

QUERY	M	Q Q E S R L K V A D N S G A R E V L V I K V L G G S G R Y A N G D V V	M	Q M E T M L N V A D N S G A K R V K C I V L G G G S K R R Y A G L G D V V M
UniRef90_U2TIU9	M	Q Q E S R L K V A D N S G A R E V L V I K V L G G G S K R R Y A G L G D V V	M	Q Q E T R L K V A D N S G A R S L L C I V L G G G S K R R S A G I G D I V
UniRef90_Q1AU39	M	Q Q E S R L K V A D N T G A R E L L C I V L G G G S K R R Y A S I G D I V	M	Q Q E S R L K V A D N S G A R K L M C I V L G G G S G N R R Y G G V G D V I I
UniRef90_UPI00037CCCF5A	M	Q Q E S R L K V A D N S G A R K L M C I V L G G G S K R R Y A S I G D I V	M	Q Q E S Y L N V A D N S G A R K L M C I V L G G G S G N R R Y G G V G D V I I
UniRef90_K9VYZ3	M	Q Q E S Y L N V A D N S G A R K L M C I V L G G G S G N R R Y G G V G D V I I	M	Q P Q S Y L N V A D N S G A K K I M C I V L G G G S G N R R Y A R I V G D V I I
UniRef90_F8AA47	M	Q P Q S Y L N V A D N S G A K K I M C I V L G G G S G N R R Y A R I V G D V I I	M	Q T E T R L K V A D N S G A R E L L C I R I L G G G T S R R Y A N I G D V I V
UniRef90_D1CFD6	M	Q T E T R L K V A D N T G A R E L L C I R I L G G G T S R R Y A N I G D V I V	M	Q Q E T R L N V A D N S G A K E A Q C I R V L G G S S G R R Y A G I G D Q I V
UniRef90_V1D7Y3	M	Q Q E T R L N V A D N S G A K E A Q C I R V L G G S S G R R Y A G I G D Q I V	M	Q Q E T R L N V A D N T G A K E V L T T I R V L G G G T K R R Y A S L G D K I V
UniRef90_E4U9H5	M	Q Q E T R L N V A D N T G A K E V L T T I R V L G G G S S R R Y A S L G D K I V	M	Q Q E T R L N V A D N S G A K E L L C I R V L G G G S Q R K Y A A G D V I I
UniRef90_Q2S3Q4	M	Q Q E T R L N V A D N S G A K E L L C I R V L G G G S Q R K Y A A G D V I I	M	Q Q E T R L N V A D N T G A K E L L C I R V L G G G S T R R Y A G V G D L I V
UniRef90_A4CJV1	M	Q Q E T R L N V A D N T G A K E L L C I R V L G G G S T R R Y A G V G D L I V	M	Q A E T R L N V A D N T G A R K L L C I R V L G G G A H R K Y A R I V G D T I V
UniRef90_K2F0A0	M	Q A E T R L N V A D N T G A R K L L C I R V L G G G A H R K Y A R I V G D T I V	M	Q P L S K L V V A D N T G A K E I M C I V L G G G S K H R Y A G L G D V F V
UniRef90_Q9MUU4	M	Q P L S K L V V A D N T G A K E I M C I V L G G G S K H R Y A G L G D V F V	M	Q Q E T R L K V A D N S G A K E I M C I V L G G G S N K R Y A A G D V I I
UniRef90_R5AACX2	M	Q Q E T R L K V A D N S G A K E I M C I V L G G G S N K R Y A A G D V I I	M	Q Q E T R L K V A D N S G A K E L L C I R V L G G G H D K R Y A T V G D V I V
UniRef90_C8W3Z5	M	Q Q E T R L K V A D N S G A K E L L C I R V L G G G H D K R Y A T V G D V I V	M	Q A E T R L N V A D N T G A R K L L C I R V L G G G H D K R Y A T V G D V I V
UniRef90_B9KZX7	M	Q A E T R L N V A D N T G A R K L L C I R V L G G G H D K R Y A T V G D V I V	M	Q P Y T R L K C A D N S G A R E I M C I V L G G G H D K R Y A T V G D V I V
UniRef90_S5DST0	M	Q P Y T R L K C A D N S G A R E I M C I V L G G G H D K R Y A T V G D V I V	M	Q Q E T R L K V A D N S G A K E L L C I R V L G G G H D K R Y A T V G D V I V
UniRef90_S0EZW2	M	Q Q E T R L K V A D N S G A K E L L C I R V L G G G H D K R Y A T V G D V I V	M	Q Q E T R L K V A D N S G A K R V R C I R V L G G G H D K R Y A T V G D V I V
UniRef90_H5SG00	M	Q Q E T R L K V A D N S G A K R V R C I R V L G G G H D K R Y A T V G D V I V	M	Q Q E T N L V V A D N S G A K R V R C I R V I L G G G H D K R Y A T V G D V I V
UniRef90_A6YGC8	M	Q Q E T N L V V A D N S G A K R V R C I R V I L G G G H D K R Y A T V G D V I V	M	Q P Q T Y L N V A D N S G A R E L L C I R V C I R V L G G G S T R R Y A R I G D T I V
UniRef90_R5CC13	M	Q P Q T Y L N V A D N S G A R E L L C I R V C I R V L G G G S T R R Y A R I G D T I V	M	Q Q E S V L K V A D N S G A K V V K C I R V L G G G S R R Y A S L G D V I V
UniRef90_UPI000360D42E	M	Q Q E S V L K V A D N S G A K V V K C I R V L G G G S R R Y A S L G D V I V	M	Q A F T R L K V A D N S G A R E V M C I R V L G G G S N A R Y A R V G D V I V
UniRef90_H5SJZ1	M	Q A F T R L K V A D N S G A R E V M C I R V L G G G S N A R Y A R V G D V I V	M	Q T Q T T L N V A D N S G A R K L L C I R V L G G G S N R R Y A H V G D L I S
UniRef90_UPI00036B3D17	M	Q T Q T T L N V A D N S G A R K L L C I R V L G G G S N R R Y A H V G D L I S	M	Q N E S R L K V A D N T G A R E I L V R V Q Q G G S R R Y A H V G D V I T
UniRef90_UPI00040DD089	M	Q N E S R L K V A D N T G A R E I L V R V Q Q G G S R R Y A H V G D V I T	M	Q Q E T R L K V A D N T G A K E I L C I R V L G G G T K R R Y A S V G D K I I
UniRef90_S3XP22	M	Q Q E T R L K V A D N T G A K E I L C I R V L G G G T K R R Y A S V G D K I I	M	Q T Y S R L T V A D N S G A K E I M C I V N V P P G G T R R R Y A Y L G D I I V
UniRef90_UPI00037EA3CF	M	Q T Y S R L T V A D N S G A K E I M C I V N V P P G G T R R R Y A Y L G D I I V	M	Q P Q T R L K V A D N S G A K E I M C I V N V P P G G T R R R Y A S V G D V I V
UniRef90_R6AWE5	M	Q P Q T R L K V A D N S G A K E I M C I V N V P P G G T R R R Y A S V G D V I V	M	Q V Q T I L L K S A D D N T G A R E I L V R V Q Q G G S W R K F F A N I G D V I I
UniRef90_D3QZ91	M	Q V Q T I L L K S A D D N T G A R E I L V R V Q Q G G S W R K F F A N I G D V I I	M	Q P Q S Y L T A A D N S G A R K L L C I R V L G G G N R R Y A R I G D V I V
UniRef90_P23405	M	Q P Q S Y L T A A D N S G A R K L L C I R V L G G G N R R Y A R I G D V I V	M	Q Q E S R L K V A D N S G A K E V L C I R V L G G G T K R R Y A S V G D K I I
UniRef90_F4MME8	M	Q Q E S R L K V A D N S G A K E V L C I R V L G G G T K R R Y A S V G D K I I	M	Q Q E S T Y L N V A D N S G A K K I R V I G G F H K Y G T V G D I I V
UniRef90_P38508	M	Q Q E S T Y L N V A D N S G A K K I R V I G G F H K Y G T V G D I I V	M	Q Q E T Y L N V A D N S G A K K I R V I G G F H K Y A H V G D I I V
UniRef90_V717A5	M	Q Q E T Y L N V A D N S G A K K I R V I G G F H K Y A H V G D I I V	M	Q P Q T R L K V A D N S G A K E I M C I V L G G G S S R R Y A S L G D V I V
UniRef90_B5YG37	M	Q P Q T R L K V A D N S G A K E I M C I V L G G G S S R R Y A S L G D V I V	M	Q P R S I L E V A D N S G A R K V Q C I R V L G G G S N R R Y A S L G D V I I
UniRef90_K9SHF0	M	Q P R S I L E V A D N S G A R K V Q C I R V L G G G S N R R Y A S L G D V I I	M	Q Q E T I L L N V A D N S G A K K L L C I R V I A G G G N R R K V G R V G D L I V
UniRef90_R7PQA9	M	Q Q E T I L L N V A D N S G A K K L L C I R V I A G G G N R R K V G R V G D L I V	M	Q Q E S R L N V A D N S G A K N V L V R V Q Q G G S F R K S G N I G D T I V
UniRef90_Q39XZ6	M	Q Q E S R L N V A D N S G A K N V L V R V Q Q G G S F R K S G N I G D T I V	M	Q M Q T I L L D V A D N S G A R K L F C I R V L G G G S K R K Y A G I G D I I V
UniRef90_C9R8I0	M	Q M Q T I L L D V A D N S G A R K L F C I R V L G G G S S R R Y A S L G D I I V	M	Q Q E T F L L T V A D N S G A R K L Q C I R V L G G G S S R R Y A S L G D I I V
UniRef90_A2C4Y9	M	Q Q E T F L L T V A D N S G A R K L Q C I R V L G G G S S R R Y A S L G D I I V	M	Q Q E T S R L N V A D N S G A R K R V L C I R V L G G G S T R R Y A S V G D R I V
UniRef90_Q1ACG1	M	Q Q E T S R L N V A D N S G A R K R V L C I R V L G G G S T R R Y A S V G D R I V	M	Q T Q S F L L N V A D N S G A R K R V L C I R I L N S S N C K Y A N I G D T I I
UniRef90_UPI000237D168	M	Q T Q S F L L N V A D N S G A R K R V L C I R I L N S S N C K Y A N I G D T I I	M	Q Q E S R L N V A D N S G A R E R E V L C I R V L G G G T R R R Y A S V G D R I V
UniRef90_Q73PM2	M	Q Q E S R L N V A D N S G A R E R E V L C I R V L G G G T R R R Y A S V G D R I V	M	Q V E T R L N V A D N S G A K L V E C I R V I G G S K R R Y A G I G D I I V
UniRef90_G4Q738	M	Q V E T R L N V A D N S G A K L V E C I R V I G G S K R R Y A G I G D I I V	M	Q Q Q T V L N V A D N T G A K K I R V L G G G S Y R R Y A N I G D V I V
UniRef90_I4BV31	M	Q Q Q T V L N V A D N T G A K K I R V L G G G S Y R R Y A N I G D V I V	M	Q L H T M L N V A D N S G A K K I R C C I R V Q M G G S Y R R Y G T I G D V I V
UniRef90_D1Y6D4	M	Q L H T M L N V A D N S G A K K I R C C I R V Q M G G S Y R R Y G T I G D V I V	M	Q L N T V L N V A D N T G A K K I R C C I R V Q M G G S Y R R Y G T I G D V I V
UniRef90_B1XSR1	M	Q L N T V L N V A D N T G A K K I R C C I R V Q M G G S Y R R Y G T I G D V I V	M	Q T E S R L Q V A D N T G A S E V L C I R V L G G G S E R R Y A S I G D V I K
UniRef90_B0VI21	M	Q T E S R L Q V A D N T G A S E V L C I R V L G G G S E R R Y A S I G D V I V	M	Q V Q T M L N I A D N S G A K K I A M C I R V L G G G T Q R K Y A S I V G D V V V
UniRef90_Q3Z971	M	Q V Q T M L N I A D N S G A K K I A M C I R V L G G G T Q R K Y A S I V G D V V V	M	Q Q Y T R L L N V A D N T G A K K I I M C I R V L G G G S R R K L Q A K V G D V I V
UniRef90_E0RQ91	M	Q Q Y T R L L N V A D N T G A K K I I M C I R V L G G G S R R K L Q A K V G D V I V	M	Q V Q T Y L N V A D N S G A K K V Q C I R V L G G G T K R K Y A T L G D L I V
UniRef90_A6GCG9	M	Q V Q T Y L N V A D N S G A K K V Q C I R V L G G G T K R K Y A T L G D L I V	M	Q V E S V L D V A D N S G A R K L R C C I R V L G G G S K R R Y A S I V G D V I V
UniRef90_F2NJC9	M	Q V E S V L D V A D N S G A R K L R C C I R V L G G G S K R R Y A S I V G D V I V	M	Q V H T T L N V A D N S G A K Q L Q C I R V L G G G T R R R Y A C C V G D V I V
UniRef90_E6SKZ0	M	Q V H T T L N V A D N S G A K Q L Q C I R V L G G G T R R R Y A C C V G D V I V	M	Q P Q S R L L V A D N T G A K E L L M V R V L G G G S A K R Y G N I G D V V V
UniRef90_D6YRZ6	M	Q P Q S R L L V A D N T G A K E L L M V R V L G G G S A K R Y G N I G D V V V	M	Q Q E S E L L V A D N T G A K R V K C F I R V L G G G S K R R Y A N V G D L I V
UniRef90_B3EUL3	M	Q Q E S E L L V A D N T G A K R V K C F I R V L G G G S K R R Y A S V G D R I V	M	Q Q E T R L N V A D N S G A R K V Q C I R V L G G G T K R R Y A S V G D R I V
UniRef90_M1YJ9	M	Q Q E T R L N V A D N S G A R K V Q C I R V L G G G T K R R Y A S V G D R I V	M	Q L R T V L D V A D N S G A R K V Q C I R V L G G G T Q R R Y A S V G D R I V
