

1 M D Y | L V K A | L A Y D G K | V R A Y A | A R T T D M | V N E G Q R | R H G T W P | T A S A  
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 UniRef90\_UPI00036DF0BA  
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10            20            30            40

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

QUERY	50	60	70	80
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UniRef90_UPI00036DF0BA	A L G R A M T A G V M M G A M L K G D S Q I T I K I E G G G P I   G H   L V D S N			
UniRef90_L5NCF0	A I G R T M T A G V M M G A M L K G E E K K L T V K V E G D G P I   G A   I A D G D			
UniRef90_C3P9L3	A L G R T L T V S S M M G A M L K G E D K L T V K V E G D G P A G P   V A D A N H			
UniRef90_K0J159	A L G R S L T A G T M M G A M L K G D D Q K L T I K V E G N G P I   G P   L V D A H			
UniRef90_UPI0003B762F5	A L G R T L T I T A M M G T M L K G E D K L T V K I E G H P M G P   I V D S S			
UniRef90_UPI0004295B02	A L G R A M T A G S M M G A M L K G D D K L T I K V E G G K G P L G A   V V D S S			
UniRef90_A0A033UDX3	A L G R S M T A G V M M G A M L K G E D K L T V T I D G G G P I   G K   M V D A N			
UniRef90_N1ZLG6	A L G R T L V A T L L S A S L K G E G K M T V K V N G D G P L G A   V V D G			
UniRef90_W4F898	A L G R T M T A S V M M G A M L K G E D K I T V K V E G N G P I   G S M I   V D A N			
UniRef90_R2RV28	A L G R S L V G G L L G A T V K G D D R L T I K I Q G D G P A G A   V V D A N			
UniRef90_UPI00040A72F4	A L G R A M T A T T M M G A M L K G E N K V T V K I E G G G P I   G V I   I V D S S			
UniRef90_UPI0002492252	A L G R S M T A G V M M G S M L K N E E K L T V T I D G G G P I   G K   V V D G			
UniRef90_S0JBM7	A L G R S M I G T A L L S S S L S G D D K L T V K I Q G D G P A G A   I V D S S			
UniRef90_UPI0004786866	A L G R S L V G G L L G A T V K G D D D K L T V K I Q G D G P A G A   I V D S S			
UniRef90_Q49V21	A L G R T M T A T L L M M G A M L K G N Q K L L T V T V D G Q G P I   G K   I A D A D			
UniRef90_C6J5B2	A L G R T V T A A A M M G A M L K G E D K L L T V Q V K G D G P Q   I A D A D			
UniRef90_I4X681	A L G R S M T A S V M L G A M M K G E E K L T I R I I N G G G P I   G T   L V D A N			
UniRef90_UPI0002DFB0B6	A M G R T L T V T A M M G A M L K G E E H L S V K I K G G G P P   G Q   V A E A N			
UniRef90_K8EDY1	A L G R T M I G A L L L G A T M K G Q D K M T V K V E G D D G P A G T   I V D S S			
UniRef90_W3AKK5	A L G R T M T G G V M M G A M L K G D N K V T I K V D G G G P L G A   L V D S S			
UniRef90_W6TB35	A L G R S L V G T L L L A S S L K G D E Q M T V K I N G N G P L V G G   V V D G			
UniRef90_F9DVC4	A L G R T I S A A V M M G A M L K G D N K L T V K I Q G D G P L G P   V V D A N			
UniRef90_E0RJL5	A L G R S M T V G V M L G A M L K D E D K L T I R I I N G S G P P   I G T   L V D T N			
UniRef90_D2EHY0	A L G R S L T A T L L S S S L K G K E K L T V K I N G G G P V V G T   V V D G N			
UniRef90_X4ZS8Z	A L G R T V T A A A M M G A M L K G R E M I T N I Q V K G N G P P   I G Q   V A E A D			
UniRef90_UPI0003FEE6C0	A L G R T M T A S A M I G S M N K G D D T I T V K I E G G G P P   M G A   V V D S S Q			
UniRef90_UPI00038131BE	A L G R A I T A G S M M G S M L K G E E K L T I K I E G G G P P   I G R   V V D A D			
UniRef90_W4RLQ9	A L G R T M A A G V M M G A M L K G D D D K L T I V K I E G G G P P   L G L   L V D S S Q			
UniRef90_UPI000262744F	A L G R T I T V S A M M G A M L K G D D S L L T V K F E G T G P I   G A   I A D S			
UniRef90_UPI000476B0DE	A L G R T L T T A A M M G A M L K G E E K L T I V Q V K G S G P L G Q   V A D A N			
UniRef90_Q03SZ0	A L G R T L I I G T M L L S S L K G D E K L T V K I E G G G A A G P   L V D S S			
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UniRef90_F5LA13	A L G R T L S V G A M M G A M L K G E E K L T I T V R I A G D G P I   G R   V V D A N			
UniRef90_B9E8U0	A L G R T I T A G A M M G A M L K N E E K L T I T V R I I N G G G P P   V V G Y   V V D A N			
UniRef90_G4L496	A L G R T L V G A L L L G S T V K G E D T I T V R I E G D D G P A G A   I V T S D			
UniRef90_U1YD95	A V G R T V S G A A M M G A M L K G N E R L T I V V R I R G N G P P   A G Q   V A D A N			
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UniRef90_UPI0002ED346D	A L G R A M T A S V M M G A M L K G E N K I T V K V E G G G P P   I G A   I V D S D			
UniRef90_E3C8L2	A L G R T L I I G T V L L A A G L E G E A G M T V K I Q G N G P P   V V G Y   I A D G			
UniRef90_W7YTB9	A L G R A L M G G T M M A S M L K G K E K L T V R I E G N G P P   I G H   I V D S H			
UniRef90_R5HBX0	A L G R L L T A G V M M G S M L K G D D D L L T L Q V R I R G D G P V R G   T V T			
UniRef90_D3E777	A L G R T V S A A A M M G A M L K G D E R L T S I T V R I R G D G P G L   T A A E S			
UniRef90_R7BDK4	A L G R L L M S A A A M M G V M M K G D D D L L T I I K I E G D G P G G   M V T A D			
UniRef90_UPI000379CD89	A I G R A A T A G A M M G V M L K G D D D R L L T I V Q V K G N G P P   I G Q   L V D A N			
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UniRef90_E3PWE9	A L G R A I T A S S I M G I M M K G D D K L T L S I V Q V K G N G P P   L G T   V C V S			
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UniRef90_C6LM85	A L G R L L T A G V M M G S M M K G D E D D L T L Q V K R A D G P L E G   L V T A D			
UniRef90_W7AQ60	A L G R S M T A T L F L G A M Q K E D Q K V T V K I E G N G P P   I G P   I T D S			
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UniRef90_E3DPG6	A L G R V I T G A L L T G S L V K S G D E I V L K I K G S G P A G K   I V A D A N			
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UniRef90_A9KTE0	A L G R L L T G G A M M G S M M K G E D D L L T L K I A C S S G P I G G G   T V T A D			
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QUERY	90	100	110	120
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UniRef90_D7UH3	A E G K V R G Y V A N P H V H F E L N S V G K L D V R R G V G T Q G T L S S V V K			
UniRef90_N4WX52	A Q G E V R G Y V I N P H V D F D S N E H G K L D V R R A V G T D G T L S S V V K			
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UniRef90_M1ZIW3	S H G N V K G Y A Y N P Q V M L P P N S K G K L D V G G A L G K N G Q L S A I I K			
UniRef90_E3DPG6	N G Q V K G Y V D N P Y A D L P S R P D G K L D V G G A L G K N G Q L S A I I K			
UniRef90_S6CK17	Q K G E V R G Y V I A N P N L D L Y Q K E S G K L D V A K A V G A G E L L S L T K			
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UniRef90_Q17ZW5	S H G N V K G Y V P G N P Q V E V E D Y P N G K L D V A G A I G V G V L T V I V K			
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UniRef90_R6P5H1	S K S Q V K G Y V V N P I V D I P L K P N G K L D V V Q E A L G F G D L T V I V K			
UniRef90_UPI0001E2D969	S S A N V R G Y V H N P L I Y L P L N E N G K Y D V A G A I G S N G Y L N N V I V K			
UniRef90_R6BK2	A K G N V K G F A G N P Q V M L P P N A L G K L D V V G G A V G H G I L N N V I V K			
UniRef90_R6SCE6	S H A N V K G Y V V N P Q V M L P P N A L G K L D V V G G A V G G Q G T L N V I V K			
UniRef90_F5SHY7	A G G R I V R G Y V V N P Q V D L P P N A Q G K L D V V G G A V G Q G T L N V I V K			
UniRef90_J0UUP3	A T G N L K G Y L Q N P H V N L P L N D K Q K I D V K G G A V G S S G L L Q I T K			
UniRef90_R6PWF7	U N G G V K G Y P G V A D V L P P N A A A G K L D V V G G A I G H N G V L S V I V K			
UniRef90_B1C571	G D G N L K G Y V V N P Q V D V M L P P N A Q G K L D V V G G A V G H E G T L Q V V V K			
UniRef90_D0BM54	G L G Q M R G Y I S N P H V S L P L N E K G K L D V R G V V G T N G T I T V I V K			
UniRef90_UPI0002D65C3D	A N G H V K G Y I V N P R V H L P L N D K G H I D V G A A V G K N G A L S V T K			



QUERY	170	180	190	200
UniRef90_B7GFJ8	V L V N P D N T   L A A G G F   I Q L M P G T D D E T   T K   E Q R   L S Q   V E P			
UniRef90_UPI00036DF0BA	V L V N P D Y T   L A A G G F   I Q L M P G T E E Q T   A D   E K N   L T T   P P			
UniRef90_L5NCF0	V L V N P D N S   L A A G G F   I Q L M P G T D E E T   S K   E E S   I N K   T P			
UniRef90_C3P9L3	V L V N G D D S   L A A G G F   I Q L M P G A Q E E T   S F   E E R   L Q K   I P P			
UniRef90_K0J159	V L V N P D Q S   V L A A G G F   I Q V L P G T P D E E T   V D Y   E Q R   I K S   I P A			
UniRef90_UPI0003B762F5	V L V N P D N S   V K A A G G F   I Q V L P D A E E E Y   V A H   E Q Q   K Q M   P P			
UniRef90_UPI0004295B02	V L V N P D N S   L A S G G F   I Q L M P G I E D D T   S I   E E K   L S S M   E P			
UniRef90_A0A033UDX3	V L V N P D N T   Q A A G G F   I Q L M P G A S E K T   S A   E E K   L N Q M   E P			
UniRef90_N1ZLG6	V F V N D D N T   Q T A G G F   I Q V M P G A T D D E V   T K   E E R   L K D   L P			
UniRef90_W4F898	V L V N T D D S   L A A G G F   I Q L P G V D D E T   T Q   E E R   L S K   I E P			
UniRef90_R2RV28	V L V N D T D D S   K V A G G F   M   Q V M P G A D E S   T D   E E R   L A N T   P Q			
UniRef90_UPI00040A72F4	V L V N E D N S   L A A G G F   I Q V M P G A S D E V   D H   E Q R   L K H   L P			
UniRef90_UPI0002492252	V F V Q N D N S   E T A G G F   M   Q V M P G A S D E V   D H   E Q R   L N E   I P M			
UniRef90_S0JBM7	V L V N P D N T   K T A G G F   M   Q V M P G A S D E V   D A   L E E R   L K H   L P			
UniRef90_UPI0004786866	V L V N P D N T   L A S G G F   I Q V M P G A S D E V   D A   L E E R   L K H   L P			
UniRef90_Q49V21	V L V N P D N S   K A S G G F   I Q V M P G A E D E T   N K   L E D A   I N H   M T P			
UniRef90_C6J5B2	V L V D V D N S   V I V A G G F   I Q L L P G L S D S E   D S   I E K A   I G Q L   P P			
UniRef90_I4X681	V I V N P D N T   Q A S G G F   I Q L L P G T E E Q   T D   I E E R   L K V   I P T			
UniRef90_UPI0002DFB0B6	V L V N E D R A   V I A A G G F   I Q L L P G T P D E V   E K   Q H   M A K L   P Q			
UniRef90_K8EDY1	V L V N D T D N S   K A A G G F   M   Q V M P G A T D A T   D A   I E K N   A E I   P L			
UniRef90_W3AKK5	V L V N D T D N S   L A A G G F   I V Q L M P D T D D E T   S S   K I E A R   L S S   I E P			
UniRef90_W6TB35	V F V N D D N T   G V A G G F   L   Q V Q L P G A T D E A   S S   L E G K   L K E M   P L			
UniRef90_F9DVC4	V L V N P D N S   V K A A G G F   I Q V M P G A T D E T   S S   L E E K   I S S N M   T P			
UniRef90_E0RJL5	V I V N P D N S   Q A A G G F   I Q L M P D T P E E V   S F   F E R   R I E S   I P S			
UniRef90_D2EHY0	V F V N P D E T   V G V A G G F   L   Q V M P D A T D D A   D R   L Q T R   L K E I   P L			
UniRef90_X4ZS28	V L V N D T D N S   V K V A G G F   I Q L L P G L S D E E   T E   E E K   N L N S T   P S			
UniRef90_UPI0003FEE6C0	V L V N P D H T   K A A G G F   I Q L M P G A T D E T   D F   F E E K   Q S L   P Q			
UniRef90_UPI00038131BE	V L V N P D E T   V L A A G G F   I Q V L P E A E D T   L   T A I E Q R   L Q S   I P P			
UniRef90_W4RQL9	V L V N P D N S   I K A A G G F   I Q L M P G T T E E T   T A I E Q R   L Q S   I P P			
UniRef90_UPI000262744F	V L V N P D H S I   S A S G G F   V Q V M P G A D E E V   A R   L E E Q   I Q N F   P A			
UniRef90_UPI000476B0DE	V L V S P D N S   V I S A G G   L   Q V L P G L S D E E   D A   I E Q   A I S S   L   P P			
UniRef90_Q03SZ0	V F V Q P N N T   V K V A G G F   I Q V M P G A S D E A   A R   L E Q R   I K E M   P M			
UniRef90_UPI00036A6F48	V L V N P D N S   I L A A G G F   I Q L M P N V D D A T   T   L E E R   I T N M   E P			
UniRef90_F5LA13	V L V N P D H S   V K A S G G Y   I Q L L P G V D D Q F   S Q   L E K K   R L T E   I   P P			
UniRef90_B9E8U0	V L V C T P E E   V T E A A G G F   I Q L M P G A S E E T   V   S L   L E E R   L Q H   L P			
UniRef90_G4L496	V L V N P D E T   I L A A G G F   I Q L M P G A S E E E V   V   N A L   L E E R   L Q H   L P			
UniRef90_U1YD95	V L V N P D N T   V K A S G G F   I Q L M P N T P E D   I   A K   L E E N   T L L S S   I R			
UniRef90_K4L2Z9	V L V A P D N T   Q A S G G F   I Q L L P G T A E E T   T   S E   I E E S   H L L K   T P			
UniRef90_UPI0002ED346D	V L V N P D N S   I L A A G G F   I Q L M P G T E E E T   T   S E   I E E S   L L S K   V P			
UniRef90_E3C8L2	V F V N P D E S   I Q V A A G G F   M   Q V L P G A S D E E   S K   I E E K   K L G   P			
UniRef90_W7YTB9	V L V N P D E T   I L A A G G F   I Q L M P G A Q E S T   T   S E   I E E K   R L L G S   I P A			
UniRef90_R5HBX0	V L M E K T N T   V R C A G G F   I Q L M P F A E E E T   T   S E   I E H   N L L S K   I P N S			
UniRef90_D3E777	V L V S P D Y S   V A N A G G F   I Q L P G V S D E E   T   S E   I E L   A L S K   I P P			
UniRef90_R7BDK4	V L M E H D N T   T V K Q A G G   L   Q V M P F A E D A V   D K   L E E K   K I N N M   S S			
UniRef90_UPI000379CD89	V L V D R D Y T   V K T A G G F   I V Q L L P G V A E E D   A Y   I E Q Q   L S G   L P			
UniRef90_A0A011RNG3	V L V N P D E S   V K T A G G F   M   Q V L P E A S E E T   L   K   L E E T   I R S   L P			
UniRef90_F3Y8E2	V L V N A P D G Q   V K A A G G F   L   Q V M P G A N E E T   Q F   I E Q R   L E Q M   P			
UniRef90_E3PWE9	V L V D V D Y S   V K T A G G F   I Q V L M P E A E E K   D   I L E E K   N L S Q   I T S			
UniRef90_UPI000248CAE1	V L V D V D Y T   V K T A G G F   I Q V L P G L T D D E   S Q   I E K E   L S A   L P			
UniRef90_UPI0002FBDC61	V L V N P D N T   I K A A G G F   I Q V M P G A S E E T   M   D F   D R R   A A E M   T P			
UniRef90_D4LRJ1	V L M N K D N T   V R Q A G G F   V Q V M P F A E E E T   A K   L E E N   V Q K   I Q S			
UniRef90_D7UUh3	V L V N P D D T   I E A A G G F   I Q L Q L P G A T E T   K   I A Q   L E E K   I K D   L P			
UniRef90_N4WX52	V L V N P D F S   V L A A G G F   I Q I M L P G A S E E E T   K   I F E I L E S K   V N K   I T			
UniRef90_R6GF09	V L M E K D N T   V R Q A G G F   I V Q V L M P N A E E E E V   E E K   L E K K N   L A Q   I T S			
UniRef90_U2CZ88	V L M E K D N T   V K Q A G G F   I V Q V L M P F A E E E E T   Q K   L E S S N   L S K   I R			
UniRef90_R7R4S0	V L M E K D N T   V K Q A G G F   I V Q V L M P F A E E E E V   E E K   L E K K N   L A Q   V S S			
UniRef90_UPI0004791654	V L V D T D G S   V L H A G G F   I V Q V M P G L S E E E R   S Q   L E R S   I N A M   P			
UniRef90_W8YEM0	V L V D V D G K   V L H A G G F   I L Q L L P G L T D D E   E   G R   L E T A   L G G   L P			
UniRef90_F3B883	V L M E K D N T   V K Q A G G F   I V Q V M P F I L E E E E V   L   S K   L E E N   I K K   I S S			
UniRef90_W4VMZ7	V L V N P D H S I   L A A G G F   I V Q V M M P D A S E E D   T   S K   M E T K   I E A E   I P P			
UniRef90_C6LM85	V L M M N R E N T   V R Q A G G F   I L Q L M P F A S E E E V   V   A S   I E E K   K I A E   V T S			
UniRef90_W7AQ60	V L V N P D D T   I E A A G G F   M   Q V L P G A D D T   I   D E   I E E K   N L K D   L C P			
UniRef90_U4WMN3	V L V N E D H S I   F G S G G F   I L Q L L P G T P E E D   I   A A K   I E E K   N L S K   L P			
UniRef90_R5QGK0	V L M M N K D N T   V R Q A G G F   I V Q V L M P F A E E E E T   I   E Q Q   L E E K   N I S H   I S S			
UniRef90_R7ALJ4	V L M M N K E N T   V R Q A G G F   I V Q V L M P G A E E E A T   I   A A L   E E K   T   I G E   L P			
UniRef90_H4GI01	V F V E S D D S   I G V A A G G F   L   Q V V L P G A S D E E   G K   I E T T   I K D   L P			
UniRef90_UPI00035F6522	V L V D T D G S   V I E A A G G F   I I Q L L P G L T D D E   I   T K   I E E N   A L G V   L P			
UniRef90_UPI0003B52D6E	V L V D K D Q S   V K E A A G G F   I I Q L M P F T S D E V   V   D K   I E E K   K I K N   I A S S			
UniRef90_A0A023D0V5	V T M D E H D   I I E M A M G G F   I V Q V M P Q A K E D V   I   S K   M E T K   I A S F   P			
UniRef90_R5ZL72	V L M E K N N T   V K Q A G G F   I V Q V L M P F A E E E V   V   S A   L E E K   K I A K   I T S			
UniRef90_C0D554	V L M M N R D N T   V S Q S G G F   I I Q L M P G A P E D D   M   D R   I L E A R   L K E   L A S P			
UniRef90_M1ZIW3	V L V D K D I   S V R A A G G Y   I Q L L P G V E D E D   D   R   I L E G   I L K K A K   K P			
UniRef90_E3DPG6	V L V D T D L   S V K A A G G F   I Q L L P D A S E E E T   I   E I   L E N   N L S K   L P			
UniRef90_S6CK17	V F V N A D N S   V Q V A A G G F   M   I Q L Q L P G A D D A E   L   S A   L E A N   V K T   L P			
UniRef90_D7GVX9	V L M N K D N T   V R Q A G G F   I I Q L L P G A S D E E   I   D K   I E A K   L S G   I S S			
UniRef90_R6R0N0	V L M T P D N T   V N V A A G G F   I I Q V M P D A T E E E T   I   D K   I E H   N M A Q   I S S			
UniRef90_Q17ZW5	V L T K E D E   V E F A A G G F   I V Q V L M P D A E E E E T   I   A K   I E E N   V A K   I P S			
UniRef90_A9KTE0	V L M M N R D N T   V T V C A G G F   I I Q L L P F A E E E E V   I   E K   I E E K   K I A E   V T S			
UniRef90_R6V5F7	V L M M N K D N T   V R Q A G G F   I I Q V L P N A E E D A V   I   D R   I L E E K   R L G E   V D			
UniRef90_R6GX75	V L M M N K E N T   V R Q A G G F   M   I Q M M P F A S D E E V   I   T A L   L E E R   R V K D F   T S			
UniRef90_UPI000225AAA2	V L V N P D Q T   I L A S G G F   I V Q V L M P G A D D E E V   I   D K   I E E K   R V Q S   I P P			
UniRef90_R6P5H1	V L V D R D Y S   I K Q S G G F   I I Q M M P D A P E E E I   S A   I E E K   K I K V   I E P			
UniRef90_UPI0001E2D969	V L T N S E E F   I L S S G G F   I I Q L M P G A D E N T   I   S L   I E E K   K I S S G   I P			
UniRef90_R6BK22	V L M M N H D N T   V R Q A G G F   I I Q L M P F T D E K   V   I D A   L E E K   K I K D   L S S V			
UniRef90_R6SCE6	V L M M N K D N T   V R C A G G F   I I Q L M P F A T E E E T   I   S Q   L E E N   L K D   V T S S			
UniRef90_F5SHY7	V L V A P D G G I   L H S G G F   I V Q V L M P G A E E R   L   D E   L E Q R   I R H   L P			
UniRef90_J0UUP3	V F V N K D N S   V R T A A G G F   M   I Q V M P G A S E E V   L   T K   I E L Q   I A N   L P			
UniRef90_R6PWF7	V L M M N K D N T   V R Q A G G F   I I Q L M P F T E D A V   I   D A   L E Q K   I A Q   I A S P			
UniRef90_B1C571	V L V N D T N E   V L A S G G F   I I Q L M P E A T E E D   I   T Y   I E N A   V K Q C P P			
UniRef90_D0BM54	V L V N P D E S   V R A A G G F   M   I Q L M P G A S E E E T   V   I E E R   R I L S E M   P			
UniRef90_UPI0002D65C3D	V F V E K D N S   I G V A A G G F   M   I Q V L M P G A S D K A   I   S E   I E A S   L K D   L P			

210      220      230

QUERY			
UniRef90_B7GFJ8	I S K L I Q K G L T P E E E	I L E E V L G E K P E I L E T M P V R F	
UniRef90_UPI00036DF0BA	I S K M I E N G L T P E E E Q I L H A L L G Q N V K I L E T M P V S F		
UniRef90_L5NCF0	I S Q M I R D G L T P E E E I L N Q L L G E E I R I V E K M P I E F		
UniRef90_C3P9L3	I S S L V R D G K S P E E E I L L Y A V L G E D V K V L E T M D V Q F		
UniRef90_K0J159	I S S K L I E S G K S P E E E D I L L E E I F G E E V K V L D K M P I H F		
UniRef90_UPI0003B762F5	I S S K L I E H G K T P E E E D I L L K A V L G E D V Q M L D T Q P V Q F		
UniRef90_UPI0004295B02	I S S K L I A K G L S P E E E I L L Q E I T V L G E N T R I I D H M D V E F		
UniRef90_A0A033UDX3	I S S K L I D R G L S P E E E I L L E K I T V L G E N T R I I D H M D V E F		
UniRef90_N1ZLG6	V S E M M R E G L T P E E D I L L V K L F D E E V E I L D K K P V A Y		
UniRef90_W4F898	V S K M I Q K G F T P E E E I L L K A V L G E D V Q M L D T M P V K F		
UniRef90_R2RV28	I S S T L L D E G K T P E E E I L L D S L L P D E L V V L E E T M P V S F		
UniRef90_UPI00040A72F4	I S S K L I E K G L S P E E E I L L Y E L L G E N V K I L E E K L P V K F		
UniRef90_UPI0002492252	V S K M M Q A G K T P E E E M I L Y E I L G E N V Q V L D T M P V K F		
UniRef90_S0JB7M	V S S S L L E E G K T P E E D I L L E I I F G E A I M I L E D S P V Q F		
UniRef90_UPI0004786866	I S S K L I Q R G L T P E E E I L L F E I L G E E V Q I L E E N V P A H F		
UniRef90_Q49V21	V S K L L I D Q G Q L T P E E E I L L M I L R W I V K D V Q V L E E M D I V F		
UniRef90_C6J5B2	V T A L L L D Q G Q L E L D E M I L T E V L G S N V K V L D E M P V Q F		
UniRef90_I4X681	I S S N M V R Q G Q L T P E E D I L L Q R R V L G E D V K V L S R Q E I I F		
UniRef90_UPI0002DFB0B6	V S R M I G E G L S P E E Q I L L Q R R V L G E D V K V L S R Q E I I F		
UniRef90_K8EDY1	V S S K L M D E G E S P E E E I L L F E R L L G E N V K I L E E K M P V T F		
UniRef90_W3AKK5	V S S K M I Q R G L S P E E E I L L F E E V L G K N I Q I L E E T M P V K F		
UniRef90_W6TB35	V S S Q L L R D G K T P E E D I L L D M L F D G D V K V L D K M P V K F		
UniRef90_F9DVC4	I S S S L I D Q G Q L T P E E E G I L A E V L G E N V E F L C K M D V K F		
UniRef90_E0RJL5	I S S A M V M E G L T P E E Q I L L G Q I L G E N M N I L E E T M P V Q F		
UniRef90_D2EHY0	I S E M L R N G K T P E E E I L L N D I F K D D V K I L D K M D V K F		
UniRef90_X4ZS28	V T A L L L D Q G M E P E E M I L R Q I L P D T E V L D E M A I T F		
UniRef90_UPI0003FEE6C0	I S S R L I E E G N A P E E D I L L T R I F G E Q L K L G E S E V N F		
UniRef90_UPI00038131BE	L S K L L I E E K G K T P E E E V L H L L G D D Y Q I L E T A P V A F		
UniRef90_W4RQL9	V S S K L L I E E K G L T P E E E I L L E E L L G E N V K V L D T M P V N F		
UniRef90_UPI000262744F	I S S S L I R E G N S P E E Q I L L E R L F G E E I T I H G R L P V R F		
UniRef90_UPI000476B0DE	V S S A L I I D Q G Q L S P E E E L L K W V L P D V D I Q E S L D I V F		
UniRef90_Q03SZ0	V S S E L L L D A G Q T P E E E I L L A L L F K E E I K I V Q K M P V G F		
UniRef90_UPI00036A6F48	I S S K L I E K G L V P E E Q I L L T Y I F G E N V K F L E T M P V Q F		
UniRef90_F5LA13	V S S H M V D Q G Y T P E E Q I M I E T L F P A Q I K W L E R L P I R F		
UniRef90_B9E8U0	I S S T L I D R G L S P E E Q I V L L E E V L G E D V I R I L D Q M P V E F		
UniRef90_G4L496	I S S A M L D E G K A P E E E I L L D F I F A D E V A I L L D E M P V Q F		
UniRef90_U1YD95	V S S T M I D E G L S P E E E I L L H E I I L G T E F T L L D K H E V V F		
UniRef90_K4L2Z9	V S S T M I Q H G F T P E E E M I L H E I I L G K N V Q V L E K M P V K F		
UniRef90_UPI0002ED346D	I S S K L I Q E G L S P E E E I L L E K I L L G E N V E V L E T M P V E F		
UniRef90_E3C8L2	V S E M L R D G D T P E E E I L L G Q S L L G D D V K F L E T K P V R Y		
UniRef90_W7YTB9	I S S K L V E M G M P P E E E I L L Q S L L G D D V K F L E T K P V E F		
UniRef90_R5HBX0	V T A L L L D Q G M T P E E Q I L L E R V L L G F D V E I T D R M P C R F		
UniRef90_D3E777	I T E M L E E G L D L E D I I L K R V L L P D V T I L E E T E V Y F		
UniRef90_R7BDK4	I T S M L D K G M T P E E D I I L N E E K I L L G D F G V V F E T I P A A F		
UniRef90_UPI000379CD89	V T S L L L S E G T T P E E Q I L L T R L I I P G N V K F H E T I I P V L F		
UniRef90_A0A011RNG3	I S S K L L M D Q G E T P P E E Q I L L D R L I V G E S A R V L E T I L P V A F		
UniRef90_F3Y8E2	I S S Q L L L D E G K S P E E N I I L L D E D I I L G D K V E I L E K L P V Q F		
UniRef90_E3PWE9	V S S H L L I D E G K T P E E D I I L N I V L L K D E P M V Y Y E K I P V S Y		
UniRef90_UPI000248CAE1	I T S S L L L D R G D Q L E P S E E I I L L T T L P G A E V L E R R D I R F		
UniRef90_UPI0002FBDC61	V S S K L L L D Q G L T P S E E I I I D E I I I G N N W R K L D E M P V A F		
UniRef90_D4LRJ1	V T T L L L D E Q G H T P E E S I I L L K Q V L G F D I E I N D T I P T E F		
UniRef90_D7UUH3	V S S R M I D N G E T P P E E S I I I A K L L A G E N V Q I L E K S A V K F		
UniRef90_N4WX52	I S S Y L L I Q E G Q T P E E D I I L R D V V G D E L T V H E T M D V K F		
UniRef90_R6GF09	V T E E L L L D Q G Y T P E E M I I L E E V L L G D V E F T D T V P T Q F		
UniRef90_U2CZ88	V T S S L L L D E G V T P E E G I L L E E V L V L G M D F Q F L E T R D V K F		
UniRef90_R7R4S0	V T K L L L D E G R T P E E Q I L L E E V L V L G D D L E I Q D T I P T Q Y		
UniRef90_UPI0004791654	V T A L L L D Q G E T P P E E S I I L L Q F I V G E E V S I H D R I E P V F		
UniRef90_W8YEM0	V T A L L L D Q G E T P P E E E I I R W V V G D E L T V H E T M D V K F		
UniRef90_F3B883	V T S S M I D K G Y T P E E N I I L E E V L L G D V E F T D T V P T Q F		
UniRef90_W4VMZ7	I S T S M I Q H G K T P E E E I I L D A I I G D H L K I H E K S P V E F		
UniRef90_C6LM85	V T D M L E E A G C S P E E N I I L E Q I L L G D G L E L T D T M P A Q F		
UniRef90_W7AQ60	I S S R L I E E A G E T P P E E Q I I L A R L L A G E N L Q I L E K M P V S F		
UniRef90_U4WMN3	V S S R L I A E G I T P P E E L I I A K V L D N P T I H S K L D L T F		
UniRef90_R5QGK0	V T S S M L E E G K T P E E G I I L E V L F G M D L E I V D M M P A S F		
UniRef90_R7ALJ4	V T T T M L L N K G M T P E E D I I L E E I L I G Q G L E I L D K M P I Q F		
UniRef90_H4GI01	V S E M L R E G E T P P E E T I I M E R I F P N E L K V L E K L P V K Y		
UniRef90_UPI00035F6522	V T T T L L N Q G M D L D E M I L R Q I V L D D V Q I M D Q M D I Q F		
UniRef90_UPI0003B52D6E	V T E M M E K G M T P P E E I I L E E I L I G D G V E I I T D T I E T G F		
UniRef90_A0A023D0V5	I S G G M M A M Q K R T P E E D I I I Y E L C G D N V N I L E R R L P I S Y		
UniRef90_R5ZL72	V T D M L E E K G M T P E E D I I L E E F V L L G D G V E I I T D K V P T Q F		
UniRef90_C0D554	V T T T L L L D E G N T P E E M I I L E E H V L G E G L E L N D R V P V Q F		
UniRef90_M1ZIW3	I S S T L I I H Q G L S P E E Q I V M E T L F G E E M E I L E R K E I E Y		
UniRef90_E3DPG6	V S S K L L I E A G K T P P E E E I I L E E I L F G D D Y R I M A R K D V K F		
UniRef90_S6CK17	V S E E L L L K S G L T P P E E Q I I I Q R I I A G D P V Q F L D T H S L R F		
UniRef90_D7GVX9	I T A L L L N A G K T P E E E I I L T D I I L G E G L E I L S K M P V Q F		
UniRef90_R6RN0N0	V T T L L L E S G K T P E E D I I L N T I I L G L A P E M L G T M P V G F		
UniRef90_Q17ZW5	I T N N M L K E E G K S P E E D I I L N I V L L G L E P K I L D T C E V G F		
UniRef90_A9KTE0	V T S S M L D K G M T P P E E I I L Q E L L G E G L T I I L D K I P T K F		
UniRef90_R6V5F7	V T K L L L E D G M S P P E E D I I V R Y L I M G M D V D F L D T I P T Q Y		
UniRef90_R6GX75	V T S H L L D R G E T P P E E D M M A E L I F G M D D M T I E D K I P T E F		
UniRef90_UPI000225AAA2	I S S L V I E A G K T P E E I I L L F E G E E L K I H E K M P V Q F		
UniRef90_R6P5H1	L T T M L D K G M T Q E D I I L N E L I V G D D P H I L D K I P V E Y		
UniRef90_UPI0001E2D969	V T K L L L S E G K T P E E D I I L E L L G D N L K I G E K A P C K Y		
UniRef90_R6BKK2	V T S S M L D A G M T P P E E D I I L Q E L L G E G V E I I T E K T E T R F		
UniRef90_R6SC6	V T D F L L D K G Y T P E E Q M L E E K L I H L D L E I I T D T I P T Q F		
UniRef90_F5SHY7	V T Q L M L M E K G D R P P E E D I I L L R R I I L G D S L K I T D R Q P L T F		
UniRef90_J0UUP3	I S V M M A N K I T P P E E M I Y R I I C G E H T Q I I L D K V E I I G Y		
UniRef90_R6PWF7	V T E M L L E K G M T P P E E M I I L E E I L I G E M L E I I N D T M P V A F		
UniRef90_B1C571	V S Q L L I N E G K T P E E D I I L R S R L L F D D V E I I T E T Q D L F F		
UniRef90_D0BM54	V T K L L I D Q Q E E P I D I I L N R R L L G E N I V K V L E E L P V E F		
UniRef90_UPI0002D65C3D	V S Q L L L R D G K T P P E E D I I N D L F G K E V K V L E R V P P V S F		

	1	10	20	30	40
UniRef90_R7NA55	D Y I I V   R A T A A N G Q   V   R A F A A T T   R G   V   V   E   T   A   R   K   D   H   N   T   S   P   □   A   T   V				
UniRef90_UP10002897862	M D K I I I R A T A K D G E   V   R   □   A   I   T   T   D   M   V   Q   K   A   T   K   I   H   N   C   T   P   T   A   S   A				
UniRef90_D4N1F3	D Y I I I R G T A A N D Q   V   R   F   F   A   Y   T   K   D   V   V   E   T   A   R   Q   K   H   N   T   S   P   V   A   T   A				
UniRef90_UP1000469EDA	D I I L T K A V   S   K   D   G   K   F   R   V   Y   V   V   N   A   T   E   T   I   A   E   V   Q   K   R   H   D   T   W   S   N   S   T   V				
UniRef90_I0R5R1	D Y M V K A T A A D G Y   I   R   A   F   A   A   T   T   K   Y   L   V   E   E   A   K   N   D   H   N   T   S   P   V   A   T   A				
UniRef90_UP1000289602B	D Y L V R A L   G   F   G   G   S   V   R   A   F   A   V   R   T   T   D   T   V   G   E   A   Q   R   R   H   D   T   W   P   T   A   S   A				
UniRef90_E6SJB2	D Y L V R A V   A   G   D   G   L   V   R   A   F   A   C   R   T   T   R   L   V   D   E   A   R   R   R   H   D   T   W   P   T   A   T   A				
UniRef90_UP10004077D9F	D H L I R G L G   L   N   D   E   V   R   I   F   A   V   D   T   T   A   T   I   N   E   A   V   Q   R   H   V   A   Y   P   T   A   A   A				
UniRef90_C6PZ71	D K L V R A V   A   N   N   G   D   I   R   I   I   A   A   T   T   T   E   L   V   N   E   G   I   Q   K   H   K   C   A   P   T   A   A   A				
UniRef90_V2ZAH1	D Y V V R A V   A   A   G   G   E   V   R   A   F   A   C   Y   T   T   K   N   L   V   E   E   A   R   L   H   H   D   S   L   P   V   V   T   A				
UniRef90_S0FP42	D Y I I I R A T A A E   G   T   V   R   A   F   A   A   V   T   T   E   L   V   N   K   A   S   V   I   H   G   L   S   P   I   A   T   A				
UniRef90_E0I8Y1	D I I I I R G T A W G G   Q   V   R   F   F   A   G   T   T   K   K   I   V   E   T   A   R   S   I   H   N   T   S   P   V   A   T   A				
UniRef90_R5KKH0	D Y I I I R G M A A D G Q   V   R   F   F   A   G   T   T   K   K   I   V   E   T   A   R   S   I   H   N   T   S   P   V   A   T   A				
UniRef90_D9QPK8	D Y L L I R V   M   T   T   N   K   E   I   R   A   L   A   V   N   S   T   G   V   V   R   E   A   Q   K   A   H   D   T   T   P   V   A   T   A				
UniRef90_T0NJB8	M D K L V R A T A Q   N   G   E   I   R   I   G   A   T   T   D   L   V   Q   E   A   M   D   I   H   K   C   T   P   T   A   A   A				
UniRef90_R5Y4T4	M N K L V R C   S   R   D   G   T   L   V   I   M   A   A   D   T   T   D   M   V   E   R   S   Q   Q   I   H   K   T   S   A   V   T   S   A				
UniRef90_H1HRI0	D Y I V R A F A E   G   G   M   V   R   A   F   A   A   T   T   G   D   L   V   E   E   A   R   R   I   H   S   T   S   P   I   V   T   A				
UniRef90_D6XV61	D Y L V K A L   A   Y   E   D   Q   V   R   I   Y   A   I   N   S   T   D   M   T   D   E   A   A   R   R   H   Q   T   W   R   T   V   T   A				
UniRef90_UP1000477E4C3	D Y I I I R A M T T   T   N   K   E   I   R   A   L   A   V   K   S   T   T   A   V   N   D   A   Q   K   S   H   Q   T   T   P   V   A   T   A				
UniRef90_F4FRY4	D Y L V K A T T   T   D   G   M   F   V   R   A   Y   A   V   N   A   Q   O   L   V   T   T   A   Q   Q   D   H   D   T   W   S   A   S   S   A				
UniRef90_R7IRW2	D Y I V R A T A A A   G   G   Q   I   V   R   A   F   A   S   T   T   R   E   L   V   E   E   A   R   Q   L   H   N   T   S   P   V   G   T   A				
UniRef90_D4JC36	D Y I V V H   A   S   G   A   G   N   Q   V   R   I   F   A   A   S   T   R   D   L   V   E   E   K   A   R   E   I   H   N   T   S   P   V   A   T   A				
UniRef90_G2T274	D Y I V V R A T A A E   E   G   S   I   V   R   A   F   A   I   T   S   R   H   L   V   E   E   A   R   V   D   H   D   T   S   P   V   I   T   A				
UniRef90_W4CJ13	D R L I R G T A M N G   Q   V   R   A   F   A   I   Q   T   T   E   L   V   E   E   L   R   R   H   D   T   F   P   T   A   T   A				
UniRef90_I5ATJ9	D Y L V R G T A A H   G   Q   I   R   C   F   A   A   K   T   T   G   L   V   E   E   A   R   N   R   H   K   T   S   P   V   C   T   A				
UniRef90_U2FMQ4	D Y I V V K S   L   A   F   N   D   T   I   R   I   L   A   C   T   A   T   E   T   V   N   R   A   W   E   N   Q   H   T   Y   P   T   A   A   V				
UniRef90_S7TWK8	D Y L V R V V A R   H   D   N   V   R   G   L   A   C   I   T   T   R   L   V   R   E   A   C   R   R   H   D   V   Y   P   T   A   A   V				
UniRef90_W8U7M4	N Y I I L R V   T   S   K   D   K   N   V   R   G   F   F   A   V   T   T   G   L   A   E   K   A   R   T   I   H   N   T   T   P   V   A   T   A				
UniRef90_UP10003FC52A3	D Y I V V K A L   A   Y   E   K   Q   V   R   I   Y   A   M   K   S   T   D   M   V   S   E   A   R   R   H   Q   T   W   R   T   V   T   A				
UniRef90_V7I500	M D I I I K A M A Q   N   G   D   V   R   I   I   A   A   E   T   T   G   M   V   S   E   A   R   I   H   G   T   S   P   T   A   T   A				
UniRef90_UP10002196E15	D I V L V K A L   T   K   D   G   M   F   V   R   V   Y   G   L   N   A   T   G   I   V   S   Y   V   Q   K   I   H   D   T   W   S   T   S   T   A				
UniRef90_R7C9S5	D Y I V V R G T A A N G   Q   I   R   C   F   A   I   T   S   R   N   L   V   E   E   A   R   S   R   H   Q   T   S   P   V   I   T   A				
UniRef90_R5BZJ7	D Y I V V R G M A A M   G   Q   I   R   C   F   A   A   L   T   K   D   T   V   E   E   T   A   R   Q   A   H   D   T   S   P   V   A   T   A				
UniRef90_W3ALC8	D Y V V V R A T A S   N   G   L   I   R   A   F   A   C   T   T   K   D   L   V   E   E   C   R   K   T   H   N   T   F   P   I   C   T   A				
UniRef90_UP10003F4F040	D Y M V V R A T A A S   D   Q   I   R   A   F   A   I   T   S   R   N   L   V   E   E   A   R   K   S   H   E   T   S   P   I   M   T   A				
UniRef90_B8CWZ9	D Y L V V R G T A A G   G   N   S   V   R   F   F   A   T   T   G   N   L   V   K   E   A   Q   Q   R   H   S   L   P   T   A   C   A				
UniRef90_G4D437	M D Y L V V R A I   D   K   D   A   Q   V   R   I   F   A   C   S   S   K   N   M   V   E   K   S   R   E   I   H   N   T   S   K   T   A   T   A				
UniRef90_L1Q7U3	D K I I I R V A K   D   G   M   V   R   I   I   A   G   T   T   E   L   V   D   T   A   R   S   I   H   E   C   T   P   V   A   A   A				
UniRef90_UP10004662DF0	D Y I V V R A T A A G   S   Q   I   R   A   F   A   S   T   T   E   L   V   E   E   T   A   R   R   Y   H   N   T   S   P   V   I   T   A				
UniRef90_D4J0T9	D Y I V V R A T A A A   D   A   I   R   A   F   A   I   T   S   K   D   I   V   E   E   A   R   V   R   H   N   T   S   P   I   V   T   A				
UniRef90_V7HY56	D Y L V V R S   L   A   A   G   K   E   L   R   A   Y   A   I   D   A   T   E   I   V   R   E   M   Q   K   R   Q   D   T   W   S   A   A   S   A				
UniRef90_B8E253	M D Y L I V R G I S   M   D   M   K   R   I   V   A   Y   V   A   R   T   T   D   L   V   E   E   Q   A   R   K   I   H   K   A   S   P   T   A   I   A				
UniRef90_U4TK0	D Y L V V K A V   T   T   D   G   H   L   R   A   L   A   V   D   A   T   A   T   V   A   E   A   Q   R   R   H   D   T   Y   G   A   A   S   A				
UniRef90_M1MGV1	D K I I I R A T A K D   G   M   V   R   I   I   A   G   I   T   E   L   V   D   E   G   A   K   L   H   D   C   T   P   V   A   S   A				
UniRef90_R6CQ98	M D Q I I I R M   I   A   K   D   A   P   I   K   A   M   A   I   R   A   T   E   L   V   Q   R   A   Q   E   I   H   K   T   S   A   V   V   T   A				
UniRef90_R6DLU3	D Y I I V R A T A A A   Q   Q   Q   L   R   V   F   A   I   T   S   R   D   L   V   E   E   Q   G   R   K   I   H   N   T   S   P   V   A   T   A				
UniRef90_UP100047EDD4B	D Q L I I K A L   A   F   G   D   E   V   R   A   Y   V   V   R   A   T   D   M   V   E   E   A   R   L   K   Q   D   T   W   H   T   A   T   A				
UniRef90_Q39ZN3	D Y L V V R V   I   A   R   D   G   S   L   R   A   L   C   V   T   T   G   L   V   G   E   L   C   R   R   H   G   T   W   P   T   A   S   A				
UniRef90_K8DXN3	D Y L V V R G V A A   D   G   S   F   R   I   F   A   A   R   T   T   Q   T   V   E   E   A   R   R   R   H   G   C   W   P   V   A   T   A				
UniRef90_R9L017	D Y L V V R A T A A A   N   A   Q   I   R   A   F   A   V   T   S   R   A   L   V   E   E   A   R   R   I   H   N   T   S   P   V   V   T   A				
UniRef90_R6TGW6	D E I I I K A L   A   F   N   Q   S   V   R   I   Y   A   V   S   N   T   N   L   V   N   E   G   K   R   I   H   Y   Y   P   S   A   L   D				
UniRef90_Q97GJ6	D K L V V K A T A K   N   G   D   V   R   I   I   A   A   I   T   T   D   M   V   N   E   G   V   K   T   H   K   C   A   P   T   A   A   A				
UniRef90_N9WGA7	D K I V V R G T A K   N   G   M   V   R   F   I   I   G   G   M   T   N   L   V   N   E   G   T   R   L   H   N   C   T   P   V   A   S   A				
UniRef90_G9YM12	D K I I I R V   L   A   K   D   A   P   I   K   A   M   A   I   R   A   T   E   L   V   Q   R   A   Q   E   I   H   K   T   L   P   V   A   T   A				
UniRef90_UP1000410A40B	D Y M V V R A T A G   N   A   Q   I   R   A   F   A   I   T   S   R   N   L   V   E   E   A   R   K   I   H   S   L   S   P   I   C   S   A				
UniRef90_R6NNQ0	D K L V V R G N S   M   D   G   A   I   R   V   F   A   V   T   T   D   L   V   N   E   A   Q   R   I   H   H   T   Y   P   V   A   T   A				
UniRef90_UP10004673920	D Y M V V R A T A A A   A   A   Q   I   R   A   F   A   A   T   T   R   D   L   V   A   E   E   Y   G   R   K   A   H   G   L   S   P   I   A   A   A				
UniRef90_R7G7S9	D Y L I I K A L   T   C   E   E   R   V   R   V   Y   I   C   S   S   T   A   L   V   E   E   A   R   Q   R   F   D   M   Y   P   T   S   A   A				
UniRef90_B0TGU1	D E L I I R A T T   Q   D   G   M   V   R   F   I   G   A   R   T   T   E   L   V   G   R   R   A   R   E   L   H   G   T   W   P   V   P   T   A				
UniRef90_R6ULX8	M G K L V V R S   I   S   S   D   G   T   V   M   M   M   A   S   D   T   D   I   V   S   A   A   Q   K   I   H   G   T   S   K   V   C   T   A				
UniRef90_UP10003B6304C	M S Y A I V R G I T   K   D   G   Q   F   R   I   F   A   A   D   T   K   D   I   V   E   E   A   R   K   R   H   N   T   L   P   T   A   T   A				
UniRef90_C5VTP8	D K L I I K A T A K   D   G   Q   V   R   I   I   A   A   V   T   K   D   L   V   N   E   G   V   K   I   H   N   C   A   P   T   S   A   A				
UniRef90_UP10003655E36	D Y V I I K A T S   A   N   G   Q   V   R   A   Y   I   G   V   T   K   N   L   V   Q   T   A   R   D   N   H   N   T   L   K   V   A   T   A				
UniRef90_D8FI63	M G Y I I I K A   D   K   E   E   K   V   R   F   A   L   A   I   T   D   L   V   E   E   A   R   Q   R   F   D   M   Y   P   T   S   A   A				
UniRef90_UP100040D9BFB	D K K V I I R A T A K   D   G   M   V   R   I   L   G   G   I   T   T   N   M   V   D   N   D   G   T   S   V   H   E   C   T   P   L   A   S   A				
UniRef90_R6NZG5	M D K I I I R C   I   T   S   D   G   A   V   M   A   S   A   I   D   A   S   D   I   V   F   K   A   Q   K   I   H   G   L   S   R   S   A   T   A				
UniRef90_F2JLX2	D Y M I I R G I D   K   E   R   N   F   R   F   F   G   T   N   T   K   E   I   V   E   E   A   R   C   R   C   L   Q   G   L   S   P   V   A   S   A				
UniRef90_UP10003B6B8D6	M A Y L V V R G L   P   V   D   K   F   N   R   F   V   Y   A   V   C   C   K   E   I   V   E   E   A   R   Q   R   F   D   M   Y   P   T   S   A   A				
UniRef90_I7KGH4	D Y L I I K A I   D   K   T   K   N   L   R   F   L   A   I   T   A   K   D   L   V   D   N   E   A   Q   K   R   H   D   T   W   S   A   S   S   A				
UniRef90_UP10003B70764	D Y A I I R A I   S   K   D   G   K   V   R   G   F   A   I   T   T   N   L   V   Q   E   L   Q   K   R   H   G   T   Y   P   V   V   S   A				
UniRef90_UP100047CF2CB	N K I I I R V   T   A   A   D   N   S   I   I   R   G   F   F   A   N   T   T   A   M   V   E   K   A   K   E   L   H   Y   T   S   P   V   V   A   I   A				
UniRef90_L0MMF4	D Q L I I H   R   Y   L   F   E   N   Y   A   V   R   G   E   L   V   T   L   S   D   T   Y   R   H   I   L   D   N   H   D   Y   P   A   P   V   Q   A				
UniRef90_R5VKT4	M A I I I K R   A   I   S   K   D   A   S   V   V   S   Y   A   L   D   A   T   D   M   V   A   E   I   E   R   I   H   E   T   S   A   V   V   T   A				
UniRef90_R5X4F5	D Y V I I K A T S   G   N   G   E   I   I   R   A   Y   V   G   N   T   R   E   M   V   E   Q   A   R   V   N   H   N   T   T   K   V   A   T   A				
UniRef90_W7UURO	M G N L V V Y   R   A   I   S   A   D   G   S   V   F   A   E   V   L   D   A   K   D   I   V   S   E   I   E   R   I   H   K   T   S   A   V   V   T   A				
UniRef90_E4KMT4	D Q L V M K   A   L   A   F   N   Q   V   E   R   L   F   V   V   K   A   T   E   T   V   E   E   A   H   Q   R   H   D   T   W   Q   T   A   T   A				
UniRef90_UP100047CEDE1	D K L V V I   A   T   A   K   N   N   E   V   R   I   I   A   A   I   T   T   E   L   V   N   E   G   V   Q   R   H   K   C   A   T   A   S   A				
UniRef90_C0EJ62	M S N L V A R   A   I   T   A   D   G   S   A   V   A   L   A   L   N   S   T   E   L   V   S   R   I   E   Q   I   H   T   T   S   A   V   T   T   A				
UniRef90_F7V4F6	D Y I V V R A V   A   S   N   D   E   I   I   R   A   F   A   M   R   S   T   G   I   V   V   E   E   A   K   Q   R   H   Q   T   H   P   T   V   T   A				
UniRef90_F8IJQ3	D R V I I R A I   A   I   R   E   G   R   V   R   V   L   A   C   H   T   T   E   L   V   R   E   L   A   R   R   H   H   T   W   P   V   V   T   A				
UniRef90_R5MEE1	M G K L V V R   M   I   D   E   E   G   T   L   S   V   I   A   A   D   S   T   D   I   V   R   E   M   R   S   I   H   G   T   S   K   V   C   S   A				
UniRef90_D5X8S4	D L   M   V   R   G   V   A   A   G   G   L   I   R   A   C   A   A   V   T   T   G   L   V   E   E   A   R   V   R   H   K   T   E   P   T   A   T   A				
UniRef90_E5V3T8	D Y L I I R G   L   A   F   N   D   E   I   I   R   F   F   V   T   K   T   T   D   L   V   E   E   I   R   K   R   H   N   A   Y   P   T   A   I   A				
UniRef90_A6TN77	R   I   I   I R   A   T   A   A   N   S   S   I   I   R   A   F   V   A   N   T   T   N   L   V   E   E   K   A   R   G   F   H   Q   T   S   P   V   A   S   A				
UniRef90_A1HMV9	D H   I   I   R   V   A   T   A   P   G   L   R   A   F   A   V   T   T   N   L   T   D   E   A   R   R   R   H   N   C   Y   P   V   V   A   A   A				
UniRef90_D4KD98	D H   L   V   R   V   A   V   D   G   V   R   V   H   A   I   L   T   T   N   L   V   N   E   A   V   S   R   H   E   C   Y   P   V   V   A   A   A				
UniRef90_H1LGM2	D Y L V V K A T T   T   D   G   M   F   V   R   Y   A   I   T   A   Q   Q   M   V   A   T   A   Q   G   D   H   D   T   W   A   A   S   S   V				
UniRef90_R6TZ40	M D K I I I R C   I   T   S   D   G   S   T   M   A   S   A   I   T   G   T   N   I   V   V   A   T   A   Q   Q   V   H   R   L   S   P   V   A   T   A				
UniRef90_F9MTB6	N K L V V R   G   L   G   N   K   T   I   K   V   V   A   V   Y   A   P   E   V   V   E   E   A   R   R   I   H   Q   T   T   P   T   A   T   A				
UniRef90_UP100046F0804	D Y L V V R   V   K   A   M   S   K   N   G   E   I   R   A   F   S   I   D   A   T   Q   T   V   R   E   A   Q   E   R   F   D   L   W   S   G   S   S   A				
UniRef90_R6MYW4	M D R L I I R C   I   T   K   D   G   A   I   M   A   S   A   V   D   S   T   N   I   V   V   Y   T   A   Q   K   I   H   Q   L   T   P   A   A   T   A				

