

QUERY	1	10	20	30	40
UniRef90_UPI00047AC1A5	E I D I I F P L I Q F G E E V S G K K Y G E K F E T D V A L R V I A D H L R A I				
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UniRef90_G4HDM2	D T D L F M P I I G K T A E I S G V K Y G S G E D S D V A M K V I A D H I R T V				
UniRef90_K9l9G1	D T D L F Q P I I Q K T A E I S G V K Y G E K A E Y D V A L K V I A D H I R T V				
UniRef90_U4TQ25	E T D L F L P I I H E V E K L S G K K Y G V D K N D D V S F K V I A D H A R A I V				
UniRef90_UPI00036C4C52	E T D L F L P I I R E A E K L S G K K Y G V N K K D D V S F K V I A D H A R A V				
UniRef90_R7R120	D T D L F Q P I I Q E T A Q I A G V T Y K Q N E E T D V A L K V I A D H V R T V				
UniRef90_A1ATU9	D I N T M K A I R D K I C E V A G V E Y Q K D E K T D V S I R L V I T D H M R S S				
UniRef90_J9HR31	D T D L I Q G I I R H V E R L S G K T Y G K D E R D D V S M R V I A D H A R A V				
UniRef90_B9XID2	E T D L F R P I I D R T G E I I A G R R Y G E S D E D D I H F K V I A D H L R T V				
UniRef90_D0LZ22	E T D I F R P I I F D A I E K L S G K R Y G E Q E K V D V A F R V I A D H I R T L				
UniRef90_P61700	D T D I F Q P I I L H S A A E L L C G K R Y G E D G D A D T S M R V I A D H A R A T				
UniRef90_B5ED08	D T D I L Q G I I R H I E Q V S G K K Y R D D E K D D V S M R V I A D H H A R A V				
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UniRef90_B1YJE5	D T D L F M P I I H K T E E I I S S G K R Y R E D T K L D V A F K V I A D H I R T V				
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UniRef90_W7YG01	D T D V F V P V I I N E I A N I T T N T P Y G K G E D T D I A M R V I A D H I R T I				
UniRef90_W4L817	D T D D L L R P I I S T V E E I L I G K A Y G H N D D K D V S M R V I A D H I R A S				
UniRef90_B3ERX7	D T D I F V P L I I H N I M R L S H K T Y G K D N K V D I A M R V V A D H I R A I V				
UniRef90_L8XYR0	D I D L F Q T L I K A A A A A T G C T D L K H H N S L K V I S D H I R S V				
UniRef90_U7VAP1	E T D L L F P I I V E E A G R L T N T K Y G T E P E K D F S L K V I T D H A R A V				
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UniRef90_SONY50	E T D D L F L P I I H A I E E I S G V K Y G A S P V T D V S F K V I A D H I R A L				
UniRef90_V9HCZ3	E I D D L F Q N L I K A V A R E T G V E F S M D V P S L K V I A D H I R S C				
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UniRef90_R7JNX3	D T D D L F Q P T I I Q A I S Q M S G L E Y G K E E N V D V A M R V I A D H L R A V				
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UniRef90_C8PWN2	E I D I F T H L P I I H A A Q V I G L P N D I D L Q S E P S L K V I A D H H I R S V				
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UniRef90_R6NZS8	D I D T M K A I R D K V C E L S G K S Y Q D A L D D V S I R L I T D H I R S V				
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50 60 70 80

QUERY	T F A I S D G V I P S N E G R G Y V I R R L R R A M R F G Y K L G I E N P F L
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UniRef90_UPI000185076F	S F A I G D G A L P S N E G R G Y V I I R R I L L R R A V V R F A K A I G I N D P F M
UniRef90_R8AMY9	A F L V S D G V M P S N E G R G Y V I I R R I I I R R A V R H G H M L G A K D T F F
UniRef90_W8YI60	V F A A G D G V L P S N E G R G Y V I I R R I L L R R A V R Y G K S L G V D Q P F L
UniRef90_A0A022KYW5	L M L I C S D G V P R G N E G R G Y V I I R R I L I I R R A V R S M R L L G H D Q P S M
UniRef90_UPI00047BE345	S F A I T D G Q L P S N N K A G Y V I I R R I L L R R A V R Y A Y T F L N M E P F M
UniRef90_E3J8Y8	A M L I A D G V V P S N E G R G Y V I I R R I M R R A V R N V R L L G G R E P V M
UniRef90_W7YG01	S F S I T D G Q L P S N N K A G Y V I I R R I L L R R A V R Y G Y T F G Q R Q S F M
UniRef90_W4L817	C F L L A D G V L P E N T G R G Y V I I R R I I I R R A G R H G K M L G F E E P F L
UniRef90_B3ERX7	T F A I A D G Q L P S N T Q A G Y V V V I I R R I L R R A V R Y G Y T N L G F E P F M
UniRef90_L8XYR0	A F L I A D G V L P S N E G R G Y V I I R R I I I R R A V R H G Y K L L G Q K G L F F
UniRef90_U7VAP1	T F L V N D G V I P S N E G R G Y V I I R R I L L R R A V R H G R L L G R K E L F M
UniRef90_G9WXG5	T F A I S D G Q L P S N N K A G Y V I I R R I L L R R A V R H G R K L G I E K P F L
UniRef90_UPI000237D3E6	A F S I T D G Q L P S N N K A G Y V I I R R I L L R R A V R Y G Y T F N V R R P F M
UniRef90_R5NT87	A F S I A D G Q L P G N A K A G Y V I I R R I L L R R A V R Y A Y T F G Q K E A F M
UniRef90_R9KGC5	T F F M I S D G I M P T N E G R G Y V I I R R I L I R R A V R H G R L L G I E G K F A
UniRef90_F214K7	S F A V G D N A L P S N E G R G Y V I I R R I L I R R A V R Y M G R R L L G I Q G S F L
UniRef90_Q6AQ16	S F L V A D G V L P S N E G R G Y V I I R R I M R R A V R Y G K K L G L E K P F M
UniRef90_W7YQH2	A F A I A D G V L P S N E G R G Y V I I R R I L L R R A V R Y G K V L G L D R P F L
UniRef90_UPI00035E14A0	S F L I C D G V M P G N E G R G Y V I I R R I I I R R A V R H G Y K M G A N D I F F
UniRef90_F0GFZ7	T F M V S D G I Q P S N E K R G Y V I I R R I L I R R A F R H G K L L G I E G E F L
UniRef90_SONY50	S F A I G D G A L P S N E G R G Y V I I R R I L L R R A V M H G Q K L L Q I Q D S F L
UniRef90_V9HCZ3	S F L I A D G V L P S N E G R G Y V I I R R I I I R R A V R H G Y K L L G Q K Q A F F
UniRef90_F4FUB5	T V A I G D G A L P S N N V G R G Y V I I R R I I I R R A I V N G Q R L G I N E A F L
UniRef90_R7JNX3	A F S I A D G Q L P S N A K A G Y V I I R R I L R R A V R Y G Y T F L N R E A F M
UniRef90_Q8KG04	T F A L S D G A M P G N E G R G Y V I I R R I L R R A V R Y A G T L G C H E P I
UniRef90_C4G984	T F M I S D G I M P S N E G R G Y V I I R R I I I R R A S R H G R M L G I S G E F M
UniRef90_C8PWG2	S F L I A D G V L P S N E G R G Y V I I R R I I I R R A V R H G N K L G A T D N F F
UniRef90_UPI0003B6A286	T F A L A D G A V P S N E G R G Y V I I R R I I I R R A S R Y L R E L D V H K P V L
UniRef90_I9KZY1	T F A I S D G A L P S N E G R G Y V I I R R I I I R R A I L H G Q K L G L K E A F L
UniRef90_R5Y734	V F M I G D G V I P S N S G R G Y V I I R R I I I R R A C R H G R L L G V T D P F L
UniRef90_R7HES3	T F M V S D G I M P S N E G R G Y V I I R R I I I R R A A R H G R L L G E G K F L
UniRef90_UPI0003631E4D	A M L I A D G V N P G N D G R G Y V I I R R I I I R R A I V R S A R L L G A E R P V M
UniRef90_D8G7C7	V N M I A D E R A S N I G R G Y V I I R R I I I R R A V R H G R L L G E G G F L
UniRef90_UPI00047D2828	A F S I A D G Q L P S N T G A G Y V I I R R I I I R R A V R Y G F T F D T K E P F M
UniRef90_Q5YTJ9	A M L I S D G V N P G N D G R G Y V I I R R I I I R R A I V R S A R L L G A E K P V M
UniRef90_R6NZS8	T F M V S D G I M P S N E G R G Y V I I R R I I I R R A A R H G R L L G I D G L F L
UniRef90_W5W5N3	I L I V G D G V T P G N E G R G Y V I I R R I I I R R A V R S A R L L G V T E P V L
UniRef90_I4D968	S F M L A D G I R P N E G R G Y V I I R R I I I R R A V R Y A K L L G I D K P F L

QUERY	90	100	110	120
UniRef90_UPI00047AC1A5	Y K G V D L V V D I M K E P Y P E L E L S R E F V K G I V K G E E K R F I K T L			
UniRef90_UPI00037B6907	W E L T A T V G E I M G S Y Y P E I V E K R E F I E K V I R T E E E E R F F H E T L			
UniRef90_G4HDM2	Y H L V A T V G D I M G S Y Y S D V V T K R E F I E K V I R T E E E E R F F H E T L			
UniRef90_K9l9G1	F T L T G T V G D I M G A Y Y P E P L A Q K D F I S H I I K G E E E E R F F H E T L			
UniRef90_U4TQ25	F D L V P V V G E I M K S Y Y P E P L A Q K D F I S H I I K G E E E E R F F Q A T L			
UniRef90_UPI00036C4C52	F S L V K T V G D V M G V Y Y P E P L A Q K D F I S H I I K G E E E E R F F H E T L			
UniRef90_R7R120	T K I A Q T V I D E C K D G Y P E L E E K K D F I F N V L I Q E E E D K F S K T I L			
UniRef90_A1ATU9	C H M V D A V R D M M G A A Y P E L V I E R E E Y I K K V I L A E E E Q R F A E T L			
UniRef90_J9HR31	Y Q L V A V V D E I M G E D Y P E I R E K R S L I E R V V R T E E E E R F F H E T L			
UniRef90_B9XID2	Y K L V D V L A E T M G Q V F P E I R E R K Q K H V D I V R S E E E A F N K T L			
UniRef90_D0LZ22	H R M C A R V V E M K D A Y P E L L A E R A T V I H E I T L E E E K R F R A T L			
UniRef90_P61700	H K T A L K V V D I M G D D Y P E L L R E N S D F M A R V V R E E E D R F F N R T L			
UniRef90_B5ED08	F R I V D A V N M M M G D A Y P E L L E R E H Y V K K V I L A E E E E R F F I E T L			
UniRef90_A5D3F4	H E V S G A V V R Q M G R V Y P E L V I T Q R E H V F R V I R R E E E E R F F G E T L			
UniRef90_UPI00046FCEFC	K S I V S V V E Q I M G G F Y P E I V E N R S F I E Q V I E T E E I R F F H E T L			
UniRef90_Q3A1W0	Y R T A T F V L Q S M A E A Y P E P A Q R A D Y V A K I V I K I E E E E R F F I Q T L			
UniRef90_B1YJE5	Y E L V D T V G S V M V D F Y P Q V P E K A D F I K R V I K N E E E E R F F H E T L			
UniRef90_UPI00021970D6	Y K L V P V G K I M Q A Y Y P D V L I E Q S D Y P Q K I V K N E E E E R F F N A T L			
UniRef90_F7YVZ6	Y L V N D A V I E A M K D V Y P E L L A E R R Q L I E V T K A E E E E R F F K T T L			
UniRef90_R2PY18	Y K L V P T V G H I M E S Y Y P E L L I L E Q Q D F I E K V V K A N E E E E R F F H E T L			
UniRef90_C9LJS4	Y R L V P T L V E E M G E A Y P E L L A A Q R D L I T R V M K E E E E D S F L R T L			
UniRef90_UPI00046686E9	D Q L V P I V G E I M Q S Y Y P E V L Q Q K D Y I A K V V I R S E E E D R F F G E T L			
UniRef90_R6PCR6	Y N I V D T V V D N Y N K E A Y P E L L D E N R Q K I K D V I K K E E E E K F K Q T L			
UniRef90_D6TGE6	S I A A D T V I K L M G D Y Y P E L L R T Q R D R I V D V L S L E E E K K F F S Q T L			
UniRef90_UPI000299D3DF	Y R L V P I V G E I M K A Y Y P E V L E Q A D Y I A K V V I H L E E E D R F F N E T L			
UniRef90_G0IZE7	F N L V A V L A E K F G E F Y P E I V N S Q Q D F I T K V I Q E E E E L A F F L R T L			
UniRef90_UPI0002D351C9	Y E L V P T V A E I M V D F Y P E V K E K S E F I Q K V M K T E E E D R F F H E T L			
UniRef90_Q38YN9	Y K L V P I V G E I M H S Y Y P D V L E E Q K D F I E K V I R S E E E D R F F R E T L			
UniRef90_UPI0004687B89	Y L L I P T L V E S M M G G H Y T E L V A Q Q E L I T R V T K Q E E E S A F L R T L			
UniRef90_UPI0001E8998A	Y E L V P V V A E I M V D F Y P E V K E K Q D F I Q R R V V K T T E E E E R F F H E T L			
UniRef90_R6ANM3	C K L V P T L V H E M G E A P E L L K A Q Q V L I G R V M Q E E E E S F L R T L			
UniRef90_R7ZL17	Y K L V M P T L A A N F G A V F P E V A E Q L D F V S K V I L E E E E Q S F L R T L			
UniRef90_R5SEG4	Y K L V D V V V D N Y G A A Y P D L V K N K A K I I D V I K K E E E E R F F A K T L			
UniRef90_V6J2M5	F E L V P V V A S I M R D Y Y K E V E D K S A F V Q K V I R G E E E E R F F Q E T I L			
UniRef90_K7ADIO	Y K L V G A L A Q E M G D A Y P E L L N E Q R A I I E K V L R V E E E E Q F S R T L			
UniRef90_A0A010ZKHO	Y K L V P V L I I H E M G D A Y P E L L P A Q R E L I I E K V L R V E E E E Q F S R T L			
UniRef90_UPI0004788A01	Y K L V P D L V A E M G Q A Y P E L A Q A A E R V A Q V L K Q E E E E R F F I L T L			
UniRef90_UPI000380C7B3	Y K T A I F V L E S M A A F P D E A K R S S F V A K V V Q N E E E E R F F I L T L			
UniRef90_Q82TS4	K D L V D V V I A M M G Q Y P E L I S D R Q R K I E T V A L A E E E A A F L K T L			
UniRef90_H1XX74	Y K L V P T V V Q M M M G D V Y P E I R E R Q E H I M A V I R A E E E E R F F F N L T L			
UniRef90_Q1LQ59	H K L V G D L V I A Q M G E A Y P E L L A E A Q S R V V E V L K A E E E E R F F F E T I L			
UniRef90_UPI000407BE2B	Y E L S P L I S E N F G E I F P E V Q Q Q Q D F I A K V I Q E E E E A S F L R T L			
UniRef90_UPI0003825FC3	Y K L V D A L V H E M G D H F T Y P E L L K A N Q A N I E Q V I R I E E E E R F F I K T L			
UniRef90_A0L3J9	H K L V E T G L V A E M G Q A Y P E L T A Q R K T L I E T V E K R F A A T L			
UniRef90_A0A023CVZ0	Y E L V P V V G K I M Q S H Y P E G V L E Q A D Y I A K V V R S E E E D R F F N E T L			
UniRef90_A4Y931	Y K L V P T L I D V M G D A A K G I L A E T Q V I V E K A L K A E E E E E Q F A R T L			
UniRef90_B9K8T8	Y K L V D A V V E K M G K V Y P E I V R G K D M V K E V L L S S E E E N R F L K T L			
UniRef90_UPI00026252A9	H K L V A P L V R E M G T A F P E E L A Q A Q R D V E R A L E R E E E T R F R E T L			
UniRef90_K9ZY85	H S L V A V L V V A A M G E A Y P E L K Q N E A Q V Q Q G A I K A E E E A R F L L A T L			
UniRef90_E9UR75	P E L L P I S R D K M G E T Y T D L H T E W D R I K R V V A D A E E E E A F R K T L			
UniRef90_UPI000364DCCA	Y Q L V T V L K E Q M G S F F P E E L V I K Q E K L V T E V I K E E E E S F L K T L			
UniRef90_UPI000255A10C	H K L V A P L V K E M G E A Y P E L L A K M Q E Q V E R I L L K E E E E Q F A E T L			
UniRef90_W3RFB8	W R L V R V L V R E M G Q A Y P E L V I R A E A L I T E T L K L E E E T R F R R T L			
UniRef90_UPI000185076F	Y K L V P V V A E I M V D F Y P V V K E K I F E F I Q K V V K N E E E D R F F H E T L			
UniRef90_R8AMY9	Y K L V G T L I A V M G S A A D E L I Q Q Q Q A L V E K V L R L E E E E Q F A R T L			
UniRef90_W8YI60	Y R L T E T V G D V M G V Y P E I E A K A R E F I E K V I R G E E E E A F R R T L			
UniRef90_A0A022KYW5	P D L L P V C Q A V M A E S Y P E L L R S E F E R I S E T I Y T E E E E A F R R T L			
UniRef90_UPI00047BE345	G K L L P A L I S T M G D A Y P E E L K A R Q E L I G K V I H E E E E S F L R T L			
UniRef90_E3J8Y8	E N L F G V V Q S A M G P I Y P E L L V I D R A A A I T A V A V G E E E L A F F L E T L			
UniRef90_W7YG01	E N L F G V V Q S A M G P I Y P E L L K K Q Q E L I T K V I K E E E E S F L R T L			
UniRef90_W4L817	Y K L V P A L M N S M G D A Y P E E L R Q H Q S F I T K V I L S E E E E R F F L N T L			
UniRef90_B3ERX7	Y R M V D M F A G F M G E A Y P E E L R Q H Q S F I T K V I L S E E E E R F F L N T L			
UniRef90_L8XYR0	Y Q L V S I L A Q Q F K N V Y P P Q I I K Q Q Q S Y I E Q V I K S E E E E S F F K T L			
UniRef90_U7VAP1	H T L A K T L A D V V M G D A Y P E E L I E K Q A H I E A A I K Q E E E M R F F A E T L			
UniRef90_G9WXG5	Y E M V D K V V E I M E E A Y P E E L R K N I E H I K V V K I E E E D R F F S N T L			
UniRef90_UPI000237D3E6	T Q L V P I V G H I M S S Y Y P E E L I L A N Q N Q I I P V I K A E E E D R F F D Q T L			
UniRef90_R5NT87	S G L I P A L I E V M G D A Y P E E L K A Q H E L I D K V I Y E E E E S F L K T L			
UniRef90_R9KGC5	Y K L L P V L V Q E M G K S Y P E E L E A Q K V L I S K V I M K E E E E D S F F L R T L			
UniRef90_F214K7	T K I A E V I I N C S K D G Y P E E L E E K K D F I F K V I L Q E E E E K F F S K T I L			
UniRef90_Q6AQ16	A K L V P I V A D K M E K H Y P E E L K E K E A I I Q E V I V D R E E E K F F Q E T I L			
UniRef90_W7YQH2	D R V T K A V C A E M Q N A Y P Q L V I A T A A L E E K V V V N R E E E E R F F R E T L			
UniRef90_UPI00035E14A0	Y T L I G T V G D V M G V Y P E E V L E K R E F I E K K V I S T E E E E R F F H E T L			
UniRef90_F0GFZ7	Y K L V Q A L T K E M G E A Y P E E L A D Q C P V I E K V I L S V E E E E Q F S K T L			
UniRef90_SONY50	S S L V I E Y V I D S Y K D E Y P E E L L V D R K D K I I S V I K K E E E A N F Q N T I I			
UniRef90_V9HCZ3	Y K L V P V V G K I M E S Y Y P E E L V L E K Q A F I E K V I R T E E E E R F F H E T L			
UniRef90_F4FUB5	Y K L V P D L V K E M G D A Y P E E L R E K Q T Q I E E A L K A E E E T R F F A Q T L			
UniRef90_R7JN3X	Y K L V P V L I E T M G D A Y P E E L V L K Q K S L I T K V I L S E E E E R F F L N T L			
UniRef90_Q8KG04	Y K M V E V L V R T M G D V F P E E L E K Q Q Q A T V E K K V I R A E E E E S F L V T L			
UniRef90_C4G984	A R L A D V V V I R E S R D G Y P E E L A E K Q E F I I R R V L T E E E E R K F F N A T I L			
UniRef90_C8PWG2	Y K L V P A P L V A Q I M G D A Y P Q L I R E Q Q A N Y I E Q A I L K E E E E Q F A K T L			
UniRef90_UPI0003B6A286	Y K L V S D A V D S M G D A Y P E I S E R A E Y I S M V I K S E E E E R F F L N T L			
UniRef90_I9KZY1	D Q L V P L V G K I M V S H Y P E D V L K L N S D Y I E K V V V A G E E E K R F F N E T L			
UniRef90_R5Y734	Y K V A D T V I D E N L S E Y D Y L D G K R E L I R K V I L A E E E E S F G K T I L			
UniRef90_R7HES3	S K L I C T V I L E G S K D G Y P E E L D E K R D F I I K V I A E E E E D K F F N K T I L			
UniRef90_UPI0003631E4D	A E F V K I V S E L M A P S Y P E E L G T D F R R I E N V A V G E E E T A F L K T L			
UniRef90_D8G7C7	T K V A E T A I A L C E D A Y P V E R Q R S A A Q A E L I E R E E E A N F L R T L			
UniRef90_UPI00047D2828	Y L L V N V L T Q S M G D A F P E E L K E Q K Q L I Q N V I K E E E E H S F L K T L			
UniRef90_Q5YTJ9	A E F M Q V V S D L M S P S Y P E E L A T D F D R I R T V A V G E E E T A F L K T L			
UniRef90_R6NZS8	A K L S D T V I H E S K D G Y P E E L E E K K D F I F K V L S V Q N E E E N T F L T T L			
UniRef90_W5W5N3	G Q F A A V V R D E M G P V Y P D L V T N F E R I L S V V Q N E E E N T F L T T L			
UniRef90_I4D968	E S V F R I I Q R D Y A Q A Y P E E L K D N E N F I I N H L N L E E K N F Q A T L			

QUERY	130	140	150	160
UniRef90_UPI00047AC1A5	K A G M E Y I Q E V I Q K A L E E G R K T L S G K E V F T A Y D T Y G F P V D L			
UniRef90_UPI00037B6907	S D G L A I L A E E L C A K A R S E G V S E I S G P D A F K L Y D T Y G F P F D L			
UniRef90_G4HDM2	S D G L A I L S E I S A Q A K A E G R T V I S G A D A F K L Y D T Y G F P F D L			
UniRef90_K9l9G1	T D G L L E L L N S I I A D T K A D H S K V I S G K D A F R L L F D T Y G F P L E L			
UniRef90_U4TQ25	N D G L D I L D G R I A D L K K A G E K T F P G S D A F K L L F D T Y G F P F D L			
UniRef90_UPI00036C4C52	S D G L N I L A E L A E Q A K Q Q G Q S V I S G A E A F K L Y D T Y G F P F D L			
UniRef90_R7R120	D Q G L L S L L N D M E E K L N Q E G R K V L L A G A D A F K L Y D T Y G F P I D L			
UniRef90_A1ATU9	D R G L A M L N D E V A R M R A A G S T V I P G D V L F R L Y D T Y G F P I D L			
UniRef90_J9HR31	S G G E A L L S E L M A E L G V K N E T V I S G T D A F R L L Y D T Y G F P I D L			
UniRef90_B9XID2	D R G I E L F N Q E I A H V K P G H Q L Q G P F A F K L Y D T Y G F P S D L			
UniRef90_D0LZ22	D R G L L N L L E E E F G R M Q A A K S S T V S G D K V F Q L Y D T F G F P L D I			
UniRef90_P61700	D K G L S M L E D E L A T L S A S G A A H V P G D I A F R L L Y D T F G F P V D L			
UniRef90_B5ED08	D R G L A I L N E E T A A L K A K G E K V I S G E V I F K L Y D T F G F P V D L			
UniRef90_A5D3F4	A Q G T E M L N R L I I A E A R Q A G S A V V S G E D A F R L L Y D T Y G F P L E L			
UniRef90_UPI00046FCEFC	T E G L A L L N Q H I E Q V K Q D N A N E I D G K A A F T L Y D T Y G F P L E L			
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UniRef90_UPI00046686E9	N G G L D L L N G G L I I A D L K Q N G G Q E I A G A D A F K L Y D T Y G F P V E L			
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170 180 190 200

QUERY	D E I A R E K G L G	I D L E G F Q C E L E E Q R E R A R K H P V Y S H L K E L		
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UniRef90_F4FUB5	T E E E A N D A G L S	V D K P G F F E V E M Q K Q K D R A R K A R S G A K L I E I		
UniRef90_R7JNX3	T E L I L R E H G M D A	V D E A G F F E H C M M E Q K T R A R M D R K G K M Q M Q D		
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UniRef90_I9KZY1	T K E Y A G D E D L A V	T D E A G F F E V E M K A Q R D R A R N A R S G A K L I D I		
UniRef90_R5Y734	T K D I L E E R G I T	T D E D K F F N A L L A N Q K S T A R A A W K N T S V K I D		
UniRef90_U7HES3	T K E I I L E E K N I T	T D E E G F T A A M N E Q R E K A R K A R K T T N Y M G A		
UniRef90_UPI0003631E4D	T L E M A A E E A G L E	T D E A G F F E R L M A E E Q R Q R A K E D A Q S R K H A H A		
UniRef90_D8G7C7	T Q E I A A E E Q G L T	T D V E G F F E Q A M E E Q R N R G K D A H E L D K L A E N		
UniRef90_UPI00047D2828	T A L I L S E K G Y T	T D E A G F F D A A M Q V Q K K R S K S A S E M S K Q D W E		
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UniRef90_K9I9G1	K T P S E Y	V G Y D T L
UniRef90_U4TQ25	K E E S Q F	T G Y D E L
UniRef90_UPI00036C4C52	E G K S E F	I G Y E Q L
UniRef90_R7R120	D V T S K F	V G Y D R L
UniRef90_A1ATU9	G I R G E F	V G Y D G L
UniRef90_J9HR31	D Q P S K F	V G Y E E L
UniRef90_B9XID2	T V P T K F	I G F D Q L
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UniRef90_P61700	G M R S E F	I G Y D H L
UniRef90_B5ED08	G I T T D F	L G Y S E
UniRef90_A5D3F4	V G E T V F	V G Y D A L
UniRef90_UPI00046FCEFC	K V A S E F	V G Y D
UniRef90_Q3A1W0	G A R T D F	T G Y G E L
UniRef90_B1YJE5	T V P S Q F	V G Y T D L
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UniRef90_F7YZV6	A K T T K F	L G Y E K
UniRef90_R2PY18	K V D S K F	V G Y E K
UniRef90_C9LJS4	E G E S H F	V G W D T L
UniRef90_UPI00046686E9	K T P S E Y	V G Y T Q L
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UniRef90_UPI000299D3DF	K T P S K Y	I G Y E R L
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UniRef90_UPI0001E8998A	R T E S S F	V G Y D Q L
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UniRef90_R7ZL17	E E G T E F	I G Y D E L
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UniRef90_UPI000407BE2B	D E G V E F	I G Y D F L
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UniRef90_C5NYK5	V F A I	A D G A L P S N E G R G Y I L	L L R R A V R F A K V L G L N N S F M		
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UniRef90_C5ZX82	A F F L L	A Q G V N F D K E G R G Y V L	I I R R A V R H G Y L L G M R K P F V		
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Y K L V S A L V A Q M G E A Y P E L A E K Q A I I E K A L R L E E E Q F G K T L				
C Q L V Q V L A D T M G D A F P E L R E R K E F V A S V I K S E E E S F I R T L				
Y R L V D V L S N R M G K A F P E L K A Q K Q L I E N V I K E E E Q S F F L R T L				
Y K L V E T V G H I M E S Y Y P E L V L E K R E F I E K I V K S E E E S F F A R T L				
W R L L P A L I H E M G Q A Y P E L V R A E S L I S E I L K L E E E V R F R K T L				
W K T A S K V I D D M G G H Y K E L E E T R N F M V E V V R G E E E S F F A K T L				
Y K L T D V V A E I M V D Y Y P N V K E S A S F V K D V I L K E E E D R F F H E T L				
V D L V L H V G D V M G G Y Y Q D I V E K R E F F I E K V I R N E E E R F F H E T L				
Y R L V A V L V N E Q M G E F F P E L K A Q E A F I I S K V I Q E E E A A F L R T L				
V P M V D I V N T I F A E A Y P D L V E K Q S Y I V K V I Q L E E E R F Q T T L				
A E L F A A S R D A M K E A Y P I V E T D Y A R L S Q Y A L L A E E E A T F L R T L				
Y R L V G A L D A E M G E A Y P E L R E R R E L I S E K T I L L R E E E E Q F A R T L				
Y Q L I P T F V K E M G G A Y P E L T A Q Q E L I T R V I K E E E D S F L R T L				
Y E I A P V V I N L M K E V Y P E T Y K E E N R I V Q V I L A E E E K R F Q E T L				
H R L V P A L V A E M G A A Y P E L L V R A Q P L E A T L K Q E E E T F R Q T L				
Y Q L V S A L V E I M G T A Y P E L L I K Q Q K H I E K V I L L E E E Q Q F E K T L				
W K L V A P L A E A M G E A Y P E L L V I Q R A R E Q V I R S E E E D S F A T T L				
Y K L D K V V E L L M G E H Y S Y L K E K K E Y V K E L L K L E E E E R F L A T T L				
Y R L V P V L V R E M G Q A Y P E L L I R A E A L I T E T I L K L E E E T F R K T L				
P E L A L S V I A G S K D G Y P E L L E E K K D F I I L N V I R Q E E D K F E K T F				
K D L V P V V G E I M I S Y Y P E L I A K N A D Y I I A S I V E A E E I R F N K T L				
P K V A E L V I E T M G G H Y T E L L K A H K D F I I K T V S Y E E E R F E R T L				
T K L V P V L A D Q F A E V F P E L L K A Q Q D F V G R V I E E E E K S F L R T L				
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C R L V P A L V R E M G R A Y P E L L G R A E E E M I T E T L E L E E Q R F R R T L				
H K L V G E L V A Q M G E A Y P E L L K E Q Q Q R I T E V L K A E E E E R F Y E T L				
A D F A K T V I I D E C R D G Y P E L L E E K K D F I I F K V L T Q E E E E K F S R T L				
Y K L V A A L I E Q M G Q A Y P E L L A K Q Q E I I E K V L L R I E E E E Q F G K T L				
H E T V Q V V F S I M D M E A Y P E L L K D S A A F I I L N V I K N E E E K F L E T T L				
F N L V P I I G E I M K D F Y P E L V E A K Q E F I I M R V I K N E E E E R F H E T L				
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H K L V G E L V A Q M G E A Y P E L L P A A R D T V E R A L K A E E E E R F A E T L				
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K D L V K T V V D N S K H E Y T E L V I S G F D R I I L N V I S V G E E T A F L K T L				
K D L V K T V V D C N K C H E Y N E L L E E K Y D Y I V K V V L T T E E E Q N F N A T T L				
G E F T K I V R E A M S P G Y P E L L D S D F D R I I D S V V R N T E E E A F L S T L				
Y Q I V P V V V E L M G E A Y P E L L K E K Q D F V Q K V I K I E E E E R F F H E T L				
Y R L L P A L I R Q M G A A Y P E L L V I R A E A L I S E T L K L E E E N R F F R S L				
P H I A T V G I K L M Q N N Y P D L K N N N D L I L N E I K I E E E K R F F R E T L				
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V E L A Q N V I I E G S K D G Y P E L L E E K K E F I I F K V I A K E E E E Q F N K T T L				
Y Q L V A P V L V I E Q M G E A Y P E L L K N A Q E Q V E R V L L K K E E E E R F F A E T L				
H Q L A P T L A R E M G D A F P E L L N R A L I P V I I E E T L R G E E E E R F F Q R T L				
G E F A A V R D T M S P S Y P E L L A T D F P R I I E S I M R K K E E E E T F F L A T T L				
A E I A K V V I D S W S V N Y E E L T S R R T M I I E V I S K E E E E K F F H E T L				
A E I A K V V I D S W S V N Y E E L T S R R T M I I E V I S K E E E E K F F H E T L				
C D L M D K V V E I S S D A Y P E L L R E K R Y I I R K V L N V E E D R F F E E T T L				