UniRef90_UPI0003811ED2	M	Q L R T V L D V A D N S G A R K V Q C I R V L G G G T Q R R Y A S V G D R I V	M	Q Q E S R L R V A D N T G A K E I L C I R V L G G G S H R Y A G I G D L I I
UniRef90_UPI0003B5F58A	M	Q Q E S R L R V A D N T G A K E I L C I R V L G G G S H R Y A G I G D L I I	M	Q M Q T V L Q V A D N S G A R R V K C I R V L G G G S H R Y A A I G D R I V
UniRef90_C1A6R5	M	Q M Q T V L Q V A D N S G A R R V K C I R V L G G G S H R Y A A I G D R I V	M	Q Q E S V V K V A D N S G A R R V K C I R V L G G G S K R R Y A G L G D R V I
UniRef90_D2MME0	M	Q Q E S V V K V A D N S G A R R V K C I R V L G G G S K R R Y A G L G D R V I	M	Q N E T R L K V A D N T G A K E I L L V I R C I R V L G G G S K R K S A T I G D V V V
UniRef90_B2A4E9	M	Q N E T R L K V A D N T G A K E I L L V I R C I R V L G G G S K R K S A T I G D V V V	M	Q T E S T L R V A D N T G A R E I V Q C I R V I G A G Q K Q Y A N V G D V I V
UniRef90_F3YWVN9	M	Q T E S T L R V A D N T G A R E I V Q C I R V I G A G Q K Q Y A N V G D V I V	M	Q V E S T L D V A D N S G A K K V A C I R V L G G G S K R R Y A S V G D I I V
UniRef90_P56363	M	Q V E S T L D V A D N S G A K K V A C I R V L G G G S K R R Y A S V G D I I V	M	Q P Q T Y L R V A D N T G A R E L L M C I R V L G V L G T N R R Y G H V G D V I I
UniRef90_Q4G356	M	Q P Q T Y L R V A D N T G A R E L L M C I R V L G V L G T N R R Y G H V G D V I I	M	Q Q E S R L R V A D N T G A K E V L M V R V L G G G S K R R Y A T I I G D V I I
UniRef90_I5B4A7	M	Q Q E S R L R V A D N T G A K E V L M V R V L G G G S K R R Y A T I I G D V I I	M	Q S E S R L T V A D N S G A K E L L Y C I R V L G G G S K R R Y A T I I G D V I I
UniRef90_B8J870	M	Q S E S R L T V A D N S G A K E L L Y C I R V L G G G S K R R Y A T I I G D V I I	M	Q Q Q T M L D V A D N S G A K R V M C I R V L G G G T R R R Y A S I G D V I I
UniRef90_R6WC70	M	Q Q Q T M L D V A D N S G A K R V M C I R V L G G G T R R R Y A S I G D V I I	M	Q Q Q T F L L K A A D D N T G A K E L L M C I R V L G G G T R R R Y A R I V G D V I I
UniRef90_UPI0002EF64AD	M	Q Q Q T F L L K A A D D N T G A K E L L M C I R V L G G G T R R R Y A R I V G D V I I	M	Q V E S N L D V A D N S G A R K V Q C I R V L G G G S K R K T A S V G D I I V
UniRef90_K2BML8	M	Q V E S N L D V A D N S G A R K V Q C I R V L G G G S K R K T A S V G D I I V	M	Q Q Q T I L L Q V A D N T G A K S A K V C I R V L G G G S R R Y A H V G D V I I
UniRef90_L0BGJ0	M	Q Q Q T I L L Q V A D N T G A K S A K V C I R V L G G G S R R Y A H V G D V I I	M	Q L Q T Y L N V A D N T G A K Q K V M C I R I L G S N R Q Y A N I G D V I I
UniRef90_E8REA2	M	Q L Q T Y L N V A D N T G A K Q K V M C I R I L G S N R Q Y A N I G D V I I	M	Q T E T T V L N V A D N S G A K K V L C I R V L G G G T K R R Y A G I G D V I I
UniRef90_B7GW12	M	Q T E T T V L N V A D N S G A K K V L C I R V L G G G T K R R Y A G I G D V I I	M	Q T E T M L D V A D N S G A R R V Q C I R V I K V L G G G S H R R Y A S V G D I I K
UniRef90_UPI0003643080	M	Q T E T M L D V A D N S G A R R V Q C I R V I K V L G G G S H R R Y A S V G D I I K	M	Q M Q T V L K V A D N S G A K E V M C I R V L G G G S H R R M V A H L G D I I V
UniRef90_T0L8J8	M	Q M Q T V L K V A D N S G A K E V M C I R V L G G G S H R R M V A H L G D I I V	M	Q E Y S L L N V A D N S G A R K V R C F R I L R V L G G G T R R R Y A R I G D I I V
UniRef90_F9VLY7	M	Q E Y S L L N V A D N S G A R K V R C F R I L R V L G G G T R R R Y A R I G D I I V	M	Q Q E S R L K I A D N T G A K E I L T V R V L G G G S R R Y A G I G D T V V
UniRef90_UPI00034B9916	M	Q Q E S R L K I A D N T G A K E I L T V R V L G G G S R R Y A G I G D T V V	M	Q Q M Q S L L K V A D N T G A R T V M C I R V L G G G S K R R F A G I G D V I K
UniRef90_Q0AI6	M	Q Q M Q S L L K V A D N T G A R T V M C I R V L G G G S K R R F A G I G D V I K	M	Q M Q T Y L T V A D N S G A K R V Q C I R I L N C G A R K F A K I G D L I I V
UniRef90_V5WER9	M	Q M Q T Y L T V A D N S G A K R V Q C I R I L N C G A R K F A K I G D L I I V	M	Q S Q T Y L N V A D N T G A K R V M C I R I L G G G N R R Y A R I G D E I I
UniRef90_D0EV52	M	Q S Q T Y L N V A D N T G A K R V M C I R I L G G G N R R Y A R I G D E I I	M	Q T Q T I L N V A D N S G A R K V M C I R I L G G G N R R Y A R I G D E I I
UniRef90_A0YJT4	M	Q T Q T I L N V A D N S G A R K V M C I R I L G G G N R R Y A R I G D E I I	M	Q L Q S Y L D V A D N S G A R K S M C I R V L G G G T R R R Y A G V G D I I V
UniRef90_E2J488	M	Q L Q S Y L D V A D N S G A R K S M C I R V L G G G T R R R Y A G V G D I I V	M	Q Q S Q T Y L N V A D N S G A R K L M C I R V L G G G T R R R Y A G V G D I I I
UniRef90_G3XH16	M	Q Q S Q T Y L N V A D N S G A R K L M C I R V L G G G T R R R Y A G V G D I I I	M	Q N Q S Y L N I A D N S G A R K I M C I R V L G G G T R R R Y A G V G D I I I
UniRef90_M4ITN5	M	Q N Q S Y L N I A D N S G A R K I M C I R V L G G G T R R R Y A G V G D I I I	M	Q P E Y S L L N V A D N T G A R R V M C I R V L G G G T R R R Y A G V G D I I V
UniRef90_UPI00037E11B1	M	Q P E Y S L L N V A D N T G A R R V M C I R V L G G G T R R R Y A G V G D I I V	M	Q N Q S Y L L N V A D N T G A R R V M C I R V L G G G T R R R Y A G V G D I I V
UniRef90_M1Z7D0	M	Q N Q S Y L L N V A D N T G A R R V M C I R V L G G G T R R R Y A G V G D I I V	M	Q T E S R I K V A D N S G A R E L L V I R V L G G G T N K K Y A N I G D I V V V
UniRef90_Q83168	M	Q T E S R I K V A D N S G A R E L L V I R V L G G G T N K K Y A N I G D I V V V	M	Q Q Q E S R L K V A D N T G A K S I S V L P R V L G G G S N R R F G S L G D V V V
UniRef90_UPI0004270472	M	Q Q Q E S R L K V A D N T G A K S I S V L P R V L G G G S N R R F G S L G D V V V	M	Q M G T M L T V A D N S G A K K I C C I R P L G G G V G K F A K I G D V I T
UniRef90_C0E8N3	M	Q M G T M L T V A D N S G A K K I C C I R P L G G G V G K F A K I G D V I V	M	Q M Q T S L L K V A D N T G A K M C I R V T G T N D R E Y A G I G D V V V
UniRef90_B0YPR2	M	Q M Q T S L L K V A D N T G A K M C I R V T G T N D R E Y A G I G D V V V	M	Q P Q T H S N V A D N S G A Q K L M C I R V T G T N D R E Y A G I G D V I V
UniRef90_B0SA37	M	Q P Q T H S N V A D N S G A Q K L M C I R V T G T N D R E Y A G I G D V I V	M	Q Q Q E T I L Q V A D N S G A K V K C V K L G G G S K K R R Y A T L G D E I I
UniRef90_UPI00037BA1EE	M	Q Q Q E T I L Q V A D N S G A K V K C V K L G G G S K K R R Y A T L G D E I I	M	Q M Q S N L F V A D N S G A R K Q C I R V L G G G S R R F A S I G D E V I V
UniRef90_UPI00036FEF45	M	Q M Q S N L F V A D N S G A R K Q C I R V L G G G S R R F A S I G D E V I V	M	Q Q E E S I L M K V A D N S G A R L V K V I R V L G G G S D V K Y G N I G D E V I V
UniRef90_K2B7G3	M	Q Q E E S I L M K V A D N S G A R L V K V I R V L G G G S D V K Y G N I G D E V I V	M	Q Q A E S R L N V A D N S G A K R V E C M Q V R G G S T K R R Y A S I G D I I K

QUERY		50	60	70	80
UniRef90_U2TIU9	A T V K D A T P G G V V	K K G Q V V	R T K R G V R	R P D G S Y I	I R F D
UniRef90_Q1AU39	A A V Q E A T P G G G V	K R G E I V R C	T V K E Q R R	R K D G S Y I	I R F D
UniRef90_UPI00037CCF5A	A S V K E A T P G G A V	V K K G D V V	R T K K E T R R	R E D G S Y I	I S F D
UniRef90_K9VYZ3	A T V K D A I P N M A V	V K K S D V V	R T K K T M R R	R E S G M S I	I R F D
UniRef90_F8AA47	A S V K E A L P N S K V	V K K A G D V V	R T K K E Q P R	P D G T I	I R F D
UniRef90_D1CFD6	A S V K Q A Q P N G A V	V K K G D V V	R T A Q P I A R	E D G S Y I	V K F D
UniRef90_V1D7Y3	C A V K E A S P G G M V	V K K G D V V	R T K K G A R R	R D D G S Y I	V K F D
UniRef90_E4U9H5	A S V K E A I P G G G V	V K E G E V V	R T K K E V K R	A D G S A I	I R F D
UniRef90_Q2S3Q4	V S V K S A I P S G E I	N K G D V S R A V	R T A K E T R R	E D G T Y I	I R F D
UniRef90_A4CJV1	V T V K E A T P N G T I	V K K G A V S T A V	R T T K E V R R	P D G S Y I	I R F D
UniRef90_K2F0A0	A T V K D A A P N M P V	V K K S D I V K A V	R T K A S L K R	T D G T T I	I R F D
UniRef90_Q9MUU4	G V V K D S V P N M S L V	V K K S E V V R A V	R T C K G I R R	E N G M T I	I R F D
UniRef90_R5AAC2	A A V K D A T P G G V V	V K K G D V V	R T V H P V G R	A D G S Y I	I K F D
UniRef90_C8W3Z5	C S V K E A T P G G G V	V K K G D V V	R T K K E L R R	R N D G T Y I	I K F D
UniRef90_B9KZX7	A S V K K C A E P N A A V	V K K G D V V	R T K K E Y R R	K D G S Y I	I K F D
UniRef90_S5DST0	A T V K D A I P G G Q I	V K K G E I V S A	V V V R T K K E T R R	K D G T Y I	I R F D
UniRef90_S0EZW2	G V V K S A T P N Q A V	V K K S D V V K C	V V V R T R R Q P I R R	P D G S V L	I R F D
UniRef90_H5SG00	V S V K A A L P N G A V	V K K G D V V	V K A V V V R T K K E I I R R	R D G S F V	I R F D
UniRef90_A6YGC8	A V V K D A L P N M P V	L K K G D V V	V K A V V V R T R K G V N	R N N G T S I	I R F D
UniRef90_R5CC13	A S V K D A A P G G M V	V K K G D V V	V K A V V V R T V R E T R R	K D G S Y I	I R F D
UniRef90_UPI000360D42E	L S V K S A I P H S D V	V K K G S L H R G V	V I V R T K K A V R R	S D G S Y V	I R F D
UniRef90_H5SJZ1	A S V K D A A P N S A V	V K K G D V V	V R A V V V R T R R P I R R	P D G T T L	I R F D
UniRef90_UPI00036B3D17	A S V K T A I P G G T V	V K K G D V V	V K A V I V R T K K E Y R R	R D G S Y I	I R F D
UniRef90_UPI00040DD089	A T V K T A S P Q G T V	V K K G E V V	V K A V V V R T K K E F G	R E D G T Y I	I A F D
UniRef90_S3XP22	A T V K D T I P G G G S V	V K R G E V I	R A V V V R T V K E S R R	P D G S Y I	I K F D
UniRef90_UPI00037EA3CF	A S V K Q A I P S A G V	V K K G E V V	V R A V I V R T A S P H R R	P D G S Y I	I K F D
UniRef90_R6AWE5	A S V K S A S P G G A V	V K K G D V V	V K A V V V R T V T G V H R	E D G S H	I R F D
UniRef90_D3QZ91	C S V K D A A P G G V V	V K K G D V V	V K A V I V R S K S G L R	R N D G S Y I	I K F D
UniRef90_P23405	A V V K D G I P N I P V	V K K S D T V	V K A V I V R T R K E L K R	D N G M N C F D	I K F D
UniRef90_F4MME8	V T V K D A M P S G N M K V	K G T V S R A V	V V V R T R K E F R R	P D G S Y I	I R F D