50            60            70            80

UniRef90_R7NA55	A   G R L L T G A A M M G I M M K N D D I L T V Q   K G N G P   G A M T   V T A E
UniRef90_UP10002897862	A   G R M L T S A G L M S A M L K S E D S L T T L Q   N G G G E A K G V V V T A H
UniRef90_D4N1F3	A   G R L L T A G A M M G S M C K N D D V I T L Q   Q C S G P   G G L T V T A D
UniRef90_UP1000469EDA	A   G R T M I G S I L V A S T L K E D E V L T T R   V G D G P   P A G A I V V D A N
UniRef90_I0R5R1	A   G R M L T A A V M M G S M M K G E D L L T L K   E G D G P   L G G V I A T A N
UniRef90_UP1000289602B	A   G R T M T A A A M M G A M Q K G E D L L T I K   V Q G N G D M R G I V V D A N
UniRef90_E6SJB2	A   G R V L T A T A L L A A Q L K D D A S V T V R   T G S G P   L G A I L V V V G E
UniRef90_UP10004077D9F	A   G R A M S A G V M M G A M L K G E D K N T I T   E G G G P   L G A I V V V D S D
UniRef90_C6PZ71	A   G R M L T A G S L M G S T L K S K D A L T L K   S G G G E A K G V V V T A Y
UniRef90_V2ZAH1	A   G R L L S A G S M M G L M M K G D D K L T L Q   K G D G P   L G G I V V V A A D
UniRef90_S0FP42	A   G R T L T A A G M M S K M L K G E D K L T I Q   K G D G P   L G Q I V V V D A D
UniRef90_E0I8Y1	A   F G R T L T A A G A M M G A M M K G E E K L T I Q   K G D G P   I G Q I V V V D A D
UniRef90_R5KKH0	A   G R L L T A G A L M G A A C Y K N D D L T L Q   Q C N G P   G R L T V T A D
UniRef90_D9QPK8	A   G R T L T N G A L L M G S M V K T G Q E T A L K   A G D G P   L G K I A A E A N
UniRef90_T0NJB8	A   G R M L T V G S L M G A L L K N E D S L T I Q   S G G G E A K G V V V T A H
UniRef90_R5Y4T4	A   G R L L T A S S L M G S M L K G E E S I T L R   N G G G P   A G T V M A V S D
UniRef90_H1HRI0	A   G R L M T A G L L M M G A M M K D K D L T I K   D G D G P   M R G M L V T A N
UniRef90_D6XV61	A   G R A L S A G T T M M G S M L K G D E K L T I K   E G N G P   P A S P M V I D A N
UniRef90_UP1000477E4C3	A   G R A L T G G I L L V I G S L V K S G M E I G L   V G D G P   L G R I M V N A N
UniRef90_F4FRY4	A   G R T L V G T V M L A S V E K N G E A V T V K   N G Q G P   V G Q I V A D S D
UniRef90_R7IRW2	A   G R L L T A A G M M G S M M K N E D V L T S I   N A D G P   M G H T G V T A N K
UniRef90_D4JC36	A   G R L L T A G A M M M G S M M K G E D L L T I Q   Q C S G P   L G G L T V T A K
UniRef90_G2T274	A   G R L L S G A A M M G T M M K G E D L L T I V Q   Q C G G P   A K G F T V T A D
UniRef90_W4CJ13	A   M G R T V T T A A I M G A M L K G E E K L T V Q   V N G D G P   P Q G I V A D A N
UniRef90_I5ATJ9	A   G R L L M T A G S I M M G S M L K G D D L T M T   R G R N G P   M Q G L Q V T A D
UniRef90_U2FMQ4	A   G R T L I V G S M M G S M L K G E E N I T I R   K G D G P   I G L I T V D A N
UniRef90_S7TWK8	A   G R A L T T G G A L L M G A L M K T G Q R T A L K   F E G N G P   L G K I V V V E A D
UniRef90_W8U7M4	A   G R A I T A G S I M G L M I K G E D K L T L Q   L K G G G P   A G A I V V V V S N
UniRef90_UP10003FC52A3	A   G R S L T L T A G A M M G S M L K G D E K L T I K   E G S G G P   P A S P I I I D A A
UniRef90_V7I500	A   F G R M L T A G S I M M G S M L K N E D S T I Q   D G G G P   P A K G I L V T G R
UniRef90_UP10002196E15	A   G R T I A A T L M L A S V L K G K E S M T V R   L N G Q G P   V G G M V I D A D
UniRef90_R7C9S5	A   G R L L S G G A M M G A M M K G E D L L T L Q   Q C S G P   V Q G L T V T A D
UniRef90_R5BZJ7	A   G R L L T A G G M M G A M M K G E D V L T L Q   K A G G P   L Q G I T V T A D
UniRef90_W3ALC8	A   I G R L M S S A L L M M G V D L K G R S V I T L T   K G D G P   K G L T A T A D
UniRef90_UP10003F4F040	A   L G R L M S A T L L M M G C M M D N D G D L T V K   E G D G P   P A V M L L A T A D
UniRef90_B8CWZ9	A   L G R L T T G G A M F G V M L K E G E D V T L Q   K G D G P   L G T L M V T A D
UniRef90_G4D437	A   L G R S L T T A A A L M S E N L K N E D D T L T   K G D G D I L Q G I V V V T A K
UniRef90_L1Q7U3	A   L G R M L T A G A L L G A T L K S E E V M T L R   N G G G D A E G V V V T A Y
UniRef90_UP10004662DF0	A   L G R L L T A G G M M G S M M K N D D D V L T I Q   K C D G G P   P Q G L T V T A D
UniRef90_D4J0T9	A   L G R M L S A G S M M G V M L K G E D D L T L Q   Q G S G P   L K G I T V T A D
UniRef90_V7HY56	A   L G R M L T A G S I M M G V M L K G E D D L T L Q   D G G G P   V G G G V V V D A D
UniRef90_B8E253	A   L G R A T V G S L L L A A T L K G D E E R I S L Q   T G N G G P   L G D G P   V G A I V A V G K H
UniRef90_U4TKN0	A   L G R T L V G T L L L S S A L E G R E T I T T R V   L G D G G P   V G A I V A V G K H
UniRef90_M1MGV1	A   L G R M L T A G A I M G A T L K N K E V I T L K   I N G G G E I N G I T V T A H
UniRef90_UP100047EDD4B	A   L G R T L M A T S M I G N T M L K S N D S V T L R   I N G G G P   L G T I L A V V S D
UniRef90_R6CQ98	A   E G R L L T A A S I M G T M L K S N D S V T L R   E G N G G P   V G M L I A V V S D
UniRef90_R6DLU3	A   L G R L L T A G A M M G S M M K G K D V L T L Q   E C G G P   I G G V T V T A D
UniRef90_UP100036A5C1E	A   L G R A L I I G T T L L A G L K N D N D Q L S V R   A G D G P   I G Y I I L A T S N D
UniRef90_Q39ZN3	A   L G R A V T G G A L M G A L K T G Q R V A L R   F E G N G G P   L K N I I L V E A D
UniRef90_K8DXN3	A   L G R T L T A G I L L G A N L K G D D I L T I R   V L G D G G P   L G A V I V T A N D
UniRef90_R9L017	A   L G R L L T A A A M M G S M L K G E D V L T M Q   H C D G G P   V R G L T V N A D
UniRef90_R6TGW6	A   M G R V L S M G A M M G S M L K L E E T I T L K   V E G D G P   L G K I I V D S D
UniRef90_Q97GJ6	A   L G R M L T A G V L M M G A L K A E D S I T L K   N G G G I I A K S V T V T S Y
UniRef90_N9WGA7	A   L G R M L T A G S L M G C L L K S E E V V T L K   D G K G E A K G V T V T G H
UniRef90_G9YM12	A   L G R S L M A A S M M M G N Q L K E D G S V T L R   K G G G P   L G G I I T V V S D
UniRef90_UP1000410A40B	A   L G R L M S G A L L M M G D M L K G E D A L I T V   D G D G P   I G G L L V T S N D
UniRef90_R6NNQ0	A   L G R L L T G A A I M G A L K N E T D S M T V Q   K G E E G E I T T N L V A V T D
UniRef90_UP10004673920	A   L G R L M T G T A M M G T M M D N D D D I T V K   D G D G P   M K G V L A T A D
UniRef90_R7G7S9	A   L G R V L S V G S M M G S M L K S S E E Q L T I R   N G H G P   I G T I L V D A Y
UniRef90_B0TGU1	A   L G R A L T A A S L L G A L Q K N D E K M T L R   L G D G P   L G A V V I A Q G D
UniRef90_R6ULX8	A   L G R L L T G C S F M Q G M K E E G S V T L R   N G G G P   A G S V I A V S D
UniRef90_UP10003B6304C	A   L G R A L T A A A L L G D L K T G R V M I Q   N G G G P   L G E I I A E A D
UniRef90_C5VTP8	A   L G R M L T A G T L M G S M L K N R D V V T I K   D G G G P   P A K G V T V T S Y
UniRef90_UP10003655E36	A   L G R T L T A T A M M G L M M K N D D E L S V I   K G G G P   P G T I I L T T A D
UniRef90_D8FI63	A   L G R S L T A T A I M A S W L K N K D T I T F N   K S D G P   P A K N I I V T G K
UniRef90_UP1000404D9BFB	A   L G R M L T A A A L L M G R T L K D D E V V T I K   N G G G G I I A K G V T V T G Y
UniRef90_R6NZG5	A   L G R L L C A T S M M M G A M L K Q K D S I N L R   V S G D G E L G P V I A V A D
UniRef90_F2JLX2	A   L G R T L T G V A M M G S M L R D E D R V S I   I K G D G P   L G G I I A E S N D
UniRef90_UP10003B6B8D6	A   L G R A L A G V A L L S A D L K I G K V L L Q   K G D G P   I G E I I A E G D
UniRef90_I7KGH4	A   V L G R T M I G S S L L L A G A L K D K D E L T V R   L G N G G P   V G A C L V T A K
UniRef90_UP10003B70764	A   L G R T A T M G A L I G L T L K E E H K V T I Q   V A G D G P   I G R I I V D A D
UniRef90_UP100047CF2CB	A   L G R T L T A T S M M M G L M L K E E N K I T V T I   N G G G G P   L G S V V V T G N N
UniRef90_L0MMF4	A   L L G E M V L V A T S L L T A T L K F N G D I T V Q L   Q G D G P   L K L A V I N G N
UniRef90_R5VKT4	A   L G R L A I A A S M M G Y G L K G E D T V T L R   K G D G P   P A G Q L V A V A D
UniRef90_R5X4F5	A   L G R T L T A T S M M M G L M M K N E D E L T V I   I K G G G P   I G T I I A T S D D
UniRef90_W7UURO	A   L G R L T I A A S L M G Y M L K G D D S V T L R   D G G G P   P A G Q L V A V A D
UniRef90_E4KMT4	A   L G R T L I A T S L L A A N L K G K D R L N V V V   D G Q G P   L G R I M A E A Y
UniRef90_UP100047CEDE1	A   L G R M L T V G T I M M G A M L K N K D S I T L K   N G G G I I A K G I V V T A H
UniRef90_C0EJ62	A   L G R L A T G A G L M G A M L K G E D S I T L R   M Q G D G P   P A G I I L A V A D
UniRef90_F7V4F6	A   L G R L L T G G A M M G V M M K G E D L L T L Q   K S A G P   I K G M T V T A D
UniRef90_F8IJQ3	A   L G R T A S I A A M M M A M L K N H E S M T V K   I E G D G P   I G Y L V V E A L
UniRef90_R5MEE1	A   L G R M L T A A T T M M G S T L K G D D S I T T V K   I N G G G P   P C G T V L A V S D
UniRef90_D5X8S4	A   L G R V L T G A A L L T S G L K E H D T I T L R   V L G D G P   L G A I V A T A D
UniRef90_E5V3T8	A   T G R V A T V T T M M G A M L K S G D R I D V A   V R G D G P   I G T I Y A S S D
UniRef90_A6TN77	A   L G R T L T A T S M M M G V M L K G E Q K I T T K   I N G G G G P   L G V I L V V G D
UniRef90_A1HMV9	A   L G R T M T A A L L L A T N L K A D E S I T V R   I S G D G P   I G E I I A D A T
UniRef90_D4KD98	A   L G R T M T G A L L M M A A N L K N K D E S I T I K F   I N G N G G P   L G S V V V A D A N
UniRef90_H1LGM2	A   L G R T L I A T T M L I A T S V N N D E A I T V K   I N G Q G P   P A G E I V A D A D
UniRef90_R6TZ40	A   L G R L L T G A S L M G A Q L K Q R A A L T V R   I K G D G P   L G V M V A S A T
UniRef90_F9MTB6	A   L G R T L M A G L L M M A A M K N Q K D A L T I H   D G D G P   L G K I L V T G K
UniRef90_UP100046F0804	A   L G R T L I A T A L F S K N M K N D E R L M I Q V   D G G D G P   L G G K I F T E G L
UniRef90_R6MYW4	A   L G R L L T A S S M M G A Q L K Q E G S I T L K   V S G D G P   P G S M V A V A Y

	90	100	110	120
UniRef90_R7NA55	P N G H V K G F V A N P E V M L P   L   K N G H M D I A G A V G □ G V L S V I K			
UniRef90_UP10002897862	T D G K V K G Y I G N P S V D L P   L   N S K G K V D V G G A I G T D G Y L Q I I R			
UniRef90_D4N1F3	S K A N V K G Y V N N P D V M L P   P   S K E G K L D V G K A L D L G V L T V I K			
UniRef90_UP100046A9EDA	A K G D T K G Y I Q N H V S L P   N   D N H H I D V A E A I G V G L M S V I M			
UniRef90_I0R5R1	N H G E V K G Y P F N P V V L I P A N S K G K L D V R R A V G T E G T L S V V K			
UniRef90_UP1000289602B	A K G E V R G Y A V N P H V H F D L   N A Q G K L D V G A V G L P G F L H V T R			
UniRef90_E6SJB2	P D G T V R G Y V R N P H V D L P   R P D G K L D V R R A V G T N G Y L R V A K			
UniRef90_UP10004077D9F	A H G H V R G Y L G N P Q V H F D L   N D Q G K L D V R R A V G T N G Y L R V A K			
UniRef90_C6PZ71	S D A R V K G Y I G N P L   D   P A N S K G K L D V G G A I G K N G S L L V V I K			
UniRef90_V2ZAH1	S K A R V K G Y A F N P D V D I P   L   K A E G K L D V G G A I G N G E L T V I R			
UniRef90_S0FP42	S M A N V R G Y V H D P V D L P   N   E R G K L D I R T A V G R T G Y I H I I K			
UniRef90_E0I8Y1	A K G N V R G Y V D H P V Q H M A S N S Q G K L D V A G A V G K G T M T V I S			
UniRef90_R5KKH0	A H C N V K G Y V N N P E V I L H A N D K G K L D V A K A L D M G V L S V I K			
UniRef90_D9QPK8	H H G E V R G Y V Q N P K V D F M T S R Q G K L D V A Q A I G K G Q L V V R K			
UniRef90_T0NJB8	A D A C V K G Y I G N P D V D L P   N   S I G K L D V G G A I G T N G Y L K V I R			
UniRef90_R5Y4T4	S S G N A R G Y V Q N P V V E I P   L   N S K G K L D V A G A V G K G T M T V I S			
UniRef90_H1HRI0	N A G E V K G Y P Y E P A V I L P A N Q L G K L D V A G A V G K G T M T V I S			
UniRef90_D6XV61	A K G K A R G Y V G R V D V D P E R R E D G K L L N V G A V V G N E G H I S V V K			
UniRef90_UP1000477E4C3	Y R G E V R G Y V G N P N I E L M T N Q Q G K L D V A R A I V G N G Q L T I K K			
UniRef90_F4FRY4	S N G H V K G Y I Q N P H V H L P   L   N A H H I D V G K A V G V N G L I E V S R			
UniRef90_R7IRW2	A N A D V K G Y I S N P D F Q N P P Y F G K L D V G G A I G N G I L L K V I K			
UniRef90_D4JC36	S D G T V K G Y V N N P D V M L P   P   N S K G K L D V G G A I G L D L G V L S V I K			
UniRef90_G2T274	A N G H V K G F P N V P D V E L P   L   N A Q G K L D V G G A I G L G L G V M S V I K			
UniRef90_W4CJ13	A K G E V R G Y V S N P H V H L P   S N S V G K L D V A G A V G K G E F I N I T K			
UniRef90_I5ATJ9	S A S R V K G Y V F Q P F E V W N E P K Y A G K L D V G G A V G K D G T L T V V R			
UniRef90_U2FMQ4	A R G E V R G Y V E N P L V H Y Q Y D N G K L N V A K A V G K N G E I H V I K			
UniRef90_S7TWK8	S D G G V V R G Y V G N P H V D L P   P   A G G K F D V A G A L G K A G L L T V T K			
UniRef90_W8U7M4	S Q G I V K A Y I E N P G V E V P   L   R E D G K L L N V G A A I G T D G K I I N V I I			
UniRef90_UP10003FC52A3	A D G S A R G Y V N R S A A D P E R H A D G K L L N V A A V V G E E G T L S V V K			
UniRef90_V7I500	T N G L V K G Y I V N P E A D L P   L   N Q K G K L D V G G L V G R E G N L T T V I M			
UniRef90_UP10002196E15	A K G H I K G Y I Q N P H V N L P   L   T Q D G K I L D V A K G V G K N G F L T E V V K			
UniRef90_R7C9S5	A F G H V K G Y A V N P V V S L P   R K D G K L D V G A L G D L G V L T T V I K			
UniRef90_R5BZJ7	S Q G N V K G Y V G N P Q V I L P   N   E K G K L D V A S A V G P G F L T N V I I			
UniRef90_W3ALC8	N L G N V K G F V S N P N V L L P   P   N E A G H H L N V G G A L G Q G K L S V I K			
UniRef90_UP10003F4F040	A K G N V K G Y V K N N K V Y L E N N A S G H H L N V G G A V G G N G L T V V I R			
UniRef90_B8CWZ9	S R G H V R G Y V E N P S V H L P   L   N E K G K L D V G S A I G K G M L Y V I K			
UniRef90_G4D437	A N G I V K G Y I V N P M A D A D I R E D G K L D V G K I V G K G T L T V V A			
UniRef90_L1Q7U3	E G A K V K G Y I G N P Y G D L P   L   N A N G K L D V G Y T G K N G N L M V I K			
UniRef90_UP10004662DF0	S K A N V K G Y A E N P D V M L P   P   K N G K L D V G G A I G L D L G I M R V I K			
UniRef90_D4J0T9	S K G E V K G F P N V S V D L P   P   K N G K L D V G G A I G K D G T L A V T T K			
UniRef90_V7HY56	A H G H V K G Y V Q H P H V H L P   L   E N G K I D V R G A V G K D G F L A V T T K			
UniRef90_B8E253	P K G N V R G F I K R A Y I D L P   P   T P D G K L D V P S A V G K Q D G T L S V I R			
UniRef90_U4TK0	P A G T V K G Y I Q H P H V Q L P   L   N T V G K I D V R R A I V G T N G I L Y V I K			
UniRef90_M1MGV1	S D G T V K G V I G N P Y I E R P   L   N V G K I D V V G G A I G T N G S T V V I K			
UniRef90_UP100047EDD4B	S T G N V R G Y V Q E G Q I T L P   S K A P G K L D V V G T A V G E D G F L Y V I K			
UniRef90_R6CQ98	G S G N V K G Y V G N P I V E I P   L   K P S G K L D V V S G A V G P G F L N V I R			
UniRef90_R6DLU3	A N A N V K G Y V N Q P N V I I P   N   A N G K D G K L D V V S G A I G P G F L N V I R			
UniRef90_UP100036A5C1E	R V G E T K G Y I K N P H V A L E L N D L G K L D V V R K A I V G T E G T L S V V K			
UniRef90_Q39ZN3	A N G A V R G C V G N P E A N P   L   R E D G K L D V V A A A I G Q A G L T V T K			
UniRef90_K8DXN3	A K G E V R G Y V Q E P Q V H L P   A T A D G K L A V G A A V V G H G Y L H I T R			
UniRef90_R9L017	A H A N V K G A A L E P Q V M L P   P   N A L G K L D V V G G A V V G N G I L S V I K			
UniRef90_R6TGW6	A H G N I R G Y C D N P H C H F E Y N D F F R L N A K Q T I G T T G F I T S V I K			
UniRef90_Q97GJ6	S D A H V K G Y I A N P N A D L P   V N S Q G K L D V V G G I G K N G N L L V I R			
UniRef90_N9WGA7	F D G S V K G Y I G N P I D L P   C P N G K L D V V G S G A I G K D G M L Y V I K			
UniRef90_G9YM12	S Q G N A R G Y V V N P L   V D L P   L   K G P A K L D V V G S A V G R D G S L T V I K			
UniRef90_UP1000410A40B	N K G Q V K G Y V K N N A V V L P   N N A E G H H L N V G G A V G N Q G T L T E V I K			
UniRef90_R6NNQ0	C H S R V K G Y V S N P P Y V Y D R P   L   N N K G K L D V V G G A I G E G T L T V I R			
UniRef90_UP10004673920	N K G N V K G Y V S N P P Y V Y D R P   L   N N K G K L D V V G G A I G E G T L T V I R			
UniRef90_R7G7S9	Y D G H V R G F V S D P H I M L Q Y N D T G K L D V V G M A V G N Q G T L T E V I K			
UniRef90_B0TGU1	A R G R V R G Y V Q H P E L D L P   T A E G K L D V V G G A V G R Q G H I I H V T R			
UniRef90_R6ULX8	S L G N V K G Y V V N P G V E L P   L   K D N G K L D V V G G A V G C D G Y L S V M K			
UniRef90_UP10003B6304C	A E G N V R G L V Q K P H I L H T P   Q K G K L D V V G Q A V G R D D G F I S V T K			
UniRef90_C5VTP8	A D A H V K G Y I G N P S A D L P   P   A N S I G K L D V V S G V I G K N G S L L V I R			
UniRef90_UP10003655E36	S K G N V K G Y V Q Y P D V E V Q D Y P   N G K L D V V V A G A V G N K G Y V K V I K			
UniRef90_D8FI63	N D G Y I K A F I A N P Q E D L P   L   N K K G K L D V V G G L G L T I T I			
UniRef90_UP100040D9BFB	Q N A S V K G F I G N P Y I E L P   L   N A K G K L D V V G G A I G K D G L L Y V I K			
UniRef90_R6NZG5	S K G N V R G Y V G N A N C P T E Y Y N N G K I I N V S K A V V G K N G V L N V M R K			
UniRef90_F2JLX2	G A G D V K G Y V Y N P H V D L P   L   N E F G K L D V V A G A V V G N A N M T V V M K			
UniRef90_UP10003B6B8D6	Y Q G F L R G T V Q N P H V Y I D P   N H K L P   V G L A V V G K K G F I S V V K			
UniRef90_I7KGH4	UniRef90_I7KGH4 A D L K V K G F V Q N P H I A L P   P   R K D G H I D V V A G A V V G Q G W L Q V T K			
UniRef90_UP10003B70764	G E G H V R G S V D N P Y V E H N D D Y Y K L L N V G A A V V G Q S J I Y V T K			
UniRef90_UP100047CF2CB	UniRef90_UP100047CF2CB A T G N V K G Y V N N P Q V E T T N I R E G K L L N V G A A V V G T K G V I T V S K			
UniRef90_L0MMF4	N Q E M R G V A R L Q G D I A E G S T L Q M Q I G N V M V I T I			
UniRef90_R5VKT4	S H G N V K C D V E H P I L V E I P   L   N A H G K L D V V G G A V G T D G M L S V V K			
UniRef90_R5X4F5	A K G M V R G Y V Q N P D V Q V E N Y P N G K L D V V V A G A V G T D G Y V Q V I K			
UniRef90_W7UUR0	S R G N V K S C V N N P V V E I P   L   N A Q G K L D V V G G A V G S D G T L S V V K			
UniRef90_E4KMT4	N D G R V R G F A S Q P H V A L P   L   N A A G K I D V V A G G V G L P G T L I V K K			
UniRef90_UP100047CEDE1	S D A S V K G Y I G N P N A D L P   E N S R G K L D V V S G I I G K D G S L T V I K			
UniRef90_C0EJ62	S A G H V K K A Y V E N P V V E I P   L   N K L G K L D V V A G A V G T N G T L S V V K			
UniRef90_F7V4F6	S R G H V K G Y A N V P D V D V P   P   S P Q G K L D V V G Y A V G P G E L Q V V K			
UniRef90_F8IJQ3	P S G D V R G Y P G N P H V H L P   P   N S Q G K L D V V G G A I V G R G H L Y V V R			
UniRef90_R5MEE1	S D G N V R G Y C V N N P D V D V P   L   N K K G K L D V V A G A V G N N G F V V T V I K			
UniRef90_D5X8S4	A H G N L R G Y V Q N P E V N L P   P   A G P G K L D V V G L A V V G K N G F L H I T K			
UniRef90_E5V3T8	E L G E T T A Y A K N M Q V H I P   S N S Q G K L D V V K G V V G G N I T V V R			
UniRef90_A6TN77	S E G N V K G Y V G N P Q V E S T N I R P G K L D V V G A A V V G S D G E I T V V I K			
UniRef90_A1HMV9	A R G S V R G Y V K N P Q I D L P   L   Q E G K L D V V G K A V V G A G N F V T R			
UniRef90_D4KD98	P E G F V R G Y I A N P H V N L P   L   N E K G K L D V V G G V G Q G L L S V T R			
UniRef90_H1LGM2	S K G N V K G F I H N P H V Q L P   N D G K H Q M T S G K A V V G V N G F L S E V T K			
UniRef90_R6T7Z40	S D G N V R G F V G N P N C E T T Y Y E N G H I I N V G K A V G S N G T L Y V V V R			
UniRef90_F9MTB6	N D G Q I K G Y V Q N P Q A D H D L K A N G K L D V V S G I V G S S Q G V M T V V M			
UniRef90_UP100046F0804	G N G D V R G Y V G N P N A V D P N E Q G K L I D V V R K V V G T S G T I T V V I K			
UniRef90_R6MYW4	S S G C C K G Y A V N P H A Q A E N Y P N G K L I N V A G V V G K N G L L Y V V M R			

UniRef90_R7NA55	D I G L R E P Y V I G D T I L I T S E I   A D D L T Y Y F A T S E Q Q V P S S S V G L G G	130	140	150	160
UniRef90_UPI0002897862	D M G L K E P Y V G Q V P I   C T G E I   G D D L T A Y Y F T V S E Q Q T P S S A V G A L G G				
UniRef90_D4N1F3	D I G L K E P Y S G Q T H   V S G E I   A E D L T Y Y F A S S E Q Q T P S A V G A L V S G				
UniRef90_UPI00046A9EDA	D L H L K E P F T G Q V P   L V S S G E I   G A D F T Y Y M A K S S E Q Q T P S A I G L V S G				
UniRef90_I0R5R1	D T G M K E P Y V I G Q V A   L L I S S G E I   A E D L T Y Y Y A T S S E Q Q T P S S A V G L L G G				
UniRef90_UPI000289602B	D T G L R D Y F T Q G Q V E   L L I S S G E I   G E D F A Y Y F T K S D Q T P S V V G L V G G				
UniRef90_E6SJ82	D L G L G L T P Y T G S V P   L V S S G E I   G D D L V T A F L V Q S   E Q T P S V V G L V G G				
UniRef90_UPI0004077D9F	N I G L K D N F V G S T E I   V S S G E I   G E D F S Y Y F Y A S S E Q Q V P S I V A L L G G				
UniRef90_C6PZ71	D M G L L R E P Y V G Q V P   I Y T G E I   G D D L A Y Y F T V S S E Q Q T P S A V G A L L G G				
UniRef90_V2ZAH1	D M G L K E P Y V G R T K L   I S S G E I   A E D L T Y Y Y F A S S E Q Q V P S S T V A L L G G				
UniRef90_S0FP42	D M G L R E P Y I G F A D   L V S S G E I   A E D D L T Y Y Y F A S S E Q Q V P S S V V A L L G G				
UniRef90_E0I8Y1	D L G L K E P Y I G Q T Q   L V S S G E I   A E D L T Y Y Y F A T S S E Q Q I P T S V A L L G G				
UniRef90_R5KKH0	D I G L K E P Y I G Q T Q   L V S S G E I   A E D L T Y Y Y F A T S S E Q Q I P T S V A L L G G				
UniRef90_D9QPK8	D L G V E E P Y E G S V P   L V S S G E I   G D D L T Y Y Y F T Q S E Q Q V P S S A V G A L L G G				
UniRef90_T0NB8	D M G L K E P Y I G Q V P   I Q T G E I   G D D L A Y Y F T Q S E Q Q V P S S A V G A L L G G				
UniRef90_R5Y4T4	D L C L K E P Y V G Q I P   L V S S G E I   A E D D I T S Y Y Y A I S S E Q Q I P P S V C A L L G G				
UniRef90_H1HR10	D L G L K E P Y V G Q V P   E L V S S G E I   A E D D I A Y Y Y Y A S S S E Q Q V P S S G V G L L G G				
UniRef90_D6XV61	D L G M K D Y F T G S V P   L V S S G E I   G D D F T Y Y Y F A S S E Q Q T P S S V V A L L G G				
UniRef90_UPI000477E4C3	D L K V K L E P Y T Q G S V P   L V S S G E I   G D D F T Y Y Y F T K S D Q T P S S S V V G L G G				
UniRef90_F4FRY4	A A E G E D P Y T G S V P   P L A S G E I   G D D F T Y Y Y L A Q S S E Q Q I P P S A V G L V S G				
UniRef90_R7IRW2	D M G M K E P Y I G Q T T G L   I S S G E I   A E D D L T Y Y Y F A T S S E Q Q V P T S V V A L L G G				
UniRef90_D4JC36	D M G M K E P Y V G Q T Q L   V S S G E I   A E D L T Y Y Y Y A T S S E Q Q V P I N S S V V A L L G G				
UniRef90_G2T274	D M G L K E P Y V G Q T A   L Q T G E I   A E D D L T Y Y Y F A T S S E Q Q V P I N S S V V A L L G G				
UniRef90_W4CJ13	D Q E F G D P Y S S S Q I R   L V S S G E I   A E D D L T E Y Y F A V   S E Q Q V P S S S V V G L G G				
UniRef90_J5ATJ9	D L K M R D Y F H S S V P   I I S S G E I   G E D F T Y Y Y F T R S E Q Q T P S S S V V G L G G				
UniRef90_U2FMQ4	D L R V K E P Y R G L V H   Y T S E I   A E D D I A Y Y Y L L E S S E Q Q I P P S S A V V G L G G				
UniRef90_S7TWK8	D M G L K E P Y V G Q Y G L   V S S G E I   G E D F L A H Y F T F S E Q Q T P S S S V V G L L G G				
UniRef90_W8U7M4	D L G M R D H F T G S V P   L V S S G E I   G E D F T Y Y Y F A T S S E Q Q T P S S S V V G L L G G				
UniRef90_UPI0003FC52A3	D Q G L R E P Y V I S S V P   L V T Y T G E I   A E D D L A Y Y Y T T S S E Q Q Q L P S S S A V V S L G G				
UniRef90_V71500	N Q G T S E P Y T S D V P   L V S S G E I   G D D F T F Y L A Q S S E Q Q I P P S S S V V G L L G G				
UniRef90_UPI0002196E15	D I G M K E P Y S G Q V Q   L V S S G E I   A E D D L T Y Y Y F A A S S E Q Q V P P S S S V V G L L G G				
UniRef90_R7C9S5	D M G M K E P Y S G Q T T M   L Q T C E   A E D D L T Y Y Y F A T S S E Q Q V P P S S S V V G L L G G				
UniRef90_R5BZJ7	D I G L K E P Y I G S V D   L Q T G E I   A E D D L T Y Y Y F A V   S S E Q Q Q L P S S S A V V G L L G G				
UniRef90_W3ALC8	D M G L K E P Y V G Q V P   L Y T G E I   A E D D I T Y Y Y A K S S E Q Q V P P S S S V V G L L G G				
UniRef90_UPI0003F4F040	D M G L K E P Y R G S T P   L I S S G E I   G D D L T Y Y Y L T R S S E Q Q I P P S S S V V G L L G G				
UniRef90_B8CWZ9	D Q G L K E P Y I G K V E   L I S S G E I   A E D D L A N Y Y F Y R S D Q V P P S S S V V G L L G G				
UniRef90_G4D437	D L G L K D P Y V G Q V P   I H S S G E I   V A E D D L A Y Y Y F T V S S E Q Q T P P S S A V V G L L G G				
UniRef90_L1Q7U3	D M G L K E P Y I Q G Q T   I L Q T G E I   I G D D L T Y Y Y F A N S S E Q Q V P P S S S V V G L L G G				
UniRef90_UPI0004662DF0	D M G L K E P Y V G T V E   L Q T G E I   A E D D L T Y Y Y A V   S S E Q Q Q I P P S S S V V G L L G G				
UniRef90_D4J0T9	D M G L K E P Y V G T V E   L Q T G E I   A E D D L T Y Y Y A V   S S E Q Q Q I P P S S S V V G L L G G				
UniRef90_V7HY56	D L G L K E A F T G Q V P   L V S S G E I   G E D F T Y Y Y L A K S S E Q Q Q I P P S S A V V G L G G				
UniRef90_B8E253	D L G L K E P Y R G V V P   L I S S G E I   A K D L A Y Y Y F T Y S S E Q Q Q I P P S S A V V A G G L G G				
UniRef90_U4TKN0	D M G L K T P F T G Q V P   L V S S G E I   A E D F S Y L A Q S S E Q Q Q I P P S S A V V G L G G				
UniRef90_M1MGV1	D L G L K D P Y V G Q V P   I Q T G E I   G D D L A F Y Y Y T V S S E Q Q T P S P S A V V S L G G				
UniRef90_UPI00047EDD4B	D L C L R E P Y V G T I P   L V S S G E I   A E D I T A Y Y A F E S S E Q Q I P P T A C A L L G G				
UniRef90_R6CQ98	D M G M K E P Y V G Q V P   I V S S G E I   A E D I T N Y Y A T S S E Q Q Q I P P T V C G L L G G				
UniRef90_R6DLU3	D I G M K E P Y N G Q V H   L V S S G E I   A E D D L T Y Y Y A T S S E Q Q Q I P P S S V V G L L G G				
UniRef90_UPI00036A5C1E	D L G L K S P F S G Q V K   L I S S G E I   A E D F T Y Y Y L A A S S E Q Q Q I P P S S V V G L L G G				
UniRef90_Q39ZN3	D L G L K E P Y T G T V L   Y T S E I   A E D L A Y Y Y L T D S S E Q Q V P P S S A V V G L L G G				
UniRef90_K8DXN3	D L G L K E R E P F T G S V   E L V A G E I   A E D I A H Y L T V S S E Q Q T P S P S A V V S L G G				
UniRef90_R9L017	D M G L K E P Y V G Q T Q I   Q T G E I   A E D D L T Y Y Y F A T S S E Q Q V P V Q S S V V G L L G G				
UniRef90_R6TGW6	D L K L K E P F I V G S T P   I I S S G E I   A E D F A Y Y Y F Q V S S E Q Q Q I P P T V C G L L G G				
UniRef90_Q97GJ6	D M G L K E P Y V G Q V P   I Y T G E I   G D D I A Y Y Y V N S S E Q Q Q I P P T A C A L L G G				
UniRef90_N9WGA7	D L G L K D P Y V G Q V P   I Y T G E I   A E D F A Y Y Y F T V S S E Q Q Q I P P T A C A L L G G				
UniRef90_G9YM12	D L C M K E P Y V G T V P   L V S G E I   A E D I T S Y Y F A E S S E Q Q I P P T A C A L L G G				
UniRef90_UPI000410A40B	D L G L K D P Y V G T V P   L V S G E I   A E D I T S Y Y F A E S S E Q Q I P P T A C A L L G G				
UniRef90_R6NNQ0	D M G L K E P Y V G Q I P   L V S G E I   A E D D L T Y Y Y A K S S E Q Q Q I P P T S S V V G L L G G				
UniRef90_UPI0004673920	D M G L K E P Y V G Q V P   L Y S S G E I   V A E D D L T Y Y Y F T K S S E Q Q Q I P P T S S V V G L L G G				
UniRef90_R7GS9	D L H M K E N W G G T V A   L Q S S G E I   G D D F A Y Y Y F T A S S E Q Q T P S S A V V S L G G				
UniRef90_B0TGU1	D L G L K E P Y V G T A E   L V S S G E I   A E D D I T Q Y Y F L I S S E Q Q T P S S A V V A V A L L G G				
UniRef90_R6ULX8	D F G T G D P Y T G Q V P   I V S S G E I   A E D I T S Y Y A T S S E Q Q V P V T V C A L L G G				
UniRef90_UPI0003B6304C	D L G L K E P Y Q G S T K   I I S S G E I   A E D D I V S Y Y L T V S S E Q Q Q I P P T A V V G L L G G				
UniRef90_C5VTP8	D F G L K E P Y V G N V P   I Y T G E I   G D D I A Y Y Y F T V S S E Q Q Q I P P T A V V G L L G G				
UniRef90_UPI0003655E36	D L G L K L E P Y V G S Y V P   L V S S G E I   A E D F T H Y F A L S S E Q Q Q I P P T S V V S L G G				
UniRef90_D8FI63	D N G L K E P Y H G T V P   L I S S G E I   G E D D L A N Y Y F L K S S E Q Q Q I P P T S V V S L G G				
UniRef90_UPI00040D9FBFB	D L G L K E P Y V G Q V P   I Q T G E I   A E D D L T Y Y Y F T V S S E Q Q Q I P P T S V V S L G G				
UniRef90_R6NZG5	D Y G S G D P Y I G Q V E   L V S S G E I   A E D I T N Y Y F A T S S E Q Q Q I P P T V C A L L G G				
UniRef90_F2JLX2	D L G L K E P Y S G Q V P   M L I S S G E I   A E D I S Y Y F A V V S S E Q Q Q I P P T V C A L L G G				
UniRef90_UPI0003B6B8D6	D L G L K L E P Y V G S Q V P   M L I S S G E I   A E D I S Y Y F A V V S S E Q Q Q I P P T V C A L L G G				
UniRef90_I7KGH4	D L G L K L N K E P Y T G E   V P I V S S G E I   A E D F T Y Y Y L A K S S E Q Q Q I P P T V C A L L G G				
UniRef90_UPI0003B70764	D L G L K L K E P Y R G A S P   I I S S G E I   A E D F T Y Y Y F A V V S S E Q Q Q I P P T S S V V G L G G				
UniRef90_UPI00047CF2CB	D I G L K E P Y V G S Y P   I S T G E I   A E D F T A S Y Y F T Y S S E Q Q Q I P P T V C A L L G G				
UniRef90_L0MMF4	T P A E G E R Y Q G V V A   L E G E T L   A E C L E A N Y Y F R Q S S E Q Q Q I P P T V C A L L G G				
UniRef90_R5VKT4	D L G L K E P Y V G M C P   L V S S G E I   A E D I A S Y Y F A T S S E Q Q Q I P P T V C A L L G G				
UniRef90_R5X4F5	D L G L K E P Y I V G S Y P   L V S S G E I   A E D F T H Y Y F A L L S S E Q Q Q I P P T V C A L L G G				
UniRef90_W7UUR0	D M G L K E P Y V G V P   I V S S G E I   A E D I A S Y Y Y A T S S E Q Q Q I P P T V C A L L G G				
UniRef90_E4KMT4	T I E D S E P Y V G Q V P   I V S S G E I   A E D F T Y Y Y A T S S E Q Q Q I P P T V C A L L G G				
UniRef90_UPI00047CEDE1	D M G L K E P Y I G Q V P   I Y T G E I   G D D L A Y Y Y F T T S S E Q Q Q I P P T V C A L L G G				
UniRef90_C0EJ62	D L G M K E P Y C S Q V P   I T S S G E I   V A E D I T Y Y Y A T S S E Q Q Q I P P T V C A L L G G				
UniRef90_F7V4F6	D L G L K D P Y V S T V L   Q S S G E I   I G D D L T Y Y Y F A A S S E Q Q Q I P P T V C A L L G G				
UniRef90_F8IQJ3	D T G G L R S Y Y T S S S E I   V S S G E I   A E D D F T Y Y Y F A A S S E Q Q Q I P P T V C A L L G G				
UniRef90_R5MEE1	D L G L K E P Y I G K T P   I V S S G E I   A E D I T S Y Y A V V S S E Q Q Q I P P T V C A L L G G				
UniRef90_D5X8S4	D L G L K L E P Y T G S V P   I R T G E I   G D D L A A Y Y F L V S S E Q Q Q I P P T V C A L L G G				
UniRef90_E5V3T8	D L G L L N E K Y T T S S P   I V S S G E I   A E D F T Y Y Y F A A S S E Q Q Q I P P T V C A L L G G				
UniRef90_A6TNN7	D L G M K K P Y V G T A P   I V S S G E I   I G E D F A T Y Y Y F L N S S E Q Q Q I P P T V C A L L G G				
UniRef90_A1HMV9	F T G L K R P F T G S A P   I V S S G E I   A E D V T N Y Y L L T S S E Q Q Q I P P T V C A L L G G				
UniRef90_D4KD98	F T G L K D P I T G S C   E I V S S G E I   A E D D L T N Y Y L Y T S S E Q Q Q I P P T V C A L L G G				
UniRef90_H1LGM2	T S E G E D P Y T S S V P   I T S S G E I   G D D F T Y Y Y L A Q S S E Q Q Q I P P T V C A L L G G				
UniRef90_R6T4Z0	D Y G T T G E P Y T G V I P   I V S S G E I   A E D F T Y Y Y A N S S E Q Q Q I P P T V C A L L G G				
UniRef90_F9MTB6	D L G L K E P Y V G R V S P   I V S S G E I   A D D F A N Y Y F V Q S S E Q Q Q I P P T V C A L L G G				
UniRef90_UPI00046F0804	D L G M K E P F S G Q V P   I V D S E I   G S D F T Y Y Y M A V V S S E Q Q Q I P P T V C A L L G G				
UniRef90_P8MMW4	D L G M K E P Y M Y Q M V P   I V D S E I   G S D F T Y Y Y M A V V S S E Q Q Q I P P T V C A L L G G				

	170	180	190	200
UniRef90_R7NA55	V L M N K D N T V R E A G G F	I I Q L M P N A T D E F I D K L	E K R I K E I I K S	
UniRef90_UP10002897862	V L V D R D L S I K A A G G F	I I Q M M P G A S D F V A D I I	S Y R L Q E I I P S S	
UniRef90_D4N1F3	V L M N K D N T V R Q A G G F	I I Q M M P Y A E E E T I S K L	E E K K I A E F K S	
UniRef90_UP100046A9EDA	V F V Q P N E T V G A A G G F	I I Q T L P G A G D A D I D K I	E N N L K I V P N	
UniRef90_I0R5R1	V L L N K D N T V K A S G G F	I I Q L M P G C P D E A I D K L	E A K I I N N L S P P	
UniRef90_UP1000289602B	V L V N T D D S I L A A G G F	I I Q V L M P G V D D E T I T K I	E T A L S S N I E P P	
UniRef90_E6SJB2	V L V N P A G D V R A A G G F	I I Q L P G H P G H W A E R L	E D N R Q L Q G	
UniRef90_UP10004077D9F	V L V N P D N T I Q A A G G F	I I Q V L P S A S E E T I N R L	N E R A K E M T P	
UniRef90_C6PZ71	V L V D T D L S I K A A G G F	I I Q M M P G A N D L T A D L	V T Y R L Q E I I P S S	
UniRef90_V2ZAH1	V L V E R D Y S V K R A G G F	I I Q L M P G A S D A T I D A I	E K K I I P M V T S S	
UniRef90_S0FP42	V L V D K D G V T S A G G F	I I Q L M P G A E E E T V E K L	E K R L I G F P S S	
UniRef90_E0I8Y1	V L V D T D G S V L H A G G Y	I I Q V L P G L T E E E L T R L	E Q A V S T M P P	
UniRef90_R5KKH0	V L M E K N N T V K Q A G G F	I I Q L M P F A S E E L I S D L	L E K R L G E F T S S	
UniRef90_D9QPK8	V L V D T D L S V K A A G G F	I I Q L L P E A S E E T I E Q L	E E N L A E I I E S S	
UniRef90_T0NJB8	V L V D T N L T I K A A G G F	I I Q M M P G A S E F V A D I	L S Y R L Q E I I P S S	
UniRef90_R5Y4T4	V L V N P D L S I K A A G G F	I I Q L L P T A M D D T I D A V	E R C I K D I V P	
UniRef90_H1HRI0	V L M N Q D N T V R C A G G F	I I Q V L M P G C P E E V I T A L	E D R L K T V G S S	
UniRef90_D6XV61	V L I G E E E K V L A S G G F	I I Q L M P E A S D A T I D E V	E R I L Q G L I P S S	
UniRef90_UP1000477E4C3	V L V D T D L S V K A A G G F	I I Q L L P D A T E E T I T Q L	E S N L S K I I N S	
UniRef90_F4FRY4	V F V N D D N S I G A A G G Y	I I Q V L P D A T D D T I N Q V	D R I K Q M P M	
UniRef90_R7IRW2	V L M N M H N N T V K Q A G G F	I I Q L M P F A E D E V I D R L	E A K I K E I I T S S	
UniRef90_D4JC36	V L M E K N N T V K Q A G G F	I I Q L Q L M P F T E D A V I D K L	E E N V K K L I P S S	
UniRef90_G2T274	V L V N P D R S V R Q A G G F	I I Q L M P F T P D D V V D R L	E K K I T E I I A S S P	
UniRef90_W4CJ13	V L V D T D N S V I V S G G F	I I Q M Q L P G L T D P E I T A I	E N A I S T L L P P	
UniRef90_I5ATJ9	V L L N T D Q T V R C A G G F	I I Q L L P G C E D A T I D R I	E A R L T S V H S	
UniRef90_U2FMQ4	V L V E P D N S V S A A G G F	I I Q V M P G A T E E T I K K I	E T N L G K I I K S	
UniRef90_S7TWK8	V F A D A S G I T A A G G F	I I Q T L P P A D E T V I D T L	S R R I E T L L P P	
UniRef90_W8U7M4	V L I D K D Y S V K A A G G F	I I Q P L P D A A E E S I A R L	E E N I S G M K P	
UniRef90_UP10003FC52A3	V V V G E E D K V E G A G G F	I I Q I M P D A S E E V L D E I	E A R L H A L L P P	
UniRef90_V7I500	V L V D T D G S V K K A A G G F	I I Q M M P G A N E H I A D I	M Y R L E E I I P S S	
UniRef90_UP10002196E15	V D I D G K N N V Q S A G G Y	I I Q V M P G A S D E A I D K L	E K K A L K T A P S	
UniRef90_R7C9S5	V L M N K N N T V Q S A G G Y	I I Q L M P D V E E E T I E I I	A S I E P K R L	
UniRef90_R5BZJ7	V L M G R E N T V R Q A G G F	I I Q V M P F A E E A V I S Q L	E D D N K K G I T S S	
UniRef90_W3ALC8	V L M N K N N T V K Q S G G F	I I Q L M P D A T D E V I S K L	E A K L S S G I I R S S	
UniRef90_UP10003F4F040	V L I I N P D E S V K E A G G F	I I Q L L P F A K E E T I D Q L	E K K N I K S F S S S	
UniRef90_B8CWZ9	V L V D K G A R V R A S G G F	I I Q M Q L P D H G D N V V S I	E T R L N K N K L I K D M P	
UniRef90_G4D437	V L V D V D Y S V K A A G G F	I I Q M Q L P G A D D E C I S K I	E Q N I I S K I I K S S	
UniRef90_L1Q7U3	V L V D T D Y S I K V A G G F	I I Q M L P G A D E F L A D I	T Y R L E E N I I S T K I I H S S	
UniRef90_UP10004662DF0	V L M E K D N T V R C A G G F	I I Q V M P F V E E Q V L V I R L	E E N I I S T K I I H S S	
UniRef90_D4J0T9	V L M N K D N T V N C A G G F	I I Q L M P F T S E E V I A Q L	E E N I I K T L L P	
UniRef90_V7HY56	V F V N A D N T I E V A G G F	I I Q V L P G A S E E T I A S L	E T K K I K D M P	
UniRef90_B8E253	V Y V N K D G R V I S A G G Y	I I Q V L I E N A D N D M V D I	L E S N I I K N L I D P	
UniRef90_U4TK0	V F V Q A N N T I G A A G G F	I I Q A L P D A G D A E L A A V	E K K A V R G G L I P	
UniRef90_M1MGV1	V L V D T D L S I K A A G G F	I I Q V M M P G A D E F L A D V	I T Y R L Q E I I P P	
UniRef90_UP100047EDD4B	V L V D R D Y S V L T A G G Y	I I Q M Q L P G A D A E V V E A I	E A E L I G Q	
UniRef90_R6CQ98	V L V N P D L T V S A A G G Y	I I Q L L P G A D E E V I I S H	V E E N G I K K L I P P	
UniRef90_R6DLU3	V L L D K E N F V K Q A G G F	I I Q V M P F A E D E V I D K V	E E S L K H I V H S	
UniRef90_UP100036A5C1E	V L V N P D E T V Q S A G G F	I I Q V L P H A S E E T I Q K L	E N V L T K V T H	
UniRef90_Q39ZN3	V F V E P D G A V A A A G G F	I I Q S L P P H N D E A V D R L	M E R I G A M P P	
UniRef90_K8DXN3	V L V E T D N S V A A A A G G L	I I Q L L P H A G E E V L E Q L	E H N L A G L I P R	
UniRef90_R9L017	V L M E K D N T V K Q A G G F	I I Q L M P F A E D E T I N V L	E E K L K S M D S	
UniRef90_R6TGW6	V L V D T N N M A T S S G G F	I I Q V L M P N T S E E V I Y K L	E E K L K L I P T	
UniRef90_Q97GJ6	V L V D K D L S I K A S G G F	I I Q M M P G A D D L V A D L	T Y R L Q E I I P S	
UniRef90_N9WGA7	V L V D K D L S I K C A G G F	I I Q M M P D A D E L L A D V	T Y R L Q E E M P P	
UniRef90_G9YM12	V L V D V D Q S V Q C A G G Y	I I Q L L P G A D D A A I S A I	E Q G I A R V G G P	
UniRef90_UP1000410A40B	V L V N K D L S I M E A G G F	I I Q L M P D A T E E V I S K L	E S N I Q G M P T	
UniRef90_R6NNQ0	V L V D T D N S V I S A G G F	I I Q L M P E A T E E M A V Q L	E D I L K E L P P	
UniRef90_UP10004673920	V L V E R E N S V I A A G G F	I I Q L L P F A D D A T I S H	E E N L N K F T S	
UniRef90_R7G7S9	V L V D T D N S I K A A G G M	I I Q M M P D A K E E D I V K I	E Q I V A N M K H	
UniRef90_B0TGU1	V L I D V D G S V K S A G G Y	I I Q L M P G A D D T M I D Q L	E A R I A R I I G S	
UniRef90_R6ULX8	V L V N Q D K S V A C A G G F	I I Q L L P A A D E N T V S A L E	K K C I S D V R P	
UniRef90_UP10003B6304C	V F V E P D N T V K V A G G F	I I Q T L P A A T D E Q I A R I	E E V L K K L L P P	
UniRef90_C5VTP8	V L V D K D L S I K E A G G I	I I Q M M P G A D E M L A D L	T Y R L Q D L L G S S	
UniRef90_UP10003655E36	V L T T A T E V E Q A G G G	I I Q L L P D A T E E T I A T L	E Q N I V A K L L K S S	
UniRef90_D8FI63	V L V D K D I T I K A S A G G F	I I Q M M P G A G E E I I R K L	E E N L K T L L K S S	
UniRef90_UP100040D9BFB	V L V D K D Y S I K A A G G F	I I Q M M P G A D P L L A D L	M Y R L E E V P P S S	
UniRef90_R6NZG5	V L I N E D G E V M L A G G G	I I Q L L P G A F E D T I E K L	E K N L E T L E P	
UniRef90_F2JLX2	V L V D V D Y S I R Q A G G G	I I Q V L P D A D D D A I T Q L	E K K I K G F K S	
UniRef90_UP10003B6B8D6	V L V D R D G T I L A A G G F	I I Q V L P K A T E E S E L E E K L	E A K L K D F P P	
UniRef90_I7KGH4	V F V E P N N S I G A A G G F	I I Q V L P M Q A L P G A S D E L L	E K K I K Q L P H	
UniRef90_UP10003B70764	V L V K G E Q I L V A G G Y	I I Q V M P G A S D E V I T R L	E T A I E E L T S P	
UniRef90_UP100047CF2CB	I L I I D T D Y T I K A S G G G	I I Q V M P D I S E E I L T K L	E T K L Q T I I E P	
UniRef90_L0MMF4	I R T G E A D G Q P A A G G M	I I Q V L P A Q D E Q N A D D F D H	L V Q L T A T	
UniRef90_R5VKT4	V L V N P D L H V K A A G G Y	I I Q V L P F A S D A C I D Q L	E K K N I Q G L P H	
UniRef90_R5X4F5	V I T K E D G S V E Q A G G F	I I Q V L P F A S E E T I A T L	E K N N I K D I I P S S	
UniRef90_W7UURO	V L V N P D L S V K S A G G F	I I Q V L P F A D E K C I D V I	E K N N I A G I R P	
UniRef90_E4KMT4	V L V A P D E S V L A A G G F	I I Q V L P G A S E E T I T A L	E D R L Q A L G R	
UniRef90_UP100047CEDE1	V L V E K D L T I K A A G G F	I I Q M L P G H N E L T A D L	V T Y R L E E I I P S S	
UniRef90_C0EJ62	V L V N P D L T V C S A G G F	I I Q L L P F A D E A C I D L	I E E N L K K D L L P P	
UniRef90_F7V4F6	V L M N T D N T V K T A G G F	I I Q L L P F A S E E T V A E L	E K R I S R V T S S	
UniRef90_F8IJQ3	V L V G T D N D V P I V A G G F	I I Q L M P G H T E D D A A Y V	E E R L A E V P P S S	
UniRef90_R5MEE1	V L T E H D G E I I C A G G F	I I Q L P T A D D T I I E R V E	E E S I K D L P P	
UniRef90_D5X8S4	V L V N P D G T V Q S S G G Y	I I Q L M P G V K D E Q I E E I	E N I Y S L I Q P P	
UniRef90_E5V3T8	V L V D T D N S V I A A G G F	I I Q V L P Q A T D A T I T K L	E K V I S N I K P P	
UniRef90_A6TN77	V L I D I D Y R I K A S G G F	I I Q V L P N V Q E A V L A K L	E S R I I G Q L L E S	
UniRef90_G1AMV9	V L V G P D Y T V Q A A G G F	I I Q V L P G A A D E V I D K L	E Q N I L A S L R P P	
UniRef90_D4KD98	V L V N P D L K V A A A G G F	I I Q L L P D A T E E T I T K L	E N N L A K I I R P P	
UniRef90_H1LGM2	V F V N G D D M I G A A G G Y	I I Q A L P G A K D E A I N K V	I D H I Q A M P A	
UniRef90_R6TZ40	V L L D K D G A L L A G G M	I I Q L L P G A T Q D I C D K L	E A N I K K I L E S S	
UniRef90_F9MTB6	V L V E K D R T V K T A G G F	I I Q M M P G V A D Q E V D Q L	V E E A V K K I I G S S	
UniRef90_UP100046F0804	V Y V V D T D D S I I S A G G F	I I Q L M P G A T E E T I T E L	E E R L A K L I P Q P	
UniRef90_R6MYW4	V L C D K E G E A L L S G G	I I Q L L P A A G E E A V A R L	E K N I S L E P	

