

QUERY	1	10	20	30	40
UniRef90_F6B3U8	V G R A L P E V R D G L K P V H R R I V L Y A M F D S G F R P D R S H A K S A R S				
UniRef90_E6JAY4	V G R A L P D V R D G L K P V H R R I V L Y S L H E L G L T P D K P F R K S A G I				
UniRef90_R7D844	T A R A L P D V R D G L K P V H R R I V L Y A M W D N G Y R P E R S Y V K S A K P				
UniRef90_Q3A8P8	V G R A L P D V R D G L K P V H R R I V L Y A M H I L G M T P D K P H R K S A H I				
UniRef90_R5GQF3	V D R A L P D V R D G M K P V H R R I V L Y A M Y D G G Y R P D R G Y S K C A R V				
UniRef90_Q03I55	V A R A L P D V R D G L K P V H R R I V L Y G M N E L G V T P E K P Y K K S A R I				
UniRef90_F5WQN6	V S R A L P D V R D G L K P V H R R I V L Y A M N D L G M T S D K P Y K K S A R I				
UniRef90_H5WX55	V S R A L P D V R D G L K P V H R R I V L Y S M Y D S G F R P D R G Y N K C S R V				
UniRef90_R6AWV9	I S S R A L P D V R D G L K P V H R R I V L Y A M D E L S M Q P D K P F R K S A R L				
UniRef90_B0TAN1	V S R A L P D V R D G L K P V H R R I V L Y T L Y E T G R A P D K P Y S K S A G L				
UniRef90_Q5HJZ0	V A R A L P D V R D G L K P V H R R I V L Y G L N E Q G M T P D K S Y K K S A R I				
UniRef90_S6C8E2	V S R A L P D V R D G L K P V H R R I V L Y A M N E S G Y T P N K P H M K S A R T				
UniRef90_UP100041BE09A	V S R A I P D V R D G L K P V H R R I V L Y A M Y E V G M T P D K P Y K K S A R V				
UniRef90_D2BQL6	V A R A L P D V R D G L K P V H R R I V L Y G M N E L G N T P D K P H K K S A R I				
UniRef90_Q1NV33	V G R A L P D V R D G L K P V H R R I V L Y A M R E L N N Y H N R P F L K S A R I				
UniRef90_G2DVZ1	V G R A L P D V R D G L K P V H R R I V L F S M H E Q G N V W N R A Y R K S A R V				
UniRef90_S7TB88	V G R A I P D V R D G L K P V H R R I V L Y A M H E L S N S W N R P Y K K S A R V				
UniRef90_UP1000366BF9E	V G R A I P D I R D G L K P V H R R I V L F A M H D L N N D F N K P Y K K S A R V				
UniRef90_B5JSE9	V G R A L P D V R D G L K P V H R R I V L Y A M S E L G N D W N K S Y K K S A R I				
UniRef90_F7NQC7	V M R A L P D V R D G L K P V H R R I V L Y A M Q E A G M Y S N K P Y K K S A R I				
UniRef90_C0GI67	V S R A L P D V R D G L K P V H R R I V L Y A M N E L G M W P D K P H K K S A R L				
UniRef90_R5DLZ6	V G R A L P D V R D G L K P V H R R I V L Y A M N E L G M T P D K P F K K C A R L				
UniRef90_F1T5R0	V A R A L P D V R D G L K P V H R R I V L Y A M N E A H I P T R P H K K S A R V				
UniRef90_V5C915	V G R A L P D V R D G L K P V H R R I V L Y G M Y E A G N D W N K P Y V K S A R I				
UniRef90_A0B8Z5	V G R A L P D V R D G L K P V H R R I V L Y A M Y E Q G V T F D Q P Y K K S A R I				
UniRef90_A0A023WZQ3	V S R A L P D V R D G L K P V H R R I V L Y A M N D L G L Q P N R P Y R K S A T V				
UniRef90_C9MF4	V S R A L P D V R D G L K P V H R R I V L F S M S E M G M S H K T P F K K S A R I				
UniRef90_D1PRM5	V S R A L P D V R D G L K P V H R R I V L Y T M H E R G N D P Q H P Y R K S A D T				
UniRef90_R9LB38	V S R A L P D V R D G L K P V H R R I V L Y T L H E N G L T P D K A Y R K C A D T				
UniRef90_UP100047CB2A7	V G R A L P D V R D G L K P I H R R I V L Y S M N Q L G L M P D K G Y R K S A F I				
UniRef90_C9R598	V G R A L P D V R D G L K P V H R R I V L F A M H E G G N L Y N K P Y R K S A R I				
UniRef90_K2AN04	V A R A L P D V R D G L K P V H R R I V L Y A M Q R I G V T H S A R Y T K S A K V				
UniRef90_UP1000468C0F0	V S R A L P D V R D G L K P V H R R I V L Y G M N E L G V T P D K P Y K K S A R F				
UniRef90_U5FAU4	V D R A L P D V R D G L K P V H R R I V L H A M N E L G I V A S K P F K K S A R I				
UniRef90_I4CB96	V G R A L P D L R D G L K P V H R R I V L Y A M F R A G N L W N R A Y R K A A R A				
UniRef90_U1KTG4	V G R A L P D V R D G L K P V H R R I V L F A M N E L N N D W N K P Y K K S A R V				
UniRef90_UP10003765E11	V G R A L P D V R D G L K P V H R R I V L Y A M Y D G G Y R P D R G W N K C S R V				
UniRef90_UP10004721B02	V G R A L P D I R D G L K P V H R R I V L Y A M R E L G N D W N K P Y K K S A R V				
UniRef90_L0GVU5	V G R A L P D V R D G L K P V H R R I V L Y A M S E L G N D W N K P Y K K S A R I				
UniRef90_V4J458	V G R A L P D V R D G L K P V H R R I V L Y T M H E L G V Q F N R P Y V K S A R I				
UniRef90_F6CVE7	V G R A L P D V R D G L K P V H R R I V L F A M N E L K N D W N K P Y K K S A R I				
UniRef90_UP100036233A2	V G R A L P D V R D G L K P V H R R I V L Y A M K E L G N D Y N K P Y K K S A R V				
UniRef90_A6W3W0	V S R A L P D V R D G L K P V H R R I V L Y A M Y D G G Y R P D R G Y S K C A R V				
UniRef90_A9KCT7	V G R A L P D V R D G L K P V H R R I V L Y A M S E L G N D W N K P N K K S A R I				
UniRef90_B2ZA27	P D V R D G L K P V H R R I V L Y S M H E L G L S P E K G Y R K C A R I				
UniRef90_UP1000375CAE4	V G R A L P D V R D G L K P V H R R I V L Y A M H E A N T V W N R P Y V K C A R V				
UniRef90_B3PI15	V G R A L P D V R D G L K P V H R R I V L F A M S E L N N D W N K P Y K K S A R V				
UniRef90_W0B9Z7	V G R A L P D V R D G L K P V H R R I V L Y A M S E L G N D W N K P Y K K S A R V				
UniRef90_R7PRJ8	V T R A L P D V R D G L K P V H R R I V L Y A M Q R I G V T H S A R Y T K S A K V				
UniRef90_K9EFK9	V G R A L P D V R D G L K P V H R R I V L Y A M Y D G G Y L P D S S F S K S A K I				
UniRef90_C0R046	V S R A L P D V R D G L K P V H R R I V L Y A M Y D A N L T H D K P Y K K S A A T				
UniRef90_UP10002F0CE43	V S R A L P D V R D G L K P V H R R I V L Y D M N E L N L Y S D K P H R K S A R I				
UniRef90_Q3BV10	V G R A L P D A R D G L K P V H R R I V L Y A M H E L G A H S N K A Y F K S A R I				
UniRef90_D9SML3	V G R A L P D V R D G L K P V H R R I V L Y S M Y E L G I T P D K P H R K C A R I				
UniRef90_UP100040E67A5	V G R A L P D V R D G L K P V H R R I V L H S M N Q T S N H W N K P Y K K S A R I				
UniRef90_UP100047D3D9	I G R A L P D V R D G L K P V H R R I V L Y G M N D L G L S S G K P Y K K S A R I				
UniRef90_UP100047E6ED7	V S R A L P D V R D G L K P V H R R I V L Y G M S E L N L S P D K P Y K K S A R I				
UniRef90_G0VM75	I T R A L P D V R D G L K P V H R R I V L Y A M H E A G M T P N K P Y K K S A R I				
UniRef90_C7H086	V G R A L P D V R D G L K P V H R R I V L Y G M H N L G I T P D K P H K K S A R T				
UniRef90_D1YWG1	V G R A L P D V R D G L K P V H R R I V L Y G M Y E L G N T Y D K P Y K K S A R V				
UniRef90_UP10003B65BD1	V G R A L P D V R D G L K P V H R R I V L Y A M H E L G N D W N K S Y K K S A R V				
UniRef90_UP10003B4C2CB	V G R A L P D V R D G L K P V H R R I V L F A M Y E L K N D W N K P Y K K S A R I				
UniRef90_UP10002E6BC82	V S R A L P D V R D G L K P V H R R I V L Y A S H E S G Y H W N R K Y V K S A R P				
UniRef90_UP100036380BD	V G R A L P D V R D G L K P V H R R I V L Y A M Q E L N N T W N R S Y I K C A R V				
UniRef90_R6ER32	V G R A L P D V R D G L K P V H R R I V L Y G M S G L G V T P D K P H K K S A R I				
UniRef90_W8ULX2	V G R A L P D V R D G L K P V H R R I V L Y A M N V L G N D W N K P Y K K S A R V				
UniRef90_R5QN94	V S R A L P D V R D G L K P V H R R I V L Y S M F E N G Y D Y N R P F R K S A R I				
UniRef90_E6W0A6	V G R A L P D V R D G L K P V H R R I V L F A M H E L G V A Y N K P Y K K S A R I				
UniRef90_D4YKU2	V G R A L P D A R D G L K P V H R R I V L Y A M Y D G G Y R P D R N Y S K C S R V				
UniRef90_I5B470	I G R A L P D V R D G L K P V H R R I V L Y A M Q Q L H N D W N K P Y K K S A R I				
UniRef90_UP10004719DB8	V S R A L P D A R D G L K P V H R R I V L Y D M S E L G I L P T S Q H R K S A R I				
UniRef90_UP1000429E42E	V S R A L P D V R D G L K P V H R R I V L Y G M L D G V T S T K A H K K S A R I				
UniRef90_C0VY08	V G R A L P D V R D G L K P V H R R I V L Y A M Y D G G F R P N A G F Y K C M R V				
UniRef90_F0SUH4	S R A L P D V R D G L K P V H R R I V L Y T M H D L G M V P S K S Y S K S A R L				
UniRef90_E4RNH2	V G R A L P D V R D G L K P V H R R I V L Y A L N D L G M T P N K P H K K S A R I				
UniRef90_U1MQH3	V G R A L P D E V R D G L K P V H R R I V L Y A M Y D G G Y R P D K A F S K C S R V				
UniRef90_UP10003656636	V G R A L P D A R D G L K P V H R R I V L Y A M S E L G N S W N K P Y K K S A R V				
UniRef90_X5MNE0	V S R A L P D A R D G L K P V H R R I V L Y F S M N E N G Y D W N K P Y R K S A R V				
UniRef90_E8T2L0	V G R A L P D V R D G L K P V H R R I V L Y S M Y Q L G L M P D K P F K K S A R I				
UniRef90_D9SF67	V G R A L P D V R D G L K P V H R R I V L F A M H E L S N D W N R A Y K K S A R I				
UniRef90_G8TF15	V S R A L P D V R D G L K P V H R R I V L Y A M N E L G L N Y N R A Y K K S A R V				
UniRef90_P48369	V G R A L P D V R D G L K P V H R R I V L Y F A M N E L G N D W N K P Y K K S A R V				
UniRef90_UP1000344B664	V G R A L P D V R D G L K P V H Q R V L Y A M Y D G G Y R P D R G Y F K C A R V				
UniRef90_UP100036C414A	V S R A L P D V R D G L K P V H R R I V L Y S M H E N G Y E W N K P F R K S A R I				
UniRef90_D4YHA6	V A R A L P D V R D G L K P V H R R I V L Y G M N E L G V T S D K P Y K K S A R I				
UniRef90_N9UOF1	V A R A L P D A R D G L K P V H R R I V L Y G M N E L G M F H N V Q H K K S A R I				
UniRef90_C6X523	V S R A L P D V R D G L K P V H R R I V L Y G M Y G L N V F S N R K H L K S A R I				
UniRef90_UP100047BCB4B	V S R A L P D V R D G L K P V H R R I V L H S M N E M G I A S N R P Y R K C A G V				
UniRef90_R5TU16	V A R A L P D V R D G F K P V H R R I V L Y G M M E L G N T S D K P Y K K A A R I				
UniRef90_R5JAX0	S R A L P D L R D G L K P V H R R I V L Y S M Y E S G Y T P D K P H K K S A K T				
UniRef90_I4YMX1	V S R A L P D A R D G L K P V H R R I V L Y S M H E N G Y T P D K K Y V K S A R I				

QUERY	50	60	70	80
UniRef90_F6B3U8	V A E T M G N Y H P H G D A S I	Y D S L V R M A Q P W S R Y P L V D G Q G N F		
UniRef90_E6JAY4	V G K V M Q D F H P H G D M A I	Y D S M V R L A Q D F S S R Y P L I E G H G N F		
UniRef90_R7D844	V A D T M G N Y H P H G D S A I	Y D T L V R L A Q P W A M R Y P M V D G Q G N F		
UniRef90_Q3A8P8	V G E V I G K Y H P H G D S A V	Y E T M V R L A Q P W F S M R T P L I D G H G N F		
UniRef90_R5GQF3	V G E V L G K F H P H G D V A V	Y D A M V R M A Q D F S T R Y P L I D G H G N F		
UniRef90_Q03I55	V G E V M G K Y H P H G D S A I	Y D T L V R M A Q S W S M R Y T L V D G Q G N F		
UniRef90_F5WQN6	V G D V M G K Y H P H G D T A V	Y D S M V R M A Q D F S Y R Y M L I D G H G N F		
UniRef90_H5WX55	V G D V M G N Y H P H G D S A I	Y D A L V R L A Q R W S M R Y P L I D G Q G N F		
UniRef90_R6AWV9	V G D V L G K Y H P H G D T A V	Y D A M V R L A Q P F S T R Y P L V E G H G N F		
UniRef90_B0TAN1	V G D V M G R Y H P H G D S A I	Y D A T V R L A Q D F S T R Y M L I D G H G N F		
UniRef90_Q5HJZ0	V G D V M G K Y H P H G D S S A V	Y E A M V R M A Q D F S Y R Y P L V D G Q G N F		
UniRef90_S6C8E2	V G D V I G K Y H P H G D S A V	Y D T M V R L A Q P F S L R Y P L I D G H G N F		
UniRef90_UP100041BE09A	V G D V L A K Y H P H G D A A V	Y D A L V R M A Q D F S T R Y P L V D G H G N F		
UniRef90_D2BQL6	V G E V M G K Y H P H G D S S I	Y E A M V R M A Q W W S Y R H M L A D G H G N F		
UniRef90_Q1NV33	V G D V I G K Y H P H G D S A V	Y D T L V R M A Q S F A M R Y P L V D G Q G N F		
UniRef90_G2DVZ1	V G D V M G K Y H P H G D S A I	Y D T M V R M A Q P F S S M R Y L L V D G Q G N F		
UniRef90_S7TB88	V G D V I G K Y H P H G D S A V	Y D A L V R M A Q D F S M R D P L V D G Q G N F		
UniRef90_UP1000366BF9E	V G D V I G K Y H P H G D T A V	Y D S L V R M A Q D F S M R H P L V D G Q G N F		
UniRef90_B5JSE9	V G D V I G K Y H P H G D S A V	Y D T M V R M A Q D F S M R Y M L V D G Q G N F		
UniRef90_F7NQC7	V G E V L G K Y H P H G D S S V	Y D A L V R L A Q D F S T R Y P L L A D G H G N F		
UniRef90_C0GI67	V G E V L G K Y H P H G D T A V	Y D A M V R L A Q N F S S R Y P L V D G H G N F		
UniRef90_R5DLZ6	V G E V L G K Y H P H G D T A V	Y E A L V R M A Q D F S T R Y L T V D G H G N F		
UniRef90_F1T5R0	V G E E V M G K Y H P H G D S S I	Y D A M V R M A Q E F S M R L P L V D G H G N F		
UniRef90_V5C915	V G E E V M G K Y H P H G D S A I	Y D T M V R M A Q P F S S M R Y V L I D G Q G N Y		
UniRef90_A0B8Z5	V G D V M G K Y H P H G D V A I	Y D T M V R M A Q D F S M R Y T L I D G Q G N F		
UniRef90_A0A023WZQ3	V G E V I G K Y H P H G D S A V	Y D T L V R L A Q D F S M R Y K L V D G Q G N F		
UniRef90_C9MF4	V G D V L G K Y H P H G D S S V	Y G A M V R M A Q D F N M R Y E L I D G H G N F		
UniRef90_D1PRM5	V G A V L G S Y H P H G D A S V	Y D A M V R L A Q D F S L R Y P L V D G Q G N F		
UniRef90_R9LB38	V G S V L G R Y H P H G D A S V	Y D A M V R L A Q D F S M R Y P L V D G H G N F		
UniRef90_UP100047CB2A7	V G D V M G K Y H P H G D A A I	Y E T L V R L A Q D F S I R Y P L V D G H G N F		
UniRef90_C9R598	V G D V I G K Y H P H G D S A V	Y D T L V R M A Q P F S L R Y M L V D G Q G N F		
UniRef90_K2AN04	V G E V L G K Y H P H G D A P V	Y E A L V R M A Q N F S M R I P L I D G Q G N F		
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UniRef90_U5FAU4	V G E V I G K Y H P H G D T A V	Y D A M V R M A Q D F S Y R Y M L V Q G H G N F		
UniRef90_I4CB96	V G D V I G Q Q Y H P H G D A A V	Y D S L V R M A Q P F S M R Y T F I D G Q G N F		
UniRef90_U1KTG4	V G D V I G K Y H P H G D S A V	Y D T I V R M A Q P F S L R Y L L V D G Q G N F		
UniRef90_UP10003765E11	V G E V M G L Y H P H G D S A I	Y D T L V R L A Q P W V M R A P L V A G Q G N F		
UniRef90_UP10004721B02	V G D T I G K Y H P H G E S A V	Y D A L V R M A Q H F S M R G M L I D G Q G N F		
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UniRef90_V4J458	V G E V L G K Y H P H G D S A V	Y D T L V R L A Q N F S M R Y P L V D G Q G N F		
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UniRef90_A6W3W0	V G D V M G Y H P H G D T S I V	Y D A L V R L A Q D W S L R Y P L V D G Q G N F		
UniRef90_A9KCT7	V G D V I G K Y H P H G D V A V	Y Y D T I V R M A Q P F S L R Y L I D G Q G N F		
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UniRef90_UP1000375CAE4	V G E V M G K F H P H G D S A I	Y D T L V R M A Q E F S L R Y T L V D G Q G N F		
UniRef90_B3PI15	V G D V I G K Y H P H G D S A V	Y D T I V R M A Q P F S L R Y M L V D G Q G N F		
UniRef90_W0B9Z7	V G D V I G K Y H P H G D T A V	Y Y D T I V R M A Q P F S M R Y M L V D G Q G N F		
UniRef90_R7PRJ8	V G D V L G K Y H P H G D T A V	Y E S A V R M A Q D F S T R Y E L V D G H G N F		
UniRef90_K9EFK9	V G D V M G H Y H P H G D A A I	Y D T M V R L A Q P W S M R Y P L V A G Q G N F		
UniRef90_C0R046	V G E V L A R Y H P H G D A A V	Y Y G T M V R M A Q D F S M R Y L L V D G Q G N F		
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UniRef90_D9SML3	V G D V L G K Y H P H G D S S V	Y Y D A L V R L A Q D F S M R Y T L V D G H G N F		
UniRef90_UP100040E67A5	V G D V M G K Y H P H G D S A I	Y D S V R M A Q D F S L R Y M L I D G Q G N F		
UniRef90_UP100047D3D9D	V G E V L G K Y H P H G D S S V	Y Y F A M V R M A Q W S M R Y P L V D G Q G N F		
UniRef90_UP100047E6ED7	V G D V L G K Y H P H G D S A V	Y Y L A M V R M A Q E F S T R Y G P L V D G H G N F		
UniRef90_G0VM75	V G E V L G K Y H P H G D S S V	Y Y D A T V R L A Q D F S T R Y P L V D G H G N F		
UniRef90_C7H086	V G E V M A K Y H P H G D S S I	Y D A M V R M A Q D F S I R Y M L V D G H G N F		
UniRef90_D1YWG1	V G D V M G K Y H P H G D M A I	Y D T I V R M V Q D F S L R Y P L I D G Q G N F		
UniRef90_UP10003B65BD1	V G D V I G K Y H P H G D A A V	Y Y D T I V R L A Q P W S M R Y P L V D G Q G N F		
UniRef90_UP10003B4C2CB	V G D V I G K Y H P H G D M A V	Y Y D T L V R M A Q D F T M R Y P L I D G Q G N F		
UniRef90_UP10002E6BC82	V A D V M G K Y H P H G D A S I	Y Y D A L V R M A Q D F W S M R Y P L I D G Q G N Y		
UniRef90_UP100036380BD	V G D V I G K Y H P H G D Q S V	Y Y D A L V R M A Q D F S L R Y P L V D G Q G N F		
UniRef90_R6ER32	V G E V M G K Y H P H G D G S V	Y Y D A M V R L A Q P F N I R Y T L V D G H G N F		
UniRef90_W8ULX2	V G D V I G K Y H P H G D I A V	Y Y D T I V R M A Q P F S M R Y L L V D G Q G N F		
UniRef90_R5QN94	V G D V L G K Y H P H G D S S V	Y Y E A M V R M A Q P F S M R Y V P L V D G Q G N F		
UniRef90_E6W0A6	V G D V I G K Y H P H G D S A V	Y Y D T I V R M V Q D F S L R Y P L I D G Q G N F		
UniRef90_D4YKU2	V G D V M G Q Y H P H G D S A I	Y Y D A L V R L V Q P W A M R Y P L I D G Q G N F		
UniRef90_I5B470	V G D V I G K Y H P H G D S A V	Y Y D T I V R M A Q D F S L R Y T L V D G Q G N F		
UniRef90_UP10004719DB8	V G D V L G K Y H P H G D S S V	Y Y E A M V R M A Q D F S M R Y P L V D G H G N F		
UniRef90_UP1000429E42E	V G D V L G K Y H P H G D S S V	Y Y F A M V R M A Q P W S L R Y P M V D G Q G N F		
UniRef90_C0VY08	V G D V L A K F H P H G D T A V	Y Y D A L V R L V Q P W S L R Y P L I A G Q G N F		
UniRef90_F0SUH4	V G D C M G K F H P H G D S S I	Y Y D A V V R M A Q E F S S R Y P L I D G H G N F		
UniRef90_E4RNH2	V G E V L G K Y H P H G D T A V	Y Y D T M V R M A Q D F S Y R Y P L I D G H G N F		
UniRef90_U1MQH3	V G D V M G Q Y H P H G D T A I	Y Y D T L V R L V Q P W S L R Y P L I D G H G N F		
UniRef90_UP10003656636	V G D V I G K Y H P H G D S A V	Y Y E T I V R M A Q P F S L R Y M L V D G Q G N F		
UniRef90_X5MNE0	V G D V I G K Y H P H G D Q S I	Y Y E T I V R M A Q D F S L R Y P L L D G Q G N F		
UniRef90_E8T2L0	V G E T L G K F H P H G D T A V	Y Y D A L V R M A Q D F S M R Y P L I E G Q G N F		
UniRef90_D9SF67	V G D V I G K Y H P H G D T A V	Y Y D T L V R M A Q P F S L R Y M L V D G Q G N F		
UniRef90_G8TFI5	V G E V L G K Y H P H G D S S V	Y Y D Y D A M V R M A Q E W S M R Y T L V D G Q G N Y		
UniRef90_P48369	V G D V I G K Y H P H G D S A V	Y Y D T L V R L A Q D F S M R Y M L V D G Q G N F		
UniRef90_UP1000344B664	V G D V M G N Y H P H G D S A I	Y Y D T L V R L A Q P W S M R M P L V D G N G N F		
UniRef90_UP100036C414A	V G D V M G K Y H P H G D S A I	Y Y D A L V R M A Q D F S M R A P L V D G Q G N F		
UniRef90_D4YHA6	V G D V M G K Y H P H G D S A I	Y Y E S M V R M A Q D F S Y R Y M L V D G H G N F		
UniRef90_N9UOF1	V G D V L G K Y H P H G D S S V	Y Y E A M V R M A Q D F S L R Y P L I D G H G N F		
UniRef90_C6X523	V G D V L G K Y H P H G D S S V	Y Y D A M V R M A Q P W S L R Y P Q V D G Q G N F		
UniRef90_UP100047BCB4B	V G D V M G N Y H P H G D Q A I	Y Y D A L V R M A Q D F S M R L P L I D G Q G N F		
UniRef90_R5TU16	V G E V L G K Y H P H G D S S V	Y Y G A L V R M A Q D W A M R Y P L V D G Q G N F		
UniRef90_R5JAX0	V G E V M G N Y H P H G D S S I	Y Y E A M V R M A Q D F S Y R Y P L I D G H G N F		
UniRef90_I4YMX1	V G D V M G Q Y H P H G D S A I	Y Y D A L V R M A Q D F S L R L M V D G Q G N F		

QUERY	90	100	110	120
UniRef90_F6B3U8	G S P G N D P P A A M R Y T E A R L T P A M E M L R E I D E E T V D F I P N Y			
UniRef90_E6JAY4	G S I D G D P P A A M R Y T E A R M A K I T L E M L A D I D K E T V D F F A P N Y			
UniRef90_R7D844	G S R G N D G A A A M R Y T E C K M T P L A M E M V R D I D K N T V D F Q P N Y			
UniRef90_Q3A8P8	G N I D G D S A A A M R Y T E S R L A K P A M E L L R D I D K Q D T V D W Q P N Y			
UniRef90_R5GQF3	G S V D G D S A A A M R Y T E A R M A K I T V E M L R D I D K E T V D F M P N Y			
UniRef90_Q03I55	G S P G D D P P A A A M R Y T E C R M A P L A M E M V R D I D K K D T V D F F L P N Y			
UniRef90_F5WQN6	G S V D G D G A A A M R Y T E A R M S K I T L E M L R D I D K N K T V D F F Q E N Y			
UniRef90_H5WX55	G S P G N D P A A A M R Y T E S R L D P L A M E M L R E I E E E T V D F F S D N Y			
UniRef90_R6AWV9	G S V D G D P A A A M R Y T E A R M S R L T L E M L R D I D D K N T V D F F Y P N F			
UniRef90_B0TAN1	G S I D G D P A A A M R Y T E L R M A K I T S Y I L L A D I D K N T V D F F K P N Y			
UniRef90_Q5HJZ0	G S M D G D G A A A M R Y T E A R M T K I T L E M L R D I D K K D T I D F F I D N Y			
UniRef90_S6C8E2	G S I D G D S A A A M R Y T E A R L D K P A M E L L R D I D K E T V D F F Q P N Y			
UniRef90_UP100041BE09A	G S I D G D G S A A A M R Y T E S R M S Q A L E E L L R D I D N K K E T V D F F G P N Y			
UniRef90_D2BQL6	G S M D G D G A A A M R Y T E A R L L S K I A M E M L R D I D N K N T V D F F M D N F			
UniRef90_Q1NV33	G S V D G D P P A A A M R Y T E A R M T R I D Q E L I S D D L R D I D K E T V D F F I P T Y			
UniRef90_G2DVZ1	G S V D G D P P A A A M R Y T E V R M K R I S E S L L R D I D D K D T V D F F I P P N Y			
UniRef90_S7TB88	G S I D G D A A A A M R Y T E V R M A R L T A E F L R D I D D K D T V N W R A N Y			
UniRef90_UP1000366BF9E	G S V D G D S A A A M R Y T E I R M D K L A H E L L A D I D K K E T V D F F G P N Y			
UniRef90_B5JSE9	G S V D G D A P A A M R Y T E V R M A K L A H E M L A D I D K K E T V D F F V D N Y			
UniRef90_F7NQC7	G S V D G D G S A A A M R Y T E V R M S R L A E E M L A D I D K K N T V D F F T P N Y			
UniRef90_C0GI67	G S V D G D R A A A M R Y T E A R M S K I A T E M L S E I H K E T I D F F R P N F			
UniRef90_R5DLZ6	G S V D G D G A A A M R Y T E A R M H K T Q S M L A D I D C E T V E F F E P N F			
UniRef90_F1T5R0	G S I D G D P P A A M R Y T E S R L T H A A M Q M L R D I D K K E T V D F F D P N Y			
UniRef90_V5C915	G S V D G D P P A A M R Y T E A R M L S H E M L A D I D K K E T V D F F D P N Y			
UniRef90_A0B8Z5	G S V D G D P P A A M R Y T E V R L L S K I A G E M L A D I E K E T V D F F V P N Y			
UniRef90_A0A023WZQ3	G S V D G D P P A A A M R Y T E A R L L A R M A T E M L R D I I N A D T V D F F V P N F			
UniRef90_C9MF4	G S I D G D E A A A M R Y T E A R M A K I T E E L R D I G K D T I D Y R K N F			
UniRef90_D1PRM5	G S V D G D P P A A A Y R Y T E S R M S R M S L S M L T D I D K K D T I D W D P N F			
UniRef90_R9LB38	G S V D G D P P A A A Y R Y T E S R M S R M S L S M L T D I D K K D T V N F T N N Y			
UniRef90_UP100047CB2A7	G S I D G D P A A A A Q R Y T E A R L L S K I A V E M L T D I D K K E T V D F F M P N F			
UniRef90_C9R598	G S V D G D A P A A M R Y T E A R M T K I A H E L L A D I D K E T V N F V P N Y			
UniRef90_K2AN04	G S V D G D P P A A A M R Y T E A R L A H I T E T L Y D L D K K N T V D F F A D N F			
UniRef90_UP1000468C0F0	G S I D G D P P A A M R Y T E A R M S K I K A V E M L R D I N K D T V D L V P N Y			
UniRef90_U5FAU4	G S M D G D G A A A M R Y T E A R M S K I K A M E L L R D I N K N T V D F F G P N Y			
UniRef90_14CB96	G S V D G D S A A A M R Y T E V R M D R I C Q A L L E D D L D K E T V D F F V P N Y			
UniRef90_U1KTG4	G S V D G D S A A A M R Y T E V R M A K M A H Q L L A D D L D K E T V D F F V D N Y			
UniRef90_UP10003765E11	G S P G N D P A A A A M R Y T E C K M A P L A M E M V R D I T E N T V D F F T P N Y			
UniRef90_UP10004721B02	G S V D G D P P A A A M R Y T E V R M A R L A H D L L A D I D K K E T V D F F V P N Y			
UniRef90_L0GVU5	G S V D G D A P A A M R Y T E V R M A R I A H T L L D D D L D K E T V D F F V P N Y			
UniRef90_V4J458	G S L D G D A P A A M R Y T E A R M T R I D R E I V A D I L D D L D K Q T V D F F T P N Y			
UniRef90_F6CVE7	G S V D G D S A A A A M R Y T E I R M E K I I S H H L M D L E K E T V D F F V P N Y			
UniRef90_UP100036233A2	G S V D G D S P A A A M R Y T E I V R M S K I I A H S L L I D D K E T V N F S P N Y			
UniRef90_A6W3W0	G S P G N D P A A A P R Y T E C R M A P L A M E M V R D I D E E T V D F F S P N Y			
UniRef90_A9KCT7	G S V D G D A P A A A M R Y T E I R L S R F A H A L M A D D L D K E T V D F F A P N F			
UniRef90_B2ZA27	G S V D G D N A A A A M R Y T E A K K M N K I I A A E M L R D I D N K K D T V N F I P N F			
UniRef90_UP1000375CAE4	G S I D G D A A A A M R Y T E C R L E R L S N D L L A D I D K K E T V D F F Q P N Y			
UniRef90_B3PI15	G S I D G D N A A A A M R Y T E I R M A K I I A H D L M A D D L D K K E T V D F F V P N Y			
UniRef90_W0B9Z7	G S V D G D A P A A M R Y T E V R M S K I I A H A L L A D D L D K K E T V D F F S P N Y			
UniRef90_R7PRJ8	G S I D G D S P A A A M R Y T E I V R M R T K I I A V E M L R D I D E K D T V N F M P N Y			
UniRef90_K9EFK9	G T P G D L G A A A P R Y T E A R M A P L A L E M V R D I K E D D T V D F F M E N Y			
UniRef90_C0R046	G S I D D D P P A A A M R Y T E A R M T R F A E E M L N D I E K E T V K F V P N F			
UniRef90_UP10002F0CE43	G S V D G D G P A A M R Y T E A R M R K I I A D E V M V A M D I D K D T V D F F R P N F			
UniRef90_Q3BV10	G S V D G D S A A A A M R Y T E I V R M S R L I A H E L M A D D I D K K E T V D F F Q P N Y			
UniRef90_D9SML3	G S V D G D G A A A M R Y T E A R M D K M A N E M V R D I N K N T V D F F I P N Y			
UniRef90_UP100040E67A5	G S I D G D S A A A A M R Y T E V R M S K I I A E A L L Q D I E K E T V D F F V P N Y			
UniRef90_UP100047D3D9D	G S V D G D S P A A M R Y T E A R L N K L S E E T L L D I D K K D T V D F F Q L N F			
UniRef90_G0VM75	G S V D G D S P A A A M R Y T E A R M S R L I S L E L L R D I D K K E T V D F F Y I P N F			
UniRef90_C7H086	G S I E G D G A A A M R Y T E A R M S H L A Q M L R D I D K K K T V D F F V P N F			
UniRef90_D1YWG1	G S V D G D S A A A M R Y T E V R M A K I I A D E M L D D D L D K E T V N F V P N F			
UniRef90_UP10003B65BD1	G S V D G D P P A A A M R Y T E I R M A R I A H E L L A D D L D K E T V D F F V P N Y			
UniRef90_UP10003B4C2CB	G S M D G D A P A A M R Y T E V R M A K I I A H E L L T D I E K E T V D F F M P N Y			
UniRef90_UP10002E6BC82	G S I D G D P P A A A M R Y T E I V R L T K V A H E L L E D D I D K K D T V D F F Q E T Y			
UniRef90_UP100036380BD	G S V D G D N A A A M R Y T E C R L D R L T S E I L S D D L D K E T V D F F Q P N Y			
UniRef90_R6ER32	G S V D G D G A A A M R Y T E I V R M T P L A L Q M L R D I D K E T V D F F T P N F			
UniRef90_W8ULX2	G S V D G D S A A A M R Y T E I R M S K I I A H E L L A D D L E K E D D T V D F F V P N Y			
UniRef90_R5QN94	G S M D G D S A A A M R Y T E I V R L A K V A H S L I D D I D K D T V D F F M P N Y			
UniRef90_E6W0A6	G S V D G D S A A A M R Y T E V R L K R I S D E L L T D I E K N T V E F F Q S N Y			
UniRef90_D4YKU2	G S A G N D G A A A P R Y T E C R M A P L S L E M V R D I E E D T V D F F Q D N Y			
UniRef90_I5B470	G S V D G D S P A A A M R Y T E I R M R K L I S H Q M L A D D L E K E K T V E F F T P N Y			
UniRef90_UP10004719DB8	G S I D G D D P P A A A M R Y T E A R M S K L I A A E M L E G I K K D T V D F F V D N Y			
UniRef90_UP1000429E42E	G S V D G D S P A A M R Y T E A R L K F A E E M L A D I N K K E T V D F F Q L N F			
UniRef90_C0VY08	G S P G N L G P A A P R Y T E C R M A P L A M E M V R D I D E N T V D F F V D N Y			
UniRef90_F0SUH4	G S V D G D S A A A M R Y T E V K M A S L I A T Y M V R D I D K K D T V D F F G P N Y			
UniRef90_E4RNH2	G S V D G D S A A A M R Y T E I V R M S S I I T T E L L T D I D N K K E T V D F F T P N F			
UniRef90_U1MQH3	G S A G D D E A A A P R Y T E T K M S H A L E M V R D I D E D T V D F F Q D N Y			
UniRef90_UP10003656636	G S V D G D R A A A M R Y T E I V R M T K M A H A L L E D D I D E K D T V E F F K P N Y			
UniRef90_X5MNE0	G S V D G D P P A A A M R Y T E V R M G K P A H A L L E D D I D E K D T V D F F Q N N Y			
UniRef90_E8T2L0	G S I D G D S A A A M R Y T E I V R L S K I I A L E E L L K D I D E K D T V D F F K P N F			
UniRef90_D9SF67	G S V D G D N A A A M R Y T E I V R M A K I I A H E L L A D D L D K K E T V D F F G P N Y			
UniRef90_G8TF15	G N Q D G D G P A A M R Y T E I V R L D R L A E F M M D D I D K K D T V D F F Q P N F			
UniRef90_P48369	G S V D G D S A A A M R Y T E V R M A R I S H E L L A D D L D K K E T V D W V P N Y			
UniRef90_UP1000344B664	G S P G N D P A A A M R Y T E C K L A P L A M E M L R D I E K D T V D F F R P N Y			
UniRef90_UP100036C414A	G S M D G D S A A A M R Y T E I V R M D K V S S M L A D I D K D T V N F Q A N Y			
UniRef90_D4YHA6	G S V D G D Q A A A M R Y T E I V R M S K I I A H E M V R D I D M N K D T V D F F I P N Y			
UniRef90_N9UOF1	G S L D G D S A A A M R Y T E I V R M S K I I A G A M L D G L K K N T V D F F L D N Y			
UniRef90_C6X523	G S M D G D P P A A M R Y T E I V R M K L I S D E L L A D D L D K D T V D F F Q N N F			
UniRef90_UP100047BCB4B	G S L D G D P P A A M R Y T E C R L D K S A E S M L S D I D K N T V D F F Q E N Y			
UniRef90_R5TU16	G S V D G D S P A A M R Y T E I V R L K K I G E E M M Q D L Y K E T V D F F T T N N F			
UniRef90_R5JAX0	G N I E G Y G A A A M R Y T E I V R L A K I S L E L L R D I D N K N T V D F F T T N Y			
UniRef90_I4YMX1	G S V D G D P P A A M R Y T E I V R L A K A A M P L L D D I D K D T V D F F T P N Y			

QUERY	D G R V Q E P T V L P S R F P N L L A N G S G G I A V G M A T N I P P H N L R G E	130	140	150	160
UniRef90_F6B3U8	D N R T K E P V I L P A K I P N L L I N G S S G G I A V G M A T N I P P H N L R G E				
UniRef90_E6JAY4	D G K T S E P V V L P S R I P N L L V N G S S G G I A V G M A T N I P P H N L R G E				
UniRef90_R7D844	D E S L A E P V A L P A R F P N L L V N G S Q G G I A V G M A T N I P P H N L R G E				
UniRef90_Q3A8P8	D N S T K E P V V L P S R I P N L L V N G S S S G G I A V G M A T N I P P H N L R G E				
UniRef90_R5GQF3	D G K T Q E P T V L P A R F P N L L C A V G M A T N I P P H N L R G E				
UniRef90_Q03155	D G T E R E P S I L P A R F P N L L V N G A T G G I A V G M T N I P P H N L S G E				
UniRef90_F5WQN6	D G E E R E P V V L P S R F P N L L V N G G T G G I A V G M A T N I P P H N L S G E				
UniRef90_H5WX55	D G R T T R E P D V L P S R I P N L L V N G G S S G G I A V G M A T N I P P H N L R G E				
UniRef90_R6AWV9	D E T L M Q P A V L P A R Y P N L L V N G S S N G I A V G M A T N I P P H N L R G E				
UniRef90_B0TAN1	D D K R E E P T V L P S R V P N L L L N G A S G G I A V G M A T N I P P H N L T G E				
UniRef90_Q5HJZ0	D G N E R E P S V L P A R F P N L L A N G A S G G I A V G M A T N I P P H N L T G E				
UniRef90_S6C8E2	D E S L Q E P T V L P S R F P N L L V N G S S N G I A V G M A T N I P P H N L G G E				
UniRef90_UP100041BE09A	D E N E Q E P L V L P S R F P N L L V N G S S S G G I A V G M A T N I P P H N L G G E				
UniRef90_D2BQL6	D G T E R E P L V L P A R F P N L L V N G S S G G I A V G M A T N I P P H N L G G E				
UniRef90_Q1NV33	D N S Q N E P L V F P A R I P N L L V N G S A G G I A V G M A T N I P P H N L R G E				
UniRef90_G2DVZ1	D N T E H E P S V L P A R F P N L L V N G S S S G G I A V G M A T N I P P H N L R G E				
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QUERY

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UniRef90_R7PRJ8	V I D G L C M M I I D P P N I T I D Q L M T T I K G P D F P T G G L I Q G			
UniRef90_K9EFK9	I N D G V Q W Y L Q H P D A T R E E E L L G E L M L R I K G P D F P T G A Q I L G			
UniRef90_C0R046	V V N A I V Y Y I D H Q D A E T I K D L M R Y V Q G P D F P T A G I I Y G			
UniRef90_UP10002F0CE43	V I D A T C A Y I D D R Q V E T S E E L L K I V K A P D F P T G G I I Y G			
UniRef90_Q3BV10	A I N A C I A L I I D T P E L D V E G L M E Y I P G P D F P T A G I I M G			
UniRef90_D9SML3	V I D G V N L L I I E N P E A T V L D L M T K I K G P D F P T A G I I M G			
UniRef90_UP100040E67A5	V I D A S I L A L L H N S E L T I D E L M Q Y I P A P D F P T A G I I N G			
UniRef90_UP100047D3D9D	V V D A I T Y I D N N D V S I D E L L V T Q F I K G P D F P T S A I I M G			
UniRef90_UP100047E6D7	V I D A T I H L I I D N N E D C T I D E L L V T Q F I K G P D F P T S A I I M G			
UniRef90_G0VM75	V I D G C V L L I I D N P E A S L E E I M T K I K G P D F P T G A K I M G			
UniRef90_C7H086	V I D A T V K L I I D D R E T S V E E L L A K I I K G P D F P T G A K I L G			
UniRef90_D1YWG1	V I D G T V A L I I D N P D A I E P L E L L K L T G P D F P T G A Y I Y G			
UniRef90_UP10003B65BD1	V I N G V L A L I I E Q P P E I L T V T Q L I G H I P G P D F P T G A V I N G			
UniRef90_UP10003B4C2CB	V I D A L V A M I I H N P N I T V D E L L L E Y V K G P D F P T G A F V C			
UniRef90_UP10002E6BC82	V C D G A I A L I I D N P P A L D T L P S L M E I V P G P D F P T G G I V L G			
UniRef90_UP100036380BD	V I V D A T I A L I I D N P D L G F D E L L R L V P G P D F T Y G I I N G			
UniRef90_R6ER32	V I D A A V V K L I I D E P E S T V E D L I K I V K G P D F P T G A I I M G			
UniRef90_W8ULX2	V I D G C L A Y I I E D E N I T I E G L M E Y I P G P D F P T A A I I N G			
UniRef90_R5QN94	V I D A C C A Y I I D N P F V S V E D L I N I V P G P D F P T G G L I L G			
UniRef90_E6W0A6	V V D G L L L L D K P E A D I A E I M Q H I K G P D F P T A G F I T G			
UniRef90_D4YKU2	V A A G A Q W L L A H P D A T N D E A L E A L L G I I K G P D F P N G A T I L G			
UniRef90_I5B470	V I E G L K A L I I D N P D I D T R E A L L M A H I P G P D F P T Y G H Y G			
UniRef90_UP10004719DB8	A I D A T V A L A R N S E I T T L E L M E H I L K G P D F P T G G I I Y G			
UniRef90_UP1000429E42E	V I N A T V A Y I I D D N E I D P G L M Q H I K A P D F P T G G I I Y G			
UniRef90_C0VY08	V A E G V Q W Y L D H P E A S R E E E L L N A L I G I V K G P D F P T G A T I L G			
UniRef90_F0SUH4	V I D G V N Y L I I D Q P D S D Q E I T E K L L K L I K G P D F P T A G L I M G			
UniRef90_E4RNH2	V I D G V V K L I I T K P P E I T T K E L M T I I K G P D F P T G Q Q I M G			
UniRef90_U1MQH3	V A D G A I W H E H P E A S K E E L L T A L T E R I K G P D F P T G A Q I L G			
UniRef90_UP10003656636	I I E G C L A L I I E N S E I E D E L I D D L M Q I V P G P D F P T G G M I L G			
UniRef90_X5MNE0	V V D D A C I A T L I I D T P T I G I D D L M Q I V P G P D F P T G G M I L G			
UniRef90_E8T2L0	V C K A V V Q Y L V D H P E A T T E E L I M Q F I K G P D F P T G A E V I N G			
UniRef90_D9SF67	V I D A C L A L L K N P E M D I E E L I E Y Y V P A P D F P T A G F I Y G			
UniRef90_G8TF15	V I D G C I A Y I I D N R D I T I D E M M L H I K A P D F P T G G I I Y G			
UniRef90_P48369	I V N G C L A L I I E N G N L T I D E L M T Y I T G P D F P T G A L I N G			
UniRef90_UP1000344B664	V A D G V N W Y L D H P E T D D E E L L E A L I A R I K G P D F P T S G Q I V G			
UniRef90_UP100036C414A	V I D G V C A V I I D D P E I D T L G L M Q H I P G P D F P T G G I I L G			
UniRef90_D4YHA6	V I G A I K I L M Q N A D A T T N E L M E A L P G P D F P T G G I I V I G			
UniRef90_N9UOF1	V I D G V C A L A K N P D I S V A E L M E Y V Q A P D F P T G G I I F D			
UniRef90_C6X523	S I D A I V A Y I I D N K E I T I D E L M K H I A P D F P T G G I I Y G			
UniRef90_UP100047BCB4B	V I D G C V A L I I D D P A L S D V D G L M K Y I P G P D F P T G G V I L G			
UniRef90_R5TU16	V I D A C V A Y I I D N D I D T D G L M Q Y I K G P D F P T G G Y I Y G			
UniRef90_R5JAX0	V I D G C I A Y I I D N P D I D T D G L M Q Y I K G P D F P T G A T I L G			
UniRef90_I4YMX1	V I N G C L A F I I D N D G I S A E E L I E L I P G P D F P T G A L I L G			

QUERY	210	220	230
UniRef90_F6B3U8	S Q G T A D A Y K T G R G S I	R M R G V V E V E E D S R G R T S L V I T E L P P F	
UniRef90_E6JAY4	R D G I I R A A Y R T G R G S I	I K I R A Q A T I V E T K N N G R S A I I V I T E L P P F	
UniRef90_R7D844	D D G I K D A Y S T G R G S I	R M R G K T S I V E E G N R T V I V I T E L P P Y	
UniRef90_Q3A8P8	S D G I R Q S Y E T G R G S I	T V R A K A H V E T T K T G R N R L V F T E L P P Y	
UniRef90_R5GFQ3	R Q G I R Q A Y T T G R G R T I	K V R A V T T F E E K L S G G K T A I I V T T E L P P Y	
UniRef90_Q03155	H K G I E Q A Y R T G R G R G I	T M R A V V N T E E I K G R M C L V I T E L P P Y	
UniRef90_F5WQN6	K S G I R K A Y E T G H G T I	I L R A K V D E E T E K N G R E R V I V A T E L P P Y	
UniRef90_H5WX55	T Q G I S D A Y R T G R G S V	V M R A K V D I E E M K N G K P R I I I S E I L P P Y	
UniRef90_R6AWV9	D V G I R H A Y F T G R G K I	L V R A K S E I E Q C K A D R S R I I V V T E L P P Y	
UniRef90_B0TAN1	R E G I R Q A Y T T G R G S I	I L M R A K V D E E K M N G K M R I L V V H E L P P Y	
UniRef90_Q5HJZ0	K S G I R R A Y E T G R G S I	Q M R S R A V I E E R G G G R Q R I V V V T E L P P Y	
UniRef90_S6C8E2	K K G I L D A Y E T G H G N L	T I R A K C E L E E K K N G R A S I V V V K E L P P Y	
UniRef90UPI00041BE09A	T D G I R E A F R T G R G S I	T I R A K T Q F E E G P G G G K T R I I V V N E L P P Y	
UniRef90_D2BQL6	K S G I R R A Y E T G K G S I	T I R A K T H E E K H K S G R E V I V V T E L P P Y	
UniRef90_Q1NV33	R A G I R E A Y E T G R G R G I	L I R S R H E E K H K S G R E V I V V T E L P P Y	
UniRef90_G2DVZ1	I R G I R E A Y R T G R G R G I	C V M R A R T T T E Q K R S G R E A I I V V T E L P P Y	
UniRef90_S7TB88	G R G I A D A Y A T G R G T I	R I L R G T A E E E A K N G R Q S I I V V T E L P P Y	
UniRef90UPI000366BF9E	R E G I R E A Y S T G R G R G I	Q V M R A R A L V E E D R R G R E K I V V V T E L P P Y	
UniRef90_B5JSE9	A R G I R E A Y R T G R G R I	Y M R A R A S V E E D K N G K P Y I V V V T E L P P Y	
UniRef90_F7NQC7	K E G I R Q A Y T T G R G S V	K M R A Q A R I E E K M S N G K Y R I L V V T E L P P Y	
UniRef90_C0G167	R E G I R S A Y R T G R G R G I	K I R A K T Q I E E R M E N G K S R I L V V V T E L P P Y	
UniRef90_R5DLZ6	L N D I K Q A Y E T G R G S I	M Q A V A N F E I A G G N G K R Q R I V V V T E L P P Y	
UniRef90_F1T5R0	T D G I R D A Y T T G R G S I	T I R S R K V H V E E N G R G R Q R I V V V T E L P P Y	
UniRef90_V5C915	Y S G I Y S A Y T T G R G K I	Y L R A R C H F E D V E G G G N R Q I I I T T E L P P Y	
UniRef90_A0B8Z5	R S G I E S A Y S T G R G T I	T I R A R S E I E E G R R G S R I I I F T E L P P Y	
UniRef90_A0A023WZQ3	L S G I K S A I E T G R G S I	R V Q A K A H T E Q M R G N R T Q I V V V T E L P P Y	
UniRef90_C9MFZ4	K Q G I Y D A Y R T G R G K I	R V A G R V E V E T S K T K G K E R I V V V T E L P P Y	
UniRef90_D1PRM5	R S G I R A A Y A T G R G K I	T L R G R A E I V E K K K N G R Y E R I L I V T E L P P Y	
UniRef90_R9LB38	R A G I R A A Y A T G R A R I	M L R A R A G I E E E M N A G R E R I V V V T E L P P Y	
UniRef90UPI00047CB2A7	Y E G I K E A Y A T G K G K I	V V R A K T E I E Q S S T K T R I I V V K E L P P Y	
UniRef90_C9R598	R K G I E E A Y K T G R G K I	Y V R A R A E I E T D K G R F Q I I V V N E L P P Y	
UniRef90_K2AN04	I S E I T A A Y A T G R G K I	L M R G K A D I E E T K A G K F F Q I I I V T E L P P Y	
UniRef90UPI000468C0F0	R S G I R K A Y E H G K G T I	I L R A K V D V V T K K N G A E Q I I V V T E L P P Y	
UniRef90_U5FAU4	R S G I R Q A Y E T G R G R G I	L T R S K Y H V E E E M G N G K N R I V V V T E L P P Y	
UniRef90_I4CB96	R R G A I D A Y T T G R G S V	T M R A K T E I D A G K G Y Q R I V V V T E L P P Y	
UniRef90_U1K7G4	K K G I E Q A Y K T G R G K V	Y T M R A K T E I E K R G R E A I I V V H E L P P Y	
UniRef90UPI0003765E11	R Q G I E D A Y R T G R G S V	I M R A V I N E E D K A G R T L L V V V T E L P P Y	
UniRef90UPI0004721B02	S G G I V E A Y A H T G R G R G I	Y V R A R A N T E E N D G G G N R R R I V V V T E L P P Y	
UniRef90_L0GVU5	V R G I R E G Y R T G R G R G I	F M R A R T H T E I E K R G R E A I V V V T E L P P Y	
UniRef90_V4J458	R N G I R E A Y E T G R G R G I	T L R A K T H E E K K D E R H E K I V V V T E L P P Y	
UniRef90_F6CVE7	R A G I I E A Y K T G R G R G I	Y M R A R H H I E D M E K G N R R Q I V V V T E L P P Y	
UniRef90UPI00036233A2	R A G I V D A Y N T G R G R G V	V I M R A K A S I E Q D K K D R E Q I V V V T E L P P Y	
UniRef90_A6W3W0	H R G I S D A Y R T G R G S I	T M R A V V E V E E I Q G R T C L V V S E L P P Y	
UniRef90_A9KCT7	N R G I V Q A Y K T G R G R G I	V Y V R A K T E I T T K S G R S R I V V A H E L P P Y	
UniRef90_B2ZA27	K S G I R A A Y E T G K G R V	V I V R A K A E I E E E N N R H R I I V V T E L P P Y	
UniRef90UPI000375CAE4	L I H G V H E G Y R T G R G R V	V V M R A R T H I E D M E K G N R R Q I I V V D E L P P Y	
UniRef90_B3PI5	R A G I V E A Y R T G R G R G V	V V M R A K A E I E T D K T G R E T I I I V T E L P P Y	
UniRef90_W0B9Z7	R A G I I Q A Y R T G R G R G I	L I R A K I D I E T D D S G R Q A I I I V T E L P P Y	
UniRef90_R7PRJ8	R K G I E K A Y H T G R G G I	T L R A K T F I E E M S H G K N R I V V V T E L P P Y	
UniRef90_K9EFK9	T R G I E E A Y R T G R G S I	T M R A V V E V E E I H G R T C L V V S D E L P P Y	
UniRef90_C0R046	K E G I K E A Y T T G K G R I	K I R A R L E V E E T K R D R E A I V V V T E L P P Y	
UniRef90UPI0002F0CE43	Y E G I V E R E A Y E T T G R G R G I	V M R A K T E I H T S T G R E C I V V V T E L P P Y	
UniRef90_Q3BV10	T A G I I A A G Y R T G R G R G V	R I R A K A D V E V E V A D N G G R E A I V V V T E L P P Y	
UniRef90_D9SML3	K S G I I R E A Y E T G R G R G V	V V V R A N A T I E E E D G G G R H K I I V V T E L P P Y	
UniRef90UPI00040E67A5	T K G I I R E A Y H T G R G R G V	V I I R A K A E I E H D K R G R G R D V I I I T T E L P P Y	
UniRef90UPI00047D3D9D	Y Q G I V K E A Y A T G R G R G V	V I I R A K T D V E E T D K N G R E K I I I T T E L P P Y	
UniRef90UPI00047E6ED7	K E N I A H A Y R T G R G K V	K V V R A R A Y I E E L A K G R Q Q I I I T T E L P P Y	
UniRef90_G0VM75	R D G I I K A Y S T G R G S I	K M R S C A T I E E P M N K G K H R I V V V T E L P P Y	
UniRef90_C7H086	R A G I I R E G Y L T G Q Q G K I	K I R S T L D I E Q T K K G K E Q L V V V S E L P P Y	
UniRef90_D1YWG1	R E G I I K D A Y L T G R G S I	K I R A K A E I E T E Q D K T G R E T I I V V H E L P P Y	
UniRef90UPI0003B65BD1	R R G I I E E A Y R T G R G K V	Y I I R A R A E V E E A D K T G R E T I I V V H E L P P Y	
UniRef90UPI0003B4C2CB	A Q G I I R Q A Y T T G R G R G V	Y I I R A C S H V E T K D S G R Q S V I I I V T E L P P Y	
UniRef90UPI0002E6BC82	T K G I I K E A Y A T G K G G I	L I K L R A R A H I E R E G S R A S I I I V T E L P P Y	
UniRef90UPI00036380BD	R S G I I Y N A Y S S G R G S I	V I M R G R V H V E E A L R N D R E A I I I I T T E L P P Y	
UniRef90_R6ER32	A A G I I I E A Y K T G R G R G V	T R Q A R A V V E V E E E T D N G R E T I I I I T T E L P P Y	
UniRef90_W8ULX2	K S S V I R E A Y R T G Q G K A V	V V V R A V A E E E E T S H G K Q Q I I I V T E L P P Y	
UniRef90_R5QN94	R R G I I E E A Y R T G R G K V	R R G I I E E A D K T G R E T I I V V H E L P P Y	
UniRef90_E6W0A6	Y A G A K S A Y L T G R G S V	Y I I R A C S H V E T K D S G R Q S V I I I V T E L P P Y	
UniRef90_D4YKU2	K Q G I I I D A Y R T G R G R G V	R M R A R A Q I E E T S K S G R E T I I V V T E L P P Y	
UniRef90_I5B470	R K G I I E D A Y R T G R G S I	T Q R A R V V E V E E E T S K S G R E T I I V V T E L P P Y	
UniRef90UPI0004719DB8	T K G I I F E A Y D T G R G G I	T L R A K V E V E E E N K K G Q E T I I V V T E L P P Y	
UniRef90UPI000429E42E	T K G I I Y D A Y E T T G K G K I	P V R S K C E V K E E L S N G K S K I I I I T T E L P P Y	
UniRef90_C0VY08	Y S G G V Q D A F E T G R G R G V	V I M R A K A E I E S Y G N D R E R I I V V N E L P P Y	
UniRef90_F0SUH4	K T A I I E Q V Y R T G R G S V	K T A I I E L J H K D K E E A I I I V V H E L P P Y	
UniRef90_E4RNH2	T E G I I Q K A Y T T G R G R G S V	K T A I I E L J H K D K E E A I I I V V H E L P P Y	
UniRef90_U1MQH3	R G S I I Y K A Y K T G R G R G V	V I K I R A K A I I I E I K N N K M Q I I I V T E L P P F	
UniRef90UPI0003656636	T K G I I E E A Y R T G R G S I	T V R A K T R I E D L K V N R K Q I I I V D E L P P F	
UniRef90_X5MNE0	R A G I I V E A Y K T G R G R G V	T M R A V V T V E E I E Q T R G D R E A I I I V T E L P P F	
UniRef90_E8T2L0	R S G I I N T A Y R D G R G S V	V I M R G K V H I E E Q T R G D R E A I I I V T E L P P F	
UniRef90_D9SF67	P E E L I P K I Y K K G R G S V	T I I R A K H T L E E V R K R S R A I I I V T E L P P F	
UniRef90_G8TF15	LAGGV I K E G Y R T G R G R G V	T I I R A R C C H F E D L G K G E R R Q I I I V D E L P P F	
UniRef90_P48369	M E G V I R A G M H F G R G R G V	V I L R G K L T V D T K P S G R E T I I I V D E L P P F	
UniRef90UPI000344B664	R A G I I V Q A Y R T G R G S V	V I L R A K I N F E E V G N R S A I I I V T E L P P F	
UniRef90UPI00036C414A	R R G I I E E A Y R T G R G S I	T M R A V V E I D E D S R G R Q V I I V V T E L P P F	
UniRef90_D4YHA6	A G G I I R Q A Y E T G K G S I	I I R S R S H V E E T R K D R W A I I I V V T E L P P F	
UniRef90_N9U0F1	K S G I I R K A Y E T G K G T I	I I V R A K L D I E T L S S G K E R I I I V T E L P P F	
UniRef90_C6X523	K E G I I I K A Y E T G V G K V	I I V R S K S E I Q E L N G K S K I I I V T E L P P F	
UniRef90UPI00047BCB4B	Y D G V I R D A F H T G R G R I	I I V R A K I N F E E V G N R S A I I I V T E L P P F	
UniRef90_R5TU16	R G G I I R S A Y Q T G R G S I	L M R G K V T M E T G A R D R E V I I V V T E L P P F	
UniRef90_R5JAX0	I S G V I R E A Y E T G R G R G V	V I M R A K A E I I E S H P T H D K I I V V R E I L P P F	
UniRef90_I4YMX1	R S G V I K S A Y T T G R G S I	V M R A K S E V E E V R K D R E A L I I F T E I L P P F	

QUERY	250	260	270	280
UniRef90_F6B3U8	Q V N H D N F I T S A E Q V R D G K L A G S N E D Q S S D R V G R V I			
UniRef90_E6JAY4	Q V N K A K L V E K I A E L V K D K K I E G I S D L E D Q S S D R R G M R V I			
UniRef90_R7D844	E V N P D N M I L S A E Q L R D G K I A G I S K I D D E S S S D R V G L R V V			
UniRef90_Q3A8P8	M V N K G T L Q E K I A Q L V R E K R V E G I S D M R D E S S N Q K G I R V I			
UniRef90_R5GQF3	Q V N P D R L V V S R E A V R D G K I Q G G A D M R D E T S G R T G Q R L V L			
UniRef90_Q03I55	M V N K A K L I E K I A E L V R D K K I D G G T D V N D E S S D R K G M R V I			
UniRef90_F5WQN6	Q V N K A T L V E K I A T L V R D K E I D G G T D L R D E S S N R E G I R V V			
UniRef90_H5WX55	Q V N P D N L V E N A A L V R D G K I T G G S D L R D E S S N S R S G M R V I			
UniRef90_R6AWV9	Q V N K A K L V E K I A E L V H E K R V D G G T D L R D E S S D R R G M Q V I			
UniRef90_B0TAN1	Q V N K S K L L E R I A E L V R D K R V D G G T D L R D E T S S L R T G V R V V			
UniRef90_Q5HJZ0	Q V N K A R M I E K I A E L V R D K K I D G G T D L R D E T A A D R K G L D I			
UniRef90_S6C8E2	Q V N R K R L L E K K L G E L V R D K K I P E S N I H D A S D R T G M R V I			
UniRef90_UPI00041BE09A	Q Q N K A R L I I E K I A E L V R D R R L D G G T D L R D E S S N R E G R V I			
UniRef90_D2BQL6	M V N K A R L V I E H V I R L N H E K R I E G G T A V R D E S S N R E G R V I			
UniRef90_Q1NV33	Q Q N K S T L L E E K I A M L I K E K R I E A I E F R D E S S D R H G M R V I			
UniRef90_G2DVZ1	Q V N K A R L L E E R I A E L V K D K K I D G G A D G L R D E S S D K D G M R V I			
UniRef90_S7TB88	A V N K S T L V E K I A Q L V N D R K I E G G V S D L R D E S S D R K G R V I			
UniRef90_UPI000366BF9E	Q V N K A R L I I E K I A E E L V K T K K I E G G S D L R D E S S D R E G M R C			
UniRef90_B5JSE9	Q V N K A R L L E E K I A E E L V K E K K I E G G T D L R D E S S D K D G M R V I			
UniRef90_F7NQC7	Q V N K A R L V E E A I A H L V R D D K T I D G G T D L R D E S S D R S G M R V I			
UniRef90_C0GI67	Q V N K A K T I E E K I A D L V R E E K K L E G G T D L R D E S S D R T G M R V I			
UniRef90_R5DLZ6	Q V N K A A L L I E K I A E E L V K D Q R V T G G S D L R D E S S D R E G M R V I			
UniRef90_F1T5R0	Q V N K G L L Q E R I A Q Q V N E K R I E G G S S A R D E S S N R K G M R V I			
UniRef90_V5C915	Q V N K A N L Q E K I A E E L V K E G R I E G G S S A R D E S S D K D G M R V I			
UniRef90_A0B8Z5	Q V N K A K V V E D I A E E L V K A G R V D G G S E I R D E S S D R E G R V V			
UniRef90_A0A023WZQ3	Q V N K S Y L L Q K I A E E L V K D R K I D G G S D L R D E S S D R N G M R V I			
UniRef90_C9MF4	Q V N K A R L I E K I A D L V R Q K K I T G G S D L R D E S S D K D G M R V I			
UniRef90_D1PRM5	M V N K T R L I E S S I A D L V K D K K I E G G S D L R D E S S S S R T G M K V I			
UniRef90_R9LB38	M V N K A R L I I E H A E E L V K N K R I E Q S D L R D E S S S D R D G M R V I			
UniRef90_UPI00047CB2A7	M V N K A R L V E K I A E E L V R D K K I E G G A D L R D E S S D R S G M R V I			
UniRef90_C9R598	Q V N K A K L I E K I A D F V K D K K I E G G S G L R D E S S D K D G M R V I			
UniRef90_K2AN04	Q V N K A T L V T K I A D L V K E K K L D G G S D L R D E S S D R R G M R V I			
UniRef90_UPI000468C0F0	M V N K A N L V E R I A E L A R D K K K I E G G T D L N D E S S S D R E G M R V I			
UniRef90_U5FAU4	Q V N K A N L I S K I A D L V R E K Q V D G G T Y L N D E S S N R Q G R V V			
UniRef90_I4CB96	L V N K A R M V E N V A D L V K D K R I A G R D R D E S S S D K D G M R V V			
UniRef90_U1KTG4	Q V N K A R L I I E K I A D L V K D K K I E G G S A L R D E S S S D K D G M R V I			
UniRef90_UPI0003765E11	M C N P D N L A V K I A E E L V N A G R I S G G A D I R D D E S S S A R T G Q R L V I			
UniRef90_UPI0004721B02	Q V N K A R L Q E K I A E E L V K E K K I E G G S E L R D D E S S D K D G M R V I			
UniRef90_L0GVU5	Q V N K A R L L K Q I A E E L V K D K R I E G G A E L R D E S S D K D G M R V I			
UniRef90_V4J458	Q Q N K A V L V E R I A Q Q V I N D K K I T A S E I R D E S S D R Q G R V M			
UniRef90_F6CVE7	Q L N K A K V I I E K I A E E L V K D K K I E G G S E L R D E S S D K D G M R V I			
UniRef90UPI00036233A2	Q V N K A R L I I E K I A E E L V K D K K I E G G S E L R D E S S D K D G M R V I			
UniRef90_A6W3W0	Q V N P D N L A E N I A N L V R D G R I T G A D V Q D H T S G K T G Q R L V I			
UniRef90_A9KCT7	Q V N K A R L Q E K I A E E L V K E K K I E G G S E L R D D E S S D K R G M R M V I			
UniRef90_B2ZA27	Q V N K A K L I I E N I A D L V K D K K I V G S D L R D E S S D R E G M R V I			
UniRef90UPI000375CAE4	Q V N K K T L I I E K I A E E L V G D K K I E G G S D L R D E S S D K S G M R M V I			
UniRef90_B3PI15	Q I N K A R L I I E R I A E E L V K E K K I V E G G S E L R D E S S D K D G M R V I			
UniRef90_W0B9Z7	Q V N K A R L V E R I A D L V R D K R L E G G S G L R D E S S D K Q G M R V V I			
UniRef90_R7PRJ8	Q V N K A R V I I E N I A D L S R Q K V L D G G T A L R D E S S D R K G M R V I			
UniRef90_K9EFK9	Q V N P D R L L D R M V I E A I K D G R I S G G V A D R D E S T S G R A G Q R V V			
UniRef90_C0R046	G V V K T T L H E K A D L V K Q G K I E G G S E L R D E S S S N R A G R L I			
UniRef90UPI0002F0CE43	UniRef90UPI0002F0CE43	M V N K A E M R K I A D L I N D K K I E G G A Y I N D E S S D R S G M R V M		
UniRef90_Q3BV10	Q V N K A R L I I E K I A E E L V K D K K I E G G S E L R D E S S D K D G M R Y V I			
UniRef90_D9SML3	Q V N K A K L I E N I A D L V K D K K I V G S D L R D E S S D R D G M R V I			
UniRef90UPI00040E67A5	Q V N K A R L I I E R I V I E L Y R E K I E G G A D G L R D E S S D K D G M R V I			
UniRef90UPI00047D3D9D	UniRef90UPI00047D3D9D	L V N K A E L I M K I A D L V N E K K I E G G S S N V N D E S S N R N G M R V V		
UniRef90_G0VM75	Q V N K A R V I E S I A D L S R N K E I D G G T A L R D E S S D R K G M R V V			
UniRef90_C7H086	Q V N K T R L L M E K I G E L V K E K I E G G S E I R D E T T N K E G R V I			
UniRef90_D1YWG1	Q V N K A K L I I E N I A D L V R D K K L E G G S D L R D E T S D R D G M R V V			
UniRef90UPI0003B65BD1	UniRef90UPI0003B65BD1	Q V N K A K L V E K I A A L A R D K K I E G G A E V R D E S S D K D G M R M V V		
UniRef90UPI0003B4C2CB	UniRef90UPI0003B4C2CB	Q V N K A K L V E K I A A L A R D K K I E G G S D L R D E S S D R E G R V V		
UniRef90UPI0002E6BC82	UniRef90UPI0002E6BC82	Q V N K A T M I E K M A E L V R D K R I E G G S D L R D E S S D R Q G Y R V V I		
UniRef90UPI00036380BD	UniRef90UPI00036380BD	Q V N K K R L I I E A I A E L H E K K L E G G S D G L R D E S S N R K G M R V I		
UniRef90_R6ER32	UniRef90_R6ER32	Q V N K A R L I I E K I A D L V R D K R V V E G G T A I R D E S S S D K D G M R V I		
UniRef90_W8ULX2	UniRef90_W8ULX2	Q V N K A R L I I E K I A D L V K E K R V V E G G S A L R D E S S S D K D G M R V I		
UniRef90_R5QN94	UniRef90_R5QN94	Q V N K A A M I T R I A E L I K E K K I D G G S E I R D E S S D R Q G V R V V I		
UniRef90_E6W0A6	UniRef90_E6W0A6	Q V N K S R L I E K I V E L V K E K R I E G G A D L R D E S S D R E G M R V V I		
UniRef90_D4YKU2	UniRef90_D4YKU2	M V N P D T L A N K I A S Y V K D G K V A G I R D E S S S G R T G Q R L V I		
UniRef90_I5B470	UniRef90_I5B470	Q V N K A K L V E K I A E L V R D K V I T G V S Y V R D E S S S D R D G M R R M A		
UniRef90UPI0004719DB8	UniRef90UPI0004719DB8	A I K K S T I L V Q K I A E L H K E K V I E G G S E I R D E S S S N R E G R V I		
UniRef90UPI000429E42E	UniRef90UPI000429E42E	Q V N K A N M I E Q T A G L V N D K K I E G G S E I R D E S S S D R D G M R V I		
UniRef90_C0VY08	UniRef90_C0VY08	Q V N P D N L A L K I A Q V K D G A L A G A D I R D E S S T S D R S G Q R L V I		
UniRef90_F0SUH4	UniRef90_F0SUH4	M V N K S R L I I E K I A E L V Q E K K I D G G T D L R D E S S T S D R K G M R V I		
UniRef90_E4RNH2	UniRef90_E4RNH2	Q V N K A R L I I K K I A N L V K D E K I D A S D I R D E S S S D R D G M R V I		
UniRef90_U1MQH3	UniRef90_U1MQH3	Q V N P D R L A V R I A D L V K D G K L Q G A N I E D Q T S G R T G Q R L V I		
UniRef90UPI0003656636	UniRef90UPI0003656636	Q L N K S R L I I E K I A E L V K D K K I E G G S E L R D E S S S D K D G M R V I		
UniRef90_X5MNE0	UniRef90_X5MNE0	Q V N K S S M V E K I A E E L V R E K R V V E G G S D L R D E S S S D R D G M R V V		
UniRef90_E8T2L0	UniRef90_E8T2L0	Q V N K A D L I I K K I A E E L V K E K K I D G G A D I R D E S S S D R E G R V V I		
UniRef90_D9SF67	UniRef90_D9SF67	Q V N K A N L L M K I G E M V R E K R I E G G S E I R D E S S S D K S G M R A V I		
UniRef90_G8TFI5	UniRef90_G8TFI5	Q V N R D A L C D K I G Q L V N E K V I E G G A H N N E S S N A K E G T R I V I		
UniRef90_P48369	UniRef90_P48369	Q V N K A R L I I E K I A E E L V K E K K V V E G G S A L R D E S S S D K D A C R I		
UniRef90UPI000344B664	UniRef90UPI000344B664	Q V N P D N L A L K I A E E L V K D G R V V S G G A D V R D E S S T S G R T G Q R L V I		
UniRef90UPI00036C414A	UniRef90UPI00036C414A	Q V N K A S M I E K I A E E C V Q T K R I E G G S D I R D E S S S D R D G V R V V I		
UniRef90_D4YHA6	UniRef90_D4YHA6	M V N K A K L V E R I A E L A R D K R V V E G G T A V R D E S S G R E G M R V V I		
UniRef90_N9UOF1	UniRef90_N9UOF1	G K N K S V L I I E S I G H L I K D K K I E G G A D F R D E S S S N R D G I R V I		
UniRef90_C6X523	UniRef90_C6X523	Q V N K A E M I A R T A E L V K D E K I P G Y E I R D E S S S D R Q G L R V Y		
UniRef90UPI00047BCB4B	UniRef90UPI00047BCB4B	Q V N K A A M I E K I A E E L V R E K R I E G G A D I R D E S S S D R Q G V R V V I		
UniRef90_R5TU16	UniRef90_R5TU16	N V N K K E L I I E K I A S L V N V K D K K I D G G S Y I N D E T S D R E G M R V V I		
UniRef90_R5JAX0	UniRef90_R5JAX0	G V N T S D L K D K V A E L V H S K V I D G G S D Y H T D L K N G I T V I		
UniRef90_I4YMX1	UniRef90_I4YMX1	Q V N K A S L I I E K I A E E L V R E K K I E G G A D L R D E S S S D R D G M R V V		

QUERY	290	300	310	320
UniRef90_F6B3U8	I K R D A V A K V V I N N L Y K H T Q L Q T S F G A N M L	A I V D G V P R T L		
UniRef90_E6JAY4	E L K K D A N P N V I L N Q L Y K F T Q M Q E S F G I I M L	A L V N N Q P K V L		
UniRef90_R7D844	T L K R D A V A K V V L N N L Y K H S Q L Q T S F G A N M L	S I V D G V P R T L		
UniRef90_Q3A8P8	E L K R D A N P Q V V L N Q L F K H T Q L Q D T F G I I M L	A L V N G V P K C L		
UniRef90_R5GQF3	V L K R D A V P K V V L N N L Y K H S Q L Q Q T F G A N M L	A L V D D G V P R T L		
UniRef90_Q03I55	D V R R D V S A S V V L N N L Y K H T Q L M Q T T F G F N M L	A I V N G A P K V L		
UniRef90_F5WQN6	E L R R E V Q A E V V L N Q L Y R L T A L Q S S F G V N M L	A L V N G R P E L L		
UniRef90_H5WX55	A L K R D A V A K V V L N N L Y K H T Q L Q Y N F G V N M L	A L V D G V P R T L		
UniRef90_R6AWV9	E L K K D V N A N V V L N N L Y K H T Q L Q D T F G V I M I	A L V N G E P K V L		
UniRef90_B0TAN1	E L R R D V N P Q I V V L N Q L F K Y T Q M Q E T F G V I M I	A L V D G V P K V L		
UniRef90_Q5HJZ0	D V R K D A N A S V I V L N N L Y K H T Q P L Q T S F G V N M I	A L V N G R P K L I		
UniRef90_S6C8E2	D L K S N A I P Q V V L N N L F K H T Q L Q V G F G C L N M L	A L V N G T P R V L		
UniRef90UPI00041BE09A	E L R R D V K P Q I V L N N L F K H T G L Q S S F G V I M L	A L V N G Q P K V L		
UniRef90_D2BQ6L	E V R R D L S A H V I L N N L F K L T S L Q T S F G F N M L	A I E K G I P K I L		
UniRef90_Q1NV33	E L K K D E I A E V V I N Q L Y K H T Q L P L Q K S F G I I M L	S I V N M R P E V L		
UniRef90_G2DVZ1	E L K R D A H A E V V L N N L Y K H T Q M Q Q V F G I N M V	A L V D G Q P L T L		
UniRef90_S7TB88	D L K K G S I A E I I V N S L Y K Y T Q L E T S F G I N M M A	V V D N R P M L L		
UniRef90UPI000366BF9E	E L K K D M V P G V I L N Q L Y K M T A M Q S S F G I I M L	A I V K G Q P R I L		
UniRef90_B5JSE9	E L R R G E V G E V I L N N L Y A Q T Q L Q T V F G I N M V	A L D K G Q P R L M		
UniRef90_F7NQC7	E L R R D V N A D V I L N Q L Y K H T Q L Q D T F G V N M L	A L V V N N K P Q V L		
UniRef90_C0GI67	E L K R E T N A Q V V L L N Q M F K F T Q L Q Q T F G I I M L	A L V D G Q P L T L		
UniRef90_R5DLZ6	E L K R D A K P D V V K N N L F K F T Q L A T T F G V N M L	A L C G K Q P R L M		
UniRef90_F1T5R0	D L K S G A V P Q V V L N N L Y K Y T Q L Q V S F G V I D L	A L V D G V P R T L		
UniRef90_V5C915	E L K R G E M P E V V L N N L Y K Y T Q F Q T V F G I N M V	A L L D G R P Y P C L		
UniRef90_A0B8Z5	E L K Q G V N P Q V V L N Q L H K H T Q L E T T Y G I I N L	V L V D G Q P R T L		
UniRef90_A0A023WZQ3	E L K R D A V P K V V I N N L Y K H T Q M Q Q T F G V N L V	A L V V D G V P R Q L		
UniRef90_C9MF4	E L K K G E E S E L I N N L Y K H T D L Q N T F G V I M L	A L V D N A P R V L		
UniRef90_D1PRM5	E I K K D A N P Q V V L N Q L Y R Y T Q L Q D T V G V I M L	A L D D G V P K I M		
UniRef90_R9LB38	E L K R D A N A Q V V V L N Q L Y S Y S Q M Q D T V G V I M L	A L V V D G I V P K V M		
UniRef90UPI00047CB2A7	E L K K D A N P N V I L N R L Y A H T Q M Q D T F G V I M L	A L V V D G Q P K I L		
UniRef90_C9R598	E I K R D A V G E V V L N N L Y A L T Q M V V T L G I N I V	A L D H G Q P K L L		
UniRef90_K2AN04	E L K R D A P Q S V V L N N L Y K H T A L Q Q S F P V N M V	A L V D G T P Q T L		
UniRef90UPI000468C0F0	D I R D M S A S V V V L N N L Y K L T Q L Q I S Y G I N M V	A I V D K T P R V L		
UniRef90_U5FAU4	E L K R D V Q V E V V M N Q L F R L T S L Q T S F G V N M L	A L V V D G A P K Q M		
UniRef90_14CB96	E L K K D E N P D V I L N Q L F R F T Q L Q T N F G I Q L S	V D Q G R P K Q M		
UniRef90_U1KTG4	E I K R G E V G E V V L N N L Y A Q T Q L Q M Q T V F G M N M V	A L D N G Q P K L L		
UniRef90UPI0003765E11	V L K R D A Q P R V V M N N L Y K H T Q L Q D T F G C N M L	A L V V D S V P R T L		
UniRef90UPI0004721B02	E L R R G E N A D V M I K N N L Y R Q T S L E T V F G I N L V	A L V V E G R P Q L L		
UniRef90_L0GVU5	E L K R D Q S P E I L V N N L Y Q H T Q M Q Q V F G I N M V	A L V V D G Q P R L L		
UniRef90_V4J458	D L K K D E Y A D I V I N Q L Y A M T P M Q K S F G I I L	A L V V N N K P E I L		
UniRef90_F6CVE7	E L R R G E N P D V V V N N I F T Q T Q L Q S S V F G M N M V	A L V V D G R P Q L L		
UniRef90UPI00036233A2	D I K R G E V P E V V L N N L Y A Q T Q M Q Q L S F G V N M V	A L V V D N Q P K L L		
UniRef90_A6W3W0	I I R R D A V A K V V L N N L Y K H T Q L Q T N F G A N M L	A L V D G V P R T L		
UniRef90_A9KCT7	E V S R G D N A E I V I V N N L Y A Q T Q L Q T V F G I N M V	A L D N G Q P R V L		
UniRef90_B2ZA27	E L K K D A N P V V V L N L Y K H T K M Q D T F G V I M L	A L V V N N E P Q V L		
UniRef90UPI000375CAE4	E L K R G E V A E V V L N N L F K Q T Q L Q D T F G M N M V	A L V V D G K P R L L		
UniRef90_B3PI15	E V K K T E S G D V V L N N L F Q A Q T Q L Q T T F G V N M V	A L D D G Q P K L L		
UniRef90_W0B9Z7	E L K R G E V A E V I V L N N L Y A H T Q M Q N V F G I N M V	A L V V D G Q P R T L		
UniRef90_R7PRJ8	E L R S D V N P Q I M L N N L Y K H T Q L Q T T F G T I M L	A L V V D G H P R V L		
UniRef90_K9EFK9	V L K R D A V A K V V L N N L Y K H T Q L Q T N F P A N M L	A L V V D G V P R T L		
UniRef90_C0R046	E L K K G V A T Q I V L N Q L W K H T D L E T T F G I I N L	A L V V N G E P K V L		
UniRef90UPI0002F0CE43	I L K H D A V A S V V V N N L F K L T P M Q T S F P V N N I	A L V V D G R P Q M L L		
UniRef90_Q3BV10	E V K R G E S A E V V L N N L Y K Y Q T Q M E A V F G I N M V	A L I D G R R P Q L M		
UniRef90_D9SML3	E L K R D A N P N V I L N Q L Y K H T K L Q D S F G I I M L	A L V V D N Q P K V L		
UniRef90UPI00040E67A5	E L R R G E M G E V I L N Q L F K H T A L Q S S F G I N M V	A I D R G Q P K L L		
UniRef90UPI00047D3D9D	D L K R D A I A N V V L N H L Y K Y T A L Q S S F G I V N N I	A L V V K G R P Q L L		
UniRef90_G0VM75	E L R A D V N P D I V V L N N K L Y K H T Q L Q E T T F G V I M L	A L V V D G H P R V L		
UniRef90_C7H086	E L K R D A N A S I V V L N N K L Y K H T S L Q E S S M S M I M I	A L V V N G E P K K I L		
UniRef90_D1YWG1	E L K K G A N A N V V L N Q L Y R H T Q M E T T F G V V N N I	A L V V D N Q P R T L		
UniRef90UPI0003B65BD1	E L K R G E H P D V I V V L N N L Y Q H T Q L Q N V F G I N M V	A L V V D G R P P C L		
UniRef90UPI0003B4C2CB	E L K R E K F A P V I V N Q L Y K Q T P L E T T F G I I M L	A L V V N N R P E L L		
UniRef90UPI0002E6BC82	E L R R K D A N S D V I V N Q L Y R F T P L Q T S F G A N V V	A L N G G K P E V L		
UniRef90UPI00036380BD	E V R K D T L A E V V L N N L Y Q T Q M E V T F G I N M V	A L V V D G Q P R L L		
UniRef90_R6ER32	E L K R D T N A N I V V L N N L Y K H T Q M D S F S M I M L	A L V V D G R P K I L		
UniRef90_W8ULX2	E I K R D A V G E V V V L N N L Y S L T Q L Q V T F G I N M V	A L S Q G Q P K I L		
UniRef90_R5QN94	E V K R D F Q A D V V V N Q L Y K Y T P L Q T S F G M N M V	A I N N G R P M M M		
UniRef90_E6W0A6	E I K R G E H A E S I L N R L Y K F T P M E G T F G V I N L	A L V V N N S P R V L		
UniRef90_D4YKU2	V L K R D A V A K V V V N N L Y K H T Q L Q E N F S A N M L	A L V V D N V P R T L		
UniRef90_I5B470	GL K R D Q I A D V V V N N L Y K H T N M Q T S F G I I F L	A V V V N N R P E L L		
UniRef90UPI0004719DB8	D V K K G F N P H I L L N K L Y Q K S Y L Q T N F N V N M V	A L V V H G R P M M L		
UniRef90UPI000429E42E	E I K R D S N A S I V V V N N L F K Y T A L Q T S F S V N N I	A L V V D G V P R T L		
UniRef90_C0VY08	V L K R D A V A K V V V N N L Y K R T D L Q S S F P A N M L	A L V V D G T P K T L		
UniRef90_F0SUH4	E L R R D V N P Q I I L N L Y K H T Q L Q E E S F G I N L L	A L V V N N E P K V L		
UniRef90_E4RNH2	E L K R E A T P E V V V N Q L Y K H S R L Q I T F S T I M I	A L V V N N E P K V L		
UniRef90_U1MQH3	T L K R D A V A K V V V N N L Y K H T Q L Q E N F G A N M L	A I V D G V P R T L		
UniRef90UPI0003656636	E L K R G E V T D V V V N N L Y A Q T Q M Q S S V F G I N V	A L V V D D Q P K I L		
UniRef90_X5MNE0	E L K R D A V S D V V V N N L Y R F S Q L Q T S F G M N M V	A L N G G R P E V L		
UniRef90_E8T2L0	E L K R D A T P Q V V V N N L Y K L T P L Q T N F N F N M V	A L V V N G E P K L L		
UniRef90_D9SF67	E L K R G E N A D V V V N N L Y K D T Q M Q D S F G I N M V	A I V D G Q P R K T L		
UniRef90_G8TF15	D L K R D A I A N V V V N N L Y K F T E L Q T S Y G I N N V	A L S K G R P K T L		
UniRef90_P48369	E I K R G E S G E I V V V N N L Y K H T Q L Q T T F G I N M V	A L D N N Q P K V M		
UniRef90UPI000344B664	V L K R D A V A K V V V N N L Y K H T Q L Q E T T F G A N M L	A L V V D G V P R T L		
UniRef90UPI00036C414A	E L K R D A V A D V V V N N L Y R F T P L Q T S F G I N M V	A L N G G R P E Q L		
UniRef90_D4YHA6	E C R K D A S A S V I V V N N L Y K Y T Q L Q T N F G I N M V	A I V N G V P R T L		
UniRef90_N9UOF1	D V K K S F V P E V V V N N L Y K H T Q F Q T R F S F N M V	A L V V N N E P K K I L		
UniRef90_C6X523	E L K H D A I P N V V V N N L Y K Y T S L Q T S F S V N N I	A L V V K G R P E Q L		
UniRef90UPI00047BCB4B	E V K R D A V A D V V V N N L Y R F T P L Q T S F G A N F V	A L N G G R P E Q L		
UniRef90_R5TU16	D V K R D A N A V V V N N L Y K H T Q F Q T T Y G I I L L	A L V V H G R P R L L		
UniRef90_R5JAX0	T L K R D A N P Q V V V N N L Y K H T Q F Q T T Y G I I L L	M D N N T P R T L		
UniRef90_I4YMX1	E I K R D A M A D V V V N N L Y R Y T P L Q T S F G A N M V	A L N G G R P E L M		