UniRef90_P38508	C S V R E A I P N S D V	K G D V V	R A V I V R T K K E I R R	R N D G T Y I	I R F D
UniRef90_V717A5	A S V K N A T P G G V V	V K K G D V V	V K A V V V R T V N S V V R	P D G S Y I	I R F D
UniRef90_B5YG37	V S V K E A L P D S N I V	V K K G S V A K A V I	R L R R S V R R	R N D G S Y I	I R F D
UniRef90_K9SHF0	A T V K D A A P N M P V	V K K S D V V	V K A V I V R T R S N I N R	D S G M S I	I R F D
UniRef90_R7PQA9	V T V K D A A P G G V V	V K K G Q V C	V A V I V R T V S G M N R P D G S H	V I R F D	I R F D
UniRef90_Q39XZ6	A S V R E A I P N S K V	V K K G D V V	V K A V I V R T A K E V G R L D G S Y I	R F D	I R F D
UniRef90_C9R8I0	A S V K E A T P G G I V	V K K G D V V	V K A V V V R T K K E V R R P D G S Y I	K F D	I R F D
UniRef90_A2CY49	A S V K D A M P N M G V	V K K S D V V	V K A V V V R T R A T M R R E T G N S I	R F D	I R F D
UniRef90_Q1ACG1	A V V K E A I P N M S I V	V K K S E I V	V K A V V V R T R K G I K R Q S G I T	R F D	I R F D
UniRef90_UPI000237D168	V T V K S A L P S S E M K V	K G T V S K A V V	V V V R T K K E V R R A D G S Y I	R F D	I R F D
UniRef90_Q73PM2	V A V K E A L P T S V I K V	K G T V E K A V I	V I V R V S K E Y R R P D G T Y I	R F D	I R F D
UniRef90_G4Q738	A A V K D A T P G G V V	V Q K G Q V V	V K A V V V R S V K G T R R A D G S Y I	R F D	I R F D
UniRef90_I4BV31	A S V K E A I P N S N I V	V K K G D V V	V R A V I V R V R K E L R R R D G S Y V	R F D	I R F D
UniRef90_D1Y6D4	C A V K E A I L P N S N V	V K K G S V K A V I	V V V R T K K E R R R A D G S Y V	R F D	I R F D
UniRef90_B1XSR1	V S V K S A A P R G R V	V K K G D I Y N A V	V V V R T A K G V R R P D G S L I	K F D	I R F D
UniRef90_B0VI21	V A I K S A T P G G K V	V K K G S V E R A V I	V I V R T R K E L R R P D G S Y I	R F D	I R F D
UniRef90_Q3Z971	A A V K K K S S P D A Q A K S G T V	V V K A V V V R T K Y I K R P D G T K L	R F D	I K F D	
UniRef90_E0RQ91	V S V K E A L P D A P V	V K K G T V Q R A V V	V V V R T K K E V R R P D G T Y I	R F D	I K F D
UniRef90_A6GCG9	V S V K R E S L P N S K I V	V K K G Q V M K A V I	V I V R T K Q G V R R H D G S L I	R F D	I R F D
UniRef90_F2NJC9	V A V K E A L P N S K V	V K K G D V K R A V V V R T I K E T S R P D G S Y I	R F D	I R F D	
UniRef90_E6SKZ0	A S V K A A T P G G V	V K K G D V V	V R A V V V R T R H G L R R E D G S H	I R F D	I R F D
UniRef90_D6YRZ6	A S V Q E A E P N G S I V	V K K G E V V	V K A V I V R T K Y I K R P D G T K L	R F D	I R F D
UniRef90_B3EUL3	V S V K S A S P A G N I V	V K K G A V S K A V V V R T K K E V R R K D G S Y I	R F D	I R F D	
UniRef90_M1YJ9	V A V K E C E P N S N V	V K K G D V K K A V V V R T R K E M R R S E G S Y I	K F D	I R F D	
UniRef90_UPI0003811ED2	A T V K D A I I P G G T V	V K K G D V V	V K A V V V R T V K E R R R P D G S Y I	K F D	I R F D
UniRef90_UPI0003B5F58A	V S V I Q E A I P R G K V	V K K G D V Y N A V V V R T A S G V R R G D G S Y I	I R F D	I R F D	
UniRef90_C1A6R5	V A V K D A L P N G T V	V K K S D V V A K A V V V R T V K E T R R K D G S Y I	R F D	I R F D	
UniRef90_D2MME0	C S V K H A T P H G T V	V K E G Q V V	V K A V I V R T V Y G L R R D N G S Y I	K F D	I R F D
UniRef90_B2A4E9	G T I K E A T P G G V V	V K R G Q V V	V R A V I V R T K R G I V K R P D G S Y I	R F D	I R F D
UniRef90_F3YW9N	V S V K E A M P H A K V	V K K G E V M K A V V V R T T K E V G R P D G S F I	K F D	I R F D	
UniRef90_P56363	A V V K D A T P N M P V	V K R S D V V R A V I V R T R K N V R R V N G T S I	R F D	I R F D	
UniRef90_Q4G356	G V V K D A T P N L T V	V K R S D V V R A V I V R T K Q S I I R R K D G S R L	R F D	I R F D	
UniRef90_I5B4A7	V S V K E A I P N S K V	V S K G D V V R A V I V R T T K E I S R P D G S S I	R F D	I R F D	
UniRef90_B8J870	V S I K E A I P Q A K V	V K K G E V A R A V I V R T A R E V K R P D G S Y I	R F D	I R F D	
UniRef90_R6WC70	V S I V K K A A P G G V	V K K G D V V K A V V V R T V K G Q H R A D G T F V	K F D	I R F D	
UniRef90_UPI0002EF64AD	C S V K K D A I P R A K V	V K K G E V H R A V I V R T A Y P V R R G D G S A I	R F D	I R F D	
UniRef90_K2BML8	V A V V K E A S P R G L V	V K K K A I E R A V I I I R T R K E V Y R R K D G S A I	R F D	I R F D	
UniRef90_L0BGJ0	A V V K D S I P N M V	V V K R S N V V R A V I I V R T T K G L L R E S G M L I	R F D	I R F D	
UniRef90_E8REA2	V T V K E A I I P H A K V	V K K G D V L N A V V V R T V K S I I K R P E D T T V	K F D	I R F D	
UniRef90_B7GW12	V T V K E A I I P R A R V	V K K G D V M N A V V V R T K F G I I R P D G S V I	R F D	I R F D	
UniRef90_UPI0003643080	V S V K Q A I I P N G K V	V K K G E V C K A L I V V R T K C G I S R D D G S N I	K F D	I R F D	
UniRef90_T0L8J8	A T V R D A I P G A E I	V K R G N V C K A V V V R T T R E T K R K D G S Y I	R F D	I R F D	
UniRef90_F9VLY7	A S V K N A S P G G V V	V K K G D V V K A I V I V R T V K G V V R S D G S F I	R F D	I R F D	
UniRef90_UPI00034B9916	G T V K D A L P A A G I V	V K K G D I V K A V I V R T A K E R R R P D G S Y I	R F D	I R F D	
UniRef90_Q0AI16	V A V V K D A A P R G R I V	V K K G E V Y N A V I V R T A K G I R R S D G S L V	K F D	I R F D	
UniRef90_V5WER9	V S V K D A L P N A P V	V K K G K V E K A V V V R T K S S Y R R Q D G T Y I	R F D	I R F D	
UniRef90_D0EVS2	G V V K Q S T N M P V	V K K S E I V R A V I V V R T C K P F R R K N G F I	I Q F D	I R F D	
UniRef90_A0YJT4	A V V V K D A I P N M A V	V K K R S D V V R A V I V V R T R K K T T R R D D G M I	R F D	I R F D	
UniRef90_E2J488	A V V V K E A V P N M S L V	V K K R S E V V R A V A A C C T R K G M K R C N G M V L	G F D	I R F D	
UniRef90_G3XH16	A V V V K E A L P N M P V	L Q E S E I V R A V I V V R T R K K E L K R D D G M I	R S D D	I R F D	
UniRef90_M4ITN5	G V V K D A S P N M P V	V K K R S D V V R A V I V V R T K K T T R R D G M Q I	R F D	I R F D	
UniRef90_UPI00037E11B1	C S V K D A V P N G Q V	V K K G Q V V R A V I V V R T K H G V R R N D G S Y I	K F D	I R F D	
UniRef90_M1Z7D0	C S V K S A T P G G V V	V K K G E I I I K A V V V R T K H G V R R N D G S Y I	K F D	I R F D	
UniRef90_Q83168	A S V K D A V P G S S V	V K K G D V V V K A V I V V R S T K E V R R T D G S Y I	R F D	I R F D	
UniRef90_UPI0004270472	A S V K E A I P G G T V	V K K G D V V V K A V V V R Q R K A Y R R K D G S Y I	R F D	I R F D	
UniRef90_C0E8N3	A S V V K K A T P G G V V	V K K G E I V K A V I V V R S A K G V R R D D G T Y I	R F D	I R F D	
UniRef90_B0YPR2	A V V V K E A V P N M P T V	V K K S E I V R A V I V V R T R K E I I G R T D G S V I	K F D	I R F D	
UniRef90_B0SA37	V A V V K E A Q P G K K V	H N K A V Q R A V V V R T K K E V R R P D G T Y I	R F D	I R F D	
UniRef90_UPI00037BA1EE	V S V K D A I P R G K V	V K K G E V L K A L I V V R T K K N Y R A D G T S I	R F D	I R F D	
UniRef90_UPI00036FEF45	V S V K R Q A T P G G V V	V K K G E V V R A V I V V R T K S G A R R L D G S Y I	K F D	I R F D	
UniRef90_K2B7G3	V V V K D A Q P N G T V	V K K G D V C L A V I V V R T S K E I A R A D G S F I	R F D	I R F D	

QUERY	90	100	110	120
UniRef90_U2TIU9	E N A C V I I R D D K S P R G T R I F G P V A R E L R D K D F M K I I S L A P E			
UniRef90_Q1AU39	Q N A C V L V N K D G E P K G T R I F G P V A R E L R D R K Y M K I V S L A P E			
UniRef90_UPI00037CCF5A	E N A G V L I N S D G S P R G T R I F G P V A R E L R E K G Y T R I I S L A P E			
UniRef90_K9VYZ3	E N A A V L I D K N N E P K G T R I F G P V A R E L R D K N F T K I V S L A P E			
UniRef90_F8AA47	E N A A V L I N Q W G E P I G T R I F G P V A R E L R S K R F M K I I S L A P E			
UniRef90_D1CFD6	E N A A V L I N Q Q G N P R G T R I F G P V A R E L R E K N F S R I I S L A P E			
UniRef90_V1D7Y3	Q N A A V V I K E D K N P V G T R I F G P V A R E L R D R N Y M K I V S L A P E			
UniRef90_E4U9H5	S N A A V V L N N Q G E P R G T R I F G P V A R E L R E R K F M K I V S S L A P E			
UniRef90_Q2S3Q4	E N A A A V L I N Q E E E P V G T R I F G P V A R E L R E K Q F M R I V S S L A P E			
UniRef90_A4CJV1	D N A A C V L L N P T G E M R G T R I F G P V A R E L R D R Q F M K I V S S L A P E			
UniRef90_K2F0A0	E N A A V V I N K D G N P R G T R I F G P V A R E L R E K N F M R I I S S L A P E			
UniRef90_Q9MUU4	D N A A V V I N K D G N P R G T R I F G P V A R E L R D R N F T K I V S S L A P E			
UniRef90_R5AACX2	E N A A V V I K D D K N P R G T R I F G P V A R E L R E K Q F M K I L S S L A P E			
UniRef90_C8W3Z5	E N A A V V I K D D K S P R G T R I F G P V A R E L R D K D Y M K I V S S L A P E			
UniRef90_B9KZX7	D N A A A V L V T P Q G Q P R G T R I F G P V A R E L R E K H Y M R I I S S L A P E			
UniRef90_S5DST0	E N A C V V I N D Q D Q P R G T R I F G P V G R E L R D R D F M K I I S S L A P E			
UniRef90_S0EZW2	D N A A V V I Q N N L E P R G T R I F G P V A R E L R D R D F M K I I S S L A P E			
UniRef90_H5SG00	E N A A V V L L N N Q L E P R G T R I F G P V A R E L R E K N F M K I I S S L A P E			
UniRef90_A6YGC8	E N A A V V I N K E G N P R G T R I F G P V A R E L R E R E N F T K I V S S L A P E			
UniRef90_R5CC13	E N A A V V I K D D L T P T G T R I F G P V A R E L R D K Q F M K I L S S L A P E			
UniRef90_UPI000360D42E	D N A V V I N E V M E P K G T R I F G P V A R E L R E K K F M K I L S S L A P E			
UniRef90_H5SJZ1	D N A C V I N N Q G E P R G T R I F G P V A R E L R D R N F M R I V S S L A P E			
UniRef90_UPI00036B3D17	E N A A V V I N K D Q E P V G T R I F G P V A R E L R E K S F M R I V S S L A P E			
UniRef90_UPI00040DD089	E N A A V V I D A A G N P R G T R I F G P V A R E L R D R N Y M K I I S S L A P E			
UniRef90_S3XP22	E N A A V V I V K N D G E P R G T R I F G P V A R E L R D R R Y M R I V S S L A P E			
UniRef90_UPI00037EA3CF	E N A A V V L T D G L N P R G T R I F G P V A R E L R D K S F M R I V S S L A P E			
UniRef90_R6AWE5	D N A A V V I N D Q K Q P R G T R I F G P V A R E L R E K D Y M K I V S S L A P E			
UniRef90_D3QZ91	E N A A V V I K D D K N P Q G T R I F G P V A R E L R E R D Y M K I L S S L A P E			