	130	140	150	160
UniRef90_B5JV98	S Q G M G I L N Q A I D S L	D G E R I P G E T V F Q	Y D T Y G F P V D L	
UniRef90_W7CIN6	N E G G L A I L E E G L I E E A K N G D Q T I A	G K D I F F K L	Y D T Y G F P V E L	
UniRef90_UPI0003682529	E R G L T I L D E E L A A L S G S V I P G D L V F K L	Y D T Y G F P V D L		
UniRef90_C9RP10	D A G G L E R F A A I S A E L K K G D K	Y D T Y G F P V D L		
UniRef90_UPI0003626078	D Q G L V L L N R I V D E T K S D T V S G E K A F E L	Y D T Y G F P V D L		
UniRef90_UPI000422F075	H T G G S Q F A E Q L M D K L A T E G K T I D G R D I F K L	Y D T Y G F P V D L		
UniRef90_M1PH1	E R G L G L L N E A S T N L K E G D C F N G E I A F K L	Y D T Y G F P V D L		
UniRef90_F0JF10	D K G L E M L E E E L A E L K K A G A A I V P G E T T F K L	Y D T Y G F P V D L		
UniRef90_C5NYK5	H E G E T I L N N I A N E V K D T T K V I S G K D A F K L	Y D T F G F P V E L		
UniRef90_M9LBS6	A D G G L A I L G D M A E A A R A E G R T Q I T G V Q A F K L	Y D T Y G F P V D L		
UniRef90_UPI0004781760	E T G L R R L N E L I S S G S K A I S G P V A F E L Y D T F G F P V D L			
UniRef90_I8S1T1	V Q G M E L L N G H I Q K Q L K E L N I S E L D G A T F K L	Y D T Y G F P V D L		
UniRef90_U2YR26	A A G S E L L D E S V A Q A Q A G A G E L S G A Q A F L H	Y D T Y G F P V D L		
UniRef90_UPI000375FC42	D H G M R L L D E A L A S L T G T T L D G E T I F K L	Y D T Y G F P V D L		
UniRef90_G5GE05	A T G T N L L D G G L I R E T K A A G S D T L D G A K A F T L	F D T Y G F P V D L		
UniRef90_X1JVU1	N I G I Q I L D N L K E E L K Q K S K D K L S G R D T F K L	Y D T Y G F P V D L		
UniRef90_F3WSH6	D K G L K L L D E A T A G M A P G A T L A G E T A F K L	Y D T Y G F P V D L		
UniRef90_F3LHC1	E K G G L S V L E S V L D S A E F S A S T Q I P G E T I F T L	Y D T Y G F P V D L		
UniRef90_UPI0003B346A2	D K G M K L L E D A I G T L K S D V I P G E V V F K L	Y D T Y G F P V D L		
UniRef90_A0RPR0	V A G L D L F N E E L A K T S S N V F S G E V A F K L	Y D T Y G F P V D L		
UniRef90_I4Z313	E R G L S I L L D E E S R G L T K Q G N L S S G D T A F T L	Y D T Y G F P V D L		
UniRef90_UPI0003B523B5	E Q G L E I L A N M Q E E L K A A G K N T L S G E D A F K L	Y D T Y G F P V D L		
UniRef90_C5RD17	T D G L S L L D D V I E Q A K S K K G I I D G A I A F K L	Y D T Y G F P V D L		
UniRef90_H5SRJ7	D Q G L E K A E K I I I S E L E R K G E R L I P G E A F F L H	H D T Y G F P V E M		
UniRef90_I2EZ65	E T G L K K L L D D I E Q A T A E K K D V I S G E V V V F E L S	S D T F G F P V D L		
UniRef90_B0SZN4	G R G M G L L D E A T A G L S A G G V L D G E T A F K L	Y D T Y G F P V D L		
UniRef90_UPI000477B927	D R G L A L L D E A T E P L D E G G T L D G E T A F K L	Y D T Y G F P V D L		
UniRef90_F3KRB6	A N G M E I L D A A L G G G G A K V L P G D V A F K L H	H D T Y G F P V E M		
UniRef90_R9JPR5	D Q G L A I L S D M E E Q M Q Q A G E K V L S S G E N V F K L	Y D T Y G F P V D L		
UniRef90_Q3ILF3	E R G L A I L E E S L S D L K G D V I P G D L V F K L	Y D T Y G F P V D L		
UniRef90_UPI0003B775DC	G T G M K L L E G T L E D L R A G K E K I L P G D V I F K L	Y D T F G F P V D L		
UniRef90_S2YRK6	Q D G L I L S N V I S T Q Q A G L S I P G S D A F R L	Y D T Y G F P V E L		
UniRef90_R5UP11	D K G I K L L D R I I I A T T K S E D F L T V P G N V A F R L	Y D T Y G F P V D L		
UniRef90_UPI000465940B	D S G M R I F D E V A A R A T G G V I P G A D V F R L	Y D T Y G F P V D L		
UniRef90_Q2W1D9	D K G L K L L D D E I T R I G S G Q K L A G E V V A F K L	Y D T Y G F P V D L		
UniRef90_UPI00035FEAAAB	D R G M A I L L N E A I D E L G D N K T L D G E T V F K L	Y D T Y G F P V D L		
UniRef90_F2JR22	D R G L N I L K A H I D E M K A E G K T V L D G K A C F K L	S D T Y G F P V D L		
UniRef90_UPI000476EAE9	T S G S K L F D T A A E T V K S S G R K T I G G A E A F A L H	H D T Y G F P V D L		
UniRef90_R6U6Y0	D R G M K I L L D D L I A Q M Q K D G K T E L D G E S C F K L	S D T Y G F P V D L		
UniRef90_UPI00035F09AD	S A G S K I F D T A V E Q T R K S G S A Q L P G A K A F Q L H	H D T Y G F P V D L		
UniRef90_Q8GDZ1	H E G M R I A A D I V A K V K E D G G G G V L P G R Q A F T L	Y D T Y G F P V D L		
UniRef90_G9ZW26	D R G L G M L L A D E T A K L G D K G V L P G D V A F K L	Y D T Y G F P V D L		
UniRef90_UPI00047342E0	E R G E K L L D E L I F S G Q G K L I S G F K A F E L Y D T Y G F P V E L			
UniRef90_R5PG35	D Q G L S I L L N G Y V E D M M K A K G E K T L S G E H A F K L	Y D T Y G F P V D L		
UniRef90_C5ZX82	E N G M N L F N K E L L E V L K K E K S K S A F S G E I A F K L	Y D T Y G F P V D L		
UniRef90_R7BPH3	K Q Q Q A Y L L D D A L K E L E G S V L S G K I A F T L H	H D T Y G F P V E V		
UniRef90_UPI000367BF15	A S G T A R L E E A V A E S L A S G S K T L S G Q D A F A L H	H D T Y G F P V D L		
UniRef90_UPI00037C4B63	D R G M R I L L S E E T D K L S D K G T L N G E V A F K L	Y D T Y G F P V D L		
UniRef90_A4ACW8	E Q G M V I L N E A L A E M S G T V I P G D V V F K L	Y D T F G F P V D L		
UniRef90_Q0YSB8	D R G L G L L N E A T V D L K E G D A L A G D T A F K L	Y D T Y G F P V D L		
UniRef90_UPI00037EE10E	E R G L G L L N E A T V D L K E G D A L A G D T A F K L	Y D T Y G F P V D L		
UniRef90_UPI00036E8324	T A G S R I F E T A A E Q A K A G A Q V L S G D K A F Q L H	H D T Y G F P V D L		
UniRef90_H4GIJ1	N G G L N L L N E V I A E A K A D Q T N S D G R T A F K L	Y D T Y G F P V D L		
UniRef90_UPI0003FE6AF6	S T G I Q R F E K F A N T A S K I E G S F A F E L Y D T F G F P V D L			
UniRef90_UPI0003B6F48C	E R G L S L L L Y E E E I E K L K K S G E K I P G S F I F K L	Y D T Y G F P Y D I		
UniRef90_UPI0003B43312	E R G L G L L E D A T A K L T T G G T L P G D V A F K L	Y D T F G F P Y D I		
UniRef90_R9M1W5	D G G M K I Y N E L L S A H K T K G E K V F S G A D A F K L	Y D T F G F P V D L		
UniRef90_C0ZAS0	N D G L A I L S D M V K A A K D S G K T Q L S G Q D A F V K M	Y D T Y G F P V D L		
UniRef90_Q4L6W5	Q E G L A I L N N L L A K A K S S N N E I N G S D A F K L	Y D T Y G F P V D L		
UniRef90_N2BC36	E S G M A L F Q T E L L D S M R Q K N E K S F N G E I A F K L	Y D T Y G F P V D L		
UniRef90_X7EKI8	D R G L K L L D D E L L G G L P G E A P L P G A S A F K L	Y D T Y G F P V D L		
UniRef90_U2ZBW6	G R G M A L F E D A T A N L K E G D M L E G E T A F T L	Y D T Y G F P V D L		
UniRef90_F4BPE7	N D G L T I L N E R I T E L K A K G E T S T A G S D I F K L	Y D T Y G F P V E L		
UniRef90_UPI000464B9FA	D Q G L G I L L A E M E G E M K E K G E T T V L S S G D H A F K L	Y D T Y G F P V D L		
UniRef90_M1Z0G1	T F G T E R L L N E I L D L R Q E N K T T I P G E E V F K L	Y D T F G F P V D L		
UniRef90_G7ZBX7	E R G L R L L E D E V G H L G E G Q P L A G D V A F K L	Y D T F G F P V D L		
UniRef90_E3I0A9	A R G L S L L D D A S G S L G A G D T F S G D V A F K L	Y D T Y G F P V D L		
UniRef90_F5ISK2	D T G L I K L L D K Q I S E T K A K N G T E L N G T D A F T L	Y D T F G F P V D L		
UniRef90_S2VUG7	S A G T T I L L D T A V D K A K K G A S K L S G E D A F R L	H D T Y G F P V D L		
UniRef90_A8YTJ0	D T G L T L L D D L I D K A K S S D D K T I S G K D K M F D T Y G F P Y E L	H D T Y G F P V D L		
UniRef90_UPI000381A987	E S G T E R F D D A A A E V K E K G A T I L S G S Q A F E L H	H D T Y G F P V D L		
UniRef90_K9GNM4	D R G L K L L E D E A A G L A K G G T L S S G D V A F K L	Y D T Y G F P V D L		
UniRef90_M5A0G8	K N G L S I L D G E L S D G D G D K K E T L S S G S T A F L H	H D T Y G F P V D L		
UniRef90_F5SER3	S E G L H L L E R K A A K L R E E G K R E I S G S D A F K L	Y D T Y G F P V D L		
UniRef90_R4KHK6	A Q G T D M L S R L I Q E A R Q A G R N Y I D G E Q A F R L	Y D T Y G F P V D L		
UniRef90_UPI0002195DAD	K S G G L T T M F D Q F V A E A K K A G K N E I S S Q D A F K L	Y D T Y G F P V D L		
UniRef90_F7V6P4	D Q G L S I L E K I Q K T M Q E N G S K V M T G E D M F R L	Y D T Y G F P P D L		
UniRef90_F5RM87	A Q G I L E L L N D E I S R L K E A G E A V L P G T V G F P R E L	Y D T Y G F P P D L		
UniRef90_UPI00037765B5	D R G L T L L D E A S R E L E K G D S L D G E T A F K L	Y D T Y G F P P D L		
UniRef90_A0A059FC27	G N G G L S L L E K E T E T L V E G A A L P G E T A F K L	Y D T Y G F P P D L		
UniRef90_UPI000400FAAD	E S G G L K R L D V I V N S L K E K G I N T I A G N E V F E L S D T F G F P V D L	S D T F G F P V D L		
UniRef90_UPI0004652929	D K G M E L F K E A L S K T A G D V F S G E I A F K L	Y D T Y G F P V D L		
UniRef90_R5RYC3	D G G M K I F E S D M L A E H K A K G E T K F S G E D A F K L	Y D T Y G F P V D L		
UniRef90_T0CUF4	I E G E A L L A D V I G S L Q A T G K T V I S G D D A F K L	Y D T Y G F P V D L		
UniRef90_UPI00036BDBB7	E S G T H L F E Q A V A S L R E Q R A T T V S S G R Q A F E L H	H D T Y G F P V D L		
UniRef90_B0NAH2	D Q G L S I L L S D M V A E T E K K G E K T L D G Q N A F K L	Y D T Y G F P V D L		
UniRef90_G4TOB9	E Q G M K I L L E A C V A K L E G S T I P G G N I V F Q L Y D T Y G F P V D L	Y D T Y G F P V D L		
UniRef90_UPI000376AFCA	G R G L G L L E E A I S D L T E G Q A L P G D T A F K L	Y D T Y G F P V D L		
UniRef90_W7IP76	A S G S R I F D L A D R L V D D G K A T L P G D K A F Q L H	H D T Y G F P V D L		
UniRef90_F9MXB5	E T G M V L L E D Q V A D L K A K N E K V L S G E R A F K L	Y D T Y G F P V D L		
UniRef90_A0A017HQ94	D R G L R L L E D E V A G L P D G A E L P G G E A A F R L Y S T F G F P V D L	Y D T Y G F P V D L		
UniRef90_W8TK17	D Q G M E I L K G Y M E S L K E A G K N I P G E D A F R L Y D T Y G F P V D L	Y D T Y G F P V D L		

	170	180	190	200
UniRef90_B5JV98	T A D I A R E H E L D I	D [] E G Y E A C M E E Q R Q R A R A S Q F S E R I E F		
UniRef90_W7CIN6	T E E Y A L D H A L S	V D H A G F E T E M E A Q R D R A R K A R Q G E [] L Q N []		
UniRef90_UPI0003682529	T N D V A R E R N L L T	I D Q Q G F D A A M A A Q R K R A Q Q A S D Y N A T L G S		
UniRef90_C9RP10	T G I L A E E K G L L	I D E E G Y E K C M N E Q K E R A R A N M K Q G I T Q Y S		
UniRef90_UPI0003626078	T A L L I L S E K G L K	L D E K G F F E A A M K E Q Q D R A R A S [] V V K E T L A G I		
UniRef90_UPI000422F075	T E E L A E N R G M T L	D I P G F E A A M K E Q Q D R A R A S [] V V K E T L A G I		
UniRef90_M1PH1	T Q D A L R C R G I S	V D V D A F E K A M E R Q K A E A R A N W I W F S V R E K		
UniRef90_F0JF10	V R D V A E Q Q G M G	V D E A E F D K F M Q E Q K Q R S K A A W K F Q T L L E Q		
UniRef90_C5NYK5	T E E Y A E E L G L T	V D I D G F N E E M E K Q K E R A R S S R Q D D S S M K I		
UniRef90_M9LBS6	T E D Y A A E H G L T	V D H E G F D E A M Q A Q R E R A S M K [] Q G G P L A E L		
UniRef90_UPI0004781760	T G L I A R E N G L T	V D E K G F S A E M Q K Q K E R S K K A A V W V A V K G G		
UniRef90_I8S1T1	T L E I L E E H D M Q L	D K P N F D S A M K E Q R E R A R A R A R Q		
UniRef90_U2YR26	T L E I V E E A G L S	V D R G A F D S L M Q E Q R E R A K A D A R S R K G Q L A		
UniRef90_UPI000375FC42	T A D I A R E R D I M L	D E V G F Q R E L E A Q R S R A R A A S R F G A Q L E L		
UniRef90_G5GE05	T E L I C A E Q G L K	T D E E G F N A E M Q K Q K E R A R A N A A A V E T G D W V		
UniRef90_X1JVU1	T R D I L E E F G F G	E E D D F K N E M K I Q R E R S R E S W V Y Q D I L K E		
UniRef90_F3WSH6	T E D A L R A Q N L L S	V D R D A G F D A A M A E Q K Q R A A R A A W K W F D I A E E		
UniRef90_F3LHC1	T N D I A R E R E L T L	D M P G Y E K C M E A Q R T R A R A A G K Y S S S V E L		
UniRef90_UPI0003B346A2	T A D I A R E R N L L K L	D E A G Y D R E M E A Q R T R A R A A S K F T A L K Y E E		
UniRef90_A0RPRO	T A D M L R E K G L S	V D E A K F D A L M N E Q K A R A K A S W K F K T L L E E		
UniRef90_I4Z313	T Q D A L K P R G I G	V D T E T F D A A M Q R Q R E M A R A A W V W F S V K E R		
UniRef90_UPI0003B523B5	T E E I L A E N G F L	V D A E G F E K A M K N Q R D T A R A A R K V S N Y M G A		
UniRef90_C5RD17	T E E Y A T D E G L K	V D R D G F D E Q M K A Q Q E R A R S A R S N K A L T G L		
UniRef90_H5SRJ7	[] E D I A R E H G M H	V D R D A G F E R E M E K Q R E R S R K T V T V S A R S E L		
UniRef90_I2EZ65	T A L I A R E K G F K I	D E E G F Q K A L Q E Q K D R S R K A K E A T D W V E L		
UniRef90_B0SZN4	T Q D A V R A R G I T	V D T D G F D V A M D R Q R T M A R A N W A W F G I K E Q		
UniRef90_UPI000477B927	T Q D A L R G R G L T	V D V E S F D A A M E R Q R A E A R K A W V W Y A V K D R		
UniRef90_F3KRB6	T N D V C R E R G V T	V D E A G F K S A M D K Q K N Q A R A A G K F K A L D Y T		
UniRef90_R9JPR5	T C E I L E E K G F S I	V D R E G F D T A M A A A Q R E K A R S A R K E T N Y M G A		
UniRef90_Q3ILF3	T A D V A R E R Q M T I	D N K G F F E C M A V Q R K T A Q Q A G K Y N D Q L K S		
UniRef90_UPI0003B775DC	I V I D H V K E M D I D L	D L D G F D A A M A R Q K A R S K S K K K F A G V G D A		
UniRef90_S2YRK6	T E E Y A E E V G M T	V D H E G F K A S L E A Q R T R A R S A R K D V D L G N I		
UniRef90_R5UP11	T E L I L R E H G L V	N R R E F F K A E L E A Q K A R S R S A A T V N T D D W I		
UniRef90_UPI000465940B	T A D M A R E R D M T	V D M A G F E A A M E Q Q R E T A R A A G K F A E L V A T		
UniRef90_Q2W1D9	T Q D A L K A K G I G	V D T D G F A S A M E R Q R A E A R K A W V W F E L R E K		
UniRef90_UPI00035FEAAAB	T N D V A R E R D V N I	D E E G F E K A M N A Q R Q R A E A G Q Y N K A I K T		
UniRef90_F2JR22	T H E I L E E Q G L K A	D E E G F E K V E M D A Q R Q K A R D A R G G S K Y M G A		
UniRef90_UPI000476AE9	T L E M A S E A G L T	V D E D G F R S L M A E Q R Q R A K E D S T Y R N L L D Q		
UniRef90_R6U6Y0	T R E I L E E K G M T	C D E E G F A E C Y A K Q R E T A K N A H A A T K Y M G A		
UniRef90_UPI00035F09AD	T L E M A A E K G L S	V D E Q G F R D L M E Q Q R Q R A K E D S T Y R N L L D Q		
UniRef90_Q8GDZ1	A E D I A E E N G L T	V D K D G F F A A A M E A Q R E R A R A A E I W A D L L N K		
UniRef90_G9ZW26	T Q D A L R S E G K V S	V D V A G F E T A M A E Q R Q R A R A A W A W F D L L K E K		
UniRef90_UPI00047342E0	T V E I A E E N S I S	V D D V K G F F E E E M M N A Q Q K E R A K A A S S N I D L I D L		
UniRef90_R5PG35	T V E I L E E S G F A	A D E E G F K A C M Q E Q R E R A R K A R K T T E Q I D V		
UniRef90_C5ZX82	T Q D M L R E N G F G	V D D I D S F E V C M Q K Q K E Q A K A N W K F K T L L L S K		
UniRef90_R7BPH3	T K E I C V E R G F S	V D E D E F A R C M Q E E Q R E R A R A A N V K D D L L R E		
UniRef90_UPI000367BF15	T L E M A E E A G V A	V D E G Q F R A L M T E Q R E R A R A D A K E K K S A H A		
UniRef90_UPI00037C4B63	T Q D V L R G Q Q G L	S V D T A G F N A A M E L Q R A A A R K A W V W F E L L Q E R		
UniRef90_A4ACW8	T N D I A R E R D F S L	T D M E G Y E A A M A Q Q R E R S K E A V D Y N R T L T L		
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UniRef90_J7QT50	D I D L F R A L T G A V I D F T G A P V D G P Q G A S H R V I A D H I R A S
UniRef90_UP100035F50A3	E I D F V H L I D D I A Q L L G V N D K S D K S L R V I A D H I R S C
UniRef90_C1DQF9	E I D L F Q N L I L A A S A Q A I G C A N D G A P S L K V V A D H I R S C
UniRef90_UP1000369135B	Q I D L F K N I I K S A E N F I D K V S E K N I P S F R V I A D H L R A T
UniRef90_A4AUE8	D T D V F T P I I I R E I E T I T N A D Y G K N E E I D I A I R V I A D H I R A V
UniRef90_E7G7N0	D T D F F L P I I I H A T E E M T N V R Y E D N K M A Y R V I A D H I R T V
UniRef90_W0Q7U4	E T D I F Q T L I K E T A N L L D V Q D L D N K S L R V I A D H I R A C
UniRef90_R9MFN1	D I D T L F A L R E H V C I A G V G Y G K G E E S D V S V R V I T D H I R S V
UniRef90_F810F0	E T D L F L E P I I Q M T E K R I A P Y K Y G N D A E K D I S F K V I A D H A R A V
UniRef90_R5V8Y4	E V D T V Q N I M K H V C K I A N V A Y H T D D D K T D V A L R V I T D H I R S T
UniRef90_UP100026C695D	E I D Q I F P V I E K A Q E L S G R R Y G A D E E D D V H L R V I G D H V R S A
UniRef90_UP100034D8E8C	E T D L I F P I I I K T A A D L A G D I H K S N E K K T S L R V I G D H V R A V
UniRef90_Q1G947	E T D L F L P I I I H A T E E M S G K K Y G A N K A D D I S F K I I A D H I R A I
UniRef90_D9TPU4	D V D V I R G L I T D Y V I G E M A G V K Y G D D K K D V S L R V I T D H I R G V
UniRef90_UP10003782651	E I D L F Q D L L N A A S K V L G G V A T T E S S L R V I A D H I R S C
UniRef90_UP10003B33F89	D T D L F L K G I I M D K I I S E I T G K A F K E N K E T E V A F K V I A D H I R A A
UniRef90_UP100037E3574	D C D L L M N I I K E V C R V T G K S Y G L N K E D D V S I R V I T D H A R A V
UniRef90_R7GNK8	D T D L F L P I I I H A A E E L A D V K Y A E D K M A Y R V I A D H I R T V
UniRef90_A8F323	I D L F Q E I I I N F T E N I V K V K V E G E A K F S Y R V I A D H L R A S
UniRef90_UP10003B6BCB9	E T D L L R P V I D V A A E E L T G A K Y N E K Q D N D V R F R V I A D H S R T G
UniRef90_F9DN18	D T D L F L P I I I H A A E E L D V S G K K Y G E T T V A D T A F K V I A D H I R T V
UniRef90_Q7VH4	D T S L F A P L M Q C L Q K L T N K T Y F G D D E I Q A S F R V I A D H A R S V
UniRef90_A6W1F1	E I D L F Q N L I K A A A Q V V G T Q D L S A Q S L R V I A D H I R S C