	210	220	230
UniRef90_R7NA55	V T N M L D E G M T P E D I L E H I L G D D L Q I L D T V P T E F		
UniRef90_UPI0002897862	V T T M I S D G K T V Q D I L I N S L F D D D V K F Y D E G V L E F		
UniRef90_D4N1F3	V T Y A L E H E H T P E K E M M E D L L G D D M K I Y E K V P T Q F		
UniRef90_UPI00046A9EDAA	L S T L L N E G L T N E E V M N K L M G I D M K V L D T M P V Q F		
UniRef90_I0R5R1	I T T M L S D G M L P N D I L L K H I L G D N P E F N E S L D L S F F		
UniRef90_UPI000289602B	V S K M I E K G Y S P E E I L N A V L G E D V F D L D T L P I S F F		
UniRef90_E6SJB2	I S R L I D A G L T P Q A M V E R L A G L G P R I L D R Q P A F F		
UniRef90_UPI0004077D9F	V S K L L A K G M T P N Q I L D E A I G E E W R Q L S E M P V S F F		
UniRef90_C6PZ71	I T E M M T K G M N I E E I L N Y I F E D D L K I L D S C T P Y Y		
UniRef90_V2ZAH1	V T G M L D E D M T P E E I L T F I L E D G V E I T D K A E T S F		
UniRef90_S0FP42	I S K L L A D G A T P E E Q I L D M L L E D N P R V I E K I P T S F		
UniRef90_E0I8Y1	V T A L L D Q G G E T P E E I L K F K L V G D D L T I H D T T D I H F		
UniRef90_R5KKH0	I T A L L D Q G G M E P L D I V K Q I F G Y N V E V T D T P T K W		
UniRef90_D9QPK8	V S R L I D H G L S P E E L L L E K I L G G F E F R T L A E K E V I Y		
UniRef90_T0NJ8B	V T S M I T E G M T I E D I L K Y I F E D D L K I L D D I L T S K P E Y		
UniRef90_R5Y4T4	V T S M L C L G S P E E D I C Q K V L N E E D L K I L D D I L T D K L P C R F		
UniRef90_H1HRI0	V T S F L I K E G K T P E E D I L A W I F G R E L K I L D D I L T D K L P C R F		
UniRef90_D6XV61	V T E M L I S E G G M T P P E E D I V A R L L S G G G T H R I V L L E K L D T A F		
UniRef90_UPI000477E4C3	V S A L I L E S G G L T P P E E I L E K L L G G F F E R V L E K A D V K F		
UniRef90_F4FRY4	I S E L L L D N Q S P E E D I L E L I F G K Q L H F E T V P V E F		
UniRef90_R7IRW2	I T A L L L D E G L T P E E Q I L E K V L G E G L E I N D K I P T R Y		
UniRef90_D4JC36	V T T M L E E G E T P E E S M I R R V L G F D D V E F Y E E T P T G Y		
UniRef90_G2T274	V T E M L E D G K T P E E I L E L I G E G L E I N D T V D A A F		
UniRef90_W4CJ13	V T T		
UniRef90_I5ATJ9	V T Q M L D Q G G M S P E E M L E Y I F G M D L E I L D T P T G F		
UniRef90_U2FMQ4	V S S M V A D G Y T P E D I I V K E I C N E G Y R I L D Q M Q I A Y		
UniRef90_S7TWK8	V T E M L H A S L T P P E E I L D K I F G G P I D V L L E K R A L T F		
UniRef90_W8U7M4	I T A L I E E G K T P P E D I M N I V L G F E P E V L L E K Y E V D Y		
UniRef90_UPI0003FC52A3	V S A M I I Q R G D T P E Q I I M Q L A G E N Y Q V L E T Q E A R F		
UniRef90_V7I500	L T A M L S E G K S I K D I I S Y I F E D M L E I H E E K		
UniRef90_UPI0002196E15	I S S M L E K K D P N P D H I L D E I L F G D Q L L D I V D H L P V E F		
UniRef90_R7C9S5	V T T L F E F K G H S P P E S I L A A I L D F E L L E L S E E K P V C F		
UniRef90_R5BZJ7	V T G L L D E G N T P E E Q I L E R E R L L G G L N L E L S D T L P V R F		
UniRef90_W3ALC8	V T S M L D D G M T P P E E M L M Q F I L G D D L E I N D H P V R F		
UniRef90_UPI0003F4F040	V T D V L K A G K T P P E E M L E I I L L H		
UniRef90_B8CWZ9	I S R K I D N G M T P P E D M V D L L G L D W D I K S R V D L K F		
UniRef90_G4D437	I T S M L D E G M T P P E Q I V E A V M G F E I K I L D K K G L F		
UniRef90_L1Q7U3	L T T M L N E G K T M D D D I L L D Y I F G G D D L K I L E E M K P E F		
UniRef90_UPI0004662DF0	V T A L L L E Q G Q H T P P E E S L L Q E I V L G M D I E I T D T L P T A F		
UniRef90_D4J0T9	V T D M L I S S S G K T P P E Q M L E T V L G L D D V D F K E T Y P A A Y		
UniRef90_V7HY56	V S Q M M R E G M K P P E D I L N W L F G E D V D I L A R D T V K F		
UniRef90_B8E253	P S K M I L E G K T P P E E I M S K I F K D D Y E Q F S R E Y L K Y		
UniRef90_U4TKN0	I S E M M R G G D T P P E D I L T K I F G E Q L K F I D R T P V A F		
UniRef90_M1MGV1	I S T L I S E G K S I E E I L E E F I F G M D L K I L L D S M N P E Y		
UniRef90_UPI00047EDD4B	V T P A L S Q G M L S S E E L L R K V L S F E L E I L E D T T P V E Y		
UniRef90_R6CQ98	V S S M I S Q G M T P P Q Q I A F A A L G F E P N V I D E Y E M G Y		
UniRef90_R6DLU3	V T S L L E Q G M T P P E D M H H I L L G D D L E I L D R M P A Q Y		
UniRef90_UPI00036A5C1E	L S Q W F Q D E I S T E E I L L K K L V G N D Y Q V I E K I P V R W		
UniRef90_Q39ZN3	V T E L L R Q G K S P P E E G I L L E Y L F G I P Y D T L E K R A L A F		
UniRef90_K8DXN3	L S S L I K E G E T P D E D I I K R V T G L A V K L L E A R P V S F		
UniRef90_R9L017	V T N L L D A G N T P P E Q		
UniRef90_R6TGW6	V S E M L S S G G Y T V E E D M I Y N I A E D V Q I L E K P L N F		
UniRef90_Q97GJ6	I T D L I A K G M S V V E D I L E F I F E D D L K I L L D E		
UniRef90_N9WGA7	I T T L L D Q G K D I K E I L E M I F E D D I N F L E E E P S Y		
UniRef90_G9YM12	V T E A L R G G G L S A R E L V E Q V L S E Q L E I L S E E P V E Y		
UniRef90_UPI000410A40B	V T D I L R D G K T P P E D I L L S M V L G L S M E I T D T R P V E Y		
UniRef90_R6NNQ0	V T T M I K E G M T A E D I L L F R V		
UniRef90_UPI0004673920	V T D I L K A G K T P P E E I L L N I V L G F D I E I T D T P D L N F		
UniRef90_R7G7S9	I S S Y I L E K E S L E A I L E E L F G D D L Q I L S K Q D I C F		
UniRef90_B0TGU1	I S Q Y W S T G K S V R D I M E E L L G M E P K V L A A Y R P E F		
UniRef90_R6ULX8	V T T M L I A E G M T P P E D I C R T V P G F D M E I I L D S F D I A Y		
UniRef90_UPI0003B6304C	V T S L L Q E G G F T P E T I L E R I F G E N V K V L L K R P P L A Y		
UniRef90_C5VTP8	I T S F L I S K G K D I Y D M I F D D D L D P K I I D I C V K F		
UniRef90_UPI0003655E36	V T T M L S E G M T P D D I L L N L V L G D P K I I D I C V K F		
UniRef90_D8F163	I S H L V A Q G G Y D A Y D I L L E K I I S G G F D V K I I L E K K E I S Y		
UniRef90_UPI00040D9BFB	I T T M I S E G K T I E E I L E F I F G M D L K I I L D E V E P K Y		
UniRef90_R6NZG5	V T T M L I A K G M S I L D I C K A L A G F E V E V I D E Y P V K Y		
UniRef90_F2JLX2	L T T A C L E K G Q S I E Y V L E N L L G E I E I V I M D T T E V R F		
UniRef90_UPI0003B6B8D6	V T S L L L S S G K T P P E E I L L Q M I F P N L Q Q I L E K R P P L A W		
UniRef90_I7KGH4	L S T L L L D G G L T P E P K L A E Q I L G D D D C K I I L D K Q E V A F		
UniRef90_UPI0003B70764	I S E L L H Q G V T A E E I L L V R L M G E G T E I L H Q K P V S F		
UniRef90_UPI00047CF2CB	I T T L L M E R G M T L E E I L L Q H V L G D G V K I I L E E Y E V D F		
UniRef90_L0MMF4	I K N E E L F T L P A N E V L L Y R L Y H E E V T L L Y E P Q P V V F		
UniRef90_R5VKT4	V T K L L L T D G M T P D Q I A L R L L G L E P N I L L D E A T V S Y		
UniRef90_R5X4F5	V T T L L K A G N K P E D I V E M V L K D P K I I V C E V G F		
UniRef90_W7UUR0	V S A M I L D E G I T P E E I A G M L G L E P N V I D T A E P V Y		
UniRef90_E4KMT4	F S D L I D Q G K S I L E E I A D I L V G G N Y R E I D R Q A L S F		
UniRef90_UPI00047CEDE1	I T K L L I S D G G M S I E E I L D F I F E D D L K I I L G E M K P E Y		
UniRef90_C0EJ62	V S E L L F R T G M T P E Q I V C M R I L L G M E P N I L L D E S E V R Y		
UniRef90_F7V4F6	V T D L L L D R L G T P E A M I L E D I L G M G L Q I I T D T V P A A F		
UniRef90_F8IJQ3	V T G F L E K Y P A A D A L L F K I I F P D A H I I L A M Q D V R F		
UniRef90_R5MEE1	V T K M L I S D G G M T P P E E I C K K L S K F N L Q I L L D E T N T A Y		
UniRef90_D5X8S4	I S T L V S I G W G P R R I L E E I L H L D F K Q I L E E T E L R F		
UniRef90_E5V3T8	I S T L L I H E G K T P E E I A D I L F E N Y R I I L K R N D V V F		
UniRef90_A6TN7	I T V M M E G M G N E V D I L H V L E G M D P K I I V E T Y E V D F		
UniRef90_A1HMV9	V S H L I K A G Y G A A D I L E K I I F G L S I N L Y E P K K L T F		
UniRef90_D4DK98	V S T M V K D G L D A R G I A E L I F D K I I D Y L T T D L L A F		
UniRef90_H1LGM2	I S E T L L D G E A P E T I L E Q V F F G K G L H F I L K L P V A A F		
UniRef90_R6TZ40	V T T M M A K G M A P L D M C I R A L L G Q D P E I L D E M P V V P		
UniRef90_F9MTB6	V T D Y F K T G K G P E D I L I R D L L G Q D P E I L D E S R P I A Y		
UniRef90_UPI00046F0804	V T Y E M M A A G D T P E D M L E R I I L G E Q V N I L L S T E P I R Y		
UniRef90_PCMWY4	V T M A L K C I S F M A K I C F E C G C V Y A V Y		

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1 10 20 30 40  
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 D R I I R A T A K D G A I R I I G A T T T N L L N E A I R I H K T T P T A S C  
 M D K I I R T I T S D G S L M A A A I D S S K I V Y T A Q K V H G L S K T A C A  
 M G R V L R A I S E D G G V V V M T A I D S T D I V A R A E E Q I H E S S A V V T A  
 D Q L I R A T A A A D G I R A V G V I T T R L T E E A K Q R H K L S P I A T A  
 D Y L V R A I A K S G S V V R A L A C V T T A T V G A I C K R H D T L P T A T A  
 D Q L I R A T A A D G G I R A V G V I T T R L T E E A K Q R H K L S Y V V A T A  
 M S N L I R G I S E N G G V V F C G V D S T E I V R T A E K L H T T S A T C S A  
 D Y L V R G T A A E G Q I R A F A C S T R N T A E E Q R R I H N T S P I A T A  
 D Q L I R A T A A N G G I R A I G V I T T K A V E E A R R R H N L S Y V V A S A  
 R I I I K F L A Y E G R A L V K C I D S T N I V E E A R K I H D L S P T V T A  
 M D K I I R A T A K G G M I R I I A G E T T N L V S E G A R I H E C T P T A A S  
 M D K I I T R C I T H D G A V M A A A I D S T E T V F T A Q K I H N T S P V V A T A  
 D Y L V R A V A N G G Q I L A L V A R S T E L V R E A R R L H G T S P T A T A  
 M D R R I R A I T A D A A I Q I T A V E T T G M V E R A R N I H K T L P L A T A  
 D Y L I K A I N A S K D L R L T I N G K D L V A E A Q K R H D T W S A S S A  
 M D Q L V K A I A A G G A L R A Y A A V T T D A V A E A A M R H D C Y P V A A A  
 D K I I L K S I S K N G H F R A F A L D S T L T V R E A Q E R H Q T M P T S T V  
 D K I I I K F L A Y N N K K V S I V C A K T T S L V E E T R K I H D L S P P V A T A  
 D Y L V R A T A A D G Q I R A Y A A V T T R E L C A H A H K I H N T S P A A T V  
 D Y T V K A Y C Y N E Y L R I Y A C C S T E L V T A R K I H G T W P T A T A  
 D Y M I R A V A A N N Q I R A F A I T S K H L V E Q A R V Y H N T S P V I T A  
 D Q I I I K F L A Y N G K I S V V C C S T T N L V E E A R K L H D L S P L S T A  
 D K L I R A T A A D N G I R A V G V I T T R L T E E A R Q R H N L S Y V V A T A  
 D E L V R A I T A D G L V K A V A I T G R D L V E E R A R Q I H T L P V A T A  
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 D E I I I D C L A Y N G K V S I V C C S S R E I V E K A R K L H D L S P T A S A  
 D Q L I Y R F L F E S H S V R G E L V S V S E T Y Q R M L E N H H F P Q P V Q R  
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 M E Y I I I R A M T R D G S A R A V A I I S T D I V N E A V K M K H T S P T A T A  
 N K M I R A T A K D G S V K I I A A T T T E M I N K M I K I H N T S S V V A S A  
 M G Y I L R A I D E T E T I K I S A A I T D V V E E A A R I H K L S K A T S A  
 D Y I V R A I S T D G L V Q A A A I C S R G I T E R A R Q I H H T S P V A T A  
 D H I R A T A P G I R A F A A I T T N L V E E A R G R H T C Y P T A T A  
 D Q L L K A L V L N E H V R L Y I V R T T D L V Q E A Q D R F D L H P C A C A  
 N Y A L I A T A Y D N M A R I Y I Y G N T N L V E E A R Q I H K T L P T A T A  
 M D K L I K S I A T S G F F R A Y V L D S T E T V K E A Q E K H Q T L S S S T V  
 N Y V I R S I D K K Q N V R I F I A D T T Q L V Q E I R E I H E S S A T G T A  
 M D R I I R A T A A D G F I K M S A V S A K E T V Q R A K D I H N C T P T T A A  
 M G R I V R A I S K D A S V V C S A I D G K D I V E E I R V H E S S A V V V T A  
 D T L V R A V T T D G N F R A I A I D A T E E M M A E V S K F H E A S Q L G T T  
 D Q L I R A M A A E G G I R A V G V I T T R L T E E A R Q R H K L S W V V A S V  
 D Y L T K V M A F N G Q F R I Y V A N T T Q L V T R A Q Q I H N T K P L A A V  
 M G R L L R A I S D N K T I N M I A I D S K D M V E E A R K V H Q C T P V A T A  
 D Q L I R A T A A D G G I R A V G V L I S T Q L T E E A R R R H K K M S A V V A T A  
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 D N L I T R F I L F E E D A V R G E L V T L E Q T Y Q A I L D N H D Y P P A V Q H  
 D K I I K C L A Y N G K I S V I C A N T E L V E K A R K I H D L S P V T T A  
 V T R A M T R D G S A R I L V I N S R D I V N R A I E Y H H T E P T A T A  
 M D K I I K T I S K S G S F R A F V L D S T E T V R A A Q E Y H Q T Q A S S T V  
 D Q L I I K A L I A Y Q D Q V R V F V V D A T Q A V A Q A Q Q R H D T W H T A T A  
 K I I R A L I A Y N D E I R V F V I D G L E V V E T A R K T H E T W Y T A T A  
 D Y L I K S T G Y D G K V R A Y A L V A T E M V N E A V R R Q G T W P T A S A  
 D S T Q R F L F D D T D I R G E M V I S L T D T Y S H V L A K H P Y P R P V A Q  
 D Y V L K A T A G N G Q I R V F A A T T Q G L A E T A R R L H Q T S P V V T Q  
 D Q L V R A T A A Q G R I R A V G V L S T R L T E E A R G R H K L S Y V V A T A  
 D Y L V R A L G F N G E V R A F A A R T K T V Y E T Q L R H Q T T P V A S A  
 D Q L V R A L G F N G E V R G E L V Q L N Q T T K D I L G G H H Y P L A I Q R  
 D Q F I K A I T K N K Y F R T F A V N G T N L V H Q A A Q I H E T S R I A A V  
 M A Q I I R A L S K D K N I A I F I M E S T D I V E Y E Y A C K I H N L P P I P A A  
 D E I I W L G T L L E G Q A R W V V A K T T D L V E E A R S R H Q T S P V A T A  
 D I L L N R Y V F D N A D V R Q G I V Q L R E K S Y Q E I L S A H T Y P E A I A R  
 D Q L S R Y V F E D H H V R G E L V Q L R E S Y Q Q I I E N H D Y P A P I K K  
 D Y G V I A V T R E D A L R A F I V K T T N L C E I A R L R H K L S P M A T A  
 D Q L H R F L F E Q H V A R G E M I T V D N T F A Q I L E N H D Y P E A V K T  
 D Q I Q R F L F D D T N V R G E L V T L E Q A Y A E V E L D R H D Y P A P V N R  
 D I L L N R Y F E D L S V R G E L V Q L D S A Y Q S I I A N K N Y P V P L Q G  
 D T L V K A M A G D F R I Y A A R T T H L V G E A V R R H D C L P V A A A  
 D Q L H R Y L F E E Y E V R G E L V Q L D Q T Y R H I V D A Q S Y P L Q I Q R  
 D H L V K A V A D G V R A Y A A V T T N L V N E A I R R H D C Y P V A A A  
 D Q L H R F L F E D A Q V R G E L V Q L D Q S F Q A I L A N H Q Y P A P I Q R  
 D A L S R F L F E K S A V R G E L V T V T E T Y Q S I L E N H H Y P E E P V Q H  
 D E L W I G T M L E G R A R W V V A R T T D T V E E A R K R H G L S P V A A A  
 D Y M V I A V P K R E P A R V Y V V K A T G A V E T A R R I H G L S P P G A T V  
 D Q L I R A T A A E G G I R A V G G A I S T K L T E E A R H R H K L S Y V V A S A  
 M D T L N R F L F D N H H P I R G E I T R L E Q T Y Q A I L D N H N Y P I A V Q K  
 D Q S Q R F L F D D T D V R G E L V M V D L E R S Y S E V L V A K H P Y P E P V A Q  
 D Q L H R Y L F D H Y Q V R G E L V Q L Q Q S F Q V Q V L S G Q A Y Y P V P V Q R  
 M D K L I K T I S E N G H F R A F V L D S T E T V R I A Q E K H D S M A S S T V  
 M A R L L I R G A S K N A R F F I V D S K D V V Q K A Q D I H K C S P T A I A  
 D F T Q R F L F D D T D V R G E L V S L G E S Y A H V L A K H P Y P E P V A Q  
 D F T Q R F L F D E T D V R G E L V A T L D R S Y V E V L V A K H A Y P E P V A Q  
 M S R L L R G V S K N A R F V L V D T K D L V Q E A L D I H K C S P T A I S  
 D Q L H R Y L F E N Y A V R G E L V T V S E T L D Q I L T N H Q Y P Q P V K Q  
 D F L L N R Y L F D G V I S V R G E L V Q L G D T Y Q Q I L S S T D Y P A P I R T  
 D Q L Y R Y L F K D R A V R G E L W V R L N Q T F N D T L N T H H Y P Q A V R N  
 D Q L Q R F L F D D F D I R G E I I A N A D N S F N E I I K N H D Y P L E V A N K  
 D S S L L N R Y L F D G A A V R G E L V Q L S Q T Y Q Q I I A D K N Y P A P V A K  
 M G K I I Y S T I S K D K T I K M R F A D T T D V V N D A R L A H G L C K T A A C  
 D T L V R A M G S E G V A F A C V T T R L V E E A R R R H G A A P T A A A  
 D S S L L H R Y L F D G V I S V R G E L V Q L S D T Y Q Q L T S G K E Y P A P V K K  
 D Q L R R Y L F E N A A V R G E L V N V S N T W H A I L K N H D Y P P A V Q T

	50	60	70	80
UniRef90_R7KX19	A   G   R   L   T   I   A   A   S   L   M   G   I   G   L   K   G   E   D   T   L   T   L   R   M   N   G   N   G   P   T   G   A   L   I   A   V   A   D			
UniRef90_W6RXS6	A   M   G   R   M   L   T   A   G   V   L   M   G   A   M   L   K   N   D   D   V   L   T   T   L   K   I   D   G   G   G   P   I   K   G   I   T   V   T   A   Y			
UniRef90_R5AEW3	A   L   G   R   L   L   T   G   A   S   L   M   G   D   M   L   K   S   E   D   S   L   T   L   K   I   N   G   G   G   P   L   G   N   L   V   A   I   S   D			
UniRef90_U2F548	A   L   G   R   L   L   T   A   A   S   I   M   G   C   G   L   K   G   K   E   S   V   T   L   R   L   S   G   G   G   P   T   G   N   V   I   A   V   S   D			
UniRef90_A0YR31	A   L   G   R   T   M   A   A   G   L   L   L   A   S   M   K   Q   P   E   A   R   V   N   I   Q   I   K   G   D   G   P   L   G   R   I   F   V   D   A   G			
UniRef90_B5EC90	A   L   G   R   G   I   T   A   G   A   L   M   G   A   L   L   K   T   G   Q   R   V   A   M   R   F   E   G   N   G   P   L   K   K   I   V   I   E   A   D   G			
UniRef90_D5A1T1	A   L   G   R   T   I   A   G   G   L   L   L   S   S   M   K   R   P   E   S   R   I   N   I   Q   I   Q   G   D   G   P   L   G   G   G   I   V   V   D   A   G			
UniRef90_D4K426	A   L   G   R   L   L   T   G   V   S   L   M   G   A   M   L   K   D   D   G   S   I   T   L   R   V   S   G   G   G   P   A   G   V   V   I   A   C   T   D   D			
UniRef90_C2KWX9	A   M   G   R   L   M   S   A   A   L   M   M   G   V   E   L   K   G   E   D   L   I   T   L   S   I   K   G   D   G   P   M   K   S   L   V   A   T   A   D			
UniRef90_UP100034C727B	A   L   G   R   A   M   S   S   G   L   L   J   A   S   N   M   K   K   E   G   R   V   T   N   I   N   I   K   G   N   G   P   L   G   T   I   L   V   D   A   G			
UniRef90_R5Y5Q0	A   L   G   R   L   L   T   M   T   S   M   M   G   A   D   L   K   E   E   D   S   I   T   V   Q   I   K   G   D   G   L   A   G   T   L   T   A   V   T   D   D			
UniRef90_U2NNM0	A   L   G   R   M   L   S   A   G   A   L   M   G   T   M   L   K   M   S   D   E   V   L   T   L   R   L   K   G   G   G   E   A   K   G   V   T   V   T   A   Y			
UniRef90_R7NJE0	A   L   G   R   L   L   S   A   T   S   I   M   G   A   M   L   K   N   K   A   T   L   N   L   Q   I   A   G   D   G   E   L   G   L   V   T   A   V   A   N			
UniRef90_C9RCV9	A   L   G   R   V   L   T   A   A   A   L   M   G   A   T   L   K   D   G   Q   T   L   T   L   R   V   V   G   D   G   P   A   G   W   I   V   A   T   V   R			
UniRef90_R8W9G5	A   L   G   R   T   L   T   I   T   S   I   M   G   S   Q   L   K   D   D   G   S   V   T   V   Q   V   R   G   D   G   P   L   G   T   I   V   C   V   S   D			
UniRef90_Q1GBN7	V   L   G   R   S   L   L   G   T   L   L   L   A   G   A   L   K   G   D   Q   E   L   T   L   R   L   L   G   D   G   P   V   G   A   A   V   V   T   A   K			
UniRef90_J4U1T8	A   L   G   R   T   M   T   G   A   L   L   L   A   A   N   L   K   N   K   E   S   V   T   V   I   K   F   K   G   D   G   A   L   G   T   V   T   A   D   A   T			
UniRef90_F9VAQ2	A   L   G   R   T   L   I   A   A   Q   I   L   G   A   N   E   K   G   D   S   K   I   T   V   K   I   L   G   D   G   A   M   G   A   I   V   A   V   A   D			
UniRef90_R7GF40	A   F   G   R   L   I   T   S   A   I   M   A   S   N   M   K   N   E   D   K   L   T   I   Q   I   K   G   N   G   P   I   Q   T   M   L   V   T   A   N			
UniRef90_E3GR72	A   L   G   R   L   L   T   A   G   S   L   M   G   S   M   M   M   K   G   E   D   L   L   T   L   Q   I   K   G   D   G   P   I   G   G   I   T   V   T   A   N			
UniRef90_R7GIL4	A   L   G   R   A   L   T   V   C   A   M   M   S   L   M   Y   M   G   E   H   L   T   F   K   I   D   G   D   G   P   I   G   E   M   I   I   D   A			
UniRef90_R9J0E5	A   L   G   R   L   L   T   G   A   A   M   M   G   M   M   M   K   G   E   D   L   L   T   L   Q   I   K   C   G   G   A   A   K   G   M   T   V   T   A   D			
UniRef90_R7IXX6	A   M   G   R   V   L   T   T   A   L   I   G   S   E   M   M   N   K   D   K   L   T   I   Q   I   K   G   N   G   P   I   G   K   I   V   A   V   V   S   D   G			
UniRef90_L8M2R4	A   L   G   R   T   M   T   A   G   L   L   L   S   S   M   K   K   A   E   S   R   V   N   I   R   F   E   G   N   G   P   L   G   S   I   L   V   D   A   G			
UniRef90_F4XA34	A   L   G   R   S   L   L   G   A   S   M   L   G   D   M   L   K   E   D   G   S   L   T   L   Q   I   K   G   D   G   P   I   G   T   V   L   A   V   S   D			
UniRef90_E0QJD3	A   I   G   R   S   M   T   A   T   S   I   M   A   G   M   K   G   E   K   D   K   I   T   T   I   I   K   G   D   G   P   V   G   N   I   T   C   V   S   N   D			
UniRef90_R6C0W4	A   L   G   R   L   L   T   I   T   S   I   M   G   Y   E   L   K   T   E   E   S   I   T   N   Q   I   K   G   N   G   P   I   G   I   L   T   A   V   A   D			
UniRef90_D3VFV1	L   L   G   E   L   L   V   A   T   S   L   L   T   A   L   K   F   N   G   D   S   I   T   V   Q   I   Q   G   D   G   P   V   K   L   A   V   I   N   G   N			
UniRef90_R9LZ59	A   L   G   R   L   L   T   I   A   A   S   I   M   G   S   Q   L   K   N   D   D   S   S   V   T   V   R   L   A   G   D   G   P   A   G   S   L   I   A   V   S   D   D			
UniRef90_R7FZP5	V   L   G   R   T   M   T   A   A   S   L   M   G   T   M   L   K   E   K   D   K   L   T   L   T   F   I   T   N   G   H   P   I   G   S   I   L   V   V   D   A   Y			
UniRef90_D9SLZ8	T   L   G   R   L   I   T   S   A   A   L   M   S   S   N   L   K   S   S   E   E   A   L   T   T   L   K   I   T   N   G   G   G   P   A   G   N   V   V   V   A   V   A   Y			
UniRef90_UP10002FAC97E	A   L   G   R   V   L   T   A   A   A   I   I   G   S   W   Q   K   N   E   D   S   S   I   T   L   S   S   I   K   G   N   G   A   A   G   S   I   V   A   T   C   K			
UniRef90_R6GZY4	A   L   G   R   A   L   A   G   A   S   S   M   M   G   N   A   L   K   Q   G   Q   G   S   S   I   T   L   L   Q   I   K   G   D   G   P   I   G   T   V   L   A   V   S   D			
UniRef90_T0JNZ8	A   L   G   R   T   M   T   G   A   L   L   L   A   A   N   L   K   T   A   E   S   I   T   V   R   I   S   G   D   G   P   L   Q   E   I   V   A   D   A   Y			
UniRef90_B7CDW1	A   L   G   R   T   L   S   V   A   S   S   M   M   G   A   M   L   K   E   E   E   M   L   S   I   T   I   N   G   H   P   I   G   S   I   V   V   D   A   Y			
UniRef90_UP100047EE855	A   F   G   R   F   L   T   V   S   G   L   M   G   L   M   Y   K   D   D   E   E   K   L   V   T   V   K   V   I   G   D   S   S   F   G   H   I   I   S   V   A   D			
UniRef90_G5JW64	A   L   G   R   T   L   I   A   N   Q   I   L   A   A   N   Q   K   G   D   S   K   I   T   V   Q   I   Q   G   D   G   P   V   K   L   A   V   I   N   G   N			
UniRef90_H3NMJ9	A   L   G   R   L   A   T   I   A   A   I   M   G   T   S   K   N   D   D   E   K   L   T   I   K   F   D   G   N   G   I   G   G   K   L   T   S   V   S   N   D			
UniRef90_R5CSP1	A   L   G   R   T   L   C   A   A   S   M   L   G   N   L   L   K   E   D   G   S   S   I   T   I   R   I   N   G   G   G   P   L   G   S   V   I   A   V   S   D			
UniRef90_E6UEU7	A   L   G   R   L   A   M   G   T   S   L   M   G   G   M   K   G   E   D   D   K   I   T   V   K   I   E   G   G   G   P   A   G   Q   L   I   A   V   A   D			
UniRef90_UP10002191B52	V   L   G   R   A   L   L   G   S   L   M   V   S   A   L   K   G   D   E   R   I   T   V   V   I   N   G   D   G   P   A   G   K   I   V   V   E   A   S			
UniRef90_Q112R6	V   L   G   R   T   M   A   G   L   L   L   A   S   M   K   T   P   E   S   R   V   N   I   R   V   Q   G   N   G   P   L   G   E   V   L   V   D   A   G			
UniRef90_UP1000299F9FF	A   L   G   R   T   L   T   G   T   A   L   L   A   A   L   L   K   T   S   G   L   L   T   I   K   I   Q   G   D   G   P   L   S   P   I   V   V   D   G   N			
UniRef90_D6GR36	A   L   G   R   V   I   T   A   G   T   M   M   G   V   V   M   M   K   E   K   K   N   K   L   T   I   Q   F   K   G   D   G   P   L   G   L   L   V   C   V   S   N   G			
UniRef90_UP100034BEC21	A   L   G   R   T   M   S   A   G   L   L   L   S   S   M   K   K   A   E   A   R   I   T   V   R   I   N   R   I   N   G   D   G   P   L   G   V   V   F   A   D   A   G			
UniRef90_R6D761	A   L   G   R   L   A   L   G   A   S   L   M   G   F   G   L   K   N   E   G   T   V   T   V   R   T   D   G   G   P   A   G   T   L   I   A   V   A   D			
UniRef90_UP1000465C296	L   L   G   E   L   L   V   I   T   S   S   L   L   T   A   T   L   K   F   E   F   G   N   K   I   T   V   Q   L   Q   G   D   G   P   L   S   L   A   V   V   N   G   N			
UniRef90_R6I303	A   F   G   R   R   L   L   T   T   A   L   M   G   N   M   K   N   K   N   E   K   D   K   S   K   I   T   I   Q   M   K   G   N   G   P   I   G   M   M   V   T   V   A   N			
UniRef90_R5Q384	A   L   G   R   I   L   L   V   A   T   S   L   L   T   A   T   L   K   F   M   G   T   M   L   K   E   E   D   S   K   I   T   L   R   F   K   G   D   G   P   L   G   S   A   V   A   V   S   D			
UniRef90_U5P5L7	A   L   G   R   T   L   I   A   S   Q   I   L   A   A   N   E   K   G   N   S   D   T   R   I   L   N   I   Q   I   Q   G   S   G   P   L   G   E   I   N   C   D   G   D			
UniRef90_H3NIZ1	A   L   G   R   S   L   V   A   T   S   L   L   A   A   S   L   K   G   S   D   S   D   T   R   I   L   N   I   Q   I   Q   G   S   G   P   L   G   E   I   N   C   D   G   D			
UniRef90_K1LP90	A   M   G   R   M   I   M   A   T   S   L   L   A   A   N   L   K   G   S   D   R   L   L   V   T   V   I   I   E   G   Q   G   P   I   G   R   I   V   V   H   G   N   N			
UniRef90_UP10003471C55	A   L   G   R   A   M   M   A   S   T   M   M   A   T   M   M   K   G   D   S   K   I   T   V   K   I   E   G   G   G   P   I   G   A   I   I   I   D   S   N   S			
UniRef90_UP10002556F37	L   L   G   E   L   L   A   A   A   S   L   L   I   G   T   L   K   F   D   G   L   L   I   I   L   I   Q   A   R   S   S   G   A   V   P   L   M   V   E   C   S			
UniRef90_UP100040BA910	A   L   G   R   L   L   T   A   G   S   L   M   G   S   M   M   K   N   D   N   E   D   L   I   T   L   K   I   A   G   D   G   P   L   S   G   L   L   V   T   A   D   G			
UniRef90_Q7NIA2	A   L   G   R   T   M   A   A   G   L   L   L   A   S   N   F   K   Q   T   E   R   V   N   L   R   L   Q   G   D   G   P   I   G   K   I   I   V   D   A   D			
UniRef90_C4KZT7	A   L   G   R   T   M   T   I   G   S   M   I   G   M   Q   K   G   A   A   R   V   T   V   Q   L   V   Q   G   D   G   P   I   G   K   I   I   V   D   A   D			
UniRef90_C4L9F0	A   L   G   R   S   E   L   L   V   A   T   S   L   L   T   A   T   L   K   F   E   F   G   S   I   T   V   Q   L   Q   G   D   G   P   I   V   R   F   A   V   I   N   G   D			
UniRef90_G7VKN6	V   L   G   R   G   L   L   U   A   T   T   L   T   A   A   V   L   K   G   E   E   T   L   S   T   K   I   N   G   R   G   P   I   G   N   V   V   V   E   S   D			
UniRef90_B9MQ78	A   L   G   R   L   L   T   A   T   S   M   M   G   V   M   L   K   G   E   N   H   V   V   S   V   Q   I   S   C   S   G   G   V   L   K   G   L   V   A   V   S   D			
UniRef90_W0E9T9	A   L   G   R   L   R   M   T   A   S   L   L   L   A   S   S   L   K   G   E   N   S   I   T   V   R   L   L   Q   G   D   G   P   I   G   G   V   V   A   V   G   N   N			
UniRef90_A3QJ40	L   L   G   E   L   L   M   A   A   T   S   L   L   T   A   T   L   K   F   D   G   D   I   T   V   Q   V   Q   Q   G   D   G   P   V   S   L   A   V   I   N   G   N			
UniRef90_UP1000361F481	V   L   G   E   L   L   M   A   A   T   S   L   L   T   A   T   L   K   F   E   F   G   E   I   T   V   Q   V   Q   Q   G   D   G   P   V   K   V   A   V   I   N   A   N			
UniRef90_E8T609	V   L   G   R   A   L   T   G   A   I   L   L   T   S   L   L   K   H   N   Q   R   V   V   L   L   R   I   I   E   G   D   G   P   I   G   L   V   V   A   E   A   N			
UniRef90_K8WJQ6	L   L   G   E   L   L   V   A   T   S   L   L   T   A   T   L   K   F   D   G   D   I   T   V   Q   V   Q   Q   G   D   G   P   V   K   L   A   V   I   N   G   N			
UniRef90_U7NTV4	L   L   G   E   L   L   V   A   A   V   A   V   L   L   T   D   T   V   K   L   D   G   T   S   L   E   V   T   L   Q   R   G   S   G   P   L   A   L   L   M   A   E   S   N   D			
UniRef90_E3BIX2	L   L   G   E   L   L   V   A   T   T   L   L   T   A   T   L   K   F   E   E   G   S   I   T   V   Q   V   Q   Q   G   D   G   P   V   S   L   A   V   I   N   G   D			
UniRef90_C9LYU9	A   L   G   R   T   M   T   G   A   L   L   A   A   N   L   K   N   E   E   T   L   T   V   K   F   A   G   A   G   P   L   G   A   I   V   A   D   A   V			
UniRef90_N9TYT6	L   L   G   E   L   L   V   A   T   S   M   T   L   T   A   T   L   K   F   E   F   G   S   I   T   V   Q   L   Q   G   D   G   P   V   K   M   A   V   I   N   G   D			
UniRef90_U2US94	A   L   G   R   T   M   T   G   A   L   L   A   A   N   L   K   N   E   E   A   V   T   V   S   F   D   G   H   G   P   L   G   K   V   T   A   D   A   T			
UniRef90_K2JSR0	L   L   G   Q   L   M   A   A   T   S   L   L   T   A   T   L   K   F   E   E   G   E   I   T   V   Q   L   Q   G   N   G   P   V   S   L   L   V   I   N   G   N			
UniRef90_B4F026	L   L   G   D   D   L   L   V   A   T   S   L   L   T   A   T   L   K   F   D   G   D   I   T   V   Q   L   Q   G   D   G   P   V   R   L   V   V   I   N   G   N			
UniRef90_I4D9T1	A   L   G   R   A   M   T   G   T   L   I   A   S   S   L   K   G   D   E   S   V   T   L   R   I   L   Q   G   D   G   P   L   Q   G   V   V   S   V   G   N   N			
UniRef90_A8USE1	A   L   G   R   A   L   I   G   A   A   L   T   S   L   V   K   H   D   Q   K   V   L   L   K   I   E   G   N   G   P   I   G   T   I   V   A   E   A   D			
UniRef90_X5JPE5	A   L   G   R   A   M   V   S   G   L   L   M   A   S   S   M   K   R   P   G   R   V   N   I   R   V   K   G   D   G   P   L   G   G   L   L   V   D   A   G			
UniRef90_X2H7M8	A   L   G   E   L   L   V   A   T   S   L   L   T   A   T   L   K   F   E   G   D   I   A   V   Q   L   Q   G   D   G   P   V   P   L   T   L   A   V   V   N   G   N			
UniRef90_B7V3U0	L   L   G   E   M   L   A   A   A   S   S   L   L   C   G   T   L   K   F   D   G   L   L   V   L   Q   A   R   S   S   G   A   V   P   L   L   M   V   E   C   S			
UniRef90_UP100036581E3	L   L   G   E   L   L   T   A   T   S   L   L   T   A   T   L   K   F   E   G   H   I   T   V   Q   V   Q   Q   G   D   G   P   V   S   L   A   V   I   N   G   D			
UniRef90_UP100037647EA	A   L   G   R   A   F   I   A   N   Q   L   A   A   N   E   K   G   D   T   K   I   T   L   K   I   L   A   E   G   A   T   G   A   I   I   S   I   A   N   D			
UniRef90_E3HAG7	A   F   G   R   L   L   T   A   G   I   I   M   G   A   G   L   K   G   D   D   L   M   T   L   R   T   D   T   D   G   S   L   L   N   H   M   V   V   T   S   D			
UniRef90_L8MS53	L   L   G   E   M   L   A   A   A   S   L   L   V   G   T   L   K   F   D   G   L   L   V   L   Q   A   R   S   S   G   A   V   P   L   L   M   V   E   C   S   S			
UniRef90_H0JEW8	L   L   G   E   M   L   A   A   A   A   L   L   C   G   T   L   K   F   E   G   L   I   V   L   Q   A   R   S   S   G   P   I   P   L   L   M   V   E   C   S			
UniRef90_U7V4T7	A   F   G   R   L   L   S   A   G   V   V   M   M   G   A   T   L   K   G   N   D   L   I   T   L   R   T   M   T   D   G   P   V   S   S   M   V   V   T   V   D   D			
UniRef90_G9Z0P4	V   L   S   E   L   L   V   A   T   S   L   L   T   A   T   L   K   F   A   G   D   I   T   V   Q   L   Q   G   D   G   P   M   T   L   A   V   I   N   G   N			
UniRef90_Q2C2L8	L   L   G   E   L   L   V   A   T   S   L   L   T   A   T   L   K   F   E   G   S   I   T   V   Q   V   Q   Q   G   D   G   P   V   S   L   A   V   I   N   G   D			
UniRef90_I1XQD8	L   L   G   E   M   M   V   A   T   A   L   L   T   A   T   L   K   F   E   G   N   D   I   T   V   Q   L   Q   G   D   G   P   L   K   L   A   V   I   N   G   N			
UniRef90_UP10003B4721D	L   L   M   G   E   L   L   V   A   T   T   L   L   T   A   M   L   K   F   E   G   K   I   A   V   Q   L   Q   G   D   G   P   V   R   L   V   V   I   N   G   N			
UniRef90_W9AB33	L   L   G   E   L   L   V   A   T   S   L   L   T   A   T   L   K   F   E   G   S   I   T   V   Q   V   Q   Q   G   D   G   P   V   S   L   A   V   I   N   G   D			
UniRef90_U7UYF8	A   L   G   R   T   L   T   A   T   S   I   M   A   S   T   L   K   N   E   D   T   I   T   L   K   I   L   A   E   G   A   T   G   A   I   I   S   I   A   N   D			
UniRef90_H5SLW7	A   L   G   R   A   L   T   A   S   S   L   L   T   A   T   L   K   F   D   G   L   L   V   L   Q   A   R   S   S   G   A   V   P   L   L   M   V   E   C   S			
UniRef90_UP10002FB2805	A   L   G   E   L   L   V   A   T   S   L   L   T   A   T   L   K   F   E   G   H   I   T   V   Q   V   Q   Q   G   D   G   P   V   S   L   A   V   I   N   G   D			
UniRef90_D4GD21	L   L   G   E   L   L   V   A   T   S   L   L   T   A   T   L   K   F   D   G   E   I   T   V   Q   V   Q   Q   G   D   G   P   L   T   L   A   V   I   N   G   N			

	90	100	110	120
UniRef90_R7KX19	S R G N V K S Y V C N P V V E I P L N K Y G K L D V A G A V G K E G T L S V V K			
UniRef90_W6RXS6	A D G R I K G I V G N P N V Q L P P R Q N G T I D V S G A I G K N G M L T V I K			
UniRef90_R5AEW3	S N G N V R G Y V D H P D V E L P L K P N G K I D V G G G V G C D G R L A V I R			
UniRef90_U2F548	A W G N V R G T V S R P E V E L P P N E K G K L D V G G G A V G R N G F V Y V V R			
UniRef90_A0YR31	L D G T V R G Y V E N P E V E L P P N E K G K L D V G G G A V G R N G F V Y V V R			
UniRef90_B5EC90	A N G S V V R G Y V G D P K V H L R P D G A L D V N N A L G R A G F L T V A K			
UniRef90_D5A1T1	L D G T V R G Y V G D P K V H L R P D G A L D V N N A L G R A G F L T V A K			
UniRef90_D4K426	A H G N V K G Y C I D H P L V E L P A K E N G H L D V G G A V G K K D G V L T V I R			
UniRef90_C2KWX9	S H G N V K G V C G N P Y V I L P A R E D G H L D V G G A V G K G F L S V I R			
UniRef90_UP100034C727B	L D G T V R G Y V Q N P T V E L P P N S I G K L D V G G A V G N D G Y L Y V I R			
UniRef90_R5Y5Q0	S N G N V K G Y V T N P L V E L P L N E V G K L D V S K A V G K N G M M Y I I K			
UniRef90_U2NNM0	N D G S V V K G F I G N P F V N P L L K A N G K L D V G G A V G T N G N L T V I K			
UniRef90_R7NJE0	A K G H V K G Y V S N P N C P T E Y Y E N G H I N V G K A V G H G T L N V M R			
UniRef90_C9RCV9	D M R I K G Y I R E P H I Y L P L N A A G K L D V A Q A I G K G M L Y V T K			
UniRef90_R8W9G5	S E G Y A R G Y L Q N P A V D L P L R A D G K L N V G A G V G Y G Q L M V I K			
UniRef90_Q1GBN7	S D L T V K G Y V Q N N H V A L P A R E D G H I D V K K A V G K G W L Q V T K			
UniRef90_J4U1T8	A E G S V V R G Y V D H P H T H L P L N P R G K I D V V G G I G R G L L T V T R			
UniRef90_F9VAQ2	A K G N V K G Y V Q N K D L D Y K K A S T G E V L V T P F V G N G F F V V I K			
UniRef90_R7GF40	N I P E L K G Y V A N P Y V D I P L N E F G K L D V G G A V G N E G Y I N V I K			
UniRef90_E3GR72	S K A D V K G F V F E P Q V K S E N P L E T E K V I G N G N L S I I K			
UniRef90_R7GIL4	S Y G V V K G S H N P E V F L Q Y N N D G H L A V G K A V G N D G Y L Y V T K			
UniRef90_R9J0E5	S Q G N V V K G Y P Q V P D V M L P P N A K G K L D V G G A L G P G L L S V I K			
UniRef90_R7IXX6	N I P N V V K A C I T N P H A D L P L N E F G K L D V V G G A V G N Q G F I I N V I K			
UniRef90_L8M2R4	L D G T V R G Y V Q N P E V E L P P N D K G K L D V G G A V G K D G Y L Y V I I R			
UniRef90_F4XA34	N Q G N V V R G Y V Q N P H V E L M E I E P G K L D V G R A V G T A G T T V I K			
UniRef90_E0QJD3	H T G N I K A C A T N Y N V D L P I R D N N K L D V G G A V G V N G S L T V I K			
UniRef90_R6C0W4	S N G N V V K G Y V G N S K L D L P L R E D G K L D V G G A V G K Q G M L Y I I K			
UniRef90_D3VFV1	N Q Q N M R G T A R I D G D V K A E S S H D M I G N G Y M V I T V			
UniRef90_R9LZ59	S H G N P R G Y V I A N P L I V E L P L N Q Y G K L D V A G A V G R Q G T L T V I K			
UniRef90_R7FZP5	Y E G N V V K G Y I Q N P D V D L P L K S N G K L D V G G A V G A G L S V V R			
UniRef90_D9SLZ8	P N G D V V K G Y I I G N P T V E L P P N A V G K L D V G G A V G K N G S L V I I R			
UniRef90_UP10002FAC97E	N D G F V V K G Y V T N P Q A D L P I R E D G K I D V A G I V G D G N L T L T I			
UniRef90_R6GZY4	A Q G N V V R G Y V A N P Q A D L P L R D D G K L D V G G A V G A E G T I T V I K			
UniRef90_T0JNZ8	P D G S V V R G Y V K N P F V D L P L K Q G K W D V Q A V G K G H I Y V T R			
UniRef90_B7CDW1	A N G N V V R G F V S N P H V E D V L I R P G K L N V G A V V G T D G T L T V T K			
UniRef90_UP100047EE855	G L G V V R G D I V N P V Y I R A K E G K L D V G A V G N G F L H I T K			
UniRef90_G5JW64	T K G N I K G Y I Q N P G V D V K K T A T N E I I V G P F M G K G Q F V V I T			
UniRef90_H3NMJ9	A K G E V K I A A S N P Q A D A P S K F P G K L D V G A F V G R S G N I A I I R			
UniRef90_R5CSP1	S K G Y V V R G Y V T N P A V D L P L R S D G K I D V V G G A V G R D G M L T V S R			
UniRef90_E6UEU7	S Y G N V V K A D V M Q V V E L P P N A I G K L D V A G A V V G T D G T I T V I K			
UniRef90_UP10002191B52	A Q G E V V R G Y V T N P T V E L P L T A K G M Q D V A G A V G S N G F L Q V V T K			
UniRef90_Q112R6	L D G T V V R G Y V V N N P T I E L P L P N K I I G K H D I G K A V G N Q G Y L Y I V R			
UniRef90_UP1000299F9FF	A Q G Q V V K G Y L H H P E Y D W P Q N D L Q S I S L Q Q A V V G K N G N L A V I K			
UniRef90_D6GR36	S Q G D A K G Y I A H P E V N L P R I N D K L D V S A G V V G T K G T V S V I R			
UniRef90_UP100034BEC21	L D G T V V R G Y V T N P Q V E L P P N D K G K L D V V G K A V V G R N G F V V V V K			
UniRef90_R6D761	S Y G N V V K A Y I Q N P V V E L P L N A K G K L D V G G A V V G T D G T L T V I K			
UniRef90_UP1000465C296	N R Q Q M R G V A R V N G D I K P D S T L K E M L G N G Y I V I T I			
UniRef90_R6I303	N F P V V K G Y V A N P V I D L P L N E D G K L D V G G A V G H S G F I I N V I K			
UniRef90_R5Q384	Y K G N V V R G Y I M H P E V D L P L K P N G K L D V G G G I G H G T L S V V R			
UniRef90_U5PSL7	T Q G N V V K G Y V Q N P G V D I K K T A T G E V V V G P F V G N G E F L V I T			
UniRef90_H3NI12	S Q G A I L R G Y V V K H P H V A L E L N Q A G K I D V S G A V V G L P G S L R V R K			
UniRef90_K1LP90	S H G E T R A A I D H P H V V S L P L N E Q G K I D V S A G I V G L P G F L T V S K			
UniRef90_UP10003471C55	T K G E T R G Y V V S H P H V F D L N K H G K L D V A R A V G T S G S L S V V K			
UniRef90_UP10002556F37	S A G E L R G I A R Y D Q V I Q D D I Y S L Q E L F M E G M L A M T I			
UniRef90_UP100040BA910	A K G N V V K G Y P Y V D L H D T M E S P L P V S E A I V G G A L N I M K			
UniRef90_Q7NIA2	A D G T V V R G Y V V K N P Q V E L P P S P K G K L D V V G R A V V G A N G F L Y V V K			
UniRef90_C4KZT7	T A G D V V R G Y V V S Y S P R V D T F V N E Q G K L V G E A V V G K G T I S V I K			
UniRef90_C4L9F0	A H Q R L R G V A R W E G V I A E N A G L H E L I V G K G H M M I T V			
UniRef90_G7VKN6	UniRef90_G7VKN6	A K G S V V R G Y V T N P N L E T L I N E A G Q L D V V A K A V V G K N G F L Q V V T K		
UniRef90_B9MQ78	S K G N V V K G Y V V K N K E V L T E I D E R G K L L N V K G A I V V G E E G T L T V I K			
UniRef90_W0E9T9	A Q G E V V R G Y V H E P F T D L P L N E N G K L D V V A Q A V V G Q G E F A V S K			
UniRef90_A3QJ40	N L Q Q L R G V A R W E G E V A K D A S L Q Q L M G Q Q H M V I T L			
UniRef90_UP1000361F481	H Q Q E L R G I A R Y D Q V I Q D D I Y S L Q E L F M G Q Q G A L V I T V			
UniRef90_E8T609	A K G E V V R G F V Q N P N V E T E E E N G R K K F D I A K A V V G K G T L T V V			
UniRef90_K8WJQ6	N L Q Q M R G V A R V D G P V V A G S S L K Q M V G N G F I I V I T I			
UniRef90_U7NTV4	S P G G E L R A I R L A E A E M P A D D A G F R E L L G D G Q I M I T L			
UniRef90_E3BIX2	H E Q K V V R G V A R F D G S I D G E A S I H D M L G K G H L V I T I			
UniRef90_C9LYU9	P E G F V V R G Y V E H P H V N L P L N A K G K L D V V G A V V G T G L V T V T R			
UniRef90_N9TYT6	UniRef90_N9TYT6	H N Q Q L R G V A R F E G E L P A S N A L K D L V G N G Q L V I T I		
UniRef90_U2US94	P E G G Y V V R G Y V S E P H V V S L P L N A K G K I D V V G G G V G T D G M L A V T R			
UniRef90_K2JSR0	H Q Q V L R G V A R Y Q G E V P D G T L A D M V G Q Q G Y L V I T I			
UniRef90_B4F026	N E Q Q M R G V A R F S D D V K A G S S L K E M M M G N G F M V I T I			
UniRef90_I4D9T1	A L G E V V R G Y V R E P W V E L P L K P N G K L D V V A T A V V G A G E L A V S R			
UniRef90_A8USE1	G K G R V V R G F V E N P Q V E T E A E G R T K F D V S R I V G S E G T L T V V K			
UniRef90_X5JPE5	L D G T V V R G Y V V E N S A I E L P P N A Q G K L D V V G G A V V G N G Y L Y V V R			
UniRef90_X2H7M8	N Q Q E L R G V A R I N S S I A D D A S L K D M V G N G Y I V I T I			
UniRef90_B7V3U0	S D R Q V V R G L A R Y S A E S I G A D A G M Q E L M P E G V L T L T V			
UniRef90_UP100036581E3	UniRef90_UP100036581E3	H H Q Q M R G V A R W Q G T V P D S E R L A D V V G T G Y I T L		
UniRef90_UP100037647EA	N K G E V V K G Y I Q N P D L D Y K K T A T G E V I V G P L V G Q Q G F L V I T			
UniRef90_E3HAG7	S L G G I V K G Y L S N P E A E L P L K S N G Q P D V G G V V G K G M L R V I K			
UniRef90_L8MS53	UniRef90_L8MS53	S N R E V V R G I A R Y S A D Q V T P G A G L R D L M P E G V L T L T V		
UniRef90_H0JEW8	S E R E V V R G I A R Y E E S E I T A S A S L G E L M P D G V L A L T I			
UniRef90_U7V4T7	K D G V V K G Y V S N P E A D L P A K E N G Q P D V Q A L V G R G T L N V I K			
UniRef90_G9Z0P4	N K Q Q L R G V A R V Q G E V A E D A T L K T L V G N G Y L V I T I			
UniRef90_Q2C2L8	UniRef90_Q2C2L8	Q N Q K L R G V A R W E G D I K E G S S I H E L M G K G Y M V I T V		
UniRef90_I1XQD8	UniRef90_I1XQD8	N Q Q Q I V R A L A R L Q Q G D I D N S M S L H Q M I G K G V L V I T I		
UniRef90_UP10003B4721D	Q N L Q V V R G T A R V K G E T A G L S F S Q V L V G N G H M M I T I			
UniRef90_W9AB33	H N Q Q L R G V A R W K G D K D G T I H D L M G K G H M V I T I			
UniRef90_U7UYF8	N D G K I V K G Y V D N N V D L P A R E D G K I D V V S G F I V G K G T L N T M			
UniRef90_H5SLW7	UniRef90_H5SLW7	A S G D V V R G Y V Q N P T V H P L S S R R K L D V V G A V V G R G M L H V T K		
UniRef90_UP10002FB2805	H D Q V V M R G T A R W Q D E L P E S A S L H D L V G K G Q M V I T I			
UniRef90_D4GD21	N Q Q E L R G I A R M K G D I P D D S T L K S M V G N G Y L V I T I			

UniRef90\_R7KX19  
UniRef90\_W6RXS6  
UniRef90\_R5AEW3  
UniRef90\_U2F548  
UniRef90\_A0YR31  
UniRef90\_B5EC90  
UniRef90\_D5A1T1  
UniRef90\_D4K426  
UniRef90\_C2WKX9  
UniRef90UPI00034C727B  
UniRef90\_R5Y5Q0  
UniRef90\_U2NNM0  
UniRef90\_R7NJE0  
UniRef90\_C9RCV9  
UniRef90\_R8W9G5  
UniRef90\_Q1GBN7  
UniRef90\_J4U1T8  
UniRef90\_F9VAQ2  
UniRef90\_R7GF40  
UniRef90\_E3GR72  
UniRef90\_R7GIL4  
UniRef90\_R9J0E5  
UniRef90\_R7IXX6  
UniRef90\_L8M2R4  
UniRef90\_F4XA34  
UniRef90\_E0QJD3  
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UniRef90UPI000299F9FF  
UniRef90\_D6GR36  
UniRef90UPI00034BEC21  
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UniRef90\_H3N1Z1  
UniRef90\_K1LP90  
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UniRef90\_K8WQJ6  
UniRef90\_U7NTV4  
UniRef90\_E3BIX2  
UniRef90\_C9LYU9  
UniRef90\_N9TYT6  
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UniRef90\_A8USE1  
UniRef90\_X5JPE5  
UniRef90\_X2H7M8  
UniRef90\_B7V3U0  
UniRef90UPI00036581E3  
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UniRef90\_E3HAG7  
UniRef90\_L8MS53  
UniRef90\_H0JEW8  
UniRef90\_U7V4T7  
UniRef90\_G9ZOP4  
UniRef90\_Q2C2L8  
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UniRef90\_W9AB33  
UniRef90\_U7UYF8  
UniRef90\_H5SLW7  
UniRef90UPI0002FB2805  
UniRef90\_S1CB61

170      180      190      200

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

210      220      230

UniRef90_R7KX19	V T Q M L S S G V T A E D M M K V L E G L Q P N V M D R L E A S Y
UniRef90_W6RXS6	T T E M I N N G K T L D E I I S N I F E D D L K I H D
UniRef90_R5AEW3	V T T M L A K G M T P E E M C R A L E G F E V E I L D Q A P V H Y
UniRef90_U2F548	V T Q M L E G G M S L E Q I I G R V L G F A P N I L D E F P V E Y
UniRef90_A0YR31	F T P L L R Q R K T L P D I F Q H L L G D M L N I L P T Q I V R F
UniRef90_B5EC90	L S E L L H K G G N P E Q I L E Q L L G I P Y D I L E K R N I A F
UniRef90_D5A1T1	F T P L L R A S Q T L P N I F E Q L L G D G L N I L E T Q L L Q F
UniRef90_D4K426	V T E L L R A G K T P Q D M M E L A M G F D P Q V L D T R E V K Y
UniRef90_C2KWX9	V T D L L A K Y S P E E L L E Y L L G D G L E I H E K R E L R Y
UniRef90_UP100034C727B	F T P L L R Q G K T L S D I F R D L L G D D L E I F E V Q M V R F
UniRef90_R5Y5Q0	I S K M L N D E I S L E Q I A K I V T G D D K I I D
UniRef90_U2NNM0	V T T M T E G K T I E D I I K Y I F E D D L V I H E T L H P K Y
UniRef90_R7NJE0	V T Q M L A D G L T P V Q M A E K F L G Y E V D V L D E Y E V G Y
UniRef90_C9RCV9	V S H L F A E G C T P E G V L A L L G F T P T I L A R Q T F A F
UniRef90_R8W9G5	M T T M L D H G M T L E E I V G A V L G F T V Q F L D E A E I G Y
UniRef90_Q1GBN7	L S S A F L D G M T P E D L A K K I G D D C K I L E K D E V S Y
UniRef90_J4U1T8	V S H H M V E Q G M D A R G L G V L L G D D V K I L A S T D L A F
UniRef90_F9VAQ2	I S S E M L L K E K P L E A M L A A L Y G E E Y T I L A E S P L A F
UniRef90_R7GF40	I S S K M L D E K L T L E E I A K V T G D D V E V V E
UniRef90_E3GR72	V T S L L E K G Q T P E E I L E I L G D G V N I I D R L P T Q F
UniRef90_R7GIL4	V S K M I E E G Y T P E E I L N E V T D G D Y K I L E S N P I K Y
UniRef90_R9J0E5	V T D L L E E Q G A T P E T L L E Q V L G E G I E I T E K I P T S Y
UniRef90_R7IXX6	M S K M L D Q N L T L K E I A Q K I T G D D V K V I D A
UniRef90_L8M2R4	F T P L L R A G K S L N D I M E D M L G D G L T I M E S Q L V R F
UniRef90_F4XA34	V S R A L E E G G L D A R G L E A V L S D E L E I L E T H P V E Y
UniRef90_E0QJD3	V T D M M K E G K S P E D I A D I L L G L G C E V L S K R Q V S Y
UniRef90_R6C0W4	V S R M L D E N K T L E E I A K I V T G D E L K V L E R T E P K F
UniRef90_D3VFV1	I K G E E L F T L N A E E I L Y R L Y H E E V R L Y E P Q Q V A F
UniRef90_R9LZ59	V T E M I Q S G M T P A E I V H T V L G F S P D L L E E T E I S Y
UniRef90_R7FZP5	V S S L I A D G A T K E Q L L D R A F G I E Y D V F D E I P A V Y
UniRef90_D9SLZ8	I T T L I K E G K T I E E I L E F E D D L K I L E E T T V D Y
UniRef90_UP10002FAC97E	V T S I L D E Y H D A E K L I I E I L M K D D F K I L E K R D I D Y
UniRef90_R6GZY4	V S A I L D L D P D P E H L L R T V M S D E L K I L E T C P V S Y
UniRef90_T0JNZ8	I S Q M S N G K D A K G I L E M L F G L P I T F Y D S L E L T F
UniRef90_B7CDW1	M S T L I Q E Y D D L E A L A N D M F E D A K I L T T Q P V A Y
UniRef90_UP100047EE855	I S R W L N D G R T E D M L E F I S N G T Q K V L A T K E L K Y
UniRef90_G5JW64	I S A L L E A D Q P I D A L L K K A I Y G E E Y K I L S Q E E N W H F
UniRef90_H3NMJ9	C S K M I D E G L T P E D I L N K Y F G E E P E I L E K Q E L K Y
UniRef90_R5CSP1	L T T I L S E D G L E A V F E Q V L G L P Y H I V D D E D E V G Y
UniRef90_E6UEU7	V T K L M E D G R T T D E I L M A L E G L E P N V L D D F K V E Y
UniRef90_UP10002191B52	I S S Q L V E G H T P M D L L F G D D V K L L A T T E V A
UniRef90_Q112R6	F T S L L H S G K T L P M D I F Q E L L G D M L N I L E A Q I V R F
UniRef90_UP1000299F9FF	I G D L L A E D G S L E N L I L Q I V K D Q F E I L T K M P L N Y
UniRef90_D6GR36	I S H M L D E A E R L E Q I M E V I L G E G M N V V E E R Q T R Y
UniRef90_UP100034BEC21	F T P L L R Q G K S L S G V M Q D L L G D G L E I F E T Q L V R F
UniRef90_R6D761	V T E M I E S G M T A E D I M L A L E G L E P E K L D D F E V N Y
UniRef90_UP1000465C296	I K A D E L F S L S T E D V L Y R L Y H E E V R V F E E Q A V V F
UniRef90_R6I303	I S R M L D E K L S L E I A K V T G D N I E V I E E
UniRef90_R5Q384	I S L L F D A G M T N E A I I D R A M G I E Y D I F D D F T A E Y
UniRef90_U5P5L7	I S T L L A S D D H I E A L L T A I Y G E D Y K R L S E E E I R F
UniRef90_H3NIZ1	L S E Q I D Q A E H L E E L L A Q L V G D N Y R V I H S Q S I H F
UniRef90_K1LP90	L S D K L Q S G L T S E K L L D Y L V G E N S R I I A T Q D I T Y
UniRef90_UP10003471C55	I S K L V E Q G M S P E E I V S T V L G E N V K I H E K L P I R F
UniRef90_UP10002556F37	L A N T L L G L D N E T V L H R L Y H E E P R V F E P R A L Q F
UniRef90_UP100040BA910	L T K L L D E G K S L E A I M E D L L F I F E V Q L V R F
UniRef90_Q7NIA2	F T P L V R S G K R I P Q I L E E L L G D M L E I F E V Q L V R F
UniRef90_C4KZT7	V S V L I G E E K T P E E M L Q L L G D S L D V L D T N P I Q F V S F
UniRef90_C4L9F0	I K C S E E L L D P A E E V L Y R L Y H E E V R L F D P Q A V S F
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UniRef90_B9MQ78	I S S V L E N K S I E I V K E L F G N E Y E V L A K Y H P V Y
UniRef90_W0E9T9	I S K I A S E S R S M E E M V Q T L L G L S Y Q V L E K R P A G F
UniRef90_A3QJ40	I K A E E L F E E L E A T E V L H R L Y H E E V R V F E P V T F
UniRef90_UP1000361F481	V K S E E M L Q L P A E E L L I R L Y H E N P Q M F A P Q P V R F
UniRef90_E8T609	V S T L I K E G K R P E E I A E L I F G F T T E L L A L K E L S F
UniRef90_K8WJQ6	I K G S E L S T L D V K E V L H R L Y H E E V T L Y D P Q S V E F
UniRef90_U7NTV4	I K A E E L T G L A P E E V L H R L Y H E E V R V F A P K P L R F
UniRef90_E3BIX2	I K T D E L F G L E V N E L L Y H R L Y N Q E V R I F D P Q P V T F
UniRef90_C9LYU9	V S D M V H Q G M T A H E I A G R V L Q G E M Q V L A E T D L A F
UniRef90_N9TYT6	I K D E E L F T L P A E E I L Y R L Y N Q D V R L F D P Q S V E F
UniRef90_U2US94	V S R L V G Q G Y D A H A I I A L L G F D V H Y L T T T E L A F
UniRef90_K2JSR0	I K A E E L F G L E A E E V L H R L F H E Q V R L F D P Q A V S F
UniRef90_B4F026	I K A Q E L F T L D T K E I L H R L Y H E E V T L Y D P Q P I A F
UniRef90_I4D9T1	I S E L A A E S R G I D E M L G H L G E P Q V L E R R S V G F
UniRef90_A8USE1	V T Q L M E E G K R P E D I A T M I L G E P Q L I G L K E V E Y
UniRef90_X5JPE5	F T P L L Q A G K T L P E I F Q D L L G D M L N I F E T Q L L R F
UniRef90_X2H7M8	I T S D E L F G L S T E E I L Y R L Y N E E V R F F E T H D I I F
UniRef90_B7V3U0	L A D T L L L A L D N E T V L H R L Y H E E V R L F E P Q P L V F
UniRef90_UP100036581E3	I S T L L E S D A H I E A L L S A I Y G D D Y K L L S E E A L S F
UniRef90_UP100037647EA	V T E L L F D G G M N L E R I A K L L Y E E D Y E V Y E E I E T K Y
UniRef90_E3HAG7	L T A E E L L G L D N E T L H R L Y H E E V R L F D P Q S I Q F
UniRef90_L8MS53	I T A E E L L G L D N E T V L H R L Y H E E V R L F D E Q P V P V A F
UniRef90_H0JEW8	V T E L F K G G M D L E R I H L Y H E K L E I L D S K E I K Y F
UniRef90_U7V4T7	I K A E E L F S L P A N D V L W R L Y H E E V T L Y E P Q D V E F
UniRef90_G9Z0P4	V K D D E L F S L D A Q D L L Y R L Y H E E V K V F E P Q A V S F
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UniRef90_H5SLW7	V K N E E L F S L D A Q D V L Y R L Y H E N V N V Y E P K N V T F
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D	K	L	Y	R	Y	L	F	D	Q	A	D	V	R	G	E	L	V	Q	L	N	D	T	Y	Q	Q	M	L	S	G	H	D	Y	P	A	P	V	Q	R	
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D	D	L	H	T	Q	R	F	I	F	D	D	V	R	G	E	M	V	G	L	E</																			