UniRef90_P23405	D N A A V V I N A D G N P R G T R I F G P V A R E L R D K N F T K I I S S L A P E			
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UniRef90_P38508	D N A A V V I L D K F N A P R G T R I F G P V A R E L R E K G F M K I V S S L A P E			
UniRef90_V717A5	E N A A V V I V K D D K N P K G T R I F G P V A R E L R D K F S K I L S S L A P E			
UniRef90_B5YG37	Q N A V V L V N N Q L E P I G T R I F G P V A R E L R W K E F T K I V S S L A P E			
UniRef90_K9SHF0	D N A A V V I V N Q D G N P R G T R I F G P V A R E L R D K N Y T K I I S S L A P E			
UniRef90_R7PQA9	E N A V V L V N Q D K S P I G T R I F G P V A R E L R D R D Y M K I I S S L A P E			
UniRef90_Q39XZ6	D N S A V V I V N N Q R E P V G T R I F G P V A R E L R A R K F M K I V S S L A P E			
UniRef90_C9R8I0	E N A A V V I V R D D K S P R G T R I F G P V A R E L R E K E F M K I I S S L A P E			
UniRef90_A2C4Y9	D N A A V V I V N D D Q N P R G T R I F G P V A R E L R E E R N F T K I V S S L A P E			
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UniRef90_G4Q738	E N A A V V I V K D D K S P V G T R I F G P V A R E L R E K D Y M K I I S S L A P E			
UniRef90_I4BV31	D N A A V V I V D N Q G N P R G T R I F G P V A R E L R D R G Y T R I V S S L A P E			
UniRef90_D1Y6D4	D N A A V V I L D G N G D P R G T R I F G P V A R E L R A K K Y M R I I S S L A P E			
UniRef90_B1XSR1	G N A A V V L L N A K L E P I G T R I F G P V T R E L R T E K F M K I V S S L A P E			
UniRef90_B0VI21	D N A A V V I I D E K H E P K G T R I F G P V A R E L R E A H Y M K I V S S L A P E			
UniRef90_Q3Z971	D N A A V V I L N D K K M E P K G T R I F G P V A R E L R D K K F T K I L S S L A P E			
UniRef90_E0RQ91	D N A C V I V D N H M N P R G R R I V F G P V A R E L R E N E F M K I L S S L A P E			
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UniRef90_E6SKZ0	D N A A V V I L R D A H E P R G T R I F G P V A R E L R D K Q F M R I I S S L A P E			
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UniRef90_C1A6R5	E N A V V I I N D N G E P K A T R I F G P V A R E L R E K R Y M K I V S S L A P E			
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UniRef90_B2A4E9	E N A C V V I I D E N K D P R G T R I F G P V T R E L R E K K Y M K I I S S L A P E			
UniRef90_F3YWVN9	T N S A V L L T K Q L E P V G T R I F G P V A R E L R Q K N F M K V V S S L A P E			
UniRef90_P56363	E N A A V V I I N K E N N P R G T R I F G P V A R E L R D G N F T K I I S S L A P E			
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UniRef90_I5B4A7	D N S A V V I I N K N N E P V G T R I F G P V A R E L R A K R F M K I I S S L A P E			
UniRef90_B8J870	G N S A V L I N K D L E P I G T R I F G P V A R E L R A R K F M K I I S S L A P E			
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UniRef90_L0BGJ0	E N A V V I L N P D G S P K G T R I F G P V A R E L R D K G F L K I I S S L A P E			
UniRef90_E8REA2	E N A A V V I L A N N G E P I G T R I F G P V A R E L R S L G F M K I I S S L A P E			
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UniRef90_UPI00034B9916	E N A A V V I L K D G G D P R G T R I F G P V G R E L R E K K Y M R I I S S L A P E			
UniRef90_Q0AI16	T N A A V V I L N N K L E P I G T R I F G P V T R E L R T A K F M K I V S S L A P E			
UniRef90_V5WER9	E N A C V V I I D A N H N P K G K R I F G P V A R E L R D R D F M K I V S S L A P E			
UniRef90_D0EVS2	D N A A V V I I N K E G A P R G T R I F G P V A R E L R D S D F M K I I S S L A P E			
UniRef90_A0YJT4	D N A A V V I I N P E G N P R G T R I F G P V A R E L R E K N Y M K I V S S L A P E			
UniRef90_E2J488	D N A A V V V N Q E G N P R G T R I F G P V A R E L R E Y N F T K I L S S L A P E			
UniRef90_G3XH16	D N A A V V I I D Q K G N N P K G T R I F G S V V E E L R Q F N F T K I L S S L A P E			
UniRef90_M4ITN5	D N A A V V I L T Q D D N N P K G T R I F G P V A R E L R E K N F A K I I S S L A S E			
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UniRef90_B0YPR2	D N A A V V T I N R E N N N P R G T R I F G P V A R E L R E N N F M R I V S S L A P E			
UniRef90_B0SA37	D N A V A V I I D D K G N P K G T R I F G P V A R E L R D K K Y M K I I S S L A P E			
UniRef90_UPI00037BA1EE	K N A A V V L L D K Q E E P I A T R I F G P V T R E L R T K K F M K I I S S L A P E			
UniRef90_UPI00036FEF45	E N A C V V I I R E D K S P R G T R I F G P V A R E L R E N N F M R I V S S L A P E			
UniRef90_K2B7G3	D N A A V V I I K E D K E P R G T R I F G P V A R E L R D L D F L K I V S S L A P E			

QUERY	V	I
UniRef90_U2TIU9	T	L
UniRef90_Q1AU39	V	L
UniRef90_UPI00037CCF5A	V	L
UniRef90_K9VYZ3	V	L
UniRef90_F8AA47	V	L
UniRef90_D1CFD6	V	L
UniRef90_V1D7Y3	V	L
UniRef90_E4U9H5	V	L
UniRef90_Q2S3Q4	V	L
UniRef90_A4CJV1	V	L
UniRef90_K2F0A0	V	I
UniRef90_Q9MUU4	V	L
UniRef90_R5AACX2	V	L
UniRef90_C8W3Z5	V	I
UniRef90_B9KZX7	V	L
UniRef90_S5DST0	V	I
UniRef90_S0EZW2	V	L
UniRef90_H5SG00	V	V
UniRef90_A6YGC8	V	L
UniRef90_R5CC13	V	L
UniRef90_UPI000360D42E	V	V
UniRef90_H5SJZ1	V	L
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UniRef90_S3XP22	V	I
UniRef90_UPI00037EA3CF	V	L
UniRef90_R6AWE5	V	L
UniRef90_D3QZ91	V	L
UniRef90_P23405	V	L
UniRef90_F4MME8	V	L
UniRef90_P38508	V	L
UniRef90_V717A5	V	L
UniRef90_B5YG37	V	I
UniRef90_K9SHF0	V	L
UniRef90_R7PQA9	V	L
UniRef90_Q39XZ6	V	L
UniRef90_C9R8I0	V	L
UniRef90_A2C4Y9	V	I
UniRef90_Q1ACG1	V	L
UniRef90_UPI000237D168	V	L
UniRef90_Q73PM2	V	L
UniRef90_G4Q738	V	L
UniRef90_I4BV31	V	V
UniRef90_D1Y6D4	V	V
UniRef90_B1XSR1	V	I
UniRef90_B0V121	V	L
UniRef90_Q3Z971	V	L
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UniRef90_F2NJC9	V	L
UniRef90_E6SKZ0	V	L
UniRef90_D6YRZ6	V	I
UniRef90_B3EUL3	V	L
UniRef90_M1YIJ9	V	L
UniRef90_UPI0003811ED2	V	L
UniRef90_UPI0003B5F58A	V	L
UniRef90_C1A6R5	V	L
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UniRef90_UPI00034B9916	V	L
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UniRef90_V5WER9	V	L
UniRef90_D0EVS2	V	L
UniRef90_A0YJT4	V	I
UniRef90_E2J488	V	L
UniRef90_G3XHI6	V	L
UniRef90_M4ITN5	V	I
UniRef90_UPI00037E11B1	V	L
UniRef90_M1Z7D0	V	L
UniRef90_Q83168	V	V
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UniRef90_C0E8N3	V	L
UniRef90_B0YPR2	V	L
UniRef90_B0SA37	V	L
UniRef90_UPI00037BA1EE	V	L
UniRef90_UPI00036FEF45	V	L
UniRef90_K2B7G3	V	I

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UniRef90_G9WF17	M Q Q E S R L K V A D N S G A R E I L T K V L G G S G R K F A N I   G D M V V
UniRef90_R6TE20	M V Q Q E T R V N V A D N T G A K Q L I K I L G G S F H K T A T I   G D I C V
UniRef90_UP100037EE8FF	M R E Y C V L R M A D N S G A R T A R C R V L G G S G R Y A R I   G D I I V
UniRef90_K8F0V7	M P Q T Y L Q V A D N S G A R K L M C I H V L N R Q Y G N I   G D V I I
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UniRef90_E6W720	M Q M Q T R L N V A D N S G A K Q L M C I K V L G G S K K R Y A S L   G D V V V
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UniRef90_O31165	M Q Q E S R L K V A D N S G A K E V L V I K N L G G S W R K F T N I   G D I V V
UniRef90_C7REH2	M Q E T R M R V A D N S G A R E L S V I K V L G G T G R R Y S N I   G D V V V
UniRef90_O52342	M Q F M T R L N V A D N T G A R E V G V I K V L N G S K R Y A S V   G D I V V
UniRef90_B2XTE5	M Q P Q T L L T V A D N T G A K K V M C I R V L G G N R S Y A S I   G D I I I
UniRef90_D8K1B0	M Q S Y T R L K A A D N T G I K S L M C I N V L G G S R K L R A R I   G D V I V
UniRef90_V2RH00	M Q V Q S R S M T V A D N S G A R E I M C I R V L G G G S R K R Y G K V   G E I I T
UniRef90_K2EY1M1	M Q M G T N L K V A D N T G A K S I R C C I R V L F G G Y K K R Y A R L   G E I I T
UniRef90_Q2PMP9	M Q P Q T H L N V A D N S G A R E I M C C I R I L G A S N R R Y A Y I   G D I V V
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UniRef90_C0QW06	M Q V P S T L N V A D N T G V K K L M C C I M V L G G G S R R R Y A T L   G D V I I
UniRef90_F1LHU3	M Q E T R M K V A D N S G A K E V L T I K V L G G G S K R K Y A R V   G D Q V V
UniRef90_D0RRN5	M Q V Q T E M E V A D N T G A K R I E C I K V L G G G S K R R Y A S I   G D I I T
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UniRef90_Q5L710	M Q Q E S Q L V K V A D N T G A K R V K C F K V L G G S R R R Y A T V   G D V I V
UniRef90_B7ZIJ1	M Q P Q T Y L N V A D N S G A R K I M C I R I I G A S F Q R Y A H   G N V I I
UniRef90_Q493J8	M Q E R T I L N V A D N S G A R Y A M C I K V L G G S G R R Y A N I   G D V I K
UniRef90_K9ZWG5	M Q P Q T Y L S V V D N T G A K K L M C I R V L G S N R R Y G R I   G D I I I
UniRef90_K2FSS4	M Q T E S R L V V A D N S W A K E V L V C I K V L W G S K K R Y A T I   G D V I V
UniRef90_F0SJ96	M Q M Q T V V D V A D N T G A K V A R C I R V L G G T G R R T A H   G D V I I
UniRef90_L7VKA0	M L Q Q E S I L L R V A D N T G A R K V L L I R V L G G G R K R F A C I   G D R I V
UniRef90_R7NGJ0	M V Q Q E S R L K V A D N T G A R E L L V I R V L G G S K V K Y A N I   G D V V V
UniRef90_UP100046FD631	M L Q M R T I L T V A D N T G A K K I A A I K M L G G S T Q G Y A G L   G D V I T
UniRef90_E0TJR9	M L Q Q E S I I L K V A D N S G A K V L L I R V L G G T K K Y A Y I   G D K I I
UniRef90_K2F0W2	M L Q A E T R L K S A D N T G A K I I E C F K V L G G S R R R Y A Q V   G D I I V
UniRef90_B3R001	M L Q R E S R L V V A D N S G A K E V L V I N I L G G S T G F Y A N I   G D V I V
UniRef90_U7D452	M L Q V G D S K I K V A D N S G A K V K C I K V L G G A K R R Y A R L   G D V I V
UniRef90_K1XGW9	M L Q T E T R L V V V D N T G A K E V L C I K V L G G G S K R R Y A S V   G D I I V
UniRef90_I2F3A1	M L Q L E S Y L R V A D N S G A R M I K V I Q V T G G Y R K R S G T I   G D I V V
UniRef90_K6G600	M L Q M Q S I L T I A D N S G A R S V M C I K V L G G S R R R Y A N I   G D V I K
UniRef90_R7FP2	M V Q N E T N L V V A D N S G A R S V R F H L L G G S V R A R S S V   G D V V V
UniRef90_Q01WA2	M L Q G M R T I L E V A D N S G A R R L S C I L P R G G D L G L R A G L   G D V V T