50 60 70 80

UniRef90_R6J411	S F [L] I A D G V L P S N E G R G Y V L R R I M R R A M R H A Y L L G V K E P M I
UniRef90_N1WDP1	F F S L G D G I Y P D R T G R G Y V I R R I L I R R A S L F A R K L G I H E P F L
UniRef90_L0RAI7	A F [L] I T D Q L P S N E G R G Y V L R R I L I R R A F R F G R L L G I T D P F L
UniRef90_UPI0004650CEE	T F M I S D G I M P S N E G R G Y V L R R I L I R R A A R H G R L L G I E G K F L
UniRef90_R6BAP2	T F M I G D G I L P S N E G R G Y V L R R I L I R R A A R H G R L L G I E G E F L
UniRef90_Q0FZI2	A F [L] I A D G V L P S N E G R G Y V L R R I M R R A M R H A R L L G A G E P V L
UniRef90_U3GUN2	M M L I L D G V P S N E G R G Y V L R R I L I R R I I R S A R L L G A Q G A T M
UniRef90_U3AJA1	S F L I A D G V M P S N E G R G Y V L R R I M R R A M R H A H Q I G A K D P L M
UniRef90_D4YE20	T F A I S D R A L P S N E G R G Y V L R R I I R R A I M H A R R L G I K D N F L
UniRef90_E9SPV2	V M L I A D G V N P G N E G R G Y V L R R I I L R R A V R H G Y L L G F R E P F M
UniRef90_E0UQQ8	V F L I A D G V F P S N E G R G Y V L R R I I L R R A V R H G N K L G S K D T F F
UniRef90_UPI00046FF47C	A Y L I V D G V M P S N E G R G Y V L R R I L I R R A A R H G K L L G M D E P F L
UniRef90_G4KR20	V M M I C D G V L P S N E G R G Y V L R R I L I R R A A R H G K L L G V T D P A L
UniRef90_C7NHC6	L M L I G D G V V P G N E G R G Y V L R R I M R R A V R S M R L L G I D G R F L
UniRef90_A5Z6C2	T F M I S D G I M P S N E G R G Y V L R R I I R R A A R H G K L L G A S E P L M
UniRef90_UPI0003621C2B	C F L V A D G V L P S N E G R G Y V L R R I M R R A M R H A Q L L G Q T Q P F F
UniRef90_UPI000361226E	A F T I V D G V M P S N E G R G Y V L R R I I I R R A I R H G Y K L D I K G A F L
UniRef90_R6VAL4	T F L I S D G V M P G N E G R G Y V L R R I I I R R A A R H G R K L D I K G A F L
UniRef90_C8PCJ4	S F A I A D G A L P S N S G R G Y V L R R I I I R R A D L N G K R I G I K G A F L
UniRef90_R5SMX5	T N M I A D G I L P S N E G R G Y V L R R I V L R R A V R Y G K L I G I D D A F L
UniRef90_W5Y108	M M L I L D G V T P G N E G R G Y V I L R R I L I R R I I R S A R L L G A P G H T M
UniRef90_Q1GHA1	S F L I A E G V L P S N E G R G Y V L R R I M R R A M R H A S L L G A T D P V M
UniRef90_R6J7R1	T F M I A D G I L P S N E G R G Y V L R R I I I R R A V R H G R I G I D K M F L
UniRef90_B8GQV5	S F L V A D G V M P A N E G R G Y V L R R I I I R R A A R H G H K L G L D E P F F
UniRef90_C7PFW1	S F A I A D G Q L P S N T G A G Y V I R R I I I R R A V R Y R Y S F N W K K P L L
UniRef90_Q89I89	A F L V S D G V L P S N E G R G Y V L R R I M R R A M R H A Q L L G A K E P L M
UniRef90_R5R947	V M L I G D E A R P S N V G A G Y V L R R I I I R R A V R H G R S L G L K K E D L
UniRef90_E6X0H3	T F L L A Q G V N F D K E G R G Y V L R R I M R R A I R H G Y L L G L R E P F M
UniRef90_A0A022LYU3	L M L I A D G V S P S N E G R G Y V I L R R I L L R R T V R A M R L L G V E A A T F
UniRef90_UPI00047DAC51	S F L I A D G V L P S N D G R G Y V L R R I M R R A M R H A H L G A G E P V I
UniRef90_UPI000373D26A	A M L I G D G V T P G N E G R G Y V L R R I M M R R T I R N M R L M G V N D P V M
UniRef90_F2KVG6	A F S I A D G Q L P S N A K A G Y V I R R I I L R R A V R Y A Y T F G Q K E A F M
UniRef90_R5HWE3	T F M I S D G I I M P T N E G R G Y V L R R I I I R R A A R H G R L L G I E G N F L
UniRef90_U2EPT0	A F L I T D G V M P S N E G R G Y V L R R I M R R A I R H G H K L G A T G T F F
UniRef90_K7A3Q7	S F L I C D G V M P S N E G R G Y V L R R I I I R R A V R H G Y K M G A D D I F F
UniRef90_UPI0003681D05	S F L I A D G V L P S N E G R G Y V L R R I M R R A M R H A H L G A A E P L M
UniRef90_FOSER3	A F A I A D G Q L P S N N K A G Y V I R R I I L R R A V R Y A Y Q Y G F K E P F L
UniRef90_F3KEV6	S F L V S D G V I P S N D G R G Y V L R R I I I R R A I R H G H K L G M K D A F F
UniRef90_W5WUF8	A F L I A D G A L P S N E G R G Y V L R R I M R R A I R Y G R K L S P D Q S F L
UniRef90_D7A1A0	T F L V A D G V L P S N E G R G Y V L R R I M R R A M R H A Q L L G A R D P L M
UniRef90_UPI0003B4A68F	L M L I S D G V V P G N E A G G Y V L R R I I I R R A V R A M R L M G V T D A V L
UniRef90_S6B205	S F L I A D G I I P G N E G R G Y V L R R I I I R R A I R H G Y K L G A R A A F F
UniRef90_H8YYL5	A F L I A D G V T P G N E G R G Y V V Q R R I I I R R A I R H G Y Q L G Q Q P F F
UniRef90_R6R3V5	T F A L S D G A T F S N E G R G Y V L R R I I I R R A V R Y L R K L E I N K P F L
UniRef90_D5BZJ6	A F L I V D G V V Q P F S N E G R G Y V L R R I I I R R A I R H G H K L R D P F F
UniRef90_UPI0002260060	A F L I A D G I L P S K D G R G Y V L R R I M R R A M R H L H M M G T S E P V F
UniRef90_C0XSS2	M M I I L D G V T P S N E G R G Y V I L R R I I I R R A R H G R L L G I D G K F M
UniRef90_C0CIA3	T F M I S D G I M P T N E G R G Y V L R R I I I R R A A R H G R L L G I H E P F L
UniRef90_B0PDV5	T F M V S D G I L P Q N E G R G Y V L R R I I I R R A A R H G R L L G I H E P F L
UniRef90_L7UJF1	A F L I A D G V Q P S N E G R G Y V L R R I M R R A I R H G T L L D V D Q L F F
UniRef90_D2Z416	S F M I A D G I L P S N D G Q G Y V L R R I I I R R A A R Y G R L I G L K K A F L
UniRef90_A5FXC2	S F L I A D G V L P S N E G R G Y V L R R I M R R A M R H A H R L G M R E P F I
UniRef90_W0JIN6	D F L I A D G V L P D K E G R G Y V L R R I I I R R A A R H G R L L G I E P F I
UniRef90_D4L6K8	T F M I G D G V L P S N E G R G Y V L R R I I I R R A A R H G R L L G Y N E P F L
UniRef90_UPI000379A47F	S F M I V D G V L P D N E G R G Y V L R R I I I R R A I R H G H K L G L D T L F F
UniRef90_C3XAD0	S F M I V D G L I P G S D D G H G Y V L R R I I I R R A L R H G Y K L G Q T K P F F
UniRef90_C0W1N2	M M L I N D G V V P G N D D G R G Y V L R R I I I R R A V R S M R L L G V D T A T F
UniRef90_A0A011UQN4	L M L L S D G V T P A N E G R G Y V I L R R I I I R R A R H G R L L G V D G A T F
UniRef90_D7VJ27	S F A I A D G Q L P S N N K A G Y V I R R I I I R R A V R Y A Y T F L N F K P F I
UniRef90_UPI000428169A	T F A V A D G A L P S N E G R G Y V L R R I I I R R A V R F S K D L K I E K A F M
UniRef90_D5H79	T F M T S D G I V P S N E G R G Y V L R R I I I R R A A R H G R L L G I K G K F L
UniRef90_R6SDC9	T F M I S D G I M P S N S G R G Y V L R R I I I R R A C R H G R L L G L E R A F L
UniRef90_UPI00037F69F3	S F L I A D G V M P S N E G R G Y V L R R I M R R A M R H A H L V G A K D P V M
UniRef90_V2UVS1	C F L I A D G V N P S N E G R G Y V L R R I I I R R A I R H G N K L G A T G T F F
UniRef90_A0A022LNB1	Y M L I S D G V T P G N E G R G Y V I L R R I I I R R I I V R S V R L L G A T G D T M
UniRef90_F6GCA4	A F S I A D G Q L P S N T G A G Y V I L R R I I I R R A V R Y G F T F D K K E P F I
UniRef90_UPI0003639C88	A F M I S D G I L P S N E G R G Y V L R R I I I R R A Y R F G R L M G L S G C Y I I
UniRef90_A3DKB6	T M M I S D G V I P S N E G R G Y V L R R I I I R R A A R H G K L L G M D R P F L
UniRef90_I4W262	S F L I V D G V L P S N E G R G Y V L R R I I I R R A L R H G W M L G V R G D F F
UniRef90_J7QT50	S F L V A D G V T P S N E G R G Y V L R R I I I R R A M R H A Q L L G A K E P L M
UniRef90_UPI00035F50A3	G F L I A D G V M P S N E G R G Y V L R R I I I R R A I R H G N K L G A E Q V F F
UniRef90_C1DQF9	S F L I A D G V T P S N E G R G Y V L R R I I I R R A C R H G N K L G A R G T F F
UniRef90_UPI000369135B	A F L I A D G V L P S N E G R G Y V L R R I M R R A M R H A Y T L G S D L P V L
UniRef90_A4AUE8	A F S I A D G Q L P S N T G A G Y V I L R R I I I R R A I R Y G F T F L N K E P F M
UniRef90_E7G7N0	T F A L S D G A L P F D N A G R G Y V L R R I I I R R A V R Y G K K I G I D H S F M
UniRef90_W0Q7U4	S Y L V A D G V V P S N E G R G Y V L R R I I I R R A V R H G N L L G A K S A F F
UniRef90_R9MFN1	T F M I S D G I L P S N S G R G Y V L R R I I I R R A S R H G R L L G I G R E F F L
UniRef90_F810F0	T F A I A D G G A L P S N E G R G Y V I I R R I I I R R A V L H G R K L G I N T N F L
UniRef90_R5V8Y4	T F M I G D G V M P S N A G R G Y V L R R I I I R R A A R Y G R L I G I E K P F L
UniRef90_UPI00026C695D	L M L V G D G V R P G N E G R G Y V L R R I I I R R A V R S L R L L G Y A E P S M
UniRef90_UPI00034D8E8C	V H M V A D G I T A S N V G R G Y V L R R I I I R R R V R H G R L I G I E R E F T
UniRef90_Q1G947	S F A I G D G A L P G N T R G R G Y V L R R I I I R R A A R L H G R L L G I D G A F L
UniRef90_D9TPU4	T F M I S D G I L P S N E G R G Y V L R R I I I R R A A R Y G K L L G I D K P F L
UniRef90_UPI0003782651	S F L I A D G V M P S N E G R G F V L R R I I I R R A A R H G N K L G A Q E P F F
UniRef90_UPI0003B33F89	T F L L A E G I V P S N E G R G Y V L R R I I I R R A E R F G R L L G L K D P F L
UniRef90_UPI00037E3574	A F L I G D G V L P S N E G R G Y V L R R I I I R R A L R H G K L L E Q S D P F F
UniRef90_R7GNK8	T F A L S D G A M F D R A G R G Y V L R R I I I R R A V R Y G K N I G L D K P F L
UniRef90_A8F323	S F L I A D G V I P S N E G R G Y V L R R I I I R R A S M R H A H M L G A K E P L M
UniRef90_UPI0003B6BCB9	M M L I L D G V T P S N E G R G Y V I L R R I I I R R I I R S A R L L G A T G E T L
UniRef90_F9DN18	A F A I G D G A L P S N E G R G Y V L R R I I I R R A V R F G Q L G I N K P F M
UniRef90_Q7VH4	A F L L A Q G V N F D K E G R G Y V L R R I I I R R A V R H G Y L L G L K K P F L
UniRef90_A6W1F1	S F M I V D G V I P S N E G R G Y V L R R I I I R R A I R H G N K L G Q K G V F F

	90	100	110	120
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UniRef90_N1WDP1				
UniRef90_L0RAI7				
UniRef90_UP10004650CEE	A D L S Q T V I S L S K D G Y P E L D E K K A M I L K V L S Q E E E D K F N K T L			
UniRef90_R6BAP2	Y E V A R T V I A E N E S A Y P E L R E N E D Y I V K V I K A E E E E R F F Q K T L			
UniRef90_Q0FZI2	Y K L P T L V I A E M G R A Y P E L V R G E A L I A E T L K L E E E K K R F L Q T L			
UniRef90_U3GUN2	N Q F I T T I M D T M T P S Y P E L I A D N R E R I L Q V A V N E E E K A F L L R T L			
UniRef90_U3AJA1	H R L V P A L V Q E M G A Y P E L G Q A R A L I E E T L R A E E E T R F R Q T L			
UniRef90_D4YE20	T K L V P V V A D I M A D F Y P E L V K A D Q N F I Q D V I K T E E D R F N E T L			
UniRef90_E9SPV2	R E F V T V V R D T M S Q S Y P E L A T D F D R I V G V A V G E E E T A F F L R T L			
UniRef90_E0UQQ8	Y K L V D T L V D I M G G E Y E Y L N T K A N A V K E Q I E L E E E A R F F K T L			
UniRef90_UP100046FF47C	Y K L V G P L A T I M G T A G E P E L H A Q Q I M V E T K V V R T E E E N F L K T L			
UniRef90_G4KR20	Y K V V A T V V E V N K V A Y P D V E Q K E A Y I T K V V R T E E E N F L K T L			
UniRef90_C7NHC6	P E L L P I S R D L M G E S Y P E L V S G W D R I S Q I A Y A E E E D A F F R R T L			
UniRef90_A5Z6C2	S T L S E T V I T E S S S K D G Y P E L E E K K S M I F K V L S E E E N K F N K T L			
UniRef90UPI0003621C2B	W K L V P A L V R E M A Q A Y P E L G R G E A L I T E T L K L E E E T T R F R K T L			
UniRef90UPI000361226E	Y A L V K T L V I E Q M G D A Y P E L L K A E Q S N V E R V L K Q E E E E R F F A E T L			
UniRef90_R6VAL4	A E L S K T V I N E S K D G Y P E L L E E K K E F I L N V L N K E E E E Q F F N K T L			
UniRef90_C8PCJ4	Y K L V G V V G E I M K S H Y P E V V D Q Q A F V E K V V I E D R F Q E T L			
UniRef90_R5SMX5	G R M I D V V V K M M K P A Y P E L M E K R A F I L K K V A G V E E N R F H A T L			
UniRef90_W5Y108	E K F M N T I M D T M T P S Y P E L I A D N R E R I L R V A V T E E N A F L K T L			
UniRef90_Q1GHA1	H K L V P A L V S Q M G A A Y P E L G Q G Q A L I E E T F E Q E E E T T R F L K T L			
UniRef90_R6J7R1	A G A V D V V I E E M Y G H V Y P E L N V I E K R E Y I V Q K V I E M E E E T S F L R T L			
UniRef90_B8GQV5	H R L V G P L V A E M G E A Y P E L V K A Q P M V E R V L R Q E E E E R F F A E T L			
UniRef90_C7PFW1	Q D L V P V L V A Q Q F A N V F P E L L Q Q V D F V Q V F V F E E E E N N F L R T L			
UniRef90_Q89I89	H R L V W A L V R E M G Q A Y P E L M R A E K L I E E T L R L E E E T R F R K T L			
UniRef90_R5R947	L K I A S I Y M D E Y H E S Y K N L V I E N R E F V L K E L D K E I V R F E S T L			
UniRef90_E6X0H3	H R L V D T L V E Q M G G H Y D Y P E L L P K R A E A V K T A M K M E E E R F F A E T L			
UniRef90_A0A022LYU3	P E L L F P A S R D A M R D Y P E L V A S D Y D R I S R I A Y A E E E T F F L R T L			
UniRef90UPI00047DAC51	Y S L V P S L I R E M G Q A Y P E L A R A E A L I T E T L R L E E N R F Q K T L			
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UniRef90_F2KVG6	Y K L L N V L V H E M G T A Y P E L L A A Q R E L I G R V M K E E E E D S F F L R T L			
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UniRef90UPI0003B4A68F	P E L L P I S R D A M R G T Y P Q V A E D F D R I S R I A Y A E E R A F F L R T L			
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UniRef90_H8YYL5	Y Q L V A P L V A E M G S A Y P E L L A G K Q D Y I S E R V L R T E E E R F F A D T L			
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	130	140	150	160
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UniRef90_F3KEV6	D Q G M Q I F E R D L S E L K G N E I I P G E T I F R L Y D T Y G F P V D L			
UniRef90_W5WUF8	D H G T T I L M T E L E N A K K S G V K I E L S G E V V F R M Y D T Y G F P A D L			
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UniRef90_C0CIA3	D Q G L R I L A D L E E K M E K P G T K V L T G E E A F K L Y D T Y G F P L D L			
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UniRef90_L7UJF1	N R G M K M I E D N V A R M K Q A S E K L I M S G A D V F L H G T Y G F P W D L			
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UniRef90_UPI000428169A	D D G I K I Y Q N L R D H A L S G D K V I A G K D A F K L Y D T Y G F P F E L			
UniRef90_D5H79	D T G L A I L K D Y I D E T K A A G E K V L S G D K A F K L Y D T Y G F P L D L			
UniRef90_R6SDC9	D Q G L S I L A D M E E M M K K N G E T V L S S G E N A F K L Y D T Y G F P I D L			
UniRef90_UPI00037F69F3	E R G L K L L D E E L D G L P S D V P F P G K I A F K L Y D T Y G F P L D L			
UniRef90_V2UVS1	E Q G L K V L E G E L S Q L K G N V I P G E V V F K L Y D T Y G F P A D L			
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UniRef90_F810F0	A D G L S L L D E V I E S S K A D N G I S S G A V A F K L S D T Y G F P F E L			
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UniRef90_A8F323	E R G L K L L T E T E M L T K G N E L S G E V A F K L Y D T Y G F P L D L			
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UniRef90_F9DN18	H D G M A I L S T I I E K A K A S E V P V V S S G D A F K L Y D T Y G F P F E L			
UniRef90_Q7VH4	E S G M T L F S T E L E K L Q Q K Q E I L F S G E V A F K L Y D T Y G F P L D L			
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	170	180	190	200
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UniRef90_L0RAI7	I N D V A E K Q K F V V	D E D K G F N A A M K E Q K D R A K A A W K F R T V L E A		
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UniRef90_U3GUN2	T M E M A A E A G L T V	D R D G F E K L M A E Q V A R A K A D S R A K K H G H T		
UniRef90_U3AJA1	T Q D A L L R E K G R G V	D T E A F D A A M A E Q K A K A R A A W S W Y D L A D T		
UniRef90_D4YE20	T Q E Y L L E E V G I D V	D L S G F E E A M K A R K D S T G M A V Q S E V L S E I		
UniRef90_E9SPV2	T L E M A A E A G L S V	D E D G F R S L M A E Q R K R A K A E D A Q A R K H A H T		
UniRef90_E0UQQ8	T E D M L K E K N I L S L	D T A K F E E L M S E Q R K R A K A A W K F K A L L E E		
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UniRef90_C7NHC6	T L E M A A E Q G L A V	D E A G F R G L M T E Q R E R A K A D A V W R E L R S L		
UniRef90_A5Z6C2	T E E I L L E E K G F G V	D E D G F K E A M E V Q R K K A R S A R K K T E Q L D K		
UniRef90_UP10003621C2B	T Q D A L R L R Q R S I S V	D L A G F T D A M E R Q K A E A R A N W V W F A V R E K		
UniRef90_UP1000361226E	T A D V A R E K N L T V	D E A G F T F A M E A Q R E R A R S A S N F G A A I Q F		
UniRef90_R6VAL4	T T E I L L E E Q G C T V	D E A G F K A F M E E Q K D K A R K A R K E T N Y M G A		
UniRef90_C8PCJ4	T F E A A Q D A G L A V	D K E E F D A E M R A Q K E R A R K A S Q D I T L M N I		
UniRef90_R5SMX5	T E E I L A K E Q G I E I	D K D G F A A M A E Q K E R A R A K V S A R I A		
UniRef90_W5Y108	T L E M A A E A G L E V D	D S E G F D A L M A E Q R A R A K A D S I Y R E W V D N		
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UniRef90_W0JIN6	T L D I I L A K E Q N I F V	D I E G F N R H L E T T Q R Q K S K S S S M N I D L K D S		
UniRef90_D4L6K8	T R E I L S E K K G I K V D	V E R F E L M K E Q K K R S R S D A R K N S D A T D L		
UniRef90_UP1000379A47F	T A D I A R E R E L K V	D E A G F E Q A L E E Q R Q Q S R V A G K F K G K L D V		
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UniRef90_C0W1N2	T L E M A K E Q G V D V	D E A R F E R E L M Q E Q K E F A R Q S K D A T V Y D E L D A		
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UniRef90_E7G7N0	T A D V C R E R N I V I	D E K G F E A E M T A Q R E R A K A S S D Y N N V I K V		
UniRef90_W0Q7U4	T I E I L L E E K G L S V	D E E G F K K A V E E Q K A K A R E A T V Y D E I D P		
UniRef90_R9MFN1	T E E S A L D A G L K V	D E E G F K K A V E E Q K A K A R E A T V Y D E I D P		
UniRef90_F810F0	T M E I A A E Q G V V S	D E E G F K K A V E E Q K A K A R E A T V Y D E I D P		
UniRef90_R5V8Y4	T M E I A A E Q G V V S	D E E G F K K A V E E Q K A K A R E A T V Y D E I D P		
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UniRef90_R6BAP2	V A P T Q F T G Y T T [L]
UniRef90_Q0FZI2	V G A T E F [L] G Y D T
UniRef90_U3GUN2	D H P T R F V G F D T [L]
UniRef90_U3AJA1	H G A T E F [L] G Y D T
UniRef90_D4YE20	D V T S S Y V G Y D Q L
UniRef90_E9SVP2	D G A T E F T G F N E [L]
UniRef90_E0UQQ8	F G E N E F [V] G Y E T
UniRef90_UPI00046FF47C	D H G S D F [C] G Y T
UniRef90_G4KR20	A T P T [V] F T G Y D H
UniRef90_C7NHC6	G A T D W R A Y T D [L]
UniRef90_A5Z6C2	A L I T K F [V] G Y D K L
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UniRef90_UPI000361226E	E G E T Q F I G Y
UniRef90_R6VAL4	E E T S K F [V] G Y H D [L]
UniRef90_C8PCJ4	K D E S [V] F E Y H Q L
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UniRef90_R5HWE3	S V T T E F V G Y D H [L]
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UniRef90_C0XSS2	D H P T E F V G F S E [L]
UniRef90_C0CIA3	D V T T E F V G Y E H [L]
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UniRef90_D2Z416	H G P T P F L G Y D S [L]
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UniRef90_E1IER3	A F L I	A D G V L P G N N G R S Y V L	R R	I L R R A A Y Q G R S I G F T R P F L					
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UniRef90_A1BD33	T F A L	T D G A M P S N E G R G Y V L	R R	I L R R A L R Y S K T L G C S E P L L					
UniRef90_C8W9V0	T F M I	G D G I L P G N E G R S Y I	R R	I L R R A V R Y H G R L L G I Q G T F M					
UniRef90_UPI0002D6AFED	A F A I	A D G Q L P S N N K A G Y V I	R R	I L R R A V V R Y A Y Q Y G L K E P F F					
UniRef90_UPI0003747FCC	S M T I	A D G V A L S N T G R G Y T V	R R	I L R R A S R H A Y L L G L R E P T L					
UniRef90_A9DQ01	S F S I	A D G Q L P S N N T R G R G Y V I	R R	I L R R A A V R Y G F T F N K K E P F I					
UniRef90_R6ZWG2	T F M V	S D G I M P S N N E G R G Y V L	R R	I L R R A A R H G R L L G I K G A F L					
UniRef90_C6XZP3	A F V I	A D G Q L P S N N K A G Y V I	R R	I L R R A V V R Y A Y T F L N K D P F L					
UniRef90_A8EW16	S F M L	S Q G I L F G N E G R P Y V V	R R	I L R R A V R H G Y L I G F R K P F M					
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UniRef90_K2BIC1	A F L I	T D G V V P A N E G R G Y V L	R R	I I I R R A L R H G N K L S V D Q P F F					
UniRef90_J9H6P8	M M L I	G D G V T P G N E G R G Y V L	R R	M M R R T I R N M R L L G S Q D L I M					
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UniRef90_D7GDR7	L M L M	T D G V T P G N E A R G Y V L	R R	I I I I I I L R R A A R H G K T L G I K D A F L					
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	90	100	110	120
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UniRef90_UPI00035C2D10	Y K M V P T L V K E M S D T Y P E L	K R A E P L I T E T L K T E E E K F S S L L		
UniRef90_C7N4K1	N E Y V A V I V D L M G H V Y P E L	I V E N R A L V E S V I A S E E E G A F A N T I L		
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UniRef90_S3PAU4	Y K M L K P L I E V M G T A Y P E L	E F Q L S E R I E S I L I R E E E L F A K		
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UniRef90_E1IER3	A E V I S T V I G E M A P A Y P Q L	A E R H A F I L E S A N A E E Q Q F L R T L		
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UniRef90_R6ZWG2	A K L L S E V V I R E S K D G Y P E L	L A D K K D Y I L K L I A T E E E E N F N K T I I		
UniRef90_C6XZP3	N E L L V P V L A E Q F K G V F E E L	A L Q Q D F V Q K V I L E E E E V S F L R T L		
UniRef90_A8EW16	A K L L D T L I E I M G M G H Y T E L	V E N K N F I I E E Q L T L E E E D R F F F K T I I		
UniRef90_UPI0002DBF06B	P T I L L T A S K D V M K L S Y P E L	E E R W G T I I A D V A Y G E E E A F R R T L		
UniRef90_K2BIC1	Y K L V K P L V T E M G E A Y P E L	R K A Q I H I T I L K Q E E E E Q F S L T L		
UniRef90_J9H6P8	S E L I I K S S I Q A M G P Q Y P E L	L V S G S E R I L S I I A Q S E E E E S F I I Q T L		
UniRef90_B9MRX7	H L I V D T V V E S Y Y K N P Y P E L	V Q K A E Y I K K V I L Y N E E E S R F F N Q T I I		
UniRef90_D8LCV6	F K I V P V V V A E F G D M Y P E L	R E K E A F V M E I I I K E E E E A F S S M L		
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UniRef90_M1Z6U7	T Q V A E T A I I A L S E S A Y P E N	T R Q R E N A I I K A E L L Q R E E E S Q F L R T L		
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UniRef90_F4B2J2	H L L V D T V V D M M S M S N F Y T E L	I E T A V I V K K I I L K E E E E K F F F S T I I		
UniRef90_F2NXU3	Y K L V A T L V K Q M G D A F P E L	K S Q K N L M T N V I R E E E A S F L R T L		
UniRef90_UPI00040D67C4	A D I I A Q A V I I E N F K P C A Y P E L	E Q N K E K I F T E L S A E E E N K F F R D T L		
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UniRef90_E3IGH0	H E L L T A V I I D V M G E Q Y P E L	R A D A A N I I H T V I D A E E E A S F I I G T L		
UniRef90_I2JNT0	Y E L V P V V G E I M G D F Y P E L	V K E K A A F I Q K V I K T E E E E R F F H E T L		
UniRef90_K9SN09	H K L V A P L T L E M G E A Y P E L	V I T R Q A Q I E K V L L Q E E E E Q F F A K T L		
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UniRef90_V5G938	H Q L T D E V I I D S W G K H Y Q D L	Q A A A E S V M R T L L A E E E E R F F A E T L		
UniRef90_U2TM23	S K I V P T V V E Q M G D M F P E L	E T N K E K I K Q V I K L E E E E K F F A Q T I I		
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UniRef90_UPI00046D32EA	S V P A S A V I A Q N A G F Y T E L	I D N R A L I E G I I I A A E E E E R F F S A T L		
UniRef90_UPI000477B93D	P E L F P V A R D L M S S S Y P E L	K E N E T T L I L T E L K A E E E D K F F L E T T L		
UniRef90_F5RB97	H Q L T D E V I I D S W G K H Y Q D L	E S D F E R I S S Y A Y A E E E E S F F L K T L		
UniRef90_UPI0003F63B2A	H R M V P D L V I A Q M G A A Y P D L	E T R E Q Q Q L I T D A L R T E E E E R F F F E T T L		
UniRef90_UPI00047EBCF6	P E L F P V V S K D A M A P N Y P E L	A A A Q Q K V V M D V L R Q E E E E R F F F A T I I		
UniRef90_H2CGD6	P Q L P V S R D A M K G F Y P A V	E T T F H E V V S E S A Y G E E E D A F F R R T L		
UniRef90_W7Q921	H R L V H P E V V S I I Y G S F Y P E L	A E D F E R I S R I A Y A E E E E N S F L R T L		
UniRef90_S6GP15	H K L V G A L D V E M G D A Y P E L	I D Q K K V H D I I L L S E E E Q R F F L T T L		
UniRef90_D1PK3	H K L V V A A L A E E M G D A Y P E L	R E A R R H Q I E R I I I L K E E E E K F F F A T T L		
UniRef90_N1WEV2	T E L V D T V I I E S S E A G Y P E L	R A L Q G Q Q I E K V I L K E E E E Q Q F V K T L		
UniRef90_K8GM70	Y K L V D K V V E I Y K T R Y P E L	R E H E S Y I K K V I V G T E E E E R F F G R T I I		
UniRef90_C1A4D2	P Q V A E T A I I A L S E E A Y P H	T K N A G A I G K T I I L A E E E E E L F L K T L		
UniRef90_S9QWC7	V H V V E V L I I D T M R D L Y P E L	H V R R K H I I E T T R A E E E D R F F L T T L		
UniRef90_UPI0003B4F8ED	S Q L S L T V V E Q M G E F F P E L	H R K V A D V R E L L I D E E E E V S F S K T L		
UniRef90_F4F3H3	W R L V P A L V A E M G G H Y P E L	G R A Q A L I T E T L K L E E E E G R F F K E T L		
UniRef90_F9PRB6	S Q L V P T V V E N M K S A F P E L	E E K M C F V Q E V I L D D E E E L S F N R T L		
UniRef90_X5EBT4	S K L V P V V V E M L S G A F P P E L	K T K Q A H V T E I I L D E E E E V S F G R T L		
UniRef90_D7GDR7	G Q L V V E V S K N A M K E S Y P E L	E R N F D I I R H V A E E E E E N A F S K T L		
UniRef90_G7MCM0	P E L L F P V A R D C D M A P S Y P E L	A T D F D R I S A Y A Y A E E E D A F F L A T T L		
UniRef90_F4C3H	V D V S K V V M E A Y N M E Y P E L	L I D E R E R I K F I L I N A A E E E S K F F Q E T T L		
UniRef90_F9PRB6	E K F M D T V V R S T M T P S Y P E I	T E N W E R I R A V A V G E E E T A F L K T L		
UniRef90_T0QIL2	T E L L D V S R Q V C M H A T Y P E I	I D D Q W E R I K K D I I A D N E S E S F F E R T T L		
UniRef90_UPI0003B4F8ED	S Q L S L T V V E Q M G E F F P E L	E A K K E Y I K K V I K V E E E E D K F F R E T T L		
UniRef90_A8MG13	C N L C D I V R D S K A A Y P E L	V E D N K D Y I K R V I K V V E E E E R F F M E T T L		
UniRef90_M2N8U1	A K I V P T L V A Q M G E M F P E I	K A K Q S D V V Q I L D E E E E V S F A K T L		