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UniRef90_U1M916	L	I	G	E	L	L	V	A	T	C	L	L	T	A	T	L	K	F	E	G	E	I	A	V	Q	L	Q	G	D	G	P	V	S	L	V	V	I	N	G	D		
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UniRef90_U2JUY4	UniRef90_F0L5V4	A	I	G	R	L	T	Q	A	V	I	M	G	T	E	L	K	G	D	D	S	L	T	L	T	Q	G	N	G	P	V	D	L	L	V	A	D	F	T			
UniRef90_G2DZG4	UniRef90_I4MZ76	P	L	G	E	A	L	A	V	S	L	L	S	A	T	I	K	F	D	G	S	L	I	L	Q	A	Q	G	S	G	P	V	P	L	L	M	I	E	C	S		
UniRef90_R5KMK8	UniRef90_K6YMQ7	L	L	G	E	F	M	A	A	A	S	L	L	V	G	T	L	K	F	D	G	S	I	T	L	Q	A	R	S	D	G	P	V	P	L	L	M	I	E	C	S	
UniRef90_R4XIT6	UniRef90_R6TS37	T	L	G	R	L	L	T	I	T	S	I	M	G	C	M	L	G	E	E	E	S	I	T	V	M	L	N	G	D	G	P	V	K	F	A	I	N	G	D		
UniRef90_UP100034CBF8D	UniRef90_G8AT57	L	L	G	E	L	F	V	T	T	S	L	L	T	A	T	L	K	F	D	G	S	I	T	V	Q	I	Q	G	D	G	P	V	P	L	L	M	I	E	C	S	
UniRef90_UP100037EAD69	UniRef90_UP10002FEBB0A	F	L	A	E	T	M	T	L	A	M	L	S	S	M	L	K	Y	D	G	I	F	T	L	Q	T	K	G	D	G	P	V	R	L	M	V	A	D	I	T		
UniRef90_UP10003703019	UniRef90_UP100041C2EBC	V	I	G	E	L	L	I	A	T	S	S	L	L	T	A	T	L	K	F	E	G	K	I	A	V	Q	L	Q	G	D	G	P	V	P	L	L	M	A	E	S	N
UniRef90_UP100039E7BB1	UniRef90_B1KN30	L	L	G	E	L	L	V	A	T	S	S	L	L	T	A	T	L	K	F	E	G	D	I	T	V	Q	I	Q	G	D	G	P	V	K	F	A	I	N	G	D	
UniRef90_U1UKV9	UniRef90_UP1000368A2CA	L	L	G	E	L	G	F	L	S	A	A	S	S	T	S	L	K	F	D	G	I	A	V	Q	L	Q	G	D	G	P	V	P	L	L	M	A	E	S	D		
UniRef90_U3AXN0	UniRef90_UP100037A45D1	L	L	G	E	L	G	E	A	V	S	L	L	S	A	T	L	K	F	N	G	D	I	S	V	Q	L	Q	G	D	G	P	V	R	L	L	M	V	E	C	S	
UniRef90_UP100037A45D1	UniRef90_N6W5F6	V	L	G	E	L	E	T	L	A	S	V	L	S	S	G	N	K	F	E	G	T	I	V	M	Q	I	H	G	D	G	P	V	R	T	L	L	M	A	E	C	S
UniRef90_D3L2U9	UniRef90_J0Q3R7	A	L	G	R	L	V	M	A	S	M	M	M	A	Q	E	K	G	E	A	R	V	T	L	K	I	E	G	D	G	P	V	G	E	I	V	A	D	F	S		
UniRef90_H8Z4Z3	UniRef90_R0YV41	P	L	G	E	A	L	V	S	A	V	L	S	S	T	S	L	K	F	E	G	D	I	T	V	Q	L	Q	G	D	G	P	V	P	L	L	M	V	E	C	S	
UniRef90_A9M7Z0	UniRef90_UP1000364CC39	A	L	G	E	L	L	A	A	G	V	L	S	G	N	L	K	N	E	G	T	I	V	Q	L	Q	G	D	G	P	V	D	M	L	V	V	D	F	R			
UniRef90_UP1000364CC39	UniRef90_UP10003B4DAD0	L	L	A	E	L	E	V	L	V	T	L	G	S	T	L	K	F	D	G	E	I	T	V	Q	L	Q	G	D	G	P	V	K	F	A	V	N	G	D			
UniRef90_UP100047298A2	UniRef90_B8ER55	A	M	G	R	F	L	T	A	S	M	M	S	L	M	Y	K	D	G	E	R	L	T	K	L	E	G	D	G	P	V	G	M	T	V	E	A	K				
UniRef90_UP10002E2EA28	UniRef90_Q47VD1	L	L	G	E	L	L	V	V	A	T	S	S	L	L	T	A	L	K	F	D	G	I	T	V	Q	L	Q	G	D	G	P	V	G	Y	M	S	V	S	G	N	
UniRef90_R6DY2	UniRef90_11E162	G	L	G	R	V	L	T	G	A	G	L	M	G	L	M	L	K	N	E	G	K	I	T	V	Q	L	Q	G	D	G	P	V	A	R	Q	I	L	A	T	A	T
UniRef90_Q2NQ14	UniRef90_U7FSP5	L	L	G	E	L	L	V	A	T	S	S	L	L	T	A	T	L	K	F	D	G	I	T	V	Q	L	Q	G	D	G	P	V	R	F	A	V	N	G	D		
UniRef90_G8M548	UniRef90_UP1000361E73F	L	L	G	E	M	M	A	C	A	L	L	S	A	N	L	K	F	D	G	T	I	T	V	Q	L	Q	G	D	G	P	V	P	L	L	M	V	E	C	S		
UniRef90_UP1000361E73F	UniRef90_H0J243	A	L	G	R	A	L	T	V	G	I	L	G	T	M	K	N	E	N	R	V	S	L	Q	I	E	C	Q	P	V	L	E	G	I	L	V	Q	G	N	S		
UniRef90_K2NZ15	UniRef90_UP10004648BF5	L	L	G	E	F	L	A	A	V	A	V	L	S	S	T	L	K	F	N	G	M	I	S	L	Q	A	Q	G	D	G	P	V	S	M	V	M	A	E	C	D	
UniRef90_UP10004648BF5	UniRef90_C1DY6V	A	L	G	R	S	M	L	S	A	I	L	G	T	F	K	G	D	E	T	Q	V	T	F	K	G	D	G	P	V	I	G	Q	I	I	A	I	S	D			
UniRef90_UP100037899CF	UniRef90_Q11MG3	V	L	G	E	M	M	A	C	A	L	C	A	N	C	A	N	K	F	D	G	T	I	L	M	Q	I	F	G	D	G											

	90	100	110	120
UniRef90_A6F1X0	H D R F I   R G L   A R Y D E	H A V T E D S   L N A   L L   G E G R M A I   T I		
UniRef90_R5FX01	G H G E V   V R G Y V T N P H   I T F	S K S G K   I D E I T T L   G C   N G Y   I   D V I K		
UniRef90_E1SL31	H T Q A L   R G V A R F D G E V V E G D	L Q Q M V G K G H   L V I   T I		
UniRef90_G4KVP8	N E G N V   R G T V D H   P E T D   P L R   A D G K   L D V G G A   V G R E G T   L T V   R			
UniRef90_J4UUR4	D Q Q Q L   R A L A R   V G G E   I S E Q A S L   N E M I   I G N G V L   V I   S I			
UniRef90_U1M916	H Q Q T M   R G I A R   I Q G E   I T D T   G V L	N L I   G K G H   H M V I   T I		
UniRef90_D0IED7	N N Q Q V   R G V A R W   Q G D I   D D N A N   L H D   L L   G K G H   L V I   T I			
UniRef90_L0FBX2	A R G E V   V R G Y V   H E P   Q V N L P   L N E K G K   L D V A G A   V G A G E   F C   V S R			
UniRef90_D1AKX7	M K G E V   V K G Y L   S N P   Q V E T D D H D S A   H I H I   G K A V G   N G T M Y V I K			
UniRef90_F6AJ28	S E G D V   V R G I A R Y E A E R I   A D G D G L   G Q L   M P   E G V L   A M T V			
UniRef90_G6EM17	T K G H   V K G Y I Q N P   G V D   K K T A T   G E V L V G P   F M G   Q G Q F V S I I			
UniRef90_E4U8M7	V D G A V   V R G Y V K N   P A A E A E   L R A D G K   L N V G A L   V G A G E   L R V V R V			
UniRef90_R9NNT5	N Q Q Q M   R G A A A W L   Q G E   I A A G C   T L K E L   V G   N G Y   L V I   T I			
UniRef90_B8CH33	N L Q Q L   R G V S R W D   G D I   A A D A Q   L Q S L   F G K G H   H M V I   T L			
UniRef90_J2G6W3	T S G G L   R G Y C   R F D   P E A V A K   V S E G   F V P   G A R T   L   L G G G T F   M M T V			
UniRef90_U2ZIS4	S E R E V   R G I A R Y D A E A V   D A G A G   L R D   L M P   D G V   L A L T   T I			
UniRef90UPI000394312C	H E Q N V   R G V A R W   K G D I   P E D A T   L H Q L   M G D G H   L V I   T I			
UniRef90_Q3A7V6	A L G Q V   R G S V K E   P I S G I   A P T   E T G   F D   V P A A I   G R A G F L   H   V   V K			
UniRef90_W1Z4N4	D K Q N M   R G I A R M   Q S E V   S G T T   V K E L   V G   G Y M V I   T I			
UniRef90UPI00047114E2	D Q Q E L   R G V A R W N G   E L A D D A D   D L A Q L   F F G K G Y M I   I T L			
UniRef90_K6X6X5	H D Q K L   R G V A R W D   T D E T E   F S T S   S L E L   F P   P K G V   L V I   T I			
UniRef90UPI00029B1335	S D H E I   R G L A R Y Y A A E Q   I K D D A   S L A D L   M P   G G H   L V L   T I			
UniRef90_U5DT68	A D G T V   V R G Y V   D N P   T V E L   P P   N A L   G K   L D V G G A   I G   E G F L   Y V   V R			
UniRef90UPI0004755B06	N R Q E M   R G V A R   T Q G E I   A E G S T   L K E M   V G N G Y   L V I   T I			
UniRef90UPI0002D7BEAD	N N Q K   R G V A R F   E G E   I A E T A T   L H D M   L G K   G H   V I   T I			
UniRef90_M1FB02	H D R F V   R G L A R F   D D Q A I   G   G D G F   Q Q   L   G   D G R M A I   T I			
UniRef90_R6EQ74	G K G N V   V K G Y I   A D P   G V D   L   P   L K   E N G K   L D V G G A   I G R G E   L   T   V V   K			
UniRef90_U2JUY4	S H H H V   V K G Y L   E H P   E I   I P S   R E D   H   K   L D V G A F I   G H   Q G V   L S V   V R			
UniRef90_F0L5V4	A P E S M   R A Y A R F   D E E R   L A E A   V A   A G Q T S   P E Q   L   L G T   G I L   A F T   T I			
UniRef90_G2DZG4	H E H T I   R G L A R W S G E   V   P   T E Q   G   L   D A   C   F   G E G R   L   V   L T   V			
UniRef90_I4MZ76	S E R R D   I R G L A R Y E A E   G I   T   P   G   A   S   L   G   G E L   L   M   P   N   G   V   L   A M T V			
UniRef90_R5KMK8	W Q G N C   C R I S V E N   P   I   V   E   L   P   L   N   S   K   G   K   L   D   V   S   G   A   L   G   N   S   G   Y   L   Y   V   V K			
UniRef90_K6YMQ7	H E N Q Q L   R G V A R W D   E A L T   V   L   P   T D   F   N   E   V   K   K   G   V   L   V   I   T I			
UniRef90_R4XIT6	S D L S L   R A T V K   V R E G H   D   V   P   A D   G   D   M   Q   S   L   L   N   P   G   G   N   G   R   F   I   V   V L			
UniRef90_R6TS37	Y   L   G   N   V   R   G   Y   I   Q   N   P   A   V   D   L   P   L   K   A   N   G   K   L   D   V   G   G   A   V   G   N   G   V   L   H   I   L   R			
UniRef90UPI00034CBF8D	H E Q N L   R G V A R M   Q M   G   E   V   K   G   D   G   L   L   A   L   M   G   K   G   H   M   I   T I			
UniRef90_G8AT57	S   V   G   D   I   R   A   Y   A   Q   F   D   E   E   A   L   A   K   A   A   D   D   A   I   A   P   A   P   L   L   G   K   G   H   I   A   F   T   V			
UniRef90UPI00037EAD69	Q   D   L   E   L   R   G   T   A   R   V   E   G   E   T   T   G   L   S   F   K   Q   L   V   G   K   G   H   L   M   I   T   T I			
UniRef90UPI0002FEBB0A	P   G   G   E   L   R   A   I   A   R   L   D   E   D   A   A   I   P   A   E   D   A   S   F   T   E   L   V   G   Q   G   K   V   T   I   T			
UniRef90UPI0003703019	S   A   G   E   V   R   G   I   A   R   Y   H   A   E   Q   I   G   S   G   D   G   M   R   E   M   M   P   E   G   V   L   A   I   T   T I			
UniRef90UPI00041C2EBC	H   R   Q   E   L   R   G   I   A   R   W   E   G   E   Q   V   Q   D   L   P   F   A   E   L   V   G   K   G   H   I   V   I   T I			
UniRef90UPI00039E7BB1	S   D   Q   A   V   R   G   I   A   R   Y   S   S   D   D   I   Q   G   D   T   L   P   E   L   M   P   D   G   I   L   T   I   T I			
UniRef90_B1KN30	N   L   Q   Q   L   R   G   V   A   R   F   K   G   E   L   S   S   D   G   D   L   Q   Q   L   F   G   K   G   H   M   V   I   T L			
UniRef90_U1KKV9	H   Q   Q   N   M   R   G   I   A   R   M   Q   S   E   V   T   G   S   R   I   S   D   L   I   G   H   G   H   M   V   I   T I			
UniRef90UPI000368A2CA	S   Q   G   H   V   R   G   I   A   R   M   Q   S   E   V   T   G   S   R   I   S   D   L   I   G   H   G   H   M   V   I   T I			
UniRef90_U3AXN0	T   A   G   T   L   R   G   Y   C   R   F   D   P   D   E   V   A   E   A   S   K   G   F   A   P   G   A   K   S   L   L   G   D   G   V   F   I   M   T			
UniRef90UPI00037A45D1	A   G   L   R   I   R   A   T   A   K   L   P   D   A   E   I   P   D   A   A   T   L   H   D   L   F   N   A   H   G   K   G   R   F   V   I   T   T L			
UniRef90_N6W5F6	H   D   R   A   I   R   G   I   A   R   F   D   T   T   P   T   G   E   S   L   D   D   I   L   G   T   G   R   M   A   I   T   T I			
UniRef90_D3L2U9	R   A   G   S   V   R   G   Y   V   S   K   P   W   V   E   L   P   L   S   E   E   G   K   W   D   V   S   A   G   V   G   K   G   Y   L   T   V   I   K			
UniRef90_J0Q3R7	P   P   S   N   L   R   G   Y   A   R   F   D   D   D   K   L   K   Q   A   I   A   N   G   Q   T   S   S   E   T   I   L   G   K   G   T   L   A   F   T   I			
UniRef90_H8Z4Z3	H   D   H   S   L   R   G   L   A   R   W   R   E   P   L   G   S   T   H   L   T   D   L   L   G   P   A   Q   L   V   M   T   I			
UniRef90_R0YV41	S   D   R   T   V   R   A   T   A   R   W   D   E   T   A   E   I   A   D   D   E   S   L   G   D   L   L   G   E   G   G   V   F   V   L   T   L			
UniRef90_A9M7Z0	T   P   R   S   V   R   A   Y   A   R   D   E   A   R   L   K   E   A   L   A   A   N   K   T   R   P   E   E   L   L   G   N   G   T   L   A   F   T   V			
UniRef90UPI000364CC39	N   Q   Q   N   F   R   A   M   V   R   L   Q   A   E   L   S   G   S   S   F   R   E   L   I   G   E   G   M   I   V   T   I			
UniRef90UPI0003B4DAD0	T   P   E   N   V   R   A   Y   A   R   F   D   Q   A   L   L   D   K   A   V   A   A   G   Q   T   E   P   E   Q   L   L   G   K   G   V   L   A   F   T   I			
UniRef90UPI00047298A2	S   G   V   R   R   S   T   I   Q   N   P   N   V   Y   M   D   G   P   K   K   G   K   L   N   V   G   N   A   V   G   Q   G   N   L   F   V   T   K   D			
UniRef90_B8ER55	A   P   D   R   L   R   A   F   R   D   A   A   R   L   S   Q   A   P   S   G   A   D   L   G   A   G   H   L   A   F   T   I			
UniRef90UPI0002E2EA28	H   E   Q   K   L   R   G   V   A   R   Y   D   G   D   Q   N   E   Q   A   G   L   H   D   L   I   G   K   G   H   L   V   I   T   I			
UniRef90_Q47VD1	N   K   Q   Q   M   R   G   I   A   K   M   A   E   E   T   S   A   D   T   L   Q   T   L   I   G   K   G   T   M   I   T   I			
UniRef90_R6DY2	Q   A   G   D   V   K   G   Y   I   A   N   P   D   V   E   L   P   L   T   P   Q   G   K   L   D   V   G   G   S   L   L   G   I   T   V   I   K			
UniRef90_11E162	D   Q   Q   Q   F   R   G   V   V   R   M   Q   A   E   I   R   G   D   S   F   R   D   L   I   G   E   G   Y   L   L   V   T   I			
UniRef90_Q2QNQ4	D   R   Q   N   M   R   G   L   A   C   Y   C   L   I   N   G   D   L   A   D   D   A   T   L   A   Q   M   V   G   N   G   Y   L   V   I   T   I			
UniRef90_U7FSP5	H   D   R   K   I   R   G   L   A   R   F   D   E   Q   A   M   S   G   E   T   L   H   E   L   L   G   Q   S   R   M   A   I   T   I			
UniRef90_G8M548	S   N   L   S   L   R   A   T   A   K   L   A   E   E   V   E   A   E   L   E   N   E   M   S   L   P   E   L   L   N   R   H   G   R   G   R   C   V   I   T   L			
UniRef90UPI000361E73F	A   R   G   E   V   R   G   Y   V   S   Q   P   W   V   I   L   P   S   K   E   Q   G   K   L   N   V   E   D   A   V   G   A   G   S   K   L   L   V   V   K			
UniRef90_H0J243	P   G   G   E   L   R   A   L   A   R   I   E   D   A   L   P   S   E   Y   A   S   F   R   E   L   V   G   E   G   Q   I   V   T   T L			
UniRef90_K2NZ15	T   P   S   A   V   R   A   Y   A   R   F   D   E   A   R   L   A   E   A   V   A   A   G   K   T   K   P   E   D   L   L   G   A   G   V   L   A   L   T   V			
UniRef90UPI0004648BF5	H   H   K   N   L   R   G   I   I   R   L   K   D   S   A   D   R   P   Q   G   R   G   V   E   L   L   G   K   G   I   M   A   I   T   I			
UniRef90_C1DYV6	N   T   Q   G   V   K   G   L   V   S   N   P   N   A   D   P   P   L   R   P   D   G   K   L   N   V   G   A   A   V   G   R   G   F   L   T   V   A   R   A			
UniRef90UPI00037899CF	T   P   G   S   V   R   A   Y   A   R   F   D   E   A   R   L   A   D   A   V   E   Q   G   A   A   S   P   E   A   L   L   G   E   G   I   L   A   L   T   I			
UniRef90_Q11MG3	E   S   L   N   L   R   A   Y   A   K   A   D   A   V   P   A   S   V   A   L   D   G   G   V   A   D   L   V   G   D   G   R   L   Q   L   S   L   D			
UniRef90_N6Y6Q6	S   D   L   S   L   R   A   T   V   Q   L   R   Q   E   F   F   V   V   P   D   N   A   T   F   Q   S   L   L   N   S   N   N   G   R   F   I   V   I   L			
UniRef90_I3UDQ9	S   D   G   K   L   R   G   M   R   A   R   W   K   D   D   F   T   K   D   E   S   I   N   G   L   F   G   E   N   G   R   I   V   T   V			
UniRef90UPI0003B3F958	A   P   D   G   L   R   G   Y   A   R   F   D   H   D   A   L   V   K   A   S   E   L   G   K   T   R   P   G   E   L   L   G   H   G   H   L   A   M   T   I			
UniRef90_A0A024K8N8	T   S   G   G   A   I   R   A   Y   V   K   L   D   P   E   R   V   D   A   A   I   E   A   A   Q   E   G   L   G   A   L   L   G   E   G   T   M   A   M   T   I			
UniRef90UPI0003A56FE2	S   N   Q   T   C   R   A   T   A   R   W   D   E   T   A   Q   I   G   G   N   E   T   L   R   N   L   L   G   E   N   G   V   F   V   I   T   V			
UniRef90_D4DQD0	A   D   G   G   V   R   G   Y   V   R   N   P   H   A   E   L   P   P   R   E   D   G   K   L   D   V   R   G   V   I   G   S   G   D   L   G   V   M   R			
UniRef90_K9ZX21	H   D   D   Q   K   L   R   G   V   A   R   W   N   E   E   F   F   K   L   P   S   S   F   S   E   L   F   R   K   G   Y   L   A   I   T   L   V   I   K			
UniRef90_B0S1I1	T   P   P   H   A   L   R   A   Y   A   S   Y   D   E   A   Q   V   A   E   A   I   A   A   G   K   T   S   E   D   L   L   G   K   G   V   L   A   L   T   V			
UniRef90_G4QND9	S   E   L   N   L   R   A   T   A   K   L   A   D   D   A   I   I   S   D   D   A   T   L   S   D   L   D   V   N   V   K   G   Q   G   R   F   V   I   T   L			
UniRef90UPI000465A84C	S   E   R   E   I   R   G   L   A   R   Y   D   A   D   R   I   A   P   D   A   T   L   A   D   L   M   P   D   G   V   L   A   L   T   V			
UniRef90_A4G735	T   P   P   S   S   V   R   G   Y   A   R   F   D   A   D   K   L   A   A   A   V   S   V   G   A   T   S   S   E   A   L   L   G   G   N   G   I   M   A   L   T   V			
UniRef90_J1IHV9	G   H   G   N   V   R   A   C   R   F   D   Q   D   R   L   D   R   W   E   A   D   V   P   E   T   A   Y   M   G   G   R   G   H   M   V   F   T   I			
UniRef90_Q1YJZ3	H   H   N   D   V   R   A   I   V   R   P   Q   P   G   Q   M   P   E   S   F   I   S   L   P   E   L   L   M   G   N   G   Q   L   V   I   T   L			
UniRef90_G2KSJ8	S   P   G   Q   I   R   G   Y   A   S   Y   D   A   D   E   V   A   H   L   L   N   G   A   A   P   K   K   P   L   I   G   N   G   H   L   A   M   T   I			
UniRef90UPI000373EC8C	A   D   L   A   V   R   G   Y   V   Q   N   P   Q   A   D   L   P   S   R   D   G   K   L   D   V   G   G   G   V   G   F   V   I   T   V			
UniRef90UPI000472B8F1	E   S   G   N   V   R   G   F   V   A   N   G   Q   L   E   G   Q   A   N   W   P   V   N   A   L   I   G   P   G   T   L   T   T   K			
UniRef90_E3I4L5	S   P   E   N   V   R   A   Y   A   R   F   D   E   Q   A   V   A   D   A   V   A   A   G   R   A   S   P   E   E   L   L   G   A   G   V   L   A   F   T   I			
UniRef90UPI00046CE9BB	S   E   G   V   L   R   G   Y   A   G   I   N   E   E   T   L   A   Q   E   D   P   A   T   L   T   L   K   D   L   T   G   K   G   Y   L   A   F   T   V   D			
UniRef90UPI00035F838				
UniRef90_K2PYJ4				
UniRef90UPI00035CC609				

130            140            150            160

UniRef90_A6F1X0	S P D K G Q R Y Q G   V V   P R E E E N   L A G C L E E Y F E R S E Q I   P T S F F L F
UniRef90_R5FX01	D L H M N D   F T S S T E I I T G D L   A K D F T Y Y   L M N S S E Q I V   P S A I L L G
UniRef90_E1SL31	T P K E G E R Y Q G   V V G   L T E P T   L A G C L E Q Y F A Q S E Q I V   P T R T R L W L H
UniRef90_G4KVP8	D L N M K E P Y V G S   V E L M G G E   A E D L A A Y F V E S E Q I   P T A C G L G
UniRef90_J4UUR4	M P I D G E R Y Q G   V I S L D K P T   I R E C C L E D Y F A R S E S E Q I   P T A C G L G
UniRef90_U1M916	T P L K G E R Y Q G   V P L V S N S   L A E C C L E Q Y F Q Q S E S E Q I   P T A C G L G
UniRef90_D0IED7	E P K Q G E R Y Q G   V V G   L E G N T   L T E V L E G Y F L R S E S E Q I   P T A C G L G
UniRef90_L0FBX2	S L S N G E S Y T G M   V P I V S G E   I A D D L V H Y L H T S S E Q I   P R S A A L L G
UniRef90_D1AKX7	D M G L R D P F S G L V Q   Q T G E   I G D D L A A Y Y F Y T S S E Q I   P S V V A L L G
UniRef90_F6AJ28	D P T Q G Q R Y Q G   V V P   L E G A T   L A E C C L T S Y F A T T S S E Q I   P T A C G L G
UniRef90_G6EM17	D Y G T G N P Y T S S T P   L I S G E   I G E D F A Y Y   L T E S S E Q I   P S A V G L C
UniRef90_E4U8M7	L A G G E Q F D S S   V P L V S G E   I A E D L A H Y   L W Q S S E Q I   P S A V L L G
UniRef90_R9NNT5	S P K E G E R Y Q G   V V G   L E G E T   L A A C C L E A Y Y F E Q S E Q I   P T K I K L F
UniRef90_B8CH33	T P D D G E R Y Q G   V V A   L D K E T   L S E C C L E A Y Y F E Q S E Q I   P T R V R L A
UniRef90_J2G6W3	D Q G D M D R Y Q G   I T P   E G E T   L A L C A E Q Y F A Q S E S E Q I   P T R F W L R
UniRef90_U2ZIS4	D P A K G Q R Y Q G   V E   L E G D S   L A D S L T A Y F A T T S S E Q I   P T R F W L R
UniRef90UPI000394312C	D P E K G E R Y Q G   V V A   L D G D S   L A S V L E T Y F E Q S E S E Q I   P V P S T V A L G
UniRef90_Q3A7V6	D L G L K E P Y R G   M V Q   L Y S S E   V A E D L A A Y Y   L T S S S E Q I   P V P S T V A L G
UniRef90_W1Z4N4	T P T K G E R Y Q G   I V P   L E H D T   L S K C I E S Y F E Q S E S E Q I   P V K T R L W F A
UniRef90UPI00047114E2	T P T V G E R Y Q G   V V G   L A D K A N   L A L C E E Y F M Q S S E Q I   P T G I Y L F
UniRef90_K6X6X5	T P E L G E R Y Q G   M V A   L D K P S   L S E C C L E S Y F T Q S S E Q I   P T R L F L R
UniRef90UPI00029B1335	I P V N G Q R Y Q G   V G T   V E L L V S G E   I G D D V A N Y   L A T S S E Q I   P T R L F L R
UniRef90_U5DT68	D V G Y G Y P Y S S T   V E L L V S G E   I A A C C L E D Y F M R S S E Q I   P T R L F L R
UniRef90UPI0004755B06	A P E K G E R Y Q G   V V G   L E G D T   L A E V L E A Y Y F E R S S E Q I   P T R L F L R
UniRef90UPI0002D7BEAD	S P N K G E R Y Q G   V V G   L E G D T   L A E V L E A Y Y F E R S S E Q I   P T R L F L R
UniRef90_M1FB02	T P D Q G Q R Y Q G   V V P   R E R D S   L A G C L E E Y F E R S S E Q I   P T R L F L R
UniRef90_R6EQ74	D L G L L K E P Y V G T   V S   L V S G E   I A E D L T S Y Y Y   I S S E Q Q   P N T A I S L G
UniRef90_U2JUY4	D Y G L L K E P Y Q A K S P   V   L V S G E   I A E D F A Y Y Y A N S S E Q Q   P T F L V L G
UniRef90_F0L5V4	D Q G V G Q P Y Q G   I V P   L D G G S S   L E E I A G V Y F R Q S S E Q Q   P T R V R L G
UniRef90_G2DZG4	E H E D G E P Y Q Q G   V V P   L E G Q Q   L S E A I E S Y F G Q S S E Q Q   P T R L W G
UniRef90_I4MZ76	D P N K G Q R Y Q G   V E   L D G A D   L S E C C F T N Y F K M S S E Q Q   P T R F W L N
UniRef90_R5KMK8	D I G L K E P F I G T   T Q   V S   G E   I V A E D I T N Y F A V S S E Q Q   P T V C S L G
UniRef90_K6YMQ7	T P E D G E R Y Q G   M V A   L D K P T   L A Q C I E G Y F E Q S S E Q Q   P A T K V I L L
UniRef90_R4XIT6	D P Q H K V P Y Q Q G   I V P   L E G D T   V A E A L Q H Y M K A S S E Q Q   P D T R L W L A
UniRef90_R6TS37	D T G A E E P Y N G A   A L V   S G E   I A E D I A A Y Y A E S S E Q Q   P T V I C A L G
UniRef90UPI00034CBF8D	T P V K G E R Y Q G   I V P   L E H D S   L A K C C V E Q Y F A Q S S E Q Q   P T R M W F A S
UniRef90_G8AT57	D Q G P N E R Y Q G   V V P   L E H D S   L A D C C V E Q Y F A Q S S E Q Q   P T R L W L A
UniRef90UPI00037EAD69	T P D D G E R Y Q G   V V A   L E K D S   L S E C C L E D Y F E Q S S E Q Q   P T R L W L A
UniRef90UPI0002FEBB0A	D P R E G H R Y Q G   V V A   L T R D S   L A A G C L E D Y F A Q S S E Q Q   P T R F W L N
UniRef90UPI0003703019	D P A E G Q R Y Q G   V V A   L D G A S   L A A S L S A Y F A N S S E Q Q   P T R L W L A
UniRef90UPI00041C2EBC	T P E K G E R Y Q G   V V E   L D S A G V   L A K S L S A Y F A N S S E Q Q   P T R L W L A
UniRef90UPI00039E7BB1	D P Q Q G Q R Y Q G   V V P   L E G H S   L A E A L S A Y F D N S S E Q Q   P T R F R L Q
UniRef90_B1KN30	T P T E G E R Y Q G   V V A   L D K P T   L A G C L E E Y F A Q S S E Q Q   P T S I T L F
UniRef90_U1KKV9	T P V K G E R Y Q G   V V P   L T K D T   L A E C C I E D Y F T Q S S E Q Q   P T R L W F A
UniRef90UPI000368A2CA	D P A K G Q R Y Q G   V V P   L D G R N   L A A C C I E H Y F A Q S S E Q Q   P T R L W F A
UniRef90_U3AXN0	D Q G H M A R H Q G   V T P   I E G E T   L A L C A E T Y F A Q S S E Q Q   P T R V N L G
UniRef90UPI00037A45D1	D P A D K Q P Y Q G   V P   L D G E E D M A T V I E N Y M   L R S S E Q Q   Q M D T R L W L A
UniRef90_N6W5F6	T P E Q G Q R Y Q G   V V P   P R E H D N   L S E C C L E D Y F E R S S E Q Q   Q I E T R L F L G
UniRef90_D3L2U9	D V G L K E P V V S R   V P   L I S G E   I A E D I A Y Y Y   V K S S E Q Q   Q M P T A V M L G
UniRef90_J0Q3R7	D Q G Y T Q R Y Q G   I V A   L D G G S N   L Q E V A R T Y F D Q S S E Q Q   Q I P T D I R L W L A
UniRef90_H8Z4Z3	E P D A G Q S Y Q G   V V P   L Q G D S   L A A A I G H Y F D V S S E Q Q   Q I P T R V W L L A
UniRef90_R0YV41	Q P K D G E P W Q G   V V P   L E G G G   I A Q M L A N Y M K R S S E Q Q   Q I D T H I V L S
UniRef90_A9M7Z0	D Q G Y T Q R Y Q G   I V A   L D G S T   L E E I A V T Y F R Q S S E Q Q   Q I P T D L K L S Y A
UniRef90UPI000364CC39	T P R Q G E R Y Q G   I I P   L T G A T   L T S T L E G Y F A Q S S E Q Q   Q I P T R V W R L L A
UniRef90UPI0003B4DAD0	D Q G F S Q P Y Q G   I V A   L D G T S   L E D I A G T Y F R Q S S E Q Q   Q I P T R V W R L L A
UniRef90UPI00047298A2	W K D N Y F T S S S P   Q T G E   I G D D F T Y Y Y A A S E S S E Q Q   Q T P S A V V G L G
UniRef90_B8ER55	D Q G E A A R Y Q G   V V A   L T Q G Q   L E G D N   L A E A V L E E G Y F E R S S E Q Q   Q I P T Q V R L W
UniRef90UPI0002E2EA28	E P K Q G E R Y Q G   V V P   P R E A D N   L A G C L E E Y F E R S S E Q Q   Q I A T S L F L F
UniRef90_Q47VD1	R P N A G E A Y Q G   V V A   L D E E S   L A D C C L A H Y F D V S S E Q Q   Q I P T K I W L F G
UniRef90_R6DY2	D L G L L R E P Y V G T   I A L V   D G E   I A D D L T A Y Y F I S S E Q Q   Q I N T A I S L G
UniRef90_11E162	T P K L G E R Y Q G   I I P   L S G D S   L T S T L E A Y Y F A Q S S E Q Q   Q I P T R L Y L F
UniRef90_Q2QNQ4	T P A E G E R Y Q G   V V G   L E G P R   L A D C C L E E N Y F L Q S S E Q Q   Q I P T R L F L F
UniRef90_U7FSP5	T P E K G Q R Y Q G   V V P   P R E A D N   L A G C L E E Y F E R S S E Q Q   Q I A T S L F L F
UniRef90_G8M548	D P A D K Q P Y Q G   I V P   L S G E S   M A E V L E H Y M H H S S E Q Q   Q I D T R L W L A
UniRef90UPI000361E73F	D L G F G E P Y V G S   I T M P R G   I A Y D L A Y Y F A S S S E Q Q   Q I P S A C S A G
UniRef90_H0J243	D P R E G H R Y Q G   I V A   L D H S T   L G G C L E A Y Y F G Q S S E Q Q   Q I P T R L W L A
UniRef90_K2NZ15	D Q G H M Q R Y Q G   I V Q   L D G G S T   L E D V A R T Y F R Q S S E Q Q   Q I P T E V R L W L A
UniRef90UPI0004648BF5	E P E R G E R Y Q G   V V P   P M D S D N   L A E C C L E H Y F F Q S S E Q Q   Q I K T R L W F A
UniRef90_C1DY6V	H P Q W K A P F T G T   V E   I T T G E   I A E D I A V Y L Q D S S E Q Q   Q I V N S A V A V G
UniRef90UPI00037899CF	D P H N K Q P Y Q G   I V P   L P L N G Q S   L A A V L E H Y M H H S S E Q Q   Q I D T R L W L A
UniRef90_Q11MG3	D Q G P Y Q R Y Q G   I V Q   L D G G S T   L E D V A R S Y F R Q S S E Q Q   Q I P T E V R L W L A
UniRef90_N6Y6Q6	U P I G L D Q P Y Q S   L V P   L E G D S   L I A R C C F E N Y L A Q S S E Q Q   Q I P A G L W L A
UniRef90_I3UDQ9	D P T D R Q P Y Q G   V P   P M E G D S   L V A K V L E H Y M K M Q S S E Q Q   Q I D T H I W L A
UniRef90UPI0003B3F958	E P G K G E R Y Q G   S I V N   L D G E T   L S D C L E A Y Y F E Q S S E Q Q   Q I K T R L E L A
UniRef90_A0A024K8N8	D Q G H T E R Y Q G   G I V A   L E G Q S   L E E V A H T Y F Q Q S S E Q Q   Q I P T M V R L W L A
UniRef90UPI0003A56FE2	D Q G P M D R Y Q G   V V P   L E G E G E T   I A E A A E A Y F A Q S S E Q Q   Q I P T R I K S A
UniRef90_D4DQD0	Q P Q D G E P W Q G   V V P   L E G G S   I A E M L T H Y M L R S S E Q Q   Q I E T H I T L A
UniRef90_K9ZX21	L L E N A E P Y T G T   V E   L V S G E   I A E D L T Y L A R S S E Q Q   Q I E T H I T L A
UniRef90_B0S11	D F K L K E P Y I G Q T S   L V S G E   I A E D F S N Y F Y Q S S E Q Q   Q I R P T V V A L L G
UniRef90_G4QND9	A P K D G E R Y Q G   I V A   L D K P T   L A E C C L E D Y F L Q S S E Q Q   Q I L T K V S L R
UniRef90UPI000465A84C	D Q G H M Q R Y Q G   I V P   L D Q T S   L E E A A R I Y F R Q S S E Q Q   Q I P T D V R L L A
UniRef90_A4G735	D P K D K L P Y Q G   I V P   L D G D S   L V A T V I E N Y M L R S S E Q Q   Q I D T R L W L A
UniRef90_J1IHV9	D P T V G Q R Y Q G   I V D   L D G E T   L S D C F T N Y F V M S S E Q Q   Q I V G T R E W L N
UniRef90_Q1YJZ3	D Q G Y T Q R Y Q G   I V E   L A G S S   M E E V A E A Y F R Q S S E Q Q   Q I P T A V V K L A
UniRef90_G2KSJ8	D Q G N T E R Y Q G   V V E   L K G G T   L V E C C V Q H Y F T Q S S E Q Q   Q I A T G L R L A
UniRef90UPI000373EC8C	D P A I G E R Y Q G   I V P   L E A D T   L A G C L E H Y F K Q S S E Q Q   Q I A T R F W L A
UniRef90UPI000472B8F1	D P T H G Q R Y Q G   I V A   L D Q V S   L A A C C L E E G Y F E R S S E Q Q   Q I P T R I L W L A
UniRef90_E3I4L5	D P G A G E R Y Q G   I V A   L A G N T   L V D A A H E Y F D Q S S E Q Q   Q I P T F I R I A
UniRef90UPI00046CE9BB	D L G L K E P Y V S T A P   I Q T G E   I A E D L A Y Y L L T S S E Q Q   Q I P S A V V A L L G
UniRef90UPI00035F8F38	D L S M E E N W S G T   V E   L Q T G E   I G Q D F A Y Y F T L S S E Q Q   Q I T P T A V V S V G G
UniRef90_K2PYJ4	D Q G F M P Q Y Q G   I V P   L D G T S   L E D I A G V Y F R Q S S E Q Q   Q I P T R V R L L G
UniRef90UPI00035CC609	Q G E H M E R Y Q G   I V E   L E G A T   L S E C I Q G Y F K Q S S D Q I K T G V L

170            180            190            200

UniRef90_A6F1X0	A D E N	C S A G L M I Q K L P G D T E Q D S D L W D R I L N H L A S T	
UniRef90_R5FX01	S K F D V D N T C S V C Y G G M M I	Q L L P N A S E E T I S Y L E K V L I N D N I E	
UniRef90_E1SL31	A N G E K	A A G M L L Q E M P A S N V D A D V E F E H L E S L T D T	
UniRef90_G4KVP8	V L V N R D Q S V K T A G G Y L V Q L P	G A G E D A I S R V E G S L L A A G A	
UniRef90_J4UUR4	I R T G E Y E G K A V A G G M L L Q I M P	D G T G T P E D F E H L M T L A E T	
UniRef90_U1M916	T D A D A E K C S G M L L Q V L P	V N K E K A E Q D F T H L E A L T N T	
UniRef90_D0IED7	V L V E R D L H V A G A A G M L F Q L L P	D G K G S A E D F E H L E Q L T D T	
UniRef90_L0FBX2	V K I N K D Y K V S C A G G F I I Q L L P	G A S E E S I Q M L E N R L S Q I Q G	
UniRef90_D1AKX7	A D G L R A R G L L L Q Q L P	G A E N E F I D R L E E K L K A I R P	
UniRef90_F6AJ28	V G L D K E D K V K V V A G G F M L Q V L P	T D E E E R A A S W E H L V T L A D T	
UniRef90_G6EM17	V R V A P G G H V E A A G G L V V Q V L P	G A S E E E I Q M L E N R L S Q I Q G	
UniRef90_E4U8M7	I R T G E H D G K P G A A G G L L Q I L P	D A D E E A I A R L E R N L A G V R G	
UniRef90_R9NNT5	A D A K Q A A G M F L Q V L P	A Q D A N P E D F N H L V T L T E T	
UniRef90_B8CH33	V G Q A D T G E K W R A G G L I Q S I A G	T D G N H N E E F E H L S V L T E T	
UniRef90_J2G6W3	T S L T E E H N R A G G G L I Q V L P	G D D T E D A W T H A Q A L F E T T G	
UniRef90_U2ZIS4	A D G Q R A G G L L Q Q L P	P P H H E E R Q E S W N H L L T L A D T	
UniRef90UPI000394312C	I K T G Q S E E K L C A A G M L L Q I M P	D G T G S P D D F E H L E Q L T N T	
UniRef90_Q3A7V6	V Y L E K D G R I S A A G G L L V Q A L P	E G E E A L I A L E E R L V A L P P	
UniRef90_W1Z4N4	T D T T E G K A K A C G F L P Q V L P	V D K Q K S I N D F T H L E A L S D T	
UniRef90UPI00047114E2	A N G K Q A A G M L L Q V L P	T S S E A D S P D F T H L S A L T E T	
UniRef90_K6X6X5	T S L T E E H N R A G G G L I Q V L P	A D R Q K D I E E R E D S W N H V K T	
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210            220            230

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50            60            70            80

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

90                    100                    110                    120

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

130            140            150            160

UniRef90_A0A031MJT7	D P D Q G Q R Y Q G   V V   A L   D G D S   L   A D A   L   A G Y F D S S   E   Q   L   P   S   R   F   R   L   L
UniRef90_UP100046335E7	D Q G H M Q R Y Q G I   V   Q   L   D S T S   L   E D A   A R T Y F R Q S S   E   Q   I   P   T   E   V   R   L   S
UniRef90_C6CW5	P K D G G Q T Y Q G I   V   P   L   E G D N   I   S E   L   Q N Y M Q R S S   E   Q   I   A T R   I   W   L   S
UniRef90_F5S5P3	Q P K D G E P W Q G   V   P   L   E G G S   I   A S M   M   M   H   Y   M A R S   E   Q   I   E   T   Y   L   A   L   A
UniRef90_UP10003B52E6D	D Q G D H E R Y Q G I   V   S   L   E G A T   L   S E   C   A E   A Y   F R Q S S   E   Q   I   P   T   D   I   R   L   A
UniRef90_M1NX16	D Q G H M Q R Y Q G I   V   A   L   D G E N   L   Q K   V   S   C   N   Y   F G Q S S   E   Q   I   P   T   D   I   R   L   A
UniRef90_J1K289	D Q G H M Q R Y Q G I   V   A   L   D G S N   L   E E   I   A R N   Y   F   L   Q   S   S   E   Q   I   P   T   D   I   R   L   A
UniRef90_B1XJZ5	D F G R G Y P Y S S T   V   E   L   V   S   G   E   I   G   D   D   V   T   H   Y   L   A   T   S   S   E   Q   T   P   S   A   L   L   V   G   G
UniRef90_F8I1U0	E P V S G G W Y Q G Q   V   E   L   V   S   G   E   I   G   E   D   L   L   H   Y   Y   T   Q   S   S   E   Q   V   P   S   A   V   A   L   L   G   G
UniRef90_B3PHB0	E P G K L E R Y Q G I   V   P   M   E   A   D   D   L   A   G   C   L   E   D   Y   F   Q   Q   S   S   E   Q   V   A   T   R   L   W   L   A
UniRef90_E8RLU6	E P G M G D R Y Q G V   T   P   I   E   G   D   S   L   S   C   A   E   H   Y   F   A   Q   S   S   E   Q   I   P   T   Q   I   K   L   A
UniRef90_U2RCM9	D L G L R D P F S G   V   T   K   I   N   E   E   D   I   A   D   I   V   A   H   Y   F   L   L   S   S   E   Q   V   K   S   V   A   L   L   G   G
UniRef90_Q016Q1	H P S M K A P F S G   S   V   A   I   R   T   G   E   I   A   E   D   V   A   G   Y   L   S   E   S   E   Q   V   G   A   A   I   A   V   L   G   G
UniRef90_UP100037E13B1	D Q G H T Q R Y Q G I   V   P   L   D   G   A   S   L   E   E   I   A   G   V   Y   F   R   Q   S   S   E   Q   I   P   T   K   V   R   L   M
UniRef90_F5ZF36	T P D E G E R Y Q G I   V   A   L   D   K   P   T   L   A   E   C   L   E   E   Y   F   A   Q   S   S   E   Q   L   A   T   R   V   H   L   M
UniRef90_Q2BL47	D P E K G Q R Y Q G I   V   P   L   D   G   A   N   L   A   K   C   L   E   E   Y   Y   F   V   S   S   E   Q   L   M   T   Q   V   R   L   F
UniRef90_UP10000E10DEF	T P K D G E R Y Q G I   V   V   G   L   D   Q   D   S   L   A   A   C   L   E   E   Y   Y   F   L   Q   S   S   E   Q   L   P   T   T   V   R   L   F
UniRef90_UP10003650B3B	P G G H M R R Y Q G   V   V   P   L   D   G   D   S   L   E   E   V   A   H   A   Y   F   E   Q   S   S   E   Q   I   P   S   A   V   L   L   G
UniRef90_G8ND78	S L P N G E   Y   T   S   A   V   P   L   V   S   G   E   M   A   E   D   L   A   H   Y   L   W   Q   S   S   E   Q   L   Q   A   G   L   R   S   A
UniRef90_UP100047C9EB2	D Q G N T E R Y Q G I   V   E   L   S   G   E   T   L   W   E   C   A   Q   H   Y   F   R   Q   S   S   E   Q   L   P   S   R   L   F   L
UniRef90_F8GCS6	M P S M R E S Y Q S   S   V   P   L   D   G   D   N   I   A   E   L   F   E   H   Y   F   K   Q   S   S   E   Q   Q   P   A   G   L   W   L   A
UniRef90_UP100035E887D	V Q G M D Q P Y Q S   L   V   P   L   E   G   N   S   I   A   A   V   F   E   H   Y   L   Q   Q   S   S   E   Q   Q   P   T   A   V   A   L   L   G
UniRef90_I4BUX0	D L G L R E P   V   I   S   K   I   P   L   V   S   G   E   I   A   E   D   I   A   Y   Y   Y   S   K   S   S   E   Q   I   P   T   V   T   A   L   L   G
UniRef90_W4V630	D L G L K E P   Y   V   G   Y   D   L   I   S   G   E   I   A   E   D   I   T   Y   Y   V   Y   S   E   S   E   Q   I   P   T   V   T   A   L   L   G
UniRef90_G4R8T1	D Q G H M D R Y Q G   V   A   L   E   G   E   S   L   E   E   V   A   H   T   Y   F   M   Q   S   S   E   Q   I   P   T   R   V   R   L   A
UniRef90_UP10003468EE9	D V G Y Q G P Y S S   T   V   E   L   I   S   G   E   V   G   E   D   I   A   N   Y   L   V   V   S   S   E   Q   T   P   S   A   L   L   V   G
UniRef90_E3F124	D Q G E G E P Y S G   I   T   S   L   E   G   G   S   L   A   A   C   A   E   A   Y   F   R   Q   S   S   E   Q   I   P   T   R   F   A   L   L   S
UniRef90_UP1000373BEDC	E P A Q G R R Y Q G   V   V   P   L   E   G   E   T   L   A   R   C   I   E   N   Y   F   S   Q   S   S   E   Q   I   P   T   Q   V   H   L   V
UniRef90_M1NVC4	Y Q G P H Q P Y Q G I   V   P   L   D   G   S   N   L   Q   E   A   S   H   M   Y   F   D   Q   S   S   E   Q   I   P   T   N   I   C   L   A
UniRef90_B7S032	D P V K G Q R Y Q G I   A   L   L   S   D   D   S   L   A   S   S   L   D   A   Y   F   K   Q   S   S   E   Q   I   G   T   R   F   W   L   A
UniRef90_H3ZF39	T P N Q G E R Y Q G   I   I   P   L   S   G   Q   S   L   A   E   T   L   L   E   A   Y   F   A   Q   S   S   E   Q   I   P   T   R   F   Y   I   L
UniRef90_R5B228	D I G L R E P   Y   V   G   S   T   E   L   V   S   G   E   I   A   E   D   L   S   A   Y   L   V   E   S   S   E   Q   I   P   A   A   C   G   L   G
UniRef90_Q5QYA1	T P D T G E R Y Q G   V   V   G   V   S   A   S   A   D   S   I   A   A   M   L   E   D   Y   F   E   Q   S   S   E   Q   I   H   T   R   V   W   L   H
UniRef90_M2Y4E7	D Q G P E D R Y Q G I   V   E   L   E   G   P   T   L   E   D   C   A   R   A   Y   F   K   Q   S   S   E   Q   I   D   T   A   I   E   A   M
UniRef90_A9ILW2	D Q G H M Q P Y Q G I   V   A   L   D   G   S   N   L   Q   D   A   S   R   T   Y   F   D   Q   S   S   E   Q   I   P   T   D   I   R   L   A
UniRef90_E0TGB7	D Q G P M E R Y Q G   V   V   P   L   E   G   K   D   L   A   T   A   T   V   N   Y   F   S   Q   S   S   E   Q   I   P   T   K   V   R   L   L   A
UniRef90_A0A021XDJ0	D Q G H T Q R Y Q G   V   V   P   L   E   G   K   D   L   A   T   A   T   V   N   Y   F   S   Q   S   S   E   Q   I   P   T   R   F   S   L   S   G
UniRef90_UP1000469BAE5	D Q G E G M P Y Q G I   T   P   L   E   G   G   S   L   A   A   C   A   E   A   Y   F   A   Q   S   S   E   Q   I   P   S   A   V   S   L   A
UniRef90_W1TZA5	Y S L L R Q P Y Q S   A   I   E   I   H   S   G   E   I   A   E   D   L   A   Y   Y   L   T   L   S   S   E   Q   I   P   T   R   V   R   L   A
UniRef90_C6XMA5	D Q E N T T P Y Q G   V   P   I   E   G   D   T   L   A   E   C   A   Q   H   Y   F   N   Q   S   S   E   Q   I   P   T   R   V   R   L   A
UniRef90_W0GPF6	D L G M K E P   F   T   Q   G   Q   D   L   V   S   G   E   I   N   L   D   I   T   Y   Y   L   V   K   S   S   E   Q   I   K   S   V   I   A   C   S
UniRef90_X4ZDL7	D P E R K Q Q P Y Q G   I   V   P   L   E   G   E   T   V   A   A   E   A   L   E   H   Y   M   K   A   S   S   E   Q   I   D   T   R   L   W   L   A
UniRef90_C5BL7	D P E H G Q R Y Q G   L   V   P   L   E   G   D   T   L   A   A   D   C   L   A   L   Y   F   A   Q   S   S   E   Q   I   P   T   K   L   W   L   F
UniRef90_A6FL72	Q G P G S E P   Y   Q G   I   T   P   I   S   G   N   G   L   S   A   S   A   E   A   Y   F   A   Q   S   S   E   Q   I   P   T   R   F   S   L   W   L   T
UniRef90_UP10003A88A02	D P V K G K R Y Q G   V   P   L   E   K   E   T   L   A   A   S   S   L   E   D   Y   F   A   Q   S   S   E   Q   I   P   T   R   V   R   L   A
UniRef90_E6YP38	D Q R Y T Q R Y Q G   I   V   A   L   D   G   S   N   F   Q   E   V   A   R   N   Y   F   N   Q   S   S   E   Q   I   P   T   D   L   R   L   A
UniRef90_UP100037DEE29	D P R E G N R Y Q G   I   V   A   L   E   A   E   D   L   A   S   C   L   E   E   Y   F   Y   R   S   S   E   Q   I   A   T   R   L   W   L   T
UniRef90_M2VZG8	H Y T W K Q P Y Q G   L   T   R   I   V   S   G   E   V   A   E   D   I   A   N   Y   L   Y   Q   S   S   E   Q   I   F   S   A   V   A   A   G
UniRef90_F9UA94	E R S G A E P   Y   Q G   I   V   P   L   E   G   A   D   E   V   S   A   A   I   E   H   Y   F   V   D   S   S   E   Q   I   P   T   R   L   W   L   T
UniRef90_B0VGA4	D K K G T R S Y F S   T   I   E   L   I   S   G   E   I   A   E   D   L   A   Y   Y   Y   Q   Q   S   S   E   Q   I   P   T   A   V   N   L   G   F   N   L
UniRef90_KONSC0	L E N Y P T P Y S G   K   V   A   L   E   H   G   G   S   I   A   E   D   L   A   N   Y   F   L   V   S   S   E   Q   I   P   T   K   V   R   L   A
UniRef90_UP100037D0234	D Q G P M S R Y Q G   V   V   A   L   D   G   G   T   L   E   D   A   A   H   Y   F   R   Q   S   S   E   Q   I   P   T   K   V   R   L   A
UniRef90_Q2SPF8	A P Q N G Q R Y Q G   I   V   P   L   S   S   D   S   L   S   A   C   L   E   E   Y   F   E   R   S   S   E   Q   I   A   T   R   I   W   L   G   F   S   S
UniRef90_Q1MY14	D P E K G R R Y Q G   V   V   A   L   E   E   G   N   I   A   K   S   L   E   G   Y   F   R   Q   S   S   E   Q   I   G   T   R   I   W   L   G   F   S   S
UniRef90_UP100036D2DD0	E P E Q G H R Y Q G   I   V   S   L   E   K   E   S   I   S   E   C   L   E   D   Y   F   T   S   S   E   Q   I   P   T   Y   L   K   F   N   L   S
UniRef90_C0QLS7	L E E A K H P Y S G   Q   V   V   L   E   Y   G   T   I   A   E   D   L   A   N   Y   F   L   K   S   S   E   Q   I   T   P   T   A   F   N   L   S
UniRef90_UP100045E62E7	D Q G G L S N R Y Q G   V   V   A   L   D   G   G   S   L   E   A   A   A   H   E   Y   F   H   Q   S   S   E   Q   I   P   T   R   V   R   L   A
UniRef90_A3TWN7	D Q G Q Q G P   Y   Q G   I   T   P   L   A   G   G   S   L   K   A   C   A   E   S   Y   F   A   Q   S   S   E   Q   I   P   T   R   F   S   L   S
UniRef90_UP100036FBBD	D T G S E S R Y Q G   V   V   A   L   E   G   G   S   L   E   D   A   A   H   T   Y   F   E   Q   S   S   E   Q   I   P   T   K   V   R   L   A
UniRef90_D5C3M0	Q T E G K D P Y Q G   I   V   S   L   E   G   T   N   L   A   A   E   A   L   Q   T   Y   F   S   R   S   S   E   Q   I   Q   T   R   L   W   L   F
UniRef90_K9H5U3	D Q G P E D R Y Q G   I   T   E   L   T   G   A   T   A   D   C   A   H   Y   F   R   Q   S   S   E   Q   I   E   T   A   I   K   M   A
UniRef90_M9R127	D Q G E G T P   Y   Q G   I   T   P   I   A   G   E   S   I   S   A   C   A   E   A   Y   F   A   Q   S   S   E   Q   I   P   T   A   F   Q   L   T
UniRef90_A4Z2J7	Q G P D M S R Y Q G   L   V   A   L   T   G   G   S   L   E   E   A   A   H   E   Y   F   L   R   S   S   E   Q   I   P   T   R   V   R   L   A
UniRef90_UP100047DA887	Q P R N G E P   W   Q   G   I   V   P   L   H   S   G   G   I   A   A   M   L   A   D   Y   M   Q   R   S   S   E   Q   I   Q   T   H   I   V   L   S
UniRef90_15B4Q1	Y I E D N R P   Y   T   Q   G   I   A   L   V   H   G   A   I   A   E   D   L   A   E   Y   F   L   T   S   S   E   Q   I   P   S   G   F   I   L   S
UniRef90_V7IDW0	Q P N E G E P   W   Q   G   I   V   P   L   E   G   S   N   I   A   E   M   L   S   A   Y   M   R   R   S   S   E   Q   I   D   T   H   I   S   L   A
UniRef90_UP10003B6DC7B	L E D S P A P   Y   S   G   Q   V   A   L   E   Y   G   S   I   A   E   D   L   A   N   Y   F   L   V   S   S   E   Q   I   P   T   G   F   K   L   S
UniRef90_A0A059EBD9	D N P A   Q   P   Y   Q G   I   V   P   L   S   K   G   T   L   S   E   C   A   E   D   Y   F   A   M   S   S   E   Q   I   V   P   T   R   L   K   L   S
UniRef90_K8EVJ1	H P S W V Q   P   Y   N   G   Q   V   S   I   Y   T   G   E   I   A   E   D   I   A   V   Y   M   R   D   S   S   E   Q   I   T   N   S   A   I   S   V   L   G
UniRef90_A0A059FKH0	N P A   I   Q   P   Y   Q G   I   V   P   L   V   K   G   T   L   A   E   C   A   E   D   Y   F   A   Q   S   S   E   Q   I   V   P   T   R   I   R   L   S
UniRef90_UP10003A52959	D Q G F T Q R Y Q G   I   V   A   L   D   G   S   S   L   E   D   I   A   R   N   Y   F   M   Q   S   S   E   Q   I   I   A   T   E   I   V   Q   L   A
UniRef90_F2IY81	Q G R H M Q R Y Q G   L   V   E   L   D   G   I   S   L   E   E   V   A   R   R   Y   F   A   R   S   S   E   Q   I   P   T   E   I   R   L   A
UniRef90_Q7NWI9	E P D K N Q T W Q G   I   V   A   L   E   G   G   D   S   V   G   M   L   E   N   Y   M   L   R   S   S   E   Q   I   D   T   A   L   V   L   A
UniRef90_Q0FDN9	Q G E H M K P   Y   Q G   I   T   P   L   S   Q   G   S   L   S   K   C   A   E   T   Y   F   A   Q   S   S   E   Q   I   P   T   R   F   Q   V   I
UniRef90_A0A059GAJ8	D D P S   Q   A   P   Y   Q G   I   V   P   L   E   K   G   T   L   S   E   C   A   E   E   Y   F   A   Q   S   S   E   Q   I   V   P   S   R   I   K   L   A
UniRef90_W3RJH4	Q G S D M S R Y Q G   L   V   A   L   D   G   G   D   L   E   A   A   A   H   E   Y   F   L   R   S   S   E   Q   I   P   T   R   V   R   L   A
UniRef90_A1AU5	D L G G Q P   Y   Q G   T   V   Q   L   C   S   S   E   I   G   D   D   L   A   Y   Y   L   A   D   S   S   E   Q   I   T   P   S   A   V   G   L   G
UniRef90_K8NYV6	D Q G E M S R Y Q G   L   V   A   L   E   G   G   N   L   E   E   A   A   H   E   Y   F   L   R   S   S   E   Q   I   P   T   R   V   R   L   A
UniRef90_UP10004793073	Q G N D S S R Y Q G   I   V   A   L   E   G   Q   G   L   E   G   Q   N   L   E   E   A   A   H   H   Q   Y   F   R   Q   S   S   E   Q   I   P   T   K   V   R   L   A
UniRef90_Q21EJ8	D P K   G   D   R   Y   Q G   I   V   P   L   E   N   G   T   L   A   E   C   L   S   D   Y   F   E   R   S   S   E   Q   I   A   T   K   F   L   L   F
UniRef90_D3W814	D Q G P D T R   Y   Q G   I   V   A   L   E   G   K   S   L   E   H   A   A   H   E   Y   F   L   R   S   S   E   Q   I   P   T   R   V   R   L   A   G
UniRef90_F9MPQ3	F T P K Q D T Y S S   Q   S   I   V   S   G   E   I   A   E   D   L   A   Y   Y   L   Y   T   S   S   E   Q   I   S   S   T   I   S   L   L   G
UniRef90_D4TN63	D L G Y G Y P   Y   S   S   T   V   I   E   L   V   S   G   E   I   G   D   D   V   T   H   Y   L   V   N   S   S   E   Q   I   T   P   S   A   L   V   L   G
UniRef90_K0C4H3	K P T M G K P   Y   Q G   I   V   N   L   E   G   N   A   L   S   D   A   L   E   S   Y   F   K   Q   S   S   E   Q   I   L   K   T   R   L   W   F   A
UniRef90_D8F984	F R E A K Q P   F   T   G   Q   V   E   L   K   Y   G   S   I   A   K   D   L   A   Y   Y   Y   S   T   S   S   E   Q   I   T   P   S   V   F   N   L   S
UniRef90_F3LG36	D P D K G E R Y Q G   I   T   P   I   E   G   E   N   L   S   Q   C   L   E   T   Y   F   L   Q   S   S   E   Q   I   L   P   T   K   I   W   L   S
UniRef90_K2JU84	D Q G S G T P   Y   Q G   I   T   P   I   E   G   G   S   L   S   S   C   A   E   T   Y   F   A   Q   S   S   E   Q   I   L   P   T   Q   F   S   T   S
UniRef90_Q20WQ0	D Q G D M K R Y Q G   L   V   A   L   D   G   G   D   L   E   D   A   A   H   E   Y   F   L   R   S   S   E   Q   I   L   P   T   K   V   R   L   A
UniRef90_B7RKY6	D Q G Q G M P   Y   K G   I   T   P   I   A   G   G   S   L   A   S   C   A   E   A   Y   F   A   Q   S   S   E   Q   I   L   P   T   R   F   Q   L   S
UniRef90_UP10003AAE449	D M G L K E P   Y   T   A   V   A   N   I   D   Y   L   K   A   N   D   I   S   Y   Y   F   Y   F   N   S   S   E   Q   I   L   P   T   V   I   S   F   A
UniRef90_V2VRJ1	E P E F G E R Y Q G   I   V   P   L   D   Q   P   N   L   A   S   C   L   M   Q   Y   Y   D   L   S   S   A   Q   I   L   P   T   H   I   V   L   A
UniRef90_A0A059IMZ5	D Q G A G M P   Y   Q G   I   T   P   I   A   G   G   S   L   S   T   C   A   E   T   Y   F   A   Q   S   S   E   Q   I   L   P   T   R   F   A   L   S