QUERY	330	340	350	360
UniRef90_F6B3U8	R D Q L I R Y Y V D H Q L D V I V R R T T Y R L R K A N E R A H I L R G L V K			
UniRef90_E6JAY4	N L A Q V V L F Y Y L E H Q K D V I T R R T K Y E L L K K A E E A R A H I V E G L R I			
UniRef90_R7D844	A L N H V R L Y V A H Q V E V I V R R T Q Y L L D E A E K R A H I L R G L V K			
UniRef90_Q3A8P8	S L R E M L Q Y Y I D H Q V V I V T R R T R Y D L N K A E E R A H I L E G Y L M			
UniRef90_R5GQF3	S L D A F I R H W V N H Q L E V I A R R T A Y L K R E A E E R D H I L E G L R I			
UniRef90_Q03I55	G L K E I L F Y Y L E H Q K D V I V T R R T Q F D L K K A E D R A H I L E G L R I			
UniRef90_F5WQN6	N L L Q V L S H Y R D H Q L E V I V R R T R F D L R K K A E E R A H I L Q G L M I			
UniRef90_H5WX55	R L D Q L V R H Y Y V K H Q E V I V R R T R F R L R K K A E E R A H I L R G L V K			
UniRef90_R6AWV9	N L R E M L Y H Y I A H Q K D V I V T R R T Q F D L D K A R E R H I L E E G L M I			
UniRef90_B0TAN1	N L R D M L Y Y Y L E H Q K D V I V R R T R Y D L E K A E A R A H I L E E G L R I			
UniRef90_Q5HJZ0	N L K E A L V H Y L E H Q K T V I V T R R T Q Y N L R K K A K D R A H I L E G L R I			
UniRef90_S6C8E2	S L K E I L F Y Y I E H Q K D V V T R R T Q F D L N K A E E R A H I L E E G L R I			
UniRef90_UP100041BE09A	N L L R D M L H L Y L E H Q K D V V R R R T Q F D L N K A E E A R A H I L E E G L R I			
UniRef90_D2BQL6	S L K E I L V D Y I E H Q L E V V V E R R T A F D K A R A E E A R A H I L E E G L R I			
UniRef90_Q1NV33	N L R Q I L E N F I L H R K T V V Y R R T A Y D L R K A E E K A H V L E E G L K I			
UniRef90_G2DVZ1	N I K Q T L E Y F I L R H R D V V T R R T L Y E L R K A R D R A H V L E E G Y A I			
UniRef90_S7TB88	N I K Q I L E H F F L R H R R E V I L R R T R F D L D K A E E K R A H I L E E G L R I			
UniRef90_UP1000366BF9E	A L R E T D F F I D H R R E I V T R R C Y E L K K A E E R A H I L E E G L K I			
UniRef90_B5JSE9	N L K Q V L E A F I A H R R E V V T R R T L Y E L R K A R E R T H I L E E G L A V			
UniRef90_F7NQC7	N L Q Q V L Y H Y I E H Q K V I V T R R T Q F D L D K A K A R A H I L E E G L K I			
UniRef90_C0GI67	N L R E M L G H Y L E H Q K D V I V T R R T R F D L R K A E E R A H I L E E G L R I			
UniRef90_R5DLZ6	N L F E V L S E F V E H R V E I V T R R T I F F L K K A K I R A H I L A G L I			
UniRef90_F1T5R0	T L R E M I Y Y Y I E H Q K D V T R R T Q F D L D K A L K R V H I L E E G L L I			
UniRef90_V5C915	N L K E I L D A F I D H R R V V T R R T I F N L K K A R E R A H T L E E G L A V			
UniRef90_A0B8Z5	T L K E T L E Q Y I N Y R A E V I E R R T R F E L E Q A E K R A H I L A G L I			
UniRef90_A0A023WZQ3	S Y K E A I L R H Y I V H Q F E V V T R R T R Y E L L A R A Q A R A H I L E E G L L K			
UniRef90_C9MFZ4	N L K Q V L Q K Y L E H R F E V I T R R T E F E L L K K A K N R A H I L E E G L R I			
UniRef90_D1PRM5	S L K T V M E R Y I D F Q M E V I V R R T A F D L R K A Q E E R E H I L E E G L R K			
UniRef90_R9LB38	P L K E M L T H Y I D F Q G E V V T R R V K Y D L R K A K E E R E H V L E E G L K L			
UniRef90_UP100047CB2A7	N L K E I I S Y Y I E H Q K E V I V T R R T R Y D L N K A K A R A H I L E E G L K I			
UniRef90_C9R598	N L K Q L I E A F V L H R R E V V T R R T I F E L L R K A R E R T H I L E E G L A I			
UniRef90_K2AN04	T L K M I L E E F I K H R Q K V I I R R S Q F E L D E A K K R A H I L E E G L K I			
UniRef90_UP1000468C0F0	S L K E V L S Y Y I L K H Q E V V I R R R T E Y E L R R A Q A R A H I L E E G L R I			
UniRef90_U5FAU4	G I K E M L Q H Y Y V D H Q I D V V V R R T Q F D L K K A E D R A H I L E E G L R I			
UniRef90_14CB96	N L K E I L Q G F I V D F R K E V V I R R T R Y E L L A R A R E R A H T L E E G L K I			
UniRef90_U1KTG4	N L K E M L E A F V T H R R E V V T R R T V F D L L R K A R D R A H T L E E G L A I			
UniRef90_UP10003765E11	N L D Q F I S H W V K H Q L Q V I Q R R T A F R L D E A E K K A H L D R G L V K			
UniRef90_UP10004721B02	N I R Q M L D A F M R H R R E V I T R R T I F E L R K A R E R A H V L E E G F A V			
UniRef90_L0GVU5	N L K Q M L E Y F L R H R D V V T R R T I F E L R K A R D R A H V L E E G L A V			
UniRef90_V4J458	N L K Q M L E H F I Q H R R V V T R R T Y A Y E L Q K A E E K A H L L E E G L T I V			
UniRef90_F6CVE7	N L K Q I L E C F F V K H R R E V V T R R T I F E L R K A R E R G H I L E E G L A V			
UniRef90_UP100036233A2	N L K E V L E A F I R H R K E V V T R R T I Y E L R K A R E R A H I L R A L L K			
UniRef90_A6W3W0	P I H A F I K H W I A H Q L D V I V R R T R F R L R K A E E R A H I L E E G L G V			
UniRef90_A9KCT7	N L K Q V L L S A F I L Q H R R E V I T R R T I F E L R K A R E R A H I L E E G L R I			
UniRef90_B2ZA27	N I K Q V L L N Y Y I S F Q K E V I T R R T T F E L N K A E A R A H I L E E G L R I			
UniRef90_UP1000375CAE4	N L K Q M L E C F F L A H R R E V V T R R T I F E L R K A R E R G H I L E E G L A V			
UniRef90_B3PI15	N L K D M L E A F I R H R R E V V T R R T V Y L L R K A R E R G H I L E E G L A V			
UniRef90_W0B9Z7	N L K E I L E Y F I K H R R E V V T R R T I F E L R K A R E R G H I L E E G L G I			
UniRef90_R7PRJ8	N L K Q M L Y Y Y I L H Q Q E E V V T R R S R F E L D K A Q A K A H I L E E G L L I			
UniRef90_K9EFK9	S L D G F V R H W V T H Q V E V I K R R T Q Y R L N E A K R M H I L E E G Y L K			
UniRef90_C0R046	N L K E L I K Y F V D H R V E V I T K R T E Y D L N Q A K A K A H I L E E G L A V			
UniRef90_UP10002F0CE43	T L R D L I R H F V E H R H D V V T V R R T R Y D L A Q A E K R A H I L E E G L L I			
UniRef90_Q3BV10	N L K Q M L E A F I R H R F E V V T R R T I F E L R K A R A R A H V L E E G L T V			
UniRef90_D9SML3	N L K E V L V H Y I L N F Q K E V I T R R T Q F E L E K A E A R A H I L E E G L K I			
UniRef90_UP100040E67A5	N L K E V L E A F I L H R Q E V I T R R T I F D L K K A R A R A H I L E E G L T V			
UniRef90_UP100047D3D9	N L K E I L S C F V E H R H D V V T R R T R F E L D K Q A E K R A H I L E E G L I I			
UniRef90_UP100047E6ED7	N L K E I L Y H Y V N H Q K D V V T R R T K F E L N K A E A R A H I L E E G L K I			
UniRef90_G0VM75	T L K Q I L N Y Y I L D H Q K D V I T R R S K F E L D K A L A R A H I L E E G L L I			
UniRef90_C7H086	T L L Q I L N E Y I K H Q Q K E I V T R R T Q F D L E K A E N R A H I L E E G L R I			
UniRef90_D1YWG1	S L K E T L E Y Y I L K H Q R Q E V V T R R S Q F E L K K A Q A R E H L A G L V			
UniRef90_UP10003B65BD1	N L K E V L E A F V D H R R E V V T R R T I F E L R K A R E R V H I L E E G L A V			
UniRef90_UP10003B4C2CB	N L R E V L L G H F F L A H R R K V V T R R T I F D L R K A K E R A H V V E E G L L I			
UniRef90_UP10002E6BC82	T L I D M L K A F V S F R R E V V S R R T K F E L L R K A R D R A H V L V I G L A I			
UniRef90_UP100036380BD	N L K D I L E A F I R H R R E V V T R R T I F E L R K A R D R A H V L E E G L T V			
UniRef90_R6ER32	N L R E I L I S E Y I L K H Q K E V V T R R T I F D K K A E A R A H I L E G Y L I			
UniRef90_W8ULX2	N L K D I L V A F V D H R R E V V T R R T I F E L R K A R D R A H I L E A L A I			
UniRef90_R5QN94	N L K E I I Q A F I E F R R E V I R R R T I F E L N K A R D R A H V L V I G L A I			
UniRef90_E6W0A6	N L K E I L E Y F I E H R R E V I A R I K F E L A N A K K A H I L E E G L K V			
UniRef90_D4YKU2	S I D A F I L R L W V K H Q I D V I V R R T R F R L K K A E E R A H I L R G Y L K			
UniRef90_I5B470	S L K E I L N H F I S H R T N V I I R R T R Y D L R K A Q E R A H I L E E G L K I			
UniRef90_UP10004719DB8	N L K S A I L Q V Y L D H Q K N V V R R R L Q F D L N K T E E R V H I L E E G L K I			
UniRef90_UP1000429E42E	N L K D M I R H F V D H R E V V T R R T R Y D L A E A E K R A H I L E E G L L I			
UniRef90_C0VY08	S L D G F V H Y W V K H Q V E V I I R R T Q F R L E K A K E R H I L E E G Y L K			
UniRef90_F0SUH4	T L K A M L E Y F I A H Q K E V I I R R T H F E L K K A Q D E A H I V E E G L R K			
UniRef90_E4RNH2	S L K E I L E H Y I L E H Q K K V I T R R T K Y D L D K A L D R A H I L E E G Y K I			
UniRef90_U1MQH3	S L D G F I T H W A D H Q V E V I V R R T Q F R L A K A E K R M H I L E A Y L K			
UniRef90_UP10003656636	N L K Q V L E A F I R H R Q E V V T R R T L F L M R K A R D R A H H S L E E G F A V			
UniRef90_X5MNE0	T L K G F I D A F I L A F R E D V V T R R T K F E L N K A R D R A H V L V I G L A I			
UniRef90_E8T2L0	N L K R Y L E E F I G F R R E V I L R R T R Y D L R K A E R H I L E E G L R K			
UniRef90_D9SF67	N L K Q V M D A F I L R H R R E V V T R R T I F E L R K A R E R G H V L E E G L A V			
UniRef90_G8TF15	N V K D M I S E F V E F R H E V V V T R R T Q F E L R E A E K K A H I L Q G Y L I			
UniRef90_P48369	N L K D I L D A F I L H R R E V V T R R T V F E L R K A R D R A H I L E E G L A V			
UniRef90_UP1000344B664	R L D Q I L R H W V A H Q I E V V V T R R T K F L L R K A E E R A H I L R A L L R			
UniRef90_UP100036C414A	S L K Q V L Q A F I D F R R E V I T R R T K Y E L N K A R D R A H I M V G L V T			
UniRef90_D4YHA6	S L K E I L Q N Y L L H Q E E V I I R R S I F E K N K A E E A R A H I L E E G L Q I			
UniRef90_N9UOF1	N L K T A I L E V Y I L K H Q V D V I V R R T L Q F D L E K D A R A H I L E E G L K I			
UniRef90_C6X523	N L K N I I H H F V D H R H E V V I R R T E F E L K K A K E R A H I L E E G F M K			
UniRef90_UP100047BCB4B	G L R D I L T S F I A F R R E E V V G R R T K F L L G K A R D R A H V V L V I G L A I			
UniRef90_R5TU16	S L K D L I R F V E H R E V V I R R T R F D L R K A E E R A H I L E E G L I I			
UniRef90_R5JAX0	G L K D I L I S K Y V D Y Q K E V I I R R T K F D L D K A E E K R V H I L E E G Y K I			
UniRef90_I4YMX1	N L K D L I K A F V D F R E E V V S R R T K Y L L N K A R E R A H V V L C G L A I			

QUERY	370	380	390	400
UniRef90_F6B3U8	A D A L D E V A L I R A S E T V D I A R A G L I E L L D I D E I Q A Q A I L			
UniRef90_E6JAY4	A L A H L D E V K I I R E S R T T E E A K Q G L V T N F N L I T E V Q A E A I V			
UniRef90_R7D844	A L D A L D E V I A L I R R S E T V E I A R E G L K D L L E I D D D Q A Q A I L			
UniRef90_Q3A8P8	A L A N L D E V I K I I R G S K D V D T A R E G L M S R F G L T E K Q A Q A I L			
UniRef90_R5GQF3	A L D M I D E V I A L I R A S E S S A E T A R T G L M D L L D V D E V Q A D A I L			
UniRef90_Q03I55	A L D H I D E V I A I I R N S Q T A E V A K D K L M N N Y S L S S K Q A Q A I L			
UniRef90_F5WQN6	A L D H I D E V I S I I R S S K D D P E A I T R L N E A F D L T E I Q S K A V L			
UniRef90_H5WX55	A L D Q L D E V I A L I R R S P S A E E A R S G L M E L L D V D E I Q A T A I L			
UniRef90_R6AWV9	A L D N I D E V I A I I K A S A N G A E A K E R L I A R F G F S S E R Q A Q A I L			
UniRef90_B0TAN1	A I D N I D R I I E I I R T S R D E D E A R P I L M G E F N L S E K Q A Q A I L			
UniRef90_Q5HJZ0	A L D H I D E V I S T I R E S D T D K V A M E S L Q Q R F G L L S E K Q T N A I L			
UniRef90_S6C8E2	A L D N I D E V I H I I R S S E T D K E A A A R L T E R F G L L S E K Q T N A I L			
UniRef90_UP100041BE09A	A L D H I D E V I A L I R A S A T T D I A R D G L M T R F S L S H E Q A Q A I L			
UniRef90_D2BQ6L	A L D N I D R I I T I I R E S Q T D A I A Q K T M M D E F L L S E K Q S Q A I L			
UniRef90_Q1NV33	A I T N L D E V V A L I K A S A N P Q E A R E G L I N R F G L S A I Q A Q A I L			
UniRef90_G2DVZ1	A L A N I D E V I A T I K A S A S P A E A R E R L M E R A W L P E R Q A K A I L			
UniRef90_S7TB88	A V D N I D E V V Q L I K T S A S P V E A K S R L M E R F E L S E I Q S Q A I L			
UniRef90_UP1000366BF9E	A L D N L D E V I Q L I K T S A N P A E A K E K L I A R F T F S D I Q A Q A I L			
UniRef90_B5JSE9	A L S N I D P I A M I K A S T N P A E A R Q O L I I D T V W L S P A Q A Q A I L			
UniRef90_F7NQC7	A L D H I D A V I A T I R G S R T V D I A R E A L I A N F S L L S E K Q A Q A I L			
UniRef90_C0GI67	A L K N L D A V I K L I R A S K N T T E E A R T G L M E N F G L T Q I Q A Q A I L			
UniRef90_R5DLZ6	A L G S I D E V I E L I K K S K T T D D A R T G L M S R F G L D V D Q S N A I L			
UniRef90_F1T5R0	A V D N I D E V V H I I R S S H D D Q E A K Q R M N E R F E L L D D I Q G E A I L			
UniRef90_V5C915	A L A N I D E M E L L I K T S A N P A E A K E K L I A R F T F S D I Q A Q A I L			
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UniRef90_C9MF4	A L D N I D E V I R I I R A S K D A N V A R T E L I I A K F F G F S E I Q A K A I L			
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UniRef90_R9LB38	V C D H T D E V I S I I R H S K D S N D S K V N L I A R F G G I T D I Q A S A I V			
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UniRef90_C9R598	A L A N V D P I I E L I R R K A P N P E N A K R E L I T H P W L T E V Q A Q A I L			
UniRef90_K2AN04	A V D N I D A V I E T I K K S K D P A E A K V N L M Q K F K L L T E V Q A L I L			
UniRef90_UP1000468C0F0	A L D H I D E I I K V I I R G S Q T S S I A K Q T L M D R F F E L L S D K Q S Q A I L			
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UniRef90_U1KTG4	A L A N I D P I I E V I I R R S Q T R E E A K V A L L S R S W L S E A Q A N A I L			
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UniRef90_L0GVU5	A L A N I D E V I A L I I R A A A S P A E A K A G L I M G R A W L S E A Q U L I L			
UniRef90_V4J458	A I D N I D E V V A L I I R A A Q N P V V V A K E Q L I M E R F S L S A V Q A Q S I L			
UniRef90_F6CVE7	A L A N I D R V I E L I I R N S P T S A E A K E K L I V A E S W L S P E Q A Q A I L			
UniRef90_UP100036233A2	A L S N I D E M M A L I I K A S K T P Q E A K A A L L E R S W N G E L V A S M I L			
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UniRef90_A9KCT7	A L A N I D E V I A L I I K K A P T P Q E A K A A L L A Q A W L S P A Q A Q A I L			
UniRef90_B2ZA27	A L D N I D E V I S I I I R G S K T S E I A R N T L L M E R F N L S E K Q S T A I L			
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UniRef90_B3PI15	A I A N I D E V I E L I I K R S P S P A E A K E S L Q A R G W L S S A A Q A Q A I L			
UniRef90_W0B9Z7	A L A N I D E M M A L I I K Q S P T P Q E A K E S L L T H W L S P Q Q A Q A I L			
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UniRef90_C0R046	A Q A N E E V I R I I R G S Q S P D A K I A L I E R F S L T E V Q A A A I I L			
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UniRef90_Q3BV10	A L A N I D E M M E L I I K T S A N P Q E A R E R M L A K T W L S S E K Q S T A I V			
UniRef90_D9SML3	A L D N I D E V I S I I I R S S K S T N E A K E R L Q E R F A L S S E K Q S T A I V			
UniRef90_UP100040E67A5	A L A N I D E M M Q L I I R T S A T G A E A K E R M L A R T W L S S E E Q A Q A I V			
UniRef90_UP100047D3D9D	A S D N I D E V I R I I R A A Q T P D E A R E N L I K R F F E L S S D I Q A R A I V			
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UniRef90_G0VM75	A L D H I D E V I K T I I R E S A T D D A A K Q S L I M S K F F N L S S E K Q A L I L			
UniRef90_C7H086	A L D N I D E I I K I I I R S S Y S S D D A K Q K L I M D T F F S L S S E V Q T Q A I L			
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UniRef90_UP10003B65BD1	A L A N I D E I I A L I I K A A P S P K E A K E Q L I L A R V W L S P V Q A Q A I L			
UniRef90_UP10003B4C2CB	A L A N L D E V I A L I I K A S K T P A E A K E G L I I A R F G L T P V Q A Q A I L			
UniRef90_UP10002E6BC82	A V A N I D E V I K L I I R G A P D P Q T A R D Q L M E R R W L S S E E Q A R A I L			
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UniRef90_F0SUH4	A L D F I D E V I E I I R S S K N D E T A R E R L M T R F E F S E R Q S Q A I L			
UniRef90_E4RNH2	A L A N I D E V I E M I I K E A E D V D T A R I A L M D D Y E L S E I Q A N A I L			
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UniRef90_UP100036C414A	A V A N I D E V V A T I I R Q A T S P A Q A R E A L A A R K W L S E I Q A K D I L			
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UniRef90_C6X523	V I D D L D K A I A I I R H S S N P A E A K D G L M K E F D L S D L Q A Q A I L			
UniRef90_UP100047BCB4B	A V A N I D E V I A L I I R A A P D P H V A R E Q L M M A M A W L S S E E Q A R S I L			
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UniRef90_R5JAX0	A L D N I D D F I Q I I I R D A T K D V D V E A K T K L I A K Y S L T E A Q A E A I L			
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410 420 430 440

QUERY				
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UniRef90_Q5HJZ0	D M R L L R R L T G L E R E K I E A E Y N E L L N Y S E L E A I L A D E E V L L			
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UniRef90_D2BQL6	D M R L L R R L T G L E R E D K I E A E Y Q D L V A L A D L A D I L A K P E R V K			
UniRef90_Q1NV33	E M R L L H R L T G L E R E K I I E E Y D A L M K E I W R Q V L G D E S L V M			
UniRef90_G2DVZ1	E L Q L H R L T G L E Q E K I L K E F E E I L E R A A L L L I S D P D R L L M			
UniRef90_S7TB88	D M R L L Q R L T G L E H E K I L L E E Y R E L I K R E Y L N S I L K S D E V L K			
UniRef90_UP1000366BF9E	D M R L L H R L T G L E R E D K I L N E L N E V M A Q T R L L K E I L A S E I E I L			
UniRef90_B5JSE9	D L K L H R L T G L E Q D K I V E E Y G E L L E E K V L L E E T I A E L L N I L R N P D R L L T			
UniRef90_F7NQC7	E M R L L Q R L T G L E R E K I I E E Y Q D L V L E E S V L A D E A K V L			
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UniRef90_F1T5R0	UniRef90_V5C915	Q M R L L R R L T G L A R E E L A A Q I A E Y L Y K S E Y Y R D L A H P Q K L L		
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UniRef90_A0A023WZQ3	D M R L L Q R L T G L E Q E K V A S E A R E L E S T I A R L K G I L A S R T E V L			
UniRef90_C9MF4	D L R L L Q R L T A M E R R K V E Q E Y R D L M E K E Y L E S I L A D E A K I I Y			
UniRef90_D1PRM5	D M R L L Q R L T G L E R E D K I N Q E E L M L L E E T G I L S D D S K I I			
UniRef90_R9LB38	K L Q L G R L A G L E I L K I N Q E E L R E A I A D Y K D I L S N D E H V K M			
UniRef90_UP100047CB2A7	A M Q L L G R L S G M E Q I K I E E E L A A L I E R V A G Y E E I L A D Y G K V M			
UniRef90_C9R598	D M R L L Q R L T G L E R R K K I D E E Y D D L V K K H H Y E D I L A N E W M V M			
UniRef90_K2AN04	D L R L L Q K L T N L L G H D E I L D E Y K K K L D A G K L L Y I L R S P E R L M			
UniRef90_UP1000468C0F0	UniRef90_UP10004721B02	D M Q L L K R L A A L E R Q K I V E A E Y Q D L L V K K A D F K D I L A K P E R V D		
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UniRef90_14CB96	UniRef90_U1KTG4	UniRef90_UP10003765E11	D M R L L Q R L T G L E R E E K I L Q E L A E V L A K I A E L L E G I L S T P E R L M	
UniRef90_Y9R5W0	D L R L L H K R L T G L E H E K I I D E F D K I L E K R E E L L W I L V D P E R L R			
UniRef90_L0GVU5	D L R L L Y R R L T G L E K K D R I I D E F D K I L E K R E E L L W I L V D P E R L R			
UniRef90_V4J458	D L R L L H R R L T G L E R E K I I Q E Y Q D T L A E A R L R E L L G S D A L I M			
UniRef90_F6CVE7	D L R L L H R R L T G L E H E K I M D E Y R S L I D L G E L L E I L S N P M R L M			
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UniRef90_A9KCT7	D L R L L H R R L T G L E E Q D K I R E E Y I A I D K E E L I A V S D P D K L H			
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UniRef90_UP1000375CAE4	E M Q L L Q R L T N M E Q D K I V G E Y R D V M A E A D L L D I L A K P A R I T			
UniRef90_B3PI15	D L R L L H R R L T G M E H D K I L L A E Y D D K I K E A E Y L E I L G N A I R L M			
UniRef90_W0B9Z7	E L R L L H R R L T A L E Q D K I I N E F E Q L L A Q I K E L L D I L A S S E R L			
UniRef90_R7PRJ8	UniRef90_K9EFK9	D M R L L R R L T G L E R E K I I E A D Y K E L Q D R I N Y L I D I L S S H E K I M		
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UniRef90_UP10002F0CE43	D M P L K R L T A L E K K I E Q E L Q Q R E F A Y C E D I L A H P E K I L			
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UniRef90_UP100047D3D9	UniRef90_G0VM75	D M R L L R Q R L T G L E Q G K I R E E Y E A A L L K E A R L K D V L E H V H L R M		
UniRef90_UP100047E6ED7	D M R L L R R L T G L E R E D K I I E E Y Y A E L E K R A Y Y R S V L A D E H K V M			
UniRef90_G7H086	D M R L L R R L T G L E R E K I I E N E Y S E L L Q K K S Y Y K E I L S N E G L L M			
UniRef90_D1YWG1	D M R L L R Q R L T G L E R E K I I E D E R A R E L L I K L A H L K E V L A S S P Q M V L			
UniRef90_UP10003B65BD1	D L R L L H R R L T G L E Q D K I I D E Y Y Q S L L D K D E L L E I L G S D R R L L			
UniRef90_UP10003B4C2CB	UniRef90_R6ER32	D M R L L Q R L T G L E Q E E K I K A E Y Y E E L K R Q A W F E K I I L S D E K V L M		
UniRef90_UP10002E6BC82	UniRef90_W8ULX2	E L R L L Q R L T A L G R D E I D D E L N K I G T E A D Y L E I I L S S R A R I Q		
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UniRef90_E6W0A6	UniRef90_D4YKU2	D L R L L Q R L T G L E H E K I I R D Y E E V L A L D D L Q D I I L A T P A R Q R		
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UniRef90_UP1000429E42E	D M N L L R R L T G L E R D K I K E E Y Y A E L M K T I Y L K S I I L A D E S L R M			
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UniRef90_UP10003656636	UniRef90_X5MNE0	E M Q L L R R L T G M E H E K I I D E F F H E K L E E Y Q S L I K D Y L K S I I L G N S D V L M		
UniRef90_X5MNE0	UniRef90_E8T2L0	D L R L L Q R L T A L G R D E V G D E L K G L E G E K I E D Y L E T I L R S K E K L S		
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UniRef90_D9SF67	UniRef90_G8TF15	E L R L L Q R L T G M E R D K I R E E F F E E L Q R L I G H R E I I L G N E G M R Y		
UniRef90_G8TF15	UniRef90_P48369	D L R L L Q R L T G M E H G K I L E E Y Y Q S L I L D L A E L F I I L A S P E R L M		
UniRef90_P48369	UniRef90_UP1000344B664	D M Q L L R K L A A L E R R Q I T A E Y D E L M A Q I E E Y N A I I L A S S P E R Q R		
UniRef90_UP1000344B664	UniRef90_UP100036C414A	D L R L L H R L T A L G R D E I G D E L E T L S A A I R E Y L S I I L Q S R E K L Y		
UniRef90_D4YHA6	UniRef90_N9UOF1	D M R L L V R L T G L E R E K I I D K E H A E L M A Q I D Y L N Q V I L G S E T M R Y		
UniRef90_N9UOF1	UniRef90_C6X523	D M R L L G R L T G L A I K M N E E L D L V H Q R I A E Y Q R I I L A D K D A L I		
UniRef90_C6X523	UniRef90_UP100047BCB4B	D L R L L A R L T G M E L D K I I R A E Y D E I M N L I R D F E D I I L A N E S R R F		
UniRef90_UP100047BCB4B	UniRef90_R5TUX16	D L R L L Q R L T A L G R D E I A D E L N K I A A E I K E Y L E E I L S S N D E L C K		
UniRef90_R5TUX16	UniRef90_R5JAX0	E M R L L R Q R L T G L L Q E Q K L I H A E Y Y E E L M K Q I A Y F E E I I L A S E A K V L		
UniRef90_R5JAX0	UniRef90_I4YMX1	E L K L L R R L T G L E R E K I I D E E A E L N D L E K I K Y Y K E I I L A S E A K V L		
UniRef90_I4YMX1		D L R L L Q R L T A L G R D E I G D E L S K I A A E I S N Y L D I I L R S R A R I M		

QUERY		450	460	
UniRef90_F6B3U8	G V R D E L A E I V D R H G D D R R T R I A			
UniRef90_E6JAY4	G I K D E L T E E V K K K F A D P R R T V I			
UniRef90_R7D844	A I V G D E L M R E I V E K Y G D D R R T R I A A			
UniRef90_Q3A8P8	G V I R Q E L L E I K E K Y G D A R R T Q T			
UniRef90_R5GQF3	K I V G D E L D E I V A K Y G D E R R T K L			
UniRef90_Q03I55	E I I Y K E L L E I Q E R F G D E R R T E M			
UniRef90_F5WQN6	T I I K D E L L E I K T K F G D D R R S E V			
UniRef90_H5WX55	A I V R A E L Q E I V D K Y G D D R R T Q I			
UniRef90_R6AWV9	G V V K D E M L E I R R R F A D P R R T E T			
UniRef90_B0TAN1	D I I K K E I I S E I K E K F A D P R R T E T S			
UniRef90_Q5HJZ0	Q L V R D E L L T E I R D R F G D D R R T E T			
UniRef90_S6C8E2	Q V I K E E L L Q E I K K K K Y N T P R R T R T			
UniRef90_UP100041BE09A	G V I R E E I L E I K Q R F A D E R R T S V			
UniRef90_D2BQL6	K I I R E E L L E I V K R K F A D K R R T E L			
UniRef90_Q1NV33	K I I R E E F E A I R E T Y G D D R R T E I			
UniRef90_G2DVZ1	E V I R E E L L A I V R D Q F G D D R R T E I			
UniRef90_S7TB88	G V I R D E L L A E I R K T F A T P R R T V I			
UniRef90_UP1000366BF9E	K I I H D E L V T I R A Q F A N P R R T E I L			
UniRef90_B5JSE9	E V V R D E L L V E I L R D S Y G D E R R T E V			
UniRef90_F7NQC7	Q I I R E E L L D V K K K F G D D R R T A V S			
UniRef90_C0GI67	Q I I K D E M G E I R K K K Y G D D R R T A V			
UniRef90_R5DLZ6	D I I K K E L L E D K E K Y G D D R R K T Q L			
UniRef90_F1T5R0	E V I K E E L L T E I S T R F S D K R R T Q S A			
UniRef90_V5C915	E I I R E E L V A I K E E F G D K R R T E I L			
UniRef90_A0B8Z5	D I I K N E L R E L D E I Y G D D R R T E L			
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UniRef90_C9MF4	G I I K E E A L K L I K E D F G D E R R T E E A			
UniRef90_D1PRM5	R I V K T D L Q T L I A D K Y G D E R R T S E A			
UniRef90_R9LB38	Q I V K D E L L S V M R E K Y A D E R R T E V S			
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UniRef90_UP10004721B02	E V V R E E L L L E V K E Q F A D A R R T E E A			
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UniRef90_D9SML3	N I I R D E L L N E I K G R F G D E R R T A E A			
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UniRef90_UP100047D3D9D	E I I K N E L L F E I K T K Y G D G R R T I L I			
UniRef90_UP100047E6ED7	N V I K E E M S A I K D N Y A D E R R T E V T			
UniRef90_G0VM75	E I V K T E L L D A K K K F G D E R R T Q V A			
UniRef90_C7H086	N V I K E E L L L E I K E K Y A D E R R T Q V V			
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UniRef90_UP10002E6BC82	Q I V K D E L L A Q V R D E F G T P R R T E L			
UniRef90_UP100036380BD	R V I R D E L L I E I K T Q Y G D A R R T V Q A			
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UniRef90_E6W0A6	D I I R T E L L H E I R E K Y A D P R R T I I			
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UniRef90_UP1000429E42E	K I I K D E L L L E I L T K F G D E R R T S T T			
UniRef90_C0VY08	K I I K D E L L L A E I V E R F G D E R R T A V			
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UniRef90_UP10003656636	Q I I V D E L L R E I V D R H G D D R R T E M M			
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UniRef90_E8T2L0	R L I K E E M A Q I I E K F G D Q R R T K V S			
UniRef90_D9SF67	A I I G D E L L V A V K T Q F G D K R R S E V			
UniRef90_G8TF15	D I I K T E L L A E V K E K F G D V R K T E T			
UniRef90_P48369	E V I R D E L L L A V R E Q Y G D E R P P E S A			
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UniRef90_UP100036C414A	E V L R G E L L D A V R A E K F A D E R R T E M			
UniRef90_D4YHA6	Q I Y D E L L L E I E S K F G D D R R T E L			
UniRef90_N9UOF1	D L I K E E L L Q E I K N I Y G D D R R K S E L			
UniRef90_C6X523	E I I K A E L L L E M K E K Y G D E R R S E L			
UniRef90_UP100047BCB4B	G I V K D E L L A A V R E E F A T P R K T Q V			
UniRef90_R5TU16	K V I K D E L L L E V K E K Y G D K R R S E V			
UniRef90_R5JAX0	E I I K Q E M L E I K N K Y G D E R R T N V			
UniRef90_I4YMX1	G I I K D E L I E V R D A F A T P R R T Q V			

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UniRef90_W0FNH8	V D R A L P D V R D G L K P V H R R I	I L Y D M S E E G M T P D K P T R K S A R I			V
UniRef90_A1AJX6	I G R A L P D V R D G L K P V H R R I	I C L Y A M Y D M S N D W N K P Y K K S A R I			
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UniRef90_UP10003B49AE5	V S R A L P D V R D G L K P V H R R I	I I I I I W T S H E N G F V S G K A Y R K S A R I			
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UniRef90_F9QCW5	V S R A L P D A R D G L K P V H R R I	I I I I I Y D M S E L G I T H N T Q H R K S A R I			
UniRef90_E4XU22	I S R A L P D V R D G L K P S Q R R I	I I I I I Y A M R Q L G V T P G K A H V K C A K I			
UniRef90_G8QYU0	V S R A L P D V R D G L K P V H R R I	I I I I I L F D M Y E M G L R A N T S Y K K C A R I			
UniRef90_H3NQT7	V A R A L P D V R D G L K P V H R R I	I I I I I L Y G M N Q L G L L P N K P H R K S A R L			
UniRef90_F2I195	V S R A L P D A R D G L K P V H R R I	I I I I I I F A M Y K G G Y D W S K Q F R K S A R V			
UniRef90_A8YW46	V A R A L P D V R D G L K P V Q R R I	I I I I I L Y G M S E L G V T P D K P Y K K S A R I			
UniRef90_UP10004795F11	I G R A L P D V R D G F K P V H R R I	I I I I I L Y T M H E M G L Q Y N K K Y T K C A K V			
UniRef90_Z4XCR9	A R A L P D A R D G L K P V Q R R I	I I I I I L Y G M A T M G M W P D K P F K K S A R I			
UniRef90_E0UQ42	V G R A L P D V R D G L K P V H R R I	I I I I I L Y A M D K L N L S F G A K Y K K S A R I			
UniRef90_Q11UG4	V S R A L P D V R D G L K P V H R R I	I I I I I L Y G M E D L G V H Y N K A Y K K S A R I			
UniRef90_UP100047A155A	I G R A L P D V R D G L K P V H R R I	I I I I I L Y G M Q E M G L Q H N K K Y T K S A K V			
UniRef90_M1PZK8	V G R A L P D A R D G L K P V H R R I	I I I I I L F S M N E S G I T H D K P Y K K S A R I			
UniRef90_SOET77	V S R A L P D A R D G F K P V Q R R I	I I I I I L Y A M R E L G I G P G S A R V K S A K V			
UniRef90_UP100035D39BA	V S R A L P D V R D G L K P V H R R I	I I I I I L F A M H E A G Y A P D R P H R K S A R V			
UniRef90_D8J640	G R A L P D V R D G L K P V H R R I	I I I I I L Y A M H E M G V S S R A H R K S S S V			
UniRef90_R6M8J9	T S R A L P D L R D G L K P V Q R R I	I I I I I L W S M Y E E G N T P D K P H K K S A T T			
UniRef90_UP100021973BD	T S R A L P D L R D G L K P V Q R R I	I I I I I L Y S M F L D G N T Y D K G F R K S A K G			
UniRef90_D0LNR4	I S R A L P D A R D G L K P V H R R I	I I I I I L F A Q K G L S N Y W N R P Y L K C A R I			
UniRef90_Q04AP4	R S R A L P D R D G L K P V Q R R I	I I I I I L Y A M Y R D G N T A D K P F K K A A K A			
UniRef90_R6WSY2	V S R A I P D V R D G L K P V H R R I	I I I I I L Y S M S E L N L T C D K P F R K C A L I			
UniRef90_F7RYR4	I G R A L P D V R D G L K P V H R R I	I I I I I L F A M S V L G N D F N K P Y K K S A R V			
UniRef90_F4DIY4	I S R A L P D I R D G L K P S Q R R I	I I I I I L Y A M R Q L S L T P G A K H R K C A K I			
UniRef90_Q1MQ89	I G R A L P D V R D G L K P V H R R I	I I I I I L F A Q Q E L G N S Y T R P P K K C A R I			
UniRef90_P57277	V G R A L P D V R D G L K P V H R R I	I I I I I L F A M Y L N N D W N K A Y K K S A R I			
UniRef90_M2U8T8	V S R A L P D V R D G L K P V H R R I	I I I I I L Y S A F E N G Y V A G R P Y R K S A R I			
UniRef90_D4YDW1	D R A L P D I R D G L K P V Q R R I	I I I I I L F A M F Q E G N T S S S N F R K S A K T			

		50	60	70	80
UniRef90_E4KWZ1	V G D V M G K Y H P H G D S S I Y E A T V R L Q A Q D F N T R Y T L V D G Q G N F				
UniRef90_C2CJK5	V G D V M G K F H P H G D S A I Y D A L V R L Q A Q D F S T R Y P L A Q G Q G N F				
UniRef90_UPI0003B674A6	V G E V I G K Y H P H G D T A V Y D A M V R M A Q D F S Y R Y P L D G H G N F				
UniRef90_UPI000287E68D	V G E V I G K Y H P H G D S A I Y D T M V R M A Q D F S Q R Y E L V D G H G N F				
UniRef90_F9Z7F0	V G E V L G K Y H P H G D S S V Y M A M V R M A Q E W S L R Y P L V D G Q G N F				
UniRef90_A8TKW9	V G D V M G Q Y H P H G D S A I Y D A M V R M A Q D F S M R L P L V D G Q G N F				
UniRef90_K1Y4V5	V G E V L G K Y H P H G D T A V Y D A M V R M A Q E W S L R Y M L V D G Q G N F				
UniRef90_K0AWF9	V G E V L G K Y H P H G D S A I Y D A L V R L Q A Q D F S T R Y M L I D G H G N F				
UniRef90_UPI00046AE272	V G D V M G K Y H P H G D S A I Y D A L V R M A Q D F S M S L P L L D G Q G N F				
UniRef90_UPI0004712FB1	V G D V M G R Y H P H G D G A I Y D A M V R L Q A Q D F S M R L P L V E G Q G N F				
UniRef90_G4L3L6	V G D V M G K Y H P H G D S A I Y E A M V R M A Q T F S Y R Y V L V D G H G N F				
UniRef90_R6B572	V G D V L G R Y H P H G D S S V Y D A M V R M A Q T F S L R Y P L I D G H G N F				
UniRef90_W9DTR5	V G D V L G K Y H P H G D S A V Y D S L V R M V Q D F S L R Y P F I D G Q G N F				
UniRef90_M4V716	V G D V L G K Y H P H G D V A V Y D T M V R M A Q D F A M R F P L I D G Q G N F				
UniRef90_UPI000225A8DB	V G D V M G K Y H P H G N M A I Y D A M V R M A Q D F S L R V P L I D G Q G N F				
UniRef90_F9D5B6	V G D V L G K Y H P H G D S S V Y G A L V R M G Q E W N M R Y K L V D G Q G N F				
UniRef90_U2KH67	V G D V L G S Y H P H G D A S V Y D A L V R L Q G D F S L R Y P V I H P Q G N F				
UniRef90_A0A023D2C7	V G D V M G K Y H P H G D S S I Y D A M V R M A Q P W S M R V P L I D G Q G N F				
UniRef90_W0FNH8	V G D V L G K F H P H G D S S V Y D A M V R L Q A P F N I R Y P L I E G Q G N F				
UniRef90_A1AJX6	V G D V I G K Y H P H G D T A V Y D T I V R M A Q D F S L R Y T L V D G Q G N F				
UniRef90_I9KWG3	V G D V L G K Y H P H G D S A V Y A T L V R M A Q D F S L R Y M L V D G Q G N F				
UniRef90_W1Q1D6	V G D V M G K Y H P H G D S A I Y E A M V R M A Q P F S Y R E L L V D G H G N F				
UniRef90_A0A011NW35	V G D V I G K Y H P H G D T A V Y D T I V R M A Q E F S L R Y M L V D G Q G N F				
UniRef90_R8Y6D7	V G D V I G K Y H P H G D S S V Y E T I L V R M A Q D F S L R Y L L V D G Q G N F				
UniRef90_I4D686	V G D C M G K Y H P H G D S S I Y E S A V R M A Q P W A L R Y P L V D G Q G N F				
UniRef90_D5BQS8	V G D V M G N Y H P H G D S S I Y E A M V R M A Q D F S M R L P L V D G Q G N F				
UniRef90_R5GFY2	V G D V M G K Y H P H G D S S I Y L A L V R L Q A Q E W S M R Y T L V D P H G N F				
UniRef90_Q3SK89	V G D V I G K Y H P H G D T A V Y D T M V R M A Q D F S L R Y P L I D G Q G N F				
UniRef90_J9DIK3	V G D V I G K Y H P H G D Q S I Y D A L V R M A Q S F S M R L P L L D G Q G N F				
UniRef90_K2DWU9	V G V V I A K Y H P H S T E A V Y D S L V R M A Q T F S L R P L I D S Q G N F				
UniRef90_Q0BYK4	V G D V I G K Y H P H G D S A V Y D A L V R M A Q P F S M G V P L V D G Q G N F				
UniRef90_C1A5L6	V G D V L G K Y H P H G D S S V Y D A L V R M V Q T F S L R Y P L V D G Q G N F				
UniRef90_D4J4X4	V G D A M G K Y H P H G D S S V Y G A L V N M A Q D F W S T R Y P L V D G H G N F				
UniRef90_R5STS5	V G D V M G N Y H P H G D A S I Y D A L V R L S Q D F S L R Y P V V D G H G N F				
UniRef90_J0WSD1	V G A V L A R Y H P H G D A S V Y D A L V R L Q A Q D F S M R Y M L V D G H G N F				
UniRef90_E6MIN2	V G E V L G K Y H P H G D S S V Y D A M V R M A Q D F S T R Y M T V N G Q G N F				
UniRef90_F9Y6C0	V G D T M G K Y H P H G D S S V Y D A L A R M A Q D F S M S L Q L I E G Q G N F				
UniRef90_UPI000360ED43	V G D V I G K Y H P H G D Q S I Y F A L V R M A Q E F S M R L M L A D G Q G N F				
UniRef90_W3ALA1	V G E C M G K F H P H G D S S I Y G A L V Y M G Q P W S M R H V L V D K Q G N F				
UniRef90_B8GGZ1	V A G T M G K Y H P H G D A S I Y D T L V K M A Q P F S Y R I P L V D G Q G N F				
UniRef90_I0K0S6	V G E T M G N F H P H G D Q A I Y P T L V H M A Q P W A M R E E V L I D G Q G N F				
UniRef90_UPI000365AC0A	V G E V L G K Y H P H G D S S V Y D T M V R M A Q D F W S L R Y P L V D G Q G N F				
UniRef90_UPI00028834C3	V G E V I G K Y H P H G D S A V Y E S M V R M A Q D F S L R Y M L V D G H G N F				
UniRef90_R5A978	V G D T M G K Y H P H G D S S I Y Q A M V R M A Q N F S M R Y M L V D G H G N F				
UniRef90_B4R9P6	V G D V M G K Y H P H G D V A V Y D T M V R M A Q P F S M N L L I D G Q G N F				
UniRef90_C6XJ15	V G D V I G K Y H P H G D Q S V Y D A L V R M A Q N F S M G L P L L D G Q G N F				
UniRef90_A0A011AA33	V G E T M G K Y H P H G D A A I Y D T M A R L S Q D F S M R Y Q L V E G Q G N F				
UniRef90_M7NV77	V G D V I G K Y H P H G D S A V Y D T M V R M A Q D F N Y R Y M L V D G H G N F				
UniRef90_UPI000368439E	V G D T M G D F H P H G N L A I Y D A L V R L Q A Q D F S M R V P L I D G Q G N F				
UniRef90_Q2IW32	V G D V I G K Y H P H G D Q S V Y D A M V R M A Q D F S M R V P L I D G Q G N F				
UniRef90_H2CFZ0	V G E V I G N F H P H G D G A V Y D T M V R M A Q D F V M K M P L V E G Q G N F				
UniRef90_U5DLH0	V G E V L G K Y H P H G E T S V Y D A L V R M A Q D F S M R E L L I D G H G N F				
UniRef90_C3XD38	V G E E V M G K Y H P H G D Q S V Y D T L V R M A Q D F S L R Y T L V D G Q G N F				
UniRef90_UPI000426A3E7	V G Q V M G L Y H P H G D T A V Y D A L V R M A Q S W S M R L P V I D G H G N F				
UniRef90_F7PT51	V G D V M G K Y H P H G D S S I Y D A M V R M A Q P F S Y R Y M L V D G H G N F				
UniRef90_K9E947	V G D V M G K Y H P H G D T A I Y D S M V R M A Q D F S Y R V P L V D G H G N F				
UniRef90_A6GXM8	V G E V L G K Y H P H G D I S V Y D A M V R M A Q E W S L R Y L L V D G Q G N F				
UniRef90_R7GLN5	V G E E V M G K Y H P H G D S S V Y E A L V R M A Q D F S Y R Y M L V D G H G N F				
UniRef90_UPI0003B49AE5	V G A V M G N Y H P H G D A A I Y D A L V R M A Q P F S M G L P L V D G Q G N F				
UniRef90_F6IPQ1	V G D T M G K Y H P H G D A A I Y D A L A R M T Q D W S M R L P L I D G Q G N F				
UniRef90_G2DVD9	V G D V I G K Y H P H G D S A V Y D T I V R M A Q D F S M R Y M L V D G Q G N F				
UniRef90_S4TLL1	S G D T S G D Y H P H G E M V P T L V R M A Q N W V M R Y S L I D G Q G N F				
UniRef90_R5ZAK8	V G D V M G K Y H P H G D S S I Y E A M A R L A Q D F A V R Y M L V Q G H G N Y				
UniRef90_H7E119	V G E V L G H Y H P H G D A S V Y D A L V R L L Q D F S Q R Y T T V T P K G N F				
UniRef90_D5MLW1	V G E V L G K Y H P H G D T A V Y D T I V R L V Q D F S M R Y P L I D G Q G N F				
UniRef90_UPI0003B78AE1	V G D T M G K Y H P H G D S S V Y G A L V N M A Q Q W S T R Y P L V D G H G N F				
UniRef90_F9QCW5	V G D V L G K Y H P H G D T S V Y E A M V R L Q A Q D F S M R Y P L V D G H G N F				
UniRef90_E4XU22	V G E T M G N F H P H G D Q S I Y S T L V N M G Q P W S M R E M L V D G Q G N F				
UniRef90_G8QYU0	V G D V L G K Y H P H G D A S V Y D A L V R L Q A Q D F S L R Y P V N P Q G N F				
UniRef90_H3NQT7	V G E V M G R F H P H G D S A V Y Q A V V R L A Q D F S T R Y P L A D G Q G N F				
UniRef90_F2I195	V G D V I G K Y H P H G D Q A V Y D A L V R L Q A Q D F S M S L T L L D G Q G N F				
UniRef90_A8YW46	V G E V M G K F H P H G D S S I Y L A M A H M A Q D F S Y R Y M L V D G H G N F				
UniRef90_UPI0004795F11	V G Q A M G Q Y H P H G D S A I Y D A L V R L A Q P F S M R Y P L V D G Q G N F				
UniRef90_Z4XCR9	V G E V M G K L H P H G D S A I Y E A L V R L A Q P F N R V P L V D G H G N F				
UniRef90_E0UQ42	V G D V I G Q Y H P H G D T A V Y D A L V R M A Q D F S M R M E L V D G Q G N F				
UniRef90_Q11UG4	V G E V L G K Y H P H G D S S V Y D T M V R M A Q E W S L R Y P M V D G Q G N F				
UniRef90_UPI00047A155A	V G H V M G N Y H P H G D S A I Y D T M V R L A Q P F S L R Y I L V D G Q G N F				
UniRef90_M1PZK8	V G D D V L G K Y H P H G D S A V Y D T I V R M V Q D F S L R Y P L I D G Q G N F				
UniRef90_SOET77	V G E C M G N Y H P H G D A A I Y A T L V R M A Q D F S Y R Y P L I D P Q G N F				
UniRef90_UPI00035D39BA	V G D V M G K Y H P H G D A A I Y D A M V R M A Q P F A M R L P L I D G Q G N F				
UniRef90_D8J640	V G E T M G D Y H P H G D S A I Y D T L V R M S Q D F S M R Y P L V D G Q G N F				
UniRef90_R6M8J9	V G Y V M G H Y H P H G D S S V Y E A M V R L A Q D F N E R Y M L V D G H G N F				
UniRef90_UPI00021973BD	V G N V M G N F H P H G D S S V Y E A M V R L S Q D W K L R E P L I E M H G N N				
UniRef90_D0LNR4	V G D V I G K Y H P H G D S S V Y D A L V R M A Q D F S M R Y E L V D G Q G N F				
UniRef90_Q04AP4	V G N I M G N Y H P H G D S S I Y G A L V F L S Q D W K M R E P L I E M H G N N				
UniRef90_R6WSY2	V G D V L G K Y H P H G D S S V Y D A L V R L A Q D F S I R C P L I D G H G N F				
UniRef90_F7RYR4	V G D V L G K Y H P H G D S A V Y D T I V R M A Q P F S L R Y M L A D G Q G N F				
UniRef90_F4DIY4	C G D T S G D Y H P H G E S V I Y P T L V R M A Q P W A M R Y P L V D G Q G N F				
UniRef90_Q1MQ89	V G D V I G K Y H P H G D S A V Y D A L V R M A Q D F S M R Y D P L E E G Q G N F				
UniRef90_P57277	V G D V I G K Y H P H G D S A V Y D A I V R M A Q K F S L R Y M L I D G Q G N F				
UniRef90_M2U8T8	V G D D V M G K Y H P H G D S A I Y D A L A R M T Q D W S M R V P L I D G Q G N F				
UniRef90_D4YDW1	V G N V I G N Y H P H G D S S V Y E A M V R M S Q D W K N R E V L V E M H G N N				

	90	100	110	120
UniRef90_E4KWZ1	G N D G D G A A A M R Y T E	V R M T K L A E E M L R D	N K E T V D F V P N F	
UniRef90_C2CJK5	G S I D G D A A A A M R Y T E	V R M S K I A K E M L R D	G K D T V D F M P N F	
UniRef90_UPI0003B674A6	G S L D G D G A A A M R Y T E	A R M S K I S M E M M R D	N K D T V D F V P N Y	
UniRef90_UPI000287E68D	G S V D G D P A A A M R Y T E	A R M S K I S M E M M R D	N K D T I D F Q P N Y	
UniRef90_F9Z7F0	G S V D G D S P A A A M R Y T E	A R M A K I T E D M L V D	D K D T V D M M D N F	
UniRef90_A8TKW9	G S M D G D P P A A A M R Y T E	A R F R K I A E E G L R D	D K E T V D F Y I P N Y	
UniRef90_K1Y4V5	G S I D G D S A A A A M R Y T E	A R F R K I A E E G L R D	D K E T V D F R P N F	
UniRef90_K0AWF9	G S V D G D G A A A A M R Y T E	A R M S K I A L E M L R D	G K D T I D Y R L N F	
UniRef90_UPI00046AE272	G S M D G D G N A A A A M R Y T E	V R M D K P A A Y L L A D	D K E T V N F Q D N Y	
UniRef90_UPI0004712FB1	G S M D G D G D K A A A A M R Y T E	A R L E K A A E S L L	D K E T V D F V N N Y	
UniRef90_G4L3L6	G S V D G D G A A A A M R Y T E	A R M S R L S V E M L R D	N K D T V D F I G N Y	
UniRef90_R6B572	G S I D G D G A A A A Y R Y T E	A R M S K I A E I M L T D	D K N T V D F M P N F	
UniRef90_W9DTR5	G S I D G D S A A A A M R Y T E	V R M D K I C D E M L L D	E K E T I A T R P N Y	
UniRef90_M4V716	G S V D G D S P A A A Q R Y T E	V R M T R L A E E L L A D	E K E T V P F G P N Y	
UniRef90_UPI000225A8DB	G S M D G D P A A A E R Y T E	A R L S R A H E L L E D	R D T V D Y Q P N Y	
UniRef90_F9D5B6	G S V D G D S P A A A M R Y T E	C L S K M G E H I M D D	E K D T V D M D N N F	
UniRef90_U2KH67	G T I G G D P A A A A Y R Y T E	A R K M A K I A E T M V E D	K K E T V D F I P N F	
UniRef90_A0A023D2C7	G S V D G D S P A A A M R Y T E	A R L L A K S A S F L L D D	D R G T V D F Q P N Y	
UniRef90_W0FNH8	G S V D G D G A A A A M R Y T E	A R L L Q K L T M H H L L D G	D K D T V D F Y P N F	
UniRef90_A1AJX6	G S I D G D R P A A A M R Y T E	I R L R Q L S H E L L A D	D K E T V G M A P N Y	
UniRef90_I9KVG3	G S V D G D N A A A A M R Y T E	I R L L S K A H E M L K D	D K E T V D F F G P N Y	
UniRef90_W1Q1D6	G S V D G D G A A A A M R Y T E	A R M S K I A M E M L K D	N K D T V D F K D N Y	
UniRef90_A0A011NW35	G S V D G D N A A A A M R Y T E	V R M A R I G H E L L A D	D K E T V D F G P N Y	
UniRef90_R8Y6D7	G S I D G D S A A A A M R Y T E	V R M T K L A H E L L A D	E K D T V D W E D N Y	
UniRef90_I4D686	G S I D G D N A A A A M R Y T E	T M R M T P L A Q L M T Q D	K N T V L F K A N Y	
UniRef90_D5BQS8	G S V D G D P A A A A M R Y T E	S R L A R A E S L L R D	D K N T V E F A Q N Y	
UniRef90_R5GFY2	G S V D G D G P A A A A M R Y T E	S R L A P L A M E M L S D	D K E T V D M V P N Y	
UniRef90_Q3SK89	G S V D G D N A A A A M R Y T E	V R M A R I A H E L L A D	D K E T V D F G P N Y	
UniRef90_J9DIK3	G S L D G D P A A A A M R Y T E	V R M A K P A H S L L E D	R R N T V D F Q D N Y	
UniRef90_K2DWU9	G S M D G D P P A A A M R Y T E	A R L S R P A F F L M A D	D K E T V D F R P N Y	
UniRef90_Q0BYK4	G S I D N D D P P A A A M R Y T E	S R M T K V T T H L A D	D K D T V D F Q D N Y	
UniRef90_C1A5L6	G S M D G D N A A A A Y R Y T E	A R L T R M A V E M L T D	D K N T V D F A P N F	
UniRef90_D4J4X4	G S M D G D G A A A A M R Y T E	A R L S K I S M E M M A D	D K N T V D F Q P N F	
UniRef90_R5STS5	G S I D N D D P P A A A M R Y T E	A K L L S K K I S L E M L Q D	D K D T V D M V P N Y	
UniRef90_J0WSD1	G S V D G D P P A A A Y R Y T E	A R L L G K P A V R M L T D	E K D T V D F R P N Y	
UniRef90_E6MIN2	G S V D G D G D A A A A M R Y T E	A R M S R I S L E M L R D	N K E T V D F M D N F	
UniRef90_F9Y6C0	G S M D G D S P A A A M R Y T E	A R L R A K V A S F M L A D	D K D T V D F Q D N Y	
UniRef90_UPI000360ED43	G S I D G D M P A A A M R Y T E	V R L A K P A M A L L A D	D E D T V D F Q D N Y	
UniRef90_W3ALA1	G S D D G D S P A A A M R Y T E	E A K K M S K L A G E M L A G	N K D T V D F F M P N F	
UniRef90_B8GGZ1	G S I D G D S A A A A M R Y T E	V R M T R A A M A I L A D	D K K T V D F T P N F	
UniRef90_I0K0S6	G S I E G D P P A A A M R Y T E	A R L T R T R Y A E E L L A D	D K K T V D F V P N Y	
UniRef90_UPI000365AC0A	G S M D G D S P A A A A M R Y T E	A R L R R I S D E L L L A D	I G K D T V D F A F N F	
UniRef90_UPI00028834C3	G S I D G D S A A A A M R Y T E	A R L S K M A M E L L R D	N K K E T I D F G P N Y	
UniRef90_R5A978	G S I D G Y G A A A S R Y T E	A R M S K I T A E M L A D	E K D T V D F V P N Y	
UniRef90_B4R9P6	G S V D G D D P P A A A M R Y T E	S R M T R A A M A I L A D	D K D T V D F K D N Y	
UniRef90_C6XJ15	G S M D G D P A A A A M R Y T E	V K L L K V A N H L L A D	D K K D T V N F Q E N Y	
UniRef90_A0A011AA33	G S I D G D P P A A A M R Y T E	A R L L H A K L G E E M L T D	N E E T V D W G P N F	
UniRef90_M7NV77	G S V D G D A A A A A M R Y T E	S R M S K I S A E L L R D	N K D T I D Y Q P N Y	
UniRef90_UPI000368439E	G S V D G D P P A A A E R Y T E	A R L S K I A Q F L L D D	D K D T V D F F K P N Y	
UniRef90_Q2IW32	G S V D G D A P A A A M R Y T E	S R M T K A Q L L L D D	D K K D T V D Y Q D N Y	
UniRef90_H2CFZ0	G S I D G D N A A A A Y R Y T E	A R L T R A A E E L L R D	D K K N T V D F S P N F	
UniRef90_U5DLH0	G S V D D D D P P A A A M R Y T E	C R L R A I S S D S L Q D	E S E T V D F A D N F	
UniRef90_C3XD38	G S L D G D A A A A M R Y T E	C R L D R I S S D S L Q D	D K E T I D F V P N Y	
UniRef90_UPI000426A3E7	G S P D A G P A A A M R Y T E	R M A P A A L A M T A E L	D E D T V D F R P N Y	
UniRef90_F7PT51	G S I D G D G A A A A M R Y T E	S R M S K L S M E M L R D	N K K N T I D Y R D N Y	
UniRef90_K9E947	G S V D G D G A A A A M R Y T E	A R M S K M A L E L L R D	N K D T I D Y H D N Y	
UniRef90_A6GXM8	G S V D G D G S P A A A M R Y T E	A R M R K I S E E I M A V R D	E K E T V D F Q L N F	
UniRef90_R7GLN5	G S I D G D G A A A A M R Y T E	S R M S K I A M E M V R D	N K D T V D F V P N Y	
UniRef90_UPI0003B49AE5	G S I D N D D P P A A A M R Y T E	C R M A K P A N Y L V T D	D K D T V D F Q P N Y	
UniRef90_F6IPQ1	G S M D P D P P A S M R Y T E	A R L L A K V A D A L L A D	D K D T V D F Q P N Y	
UniRef90_G2DVD9	G S V D G D G A A A A M R Y T E	I R M A K I A H E M L A D	E E E T V N F G P N Y	
UniRef90_S4TLL1	G S L D G D P P A A A M R Y T E	A R L T H A S M Q L M E D	D K E T V D H V P N Y	
UniRef90_R5ZAK8	G S Q D G D D P A A A Y R Y T E	A R L N K L S L Q M V R D	D F V D T Y	
UniRef90_H7E119	G T I G G F P A A A A Y R Y T E	A E K M V K D	D K E T V D L I D N F	
UniRef90_D5MLW1	G S V D G D A P A A A M R Y T E	V R L A K I A Q E M L R D	D K E T V D L A P N F	
UniRef90_UPI0003B78AE1	G S V D G D G A A A A M R Y T E	A R L S K V A S L M E G	D K E T V D F Q P N F	
UniRef90_F9QCW5	G S I D G D G A A A A M R Y T E	A R L S K V A S L M E G	D K K D T V D F V D N Y	
UniRef90_E4XU22	G S V E G D A A A S M R Y T E	A R L L H P G M A M M E D	E K A T V D F Q P N Y	
UniRef90_G8QYU0	G S I D G D P A A A M R Y T E	A K M S R I G E E M M F D	Q K E T V D F G P N Y	
UniRef90_H3NQT7	G S M D G D G A A A A Q R Y T E	V R M T K L T L E M K D	N K D T V D F Q P N F	
UniRef90_F2I195	G S L D G D R A A A A M R Y T E	T R L A K V A A E F L I S D	D K N T V D F Q N N Y	
UniRef90_A8YW46	G S V D G D D E P A A A M R Y T E	A R M S K I A A E M L R D	D N Q E T V D F V P N Y	
UniRef90_UPI0004795F11	G S V D G D P P A A A M R Y T E	C R M M R V A G E L L A D	D Q E T V D F F V P N Y	
UniRef90_Z4XCR9	G S L D D G P A A A A A M R Y T E	C R M M R V A G E L L A D	D E D T V D F F V P N Y	
UniRef90_E0UQ42	G S V D G D S A A A A M R Y T E	A R M A P A A L D L V T G	E K N T V N M I D N Y	
UniRef90_Q11UG4	G S V D G D S P A A A M R Y T E	A R M T K Y A G E L L K D	E K N T V D F Q P N F	
UniRef90_UPI00047A155A	G S V D G D P P A A A M R Y T E	A R L K R A E E M L S D	D N K D T V D F F A P N Y	
UniRef90_M1PZK8	G S I D G D S A A A A M R Y T E	S R L T R A G E M L A D	D S D T V D F F T P N Y	
UniRef90_S0ET77	G S I D G D P P A A A M R Y T E	V R M D R I A D E M L V D	D E K E T V P F T P N Y	
UniRef90_UPI00035D39BA	G S M D G D P P A A A M R Y T E	C R L T P A V E M M E D	D R D T V D F M P N Y	
UniRef90_D8J640	G S V D G D P A A A M R Y T E	V R L A R A A Q S L L D G	D E D T V E F Q P N Y	
UniRef90_R6M8J9	G N I E G D G A A A A Y R Y T E	A R M S P I S E E L L T D	D E K E T V D F T A N Y	
UniRef90_UPI00021973BD	G S M D G D P P A A A M R Y T E	A R L S K I S L K M E D	D N K N T V D M D D N F	
UniRef90_D0LNR4	G S I D G D P P A A A M R Y T E	C R M A R L A S D L A D	D K E T V D W Q P N Y	
UniRef90_Q04AP4	G S M D G D S P A A A M R Y T E	T S R L A K I S N V L E D	D K E T V P M V L N F	
UniRef90_R6WSY2	G S V D G D P A A A A Y R Y T E	A R L S K I A N E M I R D	D K R V V D F C P N F	
UniRef90_F7RYR4	G S V D G D S A A A A M R Y T E	V R M S K I A H Q L L A D	D K E T V D F V P N Y	
UniRef90_F4DIY4	G S L D G D P P A A A M R Y T E	A R L T H S A F L M E D	D K D T V D M V S N Y	
UniRef90_Q1MQ89	G S I D G D A P A A A M R Y T E	V R M S R L A S E F L S D	D K E T V D F R P N Y	
UniRef90_P57277	G S V D G D S A A A A M R Y T E	V R M S K I A H E L N D	E K N T V E F L P N Y	
UniRef90_M2U8T8	G S M D P D A P A A A M R Y T E	T E A R L A K V T E E L T T D	D K D T V D F F V D N Y	
UniRef90_D4YDW1	G S M D G D S A A A A M R Y T E	A R L L S K I A D E L R D	D K D T V E M I L N F	

130 140 150 160

UniRef90_E4KWZ1	D E N E K E P T I L P A R F P N L L V N G S S G I A V G M A T N M A P H N M N E
UniRef90_C2CJK5	D E E E L E P T I V L P S R F P N L L V N G S S N G I A V G M A T N M A P H N L G E
UniRef90_UPI0003B674A6	D G E E S E P V V L P S R I P N L L I N G S V G I A V G M A T N I P P P H N L G E
UniRef90_UPI000287E68D	D D S E Q E P V V L P S R F P N L L I N G S V G I A V G M A T N I P P P H Q L G E
UniRef90_F9Z7F0	D G S L K E P T I V L P T R I P Y L L V N G A S G I A V G M A T N M P P H N I K D
UniRef90_A8TKW9	D E T T E E P S V L P A E Y P N L L V N G A G G I A V G M A T N I P P P H N L G E
UniRef90_K1Y4V5	D E S L Q E P T V L P A K A P L L L V N G A S G I A V G M A T N M P P H N L T E
UniRef90_K0AWF9	D E T L N E P K V L P S R F P N L L V N G S S G I A V G M A T S I P P P H N L S E E
UniRef90_UPI00046AE272	D G K D R E P T V L P A R F P N M L V N G A G G I A V G M A T N I P P P H N L G E
UniRef90_UPI0004712FB1	D D S E R E P S V L P A R Y P N L L V N G A G G I A V G M A T N I P P P H N L G E
UniRef90_G4L3L6	D D T E K E P E V L P A R F P N L L V N G T T G I A V G M A T N I P P P H N L G E
UniRef90_R6B572	D D R L Q E P T V L P A K I P A L L L V N G S S G I A V G M A T N M A P H N L T E
UniRef90_W9DTR5	D G S L E E P V V L P A K L P N L L I N G S T G I A V G M A T N M A P H N L T E
UniRef90_M4V716	D D S L E I P L I L P A K Y P N L L V N G S A G I A V G M A T N I P P P H N L G E
UniRef90_UPI000225A8DB	D D S T V E P K V L P A K F P N I L V N G G N G I A V G M A T N I P P P H N L G E
UniRef90_F9D5B6	D D T L K E P S V M P T K I P N L L V N G G N G I A V G M A T N I P P T H N L G E
UniRef90_U2KH67	D E S T V E P T V L P A K F P F L L A N G S S G I A V G M A T N M P P H N L R E
UniRef90_A0A023D2C7	D E S E D E P R V L P P A A F P N L L V N G A S G I A V G M A T N I P P T H N P G E
UniRef90_W0FHN8	D E T L Q Q P S V L P A R F P N L L V N G S S G I A V G M A T N I P P P H N L T E
UniRef90_A1AJX6	N D E L L E P T V L P S K F P N L L I N G S T G I A V G M A T N I P P P H N L G E
UniRef90_I9KKG3	D G S E S E P T V L P T R I P N L L I N G S S G I A V G M A T N I P P P H N L G E
UniRef90_W1Q1D6	S Q E E K E P V T L P S R F P N V L V N G A A G I A V G M A T N I P P P H N L G E
UniRef90_A0A011NW35	D G S E E E P L V I M P A R I P N L L I N G S S G I A V G M A T N M A P H N M T E
UniRef90_R8Y6D7	D G S E R I P Q V V P T R V P N L L I N G A A G I A V G M A T N M A P H N M T E
UniRef90_I4D686	D Q R L K E P V V L P S P F P N L L I N G G S G I A V G M M S N I P P H N L K E
UniRef90_D5BQS8	D E T Q L E P T V L P A E Y P N L L V N G A N G I A V G M A T N I P P P H N P G E
UniRef90_R5GFY2	D D S T L E P S V L P S R I P N L L V N G A S G I A V G M A T N M A P H N L K E
UniRef90_Q3SK89	D G S E Q E P L V L P T K I P N L L I N G S S G I A V G M A T N I P P P H N L T D
UniRef90_J9DIK3	D N S E R E P V V L P A R F P N L L V N G A N G I A V G M A T N I P P P H N L G E
UniRef90_K2DWU9	D E S T V E P T V L P S R I P N L L V N G A A G I A V G M A T N I P S H N L G E
UniRef90_Q0BYK4	D G K E K E P V V L P A Q F P N L L V N G G G G I A V G M A T N P P P H N L G E
UniRef90_C1A5L6	D D R L E E P R V L P A G F P N L L V N G S T G I A V G M A T N P P P H N L R E
UniRef90_D4J4X4	D E T E K E P V V L P S R Y P N L L V N G T T G I A V G M A T N P P P H N L R E
UniRef90_R5STS5	D D R L K E P S V L P A K L P F L L I N G A Y G I A V G M A C N P P P H N L T E
UniRef90_J0WSD1	D D R L K E P V V L P V R F P N I L I I N G S T G I A V G M A T N P P P H N M C E
UniRef90_E6MIN2	D G S E Q E P V V L P S R F P H I P N L L V N G S Q G I A V G M A T N P P P H N L G E
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UniRef90_UPI000360ED43	D G S E K E P S V L P A Q F P N L L V N G A G G I A V G M A T N P P P H N L G E
UniRef90_W3ALA1	S N E Y D E P E V L P A K F P N L I I N G A T G I A V G M A T N M P P H N L R E
UniRef90_B8GGZ1	D S S T E E P T V L P S K V P N L L V N G T S G I A V G M A T N I P P P H N L R E
UniRef90_I0K0S6	D E T K M E P A V E P A A F P N L I I N G G T G I A V G M A T N I P P P H N L S E E
UniRef90_UPI000365AC0A	D D T L K E P T V L P A R I P N L L I I N G A S G I A V G M A T N M L P P H N L T E
UniRef90_UPI00028834C3	D G E E S E P V V L P S R F P N L L V N G I S G I A V G M A T A I P P P H Q L G E
UniRef90_R5A978	D E N E K E P T V L P A R I P N L L V N G S S G I A V G M A T N I P P P H N L G E
UniRef90_B4R9P6	D G S E Q E P V V L P S R I P N L L V N G A G G I A V G M A T N I P P P H N L G E
UniRef90_C6XJ15	D G S E K E P I V L P A R F P N L L V N G G G G I A V G M A T N I P P P H N L G E
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UniRef90_M7NV77	D G Q E K E P I V L P S R F P N L L V N G S S G I A V G M A T N I P P P H N L G E
UniRef90_UPI000368439E	D D R L E E P S V L P A K F P N L L V N G A G G I A V G M A T N P P P H N L G E
UniRef90_Q2IW32	D G S F N E P Q V L P A K F P N L L V N G A G G G I A V G M A T N I P P P H N L G E
UniRef90_H2CFZ0	D D T K Q E P K V L P A G L P N L L I I N G A S G I A V G M A T N P P P H N P D E
UniRef90_U5DLH0	D G S Q Q E P T V L P S R I L P Q L L L I I N G S S G I A V G M A T N P P P H N L G E
UniRef90_C3XD38	D G K E K E P S V L P T R I P N L L I I N G S S G I A V G M A T N I P P P H N L V E
UniRef90_UPI000426A3E7	D G H E T E P S V L P A A A F P N L L I I N G A T G I A V G M A T N I P P P H N I G E
UniRef90_F7PT51	D G S E R E P Q V L P S R F P N L L V N G T T G I A V G M A T N I P P P H N L G E
UniRef90_K9E947	D G T E S E P D I L P A R F P N L L V N G A S G I A V G M A T N I P P P H N L K E
UniRef90_A6GXM8	D D T L Y E P K V M P T K V P T L L I I N G A T G I A V G M A T N M P P H N L T E
UniRef90_R7GLN5	D G E E K E P N V L P S R I P N L L I I N G S T G I A V G M A T N I P S H N L G E
UniRef90_UPI0003B49AE5	D G K D R E P I V L P A Q F P N L L V N G A G G G I A V G M A T N I P P P H N L G E
UniRef90_F6IPQ1	D G A E N E P Q V L P A R Y P N L L V N G A G G G I A V G M A T N I P P P H N L G E
UniRef90_G2DVD9	D G S E H E P L V L P T R F P A L L L I I N G S S G I A V G M A T N I P P P H N L P D
UniRef90_S4TLL1	D E T K K E P V V F P A K F P N L L I I N G S S G I A V G M A T N I P P P H N L N E
UniRef90_R5ZAK8	D G D G Q E P V V L P A R I P N L L I I N G S Q G I A V G M A T N I P S H N L R E
UniRef90_H7E119	D Q S T K E P T V L P A Q F P Y L L C N G A T G I A V G M A T N M P S H N L R E
UniRef90_D5MLW1	D E T L E E P T V L P A A L P N L L V N G S S G I A V G M A T N I P P P H N L S E E
UniRef90_UPI0003B78AE1	D E T E K E P V V L P S R Y P N L L V N G T T G I A V G M A T N I P P P H N L G E
UniRef90_F9QCW5	D A T E K E P T V L P S K F P N L L V S G V S G I A V G L A T E I P P H N L S E E
UniRef90_E4XU22	D G S Q E E P T V L P S A F P N F L V N G G T G I A V G M A T N L A P H N L G E
UniRef90_G8QYU0	D D S L Q E P T V L P A S F P F L L A N G S S G I A V G M A T N M A P H N L Q E
UniRef90_H3NQT7	D E E E V E P K V L P A R F P N L L V N G S S G I A V G M A T N M A P H N L G E
UniRef90_F2I195	D D T E L E P V V L P A Q Y P N L L V N G A S G I A V G M A T N I P P P H N L G E
UniRef90_A8YW46	D D T E N E P V V L P A R I P N L L I I N G A N G I A V G M T T N I P P P H N L S E E
UniRef90_UPI0004795F11	D E S T Y E P S V L P T R I P N L L I I N G A N G I A V G M A T N I P P P H N L S E E
UniRef90_Z4XCR9	D N Q F M Q P D V L P A A F P Q L L V N G A S G I A V G M A T N I A P H N L S E E
UniRef90_E0UQ42	D G T T K E P D V M P T R V P N L L I I N G S S G I A V G M A T N I P P P H N P T E
UniRef90_Q11UG4	D D S L Q E P S V L P S K V P N L L I I N G S S G I A V G M A T N M A P H N I T E
UniRef90_UPI00047A155A	D E S T L E P T V L P A R I P N L L I I V N G G G G I A V G M A T N I P P P H N L T E
UniRef90_M1PZK8	D G S L K E P E V L P A R L P N L L I I N G S T G I A V G M A T N M P P H N I S E E
UniRef90_SOET77	D Q S R Q E P I V F P A K F P N L L I I N G A E G I A V G M S T S I P P P H N L R E
UniRef90_UPI00035D39BA	D E T A E E P R V L P A A F P N L L V N G A N G I A V G M A T N I P P T H N L A E
UniRef90_D8J640	D D R L E E P E V L P P A A I P N L L V N G S S G I A V G M S T N V I P P P H N L R E
UniRef90_R6M8J9	D E T S K E P P R V L P S R F P N L L V N G S M G I A V G M A T N I P P P H N L G E
UniRef90_UPI00021973BD	D D T E K E P K V L P A R F P N L L V N G A T G I A V G M A T N I P P P H N L G E
UniRef90_D0LNR4	D D K E L E P T V L P T K V P N L L L V N G A S G I A V G M A T N I P P P H N L G E
UniRef90_Q04AP4	D D T A Y E P T V L P A R F P N L L V N G G S T G I S S G Y A T E I P P P H N L G E
UniRef90_R6WSY2	D D T R E Q P V V L P S R Y P N L L V N G S D G I A V G M A T S P P P H N L G E
UniRef90_F7RYR4	D G T E F I P E V L P T R I P N L L V N G S S G I A V G M A T N I P P P H N L T E
UniRef90_F4DIY4	D E T K H E P T V F P A K F P N L L I I N G S S G I A V G M A T N I P P P H N L G E
UniRef90_Q1MQ89	D N S L E E P I V L P T K V P N L L L V N G S S G I A V G M A T N P P P H N L G E
UniRef90_P57277	D G T E Y I P E I L P A K I P N L L I I N G S S G I A V G M A T N I P P P H N L N E
UniRef90_M2U8T8	D G S E S E P A V L P A R F P N L L V N G A G G I A V G M A T N I P P P H N L G E
UniRef90_D4YDW1	D D T A E E P T V L P A G F P N L L V N G A T G I S A G Y A T E I P P P H N L G E

Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 170, 180, and 190. The y-axis lists UniProt IDs. Colored boxes indicate specific mutations or motifs.