	130	140	150	160
UniRef90_A6TQZ4	H Q G [L] E I L N Q H	E E M [] G K S E N M	N G T Y A F K	L Y D T Y G F P [L] D L
UniRef90_Q47N66	R A G T T L F N R A V	R R T K E T G G T [V]	F S G A D A F Q	H D T Y G F P I D L
UniRef90_UPI0003B42CB1	E G G I Q R L G G L L	R G M E K G S T L P [G]	P A D A F E	P V D L
UniRef90_UPI00035C2D10	N R G T E L L N E N L S K I K N	N L F P G E V A F K	L Y D T Y G F P L D L	
UniRef90_C7N4K1	R Q G Q A Y L A E A L	K N L E G T T L S G D V A F K	H D T Y G F P V E V	
UniRef90_R8W434	D S G [L] S I L G D M V A A V	V K A E G K T E L P [A] S D A F K	Y D T Y G F P I D L	
UniRef90_D5EF21	Q Q G T E L I L E Q E I S R	R L R H V D A L S G T I A F E	L Y D T Y G F P L E L	
UniRef90_A0Z875	D N G M A I L L E E A L S G L Q	G A V L P G E L V F R	L Y D T Y G F P V D L	
UniRef90_D4Z310	E K G [L] K L L D E A T G D	L S E G G T L P G E T A F K	L Y D T Y G F P Y D L	
UniRef90_N6X298	S A G T T I L D T A V A Q	A K E K G T K I L D G A S A F A	L H D T Y G F P I D L	
UniRef90_E5XP45	D S G S K L F E Q V A E G	V R S S S G K V I P G A E A F A	L H D T Y G F P L E L	
UniRef90_S3PAU4	T L E Q G L K L L E G E L A N L	L K G K V I A G E T V F K	L Y D T Y G F P T D L	
UniRef90_K7QT16	E G G L K R L E T L L S G L K	P G E A F R I L Y D T Y G F P L D L		
UniRef90_E3B776	V A G T T I L D T A V A K A K Q	G D Q A F S L H D T Y G F P L D L		
UniRef90_UPI0003B6ED05	D A G G M T R L E T A	[A] A S G G K L D G E Q L F Q	H D T Y G C P P D L	
UniRef90_L0EE78	E G G L A K L A E V A E A A R	Q G Q G G V I S G E D A F K	L Y D T F G F P L D L	
UniRef90_UPI00035CF36A	E R G L T L L D E A L S E V	K D G S V E V A F K	L Y D T Y G F P L D L	
UniRef90_A9BJE0	E K G M E R L N N I I Q N	N N N E T T L P G K I V A F E	L Y D T Y G F P L D L	
UniRef90_UPI00029A1A19	T Q G M K L L E A E L I Q	A A E E K Q L S G S V L F H	L Y D T Y G F P V D L	
UniRef90_G5GHH3	D N G L G I L S Q M K E E L	R R S G G K V L D G K D V F K	L Y D T Y G F P Y D L	
UniRef90_UPI00037DAD77	D N G I K I K L I E D E	T T N N I F S G E I T A F R	L Y D T F G F P L D L	
UniRef90_UPI00047BBDB28	H Q G I D I L N E Y I I S	N M E E S G E K T L T G E V A F K	L Y D T F G F P L D L	
UniRef90_Q01XA0	L V I A E R V F N D A I	K S I Q G N T I P G A L S F K	L Y D T Y G L A L D E	
UniRef90_R6Z9K2	D T G R V Y L L D E A L G G	L A D G A V L D G A T A F K	H D T F G F P I D L	
UniRef90_K7RNL0	T S G T T M L D D A V T R	T R T R A G S S T L S G S Q K A F Q	L Y D T Y G F P I D L	
UniRef90_E1IER3	S G G I S R L S T I I E Q	V Q S S G G N A V P G N D A F V	L K D T Y G F P L D L	
UniRef90_D1PX65	E K G I Q L L N G D M E E L	R E Q G K G T Q L D G T K A F R	L F D T Y G F P L D L	
UniRef90_UPI000367A4F7	E S G S R L F E S A A S D V	L S G G G K V L S G E S A F A	H D T Y G F P I D L	
UniRef90_UPI0003B6CF83	S E G G L H I V N V A G A K	R E G R T V I I G G V D A F K	L Y D T Y G F P V D L	
UniRef90_M4DUM2	E R G E K L L E L K L G D A	S A G D K K P C G K D A F V	L Y D T Y G F P V E I	
UniRef90_A9B660	A G G L R Q L E A M L P	N Q A D K A V F S G A D A F K	L Y D T Y G F P L D L	
UniRef90_A1BD33	D R G I E I F N E L I A A V	V R S R G T V V S G D D A F R	L Y D T F G F P L D L	
UniRef90_C8W9V0	D A G E S K L T A E L E Q	L L D G A Q L S G E V A F L	H D T Y G F P I D L	
UniRef90_UPI0002D6AFED	S Q G I S R F H V Y T S K	M S Q R A K E I I D G E F A F E	L S D T Y G F P I D L	
UniRef90_UPI0003747FCC	E G G T Q R I T S S L L S G	G L D R G A T L S G E E A F V	L Y D T Y G F P L D L	
UniRef90_A9DQ01	D Q G L V L L L D R V I E	N V N G K V V S G K K V F E	L K D T Y G F P E D L	
UniRef90_R6ZWG2	D Q G L S I L N D M M A E	M E A E K T K V L S G E N T F K	L Y D T Y G F P I D L	
UniRef90_C6XZP3	A T G I Q R F D S Y T K K	Q A E K D Q M V I S G E F A F E	N N D T Y G F P I D L	
UniRef90_A8EW16	D L G M S L F N E E L E K	T K D I F S G V T A F K	L Y D T Y G F P I D L	
UniRef90_UPI0002DBF06B	S A G T T I L D T A V G R	A R E Q A S T A V S Q G D A F E	H L H D T Y G F P I D L	
UniRef90_K2BIC1	A Q G L K L F E Q V T N E	L L T G T L P G S T V F K	L Y D T Y G F P V D L	
UniRef90_J9H6P8	K S G T S I F D I A A T D	L L K K V Q S T S L S A D T V F K	H H D T Y G F P F D L	
UniRef90_B9MRX7	D V G L E I L E S E I E K	L L K K N K E T V L N G E I A F K M	L Y D T Y G F P L D L	
UniRef90_D8LCV6	E R G I K H F K E V V E E	Q R G K S S N T I P G D T A F F	L Y D S M G F P L D L	
UniRef90_F0GUB2	H E G G L A I L S H I M	K M K A K E S G S E M I A G E D A F R	L Y D T Y G F P I E L	
UniRef90_Q0BYM3	D Q G L E R L E V L I S D M	E E E N K D V L N G E E A F K	L Y D T Y G F P L D L	
UniRef90_G8QVD5	G N G G L S L L D K A A S	E L S P G E A L L P G D V A F R	L S D T F G F P L D L	
UniRef90_H8X8H4	L K G E R E F E K K M L P	N L L K G T S R Q I S G R T A F K	L Y D T Y G Y P I E L	
UniRef90_F3PAP9	T A G T T I L D T A V A S A	K R T G P L M S G R S A F E L	H H D T Y G F P V D L	
UniRef90_UPI00031233B0	E R G E K L L E E I I A A Q	V Q S K G E T Q I S G E S A F T	L Y D T Y G F P L E L	
UniRef90_M1Z6U7	T E G G L A L L L E E L V	Q V Q A K E K G R S E I S G E E A F K	L Y D T Y G F F P F D L	
UniRef90_M9MA75	D R G E K L F E E Y Y A A K	A A G S K Q L S G A D V W K	L Y D T F G F P V D L	
UniRef90_A9NGN9	L D G E K H L L Q S I K D	G H L D K G K L S G E D A F K	L Y D T Y G F P I E L	
UniRef90_F4B2J2	D K G L L L L D N V I A D	T K G D T V F F L R Q I S G R T A F K	L Y D T Y G F F P I D L	
UniRef90_F2NXU3	R K G E A E F Q K L L P	N P K K I I P G D T V F F L R Q I S G R T A F K	L Y D T F G F P L E L	
UniRef90_UPI00040D67C4	E Q G M K V L E T H	P N L M K N P K K I I P G D T V F F L R Q I S G R T A F K	L Y D T Y G F F P P V D L	
UniRef90_W2EFA4	R T G T A I F D A A V E	E E T T R R K G T P V L A G Q D Q A F Q	H H D T Y G F F P I D L	
UniRef90_E3IGH0	H E G G L A I L A S V I	E K E K E R G S D V I S G E D V F R	L Y D T Y G F F P V E L	
UniRef90_I2JNT0	D Q G M K I L L E Q	D L Q G L S G K Q I P G D T V F F R	L Y D T Y G F F P P V D L	
UniRef90_K9SN09	E R G E E L L A E I L A	S P Q T Q K S K A I A G A D A F K	L Y D T F G F P L E L	
UniRef90_S3WPV7	S Q G T S S L F D T A A	R Q T K T S G S R V L S G E K A F Q	H H D T Y G F F P I D L	
UniRef90_UPI0003607444	D K G M G V L L E E A	A L A D L K G Q E P G E V V F T	L Y D T Y G F F P V D L	
UniRef90_Q9PH22	D V G M K I F N E V A A	K V A A V K V A N G V I P P G S D A F R	L Y D T Y G F F P V D L	
UniRef90_G4D6B5	D K G T L M L D E E I K	N L K N L K E N G L D T L N G D T A F K	L Y D T Y G F F P I D L	
UniRef90_V5G938	D R G E R Q F E N Y A Q	Q A K V K G L D K L H G A D V W R	L Y D T F G F P V D L	
UniRef90_U2TM23	D A G E K S L A A E L A	A A L P A G A V L S G E V A F K	H H D T Y G F F P I D L	
UniRef90_P61708	K K G E A E F E K M L P	N L L K P K K I I P G R M A F K	L Y D T Y G F F P I E L	
UniRef90_UPI00046D32EA	K H G T S I L D S A V A	E T K K S G G R T L A G N K A F E L	H H D T Y G F F P I D L	
UniRef90_UPI000477B93D	U N I F O R M A T I O N	E T K K S G G R T L A G N K A F E L	H H D T Y G F F P I D L	
UniRef90_F5RB97	D K G M E I L L D D A	L I A G R R E L P G H V A F K	H H D T Y G F F P L D L	
UniRef90_UPI0003F63B2A	A N G M D I L L E S A	L A A A L A Q G A A L D G E T A F K	H H D T Y G F F P L D L	
UniRef90_UPI00047EBCF6	E K G T T I L L D T A V	A K S S K A P L V S G Q D A F T	H H D T Y G F F P I E L	
UniRef90_H2CGD6	E K G T T I L L D T A V	A V S A K A K S S K A P L V S G Q D A F T	H H D T Y G F F P I E L	
UniRef90_W7Q921	E T G V R K W D E Y	L L E A E K A A K A K V F P G Q K A F T	L L Y D T F G F P L E M	
UniRef90_S6GP15	E H G M G L L E E A	L A E K A A K A K V F P G Q K A F T	L L Y D T Y G F F P Y D L	
UniRef90_D1PKP3	D N G M R L L E Q	E I K K L S G S E I P G A V V F K	L L Y D T Y G F F P V D L	
UniRef90_N1WEV2	D A G L N I L L N N M	I D E R K A A G E T V L S G S E V F K	N N D T F G F P L D L	
UniRef90_K8GM70	E I G L E K I E F L V	Q K T E T S G K L I F S G A D A F L	L L Y G T Y G F F P A E M	
UniRef90_C1A4D2	E F F G E R E L E T	L I Q K I G A G G Q I P G E N A F V	L L Y D T Y G F F P L E L	
UniRef90_S9QWC7	D A G M S R F E E L A	P A A S T Q G S T T M R G E D A F R	L L Y D T F G F P I D L	
UniRef90_D5BNR5	D R G E K M F E Q Y	A A A K K S S S N V L L Q G N D V W R	Y Y E T Y G F F P V D L	
UniRef90_D8M1P4	D R G E K L R K F A Q	E A E A C Q A S G A K V I T G D V A F F	L L Y D T Y G F F P I D L	
UniRef90_T0QIL2	N K G L E R F K K I	A T A M K A E K K T V V S G E D A F F	L L Y D S M G F P P V D L	
UniRef90_UPI0003B4F8ED	E T G E Q I F E N A	V A K A R T S G H A I L P G S A T F T	H H D T Y G F F P I D L	
UniRef90_F4T3H3	R A G T T I L D T A I	T E T K S A G K P A L S G D K A F Q	H H D T Y G F F P I D L	
UniRef90_F9PRB6	E Q G L G I L N S Y	I E E K S K N S K I L P G D K A F K	H H D T Y G F F P L D L	
UniRef90_X5EBT4	E S G T R L F E D A	A A K V K A T G G T E L G G D A A F V	L L Y D T H G F F P I D L	
UniRef90_D7GDR7	N S G T Q L F D M A	V A E A R A G S S N E L L G G D K A F Q	H H D T Y G F F P I D L	
UniRef90_G7MC0	D S G M E I L N G F	V S E L K E N N E K V L L G K A D G F K	L L Y D T F G F P M E L	
UniRef90_A8MG13	D Q G M D L N Q Y	I I E E L V T L K E T V L S G V N A F K	L L Y D T Y G F F P F D L	
UniRef90_M2N8U1	D R G E S M F E R F	A Q Q C K K T D A K E L S G A D V W R	L L Y D T Y G F F P V D L	

	170	180	190	200
UniRef90_A6TQZ4	T K E I L E E R E M T	V D E S E F E S E M E K Q R N R A R K A R D A F D A L	D K	
UniRef90_Q47N66	T L E M A A E H G L K	V D E E T F H Q L M Q R Q R E T A K R D S V Y G N L L E T		
UniRef90_UPI0003B42CB1	T R E I A E E Y G V S	V D E A G Y A E S L E H A Q E L A R A G S K Y G K S E L F		
UniRef90_UPI00035C2D10	T A D I L K N K N I K	V D N A G F N R E M E K S S K L A R A N W K W F K V R E Q		
UniRef90_C7N4K1	T E E I C S E S G I S	V D H A R F E E C M N E Q R E R A R A S I Y A D L L K E		
UniRef90_R8W434	T L E I L E E Q G M T	T D R A G F D A L M N E Q R E R A R E D R K K N L G L D K		
UniRef90_D5EF21	T T E I C A E N D I K	V D E A G F H V E M E K Q R E R A R A S S S K Y S Q I A A E		
UniRef90_A0Z875	T N D I A R E R N L T L	D V E G Y D E A M A Q Q R K R S Q E S G D Y N E S V T I		
UniRef90_D4Z310	T E D A L R S R G L G	V D R E G F D K A M A E Q Q K E K A S D E I W F D I A E K		
UniRef90_N6X298	T L E M A G E Q G V A	V D E D E A F K T L L M Q E Q K D R A R A D A R A K K T R E M		
UniRef90_E5XP45	T L E M A M Q E V G L Q	V D Q E G F A R L M A E Q R N R A K A D A K A R K Q A H A		
UniRef90_S3PAU4	T A D I A R E R G L E I	D E A G F E K E M A A Q R Q R A R D A G K Y N S V V N V		
UniRef90_K7QT16	T V E I A A E R G F G V	D D T E G F Q K A M A E Q Q R E R S R A A E A L E E L Y A E		
UniRef90_E3B776	T L E M A A E Q G V S	V D E A G F C R L M D E Q R Q R A K A D A V W T Q L R E		
UniRef90_UPI0003B6ED05	T I D I L R E K D A A L	S E A Q Y E S L M E Q Q R D R A R A A S K F A E L V A S		
UniRef90_L0EE78	T E D Y A A E N G L S V	D R E G F E A A M Q V Q G G P L D D Y		
UniRef90_UPI00035CF36A	T A D V C R E R N I T I	D E A A F F E R E M T R A Q A Q A S Q F G I D Y N N V I R V		
UniRef90_A9BJE0	T K E I I L S E K G L I E V	D E K E F T E L M M N K Q R E M A R S A S I Y K E I D K F		
UniRef90_UPI00029A1A19	T A D V A R E R G F Q I	D R A G F F E S E M H I Q R N K S K A A S Q F T G L D S M		
UniRef90_G5GHH3	T K E I I L E E D G Y V I	D E E G F F N A A M E K Q R K K A D A R G T N Y M G A		
UniRef90_UPI00037DAD77	T Q D Y L K N K N I T	D T D V D Q F N K K M Q L Q K D R A R S W K W F Q V T E S		
UniRef90_UPI00047BBDB28	T K E I I L E E K G L L V	D E E G F F S N E M E K Q R E R A R K A R A V F A T L D K		
UniRef90_Q01XA0	Q E D M A R E H G L A I	D R E S F D T E M E Q Q R E R A R A S S W K G A E K A A V		
UniRef90_R6Z9K2	T V E I A A E G G A G H A V	D B D I D G F N R E M E A Q R E R A R A N V K W T E L S D S		
UniRef90_K7RNL0	T L E M A A E Q G L D V	D R A G F F D A L M A E Q K E R A K A D A A Y T E L R A K		
UniRef90_E1IER3	T Q R I A G E A G L T V	D E A G Y T A A M N E Q R E R S R A A A Q F K R G A D A		
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UniRef90_K0K939	T F A I A D G G V P N S N T G R G Y V L R R L L R R G A R Y A R K Y F N Y G N F F
UniRef90_UPI00034A3DC7	V H T I A D G V S A S N I G R G Y V V R R L I R R V V R H G R L V G I D G A F I
UniRef90_W0PF59	S F M I V D G V I P G N V G R G Y V L R R L I I R R A L R H G H Q L G K T T P F F
UniRef90_UPI0002F3A636	A F A V G D G A L P S N E G R G Y V L R R L L R R A V R Y A K Q I N I N R P F M
UniRef90_R5AF82	T I M T A D G V L P S N E G R G Y V L R R L L R R A A R H G K L L G I Q G E F L
UniRef90_C4R4M5	T F S L A D G G V P N N E G R G Y V L R R I L R R G A R Y A R K Y M N Y P I F F
UniRef90_G2FPS9	S F M L A D G I R P N N E G R G Y V L R R I L R R A I R Y A K K L L G I E K S F L
UniRef90_UPI00037D2056	S F A I A D G L V P S N A K A G Y V I R R I L R R A I R Y G Y S Y L N T E P F M
UniRef90_H1G6N8	S F L I S D G G V M P A N D G R G Y V L R R I I R R A A R H G H K L G L S E P F F
UniRef90_B0DQ01	T F A L S D G G V P N N V G R G Y V V R R I L R R G A R Y A R K V K I G C F F
UniRef90_B2WCE6	S F A I A D G G V P N N V G R G Y V V R R V L R R G A R Y A R K Y F E T D D F F
UniRef90_B7C7P0	T F A L S D G A N F S N S G R G Y V L R R V L R R A V R Y G L K L G L D E P F L
UniRef90_F4MN22	F F A I A D G Q P S N I G A G Y V I R R I L R R A I R Y G F T F D Q K K P F I
UniRef90_D1NSA7	L M I M S D G V R P S N A G R G Y V L R R I I R R T V E A M R V L G Y Q D P V M
UniRef90_W6K9S4	S F L I A D G V L P S N E G R G Y V L R R I M R R A M R H A H M M G A T D P L L
UniRef90_Q7U3R9	T Q L I C D G V T A S N L G R G Y I L R R I L R R V V R H G R L L G I D K P F L
UniRef90_UPI00047EC587	T F M I S D D I P S N E G R G Y V L R R I L R R A A R H G K L I G A K G T F L
UniRef90_UPI00022C97D4	T I A L A D G V P D N T G R G Y V L R R I L R R A V R Y T E K L N A K P G F F
UniRef90_D5A1C6	V H L I A D G V T A S N V G R G Y I L R R I L R R V V R H G R L I G I R G E F T
UniRef90_X8K6X6	V F M I A D G I I P S N E G R G Y V L R R I M R R G M R H S H L L G A K D P V F
UniRef90_W9DV97	S F L I A E G V L P S N E G R G Y V L R R I L R R S V V R A M R L G V N D P V L
UniRef90_UPI000362D6CD	L M L M T D G V T P G N E A R G Y V L R R I I R R A I R H G Y K L G T R A A F F
UniRef90_D7DL84	S F L I A D G V P P G N E G R G Y V L R R I I R R A I R H G Y R L G Q T S P F F
UniRef90_UPI00035D73B7	S F M I I D G I V P G N E G R G Y V L R R I I L R R A E R F A K S I G L P S G F I
UniRef90_R5ZB17	V F A L A D G C L F S N E G R G Y V L R R I I L R R M I R H G K L L G I K D K F I
UniRef90_UPI0002F285F9	I H L I S D G V I A S N L G R G Y I L R R I I L R R A R V R Y H E K L G A Q R G F F
UniRef90_H2ME04	T I A L S D G G R P D N T G R G Y V L R R I I L R R A V R Y G R E V V K A Q E G F F
UniRef90_A9T4K7	S F A I A D G S R P P G N E G R E Y V L R R I I L R R A V R Y G R E V V K A Q E G F F
UniRef90_H2BTE1	T F S I A D G Q L P S N T G A G Y V I R R I I L R R A I R Y G F T F D T K E P F I
UniRef90_H1HBE8	A F A I A D G Q L P S N N G A G Y V I R R I I L R R A V R Y G S E V R A P E A F F
UniRef90_UPI00042B67DB	S F A I A D G A S P P G N E G R E Y V L R R I I L R R A V R H G Y M L G A K D T F F
UniRef90_D1P5U5	A F L I S D G V I P S N E G R G Y V L R R I I L R R A I T N G K S L L G I K D E F I
UniRef90_X1BF3H	T F L I S D G V F P S N E G R G Y V L R R I I L R R A I V H F H Q K L M A K Q G F F
UniRef90_M0Z265	S F A I A D G S R P P G N D G R E Y V L R R I I L R R A V R H G R L L G Q S E L F L
UniRef90_H1PR78	T F L I I N D G V I P S N E G R G Y V L R R I I L R R A V R H F G H Q K L K T K P F F
UniRef90_K4A5A8	S F A I T D G S Q P P G N E G R E Y V L R R I I L R R A V R H F G H Q K L K T K P F F
UniRef90_UPI0002C2FACA	V Y L I S D G V V V P S N I G R G Y V V R R I I L R R A V R T G R M L G I K G D F I
UniRef90_D0RPJ5	C F L I A D G L M P S N E G R G Y V L R R I I M R R A M R H A N T L G S K D H V L
UniRef90_U7Q568	T F S M A D G A V P P G N N E G R G Y V L R R I I V L R R G S R Y A R K Y F N I G S F F
UniRef90_UPI000344DFFD	T M L V A D G V K P G N E K R G Y V L R R I I I L R R S I I R N M R L A A E D R H Y M
UniRef90_A0A022MGF6	L M L L A D G T A P P G N E G R G Y V L R R I I I L R R S V V R A M R R L G Y G D P A L
UniRef90_R6XQS5	T F L I I G D G I V P S N V D Q G Y I L R R I I I L R R A V R F G R I I D L P E R S L
UniRef90_Q2GJ36	S F L I A E G L T P G N E G R G Y V L R R I I I L R R A V R Y I Q V L V G D K F S L
UniRef90_W2RKT7	T F A I T D G A I P P N S E G R G Y V V R R I I V L R R G S R Y A R K Y F N V E S F F
UniRef90_C6XHC1	S F L I A D G L L P A N E G R G Y V L R R I I M R R A M C I Y A R R L L G Y T E P L M
UniRef90_X5J91	A F A I A D G Q P P A H A K A G Y V I R R I I L R R A I R Y G Y S H A I K E P F I
UniRef90_E8V2T5	T F L I S D G V I P L N E G R G Y V L R R I I L R R G I R H G R K L G A T D I F F
UniRef90_W1NES2	S F A I A D G S R P P G N E G R E Y V L R R I I L R R A V R Y G R E V V K A E E G F F
UniRef90_E2S1A0	M M L I L D G V T P G N E G R G Y I L R R I I L R R I I I R S A K L L G A K G A T M
UniRef90_U1SEC9	L M I M S D G V R P S N E G R G Y V L R R I I L L R R T M R S M K T L L G V Q E E V L
UniRef90_R7BTX2	T F L L I G D G I L P S N V D Q G Y V L R R I I I L R R A M R Y C R T L L D I D S A L
UniRef90_X6N048	T F A I R D G A Q P D S V G R N Y V L R R I I I L R R G V R Y G R E R G A K T T G F F
UniRef90_UPI00047807A4	S F L I A D G V M P S N E G R G Y V L R R I I I I R R G I R H G R K L G A T D I F F
UniRef90_C3XNS3	A F L L A Q G V N F D K E G R G Y V L R R I I I L R R A V R H G Y L L G L R K A F L
UniRef90_J6II13	A F A I A D G Q L P S N E G R G Y V L R R I I I L R R A I R Y G F T F G Q K E P F I
UniRef90_B1C814	V F M A S D G I L T S N E G R G Y V L R R I I I L R R A M R H G K L L G I E G H F M
UniRef90_Q8G5W9	L M I M S D G V R P S N V G R G Y V L R R I I I L R R T V R S M R M L G V T D P V L
UniRef90_UPI000364AD92	S F L I I A D G V M P A N D G R G Y V L R R I I I L R R A I R H G Y K L G Q K G L F F
UniRef90_L0ESGO	V F L I A D G V L P G N E G R G Y V L R R I I M R R A M C H A Q L L G V S E P F M
UniRef90_UPI000479DBFA	V M L I G D E A K P S N T G A G Y I L R R I I I L R R A V R H A R T L G L N K D Q I
UniRef90_Q7NXM2	S F M V A D G I L P S N E G R G Y V L R R I I I A R R A I R H G Y K L G Q K G L F F
UniRef90_Q487H5	S F L I I V D G V V P S N E G R G Y V L R R I I I I R R A I R H G H K L E A T G H F F
UniRef90_Q6D1T0	A F L I S D G V M P S N E G R G Y V L R R I I I I R R A A R H G N M L G A T D A F F
UniRef90_M2ZJD7	T F A I S D G G I P P N N V G R G Y V V R R I I V L R R G A R Y A R K Y F N T D S F F
UniRef90_V6SAC9	A F A I A D G Q L P S N T G A G Y V I R R I I I L R R A I R Y G F T F L N K E P F I
UniRef90_UPI000409EFCC	T F L I I A D G V V P S N E D R G Y V L R R I I I M R R A I A Q G H R L L G F E G E F L
UniRef90_E4UDT5	S F L I I A D G I L P T N E G R G Y V L R R I I I M R R A M C I Y A R L L G Y E D P L M
UniRef90_B8E226	T F L L I M G D G V V P T N E G R G Y V L R R I I I I R R S L S R R A R Y K H G I V K P F L
UniRef90_G7DVS8	T F A I L A D G G V P S N V G R G Y V L R R I I I L R R G C R Y I R K K F P I G S F F
UniRef90_F4EZY8	A I M I M D G I L P S N E G R G Y V L R R I I I L R R A V R H G R I L G I J H D K F L
UniRef90_Q1GSD9	S F L V A D G V L P S N E G R G Y V L R R I I I M R R A M R H A H L L G A K D P L M
UniRef90_H1Y9T1	S F A I A D G Q L P P S N N K A G Y V I R R I I I L R R A V R Y S Y Q Y L N F E P F I
UniRef90_UPI00047E7919	A F A I A D G Q L P P S N N G A G Y V I R R I I I I R R A I R Y G F T F L N K E P F I
UniRef90_M3VD47	A M L I G D G V L P G N D G R G Y V L R R I I I I R R R V V R S M R L L G A N Q P T M
UniRef90_B6FZ95	S F L I I A D G V L P S N E G R G Y I L R R I I I L R R A A R H G K L L G I K G T F L
UniRef90_H6N0P9	A M L I G D G V L P G N D G R G Y V L R R I I I I A G G S A A S G S N V G A D Q A T M
UniRef90_R7N723	V M L I G D E A K P S N V G A G Y V L R R I I I I I R R A V R H G R M L N L K T E D L
UniRef90_UPI0002554CE9	T F V L I G D P V T P S N V G A G Y V L R R I I I I I R R A V R H G R K L L G I E D R V L
UniRef90_A0A023BU17	S F S I I A D G Q L P S N T G A G Y V I R R I I I I I R R A I R Y G F T F D T K E P F I
UniRef90_I4ECC4	T F L I I A D G V L P G N E G R G Y V L R R I I I I I R R R V V R S M R L L G A N Q P T M
UniRef90_R6C050	V M L I G D E A K P S N A G A G Y V L R R I I I I I R R A V R H A R A L K L N K E H I
UniRef90_F6FVF3	L M V I G D G V R P S N E G R G Y V L R R I I I I I R R A V R R A V R L L G V D E V A L
UniRef90_D1AML1	A F L I I G D G V L P S N E G R G Y I L R R I I I I I R R A F G V I E R I F E K E D I F L
UniRef90_UPI00034A3FC6	V M L V G D G V L P S N E G R G Y I L R R I I I I I R R S I R N L R L L S G T E A F L
UniRef90_M7NF35	A F A V I G D G A F P S N E G R G Y V L R R I I I I I R R A V R Y A K Q L G D K P F M
UniRef90_Q9VLM8	T I A L I A D G G T P D N T G R G Y V L R R I I I I I R R A V R Y T E K L N A K P G F F
UniRef90_I3DJT1	T F L I I H D G V I P S N E G R G Y I L R R I I I I I R R A V R H G R L L G Q K E L F L
UniRef90_C7RMX6	A F A L I A D G V I P G N E G R G Y V L R R I I I I I R R A V R H G Y K L G A R A A F F
UniRef90_A3V9G2	S F L I I A D G V L P S N E G R G Y V L R R I I I I I M R R A M R H A H L L G A K D P V M
UniRef90_UPI00031C0FB3	T F L L I A E G V S F S N S D R G Y V M R R I I I I I R R A V R F G L L G F H R P F L