170            180            190            200

UniRef90_A0A031MJT7	A D G R T A R G F M L Q A L P A N R Q T D P D E R K E T W N R L D T		
UniRef90_UP100046335E7	V G Q N G F D G H W R S R G G L L S Q F L P E A P E D A W A E V Q A L V S T I E A		
UniRef90_C6XCW5	A N E N S A A G G M L L Q K Q L P D Q P E Q D L D A W D R M G F L A D T		
UniRef90_F5S5P3	A D A Q H V G G L L L Q R L P E E Q P N P E A W Q H V T A L A E T		
UniRef90_UP10003B52E6D	V H Q G E I D A D W W V G G L F L Q R L P A A T P E E G E K V A E D W N T S A T		
UniRef90_M1NX16	V A V G E V K K S W R A G G G L L T Q F L P Q A S E E Q W R E A K I M T A T I E S		
UniRef90_J1K289	V A T L F D R Q S W R A G G G M L T Q F L P Q S S D D H W R E V I A L T H T V E S		
UniRef90_B1XJZ5	V F V G A E G V T A A G G G L L L Q I L P K A D E S L V A K L E S R L G Q L S G		
UniRef90_F8I1U0	V L V G Q E G I Q A S G G I L L Q A I L P G L A D D R A Q V L T E R F Q R L D S		
UniRef90_B3PHB0	A D D Q T V T G L F V Q A L P Q Q P E D D N Q D R W K T I T T L A D T		
UniRef90_E8RLU6	V E T T P N G E R W R A A G A M I Q A I L A G D D G D T T R E A F E H V R A I L F A T		
UniRef90_U2RCM9	V K L D D E N G E V K R A G G Y L I Q L L P G V E D G F I D K L E N K L Q Q I R T		
UniRef90_Q016Q1	V S I N R E C E V I A A G G G M V Q I L P F A S D E T I E A L E R T I P A L P S		
UniRef90_UP100037E13B1	V A E G K P R H R W R A G G M V A Q F L P E A P E D L W D E A S V M V Q T I D A		
UniRef90_F5ZFZ6	T D L Q D E N N A R A A G M L L Q V L P T D A S A T D I T Q A T G F D H I A T		
UniRef90_Q2BL47	S D G L V A A G M L L Q V L P T G D E W A R I S H L G S T L K S		
UniRef90_UP10000E10DEF	A Q Q G E K P M A G G T L L Q V L P T S S E A T N V A E S T E F G H I A A		
UniRef90_UP10003650B3B	V A E V F D R Q S W R A G G G V L V Q F L P E S E D D D D A W V E A L A R V G T		
UniRef90_G8ND78	V R V K G E G E V E V A G G G V A V Q V M P P E A P E A V L R R L E A N L G G L G G		
UniRef90_UP100047C9EB2	V R H G E K G W R G G G I M L Q R L P D P E K Q V P T D R E D D W R R A A T		
UniRef90_F8GCS6	I T T N T A I F G G I L L Q K L P A A D Q Q D P D G W T R A E A L A A T		
UniRef90_UP100035E887D	C S K D A A A A L F L Q K L P G A D A R D E D G W S R A H Q F A Q T		
UniRef90_I4BUX0	V L I Q K P S L G V I S A G G G M V Q L L P G A E E S F V E R L E E L L R K Y S S		
UniRef90_W4V630	V L T N A T Q I V V S S G G F I L Q L L P M G A D E E T I S F I E N K I S T I P P		
UniRef90_G4R8T1	V A E H S E R G Q W R A G G G V L L Q H L P E H G E D D R W T E A K A L L D T L T		
UniRef90_UP10003468EE9	V F V G A N G V T A A G G G V L L Q I M P K A D Q S L V T L L E S R I S Q L S G		
UniRef90_E3F124	S H E P G R G E R W R A G G G V M L Q H M P K A D G E N W N R A N V L L D T V E E S		
UniRef90_UP1000373BEDC	A D G Q R A A G F L L Q V M P A A G E Q D W S H I S Q L G A T L K S		
UniRef90_M1NCV4	V Q Q G K P Q K R W R A G G G I L T Q F L P K A E T K T R A Q L E N Q W Q E A K A		
UniRef90_B7S032	C D G E S A A G M I L Q Q L P A Q I V S D S N D R N S Q W Q H V T T		
UniRef90_H3ZF39	H S E I L E N S Q A A G L M L Q V L P V Q Q D K A R D D F A E L V I L S D T		
UniRef90_R5B228	V L V D T D H S V K A A G G F L V Q L P M G A P E D L I T K L E D N I F M M D Q		
UniRef90_Q5QYA1	A D G E H A A G M L L Q R L P A T G M D L T G F E H L A T L T N T		
UniRef90_M2Y4E7	V R P P A D G R G W A A A A L M I Q R M P A G S E E S W R R A E I L L G S V T		
UniRef90_A9ILW2	V Q Q G K P Q K S W R A G G I L T Q F L P Q A S D N Q W Q E A K I L M A T I E S		
UniRef90_E0TGB7	V Q G P D G E E R W R A G G G I M V Q F V P G D D D S D A W N R A A T L L D T T Q		
UniRef90_A0A021XDJ0	V A E G K A R H R W R A G G G M V A Q F L P Q A D D D N W A E A K A M V E T I D A		
UniRef90_UP1000469BAE5	F G Q S N E D E H W R A G G G V M L Q L P M G A E E E N W N R A N I L L D T V E D		
UniRef90_W1TZA5	V M V S G D V Q V L A A G G I L V E A M P D R D E E A L Q Q I E A N L V K L G P		
UniRef90_C6XMA5	V E Q E E G G T V W R V G G M I Q K V A G D D E E E W D T A R A Y F D T L S D		
UniRef90_W0GPF6	V K L N D D G T I N K A A G L F A Q L L P N H E E D I D Y L E T K V E N L G S		
UniRef90_X4ZDL7	A N G E V A A G I L I Q R L P D Q G G N E V E Q W N R A L H L A G T		
UniRef90_C5BL7	A D Q N H C G G G I M L Q Q G L P A Q Q V T D L D Q R K E Q W Q T A N T		
UniRef90_A6FL72	F G K S T E K G H W R A G G G I M L Q H M P A A D E E N W N R V N M L L D T V D D		
UniRef90_UP10003A88A02	C D G Q S S S G L L L Q A Q L P A S A E L S A D A R S E S W N R M T A		
UniRef90_E6YP38	V Q R G E I Q K N W R A G G G I L T Q F L P Q A S E N Q W Q E V Q A L T A T I D S		
UniRef90_UP100037DEE29	A N G R R A A G G L L Q Q L P D A S N L D P D A W D R L T S L A S T		
UniRef90_M2VZG8	V F V K P D G S V S A A G G Y I L V Q L L P G A S E E T L K L E E T L Y S L E S		
UniRef90_F9UA94	U N R A A G G L L Q R L P G E G L S D D D W A R I G M L A T		
UniRef90_B0VGA4	A G E N R A A G G L L Q R L P Y A D K K I A D V I K E N I A Q T P N		
UniRef90_KONSC0	I L I D K E A K V R S A G G F I I Q Q L P G A D A S R V I E A E K M I Q G I D S		
UniRef90_UP100037D0234	V A E T S D D G I W R A G G G M L V Q F L P E A E D D A W V I E A Q S L V A T V E D		
UniRef90_Q2SPF8	E S N G C W G G L L Q Q L P A A G E Y S A E N W E R I V A L S A T		
UniRef90_Q1MY14	Y E E G V A A G M L L Q E L P Q G I E A D P D A W G R L T H L A D T		
UniRef90_UP100036D2DD0	V G E N R I N G V F L Q A M P D D S K D K A A A F E H V T T L A E T		
UniRef90_C0QLS7	V H F D E K G E V T G A G G G L Y L Q A M P G A D D D T M A K A Q T M L R N I D S		
UniRef90_UP100045E62E7	V G E E M K E S S W R A G G G L L A Q F L P Q D E D D A W V E A R S L V G T L E D		
UniRef90_A3TWN7	F G K S T E E H W R A G G G V M V Q V M P E A E E D D A W N R V N L H L D T V E D		
UniRef90_UP100036FBBD	V A E S F E A G S W R A G G G L V Q F L P E A P E D A W V E A E T L V A T V E D		
UniRef90_D5C3M0	A D E H R A V G L F L Q E L P S Q P D E T D W E R I T L L A N T V T		
UniRef90_K9H5U3	T T H A D G R W R A A G G M L Q R M P A D D E E M V E D A W R T V V L M G S		
UniRef90_M9R127	V S V P G G A E S W R A G G G I M L Q A M P K A E G E N W T R A T T L L R T A E E D		
UniRef90_A4Z2J7	V G E E W S G G K W R A G G G I L A Q F L P Q A E D E A W V E G Q S L V A T I E D		
UniRef90_UP100047DA887	A D E Q Q A C G F I L Q R L P E S E A D D E E A W A Q V A L P A Q T		
UniRef90_I5B4Q1	V A F D E N E N V T G A G G G I F L Q A L P G A Q P D N V A R A E N L I R N I N A		
UniRef90_V7IDW0	U S E H A A G G G L L Q R L P E Q Q I D A D A W T H Y T T L A D T		
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UniRef90_Q0FDN9	V G E S G E K K S W R A G G G V M L Q H M P K A S D E S A D D W N R V N I L L D T		
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UniRef90_K0C4H3	V N G D K A V G F L L Q E L P A H N G E Q V D W E R V E M L A D T		
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UniRef90_A9ILW2	A D E L L D P T L A P E R	R L L Y R L F R E D V R I F D P V T A R	
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UniRef90_UPI00036FBBD	H E L L I D P M L A P E	R E R L L F N E E I R V F D S R A V R	
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UniRef90_K9H5U3	V T E L L I A P D L P	P A D V R R L F H E G L K A Y D A R H P H	
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UniRef90_A4Z2J7	I I E L I D P A L S G E	R E R L L Y R L F H E G V R V F D L V P L Q	
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1 10 20 30 40

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 D Q I Q R I L F D N I D V R G V I T S D Q S F Q D I M A R H N Y P V I L E Q  
 I I Y Y G T M F D H K V R F S I V R M R E V V E E A R N R H A L S Y L A T V  
 D A V I P F S V A P l D V R G R A V Q L G P M L D S I l D R H D Y P V V V A R  
 R F L F D E A D I R G E S V R L Q E A L A E M l S T H P Y S A A S K R  
 D T L L R F I F K N T P V K G A S V R L T T A W K A M R Q F Q K W P L S V T R  
 D L L K K Y L F E D R S V R I Q A V R L H E T W L Q A Q V N H Q H P P A V T R  
 D K L L G F T L L P L R N A R A R V V R l D R V I T D D V L A A H D Y P P P I T H  
 D A V V P F A V E A L D V R G R V I N M G P V l N S M l A R H K Y P A P V N K  
 D R I H R F F L A D K A I R G A F I Y G T R M I K E M R A N F D L G I L E T L  
 D T V L P F Q L D V S D I R G R V A V R L D G V l D G I l K Q H D Y P E Q V E A  
 D T V L P F Q L D A S D M R G R V A V R L D G V l D G I l K Q H N Y P Q P V E A  
 D S L H R F L F E Q T D I R G N L V H l D A S W R A V L D A H D Y P E P V R G  
 D T V L P F Q L D R P D I R G R V A V R L D G T l D A V L A Q H D Y P P M I E A  
 D R L I K G I T E D G F F K I S V V K T T D M V K E A Q E R H Q L S L L S T T  
 D T V L P F Q L D A S D I R G R V A V R L D G V l E Q V L K Q H N Y P P M I E G  
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 UniRef90\_UPI000479528D  
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 UniRef90\_Q28WB6  
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 UniRef90\_H1G6X4  
 UniRef90\_B6IUN2

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

	50	60	70	80
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UniRef90_B2IBT8	L L G E A V V L T V L L	G S S L K I E G R F Q L Q T R S E G A V D M L V V D F D		
UniRef90_W1N3N5	Q L G E L L A A V A V A L L	T D T V K L D G T L S I E V R G S A A V N L L M A E S N Y		
UniRef90_W4HIS8	L V A E A M A L L T A L I	G Q T M K L R W K L S L Q V Q S K G P V R M I A T D F Y		
UniRef90_UPI00034C0C0E	L L G E A V V L A T L L	G S S L K F D G R F I L L Q T Q T D G G P V S F M I V D F Q		
UniRef90_B6B617	L V A E A M A L L T A L I	G Q T I L K F E G R I V T F R I R S D G G P A V R M I A T D Y Y		
UniRef90_K2KBQ5	L L G E M L A V T S L L	T A T L K F E G H I N L Q L Q G S G A L N Y V A I N G D		
UniRef90_UPI0002F67170	I L G R S F S A A L L L	A S S M K I H G R V T F R I R S D G G P A R L I A T D Y Y		
UniRef90_U3AAJ2	L V A E M T L L T A L I	G Q T V K L R W K L S L Q V R G D G G P A R L I A T D Y Y		
UniRef90_UPI0002558B54	L L G E M L A A V S L L	S I T L K L E G R L L L Q A Q Q G E G N V S L L M A E C N		
UniRef90_C3XAC2	L L G E M I G A A A L L	C G N I K F N G A L L L Q I Q G D G G P V R L L V V E C D		
UniRef90_V7EMX3	L V A E A A L L T A L I	G Q T I K L R W K L S L Q V R G K G P A R L I A T D Y Y		
UniRef90_Z2QUT9			M I A D A N	
UniRef90_R7IJ45				
UniRef90_C3X1M6	A M G R L M T A T S M I	G V M M K G D E S V T V N I H G D G P M G T V I A V A N D		
UniRef90_D3LUW5	L L G E M I G A A V L L	S G N I K F D G S L V M Q I G D G P V R L L V V E C D		
UniRef90_B9R448	A L G R T M T G A I L L	A R D Y K N R E G V S I V I R G D G P L V G T I H V D S F		
UniRef90_UPI000255905B	L L A E A I V L T S L L	G T S L K F D G R F T L L Q T Q T Q G G P V S M L V V D F E		
UniRef90_UPI0004278263	L V A E A M A L L T A L I	G Q T I K L R W K L S L Q M Q S G G A V R M I A T D Y Y		
UniRef90_K2I6R5	L L G E L M A T T A L L	S A T L K F E G H I N L Q L Q V R G D G G P N F I A V N G S Y		
UniRef90_R5QHL5	L V A E T A L L C A L L	I Q G A I K L R W K L S L Q V R G D G G P A R L I A A D Y Y		
UniRef90_W0SJ17	L L G E A V V G L S A L L	C S S I I Y D G V F S L Q I Q G D G G P V S T L V V N Q T		
UniRef90_G8U66	L L G E L A A V T A L L	I G S N L K S P G R L I S F Q L Q Q G H G P V S M L V M D C N		
UniRef90_S6HMU8	L L G E M L A A V T I L	T S T N L K F N G K I L L Q A K G E G C V S T L M A E C N		
UniRef90_Q9X1B4	V L G R A L I G A A L V	T P W L A E K E R W T L D I E G N G P I R R V V A Q S T		
UniRef90_E0MNZ9	L L A E T I L T L T V L L	G T A L K F E G K F I V Q T Q T D G G P V S M I V T D F R		
UniRef90_B8KSS2	I L G E F A C A A V L I	S S N L K Y R G R I I V L Q A R S D G G P L S M V M V E C T		
UniRef90_R7KHP1	L M G E M T A G S L L L	A S S I K F E G N I L I M Q V Q G D G G P V R L A I V E V R		
UniRef90_Q7WD81	L L G E L V A A S T L L	A A N I K F D G S L V L Q I Q G D G G P L A L L V V E C R R		
UniRef90_A3WEW1	L L G E A L V L G A L M	G G G L L K A D G Q L T M Q A Q T D G A V S S L L V C D Y R		
UniRef90_G8PTJ6	L L S E A I V L T S M L	G S T L K F E G R I L T L Q A Q T D G A V S M L V V D F N Y		
UniRef90_E1YAH2	V L G H A Y L G C A L L	I L G Q S I L K L R W K L S L Q I R G D G G P A R L I A T D F Y		
UniRef90_D0CSN7	L V A E A M A L L T A L I	G Q T V A L R W K L S L Q V Q S K G A V R M I A T D Y Y		
UniRef90_Q1GCJ5	L V A E A M A L L T A L I	G Q T M S L R W K L S L Q V Q S K G A V R M I A T D Y Y		
UniRef90_W0E2Q9	L L G E A L A A V S L A A T L	K A T L K F D G A L I L Q A Q G D G P L R T L V A Q A T		
UniRef90_A8LPF5	M V A E A A V V L T A L I	I Q G S I L K L R W K L S L Q I R G D G G P A R L I A T D F Y		
UniRef90_UPI000370915B	M L G R A L T G V M M L L	A S E L K G E E R I I Q L R F E G D G G P I G F M V T E A N Y		
UniRef90_A4EGY6	L V A E A M A L L T A L I	G Q T M K L R W K L S L Q V R G S G G P A R L I A T D Y Y		
UniRef90_B9JQS2	L L A E A I A L T V L I	G T S L K F E G K F I V Q T K S D G P V D L L V C D F A		
UniRef90_A3K2V5	L V A E A M A L L T A L I	G Q T I K L R W K L S L Q V Q T N G G P V R M I A T D Y Y		
UniRef90_G2TC27	L L A E T I L V L A M G L	I S S N L K Y D G V F T V Q V R G E G A V R A L V I A D V T		
UniRef90_UPI0003B6F691	L G R A L L L G G L L L	A N A L L K D Q E R L A M T I D G G G G P A G K I V V E T S		
UniRef90_UPI00034AE8A0	A L G R T M S A G I L L L	A S M K R A E S R V N I R V K G N G P L L G G I L V D A G		
UniRef90_F9EM67	I F G K F C T L A I L	I L Q A Q G D G P D L L V C D Y R		
UniRef90_UPI0004678FA0	L V A E M T L L T A L I	G Q T I K L R W K L S L Q V Q S N G G P V R M I A T D Y Y		
UniRef90_I3D5Q1	S F G R I L L T V A S L M	G N S L K G E D I L T L R L I D T D G Q L K N I L V T A D		
UniRef90_N9MBY1	L L G E M L S A T A L L	A S T L K I K G R I I S L Q I Q A S G T F K W A M A E C N		
UniRef90_UPI00036D407F	Q L G Q A L A A V V L L	S A T I K F D G S I I L Q A Q G N G H F R T L V A Q S T		
UniRef90_U2FX56	L L G E L L L A A C	I L Q A Q G D G P D L L V C D Y R		
UniRef90_B8GL97	L L G Q A L A A V A V L L	S A T I K F D G S I I L Q V T G S G G P V N L L V V Q A S R		
UniRef90_F6IJN3	L L A E A L V L T A L I	M G S L L K E N G S L T V Q A Q A D G P I D L L V C D Y R		
UniRef90_UPI0003732AA0	L L G Q L A A V T T L I	T I A N L K Q A G R I L T F Q L R G D G D V S L L V I D C		
UniRef90_K9SUQ8	A L G Q T M T A A L L L	A S M K Q P A R V S I R I L N S D G D L G L V F A D A G		
UniRef90_UPI00035EED6C	I L G E F I T L A A L L	G N I M K F D G I V T L L Q T K S Q G G P V P M M V A D Y E		
UniRef90_A0A011PPQ5	L L G E L S A S T L L V	G S N L K Q P G R V T I Q L R G N G G P I S L L V I D C N R		
UniRef90_UPI000479528D	L L G E A V A L A S L M	T S T N L K F N G K I T L Q A K G E G S V S T L M A E C N D		
UniRef90_H1S9U6	L L G E M M S A A A L L	A S A N L K F N G A L V M Q V H G D G P V R M L V V E C L		
UniRef90_N8Q8E2	L L G E M L S A T A L L	A S T L K I K G R I I S L Q I Q A A G T F K W A M A E C N		
UniRef90_S6HJY9	L L G E M L A A V T I L	I S T N L K F N G K I T L Q A K G E G S V S T L M A E C N D		
UniRef90_UPI00036062CE	L F G E M T V V T L M	G G Q L K Q P G R I T A Q V R G N G A L G L L V V D C D		
UniRef90_UPI000470C2FD	A L G E L M V A G T L M	A A T L K Q G G A L I L Q V Q G K G P L K L L V V E C T		
UniRef90_A3V2D2	L V A E A M A L L T A L I	G Q T M K L R W K L S L Q V R G S G A A R L I A T D Y Y		
UniRef90_A6LJS3	A L G R L L T G I A L M	V P W L S K N D T L T Y I I E G S N K I K Y I A A Q S K		
UniRef90_UPI0003B43E28	I V A E A T L L T A M I	G Q T I K L R W K L S L Q V R G D G P V T M I A T D Y Y		
UniRef90_F1ZDR5	L L A E A L V L T A L I	G Q T I K L R W K L T M Q A Q T N D G V I D L L V C D Y		
UniRef90_S9RU46	M V A E A A L L T A L I	G Q T I K L R W K L S L Q I R G D G P L R L I A T D Y Y		
UniRef90_C1D0U6	V L G R T M T A S A L L	A T V L R S D S R V T V R V H G G G P V G G L V V I A E G S Y		
UniRef90_C7DEU3	L V A E A M A L L T A M I	G Q M V K L R W K L S L Q V R G D G P A R I I I A T D Y Y		
UniRef90_S0FZ09	I I G Q A Y I A G A L L	S T T L K G E D R I V S T L S I E C S G G P I K G L D V E A N G		
UniRef90_A2BVY6	I L G R A F S A S L L L	A S S M K I H G R V T L R V I R S D G G P I L K G L L V D A G		
UniRef90_Q28WB6	M V A E A M A L L T A L I	G Q T I K L R W K L S L Q V R S D G G P I R L I A T D F L		
UniRef90_D9SDH2	L M G E L T A A A V V A L L	A A T L K L D G S L L L Q I Q G T G P I K L L V V E C G		
UniRef90_Q16D16	L V A E A M A L L T A L I	G Q T I K L R W K L S L Q V R S K G G P V R M I T T D Y Y		
UniRef90_A9BA44	L M G R A M S A S L L L	A S M K V L H G R V T L K I Q S D G G P I K G L T V D A C		
UniRef90_Q01AP2	M L G R A M S A G L L L	A S M K V R H G R V N L R I G S D G G P I G G L F V D A G		
UniRef90_A5GDV3	M F G A L L K T Q R G P I K L L V V E C G			
UniRef90_Q128E1	L L G E M T A A G A L M	M Q S N I K F N G S L T L Q I Q G T G P I V K L A V A E V Q		
UniRef90_UPI000263221D	L L G E A E A L T L A L L	G S T L K D E G Q M T L Q A Q T Q R G I V S L I M V C D Y		
UniRef90_C0N786	V L G E M M G A A A L L	T A T V K I S G R I L V L Q I R S E G P V S L M M V E C T		
UniRef90_UPI0003FD97DA	L L G E L I A T T A L L	G T A T V K I S G R I L T V Q I Q G N G P V S L L V V Q V N Q		
UniRef90_UPI0004769B62	L L G E A L A A I T L L	S T T L K H N G S I I L Q L R G N G P V V H L V V V Q I Q		
UniRef90_U2SQ99	L F G K L L T V T A M M G K D L	K G E D L T L K T N G D G P Y G N M L A T G N R		
UniRef90_A4BAF6	L L G E F F M A A T A M L	S D T I K F D G T L S L Q V R G A G Q V R T L M A E C R		
UniRef90_I9W900	L L G E M T A A A A A L L	T A T V K I S G R I L V M Q I H G D G P V R M L V V E C H		
UniRef90_UPI0003B31705	P L G E L L A A S A L L	G S M L T D G S L V L V Q I Q G N G P V S L L V V E W N F		
UniRef90_I1AUB5	L V A E A M A L L T A L I	G Q T V K L R W K L S L Q V V T R G A V R M I A T D Y F		
UniRef90_E7RWL2	R L G E L T A A G L L L	A S S L K F D G S L L Q I Q G T G P A R L F V A E C Q		
UniRef90_UPI0004010D19	L L G E M A A V T V L L I	A A Q L K Q P G R L T F Q L R G G G P I S L L V M D C D		
UniRef90_S6CGU1	A L G E A M A A A A A L L	S T T I K F R G S L V M Q L G E G G V M R S L V A Q V T		
UniRef90_H1G6X4	L L G E M C V T S L F V	T E A L K Q P G R V T F Q V R G T G P V S I L L V V D C D		
UniRef90_B6IUN2	L L G E T I T L G A A L A S A L	K Y E G I F T L Q T K G D G P V S F T V A D V T		

90                    100                    110                    120

UniRef90_A0A037ZME3	E P A R   L R A Y A S F D A Q R   L D E K A D P F S Q V   G K G F F A I L I		
UniRef90_UPI0004661F44	T P H A L   L R A Y A R Y D A D R   L A A   T A A G D V A P E T   L L G S G V L A L T I		
UniRef90_B2IBT8	A P D R   L R A F A R Y D A Q R   L E F A E R G T   E L L G K G H L A F T I D		
UniRef90_W1N3N5	P G G E   L R A   L A R L A E D A V   L P S G D E S F R D   L V G D G Q I V I T L		
UniRef90_W4HIS8	A P A R   I R A Y A S F D R D R   V V Q R P M D N V   G E G Y F A V L I		
UniRef90_UPI00034C0C0E	A P D R   L R A Y A R F D E A R L   E P G L   S S G A L L G N G H L A M T I		
UniRef90_B6B617	A P G K   I R A Y A S F D R G R   L T   D G D P F E Q V G E G Y F A I L I		
UniRef90_K2KBQ5	A P A R   I R A Y A S F D R G R   L T   D G D P F E Q V G E G Y F A I L I		
UniRef90_UPI0002F67170	H   Q   L R G V A R   V R G E   L P S E K   L S E M L G K G Q L L I T I		
UniRef90_U3AAJ2	R D G K   V R G Y V G D P N L E   L D L N K D G K F N F F K A A V G T G Y L N V I R		
UniRef90_UPI0002558B54	A P A R   I R A W A S F D E N R   L D E G A E   P P S L I G K G Y F A I L I		
UniRef90_C3XAC2	H H Q   H   R A   A R Y E G   E V D E S L A F N E L L E K G R I I A L T I		
UniRef90_V7EMX3	S A L   H   R A T A K   L D S E A V I S D E A S F T D L I N A H G R G R F V I T L		
UniRef90_Z2QUT9	G P S E   I R A Y A S F D R D R   L D P D A T P F S Q I   G E G Y L A V L I		
UniRef90_R7IJ45	A K G E   V R A Y V D H P Q T H F P   L N E Q G K   L D V R R A V G T N G S I L M V K		
UniRef90_C3X1M6	H G D   V K V C A D D A R V E   L P L R A D G K   L D V G G A I G H T G R M T V I K		
UniRef90_D3LUW5	S A M K   I R A T A K   L D E T   V P L T G N E T F T D L I N A H G K G R F V I T L		
UniRef90_B9R448	D T N K   V R G F V E Y P Q   K L P L K A D G K   L D V G T A V G K   G T L Q V T R		
UniRef90_UPI000255905B	T P D A   I R A C   C A T F D A E R   V V G L   I D A G T A T P E A L   L G H G H L A M T I		
UniRef90_UPI0004278263	G P A E   I R A Y A S Y D A D K I   Q G S   D P W S Q L   G D E G Y F A I L I		
UniRef90_K2I6R5	H Q Q D   L R G   A   H   R S D   L A D D M N D F R Q L   F G K A I L I I T L		
UniRef90_R5QHL5	A P G R   I R A Y A S Y D A E R   L Q G G D P F L Q   I G Q Q G Y F A V L L		
UniRef90_W0SJ17	S E G K   I R G Y A R F D K A E L   E Q A E K K T A Q V   P A F F G H G A L S F M V E		
UniRef90_G8U66	E K L   Q L R G M A K S   E L A A E A V I N V G S I G D   L L G D G Q L V L T L L		
UniRef90_S6HMU8	H N L N   R G F A K   C A E G   L E I A D Y A T A F L   Q G R M V I T L S		
UniRef90_Q9X1B4	H L K   H   C R A   A Q F D E   S I P A G L S F K Q K M L   A E G H L V L T I		
UniRef90_E0MNZ9	S E F T   V R G Y V A N P K   V E L P   L N E K G K F D V A G A I   G Q G V L R V V R		
UniRef90_B8KSS2	T P G S   I R A Y A R Y D E A A V E A V I R T G N T D A P S   L L G T G I L G M T I D		
UniRef90_R7KHP1	S D R E   I R G   I A R G D   I S A D P E D   H   L A L   S E Q Q L   L A I T I		
UniRef90_Q7WD81	N G L L   V R A T V K M H E G E E V S D T M G M K E   L L N A H G R G R C A I M L		
UniRef90_A3WEW1	S D L   S   L R A T V K V R E G Q S I   P D S G T M Q S   L L N A N G G N G R F M V V L		
UniRef90_G8PTJ6	G G Q L   R G Y A D F D D A R   L S Q L G A N P S   L T A L F G E G Y L A I T F		
UniRef90_E1YAH2	A P D G   L R A M A Q F D E A K V A E   V A S K D G F K P D Q L   L G K G H L A F T I		
UniRef90_D0CSN7	A Y G E   I R G F   K Q P   Q I S I   D K P L E D F N P S P F F G A G   L L T V T K Y		
UniRef90_Q1GCJ5	A P R E   I R A Y A S F D R D R   L T D G A   P F D Q   V G E G Y F A I L I		
UniRef90_W0E2Q9	A P A R   I R A Y A S F D A D R   I T D G A   P F A Q L   G D G Y F A I L I		
UniRef90_A8LPF5	S A R T   V R G   L A R W D G E   L N P E A P   L A E   L F G T A R L V L T I		
UniRef90_UPI000370915B	A P A E   I R A Y A S Y D A D R   L A R E T D G   F A A I G K G Y F A I L I		
UniRef90_A4EGY6	S   L   G E   V R G Y V G N P   A A Q I   D Y T   K E N A S   L A D G   I G L G V L T L S K S		
UniRef90_B9JQS2	G P A R   I R A Y A S Y D A E   T S D E S A D P F S Q I   G N G Y F A I L I		
UniRef90_A3K2V5	T P E N   V R A Y A R F D E E R   L R A Q   L A D G K S T P T D L   L G A G I L A F T I		
UniRef90_G2TC27	G P A R   I R A Y A S F D R D R   I T D A A   P F Q Q L   G A G Y F A I L I D		
UniRef90_UPI0003B6F691	S G G M   V R G G V A R F D A E R   L P S G P   I T A P V   L E L L   G A G H L T F T V D		
UniRef90_UPI00034AE8A0	A E G Q   V R G Y V T N P Q   V T L P K K A D G S E D V   V A A V G T N G Y L T V T K		
UniRef90_F9EM67	L D G T   V R G Y V D N P E   I E L P P K P N G K   L D V G G A V   G S E G Y L Y A I R		
UniRef90_UPI0004678FA0	A N G N   V K G Y   L V N T N   E G N F D G   L G K G I M R V I		
UniRef90_I3D5Q1	S P A R   I R A Y A S F D R D R   L T D A A   P F D Q   I G A G Y F A I M   D		
UniRef90_N9MBY1	S N G N   V K G Y V S N P T P   D V   S D V V L   L G E G T L K V I K		
UniRef90_UPI00036D407F	H   L   G E   I R A L A D Y   P D P   H F Q Q A E D S S T   V L K   T L V   N P V L F I N I		
UniRef90_U2FX56	H G R K   I R G W V R   S I E P   V R S G S   L E D M F G Q G R L V I T I L		
UniRef90_B8GL97	P G Q R   L R G V A R F D D D A L   A T   E E P T   L Q A   L A Q G G F D G R M V M T I		
UniRef90_F6IJN3	G H G T   V R G L A R W   Q S E V   P A G D   L L A A Q F G D G R M V M T I		
UniRef90_UPI0003732AA0	D G E   I R G Y   V R H   D D D D L L A Q   L G E D E T S   L E A L F G K G Y F A I T F D		
UniRef90_K9SUQ8	E Q   L   R L R G M A H   P A   S E L   S S S G S   L P A L L   G D G S   L T L   I L D		
UniRef90_UPI00035EED6C	F D G T   V R G Y   V D Q P   Q L E   S A V L   G Q N G S   L Q V I R		
UniRef90_A0A011PPQ5	A K G R   L R G Y A Q   L D E E R   L K T Y G K N   P S F E G L I G S K N G Y   L A L T I		
UniRef90_UPI000479528D	E Q   L   Q   V R G M A K   C   A R T   V G E A S L   R E M L   G N G Q M L L V L D		
UniRef90_H1S9U6	T P   Q   G   R A T A T C   N R E R   V E G S E A G R A S S A D L   G S G T   L A M T I E		
UniRef90_N8Q8E2	S D L   S   M R A T A K   L A E G   V T L A D N A T   L A D   L V N   V   S H G R F A I T T L		
UniRef90_S6HJY9	H   L   G E   L R A S A D Y E E D S   H   F A Q A E N S S T   I   F K A L   V N P V L F I N I		
UniRef90_UPI00036062CE	H R N E   C   R A F A Q F D G E   I F   G Q   L S F K E M   L A K G H L V L T I		
UniRef90_UPI000470C2FD	E R   L   R L R G M A T G A   H   D L A D A P   L P A L L   G D G Q   L V V T V Q		
UniRef90_A3V2D2	A N L   G I   R A T A K   W E G   D L S A M D F S E M V   S D G   H F V I T L D		
UniRef90_A6LJS3	G P A R   I R A Y A S Y D A D R   L N H   D A E   P F S   H V   G N G Y F A I L V		
UniRef90_UPI0003B43E28	N N G N   V R G Y   I L P K   I V D T   I T N E K G K F D L   K S A I   G N G T   L K V V   R		
UniRef90_F1ZDR5	G P A R   V R A Y A G Y D R   D A D L   G D A A P   F D   L   G K   G F F A I L I		
UniRef90_S9RU46	R N G E   L R G Y   V R H   D R A R   L D   E L G P   N P S   L H S   F   G D G Y   L A V T F		
UniRef90_C1D0U6	G P S E   I R A Y A S Y D A E T   I D   L D A N   P F S   Q I   G K G F F A I L I		
UniRef90_C7DEU3	V   D G R   I R G Y   V G H   P D A D   L P   R E D G K   L D V   S G L   V G T   D G E   L E V T R		
UniRef90_S0FZ09	G P A R   M R A Y A S F D E T   R   D   N T T K   P F E   L   G K G Y F A I L L L		
UniRef90_A2BVY6	G Y G E   V R G F   L K T P E   I V A S D S A   H T Q S   L S A   F G A G F   L T V T K		
UniRef90_Q28WB6	R D G K   V R G Y   V G N P   N   L E   L D   L V K T K S F D   T K A L   G T   G Y   L N I I R		
UniRef90_D9SDH2	A P A R   I R A Y A S Y D E D R   L D V   A A D A F   P Q   I   G A   G Y F A I L I		
UniRef90_Q16D16	G D   L   K   R A T A K   W   E G P   L Q G   C   L   S E   L   L G D G R   F V I T L		
UniRef90_A9BA44	G P A R   I R A Y A S Y D E T   R   L T D G A   P F D   Q V G   E G Y F A I M   I		
UniRef90_Q01AP2	R D G S   V R G F   L G N P   S   L E   L D   L V K   S K E   G H   F A N A T   G K G Y   L H V I R		
UniRef90_A5GDV3	R D G R   V R G Y   V G H   P E   E L D   P D E   A G H   Y S F   D F   N A A   A G G Y   L H V V R		
UniRef90_Q128E1	S N G A V R G   C V G V   P E   V   H   P   E R N G K   L D V   A G A   L G R A G F   L T V T K		
UniRef90_UPI000263221D	P D   L   S   L R A T A K   W   V T G S   V D A G S S   L S Q   L V N   V N N Q G R   C A I T L		
UniRef90_C0N786	K N G E   L R G Y   V Q F   D A T   R   L S R   L G K N P   S   L S A   F N G G Y   L A V T F		
UniRef90_UPI0003FD97DA	S E N T   L R A F A Q W D   G E V   S D E   A G L   V D   L T   G G G   T   L A I T   T E		
UniRef90_UPI0004769B62	H   L   H   G   L   R A T A K   I   D   G   D   V   T   G L E   G L K   D   C   G E   G H   V V I T I D E		
UniRef90_U2SQ99	A N G S   V R G   L A R W S   A   I   P   E D T   R   S L   N A M M G Q Q   H   I A I T L E		
UniRef90_A4BAF6	K K G E   V K G Y   V G N E   G F   I T   N E Q   G Q   I   K F   I   G N G T   L Q V   R		
UniRef90_I9W900	H N R A L   R A I A Q Y   N D D Y   D D A   G P   V   L   G E G Q   M A I T I		
UniRef90_UPI0003B31705	S D   L   S   L R A T A K   L   A D D   V   E   L A D D   A T   L A E   L V N   A N G Q Q R F A I T L		
UniRef90_I1AUB5	A D   R   T   L R A T A K   W   E G D   L P   T A A G   L T E   L L G Q Q   F   V L   I L		
UniRef90_E7RWL2	A P   A R   I R A Y A S F D R D Q   V   N E Q   A A F   D Q   L   Q   D G Y F A I L M		
UniRef90_UPI0004010D19	A D   G   R   F   R A T   V   K   L   Q D   G   T   A   P   I   P   H   D A S   F   G   D   L   V   N   P   D   G   N   G   R   F   A   V   T   L		
UniRef90_S6CGU1	E Q   L   R   L R G M A R   A V A N   L A P   A P   P   V   P   Q   L   G   A   D   Q   G   G   Q   L   M   L   N   L   D		
UniRef90_H1G6X4	D R   R   T   L R G V A R F D D A   A D A S T   P   L   I E   G   A   R   L   V   L   T   A		
UniRef90_B6IUN2	E R   L   N   R   A   L   Q   S   G   N   D   I   E   Q   G   T   A   R   T   L   L   G   D   G   Q   L   V   L   S   L   D		
UniRef90_UPI0004010D19	S   V   G   D   L   R G Y A S F D A D R   L   A   A   V   A   G   A   P   T   L   R   D   M   L   G   T   G   Y   L   A   F   T   V		

130            140            150            160

UniRef90_A0A037ZME3	D Q G E T P Y Q G I T P L   E A G S L   A A C A E T Y F A Q S E Q   L P T R F S S   L S
UniRef90_UPI0004661F44	D Q G Y T T Q R Y Q G I V Q L   D N I S L   E E A A R T Y F R Q S S E Q   Q I P T D L R L A
UniRef90_B2IBT8	Q G N D M S R Y Q G I V V A L E   E G Q G L   E E A A H Q Y F R Q S S E Q   Q I P T F V R L A
UniRef90_W1N3N5	D P R E G R Y Q G I V A I   E H D S L   A G C L E T Y F S Q S E Q   Q I P T R L W L A
UniRef90_W4HIS8	D Q G K G T P Y Q G I S P L   V H E T L   S D A A Q T Y F A Q S E Q   Q I P T R F E L L K
UniRef90_UPI00034C0C0E	D Q G P M R R Y Q G I T P L   V A L T G G S L   E D A A H H E Y F M R S S E Q   Q I P T R V R L A
UniRef90_B6B617	D Q G T G Q P Y Q G I T P L   A Q G S L   S A C A E A Y F A Q S E Q   Q I P T M F K L S
UniRef90_K2KBQ5	T P L N G E R Y Q G I V V A   A E G D S L   A A M V E N Y F A Q S E Q   Q I H T R L W L H
UniRef90_UPI0002F67170	D N G T G D P F T S T V E L I N G S I   A E D L A S Y   L L H S E Q   Q I P T R F S L L T
UniRef90_U3AAJ2	D Q G Q G M P Y Q G I T P I   T G D T L   A S C A E T Y F A Q S E Q   Q I P T R F S L L T
UniRef90_UPI0002558B54	E P E Q G Q R Y Q G V V P L   E E A T L   A G C L Q A Y F E Q S E Q   Q I G T S I Q L T A
UniRef90_C3XAC2	D P H D K K P Y Q G I V S L   E G D T L   S H V I E N Y M K Q S E Q   Q I D T R R I Q L A
UniRef90_V7EMX3	D Q G E G N P Y S G L   T P I   A G G G S L   S A C A E T Y F A Q S E Q   Q I P T R F A V L T G
UniRef90_Z2QUT9	D V G M K D Y F S G A S P I   V S G E L   G E D F T Y Y Y A T S S E Q   Q I P T S S V G L L G
UniRef90_R7IJ45	D L G L K E P Y V G T I   T E L V S G E L   G D F A Q Y F T V S S E Q   Q I P T S V G L L G
UniRef90_C3X1M6	D P H E K E R P Y Q G I V S L   A G D A I   S Q V I E N Y M K Q S E Q   Q I D T R I W L A
UniRef90_D3LUW5	F T P R Q D T Y T S R A E L   V S G E I   A E D L A Y Y L Y T S S E Q   Q I P S T V S L L G
UniRef90_B9R448	D Q G H M Q R Y Q G L V I E L   N G I S   E E V A R R Y F E R S S E Q   Q I P T E V R L A
UniRef90_UPI000255905B	D Q G A G Q P Y Q G I S P L   T G G S L   R A C A E A Y F A Q S E Q   Q I P T R F S L L S
UniRef90_UPI0004278263	T P T E G E R Y Q G V V N A D A N S L   A E V V E N Y F M Q S E Q   Q I H T R L W L H
UniRef90_K2I6R5	D Q G D G Q P Y Q G I T P L   A G G S L   S A C A G T Y F A Q S E Q   Q I P T R F A M A
UniRef90_R5QHL5	Q K G A A E N Y Q G I T G L   E Q P T L   T E C V H Q Y F R D S S E Q   Q I G T A V R L H
UniRef90_W0SJ17	H P K S V Q P Y Q S V V P L   T G G T   T K M F E H Y L E Q S S E Q   Q I P A R R L W L A
UniRef90_G8U66	Q D N Q T Q A Y Q S L I   P I Q S T M S E N L M T Y F A Q S E Q   Q I A T R V W L A
UniRef90_S6HMU8	E P E V G G Q R Y Q G Y I V P L   E N D T L   A E C L A D Y F D R S S E Q   Q I Q S K F V F A
UniRef90_Q9X1B4	D L G L K T P F V S Q V P L   V S G E I   A E D L A Y Y F A V S S E Q   Q I P S A F S I G
UniRef90_E0MNZ9	Q G E Y T T Q R Y Q G I V V Q L   D G I G L   E E V A R R Y F R Q S S E Q   Q I P T E I R L G
UniRef90_B8KSS2	E R E G G Q R Y Q G I V V A L   D R G S L   A A T L E D Y F L Q S S E Q   Q I N T R F W L A
UniRef90_R7KHP1	D P K D G E P Y Q G V V P L   T G E S I   A A D A L M G M Y M E Q S S E Q   Q I H T K L W L T
UniRef90_Q7WD81	D P Q R K V P Y Q G I V P L   E G E T V   A E A L G H Y M K A S S E Q   Q I D T Q L W L A
UniRef90_A3WEW1	E T G Q G Q R Y Q G I V V P L   E G D N L   A Q A C L E S Y F T Q S S E Q   Q I P T L I R I A
UniRef90_G8PTJ6	D Q G H T S R Y Q G I V V V L   N G T T L   E E A A H Y F Q K S S E Q   Q I P T F V R L A
UniRef90_E1YAH2	L E D A K Q P Y S G Q I A L   L Y G S I   A K D L A N Y F Y S S E Q   Q I P T V F N L L S S
UniRef90_D0CSN7	D Q G K G Q P Y Q G I T P L   T G G S L   K A C A E S Y F A Q S S E Q   Q I P T R F S L L S
UniRef90_Q1GCJ5	D Q G G G T P Y Q G I T P L   A A T S L   S E C A Q A Y F A Q S S E Q   Q I P T R F S L L S
UniRef90_W0E2Q9	E P R T G E P Y Q G I V A L   Q G E R L   A D A M E H F F S G S S E Q   Q I P T R F Q L L T
UniRef90_A8LPF5	D Q G D M E P Y Q G I T P I   A G G S L   S A C A E T Y F A Q S S E Q   Q I P T R F S L L S
UniRef90_UPI000370915B	D Q G D M T P Y Q G I T P I   A G G S L   S A C A E T Y F A Q S S E Q   Q I P T R F Q L L T
UniRef90_A4EGY6	D Q G Y M Q P Y Q G I V P L   D G S S L   E D I A G F Y F R Q S S E Q   Q I P T R V R L A
UniRef90_B9JQS2	D Q G Y M Q P Y Q G I T P V   P A G G S S L   S D C A A A Y F A Q S S E Q   Q I P T T F A L T
UniRef90_A3K2V5	Q G E G M Q P Y Q G I T P V   P A G G S S L   S D C A A A Y F A Q S S E Q   Q I P T A L K V A
UniRef90_G2TC27	Q G A N T E R Y Q G I V V S L   E G D F L   A D C V A S Y F D Q S S E Q   Q I P S A V V V S G
UniRef90_UPI0003B6F691	E M G E D E P F T G K V Q L   A T G E I   G D D I T Y Y M A K S S E Q   Q I P T A L V V G
UniRef90_UPI00034AE8A0	D V G Y G Y P Y S S T V E L   V S G E I   G D D V T H Y L A T S S E Q   Q I P T A L V S L
UniRef90_F9EM67	D M G L K E P Y V A I S D I   D Y S N L   P N D I S A F F Y N S S E Q   Q I P T R F S L S
UniRef90_UPI0004678FA0	Q G R D M A P Y Q G I T P L   T G A S L   A S C A E A Y F A Q S S E Q   Q I P T R F S L S
UniRef90_I3D5Q1	D F G L K D P Y I G Y C Q   T N H G L   A Y D L S G Y F Y S S S E Q   Q I P T V I A F T A
UniRef90_N9MBY1	E P E F G E R Y Q G I V V P L   D K P N L   A G C L M Q Y Y D L S S E Q   Q I P T R I V L A
UniRef90_UPI00036D407F	E P D N S E P Y Q G I V P L   R G N N L   A A A L R T Y F E Q S S E Q   Q I S T R R L W L A
UniRef90_U2FX56	D P E E G Q R Y Q G I V V A L   D K P S I   A G C L E A Y F A Q S S E Q   Q I P T R R L W L A
UniRef90_B8GL97	D P G Q G E R Y Q G I V V P L   E G A S L   S A A L E G Y F T R S S E Q   Q I P T R R L W L A
UniRef90_F6IJN3	L A V T K E R Y Q G I V V P L   E G E S L   A Q A C L E S Y F A Q S S E Q   Q I P T L I R V A
UniRef90_UPI0003732AA0	T A D M R Q P Y Q S H V P L   Q G E T L   A A V F E H Y L A Q S S E Q   Q I A P T R L W L A
UniRef90_K9SUQ8	D V G Y G N P Y S G N V E I   V S E   V S E N I T Y Y L V S S S E Q   Q I P T S A L L T G
UniRef90_UPI00035EED6C	D Q G D M E R Y Q G I V V E L   K G E S T L   S D V A R N Y F L N S S E Q   Q I P T E I R L A
UniRef90_A0A011PPQ5	M P T M R E P Y Q S I V P I   D G D S I   A G V F E H Y L G Q S S V Q Q P A R R L F L A
UniRef90_UPI000479528D	Q G R S G H R Y Q G Y V K L   Q H E S E A A A H Y A F R Q S S E Q   Q I P T R R V R L A
UniRef90_H1S9U6	D P Q D K Q P Y Q S I V P L   A D A S M   T A V L E H Y M Q T S S E Q   Q I D T R R L W L A
UniRef90_N8Q8E2	E P E F G E R Y Q G I I A L   E H D T L   A A C L M Q Y Y D L S S E Q   Q I P T K I M A
UniRef90_S6HJY9	E P D V G R R Y Q G Y V P L   E Q E S T L   A L C L E E Y F Q R S S E Q   Q I D T K F I L A
UniRef90_UPI00036062CE	T D A S P T P Y Q S I V V P L   E G A T V   T E V F E R F L E Q S S E Q   Q I Q P T A L W L S
UniRef90_UPI000470C2FD	P K D D G G Q S Y Q G I V P L   E G G S V   A E I L E N Y M Q R S S E Q   Q I E T R R L W L N
UniRef90_A3V2D2	D Q G E G T P Y Q G I T P L   A G G G S L   S A C A Q T Y F A Q S S E Q   Q I P T R F A L T
UniRef90_A6LJS3	D L G L K T P Y V T P I K   I S G E I   A E D L T Y Y F T I S S E Q   Q I P S A I A L G
UniRef90_UPI0003B43E28	D Q G E G M P Y Q G I T P I   A G K S I   S D C A E T Y F A Q S S E Q   Q I P T R F Q L L S
UniRef90_F1ZDR5	D P A T G Q R Y Q G I V P L   E G E T L   A A A C L E S Y F F Q S S E Q   Q I V P T L I R V A
UniRef90_S9RU46	D Q G N M K P Y Q G I T P L   S G G G S L   A A C A E T Y F A Q S S E Q   Q I P T K F A L T
UniRef90_C1D0U6	L L D N G E P Y T G S V H   L I S G E I   A E D V S T Y L G V S S E Q   Q I P N A A L L G
UniRef90_C7DEU3	D Q G N M K P Y Q G L T P I   A G G S L   S V C A E T Y F A Q S S E Q   Q I P T R F A L T
UniRef90_S0FZ09	Y L E D R H P Y S S T V E L   A H G T I   A Q D L A A Y F L E S S E Q   Q I P T G L N L L
UniRef90_A2BVY6	D N G F G E P F T S T V E L   V N G N I   A E D L A S Y L Y H S S E Q   Q I T P S A V V F I L
UniRef90_Q28WB6	D Q G N M T P Y Q G I T P I   A G G S L   R S C A E A A Y F A Q S S E Q   Q I P T S F M L S
UniRef90_D9SDH2	I Q K D D G K P Y Q G I V E L   E G E S L   V A E L Q N Y M S H S S E Q   Q I L D T R R L W L S
UniRef90_Q16D16	D Q G Q G M P Y Q G I T P I   A G D S L   A A C A E A Y F A Q S S E Q   Q I P T R F S L L S
UniRef90_A9BA44	D I G E G D P Y S S T V E L   V G G G I   G E D I A S Y L L H S S E Q   Q I T P S A V F V G G
UniRef90_Q01AP2	D E G K G E P F S S T V E L   V R G G G I   G E D V A S Y L L H S S E Q   Q I T P S A V F V G
UniRef90_A5GDV3	D L G M K E P Y K G V V Q L   Y S S E I   A E D L A Y L T E S S E Q   Q I I P S A V V G L
UniRef90_Q128E1	D P K D K Q P Y Q G I V V P L   F G D N L   G E V L E H Y M L Q S S E Q   Q I I D T K L I L
UniRef90_UPI000263221D	D Q A T N E R Y Q G I V V P L   E G A S I   A E A A Q S Y F L Q S S E Q   Q I I P T L V R L G
UniRef90_C0N786	A E G A K Q P Y Q G I V V S L   Q G N S I   T E T L E T Y F E Q S S E Q   Q I I A T K I W L Y
UniRef90_UPI0003FD97DA	A N H F K Q P Y Q G I I S L   S E G S I   A K V I E H Y F E S S E Q   Q I I P T R R L F L L A
UniRef90_UPI0004769B62	A E K E S E R Y Q G I I A L   E G D S I   A Q A L E N Y F Q Q S S E Q   Q I I P T R R L Y L L S
UniRef90_U2SQ99	D M G L K E P F V G L T H   I A G E D I   A D T M A H Y F L I S S E Q   Q I K S V V A L L G
UniRef90_A4BAF6	E P D K G K R Y Q G I V S I   I N D G E   L N R V L E D Y F Q Q S S E Q   Q I I R T R I W L Y
UniRef90_I9W900	D P Q D K Q P Y Q G I V V P L   S G P D   M S A V L E H Y M L T S S E Q   Q I I D T R R L W L A
UniRef90_UPI0003B31705	D P K N G T P Y Q G I V V A L   E G D S I   V A E M L Q G Y M Q R S S E Q   Q I I E S R R L W L A
UniRef90_I1AUB5	D Q G E G T P Y Q G I T P I   A G G S L   V A E V L E N Y M S L S S E Q   Q I I P S R R L F L L A
UniRef90_E7RWL2	L P G L D N P Y Q G I I P F   E G D T V   V A E V L E N Y M S L S S E Q   Q I I P S R R L F L L A
UniRef90_UPI0004010D19	F P V A R Q P Y Q S F V P L   E G D S I   V A S F E H Y L E Q S S E Q   Q I Q Q A A R R L F L L A
UniRef90_S6CGU1	E S P S G E R Y Q G I V V P L   V V E A H   V A E A L A R Y F E Q S S E Q   Q I I L P T R R L W L A
UniRef90_H1G6X4	L P S M R Q P W Q S V V P L   E G E G I   G D I F E H Y L S L S S E Q   Q I I L P S R R L F L L A
UniRef90_B6IUN2	D Q G H T E R Y Q G I V E L   A G D S I   D D A V R H Y F R Q S S E Q   Q I I A T G I K V A