Position	170	180	190	
UniRef90_E4KWZ1	S	D G I A Y I D N	D E I S I S E L N Q I	K G P D F P T G A Q I M G
UniRef90_C2CJK5	A	A C A Y M K D P E I S I D D L I	E I P G P D F P T G A L I L G	
UniRef90_UPI0003B674A6	T	Q A I F R I M D D P D I V S	V P E L M E V K G P D F P T G G M I L G	
UniRef90_UPI000287E68D	V	D A V L A L S K N P E I T L E E L	M Q Y I P G P D F P T G G L I L G	
UniRef90_F9Z7F0	A	D A I C A Y I D N N D I D I E E L I	K I P G P D F P T G G T I Y G	
UniRef90_A8TKW9	V	D A C L A M L D N P G I T D E L I A	V P G P D F P T G G L I L G	
UniRef90_K1Y4V5	V	N A I C A Y I D N N E I T T E E L L L	H I K G P D F P T G G T I L G	
UniRef90_K0AWF9	V	D G I V A M I D N K D I T I E E I I S	H I K G P D F P T G A I I M G	
UniRef90_UPI0004AE272	V	D A C L A L I D N P D I T S S E E L I	E Y V P G P D F P T G G I M L G	
UniRef90_UPI0004712FB1	V	D A S A L L E K P E L S P E E L I	E Y V P G P D F P T G G V I L G	
UniRef90_G4L3L6	V	A A I D R L I E N P E E V T T N E L	M E V L P G P D F P T G G L V M G	
UniRef90_R6B572	V	N G I I K I I D D D N V T D E Q L	M Q I I K G P D F P T G G M I L G	
UniRef90_W9DTR5	V	N A T M M M I E N P E E V T I P E L M T A I	K G P D F P T G V I Q G	
UniRef90_M4V716	D	G C I H L I Q N P D C G I E E L I	E R I P G P D F P T A G Q I A G G	
UniRef90_UPI000225A8DB	V	D A C C A L I Q N P A L E V E E L I	M Q Y M P G P D F P T G G L V G	
UniRef90_F9D5B6	V	D G C C A F I D N P P E I D T D	G L M Q F I P A P D F P T G A Y I Y G	
UniRef90_U2KH67	I	A A A V A A Y I D N P P D I	T I D E L L S Q Y I T G P D F P T G G V I Y G	
UniRef90_A0A023D2C7	I	D A T L A M I A D P P	E I T L D E L M K I V K G P D F P T G G I M G	
UniRef90_W0FNH8	V	N G V I C M I D N P P	E C T L V E D L M Q H I K G P D F P T G G L I M G	
UniRef90_A1AJX6	V	D G I I A V I N N P D L A H E E L L A	L I P G P D F P T G A T I Y G	
UniRef90_I9KWG3	I	D G C I H L L R N P E A S V D E E L I	E I I P A P D F P T A G I Y G	
UniRef90_W1Q1D6	T	D A L S L L M K N P D V S V N E L	M E A L P G P D F P T G G I V M G	
UniRef90_A0A011NW35	V	D A C L A L L I I N P I G V D D L I	G L M E Y I T G P D F P T G G G I Y G	
UniRef90_R8Y6D7	V	N A C L A Y A D N P N I S I V E	D L L P A P D F P T G A T I Y G	
UniRef90_I4D686	V	A G L L I Q Q I D H P D T T V E E E L L	E K K V K G P D F P T G G L I I G	
UniRef90_D5BQS8	V	A C E A Y V N N P E I T T E E L L	M E Y I V K A P D F P T G A L I M G	
UniRef90_R5GFY2	V	E G A L A Y I D K R G D I S V A E	E Y V K A P D F P T G G T I Y G	
UniRef90_Q3SK89	I	C N A L F A L L D A P A T D I E S L I S	I V Q A P D F P T A G I Y G	
UniRef90_J9DIK3	V	N A T L A L I I E N P E L D D N E L T T	I V P G P D F P T G G Q I L G	
UniRef90_K2DWU9	V	D G C C A L I E N P D L S V E E L	M E Y I P G P D F P T G A L I M G	
UniRef90_Q0BYK4	V	D A T L A M I E D P A I T D E	A L C E P G P D F P T G A L I M G	
UniRef90_C1A5L6	V	S A V I A L I D N P P E L D G	P A L R K L V K G P D F P T G G Y I Y G	
UniRef90_D4J4X4	T	D G V I K I I D N P R E E N R E T T I E	L M E I I K G P D F P T G A M I L G	
UniRef90_R5STS5	V	N G T I A Q L D N N P D I T N E E L	M N Y I K G P D F P T G G L I L G	
UniRef90_J0WSD1	V	D G L C A L I D N P D A T M E E	M E H I K G P D F P T G G I M G	
UniRef90_E6MIN2	V	D G T I A L I D D P P D I S	V D D L M T H I P A P D F P T A G V I L G	
UniRef90_F9Y6C0	V	D A T I A L I K N P D L T S E	D L M Q Y V P A P D F P T G G M I L G	
UniRef90_UPI000360ED43	V	D A C V A L I E K P E M E V E E L L	E I V P G P D F P T S G I L L G	
UniRef90_W3ALA1	V	K A V D L I I E N K I N D K E T T I	E D V M Q V I K G P D F P T G G I L L G	
UniRef90_B8GGZ1	V	C S A V E M T I K N P P D C	T V E D L M Q V W M P G P D F P T G G L I T G	
UniRef90_I0K0S6	T	D A L V A L I D Q P G L S A E D L L	Q Y I Q G P D F P T G G V I L G	
UniRef90_UPI000365AC0A	V	D G V V A T I I E N N P P D I T T E E L L	E I V K A P D F P T G G I I F D G	
UniRef90_UPI00028834C3	V	D G I Q A L I E N P D I T P M E L M Q Y I	K G P D F P T G G Y I L G	
UniRef90_R5A978	V	D G V V C M I E N K I L E G R E T D V E E	L M Q Y I K G P D F P T G A N I L G	
UniRef90_B4R9P6	V	D A C L A Y I D N P E I G L D E L L	D I V P G P D F P T G E I I G	
UniRef90_C6XJ15	V	D A T I A M I E D D P N I D D E	A L L E I V P G P D F P T G A L I I G	
UniRef90_A0A011AA33	A	D V C C A T I L D N N P E V E	L G E L M G I M P G P D F P T G G I I L G	
UniRef90_M7NV77	A	N A V L A L A D N N P D I T T E E L L	M E I I P G P D F P T G G L I L G	
UniRef90_UPI000368439E	V	D A C I L M L D N P P D I T S I D D L T Q I	V I P G P D F P T G G I I L G	
UniRef90_Q2IW32	V	D A C I A L I D D P P A L S I D D L N V	I P G P D F P T G G I I L G	
UniRef90_H2CFZ0	V	S A V T A L I I K N P D L S L K D L M K L I	I P A P D F P T G G G I I L G	
UniRef90_U5DLH0	L	D G T I A L L V R N A D S D R E L I	Q I V P G P D F P T G G T I L G	
UniRef90_C3XD38	V	N G A L Q L L H Q P D C T I D E L I	D I V P G P D F P T G G I I L G	
UniRef90_UPI000426A3E7	V	Q A L R H L L K H P A A D L P A L M R F I	P G P D F P T G G T I V G G	
UniRef90_F7PT51	V	D G V L A L S H D P E L S	V S E L L M E Y I K G P D F P T G A N I L G	
UniRef90_K9E947	V	D A C V L L M E N E D V T V A D L M E V L	M Q H I P G P D F P T G A S I I G	
UniRef90_A6GXW8	V	N G T I A Y L E N D I E I D E L L	N D Y I P G P D F P T G G I I Y G	
UniRef90_R7GLN5	V	D A I L A V S K N P D I T I T E L L M D	E I V P G P D F P T G G L I M G	
UniRef90_UPI0003B49AE5	V	D A T I A M I D N N P Q I D D E E L L	E I V P G P D F P T G G L I M G	
UniRef90_F6IPQ1	V	D G C F A M M D N P G I T S E E L F Q I	N T I K A P D F P T A P L I L G	
UniRef90_G2DVD9	T	N A C I Q L L A D P Q T D I D V L I	P G P D F P T G A T I Y G	
UniRef90_S4TLL1	L	K A T I L L V L D N P S T T I E E I M R V	M P A P D F P T G G I I C G	
UniRef90_R5ZAK8	T	F N A I I A L L M K N P S L E P A D	L M E Y I K G P D F P G G G I I R G	
UniRef90_H7E119	V	V A S A I S A Y V I D N R D I S I D E L	M S H I K G P D F P T G G V I Y G	
UniRef90_D5MLW1	T	D A L L I L L E D P D A T P D R L M A V L	P G P D F P T G A Y I Y G	
UniRef90_UPI0003B78AE1	V	D A V V K I I D D I E N Q E T T I D D L I K L V	K G P D F P T G G T I L G	
UniRef90_F9QCW5	T	D A T I A L A K N P E L N T L E L M Q Y I	K G P D F P T G A T I L D	
UniRef90_E4XU22	V	D G I C A Q I D K P D I T L P E L M Q Y I	K G P D F P V S C E R G	
UniRef90_G8QYU0	I	C D A I C A V I E N P D I T I D E L M E Y I	K G P D F P S G A I C G	
UniRef90_H3NQT7	V	D G C I A Y I D D N D I T V E G L M K H I	K G P D F P T G A N I I G	
UniRef90_F2I195	V	E G T L K Y I D N N E I T I K E L M K V I	P G P D F P T G G I I I G	
UniRef90_A8YW46	V	S G L H M L M K N P D A T T K D L M K V I	V Q G P D F P T G G I I M G	
UniRef90_UPI0004795F11	V	N A A I E M V N P H A G L A E V L K H V	K G P D F P T G G F I Y G	
UniRef90_Z4XCR9	T	A G A I H L L D N P S A S V A D L M R Y I	P G P D F P T G G V I V G	
UniRef90_E0UQ42	I	M N G L K A L L E N P I N I T L P E I M E H I	K A P D F P T G G I I F G	
UniRef90_Q11UG4	V	D G V I A F I D D N N D I T I P E L M V H	V K G P D F P T G A T I Y G	
UniRef90_UPI00047A155A	V	N A C I A L L N K E K T D T R S D I A I A L E H V	V K G P D F P T G G Y I Y G	
UniRef90_M1PZK8	V	D G I M L L E N P E T Q I S E L M T V I	K G P D F P T G A H I L G	
UniRef90_SOET77	V	E A S I Y M L D H P D A T P D D L F R F I	P G P D F P T G G L I V L G	
UniRef90_UPI00035D39BA	V	D A T V L L I D E P E A D L A R L M E K L	P G P D F P T G G I I L G	
UniRef90_D8J640	V	D A T I H L I D D P P E C S I P D L M E H V	D L M T F V K G P D F P T G G I V L G	
UniRef90_R6M8J9	V	D G C V A Y I D N H D I D T L G L M E Y V	D L M K F V K G P D F P T G A N I V L G	
UniRef90_UPI00021973BD	V	D A T I A K M I T L D E T L D E M K I V	T I N K L M D F V K G P D F P T G G I I Q G	
UniRef90_D0LNR4	I	D A T M A L M E D P D L P E E E L A	E I V P G P D F P T G G G I I H	
UniRef90_Q04AP4	V	D A T I H L K H P D A S L E D L M T F V	K G P D F P T G G I I V M G	
UniRef90_R6WSY2	V	D A T V A L M E N P E L E V E D L M K F V	P A P D F P T G A N I V L G	
UniRef90_F7FRY4R	V	N G C L A M V D N P D I Q L E E L M E H I	P A P D F P T G A S I V S G	
UniRef90_F4DIY4	L	E A T L L L L S N P T A S I E E I M E V	V M P G P D F P T G G G I I C G	
UniRef90_Q1MQ89	L	C N A L L K I I D D P D V P I D N L L I	N I I H G P D F P T G G F I Y V	
UniRef90_P57277	V	N G C L A Y I A N P A I S A E I M E V	H I P G P D F P T A A I I N G	
UniRef90_M2U8T8	V	T A A L E Y I A N P A I S A E T I N K L M D F V	P G P D F P T G A Y V M G	
UniRef90_D4YDW1	I	D A T T Y L I D H P N A T I N K L M D F V	P G P D F P T G A I I Q G	

210 220 230 240

UniRef90_E4KWZ1	T E G K E A Y E T G R G K I T V R A V A E K S F K N N R E K V I T E L P Y
UniRef90_C2CJK5	K S G K E A Y K T G R G K I K Q R A V A K I E P F K K N R E R I I T E I P Y
UniRef90_UPI0003B674A6	R K G R Q A Y E T G R G S I M I R S K Y R E E L D N G K K R I F Y E I P Y
UniRef90_UPI000287E68D	R E G K R A Y R T G R G S I V R A R V T E E L D N G K K R V V T E L P Y
UniRef90_F9Z7F0	Y S S V R E S Y L T G R G R V V I R P K T S V E V M P N G R E K I V H E I P Y
UniRef90_A8TKW9	R S S R E A Y H T G R G S V V M R G R A E E E I R K D R F A V V T E I P Y
UniRef90_K1Y4V5	I Q G K E A F E T G R G R V V R A K T D E V N E N G R E T V V S E I P Y
UniRef90_K0AWF9	K E N R E A Y R T G R G K V I V R S E A E E E N S K G R S S I V T E I P Y
UniRef90_UPI00046AE272	R S G A R K A Y L E G R G S V I V R S K T R E E I R K D R W A V I D E I P Y
UniRef90_UPI0004712FB1	R S G S I N A L T T G R G S V I M R G K V D I E E I R K D R Q A V V T E I P Y
UniRef90_G4L3L6	K S G I R R A Y E T G K G S T V R G K V E I S E M A N G K E R L V T E L P Y
UniRef90_R6B572	R E A K Q A Y E T T G K G K V T V R A E A E E E M S N G K Q K I V T S E L P Y
UniRef90_W9DTR5	K Q G K S A Y E T G R G R V Q V R A V A E E E M K K D K Y R V V S E L P Y
UniRef90_M4V716	K E G L Q A Y R K G R G L I T I K A K T E E T K K D H E E I V T E I P Y
UniRef90_UPI000225A8DB	R A G G L E A F R T G R G S V M R G K T H T E T V R G E K E A I I D E I P Y
UniRef90_F9D5B6	Q Q G V K D A Y E T G R G R I V M R A K A E E E S D D S H D K V V T E I P Y
UniRef90_U2KH67	R K G K Q A F E T G K G R V L V R G R F N I E T D K K G R E S V F T E V P Y
UniRef90_A0A023D2C7	R R G R L A F E T G R G S I P V R A R A E I I E D I R K D R K A V V T E I P Y
UniRef90_W0FNH8	Y S G R A A Y H T G H G R T V R A R T N V E E M G N N R S R I V T E I P Y
UniRef90_A1AJX6	R Q G V R D A Y T T G R G R G I Q I R A K A H E A A K S E R Q I V D E I P Y
UniRef90_I9KKG3	V S G V R D G Y R T G R G R V V M R A K T H F E E D I D R G R Q R Q I V D E I P Y
UniRef90_W1Q1D6	K S G V R K A Y Q T G K G K I I V R S R V E I E Q M A H D K E R V V T E I P Y
UniRef90_A0A011NW35	L A G G V R E G Y R T G R G R V I M R G K V H F E E L E K G N N R Q I I D E I P Y
UniRef90_R8Y6D7	K S G V V D A Y R T G K G R L H I R G K Y H F E E D E K G R I T V F T E I P Y
UniRef90_I4D686	T D G I L S A Y K T G R G K V T M R G K A V E E Q G K S G K N L A I T E I P F
UniRef90_D5BQS8	R H G I R E A Y R T G R G S I I M R A R A E V Q T N A K D R E S I V H E I P Y
UniRef90_R5GFY2	Y Q G V K E A F E T G R G R I V I R G R A E I E V D G Q H E Q V I T E I P Y
UniRef90_Q3SK89	L S G V R D G Y R T G R G R V V M R A T C H F E E D I D R G R Q A I I D E I P Y
UniRef90_J9DIK3	R R G A L S A V M T G R G S V V M R G K A E V E E I I R K D R E A I V T E I P Y
UniRef90_K2DWU9	Q S G S R K A L M T G R G S V I M R S K T E I E E A K N G R E A I V S E I P Y
UniRef90_Q0BYK4	R A G I I A D Y Q D T G R G R I I M R A R A V I E E K S S G K S Q V V T E I P Y
UniRef90_C1A5L6	K N G I N Q A Y T T G R G K L K V R A V T D I E T M P N G R H R V A T E I P Y
UniRef90_D4J4X4	K E G I K A A Y T T G R G K V C V R A R A E I E E D A R G R Y K I V T E I P Y
UniRef90_R5STS5	R S S G I R A A Y G T G R G R I I V R A R A E I E E E K N G R F K V I S E I P Y
UniRef90_J0WSD1	R S S G I R A A Y E T G R G R I K I R S K V A V V K N M T K G K Q V I S E I P Y
UniRef90_E6MIN2	K S G I I R E A Y E T G R G R I I L M R A R S H V V E E I V R K D R Y A I V D D V P Y
UniRef90_F9Y6C0	R S G A R K A Y L E G R G S I I L M R A R S H V V E E I V R K D R Y A I V D D V P Y
UniRef90_UPI000360ED43	R G G I I R S A Y T T G R G S V I M R G R V E E V E T V R K E R E A I V S E L P Y
UniRef90_W3ALA1	R K G I E E A Y R T G R G K I K L R A V C E I I E A M Q N G K H R V V V K E E I P Y
UniRef90_B8GGZ1	T E G I V S A Y H T G Y G K L T V R G V A E I E D V E T K T P K I I I S E I P Y
UniRef90_I0K0S6	K E G I V S Y F T T G R G S L K V R G E V H F E E L R G G K S A I I I D E I P Y
UniRef90_UPI000365AC0A	Y Q G I K D A F H T G R G R V V V R G K A E I I I T D N R D R E T I I I S E I P Y
UniRef90_UPI00028834C3	R E G I R Q A Y T T G R G S V T M R A R A E I E E N N G K A R I V S E I P Y
UniRef90_R5A978	K S G I R A A Y R T T G R G K I I V R S T A E I E T H H N G R E R V I T E I P Y
UniRef90_B4R9P6	R S G A R Q A L M T G R G S V I M R G K A T I E E V R K E R E A V I T A I P Y
UniRef90_C6XJ15	R A G S R S G L M T G R G S V I M R S K S S I E E L K V N G R E A L V F T E I P Y
UniRef90_A0A011AA33	R E G I I D A Y R T G R G K L V V R G R V D I E E D G R K G K R S I I I T E I P Y
UniRef90_M7NV77	R S G I I R R A Y E T G R G S I I L T R G R K V E I V E T A P N G K E T L V H E I P Y
UniRef90_UPI000368439E	R A G A L A A Y H K G R G S I I M R A K V E E V E I I R K D R D A L V V T A I P Y
UniRef90_Q2IW32	R A G I I R L A A Y H T G R G S I V M R G K V E E V E T V R K D R E A I I I S E I P Y
UniRef90_H2CFZ0	G E G L K Q A Y T T G R G S I I R I R A K L T V E Q L R K G R D T V V T E I P Y
UniRef90_U5DLH0	R A G I I A D A Y S T G R G S T T M R G V A T I E V R G R P D R E A V I T E I P Y
UniRef90_C3XD38	V S G V R E G Y R T G R G R V V M R A K T H F E E Y G E G R Q A I V D E I P Y
UniRef90_UPI000426A3E7	L D G G I T D A Y A T G R G S F R I R A T S K I I E Q V S A R R K G V V S E I P Y
UniRef90_F7PT51	L S S G I R R A Y E Y G R G S I V M R A K H E I V E H R N G K S T I I I T E I P Y
UniRef90_K9E947	V S G V R K A Y E T G R G S I K L R A K S R I D V D Q K G K E R I I I D E I P Y
UniRef90_A6GXM8	Y E G V R E A F K T G R G R I V M R A K V G F E E V D G R E C I V S E I P Y
UniRef90_R7GLN5	R G A I I K K A Y E T T G N G L I V M R A R T D I E D I L G S N K K A I V T E I P Y
UniRef90_UPI0003B49AE5	R S G A R N G L L K G R G S V I M R A R T S F E T T M R N G R E A I V T E I P Y
UniRef90_F6IPQ1	Q G G A R N A A M T G R G S I M M R C R H Q I I E E A R G D R R S V I L T S I P Y
UniRef90_G2DVD9	M S G V R E G Y K T G R G R V V M R G K T H I E P G K G N E R I I I D E I P Y
UniRef90_S4TL11	Y R G V K E A F H T G H G K I I L R G V I R V E E D M N P D R Q R V I L D E I P Y
UniRef90_R5ZAK8	R S G I K H Y F E T G S G N V K V R G R Y H L E Q T K D G R T S V F T E V P Y
UniRef90_H7E119	R E G F R K A Y R T G R G K V I R S K F D I V E T S R T G R E S V F T E V P Y
UniRef90_D5MLW1	R T G I I R D A Y L T G R G L I R M R A K A F V E K S R G A R E A I V S E L P Y
UniRef90_UPI0003B78AE1	T S G I I I N E A Y D T G R G S I P M R S N C E I I E F T S G K S R I V T E I P Y
UniRef90_F9QCW5	I D A I I Y S A Y D T G R G S I P M R S N C E I I E F T S G K S R I V T E I P Y
UniRef90_E4XU22	I R G I I E E Y F R T G R G S M R L L R G K V E I I E E N E N G K S F V I R E V P Y
UniRef90_G8QYU0	M K G I K D A F T T G R G K I V M R S C Y E I E T H D R G H D Q V F T E I P Y
UniRef90_H3NQT7	K K P I I I D A Y K T T G R G K V K L R A E A H I E E Y K S K H V V V T E I P Y
UniRef90_F2I195	Q N D I I P G Y E K G R G S I K I R G E I E V E E G S K D K K I V I K S V P Y
UniRef90_A8YW46	R G G I Y R A Y E S G K G N I V V R A E T N I E T E K S G R E R I V S E I P Y
UniRef90_UPI0004795F11	R S G I A Q A Y K T G R G R F L M R A K C A I I E N L T Q G R Q A I V S E I P Y
UniRef90_Z4XCR9	L E G G I K E A Y E T T G R G F K F T R A K T V Q I E V R V T A R K M G I V T Q L L P Y
UniRef90_E0UQ42	K K G I M D A Y E T T G R G R I K V R A K T H I E E K K G N R D V V I D E I P Y
UniRef90_Q11UG4	Y Q G I R S A F E T T G R G R I V L R S R S T I E T T S T G K E Q I V S E I P Y
UniRef90_UPI00047A155A	R A G I A Q T Y N T G R G R F I M R A K V G T E N I I S G G R Q A I V T E I P Y
UniRef90_M1PZK8	T A G I R S A Y M T G R G P I P I R M R A V A E I Q E L K K D R Q Q I V T E I P Y
UniRef90_SOET77	T R G V R E A Y R T G R G R I I M Q A N L Q I E P M D G G R N A V V T E I P Y
UniRef90_UPI00035D39BA	R S G I R A A F E T T G R G S V P V R A R A S V E E I R K D R E A V V T E I P Y
UniRef90_D8J640	R E A I H S A Y T T G R G R L R V R A E F E R E Q A D K R E R V I T E E L P F
UniRef90_R6M8J9	N S G I R K A Y E T T G R G S I T I R S R A E I E E H N N H N T V I T E E L P Y
UniRef90_UPI00021973BD	K D G I K E A Y Q T G R G K V E L R S K T T I Q E I R G H K S Q V I T E I P Y
UniRef90_D0LNR4	R G G I R A A H T L G R G A V V I R G R T Q F E T I V R K E R K A V V T E I P Y
UniRef90_Q04AP4	K K G L R D A Y K T G K G R I Q V R A K T H I E E L R G H R Q V V T E I P Y
UniRef90_R6WSY2	R A S I R Q A Y E T T G R G G C I I R V A R A T E I E E M A N G T R V V T E I P Y
UniRef90_F7RYR4	R R Q I I D A Y R T G R G K Y I I R A R A D I E T D E N T G R D T I V H E I P Y
UniRef90_F4DIY4	H E G I C S T Y H T G R G K I K V R A R L H V E N T E K H R E S V I T E I P Y
UniRef90_Q1MQ89	G Q G L Y D A Y T K G R G T V K V R G K V E I I E E R K K G A Q S V I R E I P F
UniRef90_P57277	K S G I E E A Y R T G R G K I Y I R A Q N Q I E E K N K K K H E V F N E I P Y
UniRef90_M2U8T8	Q G G L Q S A Y T T G R G S V I M R A R S K V V E E K G G D R R A L V L T E I P Y
UniRef90_D4YDW1	K E E L K K A Y T S G R G K V V V R S K H H I E T D R G G K E K V I T E I P Y

		250	260	270	280
UniRef90_E4KWZ1	Q V N K S A L I M K A E L A K N K D I D G I S N I T D A S N R K G I N I I V				
UniRef90_C2CJK5	Q V N K A R L I E K I A D L V K E K R V D G I S D I R D E S S D R K G M R I V V				
UniRef90_UPI0003B674A6	Q V N K L N L I K K M A D L I R D K E I Q G V T Y L N D E S S D R S G M R M V I				
UniRef90_UPI000287E68D	Q V N K A E L I S R I A D L I N E K K I D G I S N I R D E S S D R E G M R I V V				
UniRef90_F9Z7F0	M V N K A E L I S R I A D L I N E K K I D G I S N I R D E S S D R E G M R I V V				
UniRef90_A8TKW9	Q V N K S K L M E R I G E V V R D K T V E G I S D I R D E S S D R D G V R V V V				
UniRef90_K1Y4V5	M V N K A R L I E K I A E L V R D K R I E G I S D I R D E S S D R N G M R I V V				
UniRef90_K0AWF9	Q V N K A R L I E K I A E L V R D K R I E G I S D I R D E S S D R D G M R I V V				
UniRef90_UPI00046AE272	Q V N K A T M I E R I A E A A R D K K I E G I A H V Q D E E S S D R N G V R V V				
UniRef90_UPI0004712FB1	Q V N K A R L V E Q I A E L V R S K K I E G I G D L R D E S S D R H G V R V V				
UniRef90_G4L3L6	M V N K A K L I E R I S E L H R D K R I E G I T D L R D E S S D R E N A V R I H				
UniRef90_R6B572	Q V N K A K L I E N I A N V R K E K K V T G V S D L R D E S S D R E G L R V V V				
UniRef90_W9DTR5	Q V N K A K L I E D I A S L V R D K K V T G V S D L R D E S S D R E G L R V V V				
UniRef90_M4V716	Q V N K A K L I E S I A D L V R E K T V E G I S D I R D E S S D R D G V R V V				
UniRef90_UPI000225A8DB	Q V N K A R L V E R I A E I V K E K I V E G I S D L R D E S S D R D G V R V V				
UniRef90_F9D5B6	G V N K Q Q L I E Y I A D L V K E G K L E G I A N V N D E T T G R Q G M R I V V				
UniRef90_U2KH67	Q V N T T V L C S R I G E L A R E K A I D G I A A V N D E T S D R A G L R I V V				
UniRef90_A0A023D2C7	Q V N K A T L Q E K I A D L V R A K E I E G I S D I R D E S S D R S G M R I V V				
UniRef90_W0FNH8	Q V N K S V L V K K I A D L V H E K K I E G I S D I R D E S S D R Q G M R I V V				
UniRef90_A1AJX6	Q V N K A R L I E K I A E L V K E K K I E G I A E I R D E S S D K S G M R V V V				
UniRef90_I9KWG3	Q V N K T L L V E R R I A E L V A R E K K I E G I T Y V A D E S S D K S G M R V V V				
UniRef90_W1Q1D6	G V N K A K L V E R R I A E L V A R E K K I E G I T Y V A D E S S D K S G M R V V V				
UniRef90_A0A011NW35	Q V N K T L L V E R R I G E L V N E K K I E G I T Y V A D E S S D K S G M R V V V				
UniRef90_R8Y6D7	Q V N K A R V L E R R I A E L V A H A S G K I S G S E V R D E S S D R E G I R L V V				
UniRef90_I4D686	Q V N K S T L A S K I E A H A S G K I S G S E V R D E S S D R E G I R L V V				
UniRef90_D5BQS8	Q V N K A Q L L E R I G E M V R D K V L E G I S D I R D E S S D R T G M R I V V				
UniRef90_R5GFY2	N V I K K D L L V K S I A D L A T T K K I D G I S N V Q D E E S S G K T G M R I V V				
UniRef90_Q3SK89	Q V N K A N L L I R I G E L V R D K Q I D G I A D L R D E S S D K S G M R V Y				
UniRef90_J9DIK3	Q V N K T T M I E K I A E L V R E K T L E G I A D L R D E S S D R D G M R V V V				
UniRef90_K2DWU9	Q V N K A K M I E R I A E L V N E K E L E G I S D L R D E S S D R D G V R V Y				
UniRef90_Q0BYK4	Q V N K A A M I T K I A E L V R E K K I E G I S D L R D E S S D R N G I R V V V				
UniRef90_C1A5L6	Q V N K A K L V A D I A E L V R D Q K L T G I S A L R D E S S D K D G V R V V V				
UniRef90_D4J4X4	M V N K A K L I E K I A E L V K D K R I E G I S D L R D E S S D R E G L R V V V				
UniRef90_R5STS5	Q V N K A A M V E N I A K L V S D K V L E G I S D L R D E S S D R D G V R V V V				
UniRef90_J0WSD1	Q V N K A R L I E T I A D L V K D K R I E G I S N I E D H S D R N G M H V V V				
UniRef90_E6MIN2	M V N K A K L Q K I A E L V K D K R I E G I T D R D E T D K H G I R V V V				
UniRef90_F9Y6C0	Q V N K S N M I D K I A E A V R D K R I E G I A H Q D E S S D R N G V R V V V				
UniRef90_UPI000360ED43	Q V N K A T L V E K I A E L V R D K R V E G V S D L R D E S S D R Q G M R I V V				
UniRef90_W3ALA1	V V Y R S R V I E N I A E L V K D K R I D G I T Y V N D A S G K G S T S K I N I				
UniRef90_B8GGZ1	Q V N K A R M V E L A T L V K E K K I E G I S D L R D E S S D R D G L R V V V				
UniRef90_I0K0S6	N V N R A A L V E K I A E L V N Q K I P E I A D L R D E S S D E N T R V V V				
UniRef90_UPI000365AC0A	Q V N K A T L V T K I A E L V G D R V D G I S D V R D E S S D R D G L R V V V				
UniRef90_UPI00028834C3	Q V I K T R L I V S I A E L V R D K K I D G I T D L R D E S S D R N G M R I V V				
UniRef90_R5A978	M V N K L R L I E K I G E L A K E K R V E G I S D L N D E A S A G D D I K I I I				
UniRef90_B4R9P6	Q V N K A A L V E R R I A E L V R E K K I E G I A D L R D E S S D R D G M R V V V				
UniRef90_C6XJ15	Q V N K A S M I E R I A E L V R D K R I E G I A D M R D E S S D R D G V R V V V				
UniRef90_A0A011AA33	M V N K T N F I E T I A K G V Q S G L I D G I S D L R D E S S D R N G M R I V V				
UniRef90_M7NV77	Q V N K A R L I E K I A E L V R E K R I E G I T D L R D E S S D R H G M R I V M				
UniRef90_UPI000368439E	Q V N K R V L I E K I A D L V R E K R V E G I S D L W D E S N R E G M R I V V				
UniRef90_Q2IW32	Q V N K A T M V E R R I A D L V R E K K I E G I S D L R D E S S D R D G F R V V V				
UniRef90_H2CFZ0	Q V N K K N L L E R R I G D L V Q D K V I E G I S D L R D E S S D R H G I R V E I				
UniRef90_U5DLH0	Q T N K A A L I E K I A D L A N E K R I D G I A D L R D E S S D R D G M R V V V				
UniRef90_C3XD38	Q V N K K N L L E R R I G E S V R E K R I D G I S D L R D E S S D R D G M R V V V				
UniRef90_UPI000426A3E7	A V G P E K I I D Q I K A G V Q S K K L T G I D G I S D L R D E S S D R D G M R V V V				
UniRef90_F7PT51	Q V N K S R L I E R I A D L A K E K K I E G I T D L R D E S S D R E G L R V V V				
UniRef90_K9E947	M V N K A K L V E R R I A E L A R D K K I E G I T D L R D E S S D R E G L R V V V				
UniRef90_A6GXM8	Q V N K A K M I E R R I A E L A R D K K I E G I T D L R D E S S D R N G M R I V Y				
UniRef90_R7GLN5	Q V N K A K D M I K R T A D L V N E K K I E G I S N I R D E S S D R E G L R V V V				
UniRef90_UPI0003B49AE5	M V N K A R L I E K I A E L V H V K E K K I N D G I T E L R D E S S D R N G I R V V				
UniRef90_F6IPQ1	Q V G K S N L V E R R I A E A A K D K R I E G V S S D I R D E S S S R E G M R V V V				
UniRef90_G2DVD9	Q V N K A K L V E R R I G E L V R D K V L E G I S D L R D E S S D K S G M R V V V				
UniRef90_S4TL1	Q V N K S R L I E Q I A D L L I N S K S L T G I S D L R D E S S D K D G L R V V V				
UniRef90_R5ZAK8	M V N K K L L A K S I M E L C A N K T L E D I Q S I A D Y S T D E K T G T K F I				
UniRef90_H7E119	M V N T T N I I K K I K E F A R D K T I D G I S S A N D E T S D R T G L R L V V				
UniRef90_D5MLW1	Q V N K A K L I E R I A E L V R D K R I E G I A D L R D E S S D R E G M R I V I				
UniRef90_UPI0003B78AE1	Q V N K A T L I K K I K E F A R D K T I D G I S S A N D E T S D R T G L R L V V				
UniRef90_F9QCW5	G I R K T T I I E K I A K L H E N V Q G G I S E I R D E S S N R E G I R L I				
UniRef90_E4XU22	G V N R A V L Q E R I A E L V N E K T L T G I S G M R D L S D E E T R I E I				
UniRef90_G8QYU0	Q V N K A D L V K K I D D L R K D G A I P S I S T V R D E S S D R K G I R V V				
UniRef90_H3NQT7	E V N R S K L V M S I A D L V K D K K I E G I S D L R D E S S N R M G T R V V				
UniRef90_F2I195	Q V N K T V L I E K I A E L I R D K K I E G I S D L R D E S S N K D G V R A I				
UniRef90_A8YW46	M V N K A E L V K K I A D L A R E K I D G I T G V R D E S S D R D G M R I T I				
UniRef90_UPI0004795F11	Q V N K N T L I K K I A E L V N D K T I D D I S D V R D E S S D R D G M R I V I				
UniRef90_Z4XCR9	M V G P E K V I E K I K E N A N A G R L K G I S S V Q N L T D R I H G I R L V I				
UniRef90_E0UQ42	Q V N K A R L I E N V A N L V K D K M I D G V S E I R D E S S D R D G M R V V V				
UniRef90_Q11UG4	M V N K A A M I E R I A A M V N E K K I E G I S D I R D E S S D R E G M R I V F				
UniRef90_UPI00047A155A	Q V N K S N L I K R I A E L A N E K V I D D I S D V R D E S S D R D G M R I V V				
UniRef90_M1PZK8	Q V N K A K L I E N I A E L V R H K R V D G I T D I N D F F S D R N G M R I V V				
UniRef90_SOET77	Q V N K A R L I E H I A E L V R H K R V D G I T D I R D E S S D R D G V R V V V				
UniRef90_UPI00035D39BA	Q V N K S D L L I E Q I A A L V R E K R I E G I T D I R D E S S D R D G V R V V V				
UniRef90_D8J640	Q Q N K S R L V E R R I A E N V N E G K I E G I S D I R D E S S D R D G V R V V V				
UniRef90_R6M8J9	G V N T M E L K N K V A E L V R D K V I D G S D Y H T D L K D G V K I T I				
UniRef90_UPI00021973BD	E V N K A Q L V K K M D E I R V L K K V E G I A E V R D E S T D R D G I R L S V V V				
UniRef90_D0LNR4	M V N K S R W I E T T A H L V R D K R I D G I S D I R D E S T D R D G I R L S V V F				
UniRef90_Q04AP4	Q L V N K A Q L V K K I D E I R V S R E L D G I S E V R D E S T D R D G I R L S V V V				
UniRef90_R6WSY2	Q V N K A R L I E N I A Q D V K D K R I E G I S D I R D E S T D R D G I R L S V V V				
UniRef90_F7RYR4	Q V N K A K L I E K I A D L V K E K R I E G I S D I R D E S T D R D G I R L S V V V				
UniRef90_F4DIY4	N V N K S R L I E Q I A D L V N D K T L S G I S D V R D E S S D K E G V R V V V L				
UniRef90_Q1MQ89	Q V N K S S L V E R I A I L V N E R K R I E G I A D L R D E S T D R D G I R L S V V V				
UniRef90_P57277	Q V N K S R L I E K I A E L V K E K R I E G I T A L R D E S T D R D G I R L S V V V				
UniRef90_M2U8T8	Q V G K A G L V E R I A E A V K D K R V E G V S D M R D E S T D R D G I R L S V V V				
UniRef90_D4YDW1	E V N K A N L V R R M D E L R L N R S I D G I Q E V R D E T D R D G I R L S V V V				

	290	300	310	320
UniRef90_E4KWZ1	E K R D A N A E V V V L N K L Y K N T Q M Q T T F G I I I N L A L V N G R P E I L			
UniRef90_C2CJK5	E I K R D S N P N I V L N N L Y K Y T Q L E N T F F G I I I N L A L V A G E P K I L			
UniRef90_UPI0003B674A6	E L K D V Q E E V I L N Q L F R L T P L Q T S F F G I I N M L A L E N G R P K Q L			
UniRef90_UPI000287E68D	E V R R D A N V I L N Q L Y K H T G L Q T S F F G I I N M L A L V D G R P Q V L			
UniRef90_F9Z7F0	D I K K D A I S N V V L N T L L K H T A L Q S S F F G V V N N V A L V H G R P R L L			
UniRef90_A8TKW9	E E L K K R D A I G E V V L N Q L Y R Y T Q L Q T S F F G V V N M L A L N R G R P V Q M			
UniRef90_K1Y4V5	K L K I G T V A N V V L N T L Y K Y T Q L Q S S F F G V V N N I A L V D G R P R I L			
UniRef90_K0AWF9	E I K R D A N A N I V L N N L Y K Y T Q L Q A T F F S I I M L A L V N D Q P K V L			
UniRef90_UPI00046AE272	E L K R D A T A E V V M N Q L F R F T P M Q T Y F G C N M L A L N G G R P E T L			
UniRef90_UPI0004712FB1	E I K R D A V A E V V N Q L Y R F T S L Q T S F F G A N M L A L N R G K P E M M			
UniRef90_G4L3L6	D V R R D V S A S V V L N N L Y K M T A L Q T S F F G F N M L A L E N G V P K I L			
UniRef90_R6B572	G L K K D A N A R V V L N Q L Y K H T Q M Q D T F G V I I M L A L V D G Q P R I L			
UniRef90_W9DTR5	E L T R G T N A N V V L N Q L Y K H T Q M Q D T F G V I I M L A L V D D I P R E L			
UniRef90_M4V716	I L K R G E N S S V V L N R L Y K F T Q L Q V S F F G I I N M L A L D K N Q P V V F			
UniRef90_UPI000225A8DB	E L K R D A V A D V V L N Q L Y R F T S L Q T S F F G V V N M L A L N H G R P E Q M			
UniRef90_F9D5B6	D L K R D V N A K V I L N K L F K M T A L Q S S F F S V N C I A L V P N K H K L L			
UniRef90_U2KH67	E L K R G A I A K V I L N Q L F S K T A L Q S S F F S V N N I A L V K G R P E V L			
UniRef90_A0A023D2C7	E L K R D A T P D V V L N Q L Y R F T Q L Q T S F F A V N C I A L D D G R P R T M			
UniRef90_W0FNH8	E L K R D V Q P Q V V L N M L Y K H T P M Q E N F G A N M L A L V D G K P Q V L			
UniRef90_A1AJX6	E V K R D D N P E V V L N L Y K L T Q M Q T S F F G I I L L A L V H N R P R I L			
UniRef90_I9KKG3	E L K R G E V P E V V L N N L Y K L T Q M Q T S F F G I I L L A L V D G Q P R L L			
UniRef90_W1Q1D6	E V R R D T S A N V V L N N L Y K Y T A L Q V T F G F N M L A I D K G V P K I M			
UniRef90_A0A011NW35	E L K R G E V A E V V N C I A L V D G Q P R L L			
UniRef90_R8Y6D7	D L K R G E N A E V V V N L F L N T Q L E N S F S I N M V C A L D N G Q P K L M			
UniRef90_I4D686	E C R K E A D P L E V L R N L Y K Y T Q M E E T F F G I I N L V T P G T P K V L			
UniRef90_D5BQS8	E V K R D A A G D V V L N K L Y R H T R L Q T S F F P V N M L A M N A G R P I Q M			
UniRef90_R5GFY2	D I K R D A N A G V V L N K L Y K M T T L Q M Q S S F F S V N N I A L V N G S P Q L L			
UniRef90_Q3SK89	E L K R G E N A D V V L N N L Y K Q T Q M Q D T F G M N M V A L I D G Q P R L L			
UniRef90_J9DIK3	E L K R E A V P E V V L N Q L Y R F S S L Q T S F F G A N M L A L N G G K P E L L			
UniRef90_K2DWU9	E L K K D A I P E V V L N R L Y A Q T P L Q T T F F G V N M L A L K A G R P Q M			
UniRef90_Q0BYK4	E L K R D A S A D V V L N Q L Y R F S Q L Q S S F F A V N M L A L N G G R P E L M			
UniRef90_C1A5L6	E L K R D A I P R V V L N Q L Y K H T A M Q S T F G V I I M L A L V P D P H K V L			
UniRef90_D4J4X4	E L K R D A N P N V V L N Q L Y K H T Q L Q D T Y G V I I M L A L V N N N Q P M I L			
UniRef90_R5STS5	E L K R D A N P N V V L N M L Y K H T Q L Q S S S Q S M L M L A L V D G Q P K V L			
UniRef90_J0WSD1	D V K R D A S P Q I V V L N H L Y T Y T Q M Q T T F G V I I M L A I V D G E P K T I L			
UniRef90_E6MIN2	E L K R D T N A T I V V L N Q L Y K H T Q L Q D T Y G V I I N L A L V D G Q P K V L			
UniRef90_F9Y6C0	E L K R D A T A D V V L N Q L Y R F S P M Q I S F G A N M L A L N G G R P E T L			
UniRef90_UPI000360ED43	E L K R D A V A D V V L N Q L Y R F S Q L Q A T F F G V N M V A L N G G K P E L M			
UniRef90_W3ALA1	E E L R R D A N P N V V L N Q L Y K H T Q L Q T T F F G V I I M L C A I V N G E P K T I L			
UniRef90_B8GGZ1	D L K G K V I P T V V L N Q L Y K H T P L E S T F F G I I N L A I S D N Q P K V L			
UniRef90_I0K0S6	E L K R D A I P K V V I N N L Y K H T P L Q T T F F A V N M V A I D R L R P K S L			
UniRef90_UPI000365AC0A	E I K R D A M A S V V V L S K L Y K Y T P L Q T S F F G V N N I A L V D G R P V V L			
UniRef90_UPI00028834C3	E L R K D A N P S V V V L N N L Y K H T A L Q T S F F G I I M L A L V N K E P K I L			
UniRef90_R5A978	D I K K D Y N A N V I V N Q L Y K Y T S L Q E S F F G A N M L A L V D G K P V V L			
UniRef90_B4R9P6	E M K R D A S A E V I V N Q L Y R Y T P L Q S S F F G V N M L A L N R G R P E Q M			
UniRef90_C6XJ15	E V K R D A S P E V V V L N Q L F R Y T Q L Q T S F F G M N M L A L N S G R P E L L			
UniRef90_A0A011AA33	E L Q R D A D P N L V L R Q L Y T R T Q L Q S T F F G V I N L A L V N G E T R E L			
UniRef90_M7NV77	E V R R D A N A N V I V N N L Y K H T A L Q T S F F G I I N M L A L V D G Q P K V L			
UniRef90_UPI000368439E	E E L K R D A I A D V V V L N Q L W R Y T S D L Q T T F F G A N M L A I N G G K P E Q L			
UniRef90_Q2IW32	E L R R D A V P D V V L N Q L Y R F T P L Q T N F F G A N M V A L D A G R P Q L M			
UniRef90_H2CFZ0	E L K K D T N A Q I V V L N Q L Y K Q T Q L Q V S Y G I I L L A L V D G Q P R V V L			
UniRef90_U5DLH0	E L K R D A Y P R V V L N N L Y K Q T P L Q A N F G A N M L A L V D G E P Q I L			
UniRef90_C3XD38	E L K R N E V P E V V L N N L F K Q T T Q L Q D T F F G M N M V A L V D G Q P R V V L			
UniRef90_UPI000426A3E7	E I K N G F N P E A V V L Q A L Y K H T Q T K L E D S F S I N A V A L V E G Q P R T M			
UniRef90_F7PT51	E L R K D V N A E V M N H L Y K Q T A L Q T T F F S V N M L A L V D N Q P K V L			
UniRef90_K9E947	D V R R D T S A G I L L N K L Y K M T Q L Q V S F F G F N M L A I V D G V P K T I L			
UniRef90_A6GXM8	E L K R D A T P N V V V L N T L Y K Y T Q L Q T T F F S V N N I A L V K G R P Q M L			
UniRef90_R7GLN5	E L K R D V Q P E V V I N Q L Y K L T A L Q T T F F G V N N I A L V N G E P K T L			
UniRef90_UPI0003B49AE5	E T K K D A S A E V V V L N Q L F R Y S Q L Q T S F F G V N M L A L N A G T P E Q M			
UniRef90_F6IPQ1	D L K R D A S P E V V V L N Q I W R N T P A Q S S N F A A N M L A I R G G R P E I L			
UniRef90_G2DVD9	E L K R N E N A E V V V L N Q L Y K L T Q L Q D S F G I I N M V A L V D G Q P R L L			
UniRef90_S4TLL1	E L K R A E I P E V T I N Q L Y K Y S D M E V T F G C H M A L D K G C P R I I M			
UniRef90_R5ZAK8	E L K R N A N V D I V L N H L F K Y T K L Q S S F F P V N M L A L D R G T P R V V L			
UniRef90_H7E119	E L K R G A I A K I V V N Q L F A K T E L Q T N F S V I N L A L V P D K P Q V V L			
UniRef90_D5MLW1	E L K K E Q P A P P I V N Q L F K H T A M Q S T F G A I M A L V E G Q P K V L			
UniRef90_UPI0003B78AE1	E L K N G V N P S V I V N Q L Y K H T Q L Q D T F F G V I I N L A L V N N E P K I L			
UniRef90_F9QCW5	E I K K G F N P N I V V L N M L Y T K S V L Q S N F N V N M V A L V E G E P R T I			
UniRef90_E4XU22	E L K R D A R P Q V V V A Q L F K L T A L E T S F F S V N N M L A I H Q N R P K Q L			
UniRef90_G8QYU0	E L K M G S E P M V T L N Q L F A R T A L Q T N F N V N S L A L V D G R P R L L			
UniRef90_H3NQT7	E T K K R D A N P N V V V L N N L Y K Q T Q M S T T F F G I I N L A L V D G V P K V L			
UniRef90_F2I195	T V K K N V S E A I I I N Q L Y K F S P L Q T S F F G F N T L A I N E K K P E L L			
UniRef90_A8YW46	D I R R D A S A S V V V L N N L F K Q T Q M Q A N F G M N M V A I V D G A P H Y L			
UniRef90_UPI0004795F11	E I K R G A E P Q I V V L N Q L Y K H T Q M Q E S F F S M I F A I V V N G Q P R E L			
UniRef90_Z4XCR9	E V K N G F N P E A V V L Q Q L Y Q R T P L E D S F S I N A V A L V G G Q P R T L			
UniRef90_E0UQ42	E E L K R D A I S E I V V L N N L F K Q T S M Q T T F F G I I M L S I L V N Q E P R I F			
UniRef90_Q11UG4	D L K R D A I A N V V V L N N L F K Y S Q L Q S S F F S V N N V C L V K G R P M T L			
UniRef90_UPI00047A155A	E L K R G A E Q Q I V V L N Q L F K H T P M Q E S F S M I F A V H N G Q P K V L			
UniRef90_M1PZK8	E L S R G V N P N V V V L N Q L Y K H T Q M A T T F F G V I N L A L V D G K P K E L			
UniRef90_SOET77	E E L R R D V V P N R I V V N F L L K H T A L R Q T F F G A I M A L V N E Q P R I L			
UniRef90_UPI00035D39BA	E V K R D A N P E I V V L N Q L Y R F T R L Q T S F F P V Q M L A L N G G R P E Q M			
UniRef90_D8J640	D L K R G A N A D V V E N Q L L I E H H L E R T F G V I I N L A L V D G Q P Q V L			
UniRef90_R6M8J9	T L K R D A N P Q V V V L N N L Y K H T N F Q I S Y G I I F M L D Q G V P K T L			
UniRef90_UPI00021973BD	E L K R D V D A N G I L N Y F L F K N T D L Q V S Y N F N M V A I A N M S P Q Q V			
UniRef90_D0LNR4	E L K R D A N E Q V V L N N L F K M T A L Q T S F F N V N M L A I V D G R P Q V L			
UniRef90_Q04AP4	E E L K K D A D A Q N I L N Y L L K N T D L Q V S Y N F N M V A I A H M T P V Q V			
UniRef90_R6WSY2	D I K K D A N A Q V V L N T L F K Q T S M Q V A F G F N M V A L A D K K P R I L			
UniRef90_F7RYR4	E L K R G E S G E V V M L N H L Y S L T Q L Q I S F G I I N M V A L D K G Q P K L F			
UniRef90_F4DIY4	E L K K G E S S E V V M I N R L Y K F T D V Q T T F F G A N M L A L D K N C P R T M			
UniRef90_Q1MQ89	E L K K G V I P E I I I N A L Y K F T P L E T S F F G I I N M L A V V D N R P Q V L			
UniRef90_P57277	E I K R E A I A E V I V N Q L Y S L T Q L Q I S F G I I N M V C L C Q G Q P K T L			
UniRef90_M2U8T8	D L K R D A T P D V V V L N Q L R H T P A Q S S F A F N M L A I R G G R P E L L			
UniRef90_D4YDW1	E L K K D A S S D A I L N Y F Y K N S D L Q I N Y N F N M V A I N D Q R P E L V			

		330	340	350	360
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UniRef90_C2CJ5	N	L K E L E Y Y V D H Q K E V V V T R R T T F D L S K A R D R K A H V V E G L L I			
UniRef90_UPI0003B674A6	S	L K E L N D Y Y L N H Q V E V I V R K T R T Q F E L L K K K A E K R A H V L E G L L R			
UniRef90_UPI000287E68D	T	L K E C H Y Y L V F Q E S V I R R R T Q F E L L K K K A E K R A H V L E G L L R			
UniRef90_F9Z7F0	N	L K D I R Y F V E H R H D V V V R R T Q F E L L K K K A E K R A H V L E G L L I			
UniRef90_A8TKW9	N	L R D V F A F V E F R E E V I T R R T R F L L H K K A E K R A H V L A G L L M			
UniRef90_K1Y4V5	N	L K Q L K Y Y V R H R H D V I I R R T K F D L E Q A E K R A H V L A G L L R			
UniRef90_K0AWF9	N	H Q M K H Y L D H Q [V] E V I V R R T Q Y E L L N K A E E R A H V L A G L L R			
UniRef90_UPI00046AE272	T	R R F T C F D F R E E V V A R R T A H L L R K A E E R S H V L I G L L A			
UniRef90_UPI0004712FB1	N	L K Q L E A F L D F R E E V V T R R T K Y L L K K A R E R R A H V L E G L L A			
UniRef90_G4L3L6	N	L K Q L E D Y Y L E H Q K G V V I T R R T I F E K Q K A E E A R A H V L E G L L K			
UniRef90_R6B572	T	L R Q C D Y Y L D H R K G V V I L K R T Q F M L L K K A Q D R K A H V L E G L L K			
UniRef90_W9DTR5	N	L K Q L R I Y L D H R I D V I L K R T Q F M L L K K A E E D R A H V L K G L L K			
UniRef90_M4V716	D	L R M E A F V E H R R D V V T K R C F L L K K A Q D R R G H V L V G L L V			
UniRef90_UP1000225A8DB	S	L K Q L T A F L E H F R E E V V L R R T R F D L L N K A R D R G H V L E G L L K			
UniRef90_F9D5B6	S	L K E C S Y F V E H R H E V I T R R T Q Y D L L K K A Q E R A H V L F V G L L A			
UniRef90_U2KH67	T	L K S L V G Y F V E H R N E V V T R R T R F D L L K K A E E R A H V L R A L I V			
UniRef90_A0A023D2C7	G	R D V E A F V E H R F R E E V I L R R R A R F D L L N K A R D R G H V L V G L L V			
UniRef90_W0FNH8	N	L R E M I V Y Y L E H Q K D V V T R R T R F D L L N K A Q N R A H V L E G L L K			
UniRef90_A1AJX6	S	L R E M D C F E H Q R A E V V T R R T R F D L L N K A L A R A H V L E G L L K			
UniRef90_I9KWG3	N	R Q M L E C F L S H R R E V I T R R T V F E L L K K A R E R R A H V L E G L L A			
UniRef90_W1Q1D6	S	L K E L T K Y L E Y Q I E V I R R R T E F E K R K A E E D R A H V L E G L L R			
UniRef90_A0A011NW35	N	L K Q M L E C F L W H R R E V V L T R R T V F E L L K K A R E R R A H V L Q E G L L A			
UniRef90_R8Y6D7	N	L K D I A A F L R Q E V V T R R T M F E L L K K A R E R R A H V L E G L L T			
UniRef90_I4D686	G	L K E I N A A F E H R K I V V T K R T K F E L L K K A R D D R A H V L V G L L A			
UniRef90_D5BQS8	G	K D V E A F C E H F R K D V V I K R T T T F L L N K S R D R A H V L A G L L M			
UniRef90_R5GFY2	N	K D L I E F V K H R F E V V V T R R T T Y D L L R K A E E R R A H V L E G R I I V			
UniRef90_Q3KS89	N	K E M D A F L R H R E V V T R R T V F D L L R K A R E R R A H V L E G L L A			
UniRef90_J9DIK3	N	R S L K A F I N F R E V V T R R S K F E L L D K A R D D R A H V L V G L L A			
UniRef90_K2DWU9	G	L K E I L E C F L F R E E V I T R R T Q F E L L K K A R D D R A H V L V G L L A			
UniRef90_Q0BYK4	N	R K V L E Y F T F R E E V I V R R T K H D L L G K A R D D R A H V L V G L L A			
UniRef90_C1A5L6	T	R Q C E H Y L A H R H E V V V R R T Q F D L L N K A E E A R R A H V L E G L L K			
UniRef90_D4J4X4	N	K Q M L E L Y L K H Q E V V T R R T R F E D L L N K A E E A R R A H V L Q G L L			
UniRef90_R5STS5	K	L N E I L G C Y K H R E E Q V I V R R T K Y D L L T K K A E E A R R A H V L E G L L R			
UniRef90_J0WSD1	T	L K E I L Q E Y V R F Q E S V I V R R T Q F E D L L R K A Q R A H V L R G L L Q			
UniRef90_E6MIN2	S	L K Q L H Y Y V A H Q K E V V V R R T K F E D L L R K A R E R R A H V L E G Y L Q			
UniRef90_F9Y6C0	T	L Y R F Q C F D F R E E V I V A R R T A F E D L L R K A R E R R A H V L C G L L A			
UniRef90_UP1000360ED43	N	R D V L V A F L A F R E E V I S R R T K F R D L L N K A E E R R A H V L V G L L A			
UniRef90_W3ALA1	N	M E I L D E Y L K H Q [V] N V F N R R T R Y D L L N K A E E R R A H V L E A L L L K			
UniRef90_B8GGZ1	G	K A I I S E F L H R A T V V R R R C F D L L N K A K D R R A H V L V G L L A			
UniRef90_I0K0S6	N	K E I L F C Y D H R E V V V A R R T K F E D L L N K A L E R R A H V L E G F L L			
UniRef90_UP1000365AC0A	N	K D I V E F I K F R I E V I V R R T I Y D L L R K A E D R R A H V L V G L L R			
UniRef90_UP100028834C3	N	K E V L H Y Y L H Q Q E V I R R R T E F D L L R K A E E A R R A H V L E G L L R			
UniRef90_R5A978	N	Q Q M L A E Y L K H Q E V V T R R T R F D L L D K A E E A R R A H V L E G L L R			
UniRef90_B4R9P6	G	R E M V T A F V D F R E E V V V R R T K F E D L L S K A R D R A H V L V G L L A			
UniRef90_C6XJ15	S	K A I L Q A F I F R E E V V V A R R T K F E D L L S K A R A R A H V L V G L L A			
UniRef90_A0A011AA33	P	L K E L V Q I F L D H R R E V V R R R T E F R D L L R K A E D R R A H V L V E G L L L R			
UniRef90_M7NV77	S	K E M L F Y Y L E H Q K E V V T R R T R F E D L L R K A E E D R R A H V L V E G L L R			
UniRef90_UP1000368439E	N	R D I L I E A F T F R Q D V V T R R T R H D L L F K A R E R R A H V L V G L L A			
UniRef90_Q2IW32	N	K D L I L F V A F R E Q V V T R R T K Y D L L N K A R D D R A H V L V G L L A			
UniRef90_H2CFZ0	N	K E I L V E F I A H R K E V V V R R T K Y E D L L D Q A E K R A H V L E G G L L K			
UniRef90_U5DLH0	G	K A F I Q V F I L A H R F R V E T G R R T Q Y L L R K A E E R R D H V L Q G L L V			
UniRef90_C3XD38	N	K Q M L E C F L H R R E V V V R R T R F E D L L R K A E E R R A H V L E G G L A			
UniRef90_UP1000426A3E7	P	K E M L F Y Y L E H Q K E V V T R R T R F R D L L F K A R E E A T R R A H V L V E G L L I			
UniRef90_F7PT51	N	R D I L I E A F T F R Q D V V T R R T R H D L L F K A R E E A T R R A H V L V E G Y R I			
UniRef90_K9E947	N	K E A L Y H Y L E H Q K V I V R R T R Y D L L D Q A E K R A H V L V E G Y R I			
UniRef90_A6GXM8	G	K D I L T H Y L D H Q K T V I R R R T E F A K N K A E E S R A H V L E G L L R			
UniRef90_R7GLN5	N	K D L I F V V E H R H D V V V R R T K F D L L R K A E E D R R A H V L L D G L L K			
UniRef90_UP10003B49AE5	S	K E M I N V Y L H Q E V D V I R R R T L F D L L N K A R D D R A H V L V G L L A			
UniRef90_F6IPQ1	S	R D I L Q A F I Q F R E Q V I T R R T K Y E D L L N K A R D D R A H V L L L G L V			
UniRef90_G2D2D9	N	K Q I L S E F R H R R E V V T R R T L F R L L N K A R D D R A H V L H E G A E G K A V			
UniRef90_S4TLL1	N	V K Q L I S A W E H R I E V I R R R T R F E D L L N K A F A E E R R A H V L A E G Y L K			
UniRef90_R5ZAK8	N	M K Q A L E L Y I E F Q R E V V R R R T V F D L L D K A K A R N H V L D G L L I			
UniRef90_H7E119	N	K Q L I E Y F V N H R V D V I T R R T K F E D L L D K A K A R N H V L E A L L I			
UniRef90_D5MLW1	N	K E A L S H F E H R K T I V I R R R T R F D L L R K A E E R R A H V L E G Y R I			
UniRef90_UP10003B78AE1	A	K E L E Y Y L E H Q K V I V R R T R Y D L L R K A E E R R A H V L Q G L L I			
UniRef90_F9QCW5	T	K E A L E I Y L K H Q K D V T T R G L K F D L L N K A E E D K L H V L L G L K			
UniRef90_E4XU22	S	K E A I D A Y I E H R R D V I I R R T R F L D L L G K A E E R R A E V L L E A F L L			
UniRef90_G8QYU0	T	K E M L V Y Y L E H R E E V V T R R T R Y D L L R K A Q R A H V L L R G L L K			
UniRef90_H3NQT7	S	K E L I H Y Y I E H Q K E V V T R R T R F D L L D K A E E R R A H V L L R G L L K			
UniRef90_F2I195	N	K Q F I K I F V D F R E K V L T K R T L F E D L L D K A K D R T H V L I G L L F			
UniRef90_A8YW46	T	K Q M L Q Y Y L D H Q K D V V T R R T K F E D L L A K A E E A R A H V L E G L L R			
UniRef90_UP10004795F11	S	P D A I R H F I D H R I D V T T R S R F R L L K C E D R L H V L I G Y Q			
UniRef90_Z4XCR9	G	K E M L Q V F I D H R I D V T T R S R F R L L K C E D R L H V L V E G L L G			
UniRef90_E0UQ42	G	I D I L K H F I N H R K T I I R R T I F D L L K C E D R L H V L V E G L L K			
UniRef90_Q11UG4	N	K E M I M Y F V E H R H E V V T R R T T Q F E D L L N K A E E K R A H V L Q G Y Q			
UniRef90_UP100047A155A	P	D H A I R A F L E H R I E V V R R R T T A F L L G K A R D R E H V L L G Y Q			
UniRef90_M1PZK8	N	K Q M L Q Y Y L D H Q K D V V T R R T K F E D L L A K A E E A R A H V L V E G R L K			
UniRef90_S0ET77	N	A Q I L I R A H E Y R R E V V V R R T R Y D L L A K A R R A H V L A E G R L K			
UniRef90_UP100035D39BA	G	K A I L L Q A F L A H R D E V V V R R T R Y D L L A K A R R A H V L A E G R L K			
UniRef90_D8J640	D	L K E T L E H Y Y V E H R K D V V R R R S E Y D L L G E A E D R A H V L L E G R L K			
UniRef90_R6M8J9	G	K D I S K Y I D H Q K E V V V R R T R F D L L D K D E R R V H V L L E G Y L K			
UniRef90_UP100021973BD	G	I Q Q L S K Y I K H Q E V V V R R T R F D L L D K D E R R V H V L V E G Y L K			
UniRef90_D0LNR4	S	R S A L Q V F I E H R R T V V R R R T C F E D L L R Q A R E R R R E V L V E G L L G			
UniRef90_Q04AP4	G	K R I L A A Y L E H E E E E V V T K R T T Q F D L L K K A S D R R L E I V L Q G L L I K			
UniRef90_R6WSY2	N	K E L I T Y Y K H Q E D V I T R R T R F D L L E K A E E R R A H V L L K G L A I V			
UniRef90_F7RYR4	T	R E M L E C F T R R E V V T R R T V Y F D L L K R A E E R R A H V L E G L L A V			
UniRef90_F4DIY4	N	H R M I S A W R H R A E V L R R R T R F E L L N K A E T R R A H V L L E G Y L K			
UniRef90_Q1MQ89	T	I K S A L T Y F L D H R R E V V V R R T R F E L L N K A E A R R A H V L L I G L L I H			
UniRef90_P57277	S	K E I L K N F L S H R Q E V I I R R S L F E L L N K V R N R I H V L L E G Y L N M			
UniRef90_M2U8T8	N	R D I L E A F I S H R Q F R E V I T R S K F E L L N K A R D R A H V L V L G L L V			
UniRef90_D4YDW1	G	R E A L N A Y I G H R Y E I R R R T T F D L L N K A Q R R L H V L D G L V K			

		370	380	390	400
UniRef90_E4KWZ1	A L D N I D R I I K V R G S K D D K E A K E F Y E E F K L T E Q S Q A I L				
UniRef90_C2CJK5	A I D H I D E I I K I I R S S Y D N D Q I K K I F Y D K F K L T E V Q S Q A I L				
UniRef90_UPI0003B674A6	A M D H I D Q V I H L R S S K K E A G I Q D L C E T F G L S E T Q A K A I L				
UniRef90_UPI000287E68D	A L D H I D E V I T L R N S K T T D L A R E G L M D A F S L T D K Q A A I L				
UniRef90_F9Z7F0	A S D H I D E V I R L R A S K T P Q D A Q A A L M D A F S L T D K Q A A I L				
UniRef90_A8TKW9	A I N N L D A V I A M R S A P D A G E A R R K L C A A A A W L S D A Q A R A I L				
UniRef90_K1Y4V5	A L D F I D E V I A I R A S K T V D E A K S N L M A R F S F S E I Q A G A I L				
UniRef90_K0AWF9	A L D N I D A V I K L R G S S T T A E A K D G L M N Q F G L S D K Q A Q A I L				
UniRef90_UPI00046AE272	A V T N I D E I V A T R S S A D A S E A R E K L M T R R W L S E F Q A R A I L				
UniRef90_UPI0004712FB1	A V A N I D D V I A L R K A P D P A T A R A E L M G R R D W L S E F Q A R A I L				
UniRef90_G4L3L6	A L D H I D E V I A I R G S E T D A Q A K E T M T M Q A F K L S D R Q S Q A I L				
UniRef90_R6B572	A L D N I D E V I N I R S S Y D D A Q A K E R L M E R F G L S D I Q A Q A I L				
UniRef90_W9DTR5	A L D H I D E V I S L R S S A N V D E A K E G L I S K F G L D E I Q A K A I L				
UniRef90_M4V716	A L D H I D E V I A T R A S K E A H A A R E A L M Q K F S F T E R Q A I A I L				
UniRef90_UPI000225A8DB	A V A N I E P I I E L R Q A S D R S I A K E Q L M S R R D W L T D A Q A Q A I L				
UniRef90_F9D5B6	A C D N I D E V V H R A S K T P A D A Q V N L E K R F E L D N L Q S K A I L				
UniRef90_U2KH67	A I D N I D E V I K I R S S R D T T Q T A K D A L S K R F G F D E V Q S Q A I L				
UniRef90_A0A023D2C7	A V A N I D E V I A L R A A P D A A A A R E A L M T R Q W L T E A Q A R G A I L				
UniRef90_W0FNH8	A L D H I D E V I A I R A S K D T N T A K E A L M L R F E F S E K Q A Q A I L				
UniRef90_A1AJX6	A L D W L D A V I E L R S S K T P P E A K Q G L M D G V H L S E I Q A Q A I L				
UniRef90_I9KWG3	A L A N I D E F I E L R S S K A P T P P I A R Q A L M E R S W L S E V Q A Q E I L				
UniRef90_W1Q1D6	A L D F I D E I I A I R G S H D T E V A K A Q L I E R F E F S P I Q A Q A I L				
UniRef90_A0A011NW35	A L D N V D E I I A L K A A P T P A D A R R G L M T K P W L S E A Q A Q A I L				
UniRef90_R8Y6D7	A L A N I D E I I E T K T S A N P A E A R E R L M L A G E W L S P T Q V G A I L				
UniRef90_I4D686	A I N H L D E V I R S S K T P A L A K A A M T R F E L L S E I Q S Q A I L				
UniRef90_D5BQS8	A L A S I D E I I E L K K A P D T E T A R N E L C A T A W L L S E V Q A R A I L				
UniRef90_R5GFY2	A A D N I D E V I A I K S S E K Q S D A I E R L M A R F N L S Q I Q A R S I L				
UniRef90_Q3SK89	A L A N V D E V I E L R S S E K Q S D A I E R L M G R A W L L S E I Q A Q R I L				
UniRef90_J9DIK3	A V A N I D E V I A V R K A A S P Q I A R E Q L M T R A W L S E A Q A R A I L				
UniRef90_K2DWU9	A V A N L D E M A L R K A S D P Q V A K H Q L L S K A W L L S E A Q A K A I L				
UniRef90_Q0BYK4	A V A N I D E V I R L R T S P D P A T A R Q R L L D K A W P Q D E Q A R S I L				
UniRef90_C1A5L6	A V D N I D E V I A L R A A S D T P T A S A Q L Q S R F G L L S E R Q A E A I L				
UniRef90_D4J4X4	A L D H I D E V I S I R S S K N V A E A K T R L M E T F G L T T E V Q A Q A I L				
UniRef90_R5STS5	A I D N I D E I R I R T S Y D D A C C Q K L M S A F G L L T E I Q A T A I L				
UniRef90_J0WSD1	A I D N I D E V I S I R S S K S I P M A K E R L L T E R F E L L D D I Q T Q A I L				
UniRef90_E6MIN2	A L D N I D E V I Q I R E R S R D A K T H M D R F R A L L T D I Q A Q A I L				
UniRef90_F9Y6C0	A V S N V D E V V Q I R E R S R D A A E A R E K R L M T R R W P A M D I A E Y I K				
UniRef90_UPI000360ED43	A V A N I D E V I Q T R T A P D P A T A R D R L M D R R D W L S F E Q A R A I L				
UniRef90_W3ALA1	A V D H I D E V V H R A A A N T E E A K A N L S V K F G F D E V Q A Q A I L				
UniRef90_B8GGZ1	A L D R I D E V I A T R Q S A S S E A A Q K A L I A T F G L T E P Q T V A I L				
UniRef90_I0K0S6	A L S Q L D E F I R L R E S T N R E E A R K R K L E L K F P V R R Q V E A I L				
UniRef90_UPI000365AC0A	A L D Y L D E V I A L R R S T T P D E A K Q G L I N G D F I D D K D A F W L				
UniRef90_UPI00028834C3	A L D H L D R V I S L R S S R T T E I A R E G R L M E Q F Q L S H E Q A Q A I L				
UniRef90_R5A978	A I D N I D E V I R I R T S Y D D A C C Q K L M S A F G L L T E I Q A T A I L				
UniRef90_B4R9P6	A V A N I D E F I H R S S K D P T E T A R E K R L M E R F A L V A K D W L T D E Q A R A I L				
UniRef90_C6XJ15	A V A N I D E V I K I R H S P D P S T A R E K R L M D R A W L L S E E Q A R A I L				
UniRef90_A0A011AA33	A L D V I D Q V I H R S S D T A A T A R N N L I E E I G F T E I Q A Q A I L				
UniRef90_M7NV77	A L D H I D E I I A L R A S K T T D E A K K A L M E R F S L L S E R Q S Q A I L				
UniRef90_UPI000368439E	A V A N I D E V I K L R F S P S P A E A K T Q M A R D W L L S E E Q A K A I L				
UniRef90_Q2IW32	A V A N I D E I R V R N S P D P N T A R E T Q M S R D W L L S F E Q A K A I L				
UniRef90_H2CFZ0	A L D F I D E V I K I R S S K T V D E A R Q S L M K R F K L L T E I Q A N A I L				
UniRef90_U5DLH0	A L N D I D A V I R V R A A A D T P S A K A G L L E R F F E L L S E A Q V D A I L				
UniRef90_C3XD38	A L A N I D D F I A I R A A P T P P I A R Q E L M S R S W L L S E E Q A T E I L				
UniRef90_UPI000426A3E7	A I L D I D A V I A V R G S Q T T E I Q Q R L M D E F D M S E R Q A K A I L				
UniRef90_F7PT51	A L D N I D D I I A V R G S Q T E Q E A I T N L I D E F A L T T E R Q S K A I L				
UniRef90_K9E947	A L D H I D A I I T I R Q S Q R A E E A K S Q L M A S Y D L L S D R Q A Q A I L				
UniRef90_A6GXM8	A S D N I D E V I K I R H S P D P S T A R E K R L M D R A W L L S E E Q A R A I L				
UniRef90_R7GLN5	A I D Q I D A I I N L R S S R T T E I Q Q R L M D E F D M S E R Q A K A I R				
UniRef90_UPI0003B49AE5	A V A N I D E V I R I R S S P D P A T A R E S L L S R D W L L S D E Q A R A I L				
UniRef90_F6IPQ1	A V S N L D E V V A M R G S S N P A D A R A K L L A K E W L L S E T Q V K A I L				
UniRef90_G2DVD9	A L S N I D E M Q L I K E S A D A P E A K E K M L A R P W L L S E L Q A D A I L				
UniRef90_S4TL11	A I D H I D E V V K L R S S N N T T E E A K K A L L E R F A F L L S D R Q A L A I L				
UniRef90_R5ZAK8	A C D N V D E V V S L R G S K T Q E E A S I K L K E R F N F D D E Q V K A I L				
UniRef90_H7E119	A V D A I D E V I K I R A S R D D V Q D A K A L E N R F G F D D I Q S T A I L				
UniRef90_D5MLW1	A L D H I D A V I A L R R S R S A D A R A R G L M E Q F G M G S Q I Q A Q A I L				
UniRef90_UPI0003B78AE1	A L D N I D E V I Q I R S S K T T A E A K E R L L I N F S L L S E A Q S Q A I L				
UniRef90_F9QCW5	A I Q F I D E V I E I K K S K T D S E A Q E K L L S T K F D L L S E R Q T K A I L				
UniRef90_E4XU22	A L G H L D D F I R I R D S K N R D E A R E L L Q G D R Y V F S E R Q V N A I L				
UniRef90_G8QYU0	G L D N I D E V I R I K E S N D N T V A A E H L M G R F G L L D L L Q A Q A I L				
UniRef90_H3NQT7	A Y D N I D E V I K I R S N Y D D D D I K A E F T K R F G L T D I Q G Q A I L				
UniRef90_F2I195	S I E N I D E V I S I R K S K D P S E A K A T L L K K V W L S D H V K A I L				
UniRef90_A8YW46	A L D N I D E V I V H R S S H S S D I A K A T L L S R F G L L D D K Q S Q A I L				
UniRef90_UPI0004795F11	A L D H I D D Q V I A I R G S N S R A D R A E N L L T F F G F T L L S Y R Q I D A I L				
UniRef90_Z4XCR9	A I L D I D D V I R V R A S K T E E A A K E N L V S E F D F S E I Q A A S I L				
UniRef90_E0UQ42	A I D I D D V I R V R A S K T E E A A K E N L V S E F D F S E I Q A A S I L				
UniRef90_Q11UG4	A L D H I D E V I K I R E S R D P E A A R I G L M T N F G M S E I Q A K A V L				
UniRef90_UPI00047A155A	A L D H I D D N V I K I R Q S S R A D R A E N L F Q Y F S L L S Y R Q V D A I L				
UniRef90_M1PZK8	A L D N I D A V V A L I K G S A N A D Q A K G L L D N F A L D E V Q A K A I L				
UniRef90_SOET77	A L N F L D E I I A L R R S Q S S E E A R A E M C A R F N L L T Q I Q A D A I L				
UniRef90_UPI00035D39BA	A V A N I D A V I A L R A S A D G A E A R A A L M A R R D W L L S E A Q A R A I L				
UniRef90_D8J640	A L D N V D S V V E L R G A E D R N G A K E A L S D F F D F S E A Q A E H I V				
UniRef90_R6M8J9	A Q D N I D E V I K I K T A K S D V E A K E K L M S R F A L L S E V Q T D A I L				
UniRef90_UPI00021973BD	A L S I L D K V I K T R G S K N K S D A K N L L K S Y K F T D E Q A E A V L				
UniRef90_D0LNR4	A V M Q D R V I E I R T S K D T D E A K A R L M S E R H L S A R Q A Q A I L				
UniRef90_Q04AP4	A M S I L D Q V I K V R A S K N K A D A K K N L V A E F A F T D R Q A E A I V				
UniRef90_R6WSY2	A L A N I D E V I K V K V K E S A D N D S A A K K L M E R F L L S D K Q A A A I L				
UniRef90_F7RYR4	A L A N I D E V I E M I R K S P S P A E A K A Q L I A Q G W L T E N Q A Q A I L				
UniRef90_F4DIY4	A L S C L D A V V K T Q D S D S K E H A K Q Q I I E L Y G F T D A Q A V A I L				
UniRef90_Q1MQ89	A L D H I D E V V N L R S S T P A E A K I R L E R F F S L S E I Q A Q S I L				
UniRef90_P57277	A L I N N K V I I Q K N W K S E K I N Y L A K K H E Y F S E K Q K A Q A I L				
UniRef90_M2U8T8	A V S N M D E V V R I R G A A S P A I A R E E L L A K D W K Y D R Q V K A I L				
UniRef90_D4YDW1	A M S I L D Q V I A T R N S K N K S D S R Y N L I E A F D F S E A Q A E A V V				