	90	100	110	120
UniRef90_V1CPZ6	S K L V D K V V E S S E K A Y P E L	G E Q E I F I K K I I S Q E E E K F I K T L		
UniRef90_R7KV60	Y K V A D T V I D E N K C A Y P E L	E E K R E Y I K K L I L N E E E S F A K T I		
UniRef90_K0K939	S Q L S P T L I D Q V K D I F P E L	T K D P S T I F E I I L D E E E A S F S K T L		
UniRef90_UPI00034A3DC7	N Q V A E T A M Q L S E A V Y P E L	R D R E S F I K A E E R E E T Q F L K T L		
UniRef90_W0PF59	H Q L V T D L V I E Q M G E A Y P E L	A K S A E H V A S V I R Q E E V R F F Q E T L		
UniRef90_UPI0002F3A636	F E L V P V V G E I M S D F Y P E L	V K G K T D F I Q K V I L K N E E E R F F H E T L		
UniRef90_R5AF82	A E L S K A V I T C S G E A Y P E L	L V D K Q D Y I F K I L S I E E E N S F Y K T I		
UniRef90_C4R4M5	S Q L A P A L I L E Q V K E T F P E L	D K N F D T I A E I L D E E E A S F S R T L		
UniRef90_G2FPS9	E S V F R I I Q R D Y S H A Y P E L	K E N E N F I L N H N L E E E K N F Q A T L		
UniRef90_UPI00037D2056	T K L V P T L A L Q F A D V F P E L	N A Q R D F V A T V I R E E E I A F L R T L		
UniRef90_H1G6N8	H K L V A P L V E V M G D A Y P E L	V I K A Q A Q V E Q V I L L E E Q R F Q E T L		
UniRef90_B0DQ41	S S L P V V V E T M G A V F P E L	T R K V D D I K E I I L D E E E E S F S R T L		
UniRef90_B2WCE6	S K I V P T L V I E Q M G D M F P E L	K K K Q Q D I V E I I L D E E E K A F A K S L		
UniRef90_B7C7P0	Y K L V P V V A D L M E D F Y P E L	Q E H V I E F N Q K L I K V E E E T F K K T L		
UniRef90_F4MN22	H L L V E I I S K Q L S D I F P E L	K K E K K L A Q N V I K K E E E S F L K T L		
UniRef90_D1NSA7	P Q L L P V S E A A M E P N Y P E L	A A T F K D V S E A A Y G E E D A F R R T L		
UniRef90_W6K9S4	W R L V P A L T A K M G Q A F P E L	N R A Q P L I E E T M K L E E T R F K K		
UniRef90_Q7U3R9	V T M G E A A I D L L K G A H P G	V I E R Q E V I L A E L Q R E E E A R F L E T L		
UniRef90_UPI00047EC587	S E L C D V V I D N S F G A Y A E L	K E K R A Y I K R V I K L E E E R F I E T L		
UniRef90_UPI00022C97D4	G S L V N V V N V N I L G D I F P E L	V K K D P Q Y I D V I L N E E E I Q F L K T L		
UniRef90_D5A1C6	T Q V A E T A I S L S Q D V Y P E L	T R E R E R V I K G E L Q R E E E S R F F L E T L		
UniRef90_X8K6X6	S D M A D R V I A V S G E A Y P E L	L V E K Q Q F I K K I I A V E E E K F A S T I		
UniRef90_W9DV97	S K L F D T L L N E M S M G N Y P E L	K R A E S L I K E T L K M E E E E K F L V L L		
UniRef90_UPI000362D6CD	P E L L P V S R D V M T A S Y P E L	H S Q W E R V S Q V A Y A E E E S F R R T L		
UniRef90_D7DL84	Y K L V P D L V K Q M G E A Y P E L	V I A N Q S R I M D M L K L E E D R F F E T I		
UniRef90_UPI00035D73B7	H K L V T D L A E Q M G E A Y P A L	V D Q G E R I S K T L L Q E E E Q R F L Q T L		
UniRef90_R5ZB17	A K L V P F V V K T N D H F Y P Y L	K E K E E K V T K M I L A E E E E R F F A S T L		
UniRef90_UPI0002F285F9	S Q L A L V G I Q L M K N T Y P E L	Q N N A Q R I F S E I D I E E Q R F L N T L		
UniRef90_H2ME04	A S L V D V V V D S L G D A F P E L	V K K D P D M V K D V I L N E E E A Q F L K T L		
UniRef90_A9T4K7	S G L V D I V V E V M G E A F P E L	K K K N Q A K I K E I I S E E E E S S F S R T L		
UniRef90_H2BTE1	Y K L I V E T L S S Q M G E A F P E L	M S Q K T L C E N V I I R E E E E Q S F L R T L		
UniRef90_H1HBE8	Y E L V E V L S A Q M G A F P E L	T S Q K E L V K N V I K E E E E T S F L R T L		
UniRef90_UPI00042B67DB	S R L V S I L V V E V M G D V F P E L	K Q K H E T R I V I A A E E E A S F G K T L		
UniRef90_D1P5U5	Y K L V P T L I K V M G T A A D E L	Q R Q Q A M V E K V I L K T E E E E Q F A R T L		
UniRef90_X1BFH3	T K I S E I V I N I M S S V Y P E L	K D K R D Y I L D V L E T E E E K K F Y K T L		
UniRef90_M0Z265	S S L V D F V F V R V M G D V F P E L	D L R S N I D H I K V V I K I E E E K F S R T L		
UniRef90_H1PR78	Y K M V D K V V S M M E N A Y P E L	Y K M V D K V V S M M E N A Y P E L		
UniRef90_K4A5A8	S S L V N V F V Q V M G D V F P E L	V K E N E K K I Q D I I R D E E E S F E N T L		
UniRef90_UPI0002C2FACA	P V V A A K V I E L S T H I N P	P D V R R T A A R I F E E L K R E E E L K F V Q T L		
UniRef90_D0RPJ5	S K M I D H L I K E M S S E Y N E L	D R A K D L I K E T I T N E E E K F Q S M L		
UniRef90_U7Q568	S K I L P A L V E Q M G H Q F P E L	I I K K Q E D I K E T I I D E E E E A F S S R T L		
UniRef90_UPI000344DFFD	H D L T A T A I R V M S E L Y P E L	R T N A E A I H S V I D A E E E K N F S D T L		
UniRef90_A0A022MGF6	V D L L A V A R D S M A P G Y P E L	V A D G F E R I A D R A A G E E E A F G A T L		
UniRef90_R6XSQ5	S K I A E Q Y I S Q Y Q D V Y Q Y L	L T N K D R I V S E L D K E E E I R F S N T L		
UniRef90_Q2GJ36	H E V V P V L T R E M G N A Y P E L	I D S A E R V A K V V L A E E E Q Q F A R T L		
UniRef90_W2RKT7	S K I V P T L V Q H M G G M F K E I	A A K E D E V K E I I L D E E E E L S F A K T L		
UniRef90_C6XHC1	M H L L P A L C T E M G S A Y P E L	I Q A K L L I E E T L R S E D E R F G K T L		
UniRef90_X5J91	H Q L V A V L A A Q M E G V Y P E L	L T H Q Q G Y I A Q L I Q A E E E A A F L K T L		
UniRef90_E8V2T5	H E M V Y A V R D E M Q V A Y P E L	I D S A E R V A K V V L A E E E A S F G R T L		
UniRef90_W1NES2	N G I L V N G V V K V M G D I F P E L	K Q H E V K I Q D I I A E E E A S F G R T L		
UniRef90_E2S1A0	E R F M N T V M D T M T P S Y P E L	I A D N R E R I L R V A V N E E E K A F L K T L		
UniRef90_U1SEC9	P H L L P V S K G L M S A S Y P D L	N D S F A D I E N A A Y G E E E D A F R R T L		
UniRef90_R7BTX2	V T L A K L Y V A K Y E E A Y P Y I	K E N E G R I V S E L E A E K D K F A K T I		
UniRef90_X6N048	H R L V D V V V D N F K D F F P E L	N A A K M E R V K R I I L D E E Q R F D L T F		
UniRef90_UPI00047807A4	Y K L V A P L A E L M G D A Y P E L	L H E R R S V I E K M L T V E E E Q F V K T I		
UniRef90_C3XNS3	Y E V V P G V V C D T M G G H Y G Y L	K E R K N A V Q E Q C K A E E E E R F F E T I I		
UniRef90_J6II13	Y K L V E T L A K Q M G G T F H E P E L	E K E F F L L V S V I K I E E E A S F N E T V		
UniRef90_B1C814	E G V A K K V I E I S G E A Y P E L	A R E K E T T I K L V S V I K I E E E A S F N E T V		
UniRef90_Q8G5W9	P T L F P T S K A A M E A S Y P E L	L N D T F H E V S E S A Y G E E E D A F R R T L		
UniRef90_UPI000364AD92	H K L V G A L A A E M G D A Y P E L	R I R Q A V I E D A L R Q E E E I F S R T L		
UniRef90_L0ESGO	W R L L P A L F A E M G T A Y P E L	L I R A E S L I I D V L K Q E E E V R F R K T L		
UniRef90_UPI000479DBFA	L G V A K I Y I D E K Y E S E H	L N K N Q K F V L T E L R E E E V R F E S T L		
UniRef90_Q7NXM2	H K I V A D L V A E M G E A Y P E L	R E K Q A H I E D A L R A E E I K F A E T L		
UniRef90_Q48TH5	H K L V A S L I I A Q M G E A Y P E L	A Q Q Q A I I E K K L L R I E E E Q F G R T L		
UniRef90_Q6D1T0	Y K L V A P L E V M G P A A E E L K K Q Q S V E Q A L K M E E E Q F A R T L	D F Q F L R T L		
UniRef90_M2ZJD7	S K I V P T L V E Q M G D M F P E L	I K K K Q A E V I E I L D E E E E L S F A K T L		
UniRef90_V6SAC9	Y Q L V E V L S N Q M G A F F P E L	V A Q K N L V S N V I K E E E E A S F L R T L		
UniRef90_UPI000409EFCC	T K Y V D V V V Q E T M G A A Y P E L	G R E R D T I L R W A Q A E E Q G F G R T L		
UniRef90_E4UDT5	M R L F P V L C S E M G S A Y P E L	E L I Q A Q Q L L E E T L K V E D M R F S K T L		
UniRef90_B8E226	Y K L V P V I V D I M K D A Y P E L	D I I E K K D Y I K Q V L I E E D Q F F L R T L		
UniRef90_G7DVS8	S T L M P T V V D Q M G G G F F P E L	I T K S A T D I K E I L D E E E V A F A R T L		
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UniRef90_M3VD47	G A I I I G K V I D L M A P S Y P E L	D A E R A H I V D V A V G E E E S S F A K T L		
UniRef90_B6FZ95	N G L V D E V I I K V S G D A Y P E L	V I K E D Y I K K V I K I E E E K F N E T I I		
UniRef90_H6N0P9	G A F I I G A A I I D L M A P S Y P E L	A D K R E H I V S V A V G E E E A S F A K T L		
UniRef90_R7N723	L T I A Q M Y I D I Y A E S Y P E L	L V I K N K E F V L S E L K K I D R F F E S T L		
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UniRef90_I4ECC4	G E M A E V V I I G M F G E H Y P E L	I E Q R D R I L R V I S H E E E R F F S R T L		
UniRef90_R6C050	L T I A Q G M Y I D I Y A E S Y P E L	L T K N R E F I L S E L K K I D R F F E S T L		
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UniRef90_D1AML1	Y R L V P V V A E I M K E A Y P E L	M E S E K I D Y E K V M K I I E E E K F F T V T L		
UniRef90_UPI00034A3FC6	H E L T E V S I D A M K D I Y P E L	L D L K A Q V I F G R V I D T E E K N F A D T L		
UniRef90_M7NF35	Y R L V P V V G S I M E S Y Y P E L	V T E K A E F I Q R V I K N E E D R F F H E T L		
UniRef90_Q9VLM8	A T L V N T V V D L L G D A F P E L	V K K D P Q H I I D I I N E E E L Q F L K T L		
UniRef90_I3DJT1	Y K M V V K K V V E Q F A V A Y P E L	T A N M E N I Q K I V K I E E E K F F S N T L		
UniRef90_C7RMX6	H R L V P D L V A E M G S A Y P E L	V S Q Q A R V T D V L R Q E E E V R F F E T I I		
UniRef90_A3V9G2	H R L V P S A L V Q Q M G A A Y P E L	G Q G Q R L I I E T L M N E E I R F K Q T L		
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	130	140	150	160
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UniRef90_K0K939	D R G E K L F Q Q Y A T A A S K S D K T L	N G K D V W R L Y D T Y G F P V D L		
UniRef90_UPI00034A3DC7	E R G E K L A E I L E A K P K Q	S G E D A F T L Y D T Y G F P L E L		
UniRef90_W0PF59	V N G M R I L N D E L A A L G K D G V L L	D G Q T A F R L Y D T Y G F P F D L		
UniRef90_UPI0002F3A636	H E G L N I L A S I M K K E K D N G S N M I	Q G K D V F R L Y D T Y G F P V E L		
UniRef90_R5AF82	D K G M E I L K E D M E E M K A A G E T T V M	S G E K S F R L Y D T Y G F P V D L		
UniRef90_C4R4M5	D R G E R L F E Q Y A I I A S K T P E Q T L	A G R D V W R L Y D T Y G F P V D L		
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UniRef90_H1G6N8	E H G L K H L E E G L G R I A D K T I P G G L	V F K L Y D T Y G F P V D L		
UniRef90_B0D0A1	D R G E K L F D Q F A T R A K E Q G K E L	N G R D V W R L Y D T Y G F P V D L		
UniRef90_B2WCE6	D R G E V I F E K Y A Q K A K V K G S D A L	P G D D W R L Y D T Y G F P V D L		
UniRef90_B7C7P0	K V G Q A I L L D D E I S K A K D G K L	S G E V V V F K L Y D T Y G F P F E L		
UniRef90_F4MN22	D Q G L V L L E N V I K N L K A K K	P G D K V F E L Y D T F G F P F D L		
UniRef90_D1NSA7	T N G L G L E I F D M A V K K A K D E D	D T D V I T G D T A F Q L H D T Y G F P I E L		
UniRef90_W6K9S4	L L D R G L G L L D E E T R G M E T G A E L	S G E V A F K L Y D T Y G F P L D L		
UniRef90_Q7U3R9	E R G E K L L A E V L A S R P T Q S G A Q A F E L			
UniRef90_UPI00047EC587	D S G I E I L L N E Y I Q E M M N A T S S K I L	S G D K A F K L Y D T F G F P I E L		
UniRef90_UPI00022C97D4	S R G R N L L N R T I L K L G S S N V L P G D V A W R L	Y D T Y G F P V D L		
UniRef90_D5A1C6	E R G E K L L A E L L E K Q P E Q S G Q D A F V L	Y D T Y G F P L E L		
UniRef90_X8K6X6	Q Q G I D I I Q G Y V D E M K Q E G K T V L	D G E K M F K L Y D T Y G F P P E L		
UniRef90_W9DV97	D R G I K I L N D E I L S K I D K V L P G D I A F K L	Y E T Y G F P I D L		
UniRef90_UPI000362D6CD	T A G S Q I F D L A A S R A K A E H A E T S G E D A F A L H D T Y G F P I D I			
UniRef90_D7DL84	E N G M E I L E T E A T M T S K A N N T L F N G D L A F K L	H D T F G F P L D L		
UniRef90_UPI00035D73B7	S N G M D I L G R A I A D L K E G D R L D G Q V A F T L	Y D T Y G F P F D L		
UniRef90_R5ZB17	K I G E K L L G E Y L S K D T D T S A E D A F K L S D T Y G F P P F E L			
UniRef90_UPI0002F285F9	U N I G E K L L N E I I A S G V K L S G S Q A F E L	Y D T Y G F P L E L		
UniRef90_H2ME04	S R G R R I L L D R K I L M S L G D C K T L P G D T A W L L	Y D T Y G F P L D L		
UniRef90_A9T4K7	V K G I E K F K K A A A E V K D G V L G A Q D A F I L	W D T F G F P I D L		
UniRef90_H2BTE1	D L G L V L L D N I I I E V T P G K T V S G K K A F E L	Y D T F G F P I D L		
UniRef90_H1HBE8	U N I G L H L L D N V I K Q T E G K V V S G V K A F E L	Y D T F G F P I D L		
UniRef90_UPI00042B67DB	V K G I E K F K K A A Q D V Q G K I L L S G Q D A F I L	W D T Y G F P L D L		
UniRef90_D1P5U5	E R G L Q L L D D E L A S L K G D T L E G E T A F R L	Y D T Y G F P L D L		
UniRef90_X1BFH3	I E G T K I L L E E N I K Q L K K L K K S V I P G D I A F K L	Y D T Y G F P I D L		
UniRef90_M0Z265	A K G Y E R F K K A A D A V K E N G G T V L S G Q D A F V L	W D T Y G Y P I D L		
UniRef90_H1PR78	D Q G M Q L V N Q E I E K L K A A G I T T K L D G E V T F K L	Y D T Y G F P Y E L		
UniRef90_K4A5A8	A K G Y E K F K K A A D A V K E N G G T V L S G Q D A F I L	W D T Y G Y P I D L		
UniRef90_UPI0002C2FACA	E R G E K F L D Q M L V I E K E S G T P Y L S G K D A F I L L	Y D T Y G F P P V E I L		
UniRef90_D0RPJ5	S N G M K I I H D E K N K I K N N T L S G E V A F K L	Y D T Y G F P P L D L		
UniRef90_U7Q568	D R G E R Q F Y A S V A V K N G G G A L S G A D V W R L	Y D T F G F P E D L		
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UniRef90_Q2GJ36	R R G T G L I E Q E L R G L K S G E V L S S G E I A F K L Y D T Y G F P L D L			
UniRef90_W2RKT7	D R G E K Q F E S Y A A K S K E K Q G Q K S L H G A D V W K L Y D T Y G F P V D L			
UniRef90_C6XHC1	D R G L V L L D G V L S H L G K D E I L N G D V A F K L Y D T H G P L D L			
UniRef90_X5J91	G T G L H R F N H L D P S K I H Q G V I E G R V A F E L Y E T F G M P L D F			
UniRef90_E8V2T5	Q L G L S Q M T N E T L S S G G A A A F R L W D T Y G F P M D L			
UniRef90_W1NES2	V K G I E K F K K A V Q Q D K K L S S G Q D A F V L E S G T R L F D D A V Q K S T S R K V L P G E K A F E L H D T Y G F P I D L			
UniRef90_E2S1A0	D N G T T I L D V A V S K A K K N G T A V S G A D A F S L H D T Y G F P I E L			
UniRef90_U1SEC9	E Q G L K E F D K I V K H D E L L Q K Q K V F S G E K L F Q L Y D T Y G F P I E M			
UniRef90_R7BTX2	D R G L I M L D D V L S T L E G K E P G D V V F K L Y D T Y G F P P A D L			
UniRef90_X6N048	E S G M A L F N K E I Q T L K R S N A T R F S G E V A F K L Y D T Y G F P L D L			
UniRef90_UPI00047807A4	E S G M K I I H D E K N K I K N N T L S G E V A F K L Y D T Y G F P P K D L			
UniRef90_C3XNS3	U N I G L L M D V M I Q N T T D K Q L S G S K D A F E L Y D T Y G F P P L D L			
UniRef90_J6II13	E Q G L L M L D V M I Q N T T D K Q L S G S K D A F E L Y D T Y G F P P L D L			
UniRef90_B1C814	N Q G L S M I D E L I A N L K G D T L G G L D A F K L Y D T Y G F P L E L			
UniRef90_Q8G5W9	E T G T I L D V A V N K A K D S A E P V V A G E D A F K L H D T Y G F P I E L			
UniRef90_UPI000364AD92	E N G M A L L D E A L A G G K T V L D G A T A F K L S D T F G F P I D L			
UniRef90_L0ESGO	E R G L V L L D E V S V G L E K H R L D G N I A F K L Y D T Y G F P L D L			
UniRef90_UPI000479DBFA	E N G M K E F K K I L D K T S T D S G K K Q I E G K D T F F K L Y D T F G F P V E L			
UniRef90_Q7NXM2	E T G L I M L E D D L G R G E V S G E D A F K L H D T F G F P I D L			
UniRef90_Q487H5	D R G M I L L E D I L A N L S G D I I K G D D V F K L Y D T Y G F P A D L			
UniRef90_Q6D1T0	E R G L S L L D E E I K N L K G D T L D G E T A F R L Y D T Y G F P V D L			
UniRef90_M2ZJD7	D R G E N M F E K Y A Q K C K A N N S K V L E G D D V W R L Y D T Y G F P V D L			
UniRef90_V6SAC9	D Q G L Q L L E N V V A E T K G N E V S G E K A F E L Y D T F G F P K D L			
UniRef90_UPI000409EFCC	E T G L I M L E D D L G R G E V S G E D A F K L H D T F G F P I D L			
UniRef90_E4UDT5	D K G I Y L L D E V S S S L E K N A I L D G S V A F K L Y D T H G P L D L			
UniRef90_B8E226	E Q G L S L L E D Y F R K A P S K T V W G G E F A F K L Y D T Y G F P I E L			
UniRef90_G7DVS8	D R G E K M F E L Y A D Q T R A K G K T E L S G K D V W R L Y E T Y G F P V D L			
UniRef90_F4EZY8	A Q G M E L L N G H I E D L K R E G K K V L P G E I G F K L Y D T Y G F P P W E V			
UniRef90_Q1GSD9	D K G L R L L D E A T A D M G R G D T L V G D V A F K L Y D T Y G F P Y D L			
UniRef90_H1Y9T1	D R G I N K F E E F I Q K F K D S K T T I R G N F A F E L S D T Y G F P P K D L			
UniRef90_UPI00047E7919	E Q G L Q L L E N V V A E T K G T E V S G V K A F E L Y D T F G F P K D L			
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UniRef90_F6FVF3	A Q G T T I L D T A V S K A K D G R T P T L S G A E A F Q L H D T Y G F P I D L			
UniRef90_D1AML1	K N G V E I L K E E V E K L K K D G K D F P S E S F K L Y D T Y G F P F E L			
UniRef90_UPI00034A3FC6	R S G T A L F N R A A E R T K V L S G E D A F R L H D T Y G F P I D L			
UniRef90_M7NF35	N E G L S I L S G I I G R V K E E G G S V I S G E D A F R L Y D T F G F P E E L			
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UniRef90_I3DJT1	D Q G L Q L V N E Q I A L A L Q A G K T K L D G E I T F K M Y D T Y G F P Y E L			
UniRef90_C7RMX6	E H G M S I L E E G E L A S L P G Q G V F N G T T A F K L H D T F G F P L D L			
UniRef90_A3V9G2	D R G L K L L D D E L L A G L P E D A A L P G E A A F K L Y D T Y G F P L D L			
UniRef90_UPI00031C0FB3	D S G M K V L E S K L Q S V P E G G V L P G E E A F L Y D T Y G F P L D L			

170 180 190 200

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UniRef90_K0K939	T T L M A E E A G L K I	D N E G F E K A R I E S Y E A S K A G G K S K G V E	
UniRef90_UPI00034A3DC7	T Q E I A E E E N G I G	V D V A A F E A E M E K Q R E R A R A A H E L D K L A E H	
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UniRef90_UPI0002F3A636	T E E Y A E E E S M K V	D H D G F E L E M E A Q Q R E R A R A A R Q G G V L G E I	
UniRef90_R5AF82	T K E I L L E E A G M R V	D E E A F A K E M Q A Q K D R A R K A R V Y D E L P T	
UniRef90_C4R4M5	T R L M A E E T G L K I	D D E G F E I A K E A S R E A S K G N G K	
UniRef90_G2FPS9	T E E I L L E E H G L S I	D M E S Y K T A A E E H R L Q A K E Q S Q Q M E K A K Q	
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UniRef90_B0DQ01	T R L M A E E L G L G V	D D N D Q E F E E A Q A W S K E A S K A S S K	
UniRef90_B2WCE6	T K L M A E E R G L K I	D D K E V E E A Q E K A R E A S K G D K	
UniRef90_B7C7P0	T Q E I A E E S G I T V S	H E D F D A Q M N K Q K E R A R A N A S Q N E E L M N F	
UniRef90_F4MN22	T T L I I A N E R G L E I	D D K E G F E K A M G K Q K S R S R G A T L S K I V I K E	
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UniRef90_F4MN22	S K K E E F V G Y D T L
UniRef90_D1NSA7	E S P I V F E G Y T E
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UniRef90_M2ZJD7	D V
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UniRef90_R7N723	S L V S E F T G Y D T L
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UniRef90_Q9VLM8	
UniRef90_I3DJT1	H G V T E F T G Y H S
UniRef90_C7RMX6	G P P T T F H G Y E R L
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UniRef90_U7UUW3	E I D A I Q D I I	K E I K L S G Y K Y G S D K N K D I S V R	V I T D H I R A M		
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UniRef90_Q1MXH1	E I D L F Q N L I	A A A A K A T G T Q D L S N K S L L V I	A D H I R S C		
UniRef90_G7J996	E T D L I L P I I	E K K A S E L A N I S Y G S D D Q T K R Y L K I	V I G D H M R A I		
UniRef90_U4KP00	E T D D L F L P I I	E K T E E L L S G L I K Y D G Q M A F K V	I V I A D H I V K T L		
UniRef90_C0BHB9	D T D V F T P L I	R E I E T L L T K S T Y G E K Q D T D R A I R	V I I A D H I R T V		
UniRef90_A0A059ANQ5	E T D L I I Y P I I	E K A S E L A N V S Y G A D D P T K L K L K I	I I G D H M R A I		
UniRef90_C0W3N6	E I D E V Y P V I	A A A A E A M S G K K Y G Q A Y E D D V R M	R V V A D H I V R S A		
UniRef90_UPI0004790F19	E I E P I S T L I	N E V E K L S G V K Y G E S K K D D M S I	R V I I T D H I L R A I		
UniRef90_L0B6U0	D I D I F K N L I	K S S A S L I N I D D L S N N S I L K V	I S D H I R A T		
UniRef90_S4NU55	D T D F F M P I F Q A I	Q E G T K I K V G S D D T D D M A Y R	V L V L A D H I A R T		
UniRef90_F2UQ47	D T D L F L P I F A A I K E K C Y G R E Y T G	K D M V D T A Y R	V V V A D H I R T L		
UniRef90_UPI00046A4E11	E I D Q V R P V I	L D R A A E L T G K R Y G A D H A D D V R	L R V I I A D H I V R S G		
UniRef90_U2EVJ4	E V D T V Q N I	M K H I S K I L A G V H Y G E D P R T D V	S L R V V V T D H I R S T		
UniRef90_R7K916	E T D V F A P A I	A E I R R L S G K E S D G S P E V L R A V	R I I I A D H I V R T A		
UniRef90_D5V5R8	F K P L V N V E V A K L A K K Q P T K E T I G	S Y R V I I A D H I L R A V			
UniRef90_UPI0003B64D01	D T D L F A P L L Q A A A D R S P R S P D A R E	K K V R V A L R V V V A D H I R T I			
UniRef90_F4PQ37	D T D I F M P I F A E I Q K V T G H P Y G K E	Q V D M A Y R V I I A D H I R T L			
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UniRef90_UPI0003B738E2	E I D Q V R P V I L D R A S E L S G R R Y G A D	H D E D D V V R M R V V A D H I V R S S			
UniRef90_UPI0003AD2B82	E T D L L A P T F R L V Q E M A G R R Y P G R	D D D S T S F R I V I V T E H S R S I			
UniRef90_D1AX74	E T D D L F I P I I E N I K E V L S I K E E E I	S T S V K V I I A D H I L K A S S			
UniRef90_D2S9G4	E I D E V A P V L H R A A E I A G V T Y G A K H	D D D V R L R V V V A D H I V R S G			
UniRef90_R6MA65	E T D L F I P I I M K G I E E I S H L P Y T Q	G M E F K K V I I A D H I R T L			
UniRef90_UPI00040DB6E0	E T D L F L P I I Q T E K I A D T S Y G K S V E	T D T S F K V I I A D H I R T V			
UniRef90_R4HZY0	E I D I F R I L I M T A V I K V T S V A D L	D N K S L R V I I A D H I R A C			
UniRef90_R6RYS2	D I D T M K A I R D R I C E L A G V E Y Q V	N E K D D V S I R I T D H I R S V			
UniRef90_A0A024N6L8	D T D I F T P L I F N A I H N G T K V R A D	D D V D G I D M A Y R V I I A D H I R T L			
UniRef90_10YQG5	T D I F T P L I F D A I Q T V T G R S Y D D T	D G K D M A Y R V V V A D H I R T L			
UniRef90_R6TTY8	E V D T V R N I	M K A V E D T A G V K Y G E N E K T D I S L	R V I I T D H I R S T		
UniRef90_UPI00042B1471	E T D L I Y P I I E K A S E L L A N M S Y A A D	E Q T K L K L K V V G D H I R A I			
UniRef90_UPI00037A681C	T D I F T P I F A K I E A I S G K Q Y N D E	M K E A V A F R V I I A D H I R T L			
UniRef90_X1T6L3	T S L F D G I M E K I K E I S E E K I K A S	L E F D K S T R I I A D H I A R A I			
UniRef90_R7QB38	E T D D L I L P I I M Q T V V A L V D T T F	E A E K E K T S L K V V G D H I R A V			
UniRef90_UPI0001CBA658	D T D L F Q P L I Q K C T S M P D S D N E N I	D M A Y R V L V A D H I R T L			
UniRef90_UPI000368C9C8	E T D L F Y P I I I V K M E D I S G F K Y Q	E D E E T F R I I S D H A K T L			
UniRef90_A0A023F3Q1	D T D I F M P L I F E A I I Q K G T G A P P Y	Y D K D G I D M A Y R V L V A D H I A R T			
UniRef90_R7KEE0	E T D D L F T P I I L A K I E E M S G I L Y N	G Q T S F K V I I A D H I I K A I			
UniRef90_R1DH37	D T D V F A P I I F A E I E A V T G A E P G	T A V V G R D T A Y R V V A D H I R T L			
UniRef90_UPI00035D2E7B	E T D D L F L P I I R S L I E G L S G V P Y	E K E K P A F R L I I A D H S R A V			
UniRef90_R6BCA7	D T D A F A H I I L A R I S E S G K N Y R D	N A E T T R A F R V V A D H I R T S			
UniRef90_W4YG12	D T D L F Q P L I I K R L I E E T C P V R	P K D Q D H I D T A Y R A V V A D H I A R M L			
UniRef90_T5AJR1	T D C F T P L I F H K I K D V T G V K Y G D	V D G I D T A Y R V V V A D H I V R T L			
UniRef90_K9UEL3	E T D D L I F P I I V Q T A A E I A G I D	Y N S D E K T K T S L K V I I G D H I R A I			
UniRef90_E8Q5T0	I D V F K N L I I I S I S E V M N V K	K S I A D R S L Y V I I A D H I R A C			
UniRef90_V8AA09	D T D V L R S L V E T T A N A L S T D P D G	S L R A S H R V V A D H I R S T			
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UniRef90_T0Z1S6			C		
UniRef90_W7ZNI6					
UniRef90_B6ABK6	D T D L F L P I I K E T E K L A N A P Y N G	N E A V D T A Y K V V V D H I R T V			
UniRef90_UPI00029ADE23	E I D I L K P I I F N Q I H S I F G M V G	D K D D K I D M S Y R V I I A D H I R T L			
UniRef90_R7GEC3	D T D E L F K P V M D K I L L E Q K V D N I E	S R R I I A E H I L R S S			
UniRef90_L0B547	D T D S F K K L I F A T A S K I G I G K V D	N S D N S L K V I I S D H I L R A S			
UniRef90_A7AQ83	D G D L F T D I F A Y V N K L M P H P Y G G	S D M I D V A Y R V V A D H A R C L			
UniRef90_Q2SSW4	E T D I F Y P T I I K K V I E Q L T N N Q F	K Q T R I I N T A F K V I I A D H I R A T			
UniRef90_B9FSH5	E T D L I F P I I E K A A S M A L V S Y T A	D D A M K T N L K I I G D H M R A V			
UniRef90_G8LR25	D T D I F F P I I I R D I K D S L G K I Y K	E E F Y Q D D V S I R I I A D H I R A L			
UniRef90_U7UHC5	E T D L I F P I I E A V R D L C R G N Y E D P	E Q K V A M K V I I A D H I R A V			
UniRef90_B5I150	E T D D L I Y P L I I E T A A A L I A G V D	Y R Q L E E Q K Q T S L K V I I G D H S R A I			
UniRef90_R4KCC2	E V D T I K K I L D E V C K I S K K V Y G E	S K S D D I S I R I I T D H I R S T			