UniRef90\_A0A037ZME3  
 UniRef90\_UPI0004661F44  
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 UniRef90\_C3XAC2  
 UniRef90\_V7EMX3  
 UniRef90\_Z2QUT9  
 UniRef90\_R7IJ45  
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 UniRef90\_D3LUW5  
 UniRef90\_B9R448  
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 UniRef90\_Q9X1B4  
 UniRef90\_E0MNZ9  
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 UniRef90\_R7KHP1  
 UniRef90\_Q7WD81  
 UniRef90\_A3WEW1  
 UniRef90\_G8PTJ6  
 UniRef90\_E1YAH2  
 UniRef90\_D0CSN7  
 UniRef90\_Q1GCJ5  
 UniRef90\_W0E2Q9  
 UniRef90\_A8LPF5  
 UniRef90\_UPI000370915B  
 UniRef90\_A4EGY6  
 UniRef90\_B9JQS2  
 UniRef90\_A3K2V5  
 UniRef90\_G2TC27  
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 UniRef90\_A9BA44  
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 UniRef90\_UPI0003B31705  
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 UniRef90\_S6CGU1  
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 UniRef90\_B6IUN2

170            180            190            200

F I L P G Q A E G W R A G G V M L Q H M P G D D E E N W V R A N T L L D T V E D	V I L P G G R Q Q W R A G G V L A Q F L P E A P E R V D N S W Q E L L A L L A T		
V A E N I T G G V W R A G G I M L Q F L P S S P E D D A W S E A K I L A G T I E	G K H A G G L L Q R L P D E S L N Q D D D A W D R A T H L S T		
F G R S T E A G H W R A G G G M M L Q H M P K A D D E E G E D W N R A N L H L D T	F G K S A E P G V W R A G G V M L Q S M P G D E E E N W N R V T M L L N T V E D		
S D S E H A A G G M M L Q V L P A A G G K D L T A F E H L E T L T D T	F G K S Q Q P G H W R A G G V M L Q H M P G D E S E N W S R A N L L L D T V E E		
E K F Q K S D V I C S G G L L A Q V L P E T D P L L I S L L E E R C R E M K S	F T E P G R G E S W R A G G V M L Q K M P K A E G E N W T R A N V L L D T V D Q		
A D G N R A A G L M L Q V L P A A E T G D E D D W S R V S M L A S T	A D G N R A A G L M L Q V L P A A E T G D E D D W S R V S M L A S T		
A D K D V I R G L L Q L Q K M P S Q T G A D N E E E N A W Q H L A A	F G K S Q Q P G H W R A G G V M L Q H M P G D E S E N W S R A N L L L D T V E E		
A D N H V I R G L L Q L Q R M P G L S E K N G D E W E N L L A L A L T	V L V N P D N T I K A A G G F I I Q V M P G A K D E T I S K L E K A L S E M T P		
V L V A R D F T V A A A G G F L V Q A L P G A R E E D L A R V E K N V Q D I G P	V L V N G D V V L K A G G G L L Q P M P G C E E E T I E Q L E L R S P P M F A D		
V G E D A P V K S W T G G G L L I V Q F L P E A E D D A W V I E A K A L V D T V K D	V G I L S T E A G H W R A G G V M L Q M M P G D S E E N W N R V N L H L D T V D Q		
Y G I L S T E A G H W R A G G V M L Q M M P G D S E E N W N R V N L H L D T V D Q	A D G E Y A A G M L Q V M P A A G H D R S A F E H L E T L T A T		
A D Q P G A E E R W R A G G V M L Q H M P G D E A D D W T R A N L L L D T V E Q	A D Q P G A E E R W R A G G V M L Q H M P G D E A D D W T R A N L L L D T V E Q		
I A P P D G K N G W R C G A I M I Q K M P A A Q K A A A H L S E E D I E E L W T	I A P P D G K N G W R C G A I M I Q K M P A A Q K A A A H L S E E D I E E L W T		
A T P D T A C G L F L Q K L P D A D P D G W N R I I E Q L A A T V R P	V N E D M A A G M L Q L M P G Q D T I Q R E Q W E Y A V Q L G Q T T		
C E N G R A R G L M L Q V L P A S A E D D D W S R L S M L T Q T L T	C E N G R A R G L M L Q V L P A S A E D D D W S R L S M L T Q T L T		
V L V D S D G V K I A G G F A V Q I I D R T E Q E K V E M I E K N I K N L P S	V L V D S D G V K I A G G F A V Q I I D R T E Q E K V E M I E K N I K N L P S		
V G E N G P S H S W T A G G V L L Q F L P D S E E R M R Q K W L E A T A L L M G T	V G E N G P S H S W T A G G V L L Q F L P D S E E R M R Q K W L E A T A L L M G T		
S N G V T G G G L M L Q Q P L P A Q L E Q G S E Q R G E Q W A N V D T	S N G V T G G G L M L Q Q P L P A Q L E Q G S E Q R G E Q W A N V D T		
A D D S A A S G L M L Q K M P G G K D E N I T S D E E S L N R I E T T	A D D S A A S G L M L Q K M P G G K D E N I T S D E E S L N R I E T T		
A D E Q H A A G L L V Q R Q L P D H G G T T Q G D A A E S S W S R A T H	A D E Q H A A G L L V Q R Q L P D H G G T T Q G D A A E S S W S R A T H		
S K S S S T G R V A A G I L V Q H L A D G E E G D H P D W E H I V A L A G T	S K S S S T G R V A A G I L V Q H L A D G E E G D H P D W E H I V A L A G T		
V E E G G A E H S W A A G G I M V Q F L P Q S D E E D A W V E A R S L V E T V K	V E E G G A E H S W A A G G I M V Q F L P Q S D E E D A W V E A R S L V E T V K		
I K F N A K G E V S G A G G I L F L P Q L M P D A A E E L A K K L E I I I D G L P S	I K F N A K G E V S G A G G I L F L P Q L M P D A A E E L A K K L E I I I D G L P S		
F G K S T E G E R W R A G G I M L Q H M P G D E G E N N W D R V N I L L D T V E D	F G K S S E P G H W R A G G I M L Q H M P K A E E E N W N R V N I L L E T V E D		
F G K S S E P G H W R A G G I M L Q H M P K A E E E N W N R V N I L L E T V E D	D A D G E R A A G M L Q R P L P G E D H A A E D W S R V G M L A D T		
D A D G E R A A G M L Q R P L P G E D H A A E D W S R V G M L A D T	F G R S G E D E H W R A G G V M L Q H M P G A E N E D W T R A N V L L D T V E E		
F G R S G E D E H W R A G G V M L Q H M P G A E N E D W T R A N V L L D T V E E	V G F D K D G N I T E S G G L L I Q K L P G A P D G Q I D L L Q E R L A S F P A		
V G F D K D G N I T E S G G L L I Q K L P G A P D G Q I D L L Q E R L A S F P A	S Q L P G E A T H W R A G G V I L Q H M P K A S P E N W N R A N T L L D T V D E		
S Q L P G E A T H W R A G G V I L Q H M P K A S P E N W N R A N T L L D T V D E	V A E G Q K P R H S W R A G G I L A Q F L P E A D D D N W A E A R M L V E T I D G E		
V A E G Q K P R H S W R A G G I L A Q F L P E A D D D N W A E A R M L V E T I D G E	F K E P G Q E E H W R A G G G M M L Q H M P G D E K E N N W N R V N A H L Q T L E E		
F K E P G Q E E H W R A G G G M M L Q H M P G D E K E N N W N R V N A H L Q T L E E	V A P P D P D A P W A T G L M L Q R M P Q A R G E A W D D A W Q I L M E S L T		
V A P P D P D A P W A T G L M L Q R M P Q A R G E A W D D A W Q I L M E S L T	V D I N D D H T I K A A G G F M V S T L P D A T D E E L A A L E S R L E S F P S		
V D I N D D H T I K A A G G F M V S T L P D A T D E E L A A L E S R L E S F P S	V F V G A A G V T A A G G I L L Q V M P K A A T D E A V Q T L E S R V A A L S G		
V F V G A A G V T A A G G I L L Q V M P K A A T D E A V Q T L E S R V A A L S G	E E C T N D G M V L C G A F M V Q L L P N A D E D F I T K L E R K A E A I R P		
E E C T N D G M V L C G A F M V Q L L P N A D E D F I T K L E R K A E A I R P	F E K S A D T G H W R A G G I M L Q H M P K A S P E D D W N R V N I L L D T V D T		
F E K S A D T G H W R A G G I M L Q H M P K A S P E D D W N R V N I L L D T V D T	V L F E D E H T V E K A G G Y M L Q L L P N A E E D F L E A L E R K I G A I R S		
V L F E D E H T V E K A G G Y M L Q L L P N A E E D F L E A L E R K I G A I R S	S N D Q R S G G G L L I Q L L P R N S E E E Q Q R D E D L W P R L T M		
S N D Q R S G G G L L I Q L L P R N S E E E Q Q R D E D L W P R L T M	A D E S Q R S G G G L L I Q L L P A Q P S G K P D R E R L E L L A D T		
A D E S Q R S G G G L L I Q L L P A Q P S G K P D R E R L E L L A D T	T D A E R A A G L L I Q K L P Q A Q G E R D D D A W D R I N H L D T		
T D A E R A A G L L I Q K L P Q A Q G E R D D D A W D R I N H L D T	A D G Q R A A G L L L Q A L P G E E D R D P D A F H R A V T L A D T		
A D G Q R A A G L L L Q A L P G E E D R D P D A F H R A V T L A D T	V R S N D P R C V A G G L L V Q H L P E G E E G H A Q E D H P D W A H V S I		
V R S N D P R C V A G G L L V Q H L P E G E E G H A Q E D H P D W A H V S I	A N H E V A A G L F L P Q A L P G A A A R D A D G W N R V Q I L A G T		
A N H E V A A G L F L P Q A L P G A A A R D A D G W N R V Q I L A G T	V L T D D R G V D V A G G G L L Q I M P Q A D H N L L E V L D S R V R S L S E		
V L T D D R G V D V A G G G L L Q I M P Q A D H N L L E V L D S R V R S L S E	C E R D A V T G N W R S G G I M V Q H L A R G E E E Q W N R A S V L M H S V K T		
C E R D A V T G N W R S G G I M V Q H L A R G E E E Q W N R A S V L M H S V K T	V S D E A A A G M L L Q K Q L P T A A E R D A D G W A R A E A L A A T		
V S D E A A A G M L L Q K Q L P T A A E R D A D G W A R A E A L A A T	V A E G E A R Q A W R A G G I L A Q F L P D S P D E E D D A W V E A A A L V D T		
V A E G E A R Q A W R A G G I L A Q F L P D S P D E E D D A W V E A A A L V D T	V A E G E A R Q A W R A G G I L A Q F L P D S P D E E D D A W V E A A A L V D T		
V A E G E A R Q A W R A G G I L A Q F L P D S P D E E D D A W V E A A A L V D T	A D D K V A A G M L L Q K L P T A R A Q D L D T W D R A C Q Q L G A T		
A D D K V A A G M L L Q K L P T A R A Q D L D T W D R A C Q Q L G A T	S T A E C S G G G L L I Q L L P R N S E E E Q Q R D E D L W P R L T M		
S T A E C S G G G L L I Q L L P R N S E E E Q Q R D E D L W P R L T M	C D G Q K A R G I M L Q V L P A M Q S G T D D W Q R L A L L A Q T		
C D G Q K A R G I M L Q V L P A M Q S G T D D W Q R L A L L A Q T	A D E S V A C G L F L Q K L P G A D Q R D A D G W A R I C H L A A T		
A D E S V A C G L F L Q K L P G A D Q R D A D G W A R I C H L A A T	C D G K R A G G M M L L Q K L P D T Q A G D D A W N R I N V L A D T		
C D G K R A G G M M L L Q K L P D T Q A G D D A W N R I N V L A D T	S Q T P G E A A H W R A G G V M L Q H M P D D E G E N W T R A N I L L D T V D D		
S Q T P G E A A H W R A G G V M L Q H M P D D E G E N W T R A N I L L D T V D D	V L V D K N G I K R A G G I I I Q L D Q S P K K D I T E I E K K F K E I T P		
V L V D K N G I K R A G G I I I Q L D Q S P K K D I T E I E K K F K E I T P	F G K T G E A A M W R S G G V M L Q M M P G D E G E H W N R V N L L D T V E E		
F G K T G E A A M W R S G G V M L Q M M P G D E G E H W N R V N L L D T V E E	V D T S G G R A I A G G G L L Q H L P E G E E G R E R R L H A Q L W Q H I S V		
V D T S G G R A I A G G G L L Q H L P E G E E G R E R R L H A Q L W Q H I S V	S T E R G E A E S W R A G G V M L Q H M P G D E Q E N W N R A S I L L D T V D E		
S T E R G E A E S W R A G G V M L Q H M P G D E Q E N W N R A S I L L D T V D E	V Y E E G G R V H R A G G G V L L I Q A M P G V S D E T L A R I L E A N I R A F G Q		
V Y E E G G R V H R A G G G V L L I Q A M P G V S D E T L A R I L E A N I R A F G Q	S Q I P P G K D E G W R A G G V M L Q H M P K A S P E N W N R A N T L L D T V E E		
S Q I P P G K D E G W R A G G V M L Q H M P K A S P E N W N R A N T L L D T V E E	V V F D E N Q A V T G A G G G I L V Q V L P G M P G A D L Q S L D I A E Q I L L G Q M D P		
V V F D E N Q A V T G A G G G I L V Q V L P G M P G A D L Q S L D I A E Q I L L G Q M D P	E K I Q N K N L I C S G G G L L A Q V L P E T D P L L V S L L E D R C K E I N S		
E K I Q N K N L I C S G G G L L A Q V L P E T D P L L V S L L E D R C K E I N S	A Q E P G K D A S W R A G G V M L Q V M P P E A K A E D W T R A N V L L Q T T E A T		
A Q E P G K D A S W R A G G V M L Q V M P P E A K A E D W T R A N V L L Q T T E A T	V D E H S A S G M L L Q K L P D Q T E E D V D A W S R F T Q L A D T		
V D E H S A S G M L L Q K L P D Q T E E D V D A W S R F T Q L A D T	F T E P Q V D E H W R G G G I M L Q H M P G D E K E N W T R A N I L L D T V E E		
F T E P Q V D E H W R G G G I M L Q H M P G D E K E N W T R A N I L L D T V E E	E K I K H K E L V C S G G G L I A Q I L P K A S Q D L A E L L E E N C T N I T S		
E K I K H K E L V C S G G G L I A Q I L P K A S Q D L A E L L E E N C T N I T S	E T I S Q E G L E C S G G G L L V Q V L P K A E P A L V A L L E E R C R E I H N Q		
E T I S Q E G L E C S G G G L L V Q V L P K A E P A L V A L L E E R C R E I H N Q	V F V E T D N S V A A A G G F L I Q A I L P V P V D E A A V D A L M A R I E E L P Q		
V F V E T D N S V A A A G G F L I Q A I L P V P V D E A A V D A L M A R I E E L P Q	A D E H S A S G M L L Q K L P D Q T E E D V D A W S R F T Q L A D T		
A D E H S A S G M L L Q K L P D Q T E E D V D A W S R F T Q L A D T	V Q K D K A T G K T I A G G G L F L Q H L P E G D H P E W Q H V E A L G G T M G A		
V Q K D K A T G K T I A G G G L F L Q H L P E G D H P E W Q H V E A L G G T M G A	A N E H N V A A G L F L Q K L P Q Q L P A Q K E Q A E E D W S R V S Q L A A T		
A N E H N V A A G L F L Q K L P Q Q L P A Q K E Q A E E D W S R V S Q L A A T	T S D Q A V A G L L I Q R Q L P G V E D S F I D K L E D K L R Q I L R S		
T S D Q A V A G L L I Q R Q L P G V E D S F I D K L E D K L R Q I L R S	A D G N G Q K S A G L L L Q A M P P E L S A D L S E D W E R L V H L A Q T		
A D G N G Q K S A G L L L Q A M P P E L S A D L S E D W E R L V H L A Q T	UniRef90_I1AUB5 UniRef90_E7RWL2 UniRef90_UPI0004010D19 UniRef90_S6CGU1 UniRef90_H1G6X4 UniRef90_B6IUN2		
UniRef90_I1AUB5 UniRef90_E7RWL2 UniRef90_UPI0004010D19 UniRef90_S6CGU1 UniRef90_H1G6X4 UniRef90_B6IUN2	V G R D S A G R W V G G A I L V Q A L P E D V E E D D W R A M V L L G S C T		

	210	220	230
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UniRef90_B2IBT8	D H E L V D P T L S S E R L L Y R L	F H E G V K V F A P Q T V H	
UniRef90_W1N3N5	L A D K E L V E L D S T T L L T R L	F H E E P R V F D P K A L Y F	
UniRef90_W4HIS8	V E E M E L P S L P P T D L L V R L	F H E E P R V F D S Q P V R F	
UniRef90_UPI00034C0C0E	V E L I D P D L S G E R L L F R L	F H E G V R V F S S L P M R	
UniRef90_B6B617	L E L I G P S V T P A D L L V R L	F H E E P R V Y D F Q P V R F	
UniRef90_K2KBQ5	I S E H E L Y T L P G E Q L L H R L	I Y H E Q V L L Y P A H E V S F	
UniRef90_UPI0002F67170	F S E E L H G T N N L L S V I K K I	F P D D L S I S E S Q E I E F	
UniRef90_U3AAJ2	L E L I G P S V T P T D L L I R L	F H E E P R V F E A Q P V Q F	
UniRef90_UPI0002558B54	L S D D E L L N L D N E A L L F R L	F H E E C R L Y E P Q P L V F	
UniRef90_C3XAC2	L A S T L K P E T D V D T L R H R L	F W E D V Y M F D P L T P V F	
UniRef90_V7EMX3	M E L I G P T V H P T D L L V R L	F H E E P R V F D A Q P V R F	
UniRef90_Z2QUT9	V S K L L E Q G L T P E G L L N E I	G E D V Q I L E K M P V Q F	
UniRef90_R7IJ45	I S R E M T E A P K E Q L L J E D	W F G M K P V V L D R T P L R Y	
UniRef90_C3X1M6	L R N K E L L D T D I L R H R L	F W E E D L F F D P L H P V F	
UniRef90_D3LUW5	V T S Y L Q E D P Q G E R L A E K I	K I F	
UniRef90_B9R448	V E L T D P E V S V E T L L Y R L	F H E G V R L F D A Q P I A	
UniRef90_UPI000255905B	L E L I G P S I A P T D L L V R L	F H E E P R V F D A Q P V K F	
UniRef90_UPI0004278263	I T A N E L F A L S G A E V L L H R L	I Y H Q E L E L Y E V Q Q V S Y	
UniRef90_K2I6R5	T E L V G P H V Q P T E L L V R L	F H E E P R V F D P Q P V A F	
UniRef90_R5QHL5	N E E L V D T N L P V E K L I N R L	Y H D L Q I F M P K L E F	
UniRef90_W0SJ17	E E L A L L P P E A L L L T R L L	F G E E V R L F E P R H A S W	
UniRef90_G8UU66	V T E G E L L T I D N Q T L L Y R L	I Y H E E L R I F E S R S T R F	
UniRef90_S6HMU8	V D E L L L S L D N E T L L F R L	F H D E E C R L F E G Q N I E F	
UniRef90_Q9X1B4	I S K L F Q E A E P L D V L E R I	F G E K V G F V E T A E I K Y	
UniRef90_E0MNZ9	I A E L T D A A V Q P E R L L F R L	F N E G V R V F D A Q K V A	
UniRef90_B8KSS2	L T T Q E L N G E S P Q T L L Y R L	F H E E L R L F E P K S V V F	
UniRef90_R7KHP1	I T D D E L L E L T P E E V T H R L	F W E E P D Y F E P A E P K F	
UniRef90_Q7WD81	L A A T L Q P A T D T D T L H R L	Y W E E P L M F E P H A V R W	
UniRef90_A3WEW1	I S E L L D P A L S L E G I A W R L	F H E E P E I	
UniRef90_G8PTJ6	D D E L L I D P S L T V E G L L Y R L	F H E G A S V F S P Q	
UniRef90_E1YAH2	I G N L I E E G K S A D Y Y C E S F	K E A P Q I L N D S R V E F	
UniRef90_D0CSN7	L L E M I G P S V A P T D L L V R L	F H E E P R V Y Y A Q S V Q F	
UniRef90_Q1GCJ5	L L E L I G P S V S P S E L L L R L	F H E E P R V Y D A Q S V R F	
UniRef90_W0E2Q9	L T R E E L L A L P A E Q L L Y R L	F N E E V R L F D P D P I A F	
UniRef90_A8LPF5	M E L I G P H V S P A E L L V R L	F H E E P R V Y E A L P V Q F	
UniRef90_UPI000370915B	V H T F F E D G Q Y I D D V M Q K V	M P L K V K E L S R Q L V D F	
UniRef90_A4EGY6	I E L I G P T V S P T D L L V R L	F H E E P R V Y D A Q P I K F	
UniRef90_B9JQS2	D E L T D P Q I G T E R L L F R L	F H E G V R V Y E P Q A V H	
UniRef90_A3K2V5	F E L L I G P S V P P T D L L V R L	F H E E P R V Y E S Q P V R F	
UniRef90_G2TC27	P T E L L D P A L S P E T L L H R P	F H E G L E V A P Y R P V F F	
UniRef90_UPI0003B6F691	I A S I L L E R E H E P L A L L N K L	F G D Q I K A L S S T D V	
UniRef90_UPI00034AE8A0	F T P L L Q A G K T L P E M F E G L	L G D M L E I L E V Q M V R F	
UniRef90_F9EM67	M N E L L M K G G M T L E Q I N L L	Y D D M	
UniRef90_UPI0004678FA0	D E M I G P S V S S T E L L V R L	F H E E P R V M D A Q A V R F	
UniRef90_I3D5Q1	I D E L F H G G M D L E D I I A L L	Y D D M	
UniRef90_N9MBY1	L T E T L L I D L L E V Q D E V L L Y R L	F Y N E E V R L P E V E H L K F	
UniRef90_UPI00036D407F	L T E K E L L E L D C E P T D L L R R L	F H Q E V R L F D A E P V E F	
UniRef90_U2FX56	I T G D E L T G L G A E Q V L L H R L	F H E E A R V F D P A P V K F	
UniRef90_B8GL97	L K D Q E L L E L P V Q T L L H R L	Y H E E V R L L D G S P V S F	
UniRef90_F6IJN3	M A E L V D P V L N L E Q L V W R L	F H E E S E V	
UniRef90_UPI0003732AA0	V R A D E L L D L G A I K L I E R L	F P E E V R V Y D P R P V S Y	
UniRef90_K9SUQ8	F T S L L L K Q G M S L R Q I L D L	G E D V R V F F E S	
UniRef90_UPI00035EED6C	D E L L D P A L D L D Q I L F R L	Y N E D V R V F F E S	
UniRef90_A0A011PPQ5	I G R S E L L S L A A E D L L P R L	F P E E I R L F A A Q G V	
UniRef90_UPI000479528D	V E E L I D P S V P A E R L L R L	F H E G V R V F F D A T P L E	
UniRef90_H1S9U6	L K D A E L L A E T P D T L L R R L	F W E D L R V F E P M T P H F	
UniRef90_N8Q8E2	L T E T L K P N L D A T E I I L Y R L	Y N E E V R L P E V E E L K F	
UniRef90_S6HJY9	L S A A E L L A L L D N E T L L Y R L	F H E E C R L F S P Q Q I T F	
UniRef90_UPI00036062CE	L T P A E M K T L D T G S L L M R L	F H E D I R V F D P V E P R	
UniRef90_UPI000470C2FD	V T D E E L L G L S A R T L L R R L	F H E E L R L F P E Q D I R F	
UniRef90_A3V2D2	L E L I G P I V T P T D L L V R L	F H E E P R V Y D A Q P I T F	
UniRef90_A6LJS3	I T N F L E K H T P I D A L K H I	F G K K I L E K T E T H E I N F	
UniRef90_UPI0003B43E28	E E L M G P E V A P T D L L I R L	F H E E P R V F D P Q P I R F	
UniRef90_F1ZDR5	M D E L L D P E L S L E A L V W R L	F H E E Q E V L G P Q L V R	
UniRef90_S9RU46	L E E L I G P S I A P T D L L Y R L	F H E E P V V Y G A Q P V K F	
UniRef90_C1D0U6	I T D H L R R G S L M E A M T V L T E G L N L	T L T E A Q P A A F	
UniRef90_C7DEU3	M E L V G P T V S P S Q L L L R L	F H E E P R I Y E A Q D I R F	
UniRef90_S0FZ09	P G Q T L L A R G K S V E N V M E T	F T P L S P R L L D Q T R V S F	
UniRef90_A2BVY6	F S E D L I F E S K D L L S I I K N I	F P D D K S I S E T Q E V R F	
UniRef90_Q28WB6	M E L I G P H V A P T D L L V R L	F H E E P R V F D A L P V A F	
UniRef90_D9SDH2	L R D D E L M Q L S T Q A L L R R L	F H E E V R L F E A Q P V A F	
UniRef90_Q16D16	M E L I G P K L S P S D L L L R R L	F H E E V R V Y D A Q V V R F	
UniRef90_A9BA44	F S E L F E Y K D N L S S G L L K D L	F N L N P E I	
UniRef90_Q01AP2	F S K H L R D N Q D L E D L L K D V	F P D L D P Q P I	
UniRef90_A5GDV3	L S E L L R K G T T P E E L L A L L	F A D I P D T L E K R A L A F	
UniRef90_Q128E1	L K R E E L L G L D A D T L L R R L	F W E E V T R F E P V T P S F	
UniRef90_UPI000263221D	D E L A D P A I A L E G L V W R L	F N E E S E V	
UniRef90_C0N786	I T D E E L L T L E L E T L L H R L	F H E E V R L Y E P A P L K F	
UniRef90_UPI0003FD97DA	A T P E E L L T L S T N E L L Y R L	Y E T D A R V F E P E S F H F	
UniRef90_UPI0004769B62	L T P E E L L D L A A A P M L Y R L	F H E E V R L F N A S P V F F	
UniRef90_U2SQ99	I T E L L I S G G F T P E R I I E L L	Y E D I S V V E E E A	
UniRef90_A4BAF6	L T T E E A L S L P P G T E V L H R L	F H E E V R V Y E P N Q L E F	
UniRef90_I9W900	L Q T E E L L E V P P E T L L R R L	F W E E V R L F E P R Q P H F	
UniRef90_UPI0003B31705	L H A P E L L A T D P D L L R H R L	F H E E L Q V K V E E Q A F	
UniRef90_I1AUB5	L E L I G P D L P P T D L L V R L	F H E E P R V F D A Q P V R F	
UniRef90_E7RWL2	L T R E E M L T L P P E E V L R R L	F W E D I R A F D Q K K P R F	
UniRef90_UPI0004010D19	V K E A E L L E L D A A T L L G R L	F H E E V R L Y D P R P V	
UniRef90_S6CGU1	L G D E E L L S L D V E T L L H R L	F H E E V R L F D P E P V S F	
UniRef90_H1G6X4	V T D D E L L I S L A P D A L L S R L	F P E E V R I F D A R T V	
UniRef90_B6IUN2	E A E L L D A R L P V N D L L F R L	F H E E A R V Y T R H A L R	

1                    10                    20                    30                    40

UniRef90_A2C1C0	D S L V R A T A A K G G I R L V A V S T T E S T K E A K E R H S L S Y L T S A
UniRef90_G0AJF2	D S L Q K F M V E N A A V R G E L V E L S S T W Q Q V L A H R N Y P T P V K T
UniRef90_Q2G3J9	D R V L H F T L P D R N A R G R A V R L G P V L D T I L S A H A Y P A P I R Q
UniRef90_Q3AK46	D R L V R A T A A A A G G I R L V A V S T N I V R E A R E R H G L S F L T S V
UniRef90_A3UGF7	R G R Y V R L G E T T M D K M L S A H D Y P R S V A R
UniRef90_UPI00036C88C4	D S V L P F Q L E R S G M R G R V A R L G A T L E H I L S R H D Y P V A V S A
UniRef90_F4GXEx3	D Q L K K Y L L S D H S T R V Q A V K L T K A W Q T G L E H Q H Y P A C V Q S
UniRef90_K1SU14	D E I I D C L A Y N G G K V S I L K C I S S R E I V E K A K R K L H D L S P T A S A
UniRef90_G2IXD7	D T L Q R F L F D G A P V R G A L V R L D G A W Q Q V L A R R R Y P L P V R A
UniRef90_A0A011R3N1	D T L H R F L L D D L D I S G A V V R V L G P A W R L M L D N R G Y A A A V A Q
UniRef90_I1XME9	D H Q R F I F D N A A I R G E W V Q L K K T W Q T V K V Q R E Y P P A V A G
UniRef90_I4YU35	D V V L P F A V E P L D V T R G R I V R M G P S L S P I L Q R H A Y P D H L G E
UniRef90_UPI0003A41685	D F I A G F T S D K L P I T G R I V R M G P S L S P I L Q R H A Y P D H L G E
UniRef90_U4V1Y5	D T V L P F Q L D R A D V R G R I A R L D G V L S G V L L K Q H D Y P P A V E A K
UniRef90_UPI0003B5343D	D L R A L G F T I P A R H A R G R V V R L G P T L D A I L L S A H A Y P P A I E K
UniRef90_W0V426	D T L Q K F I F D N T S V R G E F I D V S G T W R E V V A R H D Y P G A V K T
UniRef90_U2YKJ5	D K L L A F T L P E R H A R G R L V R L D A V L E T I L L S A H D Y P P P I R D
UniRef90_A3YAZ1	D L N E I Q R F S F D N T N V R G E R V I L N N Q A Y Q E I I I Q R K N Y P A P L E N S
UniRef90_UPI0003B3DB49	V Q P F L I E R T G I R G R Y V R L G T V L D T I L I E R A N L P D P V A S
UniRef90_S3NUF3	D L R Q R F Y I E N C P V R G E V V H L Q H S L H T L A Q R D Y A P A I Q I
UniRef90_D2RNY7	D V L V K I K A T A G D A R I Y A V T T T H L T Q H M N E H H C T P L A A A
UniRef90_A0A023NXV6	D V L H R F M L E R A G V R G V L V R L G A A W R E V A G R S A Y P A A L R S
UniRef90_UPI00045E9F19	D S L H R F I F E E F G V R G E W V K L S S S W Q N A L H N Q H G N T T V Q E
UniRef90_R5QQ60	D T C V S F I D N G A Y Q Q G R L I R M S S V L D T I I G K H C Y P R P V A A
UniRef90_UPI00047E9EEA	D R L T R F F L L P G A G V R G V H V R L E R S W Q R I R S N D D Y P P A I A E
UniRef90_D3SDM9	D T L H R F M L E E A G V R G E W V H L D A A W Q A L L E R H E Y P P V V R D
UniRef90_UPI0002F266F7	M D T L Q K F I F E N A A V V R G E L V E L P D T W R E I Q S H H T Y P K A V K T
UniRef90_M2U4W4	D V V L G F T I P D R S G R G R I L R L G D A L N A I L A H D Y P A P I A K
UniRef90_Q31F32	D H I Q R F L F K D L N I R Q G H L Q I D Q A W Q K M I A E R H Y T P E L T K
UniRef90_W5WVX7	R V H R F V S K D L T V R I A A V N A T E V V Q H M Q G L Q N T Y P L A T I
UniRef90_D5V914	D Y R Q R F F I D G S V V R G D V V K L T D A Y Q T V I T Q K D Y P V A L K A
UniRef90_A3YY76	D Q L V R A T A A D G G I R L V A A L T T V T S R Y A R R H G L S Y L T T A
UniRef90_I0HP99	M S D L T K F K L F E G L P V R G M L V R L G E G W R E M L A R R Q Y P R P V R E
UniRef90_S9SDY3	D T V L P F T L D A S D I R G R V A R L D V A L E R M L A Q H A Y P P A I E S
UniRef90_G4Q8H7	D V V L I R A T V G D A R V Y A V T T H L T Q Y M N K I H G L S P V A A A
UniRef90_W6KC13	D L I Q P F Q V E P C G L R G R L V R L G P A L V D L L S G Q D Y P P V V A R
UniRef90_UPI0004680EEA	D T V L P F Q P L Q D N S D I R G R I A R L D T A L L G G I L E Q H N Y P P Q V E A
UniRef90_G2IDT4	D K I I K A V A K N D T V R I I A T T S T N L L N K I R K L H K L N E L T M I
UniRef90_UPI000373D075	L D R A L G F A I P E R H A R G R V M R L G P T L D T I L A A H A Y P P V I E R
UniRef90_UPI0004645DDF	M N T I K R F L F K D L D I R G Q H I Q L D D V W Q Q M I E D R H Y T P A L T E
UniRef90_F8F0H3	D G I T R F T M L Q G T I K G A I L S G T R L V S Q A R A N H Q L G I I E S L
UniRef90_UPI00047C39EA	D Q L K K F F L F E D R T V R V Q A V R L S E T W R Q A Q E H H Q Y P P A V V Q R
UniRef90_UPI0003B62AC8	D R P L R F S I P G R S A R G R A V R I E D S L A D I L S A H V Y P P A V E A
UniRef90_K0HZM3	M S E L H K F F L D G L P V R G M I V R L T D A W T E I L I K R R A Y P A P V S E
UniRef90_A5P9Y5	F T I P S R D T R G R I V R V L D T T L D A I L A A H D Y P A P I L T H
UniRef90_V7ZBG5	D Q L S R F L L P A A G V R G V H V R L T Q A W H D I Q G A A E Y P P A A R Q
UniRef90_UPI000309B97F	D Y R R K A T A A D G T M R I I V A N T K D T A L Q V Q R V H Q A S P V A A A
UniRef90_UPI0003F63B3B	D T L T R F F L L E R P G V R G V L V H L D A T W H Q I A G R R G Y P A A V A D
UniRef90_B2U9C6	D E L L K F F V F D A A P V R G E L V R L E G T W Q E V L N R R R Y P A P V S T
UniRef90_U4TF17	D S V Q R F F L F N N C P V R G Q L V H L N Q S F R Q V V Q Q H S Y P A I I R N
UniRef90_UPI000372868F	D L L K K Y L F A D R S I R I Q S A N L S Q T W L D G R E H Q H Y P K V I E N
UniRef90_UPI00037DFE41	M S A L H K F F L F E G L P V R G M L V R L T D A W T D M L R R R G Y P E P V R R
UniRef90_K1UBW8	
UniRef90_V5UIP6	D Q L Q K F M F D A A P V R G E Y V S L D A T W R A V L E R H D Y P P A V R H
UniRef90_S9TQ48	D L V L P F T I E D G L V R G R L V R L G P A L D S I L D R H D Y P L P V A T
UniRef90_H6SR01	V L P F H L A S G V F R G R L V R C I G R A V A D C I E P H A Y P A P V A R
UniRef90_U7DCN7	T L L T S I S Q S G G V C I V A N T T D P I T T L F A E Q K P A T L S G I
UniRef90_F6D1F9	I I Q R F S F D H T N V N V R G E R V L L N S A Y Q E I I I Q R K E Y P L P L E K
UniRef90_UPI000420B4EF	D S F Q R F F L F E D L G I R G E L V R L D S S S W Q A V L E R H S Y P P A V S S
UniRef90_D0L056	D Q L Y R F G L A T G K V V R G V A V V S L D E S S W R A A G E H H D Y P P A V A Q
UniRef90_W7GCN6	D S L I R F F L L P D A G V R G V H V R L Q A T W Q D I Q S H G E Y P D S A T E
UniRef90_L0DZ48	D T L H R F F L L E R T A V R G E W V H L D D S S W K A L L E R H D Y P P G V R A
UniRef90_D3QZB2	D H L V R A T A R G G H V K L A A L R A E G T V S K L V A I H D L S P L M A A
UniRef90_L8XX95	Q R F F L F E N L P I R G E R V K L T S A W Q E I I L K R R E Y P A I V Q Q
UniRef90_B5JU50	D R S D V R G E L V V Q L D A A W Q S L I K S T R Y P E P V K R
UniRef90_S5MDC9	M D M Q I R A L S E K H N V K I S I V D I S E S F N E I A K L Q E T N P L A S V
UniRef90_UPI000346AD02	M S E L H K F F L F E G L P V R G M L V R L T D S W R E V L A R R R E F P A P V R A
UniRef90_UPI0002885550	D R A I I G F T I P A R H A R G R I V R L A P V L D T I L A A H A Y P A P I E A
UniRef90_W9BRZ0	V H F T L P G Q D A R G R F V R L D S V L R E I L A A H D Y P T S I K L
UniRef90_N4WPY7	D Y I I I R G S A L D G K V L V I G A D N K S S L E S I R K S N G T T L N A S V
UniRef90_R5E4J1	N R M I K F F L F E G A P V R G A C V Q M A E E W Q E M I K F H H Y P E N V A A
UniRef90_K2BBE5	D L L H R F F I F E N A P V R G E F I V Y L E D S F Q K I I I Q Q H S Y P E P I K K
UniRef90_L7H9Z2	D H T R F F L L P G A G V R G V H V C L Q S A W R E I I L A P A S Y P A A A T E
UniRef90_UPI000465D938	D L L T R F F L L P H A G V R G V H V C L Q D S W T E I I L S H A T Y P A R A R R
UniRef90_R5Y177	D E C V S F F I I D N G L F V G R I C R L E N V L K T I I I A K H G Y M K N V S A R
UniRef90_G0F114	D T L Q K F F L F D A A P V R G E L V V R M E A T W Q E V L L G R H S Y P A P V R R
UniRef90_F9VKJ4	D K I I K A V A K N G T V R I I A T S T D L L N T V K K I H N L N E L T M I
UniRef90_UPI00035FC14	D S L K F F M L G D G N V R G V V V R L G D A W Q E M I L R R R H G S A V Q E
UniRef90_W0AAE4	L D R A L G F A I L S R S V R G R L V R I G P A L E E I I L A A H N Y P L P I E R
UniRef90_UPI0002F794AE	D L L K K Y L F Q D H S V R V Q A L K L D E A W R T G L A H Q S Y P P C V Q R
UniRef90_I0I2N7	N Y L V R A L T K K S S I R G L A C C I T G V V L E V A Q R H Q A S P A A T A R
UniRef90_H3NSQ8	D N S F R F F L F E D A D V R G E T V A L Q H V L Q D L Y A H P Y G D G V K R
UniRef90_S617R3	D Y T Q R F F I F E E T D V R G E L V A L E R S Y A E E V L A K H P Y P E P V A Q
UniRef90_E1RAW7	D T L D I F F L L E E G S L R G A I A H G S M M V N Q M R A N H D L G V L E S Y
UniRef90_I9WI11	D R V L I A F T L P L R H A R G R V V R L G P V L E T V L I S A H D Y P T P V K H
UniRef90_Q1DDE0	D E L L S G M L K N T D L R V V L A T T E L S R Q A R G T H G T A P A A A V
UniRef90_UPI00047DBE1C	V T P F F H E G R P V R G R L V R L G A L A D A L L S R H D N T P E V N A R
UniRef90_K2JIY8	D M L L P F Q I E S L G L R G R M A R L G G E V D A V L Q R H D Y P E P V A R
UniRef90_J2CQ84	D Q A L I G F T I P S R R H V R G R F V R L G P V L N Q V L I S A H A Y P P A I E R
UniRef90_D7DIT3	D T L Q R F F I F E N T P V R G N L V N L T Q T L Q L A N K Q H L P T G L R K
UniRef90_E1ZPN9	I S D N G Q V S I M V V R G T Q V V Q E A C T R H Q T S P T A S A
UniRef90_G4CH82	D C R T R F F I F D D M P V R G L H I R L Q E V W Q H I V A R K H Y P D P I R N

UniRef90_A2C1C0	I V G R A M S A S [L] L A S M K V N H G R V T L R I S S N G P L K G [T] D A G			
UniRef90_G0AJF2	L L G E M M A A A A A L L S A N L K F N G V I V M Q I H G D G P I R L L V A E C D			
UniRef90_Q2G3J9	I L A E A L L V T A L L G S L L K D D G Q L T L Q A Q T D G V V D L L V C D Y R			
UniRef90_Q3AK46	M L G R A M T A G L M I A S M K V R H G R V N L R L G S D G P I K N L M V D A G			
UniRef90_A3UGF7	L V G E C A L V A I L I G D S L K F D G R L I V Q I E G N G A V S F V V A D F V			
UniRef90_UP100036C88C4	M L A E L T T L T A L I G Q T I K L R W K L S L Q V R G N G A I R T L A T D Y Y			
UniRef90_F4GXEx3	L L G E L V A A A I L T S N I K F D G S L V L Q L Q G D G P L A L V V V E C T			
UniRef90_K1SU14	A L G R L L T T S I M G Y E L K T E E S I T N Q I K G N G P I G I L T A V A D			
UniRef90_G2IXD7	M L G E M M A A A V L L A A N L K F D G T L I L Q I H G A G G P L R L A V V E C N			
UniRef90_A0A011R3N1	L L G E M T A T T L L L A G N L K Q P G R L T I Q L R G S G A L S L L V I D C N			
UniRef90_I1XME9	L L G E M L A A A A L L A E T V K M S G R L V L Q C R S D G P V S L L M V E C T			
UniRef90_I4YU35	V I G E A A A A L T V M G A S A M K F E G R I I L A Q A E G D G P V S M L V I G E Y R			
UniRef90_UP10003A41685	I L G E A L L L S T L V G S A M K F E G R I I l a Q A E G D G P V S M L V I G E Y R			
UniRef90_U4V1Y5	L V A E E M A L L T A L I G Q S I K L R W K L L S L Q V Q S R G A V R M I A T D Y Y			
UniRef90_UP10003B5343D	L L A E A L T L T A L I G Q S I K D P G Q L I M Q T Q T Q D G I V T L L V C D W			
UniRef90_W0V426	V L G E M L A A A A L L S A N L K F N G S I I M Q I H G D G P V R L M V V E C D			
UniRef90_U2YKJ5	L L A E T L T L T A L L S G S S L L K D D G S L T I Q A Q S S D G I V E L L A C D Y			
UniRef90_A3YAZ1	L L G E F V A A I A A L L R D I I K I D G I L S L Q A K G E G D L S A I M V E C D			
UniRef90_UP10003B3DB49	L L G E L V A L G S S L L G S T L K Y D G I F T L Q V K A K D G A L K T M V I S D M T			
UniRef90_S3NUF3	L L G E M L S A T A L A S T L K I Q G R I I S L Q I Q A Q G T F K W A M A E C T			
UniRef90_D2RNY7	A L G R T A A G A L L L A A T M K A G E A V T V R F K G D G P L G Q V M A D A R			
UniRef90_A0A023NXV6	V L G Q T L A A S A L L T G N I K L E G A L S V E L K S T G P L R L L F A E C T			
UniRef90_UP100045E9F19	N L G Q A L A A A V V L L S A T I I K F S G S V I M Q A Q G D G A F R T L V I A Q S T			
UniRef90_R5QQ60	V V A E S T V L A A M L A S T L K Y E G L F T L Q T Q S N G A V S M V V V D V T			
UniRef90_UP100047E9EEA	L L G E A V V A S A L T G H V K V D G R L S V Q L Q G G G A V R T L F A E C T			
UniRef90_D3SDM9	L L G Q A Y A A V A L T A A T L K F D G S L I L Q V T G T G P V H M I V A Q A D			
UniRef90_UP10002F266F7	L L G E M L A A A A L L S A N L K F N G S I I V M Q I H G D G P V R L L V V E C D			
UniRef90_M2U4W4	L L G E A L V L T G L L G S M L R D E Q G T T V Q A S A G G A I D L L V C D Y R			
UniRef90_Q31F32	V L G E L T A I A I M I L A N G M K H L G K V S I Q V Q G S G G P V N L L L V E A T			
UniRef90_W5WVX7	A V G R G M V G A L L M A A Q L K E G Q T V G L L F K G D G P L G S V Y A E A S			
UniRef90_D5V914	L L G E M L V S A S L L I S T L K I D G K L S I Q L Q S D A R L N W A M A E C D			
UniRef90_A3YY76	L L G R A M T A G L L L A S M K V A H G R V N L R I Q S D G D P L R G L M V D A G			
UniRef90_I0HP99	L L G E M S A A A V V L M Q A N I K F N G A L V L Q V R G T G P L K N M T T I T R			
UniRef90_S9SDY3	L V A E T A L L A A L I G P T I K L R W K L S I Q V R G T G P V N L L A A D Y Y			
UniRef90_G4Q8H7	A L G R T A A G A L L L A A T M K D G E G V T I R F K G N G G P L G E V M A D A T			
UniRef90_W6KC13	L L G Q A A A L L A A V L L A S S L K Y D G L F T L Q I K G D G P V S M L V L D V S			
UniRef90_UP10004680EEA	L V A E M A L L T A L I G Q T M K L R W K L Q L Q V Q S N G P V R M I S T D Y Y			
UniRef90_G2IDT4	A F G K L M T A S A M I S S T K T E S D S I I M I R F D G D G F L K N M T T I T R			
UniRef90_UP1000373D075	L L A E A L T L T A L I G S T L K D P G Q L T M Q T Q T Q N G G V V T L L M V C D Y			
UniRef90_UP10004645DDF	V L G E L T A L T L V M M A N G L K H P G K V V I Q I Q G E G P V N L L V V E A S			
UniRef90_F8FH03	A L G Q A L V S A G L L S T T I K E G T R L G I Q I H C P L K G L S V D T T			
UniRef90_UP100047C39EA	L L G E L M A A A T L L A A N I K F E G S L V L Q I Q G S G G P I A L L V V E C Q			
UniRef90_UP10003B62AC8	L L T E A V T L T A L L G S S L L K D G G E L T M Q A Q G Q G G A V T L L V C D Y R			
UniRef90_K0HZM3	L L G E M M A A G V L M Q S N I K F N G A L V L Q V F G D G P V K L A V A E V Q			
UniRef90_A5P9Y5	L L A E A L V L T T L M G S S L L K D D G S V T M Q A Q T E G A V N L L V C D Y K			
UniRef90_V7ZBG5	L L G E A A V A A A A L F T G H T K V D G R L S V Q L R G N E T L R T L F A E C T			
UniRef90_UP1000309B97F	A M G R L L T A A A A L L A A D F K D A A L V K V E V D G G G P L G R V I A E A R			
UniRef90_UP10003F63B3B	R L G E T C A A A G L F A G H V K V D G R L S V Q L R G T G A L R T L F A E C T			
UniRef90_B2U9C6	L L G E M M A A A A L L S A N L K F N G A L V V M Q L H G D G G P V R M L V V E C N			
UniRef90_U4TF17	L L G E A L A V T V L M R N I V F T G K I T L Q L Q G N G G P L K M L V A Q C N D Q			
UniRef90_UP1000372868F	L L G E L C A A S V L L S S N I K F D G S I L V L Q I Q G D G G P V R L A V V E V Q			
UniRef90_UP100037DFE41	L L G E M T A A G V L M Q A N I K F N G S I V N L R V M D G E L G P V I A V G D			
UniRef90_K1UBW8				
UniRef90_V5UIP6	L L G E M M A A A A A L L T A N V K F D G A L I L Q L H G D G G P V S M A V V E C N			
UniRef90_S9TQ48	L L A E I C A L A T A A A M L K Y D G V F T L Q V Q G D G G P V P L V V A D V T			
UniRef90_H6SR01	L V A E T T V V L G I V L A S A L K Y E G V F T L Q I Q G D G G P V R T L V A D V T			
UniRef90_U7DCN7	M L G R A L T A A A L L M G S T M K T G Q R V G L V F E G A G P L L G K I V T E G D			
UniRef90_F6D1F9	L L G E F V A A A I A L L A R D I K L D G V L I S M Q A K G N G G P L S T L M T E C D			
UniRef90_UP1000420B4EF	Q L G Q A L A A V L L L S A T I K F R G S L I L Q A Q A R G G P L H T L V I A Q A T			
UniRef90_D0L056	L L G Q C V A A A A M T M V A T L K F D G R L I I L Q F R G E G P V S L L V V Q A R			
UniRef90_W7GCN6	L L G E A C V A S A L F T G H T K V D G R L S I Q L R S N T A L R T L F A E C T			
UniRef90_L0DZ48	R L G E A Y A A V A L A A I A T L K F D G A L I I L Q V T G S G P L H M L V V Q A T			
UniRef90_D3QZB2	A A G R M A M A T Q L L A A D L K D E S T I I T S I L R C N G P V Q G M T M V A D			
UniRef90_L8XX95	Y L G E L L V A T T A L L S A T I K L E G R L L T V Q I E A T G A L Q M L V V Q I T			
UniRef90_B5JU50	L L G E A V A A T A L L M A E T I K F D G N G I L T L Q A Q G D G P V K L L V V Q V T			
UniRef90_S5MDC9	A L G R T L I I N N S L L S L S L K D G N K M T T N I I N G M G L G G T I I A E F Q			
UniRef90_UP1000346AD02	L L G E M A A A S S L M Q A N I K F N G A L I I L Q V F G D G G P V K L A V A E S R			
UniRef90_UP10002885550	L L T E A L T L I A A L I G S T L K E G G Q L T M Q A Q T E G G G V K L L V C D Y			
UniRef90_W9BRZ0	V L A E A I T I C A L I G S L M K Q D G Q V T I Q A Q T E G G G V E L L V V D Y			
UniRef90_N4WPY7	A L G R T L S I A A M M S S M Q K N G V S T N I H I K C D G G P I E G I T V K A N			
UniRef90_R5E4J1	L L G Q F T A G A L L L S S T I K F E G S L I I L Q V K G S G G P I A F I Y A E V R			
UniRef90_K2BBE5	L L G E A L S V A G L L S A I I K F Q G R L L T V Q F R G Q G K L K L L I A Q C D			
UniRef90_L7H9Z2	L L G E A C V A A A A L F T G H T K V D G R L S V Q L R S Q G A L R T L F A E C T			
UniRef90_UP1000465D938	L L G E A C A A T A M T A H V K V D G R L S S L Q L R A D A G V K K L L F A E C T			
UniRef90_R5Y177	A L S E S T A L A V L L A N A L K F D G L F T L Q M Q G N G G P V S T I V V D V T			
UniRef90_G0F114	L L G E M M A A A A A L L S A N L K F N G A L V V M Q L H G D G G P V R M L V V E C L			
UniRef90_F9VKJ4	A F G K L M L S S A M I S S T K A L N D T I T I K F D G N G G P L K N M T A V T R			
UniRef90_UP100035FCDF14	L L G E M S A A A S A L L A G S I K F D G T L I I L Q H G D G G P L R L A V A E C Q			
UniRef90_W0AAE4	L L G E A L V L T A L L G A M L K D D G Q L T L Q A Q T N G G V V D L L V A D Y R			
UniRef90_UP10002F794AE	L L G E L A A A A V L L A A N I K F D G S L V L Q L Q G D G G P V S L I V V E C T			
UniRef90_I0I2N7	U N I T E D N E T W O R K S			
UniRef90_H3NSQ8	A L G Y G L T G V A L L G A L L K V Q P R V G L K V E G D G G P L G K M V A E S D			
UniRef90_S617R3	L L G E F L L A A A A A L L V G T L K F E G S L L I L Q A R S S S G G A V P L L M V E C S			
UniRef90_E1RAW7	V L G Q A Y L A A G G L L S S A V K G N D R L I I L S I E C C G G P I K G L S V E T D			
UniRef90_J9WI11	V L A E A L I I T A L L M G S S L L K E P G S I L T L Q A Q A K G G A I D L L V C D Y			
UniRef90_Q1DDE0	L L S Q A L T A A A L L M G A L Q K G D A R I N I Q V E C D G P L L R G L F V D G D			
UniRef90_UP100047DBE1C	L A G K A L A L V A G L I S S A L K F Q G F S L S Q V K G D G P L I S L L A A D C T			
UniRef90_K2JIY8	M L G E A L A L V A V L L A G A L K Y D G V F T L Q I Q S D G G P I S L L V A D V T			
UniRef90_J2CQ84	V L A S S L V L G A L L G I S S L K D D G G Q L T L Q A Q T E N G V V S L L V A D Y			
UniRef90_D7DT3	A L G E L M A A S A L L A A T L K M D G S I L V M Q I Q S K G A L K L L V V E C N			
UniRef90_E1ZPN9	A L G R A L L G T L L M G A F R E Q G E K T Q V T F K G D G P L A G L Q V I A D			
UniRef90_G4CH82	A L G E L L A A A A A L L S S N I L K E G T L I L Q V Q G R G D L K M L V A E A T			

