	K L H K S Y T D K L T N V F K T T E A S I L K
UniRef90_A8NTM1	K L T D R Y I G E V D K I L K D L Q K
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UniRef90_G2Q6C0	K L Q D E R M R G I Q A K E K E V
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UniRef90_K2EYP4	K L V D E Y H R M I D E K G E D K E K N I
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UniRef90_C4J42	K I T A K G Q K E V K D A F E A A K K A L
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 UniRef90_U7PVM4



The figure displays a sequence alignment of UniRef90 proteins, spanning from position 50 to 80. The alignment is color-coded to represent amino acid conservation and type. A scale bar at the top indicates positions 50, 60, 70, and 80. The sequences are grouped into four main sections, each starting with a UniRef90 identifier.

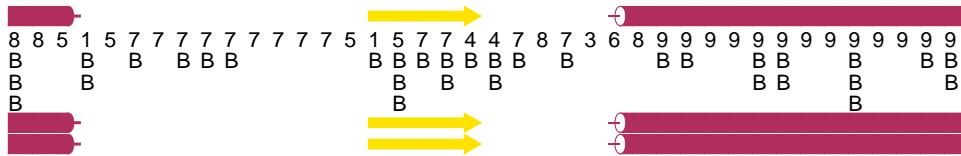
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- Section 4:** UniRef90_M5E735, UniRef90_B9WLJ7, UniRef90_F9G083, UniRef90_G0NJJ9, UniRef90_D8IHG9, UniRef90_UP100015856F7, UniRef90_A0A016WSU2, UniRef90_X6MCH3, UniRef90UPI000161C574, UniRef90_G3JJL1, UniRef90_U7PVM4

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L K S S D L N L N P Q I D K N S V R I Q I	P E P T A E I I R E E K I K N S K Q V V	I V S S P L G L N P K S D G E R R I L A V I		
I L T S D L G L N P T S D G S V I R V N I	F V I K E Y K E L K F Y V K D R S V Y A L V	P P L T K E H I Q A M T K L V A K S C		
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V Y A A N K D L T P E P A P E V L Y V H	L K S S D L N L N P Q I D K N S V R I Q I	P Q K T T K E T R Q K M I K Q V A L E C		
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P P P T K E S R D A A L Q A A S K A G	I E Q S K L N V T P R Q E G A I L Y I S L	I E Q S K L N V T P R Q E G A I L Y I S L		
P R M T R E R R E Q L A H D A K K I F	V Q A S P E F N Q Q P Q R A E D N E L L L	V Q A S P E F N Q Q P Q R A E D N E L L L		
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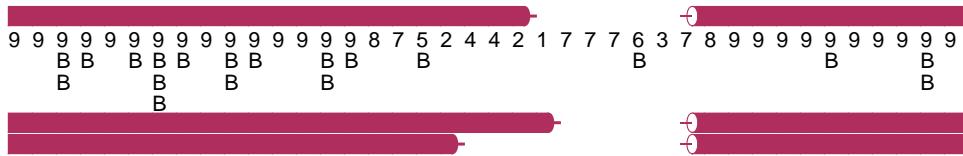
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170 180

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