50 60 70 80

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UniRef90_UPI0004761C4F	T F L I S D G V H P A N E G R G Y V L R K I L R R G I R H G R L L G Q E K P F M
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UniRef90_UPI00036CE485	A F A I A D G Q L P S N G G A G Y V I R R I L R R A I R Y G F T F D I K E P F I
UniRef90_I0YQ54	V Y M V S D G V F P G N K D R G Y V I R R I L R R S V Y G R K I G I N D A F L
UniRef90_W6A9F6	T F A I S D G V F P G N E G R G Y V L R R I L R R A I R N M R L L G A T E P V A
UniRef90_E4N7R9	L M L V G D G V T P G N E G R G Y V L R R I L R R A V R H G Y L L G F R T P F L
UniRef90_J0V0Y7	S F L L S Q G V S F G N S G R G Y V L R R I L R R A I R H S Y K L H S G P F L
UniRef90_M1LMJ6	S F L I I D G V L P S N E G R G Y V L R R I L R R A L R H S Y K L H S G P F L
UniRef90_B4JEE5	T I A L A D G G N P D N T G R G Y V L R R I L R R A V R Y A H V L D D R P F M
UniRef90_UPI0003709959	A F A I A D G A L P S N E G R G Y V L R R I L R R V R H G R L L G I D R P F T
UniRef90_B4WG64	M H M V A D G I S A S N V G R G Y V L R R I L R R S I R S M R L G A N D A C L
UniRef90_U2QDR0	L M L M T D G V R P G N E A R G Y V L R R I I R R A I R H S K M L G A N D A C L
UniRef90_F7XXK0	A F L A S S D G V I P S N E G R G Y V L R R I I R R G V R Y S E K L L N A Q P G F F
UniRef90_O01541	T I A L S D G G R P D N S G R G Y V L R R I I R R A I R H A R K L G V E G N F V
UniRef90_E0RRW1	T F I L G D G V T P S N V G Q G Y V L R R I I R R A A R F G K A L G I D E P F L
UniRef90_Q2RHZ3	T F L I A D G L L P G N E G R S Y V L R R I I R R A A R F G K A L G I D E P F L
UniRef90_I7ILU5	A F A I A D G A L P A N E G R G Y V L R R I I R R A V R F S Q S L E I N E P F M
UniRef90_D6YTZ8	A F A I A D G V Q P C P S N V D R G Y V L R R I I R R A V R Y G R M L D R P F L
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UniRef90_G8R1S8	A F A I A D G Q L P S N T G A G Y V I R R I I L R R A I R Y G F S Y L N M E A F I
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UniRef90_B0UGC4	S F L V A D G V L P S N E G R G Y V L R R I I M R R A M R H A Q L L G A R D P M M
UniRef90_Q03YQ2	T F A I G D G A L P S N E G R G Y V I R R I I R R A V V L H G Q K L G K Q F L
UniRef90_UPI00035EEAB5	S F L I A D G I I P E N E G R G Y V L R R I I R R A I R H G Y K M G A T K P F L
UniRef90_UPI00040D4EDC	V H L I A D G V N A S N I G R G Y I V R R I I R R V V R H G R L I G I N Q E F T
UniRef90_U7UUW3	T F M I S D T I I R P S N E G R G Y V L R R I I I R R A R H G I I L G I K K S F L
UniRef90_D9PGA3	S F L L A Q G V N F D K E G R G Y V L R R I I M R R A I R H G Y L L G L R E P F M
UniRef90_Q1MXH1	G F L I S D G V M P S N E G R G Y V L R R I I I R R A L R H G H L L G A T D L F F
UniRef90_G7J996	V F L I S D G V P S N V G R G Y V V R R I I I R R V V V R T G R L L G I K G D F L
UniRef90_U4KP00	S M A I A D G A I L S N E G R G Y V L R R I I I R R A I R Y G F T F N Q K E P F I
UniRef90_C0BHB9	Y F A I A D G Q L P S N N G A G Y V I R R I I I R R A I R Y G F T F N Q K E P F I
UniRef90_A0A059ANQ5	V Y L I S D G V I P S N I G R G Y T G R L G I R G D C R E N L E G A F L P A I
UniRef90_C0W3N6	I L S D G V I P S N I G R G Y T G R L G I R G D C R E N L E G A F L P A I
UniRef90_UPI0004790F19	T F L L V S D G V I P S N E G R G Y V L R R I I I R R A V R S M R L L G V Q D A A M
UniRef90_L0B6U0	A F L I V D G V I P S N E G R G Y V L R R I I I R R A S R H G K L G I K D N F L
UniRef90_S4NU55	T I A L S D G G Y P D N T G R G Y V L R R I I I R R A V R F S E K L N A K P G F F
UniRef90_F2UQ47	C I A I A D G G R P D K D G R G Y I L R L V L R R A I R H G C E Y G A P E Y F F
UniRef90_UPI00046A4E11	L M L I A D G V T P S N E G R G Y V L R R I I I R R V I L S M R L L G Y E G A S F
UniRef90_R7K916	V F M V S D G V V V P Q N E G R G Y V L R R I I I R R A A R H G R L L G I D P V L
UniRef90_D5V5R8	S F M L S Q Q G I L F G N E G R P Y V N R I I I R R A V R H G Y L L G F R E A F M
UniRef90_UPI0003B64D01	A F A I A D G V M P G N V G R G Y V I R R I I I R R A V R Y G Y Q T L A R E P F L
UniRef90_F4PQ37	S F S I A D G A V P P S S E G R G Q V L R R I I I R R A V R Y G K L N A P S G F F
UniRef90_K9EFI1	M M L I I N D T V R P G N D G R G Y V L R R I I I R R A V R S L R L G L D E P V L
UniRef90_UPI0003B738E2	L M L M S D G V M P S N E G R G Y I L R R I I I R R S V R A M R L L G V E A A T F
UniRef90_UPI0003AD2B82	A F L I A D G V M P A R D G R G Y V L R R I I I M R R A V R H A R R L G I D P V L
UniRef90_D1AX74	T F L I C D G V L P S N E G R G Y V L R R I I I R R A I R E N E I F N K S L T F L
UniRef90_D2S9G4	L M L I G D G V T P S N E G R G Y V L R R I I I R R A V R S M K L L G V D E A T L
UniRef90_R6MA65	T F A L A D G A V F E N V G R G Y V L R R I I I R R A S R M G R K L N N I N R E F L
UniRef90_UPI00040DB6E0	T F F A V A D G A L P S N E G R G Y V L R R I I I R R A V R V L R K Q I D I H E P F M
UniRef90_R4HZY0	A F L I S D G V I P S N E G R G Y V L R R I I I R R A I R H G Y L L G V K N T F F
UniRef90_R6RYS2	T F F M A S S D G I T P S N E G R G Y V F R I I I R R A A R H G R T L G I D G L F L
UniRef90_A0A024N6L8	S I A I S D G G R P D N T G R G Y V L R R I I I R R G V R Y N E K L S A P P G F F
UniRef90_10YQG5	S F A I A D G A Q P G N D G R N Y V L R R I I I R R A V R Y G Q E V S A K E G F F
UniRef90_R6TTY8	V F M I C D G V V V P S N E G R G Y V L R R I I I R R A A R H G R L L G I K G V F L
UniRef90_UPI00042B1471	V Y L I S D G V L P S N I G R G Y V V R R I I I R R V V R A G R Q D N L E G A F L
UniRef90_UPI00037A681C	S F S I A D G I L P G N T G R N Y V L R R I I I R R A V R Y G R T L G F T G P F L
UniRef90_X1T6L3	Y F L I S D G V T P S N E G R G Y V I R R I I I R R A V R Y G K L I E D Y F L
UniRef90_R7QB38	S H L I A D G V R P S N I G R G Y V V R R I I I R R V V R H A R L L G I E G P F T
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UniRef90_UPI000368C9C8	V F G L G D G V V V L A N D G R G Y V L K R I I R R A F Q K G K K I G L N Q P F L
UniRef90_A0A023F3Q1	T I A V S D G G T P N N T G R G Y V L R R I I I R R A V R Y T E K L N A K P G X X
UniRef90_R7KEE0	T F A L S D G A S F G N T G R D Y V L R R I I I R R S S R F G K Q L G F N E P F L
UniRef90_R1DH37	S T A I A D G A L P S N E G R G Y V L R R I I I R R A V R Y G R Q M G A E E G F F
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UniRef90_W4YG12	T V A I A D G C R P D S Q K R G Y V I K R I I R R A V R Y T E K L Q A P P G A L
UniRef90_T5AJR1	S F A I S D G A V P N N D G R G Y V I R R I I I R R G V R Y A R K Y A E I G S F F
UniRef90_K9UEL3	V H M N A D G I I R A S N V G R G Y I L R R I I I R R V V R H G R S I G I N D H F T
UniRef90_E8Q5T0	A F F L I K D G I I P D N E G R G Y V L R R I I I R R A V C H G R K L G V N G I F F
UniRef90_V8AA09	A F F L I A D G V M P S K D G R G Y V L R R I I I M R R A M R H L Q R G A T E P V F
UniRef90_T1CPI3	A F F L I V D G V L P S N E G R G Y V L R R I I I I R R A L R H L Q R G A T E P V F
UniRef90_T0Z1S6	A F F L V V D G I V P S N E G R G Y V L R R I I I I R R A I R H G Y R L G Q K Q P F F
UniRef90_W7ZNI6	A F F A I G D G A L P S N E G R G Y V L R R I I I I R R A V R F A K T I G I E K P F M
UniRef90_B6ABK6	S V A I S D G C C P G P P E K E N Y I V R L I R R A V R Y G R Q Y F N A G M W F
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UniRef90_L0B547	V F L I V D G V L P S N D G R G Y V L R R I I I R R A L R H S Y K L G H S G S F L
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UniRef90_B9FSH5	V Y L I S D G V I P S N I G R G Y V T G R L G I R G D G H G N S E G A F L P S L
UniRef90_G8LR25	V V S I Y D G Q L P S N T G S G Y V I R R I I I R R S I I Y A T R F L Y K K P F L
UniRef90_U7UHC5	T M L I S D G V L P S N E G R G Y V L R R I I I R R A V R F G R L L G I E A P F L
UniRef90_B5I150	T Q L I G D G V S A S N L G R G Y V I R R I I I R R V V R H G R L L G I E D R P F L
UniRef90_R4KCC2	T F M I S D D I L P S N E G R G Y V L R R I I I R R A S R H G K L G I E G N F L

		90	100	110
UniRef90_Q8EPS9		Y Q L V P V V G D I M K D F Y P E V Q K D A G Y I S N V I K V E E E R F H E T		
UniRef90_UP10002DF7A38		F E I A D M V M D S W G E Q Y K E E L K E N R E S I Q K E I I R R E E E K F L E T		
UniRef90_Q255X6		A E I P V S L V D S M G E A Y P E E R L S L S Q I V M T T T E E E N Y F K K S L		
UniRef90_UP10004761C4F		H E M V F A V R D E M Q V A Y P E E L K E S A E R V V S K V V L A E E E Q Q F A R		V I
UniRef90_G7SQU6		Y K F V D S L V R E M K T V F P E E L E N K K E Y Y I Q O H V V I K E E E E S S F F K	K V	
UniRef90_UP100036CE485		N E L V G V L A A Q M G E F F P E E L K S Q S Q S L V T N V I K E E E E A S F L R	T T	
UniRef90_J0YQ54		P A L A E T V I G L S D G C D P A V V A Q N S Q R I I A E L A E E E K F A S T	L R	
UniRef90_W6A9F6		Y R L V D I V I G T M K F E P Y P Y L I E K R N L V V E A I K T E E E N K F L K	T K	
UniRef90_E4N7R9		K D L I D I S I K A M A P Q Y P E E L E T D R K R I V E T V V V V A E E E N A F	L Q	T
UniRef90_J0V0Y7		H K I L E T L V S G M E N S Y P Y L R T E K E R V E E I L L R E E E D R F F K	T K	T
UniRef90_M1LMJ6		Y K I P D L I L E M G S A Y P D L I L K Q S E L V T K I L Q E E E D R F G	L K	T
UniRef90_B4JEE5		A S L V S T V V D L L G D A F P E E V K K D P Q H M D I I N D E E E L Q F L K	T	T
UniRef90_UP10003709959		Y E L V P V V G E I M K D H Y P E E V Q E K Q A F I Q K V V M K N E E V R F H	E T	H E T
UniRef90_B4WG64		T E V I A E R S I A L T E D A Y P A V V R T R E T A I K N E L D R E E E T Q F L	Q T	
UniRef90_U2QDR0		V E L L D V S R Q C M H V T E I L D E A W A R I Q D I A A A E E A A A F A R	T	
UniRef90_F7XXK0		Y K L V A P L I I K C M G S T A S Q L Q T K Q K I V E Q I L R A E E E H F A R	T	
UniRef90_O01541		A S L V P V V I S I L G E T F P E E L S R D P V T V M D I I N D E E E K Q F L	K	K
UniRef90_E0RRW1		H L P A Q V V V L D M Y K E Y Y P L L A E K R D F V L E E L R G E E E D K F L	K	K
UniRef90_Q2RHZ3		Y R L V D T V V A I M G G A Y P E E V A E Q Q E H A R V E Q E E E I R F H	E	H E T
UniRef90_I7ILU5		Y Q L V D I V A D I M E P Y P Y P E E L I Q G K S D F I K R V V I K S E E F R	F	
UniRef90_D6YTZ8		A D L V P L L I E L M G S D Y P E E L K Q S E N R I G E I L T T E E E N F I R	T	
UniRef90_D1AEX6		H E L T A V A I A A M G E Q Y T E E L I S T A A N I H A V V I D A E E E E R F	F	L Q
UniRef90_UP100036792B1		W R L V P A L I R Q M G V A Y P E E L G R A E A L T E T R T E E E S R F R A M	R	
UniRef90_U2RQD7		H K L V S V Y V V E T M K E G Y P E E L V E K A E Y Y E K V V K I K F S A R	T	
UniRef90_M7X1R6		S S L V P T L V V E Q M G G F F P E E I Q G K F D D L K E I L D E E E E S F A R	T	
UniRef90_A9URD2		S S L V P T V V E Q L L G D A F P P E E I K R D P E H V I E V L K A E E E K Q F R	R	T
UniRef90_G8R1S8		Y Q L V E I L A E Q M G E F F P P E E I Q S Q K Q L V E K V I H E E E E N S F L	R	T
UniRef90_H8HU55		G D L V M A T V R N A M G P S Y P E E I V A D F E R S R I A V E E E T A F R	R	
UniRef90_B0UGC4		Y R L V P T L V V R E M G Q A Y P E E V V R A E S L I S E T R L E E E T R F R	R	
UniRef90_Q03YQ2		T N L V P I V G D I M E S Y Y P E E V V K A N T A K I Q K T V A A E E E K R F N	A T	
UniRef90_UP100035EEAB5		N E L V K D L A E L M Q D A Y P A L T L T K N E F I T K T K D E E E I K F F	E T	
UniRef90_UP100040D4EDC		T L V V A E T A I Q L S E A V Y P N V R Q R E T A I K A E L Q R E E E T R F	L	E T
UniRef90_U7UUW3		A D L V C D Q I I L D S W S V E Y E E L V K E N R E S I K E V I R N E E E K F	L	E T
UniRef90_D9PGA3		Y K L V N V L A N N M S S H Y G Y L E E D R L E S I K S A M K L E E E E R F	F	D T
UniRef90_Q1MXH1		F K L V A A L V D E M G D A Y P E E L K Q N Q A Q L E K I L K L E E E Q F A K	T	
UniRef90_G7J996		P I L A Q K V V L E L S T H I D A D V D V K Q N A P R I L E E L K R E E E L	V Q	T
UniRef90_U4KP00		Y R L V P V E P V V K I M G P F Y D S V H K N Q A I V V E K V I H E E E E M K F	L	E T
UniRef90_C0BHB9		H L L V N T L S Q Q M G T A F P E E L I R E Q Q L A F N V I R E E E E N S F L	K	K
UniRef90_A0A059ANQ5		A E K V I D F G T H I D S D V K A R A P R I L E E I K R E E E Y R F V Q	T	T
UniRef90_C0W3N6		P T L L T A S K D V M K L S Y P E E L E T G W A Q S E V A Y A E E D A F R R	T	
UniRef90_UP10004790F19		Y N M V K L V I D N W K E Y Y Q E E L E E R E V Q S K I K I E E E E K F E E T	T	
UniRef90_L0B6U0		Y K L I P D L I H E M G T A Y P E E I V S G S N L I I R I L K Q E E E E R F I	I	E T
UniRef90_S4NU55		G S L V N T V V E L L G D V F P E E I T K D P E S I I Q I I N D E E E L Q F L	K	T
UniRef90_F2UQ47		A S L V P V V V D V L G D A F P E E I R K D P E E T I A V L K E E E E R Q F R	R	T
UniRef90_UP100046A4E11		S E L V F P V S R D A M Q A A Y P A V A V R D D F D I S R A A Y A E E E K T	R	L
UniRef90_U2EVJ4		Y Q V C D T V I D E N I G A Y P E E L I G E K R E Y I K K V I Q N E E E L R F E	K T	
UniRef90_R7K916		I R I V A E V Y V V G L Y G D V Y P E E I L K R N N S S K I T E E L A K E E E E K F	L	K T
UniRef90_D5V5R8		S K V D V L V I K I M G E H Y T D E L L K E Q A S F I K E Q I M R S E E E R F	F	R
UniRef90_UP10003B64D01		H T L V D P L V C Q M G D F A D F E E L L A G Q Q K D Y F A Q V I R S E E E S F	L	T
UniRef90_F4PQ37		A K L V D I V V V Q N F G D F F P E E L L R N R P Q H V V S V L E R E E E K M F A R	A	R
UniRef90_K9EF11		G E L V K T S K D S M K E A Y P D G L E K K N F D Q Y R V I T T E E E Q A F R R	R	T
UniRef90_UP10003B738E2		P E L F P A S R D A M S A A Y P G V S A D Y N R S Q A A Y A E E E T F	L	R
UniRef90_UP10003AD2B82		P A L T S S V I D T L G D A W P E L R Q S P I R Q T V G A E E E D R D	T	R
UniRef90_D1AX74		H N I V D S I I D N M K E A Y P E L L D E K R E Y I K N I I K S E E E D K F S	R	T
UniRef90_D2S9G4		P A L L P V S R D A M K A S Y P E E I E T D F A R I S S V A Y A E E E E A F R	R	T
UniRef90_R6MA65		S D L I D L V V E N Y K E I Y P Y L V G E S S S K V K D L I T K E E E L L F Q K	T	T
UniRef90_UP100040DB6E0		Y K L V P H V G S I M N E I D M G T V A F K L V Q N Q V K T T E E E Q F S R	R	T
UniRef90_R4HZY0		Y Q L V A P L I D I M G T V A F K L V E Q K S Q S F V I E Q V L K T T E E E Q F S	R	T
UniRef90_R6RYS2		A K L V A Q T V I D C S K D G Y P E E L E E K K K E I L K V L T T E E E N F N	K T	
UniRef90_A0A024N6L8		S S L V P T V V N L L G K T F P E E I H K D P Q A V M D V I N D E E E K Q F L	K	K T
UniRef90_10YQG5		V K L V D S V V A N F G G F Y P E E I L A K R D H I T D V I R E E E A S F S	R	T
UniRef90_R6RTTY8		S G I V A D V V A R E N L S E Y P E E I T E K L D Y I K K V I S E E E E R F V Q	A T	
UniRef90_UP100042B1471		P A I V A E I V M E L S T H I D S D V K I K A P R I L E E L K K E E E L H F V	Q	T
UniRef90_UP100037A681C		P Q L V D D V L V D Q M Q A V F P E E M G S R R E A I K E T L T R E E E S F N	R	T
UniRef90_X1T6L3		N D I G E A V V V S E Y S K I Y P E E L L K E K F S F N L I R D E E E N R F	T	K
UniRef90_R7QB38		T D V L V P V V A E L A R D A G P G V H D K L A E V T T E E E V R F	L	A T
UniRef90_UP10001CBA658		A S L V P I V V D T L G D A Y P E E I L T N P Q Q V I D V I N D E E E D L F L	K Q	K Q
UniRef90_UP1000368C9C8		Y R L V P T V V A D M M Q E F F P D D L K D K E T V I A Q M I K K E E E E K F	L	H T
UniRef90_A0A023F3Q1		S T L V P V V I D L L G D T F P E E V V K K G P Q N I I N I I N E E E E Q F	L	T
UniRef90_R7KEE0		T D V L V P V V D T L G D A Y P E E I L T N P Q Q V I D V I N D E E E D L F L	K Q	K Q
UniRef90_R1DH37		A S L V P I V V D T L G D A Y P E E I L T N P Q Q V I D V I N D E E E D L F L	K Q	K Q
UniRef90_UP100035D2E7B		Y R L V P T V V A D M M Q E F F P D D L K D K E T V I A Q M I K K E E E E K F	L	H T
UniRef90_R6BCA7		H E L V A F R V V V E L L M D D V Y P E E L R R R N E T T T I A Q V V V F Q E E	E K	F D T
UniRef90_W4YG12		G K I A E T V I I S D Y G E V Y P E E L L R E N E A R I R E L D T E E E A R F Q	R	T
UniRef90_T5AJR1		G S L V H L V V I S L G N T Y P E E L L E E D P V Y I D V I N N E E E Q F	L	T
UniRef90_K9UEL3		S K I L P A L V V E H M G E Q F P E E L V K K Q Q D K E I L E E E E E A F A	R	T
UniRef90_E8Q5T0		T K V V A E T A I V L S E S E A Y P N V R S K A D S K A E L Q R E E E T Q F	L	K T
UniRef90_V8AA09		T K V V P A A V G S L S A A F P E E L L A E Q Q D H V V Q A V I A D E E E A A F	S M	
UniRef90_T1CPI3		H E L V A F R V V V E L L M D D V Y P E E L R R R N E T T T I A Q V V V F Q E E	K F	E D T
UniRef90_T0Z1S6		G K I A E T V I I S D Y G E V Y P E E L L R E N E A R I R E L D T E E E A R F Q	R	T
UniRef90_W7ZN16		G S L V H L V V I S L G N T Y P E E L L E E D P V Y I D V I N N E E E Q F	L	T
UniRef90_B6ABK6		S K I L P A L V V E H M G E Q F P E E L V K K Q Q D K E I L E E E E E A F A	R	T
UniRef90_UP100029ADE23		T K V V P A A V G S L S A A F P E E L L A E Q Q D H V V Q A V I A D E E E A A F	S M	
UniRef90_R7GEC3		H E L V A F R V V V E L L M D D V Y P E E L R R R N E T T T I A Q V V V F Q E E	K F	E D T
UniRef90_L0B547		G K I A E T V I I S D Y G E V Y P E E L L R E N E A R I R E L D T E E E A R F Q	R	T
UniRef90_A7AQ83		G S L V H L V V I S L G N T Y P E E L L E E D P V Y I D V I N N E E E Q F	L	T
UniRef90_Q2SSW4		S K I L P A L V V E H M G E Q F P E E L V K K Q Q D K E I L E E E E E A F A	R	T
UniRef90_B9FSH5		T K V V P A A V G S L S A A F P E E L L A E Q Q D H V V Q A V I A D E E E A A F	S M	
UniRef90_G8LR25		H E L V A F R V V V E L L M D D V Y P E E L R R R N E T T T I A Q V V V F Q E E	K F	E D T
UniRef90_U7UHC5		G S L V H L V V I S L G N T Y P E E L L E E D P V Y I D V I N N E E E Q F	L	T
UniRef90_B5I150		S K I L P A L V V E H M G E Q F P E E L V K K Q Q D K E I L E E E E E A F A	R	T
UniRef90_R4KCC2		T K V V P A A V G S L S A A F P E E L L A E Q Q D H V V Q A V I A D E E E A A F	S M	