	90	100	110	120
UniRef90_A2C1C0	R D G S V   R G Y   V G D   P S   L E   L D   L I K   K N K S F   D F   K K A T   G   G Y   L   H   V   I   R			
UniRef90_G0AJF2	S Q L   Q M R   A T A K   L   A P   D A V   I   D   P   D   A   T   M S Q   L   V   N   L   N   G   Q   G   R   F   A   I   T   L			
UniRef90_Q2G3J9	N G E   L   R   G   Y   V   R   H   D   R   A   R   L   D   E   L   G   P   T   P   D   P   D   E   A   G   H   F   S   F   S   L   F   G   E   G   Y   L   A   I   T   F			
UniRef90_Q3AK46	R N G T   V   R   G   Y   V   G   E   P   A   L   E   L   D   P   D   E   A   G   H   F   S   F   S   L   F   K   E   A   G   T   G   Y   L   H   V   M   R			
UniRef90_A3UGF7	P   G   E   G   V   R   A   Y   A   K   F   D   P   D   R   L   E   A   Q   A   D   G   P   L   G   P   I   D   L   L   G   K   G   H   F   V   M   T   I			
UniRef90_UP100036C88C4	A   P   A   R   M   R   A   W   A   S   F   D   A   E   R   L   N   P   D   A   P   G   F   D   Q   L   G   Q   G   Y   F   A   V   L   I			
UniRef90_F4GXEx3	T   D   L   S   I   R   A   T   V   S   V   R   E   G   H   E   I   P   T   D   G   T   L   Q   T   L   L   N   T   Q   G   A   G   R   F   I   V   I   L			
UniRef90_K1SU14	S   N   G   N   V   K   G   Y   V   G   D   G   K   V   D   L   P   L   K   S   D   G   K   L   D   V   G   G   A   V   G   K   Q   G   M   L   Y   I   I   K			
UniRef90_G2IXD7	N   D   R   T   V   R   A   T   A   K   F   D   E   A   L   D   E   R   L   S   L   A   E   L   L   G   E   G   G   K   F   V   M   T   L			
UniRef90_A0A011R3N1	E   Q   L   Q   I   R   G   M   A   K   C   T   A   A   L   E   A   G   A   A   S   E   L   L   G   D   G   Q   L   Q   L   A   L   D			
UniRef90_I1XME9	S   E   H   T   L   R   G   L   A   N   W   D   G   D   I   A   E   D   A   T   M   Q   E   L   L   G   E   G   N   L   A   I   T   I   E			
UniRef90_I4YU35	A   P   D   R   L   R   A   T   A   R   F   D   K   L   E   A   L   G   P   A   T   P   G   T   G   E   L   L   G   S   G   Y   L   A   M   T   I			
UniRef90_UP10003A41685	T   D   G   G   V   R   A   Y   S   K   F   E   P   E   R   W   A   V   N   K   G   A   K   P   H   M   P   Q   L   F   G   P   Q   G   A   L   A   I   I   I			
UniRef90_U4V1Y5	G   P   A   R   I   R   A   Y   A   S   F   D   R   D   R   V   T   E   G   A   G   F   D   Q   L   D   E   G   Y   F   A   V   L   I			
UniRef90_UP10003B5343D	R   G   G   E   V   R   G   Y   V   Q   F   D   A   D   R   L   A   E   G   P   A   E   P   S   L   F   A   L   F   G   A   G   Y   L   A   I   T   F   D			
UniRef90_W0V426	A   E   L   R   L   R   A   T   A   K   L   D   P   E   A   V   I   A   D   G   A   T   V   P   Q   L   L   N   A   N   G   K   G   R   F   I   I   T   L			
UniRef90_U2YKJ5	R   G   G   E   L   R   G   Y   V   Q   F   D   E   A   R   L   A   A   L   E   D   E   I   S   L   K   T   L   F   G   T   G   F   L   A   V   T   F   D			
UniRef90_A3YAZ1	E   H   Q   N   L   R   G   I   A   Q   W   Q   E   G   A   E   F   N   E   Q   I   S   L   K   E   T   L   A   G   G   Y   L   V   I   T   I			
UniRef90_UP10003B3DB49	S   S   G   S   L   R   G   Y   V   G   Y   D   A   E   A   V   T   Q   L   R   Q   E   V   G   D   Q   P   E   D   L   L   G   D   G   Y   M   A   F   T   V			
UniRef90_S3NUF3	H   K   G   E   V   R   A   L   A   N   Y   Q   D   D   P   H   F   N   Q   A   E   D   S   S   S   T   V   L   S   N   L   V   D   P   V   L   F   I   N   I			
UniRef90_D2RNY7	D   Q   G   R   L   R   G   L   A   R   W   S   D   P   L   P   E   T   L   D   L   A   A   L   P   S   A   I   M   A   I   T   I   G			
UniRef90_A0A023NXV6	H   D   R   K   I   R   G   L   V   R   C   A   G   E   V   Q   H   G   P   L   E   A   M   F   G   Q   G   R   L   V   L   T   I   I			
UniRef90_UP100045E9F19	S   E   G   K   I   R   C   A   S   F   D   E   E   H   L   K   Q   N   Q   E   G   E   I   E   A   A   P   H   L   M   G   K   G   H   L   A   F   T   V			
UniRef90_R5QQ60	A   S   G   T   L   R   A   T   A   R   L   A   E   D   E   P   V   P   A   S   R   D   L   R   Q   L   G   A   D   A   V   L   A   I   T   I			
UniRef90_UP100047E9EEA	G   Q   G   R   L   R   G   L   A   R   F   R   E   T   P   P   E   G   A   T   L   A   E   C   A   G   D   N   A   R   L   M   L   T   L			
UniRef90_D3SDM9	S   E   L   H   L   R   A   T   A   K   L   A   S   D   A   V   I   G   D   E   D   S   L   T   S   L   V   H   A   H   G   Q   G   R   F   V   I   T   L			
UniRef90_UP10002F266F7	A   G   E   L   R   G   Y   L   R   F   D   P   T   L   P   L   S   E   A   P   S   L   R   D   L   V   G   T   G   Y   L   L   A   V   T   I   E			
UniRef90_M2U4W4	H   D   L   K   I   R   G   V   A   K   T   N   A   P   L   T   N   E   S   S   L   D   D   L   L   G   N   G   Q   I   L   L   V   T   M   E			
UniRef90_Q31F32	Y   E   G   H   V   R   G   Y   T   P   N   P   Q   Y   T   P   E   N   Y   D   K   G   L   N   T   E   A   M   G   K   G   T   L   N   V   T   R   H			
UniRef90_W5WVX7	H   T   G   S   V   R   A   L   A   G   F   D   D   T   N   Q   N   Q   T   V   W   Q   H   L   K   S   A   D   E   A   F   G   E   G   V   L   F   I   S   I			
UniRef90_D5V914	R   D   G   S   V   R   G   Y   V   G   N   P   G   L   E   L   D   L   I   E   D   A   E   F   D   F   R   K   A   T   G   T   G   Y   L   H   V   V   R			
UniRef90_A3YY76	P   D   L   A   F   R   A   T   A   T   L   T   G   E   I   T   T   D   D   A   R   L   E   A   L   V   N   V   H   Q   G   R   C   A   I   T   L			
UniRef90_I0HP99	A   P   A   R   L   R   A   W   A   S   F   D   R   D   R   L   D   S   A   G   D   G   F   P   Q   I   G   Q   G   Y   F   A   L   L   I			
UniRef90_S9SDY3	N   Y   T   V   R   G   F   V   E   H   P   E   V   M   L   P   L   K   K   G   K   L   D   V   G   G   G   V   G   H   E   G   V   V   I   V   T   R			
UniRef90_G4Q8H7	S   D   G   D   M   R   G   Y   A   R   F   E   R   D   R   I   D   G   L   D   G   A   D   V   P   H   L   L   G   A   G   Q   M   A   F   T   V   D			
UniRef90_W6KC13	G   P   Q   E   R   A   Y   S   Y   D   A   D   R   L   T   T   P   P   E   G   A   T   L   S   L   K   V   S   D   L   I   G   N   G   F   L   L   V   V   T   K			
UniRef90_UP10004680EEA	R   G   G   E   L   R   G   Y   V   Q   F   D   A   D   K   L   A   D   V   G   E   E   P   S   L   F   A   L   F   G   Q   G   Y   L   A   I   T   F			
UniRef90_G2IDT4	H   D   L   Q   I   R   G   V   A   K   T   N   R   A   L   S   N   E   T   T   L   D   D   A   R   L   E   A   L   V   N   V   H   Q   G   R   C   A   I   T   L			
UniRef90_UP1000373D075	W   N   G   N   V   R   G   Y   V   F   N   D   S   V   L   I   D   K   P   L   E   S   F   D   L   Q   P   F   I   G   S   G   T   L   S   V   I   R   K			
UniRef90_UP10004645DDF	S   D   L   S   L   R   A   T   V   K   V   R   D   G   H   E   V   P   A   D   G   D   L   Q   S   L   L   N   A   D   G   Q   G   R   F   I   V   L   L			
UniRef90_F8F0H3	D   G   E   L   R   G   Y   A   Q   Y   D   E   A   K   V   A   E   L   P   P   E   P   S   L   F   G   L   F   G   Q   G   Y   L   A   I   T   F			
UniRef90_UP100047C39EA	S   D   L   S   L   R   A   T   A   T   V   N   G   E   V   L   P   D   A   K   L   S   D   K   S   Q   M   V   N   V   G   G   G   R   C   A   I   T   L			
UniRef90_UP10003B62AC8	A   A   G   T   L   R   G   Y   V   Q   V   Q   L   A   D   G   A   D   P   A   D   L   R   E   L   G   E   A   A   L   L   A   I   T   I			
UniRef90_K0HZM3	T   G   G   R   V   R   A   R   A   E   H   P   Q   V   T   L   P   L   R   N   D   G   K   L   A   V   G   Q   A   V   G   T   D   G   V   F   K   V   T   R			
UniRef90_A5P9Y5	A   A   G   T   L   R   G   Y   A   Q   Y   D   E   A   K   V   A   E   L   P   P   E   P   S   L   F   G   L   F   G   Q   G   Y   L   A   I   T   F			
UniRef90_V7ZBG5	A   A   G   T   L   R   G   Y   V   D   F   D   H   G   K   L   A   E   G   A   E   D   D   A   P   A   D   L   R   E   L   G   E   A   A   L   L   A   I   T   I			
UniRef90_UP1000309B97F	T   G   G   R   V   R   A   R   A   E   H   P   Q   V   T   L   P   L   R   N   D   G   K   L   A   V   G   Q   A   V   G   T   D   G   V   F   K   V   T   R			
UniRef90_UP10003F63B3B	A   A   G   T   L   R   G   Y   A   Q   Y   D   E   A   K   V   A   E   L   P   P   E   P   S   L   F   G   L   F   G   Q   G   Y   L   A   I   T   F			
UniRef90_B2U9C6	A   D   L   T   S   M   R   A   T   A   K   I   A   E   G   A   E   L   D   D   A   T   A   T   M   V   N   V   H   G   N   G   R   F   A   I   T   T   L			
UniRef90_U4TF17	S   E   G   R   L   R   A   M   R   F   D   A   A   R   L   A   T   V   A   A   E   A   P   A   L   A   L   G   K   G   H   L   A   F   T   V   D			
UniRef90_UP1000372868F	D   K   L   E   F   R   G   V   A   H   F   D   E   Q   S   I   Q   A   I   N   A   A   K   L   S   E   L   V   Q   G   Q   G   H   C   V   I   T   M			
UniRef90_UP100037DFE41	S   E   L   R   V   R   A   T   V   K   L   R   Q   E   F   A   I   K   E   N   S   S   F   Q   E   L   V   N   P   N   R   S   G   H   F   M   V   I   L			
UniRef90_K1UBW8	P   D   L   R   L   R   A   T   A   K   V   L   G   E   V   A   P   T   A   R   L   E   A   L   V   N   V   H   G   Q   G   R   C   A   I   T   L			
UniRef90_V5UIP6	S   N   G   N   V   K   G   Y   V   G   N   A   D   C   P   T   Y   E   Y   E   N   G   K   I   N   V   A   K   A   V   G   R   T   G   M   L   N   V   M   R			
UniRef90_S9TQ48	A   D   L   T   S   M   R   A   T   A   K   Y   S   G   D   P   G   A   T   L   E   S   L   V   N   R   R   G   R   A   H   F   A   I   T   T   L			
UniRef90_H6SR01	S   E   G   R   L   R   A   M   R   F   D   A   A   R   L   A   T   V   A   A   E   A   P   A   L   A   L   G   K   G   H   L   A   F   T   V   D			
UniRef90_U7DCN7	S   A   G   M   I   R   A   V   A   R   F   D   E   T   R   L   A   L   P   E   D   A   S   L   A   A   L   V   G   R   G   H   H   L   A   F   T   V   D			
UniRef90_F6D1F9	A   Q   G   H   I   R   G   V   V   H   N   D   S   L   D   F   N   S   M   T   A   V   D   E   Q   I   R   T   S   L   G   P   G   I   L   S   V   V   K			
UniRef90_UP1000420B4EF	E   F   Q   N   L   R   G   Y   V   Q   W   D   E   E   Q   T   V   P   D   T   L   S   L   K   E   L   A   G   G   Y   V   L   V   I   T   I			
UniRef90_D0L056	H   Q   K   T   I   R   G   L   A   Q   W   N   G   E   V   T   G   E   T   L   S   D   I   Y   G   P   G   H   L   V   L   T   T   V			
UniRef90_W7GCN6	S   D   L   S   Y   R   V   T   A   Q   W   S   E   S   L   V   G   D   V   L   D   Q   S   I   Q   T   L   F   G   A   G   Q   L   A   L   T   I			
UniRef90_L0DZ48	A   A   G   T   L   R   G   Y   V   Q   V   Q   L   A   D   D   A   T   A   T   M   V   N   V   H   G   Q   G   R   C   A   I   T   L			
UniRef90_D3QZB2	C   H   S   R   V   R   G   V   V   K   N   P   H   V   S   T   A   E   I   R   P   G   K   L   A   V   G   A   A   V   G   K   G   E   L   T   V   I   K			
UniRef90_L8XX95	H   D   G   G   F   F   R   A   T   A   T   Y   R   D   D   L   P   E   H   A   T   F   K   E   L   T   E   G   G   R   V   V   I   T   V			
UniRef90_B5JU50	S   E   R   T   F   R   A   T   A   K   C   D   E   T   V   E   A   G   S   L   S   E   M   I   G   K   G   Q   M   V   I   T   V   E			
UniRef90_S5MDC9	E   N   K   V   R   G   Y   I   Q   I   P   N   F   E   V   D   I   K   D   D   Q   G   S   P   L   S   Q   V   V   H   G   Q   G   F   L   Q   I   S   R			
UniRef90_UP1000346AD02	S   D   L   G   F   R   V   T   A   Q   W   S   E   V   V   G   E   V   P   A   D   A   R   L   E   A   M   L   N   V   H   G   Q   G   R   C   A   I   T   L			
UniRef90_UP10002885550	R   G   G   E   L   R   G   Y   V   D   F   D   A   D   R   L   A   E   A   P   E   P   D   T   L   F   A   L   F   G   A   G   Q   L   A   I   T   F			
UniRef90_W9BRZ0	R   G   G   E   L   R   G   H   V   R   F   D   D   A   D   R   L   A   R   L   G   A   N   P   S   L   F   A   L   F   G   K   G   Y   L   A   I   T   F			
UniRef90_N4WPY7	S   K   G   K   V   R   G   Y   V   E   N   P   N   V   N   L   I   D   N   D   G   K   F   E   L   S   P   I   I   G   K   G   N   I   E   V   I   M			
UniRef90_R5E4J1	N   P   M   S   V   R   A   M   A   E   I   R   E   G   A   E   I   K   P   E   M   D   L   Q   E   L   I   N   K   D   G   L   C   A   I   T   L			
UniRef90_K2BBE5	N   Q   F   H   L   R   G   L   A   K   W   E   G   E   D   Y   A   E   L   M   D   A   F   N   D   G   V   L   V   I   M   L			
UniRef90_L7H9Z2	A   A   G   T   L   R   G   Y   V   Q   L   T   E   G   S   D   P   R   D   L   P   R   L   R   A   L   G   T   S   A   L   L   A   I   T   I			
UniRef90_UP1000465D938	A   A   G   H   L   R   G   Y   V   Q   L   D   G   G   D   A   P   A   D   L   R   D   L   P   N   P   T   L   A   I   T   I   E   N   P   G   L			
UniRef90_R5Y177	S   D   G   K   L   R   S   C   A   N   Y   D   K   E   R   L   E   K   K   N   E   G   E   I   E   A   T   P   H   L   G   E   G   T   L   A   F   T   I   I			
UniRef90_G0F114	S   D   L   S   M   R   A   T   A   K   L   A   E   D   A   H   I   A   D   D   A   T   L   A   Q   M   V   N   A   H   G   H   G   R   F   A   I   T   L			
UniRef90_F9VKJ4	G   D   G   T   L   R   G   Y   I   S   N   S   D   A   F   C   E   S   L   K   I   S   D   L   I   G   S   G   S   L   V   I   T   K			
UniRef90_UP100035FCDF14	P   D   F   G   L   R   A   T   A   K   E   L   E   A   Q   P   A   E   P   D   T   G   G   L   V   G   L   A   N   R   H   G   S   G   R   C   V   I   T   L			
UniRef90_W0AAE4	A   A   G   E   L   R   G   Y   V   R   F   D   A   E   R   L   A   E   M   P   V   E   P   S   L   F   A   L   F   G   K   G   Y   L   A   I   T   F			
UniRef90_UP10002F794AE	S   D   L   S   I   R   A   T   A   S   L   R   E   G   L   A   V   P   R   N   G   S   L   Q   S   L   N   S   Q   G   Q   G   R   F   I   V   V   L			
UniRef90_I0I2N7	S   Y   G   H   L   R   G   Y   I   E   H   P   D   V   A   V   A   P   P   I   D   A   E   R   V   A   D   L   I   G   Q   K   G   Q   I   T   V   I   K			
UniRef90_H3NSQ8	S   E   G   Q   V   R   G   L   A   R   G   Y   D   E   S   L   I   A   P   G   A   G   L   Q   D   L   M   P   D   G   S   L   T   L   T   V			
UniRef90_S617R3	N   R   E   R   L   R   G   L   A   R   Y   D   E   S   L   I   A   P   G   A   G   L   Q   D   L   M   P   D   G   S   L   T   L   T   V			
UniRef90_E1RAW7	A   K   A   Q   V   R   G   Y   L   A   Q   V   P   I   P   V   E   K   P   L   E   N   F   D   L   S   P   F   F   G   P   G   F   L   K   I   T   T   K			
UniRef90_I9WI11	R   D   G   E   V   R   G   Y   L   R   H   D   P   D   L   V   E   R   L   E   E   D   C   S   L   E   A   M   F   G   T   G   Y   L   A   I   T   F			
UniRef90_Q1DDE0	T   S   G   G   L   R   V   G   Y   V   K   N   T   Y   V   E   Y   S   G   S   D   G   Q   Y   H   W   R   P   V   L   G   N   K   G   F   L   S   V   L   R			
UniRef90_UP100047DBE1C	D   A   G   S   L   R   F   Y   A   R   S   D   E   E   A   L   P   A   L   L   G   E   V   A   T   P   S   D   E   L   F   G   N   G   Y   L   A   I   T   V			
UniRef90_K2JIY8	S   D   G   H   L   R   G   Y   A   Q   F   D   A   E   R   F   A   S   A   A   A   E   R   S   V   P   G   L   L   G   A   G   Y   L   A   F   T   V   D			
UniRef90_J2CQ84	K   G   G   E   L   R   G   Y   A   K   F   D   A   E   R   L   A   E   I   G   S   D   P   T   L   F   G   L   F   G   K   G   Y   L   A   I   T   F			
UniRef90_D7DIT3	S   D   V   K   M   R   A   T   A   K   W   G   D   G   V   T   D   N   Q   N   L   F   E   L   I   E   Q   G   Q   F   M   I   T   L			
UniRef90_E1ZPN9	A   S   G   T   V   K   G   V   G   N   P   A   A   D   P   P   L   R   P   D   G   K   L   N   V   Q   G   A   V   G   R   G   R   G   G   C   V   I   T   L			
UniRef90_G4CH82	S   G   R   T   C   R   A   T   A   R   W   N   E   Q   A   D   L   S   G   R   R   S   L   T   D   L   L   G   G   D   G   I   F   A   I   T   L			

130            140            150            160

UniRef90_A2C1C0	D D G K G E P H N S T V E L I N G G I   G E D I A S Y L L H S E Q T P S A V F V G			
UniRef90_G0AJF2	D P Q D K M P Y Q G I V P L D G E N V A T V I E N Y M L R S E E Q L D T K L W L A			
UniRef90_Q2G3J9	D L A T Q G R Y Q G V V P L E G G N S L A E A C E S Y F M Q S E Q V P S L I R V G			
UniRef90_Q3AK46	D D G K G E P F N S T V E L V S G G I   G E D V A S Y L L H S E Q T P S A V F V G			
UniRef90_A3UGF7	D P G E G E R Y Q G V T A I E G D T L A A S A E H Y F A Q S E Q V P T R L R L A			
UniRef90_UP100036C88C4	D Q G E G T P Y Q G L T P L S G G A L A A C A Q T Y F E Q S E Q L P T R F E L L A			
UniRef90_F4GXE3	D P S G K N P Y Q G V V P L E G D S V A Q V L E R Y M R D S E Q L D T R L W L A			
UniRef90_K1SU14	D L G I G K P Y V G M T P I V S G E I A E D F T N Y F A T S E Q T P T V I A L A			
UniRef90_G2IXD7	E P D K A Q T W Q G I V V A L E G D S I G Q M L E N Y M R R S E Q L D T R L I L A			
UniRef90_A0A011R3N1	M A S M R E P Y Q S I V P L A G D S I A E I F E H Y L A Q S D Q R P A R L F L A			
UniRef90_I1XME9	N I D A K Q P Y Q G I V N V Q G E T I A E M L E M Y F A Q S E Q L Q T H I W L A			
UniRef90_I4YU35	D Q G E R S R Y Q G V V A L E G Q G F E E E A H Q Y F R Q S E Q V P T Q V R L L A			
UniRef90_UP10003A41685	D D T R V Q P Y Q G I V P L N K G S L A A C E D Y F R Q S E Q V K T C L A L A			
UniRef90_U4V1Y5	D Q G Q M R P Y Q G I T P I A G G S L T A C A E A Y F A Q S E Q L P T R F E L S			
UniRef90_UP10003B5343D	D A S T G E R Y Q G I V P L D G D T L A A A A Q S Y F Y Q S E Q I P T L V R A G			
UniRef90_W0V426	D P P G Q Q P Y Q G I V P L D G D D M A T V I E N Y M L R S E E Q L D T R L W L A			
UniRef90_U2YKJ5	D L A T T D Q R Q Y Q G I V P L E G N S I T A A F E N Y F G Q S E Q V P T L I R I S			
UniRef90_A3YZA1	T P T N G R R Y Q G G V V E E L V G N S L A A E C L E Q Y F M Q S E Q L P S R V W L A			
UniRef90_UP10003B3DB49	D Q G N S E R Y Q G M V E L Q G P R L A D S L R H Y F R Q S E Q Q I N A G I L V A A			
UniRef90_S3NUF3	E P E H G E R Y Q G I T P I D Q P T L A A C L M Q Y D L S A Q I P T R I V L L A			
UniRef90_D2RNY7	C P L Q G E P F T G V S T L K S G E I A A D L T R Y L A V S E Q T P S S V A L A			
UniRef90_A0A023NXV6	H A E R G Q R Y Q G L V D L Q H P D L A S A L E N Y F S Q S E Q L P A R I V L A			
UniRef90_UP100045E9F19	R P D N G E P Y Q G I V P L K G A N L A A A A L Q T Y F I Q S E Q L I D T R L W L A			
UniRef90_R5QQ60	D Q G P N E L Y Q G I V D L Q G K N L T E C A L R Y F K Q S E Q L I D T D L K L A			
UniRef90_UP100047E9EEA	N P G L H G R Y Q G L V D L E S D S L A G A F E D Y F R Q S E Q L P T R R L L L A			
UniRef90_D3SDM9	D P G D G E R Y Q G V V E L E G E T I L A D A M N V Y F E R S E Q Q L P T R R L W L A			
UniRef90_UP10002F266F7	D P K D K Q P Y Q G I V P L D G D S V A T V I E N Y M L R S E E Q Q L P T R R L W L A			
UniRef90_M2U4W4	UniRef90_Q31F32	P S A S E E R Y Q G I V E L K G E S I C D A F T A Y F D S S E Q Q I P S K L W L A		
UniRef90_W5WVX7	N T Q T Q S F F Q S Y V P R E E N S I A K A F E S F L S Q S D Q Q P S K L W L A			
UniRef90_D5V914	L P F Q K Q P F H G M V D L V T G E I G H D I A H Y L H Q S H Q I R S I L V S L G			
UniRef90_A3YY76	H P D N G E A Y Q G I V E R R V S D S I L G E C L A H Y Q R Q S A Q I P T I I K L A			
UniRef90_I0PH99	D L G K G E P F S S T V E L V S G G I   G D D V A S Y Y L L H S E Q T P S A I V F V G			
UniRef90_S9SDY3	D P K D R Q P Y Q G V V P L H G Q N V I S V E L E H Y M L Q S E Q Q L D T K L V L A			
UniRef90_G4Q8H7	D Q G E G T P Y Q G I T P L A G G S L A A C A E G Y F A R S E Q Q I P T R F A L A			
UniRef90_W6KC13	C P E K G M P F N G Y A L L K S G E I A E D L T K Y L F D S E Q T P S V V A L A			
UniRef90_UP10004680EEA	UniRef90_UP100047C39EA	Q G A D T E R Y Q G I T E L E G A T I L G E C A Q A Y F R T R S E Q Q L E T A I I L L A		
UniRef90_G2IDT4	D Q G E G T P Y Q G I S P L S R E G L I A K S A E G Y F A Q S E Q Q L P T R F E L T			
UniRef90_UP1000373D075	D F G L K N P Y T S K V P L Y K S D I C N D L A Y Y Y T L S E Q Q T P T A I I S V E G			
UniRef90_UP10004645DDF	D L S T S E R Y Q G I V V P L D G E T I I A D A A Q S Y F F Q S E Q Q I P T L L R V G			
UniRef90_F8FH03	UniRef90_NTLT	N T L T D S L F Q S Y V D R E G L T V T E A F E T F L T Q S E Q Q L P S K L W L A		
UniRef90_UP100047C39EA	D E R G E P Y T G H I Q V L H G R I V A E D L T E Y F L R S E Q Q T K T A L A V V S			
UniRef90_UP10003B62AC8	D P R R K V P Y Q G I V P L E G D T V A Q V L Q H Y M K A S E Q Q L P T R R L W L Q			
UniRef90_K0HZM3	D D E P G G R Y Q G I V P L E G A S L A A C E C E Y Y F A Q S E Q Q I P T I I R T A			
UniRef90_A5P9Y5	D P K D R Q P Y Q G V V P L H D D H S D V L Q H Y M L Q S E Q Q L D T I I L V L G			
UniRef90_V7ZBG5	UniRef90_D1ANGK	D I A N G K R Y Q G I V P L E G E T I A A Q A C E T Y F F Q S E Q Q V P T L I R T A		
UniRef90_UP1000309B97F	D P R E P Q R Y Q S L V G M Q A P D L A A E A F E T Y F H Q S E Q Q L P T R R L L L A			
UniRef90_UP10003F63B3B	E E H N G L I Y Q G Q V E L L S G E I G Q D F A Q Y Y T S E Q Q I P S A V A L A G			
UniRef90_V5UIP6	E P G S T D P Y Q G I V P L L D A D S I L A A E D F A E G Y F R Q S E Q Q L P T R R L L A			
UniRef90_S9TQ48	D P Q D K Q P Y Q G I V P L S D D E S I T E V L E H Y M Q S S E Q Q L D T R L W L A			
UniRef90_H6SR01	D P Q D S S Q R H Q G Q V V P L T G D T L S T C I E H Y F A S S E Q Q L A T R I I W L A			
UniRef90_U7DCN7	D L N D R Q A Y Q G I V V A L E G N S I V A E V L E H Y M R N S S E Q Q L D T Y I I R L A			
UniRef90_F6D1F9	D P K D R L P Y Q G V V P L H G Q S V A E V L E H Y M L Q S E Q Q L D T R L V L A			
UniRef90_UP1000420B4EF	D Y G S G D P Y I Q G V E L V S G E I A E D I A N Y Y A T S E Q Q I P T V C A L G			
UniRef90_D0L056	D P R E K Q P Y Q G G V V P L S D P D M A S V L E H Y M H H S E Q Q L D T R L W L A			
UniRef90_W7GCN6	D P Q D K Q P Y Q G I V V P L T G D T L S T C I E H Y F A S S E Q Q L D T A V V S T A			
UniRef90_L0DZ48	D P R E P Q R Y Q S L V G M Q A P D L A A E A F E T Y F H Q S E Q Q L A T R I I W L A			
UniRef90_D3QZB2	R N D D S E P Y Q G I V V A L E G D D L A G A I Q T Y F S R S E Q Q L A T R I I W L A			
UniRef90_L8XX95	D P D E G V R Y Q S L V V P I E G T Q I A E A L E G E Y F R Q S E Q Q L P T R R L V L S			
UniRef90_B5JU50	UniRef90_D1PDRQ	D P R E P Q R Y Q S L V G M Q A P D L A E A F E D Y F R Q S E Q Q L P T R R L V L S		
UniRef90_S5MDC9	D N E N G V P Y T S R V E I I S G E I N L D F M Y Y I Q Q S E Q Q L S T G M W L A			
UniRef90_UP1000346AD02	D P Q D R Q P Y Q G V V P L H G Q Q S Q V L E H Y M L Q S E Q Q L D T R L V L A			
UniRef90_UP10002885550	D Q D T G E R Y Q G I V V P L D G D S L S K A A E H Y F L Q S E Q Q I P T L I R V A G			
UniRef90_W9BRZ0	D Q S Y G K R Y Q G I V V P L D G D S L A Q A C E S Y F T Q S E Q Q V P T M I R I V A G			
UniRef90_D4NPWY7	UniRef90_T7KNGE	T Q K N G E I V K K D S P I V S G E I G E D F S Y F S E Q Q V P S A V A V A V		
UniRef90_R5E4J1	D P K D R Q P Y Q G M V S L E S S N V A E N L E N Y M A K S S E Q Q L E T K L Y L A			
UniRef90_K2BBE5	D S S V S Q R Y Q G I V V A W Q G N S L T E S I E G Y F Q D S S E Q Q L A T K K L W L A			
UniRef90_L7H9Z2	D P R E P Q R Y Q S L V G M Q A P D L A A E S A E L G E A F E D Y F R Q S E Q Q L P T R R L L L A			
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UniRef90_R5Y177	D D G K N N Y H Q G G V V D L Q G K T L E E C A L R Y F K Q S E Q Q I E T M I I R L F			
UniRef90_G0F114	D P K D K L P Y Q G I V V P L A D A S I V S A V L E H Y M Q A S S E Q Q L D T R R L W L A			
UniRef90_F9VKJ4	D L G L K N P Y I S K V P L Y R S D V C N D L A Y Y Y T L S E Q Q T P T A I I S V D A			
UniRef90_UP100035FCDF14	D P R Q Q P Y Y Q G I V V P L A D A S I V S A V L R Q Y L D Q S E Q Q P S W L M L A			
UniRef90_W0AAE4	D Q A T N E R Y Q G I V V P L E G A S L C E A I V S D Y F E R S E Q Q I P S L I R A H			
UniRef90_UP10002F794AE	D P R Q R Q P Y Q G G V V P L E G D S V A Q V L E H Y M R T S S E Q Q I D T R R L W L A			
UniRef90_I0I2N7	D L Q L K D L Y E S V V P L Q T G R L D V D L T Y Y L I T S E Q Q V P S V V E I S S			
UniRef90_H3NSQ8	UniRef90_E1RAW7	E P D V G Q R Y Q G I I A V Q R D E L C D V L S S D Y F E Q S E Q Q L A T K F W L S		
UniRef90_S617R3	D P R Q G K R Y Q G I V V A L D G V D L A D S I S S Y F V M S E Q Q L G T R F W L R			
UniRef90_E1RAW7	UniRef90_Q1WI11	Q L E H K R P F P G Q I M L R S G N L A E D L A W Y Y L E S S E Q Q I T K S F F S L S		
UniRef90_J2CQ84	UniRef90_D1QDE0	D L A T N E R Y Q G I V V P L E G A S L A Q V C E D Y F A R S E Q Q I P T L I R I A		
UniRef90_UP100047DBE1C	D L G G D M D R H Q G I V V E I V G D D L A A M A T H Y F E T S S E Q Q H A C W L M A			
UniRef90_K2JIY8	UniRef90_Q1DDE0	Q G A H T D R Y Q G I V V E L T G A T L A D C A H T Y F R D S S E Q Q I E T C L K T A		
UniRef90_D7DT3	UniRef90_E1ZPN9	D Q A T G E R Y Q G I V V P L D G S S L A E A A E H Y F F Q S E Q Q I P S V Q I A		
UniRef90_G4CH82	UniRef90_Q1DDE0	D P K D G Q A Y Q G I V V P I E G D S I S A V L E H Y M M R S E Q Q I D T K I W L S G		
UniRef90_G4CH82	UniRef90_Q1DDE0	Q P D D G E Q W Q G I V P L E G D S I A D M L T G Y M Q R S E Q Q L E T H I S L A		

170            180            190            200

UniRef90_A2C1C0	E R I N Q D G I V C S G G L L A Q I L P K A E R D L I D L L E D R C K E I N S
UniRef90_G0AJF2	A D D K V A R G L L L Q K L P N H G N D E L E T W N R F L A L G G T
UniRef90_Q2G3J9	V R N T P A G C V A G G L L L Q K L P E G E E G H V Q L D H P E W E H V S I
UniRef90_Q3AK46	E Q V N S A G I H A S G G L L V Q I L P K A A E E L V E I E Q R C R E I T G
UniRef90_A3UGF7	I G Q D G G E T V W R A G G A L I Q K L A G D D P S D A E D F E H V L J A L F N T
UniRef90_UP100036C88C4	V G P G T A G E H W R A G G V M L Q T L P A A S H E D W T R S T M L M A T V E A
UniRef90_F4GXEx3	S D A R H V A G G L L Q R L P A H T P E A Q E E T W Q R T G H L A T
UniRef90_K1SU14	V L V D K N G I K S A G G Y
UniRef90_G2IXD7	A N E S T A A G L L L Q R L P E G H G D A E G W P H V L T T A E T
UniRef90_A0A011R3N1	A S Q D G A A G L F L Q R L P T A E Q R D A D G W T R I E A L A A T
UniRef90_I1XME9	T D E Q T A A G G L M L Q Q L P D Q D P E Q H D E N W T R I N L A E T
UniRef90_I4YU35	V A E Q F E N G R H R A G G L M I Q F L P P S E D D A W L E A K S L V G T I E D
UniRef90_UP10003A41685	V R R D A A G D W H A G G G M M I Q K M A G D D E D G W R E A K A L F A T L E P
UniRef90_U4V1Y5	F G K S S E P G I W R G G G V M L Q H M P G D D E E N W N R V N I L L S T V E E
UniRef90_UP10003B5343D	M R K D A D G R C V A G G L L I Q H L P E G E E G E W E H V E A L G R T V G A
UniRef90_W0V426	T D D Q T S R G L L L Q K L P F T E D E A L E T W N R A V M L A S T
UniRef90_U2YKJ5	V D G S G A K P V A S G I L V Q H V P E G E E G D H P E W E H V A I L T D T
UniRef90_A3YAZ1	A D G S S C A G L F L Q R L P A A K E D D E D A W E R F V H L A S T
UniRef90_UP10003B3DB49	V R R T E E G W R G G A V L L E R I L P D S A K G D V E D W R R A L I L M S S
UniRef90_S3NUF3	S T A E Q A Q G G L L I Q L P N N N E E E Q W I D E D V W P R L T M
UniRef90_D2RNY7	V L I E K D G S V A V S G G Y F V Q L P D A S E E T I K T L E D N I L L T L P Y
UniRef90_A0A023NXV6	A D G E H A V G G L M L Q K M P D E G G I D A V Q D E D A W T R I Q H
UniRef90_UP100045E9F19	A N D Q V A A G L L L Q E L P A H K D F K S D W E R I T M L A D T
UniRef90_R5QQ60	L Q A P E G E S S W L A A E I M L Q K M P G G N E S S P E E M E E A W N E M E S
UniRef90_UP100047E9EEA	A G E E R A T G G M L Q R L P G D E G D A D G W T R A C A L F D T
UniRef90_D3SDM9	A N Q Q S A A G M L L Q A V P G E G G H A V T R D P E D W N R A D T
UniRef90_UP10002F266F7	A D P T V A R G L L L Q K L P K E G G D D L E T W N R T V M L G N T
UniRef90_M2U4W4	V R W T E D G W H A G G L L L Q H L P R G E E D T R A D W E H L L G A T V T
UniRef90_Q31F32	A N E E G I G G V L I Q K M P T T D E H D E D G W E R I H L L T D T
UniRef90_W5WVX7	V Y L D H D A K V Q V A G G G V L I E V M P G V S E E V V D M I Q A N Y E D F P N
UniRef90_D5V914	T N E T T A G G G I L V Q Q L L P Q S D E A D P D L W D R I L T A L T D T
UniRef90_A3YY76	E Q I D S S G V R C S G G G V L V Q V L P K A E P A L V A L L E E R C R E I T G
UniRef90_I0HP99	A D D M T A A G L L I Q R L P K R N E D D I L E A F E R V A M L A A T
UniRef90_S9SDY3	G R P D P A A G R I R A G G G V M I Q Q M P D D R A E D W R R V N L L L D T V E P
UniRef90_G4Q8H7	V L V D K D G S I A V S G G Y F V Q P L P G A S D E F L E T L E N N C I T L P Y
UniRef90_W6KC13	C N G E R A G G G L M V Q R L P D A A G E D P D D A E E N W R R G V I
UniRef90_UP10004680EEA	F T M A D G V E E W R A G G V M L Q H M P K A S P E N W N R V N I L L D T V D D
UniRef90_G2IDT4	I D F D N G G C V K N S I G L M V Q M L P G A D E M L A D I I S Y R F Q D M G K
UniRef90_UP1000373D075	V R K G A D G R T I A G G G L L L Q H L P E G E D H P E W E H V A A L G S T M G
UniRef90_UP10004645DDF	A S E K G I G G G V L Q M P A A D K D E A D I D G D A W N R V T T
UniRef90_F8F0H3	V R F D K E G R V S G A G G G L F F Q A M P G A Q D L D M E D T E D R I R E M P S
UniRef90_UP100047C39EA	A N G E H A G G G L L V Q R L P D H G G N A E T M A R A T L L A D T
UniRef90_UP10003B62AC8	R G V V D G R P V A G G F L I Q H L A E G E E G D H P E W E H L R A L A E T
UniRef90_K0HZM3	A N D Q V A A G L L I Q R M P R E N E D Q I G H N E D R I A H L S S
UniRef90_A5P9Y5	V R S D G G K C L A A G M L I Q H L P D G E E G R E R L H A R L D H W E H
UniRef90_V7ZBG5	A G P D Q A A G L L L Q K L P G D E G D N D G W T R I G A L F D T
UniRef90_UP1000309B97F	V L V G T D S L V Q A A G G L V V Q A L P G S E P Y I D G V S A R F A H L D H
UniRef90_UP10003F63B3B	P A G E R V I A G G L L L Q Q L P G G D A D G W N R C E A L F A T L G A
UniRef90_B2U9C6	A D G K V A S G M L L Q R L P D V Q E Q D L D T W E R V C Q L G K T
UniRef90_U4TF17	S D T N H I S A L L L Q Q L P H D N Q E S L H L W E H L T T L A H T
UniRef90_UP1000372868F	A N D D K A T G I L L Q R L A V T G G I A I D K D E E N W Q K V Q T
UniRef90_UP100037DFE41	A D D Q V A A G G L I Q R L P R S R E D D I G L N E H R I A H L A T
UniRef90_K1UBW8	V L I D E D G E V L L A G G G L I Q L L P G A D D T V I D K L E K N I A E L E P
UniRef90_V5UIP6	C D D N H A V G G M L Q K L P G A P E L D E D T W N R V C Q L G N T
UniRef90_S9TQ48	V R P P A D G G W A A Q V V M I Q R L P P G T D E S W R R A E I L L G S L T
UniRef90_H6SR01	V A P A D E S Q P W R A S A L L L Q R M P G R D G E D W D D A W Q T A S L M A S
UniRef90_U7DCN7	V I P D V D G S L E A A G G F L V Q A L P N E G P D E I E S I S E F I E K L P P
UniRef90_F6D1F9	A N G S Q C G G G F L Q R L P A G D K D A W D R F T H L A S T
UniRef90_UP1000420B4EF	A D E Q R A A G L L I Q E L P A R D R D D W A R V E F L A D T
UniRef90_D0L056	A D S E R A V G L L I Q Q V P G E G G T P M V R A S A A D A D F E H
UniRef90_W7GCN6	A G R D G T A G G L L Q K L P G D E G D D G W S R A S A L F D T
UniRef90_L0DZ48	A G P E R A A G G L L L Q Q M P A A D D D T D S E D W M R A T L A D T
UniRef90_D3QZB2	V K M N D R G V S Y A G G G L L V Q L M P G H T E E D L E Y I E K R A G G F P E
UniRef90_L8XX95	N T D N E G G L L Q R I P G E M E D E D A F N R I C H L A G T
UniRef90_B5JU50	A N T D R A A G G L M L Q K L P E S Q V S S D D L W S R V K Q L D T
UniRef90_S5MDC9	V E I N E D G T I K K A C G I I I Q L L P G F S D M D I D F I E D K V G S L D Y
UniRef90_UP1000346AD02	A N D E I A A G L L I Q R L P R R N E D D I G L S E A R I A H L S T
UniRef90_UP10002885550	T G A L G Q D G R V A G G G L L Q H L P E G E D A W E H A S V I G G T V K
UniRef90_W9BRZ0	I E S D A T G C V S A G F L V Q H L P E G E E G D H P Q W E H V S I L A G T
UniRef90_N4WPY7	E L I D T D E S I M V S G G G F I Q I L E P L T D K N V K E L E N R L N Q M E P
UniRef90_R5E4J1	A D S K K L G G G L V I Q K M P S S E I S D P D A W G R I L Q L A H T
UniRef90_K2BBE5	U N D R S A A G F L L Q V V P S S E G S V A D I T P H W E R I N R
UniRef90_L7H9Z2	A D G H Q A A G G L L Q K L P G D S G D E D G W N R A G A L F E T
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UniRef90_UP10002F794AE	A D A G H A S G G L L Q R M P D G P A P G H D T W D R A V A L A S T
UniRef90_I0I2N7	A P V D A D G V L Q V A G G G L L Q L P G G D L E Q L R Q M A E R L D D L P P
UniRef90_H3NSQ8	T G D G A A A A L M L Q Q L P K Q P D E T V D Q W Q T L C A L A D T
UniRef90_S617R3	A D G H R A R G G L L Q Q L P A A P E E R N A S W E H V T T L A S T
UniRef90_E1RAW7	I Q F D N K G D I I G A G G G L F L P Q E L P G A K A E A L E K V Q E T A L A M P S
UniRef90_I9WI11	V R S N G Q R C M G G G G L I V Q H F P D G E E E D H P E W E H V A V L A S S
UniRef90_Q1DDE0	Q L P E G G E P L G R V A G G G L L Q P L P S A D M E A F A A L G E R L R R D F V
UniRef90_UP100047DBE1C	L A C E R T S E G W R S S G G G L L E R L A P A E D E D A W E T A T I L A R T L T
UniRef90_K2JIY8	V A L P G G G S V W R A A G G L M V Q R M P A E T E D E A E D G W R R I V I L T S
UniRef90_J2CQ84	T R H E P G E G C V A A G G L L Q H L P E H D H P E W E H V Q A L A G T L R D
UniRef90_D7DIT3	C D G E S A A G G M L I Q K L P E T N Q E T Q I H D E D I W N R V G T
UniRef90_E1ZPN9	V S I A K D L S I R A A G G F L I Q V L P P F A E D E T I A Q L E E N I A A A G S
UniRef90_G4CH82	A S P T H V G G G L L Q R L P E E N L T E D A W A H V T A L A D T

210            220            230

UniRef90_A2C1C0	F S E L L K K G N N   L   S   L I   E E   I   F P D   L D Q I   S T S Q E   V R F
UniRef90_G0AJF2	L R P E E M   S T D I   Q T L   M R R L   F W E E   I R V F E P Q Q P S F
UniRef90_Q2G3J9	L A E L V D P A   L D L E S I   V W R L   F H E E R E I
UniRef90_Q3AK46	F S Q O L A A S G D Q   L E D   L L L D   V F P D   D P K P L   D S Q E   L R F
UniRef90_A3UGF7	V A E L I   D P D L   T A G R V   L Y R L   F H E D   V R V Q A E R E   V K
UniRef90_UPI00036C88C4	I   E L V D A A L   P L   P N   L V F R L   F H E E   P T S F A   P Q H   L V F
UniRef90_F4GXEx3	L   K   H   E E   L L S   L D   I D T   L I T   R   F W E E   E L I   F E P Q S   I R W
UniRef90_K1SU14	
UniRef90_G2IXD7	L   Q   H   D   E   L   L   S   L   S   A   D   D   I   L   F   R   L   Y   H   Q   E   V   R   V   F   D   A   E   P   V   S   F
UniRef90_A0A011R3N1	V   K   P   A   E   L   L   S   L   P   A   D   K   L   L   L   R   L   F   G   E   E   V   R   L   F   A   A   R   P   V   A
UniRef90_I1XME9	V   T   H   E   E   L   L   K   L   D   A   V   S   E   T   L   L   Y   R   L   F   H   E   E   V   R   L   L   S   T   T   V   L   E   F
UniRef90_I4YU35	H   E   L   I   D   P   T   V   S   E   T   L   L   Y   R   L   F   H   E   G   V   R   V   F   E   G   Q   H   V   H
UniRef90_UPI0003A41685	D   E   L   C   S   E   E   L   L   S   A   Q   D   L   L   F   R   L   F   H   E   E   P   R   V   Y   E   A   Q   S   V   Q   F
UniRef90_U4V1Y5	M   E   L   I   G   P   S   V   P   P   T   E   L   L   V   R   L   F   H   E   E   P   R   V   Y   E   A   Q   S   V   Q   F
UniRef90_UPI0003B5343D	E   E   L   A   D   A   A   L   P   I   E   T   L   L   V   W   R   L   F   N   E   E   V   R   V   L   D   G   Q   P   I
UniRef90_W0V426	L   K   Q   E   E   I   L   A   T   D   D   I   D   T   L   M   Q   R   L   F   W   E   E   I   R   V   F   D   P   V   H   P   S   F
UniRef90_U2YKJ5	I   D   E   L   L   N   R   D   L   S   L   E   A   L   L   W   R   L   F   H   E   E   N   R   I   L
UniRef90_A3YZA1	V   K   N   E   E   L   L   K   L   D   T   L   E   L   L   H   R   L   Y   H   E   E   L   R   F   Y   D   A   K   A   M   Q   F
UniRef90_UPI0003B3DB49	C   T   E   L   V   D   P   S   I   S   A   E   R   L   I   F   R   L   F   H   E   D   V   R   V   F   E   S   Q   K   L
UniRef90_S3NUF3	L   T   Q   T   L   K   A   T   L   P   A   Q   E   L   I   L   Y   R   L   F   Y   N   E   E   V   R   L   P   D   V   E   Q   L   Y   F
UniRef90_D2RNY7	V   T   E   L   L   Q   T   G   L   D   A   E   E   G   M   I   R   K   V   A   G   L   P   V   E   I   L   E   S   H   P   V   S   F
UniRef90_A0A023NXV6	L   T   A   T   L   L   L   S   T   A   P   E   Q   L   L   Y   R   L   F   Y   H   E   E   V   R   L   F   E   P   R   P   L   A   F
UniRef90_UPI00045E9F19	L   T   A   T   E   L   L   N   L   D   C   E   T   L   L   H   R   R   L   F   H   E   E   V   R   L   F   D   A   E   A   V   R   F
UniRef90_R5QQ60	L   T   E   V   F   D   A   E   L   T   S   E   Q   L   L   H   R   L   F   H   H
UniRef90_UPI00047E9EEA	L   G   P   A   E   L   L   E   A   P   A   D   L   Q   R   L   F   H   E   D   V   E   L   L   G   G   R   D   L   A   F
UniRef90_D3SDM9	T   T   P   E   E   M   L   E   L   D   A   G   T   L   L   G   R   L   F   A   E   E   V   R   L   F   D   G   T   P   V   Q   F
UniRef90_UPI0002F266F7	L   R   R   E   E   L   L   T   T   N   V   D   T   L   M   R   R   L   F   W   E   E   I   R   V   L   D   A   K   H   P   S   F
UniRef90_M2U4W4	R   D   E   L   S   D   P   A   L   P   Q   T   L   L   W   R   L   F   H   E   E   I   R   V   I   P   A   I   P   L   S
UniRef90_Q31F32	V   T   D   E   E   L   L   E   A   E   P   L   L   H   R   L   F   H   E   E   V   E   L   Y   S   P   E   E   V   N   Y
UniRef90_W5WVX7	I   S   K   M   L   M   E   G   A   Q   P   V   D   L   V   K
UniRef90_D5V914	L   K   T   D   E   L   T   D   L   D   A   N   E   I   L   L   Y   R   L   Y   H   E   E   D   V   V   L   P   S   T   P   L   Q   F
UniRef90_A3YY76	F   S   A   R   L   A   A   K   D   D   L   K   L   L   E   D   I   F   P   D   D   P   Q   L   L   E   R   Q   D   V   T   F
UniRef90_I0HP99	L   T   R   E   E   L   L   E   L   P   P   E   R   I   L   H   R   L   F   W   E   E   L   R   V   F   E   P   M   T   P   R   F
UniRef90_S9SDY3	L   T   E   L   I   G   P   H   V   Q   S   P   D   L   L   V   R   L   F   H   E   E   P   R   V   T   D   P   Q   P   V   V   F
UniRef90_G4Q8H7	V   T   E   L   L   R   S   G   H   S   P   E   D   M   I   L   R   L   I   G   K   G   V   E   I   L   D   C   H   P   V   S   F
UniRef90_W6KC13	L   A   E   L   T   D   E   S   L   P   A   Q   Q   L   L   R   L   F   H   E   D   V   R   V   Y   D   P   R   P   L   R   F
UniRef90_UPI0004680EEA	L   E   L   V   G   P   T   V   E   P   S   Q   V   L   L   R   L   F   H   E   E   P   R   V   F   D   K   Q   R   V   H   F
UniRef90_G2IDT4	M   L   E   H   L   Q   N   G   K   T   I   Y   D   I   L   N   F   M   F   D   D   M   L   K   I   L   D   E   S   L   F   E   Y
UniRef90_UPI000373D075	V   D   E   L   A   D   A   T   V   P   L   E   T   L   L   V   W   R   L   F   N   E   E   V   R   V   L   D   R   A   T   I   S
UniRef90_UPI0004645DDF	L   A   D   T   L   K   S   S   L   D   S   E   T   L   L   H   R   L   F   H   E   E   V   E   L   F   E   A   K   A   V   E   Y
UniRef90_F8F0H3	L   G   T   W   F   A   S   G   K   S   R   H   G   L   D   E   W   F   A   F   E   I   D   H   V   H   D   S   P   V   Q   F
UniRef90_UPI00047C39EA	L   K   P   D   E   L   V   H   T   D   T   D   L   I   H   R   L   Y   W   E   E   T   L   L   F   E   P   A   N   V   R   W
UniRef90_UPI0003B62AC8	V   K   E   L   G   H   P   G   L   P   L   E   E   L   L   V   W   R   L   F   H   E   E   Q   E   V
UniRef90_K0HZM3	L   T   R   E   E   L   L   T   L   D   D   V   D   T   I   L   R   R   L   F   W   E   E   L   L   R   F   E   P   Q   Q
UniRef90_A5P9Y5	V   A   E   L   V   D   T   D   L   S   L   E   A   I   V   W   R   L   F   H   E   E   D   E   V
UniRef90_V7ZBG5	L   G   A   P   E   L   L   S   V   A   G   E   D   L   L   H   R   L   F   H   E   E   P   Q   L   L   G   D   K   P   L   S   F
UniRef90_UPI000309B97F	I   S   H   R   L   A   D   G   E   S   V   E   Q   L   A   E   E   V   M   G   T   P   L   H   W   Y   D   P   E   P   I   Y   Y
UniRef90_UPI0003F63B3B	R   E   L   L   A   D   T   P   A   E   T   L   L   W   R   L   F   H   D   E   V   K   V   L   E   R   R   S   L   A   F
UniRef90_B2U9C6	L   R   R   D   E   L   L   G   Q   P   I   L   K   L   Y   W   E   E   I   R   M   F   E   P   Q   S   P   R   F
UniRef90_U4TF17	I   A   D   K   E   L   L   T   L   L   N   N   E   T   L   L   Y   Y   R   L   F   H   E   Q   A   R   L   F   P   A   Q   K   V   N   F
UniRef90_UPI000372868F	I   T   H   D   E   Q   L   K   L   S   E   D   E   L   L   H   R   L   F   W   E   E   L   K   T   E   E   D   H   P   I   Q   W
UniRef90_UPI00037DFE41	L   T   R   E   E   L   L   R   L   D   A   D   T   V   L   R   R   L   F   W   E   E   L   L   R   F   E   P
UniRef90_K1UBW8	V   T   T   M   L   A   K   G   M   S   I   L   D   C   K   A   L   K   G   F   E   V   E   V   L   D   E   N   P   V   K   Y
UniRef90_V5UIP6	L   Q   R   E   E   M   L   S   T   D   R   E   T   M   L   H   R   L   F   W   E   E   V   R   V   F   E   P   L   V   T   S   F
UniRef90_S9TQ48	V   A   E   L   R   D   P   T   L   M   P   E   H   L   L   Y   Y   R   L   Y   H   E   S   L   V   L   F   D   P   R   R   L
UniRef90_H6SR01	L   D   E   M   L   D   T   T   L   D   P   E   T   L   L   R   R   P   F   H   G   D   L   R   L   A   A   P   R   P   V   F   Y
UniRef90_U7DCN7	V   T   E   L   L   R   Q   G   A   G   V   E   E   L   T   S   Q   I   F   G   T   V   P   T   I   L   G   A   R   P   V   T   Y
UniRef90_F6D1F9	V   S   E   D   E   L   L   G   L   E   T   E   T   L   L   H   R   L   Y   H   E   E   V   R   M   Y   D   S   K   Q   M   Q   F
UniRef90_UPI000420B4EF	I   T   P   A   E   L   L   H   L   P   Q   G   E   L   L   Y   Y   R   L   Y   H   E   E   V   R   L   F   D   S   E   P   V   A   F
UniRef90_D0L056	L   S   I   M   A   D   T   L   L   T   P   Q   T   I   L   L   H   R   L   F   H   Q   D   A   L   V   L   T   Q   S   D   V   R   F
UniRef90_W7GCN6	L   G   K   A   E   L   L   A   T   P   A   E   E   L   L   H   R   L   F   H   E   E   A   E   L   V   G   D   K   A   L   S   F
UniRef90_L0DZ48	V   S   P   Q   E   L   L   A   L   P   V   E   K   L   L   R   R   L   F   H   E   E   V   R   L   L   E   G   H   A   M   R   F
UniRef90_D3QZB2	I   T   F   L   L   E   E   G   F   S   P   A   Q   I   I   D   L   F   M   G   D   E   L   T   Y   L   D   C   R   P   I   S   Y
UniRef90_L8XX95	V   T   A   E   E   L   L   N   E   L   D   T   Q   T   L   L   Y   Y   R   L   Y   S   E   D   V   R   L   F   D   A   E   P   L   H   F
UniRef90_B5JU50	V   K   A   D   E   L   L   T   L   L   G   G   T   E   V   L   H   R   L   F   H   E   E   V   R   V   F   E   G   V   E   Y   Q   F
UniRef90_S5MDC9	L   I   K   T   L   I   N   T   T   N   Y   E   S   I   L   K   D   I   C   D   D   A   K   V   L   G   V   S   E   L   K   F
UniRef90_UPI000346AD02	L   T   R   D   E   L   L   T   L   D   A   D   T   V   L   R   R   L   F   W   E   E   P   Q   R   F   E   P   L   A   P   R   F
UniRef90_UPI0002885550	V   A   E   L   L   A   D   S   K   L   S   L   E   T   L   V   W   R   L   F   N   E   E   T   E   V   R   V   Q   G   E   T   R   F
UniRef90_W9BRZ0	L   S   E   M   L   D   P   A   L   S   G   R   D   I   L   L   H   R   L   F   H   E   E   D   E   V
UniRef90_N4WPY7	L   S   T   Q   I   S   K   G   K   T   I   H   E   I   L   E   N   I   V   G   P   V   K   V   L   E   R   K   E   I
UniRef90_R5E4J1	V   T   K   D   E   L   L   N   V   P   A   T   D   V   L   H   R   L   F   F   W   Q   E
UniRef90_K2BBE5	L   T   A   F   L   Q   P   D   L   D   Y   P   M   L   L   R   R   L   Y   D   E   E   E   I   R   I   F   E   A   V   P   L   K   F
UniRef90_L7H9Z2	V   S   E   A   E   L   L   A   A   T   P   A   P   V   G   V   L   L   H   R   L   F   H   E   E   P   E   L   L   G   T   R   P   L   R   F
UniRef90_UPI000465D938	L   T   A   A   E   L   L   A   A   T   P   G   P   V   L   L   H   R   L   F   H   E   E   P   E   L   L   A   Q   K   Q   L   A   F
UniRef90_R5Y177	A   E   E   L   F   D   E   N   L   S   L   Q   E   I   L   H   R   L   Y   H
UniRef90_G0F114	L   K   A   D   E   L   L   A   E   T   P   D   T   L   L   R   R   L   F   W   E   D   L   R   V   F   E   P   L   T   P   H   F
UniRef90_F9VKJ4	A   L   N   R   V   Q   N   G   N   E   T   I   Y   D   I   N   F   M   F   D   D   M   L   K   I   L   D   E   Y   A   I   D   Y
UniRef90_UPI00035FCDF14	L   Q   R   A   E   L   L   E   L   D   P   Q   E   E   L   R   R   L   F   W   E   E   V   R   V   L   S   A   A   Q   L   A   F
UniRef90_W0AAE4	G   E   E   L   V   D   P   S   L   P   L   E   T   L   L   I   W   R   L   F   N   E   E   V   R   V   L   S   A   A   Q   L   A   F
UniRef90_UPI0002F794AE	L   E   P   G   E   L   L   E   L   D   T   D   T   L   L   I   H   R   L   F   W   E   E   S   L   L   F   D   P   Q   A   V   R   W
UniRef90_I0I2N7	F   G   E   L   L   S   N   D   E   T   P   Q   S   I   L   I   A   H   L   F   S   D   D   V   L   E   V   R   E   L   Q   F
UniRef90_H3NSQ8	V   T   T   D   E   L   L   T   I   D   T   D   R   L   L   Y   R   L   F   N   E   T   V   K   R   F   E   P   K   G   I   R   F
UniRef90_S617R3	L   T   A   E   E   L   L   S   L   D   N   E   T   V   L   H   R   L   F   H   Q   D   V   R   M   E   E   M   Q   P   I   C   F
UniRef90_E1RAW7	L   G   T   A   F   S   K   G   V   S   G   S   E   V   L   V   N   R   T   L   G   K   H   P   Q   I   L   G   S   R   P   L   R   F
UniRef90_I9WI11	V   E   E   L   L   D   P   V   L   S   M   E   G   L   L   W   R   L   F   H   E   E   E   V   V
UniRef90_Q1DDE0	P   S   L   Q   A   H   G   E   A   G   A   A   V   L   R   R   L   L   P   E   D   F   E   V   V   M   S   R   Y   P   L   R   F
UniRef90_UPI00047DBE1C	A   A   E   L   L   D   D   G   L   P   P   E   K   E   L   L   N   R   R   L   F   H   E   E   L   R   V   G   Q   P   R   A   L   P   A   Y
UniRef90_K2JIY8	S   A   E   L   L   A   P   E   L   S   P   H   E   L   L   F   R   R   L   F   H   E   D   V   R   V   F   E   P   H   A   V
UniRef90_J2CQ84	E   E   L   T   D   D   D   L   P   L   T   D   I   A   W   R   R   L   F   H
UniRef90_D7DT3	V   T   D   E   E   L   L   N   L   P   T   E   T   L   T   R   L   F   H   E   E   V   R   L   F   E   S   S   I   T   Q   F
UniRef90_E1ZPN9	V   T   D   M   L   N   A   G   M   G   A   G   D   I   T   E   R   R   L   L
UniRef90_G4CH82	V   N   A   A   E   L   T   D   L   D   A   P   H   L   L   Y   R   L   F   H   E   T   P   R   V   F   P   P   E   N   I   E   F