UniRef90_K2A349	M L Q Q Y S R L L N V A D N S G A K I V Q C I L V F G G R K K D Q G E L   G D I I V
UniRef90_K7PA25	M L Q P Q T H L N V A D N S G A R E L M C I R I I G A S N R R Y A H   G D V I V
UniRef90_E3T2H5	M L Q P R T Y L N V A D N S G A R K I M C I R I L G A S N C K Y A N I   G D A T I
UniRef90_D3DH70	M L Q R Q S Y A N V A D N S G A K R V Q I G I P Y A P R K Y A T L   G D V V T
UniRef90_X1GTU6	M L Q T E T R L K V A D N S G A R K I L C I T T L G V G K T A T I   G D V I S
UniRef90_K1ZD66	M L Q H R S M L A V A D N T G A K K L Q V R V L G G G Y Q K R Y A R I   G D V V T
UniRef90_D4G8M4	M L Q E Q T I L N V A D N S G A K K V M C I K V L G G S K K R Y A Y V   G D I I K
UniRef90_B1AIN0	M L Q H M T R L K V A D N T G A K E V G V I K V L G G S K K R Y A S V   G D I V V
UniRef90_C1CXF6	M L M P Q S R L D V A D N S G A R E I M C I R V L N G G G N K R Y A H   G D I I V
UniRef90_Q057B4	M L M Q V Q T I L N V A D N S G A R L V M C I K V L G G S R R R Y A N I   G D I I K
UniRef90_A5IYX6	M L V L E L S K L N V A D N S G A K E V G V I K V L G G S R R R Y A N I   G D V I I I
UniRef90_X1FYJ3	M L Q A Y T K L D V A D N T G A R M V R C I K V L G G T R R Y A H   G D I I V
UniRef90_UP1000305A13A	M L M Q T L S K L K V A D N S G A K E V R V I R N L G G S V R K F S G L   G D I I I
UniRef90_UP10003B3A099	M L M Q H R T M L K V A D N T G A K K L Q C I L V Q G R S T R K Y A R M   G D V I T
UniRef90_P47407	M V S F M T R L N V A D N T G A K Q V G I K V L G A T Y K R Y A F L   G D V V V
UniRef90_Q1Q147	M L M E Q T S L D V A D N S G A K A K C I K V L G G S R R R Y A T V   G D V I V
UniRef90_K0P8Y4	M L M Q Q E S I L K V A D N S G A K T A L C I R V L G G T R K R Y A Q V   G D K I V
UniRef90_W4LUY6	M L M Q N E T A L L T V A D N S G A R K V K C F H I P G G T R R R Y A S V   G D V V V
UniRef90_UP10003B376AC	M L M Q R E T K V V I A D N S G A K W G K C I I G I L G G T G K R Y A Y I   G D I I V
UniRef90_H2CAN6	M L M Q V Q T M L Q V A D N T G A R K V M C I R V L G G T R R R Y A S V   G D I I V
UniRef90_T1CIA8	M L M Q L R T M L S A A D N S G A R T L M C I K V L G G G T R R R Y A T V   G D V I K
UniRef90_K1ZK18	M L M Q V G T K L L N V A D N T G A R M I K C I R V L G G G T R S R Y A G L   G D I F I
UniRef90_UP10004172B75	M L M L S E F S R C Y L N V A D N S G A K E V M I I K N F G G S I V R S T N I   G D V V L
UniRef90_X1FM82	M L M Q T N T R L K V A D N T G A K Q I M C I N V A V G A R K Y A R I   G D T I V
UniRef90_R5G9B1	M L M Q Q E S R L L A V A D N S G A K E V L C I R V L G G T R R R Y A S I   G D V I V
UniRef90_D5SQ84	M L M Q M Q T M L D V A D N T G A K T A R C I K V L G S S R K R T A T L   G D V I V
UniRef90_A9BH95	M L M Q L E S K I I R V A D N S G A K V L R V I K V L G G F G H K S K G T V   G D T V V
UniRef90_B2VTK3	M L M Q R G T Y L N T A D N S G A K K L V Q C I G I P G G A K K M H A T V   G D V I T
UniRef90_E7BKV7	M L M Q H Q T F L L N V A D N S G A K E L M C I R I I G T G N H Q Y A H   G D V V V
UniRef90_C6KIL3	M L M Q P Q T Q L T I A D N T G A R K I M C I R V L G G N K N Y A S V   G D I I I
UniRef90_R6R7W4	M V Q N E T N L M V V A D N S G A K S V R I F R L Y G G S K R K S S S I   G D I V L
UniRef90_F4YZE9	M L M R P Q T Y S N V A D N S G A R E S M R I V P G A S N R Q Y A S I   G D M I V
UniRef90_H8ZX4D	M L M Q P Q T Y L T V A D N S G A K K I M C I Q V L N G S N S K Y A G L   G D I I I
UniRef90_Q0BYC4	M L M Q M Q S H L R V A D N S G A R R V M C I K V L G G G A G R R Y A S V   G D I I V
UniRef90_B5YDV3	M L M M P Q T R L V V A D N T G A K E I M C F R I I L G K K R V A Q V   G D I I V
UniRef90_D2ISA4	M L M Q T Q T L L N V A D N S G P K V M C I R V L G G N K T H A S L   G D I I I
UniRef90_B2UMS9	M L M Q M E S L L V Q V A D N T G A R S A K M G V I G K R T R Q A H   G D I I T
UniRef90_B4UCY4	M L M L Q I R S R L D V A D N T G A R M A K M G V I G K K N T P E A H   V G D V I T
UniRef90_A0A059DEG7	M L M M Q P H S H L N V V D N S G A Q E L M C I R I V G A S N H R Y A H   V I D I I V
UniRef90_K2CI38	M V M Q H R T R L T V A D N S G A K S I Q V I P Q L G G S G K R K A S L   G Q V V V
UniRef90_H6T1P0	M L M Q P Q T L L N V A D N S G A R K L M C I R I I G A S N Q R Y A H   G D I I V
UniRef90_H6T1P8	M L M Q P Q T L L N V A D N S G A R K L M C I R I I G T S N Q R Y G H   G N V I V
UniRef90_H6T1Q2	M L M R P Q T L L N V A D N S G A R K L M C I R I I G T G N Q R Y A H   G D V I V
UniRef90_D5MKH8	M L M M E V A D N S G A K R I I S L I K V L G G G S K K R Y A R L   G D V I V
UniRef90_R9YL33	M L M Q P E T S L L A V A D N S G A K S V V C I K V L G G G S K K R Y A S I   G D I I K
UniRef90_B1ZND8	M L M Q L R S V L D V A D N T G A R K A A M I S R K G Q I T A T A G V   G D I I T

50            60            70            80

UniRef90_R5ID03	A S   V   R K A A P N G T   V   K K G E V   V   K A   V   I   V   R S M K G A R R A D G T Y   V   R F D	
UniRef90_G9WF17	A T   V   K Q A I P G G T   V   K K G D V V   V   K A   V   I   V   R T V R G I H R I D G S Y   I   K F D	
UniRef90_R6TE20	C S   V   K S A T T S G M   V   K K G D V V   V   K A   V   I   V   R T K K A V K R P D G S Y   I   K F D	
UniRef90_UP100037EE8FF	V A   V   H G V V P N G P L   V   K K G D V V   V   K A   V   I   V   R T A H T V Q R D N G M S I   R F D	
UniRef90_K8F0V7	A V   V   K D A L P N M P   V   V   K K A E V V   V   R A   V   V   V   R T A H T V Q R D N G M S I   R F D	
UniRef90_Q7VGD4	A S   V   K K A I P N G K   V   V   K K G Q V V   V   K A   V   V   V   R T K K E I H R E N G S   L   V   R F D	
UniRef90_F5WTY5	G T   V   K H A I P G G T   V   V   K K G D V V   V   K A   V   V   V   R T K Y G V R E N G S Y   I   S F D	
UniRef90_C0JWQ3	G V   V   K S A L P N M T L   V   K K S D V V   V   R A   V   V   V   R T A H G V R R S N G M T L   R F D	
UniRef90_Q1LTC8	I T   I   K E A I P R G K   V   K K G D V L   V   K A   V   I   V   R T K K G V R R P D G S I   V   R F D	
UniRef90_UP1000476ACEA	A S   V   K E A E P H S N   V   V   K K G E V V   V   R A   V   V   V   R T R K A V R R P D G T Y   V   R F D	
UniRef90_XOYYV4	C S   V   K S V I P G S D W   V   V   K K A V V V   V   K A   V   I   V   R V K S P T R R T D G S Y   V   R F D	
UniRef90_E6W720	C S   V   K T A L P N S N   V   V   K K G S V V   V   R A   V   V   V   R T T K E V R R A D G S Y   V   K F D	
UniRef90_Q6K145	C S   I   K K K A L P T G L   V   V   K E G Q V V   V   R A   V   V   V   R T K Y G I K R K D G T H   I   K F D	
UniRef90_K4KEB7	A V   I   K E V G P N S S   L   E R S E V V   V   R A   L   I   V   R T C K E F K R R D D G V L M   R F D	
UniRef90_O31165	C T   I   K K V T P G G   V   V   K K G Q V V   V   K A   I   I   V   R T K R G L K R S D G T Q   I   Q F S	
UniRef90_C7REH2	C S   V   K S A T P G A A   V   V   K K G A V V   V   K A   V   I   V   R T K R G L K R N D G S S   I   R F D	
UniRef90_O52342	V S   V   K D A I P S G T V   V   V   K K G Q V L F   V   V   V   I   V   R T K K G A Q R R D G T H   L   A F D	
UniRef90_B2XTE5	G V   V   K D A I P N M A T   V   V   K R S D I   V   R A   V   V   V   R T K K T I   R R K D G L S   R F D	
UniRef90_D8K1B0	C S   V   K R A A P D A A   I   K E G S V V   V   K A   V   V   V   R Q V A P L R R S D G S Y   I   K F D	
UniRef90_V2RH00	UniRef90_K2EYM1	A S   V   K E A S P D S N   I   V   R A   V   V   V   R T A K E E K R R A D G T Y   I   K F D
UniRef90_Q2PMP9	V A   V   K V A V P H A L   V   V   K K G D V L   Q   A   V   I   I   V   R T K K E Y R R K D G T Y   I   R F D	
UniRef90_UP100016C451A	A S   V   K K A L P G G D   V   V   K Q G D V   L   K   G   V   V   R T R V A T R R E D G S Y   V   R F D	
UniRef90_K2BQP6	V S   I   K E A Q P H T Q   M   K K G T V   A   H   A   V   I   V   R T R K E L R R K D G S Y   I   R F D	
UniRef90_C0QW06	C S   V   T D L I P T C S   I   V   R   V   K K G K V   V   K A   V   I   V   R   V   K K E V R R P D G S Y   I   R F D	
UniRef90_F1LHU3	V T   V   K K A I P G S T   V   V   K K G D V   C   K   A   V   V   V   R   T   V   S   K T H   R   N   D   G S Y   I   S F D	
UniRef90_D0RRN5	V S   I   K D A M P K G K   V   V   K K G D V   H   K   A   V   I   V   R   T   K K Q   I   Q   R   N   D   G S S   I   K F D	
UniRef90_UP100038274E1	C S   V   K E A A P R G M   V   V   K K G E V V   V   Q   A   V   I   V   R   Q   R   K   E M   R   R   A   D   G S Y   I   R F D	
UniRef90_Q5L710	C S   V   R D V E P D S S   V   V   K K G D V   V   K   A   V   I   V   R   T   R   R   N   I   L   R   K   D   G S S   L   K F D	
UniRef90_B7ZIJ1	A V   I   K E A V P N A K I   E   E   S   E   V   I   R   A   V   I   V   R   T   S   K   E   F   Q   R   N   D   G T   R   I   Q T D	
UniRef90_Q493J8	V A   I   K E A V P R A K   V   V   K K G D V   L   K   A   V   V   V   R   T   K   K   G   V   R   R   L   D   G S   I   I   R F D	
UniRef90_K9ZWG5	G V   V   K E A V P N M P   V   V   K R S D V   V   R   A   V   I   V   R   T   R   Q   P   V   Q   R   A   D   G M S   L   R F D	
UniRef90_K2FSS4	V S   V   K R A L P Q W N   I   V   K K K S V   V   K   A   V   V   V   R   T   S   Y   P   V   R   E   D   G S Y   V   K S D	
UniRef90_F0SJ96	V S   I   Q K T L P G S A   V   V   K K G Q V   A   R   A   V   I   V   R   T   K   K   S   T   R   R   D   G S Y   V   R F D	
UniRef90_L7VKA0	V S   V   K E A I P S G N   I   V   K K G E I   S   K   A   V   V   V   R   T   K   N   K   I   H   R   K   D   G S Y   I   S F D	
UniRef90_R7NGJ0	G T   I   K K A M P N G N   L   V   K K G K V   V   K   A   V   I   V   R   T   T   E   G   I   R   R   N   D   G S Y   I   K F D	
UniRef90_UP100046FD631	A S   V   K E A A P D G T   V   V   K K G D V   L   K   A   V   I   V   R   T   V   K   E   H   R   R   K   D   G S Y   I   K F D	
UniRef90_E0TJR9	V S   I   K E A I A G S S   V   V   K K G Q V   Y   K   A   V   V   V   R   T   R   N   K   I   R   R   K   D   G S Y   I   S F D	
UniRef90_K2F0W2	A S   V   K S A E P R G M   V   V   K K G D V   K   V   R   A   V   I   V   R   Q   S   K   E   V   R   R   K   D   G T   Y   I   R F D	