	130	140	150	160
UniRef90_Q8EPS9	N D G L I I L L A S I I I E E R K G S E V F P G E E V F R L			
UniRef90_UPI0002DF7A38	D G G L V R L N A H I E E M K E S G E K L L D G K K A F K L			
UniRef90_Q255X6	H R G G N G L L Q Q V L S S S T S S L I S G E D A F K L			
UniRef90_UPI0004761C4F	A I A S A K F D Q L L D A T E T A E W K T V H G P S A F R I			
UniRef90_G7SQU6	E K G E E R M K H L I I K A K E K N K K I I D G S S L F K L			
UniRef90_UPI00036CE485	D Q G L Q L L D N V I A Q T Q G N E V S G A K A F E L			
UniRef90_I0YQ54	E A G M S G S L D Q F L L W G D G S T A T V S G A A A F E L			
UniRef90_W6A9F6	T K G Q E A L A N I L K K T K K I S G K E A L L L F E S Y G F P I E L			
UniRef90_E4N7R9	R S G T S L L D A A V T E T K Q S G G A V L S G E Q A F K I			
UniRef90_J0V0Y7	E L G I Q L F E S E I V N T K D I F S G E T A F K I L			
UniRef90_M1LMJ6	A K G M K I L N A S I S K I D S G N K L I D G I T T F N L			
UniRef90_B4JEE5	T R G R N L L N R T I E K L G T S Q T T I P G D V A W R L			
UniRef90_UPI0003709959	S D G L T I L N K V M N D A E S K Q Q T M I N G S E V F R L			
UniRef90_B4WG64	A R G E K R L A D I L L A E Q P K Q V S G K D A F E L			
UniRef90_U2QDR0	S S G T Q L F D T A V A E T R A S G S L V L P G D R A F Q L			
UniRef90_F7XXK0	E R G L Q L L E K E L A K I T G D A L D G D I A F R L			
UniRef90_O01541	S R G R V L F Q R A V Q S L P E G T M T F P G D V S W R L			
UniRef90_E0RRW1	Q K G E H E F E K M L P N L L K N P K K V I P G R I A F R L			
UniRef90_Q2RHZ3	N D G L K V L N G I L E R A R Q E G R E V V S G L E A F T L			
UniRef90_I7ILU5	E E G L A I L N N L V I A K A K D S T Q E I N G K D A F K L			
UniRef90_D6YTZ8	R R G G N I L N Q I I D E A K K E H R Q I T G E E A F K L			
UniRef90_D1AEX6	R T G T A I F D A A V A E T K R A G K Q V L S G S Q A F T L			
UniRef90_UPI00036792B1	D R G L H L L A E E T A K L G H K Q P L P G E V I A F R L			
UniRef90_U2RDQ7	K N G T E L L E S E I V K L K D E N K R E L S S D V S F K L			
UniRef90_M7X1R6	D R G E K L F E S Y V Q Q A Q K E G S T T L R G A D A V W R L			
UniRef90_A9URD2	N R G R R L F Q R A A D K A T D G V I D G H V A W Q L			
UniRef90_G8R1S8	E Q G L S R L D Q I I A E T D G K M V E G A K V F E L			
UniRef90_H8HU55	A S G S R L F E E V V A S S T K K S G A T V L S G S D A F T L			
UniRef90_B0UGC4	E R G L S I L I D A E T R D L S E G Q N L S G E T A F T L			
UniRef90_Q03YQ2	T G G L S L L I N D V I K E A K K T Q G T Q I S G A D A F K L			
UniRef90_UPI00035EEAB5	E K G I G I L D E A I I N N I S G D T I P G D V V V F K L			
UniRef90_UPI00040D4EDC	E R G E K L L A E I I T K A T P T N L P L T K G E D A F V L			
UniRef90_U7UUW3	D Q G M N I L D T Y V K N I G K E K T L S G Q D A F K L			
UniRef90_D9PGA3	E A G I T L F N K E L E N T K N I F S G E V A F K L			
UniRef90_Q1MXH1	D N G G M K L L E E A I A E L K G D T I P G E T V F K L			
UniRef90_G7J996	E R G E K L L E E I T S A E R S G T V P Q C L A G E D V F I L			
UniRef90_U4KP00	S S G E K H L D E A I L E K T T D V L S K E D A F K L			
UniRef90_C0BHB9	D Q G L V L V L E S L I T T N S K S K K I D G S K V F E L			
UniRef90_A0A059ANQ5	E R G E E L L E Q M I D D R E K G T V P C L A G E D A F L L			
UniRef90_C0W3N6	A A G T T I L D T A V V A A K E G T K P V V P G S V A F E L			
UniRef90_UPI0004790F19	D Q G L N I L K E Y I I K E L T D K K L D K L D G I K A F K L			
UniRef90_L0B6U0	A N G M K I L N S N L L N N M K S G D I F S G D I L F N L			
UniRef90_S4NU55	S R G R N L L N R T I E K L G D S K T V P G D V A W R M Y			
UniRef90_F2UQ47	S R G R R Y F K R A V A A V G E D V G V I D G D T A W R L			
UniRef90_UPI00046A4E11	A S G I Q I L D T A V D A A K A G A A A V P G D T A F L L			
UniRef90_U2EVJ4	D Q G G M D M L D H I S A E Q I K A G K A V L S G D E A F K L			
UniRef90_R7K916	I G G E R E F N R L V E K L S G D V I D G A S A F R L			
UniRef90_D5V5R8	A S G M T L F N E E L I N T K K L F S G E V A F K L			
UniRef90_UPI0003B64D01	G T G L S F F E R L T P Y V H A A A D G R L S G E I A F L L			
UniRef90_F4PQ37	D R G I V E F D R M V D K V K Q Q G S K V F P A S N A W Y L			
UniRef90_K9EFI1	E T G T E M F A N A V A E A K K K G K P T L A G S A A F T L			
UniRef90_UPI0003B738E2	A S G S S V L D L A V T K T L A V A K T T G P G D T A F L L			
UniRef90_UPI0003AD2B82	R Q G S Q L L D A A I G R A T T T I S G R T A F E L			
UniRef90_D1AX74	K S G T E I L F E E I K K C K S E N I S K L P S D V S F K L			
UniRef90_D2S9G4	S S G T A L F D T A V R E A R A A G T A S L S G D Q A F S L			
UniRef90_R6MA65	L S G E K H L E E L F Q N S T K V I S G K D A F K L			
UniRef90_UPI00040DB6E0	N D G L Q I L T E I L I R E S K E G K N V F P G T E V F R L			
UniRef90_R4HZY0	V R G M A L L D H E L N R L Q D E T L D G E I A F R L			
UniRef90_R6RYS2	D Q G L K I L S D M E D K L T A S A G T T L S G S D A F K L			
UniRef90_A0A024N6L8	S R G R T L F Q K A V A G Q G H N I L P G D V A W R L			
UniRef90_10YQG5	Q K G I E R K K A A A N A S G G S F S G K D A F E L			
UniRef90_R6TTY8	D A G L K R L P E I A D R M S V E A L K M V D G K E V F R L			
UniRef90_UPI00042B1471	E R G E I L L E K M S N A Q K S G T M P C L S G K D A F L L			
UniRef90_UPI00037A681C	D R G L Q L F E N R G W Q R Y T K E P A V L S G D F A F E L			
UniRef90_X1T6L3	K E G S K V L I Q K I N R I K K D N G K Y L D P E D A F R L			
UniRef90_R7QB38	E R G E D C L A D V L A D M K A A K K E V V S G E D A F E L			
UniRef90_UPI0001CBA658	K K G R K F L D K K I S K L K E P R I L P G D I A W K M Y D G F G P I D L			
UniRef90_UPI000368C9C8	K E G E V K I L E L T E D N K I S S N E N V F K L Y D T Y G L P K E V			
UniRef90_A0A023F3Q1	S R G R N V L N K T I S K L K D T K I P G D V A W R L Y D T Y G F P V D L			
UniRef90_R7KEE0	E Q G M S K L D D I L E T V N D K V V S G Y D A F K L Y D T F G F P L E L			
UniRef90_R1DH37	S R G I K E F N S R A E A I K Q A G G G G F D G A S A F F L Y D S M G F P L D L			
UniRef90_UPI00035D2E7B	A L G F A R L E E L L E E A R A K N A R T I P G R E I F R L Y D T Y G P I D F			
UniRef90_R6BCA7	T N G M R E F E R I K G K F E N G I I D G K N A F R L F D T F G F P I D L			
UniRef90_W4YG12	K K G E K Y L K K A I T E L S S Q T V L P G D I A W K M Y D A Y G F P L D L			
UniRef90_T5AJR1	D R G E A Q F E R Y A A K A L K D N A K K L D G D I V W R L Y D T F G F P V D L			
UniRef90_K9UEL3	E R G E K L L A D L I I D V K A K G I T Q I N G A D A F K L Y G T Y G F P L E L			
UniRef90_E8Q5T0	N K G L K L L R K S L I E L K N N K I L S G R V A F Q L Y S T Y G F P L D L			
UniRef90_V8AA09	E R G M S L L E D E T A R V A E G G A L P G D V A F K L Y D T F G F P L D L			
UniRef90_T1CPI3	E E H G M K V F F E E V A A R A Q G G M I A G A D A F R L Y D T Y G F P V D L			
UniRef90_T0Z1S6	E H H G L A V L D E A L R L N A E H L S G E V I F R L A D T Y G F P V D L			
UniRef90_W7ZNI6	H E G L V I L V E I M K K A K E N N E Q T I T G K D V F R L Y D T Y G F P V D L			
UniRef90_B6ABK6	G K G I E R F N R V T N K L L K S S S P I F P A N E A F Q L Y S T Y G F P M D L			
UniRef90_UPI00029ADE23	E S G L G R F R K L V D Q A K R D G S P T I S G D A A F D L H Q T D G F P I E L			
UniRef90_R7GEC3	S H G E K E F Q K A I N K A K Q E N K E K I I S E G A V V V F K L Y D T Y G F P P E V			
UniRef90_L0B547	I H G M K I L N S A I S K V E H G N Q L D D D I V F S I L Y D T Y G F P I D L			
UniRef90_A7AQ83	D K G C D R F R K M V A K T E N S K D L V V S G A D A F K L Y S S F G F P P D L			
UniRef90_Q2SSW4	S K G Y D L L E N I I K T K N T V S D S K D A L L L F E S Y G F P I E Q			
UniRef90_B9FSH5	E R G E K L L D E L L D E A L N G G K P C L S G K D V F L L Y D T Y G F P V E I			
UniRef90_G8L2R5	E K G Y E R F H H I I K T K E K N K K I I D G K S I F Q L Y D T Y G F P I K L			
UniRef90_U7UHC5	A Q G L E L L N G M I E A R G E S T V L D G A Q V F R L Y D T Y G F P V E I			
UniRef90_B5I150	E R G E K L L A D V L I A T G P R Q I S G D Q A F E L Y D T Y G F P L E L			
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170 180 190 200

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UniRef90_Q2RHZ3	T E E I A G E G G F K V	D R D G F E K A M A E D V K A Y D F A L A F A G A L E D	
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UniRef90_D1AEX6	T L E M A A E Q G L S V	D E E G F R R L L E E Q R Q R A K A D S V L G E L L D A	
UniRef90_UPI00036792B1	T Q D A L K A E G R L V	D V E G F F Q R A M E A Q R E A A T E A V W F D L R E K K	
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UniRef90_B0UGC4	T Q D A L K S R G I G V	D T D A F K A A M E R Q R A E A A T E T L W Y A L R E R	
UniRef90_Q03YQ2	T Q E Q A E D A G L T V	D V D R Y N D E L	
UniRef90_UPI00035EEAB5	T A D I A R E R R N L Q I	D E A G F T A S M K H Q K E S S K A G S S F S K L P A A	
UniRef90_UPI00040D4EDC	T Q E I A A E E N G L T V	V D I K G F E T A M E E Q R R R S Q D A H E L D Q L A E H	
UniRef90_U7UUW3	T K E I I L A E R G L K V	D E E G F F E L L M E M Q R Q R A R Q A R D M D N I G W T	
UniRef90_D9PGA3	T E D M L R E L E I G L	D K D E F E K H M T M Q R E Q	
UniRef90_Q1MXH1	T A D I A R E K D L K V	D E A G F E S C M E E Q K	
UniRef90_G7J996	T K E V A A E E R G V S I	V D M N G F D I E M E K Q R R Q S Q A A H N G T N I A D N	
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UniRef90_A0A059ANQ5	T I E V A A E E H G V T	V D M N A F D T E M E K Q R R R S Q A A H H A I K L E V G	
UniRef90_C0W3N6	T L E M A A E Q G V E V	V D E L A F R N L M A E Q K E R A D I T R A F Q E I E K A M	
UniRef90_UPI0004790F19	T K E I L E E E G G L S I	D E S A F N E E M E K Q R D R A R K A R G D S D D D N G I	
UniRef90_L0B6U0	T A D V C R E H G I S V	D I E S F E L A M S K Q R D K A R L S G K F K S I N Y S	
UniRef90_S4NU55	T Q L M C E E K G L A I	D M E A Y G K A K K E S I L S S Q G K S V G E E	
UniRef90_F2UQ47	T I V M A E E R G L K V	D M D G F E A A K A R A V E I S R A G G A A G E	
UniRef90_UPI00046A4E11	T L E I A A E E A G V E V	D R E V F T E L M Q E Q R D R A R D S V Y K E L R G L	
UniRef90_U2EVJ4	V R E I V A E R E I G L	L D E A T F N E L M E Q Q R Q R A R A A W S E D V T A E L	
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UniRef90_R6RYS2	T Q L M A E E R G L L V	D F F E V F E N C R Q K A	
UniRef90_A0A024N6L8	T E L M A E E M G L K L	D K K A F E A C M E E Q R Q R S R A A G K A	
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UniRef90_R7QB38	T I L M C N E K G V S V	D M E G Y E E V K E K T H Q I T S Q G G I K N Q L E Y	
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UniRef90_K9UEL3	T Q E I I A A E E Q G L T V	T Q D C I C H E Y N I K I D Q L E F D Q I M L K E K K Q S Q K L N R F D I T I P I	
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UniRef90_T1CPI3	S A D I A R E R G L T V	T D M P G F F E Q A M H A Q R E R A R A A S Q F E E L V S T	
UniRef90_T0Z1S6	T A D I A R E R G A T L	T D R E G F F E R A M T Q Q R E R A R A A S R F S G V D Y D	
UniRef90_W7ZNI6	T E E Y V I E E E G G L H I	T E E Y V I E E E G G L H I H R E E F E K E M A Q R N R A R S M G V Q E D V F G D L	
UniRef90_B6ABK6	T E L L I A S E E G M F D H E G F K K C M E N H Q L A S		
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UniRef90_R7GEC3	T S E L L A K E N G M K V	T D M Q E F N E L F K A H Q E K S R L G S A Q K F K G G L	
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UniRef90_A7AQ83	T Q L M A R E E M G L D V	T D I D G F N E H F K R H Q L S E K	
UniRef90_Q2SSW4	T I E I I S E L S N V T V	T D I E G F K K L L E Q T K Q A T R N A R K D L K A W D L	
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UniRef90_U7UHC5	T Q E I I A A E E Q G L L S I	T D D A G F F E A A M	
UniRef90_B5I150	T Q E I I A A E E Q G L T V	T D L E G F F E A A M E A Q R Q R A K A A A V S D L A A D	
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UniRef90_G7SQU6	N K N E N F I G Y D F L
UniRef90_UP100036CE485	E G N T E F V G Y D Q L
UniRef90_I0YQ54	L G R T S F I G Y E H
UniRef90_W6A9F6	T I P S K F I G W E T
UniRef90_E4N7R9	A G A S V F T G Y A H
UniRef90_J0V0Y7	T G D S E F
UniRef90_M1LMJ6	G L N S I F V G Y D H
UniRef90_B4JEE5	H A I S E
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UniRef90_U2QDR0	A G E T N F V G Y S E L
UniRef90_F7XXK0	D K T T C F C G Y E K L
UniRef90_O01541	D V
UniRef90_E0RRW1	A D H T E
UniRef90_Q2RHZ3	I S G T A F T G Y D Q L
UniRef90_I7ILU5	T T E S K F V G Y D
UniRef90_D6YTZ8	F A S C E F L G Y E E
UniRef90_D1AEX6	G G K V D F L G Y
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UniRef90_U2RDQ7	H G K T E F V G Y E K
UniRef90_M7X1R6	
UniRef90_A9URD2	
UniRef90_G8R1S8	E K E E F I G Y D
UniRef90_H8HU55	A G A T E F T G F D E L
UniRef90_B0UGC4	V G A T E F G Y E A
UniRef90_Q03YQ2	
UniRef90_UP100035EEAB5	S G E T E F G Y E L L
UniRef90_UP100040D4EDC	I H P T E F L G Y T L L
UniRef90_U7UUW3	N K E S Q F V G Y E S
UniRef90_D9PGA3	
UniRef90_Q1MXH1	
UniRef90_G7J996	V P D T E F I G Y E S L
UniRef90_U4KP00	R E P S V F I G Y E
UniRef90_C0BHB9	D N V E E F V G Y D H L
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UniRef90_U2EVJ4	D L P T A F V G Y E K L
UniRef90_R7K916	G E A T T
UniRef90_D5V5R8	Y G V N E F V G Y E
UniRef90_UP10003B64D01	G E A S V F V G Y D R L
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UniRef90_K9EFI1	N G N T A F L G Y T E
UniRef90_UP10003B738E2	A G E T I F T G Y E S L
UniRef90_UP10003AD2B82	H G L T D F V G H T S
UniRef90_D1AX74	N G K T L F T G Y D T L
UniRef90_D2S9G4	H G P T D W R A Y D T L
UniRef90_R6MA65	K E E S K F V G Y D K L
UniRef90_UP100040DB6E0	T V D S D F V G Y D
UniRef90_R4HZY0	D I S S G F S G Y
UniRef90_R6RYS2	S I T S E F V G Y D T L
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UniRef90_C5WDJ1	W K L V K P L I E V M D I A G K I L Q I K T H I T S V I L K I E E E E I F N I T L			
UniRef90_D3PPT2	Y R L A E V V A Q V M G G V Y P E L K E N L E G V Q K Q I K I E E E E Q F L R T L			
UniRef90_R5N874	S G L I D L D V E I L K D M Y P E E L V S K S K E E I K E V I I Q E K D K F I K T L			
UniRef90_E3GG93	Y D V A K E V V R V S A D A Y P E L L A E K Q D Y I Q K L I R I E E E E R F K E T I			
UniRef90_D0JBR0	Y Q F V D S L V K E M K S Y F P E L L M E K K E Y I Q K N V I R I E E E E L S F L K V			
UniRef90_D3SAQ6	Y Q M V G D L V R V M G E A F P E E L L A E A Q A R V E Q V L E K E E E R K F L E			
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UniRef90_P57483	H K L V V S S V I H V M G K T G D I L K E K Q E K I V E N V L K I E E E E M Q F S Y T L			
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 D R G E R Q F E I Y A Q Q A K E S G S G K L H G A D V W R L Y D T F G F P V D L
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 D K G I V E F K K M C D A L G D Q K T F P G A D A F T L F A E R G F P V D L
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 D Q G L S L L E K E L D S L I E Q E E K V F P G Q G A F K L Y D T Y G F P Y D L
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UniRef90_A0A024UJL5	D T D L F M P I F N T I Q K S K A P Y S G S F P T D T G Y R I L A D H A R M I			
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UniRef90_K1QT13	I T A D K L G T I M E P V E T A Y A I A D H A R C I			
UniRef90_D5E9Q1	L L W P M V E Q L Q K V T G K S Y A E A T T A M R V V V D H L R G A			
UniRef90_F4CNU2		A I Y I V A D H T R C L		
UniRef90_Q2NEW4	T D L F L P I F S E L K E H S S K D I Q E E N E I D M A Y R V V A D H C R T I L			
UniRef90_S7XVZ2	L M E L R K K V A S S I G M K L S A I M E P V E K V Y A I T D H T R C L			
UniRef90_Q8PWU0	D T D L F V P I L S A I E E I S K V R V G E E D T N D A A Y R M I S D H I R M L			
UniRef90_H2XWV4				
UniRef90_K1TW31				
UniRef90_A3MXP1	D T D L F E Y I I A E K I G V D G K W L R E V V K P Q E A L Y V L A D H S R T V			
UniRef90_U4TYE1	L I N A I Q K N C S R K F G E Q D W N D T S Y R I L S D H L R M L			
UniRef90_A8A8X8	K R A S E K L G M R V D E I R E I H S R V Y Q V L D H T R T L			
UniRef90_Q2QFD6	L R Q K V A E K I G I P T D K L E K M I A S V Y A I V D H T R C L			
UniRef90_H3ZKE3	L R E T V A K R V G I D P D E L T R L V R P Y Y A I A D H T K A L			
UniRef90_E2B7L7	D T D I F Q P I F C A I Q K Y T K A P E D D T G K I D Y G Y R I L A D H A R M I			
UniRef90_E9C9B0	I W S D V I D L I S N I S N L P Y E G N E E S M R I I A D H I R T A			
UniRef90_R7IEM6	D T D L F S P L F D G I Q Q L S K A P Y G G S F P E D T S Y R I L A D H A R M V			
UniRef90_Q29FC2	T D L F Q P L F E V I R K T C S V E Y Q S S A S H D V A Y R T I L A D H A R M I			
UniRef90_UP1000359C4B2	D T D L F L P L M R I I H K Y S K V G Y G G Q G D V D T A Y R V V A D H L R A A			
UniRef90_J9DX67	L R A K I A G S I G I D P G R L E K A I L P M Y A V V D H T R C L			
UniRef90_F4BWV3	K P Q E A L Y V L A D H S R T V			
UniRef90_A8MBI2				
UniRef90_X1HWU4				
UniRef90_D5VSD6	L R K L R E V V A K R V G L D V E E L E E P Y E N L Y A L V D H T R A I			
UniRef90_F6BBG5	L R K R V A D K I G M D V E E L D K L I S P L Y A I A D H T R C L			
UniRef90_Q057H8	D V D D V E A A R G D I A A E I G V S V D E L V D L V E P L Y A I A D H C R T L			
UniRef90_F8DC10				
UniRef90_Q8TWY1				
UniRef90_U5NG06	F Y P L I K K I E E S I Q N Y S S S K A H F Q I A D H L R T L			
UniRef90_A2ST90	I R D L R Q Q V A D A T N I S V A K L E E I V P M Y A I C D H T R C L			
UniRef90_M0D0G7	I Y A I A D H C R T L			
UniRef90_D8J547	E I A A G V G D V G E L E E P M E A V Y Y A I A D H C R T L			
UniRef90_J1ARD4	L F Q L R R K V A A A L D V P Q E K L D K L I T P I Y A I A D H T R C L			
UniRef90_K7ZI87				
UniRef90_M0LRV3	D V D D V E A A R G D I A D Q L G V S V D E L R D L V E P L Y A I A D H C R T L			
UniRef90_B4IX05	D T D L F T P L F D G I H S L S K A P Y G G S F P V D T S Y R I L A D H A R M V			
UniRef90_E7QMT8	D N I I A E K V G V S T T E L V E L M E P L Y A I A D H S R A L			
UniRef90_Q8ZSV6	I A E K I G V D P K E V F K P Q E A L Y V L A D H S R T V			
UniRef90_K7Z6P0				
UniRef90_U1NMU4	V S T T K L A D L L E P L E H I Y A I A D H S R T L			
UniRef90_M0M6D9	D T D L F M P I F D A I Q K G T N V G A D D V D G K D M A Y R V L A D H A R T L			
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UniRef90_K7Z4S6	Q T S I F N P I I Q A I E K I T G K N Y K S N S I Q M R N I T D H F I S S			
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UniRef90_M1Y551	E I A D Q L G V E V G E L R E L L E A I Y A I A D H C R T L			
UniRef90_G2MN68				
UniRef90_B0R7I0	D I D E V A D I E D A I A A E L G V D A E R L T E L V A P L Y A I A D H S R V L			
UniRef90_UP10003726DAE	D I D E V A D I E D A I A A E L G V D A E R L T E L V A P L Y A I A D H S R V L			
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UniRef90_UP1000369F49C	D S D L F E P W T E Q L P S L W T L D D T S T R L V C D H L R S A			
UniRef90_UP100037B0871	N I N E K I A K K L G V S K N E I D D I L N R I Y T L L D H S K C L			
UniRef90_A0A031LQA8	I D V F E P W M T T I P S L W T L D E R S Q R I V V D H L R S T			
UniRef90_B7Q6U3	K E E L T R A A R V F Q V L D H T K T I			
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UniRef90_Q9HJW4	D Y V D E F V K T I Y L Y S A L D H A R T I			
UniRef90_E0SP23	E E I K K V R D V F L M I D H A R S L			
UniRef90_B5IBA6	I S R S M G V S V K E I E D Q L K N I F D L Y A I L D H T K T I			
UniRef90_T1CHS1	L I N E V L K A T G K E Y K E F I L P Q K I Y A V V D Y T R S L			
UniRef90_L0AG94	I S E D D Y Y S I I R P M Q A S Y A V A D H M R T L			
UniRef90_D6GUX9	D I D E V E D M R D N I A D K L G V E T E R L H E L M R P L Y A I A D H V R T L			
UniRef90_U3A6R0	D I D E V E D M R D N I A D K L G V E T E R L H E L M R P L Y A I A D H S K C V			
UniRef90_UP100037B2A4E	E S S L F S P I V N F I			
UniRef90_UP1000387AD63	D F H F S K K D K K V F W S A A D Y F R A S			
UniRef90_H6N5I9				

50 60 70 80

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UniRef90_D0UKI9	T A L A D G G R P D N S G R G Y V L R R I L R R A V R Y T E K L N A K S G T L		
UniRef90_D0UKK1	T V T L A D G G H P D S V G R G Y V M R R I L R R A V R Y H E K L N A K P G F F		
UniRef90_A0A023GDF5	T V A I S D G V L P E H A D A G N K L R R I I R K A S H A M W H L K C D R G T L		
UniRef90_D0UKL2	T I A L A D H G R P D N V G R G Y V L R R I L R R G V R Y T E K L N A K P G F F		
UniRef90_C3YAA3	T I A I A D G V M P G Q Q W R E L V L R T I L R R A V R Y Q E R L G A P E G L V		
UniRef90_R7FSR7	T M L I G D G I L P S N V G A G Y I L R R I I R R A I R Y A K T I D I N S N F E		
UniRef90_R5MPK1	V F V I A A D G I K P S N T D Q G Y I L R R I I R R A I R Y A K T I D I N S N F E		
UniRef90_M7AB85	V F V I G D G V K P A G K E H G Y V L R R I I R R A I R F A H G E L P D S A I		
UniRef90_H2U9V7	T V C I A D G V Y P G M S G A E L V L R R I I R R A V R F C N E V L Q T P P T L		
UniRef90_W7AHN5	T I A I S D G C L P G N E G R N Y V I R R I I R R A I R V G K Q I F Q V G M W F		
UniRef90_D0UKI5	T V A I S D G G P D N T G R G Y V L R R I I R R A V R Y C C D K F K C K P G L		
UniRef90_R9SJ73	A F M L A D G I I P S N V K E G Y L A R L I L R R T I R Y M N Q L G M R E S L		
UniRef90_L0KTH2	T F M L G D G I I P S N V K A G Y L A R L V L R R T L R R M M K D L N I S P L		
UniRef90_11C4A6	UniRef90_UP100032AFF70	S V C I A D G F P G M S G A P L I L R R A V R F T E I L R A P P G F L	
UniRef90_H3FYX3	T I A L A S D G G R P D N T G R G Y V L R R I L R R G V R Y T E K L G A K A G F F		
UniRef90_K6T7K5	A F M L A D G V I P S N V K E G Y L A R L I L R R T I R F I K K L G L K E S L		
UniRef90_T2IH9	UniRef90_L7QKF6	T I A L S D G G M P D N T G R G Y V L R R I L R R G V R Y T E K L N A K P G F F	
UniRef90_P75368	T F T I A E G V L P G P N E R S Y I V R R I L L R R A L L A C K K L D L D L K F I		
UniRef90_K4MF42	T F M L A D G I I P S N V K A G Y L A R L V L R R T L R R M M K D M D I N T S L		
UniRef90_L7QKC4	T I S L A D G G V P D N T G R G Y V L R R I L R R A V R Y T E K L N A K P G F F		
UniRef90_U2CES3	V F L I N D G A E P A N S D A G Y I T R R I L R R A I R A G K K I G I Q G S F M		
UniRef90_M4BAJ8	Y A L M H D G V F P S N V G R G Y V L R R I I R R A I R H A Q L D V V S G T D		
UniRef90_F6D3L4	G F M L A D G V F P S N V K E G Y L A R L V L R R T I R F M K D L E L E E S L		
UniRef90_A0A024UJL5	UniRef90_UP10003C399EF	Y A L M A D G V F P S N V G R G Y V L R R I I R R A M R F G Q A G V H D P F L	
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UniRef90_D5E9Q1	C V C L S E G I L P D R D Q H G H K V R L V L Y R C L Q S A K V L G V N P G Y I L		
UniRef90_F4CNU2	T F M L G D G I I P S N V K A G Y L A R L V I I R R T M K M M Q D L D I K I P L		
UniRef90_Q2NEW4	V F L A A D G V R P S N S K Q G Y V M R R L L R R A M R F G L D L G L T A G V A		
UniRef90_S7XVZ2	S F M L A D G I I P S N V K E G Y L A R L V L R R T V K Y M N E L G L N E S L		
UniRef90_Q8PWU0	A V C L N N D V F P S S T G R G Y V L R R I I R R A I R Y A K E I L K V D S		
UniRef90_H2XWV4	T F M L G D G I I P S N V K A G Y L A R L V L R R T L R R M M K D L D I R I P L		
UniRef90_K1TW31	T V A I S D G L Y P G P K G R E L I L R K V L R R A V L A I E K L Q T P P P F L		
UniRef90_A3MXP1	UniRef90_U4TYE1	A W M I A D G V I P S N S G A G Y L A R L L I I R R A L R G L M L A G V D A P L	
UniRef90_A8A8X8	T V C L A D G V I P E Q N Q K L R R V I I R K C F V L S E T V F G K D K G L		
UniRef90_Q2QFD6	M W M L A D G I V P S N V G E G Y L A R L V I I R R T L R A L K K L K A D V P L		
UniRef90_H3ZKE3	S Y M L G D O C I V P S N A K D G Y L A R L V L I I R R T L R M M R E L D P D E K L		
UniRef90_E2B7L7	T F M L S D G V D G V P S N V K A G Y L A R L V L I I R R K S I R H L R E L G L E I P L		
UniRef90_E9C9B0	T V A L A D N M L P E Q H P K I L R K V L R N A I D T G E K I F R K T D I L		
UniRef90_R7IE6M	S F L I A D G V I P S N L G R G Y V L R R V I I R R A A G V I G Q M G L K K P F L		
UniRef90_Q29FC2	V F I S A D G I K P S N T D Q G Y I L R R L I I R R A I R H A K K I D I N S N W E		
UniRef90_UP1000359C4B2	T A C L A D G M L P D Q N Q K L R R V I I R R K A L N I S E H V F A H E K L		
UniRef90_J9DX67	T V A I S D G L Y P S G Q D L G H K L R G I I H R C I R L C Q Q G F H T E P R I L		
UniRef90_F4BWV3	C I M I S D G V E P G S R N R G Y H L R R V L R R A A L N F T L T G A E R G M L		
UniRef90_A8MBI2	A Y M L G D G I I P S N V K G G Y L S R L V I I R R T L R L M K E L G L R L L		
UniRef90_X1HWU4	S W M I N D G V I P S N S G V G Y L A R L L I I R R M L K Y M H V I G A Q V P L		
UniRef90_D5VSD6	T F L L G D G V V P S N V K E G Y L L R M L I I R K S L R H L N K L N L N S L F		
UniRef90_F6BBG5	A F M F G D G I V P S N V K D G Y L A R L V L I I R R T K L R Y M E K A G L T L S		
UniRef90_Q057H8	T C L I A E N I L P G N E G Y V L R K I I R R T K L C H G Y F I G L Q K P F F		
UniRef90_F8DC10	A Y M L G D G I V P S N V G T G Y L A R M V L I I R R T K R L C D N A G V D A P L		
UniRef90_Q8TWY1	A F M L G D G V V P S N S N A G E G Y L A R L V I I R R A L R L L D G L D A E R E Y L		
UniRef90_U5NG06	T L L I S E G V S P S N K G R G Y V V K K L I I R R V A T S L K I L G I K D N A L L		
UniRef90_A2ST90	A Y M L G D G I I V P S N V R E G Y L A R L V L I I R R S I R M Q D L N M D D D L		
UniRef90_M0D0G7	A Y M L G D N I V P S N V S P N V G T G Y L A R M V L I I R R T K R L V D N V G V D A P L		
UniRef90_D8J547	A Y M L G D G I V P S N V A T G Y L A R M V L I I R R T K R L C D T V G V D A P L		
UniRef90_J1ARD4	A Y M L G D O C V V P S N V R E G Y L A R L V L I I R R T L R R M M A D L D L K D N L P G F F		
UniRef90_K7ZI87	UniRef90_M0LRV3	A Y M L G D G I V P S N V G T G Y L A R M V L I I R R T K R L C D N V G V D A P L	
UniRef90_B4IX05	T A C L A D G M L P D Q N Q K L R R V I I R R K A L S I S E Q V F S H E N L		
UniRef90_E7QMT8	A Y M F G D G I V P S N V A T G Y L A R M V L I I R R T K R L C D T V G V D A P L		
UniRef90_Q8ZSV6	S W M I A D G V I P S N S G A G Y L A R L L I I R R M L K L V G V E T P L		
UniRef90_K7Z6P0	UniRef90_U11NU4	A Y M L G D E I V P S N V G T G Y L A R M V L I I R R A K R L C D N V G V D A P L	
UniRef90_M0M6D9	A Y M L G D E I V P S N V S T G Y L A R M V L I I R R T K R L C D T V D I D A P L		
UniRef90_D0UKK6	T I A L A D G G R P D N T G R G Y V L R R I I R R G I R Y T E K L N A K P K F F		
UniRef90_K7Z4S6	UniRef90_K2B7H1	UniRef90_K2B6D3	V F I I D S G I Y P S N K E Q G Y I L R R L R R G L D N F Y K L E G S D P
UniRef90_M1Y551	A Y M F G D G I V P S N V G T G Y L A R M V L I I R R T K R L H G R K L G I Q G Y F L		
UniRef90_G2MN68	UniRef90_B7Q6U3	UniRef90_B0R7I0	A Y M F G D E I V P S N V G T G Y L A R M V L I I R R T K R L C D T V G V D A P L
UniRef90_L8PRR0	UniRef90_UP10003726DAE	UniRef90_UP1000369F49C	A L M L S D G L V P S N S G E G Y L G R L L I I R R T L R V L T T L W R D D P S R T L S
UniRef90_UP100037B0871	V V V I V G D G V R P S T T Q Q G Y V L R R L I I R R V L T N L W R G D P G R T L		
UniRef90_A0A031LQA8	UniRef90_B7Q6U3	UniRef90_B8D5P5	G L M L A D G L V P S N S G E G Y L G R L L I I R R A L R V I K L L G S N V R L
UniRef90_B7Q6U3	UniRef90_Q9HJW4	UniRef90_E0SP23	A Y M F G D G I V P S N V G T G Y L A R M V L I I R R S L R K L A K L N V D D L
UniRef90_B51BA6	UniRef90_E0SP23	UniRef90_B7Q6U3	A F M L T D G L V P S N V Q G G Y L A R L L I I R R T L K L D D L K N P V M I
UniRef90_T1CHS1	UniRef90_B7Q6U3	UniRef90_B8D5P5	L F G V T D G A L P S N V G G G Y N L R V I I R R V F D I I N T Y G I D D L D L
UniRef90_L0AG94	UniRef90_B8D5P5	UniRef90_Q9HJW4	A Y M F G D G I V P S N V G T G Y L A R M V L I I R R T K R L C D N V G V D A P L
UniRef90_D6GUX9	UniRef90_Q9HJW4	UniRef90_E0SP23	L I A I H D G S L P S N V G G G Y N L R N I I R R S L N F I D S K N W K I D I
UniRef90_U3A6R0	UniRef90_E0SP23	UniRef90_B7Q6U3	A Y M F G D G I V P S N V G T G Y L A R M V L I I R R T V R L I I D D V D A N V D L E
UniRef90_UP100037B2A4E	UniRef90_B7Q6U3	UniRef90_UP1000387AD63	L F M L A D G L V P S N M G E G Y L G R L V I I K S L N I D L T L M E I L K A P P G F L
UniRef90_H6N5I9	UniRef90_UP1000387AD63	UniRef90_H6N5I9	C I L L D S G I S F G G K G R E Y V L R K I F R K T I W L F K S L E D K E T F F