	1	10	20	30	40
UniRef90_A0A016QKV5	L L R G T A A G G T L R F V G I D A T Q I V E D A R L R H H L S K T A T A				
UniRef90_A0Z4T1	D C S L R F L F D D A D I R G E C V C V L N D A F N E V T A A H C Y S D S I K Q				
UniRef90_R5JUM3	D R S L P F R L P W A E A R G R V A R L G P A L D E I L G R H A Y P A A V S A				
UniRef90_I3TG1	D G M T V F M L G E G Q I R G A F F H G T R F V N K M R V Q H N G I L E S L				
UniRef90_M2BPJ0	D K L V R V I S K D A E I V Y Y H Q S N A N L V L Q G K A C A				
UniRef90_A9RG79	M S E L H K F L F D G L P V R G I I V R L T G A W T E I L A R R E W A P P V				
UniRef90_F5Y3M9	M S E L H K F L F D G L P V R G A I V R L T D A W Q E I I L Q R R P Y P L P V Q E				
UniRef90_UPI000225E6E7	M S E L H K F L F D G L P V R G I V A R L D G V L D H I L T R H D Y P P A V A A				
UniRef90_UPI000395C91B	M S E L H K F L F D G L P V R G A I V R L T D S W Q E I I L Q R R A Y P E A V S T				
UniRef90_UPI0003B7B9AE	M S E L H K F L F D G L P V R G A I V R L T D S W Q E I I L Q R R A Y P E A V S T				
UniRef90_D0J2A5	M S E L H K F L F D G L P V R G A I V R L T D S W Q E I I L Q R R A Y P E A V S T				
UniRef90_M1VLC0	M S E L H K F L F D G L P V R G A I V R L T D S W Q E I I L Q R R A Y P E A V S T				
UniRef90_Q2N614	M S E L H K F L F D G L P V R G A I V R L T D S W Q E I I L Q R R A Y P E A V S T				
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 I L G Q A S L C G A L T I P M M K D M E H T L I R F E G T G P A E G Y T V E A D  
 I L G Q A G L C A A L T I P M M K D R D H T V I K Y E G T G S A E G Y S L E A D  
 L A S A L V L A A L L G A T L K Q A D G Q L T M Q A Q T E H G V V R L L V A D Y  
 T M M E L A V A S V L V I A T L K Q D G S E I I M V Q L R G S N P L K Y A L I N I R  
 A L S E A L A L A A L C G S V L P P A G N L N L M M R S D G A V S I L V A D Y A  
 V L G R G L L T G A L H S G G L K G K D R A A F K V H S Q G G A V G G M S V E A N  
 L A G E M A A A A L L T A G A L Q F D G T V A L Q I E G D G P V R R A L A E V R  
 V L A E L L V A T S L L T A T L K F A G D I T V Q L Q G D G P L S L A V I N G N  
 T L A K T I S V M S V I T G S L K G D Q R I S L Q M T M S D P K F K V F A D A D  
 A M G R T V T C G L L L A N G I Q D E Q I V Q I T M N G D G G P I R G I V A I A S  
 A L G R A L T C T L L V A D G L K D E E T F Q V T F N G D G P L R G V M A T A N  
 L L G E M A A A S V L M Q S N I K F N G A L V L Q I F G D G P V R V A V A E A Q  
 V L S R I T A A N T L I S L D L K N G E L M N T T I S S D G Y L G K I I T E F K  
 L L G E W L L S A L I L S S L K H G S P Q K V L L K L S T P E Y S L V A E A D  
 V L A K F T A A N A L I G M E S K N N E K L S N W T T N N G A V K T M I T E F Q  
 M N L A V I N G N  
 A L G R A I A S V V L I A D G L E A D E T F Q V R F V G D G P L R G V F A V C N  
 L F A Q A L A A G A L L G A L Q K E R G R V N L Q L E C D G P L A G L F V D A D  
 A I G R S T L C A L M A S N G M Q E E Q M F Q L S M K G E G P L R G G C V V I V T  
 L I A E M A L L T A L I G Q T V K L R W K L S L Q V Q T R G A L R M I A T D Y F  
 I L G K V L N A A A I L A M D F K N H E G V S L K W V T N S P L G T I H A D A Y  
 L L G E A V V A A A L F T G H T K V D G R L S L Q L R G N D T L R T L F A E C T  
 L L G A Q A L A A M P L L A A H T K L E G R I I S L Q F Q T E G P V Q M L V T Q V E  
 A L G R A M T G A I L L A G D F K N H E N V S L R I K G D G P L G V V H V D A F  
 L L G E A L L A A L L I S S L V K H A T H Q K V L F K L N L E E G S V V A E A D  
 L M R E A M A A M P L L A T H L R F E G R I N L Q F Q G D R R M E L L V S Q D  
 A L S K F T L G N T L I S L D N K E L A K I I N S N V S K N G A V K K M I A E F Q  
 M L G K T V S A M S I L S G T L K G N Q R M S L Q I T L S N P L H K I F A E A E  
 L L G E M M A A A A L L S A N L K F N G A L I M Q L H G D G P L R M L V V E C N

	90	100	110	120
UniRef90_A0A016QKV5	A D G R V R G Y V R E P G A D L P V R G D G K L D V S G I V G T D G E L A V T R			
UniRef90_A0Z4T1	S D L Q I R G I L A R G N L K A E A A A P L A L L L V D G Q L A I T I			
UniRef90_R5JUM3	G A A N V K G Y V G N P N V I L P A N S K G K L D V A G A L D L G V L S V I K			
UniRef90_I3TG11	A S G A L R G Y A Q F D A D A V A A L D T A G A P S M P R L F G R A Y A L T L			
UniRef90_M2BPJ0	S E G F V R G Y L L E D P I R P D R P L E T W D L K P L F G E G K I S V I R F			
UniRef90_A9RG79	D E G H V K G F V V N P S C D P P L K D N G K L N V G L A V G S G V L S V R N			
UniRef90_F5Y3M9	P D L S L R A T A K V V G D V P V D A R L P E L V N L N N Q G R C A I T L			
UniRef90_UP1000225E6E7	Q G A V R G Y A E F D G E A L A R L G A N P S L P A L F G E G Y L A I T F			
UniRef90_UP1000395C91B	T N L S V R S T V T M I G D L P A D A T L T D M V N V H S K G R C A I T L			
UniRef90_UP10003B7B9AE	A P A R I R A W A S F D E D R L D A S Q P F E Q I G D G Y F A I L I			
UniRef90_D0J2A5	S D L S L R A T A S L V E A S L P L R G Q A P L A E L V N A H G A G R C A V T L			
UniRef90_M1VLC0	G R G H V R G Y V G D P Q V Q L P P T A A G K L D V G R A V G R G F L A V V R N			
UniRef90_Q2N614	A G A V R G Y A D F D R S R L D D I G I N P D L H T L F G D G Y L A V T F			
UniRef90_A0A011MKG3	E Q L Q I R G M A K S A Q P T A E G S L R E L L G D G H H L L L A L D			
UniRef90_UP100040AE4E2	S N L D L R A T A T L I G E V H D G A S L D E L L N V E G S G R C A I T L			
UniRef90_Q1GTF1	A G E L R G Y L K F D A E R L A E A G S D P T L F A L F G E G F L A I T F			
UniRef90_UP10004701F32	D T G A L R F Y A R T D E D A L N L L Q D T P N P T D R E L L G N G Y M A L T V			
UniRef90_Q21V35	A D F G L R A T A T V T G D V P L E A S L S Q M I N V N N N Q G K C A I T L			
UniRef90_L2F6M5	S H G F V R G L A D W T G N W S G L I T A N D A I L G K G G V L F I N I			
UniRef90_U2EKA4	A S G N I R G Y I S D E L L N L P Q E E V N N M S L E Q L I G D R G Y L Q V M K			
UniRef90_G7UPU7	A A G T V R G V V Q L R D G H D A P A D L T A I L G D D A L L A I T I			
UniRef90_N7PNW0	T P R S V R A Y A R Y D E A R L K E A I A A N K T R P E E L L G N G T I L A F T V			
UniRef90_UP10001DD08B2	R Q G A V R G Y A D F D A E A L A K L G A N P S L P A L F G K G Y L A I T F			
UniRef90_Q0BPT5	D T G A L R G Y A R T D D E A L E A L L A E T P H P T A A L L G Q Q G Y F A F L V			
UniRef90_A4A918	S E L T V R A A R G A E G A T S D S F D A L L G G G Q L V L T V			
UniRef90_S9QGU7	G A G V V R G Y A K N P L V S H V G A E G E Y H W R P A L G N K G F L S V L R			
UniRef90_J3HWA1	S E L L H L R A T A K V T E D A V I A A D D A T L G A L V N A N G R G R F V I T L			
UniRef90_UP100047BF00A	H D L A L R A T A K V V G D V N V S D R L P E L V N V H N R G R C A I T L			
UniRef90_Z9JIB4	A S G T L C G T V H M A K D L S H A D A P T N L R E L D A L L A I T V E N S G L			
UniRef90_K5Z251	E A G A L R G Y V R V E A A E I P P E A T A R Q L F F G N G Y I A F T V			
UniRef90_A1WVR5	S E G T L R G T A R Y Q G E P T R G G L A E L C A G G R L A I T T I			
UniRef90_A0A017CK23	H L G E V R A L A D Y E T D P R F G E A T D S S T V L A A L V N P V L F I T N I			
UniRef90_UP10003B4BC89	K G G E M R G Y L R F D A D K V A E M P A E P S L F A L F G K G Y L A I T F			
UniRef90_UP100026CC5C4	K G G E L R G Y V Q Y D A E R L A A G P E N P S L F A L F G T G Y L A I T F			
UniRef90_UP1000364E5EC	S H G F V R G L A N W V G D W T T L T T T A N D A F A K L G N T G E G V L F I N I			
UniRef90_UP10003B43BFA	R A G E L R G Y M K Y D D Q I P V L E G M S L P E L F G K G Y L A I T I D			
UniRef90_UP1000360C48E	R G G E M R G Y L R F D A D R M A E A P A T P S L F A L F G K G Y L A I T F D			
UniRef90_V8A6M4	D A G E L R F Y L R S P D T L E T G S A R S L L G E G Y F A F T I			
UniRef90_F5STL6	Q S G G I L I R A L A S W K Q Q Q A W A N K T S A D D A F A E L L G G K G V M F I N I			
UniRef90_V4YP69	P D F A V R A T A S L H G E V S E Q D Q F S D M V N V N N A G R C A I T L			
UniRef90_Q1QDY6	Q N G G I L I R A L A S W E H V Q A W N N M L H A K E A F A I L G G Q G V L F I N I			
UniRef90_UP100047E36E9	N D K I R S Y A Q H N N F D S R E I L K M E N P I I G T V G T Q G S L L I S Q			
UniRef90_UP10004776671	D K G E L R F M A Q M S E K H P D T A K G L F G D G Y F A F T I			
UniRef90_UP10003F8AEFC	Q N G I I R A L A S W K A D N D E Q V A A W E D M T Q A N A I G Q Q G V L F I N I			
UniRef90_UP100040DE745	A D L R L R A T A S V S G A V A A A D A D L A A L A N P G G K G R C A I T L			
UniRef90_L7VVK7	S D L R L R V T A T V V G E V P A G A S L S Q L V N L G N Q G R C A I T L			
UniRef90_UP10003B6E106	G G E L R R G Y V R H D R A R L D E L G P H P S L H A L F G D G Y L A I T F			
UniRef90_N0AYJ7	A P G R L R G Y A R Y D E A K L N V A N T Q G M D L G T G H L A L T L D			
UniRef90_F0RUX5	A V G A V R G Y L K H N P I P L K E S L K S L D L N E L Y G P G F I S V S K I			
UniRef90_C7JEP5	N T G A L R F Y A R T D D E A L A L L E E T P K P T D R E L L G N G Y M A L T V			
UniRef90_S3JXW2	S R G G S V R G Y L Q N P I P I T A P L E S W D L A P F F G N G T L L S V T R			
UniRef90_T0GP39	K G G E V R G Y A K F D A D R L A E L G P D P T L F G L F G K G Y L A I T F			
UniRef90_A3ZAW4	R D G T V R G Y V G N P Q L E D P I A D G E G H Y F A A A G T G Y L H V V R			
UniRef90_F6D9A1	D E L L Y L R G V V A K T Q A P L T D L I G A H A L F G D G Q I L V T L E			
UniRef90_B0U2V2	T S G T L R G T V H M A E D I S H S E A P T C L R E L D H N A L L A I T V			
UniRef90_UP1000376D51B	P S L L G L R A T A S I V G E V S D T A D M T E L V N Q H G Q G Q C A I T L			
UniRef90_W8WVM2	S T L L D L R A T A H L R D D A A P P A D A T L Q D L L N A D G Q G R F M V M L			
UniRef90_UP10002D7844F	D T G S L R G Y A R I S E G D I P R D I P R D I P T G E A L L G K G Y L A F T C			
UniRef90_A9HFT1	H A G A L R F H A R S D A E Q V A A L A A S E P D A D A A L L G A G Y L A F T V			
UniRef90_D5BMT4	E T G A M R G Y T A F D D E S A L V M P A Q G I S N L P Q I M G G G Y M A F T V			
UniRef90_Q092R9	S S G L V R G Y S K N P Y V A H V G A E G R Y R W R P V L G N K G Y I S V L R			
UniRef90_G6A0K8	S E G H I R S Y A A F D D Q L T D Q Y L P T A P V A L P R L M G S G Y V A F T V			
UniRef90_UP10003B6DEBA	S T G Y V R S Y L E N E H I K I D K P L E N W N L K P F L G V G N I T F S R I V			
UniRef90_I0X641	S T G Y V R G Y L Y N E H I K I D K P L E N W D L K P F L G V G N L T V S R V			
UniRef90_A0A013VH96	K N G D L R G Y A K F D A D R L A E L G P D P T L F G L F G K G Y L A I T F			
UniRef90_R5EF88	Q D L S F Y G S A S L N E S I A I E D N A S L G E L C G K D S V L V L S V			
UniRef90_F8J4U7	A S G K L R G Y A R Y D A E K L K V F T Q G A T S D I A A A F G D G H L A I T L			
UniRef90_H9UGZ4	V L G E I R G Y L Q N S E Q D I P A D I A T T G P S H D G L G S G T L L S V T R F			
UniRef90_R5PZC7	P G Y A F R V M V E L A A G T D P L D P N A K L K D L V N V S G R G R C A F I L			
UniRef90_A0A058T080	N Q Q M R G V A R V Q G D I P D N A D L K T L V G N G Y L V I T L			
UniRef90_W4QKTO	A K G N V R G Y L N G E F L K A P A D Y I N Q I S L D R L I G H K G T I R V I K			
UniRef90_B5Y5I8	G T G Q V R G Y V G S P G L G E M S L T D A V G K G S V Q I V K N			
UniRef90_R1E126	G K L E S R G Y V G N P A V T L P P T G A G K L D V G G V G K G S L Q V V K H			
UniRef90_UP100037679D7	P D L S L R V T A T L V G E V P E E A R L S E M V N V H N K G R C A I T L			
UniRef90_UP1000471E821	E D K I R S F I Q N A D F D P T K I I D L E D P F S A A L G Q D G I M V V G Q			
UniRef90_W0DES9	G M G R V R G F I G K G D P E G E E T			
UniRef90_G2S071	N N Q R T Y V Q N R D F N P T I N I V D K D P I K A I A G N N G F L I V K R			
UniRef90_W1EVF5	N N Q M R G V A R V Q G E I P E N A D L K T L V G N G Y V V I T L			
UniRef90_F0YCN6	G A L E T R G Y V V G N P K V A L D G G V K S G V G A G Q L Q V V R L K N			
UniRef90_A7HHY0	T E G N V R G Y V V R R P D V H F P G D P A R G A R A A L G G A G F L S V L R			
UniRef90_B8BYA1	G K G E A R G F V G N P S L G D D F T L R E A V G T G T V Q V V K N			
UniRef90_S9QLW6	A P A R I R A Y A S F D R D Q I T E A P A F E Q L Q E G Y F A I L I I			
UniRef90_H1CYU7	E G R Y V R G F I E N P D D T L P Y T S A E E A K W V S R R G K U F V T R			
UniRef90_UP100046609E4	A A G T L R R G I V Q L A D G V D A P T D L R E L G D A A L L A I T I I			
UniRef90_UP10003651F2B	H G L R V R G M A K A R A D A S G D F T A L L H G G R L G L L I E			
UniRef90_W1Y119	A D N T V R G Y V D E P H V D V P L K R A G K L D V G A A V G H N G E V Q V T R			
UniRef90_D3SMY1	G K G R V R G F I E G Q V T G Y W K G D L T			
UniRef90_I7ZBL1	H H L N V R T M A K G P A D L S G G F T E L L Y G G I L A L M E			
UniRef90_U5PFA0	N N K V R A Y A Q V K D F D I E P K L S N N P V Y A T I G T E G Q L L N S R			
UniRef90_W3AGP9	A N G N V R G Y L N K E L L R S S D T E E K S M Q D L I G P S G M I R V I K			
UniRef90_UP100018167BC	S D L S M R A T A K L V D S A Q I A D D A T L A S M V N V H G H G R F A I T L			
UniRef90_UP1000378F95B	M T V I K			

130      140      150      160

UniRef90_A0A016QKV5	L L D N G E P Y T G S V   R L S S G E I   A E D V S T Y   L G V S E Q   I   P N A V   L L G	E R E G G Q N Y Q G I   V A L E S D T L   A G A L Q N Y F L Q S E Q   Q L   H T R F W L T		
UniRef90_A0Z4T1	D I G L K E P Y V G Q T Q L V S G E I   A E D L T Y Y F A T S E Q   V   P T S V A L G	D P G Q G E R Y Q G I V E I K H K N I   A D A V H A Y F R M S E Q   E S A V R F A		
UniRef90_R5JU3	D P G Q G E R Y Q G I V E I K H K N I   A D A V H A Y F R M S E Q   V   P T S V A L G	D P G Q G E R Y Q G I V E I K H K N I   A D A V H A Y F R M S E Q   V   P T S V A L G		
UniRef90_I3TG11	N R N W K Q P Y T G T V P   I Y S G E I   A E D I A H Y   L A D S E Q   Q M N T A L G   Q	D P K D K Q P Y Q G V V P   L H G D R L S E V L E H Y M L Q S E Q   L D T T L V L A		
UniRef90_M2BPJ0	D P K D K Q P Y Q G V V P   L H G D R L S E V L E H Y M L Q S E Q   L D T T L V L A	D P E R G G R Y Q G I V P   L E G E T L   G E A C E T Y F V Q S E Q   V   P T L V R V A		
UniRef90_A9RG79	D Q G Q G T P Y Q G I T P   L A G G S L S A C A Q T Y F A Q S E Q   Q L   P T R F S L A	D P K D K Q P Y Q G V V P   L D E S M A A I L Q Q Y M R Q S E Q   Q L   D T V M V L A		
UniRef90_F5Y3M9	H S T W S E P Y Y R G I T E I Q T G E I   G D D V L H Y L V R S E Q   V   P T L I R V A	D M D E R G R Y Q G I V P   L E G E S L S H A C E T Y F A Q S E Q   V   P T L I R V A		
UniRef90_UP1000225E6E7	M P S M R E P Y Q S I V P   I V G D S I   A E V F E Q Y   L G Q S V Q   P A R I F L A	D P K G R Q P Y Q G V V P   L S D A Q L S D A L Q H Y M L Q S E Q   L D T V I V L A		
UniRef90_UP1000395C91B	D Q A T G E R Y Q G I V P   L E G E S S I   G H A A E H Y F E Q S E Q   Q L   P S L I S L A	D Q G P M E R H Q G I V V D L   A G G D L A A M A T H Y F K T S E Q   H A C W		
UniRef90_UP10003B7B9AE	D P Q T R Q P Y Q G G V V P   L V G D K L S D V L E H Y M L Q S E Q   L D T T L V L A	D Q G P R E P H Q G I V V D L   A G G D L A A M A L H Y F Q T S E Q   M Q C H V Q L A S		
UniRef90_D0J2A5	Q S N T T Q S Y Q G I V E R V A D N L   A D C L T H Y Q Q Q S V Q   P T L I N L A	D L G M N S I F T Q J I T E M L Y G N I   V D D F S Y Y F K Q S E Q   L P S L F S L N		
UniRef90_M1VLC0	D P R E P Q Y Q G V V P   L T G D S L A S S L D S Y F S Q S E Q   L Q T R L H L S	D P R E P Q Y Q G V V P   L T G D S L A S S L D S Y F S Q S E Q   L Q T R L H L S		
UniRef90_Q2N614	D L G G G E Q Y R S A V E L E S F D L G R D L E R Y F R I S D Q   P T R V Y L S	D P R D K L P Y Q G I V V P   L D G D T V A T V I E N Y M L R S S E Q   L D T T L V L A		
UniRef90_A0A011MKG3	D Q G Y T Q R Y Q G I V V P   L D G S T L E E A V T Y F R Q S E Q   P T D L K L S	D P K R G G R Y Q G I V P   L E G E S L A A A C E C S Y F L Q S S Q   P T L V R V A		
UniRef90_UP100040AE4E2	D Q G P R E P H Q G I V V D L   A G G D L A A M A L H Y F Q T S E Q   M Q C H V Q L A S	D Q G P R E P H Q G I V V D L   A G G D L A A M A L H Y F Q T S E Q   M Q C H V Q L A S		
UniRef90_Q1GTF1	T P E R G K Q Y Q G I V V P   L T G D S L A S S L D S Y F S Q S E Q   L Q T R L H L S	D Q G P R E P H Q G I V V D L   A G G D L A A M A L H Y F Q T S E Q   M Q C H V Q L A S		
UniRef90_UP10004701F32	D L G M N S I F T Q J I T E M L Y G N I   V D D F S Y Y F K Q S E Q   L Q T R L H L S	D Q G P R E P H Q G I V V D L   A G G D L A A M A L H Y F Q T S E Q   M Q C H V Q L A S		
UniRef90_Q21V35	D P Q T R Q P Y Q G G V V P   L V G D K L S D V L E H Y M L Q S E Q   L D T T L V L A	D Q G P R E P H Q G I V V D L   A G G D L A A M A L H Y F Q T S E Q   M Q C H V Q L A S		
UniRef90_L2F6M5	D Q G D K D P S Q G I V V A I E G E S L T E M A E Y Y F S T S E Q   L P A R I F L A	D Q G D K D P S Q G I V V A I E G E S L T E M A E Y Y F S T S E Q   L P A R I F L A		
UniRef90_U2EKA4	E P E E G Q R Y Q G G V V G   L D D A G L A A T L E G Y F R D S S E Q   L P T R I V L A	E P E E G Q R Y Q G G V V G   L D D A G L A A T L E G Y F R D S S E Q   L P T R I V L A		
UniRef90_G7UPU7	E P E H G E R Y Q G I V V P   L Y Q A N L A G C L M Q Y Y D L S A Q   P T R I V L A	E P E H G E R Y Q G I V V P   L Y Q A N L A G C L M Q Y Y D L S A Q   P T R I V L A		
UniRef90_N7PNW0	D Q A T G E R Y Q G I V V P   L D G G S L S E A A E H Y F L Q S S E Q   P T L V R V A	D Q A T G E R Y Q G I V V P   L D G G S L S E A A E H Y F L Q S S E Q   P T L V R V A		
UniRef90_UP10001DD08B2	D Q P D Q A E G Y Q G G I V E R V A D N L   A A C C L A H Y Q Q Q S V Q   P T L I N L A	D Q P D Q A E G Y Q G G I V E R V A D N L   A A C C L A H Y Q Q Q S V Q   P T L I N L A		
UniRef90_Q0BPT5	Q V S S E E R W Q G I V P   L E G H S L A G A L E G W F S Q S S E Q   L P S L V R V A	Q V S S E E R W Q G I V P   L E G H S L A G A L E G W F S Q S S E Q   L P S L V R V A		
UniRef90_A4A918	Q A S S G E R Y Q G I V P   L E G G S L A Q A A E H Y F A Q S S E Q   P S L V R V A	Q A S S G E R Y Q G I V P   L E G G S L A Q A A E H Y F A Q S S E Q   P S L V R V A		
UniRef90_S9QGU7	D Q G H T E R H Q G I V A L E G E T L A D M A M H Y F A T S S E Q   H Q C W M R L Y	D Q G H T E R H Q G I V A L E G E T L A D M A M H Y F A T S S E Q   H Q C W M R L Y		
UniRef90_J3HWA1	Q P A K G E A Y Q G G I V E R S H D N L   A E C C L A H Y Q L Q S S A Q   P T L I N L A	Q P A K G E A Y Q G G I V E R S H D N L   A E C C L A H Y Q L Q S S A Q   P T L I N L A		
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UniRef90_V8A6M4	D Q G H T E R H Q G I V A L E G E T L A D M A M H Y F A T S S E Q   H Q C W M R L Y	D Q G H T E R H Q G I V A L E G E T L A D M A M H Y F A T S S E Q   H Q C W M R L Y		
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UniRef90_UP10004DE745	UniRef90_L7VVK7	D P R T R Q P Y Q G G V V P   L Y D D S L S E V L Q H Y M L Q S S E Q   L A S T L V L A	D P R T R Q P Y Q G G V V P   L Y D D S L S E V L Q H Y M L Q S S E Q   L A S T L V L A	
UniRef90_UP10003B6E106	UniRef90_U0AYJ7	D P K D R L P Y Q G G V V P   L F L G D R L S E V L E H Y M L Q S S E Q   L D T T L V L A	D P K D R L P Y Q G G V V P   L F L G D R L S E V L E H Y M L Q S S E Q   L D T T L V L A	
UniRef90_U0AYJ7	UniRef90_F0RUX5	D L S S D Q R Y Q G G I V P   L E G D C L A R A C E S Y F F Q S S E Q   L V P T L I R V G	D L S S D Q R Y Q G G I V P   L E G D C L A R A C E S Y F F Q S S E Q   L V P T L I R V G	
UniRef90_F0RUX5	UniRef90_C7JEP5	S G P G E E R Y Q G G I V P   L A F E N A P   Q A T A A A Y F E Q R E G E G L   P T F I R I A	S G P G E E R Y Q G G I V P   L A F E N A P   Q A T A A A Y F E Q R E G E G L   P T F I R I A	
UniRef90_C7JEP5	UniRef90_S3JXW2	L E G H K S P F T G Q T M M A Y G D L A K D L A L H Y Q Q S S E Q   T P S M F M L S	L E G H K S P F T G Q T M M A Y G D L A K D L A L H Y Q Q S S E Q   T P S M F M L S	
UniRef90_S3JXW2	UniRef90_T0GP39	D Q G P M D R H Q G I V V E I I A G D D L S A M A M H Y F A S S E Q   Q H A C W I M L A	D Q G P M D R H Q G I V V E I I A G D D L S A M A M H Y F A S S E Q   Q H A C W I M L A	
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UniRef90_A3ZAW4	UniRef90_F6D9A1	D E G K G E P F S S T V E L V R G G I G E D V A S Y F L L H   T P S A V V F V G	D E G K G E P F S S T V E L V R G G I G E D V A S Y F L L H   T P S A V V F V G	
UniRef90_F6D9A1	UniRef90_B0U2V2	N R Q T D H F Y Q S Y V I A R E S D D L V V D L Q Q G F L T Q S S E Q   Q L Y T A F N T S	N R Q T D H F Y Q S Y V I A R E S D D L V V D L Q Q G F L T Q S S E Q   Q L Y T A F N T S	
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UniRef90_UP1000376D51B	UniRef90_W8WVM2	D P R D R Q P Y Q G G V V P   L K D S R V A D M L R H Y M R Q S S E Q   L D T T L V L A	D P R D R Q P Y Q G G V V P   L K D S R V A D M L R H Y M R Q S S E Q   L D T T L V L A	
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UniRef90_R5EF88	UniRef90_F8J4U7	D S G P G E R Y Q G G I V V A F E H A P   L S G T V A A Y F Q Q R E N L P T F I R S A	D S G P G E R Y Q G G I V V A F E H A P   L S G T V A A Y F Q Q R E N L P T F I R S A	
UniRef90_F8J4U7	UniRef90_H9UGZ4	P E G A R E P A T S T V A F A D T G L D Q V F E S F Y L Q S S E Q   V P T R I W T S	P E G A R E P A T S T V A F A D T G L D Q V F E S F Y L Q S S E Q   V P T R I W T S	
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UniRef90_R5PZC7	UniRef90_A0A058T080	T K P L P P P	T K P L P P P	
UniRef90_A0A058T080	UniRef90_W4QKTO	G S A M N Q F T G I T D M P Y R N I   A D D I S H Y F N Q S S E Q   I Q T Y I E A N	G S A M N Q F T G I T D M P Y R N I   A D D I S H Y F N Q S S E Q   I Q T Y I E A N	
UniRef90_W4QKTO	UniRef90_B5Y5I8	H P D W P R P Y N G I T A I R H G D I   D R D I G O L A E S E Q   Q R S C A L A A A A G	H P D W P R P Y N G I T A I R H G D I   D R D I G O L A E S E Q   Q R S C A L A A A A G	
UniRef90_B5Y5I8	UniRef90_R1E126	H P D W P R P Y N G I T A I R H G D I   D R D I G O L A E S E Q   Q R S C A L A A A A G	H P D W P R P Y N G I T A I R H G D I   D R D I G O L A E S E Q   Q R S C A L A A A A G	
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UniRef90_UP1000471E821	UniRef90_W0DES9	Y L Q N Y E P H I S T V N L T G G I   I D A N F M E Y L R A S N Q V R S L I M T R	Y L Q N Y E P H I S T V N L T G G I   I D A N F M E Y L R A S N Q V R S L I M T R	
UniRef90_W0DES9	UniRef90_G2S071	E L L R M G T P Y T S I I P V V S K S I R E N L L Y Y F E Q S S E Q   Q I K T A L D L G	E L L R M G T P Y T S I I P V V S K S I R E N L L Y Y F E Q S S E Q   Q I K T A L D L G	
UniRef90_G2S071	UniRef90_W1EVF5	D L G L K E P Y V S N I E I F G N I V D Y D F T K Y W T K S S Q T N S F I V T E	D L G L K E P Y V S N I E I F G N I V D Y D F T K Y W T K S S Q T N S F I V T E	
UniRef90_W1EVF5	UniRef90_F0YCN6	T P S E G E R Y Q G V V G G I E D G D T L A A C C L E D Y F M R S E Q   L P T R	T P S E G E R Y Q G V V G G I E D G D T L A A C C L E D Y F M R S E Q   L P T R	
UniRef90_F0YCN6	UniRef90_A7HHY0	L P G E E E P Y S S V V E I T S G E I A E D I N Y Y V A T S E Q   Q R E G A L S A G	L P G E E E P Y S S V V E I T S G E I A E D I N Y Y V A T S E Q   Q R E G A L S A G	
UniRef90_A7HHY0	UniRef90_B8BYA1	Q L G D G Q H Y R S A V E L R A A D L A E D L R R W F A A S E Q   Q V A T A L D L A	Q L G D G Q H Y R S A V E L R A A D L A E D L R R W F A A S E Q   Q V A T A L D L A	
UniRef90_B8BYA1	UniRef90_S9QLW6	H P D W P R P Y N G I T A I R H G D I   D R D V G G Y L A E S E Q   Q R S C A L A A A A G	H P D W P R P Y N G I T A I R H G D I   D R D V G G Y L A E S E Q   Q R S C A L A A A A G	
UniRef90_S9QLW6	UniRef90_H1CYU7	D Q G R G T P Y Q G I T P L A G G S S I A D C A Q A Y F A Q S E Q   Q I A T R F A L G	D Q G R G T P Y Q G I T P L A G G S S I A D C A Q A Y F A Q S E Q   Q I A T R F A L G	
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UniRef90_UP10003651F2B	UniRef90_W1Y119	P E N G G Q D Y Q A I V G I E G E R L A D A L E H Y F A Q S E Q   L P S L L R L A	P E N G G Q D Y Q A I V G I E G E R L A D A L E H Y F A Q S E Q   L P S L L R L A	
UniRef90_W1Y119	UniRef90_D3SMY1	E L R L G V P Y T S I V P V G N S V K D T L Q Y Y F H Q S S E Q   I K T V V D M A	E L R L G V P Y T S I V P V G N S V K D T L Q Y Y F H Q S S E Q   I K T V V D M A	
UniRef90_D3SMY1	UniRef90_I7ZBL1	P N A D N V P S Q A I V L I E G E S L S Q A L E G Y F T R S S E Q   Q L P T L L R L A	P N A D N V P S Q A I V L I E G E S L S Q A L E G Y F T R S S E Q   Q L P T L L R L A	
UniRef90_I7ZBL1	UniRef90_U5PFA0	D M G L K E P Y I S T I N T D S P N M D H I W M D F L R D S S E Q   L D T L V L A	D M G L K E P Y I S T I N T D S P N M D H I W M D F L R D S S E Q   L D T L V L A	
UniRef90_U5PFA0	UniRef90_W3AGP9	G S E M N Q F T S I T D M P N Q H I T D A I N Y F V Q S S E Q   L P T Y L Y S D	G S E M N Q F T S I T D M P N Q H I T D A I N Y F V Q S S E Q   L P T Y L Y S D	
UniRef90_W3AGP9	UniRef90_UP100018167BC	D P Q D K Q P Y Q G V V P   L S D E S M T A V L E H Y M Q T S S E Q   L D T R L W L A	D P Q D K Q P Y Q G V V P   L S D E S M T A V L E H Y M Q T S S E Q   L D T R L W L A	
UniRef90_UP100018167BC	UniRef90_UP1000378F95B	D I G L K E P Y I G T V E L Q T G E I G E D I A Y Y F Y A S E Q   Q V P S A V G V G	D I G L K E P Y I G T V E L Q T G E I G E D I A Y Y F Y A S E Q   Q V P S A V G V G	

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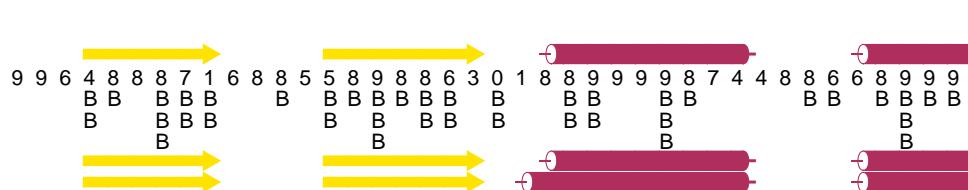
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UniRef90_UPI000471E821	Y S Q I L S L G K R P E E F L E E L I G D M P R I V G L K E I I E Y	UniRef90_W0DES9
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UniRef90_G2S071	I K T E E L L T L P A N E V L W R R L Y H E E V T V Y D P Q D V E F	UniRef90_W1EVF5
UniRef90_W1EVF5	T T S V L V K A G N T C E A V L R	UniRef90_F0YCN6
UniRef90_F0YCN6	P A A L A R G A S A Q E V I A E V G G A G F E L L A D V E V A Y	UniRef90_A7HHY0
UniRef90_A7HHY0	M T N L L L D G K T P L D I A S V L L	UniRef90_B8BYA1
UniRef90_B8BYA1	UniRef90_S9QLW6	
UniRef90_S9QLW6	F D E S G K E A S L S T L L H K E N Y V L L G S A P V S F	UniRef90_H1CYU7
UniRef90_H1CYU7	L G E D E L A R T P G L T I L R R L F N E D V R V F D P Q P V R	UniRef90_UPI00046609E4
UniRef90_UPI00046609E4	L E K F L E E G K R P E D I A T E V L G D E P R L V G L K E V E Y	UniRef90_UPI0003651F2B
UniRef90_UPI0003651F2B	L G D D E L L D T D G E T I L R R L F A E D V R S F E P R S V E	UniRef90_W1Y119
UniRef90_W1Y119	I C E V L M K S T N Y N Q V I K E I F E D A V I L E S K Q I I F	UniRef90_D3SMY1
UniRef90_D3SMY1	I F S K L E E A S D S E E A L T Q L F G D	UniRef90_I7ZBL1
UniRef90_I7ZBL1	UniRef90_U5PFA0	
UniRef90_U5PFA0	UniRef90_W3AGP9	
UniRef90_W3AGP9	UniRef90_UPI00018167BC	
UniRef90_UPI00018167BC	V T E L L R N G Y L P E D I L N H I L G E M L N L L E R V D L K Y	UniRef90_UPI000378F95B

The figure displays a multiple sequence alignment of UniRef90 entries. The sequences are aligned horizontally, with each entry's name listed vertically on the left. Above the alignment, numerical labels indicate positions 10, 20, 30, and 40. Each position is represented by a box containing a letter, where different colors (black, red, blue, yellow) likely represent different amino acids or states. The alignment shows varying degrees of conservation across the 40 positions for each entry.



	L	L	A	E	N	S	I	A	S	I	F	L	S	A	G	L	K	F	A	G	T	V	S	Y	T	T	T	F	G	G	E	I	T	K	I	Q	T	D	S	T		
UniRef90_Q9RKY8	L	L	G	E	A	V	V	A	A	L	F	A	N	H	T	K	V	N	G	R	L	S	V	T	L	H	S	K	T	A	L	R	T	L	C	E	T					
UniRef90_Q9PCR4	L	L	G	E	A	V	V	A	A	L	F	A	N	H	T	K	V	N	G	R	L	S	V	T	L	H	S	K	T	A	L	R	T	L	C	E	T					
UniRef90_R5T6D9	L	V	G	K	I	L	A	G	T	S	V	L	A	T	D	F	K	N	H	E	G	I	S	I	L	W	Q	T	N	S	I	L	G	S	I	H	T	D	A	Y		
UniRef90_T0ZWE2	M	L	G	E	A	L	A	A	S	A	L	L	T	A	H	V	K	Q	G	A	L	S	L	E	F	K	S	A	G	A	R	L	L	F	T	E	C	T				
UniRef90_E4L8N5	L	L	S	K	V	F	L	N	T	V	L	L	A	K	D	F	K	N	K	E	S	I	S	L	Q	W	Q	T	N	S	P	L	G	I	I	F	A	D	A	Y		
UniRef90_F5TA88	E	M	G	K	V	L	T	M	N	A	L	L	Y	S	D	L	K	N	D	S	I	D	L	K	L	K	T	N	G	E	C	G	L	I	I	I	S	K	L	Y		
UniRef90_UP10002624B67	L	L	G	E	A	L	V	G	L	A	L	L	T	T	Q	K	N	Y	E	R	L	L	I	Q	A	Q	S	K	G	P	L	K	L	V	A	E	M	T				
UniRef90_G7QH36	L	L	A	R	T	M	I	G	A	F	F	L	A	D	Q	I	K	E	D	T	K	V	S	L	Q	I	Q	F	D	S	S	I	H	S	V	L	A	Y	S	D		
UniRef90_I0XV00	L	L	A	R	T	M	I	G	A	F	F	L	A	D	Q	I	K	E	D	T	K	V	S	V	Q	I	R	F	D	S	E	I	H	S	V	L	A	Y	S	D		
UniRef90_R715H7	L	L	A	R	T	M	L	A	A	F	F	L	A	D	Q	I	K	E	D	T	K	V	S	V	Q	I	R	F	D	S	E	I	H	S	V	L	A	Y	S	D		
UniRef90_D87TM4	V	L	G	N	A	M	M	G	S	V	L	L	S	S	I	F	P	D	A	N	A	I	T	L	S	T	V	C	D	G	R	L	G	F	V	H	A	T				
UniRef90_A9GL46	R	L	G	E	L	L	T	G	A	I	L	V	R	E	A	M	A	P	T	L	R	V	Q	V	I	V	K	G	A	G	Q	G	S	L	V	A	D	A	H			
UniRef90_W1WBQ3	I	L	G	K	L	F	A	G	T	V	V	L	A	T	D	F	K	N	E	G	I	S	L	L	W	K	T	N	T	S	L	G	N	I	H	V	D	A	Y			
UniRef90_A0A017SZZ8	I	I	G	K	I	L	A	A	T	A	A	L	L	A	T	D	F	K	N	H	E	G	I	I	S	L	K	W	V	T	H	S	P	L	G	I	I	R	A	D	A	Y
UniRef90_R7PRV1	M	F	S	Q	M	L	L	G	T	V	M	L	L	S	I	N	K	S	G	V	R	Q	V	L	Q	L	D	A	G	D	P	I	Q	R	M	L	G	E	V	R		
UniRef90_R7CU17	L	W	G	E	Y	M	A	G	T	A	M	L	S	S	F	F	K	G	E	R	V	K	M	M	V	K	T	P	N	I	Q	E	L	Y	V	E	A	M				
UniRef90_UP100036D43EB	L	L	G	K	L	M	G	S	V	S	M	C	A	S	F	L	S	D	E	R	I	S	A	Q	I	I	S	D	N	I	N	P	T	H	I	Y	A	E	A	M		
UniRef90_V9FZ68	L	V	A	E	T	A	L	L	A	A	L	I	G	P	T	I	K	L	R	W	K	L	S	L	Q	I	R	G	D	G	P	A	R	I	V	A	A	D	Y			
UniRef90_Q55Q88	V	L	A	S	A	I	N	V	F	G	P	L	S	Y	L	I	K	E	E	G	F	S	I	K	I	F	S	K	N	L	E	S	L	V	I	E	T	N				
UniRef90_A0A017HLJ5	L	W	G	E	Y	M	A	G	T	T	M	L	S	S	F	F	K	G	E	R	V	K	V	V	V	K	T	S	S	V	Q	E	L	Y	V	E	A	M				
UniRef90_E4QSG0	L	L	G	Q	S	L	L	A	A	I	L	L	S	I	S	K	G	G	M	R	Q	V	L	Q	L	D	S	T	S	P	W	Q	R	V	L	T	E	S	R			
UniRef90_M4BM72	I	L	S	S	A	I	A	T	F	G	S	I	L	G	F	I	L	T	K	D	G	E	V	K	I	S	Y	V	S	K	Q	L	G	S	V	I	D	V	I	G		
UniRef90_F8UHJ2	I	I	A	G	A	I	N	V	F	G	P	L	S	Y	L	I	K	E	E	G	F	S	I	K	I	F	S	K	N	L	E	S	L	V	I	E	T	N				
UniRef90_Q0EY76	L	F	G	Q	S	L	L	A	A	I	L	L	S	I	S	K	G	G	M	R	Q	V	L	Q	L	D	S	T	S	P	W	Q	R	V	L	T	E	S	R			
UniRef90_Q98QQ4	I	L	S	S	A	I	A	T	F	G	S	I	L	G	F	I	L	T	K	D	G	E	V	K	I	S	Y	V	S	K	Q	L	G	S	V	I	D	V	I	G		
UniRef90_N9QYQ5	I	I	A	G	A	I	N	V	F	G	P	L	S	R	L	I	K	N	K	G	F	S	V	K	I	S	S	N	L	D	S	L	I	V	E	T	N					
UniRef90_A0A024GG44	L	W	G	Q	Y	M	A	G	T	A	M	L	G	S	F	C	K	G	E	R	I	R	L	T	L	R	S	S	D	V	S	D	L	Y	V	E	A	M				
UniRef90_M3ISC5	L	L	G	N	C	F	S	T	S	L	M	I	S	S	L	L	K	G	E	R	I	K	A	V	S	F	D	D	Q	D	K	N	F	Y	A	E	S	M				
UniRef90_W7XIE4	L	L	G	Q	Y	M	S	G	A	M	L	S	S	F	F	K	G	E	R	V	A	M	R	L	H	T	D	G	Y	V	E	S	M	S	V							
UniRef90_W4GY10	L	W	G	E	Y	M	S	G	A	M	L	S	S	F	F	K	G	E	R	V	A	M	R	L	H	T	D	G	Y	V	E	S	M	S	V							
UniRef90_V5WL72	L	F	I	Q	A	V	H	A	T	A	M	L	S	A	D	L	K	Q	T	V	R	M	V	L	Q	A	R	W	D	D	A	G	F	S	L	E	G					
UniRef90_D8R9Z0	I	L	G	Q	T	L	M	A	T	L	L	H	A	I	E	A	A	E	N	I	K	T	T	I	A	G	S	G	P	L	G	G	I	T	A	I	G	S				
UniRef90_T1BU77	M	L	G	E	A	L	A	A	S	A	L	L	T	A	H	I	K	L	Q	G	A	L	S	L	E	F	K	S	A	G	V	L	R	L	L	F	T	E	C			
UniRef90_I4B4H0	Q	F	S	E	M	A	V	C	A	N	L	A	G	L	F	R	D	V	H	D	L	T	E	V	T	T	D	R	F	F	R	S	L	I	V	E	S	T				
UniRef90_C9ZQT1	L	V	G	T	H	L	T	F	T	N	L	I	A	A	L	Q	E	G	E	R	V	A	T	L	S	N	E	G	T	G	I	V	T	E	S	L						

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
inssm

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
ipssm

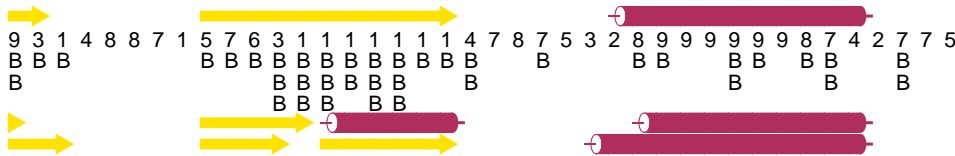
Sequence logo showing the conservation of amino acids at positions 130, 140, and 150 across UniRef90 entries. The x-axis represents positions 130, 140, and 150. The y-axis lists UniRef90 entries.

UniRef90 Entry	Position 130	Position 140	Position 150
UniRef90_Q9RKY8	V	Y	Q
UniRef90_Q9PCR4	H	C	R
UniRef90_R5T6D9	H	S	S
UniRef90_T0ZWE2	I	C	K
UniRef90_E4L8N5	A	G	F
UniRef90_F5TA88	G	D	T
UniRef90UPI0002624B67	L	F	D
UniRef90_G7QH36	G	N	I
UniRef90_I0XV00	R	E	S
UniRef90_R715H7	R	R	F
UniRef90_D8T7M4	M	S	P
UniRef90_A9GL46	R	Y	A
UniRef90_W1WBQ3	R	Y	Y
UniRef90_A0A017SZZ8	R	Y	Y
UniRef90_R7PRV1	R	Y	Y
UniRef90_R7CU17	R	Y	Y
UniRef90UPI00036D43EB	R	Y	Y
UniRef90_V9FZ68	R	Y	Y
UniRef90_Q55QQ8	R	Y	Y
UniRef90_A0A017HLJ5	R	Y	Y
UniRef90_E4QSG0	G	G	G
UniRef90_M4MB72	G	G	G
UniRef90_F8UHJ2	G	G	G
UniRef90_Q0EY76	G	G	G
UniRef90_Q98Q44	G	G	G
UniRef90_N9QYQ5	G	G	G
UniRef90_A0A024GG44	G	G	G
UniRef90_M3ISC5	G	G	G
UniRef90_W7XIE4	G	G	G
UniRef90_W4GYI0	G	G	G
UniRef90_V5WL72	G	G	G
UniRef90_D8R9Z0	G	G	G
UniRef90_T1BU77	G	G	G
UniRef90_I4B4H0	G	G	G
UniRef90_C9ZQT1	G	G	G

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
inssm

UniRef90\_C9RKY8 170 180 190 200  
 UniRef90\_Q9PCR4 A Q Y N A Q D P S F Y A A G F Y I | E A F P D L E D K D I N L I E V I V Q N L P K  
 UniRef90\_R5T6D9 A A V S P E K K I T R A A G I F A Q L L P E G N K E K F T Q Y F R N R N H L F S  
 UniRef90\_T0ZWE2 A D D G V A T G L L L Q Q I L P G G D  
 UniRef90\_E4L8N5 V D T D I N G Q I T K A S G F L I Q L L P Q G N M K K F K E I N E L Y K N Q T  
 UniRef90\_F5TA88 V K K V E D D Y I S F G F M M E L L P N Y T E K D L S Q F  
 UniRef90\_UP10002624B67 A D P Q R Q Q A G G Y F L L Q R L P G V L A A E D W E L A T Q F I A I G S  
 UniRef90\_G7QH36 I R K N G F H W D V R G L L Q S I L P E A K E E H I Q K I A S L S E K I D N  
 UniRef90\_I0XV00 A Y V K Q E G L H W R I K G L F I L Q A L P E A R P E H I D A V R E L A G K L E E  
 UniRef90\_R715H7 S D A T A A S G L M L Q K V A A D P D F D P E D W N R V Q K L A E T  
 UniRef90\_D8T7M4 M K F D E H N I V K T A R G F I I Q V Y P L S E K L A C H Q L R E N I E N S P S  
 UniRef90\_A9GL46 T L I G A D G V G A S G G Y L V Q L L P E V E R G P L M V M T E R L K D F E R  
 UniRef90\_W1WBQ3 V L V D P D Y H T V V V A G G F I V Q A L P D A T D E A L A Q V E K N I N E L G P  
 UniRef90\_A0A017SZZ8 T L L D E Q G V V G R S G G G V L V Q L L P E V E R G P L M V M T E R L R E F E R  
 UniRef90\_R7PRV1 V T R D K D N K I D R V F S L L A Q L M P E G N  
 UniRef90\_R7CU17 F Q L G E D G K L E R V A C F L A Q M T P Q A N K K L Y D D  
 UniRef90\_UP100036D43EB D D D R D A L L E A M P G C S E A A W F E A I G A L A N  
 UniRef90\_V9FZ68 S E A D E D H T R S C G L I V Q K M P E A H E R H Y E L D D L A F D K L P F  
 UniRef90\_Q550Q8 T R V I D N D Q L E F N G G L I Q T L P S T T D E E L V Q L K N N E K H S I  
 UniRef90\_A0A017HLJ5 I E I D Q N L K I T K A Q S L I I Q L L P N Y S E S E I Q E V E S W L K N  
 UniRef90\_E4QSG0 I D S E A D R D H T R T C G L I V Q Q M P K A E E R H Y E L D E L A F D K L P F  
 UniRef90\_M4BM72 A D A R R S V G L L L Q K L P D S D E P R D A D G W N R I Q H L G T  
 UniRef90\_F8UHJ2 G D L A I M I E A M P G C D E E S W F K A V E T M A K I P D  
 UniRef90\_Q0EY76 I K F D E K N N L T K A T S I I M Q L L P N H K E E D I I F I E K F W K E N N  
 UniRef90\_Q98QQ4 I K F G P N L K I I K A Q S L I I Q L L P N H S E N E I I A E I Q K W L K  
 UniRef90\_N9QYQ5 S D G M N C C G I T I Q E L P D D R A K E I I D  
 UniRef90\_A0A024GG44 I R K N G F H W D V R G L L L Q S I L P E A K E E H I Q K I A S L S E K I D N  
 UniRef90\_M3ISC5 T K S K D S K V E R S F G Y M L Q K M P E A Q E A Y L E A L H E D I I N S E I  
 UniRef90\_W7XIE4 T T A T N D D A V V C C G V T I Q E M P N A T V P L L D R  
 UniRef90\_W4GYI0  
 UniRef90\_V5WL72  
 UniRef90\_D8R9Z0  
 UniRef90\_T1BU77  
 UniRef90\_I4B4H0  
 UniRef90\_C9ZQT1 T C P D P E R G V I A S F G L L I E A L P G V S D N K K F V I T D N L E R L E S

lupas\_21  
 lupas\_14  
 lupas\_28  
 jnet  
 conf  
 sol25  
 sol5  
 sol0  
 jhmm  
 jpssm



Sequence alignment of UniRef90 proteins showing conservation across various species. The alignment highlights identical residues with black boxes and similar residues with blue boxes. A yellow box highlights a conserved residue at position 210.

UniRef90 ID	Sequence
UniRef90_C9RKY8	F C D M A D K G F D L D E L L D Q L R G E V V R E L D P K P
UniRef90_Q9PCR4	K E G L F Q G H E L E T L I K E
UniRef90_R5T6D9	G G F S I I K E A P V A F
UniRef90_T0ZWE2	L D E L I K K E
UniRef90_E4L8N5	D Q S L L Q A K P E Q F L P E I F P D S V R L H T P Q A L F F
UniRef90_F5TA88	I N D F L G K D V Y S C L N K I G E S V Q I L E E G Q P E F F
UniRef90_UP10002624B67	E K S K I Y E G T Q A L E I L Q S S W N T K F E I L E T G R P E Y
UniRef90_G7QH36	V T P D E Q L K L E P R E V L K R L F W E N P Q M G T P K A P K F
UniRef90_I0XV00	L A D L D D T D A R D I I E K L L H E P G S F S Q R D L K F
UniRef90_R715H7	L D D V L A E G A S A D V L L E L L Y G M P F S R L E D S P L S F
UniRef90_D8T7M4	I T E Y L K A N P D G K G L M E R V L G L T V N E V Y N E P I H F
UniRef90_A9GL46	L D E V L D P Q V T A D K L L E E L Y G M P F T R L E S S A L S Y
UniRef90_W1WBQ3	V D M S L L G D G E A S G L D E A F A P L E L R V L G Q D P Y R W
UniRef90_A0A017SZZ8	Y A S E L K K N T D L L E Y L N E L A D L F L K E K K S I L E I L S L T N N D V E I I S T I F V D F
UniRef90_R7PRV1	L A T E L K R N N D L E Y L N E L V P G A E I T E K Q
UniRef90_R7CU17	L L H A D E Q L A H A P L E L L R R L F P E E L R V F A P R P V S
UniRef90_UP100036D43EB	A A L E N E A P E R L L H F N D M S I E E V E N K E A N L L E T K E V T F
UniRef90_A0A017HL5	I N D F L G K D V Y S C L N K I G E S V Q I L E E G Q P E F F
UniRef90_E4QSG0	F K Q M K Y Q Q M N V K E L L E K Q F N D D I Q L T R Y P V D F
UniRef90_M4BM72	L T Q Y F E A E K D I M D L L D D I Y P G E
UniRef90_F8UHJ2	
UniRef90_Q0YE76	
UniRef90_Q55Q08	
UniRef90_A0A017HL5	
UniRef90_E4QSG0	
UniRef90_M4BM72	
UniRef90_F8UHJ2	
UniRef90_Q0YE76	
UniRef90_Q9Q8Q4	
UniRef90_N9QYQ5	
UniRef90_A0A024GG44	
UniRef90_M3IS5C	
UniRef90_W7XIE4	
UniRef90_W4GYI0	
UniRef90_V5WL72	
UniRef90_D8R9Z0	
UniRef90_T1BU77	
UniRef90_I4B4H0	
UniRef90_C9ZQT1	