UniRef90_B3R001	V T   V   K K A I S S S G A   I   V   K A   G   D   V   L   K   V   A   V   I   V   R   T   K   Y   G   L   R   K   D   G S Y   I   K F D	
UniRef90_U7D452	V A   V   Q S A S P G A N   V   V   K A   G   S   V   Q   R   A   V   V   V   R   T   A   K   E   F   G   R   R   D   G S   F   I   K F S	
UniRef90_K1XGW9	C S   V   K K A L P Q G N   I   V   K K K T V   V   K   A   V   V   V   R   T   A   F   S   V   K   R   S   D   G T   S   V   R   S   D	
UniRef90_I2F3A1	A A   V   R D V A P N T   D   F   K   K   G   D   I   V   R   A   V   L   V   V   R   T   A   K   E   I   R   R   P   D   G T   Y   I   R F D	
UniRef90_K6G600	A V   I   R E A I P T G K   V   V   K K G Q V   V   D   A   L   V   V   V   R   T   K   K   G   V   R   R   D   G S   L   I   K F D	
UniRef90_R7FP2	C A   V   K D A L P N G K   I   V   K K G D V   K   V   G   V   V   V   R   V   K   A   Y   Q   R   P   D   G S   T   V   R   F D	
UniRef90_Q01WA2	A A   V   K E A A P D S A   I   V   K K G K V   V   R   C   V   I   V   R   M   R   K   E   T   R   R   K   D   G T   Y   I   R F D	
UniRef90_K2A349	A S   V   K K A L P N S N   A   K   K   K   E   V   V   K   A   V   I   V   R   Q   R   A   P   F   Q   R   F   D   G S   K   I   R F D	
UniRef90_K7PA25	A V   I   K E A V P N L E N   K   R   S   E   V   V   R   A   V   I   V   R   T   R   K   E   L   K   R   D   N   G M   I   I   R Y D	
UniRef90_E3T2H5	A V   V   G E A V P N M P   V   V   K K P   K   K   S   G   I   V   R   A   A   V   I   V   R   T   R   K   E   V   R   R   P   D   G S   Y   I   K F D	
UniRef90_D3DH70	V T   V   K D A A P N S S A   K   K   G   K   V   Y   R   A   V   V   V   R   T   K   K   E   V   R   R   P   D   G S   Y   I   K F D	
UniRef90_X1GTU6	A T   V   K E A E P E S K   V   E   K   G   N   V   V   R   A   V   I   V   R   T   R   K   E   I   R   R   R   D   G S   H   I   R F D	
UniRef90_K1ZD66	A V   I   K E A V P H S N   V   V   K K S D   V   V   H   V   V   I   V   R   T   R   K   E   I   R   R   Q   D   G S   Y   I   R F D	
UniRef90_D4G8M4	V A   V   K E S V P N S   K   V   K   N   G   E   V   L   K   A   V   V   V   I   V   R   T   K   K   E   I   R   R   S   D   Y   S   T   I   R F D	
UniRef90_B1AIN0	V S   V   K K A T P A G   L   I   V   A   K   G   Q   M   A   K   A   V   I   V   R   T   K   K   S   I   R   R   E   S   G   L   L   R F D	
UniRef90_C1CXF6	A S   V   K D A A P R G A   V   V   K A   G   D   V   V   K   A   V   V   V   R   T   S   H   A   I   K   R   A   D   G   S   T   I   R F D	
UniRef90_Q057B4	V A   I   K E A I P R G K   V   V   K K G E V V   V   K   A   V   V   V   R   T   K   K   G   I   R   R   T   D   G   S   M   C   F D	
UniRef90_A51YX6	C S   V   K K A I P T G   I   V   K   E   G   Q   V   V   K   A   V   I   V   R   S   V   Y   G   I   H   R   E   N   G   Q   H   I   R F D	
UniRef90_X1FYJ3	G S   V   R R A M P D S   E   I   V   K   Q   G   E   V   V   V   R   G   R   V   R   R   P   D   G S   Y   V   R   F D	
UniRef90_UP1000305A13A	C S   V   I   S A T P G A   V   V   K K G Q V   V   K   V   V   I   V   R   T   T   H   E   L   R   R   E   D   G   T   Y   I   K F S	
UniRef90_UP10003B3A099	C V   I   K E A A P H T   Q   V   V   K K S D   V   V   H   A   V   V   V   R   T   H   K   E   Q   R   P   D   G   T   Y   I   R F D	
UniRef90_P47407	V S   V   K D A I P N G M   V   V   K K G Q V   V   L   R   A   V   I   V   R   T   K   K   G   Q   R   Q   D   G   T   H   L   K   F   H	
UniRef90_Q1Q147	V S   V   K K S I   H   G   G   V   V   V   K K G D   V   C   K   G   V   V   V   R   T   R   R   N   N   V   R   R   E   D   G   S   Y   L   K F D	
UniRef90_K0P8Y4	V T   V   K T A N P S G   S   L   V   V   K K G T   I   S   K   A   V   V   V   V   R   T   R   K   E   V   R   R   K   D   G   S   Y   I   R F D	
UniRef90_W4LUY6	V A   V   K E A I P N G T   I   V   K K G D   V   V   R   R   A   V   V   V   V   R   T   K   K   E   V   R   R   P   D   G   S   Y   I   R F D	
UniRef90_UP10003B376AC	V A   V   K D S V   P E Y   G   L   V   V   K K N   K   A   V   V   V   V   R   T   K   K   E   F   R   R   K   D   G   S   L   I   R F D	
UniRef90_H2CAN6	V S   V   K D A I P R G K   V   V   K K G E   V   Y   D   A   V   V   V   V   R   T   R   R   G   V   R   R   A   D   G   S   L   I   R F D	
UniRef90_T1CIA8	V S   V   K D A I P R G K   V   V   K K G E   V   Y   D   A   V   V   V   V   R   T   R   R   G   V   R   R   A   D   G   S   L   I   R F D	
UniRef90_K1ZK18	A A   V   K D A I P R G   I   V   V   K K G E   V   V   S   A   V   L   V   V   R   T   K   K   E   E   R   R   E   D   G   T   Y   I   R F D	
UniRef90_UP10004172B75	V T   V   K K A I P T G   I   V   V   K K G E   V   V   V   R   T   R   R   G   L   E   R   R   P   D   G   S   Y   I   R F D	
UniRef90_X1FM82	A T   V   K D A R M P H   G   M   V   V   K K G E   V   V   V   R   T   K   K   E   I   R   R   P   D   G   S   Y   I   R F D	
UniRef90_R5G9B1	V S   V   K S A I P G S   D   V   V   K K G A   V   V   S   K   A   L   I   V   R   T   K   K   E   I   R   R   P   D   G   S   Y   I   R F D	
UniRef90_D5SQ84	L A   V   Q   K   A   L P G S   S   V   V   K S G S   V   V   V   R   V   R   Q   P   S   R   V   V   R   D   G   S   Y   I   R F D	
UniRef90_A9BH95	C S   V   R E A I P H   T   D   L   K   K   G   Q   V   V   Q   A   V   I   V   R   T   K   K   E   I   R   R   K   D   G   T   Y   I   R F D	
UniRef90_B2VTK3	V T   V   K S A I L P S   G   T   A   V   V   K K G Q   V   V   Y   K   A   V   V   V   R   T   K   K   E   I   R   R   P   D   G   S   Y   I   V K A D	
UniRef90_E7BKV7	A V   I   K E A A P D M   P   V   V   E   R   S   E   I   I   I   R   A   V   I   V   R   T   C   K   E   L   K   R   A   N   G   M   I   I   R Y D	
UniRef90_C6KIL3	G V   V   K E S S P R M   P   V   V   K R S D   I   V   R   A   V   V   V   R   T   R   K   T   I   I   S   R   K   N   G   T   C   I   R F D	
UniRef90_R6R7W4	C S   V   K S A I I P N A K   V   V   K K G D   V   V   K   A   V   V   V   V   R   T   K   K   G   I   N   R   E   N   G   S   Y   I   A F D	
UniRef90_F4YZE9	A V   V   K E A V P N M   P   V   V   P   G   S   E   V   V   R   A   V   V   V   V   A   V   V   V   R   T   R   R   G   L   T   I   K F D	
UniRef90_H8ZXD4	G V   I   K D C V T N M   P   L   V   V   K K N   S   D   I   V   R   A   V   V   V   V   V   R   T   S   K   S   L   C   R   T   G   G   L   T   I   K F D	
UniRef90_Q0BYC4	V S   I   K E A I I P T   G   R   V   V   K K G D   V   V   R   K   A   V   V   V   V   R   V   V   A   R   D   G   S   T   I   R F D	
UniRef90_B5YDV3	A S   V   K E A V P R S   N   I   V   V   K K G D   V   V   Y   A   V   V   V   V   R   T   K   T   R   I   K   R   K   D   G   S   C   V   I   S F D	
UniRef90_D2ISA4	G V   V   K D A S P N M   P   V   V   K R S D   I   V   R   A   V   V   V   V   R   V   V   V   R   V   V   R   E   D   G   M   H   I   S F D	
UniRef90_B2UMS9	C H   I   R E S   L   P   T   A   S   V   V   K K G T   V   V   K   A   V   V   V   V   R   T   A   A   P   I   V   R   R   D   D   G   S   V   L   R F D	
UniRef90_B4UCY4	A H   I   R E A S A G G   T   V   V   K K G E   V   V   R   A   V   V   V   V   V   R   T   R   H   P   I   V   R   R   E   D   G   S   Y   L   R F D	
UniRef90_A0A059DEG7	A V   I   K E A L P N T   P   L   V   V   E   R   S   K   V   I   R   A   V   I   V   R   T   C   K   E   L   K   R   D   N   D   L   R   I   R Y D	
UniRef90_K2CI38	A V   V   K G A D P N   Q   P   V   V   K K N   H   E   V   V   I   R   A   V   I   V   R   T   C   K   E   F   K   C   K   D   G   L   K   I   R Y D	
UniRef90_H6T1P0	A V   I   K D A A P K   M   P   V   V   E   E   K   S   E   V   I   R   A   V   I   V   R   T   C   K   E   F   K   C   K   D   G   L   K   I   R Y D	
UniRef90_H6T1P8	A V   I   K E A V P N   M   S   L   V   V   E   E   K   S   E   V   I   R   A   V   I   V   R   T   C   K   E   L   K   R   E   D   G   M   I   K Y D	
UniRef90_H6T1Q2	A V   I   K E A V P N   M   P   L   V   V   E   R   S   E   V   I   R   A   V   I   V   R   T   C   K   E   L   K   R   E   D   G   M   I   K Y D	
UniRef90_D5MKH8	A N   V   K E A V P E   G   S   V   V   V   K K G A   V   V   K   A   V   V   V   V   R   T   S   K   E   L   K   R   S   D   G   S   Y   I   K F D	
UniRef90_R9YL33	V S   I   K T A N P K   G   K   V   V   K S   G   E   V   F   S   A   L   V   V   V   R   T   K   G   I   T   R   K   D   G   T   V   I   R F D	
UniRef90_B1ZND8	V H   I   K Q S S T E   A   T   V   V   K K G E   V   H   K   A   V   V   V   V   R   T   K   A   P   V   R   R   A   D   G   S   Y   L   R F D	

		90	100	110	120
UniRef90_R5ID03	E N A A   V L I   K D D N S P R G T R   F G P   V A R E L   R D S G F M K   C S   L   A P E				
UniRef90_G9WF17	E N A A V I V   R D D K T P V G T R   F G P   V A R E L   R D N E Y M R   V S S L   A P E				
UniRef90_R6TE20	D N A A V I I   K E D K N P R G T R   F G P   V A R E L   R E K D F M K   V S S L   A P E				
UniRef90_UP100037EE8FF	D N A A V I I   D D N K E P R G T R   F G P   V A R E L   R D K Q F M R   V S S L   A P E				
UniRef90_K8F0V7	E N A A V L I   N K D G N P R G T R   F G P   V A R E L   R D R D F M K   V S S L   A P E				
UniRef90_Q7VGD4	D N A A V I I   D A K K E P I G T R   F G P   V S R E V   R Y A N F M K   V S S L   A P E				
UniRef90_F5WTY5	D N A A V V I   K D D M T P R G T R   F G P   V A R E L   R E Y N F M K   V S S L   A P E				
UniRef90_C0JWQ3	E N A A V V I   N Q E G N P R G T R   F G P   V A R E L   R E K N F S K   V S S L   A P E				
UniRef90_Q1LTC8	G N A C V L L   N N N E Q P I G T R   F G P   I T R E L   R I E K F M K   I S S L   A P E				
UniRef90_UP1000476ACEA	D N A A V L V   T N Q D V P R G T R   F G P   V G R E L   R E K N F M R   V S S L   A P E				
UniRef90_X0YYV4	S N A C V I V   D S D K N P R G T R   F G A   V A R E L   R D R N F M K   V S S L   A S E				