410 420 430 440

UniRef90_E4KWZ1	D M R I R R L T G E R D R L E A E Y E K L Q A D K W F K E L E N N D V L M	
UniRef90_C2CJK5	D M Q L K R R L S G G L E E K L N A E E N D D E L A R M D Y L S L N S E E T L I	
UniRef90_UPI0003B674A6	A M Q L R R R L S G G L E E R D K I Q E Y Q E I L M T A D L E D I L A N H D R V L	
UniRef90_UPI000287E68D	D M R L T G L E E R D K I Q E Y E E I E K L A R K D Y L D L T S R P R L M	
UniRef90_F9Z7F0	A M R L G Q L T G L E Q D K L R A E Y E D I E K L A H L N D V L A H V E L R M	
UniRef90_A8TKW9	D L R L Q R L T G L E M E R S K L V D E A T D I A A R K D Y L D L T S R P R L M	
UniRef90_K1Y4V5	E M R L R Q L T G L E E R E R K I E E E Y N A L M I E S R L K E I L A S E E L V Y	
UniRef90_K0AWF9	D M R L Q R L T G L E E R E R K I E E E Y N A L M I E S R L K E I L G S R D R I M	
UniRef90_UPI00046AE272	E L R L Q R L T Q L G V N E V T T E L E E L T G L G E K V D Y L D L S S R P R L I	
UniRef90_UPI0004712FB1	D L R L Q R L T A L G Q N E V G D E L E L T G L G E K V D Y L D L A R P E R V I	
UniRef90_G4L3L6	D M R L R R L T G L E R D K I E N E Y Q D L L K Q E D L T D I L G S E K L V F	
UniRef90_R6B572	D M R L Q R L T G L E R Q K I D D E Y D E L L K Q A E Y K A I I L G S E D E R K Y	
UniRef90_W9DTR5	D M R L Q K L T G L E R Q K I V D E L A E E L M K Q D W L K F V L S D V R E V Y	
UniRef90_M4V716	E M R L Q R L T G L E R Q K I V D E L A E E L M K Q D W L K F V L S D V R E V Y	
UniRef90_UPI000225A8DB	D L R L H R L T G L E R E R K I A N D L N E A V Q K D D L D L G D R P R V L	
UniRef90_F9D5B6	D M R L S Q L T G L R M D Q L R A E Y E E V T A Q V E Y L Q S I L D D P E K C K	
UniRef90_U2KH67	D M Q L K R L T S L E I E T L K T E L L K E E V A A K I N D L L E I G S H V R R M	
UniRef90_A0A023D2C7	E L R L Q R L T G L E R E R K I Q A E E L D D E V A A K I N D L L E I G S H V R R M	
UniRef90_W0FNH8	D M R L A R L T G L E R E R K I Q E E Y Y E E L E K T A R L T A I L G D E H H L L M	
UniRef90_A1AJX6	E M R L Q R L T G L E R E R K I V T D Y G E L L E R I A D L L M D I L A R P E R I T	
UniRef90_I9KKG3	Q M R L Q R L T G L E Q D K I V Q E Y Y R D I V M G Q I A D L L D I L A R P A R I T	
UniRef90_W1Q1D6	D M R L A R L T G L E R E R K I E A E Y N D L M E L I R R L T E I L S S E A N I M	
UniRef90_A0A011NW35	E L R L Q R L T G L E R E R K I V T D Y G E L L E R I A D L L M D I L N D F N L L M	
UniRef90_R8Y6D7	E E L R L H R L T G L E Q D K I H A E Y T E L G Q I A E L T A I L A D V S K V F	
UniRef90_I4D686	D L R L Q T L N F E L D G I R Q D Y D D T L R L S E L T E G I L A D S T R V S Y	
UniRef90_D5BQS8	E L R L Q R L T G M E L E K I H A E F D E V S E R V T Y F K S I L A D E N L L Y	
UniRef90_R5GFY2	E M R L Q G L T G M E L E K I H A E F D E V S E R V T Y F K S I L A N P A R I T	
UniRef90_Q3SK89	E M Q L Q R L T N L E S D K I L A E Y K E I M A K I A D L L D I L G S R E R V L L	
UniRef90_J9DIK3	E L R L Q R L T A M G R D E I G D E L N V L G S R I V G E K E H L Y I L S S R D R R L	
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UniRef90_R5STS5	E M K L R T L Q G L Q R E R K I E D E Y K N L I E L A R L K E I L G S E A L V K	
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UniRef90_UPI00028834C3	D M R L Q R L T G L E R E R K I E E E Y Y A E L V K R A E L K A I L A D E K L L L	
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UniRef90_S4TLL1	D L R L Y Q L T A L E H D K I N D E Y Y Q D L K K D Y F K A V L A S E M M V R	
UniRef90_R5ZAK8	D M T L R K L T G L E R D K I S D E K A G H E K D M L E Y N H I L S D A A Y L D F	
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		450	460																			
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N	L	I	D	E	M	T	E	I	K	E	K	Y	A	D	D	R	R	T	Q	V		
Q	I	R	E	D	L	T	E	I	N	E	K	Y	G	D	K	R	K	T	E	T		
H	I	R	K	E	E	L	R	E	I	K	D	K	Y	N	D	Q	R	R	T	E		
E	I	I	K	N	E	L	A	V	K	A	Q	Y	G	D	D	R	R	R	T	D		
G	V	L	R	D	E	E	L	Q	T	R	E	A	W	A	N	D	R	R	T	E	M	
K	I	I	K	D	E	L	I	E	L	R	D	K	Y	G	D	N	R	R	T	D		
G	I	I	K	Q	E	L	L	E	I	K	E	N	Y	G	D	E	R	R	T	K		
S	I	I	R	D	E	L	A	E	T	R	D	L	F	A	V	P	R	R	T	Q	V	
G	I	I	Q	E	E	L	E	M	K	E	K	Y	A	N	P	R	R	T	V			
N	I	I	M	R	D	E	M	L	A	V	K	E	Q	F	K	S	P	R	R	T	E	
A	V	M	K	Q	E	L	Q	E	V	K	E	K	Y	G	D	E	R	R	T	Q	L	
Q	L	V	K	T	E	T	L	E	L	A	E	K	F	G	D	E	R	R	T	D	V	
E	V	M	R	E	E	L	T	A	V	R	A	A	L	T	S	P	R	M	T	E		
N	I	I	I	S	E	E	I	S	E	I	R	D	K	F	G	D	E	R	R	S	E	
E	I	I	I	T	E	E	L	T	A	I	R	Q	E	F	G	D	V	R	R	S	F	
A	I	I	E	D	E	L	A	D	I	K	N	R	F	P	G	E	R	R	T	E		
E	M	I	V	D	E	L	T	G	I	R	A	Q	F	S	D	R	R	R	S	E	V	
A	V	V	R	E	E	L	A	Q	V	L	Q	Y	G	D	G	R	R	T	E			
Q	V	I	K	H	E	E	L	K	D	L	A	D	K	Y	G	D	E	R	R	T	M	
Q	V	I	L	D	E	L	A	A	T	R	E	R	L	S	D	D	R	R	R	S	D	
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E	I	I	L	R	S	E	L	I	E	K	N	Y	S	T	P	R	R	R	T	T		
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Q	I	I	K	D	E	L	L	E	E	K	K	Y	G	D	E	R	K	T	E	I		
E	I	I	L	R	S	E	E	L	I	E	K	N	Y	S	T	P	R	R	T	T		
G	I	I	K	A	E	E	L	T	E	I	R	D	K	Y	G	D	D	R	R	T	T	
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E	I	I	S	V	K	D	E	L	M	E	I	R	N	Y	S	D	K	R	R	T		
S	V	V	K	D	E	L	M	E	I	R	N	Y	S	D	K	R	R	R	T	D		

		450	460																		
D	V	K	G	E	L	I	A	I	K	D	E	F	A	T	P	R	K	T	E	V	
T	I	V	K	D	E	L	I	A	V	K	T	E	F	A	T	P	R	K	T	V	I
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N	V	M	R	E	E	L	Q	A	V	R	D	A	Y	T	P	R	V	I	S	E	
E	I	I	I	R	T	E	L	E	E	V											

	1	10	20	30	40
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UniRef90_Q8XIP7	D R A L P D V R D G L K P V H R R I	L Y G A Y M L K A F P D K P Y Y K S A R I			
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UniRef90_UP100032AABDF	L G R A L P D V R D G L K P V H R R I	L F A M H E L G L S S K K P F K K C A R V			
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UniRef90_S9LI55	R A L P D I R D G L K P V Q R R I	L Y S M N K D G N T F E K G F R K S A K S			
UniRef90_K9EDZ2	R A L P D I R D G L K P V Q R R I	L Y A M H Q D K N T Y D K A Y R K S A K T			
UniRef90_UP1000376665D	Q R A L P D A R D G L K P V Q R R I	L Y S M A E M G L R P D R G H V K S S R V			
UniRef90_D8GPS9	D R A L P D V R D G L K P V H R R I	I Y G S Y M L K A F P D K P Y Y K S A R I			
UniRef90_UP10003B31FF1	S R A L P D V R D G L K P V Q R R I	L H S M I E L L N N T P D K P H R K C A R I			
UniRef90_UP1000360DA4A	V S R A L P D V R D G L K P V H R R I	L Y A M N E G G Y D W S K P F R K S A R V			
UniRef90_R5XE38	V Q R A L P D V R D G L K P V H R R I	L Y T M F E N N L Y P E K A Y R K C A D T			
UniRef90_B0R4D5	G R A L P D V R D G L K P V H R R I	L Y A M H E S G V T S G S G H R K S S N I			
UniRef90_UP100046A1629	R A L P D I R D G L K P V Q R R I	L F A M N E D G N T F D K A F R K S A K S			
UniRef90_K1MKP7	V S R A L P D V R D G L K P V Q R R I	L Y G M N E I G V T P D K P Y K K S A R I			
UniRef90_H6Q5V6	I G R A L P D V R D G L K P V H R R I	L F A M K T I I N N D W N K P P Y K K S A R I			
UniRef90_B7IDD3	I G R A L P D V R D G L K P V Q R R I	L Y S M Y E L G V T H N K P F K K S A R I			
UniRef90_M4SEK4	V S R A L P D V R D G L K P V H R R I	L F A S Q E G G F V P G R P Y R K S A K I			
UniRef90_G9WFX9	V S R A L P D I R D G L K P V Q R R I	L F A M N E D G N T F E H A Y R K S A K A			
UniRef90_W2D2P1	V S R A L P D V R D G F K P V H R R I	L F G M N E L G N T S D K P Y K K S A R I			
UniRef90_UP10003B6ADB3	D R A L P D I R D G L K P V Q R R I	L F A M F K D G N T S D K Q F R K S A K S			
UniRef90_R7KC71	D R A I P D A R D G L K P V Q R R I	L Y S M Y K E K N T Y D R P Y R K S A K T			
UniRef90_U4KRN7	D R A I P D A R D G L K P V Q R R I	L Y A M Y K M G M G S D K P Y K K S A R I			
UniRef90_UP10003669FB2	V G R A L P D A R D G L K P V H R R I	V L F A M N E S N D W N K A Y K K S A R V			
UniRef90_Q49XE9	R A L P D V R D G L K P V Q R R I	L Y A M Y S S G N T Y D K N F R K S A K T			
UniRef90_C7M9I4	V S R A L P D V R D G L K P V H R R I	V L Y G M Y D M G V L S N R P Y K K S A A I			
UniRef90_M1XKV1	V G R A L P D A R D G L K P V Q R R I	L Y A M D E M G V T S R S G H R K S S S I			
UniRef90_L0D7I2	I S R A L P D V R D G L K P S Q R R I	L M A M L D L G L S P G G S T S K C A G I			
UniRef90_B51AL1	V S R A L P D V R D G L K P V H R R I	L Y G M Y E L G L Y H N K P Y K K S A R I			
UniRef90_D4YNL7	S R A L P D A R D G L K P V Q R R I	I Y Q M G D M G L R P D R P H V K S S R I			
UniRef90_X5H566	I N R A I L P D V R D G L K P V H R R I	L H S M N E L G F Y W N K P Y R K S A R V			
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UniRef90_B3TA1	I G R A L P D V R D G L K P V H R R I	L W G M H Q Q A G H T D K G F R K S A R S			
UniRef90_G4L8L2	I G R A L P D I R D G L K P V Q R R I	L F S M N N D G N T Y D K S F R K S A K S			
UniRef90_D0BKA5	D R A L P D I R D G L K P V Q R R I	L Y A M F V E G N T S E K Q F R K S A K T			
UniRef90_U7D827	T S R A L P D V R D G L K P V H R R I	V L F A M G E L N L S H T R S Y K K S A R V			
UniRef90_UP1000344E555	Q R A L P D A R D G M K P V Q R R I	L Y Q M N E M G L R P D R G H V K C A R V			
UniRef90_W7C8J4	Q R A L P D A R D G L K P V Q R R I	L Y A M N E E G N T F D A K G F R K S A K T			
UniRef90_J5VYS4	V S R A L P D V R D G F K P V H R R I	L Y A M N E D G N T Y D K P T R K C A S A			
UniRef90_H0QM31	S R A L P D A R D G L K P V Q R R I	L Y M M S D M G L R P D R G H V K S A R V			
UniRef90_R6BM53	D R A L P D V R D G L K P V Q R R I	L Y S M Y K D K N T Y D K E T R K S A K T			
UniRef90_W4F2F5	D R A L P D A R D G L K P V Q R R I	L Y A M F M G G N T H D K P F R K S A K T			
UniRef90_UP100047AB48D	D R A I P D V R D G L K P V Q R R I	L Y A M Y K E G N T F D K N Y R K S A K T			
UniRef90_D2MM14	I G R A L P D V R D G L K P V Q R R I	L Y A M Y N D G N T H D K P Y R K S A K T			
UniRef90_Q09DS3	I G R A L P D V R D G L K P V H R R I	V L Y A M H D L G N T H N R A Y K K S A R V			
UniRef90_R7MHU7	D R A L P D V R D G L K P V Q R R I	L W S M Y E S H N T Y D K P F R K S A K T			
UniRef90_R7G313	D R A L P D A R D G L K P V Q R R I	L Y A M Y E D G N L W D K A Y R K S A K T			
UniRef90_UP10001745642	I S R A L P D V R D G L K P S Q R R I	L Y A M H E L S L Y P K K H M K C A K I			
UniRef90_G6FUN9	V G R A L P D V R D G L K P V H R R I	L Y A M H E L G L T P D R P Y R K C A R V			
UniRef90_R5FKB1	V G R A L P D V E D G L K P V Q R R I	L Y S M Y E L D L V T P D K P H R K C A R I			
UniRef90_UP100034A1D5A	V G R A L P D A R D G L K P V H R R I	L Y A M H E L G L L P D R P Y R K C A R V			
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UniRef90_B1V9B7	V A R A L P D I Q D G L K P V Q R R I	L Y G M K E L S V Y S N S S Y K K A A R I			
UniRef90_K9YK80	V G R A L P D V R D G L K P V H R R I	L Y A M Y E L G L S P D R P F R K C A R V			
UniRef90_E6SBU9	S R A L P D A R D G L K P V Q R R I	L Y G A N E L G V R P D R G H V K S Q R I			
UniRef90_R4Z679	T A R A I P D V R D G L K P V Q R R I	L Y A M D D M G L R P D R P H R K C A G V			
UniRef90_UP1000465E745	T A R A I P D V R D G L K P V Q R R I	L Y A M S D L N L W F D K P H K K S A R V			
UniRef90_F6FWG6	S R A L P D A R D G L K P V Q R R I	L Y M M A E M G L R P D R A H V K S S R V			
UniRef90_UP100046AA260	I G R A L P D A R D G L K P V H R R I	L F A M N D L S I S S R S P Y K K S A R I			
UniRef90_U2EFP0	D R A L P D V R D G L K P V Q R R I	L Y A M Y R E K N T S E K N Y R K S A K T			
UniRef90_M4ZSW1	V S R A L P D V R D G L K P V H R R I	V L Y G M Y Q L G I I S K S S Y K K S A R I			
UniRef90_K2LUF5	M S R S L P D V R D G L K P V H R R I	L Y A M R Q L K L D P A Q G F K K C A R V			
UniRef90_A4BAP5	L D R A L P H V G D G L K P V Q R R I	V Y A M S E L G L R N T A K Y K K S A R T			
UniRef90_UP10004709840	D R A L P D A R D G L K P V Q R R I	L Y A M G Q M G L N Y N K S Y K K S A R I			
UniRef90_S3XUQ5	S R A L P D A R D G L K P V Q R R I	L Y T M D N M G L R P D K G H V K S Q R V			
UniRef90_U4WGS9	L S R S A L P D A R D G L K P V Q R R I	L Y S M Y E E N N T F D K P Y R K S A K T			
UniRef90_T1BYH4	V G R A L P F A E D G L K P V H R R I	L W A M W E G G A T H D R P F R K S A R T			

UniRef90_V2YII1	V G D V L G R Y H P H G D Q S V Y D A L V R □ A Q D F S M R Y M L V D G H G N F
UniRef90_R7HJM3	V G A V M G H Y H P H G D S A Y E S M V R M A Q D F T Y R H T L V D G H G N F
UniRef90_U7UNP3	I G E V M G K F H P H G D S S Y D A A A R L A Q D F N I R Y P L V E G Q G N F
UniRef90_UP10004245562	V G E V L G K Y H P H G D S A Y D T M V R M A Q E W S L R Y P F V D G Q G N F
UniRef90_Q8XIP7	V G D I L G K Y H P H G D S S Y Y D A M V I L A Q N F S T R A P L I D G H G N W
UniRef90_G2S092	V G E V I G K Y H P H G D S A Y Y E S M V R M A Q D F S Y R Y P L I D G H G N F
UniRef90_R5HSA9	V G A V I G N Y H P H G D T A V Y D A M V R M A Q D F S Y R H P L I D G H G N F
UniRef90_UP100032AABDF	V G E V L G K F H P H G D S A V Y D S M V R M A Q D F S L R S P L V N G H G N F
UniRef90_UP10003829373	V G D V M G N Y H P H G D T A Y D A L V R L I Q D W V Q R Y P L A L G Q G N F
UniRef90_A0A023DXN9	V G E V I A K Y H P H G T D P Y G S L V R M A Q W F S M R E K L I D G H G N F
UniRef90_T0GKH8	V G E V I G N Y H P H G D S A Y Y D A L V R M V Q E F S L R V P L I D G Q G N F
UniRef90_D4JWQ7	V G E V L G K Y H P H G D A S Y Y D A L V R L A Q D F S M R Y P L I D G H G N F
UniRef90_K9Q432	V G E V L G K Y H P H G D T A V Y D A L V R M A Q D F S M R D P L I N G H G N F
UniRef90_I4BU81	V G E T M G K Y H P H G D A A Y D A M V R M A Q E F S M R Y P L V D G Q G N F
UniRef90_UP100031F7ADF	V G T V G N Y H P H G D S S Y E A M V R L S Q E W K V R N V L V E M H G N N
UniRef90_I6XRS5	V G Q V M G V L H P H G D S A Y D A L V R M A Q P W A M R L P V D G H G N F
UniRef90_A9SV22	V G E V L G K F H P H G D T A V Y D A L V R M A Q D F S L R S P L V N G H G N F
UniRef90_Q4UKM1	V G D V M G K Y H P H G D S A Y D S L V R M A Q D F S L R L P V D G Q G N F
UniRef90_UP100036280E0	V G D V L G K Y H P H G D Q A V Y D A L V R M V Q S F S S R Y P L L A G H G N F
UniRef90_K2DAM6	V G E V M K N F H P H G D S S Y D A M V R M A Q D F S M R Y P L V D G Q G N F
UniRef90_X0QKM8	V G N I M G N F H P H G D S S Y E A M V R L S Q N W K L R E P L I E M H G N N
UniRef90_U1WQI5	V G D V I G K Y H P H G D A A V Y E T M V R M A Q D F S Y R Y P L V D G H G N F
UniRef90_UP100037C6CC2	V G E V M G R L H P H G D A S Y D A L V R M A Q P F S M R L P V D G H G N F
UniRef90_UP100036B3172	V G D V M G N Y H P H G D S S Y E G M V R M A Q P W K M A H T L V D G H G N W
UniRef90_G2KTP9	V G N V M G N F H P H G D S S Y D A M V R M S Q S W K L R E P L I D M H G N N
UniRef90_D2U4I6	V G D V I G K Y H P H G D S A V Y D A I V R L A Q P F S M R Y M L V D G Q G N F
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UniRef90_K9EDZ2	V G N V I G N Y H P H G D T S V Y D A M V R L S Q P W K M R H P L V D M H G N K
UniRef90_UP1000376665D	V G D V M G K L H P H G D S A Y D A L V R L A Q P F S M R L P V D G H G N F
UniRef90_D8GPS9	V G D I L G K Y H P H G D T S V Y D A M V I L A Q D F T T R M P I I D G H G N W
UniRef90_UP10003B31FF1	V G D T M G K Y H P H G D S S Y E G A L V N M A Q D W N L R Y P L V D G H G N F
UniRef90_UP1000360DA4A	V G D V M G N Y H P H G D T A Y D S M V R M A Q N F S M R L L L V D G Q G N F
UniRef90_R5XE38	V G A V L G R Y H P H G D A S V Y D A M V R L A Q T F S M R Y I L V D G H G N F
UniRef90_B0R4D5	V G D T M G D Y H P H G D S P V Y D A L V R M A Q D F S M R Y P L V D G Q G N F
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UniRef90_H6Q5V6	V G N V I G K Y H P H G D T A V Y D T I V R M A Q K F S L R Y T L I D G Q G N F
UniRef90_B7IDD3	V G E V M G K Y H P H G D A A Y D T I V R M A Q D W T M R Y K L I D G Q G N F
UniRef90_M4SEK4	V G D V M G N Y H P H G D A A Y M A L A R L A Q D W S M R V P L V D G Q G N F
UniRef90_G9WFX9	V G N V M G N Y H P H G D S S Y D A L V R M S Q S W K M R E P L I D M N G N N
UniRef90_W2D2P1	V G E V L G K Y H P H G D S S V Y F A L V R L A Q N W S M R Y T L V D G Q G N F
UniRef90_UP10003B6ADB3	V G N V M G N L H P H G D S S Y E A L V R M S Q D W K L R V P L I E M H G N N
UniRef90_R7KC71	V G D V I G N Y H P H G D S S Y E A M V R M S Q E W K S R Y P Y I D M H G N N
UniRef90_U4KRN7	A G E V M G K Y H P H G D S S Y E A M V R M S Q Y F K M G V T L V D M H G N N
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UniRef90_M1XKV1	V G D T M G N Y H P H G D S A Y D A L A R M A Q D F S L R Y P L V D G Q G N F
UniRef90_L0D7I2	V G E T M K R Y H P H G D N S I Y P T L A R M A Q W W N M R H L L I S G Q G N F
UniRef90_B5IAL1	V G E V M G K Y H P H G D Q A Y N T L A R M A Q D F S M R Y L L V D G Q G N F
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UniRef90_B3TA1	V G E V M G K Y H P H G D Q A Y D T M V R M A Q D F S L R Y P L I D G Q G N F
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UniRef90_U7D827	V G D V I G K Y H P H G D S A V Y D T L V R M A Q D F S L R Y P L V D G Q G N F
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UniRef90_W7C8J4	V G N V I G N Y H P H G D T S V Y D A M V R M S Q D W K V R N L L I E M H G N N
UniRef90_J5VYS4	V G Q V M K Y Y H P H G D S S Y G T L V R L A Q P W N L R Y P L V Q G Q G N F
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UniRef90_R6BM53	V G N V I G N Y H P H G D T S V Y D A M V R L S Q K W K Q R V I L V D M Q G N N
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UniRef90_D2MM14	V G L V I G N Y H P H G D S S V Y D A M V R M S Q D W K V R M P F I D M H G N N
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UniRef90_X51YK2	V G N V L G K Y H P H G D S S V Y D A L V R M A Q S W S L R Y I L I D G Q G N F
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UniRef90_B1V9B7	V G D V M G K Y H P H G D S S V Y E A M V R M S Q D F S Y R Y P L L D G H G N F
UniRef90_K9YK80	V G D V L G K Y H P H G D Q A V Y D A M V R L I Q D F S S R Y P L L A G H G N F
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UniRef90_R4Z679	V G D T M G K Y H P H G D G A Y D A L T R M G Q D F S R V V T L I D P H G N F
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UniRef90_R2EFP0	V G V V I G N Y H P H G D S S V Y E A M V R L S Q D W K V R E P L V D M H G N K
UniRef90_M4ZWS1	V G E V L G K Y H P H G D I S V Y D T M V R M T Q K W T L R Y P L I D G Q G N F
UniRef90_K2LUF5	V G D V I G K Y H P H G D Q S V Y D A L V R L A Q D F A V R Y P L V D G Q G N F
UniRef90_A4BAP5	V G D V L G K Y H P H G D S A C Y E A M V L M A Q S F S Y R Y P L V D G Q G N W
UniRef90_UP10004709840	A G E V M G K Y H P H G D S S Y E A M V R L S Q D F K M R I P L V D M H G N N
UniRef90_S3XUQ5	V G D V M G K L H P H G D S A Y D A L V R L A Q D F N M R L P L V D G H G N F
UniRef90_U4WGS9	V G S V M G T Y H P H G D A S Y E T M V R M A Q W W K M R H V L I Q G Q G N F
UniRef90_T1BYH4	V G D V L G K Y H P H G D L S V Y D A L V R M A Q P F S L R Y P L V E G Q G N F

	90	100	110	120
UniRef90_V2YII1	G S I D G D P P A A Y R Y T E A R M S K L S D E M L R D I E K D T V D W D P N F			
UniRef90_R7HJM3	G S I D G D G A A A S R Y T E A R L A K I S M E L L R D I N K D T V D F S E N Y			
UniRef90_U7UNP3	G N I D G D R P A A A R Y T E V R M D K I A L E M L R D I N K N T V D F V P N F			
UniRef90_UP10004245562	G S I D G D N P A A A M R Y T E A R L S S I S M E M L R D I E K N V V D M V P N Y			
UniRef90_Q8XIP7	G S I D G D G A A A M R Y T E A R L S K I S N Y I K D I D M E T V D F E D N F			
UniRef90_G2S092	G S I D G D G A A A M R Y T E A R L S K I A M E L L R D I N K D T V D F E D N F			
UniRef90_R5HSA9	G A I D G S T A A A Y R Y T E S R I S K I A M E L L R D I N K D T V D F E D N F			
UniRef90_UP100032AABDF	G S L D A D P P A A A M R Y T E C R L E E L A E A M L A D L D Q D T V D F A P N F			
UniRef90_UP10003829373	G S P G N D G A A A Q R Y T E T K M A P L A M E M V R D I D E D T V D M Q D N Y			
UniRef90_A0A023DXN9	G S M D G D H A A A M R Y T E A R L S A L A D F I L A D Y D K E T V D E F Q P N Y			
UniRef90_T0GGH8	G S I D G D N P A A A Y R Y T E A R L E K I A E E L L R D I E K E T V D W G K N Y			
UniRef90_D4JWQ7	G S V D G D P P A A A Y R Y T E A R M A K I A S E L L R D I E K D T V D F A D N F			
UniRef90_K9Q432	G S I D N D P P A A A M R Y T E S R L Q S L T T N A L R D I E S E T V D F A D N F			
UniRef90_I4BU81	G S I D G D P P A A A M R Y T E A R L S P L G E E M L R D I N E E D T V D W G P N F			
UniRef90_UP100031F7ADF	G S V D G D P P A A A M R Y T E A R L S A I S S E L L R D I D K E T V D Y I P N F			
UniRef90_I6XRS5	G S L D A G P A A A M R Y T E C C R M H P A V A M T A G L D E D V V D F R P N Y			
UniRef90_A9SV22	G S L D G D P P A A A M R Y T E C C R Q G L S E A M L R D I E L D T V D F I P T F			
UniRef90_Q4UKM1	G S M D G D A A A A M R Y T E S R M A K V S H K L V E D D K E T V S F N P N Y			
UniRef90_UP100036280E0	G S I D N D P P A A A M R Y T E T R L A P L G N E L L T H I G E A T V D F T S N F			
UniRef90_K2DAM6	G S V D G D S P A A A M R Y T E A R L S A V S D E L L R D I N K E T V D F I D N Y			
UniRef90_X0QKM8	G S M D G D P P A A A M R Y T E A R L S A V S D E L L R D I D K D T V D M V L N F			
UniRef90_U1WQI5	G S V D G D S A A A A M R Y T E A R M S K I A T E L M R D I G K D T I D F G P N Y			
UniRef90_UP100037C6CC2	G S L G N D D P P A A M R Y T E A R M M P A A T L M V R E S I D E D T V E F F S P N Y			
UniRef90_UP100036B3172	G S I D D D P P A A A M R Y T E A R L S T I A M E L R D I D K R T V Q F K D N F			
UniRef90_G2KTP9	G S M D G D P P A A A M R Y T E A R L S K I A G E M R D I D K G T V D W V L N F			
UniRef90_D2U4I6	G S V D G D S A A A A M R Y T E V R M A K I A H E L L R D I D K E T V D F I P N Y			
UniRef90_UP10002E10C91	G S V D G D P P A A A M R Y T E T A K M S K I S M E L L R D I N K N T I D Y T D N Y			
UniRef90_UP1000376EBF0	G S M D P D P P A A A M R Y T E A R L L A R S A N A L E D I D K D T V D F Q P N Y			
UniRef90_S9LI55	G S M D G D P P A A A M R Y T E A R L S K I I A G Y L L Q D I D K N T V P F A W N F			
UniRef90_K9EDZ2	G S M D G D P P A A A M R Y T E A R L S K I A S D L L R D I D K E T V D H V L N F			
UniRef90_UP1000376665D	G S P D D L P A A A M R Y T E A R L A P A A M L M V E S I D E D T V D F K P N Y			
UniRef90_D8GPS9	G S Q D G D S A A A A M R Y T E A R L T P I A M E M I R D I E K G V V N M V D N Y			
UniRef90_UP10003B31FF1	G S V D G D G D G A A A A M R Y T E A R L S K M S M E M L R D I Q K D T V D F F V P N F			
UniRef90_UP1000360DA4A	G S V D G D P P A A A M R Y T E S R L A K S S E T L L R D I D K D T I D F I P N Y			
UniRef90_R5XE38	G T I D G D P P A A A A Y R Y T E S R M S K I I S M R M L Q D I D K D T V D F F N P N Y			
UniRef90_B0R4D5	G S V D G D P D G P A A A M R Y T E A R M P A M L M V E S I D E K D T V A F Q A N Y			
UniRef90_UP100046A1629	G S M D G D S P A A A M R Y T E T R L A P A A M L M V E S I D E K D T V D F Q P N Y			
UniRef90_K1MKP7	G S V D G D G D S A A A A M R Y T E A R L T P I A M E M I R D I E K G V V N M V D N Y			
UniRef90_H6Q5V6	G S I D G D A A A A A M R Y T E I K L S K I A H E I L T D L E K D T V N Y I A N Y			
UniRef90_B7IDD3	G S I D R D P P A A A M R Y T E A R L A K I A E E L L E D I D K E T V N M T D N F			
UniRef90_M4SEK4	G S M D P D M P A A S M R Y T E A R L A K I P A M A L L R D I D K D T V D F Q P N Y			
UniRef90_G9WFX9	G S I D N D P P A A A M R Y T E A R L S K I I A G E M L S D I D R Q A V D M V L N F			
UniRef90_W2D2P1	G S V D G D S P A A A M R Y T E A R M R M S R L A E E M L R D I D K D T V D F Q L N F			
UniRef90_UP10003B6ADB3	G S I D N D P P A A A M R Y T E A R L A K I A D E L L R D I D K D T V D M V L N F			
UniRef90_R7KC71	G S I D G D S P A A A Y R Y T E A R L S K I S N E M L R D I D N R D T V E F F A P N F			
UniRef90_U4KRN7	G S I D G D S A A A A M R Y T E A R L S K E A E A L L A D I E K R T V P F I P N F			
UniRef90_UP10003669FB2	G S I D G D S A A A A M R Y T E I R M D K I A H E M L A D I E K E T V D F A P N Y			
UniRef90_Q49XE9	G S I D N D P P A A A M R Y T E T A K L S R I S E E L L R D I N K E T V P F M P N Y			
UniRef90_C7M9I4	G S M G G D P P A A A M R Y T E A R M R M K F S E E M L R D I K E T V D H Q L T Y			
UniRef90_M1XKV1	G S V D G D P D G P A A A M R Y T E A R M M P I A E E L L R D I D K D T V D F F A P N Y			
UniRef90_L0D7I2	G S I H G L P P A A A M R Y T E T A K L S P V A A E M L E D I K L D T V D F Q P S Y			
UniRef90_B5IAL1	G S I D G D S P A A A M R Y T E T A K L S P V A A E M L E D I D M E T V D F M P N Y			
UniRef90_D4YNL7	G T L D D G P A A P R Y T E T A R L D A A L T M I A G L D E D V V D F V P N Y			
UniRef90_X5H566	G S I D G D P P A A A M R Y T E T V R Y E Y I S K F L L D D D L Y E N S L V D F R P N Y			
UniRef90_UP10004712E1B	G S V D G D P P A A A E R Y T E C R L E K A A H S L L D D D L D K E T V D F F I D N F			
UniRef90_A5GGRY6	G S V D N D P P A A A M R Y T E S R L Q S L T T D S L E D I D E S E T V D F F I D N F			
UniRef90_B3TA1	G S I D G D P P A A A M R Y T E T S R L Q S L D R S Q H M L D D D L E K D I V D M V L N F			
UniRef90_G4L8L2	G S M D G D P P A A A M R Y T E A R L S K I S G Q M L S D I E K D I V D M V L N F			
UniRef90_D0BKA5	G S M D G D P A A A M R Y T E A R L S K I S E E L L R D I D K K T V D F V L N F			
UniRef90_U7D827	G S I D G D S A A A A M R Y T E C R L T K S A E D M L D D D L E K D T C D F Q A N Y			
UniRef90_UP1000344E555	G S L G G D D A P P A A M R Y T E A R M D R A A E L L V R T S I D E D V V D F R P N F			
UniRef90_W7C8J4	G S V D G D P D P A A M R Y T E A R L A P I A A E L L R D I E K E T V D F V P N F			
UniRef90_J5VYS4	G S I D G D S P A A A M R Y T E T S R L N R L A S E M I R D I D K D T V D F Q N N F			
UniRef90_H0QM31	G S L D D G P A A P R Y T E T A R L A A A A L T M T D H I D E D V V D F V P N Y			
UniRef90_R6BM53	G S V D G D P A A M R Y T E T A R L A K I S N V L L E D I D K D S V E M A L T F			
UniRef90_W4F2F5	G S V D G D S A A A A M R Y T E A R L S A S I A A E M L R D I Q K E T V D L V P N F			
UniRef90_UP100047AB48D	G S V D G D P A A A M R Y T E T A K L A K I S G E L L K D I N K N T V P F I D N F			
UniRef90_D2MM14	G S I D D D P A A A M R Y T E T A R L A K V T Q V M E E D I D K D T V E M S P N F			
UniRef90_Q09DS3	G S V D G D S P A A M R Y T E T V R M D R L A E E L L A D I D K E T V D F G P N Y			
UniRef90_R7MHU7	G S I D G D G P A A A S R Y T E A R L S K I I A N V M L S D I D N K D A V K M T L N Y			
UniRef90_R7G313	G S I D D D P A A A M R Y T E A R L G K I S E Y L L K D I E K D T V T W S L N F			
UniRef90_UP10001745642	G S V E G D P P A A A M R Y T E A R L T H L G G H L M D D M E K E T V D F V P N Y			
UniRef90_G6FUN9	G S V D N D P P A A A M R Y T E T R L A P I S H E M L A E I G E E T V E F I G N F			
UniRef90_R5FKB1	G S V D G D G P A A A M R Y T E T A R L M P I A V E M L K D I D K D T V E M Q W N F			
UniRef90_UP100034A1D5A	G S V D N D P P A A A M R Y T E C R L S E I G N D A L S D I N D S V I D F T D N F			
UniRef90_X51YK2	G S I D K D P P A A A M R Y T E I K L K N I S E D M L L D I E K E T V D M K L N F			
UniRef90_Q8EQK4	G S I D G D P P A A A M R Y T E A R L V K M A K I A M E L I K N I T I E F V D F D N Y			
UniRef90_B1V9B7	G S I D G H K A A A A M R Y T E V K M A K I A M E L I K N I T I E F V D F D N Y			
UniRef90_K9YK80	G S V D N D P P A A A M R Y T E T S R L G A I F E T M L I E V N E S T V D F S S S N F			
UniRef90_E6SBU9	G S L D D G P A A A A R Y T E T A R L A E S A L L M V S G L D E N T V D F V P N Y			
UniRef90_R4Z679	G S L D D P P A A A Y R Y T E C R L T P A A Q D M L A E L D D E N T V D F R P T F			
UniRef90_F6FWG6	G S L D D G P A A A A R Y T E A R L A P P S M A M T A G L D E D V V D F V P N Y			
UniRef90_UP100046AA260	G S I D G D S A A A A M R Y T E T A R M T P L A E E L L K D I D K D T V D F T P N Y			
UniRef90_U2EFP0	G S I D G D P P A A A M R Y T E T A R L S K I S N E L L K D I D K E T V D M Q L N F			
UniRef90_M4ZSW1	G S L D A D P P A A A M R Y T E T V K M K I S E M L L D I D K Q T V D Y I P N F			
UniRef90_K2LUF5	G N L D G D N A A A A M R Y T E T A R M T A V A A A L M N G L D E D A V D F R P T Y			
UniRef90_A4BAP5	G S P D D P K F A A A M R Y T E T S R L H K N A H L L E E L G Q G T V D W V P N F			
UniRef90_UP10004709840	G S I D G D S A A A A M R Y T E T A R L S K E A E Y L L K D I E K R T V S F V P N F			
UniRef90_S3XUQ5	G S L D N G P P A A A A R Y T E T A R L S K I S N E L L K D I D K E T V D M V P N Y			
UniRef90_U4WGS9	G S L D A D P P A A A M R Y T E T A R L S A L A N E L L R D I D E K D T V P F I P N Y			
UniRef90_T1BYH4	G S I D G D G P A A A M R Y T E T A R L S P V A S E M L E D I E K D T V A W G D N F			

	130	140	150	160
UniRef90_V2YII1	D E T R K E P K T L	P S R F P N L L V	N G S S G I A V G M A T N I	P P H N M R E
UniRef90_R7HJM3	D G Q R K E P V V L	P S R F P N I L L V	N G N M G I A V G M A T N I	P P H N L G E
UniRef90_U7UNP3	D E R E L E P T V L	P S R F P N I L L V	N G S A G I A V G M A T N I	P P H N L K E
UniRef90_UP10004245562	D D S L K E P T V L	P A K V P A L L L V	N G A S G I A V G M A T N I	P P H N L G E
UniRef90_Q8XIP7	S D S E M E P K V L	P A R Y P N L L V	N G T F G I A V G L S T N I	P P H N L R E
UniRef90_G2S092	D A S E K E P A Y L	P G Y P N L L V	N G A T G I A V G M A T S I	P P H N L G E
UniRef90_R5HSA9	D V T R K E P K V L	P S R F P N I L L V	N G T M G I A V G M A T N I	P P H N L G E
UniRef90_UP100032AABDF	D N S Q K E P S V L	P A R L P T L L L V	N G S S G I A V G M A T N I	P P H N M R E
UniRef90_UP10003829373	D G K Q Q E P A V L	P A R Y P N L L L V	N G S S G I A V G M A T N I	P P H N L G E
UniRef90_A0A023DXN9	D D T Q K M P V V L	P A A F P N L L L V	N G G S G I A V G M A T N I	P C H N L A E
UniRef90_T0GGH8	D D T K E Q P D V L	P A N F P N L L L V	N G S S G I A V G M A T N M	P P H N L K E
UniRef90_D4JWQ7	D D K L D E P T V L	P V K F P N L L L V	N G S S G I A V G M A T N I	P P H N L N E
UniRef90_K9Q432	D G S Q Q E P V V L	P A R V P Q L L L V	N G S S G I A V G M A T N I	P P H N L G E
UniRef90_I4BU81	D E T L K E P L V L	P S L L P N L L L V	N G S S G I A V G M A T N M	P P H N L A E
UniRef90_UP100031F7ADF	D D T I N E P V V L	P A R F P N L L L V	N G S T G I S A G Y A T D I	P P H N L T E
UniRef90_I6XRS5	D G K D T E P E V L	P A A L P N L L L V	N G A S G I A V G M A T N I	A P H N L R E
UniRef90_A9SV22	D G S Q N E P A V L	P A R L P N V L L V	N G A S G I A V G M A T N I	P P H N L A E
UniRef90_Q4UKM1	D G S E E E P S V L	P A M F P N L L L V	N G S G G I A V G M A T N I	P P H N L G E
UniRef90_UP100036280E0	D N S Q K E P V V L	P A Q L P T L L L L V	N G S S G I A V G M A T N I	P P H N L G E
UniRef90_K2DAM6	S G T A Q E P I W L	P S L I P N L L L V	N G A A G I A V G M A T Q I	P P H N L G E
UniRef90_X0QKM8	D D T E K E P T V L	P A R F P N L L L V	N G A T G I S A G Y A T E I	P P H N L G E
UniRef90_U1WQI5	D G N E Q E P L V M	P A R L P H L L V	N G A A G I A V G M A T N I	P P H N L T E
UniRef90_UP100037C6CC2	D G S E S E P Q A L	P S A F P N L L L V	N G S S G I A V G M A T N M	P P H N L G E
UniRef90_UP100036B3172	D N T A K E P V V L	P A R Y P N L L L V	N G S G I S A G F A T E I	P T H N L R E
UniRef90_G2KTP9	D D T E Y E P T V L	P A R L P N L L L V	N G A T G I S A G Y A T E I	P P H N L G E
UniRef90_D2U4I6	D G T E Q I P D V M	P T R I P N L L L V	N G S S G I A V G M A T N I	P P H N L S E
UniRef90_UP10002E10C91	D G S E R E P K V L	P A R F P N L L L V	N G A S G I A V G M A T N M	P P H Q L G E
UniRef90_UP1000376EBF0	D G S E Q E P Q V L	P A R F P N L L L V	N G A G G G I A V G M A T N I	P P H N L G E
UniRef90_S9L55	D D T E K E P T V L	P A A F P N L L L V	N G A T G I S A G Y A T D I	P P H N L V E
UniRef90_K9EDZ2	D D T T E E P T V L	P A R F P N L L L V	N G A S G I S A G Y A T D I	P P H N L S E
UniRef90_UP1000376665D	D G Q E T E P V V M	P S A F P N L L L V	N G T S G I A V G M A T N M A P H N L V E	
UniRef90_D8GPS9	S G S E K E P E V L	P A R Y P N L L L V	N G A F G I A V G L A T N I	P P H N L R E
UniRef90_UP10003B31FF1	D E T E K E P T V L	P A R F P N L L L V	N G T T G I A V G M A T N I	P P H N L R E
UniRef90_UP1000360DA4A	D E S Q L E P S V L	P A E F P N M L V	N G A G G G I A V G M A T N I	P P H N P G E
UniRef90_R5XE38	D D R L K E P S V L	P T R F P N L L L V	N G S S G I A V G M A T N I	P P H N M K E
UniRef90_B0R4D5	D D R L T E P A V L	P S S F P N L L L V	N G S S G I A V G M S T N V	P P H N L G E
UniRef90_UP100046A1629	D D T E Y E P T V L	P A R F P N L L L V	N G A T G I S A G Y A T E I	P P H N L T E
UniRef90_K1MKP7	S Q E E R E P V V L	P A R F P N L L L V	N G A A G I A V G M A T N I	P P H N L S E
UniRef90_H6Q5V6	D D T E Y M P E I M	P T K I P N L L L V	N G S S G I A V G M A T N I	P P H N I G E
UniRef90_B7IDD3	D G S L K E P E V L	P S K F P N L L L V	N G S T G I A V G M T T N I	P P H N M K E
UniRef90_M4SEK4	D G S L Q E P Q V L	P F P N L L L V	N G S G G I A V G M A T N I	P P H N L G E
UniRef90_G9WFX9	D D T R Y E P T V L	P S R I P N L L L V	N G A S G I A V G M A T N I	P P H N L G E
UniRef90_W2D2P1	D D T L Q E P T V L	P T R I P N L L L V	N G A S G I A V G M A T N M	P P H N M T E
UniRef90_UP10003B6ADB3	D D T E Y E P T V L	P A H F P N L L L V	N G A T G I S A G Y A T D I	P P H N L G E
UniRef90_R7KC71	D D S L K E P T V L	P A R F P A L L L V	N Y G T Q G I S A G Y A T T N I	P P H N L G E
UniRef90_U4KRN7	D D E E L E P T V L	P A K F P N L L L V	N G A A G I S S G Y A T K I	P P H N L K E
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UniRef90_B3TA1	D D T E T E P T V L	P A R L P N L L L V	N G S D G T I A V G M A T K I	P P H N L N E
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UniRef90_D0BKA5	D D T E E E P T V L	P A R F P N L L L V	N G A T G I S A G Y A T E I	P T H N L G E
UniRef90_U7D827	D E S T E E P K V L	P A K V P Q L L L V	N G S T G I A V G M A T N M A P H N Y L E	
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UniRef90_H6Q5V6	V	V I N A C L A Y I	E N K H I S	V L D L M K H L P G P D F P T Y G V I	Y G	
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UniRef90_W2D2P1	V	V L H A C Q A Y V	D A R G E I D	V E G L M E H V K A P D F P T G A T I	Y G	
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UniRef90_X51YK2	S	I E A C S Y I	D K Q K I S I E E L	M K Y I K A P D F P T G G I I Y G		
UniRef90_Q8EQK4	V	V M D A V I L K I	D K P E A S	I D D L M K L M K G P D F P T G G I I Q G		
UniRef90_B1V9B7	V	V V D G L I A Y I	K D K N I S	I L G L M Q Y I K G P D F P T G G E I I L D G		
UniRef90_K9YK80	V	V I D G L I A L I	D Q P D D V S D E K L	M K L I P G P D F P T G G E I I I D G		
UniRef90_E6SBU9	V	V I G A A R H L I	A N P S C S L D E L	M K F V P G P D F P T G G I I V V D		
UniRef90_R4Z679	V	V A D L I E L V M T Q R	R P K P T I E Q I M A V I	V P G P D F P T G G I I V V D		
UniRef90_UP100046E745	V	V I D A T I A I I	N T P G	T R L D T I L S I V K G P D F P T G G I I V Q G		
UniRef90_F6FWG6	V	V V A A G Q H L L	K H P P G A	T L E D V M R Y V P G P D F P T G G I I V Q G		
UniRef90_UP100046AA260	V	V I D G L L A M I	D N P E I E L D E	M M G Y I K G P D F P T K G I I F G		
UniRef90_U2EFP0	V	V I N A V N Y R L K	H P D C S	L K A I M R Y I K G P D F P T G G I I V Q G		
UniRef90_M4ZSW1	T	I N A I C A Y I	H N D I S I E Q	L M K Y I K G P D F P T G G I I Y G		
UniRef90_K2LUF5	L	C A G L I T K L I	D N P D T S I A E L V	R C V P G P D F P T G G L V E P G		
UniRef90_A4BAP5	L	A A A C V H L I	D Q P D A S	V T D L M M H V R G P D F P T G A L I S P		
UniRef90_UP10004709840	V	V I D A T V A L I	D N P D I T N D E	L K Y I K G P D F P T G G I I V Q G		
UniRef90_S3XUQ5	V	V I A A A R H L L	N P E A S L E	D L M R F V P G P D F P S G G R I V V G		
UniRef90_U4WGS9	V	V I D A T I A M M R K P S I T T D E L	M E F V P G P D F S N R G I V Q G			
UniRef90_T1BYH4	V	V V D A L R L V L Q R P	E S T L Y E V L K F L	P G P D F P T G G L L S		

210 220 230 240

UniRef90_V2YII1	R S G R A A Y A T G R G R V T I R A R H E F E E F G K D R T R I V I T E I P Y
UniRef90_R7HJM3	N S G K R A Y E S G R G A I T I T I R G M A T V E E T H N K H R I V I T E L P Y
UniRef90_U7UNP3	K K G I D A Y K T G R G K I Q V R A R A E I E E Y K N R S K I V V T E I P Y
UniRef90_UPI0004245562	Y N G V K A A F E T G R G R I V T R G K A N I E T K D N G N R E M I I T E I P Y
UniRef90_Q8XIP7	E K T L L S A Y E T G E G K V T L R A K A K I E T L E N G R L G I V I T E F P Y
UniRef90_G2S092	G Q K M R D G Y K T G R G G V I I R A K V E L E E T A K H N R F I T E P Y
UniRef90_R5HSA9	N S G I K K A Y D T G K G T I T I R G K A D I V E K K D R Y E I I I K E I P Y
UniRef90_UPI00032AABDF	N L G I L E A Y R T G R G R V I V R G K T D I E L L D T K R T A I I I K E I P Y
UniRef90_UPI0003829373	R K G I E E V Y R T G R G P I T M R A V V N V E E I Q G R T C L V V T E L P Y
UniRef90_A0A023DXN9	T K G I E E A Y R T G K G S F L I R G Q A Q I E P N G K D R E C L I V T E L P Y
UniRef90_T0GGH8	G E G L L S A Y E H T G R G S I R I R S K V E I E E N K K G R E V V V V T E I P Y
UniRef90_D4JWQ7	Y S G I R S A Y Y T G R G K I T L R G K A E V E E G N H S R I V V T E L P Y
UniRef90_K9Q432	R S G I K D A Y L T G R G S I T M R G V A E V E M L R Q N G R E I V V T E L P Y
UniRef90_I4BU81	R D G I I S A Y K T G R G K I I L R G K V S I E Q M K R G R T N L L I I T E E I P Y
UniRef90_UPI00031F7ADF	E E G L K Q A Y R T G K G K V I V R G R A E I E S I R G N R E Q V I I D E I P Y
UniRef90_I6XRS5	L E G I R D A Y A T G R G S F K V R A R A S I E R V S A R R R G V I I T E L P Y
UniRef90_A9SV22	T D G I L D A Y R F G H G R L T V R G K A S I E Q L D R R S S N R V I I S E L P Y
UniRef90_Q4UKM1	I S G I R S A Y L T G R G S I I M R G R A E E N I G N S R Q A I I I T E L P Y
UniRef90_UPI00036280E0	L N G I K D A Y Q T G R G S I T V R G V V R V E E I Q T G R T R L I I T E F P F
UniRef90_K2DAM6	A T E I Q A A Y A T G K G R I L V M R A K A E E E T K G G R F D I V I T E L P Y
UniRef90_X0QKM8	L A G I K E A Y A T T G R G K A V L R S R T A I V P R G H R E Q V I I T E E I P Y
UniRef90_U1WQI5	R G G I R R A Y E T T G R G S V I I R A K A E E E N R R N K V R I V V S E L P Y
UniRef90_UPI00037C6CC2	L E G I R D A Y E K G R G T F R I R A T A S I E N V T A R R K G V V V T E L P Y
UniRef90_UPI00036B3172	E A G I R E A Y S T G R G K I Q V R S R T E E S L R G G K Q Q V V V T Q I P Y
UniRef90_G2KTP9	D G I K Q A Y K D G H G K I M I R S R S T E D L R G G K K L V K V T E E I P Y
UniRef90_D2U4I6	R R G I I D A Y R T G R G K V Y I R A R A N I E D D K N G R E T I V I N E I P Y
UniRef90_UPI0002E10C91	R S G I R K A Y E T T G K G S I T I R A K A E E E Q A N G K S R L V I S E L P Y
UniRef90_UPI000376EBF0	Q G A I R A N A Y N T G R G S I I M R S R H D V E E G R G D R S V L V T E I P Y
UniRef90_S9L55	K D E I R K A Y A T T G K G R V A V R S R T A I E T L K G G K K Q I V I T E E I P Y
UniRef90_K9EDZ2	K S G L K K A Y Q T G K G K I I R A K A D I E A I R G G K S Q V I I S Q I P Y
UniRef90_UPI000376665D	L Q G V R D A Y E S G R G T F R M R A K C I T I E Q I T P R R R K G I V I T E L P Y
UniRef90_D8GPS9	K K S M I S A Y E T G E G K V T L R A K T S I E K L D S G R L G V I I T E F P Y
UniRef90_UPI0003B31FF1	T R G I I K E A Y R T G R G K V I L R S V A N M E T P N G K T Q I V I T E F P Y
UniRef90_UPI000360DA4A	R S G I I R E A F K T G K G S I I M R S R A E I I I Q T G K N S N M L I I T E I P F
UniRef90_R5XE38	T K G I K D A Y T T G R G K I Y L R A R A E I V E E K G D H F K I V I T E L P Y
UniRef90_B0R4D5	R A D V K Q A Y Q T G R G R V R M R A E Y H V E S E N G R R D S V V V T E I P Y
UniRef90_UPI00046A1629	I D G I K K A Y E T T G R G K V I L R S R T K A I S P L K G G K A K E I I S E I P Y
UniRef90_K1MKP7	K A G I R K A Y A T T G R G R I Y V R A K V D I E P M R G E K E R V V V T E I P Y
UniRef90_H6Q5V6	S E G I Q D A Y T T S G R G K I Y I R A S A K I L A D N R G K K E S I I I Y E I P Y
UniRef90_B7IDD3	K S G I R E M Y T T G K G S F T I R G K V H V E E K K K K K N V I I T E I P F
UniRef90_M4SEK4	K G G A R A N A Y L N G K G S I I M R S R H V I E E G R G D R S V L V T E I P Y
UniRef90_G9WFX9	L G G I K D A Y T T G H G K I Y I R A R A Y E I E A D Q K G K E T L V I T E E I P Y
UniRef90_W2D2P1	Y A G I K E A F E T T G R G R I V I R G K A E I E S G A A H D K V I I S E I P Y
UniRef90_UPI0003B6ADB3	L E G I I R S A F K T G H G R V V V R S R T A I S P L K G K D C V V V T E I P Y
UniRef90_R7KC71	K K G L L D A Y Q T G K G K I I K S K Y E F E N G N G K T S V I V T E E I P Y
UniRef90_U4KRN7	K E G I R Q A L E T G A G K V I V R S R T V Y E Q M A K D Q V R V V V E E I P Y
UniRef90_UPI0003669FB2	R A G I V E A Y R T G R G R I Y I R A R Y E I E A D Q K G K E T L V I T E E I P Y
UniRef90_Q49XE9	I D G I K K A Y E T T G K G K I I V R S K V E D E E L R N G R K Q L V I V T E E V P Y
UniRef90_C7M9I4	Y E G V K C E A F K T G R G R V I I R G K A E I E S G A A H D K V V V T E E V P Y
UniRef90_M1XKV1	R E G L W D A Y T E T G R G R L R V R A E M E T E Y D E T G G D R V V V T E E I P Y
UniRef90_L0D7I2	R H T V R E A Y R T G R G K V I L R A K Y T I E E Q K D G R S Q I F T E E I P Y
UniRef90_B5IAL1	Y E G L V D A Y R T G K G K I K V R A K Y E V K E D R I I K E I P Y
UniRef90_D4YNL7	L D S I R E A Y E T G R G T F R T R A T V K F E N I T A R R K G V V V T E E L P Y
UniRef90_X5H566	E E G I R S A F E T T G R G S I I I R S R T H F E E T D T R K V I V V D E E I P Y
UniRef90_UPI0004712E1B	R A G I R S A Y E T T G R G S V I I M R G V A A I E P M R G D R E Q I I I T E I P Y
UniRef90_A5GRY6	R K G I R E T T Y T G G R G S I T M R G V A A I E K G R P D R D A V I I I T E I P Y
UniRef90_B3TA1	V D G I L D M Y R T G N G R F Q I R S D V E V Q E D S R G K R V V V H S I P Y
UniRef90_G4L8L2	K E E I K K A Y E T T G K G K V I L R S R T E I E N L R G G K Q Q V V V T E E I P Y
UniRef90_D0BKA5	I D E I L E Q A Y E T T G K G K V V V R S R T S I E A I K G G K S Q V V V T E E I P Y
UniRef90_U7D827	R K G I Y D A Y K T G R G K V L M R A R A E V E E S G G R E Q I I I T E E I P Y
UniRef90_UPI000344E555	L D G I R D A Y A K G R G T F R T R A T V S I E K V S P R R T G V V V T E E L P Y
UniRef90_W7C8J4	A D G I R K A Y E T T G K G R I I V R S R T E I E E L R G G R K Q T V H E E I P Y
UniRef90_J5VYS4	Y A G V R E A F E T T G R G R V V I R S R C E I E E H H N N H E R I V I T E E I P Y
UniRef90_H0QM31	L D G I R D A Y A T T G R G S F K T R A K V E V E Q L S A R R T G V V V T E E L P Y
UniRef90_R6BM53	K D A I L K A Y T T G K G K V V V K A R Y D F D N T K G K N Q I I I T E E I P Y
UniRef90_W4F2F5	V E G I K K A Y E T T G R G K I I V R A K A E I E E L K G G K E Q V V V T E E I P Y
UniRef90_UPI00047AB48D	K N E I L K K A Y T T G K G R V V V R S V V N K E E T R G N K V L V I I T E E I P F
UniRef90_D2MM14	E E G I R E A F T T G K G R I V V R A K T E I I I Q E K N L Q Q V I I T E E I P Y
UniRef90_Q09DS3	R E G I A R A Y E T T G R G Q I T I R A R T E I E T S K K G D R E I I I T E E I P Y
UniRef90_R7MHU7	K E G I I Q A Y T T G K G K V V V K A N Y E I L E E K G K K Q L I I K E I P Y
UniRef90_R7G313	I D G I K D A F R T T G K G R I M I R S K V S E Q T K T I Q Q I V I H E I P Y
UniRef90_UPI0001745642	T A G I R D Y F E T T G H G S I R I R G H A E I S E T G T K P Q I I I T A I P Y
UniRef90_G6FUN9	D A G I R E A Y T T G K G G V L R G V A Q I E E V V G G R T S V V V T E E L P Y
UniRef90_R5FKB1	G P E I L V Q A Y E T T G K G K V K V R A K A F I E D D T G D K K N V I I T E E I P Y
UniRef90_UPI00034A1D5A	D G G I I K E A Y T T G R G S I T I R G I A T F E T I R R S R T A V V V T E E L P F
UniRef90_X51YK2	Y E G V K K Y F I T G R G K I F L R S K V H F E E K N N R I C I V I D E I P Y
UniRef90_Q8EQK4	V E G I R K A Y E T T G R G K I I V R G K A V V E T M K G G R E Q V V V T E E I P Y
UniRef90_B1V9B7	L K G I L E N A Y K T T G Q G S V I I K A K T H L E E K G K T L V V V T E E I P Y
UniRef90_K9YK80	G K G I R D A Y L T G K G I I P V R G V A T I E Q L K I Q K K R I I I T E E I P F
UniRef90_E6SBU9	L E G I R D A Y L T G R G S F R T R A T A R I E E N I T P R R R K G V V V T E E L P Y
UniRef90_R4Z679	D D G I A E A Y A T T G R G T F R I R A T A E I T R V T K N R Q G V V V T E E L P Y
UniRef90_UPI000465E745	M D G I R E A F T G K G K V I I N S K W H E E H G N I I I D E I P Y
UniRef90_F6FWG6	L E G V R D A Y R T T G R G S F R T R A T A R I E N V T A R R K G V V V T E E L P Y
UniRef90_UPI00046AA260	K K G I L D A Y S T T G R G R I K I R S K I H M E K K G N K D I I I I D E E I P Y
UniRef90_U2EFP0	L A G I E K G Y K T G K G K I V I K S R Y E V D D K K R R N I I T E E I P F
UniRef90_M4ZWS1	Y D G V K N S F Y T G K G R I V V L R A K V H F E D L H G R P C I V V D E E I P Y
UniRef90_K2LUF5	R E N I L E A Y A T T G R G S F R L R A R W V E K L S H G L F Q V V V T E E I P Y
UniRef90_A4BAP5	K E D I R K I Y E G G R G T L R L R S K Y I Q E G T D V I I T E E I P H
UniRef90_UPI0004709840	K A G I K Q A L T T G S G K I I R S K T N I E E I S K S Q D R V V V T Q I P Y
UniRef90_S3XUQ5	L D G I R D A Y E T T G R G T F K M R A T T K V E N V T S R K K A V V V T E E I P Y
UniRef90_U4WGS9	V S G I K K A F E T T G R G Q F I I R G R A D I E E A K N K H K R V I I S E E I P Y
UniRef90_T1BYH4	R E G I R E A Y E T T G R G T L L R A K A E I R E R D N K T E V V V T E E I P Y

	250	260	270	280
UniRef90_V2YII1	Q V N K R M L I K S M A D Q V E D K R L E G I S D I R D E T D R N G M R V I			
UniRef90_R7HJM3	Q V N K K A L I I Q R I G E L V R D K I D G I S N L S D E S A L E G I K I V I			
UniRef90_U7UNP3	Q V N K S N L I I K I A D L V K N K E I E G I A N I K D L S H K K G I R I E I			
UniRef90_UP10004245562	M V N K A N M V E K T A Q L I N E K K I D G I S A I S D R S G M R I V Y			
UniRef90_Q8XIP7	R R N K A R I L Q T I S D M R H A K A L D G I V D I R D E S D R T G I R A V I			
UniRef90_G2S092	Q V N K S K I I E K I A E L V K T K I I G I A D I R D E E S N Y E G I R I V I			
UniRef90_R5HSA9	Q V N T S A L I T K I A E L V R D K V I D G I A D L R D E E T S F Q D G M K I L I			
UniRef90_UP100032AADBF	Q T N K A A L V E K I A E L V E N K S L E G I S D I R D E T S D R S G M R I V I			
UniRef90_UP10003829373	M T N P D N L A A K I A E M V R D G K I N G I A D M R D E T S G R T G Q R L V I			
UniRef90_A0A023DXN9	Q V N K A T L V E R I A E L A R D K K V E G M A E I R D E S D R T G I R I V V			
UniRef90_T0GGH8	Q V N K R T L L E R I G E L V N E K Q I E G I S E I M D L R D E S D R K G I R V E I			
UniRef90_D4JWQ7	M V N K S K L L E T T G Q L M R D K K R I E G I S D I R D E S D R Q G M R I V Y			
UniRef90_K9Q432	Q T N K A G L I E R I A D M V N D K R L D G I S D I R D E S D R Q G M R I V I			
UniRef90_I4BU81	M V N K A S L I E I A R G V Q E G Y I T G I A D L R D E S D R D G I R I V V			
UniRef90_UP100031F7ADF	E V N K A V L V K R I D E L L K L D R K V E G I A E V R D E T D R T G M R I V I			
UniRef90_I6XRS5	L V G P E R I I E Q I K K G I D S R K L V G I A G V R K D L T D A N G T R L V V			
UniRef90_A9SV22	Q A N K A A L V E K I A E L V N K T L E G V S D I R D E S D R F G M R I V I			
UniRef90_Q4UKM1	M V N K A R L V E K I A E M V K E K R I E G I S D L R D E S N K N G V R I F I			
UniRef90_UP100036280E0	Q V S K S S W I E K L A H L V N Q G K I D G I S D I R D E S D R E G L R V V			
UniRef90_K2DAM6	Q V N K A V L I A K I A D L V K E K K I E G I S D L R D E S D R R G M R I V V			
UniRef90_X0QKM8	D V N K A Q L V V K K I D E V R V L K K V W D G I S E V R D E S D R L G L S I V I			
UniRef90_U1WQI5	Q V N K A R L I E K I A E L V R E K K L E G I T D L R D E S D R R N G M R I V I			
UniRef90_UP100037C6CC2	N V G P E K V R A K V K D L V A A K K L Q G I A D L K D L T D R E H G L R L V F			
UniRef90_UP100036B3172	Q V V K S R L V T A M E N I R L E K K V E G I A E V R D E S G R E G M R I V V			
UniRef90_G2KTP9	E V N K S Q L V Q K I D D E I R I N K K V W D G I A E V R D E S S D R T G L M S I			
UniRef90_D2U4I6	Q V N K A R L I E K I A E L V K D K R V E G I S A L R D E S D K D G M R I V I			
UniRef90_UP10002E10C91	Q V N K A K L V E K I A E L A R D K K I E G I T D L R D E S S D R R N G M R I V I			
UniRef90_UP1000376EBF0	Q V G K S G L V E K I A E A A K E K R I E G I S D I R D E S S R E G V R I V I			
UniRef90_S9LI55	E V N K S V L V K R I D D V R V N N K V P G I A E V R D E S S D R R D G L R I A I			
UniRef90_K9EDZ2	E V N K A R L V Q K I D D I R I N K K V W D G I A E V R D E S S D R R S G L R I V V			
UniRef90_UP1000376665D	N V G P E R V V T K I K E L V T S K K L Q G I A D L K D L T D R E H K G L R L V I			
UniRef90_D8GPS9	R R S K A K L L Q V S E M R Y A R A L E P G I S D I R D E S S D R R S G I R A V I			
UniRef90_UP10003B31FF1	M V N K A N T I K K I A D L V N E K K I D G I T A I R D E S S N R E G T R V V			
UniRef90_UP1000360DA4A	Q V N K A L L V E K I G E L I R D K T I E G I S D L R D E S S D R R N G M R I V I			
UniRef90_R5XE38	Q V R K A A L I A S I A D L V K D K R L E G I S G I K D F T N R K G M H I E I			
UniRef90_B0R4D5	Q Q N K S T L V E R I A D D V R D G K L E G I T D L R D E S S D R R N G V R I V I			
UniRef90_UP100046A1629	E V N K S L L V K R I D E L R L L K K V E G I S E V R D E S S D R R D G L R I V I			
UniRef90_K1MKP7	G V N K A K L V K R I A E L A R E Q K I E G I T Y C N D E S S G R E G T R I V I			
UniRef90_H6Q5V6	Q V N K I R L I E K I A D L V K E K K R I E G I S A L R D E S S D R R E G M R I V V			
UniRef90_B7IDD3	N I S K A D L K K I V E Y A E K S S L P G I K D I R D E S S N R F G V R I V I			
UniRef90_M4SEK4	Q T G K S A L V E G I A E A A K E K R I E G V S E V R D E S S S R E G L V I V I			
UniRef90_G9WFX9	E V N K S A L V A K I D E I R V N K D V N G I S E V R D E S T S R E G L V I V I			
UniRef90_W2D2P1	M V N K A E L I R A I A D L V N E K R L D G V S N V N D E S S D R R S G M R I V V			
UniRef90_UP10003B6ADB3	E V N K A A L V K K I D E M H L N K D I A G I S E V R D E S S D R R D G L S I V I			
UniRef90_R7KC71	E V N K A L L V K K I D D I R L D K K L E G I V E V R D E S S A Q D I R I V I			
UniRef90_U4KRN7	E V N K A E L V R S I D L L R V D K K L E D I L E V R D E S S D R R E G L R I S I			
UniRef90_UP10003669FB2	Q V N K A K L V E K I A E L V K D K K I E G I T E L R D E S S S K E G M R V V I			
UniRef90_Q49XE9	E V N K S S L V K K M D E L R A D K K V D G I V E V R D E S T D R T G L R I A I V Y			
UniRef90_C7M9I4	Q V D T S V L L K T S D L V K E G R I E G I T D V R D E S S A R G K I R I V V			
UniRef90_M1XKV1	Q Q N K A R R I E R I A D D V G E G K I E G I R D I Q D E S S G R K E P V R I V V			
UniRef90_L0D7I2	Q L T K E P L L K K L A E L V N T D R V T G V T D I Q D E S S G R K E P V R I V V			
UniRef90_B5IAL1	U V N K S T L L K K I A S L V R E D K L R G S D L K D E S S D R R E G L R I V I			
UniRef90_D4YNL7	L V G P E R V I E K V K D Q V Q A K R L T G I A S I D D Y S S N K D G R L R I V I			
UniRef90_X5H566	Q V N K A K L V E N I A L L V K E K R I D S L K D I E G I R D E S S D R R Q G Y R V V V			
UniRef90_UP10004712E1B	Q V N K A T M I E K M A E L V R D K R I E G I S D L R D E S S D R R D G M R I V V			
UniRef90_A5GRY6	Q T N K A S L I E R I A E L V N D K K L E G I A D I R D E S S D R R D G M R I V V			
UniRef90_B3TA1	Q V K K A G M L Q G I D E I R L A K K I E G I A E V R D E S D R R T G L R M V I			
UniRef90_G4L8L2	E V N K A T L V K K I D E I R L N K K I E G I A E V R D E S D R R T G L Q I V I			
UniRef90_D0BKA5	E V N K A L L V K K I D E I R L D K K I E G I A E V R D E S D R R T G L Q I V I			
UniRef90_U7D827	M V N K T T M L E K I V E Q V R N G K I D G I S F V R D E S D R R K G M R I V I			
UniRef90_UP1000344E555	S V G P E K V V G R I K E L V Q S K Q G I S D L K D L T D R N Q G L R L R I V I			
UniRef90_W7C8J4	E V N K A E L V R S I D L R L D K K I E G I S E V R D E T D R T G L R I A I V I			
UniRef90_J5VYS4	Q V N K S E L V K A I A D L N D K K I E G I S G I A D E S T N R K G I R I V I			
UniRef90_H0QM31	M V G P E K V I I E K I K D A V N G K K L A G I S D V V D L T D R K H G L R L R I V I			
UniRef90_R6BM53	D T I K K N I E I S K I E I R L D K K I E G I F E V R D E S D R R N D E R I V I			
UniRef90_W4F2F5	E V N K A N L V K K I D E M R L D K K I E G I A E V R D E S D R R T G L R M V I			
UniRef90_UP100047AB48D	E V N K A N L V K K M D E I R A D R K V W D G I I E V R D E T D R E G L R I V I			
UniRef90_D2MM14	E V V K G N L V K K M D E I R I S R E V W D G I I D V R D E S S D R R N G L R I V I			
UniRef90_Q09DS3	Q V N K A R L I E K I A D L V R E K K L E G I S D I R D E T D R R Q G M R I F I			
UniRef90_R7MHU7	E V L K E Q L K K I E D I K S D K K I E G I V V D I V D E S S D R R T N M A R L V I			
UniRef90_R7G313	E V V K S N M V K K I D E V R L N K K I E G I L D V R D E S S D R R N G L R V V I			
UniRef90_UP10001745642	G V N R A E L C K R I G E L A S E K I P G E V T A I R D E S S D E N T R V V V I			
UniRef90_G6FUN9	Q V N K A G W I E K V A D L V N Q G R L Q G I A D R D E S D R R T G M R A V I			
UniRef90_R5FKB1	Q L K K S D L T K I K L R E A K K E S C Q Y I S D D E S D R R T G M R V V I			
UniRef90_UP100034A1D5A	Q V N K A A W I E K I A E L V N L G K I E G I A D R D E T D R R T G M R V V I			
UniRef90_X51YK2	K I N K E E L I N K T L K L V K E G K L E G I S H R R D E T D R R N G M R I V Y			
UniRef90_Q8EQK4	E V N K A T M V K M D E L R I D R K V E G I A E V R D E T D R T G L R V V I			
UniRef90_B1V9B7	Q I V K K S A L I E K I A F L V K D K V I E G I T D R D E S S R R G M K I V I			
UniRef90_K9YK80	Q V N K A G W I E K V A D L V N Q G K I N D I A D R D E S D R R T G I R V V I			
UniRef90_E6SBU9	L V G P E K V I E K I R D L V Q S K K L Q G I S D L K D L S D R R S G L R L V I			
UniRef90_R4Z679	N V G P E R V L T R A Q D L I R D G K I A G I A D R D E T D R R T G L R L V F			
UniRef90_F6FWG6	E V V K Q D L V R K I G D V W A N P G L G I R E V R V R D E T D R R T G L R L V I			
UniRef90_UP100046AA260	T V G P E K V I E K I A E G V K A K K I Q G V T N V Q D L T D R R T G L R L V I			
UniRef90_U2EFP0	Q V N K A R L I E Q I A T L V K E K Q V E G I S E L R D E T D R R Q G G L R I V Y			
UniRef90_M4ZSW1	Q V N K A D M I A R T V E L M K E G K M E G I Y Q I R D E T D R R N G L R L V F			
UniRef90_K2LUF5	Q V Q K K A L V E R I A D L M V L K K P L L A D V R D E S T D L R L V F			
UniRef90_A4BAP5	Q V S G S K I L E Q I A Q Q M Q A K K L P M V A D L R D E S D H E N P T R L V I			
UniRef90_UP10004709840	E V N K A D L V R Q I D T L R I N N N I E D I L E R D E T D R R E G L R I V V I			
UniRef90_S3XUQ5	Q I G P E K I A E K L R D A V Q A K K V Q G I S D Y Q D L S D R R K N G M R L V I			
UniRef90_U4WGS9	D V V K S K L V A Q I D E L V M E R K I E G A L A V R D E T G R K E K V R V V V I			
UniRef90_T1BYH4	E I N K S Q L L E E T A E L I K T K R I D G I S D L R D E S D K D G I S V V F			

		290	300	310	320
UniRef90_V2YII1	E	K R D A N P Q V V L	N R L F A Q T Q L	Q T T F A I N M L	A L V E V Q P R I L
UniRef90_R7HJM3	D	V K K E A N A N V V L	N N L Y K H T Q L	Q T S Y G I N F L	M L V D G S P R T L
UniRef90_U7UNP3	D	L K R D A N P K V I	L N Q L Y K N T Q M	Q I T F G I I N L	C L V D G E P K V L
UniRef90_UP10004245562	E	L K R D A V A N V V L	N Q L Y K Q T Q L	Q T S F S V N N V	A L V K G R P H T L
UniRef90_Q8XIP7	E	F K D H D M A D K V	L K Y L Y K K T D L	Q G N Q S F N M V	A L A D G K P E T M
UniRef90_G2S092	D	L K R D A N P D V V L	S K L Y K F T G L	Q S S F T I N L L	S L H N N P V L L
UniRef90_R5HSA9	E	L K R D A N P V V V L	N N L Y K H T P L	Q T T Y G I N N L	M L Y Q G K P Q I M
UniRef90_UP100032AABDF	E	L K R G S D P L I V	L N N L Y K H T P L	Q S T F S C N M V	G I L N G Q P K Q M
UniRef90_UP10003829373	V	L K R D A V A K V V L	N N L Y K H T P L	Q S N F S A N M L	A L V D G V P R T L
UniRef90_A0A023DXN9	E	L K K D A V A Q V I L	N Q L Y A L T D L	Q I S F S V N M L	A L H R G Y P V Q L L
UniRef90_T0GGH8	H	C K K D S N A Q V I L	N Q L L K L T Q L	Q I S Y G I T M L	A I L D N K P K I F
UniRef90_D4JWQ7	E	L K R D V N A Q V V L	N K L Y S F T Q L	Q D T V G V I M I	A L V N G E P K Q L L
UniRef90_K9Q432	E	L K R D A Y A Q V V L	N N L Y K H T P L	Q N N F G A N M L	A L V N G E P Q L L
UniRef90_I4BU81	E	L Q R D A D P H L V	R Q L Y S R T P L	Q T T F G V I N L	A L V N G V P R E L
UniRef90_UP100031F7ADF	E	L R K E A D S E G I L	N Y L Y K H T D L	Q I A Y H F N M V	A L K D K T P T Q L L
UniRef90_I6XRS5	E	V K N G I N P E A L	E Q L Y R V T K L	E D T F A I N A V	A L V E G Q P R T L
UniRef90_A9SV22	E	V K R G A M P K V V L	N N L Y K Y T T L	Q T R F S C N M V	G I L G G E P K V M
UniRef90_Q4UKM1	E	L K D V V V E V V V L	N Q I Y A C T Q L	Q T S F G V I M L	A L K D G L P K V M
UniRef90_UP100036280E0	E	L K R E A K P Q K V L	K Q Y R Q T P L	Q T N F G A I L L	A L V D N Q P V Q L L
UniRef90_K2DAM6	E	L R D G K P Q S I L	N N L Y K H T A M Q	Q S V F V N V N M V	A L S D G A P G L M
UniRef90_X0QKM8	E	L K Q A D A Q G I L	N Y L F N T D L	Q I T Y N F N I V	A I S D M R P K Q V
UniRef90_U1WQI5	D	R D V N P Q I V L	N N L Y K H T A M Q	Q T S F G I N M L	A L V N N E P R I L
UniRef90_UP100037C6CC2	E	I K N G F H P E A V L	E Q L Y K L T P M	E E T F G I N N V	A L V D G Q P L T L
UniRef90_UP100036B3172	E	L K D A D A N G I L	A Y L L K K T D L	Q V S Y N F N M V	A I V N K A P Q Q L
UniRef90_G2KTP9	E	L K R D A E V K G I L	N Y L F K Y T D L	Q V S Y N F N V V	A I K D M R P Q R L
UniRef90_D2U4I6	E	V K R D A V A E V V L	N N L Y S L T Q L	Q V S F G I N M V	A I Y D G Q P R L L
UniRef90_UP10002E10C91	E	L R R D A N P N V V L	N N L Y K Q T S L	Q T S F G I N M L	A I V D G Q P K V L L
UniRef90_UP1000376EBF0	D	L K R D A T P E V V L	N Q L W R H T P A	Q S S F P A N M L	A I R G G R P E I L
UniRef90_S9LI55	E	L K E A D E T I V L	N Y L F K Y T D L	Q V N Y N F N M V	A I D D Y T P K Q V
UniRef90_K9EDZ2	E	T K K D G D G E G I L	T Y L L K N T D L	Q V T Y N L N M V	A I D K K R P Q Q V
UniRef90_UP1000376665D	E	I K N G F I P E A V L	E E L Y R L T P M	E E S F G I N N V	A I V D G E P R T L
UniRef90_D8GPS9	E	F K D M K L A Q K I L	K Y L L K K T D L	Q C N S F N M V	A I G D G K P I T M
UniRef90_UP10003B31FF1	E	V R R D A N A N V I L	K K L Y K H S D M	Q T T F G I N N L	A I V N N E P K V M
UniRef90_UP1000360DA4A	E	I K D I Q G E V V V L	N Q L W R H T R L	Q T S F P V N M L	A I D N G Q P K Q M
UniRef90_R5XE38	S	V K R D A N A Q V V L	N N L Y K M T Q M Q V	T F G V I M L	A L V D G V P K I L
UniRef90_B0R4D5	D	L K Q K A N T D V V E	N R L E S H L E K T F	S V I N L	A I V D G E P K V L
UniRef90_UP100046A1629	E	L K K N S N S Q G I L	N Y L F N T D L	Q I S Y N F N M V	A I I N N K R P E H V
UniRef90_K1MKP7	E	V H R D V S A N V V L	N N L F K Y T A M Q	V T F G F N M L	A I D H G V P K I L
UniRef90_H6Q5V6	E	I K R D T V G E I V L	N N L Y S L T P L	Q V S F G I N M V	A I H H G Q P K V L M
UniRef90_B7IDD3	E	I P N D T E E I I I N	N Y L Y K H T Q L	Q S S F H S Q L L	V I D K K K P V L M
UniRef90_M4SEK4	E	L K R D A T P E V V L	N Q L W R H T S A	Q T S F P A N M L	A I R G G R P E V L
UniRef90_G9WFX9	E	L T K D A D A N G I L	N Y L F K K T D L	Q V A Y N F N M T	A I A H Q R P V S V
UniRef90_W2D2P1	D	V K R E A N A N I V L	N K L Y K M T A L	Q S S F S V N N I	A I V N G R P K L M
UniRef90_UP10003B6ADB3	E	L A K D A N A Q G I L	N Y L F K K T D L	Q V T Y S Y N M V	A I H N Q R P E R V
UniRef90_R7KC71	D	L K G V N K E F L V	N F L L K N T D M	Q I S Y N F N M V	A I V K K R P K L L
UniRef90_U4KRN7	E	L K K G A N A D M V L	N Y L F K N T D L	Q V N Y N Y N M V	A I S H Q R P V Q M
UniRef90_UP10003669FB2	E	L R R G E N A E V I M	N N L F T L P L	E T V F G I N M V	A I V N G E P K I M
UniRef90_Q49XE9	E	L K K D V N S E A V L	N Y L Y K N T D L	Q V A Y N F N M V	A I S E G R P V L M
UniRef90_C7M9I4	I	L K R D A V P N V V L	N Q L L F K H T E	Q T S F S V N N I	A L V K G R P Q L L
UniRef90_M1XKV1	E	C K R G A N A D V V R	N Q L L E H T D L	E N T F S V I S L	A L V V D D Q P R I L
UniRef90_L0D7I2	K	V K K G E D P N V V L	N Q L F Q Y S P L	Q D S F S V I M L	A L V D G R P R T L
UniRef90_B51AL1	K	V K R D M N P E I V V	N Q L L E H T D L	E V T Y G I I N L	V L V D G V P R I L
UniRef90_D4YNL7	G	I K N G F N P E A V L	E E L Y R L T P M	E D S F G I N N V	C L V E G Q P R T L
UniRef90_X5H566	E	L K R G F S C E V V L	N Q L F Q M T Q L	Q T S Y S T N M M L	A L H K M K P T L
UniRef90_UP10004712E1B	E	L K R D A N A E V I L	N Q L Y R Y T P L	Q T S F G I N M V	A I N G G K P E Q L
UniRef90_A5GRY6	E	L R R D A Y P Q V V L	N N L Y K L T P L	Q N N F S A Y T L	A L V K G E P V V L
UniRef90_B3TA1	E	I K Q N A D P H A V L	N Q L Y Q S S R L	Q E S Y S A N N M G	A I L N G E P V Q L
UniRef90_G4L8L2	E	L K K D V N A Q G V L	N Y L F K N T E L	Q V N Y S F N N M V	A I D S M R P Q Q V
UniRef90_D0BKA5	E	L K K E A N A E G I L	N Y L L K N T E L	Q I N Y N F N M V	A I D A R R P M Q V
UniRef90_U7D827	G	I K K D S F G D I V L	N K L Y K Y T Q L	Q S T F G I I N N L	A L V D G Q P Q T L
UniRef90_UP1000344E555	E	L K N G F N P E G V L	A E Y R L T P M	E E S F G I N N V	A L V D G Q P Q T L
UniRef90_W7C8J4	E	L K K E A N A E G V L	N Y L F K N T D L	Q V S Y N F N M V	A I H N K R P V L M
UniRef90_J5VYS4	D	K R D A N S G V V L	N K L Y K M S A L	Q S S F S I N N I	A L V K G R P Q L L
UniRef90_H0QM31	E	L K N G F N P N A V L	N Q L Y R Y S P M	E D S F G I N N V	A I V N K T P K T L
UniRef90_R6BM53	E	L K K D A N R D L I	I N Y L L K N T D L	Q V N Y A Y N N M V	A I V N K T P K T L
UniRef90_W4F2F5	E	L K K E V P G K P I L	Y Q Y L L K N T D L	Q I T Y N F N M V	A I Y K R R P T M M
UniRef90_UP100047AB48D	E	A R K D A N D A I I	N Y L Y K K T D L	Q V S Y N F N M V	A I S D R A P K L M
UniRef90_D2MM14	D	V R K D V D A N L I	I Q Y F F K N T D L	Q V Y Y N Y N N M V	A I M R E R P V Q V
UniRef90_Q09DS3	E	L K R D A I S G V V L	N N L F S M T P L	E T T F G A V M L	A I D G G Q P R T L
UniRef90_R7MHU7	E	K K D A D A N L I I	N Y L L K N T D L	Q I N Y N F N V V	A I D N K R P K T L
UniRef90_R7G313	D	K K D A D A Q L I I	N Y L Y K N T D L	Q V S Y N Y N V V	A I V N K R P V Q M
UniRef90_UP10001745642	D	R R E A R P Q V V L	N N L Y K Q T S L	E T T F S V H M L	A I D N R R P P R L L
UniRef90_G6FUN9	E	L K R D T N P Q D I L	Q Q L Y H T Q A L	Q T N F G A I L L	A L V D G Q P R Q L
UniRef90_R5FKB1	K	V K D D G N A E Q I L	R Y L F K Q T D L	E I N Y N F N M V	A I A G G K P C Q L
UniRef90_UP100034A1D5A	E	L K K E I N P D A V L	E R L Y Q Q T A L	Q T N F G A I M L	A L V G S Q P K Q M
UniRef90_X51YK2	N	I Q N V D K Q R L L	K N L F K E T S L	E T S F S V N V N N L	A L V N G K P T I L
UniRef90_Q8EQK4	E	L K K D A N S E G V L	N Y L Y K N T D L	Q I T Y H F N M V	A I Q D K T P K L L
UniRef90_B1V9B7	E	K K D A N S K V V I L	N Q L Y K N T D L	P R I S F G I N N V	A I V D K K P P Q L L
UniRef90_K9YK80	E	L K R D A N P Q A I L	H Q L Y R Q T A L	Q S N F G V I L L	G L V V N N K P C Q L
UniRef90_E6SBU9	E	V K N G F N P D A V L	E Q L Y R L T P M	E E N F G I N N V	A L V E G Q P R T L
UniRef90_R4Z679	E	C K A G V N P K A V L	T E L Y R Q T P L	L E E S F G I N N V	V L V N G V P T T M
UniRef90_UP100046E745	E	L S D K A N V E I V R	K F L S P L	S V S Y N Y N N V V	A I V D K Q P K Q L
UniRef90_F6FWG6	E	V K T G F D P D A V L	E Q L Y R T T P L	E D S F G I N N V	A L V D G Q P R T L
UniRef90_UP100046AA260	E	L K R E A M S E I V L	N N L Y K S T N M	E V T F G V I L L	A I E N K E P K V F
UniRef90_U2EFP0	D	Y K K D A N V E I I I	N Y L L K N T H L	Q V N Y N F N M T	A I H N K R P V V R L
UniRef90_M4ZSW1	I	L K Q N T N S N I N Q L	F Q Y T S L	Q T Y F N V N N I	A I V N G K P V Q L
UniRef90_K2LUF5	E	P R T R A E P E H L	M E M L K N T E L	E I R F G L N M V N	V L D D N T P R V M
UniRef90_A4BAP5	E	P R N R V D T D A L M N H	F A T T D L	E K T I R V N L N M	I D G K P Q V K
UniRef90_UP10004709840	D	L K K G A D S Q L M	N Y L L K T S D L	Q V S Y N Y N M V	A L L K H R P V L S
UniRef90_S3XUQ5	T	L K S G F N P E A V L	Q Q L Y H T P M	M E D S F G I N N V	A L V N G Q P R T L
UniRef90_U4WGS9	D	L K K E A D A Q A I L	H Y L Y K N T D L	Q I F Y N Y N M A I	H E G T I K Q M
UniRef90_T1BYH4	E	L K R D A S P E L V L	N Q L Y A H T R L	E T S F G V I N L	A L V D S K P K T L