	90	100	110	120
UniRef90_A1TRL4	H S L V K D L V A Q M G D A Y P K L R E Q E Q R I T E V L K A E E E R F F E T L			
UniRef90_D0UKI9	S S L I P V V V V E S L G D V F P E I K R G V D D I K N I I D E E E E T Q F L K T L			
UniRef90_D0UKK1	A T L V D I V L Q I L L A E T F P E L A K D P Q S I K D T I N E E E S Q F L K T L			
UniRef90_A0A023GDF5	A H L V D D V T S L L G D V Y P G I N V D L V S V V N S E E D K Y L L W Q M			
UniRef90_D0UKL2	A G L V P T V I Q I L G P T F P E V S R D P Q V I D I I I N D E E A Q F L K T L			
UniRef90_C3YAA3	A S L V P V V V V Q N L G E A F P E L L S N Q E K V M D T I N E E D E A L F L S N L			
UniRef90_R7FSR7	T A V V S E I F I D I Y D E A Y P D L L A A A G D D I L A T L A K E E R S F R R T L			
UniRef90_R5MPK1	E I I A L K I I D K Y D K Y Y S E L I Q N K D V L K D V L K N E K I K F C R T L			
UniRef90_M7AB85	G E V A R V V V I D I Y A D A Y P D I L A A A G D D I L A T L A K E E R S F R R T L			
UniRef90_H2U9V7	A S L V P T V C H I L G N V Y P E L L H Q E S N T I I N I I N E E E L H F L S S L			
UniRef90_W7AHN5	Y K L V D S V C Q I L K N C F T D L L K D R V N Y K N I I K Q E E L V F N R T L			
UniRef90_D0UK15	S S L V P V V V I H T L S K N Q E I I Q D L I N T E E V L F L K T L			
UniRef90_R9SJ73	S D V V M K I Q L D F L K D F Y P E I S K S Q E H M N I I D L E E E R Y G V T I			
UniRef90_L0KTH2	S E I V Q M H I K N L P E Y P E F A E R F E V I E D I L H H E E I K F Q E T L			
UniRef90_11C4A6				
UniRef90_UP100032AFF70	G S L V P V V V E T L G D A Y P E L R K N S A Q I A E L V S E G E A A F L A S L			
UniRef90_H3FYX3	A S L V P V V V E L L G G G V F P E L T K D P E T V Q Q D I I N D E E T Q F L K T L			
UniRef90_K6T7K5	G N I M N L Q L N F L S Q T Y P E I V R N H Q E H I L R V I E L E E E K R Y Q K T I			
UniRef90_T2IH9	M A E T A I Q L S Q K A Y P Q V R E R D S F I K A E L E R E E E A T F L K T L			
UniRef90_L7QKF6	S S L V H T V V E L L G E T T F P E V T R D P Q S I D I I I I Q F L K T L			
UniRef90_P75368	D P M V D A L I S V Y G S Y Y Q Q L Q G K N Q V V Q Q A I W K E V T A F D K T I L			
UniRef90_K4MF42	S D I V R M H I K N L P E Y P E F S E K F D V I E D I L A H H E E M K F D E T L			
UniRef90_L7QKC4	S S L V Y T V I D S L G E T T F P E I T K D P Q Y I I I E I I I N E E E I Q F L K T L			
UniRef90_U2CES3	G E L S E V Y I D E A T A Y E D L H S N K K V I I I N K E E E N L F Y K T L			
UniRef90_M4BAJ8	G T L A S V V V P A W A E T S G F Q Q M R A I V L N E E K A F G K M L			
UniRef90_F6D3L4	S D I M M N M Q L D F L S K T Y P E I K H S Q D H I L R V I D L E E S R Y H K T I L			
UniRef90_A0A024UJL5	S R I P M G A D P A V L V Q L Q A V V E N E E E K A F F A M L			
UniRef90_UP10003C399EF	H H I P I V A E T L G S A Y P E I Q S K Q S D I L E L I K H H E Q E V F K S L R			
UniRef90_K1QT13	S S L V D L I V D S L G G G T Y P E L N Q S C K R I K D V I I S S E E D H Y Y Y H T L			
UniRef90_D5E9Q1	S D I V Q M H I N H L P E Y P E F A D R F D V I S D I L D N E E E K K F Q E T L			
UniRef90_F4CNU2	A E L V P V V A S V Y S D V Y P E I A A G E A D I V A V A V I A K E E E K L F A R T L			
UniRef90_Q2NEW4	S D I M M K M Q V D Y L S K T Y P E I K D N K D H I I N I T D L E E E E R Y H T T L			
UniRef90_S7XVZ2	S D I M M K M Q V D Y L S K T Y P E I K D N K D H I I N I T D L E E E E R Y H T T L			
UniRef90_Q8PWU0	L V K I V E H C S N S L D I E L G D K I Y A V E E E E E K L F L K T L			
UniRef90_H2XWV4	S E I V D M H I K N M P E Y P G F R E N F P V I Q D I L E S E E E E K F N T T M			
UniRef90_K1TW31	Y T L L P T V V E S L G C A F P E V E L K Q D E V M E V I K E S E E M A F Y R T L			
UniRef90_A3MXP1				
UniRef90_U4TYE1	V E L F D L H L K E L R Y D Y P E V W E A R S L I L E L V D M E E E K K Y R E V L			
UniRef90_A8A8X8	V E L S N Y V V E N L G D V Y T E L E K N V K L I H Q I L D Y E E E I Y K S I R			
UniRef90_Q2FQD6	S E L L E L Q I N Y W K D D Y P R A W K N K D Y I L D V V E F E Q K K F E E T L			
UniRef90_H3ZKE3	G D L I E R Q M K I I G L S K F E Q D P D V V M E I V D R E V D K Y R T T M			
UniRef90_E2B7L7	S E I V A M H I K A L H K T F P E F K E M E D V V L D M V N V E E K K Y A E T L			
UniRef90_E9C9B0	A Q L V C D V A D N L G E V Y T E L H H N N L K Q V K R I I K F E E D L F N R L R			
UniRef90_R7IME6	A D L V P V L L S T D P T F Y P E I F A R Q T E I C A I L K Q E E E V F S S A L			
UniRef90_Q29FC2	E Q I A R L L I S K Y K K Y S E L D S N E V V V L E V L K N E K			
UniRef90_UP1000359C4B2	S Q L V P I V V E T L G E A Y P E M S A K Q E A V I L N H E H D V Y K N L R			
UniRef90_J9DX67	P R L V S K V V E T L G L G G A F P E L V I K T K E K V R D I V C A T I E L H E Q A S			
UniRef90_F4BWV3	A S L V P D F V N H I T L L Y N S V A A C E T V I A K T I M S E E Q L F W R T Y			
UniRef90_A8MBI2	P L A D L V Q L Q I S R L D Y P D W E E S F A T I R D I L D Q E E Q K Y A E T L			
UniRef90_X1HWU4	T E I F N T H L N Y L I N D Y P E L K E S M Q L I L D L V D L E E A K Y K S A I L			
UniRef90_D5VSD6	F I N T L			
UniRef90_F6BBG5	D V V E L H L K E L K A L Y P E L L D M K D Y M E K V L A L E T E R Y K E T L			
UniRef90_Q057H8	K D I I Q M Q L G N L K D L Y P E L L I M E D Y I M E V I E V E E K K Y I Q T L			
UniRef90_F8DC10	Y K L S E L I I Y N M K N Y D F H I Q E K I H K I K K I L F Y E E K K Q F Y Y I L			
UniRef90_Q8TWY1	D E L V D M Q A E R L G R L D Y E N R D T I R D I V R T E V E K Y R E T L			
UniRef90_U5NG06	L E V V E R V L E D L R G T Y P E L A E R E E Y I Q D A L E C I L D R Y T R A L			
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UniRef90_M0D0G7	G D L V V S Q S M K T I G L A N F E Q D E D I V R H I D V I V R T E V E K Y D T T I			
UniRef90_D8J547	D E L V D M D Q M Q A E R L G A D R L A Y E N R D T I R D I V R T E V E K Y R E T L			
UniRef90_J1ARD4	D E L V D M Q A E R L G Y E N R D T I R D I V R T E V E K Y R E T L			
UniRef90_K7ZI87	A D L V E M Q I R I I G T D S F E Q S I A G V R E I I I D R E V E K Y A A T L			
UniRef90_M0LVR3	S T L V H T V V S L L G D A F P E V A R D P Q H I I D V I V R T E E Q Q F L K T L			
UniRef90_B4IX05	D E L V D M Q A E R L G Y E N R D T I R D I V R T E V E K Y R E T L			
UniRef90_E7QMT8	S Q L V P I V V E T L G E A Y P E M S S K Q Q A V L E L I A H H E Q E V Y K N L R			
UniRef90_Q8ZSV6	D E L V D M Q A E R L G Y E N R D T I R D I V R T E V E K Y R E T L			
UniRef90_K7ZP60	V E L F D M H L K E L K A D Y P E V W E A R N L I L E L V D I E E R K Y R E I L			
UniRef90_U1NMU4	A S L V H I V V Q L L G N A F P E L T K D P Q H A I D I I N I E E Q Q F L K T L			
UniRef90_M0M6D9	D E L V D M Q A D R L G Y T N R D T I R D I V R T E V E K Y R E T L			
UniRef90_D0UKK6	D E L V D M Q A E R L G Y E N R D T I R D I V R T E V E K Y R E T L			
UniRef90_K7Z4S6	G T L V H T V V E L L G D T F P E L S K D V S G I I D I I N E E E Q Q F L K T L			
UniRef90_K2B7H1	A T L V N T V V V E L L G I N T F P E L K K D P S H I I M D V I V R T E E Q Q F L K T L			
UniRef90_K2B6D3	S S V I E S I V E Q Y K K T N P E L L N R Y E N I K N T I L E E K G A Y D T T L			
UniRef90_M1Y551	Q D L A D I V I D M F T E Y P K F A D L R S E I K L E L V N E E E K F S K A L			
UniRef90_G2MN68	D E L V D M Q A E R L G Y S N R D T I R D I V R T E V E K Y R D T L			
UniRef90_B0R7I0	L D E L V D R Q A K R L G Y E N R V T I R D I V R T E E E R K Y K E T L			
UniRef90_UP10003726DAE	D E L V D M Q A D R L G Y E N R D T I R S I V R S E V E K Y K E T L			
UniRef90_L8PRR0	R E L I K M Q I D Y W A E D F P N M L K N K E Y I I L D V I E N E Q A K F			
UniRef90_UP1000369F49C	D L P G E P L G H T L D H F R Q P G G T G R V R E V L R D E E R R F G R L L			
UniRef90_UP100037B0871	K E L I E A Q I K L W S H R F K R I W D S R E R I K E I I E L E Q K Y E E T L			
UniRef90_A0A031LQA8	G D L P T D P I Q H T I D H F R I L P T D T R S V R E M M I T E E N			
UniRef90_B7Q6U3	I D L M K D Q I D F W K E D F P E M L R N K D Y I I L D A V E Y E E E K F Q E I I			
UniRef90_B8D5P5	A S L A D S V Y T V L G E F Y P N L D L E L V K N I V N L E E D R Y I L S Q M			
UniRef90_Q9HJW4	T D V V Q E L L D R Q V K Y W K N F E K H R D Y I L D V V T M E T S K F I D A V			
UniRef90_E0SP23	D L I R M N H E D L K D L V P D F P E Q F V S D V L S I E E E K Y R D V E			
UniRef90_B51BA6	S E L V S M Q L G Y W G D M Y P R M I R Y R D T I L E M V R S L E E E D K Y R G V I			
UniRef90_T1CHS1	G E L V K M H L E R F S D I M D S S M L P I V L E E L E E E E R Y R K T L			
UniRef90_L0AG94	M K L I E M H A K D L R P I Y R D I D S S I D E I S T V I D V R T E V E K Y R N N T K			
UniRef90_D6GUX9	D E L V D M Q K A D R L E Y E N R D T I R D I V R T E V E K Y R E T L			
UniRef90_U3A6R0	N D V I N E H K K E L K T L Y P E L M Q T E C T E V I N K E I E R Y K E S K			
UniRef90_UP100037B2A4E	D L E L V D R Q A K R L D Y G N R E T T R D I V R S E V R K Y E E T L			
UniRef90_UP1000387AD63	E E L F K E Q I K L W G R I F P R L V E N K E R I F E V I D E S E K Y E Q L L			
UniRef90_H6N5I9	G S V V N V V G E S L V G F Y P S I L Q N K E S L S L M L Y E E Y L L S V K A Y			

130 140 150 160

UniRef90_A1TRL4	A N G M D [L L] D			
UniRef90_D0UKI9	S R G H R L L			
UniRef90_D0UKK1	S R G R K L L E R T I V	K L G N T T F P G D V A W R L		
UniRef90_A0A023GDF5	S K A E A A L N E A	K P S D V I S G H T A W K L	Y S Q Y G I Q R D L	
UniRef90_D0UKL2	T R G R N L L N R T I N	K L G D Q K T P G D I A W R L		
UniRef90_C3YAA3	E K G K K L L M S K T I R K L D K S A F F P S E V G W F L	H N S L G P T D L		
UniRef90_R7FSR7	A T G L K E F N K C V E G I K R K N E F M I G G K Q A F R L	Y D T F G F P E E L		
UniRef90_R5MPK1	E K G L K E F E K V A	S K G V D I D G T A F H L	F D T Y G F P L E L	
UniRef90_M7AB85	G K G L R E L R R I L	G K E N R P L T G E D F Y I L	Y D R Y G F P V E L	
UniRef90_H2U9V7	Q Q G S R V I H R T L S K K D Y K H G V F P A A V A W S L	H R D L G F P L D L		
UniRef90_W7AHN5	E K G V D Q F N K I I K R N N T G G D K L F S G K D A F D L	Y T S Y G F P I D L		
UniRef90_D0UKI5	K R G Q L L L K R A			
UniRef90_R9SJ73	E K G K K T V K R T I K N L K K Q G K T E M P L E T T I G L Y D A Q G M P P E T			
UniRef90_L0KTH2	E R G R R M I S K S A K H Y K Q A G E K M P L E K I I E M Y D T H G I P P E I			
UniRef90_11C4A6	E H G M K V F E E V A A R A Q G G M I A G A D A F R L Y D T Y G F P V D L			
UniRef90_UP100032AFF70	Q R G R V I E Q T L K R L G P S D T F P A E V A W S L S L A G N L G P L D L			
UniRef90_H3FYX3	N R G R I L F			
UniRef90_K6T7K5	R K G H Q M V K K S I K Y L K K D K K D E M P L D M L I K L Y D S Q G L P P D T			
UniRef90_T2IHI9	E R G E K L L A E I I S K T E K Q G Q I S G V D A F T L Y D T F G F P L E L			
UniRef90_L7QKF6	S R G R N L L N R T I Q K L G D S K L I P G D V A W R L			
UniRef90_P75368	N L G L M L F E K S I A H N A L Q P Q V A F Q L Y E T Y G F P I E M			
UniRef90_K4MF42	E R G R R M I Q K S A K H Y K S T G E K I P L P T L I E M Y D S H G I P P E I			
UniRef90_L7QKC4	T R G R N L L N R T I T K L G D S K Q V P G D V A W R L			
UniRef90_U2CES3	Q Q G E L E I K K H L K N K G K V T G A D A F Y F Y E T Y G F P L E L			
UniRef90_M4BAJ8	H D N R G V I E K V L F K A N T I L S G A D A F R L Y D T Y G I P L D L			
UniRef90_F6D3L4	Q K G R Q L V K K S I K Y L K K E N K N E M P V D M L I K L Y D S H G I P P E T			
UniRef90_A0A024UJL5	A H G T K A V D K I L L H T S N R K H T G Q E A F F L Y D T Y G L S D M			
UniRef90_UP10003C399EF	U N S T K A F S E V L S E Y H T F K N N S I P G D F L Y K L S D T Y G L T E E N			
UniRef90_K1QT13	E Q G T T N T F N K F L R K R K T G P S E L E S G D D L L S G H Y G Y P V P M E I			
UniRef90_D5E9Q1	Q R G K K L I Q K S A K H Y K K K G E K M P L D T V I D M Y D S H G I P A E I			
UniRef90_F4CNU2	R K G L S M V R R I L G R T Q P A I S G A H L F E L H D T F G M P I E L			
UniRef90_Q2NEW4	T K G K N L V K R S I K T L K K Q N K S F P T D M L I N F Y D S H G I P P E T			
UniRef90_S7XVZ2	E K G K L Y F N K I S K E Y D R V F P A K Y A F V L Y D T Y G Y P F D L			
UniRef90_Q8PWU0	E R G R I I I Q K S A S H F K K T G E K I P L S Q L T E L Y D S H G I P P E M			
UniRef90_H2XWV4	D R G D L I V R K T I K N L A G N E F P P E V A H K L R L Q N G Y P L N R			
UniRef90_K1TW31	A T G I N L L D G V I E R T K K E G K E L I S G K D A F E L Y D T F G F P I D L			
UniRef90_A3MXP1	K S A P A V V K R A L E E N R R R G K A G L D K E D L V T L Y D S Y G L P P E V			
UniRef90_U4TYE1	T A A R K E W D K A Y K E L Y V Q K P T E I I D G V L A H R L Y D T H G F D V E A			
UniRef90_A8A8X8	K K G R N I V I R L L I K K K Q I T L L D D L V E L L Y D S H G I P P D I			
UniRef90_Q2QFD6	E R G A R T V E R L A Q T Y K K H C E K I P L D E I I T L Y D S H G I P P D M			
UniRef90_H3ZKE3	K R G S G L V K R E I E K L K K Q G I N E L P L E K L I L F Y E S H G I T P E L			
UniRef90_E2B7L7	N A S N K R W N E M I M L K E L C K T N L L P G S V A F K L Y D T Y G L N L E T			
UniRef90_E9C9B0	H S G V S M L N S E I D A A V Q R K Q A V L A P A T V F R L H E S H G F P I D L			
UniRef90_R7IME6	E K F N R T L E K G L R E F A K V S N K D I D G D V A F H L Y D T Y G F P I E L			
UniRef90_Q29FC2	E S S S K A F R E F Q V Q R C K F P N N T I P G D F L Y K L T D T Y G L T E E S			
UniRef90_UP1000359C4B2	Q L A A K T F R K F L N K V G S R R E I R G E E L E S G H F G S P M S V D A			
UniRef90_J9DX67	D K G C K L L E H D I A S Q Q H			
UniRef90_F4BWV3	E K G M R L L V R K T A E S Y L K K N E P V P L S E M I A L Y D T H G I P P E I			
UniRef90_A8MBI2	S Q L P K L I S R I K G E L T I N D L I N L Y D S H G I P P E I V			
UniRef90_X1HWU4	D S G L N L V E R L I N E A L E Q G R E Q L P G E E I F R L H D T Y G F P Q E L I			
UniRef90_D5VSD6	K R G E G I I K R L L K K K K S L D L E D I I E L Y D S H G I P V D L			
UniRef90_F6BBG5	N R G R G I V E R L V K S K S K N E G L D D L I E L Y D S H G I P P E V			
UniRef90_Q057H8	E N G L Q K L K E N A I K Y A W E F L C E Q K I F T L Y D T Y G L P I Q I			
UniRef90_F8DC10	E R G G R R V E T L A E E Y A K G E P I P T E E L I E L Y D S H G I Q P D M			
UniRef90_Q8TWY1	K R G K K E V R K R L E E K G E L S F E D L V E L Y D S H G I P P E V			
UniRef90_U5NG06	N N F Y K R I Q E L E Q K N N N L E E R L F I L V E R E G A P L A L			
UniRef90_A2ST90	E R G T R T V Q R V Q G T Y V K K N E P V P L A E L I T L Y D S H G I P V D L			
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UniRef90_D8J547	E R G G R R V E Q L A E E Y A Q R D E P I P V E E L L E L Y D S H G I Q P D M			
UniRef90_J1ARD4	A R G A R I V Q R I A R T Y K K K S E R I P L Q E V V T L Y D S H G I P P E M			
UniRef90_K7ZI87	T R G R N L L N R T I A K L G D A K V L P G D V A W R L Y D T Y G F P I D L			
UniRef90_M0LRV3	E R G G R R V E A L I A E E Y A E S G E P I P R E E L I E L Y D S H G I Q P D M			
UniRef90_B4IX05	E S S S K I F			
UniRef90_E7QMT8	E Q G G G R R V R R L A K R H A E E G K P I P T E T L V E L Y D S H G I Q P D M			
UniRef90_Q8ZSV6	K S A P G V V K K A Y E E A R R R G R A G F D A E D L V S L Y D S F G L P P E I			
UniRef90_K7Z6P0	N R G R N L L N R T I T R L G D E K V I P G D I A W R M Y D T Y G F P I D L			
UniRef90_U1NMU4	K R G R R R V E S L A D T Y A D R D E P I P V D D L V E L Y D S H G I Q P D M			
UniRef90_M0M6D9	E R G G G R R V R Q L A D E Y A D R D E P I P T D E L L E L Y D S H G I Q P D M			
UniRef90_D0UKK6	S R G R N L L N R T I A K L K D S N V L P G D V A W R L Y D T Y G F P I D L			
UniRef90_K7Z4S6	T R G R N L L N R T I A K L K D S N V L P G D V A W R L Y D T Y G F P I D L			
UniRef90_K2B7H1	K K A K E Y I F Q K Y K K D E L K G K V E I S A D D V F F L Y S S H G I S P T Q			
UniRef90_K2B6D3	E K G E K Q F A K L T E H I P H N G V M P G E H A F H L F D T Y G F P L E I			
UniRef90_M1Y551	E R G G R Q V E R L A E E Y A G R D E P I P V L A E V V E L L Y D S R G I Q P D M			
UniRef90_G2MN68	E R G G G R K V R Q L A D K H A E E G T P I P T E T L I E L Y D S H G I Q P S M M			
UniRef90_B0R7I0	E R G G G R R V E Q L A E E Y A D R G E P V P T D E L I E L Y D S H G I Q P G M			
UniRef90_UP10003726DAE	E E V L L K A P S V A Q A L A K R Q I T L D T L I E A Y D S N G I P P D I			
UniRef90_L8PRR0	E R G R R V L A R P Q Y K G P L S D D D Y R C L H D T H G L P R D L			
UniRef90_UP1000369F49C	E R G R R V L A R P Q Y K G P L S D D D Y R C L H D T H G L P R D L			
UniRef90_UP100037B0871	R F R G L L R R G R P V V S R R S R G P L T E D D Y R Y R L H D T H G L P R D L			
UniRef90_A0A031LQA8	Q R V P S I I S T I S K K K G K I E E E E L I K I Y D T N G I P P D I			
UniRef90_B7Q6U3	S K A E A A L H D A K P S K E I S A T H C			
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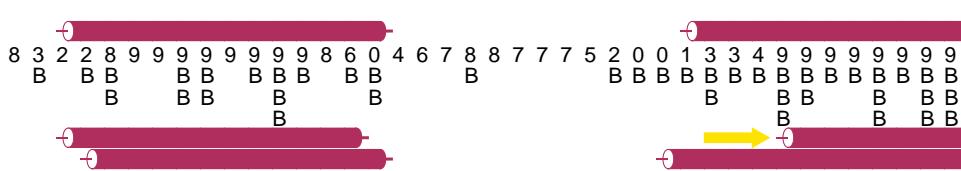
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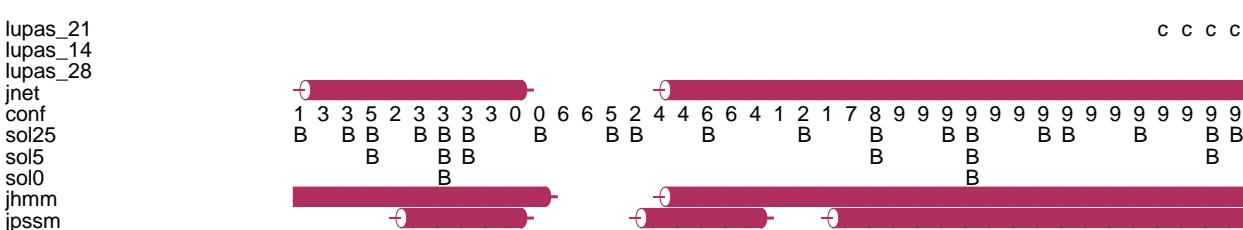


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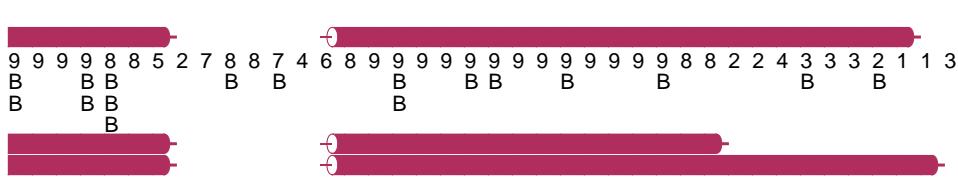
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UniRef90_W4UFM1				
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UniRef90_UPI00034FE3FC	V E L M L E E K G V Q L D S A G L A Q L V E E A Q L R A H Q A			

lupas_21
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 jnet
 conf
 sol25
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210

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