UniRef90_E6W720	S N A A V I I   N N N N E P V G S R   F G A   V A R E L   R A K N Y M K   V S S L   A P E				
UniRef90_Q6KI45	D N A V V I L   K E D G T P R A T R   F G P   V A R E L   R D K G Y L K   V S S L   A P E				
UniRef90_K4KEB7	D N A A V I I   D Q K G N P K G T R   F G P   I P E E L   R D F N F T K   V V S S L   A S E				
UniRef90_O31165	E N A V V L I   K D D K N P R G T R   F G P   I A R E L   R K D A G F V K   I S S L   A P E				
UniRef90_C7REH2	E N A A V V I   K D D L S P V G T R   F G P   V T R E L   R S E G F M R   I S S L   A P E				
UniRef90_O52342	D N A C V I I   K N R E D P R G T R   F G P   V A R E L   R D K G F N R   V S S L   A S E				
UniRef90_B2XTE5	D N A A V V I   N N D N N P K G T R   F G P   I A R E L   R D R D F M K   V S S L   A A E				
UniRef90_D8K1B0	E N A A V V I   N D K N E P R G T R   F G P   V A R E L   R D K K F L K   V S S L   A P E				
UniRef90_V2RH00	D N A A V V L   N K Q N E P I G T R   F G P   V A R E L   R G K G F L K   V S S L   A P E				
UniRef90_K2EYM1	D P K K E P K G T R   F G P   V A R E L   R K I K G F N K   V S S L   A P E				
UniRef90_Q2PMP9	D N A A V V I   D Q E G N P K G T R   F C A   I A R E L   R Q L N F T K   V S S L   A P E				
UniRef90_UP100016C451A	R N A L V L L   D N D N N P R G T R   F G A   V P R E L   R A K F N K   L S S L   A A E				
UniRef90_K2BQP6	D N A C V M I   D K K K E P I G T R   F G P   I P R E L   R K Q K G F T K   S S S L   A P E				
UniRef90_C0QW06	E N A A V V I   D D K K E P R G K R   F G P   V A R E L   R D R G F M K   V S S L   A P E				
UniRef90_F1LHU3	E N A C V I I   K E D K G P R G T R   F G P   V A R E L   R D K G Y S R   V S S L   A A E				
UniRef90_D0RNN5	K N A A V L I   A A N G E P I G T R   F G P   V T R E L   R D K K K H M K   V S S L   A P E				
UniRef90_UP100038274E1	E N A A V V I   D K N K E P K G T R   F G P   I A R E L   R V R G F Q K   V S S L   A P E				
UniRef90_Q5L710	T N S C V I   D E K G N P K G T R   F G P   I A R E L   R D R G F V K   S S S L   A P E				
UniRef90_B7ZIJ1	E N A A I V V   D Q K G N P K G T R   F G P   V L H E   R H W N F T K   I S S L   A P E				
UniRef90_Q493J8	N N A C V L L   N D T N Q P I G T R   F G P   V T R E L   R R N E K F M K   I S S L   A F E				
UniRef90_K9ZWG5	D N A A V V I   N T E N N P R G T R   F G P   V A R E L   R E K N F V K   A S S L   A P E				
UniRef90_K2FSS4	D N A C V I I   N D N K E P K A T R   F G P   V F R E L   R K N A W F Q K   I S S L   A P E				
UniRef90_F0SJ96	K N A V V L I   D K D N N P R G T R   F G A   V A R E L   R D R R F M K   V S S L   A S E				
UniRef90_L7VKA0	D N A C V L I   N T S G E V K G T R   F G P   V P R E L   R E R Q Y M K   I S S L   A S E				
UniRef90_R7NGJ0	D N A C V I I   K D D K S P V G T R   F G P   V A R E L   R E R Q Y M K   I S S L   A K E				
UniRef90_UP100046FD631	D N A A V L I   N D Q R E P V G T R   F G P   V A R E L   R E R K D Y M K   V S S L   A P E				
UniRef90_E0TJR9	D N A C V I I   T N T G E I K G T R   F G P   V S R E L   R D K E Y T K   I S S L   A T E				
UniRef90_K2F0W2	E N A A V V I   D G K E P K G T R   F G P   I A R E L   R E K G F N K   I S S L   A P E				
UniRef90_B3R001	E N A V V I I   K D D L T P R G T R   F G S   I A R E L   R E K K F T K   I S S L   A Q E				
UniRef90_U7D452	D N A A V V I   N E N G E M K G T R   F G P   I A R E L   R E K G L M R   V S S L   A S E				
UniRef90_K1XGW9	D N G C V I   N D N N E P K G T R   F G P   V F R E L   R K A K G F Q K   V A S S L   A Q E				
UniRef90_I2F3A1	D N A A V V I   D K Q N Q P R G T R   F G P   V A R E I   R D K G F S K   A S S L   A Q E				
UniRef90_K6G600	E N A A V L I   G G N K A P I G T R   F G P   V T R E L   R E G K H M K   L S S L   A P E				
UniRef90_R7FP2	D N A V V L I   N E D G S P K G T R   F G P   V A R E L   R D K G F M K   V S S L   A P E				
UniRef90_Q01WA2	S N A A V L I   N D V G E P V G T R   F G P   V A R E L   R D K K F M K   V S S L   A P E				
UniRef90_K2A349	D N A V V L I   N P E G I P R G T R   F M G P   V A R E L   R D R G Y S K   V A S S L   A Q E				
UniRef90_K7PA25	D N A A V V I   D Q G G N P K G T R   F V F G A   I A L E   R Q L N F T K   V I S S L   A P E				
UniRef90_E3T2H5	D N A A V V I   N K E G N P K G T R   F V F G P   I A R E L   R E F D S T Q   V I S S L   A P E				
UniRef90_D3DH70	D N A V V L L   N Q Y G E P L G T R   F L G P   I A R E L   R E R R F M K   L A S S L   A P E				
UniRef90_X1GTU6	D N A A V V I   D R Q G E P V G T R   F V G R E L   R E K R F M K   V S S L   A P E				
UniRef90_K1ZD66	E N A G V V I   D N N K E P K G S   F G P   V P R E L   R A L G F T K   I S S L   A S E				
UniRef90_D4G8M4	H N S C V L L   N D T E Q L I G T R   F G P   V T R E L   R N E K F L K   I S S L   A S E				
UniRef90_B1AIN0	E N A C V I I   K E D K T P R G S   F G P   V A R E I   R D R G Y T K   A S S L   A P E				
UniRef90_C1CXF6	K N A A V V I   N N Q G E P R G T R   F G P   V A R E I   R D R R F M K   V S S L   A P E				
UniRef90_Q057B4	N N S C V I V   H D T N Q P I G T R   F V F G P   V T R E L   R V E K F M K   I S S L   A P E				
UniRef90_A5IYX6	D N A A V V I   K D D K T P R G T R   F V F G P   V A R E L   R D D K G Y L K   V S S L   A P E				
UniRef90_X1FYJ3	H N A I V V I   D A T G N P R G T R   F V F G A   V A R E L   R D R Q K N F M K   I S S L   A A E				
UniRef90_UP1000305A13A	E N A A V L I   K E D K T P R G T R   F G P   I A R E I   K E A G F A K   A S S L   A P E				
UniRef90_UP10003B3A099	D N A A V V I   D P K K D P K G T R   F G P   V A R E L   R R G A G F T K   I S S L   A V E				
UniRef90_P47407	D N A C V L I   K E D K S P R G T R   F G P   V A R E L   R E K G Y N K   I S S L   A A E				
UniRef90_Q1Q147	K N A I V V I   D N D G N P R G T R   F G A   V A R E L   R Q K N F M K   I S S L   A A E				
UniRef90_K0P8Y4	D N A I V V I   E N N N E P K G T R   F G P   V A R E V   R D N K F M K   A S S L   A D E				
UniRef90_W4LUY6	D N A A V V I   N D A G E P I G T R   F G P   V P R E L   R A K G G Y M K   I S S L   A P E				
UniRef90_UP10003B376AC	D N A V V V V   N E K G D P E G T R   F G P   I P R E L   R D K G F T K   A S S L   A P E				
UniRef90_H2CAN6	E N A C V I I   D E K M N P R G T R   F G P   V A R E L   R D R D F K K   V V S S L   A P E				
UniRef90_T1CIA8	G N A A V L L   T N K L E P I G T R   F G P   V T R E L   R T Q Q F M K   I S S L   A P E				
UniRef90_K1ZK18	E N A A V V I   D K D K V P R G T R   F G P   I A R E V   R K A G F Q K   I S S L   A P E				
UniRef90_UP10004172B75	D N A V V L I   K E D G S L R G T R   F V F G P   V A R E L   R E K G Y L K   I S S L   A P E				
UniRef90_X1FM82	E N A A V V I   G D K K N P R G S   F G P   V A R E L   R D K N F A K   I S S L   A P E				
UniRef90_R5G9B1	E N A C V L L   N A A G D I R A T R   F G P   V A R E I   R A V N M K   V V S S L   A P E				
UniRef90_D5SQ84	S N A A V V I   D N D G N P K G S   F G A   V A R E L   R E K R Y M K   I S S L   A S E				
UniRef90_A9BH95	D N A A V V I   D K N K L P L G T R   F V F G P   V A R E V   R E K G Y A K   A S S L   A K E				
UniRef90_B2VTK3	D N A A V V L L   N N Q L E P I G T R   F L G P   V C R E L   R S K G F Y R   V V S S L   A P E				
UniRef90_E7BKV7	D N A A V V I   D Q E K N P K G T R   F F G A   I A K E   R Q F N L T K   V V S S L   A S E				
UniRef90_C6KIL3	D N A A V V I   N A Q N N P R G T R   F V F G P   I A R E I   R D K N F T R   V V V S S L   A P E				
UniRef90_R6R7W4	D N A A V V L   N E D G S P R G T R   F V F G P   V A R E L   R D K G F M K   V S S L   A I E				
UniRef90_F4YZE9	D N A A V V A   D R E G N P K G T R   F V F G P   V A R E S   R E C H F A K T   V V S S S A P E				
UniRef90_H8ZXD4	E N A A V V I   N V E G L P K G T R   F V F G P   V A R E L   R D R N F I K   V V S S L   A P E				
UniRef90_Q0BYC4	S N A A V V I   N N N G E P I G T R   F V F G P   V P R E L   R A K N Q V K   A N M A P E				
UniRef90_B5YDV3	D N A A V V I   D K E G N P K G T R   F V F G P   V A R E L   R D K N F M K   I S S L   A T E				
UniRef90_D2ISA4	D N A A V V I   N K E N N P R G T R   F V F G P   I A R E L   R E A N F S K   I S S L   A Q E				
UniRef90_B2UMS9	G N A A V V I   D K D N N P R G T R   F V F G P   V A R E L   R E K K F M K   V V S S L   A P E				
UniRef90_B4CUY4	N N A I V V I   D K D L N P R G T R   F V F G P   V A R E L   R E K N F M K   V V S S L   A P E				
UniRef90_A0A059DEG7	D N F A A V V I   D Q E G N P K G T R   F V F G K   V P R E L   R Q L N F T E   I V V S S L   A P E				
UniRef90_K2CI38	D N A G V V V   D N D G N L R A T R   F V F G P   I A R E L   R D A G Y T K   I S S L   A Q E				
UniRef90_H6T1P0	D N A A V V I   D K K G N P K G S   F V F G A   I A E E L   R D F G F T K   I L S S L   A P E				
UniRef90_H6T1P8	N N A A V V I   D Q K G N P K G S   F V F G A   I T E E L   R K F R F T K   I L S S L   A P D				
UniRef90_H6T1Q2	D N A A V V I   D K E G N P K G T R   F V F G A   I A R E L   R R Q L N F T K   V V S S L   A P E				
UniRef90_D5MKH8	R N A A V V L L   N E Q N M P V G T R   F V F G P   V A R E L   R E A R F M K   I S S L   A P E				
UniRef90_R9YL33	D N A A V V L L   S Q K M E P V G S   F V F G P   V T R E L   R N K S H F L K   I I S S L   S Q E				
UniRef90_B1ZND8	S N A A V V I I   D P T N N P R G T R   F V F G P   V A R E L   R A K N F M K   I S S L   A P E				

UniRef90_R5ID03	T   V
UniRef90_G9WFI7	V L
UniRef90_R6TE20	V L
UniRef90_UP100037EE8FF	V V
UniRef90_K8F0V7	V L
UniRef90_Q7VGD4	V L
UniRef90_F5WTY5	V L
UniRef90_C0JWQ3	V L
UniRef90_Q1LTC8	V L
UniRef90_UP1000476ACEA	V V
UniRef90_X0YYV4	V I
UniRef90_E6W720	V V
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UniRef90_D8K1B0	V L
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UniRef90_K2EYM1	V L
UniRef90_Q2PMP9	V L
UniRef90_UP100016C451A	V V
UniRef90_K2BQP6	V L
UniRef90_C0QW06	V I
UniRef90_F1LHU3	V L
UniRef90_D0RNN5	V L