UniRef90_V2YII1
 UniRef90_R7HJM3
 UniRef90_U7UNP3
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A	L	E	N	A	D	E	V	V	E	L</																													

410 420 430 440

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UniRef90_D4JWQ7	Q M R L L Q G L T G L E R D K V I S E L A A E I M E K N D F L D I L S S D E R V
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UniRef90_I6XRS5	D M Q L L R R L T K Y S I T S L E N A E A D E L A A R I D E L Q R I L D D D T V L L
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UniRef90_B3TAI1	E R R L L Y Q L T K L N V Q E V A D E L K K L K G A I K D Y Q N I L G S R I R R L
UniRef90_G4L8L2	N L Q L L Y R L T N T D I T T E L E N E A E E L A A Y I A E L Q K I I L S D S T E L M
UniRef90_D0BKA5	S L Q L L Y R L T N T D I T I L Q E E E K L D L N E R V A T L T S I I L K S E K T L L
UniRef90_U7D827	D M R L L R R L T G L Q R R L E L Q S E A D Q L K K E I E E L T T V L E S D A K L R
UniRef90_UP1000344E555	D T P L L R R L T R Y D R L E L Q S E A D Q L K K E I E E L T T V L E S D A K L R
UniRef90_W7C8J4	S L Q L L Y R L T N T D I T D L R N E A K E L Q E K I T R L T E K I I L G D P R E L I
UniRef90_J5VYS4	D M R L L R A L T G L E R E K L K E E Y A A L M Q E I E R L L K A I I L A D K E L R
UniRef90_H0QM31	E L R L L R Q L T K Y S R I E L E K E Q D E L R K E I A E L L E A I I L E S D Q L L R
UniRef90_R6BM53	M M Q L L Y K L T N T D V T E L K N E F E E L T K E I A Y F R E I I L S S E E K L L
UniRef90_W4F2F5	S L Q L L Y R L T N T D I T E L R E E E E E L K A K I A E L Q S I I L E S S E A K L I
UniRef90_UP100047AB48D	M L Q L L Y R L T N T D V V E L E T E Q N E L E F Q I N Q L N E I I L N D P K K L K
UniRef90_D2MM14	T L R L L Y R L S N T D I V S L R N E F A Q L V N Q I E E T K S I I L E N E S V L R
UniRef90_Q09DS3	
UniRef90_R7MHU7	M M Q L L Y K L T N T D V T D L Q N E H A N L L E L I K Y L T S V I I N D E S V L K
UniRef90_R7G313	T M R L L Y R L S S T D I T L L Q E E E S E Q L Q K E I A H L H C I I L D D P K V L R
UniRef90_UP10001745642	D L R L L Y Q L T A L E R T K L Q A D Y E E A L L L N T I T D L L M D I I L A K E S R V L
UniRef90_G6FUN9	A M P L L R R L T S L E E Q Q N L Q K E Y Y E Q L Q Q E E I T T L R K L L G D R R E L L
UniRef90_R5FKB1	E M K L L R R I T G L D V K S L E D E L V E Q K K R I E D L L T A L L Q S R R R Q N
UniRef90_UP100034A1D5A	S M P L L R R I T G M E Q Q N L R D E M A E L Q A Q I A Q L E E L L G D R R E L F
UniRef90_X51YK2	E L K L L N S L T K L E N K K I K E E Y I H I L R K K I S F F K K I I S N K L L Q K
UniRef90_Q8EQK4	M L Q L L Y R L T N T D I V E L E K E A A E L K E K I K E Y E S I I L S S D K K L F
UniRef90_B1V9B7	E M S L L Q R L T S N Q E T Q K L I F I E E Q Y Q D L Q S R I I N Q L Q E I I E S Q P K K E
UniRef90_K9YK80	A M P L L R R L T G L E R Q K I F I E E Q Y Q D L Q S R I I N Q L Q E I I E S Q P K K E
UniRef90_E6SBU9	D L Q L L R R L T R F S R I E L E S E K S E L L E R Q I E E L R A I I L E S D R L L L
UniRef90_R4Z679	E M P L L R R L T A L A R V E L E E T E I A E L L R E A I A D F E V I I L C N P V A M D
UniRef90_F6FWG6	D M R L L Y R L T S T D V V V L Q E E E Q K T T K T T E H L Q E I I L C N P V A M D
UniRef90_UP100046AA260	D M K L L N R R L T G L E R E K I F I E E N E L K A L H E E I E R L L S E A I I L K S E T T L S
UniRef90_U2EFP0	T L Q L L Y R L S N T D V V A L L E E E A R K L T V Y V I V T E L E S E I I L S K E D K L I
UniRef90_M4ZWS1	D M K L L Q S L T S L E V V K K L R K E E Y A R K L D V Q K I E F F R N V I L K E H S I R T
UniRef90_K2LUF5	N M R L L R S L R K L E E M E I K N K E H A K L T E E K E G L L E R A I I L A S E S L R W
UniRef90_A4BAP5	E I K L L R Q L A K L E E I K I R G E Q D E L S K E R D Q L E E K I I L G S K A R M R
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UniRef90_S3XUQ5	E L R L L R R L T K F S R L E L E S E R D E L E R E I A E L L E R I I L S S E E A A L H
UniRef90_U4WGS9	S L Q L L A S L T R I D I V K L E L E Q V Q L A K E I A E E L K A I I L G S E E K K L I
UniRef90_T1BYH4	E M R L L S R L T G L E R D A L V T E A K E K E T E I R R L Q G I I L G D P R V L E

UniRef90_V2YII1	G V L K D E L T A I I R D K Y G D D R V T E L	450	460
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UniRef90_X8XIP7	G V I K D E L K E V A E V Y G D E R R T A L I		
UniRef90_G2S092	H V L K E Q L D E I V A R V Y G D Q R R T S I I		
UniRef90_R5HSA9	G V I K T E L L E I K E K Y A E P R K T I I		
UniRef90_UP100032AADBF	E L I E Q E A I D L K N K F A S P R R S		
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UniRef90_T0GGH8	D I V C T E L L Q E V S D K F G N K R K T E I		
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UniRef90_UP100036280E0	K S L K K D L R A L K R K F G D K R L T R V I		
UniRef90_K2DAM6	K V I K E E I L K V K D K Y A D D R R T R V		
UniRef90_X0QKM8	K L I I K K E A L G V K K Q Y V S P R K T Q I T		
UniRef90_U1WQI5	A I I I N E E L T E I V K G K Y G D E R R T T I T		
UniRef90_UP100037C6CC2	K V V S N E L L A A V V A K K Y G T E R R T V L L		
UniRef90_UP100036B3172	N V I R K E L L T E I I R D K Y G I D R R S E L L Q S		
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UniRef90_D2U416			
UniRef90_UP10002E10C91			
UniRef90_UP1000376EBF0	E V L V E E L D K V S S D F A T P R R S Q L V		
UniRef90_S9L155	N V M K R E L L R E V V K K K F A N T R R S E L L		
UniRef90_K9EDZ2	A L M K E E L K E V K Q A Y G E D R L T Q V		
UniRef90_UP1000376665D	Q V V S G E L A D V A K K Y G T P R R T V L L		
UniRef90_D8GPS9	K V I K K E L I L E V V G E K Y G D D R R T T I V		
UniRef90_UP10003B31FF1	G V I K T E I I S E I A D K Y G D D R R T T T		
UniRef90_UP1000360DA4A	N L I Q N E L D E V L K K I D D I R R T E I T		
UniRef90_R5XE38	D I I I K S E S Q E I V N K F D D D R R T E I T		
UniRef90_B0R4D5	D V I K R E L L R E I I K T Q Y A D D R R T S F I		
UniRef90_UP100046A1629	S V I K R E L K S I I K N Y G N E R L T E I		
UniRef90_K1MKP7			
UniRef90_H6Q5V6	D E I R R E E L V L L K E E Y K D P R R T K I I		
UniRef90_B7IDD3	E K I I E E L L E A I K S E Y G D S R K S I I L		
UniRef90_M4SEK4	E V M E E E L L D L I A A E F A T P R K T T I		
UniRef90_G9WFX9	K V L I K K E L L Q E I I D K S Y S N P R K S E V Q A		
UniRef90_W2D2P1	Q V I R D E F Q E I I I D K Y G D E R K T D I V		
UniRef90_UP10003B6ADB3	K V L R G E L K K A I K K T Y A T P R R S Q I		
UniRef90_R7KC71	K V M K E E L V K V K S E Y N K E R I T E V		
UniRef90_U4KRN7	S V I I K K E L L R E V V S N K I G T D R K T L I		
UniRef90_UP10003669FB2	E V I I T E E L L E A V V R D E F G D D R M T E I T S		
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UniRef90_C7M914	E I I I K E E L L L E I I K E K Y G D E R R S T		
UniRef90_M1XKV1	D V I I K D E L L E A V V K A S Y D D E R R T G V		
UniRef90_L0D7I2	D L I I R A D M R E L L K S K Y A N P R R S V I		
UniRef90_B5IAL1	G V I I K E E L L F E I I K N L Y G D K R R T D I		
UniRef90_D4YNL7	A L V V S D E L L Q E T S D R I D S P R R T V L V		
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UniRef90_B3TA11	N I I I I S E L L D E V V D R H G D E R R S R L I		
UniRef90_G4L8L2	K V I I K K E L L R E V V K		
UniRef90_D0BKA5	Q V M K Q E E L L R E L K K K Y A T P R L T E I Q A		
UniRef90_U7D827	A I I I S D D L L D T L L A K E Y R G A R K T S I V		
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UniRef90_W7C8J4	A V L V K Q E L L T E I I K K S Y K T P R L T E I Q A		
UniRef90_J5VYS4	Q L I I R E E E L L E I I K E K Y G D E R R S E I I		
UniRef90_H0QM31	E L V V S G E L L G E I I A E K Y G T P R R T V L L		
UniRef90_R6BM53	S V I I K D K L L R S I I K E K Y A D P R R T T I		
UniRef90_W4F2F5	S V I I R K E L L Q D V V R K R F A E P R R S		
UniRef90_UP100047AB48D	S V I I K S E L L R Q I I K K K Y T S E R L T V I		
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UniRef90_Q09DS3			
UniRef90_R7MHU7	G V M K D E L L R S I I K K E F A T P R R T I I		
UniRef90_R7G313	K V M I Q E E L L K A V V N T A F P T P R L T K		
UniRef90_UP10001745642	T I I I K D E L L G N I I R A K Y G T E R L T K I E A		
UniRef90_G6FUN9	K S L K K D L L R T I I K R K Y G D E R R T K I V		
UniRef90_R5FKB1	S L M Q K E E L L L E I I K T Y K S P R L T D I K A		
UniRef90_UP100034A1D5A	K A M K K D L L R Y I I K K K H G D A R R T R R I		
UniRef90_X51YK2	K I I I K K E L L N I V I K K K Y G D I R R T E I		
UniRef90_Q8EKQ4	Q T I I K K E L L R Q I I K K K F A D P R R T V I		
UniRef90_B1V9B7	K I I I K E K E L L L E I I K K K Y Q D E R R T V I		
UniRef90_K9YK80	K A L K K E L L R S F K R K F G D N R R T K I I		
UniRef90_E6SBU9	K L V V S T E L L A E V V A K K H G T P R R T V L L		
UniRef90_R4Z679	T L V V L K E L L R E M V D A Y G R D R R T R T I V S		
UniRef90_UP1000465E745	U N I I K E E E L L E E I V K A K F K S P R I T V L L		
UniRef90_F6FWG6	G V V V S A E M G E V V A K K Y G T P R R S E I T		
UniRef90_UP100046AA260	N I I I K E E E L L E E I V K A K F K S P R I T V L L		
UniRef90_U2EPF0	T V I I T N E E L L N D V V K K N Y K S Q R R T		
UniRef90_M4ZSW1	U N I I K E E E L L E E I V K A K F K S P R I T V L L		
UniRef90_K2LUF5	K I I I K E E L L L E I I K K K Y K D K R R T Q I		
UniRef90_A4BAP5	E K I I R D E V E E M R E E K K F G K K R R T E I		
UniRef90_UP10004709840	T L I I K K E E I L A D A E T Y G D D R R T L L V S		
UniRef90_S3XUQ5	K T I I K T E E L L L E V V Q K Q L Q S P R K T E L E A		
UniRef90_U4WGS9	R V V V S A E L L Q A V V E E H G T P R R T I L L		
UniRef90_T1BYH4	S V V V S A E L L Q A V V E E H G T P R R T I L L		

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UniRef90_K0D9N7	R A R A L P D I R D G L K P V Q R R I L F A M D Q D G N T Y D H P Y R K S A K S				
UniRef90_U1QRD8	A R A L P D A R D G M K P V Q R R I I Y Q M G Q M G L T P E K P Y M K S A R V				
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UniRef90_I316G9	L D R A L P H I G D G L K P V Q R R I V Y A M S E L G L I R Y D K P Y R K S A R I				
UniRef90_G2SXD1	I S R A L P D I R D G L K P V Q R R I T Y D M Y E L G I R Y D K P Y R K S A R I				
UniRef90_UPI00037C0717	D R A L P D A R D G L K P V Q R R I L Y A M H M E G N T A E E K N F R K S A K T				
UniRef90_R6XRM3	D R A L P D V R D G L K P V Q R R I L Y S M F K L G L A S N K P T K K S A R T				
UniRef90_B9QV00	M H R A L P D V R D G L K P V H R R I L Y A M R L L K L D P G Q G F K K C A R V				
UniRef90_R6G0F1	M H R A L P D V R D G L K P V H R R I L Y G S Y L L K A F P D R P Y Y K S A R I				
UniRef90_B4W7D2	T N R A L P D V R D G F K P V H R R I L Y A M H Q M R L N P Q A A A R K C A K V				
UniRef90_W9HDT2	M S R S L P D V R D G L K P V H R R I L F A M S Q L K L D P S T P P K K C A R V				
UniRef90_I7ZCM7	L D R A L P H I A D G L K P V Q R R I I Y S M S E L G I N A T A K H R K S A L T				
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UniRef90_UPI000479DFCE	D R A L P D A R D G L K P V Q R R I L Y A M N E L G M N Y N K P Y K K S A R I				
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UniRef90_X5LB10					
UniRef90_R5QWA6					
UniRef90_Q0FAB4	R A L P D V R D G L K P V Q R R I L Y S M N K E G N T A S K P Y R K S A K T				
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UniRef90_V2USW1	M D R A L P H I S D G L K P V Q R R I V Y A M S E L G L D A D A K H K K S A R T				
UniRef90_K2HAW8	M D R A L P D V R D G L K P V Q R R I L Y A M Q Q E K N T A D K P Y R K S A K T				
UniRef90_B8HNL0	V G R A L P D V R D G L K P V H R R I L Y A M H E L G L T P D R P Y R K C A R V				
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UniRef90_A7HX51	M H R A L P D V R D G L K P V H R R I V L F A M R Q L K L D P G S G F K K S A R V				
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UniRef90_I0IBH7	V D R A L P D V R D G L K P S Q R R I V S L N D L R L P S S K H R K C A K I				
UniRef90_H5SDW4	V G R A I P D A R D G L K P V Q R R I L Y A M Y Q M G L S P E K P F V K S A R I				
UniRef90_Q07XV3	M D R A L P H I G D G L K P V Q R R I I Y A M S E L G L S A Q S K H K K S A R T				
UniRef90_R4YWH2	V S R A L P D V R D G L K P V H R R I I W A M H E A G L R P D R Q H R K C A T V				
UniRef90_C6XIU3	T S R A L P D V R D G L K P V H R R I I M A M R L L K L N P E L A F K K S A R V				
UniRef90_E3I6K3	M H R A L P D V R D G L K P V H R R I L F A M R Q L K L D P A G G F K K C A R V				
UniRef90_UPI0003652A42	M D R A L P H I S D G L K P V Q R R I I Y A M S E L G L S A L A K Y K K S A R T				
UniRef90_Q83G39	S R A L P D A R D G L K P V Q R R I I Y T M S R M G L S P D K A H V K C A R V				
UniRef90_C4KAV4	S R A L P Q V E D G L K P V Q R R I I F A M N E M R L S S T S K H V K S A R V				
UniRef90_Q3ANP5	V G R A L P D A R D G L K P V Q R R I I Y A M Q E L G L T P D R P Y R K C A R V				
UniRef90_UPI00047CE01C	D R A L P H I G D G L K P V Q R R I I Y A M S E L A L R S T A K H K K S A R T				
UniRef90_B9JCW3	M H R A L P D V R D G L K P V H R R I I Y A M S E L M G L R P N A A F R K C A K I				
UniRef90_A3Y7F8	L D R A L P H I G D G L K P V Q R R I I Y A M S E L G L K A T A K Y K K S A R T				
UniRef90_J3UZG1	I G R A I P D I R D G L K P V H R R I V V F A M H E L K N T C N K K H L K S A R V				
UniRef90_G9ELC9	L D R A L P H I A D G L K P V Q R R I I Y A M S E L G L K A T A K H K K S A R T				
UniRef90_UPI0003B5D948	V S R S L P D V R D G L K P V H R R I I Y A M R T L R L T F N K K T V K C A K T				
UniRef90_K9H320	V S R S L P D V R D G L K P V H R R I I Y A M R T L R L S P T G Q G F K K C A R V				
UniRef90_R5ZS38	T D R A I P D V R D G L K P V H R R I I F D M W K S G I T F N K K T V K C A K T				
UniRef90_K5YPU3	M S R S L P D V R D G L K P V H R R I I Y G M H Q L K L D P R S G F K K C A R V				
UniRef90_G6EZ40	M S R S L P D V R D G L K P V H R R I I V F A M R Q L K L D P K S G F K K C A R I				
UniRef90_A5Z3F7	A R A L P D A R D G L K P V Q R R I I Y A M D Q L K L G L N Y D K P H R K S A R I				
UniRef90_R4U177	D R A L P D V R D G L K P V Q R R I I L F A M N E L G L T F N S S Y K K S A R I				
UniRef90_R6C216	I A R A L P D V R D G L K P V Q R R I I Y D M H E L G L R Y D R P Y R K S A R I				
UniRef90_F3L3G5	L D R A L P N V G D G L K P V Q R R I I I Y A M S E L G L K A S A K Y K K S A R T				
UniRef90_UPI00047EA266	T Q R A L P D V R D G L K P V H R R I I L Y A M R Q L K L N P E T A H K K S A R I				
UniRef90_F7YV04	I G R A I P D V R D G L K P V Q R R I I L Y A M Y E L G L T H N A Q T K K S A R I				
UniRef90_UPI000471FE19	G R A L P D V G D G Q K P V Q R R I I L Y A M Q A M G L A S G A K P V K S A R V				
UniRef90_L0EXJ1	M H R A L P D V R D G L K P V H R R I I V H A M N E M G L L N F N S S F K K S A R I				
UniRef90_A1ST91	M D R A L P H I S D G L K P V Q R R I I I Y A M S E L G L S A L S K H K K S A R T				
UniRef90_R7H146	D R A L P D V R D G L K P V Q R R I I L Y S M Y K E R N T Y D K P T K K S A N A				
UniRef90_T0GB41	T A R S L P D L R D G L K P V H R R I I L W A M R L L K M R N T T G Y K K C A R V				
UniRef90_UPI0002F3AA35	M H R A L P D A R D G L K P V H R R I I L Y G M R L R L D P G A A F K K S A R V				
UniRef90_UPI0004651DF4	I S R A L P D V R D G L K P V Q R R I I L Y D M Y E L G L R Y D R P Y R K C A R I				
UniRef90_UPI0003F5AE03	M H R A L P D A R D G L K P V H R R I I L Y G M R L L R L D P S S A F K K S A K I				
UniRef90_E1ZRV4	V G R A L P D V R D G L K P V H R R I I L Y A M H E L G L Q H N K P F R K C A R V				
UniRef90_S9QT77	M N R A L P D A R D G L K P V H R R I I L Y A M R R L R L S S A G G F L K S A K I I				
UniRef90_B0NAD1	V A R A L P D V R D G L K P V Q R R I I L Y D M Y E L G L R Y D R P Y R K C A R I				
UniRef90_U3TZ25	M D R A L P Y I G D G L K P V Q R R I I V Y A M S E L G L N A S A K Y K K S A R T				
UniRef90_R5DP74	T A R A L P D V R D G L K P V Q R R I I L Y A M D Q L G L N Y D K P H R K S A R I				

		50	60	70	80
UniRef90_H8N0U2	V G A I M G R Y H P H G D T A I	Y D A L V R M A Q D F S L R Y P L V	D G H G N F		
UniRef90_F9EHB4	V G D V M G R L H P H G D V A I	Y E A L V R L A Q P F T M R L P L V	D G H G N F		
UniRef90UPI0003686E19	V G E V M G K L H P H G D S A I	Y D A M V R L A Q S F A M R L P L V	D G H G N F		
UniRef90_C5B4N9	V G D V M G Q Y H P H G D T A I	Y D A M V R M G Q H W S L R Y P L I	D P Q G N F		
UniRef90_R6WUP0	V G E C L G K F H P H G D T S V	Y D A M V R M A Q P F N M R E V L I	D G H G N F		
UniRef90_K0D9N7	V G N V M G N F H P H G D S S I	Y E A M V R L S Q D W K V R E P L V	D M N G N F		
UniRef90_U1QRD8	V G E V M G K L H P H G D S A I	Y E A M V R L A Q P F A M R L P L V	D G H G N F		
UniRef90UPI00037BE4C8	V G D V I G K F H P H G D S A A Y E A M V L M A Q P F S Y R Y P L I	D G Q G N F			
UniRef90_V8C8F7	V G D V I G K Y H P H G D T A V	Y D A L V R L A Q D F S M R L E L V	D G Q G N F		
UniRef90_U2XJT8	V G E V M G K L H P H G D S A I	Y D A L V R L V Q D F S T R Y P L V	D G H G N F		
UniRef90_B1XQN0	V G D V L G K Y H P H G D Q S V	Y D A L V R L V Q D F S T R Y P L V	D G H G N F		
UniRef90_I3I6G9	V G D V I G K F H P H G D S A S Y E A M V L M A Q P F S Y R Y P L I	D G Q G N F			
UniRef90_G2SXDI	V G D T M G K Y H P H G D S S I	Y G A L V V L A Q D F K M G Q T L V	D G H G N F		
UniRef90UPI00037C0717	V G N V I G N Y H P H G D S S V	Y E A M V R M S Q D W K L R S V L I	E M H G N F		
UniRef90_R6XRM3	V G D V I G K Y H P H G D T A V	Y D A M V R M S Q Q F K V M L P V	D M Q G N F		
UniRef90_B9QV00	V G D V I G K Y H P H G D Q S V	Y D A L V R L A Q D F A Q R Y P L I	D D G Q G N F		
UniRef90_R6G0F1	V G D V L G K F H P H G D S S V	Y E A M V I M A Q D F S T R E P L F	D G H G N F		
UniRef90_B4W7D2	V G E V M G G Y H P H G D A S I V	Y E A L V R L A Q D F A Q R Y P L V	D G G Q G N F		
UniRef90_W9HDT2	V G D V I G K F H P H G D T A V	Y D A L V R L A Q D F A V R Y P L I	D G Q G N F		
UniRef90_I7ZCM7	V G D V I G K Y H P H G D S A C	Y E A M V T M A Q P F N Y R Y P L V	D G Q G N F		
UniRef90_K8GPT7	V G D V L G K Y H P H G D Q A V	Y D A L V R M V Q D F S S R Y P L I	A G H G N F		
UniRef90_A0A033V433	V G N V I G N Y H P H G D S S V	Y D A M V R M S Q D W K L R H V I	E M H G N F		
UniRef90_K1X190	V G D V L G K Y H P H G D S S V	Y E A M V R M A Q D F S M R Y T L V	D G Q G N F		
UniRef90_K9YVW8	V G D V L G K Y H P H G D Q A V	Y D A L V R M V Q E F S T R Y P L L	A G H G N F		
UniRef90UPI000479DFCE	A G E V M G K Y H P H G D S S I	Y D A M V R M S Q D F K M L L P I	D M H G N F		
UniRef90UPI0002EAB6C6	V G R T M E R Y H P H G D M S I V	Y D T L V R L A Q D F W V L R Y K L V	H G Q G N F		
UniRef90_J6J583	V G D V I G K Y H P H G D Q S V	Y D A M V R L A Q D F A Q R Y P L V	D G Q G N F		
UniRef90_D5V0S3	V G D V I G K Y H P H G D T S V	Y D A L V R M A Q S F S S M R E P L I	D D G Q G N F		
UniRef90_E8RSX2	V G E V M G N F H P H G D Q S I I	Y D A L V R M A Q W F A Q R Y P M V	D D G Q G N F		
UniRef90_R5SNV7	V G D T M G K Y H P H G D S S I I	Y D A L V H M T E E Y S L S P L V	D D G H G N F		
UniRef90UPI00037ECA09	V G D V I G K F H P H G D Q S I V	Y D A L V R L A Q E F F S L R Y P L I	D D G Q G N F		
UniRef90_K9XQ85	V G D V L G K Y H P H G D Q A V	Y D A L V R M A Q D F S T R Y P L L	D G H G N F		
UniRef90_V4RAP1	V G D V M G K F H P H G D Q A I	Y D A M V R L A Q D F S V R Y P L V	D G Q G N F		
UniRef90UPI000361B5C5	V G D V I G K Y H P H G D V A V	Y D T L V R M A Q G F S S M R Y P L I	E G G Q G N F		
UniRef90_A0A011VN80	V G E V M G K F H P H G D Q S I	Y D A L V R L A Q G F S M R Y P L V	D D G Q G N F		
UniRef90_Q0C3T5	V G D V M G N Y H P H G D S S I	Y D T L V R L A Q D F D N V R Y P L V	D D G Q G N F		
UniRef90UPI000255A8E4	V G D V L G K F H P H G D S A C	Y E A M V L M A Q S F S Y R Y P L I	D G Q G N F		
UniRef90_Q47WK0	V G D V L G K F H P H G D S A C	Y E A M V L M A Q P F S Y R Y P L V	D G Q G N F		
UniRef90_X5LB10					
UniRef90_R5QWA6	V G N V I G N Y H P H G D T S V	V Y D A M V R L S Q E W K I R A P L I	D M Q G N F		
UniRef90_Q0FAB4	S G D T M G D F H P H G D A A I	V Y D A M A R L A Q D F S V R Y P M V	D G Q G N F		
UniRef90_I7C1Y2	V G D V L G K F H P H G D S A C	V Y E A M V L M A Q P F S Y R Y T L V	D G Q G N F		
UniRef90_V2USW1	V G D V L G K Y H P H G D S A C	V Y E A M V L M A Q P F S Y R Y R F I	E E G Q G N F		
UniRef90_K2HAW8	V G T V I G N Y H P H G D S S V	V Y E A M V R L S Q T W K V R Y P L V	E M H G N F		
UniRef90_B8HNL0	V G D V L G K Y H P H G D Q S V	V Y D A L V R M V Q T F S S R Y P L L	D D G Q G N F		
UniRef90_W9VIR1	V G D V L G K F H P H G D S A C	V Y E A M V L M A Q F S Y R Y P L V	D D G Q G N F		
UniRef90_A7HX51	V G D V I G R Y H P H G D Q S I V	V Y D A L V R L A Q S F S V R Y P L V	D D G Q G N F		
UniRef90_C0D091	V G D T M G K Y H P H G D S S I V	V Y E T L V V L S Q E F K K G M T L V	D D G H G N F		
UniRef90_R6R0N2	V G D T M G K Y H P H G D S S I V	V Y D A L V V M A Q E F K K G Q P L V	D D G H G N F		
UniRef90UPI0003674B6C	V G D V I G K Y H P H G D Q S V	V Y D A M V R L A Q D F A V R F P L V	D D G Q G N F		
UniRef90_G4R626	V G D V I G K F H P H G D Q S V	V Y D A L V R M A Q D F A V R Y P P L V	D D G Q G N F		
UniRef90_M1YMM4	I G E V L G K F H P H G D T S T	V Y D A M V R M A Q D F A M R Y P P L V	D D G K G N F		
UniRef90_G9ZY17	V G D V M G K Y H P H G D A S I	V Y E A M V R L A Q E F A R Y T L V	V E G Q G N F		
UniRef90_I0IBH7	V G D T T G N Y H P H G E L S V	V Y G A L V N M G Q D W K Y R H T L V	D P Q G N F		
UniRef90_H5SDW4	V G T V L G Y Y H P H G D Q A V	V Y D A L V R M A Q D F N M R Y P L I	I G Q G N F		
UniRef90_Q07XV3	V G D V L G K Y H P H G D S A C	V Y E A M V L M A Q P F S Y R Y P L V	D D G Q G N F		
UniRef90_R4YWH2	V G D V I G K Y H P H G D S S V	V Y D A L V R M Q Q D F S L S H V L	D D G K G N F		
UniRef90_C6XIU3	V G D V I G K Y H P H G D A S I	V Y D A L V R L A Q D F N V R Y P L V	D D G Q G N F		
UniRef90_E3I6K3	V G D V I G K Y H P H G D Q S V	V Y D A L V R L A Q S F S S Q R Y P L V	D D G Q G N F		
UniRef90UPI0003652A42	V G D V L G K F H P H G D S A C	V Y E A M V L M A Q P F S Y R Y P L I	D D G Q G N F		
UniRef90_Q83G39	T G E V M G K L H P H G D A I	V Y D T L V R M S Q D F T M R P L V	D D G Q G N F		
UniRef90_C4KAV4	V G D V I G K Y H P H G D S S V	V Y D A M V R V A Q D F S L R Y P P L V	D D G Q G N F		
UniRef90_Q3ANP5	V G D V L G K Y H P H G D Q A V	V Y D A L V R L V Q T F S S R H P P L V	D D G H G N F		
UniRef90UPI00047CE01C	V G D V L G K Y H P H G D S A C	V Y E A M V L M A Q P F S Y R Y P L V	D D G Q G N F		
UniRef90_B9JCW3	V G E V M G N Y H P H G D Q S I	V Y D A L A R L A Q D F S Q R Y T L V	N Q G G N F		
UniRef90_A3Y7F8	V G D V L G K F H P H G D S A C	V Y D A M V L M A Q P F S Y R Y P L V	D D G Q G N F		
UniRef90_J3UZG1	V G D V I G K Y H P H G D S A V	V Y D A L V R M S Q A F S M R Y V L I	D D G Q G N F		
UniRef90_G9ELC9	V G D V L G K F H P H G D S A C	V Y E A M V L M A Q P F S Y R Y P F V	D D G Q G N F		
UniRef90UPI00035B9D948	T G D V M G N Y H P H G D A A I	V Y D A M A R L A Q D F A M R Y P P L V	D D G Q G N F		
UniRef90_K9H320	V G D V I G K Y H P H G D T A V	V Y D A M V R L A Q E F A V R Y P P L V	V E G Q G N F		
UniRef90_R5ZS38	V G D V L G H Y H P H G D S S V	V Y D A M V R L S Q S W K M R V P L L	F Q G N F		
UniRef90_K5YPU3	V G D V M G K F H P H G D S S I V	V Y E A L V R L A Q D F S S R F P L I	E E G Q G N F		
UniRef90_G6EZ40	V G D V I G K Y H P H G D A S V	V Y E A L V R L A Q D F A V R Y P L V	E E G Q G N F		
UniRef90_A5Z3F7	V G D T M G K Y H P H G D S S V	V Y E T L V V L V A Q D F D K K G M A L V	D D G H G N F		
UniRef90_R4U177	V G E V I G K Y H P H G D T S V	V Y D A M V R L S Q D W K V R Y P L I	D D M H G N F		
UniRef90_R6C216	V G D T M G K Y H P H G D S S I V	V Y D A L V V M A Q D F K K G M P P L I	D D G H G N F		
UniRef90_F3L3G5	V G D V I G K F H P H G D S A A Y E A M V L M A Q P F S Y R Y P L V	D D G Q G N F			
UniRef90UPI00047EA266	V G D V M G Q Y H P H G D A S I	V Y D A L V K L S Q S F S S R Y P L V	D D G Q G N F		
UniRef90_F7YV04	V G E V I G K Y H P H G D A A V	V Y D A L V R M A Q P F V M R Y P L V	I G Q G N F		
UniRef90UPI00047FE19	V G D V L G K Y H P H G D Q A A Y D A M V R M A Q D F S L R Y P L I	D G H G N F			
UniRef90_L0EXJ1	V G D V I G K F H P H G D Q S I	V Y D A L V R L A Q D F S Q R Y P L I	D D G Q G N F		
UniRef90_A1ST91	V G D V L G K Y H P H G D S A C	V Y E A M V L M A Q P F S Y R Y P L I	D D G Q G N F		
UniRef90_R7H146	V G L V M A N Y H P H G D S I	V Y E A L V R M S Q W W K N E A P L I	E E M Q G N F		
UniRef90_T0GB41	V G D V I G K Y H P H G D A S V	V Y D A M V R L A Q D F D S L R T P P L V	D D G Q G N F		
UniRef90UPI0002F3AA35	V G D V M G Q F H P H G D Q A I	V Y D A L V R L A Q D F A Q R Y P P L V	E E G Q G N F		
UniRef90UPI0004651DF4	V G D T M G K Y H P H G D S S I	V Y E A L V V M A Q D F K K G M V M V	D D G H G N F		
UniRef90UPI0003F5AE03	V G D V M G S F H P H G D Q A I	V Y D A M V R L A Q D F S S R Y P L V	D D G Q G N F		
UniRef90_E1ZRV4	V G E V L G K F H P H G D T A V	V Y D A L V R L A Q D F S M R V Q L V	D D G H G N F		
UniRef90_S9QT77	S G D T M G D F H P H G D A A I	V Y D A M A R L A Q D F T R Y P P L V	D D G Q G N F		
UniRef90_B0NAD1	V G D T M G K Y H P H G D S S I	V Y E S L V V M A Q E F K K G M I L V	D D G H G N F		
UniRef90_U3T225	V G D V L G K Y H P H G D S A C	V Y E A M V L M A Q P F S Y R Y P L V	D D G Q G N F		
UniRef90_R5DP74	V G D A M G K Y H P H G D S S I	V Y E T L V V M S Q D F K K G M A L V D	D D G H G N F		

	90	100	110	120
UniRef90_H8N0U2	G S L D G D S A A A Y R Y T E	C R E K L A T E L L G E	D S K T V R F R P N Y	
UniRef90_F9EHB4	G S L D D G P A A A R Y T E A R L L A A S A L A L T T A D I	D E D T V D F S A N Y		
UniRef90_UPI0003686E19	G S L D D G P A A S R Y T E A R M P A A L A L T T A D I	D E D D V V D F V P N Y		
UniRef90_C5B4N9	G S I D N D P P A A A M R Y T E S R L E R L A G H L V A D	G E G V V D F R P N Y		
UniRef90_R6WUP0	G S I D G D G A A A M R Y T E A R L N P L A M E L K D	E K D T V P W Q W N F		
UniRef90_K0D9N7	G S I D N D P P A A A M R Y T E A R L S K L A G E M M A D	G Q E T V D M V L N F		
UniRef90_U1QRD8	G S I D D G P A A S R Y T E S K L H G F A D V L L S E	G E E T V D F T P N Y		
UniRef90_UPI00037BE4C8	G S Q D D P K F A A A M R Y T E S K L H G F A D V L L S E	A Q G T V D W Q P N F		
UniRef90_V8C8F7	G S I D G D S A A A M R Y T E A R M T Q A S E E M R D	D K D T V D F V P N Y		
UniRef90_U2XJ78	G S I D D G P A A A R Y T E A R L A P S A L A L T E N L	D E D V V D F T P N Y		
UniRef90_B1XQN0	G S I D N D P P A A A M R Y T E T R L S P V S F E M L	F T D N F		
UniRef90_I316G9	G S P D D P K F A A A M R Y T E S R L T K Y S E V L L	D G Q G T V D W Q P N F		
UniRef90_G2SXD1	G S I E G D G A A A M R Y T E A R L Q K L T Q E F L	A D L D K D V V D F V P N F		
UniRef90_UPI00037C0717	G S I D G D P A A A M R Y T E A R L S P I A A E L L H	H D D K E T V H F I P N F		
UniRef90_R6XRM3	G S I D G D P A A A M R Y T E A R M S K Y S E L L M	N K H T V G F V P N F		
UniRef90_B9QV00	G N V D G D N A A A M R Y T E A R M T D T A K R L	D E D A V D W R E T Y		
UniRef90_R6G0F1	G S M D G D S A A A M R Y T E A R L L S S I A M E M	D K D T V D M V P N Y		
UniRef90_B4W7D2	G N I D G D S A A A M R Y T E C K L T P A A V L L	D Q D S V D F R A T Y		
UniRef90_W9HDT2	G N I D G D N A A A M R Y T E A R L T D V A K A L L	D E D T V D F R G T Y		
UniRef90_I7ZCM7	G S A D D P K F A A Y R Y T E S R L T P Y A N A L L	D M G T V D W T P N F		
UniRef90_K8GPT7	G S V D D D P P A A A M R Y T E T R L A P I S N E A L	S E L D M G T V D F V G N F		
UniRef90_A0A033V433	G S I D N D P P A A A M R Y T E A K L S K L A E V L L	D K E T V E H V Q N F		
UniRef90_K1X190	G S M D G D N A A A M R Y T E T V K M A K L G E L M	D K G T V D W R D N Y		
UniRef90_K9YVW8	G S L D D N D P P A A A M R Y T E T R L A S I A Q E S L	D E A T V D F V G N F		
UniRef90_UPI000479DFCE	G S I D G D S A A A M R Y T E A R L S L P S E Y L L	K K K T V P F V P N F		
UniRef90_UPI0002EAB6C6	G S V A G L P A A P R Y T E A R L M P L A A D L	D R E T V D F I P N F		
UniRef90_J6J583	G N I D G D N A A A M R Y T E A E R L T E V A R L M	D E N A V D F R P T Y		
UniRef90_D5V0S3	G S V D G D S A A A M R Y T E S R F T K I S E D L	D K D T V N F T A N Y		
UniRef90_E8RSX2	G N I D G D S A A A M R Y T E C K M T T A M L L L	D E N A V D F R P T Y		
UniRef90_R5SNV7	G S I D G D S A A A M R Y T E A R L L S P G A M T M	D K Q L V P F G P N F		
UniRef90_UPI00037ECA09	G N I D G D N A A A M R Y T E A E R L T D V A G E L L	D E D T V E M R P T Y		
UniRef90_K9XQ85	G S V D N D P P A A M R Y T E T R L A S V A H Q M L	S E I G E A T V D F T S N F		
UniRef90_V4RAP1	G N I D G D S A A A M R Y T E A E R L T E V A Q L L L	D E D A V D F R E T Y		
UniRef90_UPI000361B5C5	G S I D G D N A A A M R Y T E S R L T Q A A L L M Q D	D K D T V D L K K T Y		
UniRef90_A0A011VN80	G N I D G D N A A A M R Y T E A E R R M T D V A T E L L	T E D A V D F Y R P T Y		
UniRef90_Q0C3T5	G N I D G D S A A A A Y R Y T E A E R R M T D V A T E L L	D E N A V D F R P N Y		
UniRef90_UPI000255A8E4	G S A D D P P K F A A A M R Y T E T R L A P Y S E V L L	G Q G T V V N W V P N F		
UniRef90_Q47WK0	G A P D D P K F A A A M R Y T E T R L S R F S E V L L	G Q G T V D W Q P N F		
UniRef90_X5LB10	G S I D N D P A A A A M R Y T E A E R R N T E A R L T P L A M E M	R E I D E E T V D F I P N F		
UniRef90_R5QWA6	G S I D N D P A A A A M R Y T E A E R R N T E A R L T P L A M E M	L M S L N F		
UniRef90_Q0FAB4	G N I D G D N P A A A A M R Y T E A E R R N T E A R L T P L A M E M	D F Q D N Y		
UniRef90_I7C1Y2	G A P D D P K F A A A M R Y T E A E R R N T E A R L T P L A M E M	D F W V P N F		
UniRef90_V2USW1	G S P D D D P K F A A A M R Y T E A E R R N T E A R L T P L A M E M	C D W Q D N F		
UniRef90_K2HAW8	G S I D G D P P A A M R Y T E A E R R N T E A R L T P L A M E M	V E H I P N F		
UniRef90_B8HNL0	G S V D N D P P A A M R Y T E A E R R N T E A R L T P L A M E M	G E E T V E F M G N F		
UniRef90_W9VIR1	G S P D D D P K F A A A M R Y T E A E R R N T E A R L T P L A M E M	D G Q G T V D W Q P N F		
UniRef90_A7HX51	G N V D G D N A A A M R Y T E A E R R N T E A R L T P L A M E M	D E D T V D F R D T Y		
UniRef90_C0D091	G S I E G D G A A A M R Y T E A E R R N T E A R L T P L A M E M	G E A T V D F T S N F		
UniRef90_R6R0N2	G S I E G D G A A A M R Y T E A E R R N T E A R L T P L A M E M	D E D A V D F R E T Y		
UniRef90_UPI0003674B6C	G N I D G D N A A A M R Y T E A E R R N T E A R L T P L A M E M	G N V V D F G P N F		
UniRef90_G4R626	G S I D G D S A A A M R Y T E S R M T E V A Q R L L	E A I T E D A V D F R P N Y		
UniRef90_M1YMM4	G S V D G D S P A A Y R Y T E T E G K L T P I T S Y M L	A D I K K S T V E F R A N Y		
UniRef90_G9ZY17	G N I D G D N A A A M R Y T E T E G K L T P I T S Y M L	E E N A V D F R A T Y		
UniRef90_I0IBH7	G S V D P D P P A A M R Y T E T E G K L T P I T S Y M L	D K L D T V D W Q P T Y		
UniRef90_H5SDW4	G S I D G D P P A A M R Y T E S R L T P I T S Y M L	E E D T V D F I P N F		
UniRef90_Q07XV3	G A P D D P P K F A A A M R Y T E T E G K L T P I T S Y M L	G Q G T V D W S P N F		
UniRef90_R4YWH2	G S L L S D G P A A Y R Y T E C L T P I T S Y M L	D E D T V D R I P N Y		
UniRef90_C6XIU3	G N I D G D S A A A A M R Y T E T E G K L T P I T S Y M L	D E N A V D F K E T Y		
UniRef90_E3I6K3	G N I D G D N A A A A M R Y T E T E G K L T P I T S Y M L	D E D T V D F R E T Y		
UniRef90_UPI0003652A42	G A P D D P P K F A A A M R Y T E T E G K L T P I T S Y M L	G M G T V D W G P N F		
UniRef90_Q83G39	G S L N D G P A A S R Y T E T E G K L T P I T S Y M L	E S N V V D F V P N Y		
UniRef90_C4KAV4	G S R D G D S A A A A M R Y T E C L T P I T S Y M L	D R G T V D F I P N Y		
UniRef90_Q3ANP5	G S V D D D P P A A M R Y T E T E G K L T P I T S Y M L	G E D T V D F A P N F		
UniRef90_UPI00047CE01C	G S P D D D P P K F A A A M R Y T E T E G K L T P I T S Y M L	G E Q G T V D W Q P N F		
UniRef90_B9JCW3	G N I D G D S P A A M R Y T E T E G K L T P I T S Y M L	D Q D A V D F R D T Y		
UniRef90_A3Y7F8	G A P D D P P K F A A A M R Y T E T E G K L T P I T S Y M L	V E S S G T V D W V P N F		
UniRef90_J3UZG1	G S I D G D N A A A M R Y T E T E V R L S R I T S E F L	S E N D T V W V D N Y		
UniRef90_G9ELC9	G S P D D D P P K F A A A M R Y T E T E V R L S R I T S E F L	G Q G T V D W V D N F		
UniRef90_UPI0003B5D948	G N I D G D N P A A A A M R Y T E T E V R L S R I T S E F L	T E D S V D F R P N Y		
UniRef90_K9H320	G N I D G D N A A A A M R Y T E T E V R L S R I T S E F L	M D G L T E D A V D F R G T Y		
UniRef90_R5ZS38	G D I D N D D P A A Y R Y T E T E V R L S R I T S E F L	G D E D T V D M T L T Y		
UniRef90_K5YPU3	G N I D G D N A A A A M R Y T E T E V R L S R I T S E F L	D E D A V D F R A T Y		
UniRef90_G6EZ40	G S I D G D N A A A A M R Y T E T E V R L S R I T S E F L	D E G A V D F R D T Y		
UniRef90_A5Z3F7	G S I D G D N A A A A M R Y T E T E V R L S R I T S E F L	D K D V V D F V P N F		
UniRef90_R4U177	G S I D G D P P A A A M R Y T E T E V R L S R I T S E F L	D E G T V D F R S T Y		
UniRef90_R6C216	G N I E G D G A A A A M R Y T E T E V R L S R I T S E F L	D K D V V D F F I P N F		
UniRef90_F3L3G5	G S A D D P P K F A A A M R Y T E T E V R L S R I T S E F L	G Q G T V D W V P N F		
UniRef90_UPI00047EA266	G N I D G D S P A A M R Y T E T E V R L S R I T S E F L	E E D A V D F T L T Y		
UniRef90_F7YV04	G S I D R D P P A A M R Y T E T E V R L S Q L A E E M L	D K E T V P M T K N F		
UniRef90_UPI000471FE19	G S R D G D N A A A A M R Y T E T E V R L T P F A R L L	D E G T V D F V P N Y		
UniRef90_L0EXJ1	G N I D G D S A A A A Y R Y T E T E V R L T P F A R L L	D E D A V D F R S T Y		
UniRef90_A1ST91	G A P D D P P K F A A A M R Y T E T E V R L T P F A R L L	G Q G T V D W K P N F		
UniRef90_R7H146	G S I D G D S P A A S R Y T E T E V R L T P F A R L L	E A D T V D F M P N F		
UniRef90_T0GB41	G N I D G D N A A A A M R Y T E T E V R L T Q A A A D L M A G L	D E G T V E F R P T Y		
UniRef90_UPI0002F3AA35	G N I D G D N A A A A M R Y T E T E V R L T Q A A A D L M A G L	D E D A V D F R E T Y		
UniRef90_UPI0004651DF4	G S I E G D G A A A A M R Y T E T E V R L T Q A A A D L M A G L	D K D I V N F V P N F		
UniRef90_UPI0003F5AE03	G N I D G D N A A A A Y R Y T E T E V R L T M T V M S E A L L	D E D A V D F R P N Y		
UniRef90_E1ZRV4	G S L D D D P P A A M R Y T E T E V R L T Q A V A S A M L	E A D T V D F M P N F		
UniRef90_S9QT77	G N I D G D N P A A S R Y T E T E V R L T Q A V A S A M L	D E D A V D F R A N Y		
UniRef90_B0NAD1	G S I E G D G A A A A M R Y T E T E V R L T Q A V A S A M L	D K D I V D F M P N F		
UniRef90_U3TZ25	G A P D D P P K F A A A M R Y T E T E V R L T Q A V A S A M L	G Q G T V D Y I P N F		
UniRef90_R5DP74	G S I E G D G A A A A M R Y T E T E V R L T Q A V A S A M L	D K D V V D F I P N F		

	130	140	150	160
UniRef90_H8N0U2	D G T R D E P [V] I P A R V P Q L L M N G T T G I A V G M A T N I P P H H L G E			
UniRef90_F9EHB4	D Y T L T E P G V L P A S L P N L L L V N G A S G I A V G M A T N N M P P H H N L V E			
UniRef90_UPI0003686E19	D N Q F T Q P G V L P A A F P N L L L V N G S S G I A V G M A T N M A P H H N L R E			
UniRef90_C5B4N9	D S S C K E P V V L L P C R F P N L L L V N G G L G I A V G M A T N I P P H H H L G E			
UniRef90_R6WUP0	D D T M K E P V L L P C R F P N L L L V N G A N G I A V G M A T N I P P H H H L G E			
UniRef90_K0D9N7	D D T T Y E P T V L L P S R I A S L F I N G A T G I S A G Y A T E I P P H H N L K E			
UniRef90_U1QRD8	D N K L E E P T V L L P S A F P N L L L V N G A S G I A V G M A T N M V T H N L R E			
UniRef90_UPI00037BE4C8	D G T M D E P K V L L P S R A P S V L L L V N G V T G I A V G M A T D I P P H H N V R E			
UniRef90_V8C8F7	D D T Q K E P D V L L P T R I P N L L L V N G S S G I A V G M A T S I P P H H R I D E			
UniRef90_U2XJ78	D G Q F Q Q P A V L P A A Y P N L L L V N G T T G I A V G M A T N M P P P H H N L G E			
UniRef90_B1XQNO	D G S Q Q E P V V L L P V Q L P I L L L V N G S S G I A V G M A T N M P P P H H N L R E			
UniRef90_I316G9	D G T L E E P I V L L P A R V P N V L L L V N G T T G I A V G M A T D I P P H H N L R E			
UniRef90_G2SXD1	D E T E K E P E V L L P V K V P N L L L V N G A E G I A V G M T T S I P P T H N F G E			
UniRef90_UPI00037C0717	D D T A N E P T V L L P A R F P N L L L V N G S T G I S A G Y A T D I P P P H N L G E			
UniRef90_R6XRM3	D D E E L E P I V L L P S K F P N L L L I N G A S G I S A G Y A T E I P P P H N P G E			
UniRef90_B9QV00	D G E D K E P I V L L P G G F P N L L L G N G S S G I A V G M A T S I P P P H N A F E			
UniRef90_R6G0F1	S D S D F E P K V L L P A R Y P N L L L V N G T F G I A V G L A T N I P P P H N L G E			
UniRef90_B4W7D2	D D Q D E E P V V L L P A G F P N L L L A N G S S G I A V G M A T S I P P P H N V G E			
UniRef90_W9HDT2	D G E G E E P I V L L P S A F P N L L L A N G S Q G I A V G M A T S I P P P H N A E E			
UniRef90_I7ZCM7	D G M R D E P R L L P A R L P N I L V N G T T M G I A V G M A T D I P P P H N I R E			
UniRef90_K8GPT7	D N S Q Q E P T V L L P A Q L P L L V N G S S G I A V G M A T N I P P P H N L N E			
UniRef90_A0A033V433	D D T A M E P M V L L P A R Y P N L L L V N G S T G I S A G Y A T D I P P P H N L G E			
UniRef90_K1X190	D A S T Q E P T V L L P T R I P N L L L V N G S V G I A V G M A T N I P P P H N L G E			
UniRef90_K9YVW8	D N S S Q E P V V L L P A Q L P L L V N G C S G I A V G M A T N I P P P H N L G E			
UniRef90_UPI000479DFCE	D D E E L E P T V L L P A K F P N L L L V N G S S G I S A G Y A T E I P P P H N L G E			
UniRef90_UPI0002EAB6C6	D G K Y R E P L V L P C R V P N L L L I N G S D G I A V G M A T E I P P P H N V K E			
UniRef90_J6J583	D G S E D E P V V L L P G A F P N L L L A N G A Q G I A V G M A T A I P P P H N A A E			
UniRef90_D5V0S3	D D T L K E P S V L L P T R V P T L L M N G S E G I A V G M A T K I P P P H N L N E			
UniRef90_E8RSX2	D G Q D E E P V V L L P A A F P N L L L A N G A T G I A V G M A T S I P P P H N V A E			
UniRef90_R5SNV7	D E S E K E P L V L P A T L P N L L I N G T T G I A V G M A T N M I P P P H N P A E			
UniRef90_UPI00037ECA09	D G E A E E P C V L P S A F P N L L L A N G S Q G I A V G M A T S I P P P H N V G E			
UniRef90_K9XQ85	D N S Q Q E P V V L L P V Q L P I L L L N G C S G I A V G M A T N I P P P H N L S E			
UniRef90_V4RAP1	D G E E R E P V V L L P G A G P N L L L A N G S S G I A V G M A T N I P P P H N A A E			
UniRef90_UPI000361B5C5	D D S E L E P S L L P A S F P N I L L A N G A E G I A V G M A T S I P P P H N I S E			
UniRef90_A0A011VN80	N E E D E E P V V L L P G A F P N L L L A N G S S G I A V G M A T S I P P P H N A A E			
UniRef90_Q0C3T5	A E N D E E P V V L L P A G F P N L L L A N G A T G I A V G M A T S I P P P H N L V A E			
UniRef90_UPI000255A8E4	D G T I N E P E V L L P A R L P N V L L N G G T G I A V G M A T D I P P P H N L R E			
UniRef90_Q47WK0	D G T M Q E P K T L P A R L P H I L L L N G I T G I A V G M A T D I P P P H N V R E			
UniRef90_X5LB10	D G R V Q E P T V L L P S R F P N L L L A N G S G G I A V G M A T N I P P P H N L R E			
UniRef90_R5QWA6	D D T E Y E P T V L L P A A Y P N L L L V N G S T G I S A G Y A T D I P P P H N L Q E			
UniRef90_Q0FAB4	D G R L T E P S V L L P A S F P N L L L A N G S T G I A V G M A T N I P P P H N I G E			
UniRef90_I7C1Y2	D G T L T Q E P A V L L P A R L P N I L L L N G T T G I A V G M A T D V P P P H N L R E			
UniRef90_V2USW1	D G S L L K E P I N L P A R V P N I L L L N G T T G I A V G M A T D I P P P H N L R E			
UniRef90_K2HAW8	D D T I E E P T V L L P A R F P N L L L V N G S T G I S A G Y A T D I P P P H R L G E			
UniRef90_B8HNL0	D N S Q Q E P V V L L P S Q L P V L L L N G C A G I A V G M A T N I P P P H N L A E			
UniRef90_W9VIR1	D G T L E E P K L P A R L P N I L L M N G T T G I A V G M A T D I P P P H N L R E			
UniRef90_A7HX51	D G E D S E P T V L L P G A F P Q L L L A N G A A G I A V G M A T S I P P P H N A A E			
UniRef90_C0D091	D E T E K E P E V L L P V I R V P N L L I N G A E G I A V G M S T S I P P P H N L G E			
UniRef90_R6R0N2	D E T E K E P E V L L P V R I P N L L V N G A D G I A V G M A T S I P P P H N L G E			
UniRef90_UPI0003674B6C	D G E D S E P V I L L P G C F P N L L L A N G S S G I A V G M A T N I P P P H N A G E			
UniRef90_G4R626	D G E D E E P V V L L P S N F P N L L L A N G S S G I A V G M A T N I P P P H N V A E			
UniRef90_M1YMM4	D N T L Q E P V I L L P S K V P N L L L I N G S S G I A V G M A T C S F P S H N L K E			
UniRef90_G9ZY17	D G E E Q E P I V L L P A A F P N L L L A N G A A G I A V G M A T S I P P P H N A G E			
UniRef90_I0IBH7	D D V T T E P Q Y L P G K F P N L L L V N G G T G I A V G M A T S L A P H N L G E			
UniRef90_H5SDW4	D G S A V E P A V L L P S K F P N M L C N G S S G I A V G L A T S I P P P H N L K E			
UniRef90_Q07XV3	D G T M K E P V T L P A R L P H I L L L N G I T G I A V G M A T D I P P P H N V H E			
UniRef90_R4YWH2	D G S T D E E P T V L L P S R F P N L L L V N G S Q G I A V G M A T S I P P P H N L G E			
UniRef90_C6XIU3	D G G D K E E P V V L L P A S G F P N L L L C N G S S G I A V G M A T S I P P P H N A A E			
UniRef90_E3I6K3	D G E E E E P V V L L P A A F P N L L L A N G S S G I A V G M A T S I P P P H N A D E			
UniRef90_UPI0003652A42	D G T L K E P V Y L P A R L P H I L L L N G V T G I A V G M A T D I P P P H N V R E			
UniRef90_Q83G39	D N Q F T Q P E V L L P A L P N L L V N G S S G I A V G M A T S I P P P H N L R E			
UniRef90_C4KAV4	D G A F E E P P Q L P A R L P N L L V N G A S G I A V G M A T E I P P P H N L R E			
UniRef90_Q3ANP5	D G S Q Q E P T V L L P A Q L P F L L L N G C S G I A V G M A T S I P P P H N L G E			
UniRef90_UPI00047CE01C	D G T M E E P C V L P A R L P N L L L N G T T G I A V G M A T D I P A H N A H E			
UniRef90_B9JCW3	D E S N S E P I V L L P G A F P N L L L A N G S S G I A V G M A T S I P S H N L T E E			
UniRef90_A3Y7F8	D G T I K E P S V L L P A R L P N L L L N G T T G I A V G M A T D V P P P H N L T E E			
UniRef90_J3UZG1	D G T E K I P E V L L P S R I P N L L L N G T S G I A V G M A T N V P P P H N I K E			
UniRef90_G9ELC9	D G T L Q E P S L L P A R L P N I L L L N G A T G I A V G M A S D L P H N L T E E			
UniRef90_UPI0003B5D948	D G T L T E P A V L P A A F P N L L L A N G A S G I A V G M A T N P P H N L H R E			
UniRef90_K9H320	D G E E H E P V V L L P A A F P N L L L A N G A S G I A V G M A T N P T H N P T E E			
UniRef90_R5ZS38	D D S A V E P V V L L P A E F P N L L L I N G A S G I A I G N S T N P T H N P T E E			
UniRef90_K5YPU3	D G E E E Q E P V V L L P G A F P N L L L A N G A S G I A V G M A T S I P P P H N A G E			
UniRef90_G6EZ40	D G E E E E P I V L L P G A F P N L L L A N G A S G I A V G M A T N P T H N L R E			
UniRef90_A5Z3F7	D E T E K E P S V L P V R V P N I L L L V N G A E G I A V G M A T N P T H N L G E			
UniRef90_R4U177	D D S E Q E P V V L L P A L F P N L L L I N G A T G I A A G Y A T N P T H N L P E E			
UniRef90_R6C216	D E T E K E P E V L L P V K I P N L L L V N G S E G I A V G M A T S I P P P H N L G E			
UniRef90_F3L3G5	D G T M D E P S V L P A Q V P N V L L L N G T T G I A V G M A T D I P P P H N L R E			
UniRef90_UPI00047EA266	N E E D E E P V V L L P A G F P N L L L A N G S T G I A V G M A T S I P P P H N V A E			
UniRef90_F7YV04	D D T L E E P T V L L P A K V P N L L L N G A S G I A V G M A T N P P H N L A E			
UniRef90_UPI000471FE19	D G S Q Q E P Q M L P A R L P V M L L N G A S G I A V G M A T E I P A H N L R E			
UniRef90_L0EXJ1	N E E D S E P I V L L P G K F P N L L L A N G S S G I A V G M A T S I P P P H N V Y E			
UniRef90_A1ST91	D G T M K E P V L L P A R L P H I L L L N G I T G I A V G M A T D I P P P H N V R E			
UniRef90_R7H146	D D R L L E E P T V L L P S R F P N L L L V N G T T G I S A G Y A T N M P P H N L G E			
UniRef90_T0GB41	N G E D E E P E V F P G L F P N L L L A N G A S G I A V G M A T S I P P P H N V A E			
UniRef90_UPI0002F3AA35	D E A N R E P I V L L P A A F P N L L L A N G S Q G I A V G M A T S I P P P H N V A E			
UniRef90_UPI0004651DF4	D E T E K E P E V L L P V R F P N L L L V N G A E G I A V G M A T S I P T H N L G E			
UniRef90_UPI0003F5AE03	D G Q S K E P V V L L P G G F P N L L L A N G A Q G I A V G M A T A I P P P H N A A E			
UniRef90_E1ZRV4	D A S V D E P S V L P A R V P N L L L I N G T S G I A V G L A T K I P P P H N M R E			
UniRef90_S9QT77	D G R L L E E P A V L P A S Y P N L L L A N G A S G I A V G M A T N P P H N I G E			
UniRef90_B0NAD1	D E T E K E P E V L P V R I P N L L L V N G A E G I A V G M A T S I P T H N L G E			
UniRef90_U3TZ25	D G T L Q E P K M L P A R L P N L L L I N G T T G I A V G M A T D I P P P H N L R E			
UniRef90_R5DP74	D E T E K E P A V L P V R V P N L L L V N G A D G I A V G M T T N I P T H N L G E			

170 180 190 200

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

	210	220	230	240
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UniRef90_C5B4N9	R S G I R Q A F A T G R G A I R V S G V A S V E E E G K A G R R R V I A Q L P Y			
UniRef90_R6WUP0	G D D L V Q A Y S T G K G K I T L R A R I H I E D G E Y E K K N V I S E L L P Y			
UniRef90_K0D9N7	R E G I K K A Y K T G R G K I I V R S K T E I S D L K G G K K K E V T E L L P Y			
UniRef90_U1QRD8	R D G I R E A Y E T G R G T F T T R S Q T H I E N V T A R K K A I V T E L L P F			
UniRef90_UPI00037BE4C8	P A D I Q K M Y E T G K G S M R M R A I W Q K E G P D V V T A L P H			
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UniRef90_U2XJ78	L D G I K D A Y T T N G R G T F R T R A K V S V E S L G P R R T G L V V T E L L P Y			
UniRef90_B1XQNO	L A G V R D A Y R T G R G I I P M R G I V H E V L Q R D V N A L V V T E L L P Y			
UniRef90_I3I6G9	R E E L I K M Y E T G R G S V R M R A V W Q K D E E S G D I I T A L P H			
UniRef90_G2SXD1	K D E L T A [Y] S T G V G K I K I R G K V E V E Q V K G G K E R L V I T E I I P Y			
UniRef90_UPI00037C0717	V E G G I K K A Y K T G K G K M V V R G K T A I E D M R G G R Q Q V I T E I I P Y			
UniRef90_R6XRM3	I D G I R D A Y E T G R G K V I I S S K Y T I D T T K A N D P R V I T E I I P Y			
UniRef90_B9QV00	D Q G I R E A Y A T G R G S F R V R A W V E V E L G R G Q W A V V T E I I P Y			
UniRef90_R6G0F1	K K S I L L S A Y E T G E G K V T L R A K T S L E T T L E N G R L G V I T E F P Y			
UniRef90_B4W7D2	H A S I L L D A Y E T G R G G V R L R A R W E T E D L G R G V W R I V T E M P Y			
UniRef90_W9HDT2	A A S I A E S Y R T G R G S F R L R A K W E V E K L G Q Q T W Q V V T E I P Y			
UniRef90_I7ZCM7	P H D I L K I Y S T G V G Q V V A R A R W E K E D E G V V I T H P H			
UniRef90_K8GPT7	T R G I W D A Y T T G K G S P V R G V V A Q I E E I Q T G R G R V V T E L P F			
UniRef90_A0A033V433	L D G I K K A Y K T G K G K I V V R S K V E I E K I R G G R E Q V V T E V P F			
UniRef90_K1X190	K K D I L N A Y A T G R G S V T M R G R A S I D E L K S G K R A I I T E V P Y			
UniRef90_K9YVW8	L E G V R D A Y R T G R G T I R V R G V V V K V H H R H D R D A L V V T E F P Y			
UniRef90_UPI000479DFCE	R N G G I K Q A L K T G S G K I I R A K T H T E E I A K N Q E R I I T E I P Y			
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UniRef90_J6J583	R A T I A E A Y E T G R G A F R V R A R W E K E E G T R G S W V V V T E I P W			
UniRef90_D5V0S3	R R G I I D A Y N T G R G R V R I R A C H H E T R G K K E I V L D E L P Y			
UniRef90_E8RSX2	R R E I Y E A Y E T G R G S V R V R A R Y E V E D L G R G A W R L V S E I P Y			
UniRef90_R5SNV7	A D E I A H Y E T G E G K L K V R A K T V I E K S D Y G R Q N V I T E I P Y			
UniRef90_UPI00037ECA09	R E S I L Q T Y S T G R G S F R V R A R W E T E D L K G G L Y Q V I T E I P F			
UniRef90_K9XQ85	N S G I I E A Y R T G K G I T V R G V A K V E N I R K E R T A L I V T E L P Y			
UniRef90_V4RAP1	R E A I T T E A Y R T G R G S F R V R A R W E K E D T G R G T W A V V T E I P Y			
UniRef90_UPI000361B5C5	F E A I T K A Y E I G R G S F R I R S K W H V E S L D R G S Y N I I T E I P Y			
UniRef90_A0A011VN80	S R A I A E A Y R T G R G S F R V R S R R W H Q E D Q G R G R T W V A V T E I P Y			
UniRef90_Q0C3T5	R A S S M I E A Y E T G R G A F R M R A R W H V E D T G R G T Y Q I V T E I P Y			
UniRef90_UPI000255A8E4	A K D I R E I Y S K G R G S F R M R A I W G K E D G E V I T S L P A			
UniRef90_Q47WK0	K A E I E K I Y Q T G R G S I R M R A V Y D V E Q G D V I T S L P H			
UniRef90_X5LB10	S Q G I E D T Y K T G R G S I K M R G V V E I E E D S R G R T G V I T E L P Y			
UniRef90_R5QWA6	L D G I K K A F E K G K G K V I V R A T K E T I E E K K N M N Q V V T E I P Y			
UniRef90_Q0FAB4	R D S I L E T Y R T G R G P M R L R S K W E I E D L P R G L W Q V V T E I P Y			
UniRef90_I7C1Y2	R A E I L K M Y E S G R G S I R M R A V Y R V E D G D V V T A L P H			
UniRef90_V2USW1	P E D D L L K I Q V T G R G S Y R V R A L Y S V E K N E I I H E L P F			
UniRef90_K2HAW8	A Q G I K E A Y E N G K G K I I V R G K A E I Q Q I K G G K E Q V I D E L P Y			
UniRef90_B8HNL0	T E E G I R E A Y T T G R G S I T L R A V A Q M E E M Q P G R P A I I T E I P Y			
UniRef90_W9VIR1	P E D D L L K I Y Q T G G G S V K Q R A R Y E L E R G D V V T A L P H			
UniRef90_A7HX51	R A A M L E A Y E T T G R G G F R V R A R W E Q E E L P R G G Y Q V V T E I P Y			
UniRef90_C0D091	K S D L L P A I Y E T G S G K I K L R G K M V E L G K R D D K V I T E I P Y			
UniRef90_R6R0N2	K D D L L S I Y E S G T G K I K L R G K V E V E K G K N G K N L V I T E I P Y			
UniRef90_UPI0003674B6C	R D T L E H A Y E T T G R G A M R V R A R W E K E D L S H G Q Y Q V I T E I P Y			
UniRef90_G4R626	P A A T E Q A Y T T G R G G F R V R A R W E I E D S G R G T Y N V V T E I P Y			
UniRef90_M1YMM4	S K E L R K M Y E E G S G N L K V R G K W T M E L P R S K T Q V I T E I P Y			
UniRef90_G9ZY17	A E A V R E A Y A T T G R G G F R I R A R W E K E S L K N G T W Q V V T E I P Y			
UniRef90_I0IBH7	R G G V V Q A Y R T G R G R G Y L R A K V H E T R G K R N L V I T E I P Y			
UniRef90_H5SDW4	Y Q E L I E Y Y H T G R G H V R V R A K A H V E K L Q G G R E Q I I T E I P Y			
UniRef90_Q07XV3	R A D I E R I Y D T G K G S I R A R A V Y S E E Q G E V I T S L P H			
UniRef90_R4YWH2	R A G I L I S A Y R T G R G S I K L R G K G A E I V E D A N G R N S V V S E V P Y			
UniRef90_C6XIU3	E D S I L K K A Y E T T G R G G F R M R C Y E K W E K D L P R G L W Q V V T E I P Y			
UniRef90_E3I6K3	T A G L V E A Y R T G R G S F R L R A R W H T E D T G R G Y Q I V T E I P Y			
UniRef90_UPI0003652A42	R E E I L K K I Y S Q G R G S F K M R A V Y H D E Q G E V I T A L P H			
UniRef90_Q83G39	K E A F K E I Y A T G K G S F K I R A K S I D Y A G I G H T N L V I T E I P Y			
UniRef90_C4KAV4	P Q T I R E A Y T A T G K G S F R L R A R W K I E L A R Q W R A I V E E L P H			
UniRef90_Q3ANP5	S S G L R D T Y L H G R G S P M R G V A H T E E V Q P G R N A V V V T E I P Y			
UniRef90_UPI00047CE01C	R H E L V Q M Y A T G K G G F R M R A V Y E V E D G D V V V T A L P H			
UniRef90_B9JCW3	R R S I L E S Y K T G R G G F R V R A K W E I E D L G R G Y Q V I T E I P F			
UniRef90_A3Y7F8	R N D I K K L Y E T G K G Q I K A R A R Y E M E E G D V I K E L P H			
UniRef90_J3UZG1	T A G I V E A Y K T G K G S L N I R A K H I K K N K N G T E K L I F T E I P Y			
UniRef90_G9ELC9	P E A I T T L Y A T G H G S I K M R A I Y N P E K Q N V I T A L P Y			
UniRef90_UPI0003B5D948	P E A I T T L Y A T G H G S I K M R A I Y N P E K Q N V I T A L P Y			
UniRef90_K9H320	S A E M A E T Y R T G R G F R L R A R W S V E D L G R G Q W Q V V T E I P Y			
UniRef90_R5ZS38	A D A V R E A Y A T T G R G G F R L R A R W E K V E L D L G R G Y Q V I T E I P Y			
UniRef90_K5YPU3	K A A I A K L Y R T G Q A T F Y I Y S R A T I D K D T N Q I I T E I P Y			
UniRef90_G6EZ40	E A T I L A A Y E T T G R G S I R T R A V W A K E P A K N G T W N V V T E I P Y			
UniRef90_A5Z3F7	Q E L I L Q T Y E T G R G S I R L R A R W V E Q G R F G T W Q V V T E I P Y			
UniRef90_R4U177	K S D D L K D Y E N G T G K L K R G K L E F F E K G K G R K D K L V I T E I P Y			
UniRef90_R6C216	K Q G I I D A Y Q T G K G K I I R S K I T N E N N N L V I T E I P Y			
UniRef90_F3L3G5	E E E L L N I Y E T T G V G K I K R G K V E V E K A K G G K L N V I T E I P Y			
UniRef90_UPI00047EA266	R D E I K A F Y R S R G G S I K M R A H W R K E D G A I V D A L P H			
UniRef90_F7YV04	S K S I L D A Y K T G K G S F K V R S R W H K E D L G R G M Y Q V V T E V P Y			
UniRef90_UPI00047FE19	A K E L P E V Y A T G K G R I I R A K T H F E E D K K F N K V I T E I P Y			
UniRef90_L0EXJ1	A A D I A H I Y T T T G R G S I R K A R A R W T F E E M A R G Q W Q V V T E I P Y			
UniRef90_A1ST91	H E S I V E A Y R T T G R G G F C V R C K W N I E D L G R G S W C V V T E I P Y			
UniRef90_R7H146	N S D K K I Y E T T G R G S F K S R A V Y T V E N G E K N K N G T E K L V I T A L P H			
UniRef90_T0GB41	D G I K K A Y E T G R G K F I R A K T K L E K N K I I D E I P Y			
UniRef90_UPI0002F3AA35	P S I I S E A Y A T G R G A F R T R A R W H K E E G G R G T W V A V V T Q I P F			
UniRef90_UPI0004651DF4	R E S I L D A Y R T T G R G S F R V R A R W E K E T G R G G W V A V V T E I P Y			
UniRef90_UPI0003F5AE03	Q D D L A E I Y E T T G R G K F K I R G K V K V E D Q K G G K R L V I T E I P W			
UniRef90_E1ZRV4	S K E I R Q A Y E E G K G G I L M R A K I H I E D G S S G K P L V V I T E I P Y			
UniRef90_S9QT77	R D R I A E A Y R T T G R G S I R L R A K W V E E D L G R G Q W Q A V V T E I P Y			
UniRef90_B0NAD1	K D E L L N I Y E A G S G G K I K R G K V V E E M K G G K N R L V I T E I P Y			
UniRef90_U3TZ25	R D E I R K I Y Q N G R G S I R Q R A V W K K E D G E V V V I T A L P H			
UniRef90_R5DP74	K S E I P A I Y E T G T G K L K L R G K V V F E P A Q K R K D K L V I T E I P Y			

	250	260	270	280
UniRef90_H8N0U2	T V N K S T L V A K I G E L V R D R K L P L I T D V R D E S T K D V R I V L			
UniRef90_F9EHB4	L V G P E K I I T R I K E A V A S K K L Q G I T D V A D L T D R K N G T R L V I			
UniRef90_UPI0003686E19	M V G P E K V T E K I K E A A Q A K K L Q G V S D I V D E S D R N G M R A V I			
UniRef90_C5B4N9	L V V K A E F V E K L A E L V E E K K I E G I S D I R D E S S D K A G I R V I			
UniRef90_R6WUP0	Q V E K A D L L Q K I L Q L R E A K K L G G I S D I V D E S D R N G M R A V I			
UniRef90_K0D9N7	E I V K S N L V A K I D T I R L N K D V A G I S E V R D E S D R E G M S I V I			
UniRef90_U1QRD8	M V G P E K V L E R I S E G V K N K K L D G I S G A I D L T D R H N G T R I V I			
UniRef90_UPI00037BE4C8	Q V S G S K I L E Q I A G Q M Q A K K L P M V A D L R D E S D H E N P T R L V I			
UniRef90_V8C8F7	Q V N K A K L V E Q I S E L A K E K I D G I S E V R D E F T D R N H G L R L V I			
UniRef90_U2XJ78	M V G P E R I I E K I K D A V N A K K L T G I S D V Q D F T D R N H G L R L V I			
UniRef90_B1XQN0	Q V N K A A W E K I A D L V N D G K I S G I S D I R D E S D R Q G M R V V I			
UniRef90_I316G9	Q V S G A K I L E Q I A A Q M Q A K K L P M V A D L R D E S D H E N P T R L V I			
UniRef90_G2SXDI	T M N I G K F L N D V Y S L V E T K K T N D I V D I T N Q S S K E G I R I V I			
UniRef90_UPI00037C0717	E V N K A N L V K K M D E F R I D R K V E G M S E V R D E T D R T G L R I V I			
UniRef90_R6XRM3	D V N K A L L V K K M G D A L Q T K N V D G V R E I L D N T S S E G L Q I D I			
UniRef90_B9QV00	Q V Q K S R L I I E K I A E L L I A R K L P L L D D V R D E S A E D I R V V L V P			
UniRef90_R6G0F1	R R C K A L L Q T I S E M T G D K K L E S I V D I R D E S D R S G V R A V I			
UniRef90_B4W7D2	Q V Q K S R L I I E A L A D L I E H K K A P L L G D V R D E S A E D I R L L I L			
UniRef90_W9HDT2	Q V Q K S R L I I E K I A E L L I A R K L F L L D D V R D E S A E D I R L V L V P			
UniRef90_I7ZCM7	Q V S G S K I Q E Q I A E Q M R A K K L P L V E D V R D E S D H E N P T R I V I			
UniRef90_K8GPT7	Q V N K A G W I C K V A E L V S L G R I D G I S D L V R D E T D R E G L R I A I			
UniRef90_A0A033V433	E V N K G T L V K K I D E L R A D K K I E G I V E V R D E T D R E G L R I A I			
UniRef90_K1XI90	Q L N K K S F I D K M V E L I Q E K I I G I S D I R D E S K G L G D V R I V I			
UniRef90_K9YVW8	Q V N K A A W I E K V A E L V N G G R I E G I A D I R D E S D R A G V R V V I			
UniRef90_UPI000479DFCE	E L N K S D L V R S I D L L R D K K I D D I L E R D E T D Q E G L R I A I			
UniRef90_UPI0002EAB6C6	Q Q T R N R L A E Q I G E L V K D E R I K G I D E V R D E S A P R E P V R L V V			
UniRef90_J6J583	L V Q K S R L V R E R I A E L L N D K K I P L V G D V R D E S A E D I R V V I			
UniRef90_D5V0S3	Q V N K A R L I I E L I A N L T K D K K I E G I S E V R D E S D R D G I R V V I			
UniRef90_E8RSX2	Q V Q K S R L I I E Q L A D L I E A K K A P L L G D V R D E S D E E V R L I L E			
UniRef90_R5SNV7	T V N K M K L L E N L V S L T K D K V F D E I Y D V R D E S S K E G I R L V I			
UniRef90_UPI00037ECA09	Q V Q K S K L I I E K I A E L I N N K K L F L L N D V R D E S A E D I R V V V			
UniRef90_K9XQ85	Q V N K A S W I C K V A E L V N Q G K I E G I A D I R D E S N R A G I R V V V			
UniRef90_V4RAP1	Q V Q K S R L I I E R I A E L L T S R K L P L L A D V R D E S T D E V R V V V			
UniRef90_UPI000361B5C5	Q V Q K S R I I I E Q I A D L L K D R K V P L L S N I R D E S T D E I R V V V			
UniRef90_A0A011VN80	G V Q K S R L I I E K I A E L L I A R K L P L L E D I R D E S A E D I R V V V P			
UniRef90_Q0C3T5	Q V Q K S R L L E K I A E L L I A R K L P L L E D I R D E S A E D I R V V V P			
UniRef90_UPI000255A8E4	Q V S G A K V L E Q I A S Q M Q K Q K L P M V V D L R D E S D H E N P T R L V I			
UniRef90_Q47WK0	Q A S G G K I L E Q I A G Q M T A K K L P M V V D L R D E S D H E N P V R L V I			
UniRef90_X5LB10	Q V N H D N F I T S I I A E Q V R D G K L A G I S N I E D Q S S D R V G R I V V V			
UniRef90_R5QWA6	Q V N K A E L V R K I D E I R F N K N I D G I L E V R D E S D R E G L R I V V V			
UniRef90_Q0FAB4	Q V Q K S K L I I E K I A E L I Q L K K L P L L A D V R D E S A E D I R L V V V			
UniRef90_I7C1Y2	Q V S G A K V L E Q I A A Q M Q A K K L P M V A D L R D E S D H E N P C R I V V I			
UniRef90_V2USW1	Q V S G S K V V T Q I A D Q M Q A K K L P L V S D I R D E S D H K N P T R L V I			
UniRef90_K2HAW8	D V N K S T L V K R M D E L R I D R K V E G I A E V R D E T D R T G L R I V V I			
UniRef90_B8HNL0	Q V N K S G L I I E K I A E L I N Q G R I E G I A D L R D E S D R E G M R I V V I			
UniRef90_W9VIR1	Q V S G S R V L E Q I A A Q F N A K K L P M I E D F R D E S D H E Y P T R L V I			
UniRef90_A7HX51	Q V Q K S K L V E K I A E L L Q A R K L P L L E D V R D E S A E E I R L V L V P			
UniRef90_C0D091	T M I G A K F L M D V A D L V E S K K L T D V V D I S N Q S S K E G I R I V V I			
UniRef90_R6R0N2	T M N I G K F L N D V A S L V E T K K T T D V V D I S N Q S S K E G I R I V V I			
UniRef90_UPI0003674B6C	Q V Q K S K L I I E K I A E L I G D K K L P I L T D V D I S N Q S S K E G I R I V V I			
UniRef90_G4R626	G V Q K S R L V E K I A E L L L A R R L P L L K D V R D E S S A E D I R L V V V			
UniRef90_M1YMM4	G V N K A R L I I E K I A E I I I A R K K L P A L T D V R D E S S A E D I R L V V V			
UniRef90_G9ZY17	Q V Q K S G L I I E K I A E L L L A R R L P L L A D V R D E S T D I V R I V V V			
UniRef90_I0IBH7	Q V Q K N D V V V A K V K L A R A S G K L T E I S A T D V R D E S S N R V G M R I V V V			
UniRef90_H5SDW4	Q V N K A E L I I K R M A E L V R E G K L K E I S E I R D E S S D K E G I R I V V V			
UniRef90_Q07XV3	Q A S S G K I L E Q I A N Q M Q A K K L P M V S D L R D E S D H E N P V R L V V V			
UniRef90_R4YWH2	Q T A P E V I E E R A E L V N R E L E G I R A R I T N S S A K G Q I K L V F			
UniRef90_C6XIU3	Q V Q K S K L I I E K I A E L I E T K K A P L L D D V M D E S A E D I R V V V P			
UniRef90_E3I6K3	G V Q K S R L I I E K M A D L L Q A R K K L P L L G D I D D E S A E D I R V V V			
UniRef90_UPI0003652A42	Q A S S G K I L E Q I A S Q M Q A K K L P M V A D L R D E S D H E N P I R V V V			
UniRef90_Q83G39	M V G S E R V L E K I Q K G V N A H R I D G I L D V T D L S D R K N G L K L V V			
UniRef90_C4KAV4	G V S A A Q V L E K I A E L L L A R K L P L L E D I R D E S D S D K A P V R I V V			
UniRef90_Q3ANP5	Q L S K A G W I E K I A E S V N D G K I G G I A D I R D E S D H E N P T R L V V V			
UniRef90_UPI00047CE01C	Q V S G A K V L T Q I A D Q M Q A K K L P W V A D L R D E S D H E N P T R L V V V			
UniRef90_B9JCW3	Q V Q K S R L I I E K I A E L L L A R K L P L L E D I R D E S A E D I R V V L V V			
UniRef90_A3Y7F8	Y A S G S K I L E Q I A A Q M Q A K K L P M V V D L R D E S D H E N P T R L V V V			
UniRef90_J3UZG1	H V N K A R L I I E K I V E L V K T K K I S G I K E L R D E S D K D G L R V V V V			
UniRef90_G9ELC9	Q V S G A K V M E Q I A L Q M Q Q K K L P M V E D L R D E S D H E H P T R L V I V V			
UniRef90_UPI0003B5D948	Q V Q K S K L I I E R L I A E L I Q T R K I P L L A D V R D E S A E D I R L V V V			
UniRef90_K9H320	Q V Q K S K L I I E R I A D L L N A R K K L P I L G D V R D E S A E D I R V V V			
UniRef90_R5ZS38	G V V K A Q M V K D L D N R R I N E G L D N I T E V R D E S A E G D I R I V V V			
UniRef90_K5YPU3	Q V Q K S R L V E Q I A L L L G D K K L P L L A D V R D E S D H E N P T R L V V V			
UniRef90_G6EZ40	Q V Q K S K L I I E Q I A S L M E Q K K L N L A D I R D E S D H E E Q V R L V V V			
UniRef90_A5Z3F7	T M I G A G I G K F I S D V I D L V E T K K T T D V D I S D E N G I R I V V V			
UniRef90_R4U177	E V V K Q D L V K K I D D I K Y N E P G L N I K E V R D E T D R T G L R I V V V			
UniRef90_R6C216	G L N I A K F L S D V A A L S E T K K T M D V D I S N Q S S K E G I R I V V V			
UniRef90_F3L3G5	Q V S G A K V L E Q I A A Q M Q A K K L P L V N D L R D E S D H E N P T R L V V V			
UniRef90_UPI00047EA266	Q V Q K S R L I E Q I A E V I E T K K A P W L V R D E S D H E E Q V R L V V V			
UniRef90_F7YV04	T V S K A S L V E E I A N Y A T K E P K L M I K N V R D E S D K T G L R I V V V			
UniRef90_UPI000471FE19	G T S G Q K V L E E I E E L T N P K M L A L L D A V R D E S S G K D A A V R L V V V			
UniRef90_L0EXJ1	Q V Q K S R L I I E K I A E L L V S K K L P L L E D V R D E S A E D I R L V V V			
UniRef90_A1ST91	R V S G G K I L K E I A Q M Q D K K L P M V A D L R D E S D H E N P T R L V V V			
UniRef90_R7H146	E V N K Q L L V K R M D E I R I D K K I D G I V E V R D E S D K D G L Q I A V V V			
UniRef90_T0GB41	Q V Q K S K L I I E Q I A A L I N D R K L P I L A D V R D E S D T E I R I V V V			
UniRef90_UPI0002F3AA35	G V A K A R L I E K I A E L L Q E R K L P L L A D V R D E S D K D G L Q I A V V V			
UniRef90_UPI0004651DF4	T M I G A K F L N D V C S L V E T K K T S D V D I S N Q S S K E G I R I V V V			
UniRef90_UPI0003F5AE03	L V Q K S R L V E K I A E L L N E K K L P L V G D V R D E S A E D V R L V V V			
UniRef90_E1ZRV4	Q T N K S A L V E Q I A R L V D A G T L T G V S D I R D E S A E D I R V V V V			
UniRef90_S9QT77	Q V Q K S K L V E R I A E L I Q T K K V P V L A D I R D E S A E D I R M V V V			
UniRef90_B0NAD1	T M I G A K F L N D V C A L V E S K K L P M V E D I R D E S D H E N P T R L V V V			
UniRef90_U3T25	Q V S G A R V L E Q I A S Q M R N K K L P M V E D I R D E S D H E N P T R L V V V			
UniRef90_R5DP74	T M I G A N I G K F I S D V V E L I E S K K A T D V D I S S N E K E G I R V V V V			

	290	300	310	320
UniRef90_H8N0U2	E V K K D A N P E L V M A Y L Y K H T P L Q T N F G V N L T C L V P G T P K R L			
UniRef90_F9EHB4	G V K N G Y N P E A V L T Q L Y R H T P L E D S F G I N N V C L V D G R P R T L			
UniRef90_UPI0003686E19	E V K N G F N P Q A V L Q Q L Y K T P M E D S F G I N N V A L V D G R P R T M			
UniRef90_C5B4N9	D V R K D A D P A V V L N R L R E K T D F V T N L N M T C L D R G R P R T M			
UniRef90_R6WUP0	K V R K D A D A Q K I V N Y L L A H T K L E T N F N I N M V A I A E G K P K Q L			
UniRef90_K0D9N7	E L A K D A N A E G I L T Y L F K K T D L Q I S Y N F N M V A I H D Q R P V H			
UniRef90_U1QRD8	E I K S G F D P Q A V L T Q L F K Y T P L E D N F T I N N V A L V D G R P R T M			
UniRef90_UPI00037BE4C8	V P R S N R V D E P M M N H L F A S T D L E R S Y R I N M N M I I D G R R P Q V K			
UniRef90_V8C8F7	E L K K D A M S E I V L N N L Y K S T T M E S T F G I I L L A V N N K E P K I F			
UniRef90_U2XJ78	T I K T G F D P N A V L E Q L Y R L T P L E D S F G I N N V A L V E G Q P Q T L			
UniRef90_B1XQN0	E L K R D A E P E K V L K L Y K K T A L E R T Y R V N M M I I D G R R P A V K			
UniRef90_I316G9	I P R S N R V D E Q V M Q H L F A T T E L E D T F G V N M L A V V D G R R P E T M			
UniRef90_G2SX61	E L R K G A D A A N L E N L Y K K T K L E D T F G V N M L A V V D G R R P E T M			
UniRef90_UPI00037C0717	E L K K D A D A N S V L N Y L F K N T D L Q V S Y N F N M V A I H N R R P Q L M			
UniRef90_R6XRM3	H L R K D V N P E T I L N F L L Q T D L Q T S Y N F N M V A S Q G R R P M Q M			
UniRef90_B9QV00	R S K N V D A N I L M E S L F K L T D L E N R F S L N M N V L S M G K V P M M			
UniRef90_R6G0F1	E F F K K A A T R E K V L K Y L F K K T D L Q C N L S F N M V A L A N G K P K T M			
UniRef90_B4W7D2	E P K N R T I P E M L M E S L F F L S D L E V R F P I N M M V L D D G T P R V M			
UniRef90_W9HDT2	K N R N V D P D V L M E S L F F T T D L E T R F G L N M M V L D D N V P R V M			
UniRef90_I7ZCM7	V P R N R V D A E A L M A H F A T T D L E R S H R V N L M I G D G R R P R V K			
UniRef90_K8GPT7	E L K K R E A N P Q K V L N F L Y K Q T A L Q N N F G V I M L A L D N G L P R Q M			
UniRef90_A0A033V433	E L K K D I N S E G V L N Y L Y K N T D L Q V L Y H F N M V A I N N R R P E L L			
UniRef90_K1XI90	E I K K D A F P K K I L N Q L Y Y K L T Q L Q T S F A F N M V A L H D R Q P K L F			
UniRef90_K9YVW8	E E L K R D V S P N T V L E Q L Y H Q T A L Q S N F G T I L L A L V D N A P R Q L			
UniRef90_UPI000479DFCE	D L K G A D S N E I L N Y L F K Q S D L Q V A Y N Y N I T A I L N R R P Y Q V			
UniRef90_UPI0002EAB6C6	Y L K K D V D P H L V L N Q L Y E Y S P L Q K T V S I I L A A D G R R P K V L			
UniRef90_J6J583	E P R S R V D P E I L M E S L F K L T D L E S R R L P L N M M V L V H G R R P K V I			
UniRef90_D5V0S3	E E L K K D A M S E I V M M N L Y K S T P M E T T F G I I L L A V Y N K E P K V F			
UniRef90_E8RSX2	P K T R N I D P E V L M E S L F L S D L E T R F A F N M M V L D K G T P R V M			
UniRef90_R5SNV7	E V K K D R D V Q N L N G L Y K K T A M E D T Y G V N M L A V K D K Q P I T F			
UniRef90_UPI00037ECA09	E P K R N V D P A V L M E S L F K Q T E L E A R A S L M M M V L D A D Q R R P V M			
UniRef90_K9XQ85	E E L K R D T N P Q P V L K Q L Y R Q T A L Q S N F G A I M L A L V E N K P C Q L			
UniRef90_V4RAP1	E P R S R V E P E L L M A S L F R L T D L E E A K I P L N M M V L T D G R R P R V L			
UniRef90_UPI000361B5C5	E P K S R T C A E I I M E I L F R Q T D L E S R F Y L N L N V L N M G L P K V M			
UniRef90_A0A011VN80	K S R S V D P G I L M E S L F K L T E L E S R F S L N M M V L S R G K V P N L			
UniRef90_Q0C3T5	R A K T V E P D V L M E S L F R T C D L E T R F S L N M M V L H K G A P Q V M			
UniRef90_UPI000255A8E4	V P K R G K D L D A L M A H F R T C D L E V R F N L N L N I I D G R R P Q V K			
UniRef90_Q47WK0	I P R N R V D V E Q L M Q H L F A S T D L E K S Y R V N L M I G L D N R R P V K			
UniRef90_X5LB10	E L K R D A V A K V V L N N L Y K H T Q L Q T S F G A N M L S I V D G V P R T L			
UniRef90_R5QWA6	D L K T K V N Q N T L N Y F Y K N T D L Q K N Y N Y N M V A K D K R R P V L M			
UniRef90_Q0FAB4	E P R A R K V D P T V L M E T L R M S D L E V R F N L N L T I I D G R R P K V C			
UniRef90_I7C1Y2	I P R N R V D V D E L M Q H L F A T T D L E S T Y R V V N V I I G D G R R P Q L K			
UniRef90_V2USW1	V L R N R V D A A M V M S H L F A T T D L E S S Y R V V N N M I A D G K P Q V K			
UniRef90_K2HAW8	E E L K K E S N S E G I L N Y L Y K H T D L Q V S Y N F N M V A I S D Q K P K L M			
UniRef90_B8HNL0	E E L K R E T Q P Q P L L D Q L Y K T Q L Q T N F G V I M L A V D G Q R R P Q M			
UniRef90_W9VIR1	V P R S N R V D V A V L M S H L F A T T D L E R S Y R V V M M L I S N G R R P R V M			
UniRef90_A7HX51	K A R T V D P A H L M E S L F R S T E L E N R F P L N M M V L S A G Q V P V M			
UniRef90_C0D091	E E L R K D A D I E K I R N I L Y K K T K L E D T F G V N M L A I A G G R R P E T L			
UniRef90_R6R0N2	E E L K G K A D V E N L K N M L Y K K T R L E D T F G V N M L A V A E G R R P E T L			
UniRef90_UPI0003674B6C	E P K N R A V D E V L M E S L F R M T E L E V R F S L M M V L A Y G R R P R V L			
UniRef90_G4R626	E P R A R T V D A V L M E S M F K L T E L E S R F S L M M V L D K G Q R R P R V M			
UniRef90_M1YMM4	E I K S G S D P D K I M A Y L F K H S D L E S G F Q I N F N C L K N G E P E R L			
UniRef90_G9ZY17	E P K N N I D P A V V M E T L F R A T P L E N R F P L M M V L D S R T P Q V M			
UniRef90_I0IBH7	E E L K M G A D P H T V E N Q L Y A L T P L Q S T F P I H S L A L V R G Q R P R T L			
UniRef90_H5SDW4	E E L K R D A Q G Q K V L E K L Y K H T A L R K R N F P I N F V V L I D N Q R P K Q V			
UniRef90_Q07XV3	V P R S N R I D D Q L M T H L F A T T D L E K S F R V N L N V L G D G R R P K V K			
UniRef90_R4YWH2	E E L K R D A S P M V V L N N L Y K Y T P L Q T T F A A N M V V L V D G V P R T L			
UniRef90_C6XIU3	R N K L V D P D V L M A S L Y K M S D L E S R F S L M M V L D H N V P R V M			
UniRef90_E3I6K3	E P K R N V D A A L L M E Q L F R L T E L E A R I P L N M T V L S K G Q V P Q L			
UniRef90_UPI0003652A42	P R S N R V D V E M L M Q H L F A T T D L E K N Y R V N L M V A L G N N R R P Q V K			
UniRef90_Q83G39	G I K P N F S P N E V M D N L Y R H T P L E E S F S V N S V A L I D G K P K T L			
UniRef90_C4KAV4	E P K S R Q N R D E F M A V L L A H T P L E T S A S V N M T M I G R R R P Q Q Q K			
UniRef90_Q3ANP5	E L R R D A D P G K V L K D L Q R R T A L L Q S N F G A I L L A V D G Q R R P Q Q L			
UniRef90_UPI00047CE01C	V P R R N R V D V E Q L M G H L F A T T D L E S S Y R V N M M V L G D G R R P R V M			
UniRef90_B9JWC3	E P K T R D V D P E Q L M A A L F K T S D L E S R R P L M M V L S M G R R P K V M			
UniRef90_A3Y7F8	E P K T R N V D V E A V M T H L F A S T D L E R S Y R V N M M V I G D G L P H V K			
UniRef90_J3UZG1	E I N R Y E S S K F I L N N L A H T Q M E V I Y S V N M V A V E K G K P K T F			
UniRef90_G9ELC9	I P R R N R V D V D G L M S H L F A T T D L E R S Y R V N F N M I G D G K P R V K			
UniRef90_UPI0003B5D948	E P K T R D V D P E Q L M A A L F K T S D L E I R F P L N M M V L I D G R R P K V C			
UniRef90_K9H320	E P R R S R V D P D V L M E H L F K Q T D L E S R F S L M M V L D D G V P R V M			
UniRef90_R5ZS38	D I K K G A D P T A I L N Y L Q S K G A L R T T F A A N M L A L V K G H P R T L			
UniRef90_K5YPU3	E P K K N R V D A D M L M A S L F R A T Q L E S R F S L M M V L A D G N P K V M			
UniRef90_G6EZ40	E P K N R T I P E V L M E S L F K A T P L E G R F S Y N M M V L D S K V P K V M			
UniRef90_A5Z3F7	E L K K G A D V E K L K N I L Y K K T K L E D T F G V N M L A I A D G R R P E V M			
UniRef90_R4U177	E L S K Q A N Y E T V R K Y L L K N T N L Q V S Y N F N I V G I A N K Q R P K L L			
UniRef90_R6C216	E L L R K D T D V E N F T N M L Y K K T R L E D T F G V N M L A I A D G R R P E T M			
UniRef90_F3L3G5	V P K N R V D I D A L M L H L F A T T D L E R S Y R I N L N L I N N G R R P G V K			
UniRef90_UPI00047EA266	E P K K N I D P D L M E S L F K I T G M L E S R T S L M M V L D T R T P R V M			
UniRef90_F7YV04	E L A K N A D Q V V L N N L F K N T K L E D S F N V Q M L V I D A K K P K L M			
UniRef90_UPI000471FE19	E P K T R V D R D E F V N T L L A Q T S M E S N V P I N L V C I G T D R P R Q K			
UniRef90_L0EXJ1	E P R S R T V D P A L L M E S M F M L T E L E S R R F P L M M V L S M G R V P Q M			
UniRef90_A1ST91	I P R S R N R I D E G L M H H L F A S T D L E V N H K V N M L G L D Q R R P Q K			
UniRef90_R7H146	E E L K K D A D A N L N I L Y K Y T P M L Q V S Y N F N I V G I V N R R P M Q L			
UniRef90_T0GB41	E P R A R V D P D V L M D S L F R L T D L E N R F S L N L N V L D S R T P R V M			
UniRef90_UPI0002F3AA35	E P R A R V D P V L L M E S L F R L T D L E S R V P L M M V L T A G Q R R P R V L			
UniRef90_UPI0004651DF4	D L K K D A D V D K L I N M L Y K K T K L E D T F G V N M L A V A D G K P E T M			
UniRef90_UPI0003F5AE03	E P K S R V D P E L M M E S L F R L T E L E S R R P L N L N V L V K G R R P K V L			
UniRef90_E1ZRV4	E V K R G G N A D L V L N Q L L K H T A V Q S R F S A N M V A V G A T P L T L			
UniRef90_S9QT77	E P K K N V D P E L L G M L F K N S D L E V R F S L N M N V L I D G V T P R V			
UniRef90_B0NAD1	E E L K R G A D V E N L T N M L Y K T R L E D T F G V N M L A V A N G R R P E T M			
UniRef90_U3T25	E P H S N R V D L D Q V M N H L F A T T D L Q K S Y R V N L M G L D N R R P V K			
UniRef90_R5DP74	E E L K K N A D V E N L K N L Y K K T K L E D T F G V N M L A I V D G R R P E T L			

	330	340	350	360
UniRef90_H8N0U2	D K S I L R Y F L D F R L E I V T K R F E H E L A E L K R R V H I L E G F E K			
UniRef90_F9EHB4	G L R E L L E V F V H H R L T V V E R R T R F R L D K R K E R Q H L V E G L L I			
UniRef90_UPI0003686E19	G L L E L L R Y V V E H R L S V V R R R T G F R L A K R R D R L H L V E G L L V			
UniRef90_C5B4N9	G V L Q V L G E F V D F R R R E V V R R T M H R L E K T R E D L H R Q I G L Y A			
UniRef90_R6WUP0	G L V E M L V H Y V N F Q R D V L I K R C N F D L K Q A K I R A E I V E G L L I			
UniRef90_K0D9N7	S L Q Q G L Q A F L D F R K N I V L K R S T Y E L A K A Q T R Q H I V E G L I R			
UniRef90_U1QRD8	G L L E L L N V W I A H R R D V I R K R S I Y R K R K A E E R L H L V E G L L L			
UniRef90_UPI00037BE4C8	A L N R I I S E W L E F F R L E T T T R R L Q Y R L D K V S E R L H K L D G L L I			
UniRef90_V8C8F7	T L L E L L N I F I S H R K T I I I R R T I F E L E K A K A R A H I L E G L L K I			
UniRef90_U2XJ78	G L K E L L R V Y L D H R I E V V T R R S R Y R L A R K Q E R L H L V E G L L I			
UniRef90_B1XQNO	S L K A I L Q E F L E F F R E T V T R Q Y R E L E Q K E T R Q H S V E G L L L			
UniRef90_I316G9	S L T K I L S E W L S F R T V T R R L Q Y R L E K V E E R L L R L A G L M V			
UniRef90_G2SXD1	G I V P I I R H H V N F Q Y E L A K R K Y T T L L A K E L E K K E V Q E G L I H			
UniRef90_UPI00037C0717	G L R E L L D A Y I T H Q K E V V T K R T E F D L L K K A D R R K H I V D G L M K			
UniRef90_R6XRM3	G L A E I L D A Y I V H Q K E V V T N R S N F E L E K D L K R Q E V V K G L I S			
UniRef90_B9QV00	G V K Q V L R E W L D H R K V V L V R R S E H E R L G Q I N H R L E V L A G Y L I			
UniRef90_R6G0F1	G L K T I L M H Y I E H Q K E I I T R R T R E L A I A E K R F H I V E G F I K			
UniRef90_B4W7D2	G L K A C L R A F L D H R R E V L N R R S Q W R I A R V E K R L H L E G L R I			
UniRef90_W9HDT2	N L K E V V L Q A F L A H R I E V L E R R S R H R L A K I D H R L E V L G G Y L I			
UniRef90_I7ZCM7	N L R D I L G E W L S F R F N T V T R R L N H R L Q K V N D R L H L E G L L I			
UniRef90_K8GPT7	P L R D L L Q R F L D F R E T L T R R R H E Y A Q A E S R R H I V E E G L L I			
UniRef90_A0A033V433	G L K S I L E S Y I E H Q K E V V T R R S Q Y E L L S Q A Q K R M H I V E E G L I K			
UniRef90_K1X190	N L L E M L E E F I V H R R E V I E R R T R Y E L L M I A E A R A H I L E G L K I			
UniRef90_K9YVW8	S L R Q L L D N F L Q F R E T L T R Q Y T H Q L E G A R K R L H L A E G L L A			
UniRef90_UPI000479DFCE	G V K P L L K A Y I D H Q K E V I T N R S N Y E L R R A E K R L H I V L G L I K			
UniRef90_UPI0002EAB6C6	T L K E M M Q E F L K H R I Q V I R R T E Y M L R E A K R R G H F L E G Q L I			
UniRef90_J6J583	G L R D A L L R E W L D H R R D V L V R R A N H R L D K I A H R L E V L G G L L I			
UniRef90_D5V0S3	T L P E L L N V F I S H R K T V V I I R T R E H F D L E K A K A R A H I L E G L K I			
UniRef90_E8RSX2	G L K T I L T S F L D H R R E V L I R Q S Q W R L G K I E K R L H V L D G L M I			
UniRef90_R5SNV7	D L K S L I I Q E F V F F Q E E L Y T K E Y T H L N K A N K R L E I V A G L I K			
UniRef90_UPI00037ECA09	N L R E V L L Q A F L D H R H E M L V R S S R F R L G K I A N R L E V L E G Y L I			
UniRef90_K9XQ85	P L R D L L T E F L N F R E Q T L R R Q Y S H D L E Q A Q Q R L H L V G G L L S			
UniRef90_V4RAP1	G L V E V L V H W L D H R R E V V L L R R S R H R L G K I A H R L E V L G G Y L I			
UniRef90_UPI000361B5C5	N L K E V V L S E F L D H R F K I V V R R S K F E I E K I S Y R L E I L S G L K I			
UniRef90_A0A011VN80	S L K S V L L R E W L D H R R E V V L L R R S R H R L A E I E R R L E I L A G Y L I			
UniRef90_Q0C3T5	U H R D V L Q A Y I D H Q K E V I T N R S N Y E L R R A E K R L H I V L G F L K			
UniRef90_UPI000255A8E4	D L R Q I L V E W L T W T R T S I V R R R L E Y R L Q K V L D R L H I L E G L L M V			
UniRef90_Q47WK0	N L L V I L S E W L E Y R R E T V T R R R L Q H R L D K I V E K R L H I L D G L L V			
UniRef90_X5LB10	R L D Q I L R L Y V D H Q L D V I V R R T R Y R L R K A N E R A H I L R G L V K			
UniRef90_R5QWA6	G I E E I L D G Y I D H Q I D V V T R A S L Y D L N K A N R A H I V Q G L I K			
UniRef90_Q0FAB4	S M K E V L L R A F I D H Q R D F V L L R R S K H R M D K I D H R L E V L E G Y I V			
UniRef90_I7C1Y2	N L R T I L V E W L E F R T N T V T R R R L Q H R L D K I V E K R L H I L D G L L I			
UniRef90_V2USW1	S I R Q I L L E W I S I R K N T V T R R R L Q Y H R L D K I E K R L H I L A G L L I			
UniRef90_K2HAW8	S L P M I L D A Y I S H Q K N I V R R Q A M H D L K K A R N R A H I V Q G L I K			
UniRef90_B8HNL0	G L K E C L L E H F L N F R E H T L T R R Y R H Q L D Q A Q S L H L V E E G L L I			
UniRef90_W9VIR1	N L R E L L V E W L A Y R T Q T V T R R R L Q H R L D K I E K R L H I L D G L L I			
UniRef90_A7HX51	S L R G V L L R A W L E H R K V V L V R R S N F R L D K I E K R L H I L D G L L V			
UniRef90_C0D091	S L R G I L K N F L D F Q Y Q N T E K K Y R V L L Q K E R E R R Q E V V Q E G L I A K			
UniRef90_R6R0N2	G L R Q I L E H V D F Q F D V V T R T R K Y Q N L L K E Q E N R E V V Q E G L I K			
UniRef90_UPI0003674B6C	S L K E V L L D S F D H Q I D V D V L I R R S K F R L D K I E K R L H I L D G F A V			
UniRef90_G4R626	N L A E V L L K A W L N H R K D V L V R R S R Y R L D K I E K R L H I L D G F A V			
UniRef90_M1YMM4	S I G E L L C L H F F D F R K D V T R R R L Q Y D L E V L E K R L H I L D G Y L I			
UniRef90_G9ZY17	G L K Q V L R S W L N H R H E V V L V R R S Q H R L D K I V E K R L H I L D G Y L I			
UniRef90_I0IBH7	T L R E M L D E Y V V G H R D V I V R R T R Y R L D K I Q A Q I E A H R I E G L I Y			
UniRef90_H5SDW4	G I K E L L Q E F L R R L E V I L R R A K H H L K K A E D R L H I V E E G L T K			
UniRef90_Q07XV3	G L K Q L L T E W L E F F R L T T V T R R L Q Y R L D K V L A R L H I L E A L M V			
UniRef90_R4YWH2	N L R D A L V H Y L E H Q R E V V R R R T E F F R L D K I A R A Q R A H I V E E G L V R			
UniRef90_C6XIU3	G L K Q V L Q C Y L A H R Q E V I V R R A Q H R L D K I E A R L H I L E G Y L I			
UniRef90_E3I6K3	U H R D V L Q E W L D H R R R V V L L R R S E H R L D K I D H R L E V L G G L L I			
UniRef90_UPI0003652A42	G L A E I L I E W L E F F R L A T V T K R L N F R L D K V L A R L H I L E G L L V			
UniRef90_Q8G39	G M L D M L K V F I D H R V C V I T R R S K F Y L A T H K R L H M I D G L L L			
UniRef90_C4KAV4	N L V Q I L R E W L D F F R Y V T V E R R T R H R L D E V D R R I H I L E G R M I			
UniRef90_Q3ANP5	S L R Q L L Q T F L D F F E L T I R R T S H A L R K T E D R R L E V V E G L I T			
UniRef90_UPI00047CE01C	G L R E M L G E W L E F F R T L T V R R R L Q H R L D K V N A R R L H I L D G G F L I			
UniRef90_B9JCW3	A L N E V L K E W L D H R R E V V L Q R R S R F R L A K I E K R L H I L E G G F L I			
UniRef90_A3Y7F8	G L K D F I L T E W L K F R I D V D V V R R K L Q F R L D K V L N R L H I L E G L L V			
UniRef90_J3UZG1	N L K E I I E A F I N Q R Q E V V L K R R T L Y K L K Q I T K Q K I I E G L I I			
UniRef90_G9ELC9	N L I T I L S E W L I Y R V S V V K R R L E Y R L D K I V E R I H V L E G Y L I V			
UniRef90_UPI0003B5D948	S L K E V L L R A F L D H R R E V V L L R R A N F R L D K I A A R L E V V E G Y L I V			
UniRef90_K9H320	S L K E V L L Q A F L D H R H E V V L I R R S E H R L D K I N H R L E V V L Q G Y I I			
UniRef90_R5ZS38	S L L A I I D A Y I D H R Q D V I T K R S A F E F S K F N A R V E I I N G L L K			
UniRef90_K5YPU3	G L K A I L R A W D H R H E V V L V R R S N H R L D A A I A R R L E I L D G Y I K			
UniRef90_G6EZ40	G L K D I L R A W D H R Y V V L V R R S Q H R L S V L D R R L E I L Q G Q L A			
UniRef90_A5Z3F7	G L K S I I K Y N V D F Q Y E L A Q R K Y T T L L N K A L E Q K E I K E G L I K			
UniRef90_R4U177	G L K E I L L G Y Y V A H Q Q E I V T N R S K F E L A K A N K R L E I V D G L I K			
UniRef90_R6C216	G L K Q I L K A C T D F Q F E V A T R K Y T T L L E K E K E K K E I Q E G L I K			
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UniRef90_UPI00047EA266	D L K E V V I Q A F I N H R F E D H R R V V L Q R S N Q R L G K I D R M E I L D G Y M I			
UniRef90_F7YV04	N L Q Q L I I K A F I N H R F E V I R K R A E Y Q F K V Y S K R A H I I E G L I K			
UniRef90_UPI000471FE19	G L R E I I L E E W V A F R T N T V V R R T R H R L D K V L D R L H V L E G R M V			
UniRef90_L0EXJ1	S L D K V L K E W L A H R R E V V L C R R S R F R M V A I D K R L E I L Q G F L V			
UniRef90_A1ST91	G L V T I I L N E W L V Y R M K T V R R L Q F R L D K I L A R L H I L E G L L A			
UniRef90_R7H146	G L L G I L D A Y I A H Q K E I V Y K G T E Y D L K T A K S Y H I M E G L V K			
UniRef90_T0GB41	G L R E V V M V E W L R H Q I D V L V K R A Q H R L D K I A A R L E L L D G Y I I			
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UniRef90_UPI0004651DF4	G L R K I I E Y H V D F Q F E I T T R K Y T R L S K E Q E K R E V V Q E G L I K			
UniRef90_UPI0003F5AE03	G L A E C L R E W L D H L R D V L I R R S N F R K G Q E H R L E I L G G Y L I			
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UniRef90_S9QT77	C L K E V L R A F L D F F R R D V L C R R S R H R M E K I D H R L E V V L E G L I V			
UniRef90_B0NAD1	G L K K I I E H V D F Q F E L A T R K Y Q N L K E Q D R K E I Q E G L I K			
UniRef90_U3T25	N L L E I I L S E W L V Y R R D T V T R R L H N S L E R V L R R L H I L E G L L V			
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		370	380	390	400
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UniRef90_F9EHB4	A I L D I	D E V I Q V	R S S E D A A T A R T R L	M Q V F D L T E P Q A S Y I	L
UniRef90_UPI0003686E19	A I V D I	D E V I Q I	R S S D E T A V A R E R L	M A V Y D L S R V Q A D H	
UniRef90_C5B4N9	A T L R I	D E I V A L I	R S S S H D I D E A R A A L	G D T F R L S D A Q V R A I	L
UniRef90_R6WUP0	A I N N I	D E I I K I I	K T S K S A A I A S E R M R Q R F G L	T E R Q A Q A I	L
UniRef90_K0D9N7	M L S I L	D E V V T T I	R S S K N R K D A T Q N L I	Q T F D F T Q P Q A E A I	V
UniRef90_U1QRD8	A L I D I	D E V I E V I	R S S D D A D S A K H R L M A V F D L	D E V Q A Q Y I	V
UniRef90_UPI00037BE4C8	A F L N I	D E V I H I	R T E D E P K K V L M A R F E L L	S E I Q A E E Y I	V
UniRef90_V8C8F7	A L D N I	D E V I A L I	R A S K D T E E A K N G L M S K F G L	S E L Q A K A I	L
UniRef90_U2XJ78	A I L D I	D E V I Q V I	R T S D D G E Q A R T R L I	D V F D L S Q P Q A E Y I	L
UniRef90_B1XQN0	A L N N I	D E V I E I I	R N A A D G T T A K Q Q F Q A A L G F S E S Q S D A I	L	
UniRef90_I316G9	V F L N V	D E V I R I I	R E E D N P K P V L M E R F N L I	E M Q A E E Y I	L
UniRef90_G2SXD1	A C D V I	D L I E I L	R G S A N V K M A R A C L T E G I R F T E R Q A D A I	L	
UniRef90_UPI00037C0717	A L S I L	D E V I A A I	R A S K D K R D A K A N I M A G F G F T E P Q A E A I	V	
UniRef90_R6XRM3	M V S I L	D A V I T T I	R N S K N K T D A K E N I I S K Y G F T E L Q A E A I	V	
UniRef90_B9QV00	A Y L N I	D E V I R I I	R E E D D A K A S L I R T F E L T D V Q A E A I	L	
UniRef90_R6G0F1	A I N I I	D E V I A T I	R S S K S K K D A G I N L V A K F G F T E E Q A E A I	L	
UniRef90_B4W7D2	V F L N I	D E V I R I I	R E E Q P K A V L I A R F G G L T E V Q A D F I	L	
UniRef90_W9HDT2	A Y L N L	D E V I R I I	R E E D E P K K S L M A T F S L T T D V Q A E A I	L	
UniRef90_I7ZCM7	A F L N L	D E V I R I I	R F E D E P R A K L M R T F A L S E V Q T D Y I	L	
UniRef90_K8GPT7	A L E N L	D D I D I L	R N A P D G S T A K M Q F Q E E F E L S D R Q S D A I	L	
UniRef90_A0A033V433	A L S I L	D E V I E T I	R A S K N K R D A K E N I I L I A K F E F T E E Q A E A I	V	
UniRef90_K1X190	A L D N I	D A V I K T I	K E S N S K E E A H D N L M T R F G L S D K Q S Q A I	L	
UniRef90_K9YVW8	A L K N L	D T V D I L	R N A P D G S T A K A Q L I Q V Q L G M T D E Q G D S I	L	
UniRef90_UPI000479DFCE	M V S V L	D E I I K I I	R G S K N K A D S K E N I I M N R F Q F T D L Q A E A I	V	
UniRef90_UPI0002EAB6C6	A F S S I	D E I I R I I	C R A A P D R N V A K Q Q L I M V M Y H M T E Q Q A E A I	V	
UniRef90_J6J583	A Y L N I	D E V I R I I	R T E D E P K P V L I R T F E L T T E V Q A E A I	L	
UniRef90_D5V0S3	A L D N I	D E V V K I I	R A S A N D S D A K E K L E L R F G L S P I Q S Q A I	L	
UniRef90_E8RSX2	A F L N L	D E V I R I I	R E D E T P K Q T L M A R F E L T E V Q V D Y I	L	
UniRef90_R5SNV7	A T D V I	D L I V E I I	R G S S S V K Q A K G C L V N G V D F T E T Q A D A I	L	
UniRef90_UPI00037ECA09	A Y L N L	D E V I R I I	R E E D K A K Q A L I I A R F F K L T T D V Q A E A I	L	
UniRef90_K9XQ85	A L N N L	D R V D I L	R N A A D G T T A K Y T L E T E L N L T D A Q T D S I	L	
UniRef90_V4RAP1	A Y L N L	D E V I R I I	R E E D E P K Q E L M R T F S S L T D V Q A E A I	L	
UniRef90_UPI000361B5C5	A Y L N L	D K I E I I	R E E D A P K E V V M M Q K F S L T D V Q A E S I	L	
UniRef90_A0A011VN80	A Y L N I	D E V I R I I	R E E D E P K P V M M G R W D L T D T Q A E A I	L	
UniRef90_Q0C3T5	A Y L N I	D E V I R I I	R T E E D E P K P V L M K R F K I S D I I Q A E A I	L	
UniRef90_UPI000255A8E4	A Y L N I	D E V I A I I	R E E D E P K P V L M K R F K I S D T V Q A D A I	L	
UniRef90_Q47WK0	A Y L N I	D E V I E I I	R E E D E P K P V L M K R F K I S D T V Q A D A I	L	
UniRef90_X5LB10	A L D A L	D E V I A L I	R A S Q T V D I A R A G L I E L L D I D E I Q A Q A I	L	
UniRef90_R5QWA6	A I S I L	D D V V K T I	R A S K D K S D A K N N L I K Q Y A F S E K Q A E A I	V	
UniRef90_Q0FAB4	A F L N L	D R V E I I	R E E D E P K K I I M M K E F S L S D V Q V E A I	L	
UniRef90_I7C1Y2	A F L N L	D E V D E I I	R H I I R T E E Y P K Q A L I E R F E L L T E I Q A D Y I	L	
UniRef90_V2USW1	A Y L D I	D T V Q I I	R E E D D P K T V L M E K F A I I D E I L Q A E A I	L	
UniRef90_K2HAW8	A I S I L	D E V I S T I	R S S S D K S D A K E K L I K S A Y T F S E A Q A E A I	V	
UniRef90_B8HNL0	A L Q N L	D R V T T L L	R E A T D G S S A A K Q T L Q S E E N L S D R Q A D A I	L	
UniRef90_W9VIR1	A F L N L	D E V I R I V T	R E E D E P K P V L M A A F G L S D T Q A E Y V	L	
UniRef90_A7HX51	A Y L N L	D E V I R I I	R Q E E D E P K P A L I K K F K L T D N Q A E A I	L	
UniRef90_C0D091	A C D C	D L I A V L	R G S K N L K D A R A C L T K K K L H F T E R Q A S A I	L	
UniRef90_R6R0N2	A C D V I	D L I E I I	R G S K S R E Q V K N C L I H F T E R Q A L A I	L	
UniRef90_UPI0003674B6C	A Y L N L	D E V I R I I	R E E D D A K A S L M S T F K L T T E N Q A E A I	L	
UniRef90_G4R626	A Y L N L	D E V I R I I	R E E D E P K A I I M M A K W D L T T E V Q A E A I	L	
UniRef90_M1YMM4	T F K D L	D K A L K L I	R S S K S K D E A A T K L K K T F K L D D E Q T A A I	L	
UniRef90_G9ZY17	V Y I L N	D E V I R I V	R E E D H P K Q A L I A T F D L T E M Q A E A I	L	
UniRef90_I0IBH7	A V V L D I	D E V V R L I	R S S T T R D E A I E K L M A R G F R I D P Q A E A I	G	
UniRef90_H5SDW4	A L E R L	D E V I Q D I	R S S K D V P Q A K E K L		
UniRef90_Q07XV3	A F L N I	D E V I E I I	R Y N D E P K A E L M A R F N L S D K Q A E S I	L	
UniRef90_R4YWH2	A L D L I	D A I A A I	R A S A D R G V A R A A L M E G F E F S E I I Q A N H I	L	
UniRef90_C6XIU3	A Y L N I	D E V I R I I	R E D H P K E E L M K A F K L S E I I Q T D A I	L	
UniRef90_E3I6K3	A Y L N L	D E V I R I I	R N E D E P K P A L I A R F A L T D D V Q A E A I	L	
UniRef90_UPI0003652A42	A F L N I	D E V I H I	R T E E K P K Q E L M S R F E L S D K Q A E E Y I	L	
UniRef90_Q83G39	A L V D I	D K T S I I	R N S E G Q K E A R K N L I M K C L N V T R D Q A E Y I	L	
UniRef90_C4KAV4	A F L N I	D E V I R V I	R E E D E P K P A L I A A F G L S D D V Q A E D I	L	
UniRef90_Q3ANP5	A L N N L	D Q A V I A M I	Q E A N D A A S A R A S L M V R L D L S E R Q A D A V	V	
UniRef90_UPI00047CE01C	A F L N I	D E V I R I I	R R Y E E E P K A E L M L R F G L S D L Q A E E A I	L	
UniRef90_B9JCW3	A Y L N I	D E V I A I I	R E E D E P K P V M E R F G L T D N Q V E A I	L	
UniRef90_A3Y7F8	A F L N I	D E V I E I I	R N E E K P K V E L M L R F G L T D I Q A E E A I	L	
UniRef90_J3UZG1	A S S N I	D S V I E I I	K S A S S F K D A K T K L Q N V K W L T E F Q L K A I M		
UniRef90_G9ELC9	A Y L N I	D E V I A I I	R E E H E H P K Q G L I A R F F N L S E R Q A E E A I	L	
UniRef90_UPI0003B5D948	A Y L N I	D R V E I I R	H E D E P K A V V M M A E F G L S E V Q V E A I	L	
UniRef90_K9H320	A F L N L	D E V I R I I	R E E D E P K T E L M R T F E L T D D V Q A E A I	L	
UniRef90_R5ZS38	A K S I I	D E V I A V I	R K S N S R V E A K E N M M M N K F G F T E L Q A D A I	G	
UniRef90_K5YPU3	V F L N L	D E V I R I I	F E D K P K E Q L I A T F F E L S E E V Q A E E A I	L	
UniRef90_G6EZ40	V Y L N L	D E V I R I I	R E E D E V K S V L I I E T F K L T D L Q A E S I	L	
UniRef90_A5Z3F7	A T N I I	D L I E I I	R G S Q S Q K Q V K A C L H G K T F T E R Q A Q A I	L	
UniRef90_R4U177	T V S I L	D E V I A V I	R H S K D R Q D A I K N L V A K F S F T Q L Q A E A I	V	
UniRef90_R6C216	A C N V I	D L I E I I	R G S K D R N M A K R C L T Q Q L M F T E K Q A N A I	L	
UniRef90_F3L3G5	A Y L N I	D E V I H I	R T E D K P K P V L M Q R F G L S D A Q A E E A V	L	
UniRef90_UPI00047EA266	A F L N I	D E V I R V I	R F E D K P K D E L I K A F K L T D R Q A D A I	L	
UniRef90_F7YV04	A A R A I	G V V V D I	R T S K D S Q E A I K N L I E T L S I T T E Q A K A I	L	
UniRef90_UPI000471FE19	V Y L N V	D E V I Q T I	R D S D E P R Q A L M S R F K L T T E R Q A E D I	L	
UniRef90_L0EXJ1	A Y L N M	D T I S I I	R E E D E P K P L I M K R F S L L N Q N Q A E A I	L	
UniRef90_A1ST91	A Y L N I	D E V I E I I	R T C D D A K A E L M S R F E L S A I Q A H A I	L	
UniRef90_R7H146	A I S I L	D E V I A L I	R R S K N K A D A I V N L V K E Y S F T D K Q A E A I	V	
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UniRef90_UPI0002F3AA35	V Y L D L	D K V I R I I	R E D E P K A E L M L V F S L T E V Q A D A I	L	
UniRef90_UPI0004651DF4	A C D V I	D L I E I I	R G S R S V K D A K A C L M Y G I T F T E R Q A T A I	L	
UniRef90_UPI0003F5AE03	A Y L N I	D K V I K I I	R T E D E P K P V L M K T F K L S E V Q A E A I	L	
UniRef90_E1ZRV4	A M R D L	D A V V H A I	R Q A S D G A A A L V V L R S P F G L S R E Q A E G V		
UniRef90_S9QT77	A F L N L	D R V I D I	R Y D E A P K A A L M R E D W G R D L T E V Q A E A I	L	
UniRef90_B0NAD1	A C D V I	D L I E I I	R G S Q S V K D A K A C L M Y G I T F T E R Q A T A I S		
UniRef90_U3T25	A F L N I	D E V I H I	R S E D E P K P V L M S R F D I S E T Q A E A I	L	
UniRef90_R5DP74	A C D I I	D L I E I I	R G S T N L K M A K E C L M T G N D F T E R Q A S A I L		

410 420 430 440

UniRef90_H8N0U2	E M R L Y K L A R L E I L I V Q K E □ K E K R A E I K R I E G I L K D V K K R W	
UniRef90_F9EHB4	E Q L R R L T K F S V I E L E K E K E R D E □ L A R E I S D L E T L A D E A V L R	
UniRef90_UPI0003686E19	E L R L R Q L T K Y S R I E L E K E K E Q E E L R R E A E E T L A S D S R L R	
UniRef90_C5B4N9	E M R L S R L T G L E E D A L K A E □ L A E L K K T I E E L T A I L N S K R L Q N	
UniRef90_R6WUP0	E M K L R R L T G L E E D A L K A E □ L A E L K K T I E E L T A I L N V K A V L D	
UniRef90_K0D9N7	T L Q L Y R L T N T D V I T Q E E E F A D L T N K I N R L N L H E E E S A L K	
UniRef90_U1QRD8	D L R L R R L T K M S R I E L E E F A D L K R A E E L N K E E A T L G S P R R L K K	
UniRef90_UPI00037BE4C8	D T K L R Q L A R L E E V K I R A E E Q D E L N K E E N E L G S P R R L K K	
UniRef90_V8C8F7	E M R L Q R L T G L E E D A L K A E □ L A E L K K T I E E L T A I L N S K R L Q N	
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UniRef90_B1XQNO	A M P M R R L T G L E E D A L K A E □ L A E L K K T I E E L T A I L N S K R L Q N	
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UniRef90_B9QV00	N M R L R S L R K L E E F E I R K E H D K L T D E K D Q L T K L L G S D A R Q W	
UniRef90_R6G0F1	E L M L Y R L T G L E I T V F Q K E H D K L T D E K D Q L T K L L A S E R E L L	
UniRef90_B4W7D2	D T R L R Q L A R L E E E M T I E K E F K A L S E E L A H Q A L T S S E G K Q W	
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UniRef90_K9YVW8	A M P M R R L T G L E R Q K I E K E V T E L Q T E I G Q L E T L L S N E N V L K	
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UniRef90_J6J583	R L Q I G Q L A N L E R D E I F R E Y A G L R G E I Q T Y E A L L T S E A T I L	
UniRef90_D5V0S3	N M R L R N L R K L E E E M E I R A E D K A L R K E Q R D L R A L V A S E A K Q W	
UniRef90_E8RSX2	D M R L G R L T G L E E E M E I R K E Q D E L V G L E E R D E L V L I G S V R R Q W	
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450 460

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UniRef90_UPI0003686E19	A L V S A E L A E V A E V H G D D R R T E L L
UniRef90_C5B4N9	G V V R R E L E E I K A A F P D G R R T A I
UniRef90_R6WUP0	S K I K S D L L D V K K R F K S P R K S E I I
UniRef90_K0D9N7	D V I R D E I T A I T K T Y S S P R Q S V I Q A
UniRef90_U1QRD8	G V V D S M N K A V E Q W G D D R R S I L L
UniRef90_UPI00037BE4C8	T L I K K E L Q A V V D E Y G D D R R S P I V S
UniRef90_V8C8F7	E I I K E E L A E I K D K F S T P R R T Q I
UniRef90_U2XJ78	A Q V A R E L E A A E T Y G T P R R T L L L
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UniRef90_R6XRM3	K T V I A E L S R V K E I D C P R K T L I
UniRef90_B9QV00	T K I S K E I G E I A K V Y G P E R R T
UniRef90_R6G0F1	K V V K T E L K E I T D K Y R N P R R T M V V
UniRef90_B4W7D2	K A I S K E L E A V R K A L S P R R T T I
UniRef90_W9HDT2	K A I A K Q I A E T R K R F G K A R R T V I
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UniRef90_A0A033V433	K V I K N E L R A V R
UniRef90_K1X190	
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UniRef90_UPI000479DFCE	K A L K K E L R S L K R R F G N E R R T R I V
UniRef90_UPI0002EAB6C6	D V I K E E L L E T K D K I N V K R K T V I
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UniRef90_D5V0S3	E K I S E E I A K V R E T F G P K R R T
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UniRef90_R5QWA6	Q V I I K R L K E I K Q K Y P M P R L T Q I
UniRef90_Q0FAB4	E R I I N E L R E T R K V F G K N R R T E L
UniRef90_I7C1Y2	K L V R S E L L K D A E T Y G D D R R R S P I V A
UniRef90_V2USW1	A L I I D E L K S D A K R F G D D R R R S Q I V A
UniRef90_K2HAW8	U R I K K D L R S I K K T Y K D D R M T V I
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UniRef90_W9VIR1	R L I R E E I A A D A E K Y G D D R R S P L V
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UniRef90_R6R0N2	A V I E D L K K I K R E Y A K P R R T V V
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UniRef90_M1YMM4	Q E V K A E L K E I T D K Y S D K R R T Q
UniRef90_G9ZY17	N K I A E E I E K T R E K Y G E E R R T T L
UniRef90_I0IBH7	G I L L E D V S T M R D K Y A N P R R T Q I T
UniRef90_H5SDW4	
UniRef90_Q07XV3	T L V K K E L I Q D G E T Y G D N R R S P I I
UniRef90_R4YWH2	A V I R E E L A D I R S R F A V D R R S
UniRef90_C6XIU3	T E V K R Q L K I A R E V F D P E R R S K
UniRef90_E3I6K3	D R I S A E I K G I K K Q F G K K R K T V T A A
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UniRef90_J3UZG1	D W I R K E L I E I S Y K Y G D K R K T K I T A
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UniRef90_R6C216	Q V I I N E L N Q I K K E Y S K P R K T E I T
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UniRef90_UPI0002F3AA35	K T V A W E V R E V K K T F G P E R R R T
UniRef90_UPI0004651DF4	A V I E D L N R L K K E Y G V K R R T L L
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UniRef90_S9QT77	K R I S E Q L R E T K K A F A K D
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UniRef90_D4XVG2	Q R A L P D V R D G L K P V H R R I I H A M R L L K L N P D Q S Y A K C A R I				
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UniRef90_E6QR37	G R A L P D V C D G Q K P V Q R R I L Y A M R E M G L T H H S N F V K S A R V				
UniRef90_I4IBJ1	V G R A L P D V R D G L K P V H R R I L Y A M H E L G L T P D R P F R K C A R V				
UniRef90_UP100042023B4	M S R S L P D V R D G L K P V H R R L V Y A M H Q L R L D P T S G F K K C A R V				
UniRef90_UP10003FD4C58					
UniRef90_L8XZ32	D R A L P P H V G D G L K P V Q R R I I Y A M S E L G L S A V S K H K K S A R T				
UniRef90_R7A2Q3	I S R A L P E I D G F K P S H R K L L Y T M Y K M G L L T G Q R T K S A N				
UniRef90_R8AT51	M D R A L P F I G D G L K P V Q R R I V Y S M S E L G L N A A A K Y K K S A R T				
UniRef90_V4ZTU5	G R A L P P D A R D G L K P V Q R R I L Y A M S E A G V T A N A G H R K S S S V				
UniRef90_L2F995	M D R A L P N I A D G L K P V Q R R I V Y A M S E L G L K N T A K P K K S A R T				
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UniRef90_UP10004108F83	S R A L P D A R D G L K P V H R R I L Y A M H E A G V S S N A A H R K S S S I				
UniRef90_UP100036CCD41	R A L P D V R D G L K P V H R R I L F S M N E Q G Y R P T H A Y V K S S R V				
UniRef90_G4ENR9	D R A L P D I R D G L K P V Q R R I L Y A M N E L K I H H D K P Y K K S A R T				
UniRef90_UP100047541E7	S R A L P P Q V E D G Q K P V Q R R I L Y A M H E L G L T A T A K P V K S A R I				
UniRef90_UP1000364F01E	G R A L P P N V E D G M K P V Q R R I L Y A M R E M G L G S N T K H V K S A R V				
UniRef90_D4M715	V G R A L P D V R D G L K P V Q R R I V L Y A M S E L G L R H N S A Y K K S A R I				
UniRef90_UP10003B64A5A	Q R A L P D V R D G L K P V Q R R I L Y S M N D L G L Q Y N K S Y K K S A R V				
UniRef90_F3SZD6	N R A L P D V R D G L K P V H R R I L F A M Y S S G N T Y D K N F R K S A K T				
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UniRef90_UP10002556458	T A R A I P S L A D G Q K P V Q R R I L F A M R E M G L L K S P K H V K S A R V				
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UniRef90_UP10002D7A363	V S R A L P E I D G F K P S H R K L L Y T M Y K M G L L E G N K T K S A N				
UniRef90_UP10003C180C1	T S R A L P D V R D G L K P V Q R R I L Y G M Y N D R L S F D G R P A K C A R I				
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UniRef90_I9W961	G R A L P E V A D G Q K P V Q R R I L Y A M H E M G L R A D S K P V K S A R V				
UniRef90_B1JWA4	S R A L P D V C D G Q K P V Q R R I L F A M N E M G L G P D A K P V K S A R V				
UniRef90_W6LYW1	L D R A L P H I G D G L K P V Q R R I V Y A M S E L G L N A G A K H K K S A R T				
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UniRef90_U4TI0	L D R A L P H I G D G L K P V Q R R I V Y A M S E L G L H A S A Q Y K K S A R T				
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UniRef90_A0A024IBX7	G R A L P D V C D G Q K P V Q R R I L Y S M E R M G L G Y S G N P V K S A R V				
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UniRef90_R6RFC4	L S R A I P Q I D G F K P S H R K L L Y T M Y N M G L L Q S G T I K S A N				
UniRef90_Q70CL7	R D G L K P V H R R I I Y A M N D L G M T S D K P Y K K S A R I				
UniRef90_F9EJR9	V S R A I P D V R D G L K P V H R R I I L F A M N E M G M T N D K P F K K S A R I				
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UniRef90_UP10004737416	I D R S L P D V R D G L K P T H R R I I L Y K M Y E I G L S H N K P K M K C H P				
UniRef90_UP10003619C10	S R A L P D A R D G L K P V Q R R I I Y G A N E L G L R P D R G H V K S Q R V				
UniRef90_UP1000362B785	T A R A L P G L E D G M K P V Q R R I I L F A M D G F A R P D A A H K K S A R V				
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UniRef90_K0JZB4					
UniRef90_A8TBZ2					
UniRef90_U3TN66					
UniRef90_Q9ZAF9					
UniRef90_UP1000464DF9C	K P V Q R R I I V Y A M S E L G L N A S A K F K K S A R T				
UniRef90_T0Y9J9	M G R A L P D V T D G Q K P V Q R R I I L F A M H E L G L Y R P A R H V K S A R V				
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UniRef90_N1NJR9					

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UniRef90_V9WDX6	S G D T M G D F H P H G D A A I Y Y D A M A R L A Q D F N V R Y P L V D G Q G N F			
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UniRef90_D4XVG2	V G D V I G K Y H P H G D T S V Y Y D A M V N M S Q W W K N G I A L L D M H G N V			
UniRef90_J1JU4	V G D V M G K F H P H G D T S I Y Y D A L V R L A Q D F A V R Y P L V D G Q G N F			
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UniRef90_UP100046FE4D4	V G D V L G K F H P H G D S A C Y E A M V L M A Q S F S Y R Y P L V D G Q G N W			
UniRef90_UP1000473CC76	V G D V L G K Y H P H G D Q A V Y Y D A L V R L V Q N F S T K Y P L A L D G H G N F			
UniRef90_P47446	V G E I M G K Y H P H G D S S I Y D A I I R M S Q S W K N N W T T V S L H G N N			
UniRef90_E6QR37	V G E V L G K F H P H G D S S A Y D A M V R L A Q N F S R Y P L V D G Q G N F			
UniRef90_I4IBJ1	V G D V L G K Y H P H G D Q S V Y Y E A L V R M V Q D F S S R Y P L L S G H G N F			
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UniRef90_R1CCZ8	V G E V L G K F H P H G D Q S V Y Y D A L V R M A Q P F S L R A P L V D G H G N F			
UniRef90_L1MSK7	V G D V I G K Y H P H G D S A V Y Y D T L V R M A Q P F S L R Y M L V D G Q G N F			
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UniRef90_K9DXM0	V G D V L G K [L] H P H G D Q S V Y Y D A L V R M A Q D F S L R Y P L I D G Q G N F			
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UniRef90_A3SWF3	V G D V M G S Y H P H G D S A I Y Y D A L V R M A Q D F S M S L P L I D G Q G N F			
UniRef90_F9QB78	V G D V L G K F H P H G D S A C Y E A M V L M A Q P F S Y R Y P L V D G Q G N W			
UniRef90_C9P113	V G D V L G K Y H P H G D S A C Y E A M V L M A Q P F S Y R Y P L V D G Q G N W			
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UniRef90_U4TI0	V G D V L G K F H P H G D S A C Y E A M V L M A Q P F S Y R Y P L I D G Q G N W			
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UniRef90_UP10003619C10	V G E V M G K Y H P H G D Q A I Y Y D A L V R M A Q P F T L R L P L V D G H G N F			
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UniRef90_J9CWX4	C S A V T G N L H P H G G A S M Y G A A A L M A A D F Q R V K V I D G Q G A F			
UniRef90_A4T3N2	I V G Q T M K [L] N P H G D S A I Y Y E T M V K L S R G N L H P Y P D S K G N F G K			
UniRef90_K4IUR2	V G D V L G K Y H P H G D S A C Y E A M V L M A Q P F S Y R Y P L V D G Q G N W			
UniRef90_D6GS45	V G D V L G K Y H P H G D Q S A Y Y D A L V R L A Q G F S M R Y P L I D G Q G N F			
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UniRef90_U3TN66	V G D V L G K Y H P H G D S A C Y E A M V L M A Q P F S Y R Y P L V D G Q G N W			
UniRef90_Q9ZAF9	V G D V L G K Y H P H G D S A C Y E A M V L M A Q P F S Y R Y P L V D G Q G N W			
UniRef90_UP1000464DF9C	V G D V L G K Y H P H G D Q S A Y Y D A L V R L A Q G F S M R Y P L I D G Q G N F			
UniRef90_T0Y9J9	V G D V I G K Y H P H G D S A A Y E A L V R Q A Q D F T L R Y P L I D G Q G N F			
UniRef90_UP100037C73AF	T M Q Y H P H G D A S I K D A L V Q L G Q K D L L I D C Q G N W G N I L			
UniRef90_R5UZR0	V I G N T M K Y H P H G D A S I C D A M V Q L G Q K D L L I D T Q G N W G N T F			
UniRef90_D5EPM8				
UniRef90_N1NJR9				

90 100 110 120

UniRef90_I6ZI50	G S I D G D S P A A M R Y T E V K M S K L G E K F L E G I K E D P V D F V P N Y		
UniRef90_UPI0003B363BB	G N I E G D G A A A M R Y T E A R L S K V T Q N F L E D L N L N V V D F L P N F		
UniRef90_UPI0003B34748	G N I D G D N A A A M R Y T E A R L T A T A I R L M A G L D E G T V D F L P T Y		
UniRef90_C0QET9	G A P D D P K F A A M R Y T E S R L S T Y A D I L L S E L D L G A T E W T P N F		
UniRef90_V9WDX6	G N I D G D N P A A S R Y T E A R M T F V A E A M L E G L S E N A V D F R D N Y		
UniRef90_Q4PK96	G S Q D D P K F A A M R Y T E S K L T K F A K L L D E L K A G T V D F W Q P N F		
UniRef90_C6XHT3	G N I D G D S A A A M R Y T E S R L T A R M T Q V A E L L G V D E D A V D F R D T Y		
UniRef90_D4XVG2	G S L D N D P A A A M R Y T E V R M S K I C N Y M L D D L K K N T V S F I P N F		
UniRef90_J1JU4	G N I D G D N A A A M R Y T E A R M T E V S T L L D G I S E N A I D F R P T Y		
UniRef90_R5GNX3	G S I E G D G A A A M R Y T E A K L Q K F T Q E Y L A D M M D K N V V D F Q S N F		
UniRef90_UPI00046FE4D4	G S P D D P K F A A M R Y T E S R L S R F S E L L S E L L G Q G T V N W S P N F		
UniRef90_UPI000473CC76	G S V D N D P P A A A M R Y T E T T R L A P A H K F L E E I G S D T V N F S N N F		
UniRef90_P47446	G S V D G D N A A A M R Y T E T T R L S L Y G F E L L K D K L V S F I N N F		
UniRef90_E6QR37	G S R D G D N S A A M R Y T E A R R L T P I S A V L L S E L L D M G T V D M I P N Y		
UniRef90_I4IBJ1	G S I D N D P P A A M R Y T E T T R L A G I G D Q V L G G I S E A I V N F S S N F		
UniRef90_UPI00042023B4	G S V D G D N A A A M R Y T E A R R L T K V A Q A L L E G I A D D A V D F R P T Y		
UniRef90_UPI0003FD4C58	H A F V T D G F V S H N T E S R L D P A M D M L R D L E E T V D F S D N Y		
UniRef90_L8XZ32	G S L D N P K F A A M R Y T E S K L S K Y A D V L L K E T N E A T V D W Q P N F		
UniRef90_R7A2Q3	A Y S R D M S Y A S R Y T E V K L D P I C N E L F R D I D K E T I D F V P N Y		
UniRef90_R8AT51	G A P D D P K F A A M R Y T E S R L S K M A D V L L G E L Q Q G T V D F Q P N F		
UniRef90_V4ZTU5	G S P D D P K F A A M R Y T E A K L S N Y A N T L L T E L G Q G T V D W H D N F		
UniRef90_L2F995	G S V D G D P A A A M R Y T E A R M A P I A E E L L A D I D M D T V D F E G N Y		
UniRef90_U2YGR6	G S P D D G P A A S R Y T E A R M S P E A M L L V G E L G E D T V D F R P N Y		
UniRef90_UPI0004108F83	G N I D G D N A A A M R Y T E A K L T E S E L L E N I D E E T V D F K S T Y		
UniRef90_UPI00036CCD41	G S L D G D G P A A M R Y T E C R L S L F G E L M L E D I D K D T V K F I P N F		
UniRef90_G4ENR9	G S R D G D G A A A M R Y T E A R L T P I A E L L L G E L D A G T T D F I P N Y		
UniRef90_UPI00047541E7	G S R D G D G A A A M R Y T E S R L T P I A E L L L S E I D M G T V D F V P N Y		
UniRef90_UPI000364F01E	G S R D G D G A A A M R Y T E S R L T P I A E L L L S E I D M G T V D F V P N Y		
UniRef90_D4M715	G S V D G D R A A A M R Y T E A R L T H E L G E L M L A D I D E D T V E W G P N F		
UniRef90_UPI0003B64A5A	G S I D D D P A A A M R Y T E A K L S K I S S L M L Q D I E K N T V S F A P N F		
UniRef90_F3SZD6	G S I D N D P P A A M R Y T E A K L S Q L S E E L L R D I I N K E T V S F I P N F		
UniRef90_Q4A6Z3	G S I D D D K Q A A M R Y T E V K L A K I A N Y I G D I I K K K T V K F I P N F		
UniRef90_A0A011PLV3	G S R D G D N A A A M R Y T E A R L T P I C A E L F R D I D Q D T V D F Q P N Y		
UniRef90_V2ZEK3	V Y S R D M A W A A S R Y T E A R L D P I C A E L F R D I D Q D T V D F V D N Y		
UniRef90_UPI00046411B1	G S L D G D S A A A M R Y T E A R L L P I S D L L L S E I I D E D T V D F Q R N Y		
UniRef90_UPI0002556458	G P D E P K S F A A M R Y T E A R L R S K F S E V L L S D L L K L N C T T Y V P N F		
UniRef90_X0U744	P A A M R Y T E I R L R M H E I A E E F L A D V E R K E T V D F V S N Y		
UniRef90_R9M160	A Y S R D M A Y A A S R Y T E V K L D P I C N E L F G D I D R D T V D F V D N Y		
UniRef90_R7KRH7	A Y S R D M A Y A A P R Y T E A K L A P I C A E L F R D I D K D T V D F F V P N Y		
UniRef90_UPI0002D7A363	G S V D G D R P A A Y R Y T E A K L S A I S D Y L M R E L R Q E T V E M R P S Y		
UniRef90_UPI0003C180C1	G N I D G D N A A A M R Y T E C R M T E A S L L L D G I D E D A V D F R P T Y		
UniRef90_R1CCZ8	G S N D P D P P A A M R Y T E C K L Q R L A R D S I T D V A L D T V D F T D N F		
UniRef90_L1MSK7	G S V D G D A P A A M R Y T E A R M T K I A H E L L D K E T V N F V P N Y		
UniRef90_M4R905	G S P D D P K F A A M R Y T E T K S R L A K F A E L L L N Q G A A E Y Q P N F		
UniRef90_C8NBL7	G S A D D P K F A A M R Y T E S R L T G Y A K T L L E E L N Q G T V E W V A N F		
UniRef90_K9DXM0	G S R D G D G A A A M R Y T E A R L T P I S R L L M D E I D M G T V D S Q P N Y		
UniRef90_A3UC93	G N V D G D G A A A M R Y T E A R L T E A A I L I L Q D Y D E G T V D F R E T Y		
UniRef90_B8ERL4	G N I D G D G A A A Y R Y T E A R M T D V A R L L L E G I I D E D S V D F R D N Y		
UniRef90_I4EQ20	N T E A R L T P I A M E M L R D I I D E E T V D F Q P N Y		
UniRef90_I9W961	G S R D G D G A A A M R Y T E A R L T P I A R L L L E E I D Q G T A D F I P N Y		
UniRef90_B1JWA4	G S R D G D G A A A M R Y T E A R L T P I A K L L L D E I D Q G T V D F M P N Y		
UniRef90_W6LYW1	G S P D D P K F A A M R Y T E A R L S P F A Q V L L S E I I D Q Q G T V D W T P N Y		
UniRef90_A3SWF3	G S M D G D S A A A M R Y T E S R L D K V A S F M T G D L D K E T V D F I D N Y		
UniRef90_F9QB78	G A P D D P K F A A M R Y T E S R L D K A L I S E I L L G E L D Q Q G T V D Y Q P N F		
UniRef90_C9P113	G A P D D P K F A A M R Y T E A K L S K F A E V L L G E L D Q Q G T V E W Q P N F		
UniRef90_A6FMY1	G N I D G D N P A A S R Y T E A R M T A V A E A L L D G I N E N A V D Y R D N Y		
UniRef90_C1D9X7	G S R D G D G A A A M R Y T E A R L T P I A D L L L A E I D Q Q G T V D F V P N Y		
UniRef90_U4TI0	G S C D D P K F A A M R Y T E S R L S K Y A N N L L E E V A Q G T V N W L P N F		
UniRef90_UPI0003B3791C	G N I D G D N A A A M R Y T E A R L T D A A I R L M D G I D E E S V P M R T T Y		
UniRef90_R6MXA9	F Y S R D M A W A A S R Y T E A K L D A I A Q E L F R D I D K D T V D F V D N Y		
UniRef90_UPI00035E873E	G S P D D G P A A S R Y T E A R M S N E A M L L V G E I D E D T V D F R P N Y		
UniRef90_R5MN38	S Y S K N M Q Y A A S R Y T E A K L A P I S A E L F R D I D K D T V D F V P N Y		
UniRef90_K1ZJE0	G S I D G D P P A Q M R Y T E A R M Q K I T E E M L K D L D K Q T V N F R D N Y		
UniRef90_R5H390	A Y S R D M A Y A A S R Y T E A K L K E P I S G E L F A E I D K D A V D M V P N Y		
UniRef90_A0A024IBX7	G S R D G D G A A A M R Y T E A R L K A S G L L L D E I D E G T V D F V P N Y		
UniRef90_J9DB99	M M Q D I E K E T V D M D R N F		
UniRef90_F0EW91	G S R D G D G A A A M R Y T E A R L S P I A D L L L S E I I Q Q G T V D F V P N Y		
UniRef90_K1KGQ6	G S R D G D S Q A A M R Y T E A R L L M P I A S L L L E E V D T G A I D F T P N Y		
UniRef90_R6RFC4	A Y S K N M V Y A A S R Y T E A K L A P I C H E L F D D I K S D T V D F V P N Y		
UniRef90_Q70CL7	G S V D G D S A A A M R Y T E A R M S P A M L L V G E I I D E T V D F R P N Y		
UniRef90_F9EJR9	G S I D G D S A A A M R Y T E A R M E K I T A E L L E D I D K N T I D W R K N F		
UniRef90_E6U414	A Y S R D M A F A A S R Y T E V K L D P I C N E L F R D I D K K T V D F V D N Y		
UniRef90_UPI0004737416	G K Y D T D S P A S R Y T E A R L N K F A N E M D G I L N K E V V N F I G E D		
UniRef90_UPI0003619C10	G S L D D G P A A A R Y T E A R M A N A L L M V A G L D E D T V D F V P N Y		
UniRef90_UPI000362B785	G S M D G D N A A A M R Y T E C R L T S F A R H V L S E L N A G V V E F Q P N Y		
UniRef90_B5ABQ1	G S V D G D S A A A M R Y T E A R K M N K I A S E M L R D I N K N T V D F T P N F		
UniRef90_Q8GDZ7	G A V D G S G A A A M R Y T E A R I S K Y T E D C M K D L P F F K D Q F I P N F		
UniRef90_D5HG21	A Y S R D M A Y A A S R Y T E A K L E P I C E E L F R D I D K E T V D F V P N Y		
UniRef90_J9CWX4	P R I Q G D I P A A D R Y T E M R L S A P G A A L T A E I L D S H A V P M V A T F		
UniRef90_A4T3N2	S T S R D M Q F A A P R Y T E A K L M P I C K E L F G E I E K N T V D F V D N Y		
UniRef90_K4UR2	N T E A R M S P A M L L V G E I D E D T V D F R P N Y		
UniRef90_D6GS45	G A P D D P K F A A M R Y T E A K L S K F A E V L L G E I L G Q G T V D W Q P N F		
UniRef90_K0JZB4	R R S P D D P F A A M R Y T E S R L S K Y S E L L L S E I L G R G T A D W V P N F		
UniRef90_A8TBZ2	G S R D G D G A A A M R Y T E A R L T P I A K L L L D E I I D M G T V D F M P N Y		
UniRef90_U3TN66	G S R D G D G A A A M R Y T E C R L T P I A E L L L G E I I T E D T V D F V P N Y		
UniRef90_Q9ZAF9	R R S P D D P F A A M R Y T E S R L S K Y S E L L L S E I I T E D T V D F V P N F		
UniRef90_UPI000464DF9C	G S R D G D G A A A M R Y T E A R L T P I A K L L L D E I I D M G T V D F M P N Y		
UniRef90_T0Y9J9	G S R D G D G A A A M R Y T E C R L T P I A E L L L G E I I T E D T V D F V P N Y		
UniRef90_UPI00037C73AF	T T G D E A A A G R Y I E A R L S K F A N E V V F N K K T T E W M L T Y		
UniRef90_R5UZR0	T T G D E A A A A A R Y I E A R L S K F A L D V V F N P K T T N W L A S Y		
UniRef90_D5EPM8	T T G D E A A A A A R Y I E A R L S K F A L D V V F V D F V P N F		
UniRef90_N1NJR9	T T G D E A A A A A R Y I E A R L S K F A L D V V F V D F V P N F		

130 140 150 160

UniRef90_I6ZI50	D G S K E E P S I L P I V A P S I L L N G G D G I A V G M A S K I P S H N L K E	
UniRef90_UP10003B363BB	D E T E K E P S V L P V K I P N F L I N G S E G I A V G M A T S T P P H N L K A E	
UniRef90_UP10003B34748	N G E E Q E P E I P G L F P N I L L A N G A S G I A V G M A T N I P S H N L V A E	
UniRef90_C0QET9	D G T L N E P T L L P A R L P N I L L N G T T G I A V G M A T D I P P H N L T E	
UniRef90_V9WDX6	D G R L T E P A V L P A T F P N I L L A N G A A G I A V G M A T N I P P P H N I N S E	
UniRef90_Q4PK96	D G S L L E P V I F P A K V P S I L L N G T S G I A V G M A T D I S S H N I N Q E	
UniRef90_C6XHT3	N E E D S E P T V V F P S I F P N I L L V N G T T G I A I G M A T E M P P P H N L N V Q E	
UniRef90_D4XVG2	D D S E K E P S V L P S I F P N I L L V N G S S G I A V G M A T S I P P P H N L V A E	
UniRef90_J1JU4	N E E D E E P S V L P G A F P N I L L V N G S S G I A V G M A T S I P P P H N L V A E	
UniRef90_R5GNX3	D E T E K E P V V L P V R I P N I L L I N G A E G I A V G M T T S I P P P H N L V H E	
UniRef90_UP100046E4D4	D G T L Q E P S V L P S I F P N I L L I N G G S S G I A V G M A T D I P P P H N L V H E	
UniRef90_UP1000473CC76	D G S Q K E P D V L P A Q L P F I L L N G S S G I A V G M A T N I P P P H N L G E	
UniRef90_P47446	D D S E K E P T V L P T L L P N I L L F I N G A S G I A A G Y A T N I A P H N T N E	
UniRef90_E6QR37	D G H F Q E P A M L P A R L P M V L L N G A S G I A V G M A T E P S H N L R E	
UniRef90_14IBJ1	D N S Q Q E P V V L P A Q L P I L I N G C S G I A V G M A T S I P P P H N L G E	
UniRef90_UP100042023B4	D G E E S E P V V L P A A F P N I L L A N G A A G I A V G M A T S I P P P H N L A G E	
UniRef90_UP10003FD4C58	D G R T Q E P D V L P S R I P N I L L V N G G S G I A V G M A T N I P P P H N L R E	
UniRef90_L8XZ32	D G S L N E P V R L P A R L P N I L L N G T T G I A V G M A T D I P P P H N L T E	
UniRef90_R7A2Q3	D N T M A E P T L L P A S F P S V L V N A N M G I A V S M A S S I V C P F N L A E	
UniRef90_R8AT51	D G T L P E P K W L P A R L P H I L L N G T T G I A V G M A T D I P P P H N L V R E	
UniRef90_V4ZTU5	D G R L L E E P E V L P A G F P N I L L V N G S S G I A V G M S T N I V P P P H N L G E	
UniRef90_L2F995	D G T L L E E P I T L P A R L P N I L L V N G T T G I A V G M A T D I P P P H N L T E	
UniRef90_U2YGR6	D G R L L E E P T V L P P A A F P N I L L V N G S S G I A V G M S T N I V P P P H N L G E	
UniRef90_UP10004108F83	D G S L L E E P A V L P P A A F P N I L L V N G T S G I A V G M A T N I M I P P H N L G E	
UniRef90_UP100036CCD41	D G D L Q E P L V F P A K F P N I L L A N G A S G I A V G M A T S I P P P H N I V E	
UniRef90_G4ENR9	D D S E S E P S I L P S I L P N V L V N G S T G I A A G Y A T N I V P P F N L S E	
UniRef90_UP100047541E7	D G A L E E P L L L P A R L P L L L V N G T S G I A V G M A T E I P S H N L G E	
UniRef90_UP1000364F01E	D G A F K E P A L L P A R L P M L L A N G A S G I A V G M A T E V P P P H N L R E	
UniRef90_D4M715	D E S L K E P L S L P S V L P N I L L V N G S T G I A V G M A T N I P P P H N L R E	
UniRef90_UP10003B64A5A	D D T E K E P T V L P P S Y L P N I L L L N G A K G I A S G F A T E I P P P H N L S E	
UniRef90_F3SZD6	D D T T L E P M V L P A R F P N I L L I N G S T G I S S G Y A T D I P P P H N L A E	
UniRef90_Q4A6Z3	D D S E S E P T P I V L P S M F P N I L L V N G S R G I A I G M A T E M P P P H N L G E	
UniRef90_A0A011PLV3	D G S F D E P T C L P A R L P F V L L V N G S S G I A V G M A T E I P P P H N L R E	
UniRef90_V2ZEK3	D G K L K E P S L L P T T F P N I V L V S A N K G I A V G M A S D I C G F N L G E	
UniRef90_UP100046411B1	D G T L L E E P E A Y L P A R L P H I L L N G T M G I A V G M A T N I P P P H N L R E	
UniRef90_UP10002556458	D G S L L S E P E A Y L P V I L P T N I L L I S G S S G I A V G M A T N I V P P P H N L V R E	
UniRef90_X0U744	D N T M K E P T I L P V T F P S V L V N A N V G I A V G M A S S I C P F N L S E	
UniRef90_R9M160	D N E T T V E P T I L L P A S F P S I I L V N S N V G I A V S M A S A I V C S F N L T E	
UniRef90_R7KRH7	UniRef90_UP10002D7A363	D N N E N F E P V V L P P A E Y P N I L L V N G S S G I A V G M A T N I P P P H N L G E
UniRef90_UP10003C180C1	D G E E E E P E P V V L P A G F P N I L L A N G S S G I A V G M A T S I P P P H N A A E	
UniRef90_R1CCZ8	D A S E R E P M V L P A R L P M I L L N G A S G I A A T N I P P P H N L G E	
UniRef90_L1MSK7	D G S E M I P E V L P T K V P A L L V N G S S G I A V G M A T N I P P P H N L G E	
UniRef90_M4R905	D A T L L E E P K S F P A R L P H I L L N G T M G I A V G L S T N I P S H N I N E	
UniRef90_C8NBL7	D G T L Q E P A R L P A R L P N I L L N G G S G I A V G M A T N I L P H N L R E	
UniRef90_K9DXM0	D G S T T E P R T L P A R L P M V L L N G A S G I A V G L A T E I P S H N L R E	
UniRef90_A3UC93	D G E D K E P L V L P A A F P N I L L A N G S A G I A V G M A T N I P P P H N A A E	
UniRef90_B8ERL4	S G D Q K E P V V L P P S A L P N I L L A N G A Q G I A V G M A T S I P P P H N L R E	
UniRef90_I4EQ20	D G T K Q E P L V L P G R F P N I L L V N G S A G I A V G M A T N I M P P H N L R E	
UniRef90_I9W961	D G S M E E P Q L P A R L P F V L L N G A S G I A V G M A T E I P P P H N L R E	
UniRef90_B1JWA4	D G S F E E P K T L P S R M P F V L L N G A S G I A V G L A T E I P S H N L R E	
UniRef90_W6LYW1	D G T L D E P V W L P A R L P N I V L L N G A T G I A V G M A T D I P P P H A L G E	
UniRef90_A3SWF3	D G K E R E P T V L P A R F P N I M L V N G A G G I A V G M A T N I P P P H N L G E	
UniRef90_F9QB78	D G T P E P Q Y L P A R L P H I L L N G T T G I A V G M A T D I P P P H N I N E	
UniRef90_C9P113	D G T M Q E P K M L P A R L P H I L L N G V T G I A V G M A T D I P P P H N V R E	
UniRef90_A6FMY1	D G T L R E P I L V L P A S F P N I L L A N G S S G I A V G M A T N I P P P H N I S E	
UniRef90_C1D9X7	D G A F D E P R I L P A R L P M V L L N G A S G I A V G M A T E I P P P H N L T E	
UniRef90_U4TI0	D G S L R E P R I L P A R L P N I L L N G V T G I A V G M S T D I P P P H N M Q E	
UniRef90_UP10003B3791C	N G E E E E P E V F P G L F P N I L L V N G A A G I A V G M A T S I P P P H N P V E	
UniRef90_R6MXA9	D N T M K E P S L L P A T F P T V L V N A N T G I A V G M A S S I C P F N L K E	
UniRef90_UP100035E873E	D G S L E E P S V L P P A A Y P N I L L V N G T S G I A V G M A T N I M I P P H N L G E	
UniRef90_R5MN38	D N T M T E P T L P V T F P S V L V N A N M G I A V G M A S N I C S F N L K E	
UniRef90_K1ZJE0	D A T R K E P S V L P A R F P Q L I T N G S I I G I A V G M A T N I P P P H N L S E	
UniRef90_R5H390	D N T M L E P S L F P V R Y P A V L V N S N F G L A V S M A S N I C S F N L R E	
UniRef90_A0A024IBX7	D G S T T E P R Q L P A R L P F N I L L N G A S G I A V G L A T E I V P S H N L R E	
UniRef90_J9DB99	D N T L D E P S V M P T R Y P A V L V N G M A S G I A V G M A T N I V P T H N L S E	
UniRef90_F0EW91	D G A E K E P V L L P A R L P M V L L N G A S G I A V G M A T E I P S H N L T E	
UniRef90_K1KGQ6	D G N F Q E P V V L P A K L P F V L L N G S S G I A V G M A T D I P S H N L R E	
UniRef90_R6RFC4	D N T M K E P T L P V T F P S I I L C N V T T G I A A G M A S S I A S F N L K E	
UniRef90_Q70CL7	D G S E R E P A V M P S R F P N I L L V N G A A G I A V G M A T N I P P H Q L G E	
UniRef90_F9EJR9	D D S L D E P T V L P A K L P N I L L N G A I G I A V G M A T N I P P P H N L G E	
UniRef90_E6U414	D S T M Q E P V V L P A A F P S I I I N S N I G I A V G M A S S I C P F N L T E	
UniRef90_UP10004737416	UniRef90_UP10003619C10	D Y K Q P I T L P T N F P N I I L I K P N N G M A V G F A C N F P S F N L K E
UniRef90_UP1000362B785	D D T Q L Q P G V W M P A A Y P N I L L V N G A A G I A V G M A T N I M P P H N L V E	
UniRef90_B5ABQ1	D G T Q Q E P A L L P A R L P V L V A N G A S G I A V G M A C E I P P P H N L R E	
UniRef90_Q8GDZ7	D G E E K E P V V L P S R Y P N I L L V N G S S G I A V G M A T N I P P P H N L G E	
UniRef90_D5HG21	D G T E T E P T F L P F Q V P N I L L V S G S T G I A V G M A T D I P T H N L G E	
UniRef90_J9CWX4	D G T T T E P T L L P V T F P T I L A N N T L G I A V G M A S N I C S F N L R E	
UniRef90_A4T3N2	D G E W T E P T V L P A Q W P V L L C N G A V G I A E G W A T K V P A H N P R E	
UniRef90_K4UR2	D G T M K E P V L L P T T F P N I L L L K A N K G I A V G M A T N I M A P H N L R E	
UniRef90_D6GS45	D S T M K E P V L L P T T F P N I L L L K A N K G I A V G M A S S I P S F N L S E	
UniRef90_K0JZB4	D G S L Q E P S V L P A S F P N I L L V N G T S G I A V G M A T N I M I P H N L G E	
UniRef90_A8TBZ2	D G T M K E P Q M L P A R L P H I L L N G V T G I A V G M A T D I P P P H N V R E	
UniRef90_U3TN66	D G T L Q E P K M L P A R L P N I L L N G T T G I A V G M A T D I P P P H N L R E	
UniRef90_Q9ZAF9	D G S F Q E P R L L P A R L P F V L L N G A S G I A V G M A T E I P S H N L R E	
UniRef90_UP1000464DF9C	D G S F Q E P T L L P A R L P M V L L N G A S G I A V G M A T E I P S H N L T E	
UniRef90_T0Y9J9	UniRef90_UP100037C73AF	D G R K E E P V T L P I K F P L L L A Q G S D G I A V G L A S K I P P H N F V E
UniRef90_R5UZR0	D G R N K E P E T L P V K F P L L L A Q G V E G I A V G L A C K I P P H N F I L E	
UniRef90_D5EPM8	D N S Q K E P S L L P S R L P T I L L N G S S G I A V G M A T N I P P P H N L G E	
UniRef90_N1NJR9	D G E E E K E P V V L P S R Y P N I L L V N G S S G I A V G M A T N I P P P H N L G E	

This figure displays a multiple sequence alignment of UniRef90 entries, focusing on positions 170, 180, and 190. The sequences are color-coded by residue type: C (Cysteine), E (Glutamate), M (Methionine), A (Alanine), I (Isoleucine), T (Threonine), L (Leucine), V (Valine), D (Aspartate), Q (Gluamine), H (Histidine), P (Proline), S (Serine), N (Asparagine), K (Lysine), R (Arginine), G (Glycine), F (Phenylalanine), Y (Tyrosine), and W (Tryptophan). Positions 170, 180, and 190 are highlighted in yellow. The alignment shows significant conservation of the amino acid at position 170, with many entries having the same residue at this position. Position 180 shows more variation, with a mix of polar and non-polar residues. Position 190 also shows varying residues across the different entries.

	210	220	230	240
UniRef90_I6ZI50	V Q K Y L L T G R G S F R I R A R A I L E E D K H Q V F T E I P Y			
UniRef90_UPI0003B363BB	K D E L L E I Y E T G I G K I R I R G K V E T E K G K N G H I N I I T E I P Y			
UniRef90_UPI0003B34748	P A A I S A A Y E T G R G S I R V R G R F S I E R L G S G Q W Q V I S E I P Y			
UniRef90_C0QET9	L S E I R Q M Y K T G N G R K M R A K F H V D D G D V V T A L P H			
UniRef90_V9WDX6	P K E I A K A Y N T G R G S F R L R C T H E V E D L G R G Q W Q V I T E I P Y			
UniRef90_Q4PK96	S E E I F E I Y S T G R G G F K I Q A N W D K E G N D V I T S L P Y			
UniRef90_C6XHT3	S R E I V E S Y R L G R G G F K I Q A N W D K E G N D V I T S L P Y			
UniRef90_D4XVG2	N K G I F E A F Y N G K D K E K K I K F S N Y T V K Q T D K N K E I T E I P F			
UniRef90_J1JVU4	K T S I E N A Y E T G R G A F R L R A R W H K E E G G R G A Y I V V T E I P Y			
UniRef90_R5GNX3	Q K E L L R N I Y E T G S G K M K L R G K V H F E K A K K R R D K V I T E I P Y			
UniRef90_UPI00046FE4D4	R S E L L R K L Y Q S G R G S V K M R A R F K I E E G D V I T S L P Y			
UniRef90_UPI000473CC76	I D E L L Y E T G K G S I T I R G V I N T E E N L G K N A I I T E I P Y			
UniRef90_P47446	E K S I L S D I Y Q A G K G K F I I Q A K Y E V N K N L N Q E I T Q I P Y			
UniRef90_E6QR37	P M E I R E C Y R T G R G S L K M R A R W Q V E A L T R G Q W R V V V Y E E L P H			
UniRef90_I4IBJ1	D T G I R E A Y R T G R G I P V R G R V A K T E T I R R R E R T A V V T E I P F			
UniRef90_UPI00042023B4	P A A I L Q A Y E T G R G G F R I R A R W A V E Q G R F G T W Q V V T E I P Y			
UniRef90_UPI0003FD4C58	T R G I L S E A Y R T G R G S V R M R A V V E E D T K G R A T V V T E I P Y			
UniRef90_L8XZ32	K S E L L L K L Y T Q G T G S I R L R A K Y V M E E G N V I T E I P Y			
UniRef90_R7A2Q3	E E G L L N K I Y Q T G R G S V R L R A K Y S Y D K D A N C E I T E I P Y			
UniRef90_R8AT51	Q S D I L K K I Y Q T G R G S I R M R A L W K K E D G E I I T A L P H			
UniRef90_V4ZTU5	A D S V L N A Y N T G R G R R V Q A D Y E V T D D R V I T E I P Y			
UniRef90_L2F995	A D D L L Q M Y T T G R G S Y K M R A T Y H L D E K E K N L V I D A L P Y			
UniRef90_U2YGR6	R S A I R R Q A Y H T G R G R L R V R A E Y H V E E G E R G D S V I T E I P Y			
UniRef90_UPI0004108F83	L D E E V R R A Y E T G R G V V R M R A K V E I G P L E G R R Q A T V S I N E I P Y			
UniRef90_UPI00036CCD41	K S E I L K A Y T S G K G F F E L R S S Y K E D L G R G Q Y Q S I N E I P Y			
UniRef90_G4ENR9	K D G I L E I F A T G K G K F N I R A R I E T V K S N K K T Q L V V T E I P Y			
UniRef90_UPI00047541E7	A R D I Q S A Y E T G R G S L K V R A R W E K E D L A R G Q W Q V V T E I P Q			
UniRef90_UPI000364F01E	A A D L L R A I Y E S G R G S V R V R A R W T V E Q L A R G Q W R V V T E I P P			
UniRef90_D4M715	R Q G I Y D A Y R T G R G K V I V R G R M H V E D G R R G K V N V I T E I P Y			
UniRef90_UPI0003B64A5A	I K G I E N S F E R G Q G R I T L C S K Y I V E K E G K N D V I K I E I P F			
UniRef90_F3SZD6	I E G G I K K A Y E T G K G K V V V R S R V D E E P L R S G R K Q I V T E I P Y			
UniRef90_Q4A6Z3	T K G I A A E L E N G R N K N K I K L F C Y E I Y T K G K N K F I I T E I P Y			
UniRef90_A0A011PLV3	P A D I A A A Y G S G R G T L R V R A R W R Y V K A E N L E V Y E I P Y			
UniRef90_V2ZEK3	G A A L A D Y R T G R G S F K V R A R W R Y V K A E N L E V Y E I P Y			
UniRef90_UPI00046411B1	P E V I R Q A Y L T G R G S L R V R A S W T V E T F A K K E W Q V I T E I P P			
UniRef90_UPI0002556458	K E E L Q K L Y E T G H G S I R M R A V Y V V Q G E V E T A L P Y			
UniRef90_X0U744	E R G I Q K E A Y S T G R G R G I I R V R A R A F V E K I G D N K E R V I T E I P Y			
UniRef90_R9M160	E R E I L R Q V Y E T G R G G G I R V R A R Y T Y D K A N N C D E T E I P P			
UniRef90_R7KRH7	D E E L L E K I Y R T G R G S V K I R S K Y N F D P D S N C D E T E I P P			
UniRef90_UPI0002D7A363	R P T L L R R I Y E E G D G G G I V Q A E W K L E K E D S K I P Q V I T S I P Y			
UniRef90_UPI0003C180C1	R A S L L E T Y E T G R G G G V R V R A R W T R E E L Q R G G Y Q V I T E I P Y			
UniRef90_R1CCZ8	N A G A R D M Y T T G R G S V V L R S T T S I E R G Q G S R Q A I V T E I P Y			
UniRef90_L1MSK7	R K G I E E A Y K T G R G K I Y V V R A R A E I E T D D E K G R E S I V T E I P Y			
UniRef90_M4R905	K S E L L A K M Y E S G R G S V T Q R A V W T K E K G D I V V T A L P Y			
UniRef90_C8NBL7	R E E I I A A L Y R T G R G A V R L R A T W H L E D G N I I D Q L P Y			
UniRef90_K9DXM0	A S Q I I A D M Y A V G R G S M K V R A R W K I E E L A R G Q W Q A V V H E L P P			
UniRef90_A3UC93	T R E I I L E A Y E T G R G G F R L R A R W E V E E L G R G Q W Q V V T E I P Y			
UniRef90_B8ERL4	K Q S I I A E T Y R T G R G S L R R L R A R W S K E E A A R G A W T I V T E I P Y			
UniRef90_I4EQ20	R E G G I E D A Y R T G R G S V R M R A V V V T V E E D S R G R V Q L V V T E I P Y			
UniRef90_I9W961	A T D I I A Q Q Y E S G R G S L K V R A R W T I E E M A R G Q W Q L V V N E L P P			
UniRef90_B1JWA4	D T E I I A A A Y E T G R G S L K V R A R W K I E D L A R G Q W Q L V V T E I P P			
UniRef90_W6LYW1	R E E I I L R K L Y Q T G N G S V R L R A R F F E R E N G D V V I N A L P H			
UniRef90_A3SWF3	R S G A R K A Y L E G R G S V I M R A K T R V E E I R K D R F A V I D E I C Y			
UniRef90_F9QB78	K S E I I K K I Y Q Q G R G S I K M R A S W K K E D G E V I H A L P H			
UniRef90_C9P113	P S D I I L E K I Y Q T G R G S I K M R A V W H K E G S D V I S A L P H			
UniRef90_A6FMY1	R E N I I A Q Q A Y R T G R G A F R L R C K W E V E D L G R G Q W Q V V T E I P Y			
UniRef90_C1D9X7	S D D I I R A Y E S G R G S V R V R A Q W V E K L K A R G Q W R V V S E L P P			
UniRef90_U4TI0	P A E I I Q K Y Q H G L G S I K Q R A I Y H K E N G D V V I S A L P Y			
UniRef90_UPI0003B3791C	R A S I I A E S Y L T G R G S F R L R A R W S V E D Q G R G T W T I I S E I P Y			
UniRef90_R6MXA9	R N A L I K Q V Y A T G R G G I K V R A R Y S Y D Q S A N C D V T S I P P			
UniRef90_UPI00035E873E	L D E V R K A Y E T G R G V V R M R A N V E T G P L E R G R Q A T V T E I P Y			
UniRef90_R5MN38	E D K M N E F R T G R G S F K I R A K Y S Y D K K N N C D Y E I P A			
UniRef90_K1ZJE0	I E A L K K N A Y A T G R G S I V V R G K T E I V E G K K G A F K I I V S E I P Y			
UniRef90_R5H390	E A E M N K I Y R T G T G A V K V R A V Y N Y D P D A R C D E V T Q I P P			
UniRef90_A0A024IBX7	P A G I I A D A Y R T G R G S L K V R A R W K I E D L A R G Q W Q M V V T E I P Y			
UniRef90_J9DB99	M Q G V R N A Y E T G T K G R V V V M R A R T E I E S G P Q H D S I V T E I P Y			
UniRef90_F0EW91	A K D V R Q I Y E T G K G S L R V R A R Y E I D K M A R G Q W R V I V S E I P Y			
UniRef90_K1KGQ6	R S T I I T R D I Y R T G R G K L T V R A R Y H F E D L A R G Q W Q L V I D E L P P			
UniRef90_R6RFC4	K E E F D K I I Y R T G R G S V K V R A K Y S Y D K K Y N C D I T Q I P P			
UniRef90_Q70CL7	R S G I I I R K A Y E S G R G S I K T I R A K E I E E T S S G K E R I V T E I P Y			
UniRef90_F9EJR9	R A G I I I E A Y K T G R G K I K V R G K V D I E E L K N G K S N I V S E I P Y			
UniRef90_E6U414	D A D L L R S V Y E T G R G S L R V R A R Y Q L D K A G R F E I T E L P P			
UniRef90_UPI0004737416	K K E M K Q I F D I G K G S V T L R A K Y R V D G N Y I E I Y E P Y N T S S T			
UniRef90_UPI0003619C10	L E G I I R D A Y L T G R G S F R T R A T R A I E S I T P R R K G V V T E I P Y			
UniRef90_UPI000362B785	R E T V V A A Y K E G R G A F R M R A N Y E I E A L A R G Q W Q V V T E I P Y			
UniRef90_B5ABQ1	K S G G I I R A A Y E T G K G R I V V R A K A E I E E E N G R H K I V T E I P Y			
UniRef90_Q8GDZ7	R E G I I R Q Y L T G R G S V I M R A K A R I E K M N G G K M R L V H E I P Y			
UniRef90_D5HG21	P E E L L Y V A T G L G K I K V R G K V E V R D I G Y G R K S C V T E I P Y			
UniRef90_J9CWX4	D D E M M R R I Y E T G R G S V R I R A V Y D Y V K D G N M L E I T R I P P			
UniRef90_A4T3N2	T D G G L R E Y I T T G R G L F T V R G T V S V D G K N C I I T E I P Y			
UniRef90_K4IUR2	N D N L L V K A Y K T G K G S V V I R A R Y H I E E R T E D R N A I V T E I P Y			
UniRef90_D6GS45	E E E M K S I Y E T G R G S F K L R G K Y R Y L K K E Q L I E I Y E I P Y			
UniRef90_K0JZB4	L D E V R K A Y E T G R G V V R M R A K V E T L E G S R G Q A T T E I P Y			
UniRef90_A8TBZ2	Q A D I I E K I Y R S G R G S I K M R A V W H K E G S D V I T S E I P Y			
UniRef90_U3TN6	A D E I I K K A Y E T G K G R V V V R S R T E I E L K G G K Q Q I V T E I P Y			
UniRef90_Q9ZAF9	R A E I I R K M Y E K G R G S V R M R A V W K K E D G A V V I S A L P Q			
UniRef90_UPI000464DF9C	P A E I I A A A Y E T G R G S L K V R A R W K I E E L A R G Q W N L V V T E I P P			
UniRef90_T0Y9J9	S Q D I I L E A Y R T G R G T L R M R A R W N I E P L A R G Q W R V V V T E I P Y			
UniRef90_UPI00037C73AF	Q K E I I I T A Y S Q G K G P L I R G K A E I V E A K K G G W K V I S E I P Y			
UniRef90_R5UZR0	G G M A D V S R Y N D G L R G G A V V R A R K S C D K R T L A I T E I P P			
UniRef90_D5EPM8	G G G A D V S E Y N N G K R G R V K V R A R M E A R K N L L A I T E I P F			
UniRef90_N1NJR9	N L G I L E A Y R T G R G R V V V R G K T D I E L L D S K T K V I K E I P Y			

250 260 270 280

UniRef90_I6ZI50	G V K K N R L I K R I A Q L A S D E K N P F I K N I R D E S N S L K E G I R L V I
UniRef90_UP10003B363BB	T M I G A G I G K F M A D V A E E K K I T N V I V D I S N Q S S K E G I R I V I
UniRef90_UP10003B34748	M V Q K G K L I E Q I A A L I G D K K L P I L E D V R D E S D E H H E E P T R L V I
UniRef90_C0QET9	H S S G E K I L E Q I A A Q M Q A K K L P M V V D L R D E S D E H H Q E P V R L V I
UniRef90_V9WDX6	Q V Q K S K L I E K I A E L I Q T K K I P I L G D V R D E S A E D V R I V I
UniRef90_Q4PK96	Q A S G S K I L E Q I A D Q M L N K K V P M I V D L A D E G D H Q E P V R L V I
UniRef90_C6XHT3	Q V Q K S K L I E K I A E L I I A K R I P P L E D I R D E S A E D V R I V I
UniRef90_D4XVG2	G V V K S Q L V Y D I D V L I N N E S I D G L L E I K D Q S D R E G I R I V I
UniRef90_J1JU4	Q I Q K S R L I E K T A E L L L A R R L P M L D D I R D E S A Q D I R I V I
UniRef90_R5GNX3	T M I G A N I S K F I A D V V G L I E N K T T S D I V D V S N E K E G I R I V I
UniRef90_UP100046FE4D4	Q V S G A K V L E Q I A S Q M Q A K K L P M V V D L R D E S T H E E P T R V V
UniRef90_UP1000473CC76	Q I S K A G W I E K I A E L V N T N I V N G I S D I R D E S D R D G M R I V I
UniRef90_P47446	E T L K A N I V K Q I E E I I F D N K L S A I E S V I D S S D R N G I R I I I
UniRef90_E6QR37	G T S S K K I M E E E E H H N K Q L M L S V L D K A A D E S S D K D Q A V R L V F
UniRef90_14IBJ1	Q V N K A A W I E K I A E L V N L G K L E G I A D I R D E S N R E G I R V V I
UniRef90_UP100042023B4	Q V Q K S R L I E Q I A D D L I E Q K K L P L G D V R D E S A E D I R L I L
UniRef90_UP10003FD4C58	Q V N P D N L V E N I E A T L A R D G K L T G I A D I R D E T N S R S G M R I V I
UniRef90_L8XZ32	Q V S G E K I Q V D I A Q Q I Q A K K L P M I D D I R D E S D Y E H P V R I V I
UniRef90_R7A2Q3	S T T E A I M D K I E L L I K A N K I R E I S Y I R D E T D L S G L K L A I
UniRef90_R8AT51	Q C S G A K V L E Q I A A Q M R A K K L P M V V D D L R D E S D H E N P T R L V I
UniRef90_V4ZTU5	Q V Q K S R L I E Q I A D D V N E G K I D G V R D L R D E S D R D G I R V V I
UniRef90_L2F995	Q V A G K K V I E Q I A N L M I G K K L P W V V D I H D E S D H Q N P C R I V I
UniRef90_U2YGR6	Q Q N K S R L V E H I A E D V N D G T L E G V R D L R D E S D R D G I R V V V
UniRef90_UP10004108F83	Q V G S E K I I T E E V N K S K T G I A D V K D L T D R E N G T R L V I
UniRef90_UP100036CCD41	Q V S K S T L I E K I A D L L I S S K K N K I D D N V I D E S D D Q L V R I V I
UniRef90_G4ENR9	E T N K A N I V K S I E E L R I N N E L P G L K E V R D E S D S D K N G V S I V M
UniRef90_UP100047541E7	G T S S Q R V L E E I E E Q T K Q L V L S Q L D R V R D E S S G K D Q P V R L V F
UniRef90_UP1000364F01E	A V S T A Q V L T Q I E A L A N P Q P K A G K K D T R D E S D D E Q N P V R L V M
UniRef90_D4M715	A V V N K T T L I E T M V K A A Q D K V I D G I Q D I R D E S N R E G M R I V L
UniRef90_UP10003B64A5A	G V I K S K L V R D I D E L R I N G Q L N G I K E V R D E S D R N G I S I A I
UniRef90_F3SZD6	E V N K S S L V V K K I I D E L R A D K K V D G I V E V R D E T D R T G I N I L I
UniRef90_Q4A6Z3	G V V K V K L V Y E I I D L I Q N Q K L I D G I E I E I K D R S D R D G I N I L I
UniRef90_A0A011PLV3	G V V S A K V L L A E I G A L I N P Q V I P G K K T I R D E S G K D D D V R L V F
UniRef90_V2ZEK3	S T T S E A I M D K V T E L V K L G K V K E I I A D M R D E T D L S G L K L T I
UniRef90_UP100046411B1	G V S T A S V L T E I E S K L K N A F L S Q I V D Q V R D E S G K A Y A V R L I I
UniRef90_UP10002556458	Q V S G S N V V M T I I A E L L M N A K K L P L V S D V R D E T S D K D G L R I A I
UniRef90_X0U744	Q V N K A N V L L K S I G E L V K D D K K I D G I S D I R D E T S D L N G L K I A I
UniRef90_R9M160	T T T V E A I M D K V V D L V K A G K I R E I A D M R D E T D L S G L K L T L
UniRef90_R7KRH7	T T T T I E Q I K D D K I V D D L A K T G K I R E I T Y I R D E T S D L N G L K I A I
UniRef90_UP10002D7A363	G T D K E K I E N D I G M I I E N R K K P G L V G L T N E T T N Q K E G F R I T M
UniRef90_UP10003C180C1	G V K K A D V E Q L A E L I D N K K A P P L G D V R D E S S A E D V R L V L
UniRef90_R1CCZ8	G T A K K A D P L L E E K V V A A L V N A K T L V G I S D I R D E T S S L A G T R V V F
UniRef90_L1MSK7	Q V N K A K L I I E E K I A E F V K D D K K I E G I S G L R D E S S D K D G M R I V I
UniRef90_M4R905	Q V S P S E I I S Q I A Q K M T D K K L P Q I E D V R D E S S G K D N A T R L V I
UniRef90_C9NBL7	Q V S G S K V Q E Q I A Q K M Q A K L A W L E D L R D E S D H E H P I R L V V
UniRef90_K9DXM0	G C S S Q R V L E E I E E A L K N T I L G A L D A V R D E S G R D A P V R L V F
UniRef90_A3UC93	L V Q K A K L I I E E R I A A L L D Q K K L P L L A D V V M D E S A E D V R L I L E
UniRef90_B8ERL4	M V Q K S R L I I E E K I A E L L N D K K L P L V A D I R D E S S D R N G V R V V I
UniRef90_I4EQ20	Q V N P D N L I A E A D G V R D G R L Q G I S E I A D R D E T S D R V G R R L V I
UniRef90_I9W961	G T S A Q K V L E E I E E K V K T G K A L T S D Q R D E S G K D A P V R L V F
UniRef90_B1JWA4	S T S G Q K V L E E I E E N T K K A M L D L L D A V R D E S S G K E A A V R L V F
UniRef90_W6LYW1	Q V S G A R I M E Q I A A Q M I A K K L P M V E D L R D E S D H E N P T R L V M
UniRef90_A3SWF3	Q V N K S T M I E K I A E Q V R E E K K I D G I A H V Q D E S D R N G V R V V I
UniRef90_F9QB78	Q A S P S K I I I A Q I A E Q M T A K K L P M V E D L R D E A D H E N P T R I V V
UniRef90_C9P113	Q V S G A K L L E Q I A G Q M R A K K L P M V E D L R D E S D H E N P T R I V I
UniRef90_A6FMY1	Q V Q K S K L V E E K L A E V V I Q T K K V P I L A D I R D E S A D D V R M V L
UniRef90_C1D9X7	G S S A Q K V L A E D N L N K L M S Q L D R V R D E S D H E N P T R L V F
UniRef90_U4TI0	Q V S G E K V L L E Q I A G Q M R A K K L P M V A D L R D E S D H E N P T R L V V
UniRef90_UP10003B3791C	Q V L K G K L I E Q I A E L I T E K K L P I L A D V A D E S D E Q L R I T I
UniRef90_R6MXA9	T T T T C E A I I I E E L V K Q G K L K E I A D I R D E T G L D G L K I T I
UniRef90_UP100035E873E	G V G P E K V I T D E V N K S K T G I A D V K D L T D R E N G T R L V I
UniRef90_R5MN38	T T T T T E A I I I D K V V E E Q L K A S I L A D V R D E S T D K K G L K I T I
UniRef90_K1ZJE0	Q A N K A T I I I E E K V A T L V K D K K I L G I K D I R D E S G R E E D I R I V I
UniRef90_R5H390	T T T T T E A I I I D K V V E E Q L K A S I L A V L D R V R D E S T D L S G L R L A F
UniRef90_A0A024IBX7	G T S S Q K V L E E I I E E Q L K A S I L A V L D R V R D E S S K D A P V R L V F
UniRef90_J9DB99	G L N K E E L V K F I G Q L A A D K D R K I E G I S S N V N D R D E S S D K D G M R I V I
UniRef90_F0EW91	N T S S A K I L A E I E E Q T N P K M I D L I E K V R D D E S S D G E H P V R L I F
UniRef90_K1KGQ6	A S S S Q D V L N Q I Q Q Q A K S A M L A I L D R V R D E S T E E K P V R L V F
UniRef90_R6RFC4	T A T S S A I I I D K V V E L V K T N K I K E I S D V R D E S D L S G L R L V I
UniRef90_Q70CL7	Q V N K A R L I I E E K I A D L V R D D K K I E G I T D L R D E S D R N G M R V V
UniRef90_F9EJR9	Q L N K A N L I E E K I A N L V K E K K I T E G I S D L R D E S N R E G I R I L I
UniRef90_E6U414	T T T T V E A I I M D R I V E L V K T G K V R E I A D I R D E E T D L S G L K L T I
UniRef90_UP10004737416	A I I K V K V N E I L K G N T L K G I E T D I R D E S E F N H D T N K E E L V I
UniRef90_UP10003619C10	L V G P E K V I D K V K D L V Q G K K L Q G I A D K D L S D R Q H G L R L V I
UniRef90_UP1000362B785	G V S T G G V M S R I I D D L A N P K D K K I S D D R D E S D A R H P V R L V I
UniRef90_B5ABQ1	Q V N K A K L I I E Y I A D L V K D K K I T G I S D L R D E S D R E G M R I V I
UniRef90_Q8GDZ7	Q V N K A K L L E R I A E L V R D K R V D G I T D L R D E S D R K G M Q I V I
UniRef90_D5HG21	T M G T A K F L D T V A E L V K V A F L K E E K I P A V V D L A D R G D K N G E C L C
UniRef90_J9CWX4	T T T T V E A V M D K I A E L V K V A G K I K E I S D M R D E T D L N G L K L A L
UniRef90_A4T3N2	G V A S G T V Q D R I V R A L V E S G E M A G V A D M S D L T D R R N G L R I V V
UniRef90_K4IUR2	T V V I N K S A L L M K V A F L K A E E K I L G E L L D I R D E S D R E G I R I V L
UniRef90_D6GS45	T T T T V E V I I E E K I I D L I K D G T L R E I T D I R D E T D L N G L K I T I
UniRef90_K0JZB4	G V G P E K I I E E K I T D E V K S K R L T G I S D V K D L T D R E N G V R L V I
UniRef90_A8TBZ2	Q V S G A K L L E Q I A N Q M R A K K L P M V D D L R D E S D H E N P T R I V V
UniRef90_U3TN66	E V N K A V L V K K I D D V R V N N K V P G I V E V R D E S D R T G L R I A I
UniRef90_Q9ZAF9	Q V S G A R V L E E Q I A A Q M R N N N V P M V D D L R D E S D H E K P T R L V I
UniRef90_UP1000464DF9C	N T S G Q K V V L E E I E D V E K L T N P R V R E G K K A V R D E S D K N A S V R L V F
UniRef90_T0Y9J9	G V S T R S V L E D V E K L T N P R V R E G K K A V R D E S D K N A S V R L V F
UniRef90_UP100037C73AF	Q V N K S V L V G Q I A K L Q D K K I K G V R D A R D E S D R D G L R I V V
UniRef90_R5UZR0	T T T T T E S I I K D S I V I L K A N D K G K K I K L S R V E D N T A D R V E I V V
UniRef90_D5EPM8	G K T T T S L D S I L S A N D K G K K I K L S R V E D N T A D K V E I L I
UniRef90_N1NJR9	Q T N K A A L V G K I A E L V E N K N L D G I S D I R D E S D R S G M R I V I

290 300 310 320

UniRef90_I6ZI50	E C R Q G A P L E T I L N N L Y K H T Q L Q Q A Y A A N L T V L S V G E P K T L
UniRef90_UP10003B363BB	E L K K D T D V E N F T N L L Y K K K T K L E D T F G V N M L A D N G R P E T M
UniRef90_UP10003B34748	V P K R N V D P E L L K E S L Y R L T D L E T R F G L N L N V L D S Q R T P V L
UniRef90_C0QET9	I P K A R T N T T A L M D H F A T T D L E R S Y R I N M M I I N G R P E V K
UniRef90_V9WDX6	E P K K N V D P E V L M N M M F R N S D L E I R F S L N M M V L I D G T P K V C
UniRef90_Q4PK96	S L K N R V N A D D V M N H F A T T D L Q K S Y R F N M N L I S S G N P R V F
UniRef90_C6XHT3	F P K N R S D P D L L M E S I F M S D M E T R F P L N M N V L S M G R V P Q M
UniRef90_D4XVG2	T L S K D A N E E S I I S F L L Q K T S M Q V N Y S Y N N V V I S N N S P K L M
UniRef90_J1JU4	E P K N R V D P E L L M E S I F K L T D F E V R V P L N L N V L T L G K V P N L
UniRef90_R5GNX3	E L R R N A D V E R L E N L Y K K T R L E D T F G V N M L A T A N G R P E L L
UniRef90_UP100046FE4D4	P R S N R V D Q Q L M D H F A T T D L E K K S Q R V N L N L I G D G R P R V M
UniRef90_UP1000473CC76	E L K K D T N A E L I I S N L Y K K T T L Q T N F G A I F L A I K G K P I Q L
UniRef90_P47446	K H K D F L P A E K I M A F L F K H T Q L Q V N F N L N N T V I A N R F P I Q I
UniRef90_E6QR37	E P K S G R Q S D E L M T L L A H T S L E A S L S I N M V M I I D G R P K Q K
UniRef90_14IBJ1	E L K R E S Q P Q V L A Y Q T A L Q T N F G A I I L A L V D N Q P R Q L
UniRef90_UP100042023B4	E P K T R A D A E V L M E T M F R A T A L E S R F P L N M N V L G P D R A P V L
UniRef90_UP10003FD4C58	T L K R D A V A K V V L N N L Y K H T Q L Q Y N F G V N M L A L V D G V P R T L
UniRef90_L8XZ32	P R S N R V E C D R V M D H F A T T D L E K S L R V N L N M I G L N D R P E K
UniRef90_R7A2Q3	D C K R G T D P D K L M Q K L F R M T P L Q D N F S C N F N I L I A G T P K V M
UniRef90_R8AT51	V P K S R V D V D M L M N H F A S T D L E K S Y R V N L N M L G D G R P A V K
UniRef90_V4ZTU5	E L K R G A Q P D V V E N R L D S H L E S T F G V I T L A L V D D E P R V L
UniRef90_L2F995	E L R N R V D T D M V M G H F A V T D L E T S F R V N L N M I V N G K P Q V K
UniRef90_U2YGR6	E L K S N A N T D I V E N H L L I E S H L E R T F G V I N L A L V D G Q P E V L
UniRef90_UP10004108F83	E C K V G V N P Q A L I A D Y R L T P M E Q S F G I N N L V L V E G Q P R T L
UniRef90_UP100036CCD41	R P K N N V K P E V L M E S F R Q T D L Q V R P L N M N V L N S K Q P K V M
UniRef90_G4ENR9	E F E T D K D L E I I K N F L Y K K T Q L Q I S Y S A N I I I K D R K P S Q T
UniRef90_UP100047541E7	E P K S R Q D P A E L M T M L A H T S L E T N L P L N L V T I G R G R P G Q K
UniRef90_UP1000364F01E	E P S R N Q D P E A F M R F F L A Q T G L E T N V P V N L T V I G R G R P G Q K
UniRef90_D4M715	E L S R D A N P D L V M R Q L Y K R T Q L Q A T F G V I N L A L D R Q T P R L L
UniRef90_UP10003B64A5A	I L E Q D V N V Q T I N F L M Q K T D M K I Y Y Y N Y N M V S I V D A A P K V L
UniRef90_F3SZD6	E L K K D A N S E S I K N Y L Y K N S D L Q I S Y N F N M V A I S E G R P K L M
UniRef90_Q4A6Z3	T L D I N S N E E S I L N Y L F S K T Q M Q I T Y S Y N N I V I D N N S P T L M
UniRef90_A0A011PLV3	E P S S R D R N E F V A L L A H T S L E T S A S S I N V A V G D G R P C Q K
UniRef90_V2ZEK3	D L K R G T D P E K L M A K L F K L T P L D E K T Y S I N M N I L I A G M P R V M
UniRef90_UP100046411B1	T P K S K N Q P E E L A R F L L A R T S L E T N A S L N L T L I D T G K S P C L
UniRef90_UP10002556458	P R S N R V D P D K L M L H F P K L D E K T Y S I N M N I L I A G M P R V M
UniRef90_X0U744	D I K R G A M A L V I L N R L Y K F T Q M E T S F G I I M L A I V N G R P E I L
UniRef90_R9M160	D L K R G T D P D A L M R R L F R M T P L E D S F S C N F N V L I G G M P R V C
UniRef90_R7KRH7	D I K K N T D P D A L M K K L Y R M T S L Q D T Y S C N F N I L I V G G Y P K V M
UniRef90_UP10002D7A363	D L K P G T D P N L V M A Y L Y R H T D L Q S N F S Y N L T C V P G R P E R L
UniRef90_UP10003C180C1	E P K N R V E P E V L M E S F K L S A L E K S R F P V N M N L D R G T P G V M
UniRef90_R1CCZ8	E L R R D A D P L V V L N Q L F K K T E L Q K N F P A N W M A V E G K M P A R L
UniRef90_L1MSK7	E I K R D A V G E V V L N N L
UniRef90_M4R905	I P R N R V D A E E V M S H L F A T T D L Q K N Y R V N M N M I G D G K P A V K
UniRef90_C8NBL7	P R S N R V D H E R L M Q H L F A T T D L E K K R Y S A Q M N M I G D G R P Q V K
UniRef90_K9DXM0	E P K S K N V D Q E F M L M L A H T S L E S S A P I N L V M I G D G R P R Q K
UniRef90_A3UC93	P K S R T I D P A L L M E S V F K L T D L E V R F A L N L N V L D P G A P R V V
UniRef90_B8ERL4	E P K S R V D P D A L M E H L F R L T E L E T R F P V N L V L V D G V P R V V
UniRef90_I4EQ20	T L R R D A V A K V V L N N L Y K H T Q L Q T T F G C N M L S I V D G V P R T L
UniRef90_I9W961	E P K S K N I E Q Q E I N T L L A H T S L E S G A A I N L V M I G M G R P R Q K
UniRef90_B1JWA4	E P K S R T I D Q T E F N T L L A Y T T S L E S N A T L N L V M I A D G R P G Q K
UniRef90_W6LYW1	V L R N R V D V D L L M D H L F A T T D L E K S Y R V N N M I G D G R P Q V K
UniRef90_A3SWF3	E L K R D A T A E V V M N Q L Y R F T P M Q T Y F G C N M
UniRef90_F9QB78	P R S N R V D T D A L M A H L F A T T D L E K S Y R I N M M I G L D H K P V K
UniRef90_C9P113	V P R S R V D C D T L M N H L F A S T D L E K S F R V N L N M I G N N R P E V K
UniRef90_A6FMY1	E P R K N V D P E V L M G M L Y R N S D L E V R F S L N M N V L I D G T P K V C
UniRef90_C1D9X7	E P K S S R N P D E F M T L L A Q T S M E Q N V S M N L V M V G M G R P Q Q K
UniRef90_U4TI0	T P K R N V D A D V L M E S F K L T D L E V R I P L N M N V L D E G R P G V L
UniRef90_UP10003B3791C	D L K R S V D P E K L M L K L F R M T P L E D T F S C N F N V L I A G T P R V L
UniRef90_R6MXA9	E C K V G V N P Q A L I A D Y R L T P L E Q S F G I N N L V L V D G Q P Q T L
UniRef90_UP100035E873E	D L K R G T D A D K L M K L Y K M T P L E D S F G C N F N V L I A G T P R V L
UniRef90_R5MN38	E L K K D A Y P K K V N R L Y K L T D L Q T A F H F N M L A I D G Q P R V L
UniRef90_K1ZJE0	D L K K G Q D P D A V M N K L F R L T P L Q D N F N C N F N V L I N G T P R V M
UniRef90_R5H390	E P K S S R I E Q Q E L I Q L A H T S L E T S A P I N L T V I G D G R P V Q K
UniRef90_A0A024IBX7	D L K R D F N A N V V L N K L F K M T A L Q T S F A V C A L V H G R P K L L
UniRef90_J9DB99	E P K S R I E P Q H F V N T M A Q T G L E G N V S V N V M M G A D N R P A Q K
UniRef90_F0EW91	E P K S R I D R E E F V A A L L S Q T S M E S N V S V N V M M G A D N R P A Q K
UniRef90_K1KGQ6	D L K R G V D P D K F M A K L Y K S T P L Q D S F S C N F N V L I D G R P K Q K
UniRef90_R6RFC4	E I R R D A N A H V I L N L Y K Q T A L Q T S F G
UniRef90_Q70CL7	E V K
UniRef90_F9EJR9	D L K R G A D G D K L M S R L F R L T P L E D T F G C N F N V L V G G R P Q V L
UniRef90_E6U444	E V K K N T N V D L L M A K L Y K N T P L E S V F S C N M N C V V D N K P K L L
UniRef90_UP10004737416	E I K N G F N P D A V L E Q L Y K L T P M E E N F G I N N
UniRef90_UP10003619C10	E P K S R A V Q E D L L A F F A Y T D L E C N A S L N L T L D T R R P Q I L
UniRef90_UP1000362B785	E L K R D A N P N V T L N L Y K H T K M Q D T F G V I M A L V D V D N Q P Q I L
UniRef90_B5ABQ1	E L R R D V N P Q V V L N Q L Y K H T Q M Q D T F G V N M A L V D V D N V P K V L
UniRef90_Q8GDZ7	E L V K G Q D P E K L M Q K L F R L T P L E D T F G V N C I N N G K P E V M
UniRef90_D5HG21	D L K R G Q D P E K L M Q K L F R L T P L E D S F A C N F N V L I S G E P R V L
UniRef90_J9CWX4	T A K R G H S A E Q I R D Q L A L T P L E S S F A A S L V A L D E N R P R W W
UniRef90_A4T3N2	E V K R G R F D P H V I M N L Y E Y T E F K K H F S I N N L V A L V D G Q P K Q L
UniRef90_K4IUR2	E D V R K N A D V E S M M G K I K Y T T L E D S F S C N F N V L I D N K P K L L
UniRef90_D6GS45	E C K V G V N P Q A L I A D Y R L T P L E M Q S F G I N N L V L V G G Q P Q T L
UniRef90_K0JZB4	V P K N R V D C D L L M N H L F A S T D L E R S Y R
UniRef90_A8TBZ2	E L K K D A D S Q T I N Y L L K Y T D L Q V N Y N F N M V A D H F T P R Q V
UniRef90_U3TN66	E L K K D A D S Q T I N Y L L K Y T D L Q V N Y N F N M V A D H F T P R Q V
UniRef90_Q9ZAF9	V P R N R V D D Q V V M N H L L A T T E L E K S Y R I K L N M I G D G R P A V K
UniRef90_UP1000464DF9C	E P K S R Q D P Q A F V N L L A H T P L E T N L S L N L V M L G R D G H P R P
UniRef90_T0Y9J9	E L R K D A F P Q K V L N R L Y K A T D L Q K K F H N M L A V D G Q P K V L
UniRef90_UP100037C73AF	Q V S P D E S S D K T I D Y A F T D C E V S I A P N A C I W E D K P H F L
UniRef90_R5UZR0	Y L P S G S D P E T A E Q A L Y A F T D C E V S V S T N I C V E N E K P H F F
UniRef90_D5EPM8	E L K R G A D P L I V L N N L Y R L T S L Q S T F S C N M V G I L N G Q P K Q M
UniRef90_N1NJR9	

		330	340	350	360
UniRef90_I6ZI50	G	I P I L R E Y L E Y Q Q L E I	L V R R T Q F N L E K L R A R I I H	L L E G R K I	
UniRef90_UPI0003B363BB	S	K E I M R A C A D F Q F E I	A T R K Y Q T L L K K E Q D K K E I	Q E G L I K	
UniRef90_UPI0003B34748	G	K L L Q E W V V S Q I D L	M L R R T Q H R L L K I A A R L E L E G Y I K	L E G Y I K	
UniRef90_C0QET9	P	Q V I L S E W L A F R I D T	V R K R I S H R L D K V N D R L H L L E G L L T	L L E G L L T	
UniRef90_V9WDX6	S	M K E V L R A F L D H R R D	V L L Q R R S Q H R M D K I D H R L E V L E G F I I	V L L E G F I I	
UniRef90_Q4PK96	A	L D E L L K E W I K F R K I T	T V T R K L E N R L D Q V N D R L H L L D G L A K	H L L D G L A K	
UniRef90_C6XHT3	P	D G I L K E W L A H R R E	V L L F R R S S F R M Q A I D R R V E I L K G L L L	E I L K G L L L	
UniRef90_D4XVG2	N	L N E L L D A Y I I A H I K D V K T K T	L T Y D Y N K Y L L R L E I V L G F L K	V L G F L K	
UniRef90_J1JU4	S	L K E T L K Q W L A H R Q E	V L L T R R A Q H R L D N I A H R L E I L G G Y L K	L G G Y L K	
UniRef90_R5GNX3	S	K D I I S Y H T R F H Y E	V L L T R R K Y E T L L K K E L E Q K E I K E G L I K	K E G L I K	
UniRef90_UPI00046FE4D4	A	L N E L L G E W L T F R E T	T T V R R R E H R L G K V N D R L H L L A G L L I	A L G L L I	
UniRef90_UPI000473CC76	N	L K Q Y L N N F F L E F R E K T I	R K R T S F F L K N T L E K L E V L E G L L S K	V L E G L L S K	
UniRef90_P47446	G	L L S Y L D H F L K F C H E	L I N K A K Y E L E L A S K R L E I V I L G L I K	I V I L G L I K	
UniRef90_E6QR37	A	I T E I I R E W G Q Q F R I L A T	V V R R R S T Y R L D Q I N D R I H V L Q G R M I	V L Q G R M I	
UniRef90_I4IBJ1	S	K Q V L L F R E F L R E T	T T V R R Q Y G D E L Q Q A S D R I H V L E G L L L	H V L E G L L L	
UniRef90_UPI00042023B4	G	L R Q V L L R A W L D H R H E	V L E R R R S R H R L A A V V E R R I E I L E G F L A	I L E G F L A	
UniRef90_UPI0003FD4C58	R	L D Q M V R H Y V A H Q I D V I	V V R R T R Y R L R K A E E R A H H L R G L V K	H H L R G L V K	
UniRef90_L8XZ32	S	L A K I L L T E W I A F R T D T	V V T R R R L Q H Q L L N K V E A R R L H H L E A L L M I	H H L E A L L M I	
UniRef90_R7A2Q3	G	V R E I L T E W V A F R A E	C V K R R V H F D L Q K K S E K L H H L E G L Q K	H H L E G L Q K	
UniRef90_R8AT51	G	V T L N E W L T F R R T D	V V T R R R L Q H Q L L E K V L K R H H L V E G L L V	H H L V E G L L V	
UniRef90_V4ZTU5	T	L K E A L E V Y L D H R H E	V V V R R R S A H E L L A E R E E R A H H V L E G R L R	H H V L E G R L R	
UniRef90_L2F995	S	L K T T L E T E W L S V R R Q	T V V V R R R L Q N Y R L V K I N E R L H H I I A G L L I	H H I I A G L L I	
UniRef90_U2YGR6	S	K E T L E H Y L E E H R K E	V V V R R R S A Y E L S E A E D R A H H I I E G R L K	H H I I E G R L K	
UniRef90_UPI0004108F83	G	G L K A L L E V F L R H R Y E	V V V T R R R T R Y R K R K R E E R L H H L V E G L L K	H H L V E G L L K	
UniRef90_UPI00036CCD41	S	I K E V L V N F L S H R Y E	V V V L I R K S E F R L K N I K N R I E I L I G F I K	H H I I L I G F I K	
UniRef90_G4ENR9	N	I Q I I D S Y L L E H A N D I	I I R S A T F D L L K K A L N R K E I I L E G L I K	H H I I L E G L I K	
UniRef90_UPI00047541E7	S	R D L I I A E W V D F R F V	T V V R R R T E H R L G K V N D R I H H I I E G R M V	H H I I E G R M V	
UniRef90_UPI000364F01E	G	V A L V A V E W A G F R V Y	T V V R R S Q Y R E L E L V N R R I H H L E G R M I	H H L E G R M I	
UniRef90_D4M7I5	P	A S I L G L F L S Y R R D V	V V V R R R T Q F R L N K A H H I I I N G L I R	H H I I I N G L I R	
UniRef90_UPI0003B64A5A	G	D R M I D S Y L K H I K L V	R K K A I I E F D L V V R A E K R L E I I N G L I R	H H I I I N G L I R	
UniRef90_F3SZD6	G	L R E T I I E S Y L N H Q I E	V V V T N T R T R Y D L E E Q A E K R M H I I V E G L M K	H H I I V E G L M K	
UniRef90_Q4A6Z3	N	E N N L I S S Y L I A H I K N	V V V T N Y R L L N K A K V R L E I I N G F I K	H H I I I N G F I K	
UniRef90_A0A011PLV3	S	P E L L L G E W C T F R I R	T V H R R T G H R L Q K A D D R I H H I I E G R H I	H H I I E G R H I	
UniRef90_V2ZEK3	G	V R E I I L E E W T A W R M E	S V V R R R T A F R L L K R K R E E R L H H L L K G L R R	H H L L K G L R R	
UniRef90_UPI00046411B1	G	P A I I L R Q W A E F R I Q T	V V V R R R T A F R L L K R K Q D K H H L L E G R M K	H H L L E G R M K	
UniRef90_UPI0002556458	N	N L K Q I I L N E W L T F R K D	T V V R A R L I N S R A L D K I I N S R I H H L L E E G L F T	H H L L E E G L F T	
UniRef90_X0U744	N	N L K Q I I L Q H F I N R K E	I I V V R R T S F A L R K A E T K A H H H L L R G L L R V	H H H L L R G L L R V	
UniRef90_R9M160	G	K T L I I N E W A A F R E E	C V V R R K I H F E L L K R K Q D K H H L L R G L L G K	H H H L L R G L L G K	
UniRef90_R7KRH7	G	V Y E I I L T E W T A F R K D	C V V R R K R V Y F D L L N K K K D R L H H L L R G L L R K	H H H L L R G L L R K	
UniRef90_UPI0002D7A363	G	K A I I L R Y F L D R F I T	V V V K K R F E F E L V A V L K K R I H H H L L E G F R I	H H H L L E G F R I	
UniRef90_UPI0003C180C1	G	K P A I L Q A F L A H R E	V V V V R R A K W R L I K I E Q R L H H L L E G L L V	H H H L L E G L L V	
UniRef90_R1CCZ8	T	R S A L S S F L D F R V C	V V V R R R T A H L L A K A E A R L H H L L D G L L L	H H H L L D G L L L	
UniRef90_L1MSK7					
UniRef90_M4R905	G	V Q I L T E W L A F R Q T	V V T R R R L N F R L D K I L S R L H H I L E G L M I	H H I L E G L M I	
UniRef90_C8NBL7	N	G Q I L T R E W L V Y R E	T V V R R R L N H R L H A V V N E R I H H I L Q G L L I	H H I L Q G L L I	
UniRef90_K9DXM0	G	L T A I L Q E W I D Y R F	V T V V R R R T E F K L G K V N D R I H H I L E G R E T	H H I L E G R E T	
UniRef90_A3UC93	G	L K I E A L Q I W L D H R R	V V V V V V V V R R R A T T R L E E H V E D R R L E V V L S G F M V	H H H V L S G F M V	
UniRef90_B8ERL4	S	F K E A L Q Q W L D H R R	V V V V V V V V R R R A T T R L E E H V E D R R L E V V L S G F M V	H H H V L S G F M V	
UniRef90_I4EQ20	R	D E L L V F R F W V A H Q V	E V V I V V R R T R Y R L R K A E E R A H H H I L R G Y A K	H H H I L R G Y A K	
UniRef90_I9w961	A	L P E I I L Q E W I S F R F A	T V T R R T Q H R L G K V D D R I H H H I L E G R M L	H H H I L E G R M L	
UniRef90_B1JWA4	G	G L L T I I L D E W V K F R Q	L T M T R R C H R H L A K V D D R I H H H I L E G R M I	H H H I L E G R M I	
UniRef90_W6LYW1	N	R Q I I L E E W L R Y R	V T T V R R R L E G H R L N Q V D Q R L H H H I L D G L L I	H H H I L D G L L I	
UniRef90_A3SWF3					
UniRef90_F9QB78	G	I E I L T E W L S F R R T	T V T R R R L Q Y R L D K V L A R L H H I L Q G L M I	H H H I L Q G L M I	
UniRef90_C9P113	G	L T Q I I L S E W I E F R R	E T V R A R L Q Y R L D K V L A R L H H I L Q G L L I	H H H I L Q G L L I	
UniRef90_A6FMY1	S	S L K E V L L R A F L D F R E	V E V L E R R R S R H R M A K I D N R L R E V V L Q G L I T	H H H I L Q G L I T	
UniRef90_C1D9X7	G	G L K A I I L S E W L G F R E	T V T R R T Q H R L G K V D D R I H H H I L E G R Q L	H H H I L E G R Q L	
UniRef90_U4TI0	N	N L L E I L L Q E W L V F R Q	G V V Q R Q I L T Y R L L G K V D D R I H H H I L E G R Q L	H H H I L E G R Q L	
UniRef90_UPI0003B3791C	G	G L K P V I A K W L I H Q R E	V L I A R S R Y R L L G K V D D R I H H H I L E G R Q L	H H H I L E G R Q L	
UniRef90_R6MXA9	G	G I R E L L G E W I A F R I E	C V V R R T Y F D L Q Q K K K D K L H H H L L K G L L K R	H H H L L K G L L K R	
UniRef90_UPI00035E873E	G	G L K A L L E V F L R H R Y E	V V V T R R T Y R R R K R E E R L H H H L L D G L L I	H H H L L D G L L I	
UniRef90_R5MN38	G	G V E L L L E W I A F R T E	C V V R R T Y R R R K R E E R L H H H L L E G G L L Q K G L L Q K G L L Q K	H H H L L E G G L L Q K G L L Q K	
UniRef90_K1ZJE0	N	N L K S L L E Q Y I S H R V I	V V V T R R T K F E L L K Q A K D R A H H H I L Q G L L K K	H H H I L Q G L L K K	
UniRef90_R5H390	G	G V Y E I I L N E W T I F R R	D C V V K R R V A F D L L K K K K E K L H H H L L N G L L K K	H H H L L N G L L K K	
UniRef90_A0A024IBX7	S	S L R Q M L V E W I F R R D	C V V K R R V A F D L L K V L D R I H H H I L E G R Q L	H H H I L E G R Q L	
UniRef90_J9DB99	T	T L K D C V F Y F E H R Q D	V V V D V V V R R T R Y D L R K A Q E R A H H H I L E G L I I	H H H I L E G L I I	
UniRef90_F0EW91	N	N L K T I I L Q E W L D Y R	V A T V T R R R L Q H R L N A V V E R R I H H H I L D G R L I	H H H I L D G R L I	
UniRef90_K1KGQ6	N	N L L E I I I R E W I A F R L	L L A V V R R R T Q A R L D K V V N D R I H H H I L E G R A L	H H H I L E G R A L	
UniRef90_R6RFC4	G	G V R D I I L L E W V D F R	L L A V V R R R T Q A R L D K V V N D R I H H H I L E G R A L	H H H I L E G R A L	
UniRef90_Q70CL7	G	G V R D I I L L E W V D F R	L L A V V R R R T Q A R L D K V V N D R I H H H I L E G R A L	H H H I L E G R A L	
UniRef90_F9EJR9	G	G V R G L L R A W T A F R M D	C V V R R R L R F D L G R A K D R L H H L L R G L E K	H H H L L R G L E K	
UniRef90_E6U44	G	G V K D I L S E W L K Y R	I E C I E K S L K F D I D K K S A K L H H E L R G L E K	H H H I L E G R L E K	
UniRef90_UPI0004737416	G	G L P A L L R Q W C D Y R	L G A V T R R R L Q Y R L D K V L A R L H H I L Q G L M I	H H H I L Q G L M I	
UniRef90_UPI0003619C10	N	N L K Q V L V H Y I N F Q K D	V I T R R R T Q F E L L N K A K E R A H H H I L Q G L L I	H H H I L Q G L L I	
UniRef90_UPI000362B785	G	N L R D I I Y Y Y L E H Q K D V I	T V V R R R T Q F E L L N K A K E R A H H H I L Q G L L I	H H H I L Q G L L I	
UniRef90_B5ABQ1	G	G L K K I I K V Y T D F K Y G	L Y D T K Y R K L L A Q Q E E I R E I K M G M L L T	H H H I K M G M L L T	
UniRef90_Q8GDZ7	G	G V R R Q I I L N E W T A F R	T E C V V R R R T W F E L L Q G K Q K R L Y L L L Q G L L A A	H H H I L Q G L L A A	
UniRef90_D5HG21	G	G S V R E L L I A A F L S R D	S V V L H R S E Y R L E K V T A R R R H H H I L V A G G L M T	H H H I L V A G G L M T	
UniRef90_J9CWX4	N	N L E E E L L F E F F I E H R	K N I I E R R I I E F D L R K A K E K A H H H I L E G E G L N I	H H H I L E G E G L N I	
UniRef90_A4T3N2	S	G I K D I I F H W L N F R R Q	C I V V R R T L N E M E D K S K R L F L L L Q G L E K	H H H I L L Q G L E K	
UniRef90_K4IUR2	G	G L K R I L L E V F V L A H	R Y E V V T V T R R T Y R R R K R E D R L H H V E G L L K	H H H I L V E G L L K	
UniRef90_D6GS45	G	G L K R I L L E V F V L A H	R Y E V V T V T R R T Y R R R K R E D R L H H V E G L L K	H H H I L V E G L L K	
UniRef90_K0JZB4	G	G L K R I L L E V F V L A H	R Y E V V T V T R R T Y R R R K R E D R L H H V E G L L K	H H H I L V E G L L K	
UniRef90_A8TBZ2	G	G L Q K I L L S S Y I S H R	K D I I I E R S K F D K A K A E K R L H H I V E G L I R	H H H I V E G L I R	
UniRef90_U3TNN6	N	N L L E I I L S E W L V L R	R D T V V R R R L N Y R L E K V L K R L H H M L E G F L V	H H H I L M L E G F L V	
UniRef90_Q9ZAF9	G	G L Q K I L L S S Y I S H R	K D I I I E R S K F D K A K A E K R L H H I V E G L I R	H H H I V E G L I R	
UniRef90_UPI000464DF9C	G	G V S E I I L R R S A E H T	K T K W L L G R E L E I R R L G E L N L E A W H A A S L E R I	H H H I L V A G G L M T	
UniRef90_T0Y9J9	K	K I S K L L F F R N G W S T	V S I R A D I D E R M H R Q E V V V L E G L A K	H H H I L V E G L A K	
UniRef90_UPI00037C73AF	S	S L P E V L N Y Y L A H R Q E	V V V L R R S K Y E L L A K A K A R Q H V L E G L A K	H H H I L V E G L A K	
UniRef90_R5UZ0	G	G V S E I I L R R S A E H T	K T K W L L G R E L E I R R L G E L N L E A W H A A S L E R I	H H H I L V A G G L M T	
UniRef90_D5EPM8	A	A V D L L V Y L A T E K T R	E L L R M E L I Q L A E E L E K W H F S S L E R I	H H H I L V E G L L N I	
UniRef90_N1NJR9	G	G L K E L L Q V F I D F R	C T V V E R R A R F K L S H A Q A R R H I V E N Y Q H	H H H I L V E G L L K	

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 UniRef90_V9WDX6
 UniRef90_Q4PK96
 UniRef90_C6XHT3
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 UniRef90_N1NJR9

	370										380										390										400										
	I	V	T	D	L	K	E	A	I	D	I	T	Q	E	E	P	E	K	L	I	K	E	K	Y	S	L	S	D	I	Q	I	K	D	I	F						
	A	C	N	V	I	D	L	V	I	E	I	R	G	S	K	D	R	A	M	A	K	D	C	L	V	N	G	N	T	F	S	E	A	Q	A	D	I	L			
	A	Y	L	N	L	D	R	I	I	E	I	R	T	E	D	E	P	K	P	V	M	M	A	E	F	G	L	T	D	R	Q	A	E	I	L						
	A	F	L	N	L	D	R	V	I	D	I	R	N	S	D	E	P	K	P	V	M	M	E	R	F	N	L	S	D	R	Q	A	T	A	L						
	A	Y	L	N	L	D	R	V	I	K	I	R	E	S	D	D	D	P	K	A	L	M	R	E	D	W	L	S	E	V	Q	A	E	I	L						
	A	Y	L	N	L	D	R	V	I	K	I	R	E	S	D	E	D	P	K	E	L	S	K	K	F	K	L	S	D	I	Q	V	N	A	L						
	A	Y	L	N	L	D	R	V	I	K	I	R	E	S	D	E	D	D	P	K	P	V	M	V	S	R	F	S	L	T	E	N	Q	V	D	A	L				
	V	A	E	I	T	D	A	V	I	K	V	I	R	N	S	E	G	S	K	S	V	I	K	A	L	K	E	S	F	G	F	S	Q	N	Q	A	T	A	A		
	A	Y	L	N	L	D	R	V	I	R	I	R	E	E	E	E	E	P	K	K	S	I	H	F	E	L	S	E	I	Q	A	E	A	I	L						
	A	S	D	M	I	D	L	I	I	E	I	R	R	G	S	K	S	L	K	D	A	K	N	C	L	I	H	K	L	C	F	T	E	K	Q	A	S	A	I	L	
	A	Y	L	N	L	D	R	V	I	R	I	R	E	E	E	E	E	P	K	Q	A	L	V	A	A	F	Q	L	T	E	R	Q	A	E	A	I	L				
	A	T	K	D	I	D	K	K	V	I	E	T	I	E	S	S	E	N	S	A	E	A	K	S	K	L	M	G	N	F	F	L	S	E	K	Q	A	N	S	V	L
	A	I	S	I	I	D	K	I	I	K	L	I	R	S	A	V	D	K	S	D	A	R	E	K	L	D	M	N	F	K	F	T	F	N	Q	A	E	A	I	V	
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D **L** P | L | R Q | L | K R | I | E F | Q K | L | V | D | E | **E** E | K | I | Q | F | R | I | Q | **H** | E | E | R | L | A | S | R | E | **L** | Q | N
 E M R | L | Y K | L | I | G | L | E | **L** | D | A | L | I | K | E | H | E | Q | T | V | A | N | I | Y | K | Y | E | D | I | L | E | S | H | E | S | M | S
 N M R | L | R | S | L | R | K | L | E | E | M | E | M | R | R | E | H | R | E | D | A | L | L | L | A | E | Q | C | D | D | L | N | K | L | L | L | E | S | P | A | R | Q | R
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 E | I | R | L | R | Q | L | A | K | M | E | G | I | K | L | E | R | E | **□** | S | A | L | Q | G | E | A | A | D | **□** | S | K | L | L | G | S | D | S | L | M | R
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 D | M | Q | L | R | R | L | A | A | L | E | R | Q | K | I | T | D | E | L | A | E | R | E | A | T | **□** | A | D | L | K | D | I | L | L | D | K | P | E | R | Q | R
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 E | L | R | L | Y | R | L | N | K | T | D | I | Y | F | E | E | K | Q | E | **□** | E | N | K | I | A | N | F | K | L | L | L | S | N | Q | D | E | F | D
 UniRef90_F3SZD6
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 D | S | Q | L | Y | K | I | A | Q | M | E | I | R | K | I | L | D | L | K | E | K | K | E | Q | A | A | H | I | E | S | I | L | K | S | Q | K | K | L | W
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 E | T | K | L | R | H | L | A | R | L | E | E | M | K | L | R | G | E | Q | G | E | L | R | K | E | Q | E | Q | Q | L | Q | L | L | G | S | E | K | R | L | N
 N | L | R | L | R | H | L | A | K | L | E | E | H | E | L | R | A | E | Q | E | Q | L | E | K | E | R | D | S | L | Q | L | V | L | G | S | E | R | R | L | N
 D | T | K | L | R | H | L | A | K | L | E | E | V | K | I | R | G | E | Q | D | A | L | D | K | E | R | A | K | L | E | E | L | L | L | G | S | E | R | R | L | N
 E | I | R | L | R | Q | L | A | R | L | E | G | F | R | L | E | K | E | **□** | G | E | L | R | D | E | A | G | G | L | R | H | L | L | A | S | D | H | A | R | Q |
 D | I | K | L | R | Q | L | A | K | L | E | E | E | K | L | L | K | E | Q | A | D | L | L | Q | A | E | K | E | K | L | E | A | I | I | L | L | A | S | E | R | R | L | R
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 E | I | R | L | R | Q | L | A | R | L | E | G | F | R | L | E | K | E | **□** | G | E | L | R | D | E | A | G | G | L | R | H | L | L | A | S | D | H | A | R | Q |
 D | I | K | L | R | Q | L | A | K | L | E | E | E | K | L | L | K | E | Q | A | D | L | L | Q | A | E | K | E | K | L | E | A | I | I | L | L | A | S | E | R | R | L | R
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 E | I | K | L | R | H | L | N | R | E | Y | I | L | K | R | I | K | D | I | E | Q | L | E | N | E | I | V | E | L | E | A | I | L | L | S | S | K | N | K | M | K
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 E | I | R | L | R | Q | L | A | R | L | E | G | F | R | L | E | K | E | **□** | G | E | L | R | D | E | A | G | G | L | R | H | L | L | A | S | D | H | A | R | Q |
 D | I | K | L | R | Q | L | A | K | L | E | E | E | K | L | L | K | E | Q | A | D | L | L | Q | A | E | K | E | K | L | E | A | I | I | L | L | A | S | E | R | R | L | R
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UniRef90_UPI000362B785	
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UniRef90_Q8GDZ7	Q Q M I D D D M L E I K A K Y A I P R R T Q I
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UniRef90_A4T3N2	N I I I R E E T I N L G L K F G D E R R T K I I
UniRef90_K4IUR2	K L I I S E L K K I K T Y G Q E R K T T I V S
UniRef90_D6GS45	K V V S G E L A K V A K D L Q Q E R R T V L L
UniRef90_K0JZB4	
UniRef90_A8TBZ2	N V M K R E L R E V K K K F A N P R L S E L Q A
UniRef90_U3TN66	
UniRef90_Q9ZAF9	
UniRef90_UPI000464DF9C	A V V K K E L G E M K E M F G D Q R R T K V
UniRef90_T0Y9J9	E Y A V A Y Y E R I R D K Y G K E R R T E L
UniRef90_UPI00037C73AF	K Y T I K W F N D L K K K Y G K E R R T E L
UniRef90_R5UZR0	E L I E Q E A I E L K N R F A N P R R S T L
UniRef90_D5EPM8	
UniRef90_N1NJR9	

		1	10	20	30	40
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UniRef90_F9ZAA3	L	E R A V	P Y V N D G L K P V Q R R I	I L H S M K R M D D G R Y N K V A N I I G N		
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UniRef90_R6A07	L	E R A V	P H I G D G L K P V Q R R I	I L H S M K R M D D G R Y N K V A N I V G H		
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UniRef90_R5FC17	L	E R A V	P A I E D G L K P V Q R R I	L H S M K R M D D G R Y N K V A N I V G Y		
UniRef90_R5IQ67	L	E R A V	P A I E D G L K P V Q R R I	L H S M K R M D D G R Y N K V A N I V G H		
UniRef90_E4T8Y5	L	D R A I	P S I F D G F K P V Q R R I	M H S M K E L D D G R Y N K V A N I V G N		
UniRef90_D1W7E0	L	E R A V	P H I E D G L K P V Q R R I	L H S M K R M D D G R Y N K V A N I V G H		
UniRef90_R5MAS8	L	E R A V	P H I N D G L K P V Q R R I	L H S M R R M E D D G R Y N K V A N I V G H		
UniRef90_W8EYMO	L	E R A V	P A I E D G L K P V Q R R I	L H A M K E M D D G R F N K V A N I V G H		
UniRef90_I2GHU9	L	E R A V	P A V E D G L K P V Q R R I	L H A M K E M D D G R F N K V A N I V G H		
UniRef90_F3ZRM1	L	E R A V	P H I N D G L K P V Q R R I	L H S M K R M D D G R Y N K V A N I V G H		
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UniRef90_UPI00035FF6C9	D R A I	P N L V D G L K P V Q R R I	L W S L H Q N D D G K F I K V A N I V G H			
UniRef90_E5L9E0						
UniRef90_K1Z7I0	L	D R A I	P H I A D G L K P V Q R R I	I V Y A M S E L G K N T A K Y K K S A R T		
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UniRef90_C7M6L6	L	E R A V	P A I I E D G F K P V Q R R I	M H S S L K E L D D G R Y N K V A N I V V G N		
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UniRef90_I3CAG2	L	E R A V	P A I I E D G F K P V Q R R I	M H S S L K E L D D G R Y N K V A N I I V G H		
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UniRef90_UPI0001746359	L	E R A V	P H I N D G L K P V Q R R I	L H S M R E E D G R Y N K V A N I V V G N		
UniRef90_UPI000422F0A1	L	E R A V	P A I I E D G L K P V Q R R I	L H A M K E M D D G R F N K V A N I V V G N		
UniRef90_M0SVF6	L	Q R S I	P S M V D D G L K P G Q R K I	L F C A F K R N F V K Q A K V A Q F V G Y		
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UniRef90_J9BQY6	L	E R A V	P H I M D D G L K P V Q R R I	L H S M R R M E D G R Y N K V A N I V V G H		
UniRef90_E6XFG1	L	E R A V	P A I E D G F K P V Q R R I	L M H A L K E L D D G R Y N K V A N I V V G H		
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UniRef90_UP1000471FC65	L	E R A V	P A I I E D G L K P V Q R R I	I L H A M R E M D D G R F N K V A N I V V G N		
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UniRef90_W9YFI4	R S I	P S V V D G L K P G Q R K I	V M Y T C F K R N L R K D M K V A E L A G L			
UniRef90_UP1000467F26C	L	E R A V	P H I N D G L K P V Q R R I	L H A M R R M E D G R Y N K V A N I I G F		
UniRef90_I1MJQ7	L	Q R S I	P S M V D G L K P G Q R K I	L F C S F K K L S K E I K V G Q F I G Y		
UniRef90_G8TE76	L	E R A V	P A V E D G L K P V Q R R I	L Y A M K E M D D G R F N K V A N I V V G N		
UniRef90_S8D1A8	L	Q R S I	P S M I D D G L K P G Q R K I	L F C S F K R N F V K E A K V A Q F S G Y		
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UniRef90_A7E9F0	R S I	P S V I D G L K P G Q R K I	V M Y A C F K R N L T N D M K V V E L A G Y			
UniRef90_A6RG78	R S I	P S V V D G L K P G Q R K I	V L Y T C F K R N V K K D V K V A E L S G Y			
UniRef90_J4ICG2	R S I	P S V A D G L K P V Q R K I	V I W A C F C F K R K L L K G E I K V A Q L V G H			
UniRef90_Q8GSC4	L	Q R S I	P S M L D D G L K P G Q R K I	L F C S F K R N F V K E A K V S Q F S G Y		
UniRef90_M2RR97	R S I	P S V A D G L K P G Q R K I	V L W S C F K R G L K K S E I K V A Q L V G Y			
UniRef90_D4DAV0	R S I	P S V V D G L K P G Q R K I	V L W S C F K R G L K K S E I K V A Q L V G Y			
UniRef90_F4WEK4	R S I	P S V M M D G F K P G Q R K I	V L Y T M F K R N V R K N V R K N V R K N V R K N V A Q L A G S			
UniRef90_I3ZZC4	L	S R A I	P S I Y D G L K P V Q R R I	I L H S M R E M E D G R Y N K V A N I V V G N		
UniRef90_A0A024MPX1	R S I	P S L V D G L K P G Q R K I	L F T C F K R A D K K E V K V A Q L A G A			
UniRef90_UP10002B44BA4	L	Q R S I	P S M V D G L K P G Q R K I	L F C S F K R N F V K E A K V Q L A G A		
UniRef90_G5GD69	L	E R A V	P H I A D G L K P V Q R R I	I L H A M K R A D D G R Y N K V A N I V V G N		
UniRef90_M7BE62	R S I	P S L V D G L K P G Q R K I	V L F T C F K R N D K R E V K V A Q L A G S			
UniRef90_G1NAT9	R S I	P S L V D G L K P G Q R K I	V L F T C F K R N D K R E V K V A Q L A G S			
UniRef90_B0WRP3	R S I	P C L V D G L K P G Q R K I	V M F T C F K R N D K R E V K V A Q L A G S			
UniRef90_L7MAX8	R S I	P S L V D G L K P G Q R K I	V L Y T C F K R N D K R E L K V A Q L A G S			
UniRef90_K7UYE6	L	Q R S I	P S M V D G L K P G Q R K I	L F C S F K R N F V K E A K V A Q F S G Y		
UniRef90_H1GWN7	L	E R A V	P A I I E D G F K P V Q R R I	I M H S M K E L D D G R Y N K V A N I V V G H		
UniRef90_N1JNK9	R S I	P S V I D G L K P G Q R K I	V M Y A C F K R N L I R D M K V V E L A G Y			
UniRef90_T1HFS3	R S I	P N V V D G L K P G S R K I	V L F T C L K R N D K R E V K V A Q L A G S			
UniRef90_UP100029AC00B	L	D R A V	P H I H D G L K P V Q R R I	I M H S L K E M D D G R F N K V A A N		
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UniRef90_Q7MUA9	L	E R A V	P H I E D G L K P V Q R R I	I L Y T M H H W F D N G R M K N V K A V K		
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UniRef90_O51066	D R A I	A S V V D G F K P V Q R R I	I H S S L F E M H D G N F H K V A N			
UniRef90_I3JVT3	R S I	P S L V D G L K P G Q R K I	V L F T C L K R N D K R E V K V A Q L A G S			
UniRef90_R5IGE1	R S I	P C L V D G F K P G Q R K I	V L F C F K R N D K R E V K V A Q L S G S			
UniRef90_A0A034VUE0	R S I	P S M V D G L K P G Q R K I	V L F T C F K R N D K R E V K V A Q L A G S			
UniRef90_F7A8M1	R S I	P S V V D G L K P G Q R K I	V L F T C F K R N D K R E V K V A Q L A G S			
UniRef90_J3NNY5	R S I	P S V V D G L K P G Q R K I	V L F T C F K R N D K R E V K V A Q L A G S			
UniRef90_O41065	L	Q R S I	P S V V D G F K P S Q R K I	V L Y G C F K R N L T S D V K V A Q F S G Y		
UniRef90_C5Y0E7	L	Q R S I	P S M V D G L K P G Q R K I	V L Y G C F K R N L T S D V K V A Q F S G Y		
UniRef90_M3HI84	R S I	P S V L D G L K P G Q R K I	V L Y G C F K R N L T S D V K V A Q L A G Y			
UniRef90_G2WQG2	R S I	P S V L D G L K P G Q R K I	V L Y G C F K R N L T K D Q K V V E L A G Y			
UniRef90_Q7ZXS2	R S I	P S L V D G L K P G Q R K I	V L F T C F K R N D K R E V K V A Q L A G S			
UniRef90_L1IRG4	R S I	P S L V D G W K P G Q R K I	V L Y A C F K R K L K A F E L K V A Q L A G Y			
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UniRef90_UP100037868B8	L	E R A V	P A V L D G L K P V Q R R I	I L H T M Q K M D D G R Y H K V A N I I Q G		
UniRef90_B8M038	R S I	P S V V D G L K P G Q R K I	V L F T C F K R N V K K D M K V V E L A G H			
UniRef90_W6MU72	R S I	P S V L D G F K P S Q R K I	V L Y G C Y K R N L S S E I K V S Q L A G Y			
UniRef90_V9K8D6	R S I	P S L V D G L K P G Q R K I	V L F T C F K R N L S S E I K V S Q L A G Y			
UniRef90_U6MRN9	S R A L	P D T R D G L K P V H R I I Y A M Q G L G L S H A G P F R K S A R V				
UniRef90_A0A017SJN0	R S I	P S V V D G L K P G Q R K I	V L Y T C F K R N L N L R D M K V V E L A G H			
UniRef90_J5Q6D7	R S I	P S V A D G L K P G Q R K I	I F G C F K K K I K N Q I K V Q Q I V G Y			

	50	60	70	80
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UniRef90_R7HRR4	T	M Q Y H P H G D A S I G D A L V Q L G Q K E L L V D T Q G N W G N I L		
UniRef90_F9ZAA3	T	M K Y H P H G D A S I G D A L V Q L G Q K D L L I D C Q G N W G N I L		
UniRef90_R6WR13	T	M Q F H P H G D A S I G D A L V Q L G Q K D L L V D C Q G N W G N I L		
UniRef90_R6AQ07	T	M Q F H P H G D A S I G D A L V Q L G Q K N L L I D S Q G N W G N I L		
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UniRef90_M7N0H6	T	M Q Y H P H G D A S I A D A T V N L G Q K D L L I D T Q G N W G D V R		
UniRef90_C6W2K8	S	M Q Y H P H G D A S I Y D A I V N I L G Q K E L L F D T Q G N W G D I R		
UniRef90_R5FIC7	T	M Q F H P H G D A S I G D A L V Q L G Q K N L L V D S Q G N W G N I L		
UniRef90_R5IQ67	T	M Q F H P H G D A S I G D A L V Q L G Q K D L L I D C Q G N W G N I L		
UniRef90_E4T8Y5	T	M K Y H P H G D A S I T D A M V L Q L G Q K E L L I D T Q G N W G N V Y		
UniRef90_D1W7E0	T	M Q F H P H G D A S I G D A L V Q M G Q K D L L V D T Q G N W G N I L		
UniRef90_R5MAS8	T	M Q F H P H G D A S I G D A L V Q L G Q K D L L V D C Q G N W G N I L		
UniRef90_W8EYMO	V I G Q T M Q Y H P H G D A S I G D A M V N L G Q K D L L I D T Q G N W G D I R			
UniRef90_I2GHU9	V I G Q T M Q Y H P H G D A S I G E A L V N I L G Q K E L L F D T Q G S W G D V R			
UniRef90_F3ZRM1	T	M Q F H P H G D A S I G D A L I Q L G Q K D F L I D C Q G N W G N I L		
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UniRef90_UPI00035FF6C9	S	M Q Y H P H G D A S I G D A L V V L T N K R Y L I E G Q G N F G		
UniRef90_E5L9E0				
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UniRef90_F8L175	T	M A Y H P H G D A P I T E A L V N M A N R G Y L L D Q Q G N F G		
UniRef90_E8RB29	T	M K L H P H G D Q S I F D A L V N L A N K G Y L I D R Q G N F G		
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UniRef90_UPI00042910C3	T	M Q Y H P H G D A S I A D A M V Q I G Q K D L L I D M Q G N W G N I L		
UniRef90_I3CAG2	T	M Q Y H P H G D A S I G D A M V Q I G Q K D L L I D T Q G N W G N I L		
UniRef90_A0A059B1M6	V S E H S A Y H H G E Q S L A S T I L G M A Q D Y N I N L L M P N G Q F G T			
UniRef90_UPI0001746359	T	M K Y H P H G D A S I G D A M V Q L G Q K E L L I D T Q G N W G N I L		
UniRef90_UPI000422F0A1	I I G Q S M Q Y H P H G D A S I G D A L V N L G Q K D L L I E T Q G N W G D I R			
UniRef90_M0SVF6	V S E K S A Y H H G E Q S L A T T I I G M A Q D F N I N L L Q P E G Q F G T			
UniRef90_UPI00042B6F53	V S E H S A Y H H G E Q S L A S T I V G M A Q D F S N N I N L L N P G G Q F			
UniRef90_UPI00036043B5	I I G Q T M Q Y H P H G D A S I S D A I V H I G K E L L I E T Q G N W G D I R			
UniRef90_A6KWX2	T	M Q F H P H G D A S I G D A L V Q L G Q K D L L I D C Q G N W G N I L		
UniRef90_A1ZXC5	A	M Q Y H P H G D A S I G D A L V N M G Q K D L L V D T Q G N W G D I N		
UniRef90_C9RLW5	I V G R T M A Y H P H G D A S I G D A L V G L G Q K N L L I D T Q G N W G			
UniRef90_B2AS80	I S E Q A A Y H H G E Q S L Q Q T I I G L A Q T F S N N V N C L E P S G N F			
UniRef90_J9BQY6	T	M Q F H P H G D A S I S D A L V Q L G Q K D L L I D C Q G N W G N I L		
UniRef90_E6XFG1	T	M Q Y H P H G D A S I A D A M V Q I G Q K D L L I D T Q G N W G N I L		
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UniRef90_B5RLP2	T	M K Y H P H G D T S I Y E A L V N M A N K D L F I E K Q G N F G		
UniRef90_W9YFI4	V G G M T A Y H H G E A S L Q Q T I V G L A Q D F N V N L L I E P S G Q F G T			
UniRef90_UPI000467F26C	T	M Q F H P H G D A S I G D A L V Q L G Q K N L L I D M Q G N W G N V F		
UniRef90_I1MJQ7	V S E H S A Y H H G E Q S L A S T I I N M A Q D F N I N L L K P N G Q F G T			
UniRef90_G8TE76	I I G Q S M Q Y H P H G D A S I G D A L V N M G Q K D L L I E T Q G N W G D V R			
UniRef90_S8D1A8	V S E H S A Y H H G E Q S L A G T I I G M A Q D F N I N L L L P N G Q F G T			
UniRef90_M3B324	V S G G L T A Y A Y G D A S L Q Q T I V A L A Q N F S N N M N I L E P S G N F			
UniRef90_A7E9F0	V S Q V S A Y H H G E A S M Q M T I V G L A Q N F S N N V N C L E P S G N F			
UniRef90_A6RG78	V L G M T A Y Q H G E Q S L Q Q T I I G L A Q N F S N N I N C L E P S G N F			
UniRef90_J4ICG2	V S E H A Q Y H H G E Q S L M M M T I V N L A Q D F N L N L M P N G Q F G T			
UniRef90_Q8GSC4	V S E H S A Y H H G E Q S L S S T I I G M A Q D Y N V N L L Q P N G Q F G T			
UniRef90_M2RR97	V S E H A Q Y H H G E M S L M Q T I V N L A Q D F N M N I L M P N G Q F G T			
UniRef90_D4DAV0	V S G M T A Y Q H G D N S L H T T I V G L A Q T F S N N I N C L E P S G N F			
UniRef90_F4WEK4	V A E H S A Y H H G E T S L M A T I V N L A Q N F N I N L L Q P I G Q F G T			
UniRef90_I3ZZC4	T	M K Y H P H G D S S I G G A L V Q I G Q K N L L I D K Q G N W G N I F		
UniRef90_A0A024MPX1	V G E M S A Y H H G E A S L M S T I V N L A Q D Y N I N L L L P I G Q F G T			
UniRef90_UPI0002B44BA4	V S E H S A Y H H G E Q S L A S T I I G M A Q D F N I N L L L P N G Q F G T			
UniRef90_G5GD69	L V G D T M H F H P H G D Q S I G G A L V Q L G Q K D L L I D T Q G N W G N I L			
UniRef90_M7BE62	V A E M S S Y H H G E A S L M M M T I V N L A Q N F N I N L L Q P I G Q F G T			
UniRef90_G1NAT9	V A E M S S Y H H G E A S L M M M T I V N L A Q N F N I N L L Q P I G Q F G T			
UniRef90_B0WRP3	V A E M S A Y H H G E Q S L C S T I V N L A Q N F N I N L L Y P G Q F G T			
UniRef90_L7MAX8	V A E H S A Y H H G E Q S L V S L M S T I V N L A Q N F N I N L L Q P I G Q F G T			
UniRef90_K7UYE6	V S E H S A Y H H G E Q S L A G T I I G M A Q N F N I N L M Y P S G Q F G T			
UniRef90_H1GWN7	T	M Q Y H P H G D A S I L G D A L V Q I G Q K D L L I D M Q G N W G N I L		
UniRef90_N1JKN9	V S E N T A Y H H G E A S M H Q T I I G L A Q N F S N N I N C L E P S G S F			
UniRef90_T1HFS3	V G E H S A Y H H G E Q S L M T T I I N L A Q N F N I N L L Q P I G Q F G T			
UniRef90_UPI00029AC00B	V I G N T M K Y H P H G D A S I G D A M V Q I G Q K D L L I D M Q G N W G D			
UniRef90_T1P94	V S E Q S A Y H H G E Q S L N A T I I I N L A Q N F N I N L L Q P I G Q F G T			
UniRef90_Q7MUA9	V T G Q T M A L H P H G D A S I N D A L V Q L G Q K G Y L I E T Q G N W G N I L			
UniRef90_G8ZS14	V A E K T S Y H H G E Q A L A Q T I I G L A Q N F N I N L L K P N G A F G T			
UniRef90_D0A926	V S E H A A Y H H G E Q S L V Q T I I V G L A Q D Y N V P L L Y R D G Q F G T			
UniRef90_O51066	V V I G N T M K Y H P H G D T S I Y E A L V N I A N K D L F I E K Q G N F G			
UniRef90_I3JVT3	V A E M S A Y H H G E Q A L M M T I V N L A Q N F N V N I L Q P L G Q F G T			
UniRef90_R51GE1	V	A E M S A Y H H G E M S L Q A T I V N L A Q N Y N I N L L E P R G Q F G T		
UniRef90_A0A034VUE0	V	A E M S S Y H H G E M S L M M M T I I N L A Q N F N V N L Q P I G Q F G T		
UniRef90_F7A8M1	V S E H V A A Y H H G E A S L Q Q T I V G L A Q F N S N N V N C L E P S G N F			
UniRef90_J3NNY5	V A E H S A Y H H G E V S L Q Q T I V N L A Q D Y N I N W L L P E G Q F G S			
UniRef90_O41065	V S E H S A Y H H G E Q S L A S T I I G M A Q N F S N N I N L M F P G G Q F			
UniRef90_C5Y0E7	V S E N T G Y H H G E Q S L V Q T I I G L A Q N F S N N I N L L K P N G S F			
UniRef90_M3HI84	V S E K A A Y H H G E M S L Q Q T I I G L A Q N F S N N V N C L E P S G N F			
UniRef90_G2WQG2	V A E M S A Y H H G E I S L M M T I I G L A Q N F N V N L L Q P I G Q F G T			
UniRef90_Q7ZXS2	V A E H S A Y H H G E Q S L V Q T I I G M A Q N F N V N V L V P S G Q F G T			
UniRef90_L1IRG4	V A E H S A Y H H G E Q S L A M A V G M A Q N F N V N V L V P S G Q F G T			
UniRef90_Z2DT55	V S E H S A Y H H G E Q S L A S T I V G M A Q S F N I N L L Y P G G Q F G T			
UniRef90_K3YP99	T	M Q Y H P H G D A A I G D A L V N L G Q K D L L I D P Q G N W G D		
UniRef90_UPI00037868B8	V S G M T A Y Q H G D T S I L Q Q T I V G L A Q T F S N N L N C L E P S G N F			
UniRef90_B8M038	I G E H T G Y H H G D A S I I Q S I V G L A Q D F N M N L M P L G G F G T			
UniRef90_W6MU72	V A E M S A Y H H G E V S L M M T I V G L A Q N F N I S L L Q P I G Q F G T			
UniRef90_V9K8D6	V G E V L G K F H P H G D K A V Y D A L V R L A Q P F V Y Q L P L I E G H G N F			
UniRef90_U6MRN9	V S G M T A Y H H G D V S L Q Q T I V G L A Q D F S N N I N T L E P S G N F			
UniRef90_A0A017SJN0	I L E N T A Y H H G E T S L Y S T I V G L A Q N F S N N V N L L A P H G Q F			
UniRef90_J5Q6D7				

	90	100	110	120
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UniRef90_A5K033	G S V E Y N A A A M R Y T E A K I S N F C Y D V L L D N E E N V E Y V R N F			
UniRef90_R7HRR4	T G D S A A A P R Y I E A R L S E F A I E T V Y N P K T T D W T V S Y			
UniRef90_F9ZAA3	T G D G A A A P R Y I E A R L S K F A L D V V F N P K T T N W K P S Y			
UniRef90_R6WR13	T G D R A A A P R Y I E A R L S K F A L D V V F N P K T T E W K M S Y			
UniRef90_R6A0A7	T G D S A A A P R Y I E A R L S K F A L D V L F N P K T T E W K M S Y			
UniRef90_H6WG43	G S I S E D S P A A A A R Y L E V K S S E F T Q N Y I N E D K E S C E W R D N Y			
UniRef90_M7N0H6	T G D G A A A P R Y I E A R L P S K F A L E I L Y N P Q T T Q W Q L S Y			
UniRef90_C6W2K8	T G D G A A A A A R Y I E V R L S R F G K D V V F N P K T T E W Q L S Y			
UniRef90_R5FIC7	T G D R A A A P R Y I E A R L S K F A L D V A F N P K T T E W Q L S Y			
UniRef90_R5IQ67	T G D S A A A P R Y I E A R L S K F A L D V V F N P K I T Q W K P S Y			
UniRef90_E4T8Y5	T G D S A A A A A R Y I E A R L T P F A L E V V F N P K T T H W V K S Y			
UniRef90_D1W7E0	T G D R A A A P R Y I E A R L S K F A L D V V F N P K T T H W Q L S Y			
UniRef90_R5MAS8	T G D G A A A P R Y I E A R L S K F A L D V V F N P K T T E W K L S Y			
UniRef90_W8EYMO	T G D G A A A P R Y I E A R L S K F A L D V V F N P D T E W Q M S Y			
UniRef90_I2GHU9	T G D G A A A P R Y I E V R L S K F A H D T L F N D K T T E W Q L S Y			
UniRef90_F3ZRM1	T G D R A A A P R Y I E A R L S K F A L E V V F N P K T T E W Q K S Y			
UniRef90_Q7R897	G S V E Y N A A A M R Y T E A R I S D F C Y D V L L D N D E N V D Y K N F			
UniRef90_UPI00035FF6C9	N V F T G D P A A A S R Y I E C R L T D L S R T Q L F N N E L T E F V P S Y			
UniRef90_E5L9E0		I L G E L K K N P V N F V P N F		
UniRef90_K1Z7I0	G S A D D P K F A A M R Y T E S R L T G Y A N A L L N E L Q Q G T T D W T P N F			
UniRef90_F8L175	N I F T G D P A A A A R Y I E T R L A A L A K E T L F N P D L T A Y A P S Y			
UniRef90_E8RB29	N I F T G D Q A S A P R Y I E C R L S P L A R E T L F N K D L T E F D S Y			
UniRef90_C7M6L6	T G D D A A A P R Y I E A R L S K F A L D V V F S P K V T E W Q S S Y			
UniRef90_UPI00042910C3	T G D R A A A A S R Y I E A R L S K F A L E V V F N P K T T E W K M S Y			
UniRef90_I3CAG2	T G D S A A A S R Y I E A R I S K F G L E V V Y S P K I T E W Q L S Y			
UniRef90_A0A059B1M6	R N M G G K D H A S P R Y V Y T K L S P T T R F L F P K D D D D N L L S Y L N E D			
UniRef90_UPI0001746359	T G D G A A A S R Y I E S R L T K F A L D V V F S P K V T E W A N S Y			
UniRef90_UPI000422F0A1	T G D S A A A A A R Y I E A R L S K F A L E V V F N P Q T T D W Q L S Y			
UniRef90_M0SVF6	R H Q G G K D H A S A R Y I F T C L S P I T R F L F P K D D D D L L D Y L N E D			
UniRef90_UPI00042B6F53	G T R N Q G G G K D A A R Y I F T N L S P I T R Y L F P K D D D D G L L D Y L N E D			
UniRef90_UPI00036043B5	T G D G A A A A A R Y I E A R L S K F A L E V V F N P Q T T E W Q L S Y			
UniRef90_A6KWX2	T G D G A A A P R Y I E A R L S K F A L D V V F N P K T T E W Q A S Y			
UniRef90_A1ZXC5	T G D S A A A P R Y I E G R L S K F A L D V I F N P Q T T E W Q L S Y			
UniRef90_C9RLW5	N P Y T G D R A A A P R Y I E G R L T P F A V D V V F N P E T T E W I P S Y			
UniRef90_B2AS80	G S R G G K D S A S A R Y I H T R L S P F A R K V F S K L D E P N P N L E Y Q F D D			
UniRef90_J9BQY6	T G D S A A A A P R Y I E A R L S K F A L D V V F N P K T T L W K L S Y			
UniRef90_E6XFG1	T G D S A A A S R Y I E A R L S K F A L E V V F S P K I T A W Q S S Y			
UniRef90_R6AIX8				
UniRef90_UPI000471FC65	T G D S A A A P R Y I E A R L S K F A L D V V F N P Q T T L W Q L S Y			
UniRef90_B5RLP2	N L L T G D P A S A S R Y I E C R L T P L A F E V L Y S K E I T T Y E P S Y			
UniRef90_W9YFI4	R N Q G G N D C A S A R Y I F T R L S P F A R K L F H Q A D E P L L T Y N K D D			
UniRef90_UPI000467F26C	T G D R A A A P R Y I E A R L T K F A Q E V V F N P K T T E W K P S Y			
UniRef90_I1MJQ7	R N L G G K D H A S A R Y I Y T E L N T I T R C I F H E D D D K L L E Y L N E			
UniRef90_G8TE76	T G D D A A A A A R Y I E A R L S R F A L D V A F N A K T T E W A V S Y			
UniRef90_S8D1A8	R D Q G G K D H A S A R Y I F T Q L N P V T R F L F P K A D D L L D Y L N E D			
UniRef90_M3B324	G S R R L Q G G G S D A A R Y I Y T R L S P F A R R H I F D P K D E P L L K P N L D D			
UniRef90_A7E9F0	G S R R L Q G G G S D A A R Y I F T R L S P F A R R V Y S A L D D P V L E Y N V D D			
UniRef90_A6RG78	G S R R L Q G G G S D A P R Y I Y T R L S P F A R R I F H E A D E P L T Y N V D D			
UniRef90_J4ICG2	R D Q G G K D H A S A R Y I Y T E L S P A T R A V F H P G D D P L M K Y L T D D D			
UniRef90_Q8GSC4	R N M G G K D H A S S R Y I Y T R L S P I A R F L F P K E D D T H D Y L N E D			
UniRef90_M2RR97	R D Q G G K D H A S A R Y I F T E P S I T R K V F H P A D D P L M N F Q T E D			
UniRef90_D4DAV0	G S R R L Q G G K D S A S A R Y I Y T R L S P F A R R L F H Q A D E P L L V N N V D			
UniRef90_F4WEK4	R L A G G K D S A S A P R Y I F T M L S P L A R Y I F H K H D D P L L K Y E Y D D			
UniRef90_I3ZZC4	T G D V A A A A S R Y I E A R L T K F A L E V V F N P K T T E W Q N S Y			
UniRef90_A0A024MPX1	R L Q G G K D S A S A P R Y I F T Q L N P V T R A L F P A V D E N V L R F L F E E D			
UniRef90_UPI0002B44BA4	R N H G G K D H A S S R Y I Y T K L S N V T R F L F P R D D K L L N Y L N E D			
UniRef90_G5GD69	T G D S A A A A P R Y I E A R L S S K L A D L F N P K T T E W K L S Y			
UniRef90_M7BE62	R L H G G K D S A S P R Y I F T M L S S S L A R L I F P A T D D S I L R F L Y D D			
UniRef90_G1NAT9	R L H G G K D S A S P R Y I F T M L S P L A R L L F P P V D D N V L R F L Y D D			
UniRef90_B0WRP3	R L A G G K D S A S P R Y I F T M S M S A L T R L F H P D P L L E Y Q Y D D			
UniRef90_L7MAX8	R L Q G G K D A A A S P R Y I F T M L S P L A R L I M P A S D P I L D Y L F D D			
UniRef90_K7UYE6	R A Q G G K D A A A S P R Y I F T K L S H I T R S I F P K D D D I L L N Y L N E D			
UniRef90_H1GWN7	T G D G A A A A S R Y I E A R L S K F A L E V V F S P K I T N W Q A S Y			
UniRef90_N1JNK9	G S R R L Q G G G S D A P R Y I F T R L S P F A R R V F S P L D G P L Y E H N V D			
UniRef90_T1HFS3	R L Q G G K D A A A S P R Y I F T M L S P L T R L F H P H D D P L L R Y Q R D D			
UniRef90_UPI00029AC00B	P I T G D S A A A P R Y I E A R L S K F A N E V V F N P D T T E W Q L S Y			
UniRef90_T1P94	R L Q G G K D A A A S P R Y I H T M L S P V A K H F N V K D Q P L L N H L N D D			
UniRef90_Q7MUA9	T G D E A A A G R Y I E A K L S A L A Q E T L F N D K I T H W K R S Y			
UniRef90_G8ZS14	R A T G G K D A A A A A R Y I Y T E L S K I T R K I F H P S D D P L Y K Y L Q E D D			
UniRef90_D0A926	R L Q G G K D H A A G R Y I F T R L T D I A R R I Y H P S D D F I V E Y R D D			
UniRef90_O51066	N L F T G D P A S A S R Y I E C R L T P L A F D V L Y S K E I T I Y E S S Y			
UniRef90_I3JVT3	R I N G G K D A A A S P R Y I F T M S P L A K L L F P A V D S N L L K F L Y D D			
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UniRef90_F7A8M1	R L H G G K D S A S A P R Y I F T M L S P L A R L L F P V K D D N T L K F L Y D D			
UniRef90_J3NNY5	G S R R L Q G G G S D A A R Y I F T R L S P F A R R V F S A L D E P I L Q H Q V D			
UniRef90_O41065	R L Q G G K D H A S A R Y I F T K L S N P T R Q V F V D D N L L K Y L Y D D			
UniRef90_C5Y0E7	G T R A Q G G G K D A P R Y I F T K L S H I T R S I F P K D D D I L L N Y L N E D D			
UniRef90_M3HI84	G S R R G G K D F S A A R Y I F T E L N E I T R R I F N P L D P L Y T Y V Q D D			
UniRef90_G2WQG2	G S R R L Q G G G S D A P R Y I H T R L S P F A R K F S V L D E P N L E V Q M E D D			
UniRef90_Q7ZXS2	R L H G G K D A A A S P R Y I F T M L S P L A R L L F P A L D D N V L K F M Y D D			
UniRef90_L1IRG4	R L Q G G G K D A A A S P R Y I F T Y L H P I T R F L F H E A D D A L L K Y L N D D			
UniRef90_Z2DT55				
UniRef90_K3YP99	R S Q G G G K D A A A S P R Y I F T K L S H I T R S I F P K D D D T L L N Y L N E			
UniRef90_UPI00037868B8	S R T G D R A A A A S R Y I E A R L T K F A L E V V F N P Q T T D W Q F S Y			
UniRef90_B8M038	G S R R L Q G G G S D A A R Y I Y T R L S P F A R R R V F H Q A D E P L L T Y N E D D			
UniRef90_W6MU72	R G S G G K D A A A S P R Y I Y T E L S A S I T K K V F N P K D N P L L T Y L Q D D			
UniRef90_V9K8D6	R L H G G K D A A A S P R Y I F T M L S P L A R R V F P S L D D N L L N N L F D D			
UniRef90_U6MRN9	G S V D G D P A A A M R Y I T E C R L S A F C Q D V L K D H T S A C G F R S N F			
UniRef90_A0A017SJN0	G S R R L Q G G G S D A A R Y I Y T R L S P F A R R R I F H Q A D E P L L T Y N E D D			
UniRef90_J5Q6D7	G T R L Q G G G K D A A A S P R Y I H T S V S R I T R T I F H P A D E P I L N N L F E E			

130 140 150 160

UniRef90_E1KRA8	D G R N K E P V T L P A K F P L L L A Q G A E G I A V G L S S K I L P H N M V E	
UniRef90_A5K033	D G N E I E P K V F C S K V P L L L I N G C S G I A V S I L S S N I P C H N L V D	
UniRef90_R7HRR4	D G R K P E P V T L P V K Y P L L L A Q G A E G I A V G L S S K I L P H N F V E	
UniRef90_F9ZAA3	D G R N K E P I T L P A K F P L L L A Q G A E G I A V G L S S K I L P H N F N E	
UniRef90_R6WR13	D G R K K E P V S L P V K F P L L L A Q G A E G I A V G L S S K I L P H N F N D	
UniRef90_R6AQ07	D G R K K E P V S L P V K F P L L L A Q G A E G I A V G L S S K I L P H N F G E	
UniRef90_H6WG43	D G S T Q E V H R I V P A L P S L L V I N G G V G I A A G Y A C N H I S Y N L S E	
UniRef90_M7N0H6	D G R K K E P V T L P V K F P L L L A Q G V E G I A V G L S S T K I L P H N F N E	
UniRef90_C6W2K8	D G R K K E P I T L P V K F P L L L T L G V E G I A V G L S S T K I L P H N F C E	
UniRef90_R5FIC7	D G R N K E P I T L P V K F P L L L A Q G A E G I A V G L S S S K I L P H N F N E	
UniRef90_R5IQ67	D G R N K E P I T L P V K F P L L L A Q G V E G I A V G L S S S K I L P H N F N E	
UniRef90_E4T8Y5	D G R N N E P I D L P V K F P L L L A Q G V E G I G V G L S S T K I V M P H N F N E	
UniRef90_D1W7E0	D G R N K E P I T L P A K F P L L L A Q G A E G I A V G L S S S K I L P H N L N E	
UniRef90_R5MAS8	D G R N K E P V T L P V K F P L L L A Q G V E E G I A V G L S S S K I L P H N F N E	
UniRef90_W8EYMO	D G R K R E P T T L P V K F P L L L A Q G V E G I A V G L S S T K I M P H N F R E	
UniRef90_I2GHU9	D G R K R E P V T L P V K F P L L L A Q G V E G I A V G L S S T K I L P H N F N E	
UniRef90_F3ZRM1	D G R N K E P I T L P L K F P L L L A Q G A E G I A V G L S S S K I L P H N F N E	
UniRef90_Q7R897	D G N E K E P K V L C S K I P L L L I N G C S G I A V S I L T N P S H N L V D	
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UniRef90_J9BQY6	D G R N K E P V T L P V K F P L L L L V Q G V E G I A V G L S S K I L P H N F N E	
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UniRef90_M2RR97	N H V E P D Y Y L P V L P M I I I N G A E G I G T G W S T S I V P S Y N P E D	
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UniRef90_H1GWN7	G Q S I E P T W Y M P I I P M V L V I N G S E E G I G T G W S T Y I P N Y N P R D	
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UniRef90_D0A926	E A T I E P E W Y L P I I P M I I I V N G A E G I G T G W S T N I P P F N P L D	
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UniRef90_J3NNY5	D G K V I E P K T Y A P V I P M V L V I N G A D G I G T G W S T S I P N Y H P K D	
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UniRef90_M3HI84	E Q T V E P E W Y L P I I P M I I I V N G A E G I G T G W S T N I P S Y N P K D	
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UniRef90_Q7ZXS2	N Q K V E P E W Y I P I I P M V L V I N G A E G I G T G W S C K L P N Y D T R E	
UniRef90_L1IRG4	G Q S I E P Q F Y V P I I P T V L V I N G A H G I G T G W S T D V P C Y N P R D	
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UniRef90_J5Q6D7	G A K I E P E T Y M P V V P M I I I I N G S D G I G T G W S S N I P N Y N P E D	

170 180 190 200

I C D A A I N Y L K	E K P F A L Y P D F P T
V I N C T I S F L L N P S I R E D H L S A	I I K G P D F T T G G I I I S
I L D A A I A Y L R G E	E F A L Y P D F P T G G F I D V
L I D A A C I A H L K H E D	F V L Y P D F P T G G M I D V
I C D A A V S Y L H G E E F H L Y P D F	P F Q L Y P D F P T
L C E A A I K Y L H G E E F H L Y P D F	Q T G
V I K G T V A Y I Q N Q K I	T D K A L Y K H I T G P D L P Q G A R I L K
L I D A S I D L L K G K S V S L M	P D F P T
L I E A S I G I L Q G K E V T I	Y P D F L T G G L V D V S N Y N D G
L C D A A V S Y L Q G R	E Y H L Y P D F P T
L L D A S V A Y L R G E E F E L	Y P D F Q T G G F V D I T R Y N D G
L I E A S I A Y L K G	K K F Q L Y P D F M T
L C E A A I H Y L R G E	K F Q L Y P D F P T
L C D A S I R Y L H E E F K L Y P D F Q T G G S D V S K Y N D G	G
L C K A S I D V L R G R E I Q	L F P D F P T G G L C D V
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L C E A S I N Y L N G	K K F T L Y P D F Q T
V I N A S I N F L I N E K I T N D E L	F N L I K G P D F S T G G I I T
L L E A Q I S L L R K Q S	F Q V L P D F P
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UniRef90_E6XFG1	E Q M E P M H P W Y R G
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210 220 230 240

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

UniRef90_E1KRA8	250	260	270	280
UniRef90_A5K033	T K T A S S L A E S I L T K A V E K G K L K I R K V E D M T A S S E	V E Q L		
UniRef90_R7HRR4	N L H P E D I D S R G S K K L V I K N L P P N V K P N E D E S E K E D M R V L	I V		
UniRef90_F9ZAA3	G R T T S G V S I E T I K A Q E K G K K I K R V D D D N T A T A K H A D I V			
UniRef90_R6WR13	G R T T T S S L I D S I I K A N E K G K K I K K I D D D N T A A E V E Q			
UniRef90_R6A07	G K T T T T L I I D S I L K A I E K G K K I K A R K V D D D N T A A E V E Q	H A D		
UniRef90_H6WG43	G K T T T S T L I I D S I L K A N E K G K K I K R K V E D N T A A E E A E E	E L		
UniRef90_M7N0H6	G S S E R F L E E K V K N T V D A G K D Q I V D A A D H S S T E G I H E E	E L		
UniRef90_C6W2K8	G T T T T T S S L I I E S I I K A N D K G K K I K K K V V D N T A A D V E E	Q V		
UniRef90_R5FIC7	G T T T T T S S L I I E S I I K A N D A G K K I K K V D N T A A D V E E	Q V		
UniRef90_R5IQ67	S K T T E S L I I D S I K K A D K G K K I V R K V E D M T A A E A E Q	L		
UniRef90_E4T8Y5	G K T T T S T L I I D S I L K A Q E K G K K I K K I D E D N T S D Q V E N	Q V		
UniRef90_D1W7E0	S K T T T T T L I I D S I L R A D K G K K I K A K K V D D N T A A E V E N	Q V		
UniRef90_R5MAS8	G K T V A N V C D S V K A S E K G K K I K K V E D L T S G N V E	L		
UniRef90_W8EYMO	G T T T T T T A L M E S V K A S E K G K K I K K V V V D N T A A E V E Q	V		
UniRef90_I2GHU9	G V T T T S Q L M E S V K A S E L G K R I K S P A K N I D N T A R D V E L	V		
UniRef90_F3ZRM1	G K T T T S S V I D S L K A V D K G K I K I R K V V D D N T S A N V I V	V		
UniRef90_Q7R897	N V K P N E L I E N V T V L N E R K N E H L S K R D E S E K N E M R V L	V		
UniRef90_UPI00035FF6C9	A T T T E S L I I S S E D A T R K G K K V R S I N D F T A E K I E E	E		
UniRef90_E5L9E0	G V V K S D L V Y S D V L I S Q N E M D G V L E I K D Q S D R E G I K V	V		
UniRef90_K1Z7I0	Q V S A S K I L E E Q A Q Q M Q D K K D E A A K R G K K I D A I N D Y T A E K V E I	E		
UniRef90_F8L175	N L T T Q A L I I E S I E K A A K A N K L K I A S I N D Y T A E K V E V	E		
UniRef90_E8RB29	T T T T T S S L I I D S I L K A N E K G K I K I K R I E D D N T A A N V E I	L	V	
UniRef90_C7M6L6	A T T T T S S L I I D S I L K A N E K G K I R I K R I E D D N T A A N V E I	L	V	
UniRef90_UPI00042910C3	G T N T T S S L I I D S I L K A N D K G K I K I K K I I E D D N T A A N V E I	L	V	
UniRef90_I3CAG2	R R W T Q D Y R E F L E S E K D K A K D P F V K E F R Q Y S S D D V T V H E V M	E V		
UniRef90_A0A059B1M6	G T T A G S V Q E S V A A N E K G K I K I K V E D N T A E F V E I	L	V	
UniRef90_UPI0001746359	G T T T D S L I I D S I L K A N D K G K I K I K K I V V D N T A T A K D V I	Q		
UniRef90_UPI000422F0A1	T Q D Y K E F L E S M M T G N D K S K E P F I K D Y R E Y N D D D K T V H F E V	V		
UniRef90_M0SVF6	R R W T Q D Y R E F L E S I I T G N D P F I K E F R Q Y S S D D D T V E F E V	E V		
UniRef90_UPI00042B6F53	G T T T T S V I D S I K A N D K G K I K I K K I V V D N T A T A K D V E	V		
UniRef90_UPI00036043B5	G K T V P G V C D S V K A S E K G K K I K R V E D L T S E K V E I	L	V	
UniRef90_A6KWX2	G V T T E N L I I E S I K K A N D A N K I K V K K I D N T A K D V E I	Q		
UniRef90_A1ZXC5	G T T T V S L I I E S I V K A N D D K G K I K H V D D N T S Q G V E L	V		
UniRef90_C9RLW5	R M W T D D F K A K E D I I Q N D K T P T F I K D Y K E F N D H K T V H F I	V		
UniRef90_B2AS80	G K T V A N V C D S V K A S E K G K K I K R V E D L T S G N V E I	L	V	
UniRef90_J9BQY6	G T N T S S L I I D S I L K A N E K G K I R V R K I E D N T A A D V E I	L	V	
UniRef90_E6XFG1	M V N K A K L I E K I A E L V R D K K I D G T D L R D E S D R E G M R A	V		
UniRef90_R6AIK8	G T T T T G L M E S V K A S E N N K I K I K R V V D N T A A D V E I	Q		
UniRef90_UPI000471FC65	G E T T T E S L I I A S I F E R A I R K N Y K V V S L N D F T T E N V D E	V		
UniRef90_B5RLP2	R T W T Q D F K D K L E E I I K A E K V P S F I K D Y K D Y N T H D S V H F V	V		
UniRef90_W9YFI4	G R N T S S L I I E S I L K A N E K G K I K I K K I I D D D N T A Q K V E I	Q		
UniRef90_UPI000467F26C	T Q D Y K Q F L E S I T D G S P N V K P D L I D D F R Q N G D D A T V D I E	E		
UniRef90_1MJJQ7	G V T T T Q L M D S I V K A N D D G Q K I K I K V T D N T A A E V E V	L	V	
UniRef90_G8TE76	T Q D Y K E F L E S V S A E N D K S K D P F V Q G C S D H S S P Q F A H F M V	Y		
UniRef90_S8D1A8	H Q W T Q D F K E K L E D I I K A E K T P S F I K D Y T E Y N T P E T V H F I	V		
UniRef90_M3B324	R M W T Q D F K A K L E E I I K A E K V P S F I K D Y K E F N D H K T V H M I	F I		
UniRef90_A7E9F0	R S W T Q D F K D R L E E I I K A E K V P S F I K D Y K D Y N T H T K V H F I	V		
UniRef90_A6RG78	H K W T Q N Y K V E L E A M C G E K G D G P V K D Y K E Y H N N M N V H F V	V		
UniRef90_J4ICG2	T E D Y K Q F L E S M T V S N D K A K D P F I K E V R A Y G D E N S V C F E V	V		
UniRef90_Q8GSC4	H K W T Q N Y K A E L E A M C G E K G D G P V K D Y K E H H D N M N V H F V	V		
UniRef90_M2RR97	R T W T Q D F K D K L E E I I K A E K V P S F I K D Y K D Y N T H T N V H F I	V		
UniRef90_D4DAV0	G T W T Q A Y K E T V L E P M H E K T P A I I T D Y K D Y N T D T A V H F I	V		
UniRef90_F4WEK4	G Q T T S S V I A S I L S A N E K G K I K I R K V E D N T A E K V E I	L	V	
UniRef90_I3ZZC4	R T W T Q N Y K E S V L E S M E D K Q P P P I Q D F K E Y H T D T T V K F V	V		
UniRef90_A0A024MPX1	R R W T S D Y K D F L D K D K E K A A K D P F I K E Q A D H H S D D D K V S I D	V		
UniRef90_UPI000244BA4	G T T G S V I D S I L R A N E K G K K I R K V D D N T A A K V E I	L	V	
UniRef90_G5GD69	T Q T Y K E Q V L E P M L N G T E K T P P I T D Y K D Y R E Y H T D T T V K F V	V		
UniRef90_M7BE62	R T W T Q T Y K E Q V L E P M N E K T P S L I T D Y K D Y N T H T D T T V K F V	V		
UniRef90_G1NAT9	G T W T Q V Y K E N T L E P P L H K Q K V A S D Y K E Y N T D T T V R F V	S		
UniRef90_B0WRP3	T D T T V R F V V T M T E X H G S E K V P P I T D Y K D Y N T H T D T T V R F V	S		
UniRef90_L7MAX8	T Q D Y K D Y L E S L A P D T K N K D K V P F I E D V T C Q G D N E D V Y I Q F	V		
UniRef90_K7UYE6	S T T T S L I I D S I L K A N E K G K I K I K K I E D N T A A Q V E I	L	V	
UniRef90_H1GWN7	R M W T D D F K A K L E E I I K G E K A P F I K D Y K E Y N D H K S V H F I V	Q		
UniRef90_N1JKN9	G T W T H P Y K E T V L E P M L N D K Q P A T I T D F K E Y H T D T T V R F V	V		
UniRef90_T1HFS3	S T T T S S V I D S I A A N D K G K I K I K K I E D S T A A N V E I	V		
UniRef90_UPI00029AC00B	R V W T Q A Y K E A V I E P M L H E K V P S I I T D Y K E Y H T D T T V R F V	V		
UniRef90_T1IP94	G K T T S S L I I E S I L K A N E K G K I K I K R I D D M T A A E A D I R I	V		
UniRef90_Q7MUA9	R T W T S T I K E Y L L L G L S G T E K M K P W I K D M E E Q H S D T I R F I	V		
UniRef90_G8ZS14	G T W T Q Q Y K K F E D L R R E I V I Q Y R E H N T D V T V D F E V F I	H P		
UniRef90_D0A926	G E T T T E S L I I S S I E K A I R K N Y I K V S S I N D F T A E N V A I E L	V		
UniRef90_O51066	R T W T Q A Y K E S V L E P M Q D K T P A L I N D Y K E Y H T D T T V K F V	V		
UniRef90_I3JVT3	M V N K A R L I E K I A E L V K E K K I D G T Y I G D E S N R E G M R I N	V		
UniRef90_R51GE1	G T W T Q A Y K E S V L E P M Q D K T P A L I N D Y K E Y H T D T T V R F V	V		
UniRef90_A0A034VUE0	G T W T Q A Y K E S V L E P M Q D K T P A L I N D Y K E Y H T D T T V R F V	V		
UniRef90_F7A8M1	UniRef90_J3NNY5	A L I V D Y R E Y H T D T T V K F V	V	
UniRef90_O41065	R M W T Q D F K A K L E D I I K G D K T P S F I K D Y K E F N D H R N V H F I	V		
UniRef90_C5Y0E7	G K W T H D Y K E H L D G L L E K K I I S D F R E K H S D D T D V L	V		
UniRef90_M3HI84	T G D Y K E F L E S L G P D K N K D K V P F I E D V T A Q G D N E D I E E I	V		
UniRef90_G2WQG2	K T W T N N V K E F L L A G F G N E K T P W I K D M E E H T T S I R F V	V		
UniRef90_Q7ZXS2	R M W T D D F K A K L E E V I S G A K G P A W K D Y K E F N D H K S V H F I V	V		
UniRef90_L1IRG4	R T W T Q N Y K E Q V L E P M N E K T P S L I T D Y K D Y N T H T D T T V R F V	V		
UniRef90_Z2DT55	T Q Q Y K E F E L T L M D T E G G K K E P F I K G Y R E Y H T D T T V Y F E V T	V		
UniRef90_K3YP99	Q V S G S K L L E Q I A N Q M R A K K L P M V E D L R D E S D H H E N P T R I V	V		
UniRef90_UPI00037868B8	R R W T Q D Y K D F I D S L R K N K D K E A F I E D C T A Q G D N D D V Y F E V L	V		
UniRef90_B8M038	G I T T T S S L I I D S I L K A N D K G K I K I K K V V D N T A A E V E I A	V		
UniRef90_W6MU72	R T W T Q D F K D K L E D I I K G D K T P S F I K D Y K D Y N T H T K V H F V	V		
UniRef90_V9K8D6	K M W T V T M K E Y L L Q G L A G T E K Q K P W I K D M Q E Q H G V G K F V	V		
UniRef90_U6MRN9	R T W T Q N Y K E N V L E A M V N E K T P A L I S D Y R E Y H T D T T V R F V	V		
UniRef90_A0A017SJN0	Q	R T W T Q D F K D K L E D I I K G D K T P S F I K D Y K D Y N T H T K V H F V	V	
UniRef90_J5Q6D7	R K W T Q D F K E M I E Q M T D T P K V V S V I K D Y E E N H T D T T V R F R L	V		

290 300 310 320

UniRef90_E1KRA8	H T P G T S S D K T M D A L Y A F T D C E V S I S P N C C V I S D N K P Q F L
UniRef90_A5K033	E L R K N T Q V E Q I N D F L F K Y T Q M Q T T Y H C N F V C H Q N S Y T Q F
UniRef90_R7HRR4	H L P G T S S D R T I D A L Y A F T D C E V S I S P N C C V I S D R K P H F L
UniRef90_F9ZAA3	Q L A P G V S S D K T L D A L Y A F T D C E M N I S P N C C V I E E E K P R F M
UniRef90_R6WR13	H L A P G V S S D K T L D A L Y A F T D C E T S I N P N C C V I D E K K P K F L
UniRef90_R6A0A7	H L T P G T S S D K A I D A L Y A F T D C E T S I N P N C C V I K E A L P E M F
UniRef90_H6WG43	I L K A N A D A Q M V I G Q L L A H T N L Y D T I G V N A M A V D E K P R F M
UniRef90_M7N0H6	H L A P G Q S P D V A D A L Y A F T D C E V S I S P N A C V I I A E K P H F V
UniRef90_C6W2K8	H L A P G V S P D I T M D A L Y A F T E C E V S I S P N A C V I R D Q K P C F L
UniRef90_R5FIC7	H L Q P G T S S D K T L D A L Y A F T D C E V S I S P N C C V I C D N K P H F L
UniRef90_R5IQ67	H L I P P G T S S D K A I D A L Y A F T D C E V S I S P N C C V I E D D K P G F L
UniRef90_E4T8Y5	H N N D V S P D K M I D A L Y A F T D C E I N V S P N A C V I V G D K P M F L
UniRef90_D1W7E0	H L A P G V S S D K T I D A L Y A F T D C E V S I S P N C C V I E D D K P G F L
UniRef90_R5MAS8	H L A P G V S S D K T I D A L Y A F T D C E V S I S P N C C V I D D Q K P H F L
UniRef90_W8EYMO	H L P A G V V S P D L T M D A L Y A F T D C E V S I S P N T C V I I E D K P R F V
UniRef90_I2GHU9	H L Q P G V S P D V S I D A L Y A F T D C E V S I S P N A C V I I G D K P H F V
UniRef90_F3ZRM1	H L P S G V S S D K T I D A L Y A F T D C E V S I S P N C C V I D D N K P H F L
UniRef90_Q7R897	E L R K H S Q I E Q I H N F L F K Y T S M E L N Y H C N F V C G Y N S Y T Q F
UniRef90_UPI00035FF6C9	K S P P G L H A E K L V P A L Y A F T G C E T S V S S R L I V I R D N R P V E M
UniRef90_E5L9E0	T L E K D A N E K S I M R Y F S K T K L Q I N Y S Y N N M V I K N N S P Q L L
UniRef90_K1Z7I0	
UniRef90_F8L175	K L P R G Q Y A E E L Q A L Y A Y T E C E V A I H S Q I V V I K D D P W E T
UniRef90_E8RB29	K L A R G V L A E E T I D A L Y A F T D C E L S V S P S L V T I V D N M P R Q M
UniRef90_C7M6L6	H L P N G T S P D K T I D A L Y A F T A C E T A I S P I T C V I E D N K P H F L
UniRef90_UPI00042910C3	H L P P N V S P D K T I D A L Y A F T S C E N S I S P L A C V I E D N K P L F I
UniRef90_I3CAG2	H L P S G I S P D K T I D A L Y A F T A C E S S I S P L A C V I E D N K P L F I
UniRef90_A0A059B1M6	L T E E N M M A L A K Q E G L L F K L T S S I S T S N M H L F D P N G V I K K Y D
UniRef90_UPI0001746359	H L P S G T D P D Q A I Q A L Y A F T D C E V S I S V N A V V I Q D D K P N F I
UniRef90_UPI000422F0A1	H L A S G V S P D V T I D A L Y A F T D C E V S I S P N A C V I V N E K P V F I
UniRef90_M0SVF6	T L T E D N L S I A R Q E G L E K K F K L T T S I G T T N M H L F D P I K K Y D
UniRef90_UPI00042B6F53	L T E E N M M V A K Q E G L L F K L T T T I S T S N M H L F D S K G M I K K Y D
UniRef90_UPI00036043B5	Y L A P G Q S P D M T I D A L Y A F T D C E V S I S P N A C V I V N E K P V F M
UniRef90_A6KWX2	H L A P G V S S D K T L D A L Y A F T D C E V S I S P N C C V I D E K K P H F L
UniRef90_A1ZXC5	H L S T G V E P E Q T I D A L Y A F T N C E V S I S P N A C V I L D D K P C F I
UniRef90_C9RLW5	H L Q P G T D P Q V A I D A L Y A F T D C E K S L S P C T C V I I D K H P K F V
UniRef90_B2AS80	D M D E K H R E A A L R E G L E K K F K L T T T V S T T N F D T Q G K I R K Y D
UniRef90_J9BQY6	H L A P G T S S D K A I D A L Y A F T D C E V S I S P N C C V I D N Q K P H F L
UniRef90_E6XFG1	H L P S G L S P D K T I D A L Y A F T A C E S S I S P L G C I I E D N K P L F I
UniRef90_R6AIK8	E L R R D V N P N I I L N Q L Y K H T Q L Q D T F G V I M L A L V V D N Q P K V L
UniRef90_UPI000471FC65	Q L P P G V S P D L T M D A L Y A F T D C E V S I S P N A C V I I N D K P H F L
UniRef90_B5RLP2	T L L P R G V Y A N E I I E K L Y H Y T N C Q V S I S V N L L L S D R Y P V I Y
UniRef90_W9YFI4	Q L D E K H L K T A V E E G L V E K F K L T K S V N L V A F D P E G R I T K Y P
UniRef90_UPI000467F26C	H L P A N T S P D K T I D A L Y A F T D C E L S I S P N S C V I R D E K P A F L
UniRef90_I1MJQ7	R M K L E K I V G I M Q E G L L K K F K L T S S I S T N N M H L F D A E G K I K
UniRef90_G8TE76	D L A P G I S P D L T I D A L Y A F T D C E V S I S P N A C V I V D K P T F I
UniRef90_S8D1A8	M T A E N L L A A K Q E N L F K L T A N I C T T N M H L F D R N G A I K K Y D
UniRef90_M3B324	K M D E K I L Q E N E L E E L F K L L S K T Q A T S N L V A F D Q H G R I H K Y A
UniRef90_A7E9F0	Q M D D K H M K A A L V I E G L F K L L N K T V A T S N L V A F D H R G Q I R K Y E
UniRef90_A6RG78	Q L D E K Y K A K K A I A E G L E E K F K L T K T L N V A F D P E G R I T K Y E
UniRef90_J4ICG2	H M E P K A V E K A E S Q G L L E F F R K I N T S N M I C F D F E G K I K K Y N D
UniRef90_Q8GSC4	M S E E N L I L A Q Q E G L L F K L A T T I S T S N M H L F D S N G K I K K Y D
UniRef90_M2RR97	N M T A N D L E K A E Q Q G L F K L T G K I N T S N M I C F D F D G Q I R K Y N
UniRef90_D4DAV0	Q M E E K H M K K A L E E G L F K L V K Q I A T S N M V A F D A E G R I T R Y E
UniRef90_F4WEK4	M M N R D K L V E L E R D G L H T K T F K L Q T T M S M C A F D E N Q C I N K Y E
UniRef90_I3ZZC4	H L S N N V S P D K M D A L Y A F T S C E V S I S P N A C V I V D K R P E F L
UniRef90_A0A024MPX1	K M N P A K L R E A K M E G L H K F K L Q T A I N I S S M V L F D C L R R F S D
UniRef90_UPI0002B44BA4	H L T E E N M L L A I Q E G L K K F K L Q T T V S T S N M H L F D A N K K Y D
UniRef90_G5GD69	H T P G T S S D K T I D A L Y A F T D C E V S I S P N C V I R D N K P E F L
UniRef90_M7BE62	K M S E Q K L A E A E A A G L H K V F K L Q T N L T C N S M V L F D P V G F L K
UniRef90_G1NAT9	K M S E E K L A E A E A A V G L H K V F K L Q T N L T C N S M V L F D H V G F L K
UniRef90_B0WRP3	F L P G E F D E D G G F H R V F K L T S S I S T S N M H L F D D K N Y L R R Y E
UniRef90_L7MAX8	T T M T E K L S K A R D E G L H K V F K L Q T S L T S S M V L F D S K G V L T
UniRef90_K7UYE6	T L L S E K N M N I A M E E G L V K K F K L T T T I G T S N M H L D G K I R K Y D
UniRef90_H1GWN7	H L P A G T S P D K T I D A L Y A F T A C E T S I A P L G C V I Q N N K P L F T
UniRef90_N1JKN9	I D K H K P D M E D G L F K L H K T V A T S N L V A F D T R G Q I I R K Y E
UniRef90_T1HFS3	S L S S D K L Y N A E K D G L H K V F K I Q T T V S L S S M C A F D R H C C L K
UniRef90_UPI00029AC00B	H L A P G I S P D V T I D A L Y A F T A C E V S I S P N T C I I Q D D K P H F L
UniRef90_T1P94	S M S E E K L R K A E L H K L Q S T M T T S M V L F D H H N G C L K R Y E
UniRef90_Q7MUA9	H L L A G V S S D K T I D A L Y A F T D C E V S Q S P N A C V I M D D K P V F L
UniRef90_G8ZS14	K L T Q E E M D K T R K I G F F E R F K L T S T I N L N M T P S S K I I R K Y E
UniRef90_D0A926	E V L R Q W V A Q G C V E E R L Q L R E Y I H A T N I I A F D R E G K I T K Y L
UniRef90_O51066	S L P R G V Y A S E V I E K L Y H Y T N C Q I S I S V N L L L S E R Y P V V Y
UniRef90_I3JVT3	R M S E E K L A Q A E A A G L H K V F K L Q S S L T C N S M V L F D H M G C L K
UniRef90_R5IGE1	E L R R D V N A N V I L N Q L K H T Q L Q D T F G V I M L A L V N N E P K V M
UniRef90_A0A034VUE0	T F T P G E F E R L Q A E R A F K L T S S M S T N Q M H C F D Q N N C L R R F P
UniRef90_F7A8M1	K M T E Q K L A E A E A A G L H K V F K L Q T N L T C N S M V L F D H V G C L K
UniRef90_J3NNY5	Q L D E K H M Q I A L K E G L L E K F K L L K N I A T T N L V A F D T N G M I R
UniRef90_O41065	E I D F V G N P N I D I L K L E T T I R S T N M H A F D P S G K I K K Y D
UniRef90_C5Y0E7	Q L S E G N M N I A K E E G L V K K F K L T T T I G T S N M H L N G K I R K Y D
UniRef90_M3HI84	K L S D A E M Q K S L R V G L L E R F K L I G S I S T A N M I A F D E H G R K
UniRef90_G2WQG2	Q L D E K H Y K D I H I M D R F K L N K Q I A T S N L V A F D S T G R I I R K Y E
UniRef90_Q7ZXS2	K M T E Q K L A E A E A A G L H K V F K L Q A S L T C N S M V L V G C L R K Y E
UniRef90_L1IRG4	E K R M E E A A E V G I A K K F Q L S R S L A I S N M H L F N A D G Q I Q R Y D
UniRef90_Z2DT55	V P R N R V D C D L L M N H F A S T D L E R S Y R V N N M G D N R P Q V K
UniRef90_K3YP99	K L S E K N M N I A K E E G L L K K F K L T T T I G T T N M H L D G K I R K Y D
UniRef90_UPI00037868B8	E L A T G V S P D L T I D A L Y A F T C E M S I S P N A C V I I D D K P H F L
UniRef90_B8M038	Q M D E K H L K A A V S E G L E E K F K L S R T I N L V A F D P E G R I T K Y A
UniRef90_W6MU72	T L T Q E E M A K S L A M G L F K L V T S L S T A N M V A F D A N G R I K K Y N
UniRef90_V9K8D6	T M T E E K L A E A E A A G L H K V F R L N T P L T C N S M V L F D H A G C L K
UniRef90_U6MRN9	
UniRef90_A0A017SJN0	Q M D E K N L Q A A M N H G E D K F K L S K T T N L V A F D P E G R I T K Y A
UniRef90_J5Q6D7	H M K E E G M K K A E F D K F F K L S T T L S T S N M V C F D L E G K I R K Y S

		330	340	350	360
UniRef90_E1KRA8	T	I S D V L R H S V N H T Q G L L R R E L E I R K A E L E E Q L F F S S L E R I			
UniRef90_A5K033	S	L K S F L Q [L] W C E N R I K F I R N N L T I K N K N L Q K E L R E S L L Y A S L E K I			
UniRef90_R7HRR4	S	V S D V L R H S V D T K H L L Q R E L E I Q R G E L R E S L L Y A S L E K I			
UniRef90_F9ZAA3	P	V S D V L R Q S A D D T V A L K L E I R L K E L L E D L H Y V S L E R I			
UniRef90_R6WR13	T	V S D V L R R S V D H T R S L L E K E L M I R R G E L M E S L H F A S L E R I			
UniRef90_R6AQ07	S	V S D V L R R S V D H T R S L L E K E L M I R R G E L M E S L H F A S L E R I			
UniRef90_H6WG43	G	V K D I I A T W H K S R C K A L I S R Y S A E C S R I Q D R M H I L D G F L T			
UniRef90_M7N0H6	T	V N D I L R Y N T Q Q T V D L L K Q E L E I R R G E L L E K L L F S S L E R I			
UniRef90_C6W2K8	G	V T D I L K Y N T Q Q T V H L L Q R E L E I K R L E L L E K I L Y G S S L E K I			
UniRef90_R5FIC7	T	V S E V L E D N V N R T R D L L R R E L E I E R G E L Q E Q L F Y A S S L E R I			
UniRef90_R5IQ67	T	V S A V L K Q S V D N T L D L L R Q E L L Q I Q K G E L L E E S L H F C S L E K I			
UniRef90_E4T8Y5	S	V S E I L K R N T D H T V S L L K R E E L E I E L G E E L E D K W H F A S S L E K I			
UniRef90_D1W7E0	T	I S D V L R H N V D S T M G L L R K E E L E I R K N E E L L E Q L F F A S S L E K I			
UniRef90_R5MAS8	T	V S D V L R K S V D N T L S L L R Q E E L E I R K D E I L L E S L H F A S S L E K I			
UniRef90_W8EYMO	G	V E D M L K L S T Q K T V R L L E R E L E I R Q N E E L Q E K W H S A S S L E K I			
UniRef90_I2GHU9	S	V T D I L R V N T H T Q V L L Q R E L E I R R I E L M E R L L Y S S L E K I			
UniRef90_F3ZRM1	T	V S D V L L K S V D N T L D L L Q K E L E I R K S E E L E E G L H L A S S L E K I			
UniRef90_Q7R897	S	L K P F L Q L W C E N R I K F I K K K N Y K I K N N N L Q K E L N I I D L Y L T			
UniRef90_UP100035FF6C9	S	V S E V L E F N T Q Q L V D L L R R E L E I K E Q K L L I E D L F F K T L V R I			
UniRef90_E5L9E0	N	L N N L I T S Y V E H I S D I K T K T L T Y D V E K H K L R L E I V L G F L K			
UniRef90_K1Z7I0	D	V D S I L K L H A E K L Q E Y L R I E L E I R D R F K E K □ F A K T L L E Q I			
UniRef90_F8L175	A	V E E V L R R N T D R L V A N I E R E L Q I E L G R L E D K W H A R K L L E Q I			
UniRef90_E8RB29	T	V S E V L R R S T D R T V S L L K Q E L E I E L S E L E M Q W H S A S S L E K I			
UniRef90_C7M6L6	G	V T E M L K H S T D R T V E L L K Q E L E I Q L H E L L E E Q W H F A S S L E R I			
UniRef90_UP100042910C3	S	P E Q L L E E F F H L R L E C Y E K R K K I L L E N L E □ K L V M L D N K V R			
UniRef90_I3CAG2	S	V T E I L K S N A E Y A K Q L L K Q E L E I E L G E L L E E K W H F S S L E K I			
UniRef90_A0A059B1M6	N	S V N E I L E E Y N T Q T K Q T K D L L Q K E L E I R K G E L L M E K L L F S S L E K I			
UniRef90_UP10001746359	N	S E Q I L E E F F H L R Y E F Y E K R K K A L L D N L E F Q L L K L D N K V R			
UniRef90_UP1000422F0A1	T	P E Q I L E E F F H L R F E F Y E K R K K I L L D N L E M E L L K M E N K V R			
UniRef90_M0SVF6	G	V N E I L A H N T Q T K E L L K R E L E I R K G E L L M E K I L F S S L E K I			
UniRef90_UP100042B6F53	T	V S A V L V K K A T D N T L S L L R Q E L L I H K G E L L I E K W H M T T L E K I			
UniRef90_UP100036043B5	K	V E E L L K □ N T Q T K T K D L L E Q E L L I R K S E L L Q E K M L L Y S S L E K I			
UniRef90_A6KWX2	G	V S D I L K L N T E H T V K L L E W E L A N E L K H L E D K W H M T T L E K I			
UniRef90_A1ZXC5	N	V E E I M E E Y Y H Y R L K M Y T E R K K H W Y H A D Y R K L K N Q Y R F I T			
UniRef90_C9RLW5	T	V S D V L L K V K S V D N T L L L K Q E L E I R K G E L L V E N L H F A S S L E K I			
UniRef90_B2AS80	G	V T E M L Q R S T D Y T V E L L R A E L E V Q L R E L E E Q W H F A S S L E R I			
UniRef90_J9BQY6	N	N L Y D M L K Y Y L L H Q E E V V T R R T K F D L N K A E E R A H I L E G G L M I			
UniRef90_E6XFG1	D	V N E L L R L R S T F K T V D L L K R E L E I R K G E L L E D K W H Y S S L E K I			
UniRef90_R6AIK8	T	V T D I L K F H A E H L Q K V L K M E L E L E R S K I L E K I □ F S K T L L E Q I			
UniRef90_UP1000471FC65	C	N V E A I M D E F Y S Y R L Q L Y A K Q L W D M Q K T L R R L T N Q A R F I Q			
UniRef90_B5RLP2	G	V S E I L K N N T N H T V H L T R E L E I R K G E L L E E A W H M S S L E K I			
UniRef90_W9YFI4	K	Y E Q I L E E F F P L R L E Y Y E R R K K H I L N N L E Q L L L I L D N K V R			
UniRef90_UP1000467F26C	S	V H E L L R I S A E N T K E L L K R E L E I K L A E L Q E K W H Y T S L E K I			
UniRef90_I1MJQ7	T	P E Q I L E E F F H I R L E Y Y E K R K A T L L A N E I D L L K C E N K W R			
UniRef90_G8TE76	T	V E E I L E E F F H I R L E Y Y E K R K A T L L A N E I D L L K C E N K W R			
UniRef90_S8D1A8	T	T T L D M E E F Y L H R H D A Y I E R K R M M L E K M G Q E L L K L N N Q A M			
UniRef90_M3B324	K	V I E D I L E E F Y E Q R F K M Y T V R K A Y W V N K L N V E Y R K L T N Q A R			
UniRef90_A7E9F0	S	V I E E I L R E F F S V R L K L Y E K R K Q H Q M Q K D L E K M T N Q A R F V Q			
UniRef90_A6RG78	T	P E E I I E D F Y P Q R L A Y Y Q K R K D F M			
UniRef90_J4ICG2	N	P E E D I L E E F Y H V R L E Y Y E K R K K A L L E I L E E L L R I E N K V K			
UniRef90_Q8GSC4	S	P E E V E E Y Y P K R L A Y Y Q K R K D F M			
UniRef90_M2RR97	T	S P E E D I L R A F Y A V R I K L Y E K R K Q Y L L S E L Q T Q L D K L S N Q A R			
UniRef90_D4DAV0	S	V V Q L K G F Y K V R M D T Y H K R K D Y L E G G I L Q A E A A K L S N Q A R			
UniRef90_F4WEK4	S	V S Q L K L N T Q N T V E L L K R E L E I E L E E L E Y K W H F S S L E R I			
UniRef90_I3ZZC4	N	V I E E I C K E F E I R K K K Y L E R K A F Q E G M L R E R I L S N Q A R F I L			
UniRef90_A0A024MPX1	T	P E Q I L E E F F P D L R L E F Y E K R K R I L L E M E L L K L E N K V R			
UniRef90_UP10002B44BA4	T	P E Q I L E E F F H P D L R L E F Y E K R K R I L L E M E L L K L E N K V R			
UniRef90_G5GD69	T	V S D V L L R H N V D S T K E L L R R E L E I R R N E L I E S L H F A S S L E K I			
UniRef90_M7BE62	K	K Y E T P L D I F F D L R L Q Y Y S L R K E W L T G M L G A E S A K L N N Q A R			
UniRef90_G1NAT9	K	K Y E S P Q D I L F F E L R L R Y Y S L R K E W L I G M L G A E S A K L S N Q A R			
UniRef90_B0WRP3	H	K A N D □ F Q E Y Y K I R L D F Y H K R K A Y L E G M L Q D R L T D Q A R F I M			
UniRef90_L7MAX8	T	T F R T P E E D F Y E T R L E F G Y K R K A Y M M G L L S A E A K K L E N Q A R			
UniRef90_K7UYE6	T	T P E Q I L E E F C H L R L E F Y			
UniRef90_H1GWN7	G	G V S E M L K N S T H Q T V E L L R R E L E I E L E N E L E E K W H F L S L E R I			
UniRef90_N1JKN9	K	V E D I L E E Y Y V Y R L A M Y T K R K A Y W L E K I N T E Y T K L R N Q A R			
UniRef90_T1HFS3	K	K Y D E I M K E F F D L R L E Y Y V K R K A Y L E G M L Q A E A D K L S D Q A R			
UniRef90_UP100029AC00B	S	V N D I L I E N T K H T K S L L K K E L E I R L H E L Q E K □ F F S S L L K I			
UniRef90_T1P94	S	S V K D I L M E F F Q L R L E Y Y I R R K S Y L E G E S L K A E A A K L S N Q A R			
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UniRef90_C5Y0E7	T	T P E Q I L E E F F Q L R L E F Y			
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UniRef90_Q7ZXS2	T	T V L D I L R E F F D L R V K Y Y S L R K D W L V G M L T A E A S K L S N Q A R			
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370 380 390 400

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UniRef90_L1IRG4	F I L E K I E G K I V I E N K P K K E L I Q M		
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410 420 430 440

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450 460

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UniRef90_R6WR13	E V T A WFTY LKEKYGK P R T E	
UniRef90_R6AQ07	E V T A NWF R L RDKYA H P R R T E RS	
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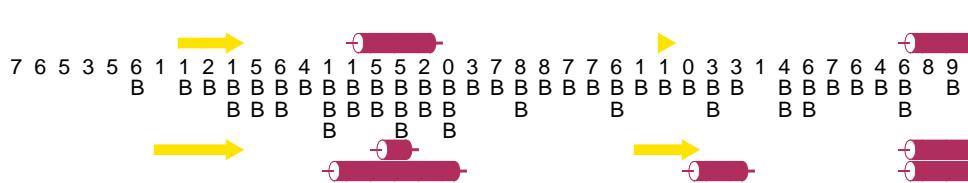
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UniRef90_H3EX86		G T R H A G G A A R Y	I Y A A L S P L S R R L F P A A D D G L L T S V E E	G T R H A G G A A R Y
UniRef90_L1Y62				
UniRef90_R7C1R0				

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lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
incom

	130	140	150	160
UniRef90_U6HMJ5	N Q K E P A W Y M P V I P M V L I N G A E G I G T G W S T K V P N Y D T N E			
UniRef90_W5U7Z3	N V R V E P E W Y V P I P L V L A N G A D G I G T G W A S R L P N Y D V R E			
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UniRef90_M3YTB1	N Q R V E P E W Y I P I P M V L I N G A E G I G T G W S C K P N F D I R E			
UniRef90_A7ANB1	G Q T I E P M Y Y I P T I P M V L V N G S E G I G T G F S S Q P N Y N P L D			
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UniRef90_Q00XH2	G Q R I E P D F Y Y P V L P L V L V N G A E G I G T G W S T S P N F N P R D			
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UniRef90_W9IMY8	D G K K E P M V Y A P I I P M V L V N G A D G I G T G W S T S P N Y H P M D			
UniRef90_D0ZZW9	D G R E K E P D I L P A K L P V L L L H G V D G I A V G M T T K F P H N F A E			
UniRef90_N1PUU3	G K T I E P E M Y V P I L P M I L I N G A D G I G T G W S T T V P N Y R P E D			
UniRef90_F5YHE0	D G R K K E P I L F P A K I P V V L V M G A E G I A V G M S T K L P H N I I E			
UniRef90_B0EP10	D R R I E P K Y Y C P I I P T V L V N G A D G I G T G W S T A V S N Y N P L D			
UniRef90_W4UJN5	G L S I E P E Y Y M P V I P M V L V N G S D G G T G W S T I Q N H D P R E			
UniRef90_B8C9P0	G Q K I E P Q Y Y I P V I P T I L V N G C E G I G T G Y S S F I P N Y N Y K D D			
UniRef90_Q4ZB9	G Q S I E P T W Y M P I P M V L V N G S E G I G T G W S T Y T P N Y N P R D			
UniRef90_I1ICW6	G K S I E P D Y F V P I P M V L V N G T E G I G T G W S T F P Q F C P K E			
UniRef90_A0A059F4M9	D N R M V I E P T H Y C P I V P M V L V N G S S G G T G W S T N I P N H N I R D			
UniRef90_E4XKZ9	D G R P I E P D F Y M P T L P M V L V N G T E G I G T G F S C Y V P P F N P K D Q			
UniRef90_G9E523	N T F I E P E W Y C P I P M I L I N G A E G I G T G W A T K L P R C P R Q			
UniRef90_UP10001E461AA	D G R N Q E P V V F P A K I P V V L I Q G V S G I A V G M S T Y L P H N P L E			
UniRef90_F0RX44	E Q T V E P E W Y V P V V P M V L V N G A D G I G S G W S T S P P Y N P D D			
UniRef90_I2JRH1	E G M G I E P E F Y V P V L P L V L I N G A E G I G T G W S T Y P C F S P H			
UniRef90_J9IBE1	G Q Q I E P L Y Y V P I I P M I L V N G T D G I G T G W S S S V P N Y N P K D			
UniRef90_Q5CF68	D E K V M E P L G L L P K L P L M L L N G A E G I G T G F S S V P S F H H K D			
UniRef90_T0RN15	N L K I E P E W Y M P T V P L V L I N G A D G I G T G W S T S I P N Y N P V D D			
UniRef90_G4TR37	G Q M I E P E Y F C P I P L L V N G C Q G I G T G W S T F P Q H N P L D			
UniRef90_B8C981	UniRef90_A4NAS3	D G L M V E P E F Y L P I P M I L V N G A T G G T G F S T S P C Y H P Q E		
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UniRef90_UP10002651A51	D G T F V E P I Y Y L P I I P M I L V N G T K G I G T G F S T D P C F H P V Q			
UniRef90_F2Y1Z2	D L E H P R F Y L P I I P T V L L N G V R G I A T G Y S T S L P H D F E S			
UniRef90_E5EQ32	N Q R V E P E W Y I P I P M V L L I N G A E G I G T G W S C K V P N Y D I R E			
UniRef90_V8P300	D K E H V P P A F Y L P I I P T V L L N G V Q G I A T G Y A T K L P H S F E S			
UniRef90_E5DI03	G L V V E P R W L C P I P L I L V N G T E G I G T G W S T K V N R N A I D			
UniRef90_E3M184	UniRef90_K4F9M4	D G T T M E P K F F L P I P L A L L G V D G T A T A Y K S F F P Y R M N D		
UniRef90_J9EDZ5	N Q R I E P E W Y C P I P T V L V N G A E G I G T A W S T K P N Y N P R E			
UniRef90_C4R475	S C Q G I G T G W S T N P P F N P V D			
UniRef90_I1TQE9	N D D K L P L Y L P A L L P T L F F I T S T P P P A Y G V K V G N P A F S M G T			
UniRef90_M8B245	G Q S I E P S W Y M P V I P M V L V N G S E D M G T G Y V P N Y N P R D			
UniRef90_C8XUB8	E E R L E P K F F L P I P M F L V N G I N G I G T G Y S T D T P C H C V K S			
UniRef90_U6GNW4	D A T E V E P T C L P A R L P L L L Q G T S G V A V G L S T H L P P H N L N E			
UniRef90_E9GAL2	G K R L I E P E F Y A P I I P M I L V N G I G G G I G T D W T T S R L Y N P R D			
UniRef90_Q8HF99	G K Y V E P R F Y V P I I P M I L L V N G S V G I G F G F A C T V Q M H H P L D			
UniRef90_Q196X4	Q S S E G E P V H F V P I I P L V L V N G S V G I G L G T G W S C F V P Q Y N P L E			
UniRef90_G0LWK9	G Q K I E P R F L L P T I P L I L L I N N N G M G V G F A Q N I M Q R S A E D			
UniRef90_R7C1R0	UniRef90_H3EX86	G V T A E P V W F C P I I P L I L L N G A E G I A T G W S T T V H P R D P R R		
UniRef90_L1IY62	UniRef90_B9X360	D G L E I E P R Y Y I P I I P M T L V N G A Q G I G T G W S T S I P S Y N P F E		



This figure displays a sequence alignment of UniRef90 proteins, focusing on specific domains and motifs. The alignment is presented in two main sections, each with a title indicating the domain or motif being analyzed.

Section 1: Domains and Motifs

The first section shows a sequence alignment of UniRef90 proteins, likely representing a domain or motif. The alignment includes the following titles:

- 170
- 180
- 190

The sequences are color-coded, with blue representing conserved positions and red representing variable positions. Several key residues are highlighted in yellow, including C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, and Y. These highlighted residues are found in various positions across the alignment, often in clusters that define specific functional sites or structural elements.

Section 2: Domains and Motifs

The second section shows a sequence alignment of UniRef90 proteins, likely representing another domain or motif. The alignment includes the following titles:

- 170
- 180
- 190

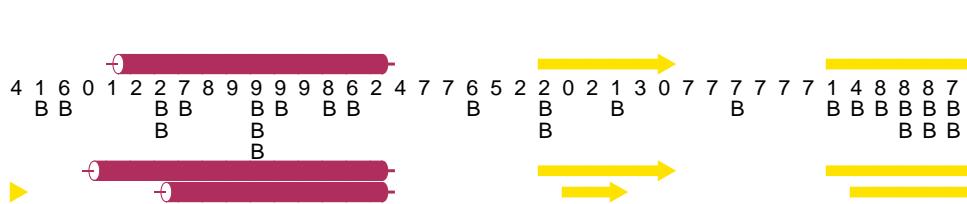
The sequences are color-coded, with blue representing conserved positions and red representing variable positions. Several key residues are highlighted in yellow, including C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, and Y. These highlighted residues are found in various positions across the alignment, often in clusters that define specific functional sites or structural elements.

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
inssm

This figure displays a sequence alignment of UniRef90 proteins, focusing on the region from position 106 to 240. The alignment is color-coded to highlight conservation and specific residues. Yellow boxes indicate highly conserved or functionally important residues, while blue boxes indicate other residues. The alignment shows a high degree of conservation across the proteins, with many identical residues highlighted in yellow.

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

	250	260	270	280
UniRef90_U6HMJ5	K T W T Q C Y K E T V L E P M L N E K V P V S I S D Y K E Y H T D V T V R F V V			
UniRef90_W5U7Z3	K T W T Q T Y K E N V L E V M M N D K V P A L I T D Y K E Y H T D T T V R F V V			
UniRef90_P27570	M T S I E A F R S H I S S L A S S D V V Q R I A D Y S G A N H D I D L I V R			
UniRef90_H0EPW9	R V W T D D F K A K L E E I I K G E K T P F I K D Y K E Y N D H K S V N F I V D			
UniRef90_Q8X1U1	R T W T Q D F K D K L E D I I L K A E K T P S F I K D Y K D Y N T H T K V H F V I			
UniRef90_M3YTB1	R T W T Q T Y K E Q V L E P M L N E K T P P L I T D Y R E Y H T D T T V K F V V			
UniRef90_A7ANB1	T H D Y R V F L E S L E Q G V N G K E P L I L G F V D N S T H E S V H F T L			
UniRef90_A0A024G308	K V W T Q T Y K Q F L E T L L E N E T I K D F K E N H T D S K V L F T I			
UniRef90_UP10003F49F6C	R K W T Q D F K E M L E E M T T D K V P S T V K D Y E E H H T D T T V H F R L			
UniRef90_K3X2K0	K T W T Q T Y K Q F L E S L L E S G T I K D F R E N H T D A K V L F I T F			
UniRef90_Q00XH2	R S W T T D Y K D F L E D M L T K N E K P F I T D Y K E Y H T D T T V H F V I T			
UniRef90_L7MS76	R T W T Q V Y K E Q V L E P M L N D K T P A L I S D Y K E Y H T D T T V K F V V			
UniRef90_P30182	R R W N D D Y K N F L Q S L K T D N G A P F F Q D V K A Y N D E K S V D F D L I			
UniRef90_W9IMY8	R M W T D D F K G K L E K I I A G V D G P A W I K D Y K E F N D H S T V H F E I I			
UniRef90_D0ZZW9	Q S T T E T L I R S I E N A A K R G T I K I D T I Q D F S T D V P H I E I			
UniRef90_N1PUU3	R Y W T Q D F K E K L E D I I L K A E K V P F I K D Y T E Y N T P E T V N F I I K			
UniRef90_F5YHE0	G S T T E S L I I N S V E T A A K A G R I K I Q S I N D F T T S A V E I E V			
UniRef90_B0EP10	Q I W T D T Y K Q H E E K C E A K I V K G Y S E Y H M V N T V H F V I			
UniRef90_W4UJN5	M C N P D N I A T K I A D L V N S G R I N G I A D I R D D S S A R T G Q R L V I			
UniRef90_B8C9P0	G K W T Q N Y K A F L E E G L M S G T D K D P I S D F K E N H T D T T V S F T V T			
UniRef90_Q4ZOB9	K R W T Q D Y K E F L E E L L T D E K N Q I I D Y I D N S S H E D V C F T M D			
UniRef90_I11CW6	N K N K S K D K D K D K D K N K E K P P F I L E D L R S Q C D D S S V Y F E L			
UniRef90_A0A059F4M9	G S W T D S S Y K E N V I C K L L K D K D K E V E D L R E Y H T D S L V H F E F M			
UniRef90_E4XKZ9	Q V W T D D Y K Q K L M K M Q K G K E L P K L I E D F D N N S S H D R V K F I V			
UniRef90_G9E523	G R W T Q D Y K E Y L D T L M E K K V I T N F T N N S T T D D V D F E I V G			
UniRef90_UP10001E461AA	G I W N N N K Y K E V K V L D S I M K S G L I S Y F I C S S Y H S E S N V H F I V I			
UniRef90_F0RX44	G T T S E A M I R S V E E A A K G K G K L I S S I N D Y T A E K V N I E I			
UniRef90_I2JRH1	R M W T I T M K E F L L K G L S G S E K Q S A W K D M E E D H G V G I K F I V			
UniRef90_J9IBE1	Q K W T R E Y K N F L E E L A Q K D E I I D I K E F H D N T V H F E V K F N R S			
UniRef90_Q5CF68	R R W T Q D Y K E W L N A D N D N I E N S W I I D Y R D N S S H E S V H I T V			
UniRef90_T0RN15	G Y D A Q K I Y R Y L T K Y M D E D Y I K D F V D S S V D N D I R I E L			
UniRef90_G4TR37	K G K P S E T F I K D Y R E Y H T T T S V S F V V T			
UniRef90_B8C981	G V W T N D Y K A T L V A M L K K A E I K S F S Q N H T T T V S F N V K V N			
UniRef90_A4NAS3	Q V I N K A K L V E K I A E L I R E K K I E G I S N I T D L S N K E G I R I E I			
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UniRef90_F2Y1Z2	G V W N E D Y I L H E L K C M D I L K D Y K D Q S T D K K V Y F K L T			
UniRef90_E5EQ32	Q F D R A K Y V E K L W L D P L E D A G L I T Y D D D C S K E G F G F K I K F R K			
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UniRef90_K4F9M4	R M K L E K F V E D L I E M E D S G K I R S Y E D N S S G K V D I T I			
UniRef90_J9EDZ5	R T W T Q T Y K E S V L E S M L D K Q P P L I Q D F K E Y H T D T T V K F L V			
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UniRef90_I1TQE9	E D T I A R T V E K L A N I I D G V K N A Y N T P G K N V K G S G P Y G A L I S V			
UniRef90_M8B245	T V D Y E H F L K S I C P H K E K E K P P F L E G Y R S R C S H A D V Y F K V I			
UniRef90_C8XUB8	G W F A K T Y E T K V L L P L Y K A G I L T E Y A N D T T E D G W D I T V			
UniRef90_U6GNW4	G V W G C T W V R D E S D Y S G V R V V F			
UniRef90_E9GAL2	G I S V R N Y R E S V M E N L L H E K I P P L I T G Y K E Y H T D T T V R F V V			
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UniRef90_Q196X4	G M W T D R F K D Q C Y S L I E S G Q L Q V N E S T V S K V D F T L			
UniRef90_GOLWK9	Y A T N E S M L I H F N S L K E K K I I K D Y K D Y S L G D N F E Y V I			
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UniRef90_L1IY62	G M W T E D F Q D H L N R L S D K T E D R A A M I S S Y T T N N S E A V I			
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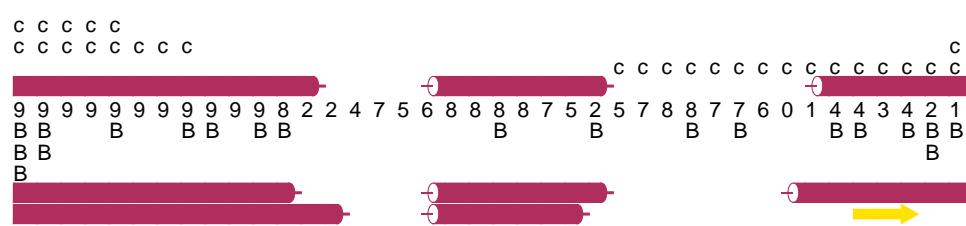


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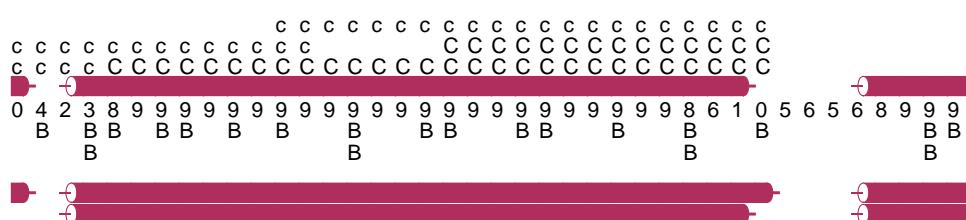
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jnet
conf
sol25
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sol0
jhmm
inssm

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UniRef90_W5U7Z3	T	V	Q	D	I	M	K	D	F	F	E	[REDACTED]	R	L	K	Y	Y	V	L	R	K	D	W	L	G	M	L	G	A	E	N	A	K	L	S	N	Q	A	R								
UniRef90_P27570	D	L	S	P	V	L	Q	W	H	Y	D	R	R	L	D	[REDACTED]	Y	K	R	R	R	T	R	Q	I	G	L	E	M	D	L	A	R	L	Q	S	T	R	K								
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UniRef90_D0ZZW9	S	I	S	E	I	I	L	K	L	H	T	T	A	L	O	G	Y	L	E	K	L	L	L	Q	E	Q	L	T	D	H	H	H	K	T	L	E	Y	I									
UniRef90_N1PNU3	T	P	L	D	I	M	E	F	Y	N	V	R	L	Q	K	Y	D	Q	R	K	M	Y	L	S	E	M	E	R	L	R	K	F	T	N	Q	A	R	R									
UniRef90_F5YHE0	T	V	E	V	I	K	H	H	A	K	Q	L	V	K	V	L	T	R	E	L	E	K	K	E	L	Q	D	K	L	H	L	R	T	L	E	R	I										
UniRef90_B0EP10	T	V	L	D	L	L	A	E	F	C	D	V	R	M	K	G	Y	E	E	R	K	K	A	I	I	E	S	M	E	R	Q	L	M	I	L	S	N	K	V	R							
UniRef90_W4UJN5	R	L	D	Q	F	I	S	Y	W	I	D	H	Q	M	E	V	I	R	R	T	E	Y	R	L	A	Q	A	K	D	A	H	I	Q	R	A	L	V	K									
UniRef90_B8C9P0	G	S	V	D	I	L	R	T	F	H	R	L	E	Y	V	K	R	K	D	M	L																										
UniRef90_Q4Z0B9	S	E	L	D	I	L	K	D	F	C	F	H	R	L	N	A	Y	T	D	R	K	N	Y	L	I	S	K	L	E	K	R	I	I	S	N	K	A	K									
UniRef90_I1ICW6	T	P	E	E	I	I	L	Q	E	F	F	T	[REDACTED]	R	L	E	F	Y	G	R	R	K	I	T	M	K	N	M	R	V	E	L	L	K	L	E	N	R	V	R							
UniRef90_A0A059F4M9	S	I	K	E	I	M	L	D	F	Y	S	R	L	E	Y	C	K	R	K	A	H	L	L	K	C	L	G	E	K	V	V	Q	L	E	N	K	I	K									
UniRef90_E4XKZ9	N	T	T	D	I	V	K	D	H	Y	E	L	R	K	T	Y	Y	K	R	H	N	F	L	L	E	M	A	R	V	Q	F	I	T	N	R	R	F										
UniRef90_G9E523	S	P	E	E	I	L	K	D	F	V	D	R	L	D	H	Y	K	K	R	R	E	H	L	I	K	V	L	Q	T	K	A	T	M	C	G	Y	K	S	K								
UniRef90_UP10001E461AA	G	T	V	D	I	F	Q	E	F	F	E	V	R	R	Q	K	Y	V	E	R	R	E	Y	E	L	K	A	M	D	K	K	L	K	F	I	G	N	Q	V	R							
UniRef90_F0RX44	V	H	E	I	I	L	D	W	H	A	Q	H	L	V	V	V	L	K	A	E	L	E	L	E	K	G	H	L	L	D	K	L	H	A	R	T	L	E	R								
UniRef90_I2JRH1	K	I																																													
UniRef90_J9IBE1	N	E	C	Q	I	L	E	E	F	F	N	Y	R	L	N	L	Y	K	K	R	K	E	S	M	L	K	I	I	T	E	Q	Y	E	K	L	S	N	K	Y	R							
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UniRef90_B0EP10	D [L]	D A F [V] K K Y
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UniRef90_E5EQ32	D [L]	
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UniRef90_C4R475		
UniRef90_I1TQE9		
UniRef90_M8B245		
UniRef90_C8XUB8	Q [L] I K K E [L] Q E [L] K N K Y S C P R R T	
UniRef90_U6GNW4		
UniRef90_E9GAL2		
UniRef90_Q8HFR9		
UniRef90_Q196X4	Q M W Y D E [L] Q Q [L] K	
UniRef90_G0LWK9	R [L] A K E T K E A [V] K A F G D E R R T [L] V E A	
UniRef90_R7C1R0		
UniRef90_H3EX86		
UniRef90_L1IY62		
UniRef90_B9X360	G Y S [L] N F [L] D [L] L L A K Y S K E R K T K [L]	