UniRef90_UP100038274E1	V L
UniRef90_Q5L710	V I
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UniRef90_F0SJ96	V V
UniRef90_L7VKA0	V L
UniRef90_R7NGJ0	V I
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UniRef90_K2F0W2	V L
UniRef90_B3R001	V L
UniRef90_U7D452	V L
UniRef90_K1XGW9	V L
UniRef90_I2F3A1	V [
UniRef90_K6G600	V L
UniRef90_R7FPP2	V L
UniRef90_Q01WA2	V I
UniRef90_K2A349	L L
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UniRef90_C1CXF6	V L
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UniRef90_D5MKH8	V V
UniRef90_R9YL33	V I
UniRef90_B1ZND8	V L

	1	10	20	30	40
UniRef90_O21251	M Q V E T M L K V A D N S G A K R V Q C I K V L G G S K R Y G S V G D T I V				
UniRef90_E8ZJY9	M Q F M S R L S V A D N S G A K E V G V I K V Y G G T G R R Y A S I G D V V L				
UniRef90_UP100037C9377	M Q P T M V K V A D N T G A K L I Q C F R V L G G S K R R Y A Q L G D V I V				
UniRef90_Q4A5D1	M F E L S R A N V A D N S G A K Q V G V I K V L G G S K K K V A E I G D V V I				
UniRef90_D5EJU9	M Q M N S R V F V A D N T G A K S A E M R R L G Q N K T A S V G D V V V				
UniRef90_M1E7V1	M L C V Q S R L N V A D N T G A K L I Q C F R V L G G S K R R Y A Q L G D V V V				
UniRef90_A9QBT8	M Q S Q T Y L N V A D N C G A R K L M C R I I G M K S L G K Y A G V G D V V V				
UniRef90_D0J9I2	M L Q Q E S R C K V S D N T G A K E V L I R V L G G T K K R Y A S L G D S V I				
UniRef90_V6DHU4	M L Q K E S Y L E V A D N S G A Q L L Q C H L V G S T R K R Y A Y I A D I I K				
UniRef90_K3ZA78	F I Q M R T N L K V V D N S G A K R V M C Q A K R G K Y G A R L G D T I I				
UniRef90_K2FWL0	M L Q L R T V L N V A D N S G A K K V S M G M A K G K N R K F A Y L G E V I N				
UniRef90_UP100036B9399	M L K V A D N T G A K Q V C H M V L G G S S R K R Y A Q I G D T I V				
UniRef90_K1XFQ8	M I Q E R S I L K V A D N S G A K T I R C F R I L G G T R R Y A R I G D I F V				
UniRef90_V4UDL8	F I Q M R T V L K V V D N S G A K T V M C Q P L K G R K V A R L G D T I V				
UniRef90_B3E0J4	M E V A D N S G A K K A T M G V I G R K T L V A K V G D I I T				
UniRef90_V4L7Y1	F I Q M G T V L K V V D N S G A K K V K C Q A L K S K K G A R L G D T I V				
UniRef90_UP100046421DF	M K V A D N S G A K K V K C Q A L K S K K G A R L G D V I V				
UniRef90_E0TJ38	M I Q N Q T K L N V S D N T G A K I A L C K V L G G S K R K T A N I G D L I K				
UniRef90_A9YUC5	M I Y L K T L L K V I D N S G A E L V E C K V L R K S P M N C A H V G D K I V				
UniRef90_M4QL29	M I C V S T Y L K V M D N S G A K E A Q C R I L G G F H K K T A T T V G D M V L				
UniRef90_K2FRW6	M V Q L R T M L V P A D N S G A K R M I G V P G R V G R F A T L G D V I L V				
UniRef90_M3IGM7	M I Y L K T M L N V I D N S G A Q V E C K V L R H K P M N F A Q I G D I I T				
UniRef90_A5E2M4	M I Y L K T L L N V I D N S G A Q I V E C K V S R H G P K T A G N I G D I I T				
UniRef90_V5RRK0	M L Q I G T T V N L A D N S G A R R L K I G P G S R K T V A K I G D L V T				
UniRef90_W1QC18	M F F L K T M L R V V D N S G A E L V E C K V L G K P T N H A N I G D K V V				
UniRef90_M4QEJ4	M I Q V E T N L L V A D N S G A K R V Q C I K V L G G T K A S I G D I I V				
UniRef90_UP10003C15781	M I Q T E S R L E V A D N T G A R E V L C K V L G G S K R Y A G I G D V I K				
UniRef90_K2FR02	M I Q L R T V L T V A D N T G A R K L R V Y T I H G G S K R K L G H I G D F V G				
UniRef90_M4Q9X0	M Q S E T F L Q V A D N S G A K L V Q C I K V L R S M K Y A S V G D V I V				
UniRef90_A0A059CK00	F I Q M G T I L K V V D N S G A K K A M C Q A L K A G K K G A R L G D T I K				
UniRef90_R4X7J3	M I G L K A T L N V I D N S G A Q I V E C I Q V L R K A G T H A R I G D E I V				
UniRef90_G3B241	M I Y L K S L N V I D N S G A Q V V E C I K V L R H G P R N F A K V G D E I T				
UniRef90_A0A024JLE5	M L Y L K S M L N V I D N S G A M L V E C I K V L G K S P K N N A R I G D R I V				
UniRef90_W8VRA2	M I T F L S N L N C A D N S G A R F V Q C I K L L G G S F H K R A Y I G D I V V				
UniRef90_X8DL57	M I Q Q E S R L K V A D N T G A K E I L C R V L G G S S R R Y A G L G D I I V				
UniRef90_O42867	M I V Q A I M N C A D N S G A K N L Y I V S V F G T G A R P A A S C G D M V L				
UniRef90_U9TQG3	M I Q L Q K T L N V I D N T G A I A E C I V P G R H G G G R Y G R I G D P I T				
UniRef90_Q9UX97	M L Q H Y S V V N V A D N S G G K E A M I I G V Y G Y R R V P F A N I A D M V M				
UniRef90_J6N5N1	M I Q Q E T T I L K V A D N S G A K T V K C K V L G G F K K R Y A S L G D I I V				
UniRef90_L8GW62	M I V G A V V N C A D N T G A K N L Y V I S V K G I G A R L N R L P G D M V M				
UniRef90_K2DKH5	M I Q L R S I L Q I A D N S G A K R I R V I Q V H G G S R K R F G V V G D I V A				
UniRef90_M7A605	M I V G A V I N C A D N S G A K N L Y I I A V K G I K G R P S A G V G D M V L				
UniRef90_F4P905	M I L K T I L D V A D N S G A R S V Q C I K V L A G S K R Y A S I G D V I V				
UniRef90_UP100046AA498	M I V G A I N C A D N T G A K N L Y I I A V T R I K G R P A S S I G D T I V				
UniRef90_A9BK61	M I G L K G I L K V I D N S G A T L A E C I R V V R A G K F A S L G D E V V				
UniRef90_Q5GSV4	M I Q K N T L L E V A D N S G A R E V L C I G L L G G R K S A S I G D T I V				
UniRef90_Q0P311	M I Q V G T Q L H V A D N S G A K K V E C I K V L N K T K Q R V G G A G E F V L				
UniRef90_O94292	M I G L K G I L K V I D N S G A T L A E C I R V V R A G K F A S L G D E V V				
UniRef90_D2V375	M I A V M N C A D N S G A K N L Y V I A V N Q T Q G R P A A G V G D M V M				
UniRef90_Q9G895	M I Q T K T K L K V A D N S G A K I A E C I K V F P K S G Y N N A S V G D I I V				
UniRef90_J7H027	M I Q E Q T L V E I T D N S G A R L V Q C I K V L G G S K K F A K I G D I I K				
UniRef90_D8R0T8	M I F V Q M R T K L N V A D N S G A K I V G C I Q A K A R K I G G S I G D V I V				
UniRef90_B9KJ60	M I M Q K N A I L D V A D N S G A R K V L C I G F L G G K K R F A N I G D V I V				
UniRef90_G6EM04	M I M Q Q E S R L K V A D N S G A R E I L T K V L G G S S G R K F A N I G D V I V				
UniRef90_U7PK52	M I V G A I M N C C D N S G A R N L Y I I S V K G I G A R P A G G V G D M V M				
UniRef90_K0KXY6	M I Y L K S M L K V I D N S G G L M A E C I K V L R K S P K N Y A S V G D K I V				
UniRef90_H6CA19	M I Q L Q K T M L N C I D N S G A I V E C I V A V M R K K V Q H A T I G D R I I				
UniRef90_W6MXF4	M I M L I L K S M L N V I D N S G A Q I V E C I K V L G K R P K G F A S I G D K V V				
UniRef90_A0A059LKU8	M I M Y N G T R L D V S D N S G A R V V E C I R T K G A Y T L G D I I T				
UniRef90_V4K7Z6	M I V Q V G S Y V D V A D N S G A K E A M I V D V P G V K T R A A G P G D L V I				
UniRef90_E9BSQ4	M I M V G A V V N C A D N T G A K N L Y I I S V K G Y H G R P S A A L G D M V M				
UniRef90_G7YIU3	M I M V G A V N C A D N S G A K N L Y I I A A F G I R G R L N R L P G D L I V				
UniRef90_B6Q949	M I M Q L K T M L N C I D N S G A A V V E C I V N V L K K K S P A T I G D R I V				
UniRef90_C5LAK1	M I M L N T G A I L N C A D N S G G K N L Y T I A V K G T G A R P A A S L G D M L M				
UniRef90_H2BC35	M I M Q P Q T H L N V A D N S G A R K L M C I R I G A S N R Y A R I G D V I V				
UniRef90_D8LGN4	M I M A V M N C C D N S G A K N L Y I I S V K G I G K R P S A G V G D M V M				
UniRef90_U6N2G2	M I M V G A L N C C D N S G A K N L F I I A V K G W G S C P S S S L G D L V L				
UniRef90_M2NJ49	M I M Q L K T M V N V I D N S G A A V A E C I V K V L V K M K R H A K I G D R I I				
UniRef90_M7PK55	M I M Q V N T R L K V A D N S G A K E V L V I G P G D T G K R Y A Y I G D L V T				
UniRef90_U7PZC8	M I M Q L K T M L N C I D N S G A A L V E C I V K M Q R I G Q K R H A G L G D R I V				
UniRef90_Q8SRA7	M I M Q V E T L M K C A D N S G A K I L R C I G V K R Y R G R P A A A P G D I C V				
UniRef90_Q6E6H8	M I M Q V Q V G T R I A C A D N T G A K I M Q I I G V K G V R G R P A A S V G D V I V				
UniRef90_R5PAH0	M I M Q T E S R L T V C D N S G A R E A L C I R V L G G T G R R Y A S V G D V I V				
UniRef90_C9SDJ6	M I M Q L K T M L N C I D N S G A A L V E C I A M V I G R K G A A R I G D R I V				
UniRef90_J9HJP4	M I M G A V M N C A D N T G A K N L F I I G V S V T A T G A R P K G S V G D M F I V				
UniRef90_UP10004736C42	M I F I Q M R T V L K V V D N S G A A L V E C I V R V L G K R P A T V G D V I V				
UniRef90_K7MR50	M I M A L K A L V V D N S G A A L V E C I Q V L R A G K F A S V G D E I V				
UniRef90_B6JVA8	M I M Q T Q T Y L N V S D N S G A K K I M C S I I S T K R Y A K I G D T I I				
UniRef90_P58139	M I M G A R L V C A D N T G A K E V E I Q V L K Y H K Y P S A G V G D M V I				
UniRef90_D3TB38	M I M Q V G T L L A I S D N S G A K K A K C I K I L K K T K K N M G Q V G D L I V				
UniRef90_K8EXJ4	M I M Q L K T M L N C I D N S G A A I V E C I K V L G Q K R H G R I G D R I I				
UniRef90_S8BSL9	M I M Q L K T M L N C I D N S G A A I V E C I K V L G Q K R H G R I G D R I V				
UniRef90_W3XHS2	M I M Q L K T M L N C I D N S G A A I V E C I K V L G Q K R H G R I G D R I V				
UniRef90_Q9YHX0	M I M V G A V N C A D N T G A K N L Y I I S V K G I K G R P A A G V G D M V M				
UniRef90_I2K2U1	M I M G A V M N C A D N S G A K N L Y V I M A V K G I G A R P A A A A G D M V V				
UniRef90_Q8TW20	M I M V G A R L V C A D N T G A K E R Q I I G V K G Y K G V R N A G I G D M V V				
UniRef90_A3DNB7	M I M Q P Q T L L N V A D N S G A R K L M C I R V V G A R N Q R Y S R I G D L V V				
UniRef90_C5YAV2	M I M N L K T M L Y V A D N S G A Q M A E C I N I L K S G K Y A R I G D E I V				
UniRef90_M7NX79	M I M Q P Q T L L N V A D N S G A Q M A E C I N I L K P K A S G D M V M				
UniRef90_B7GHD3	M I M Q L K T M L Y V A D N S G A K N L R I A V C N I G G R P A T V G D V I V				
UniRef90_B7VLE7	M I M A V N C A D N T G A K N L R I A V C N I G G R P A T V G D V I V				
UniRef90_D5GJJ4	M I M L N C I D N S G A A L V E C I V R V L G K R P A T V G D K I V				

		50	60	70	80
UniRef90_O21251	V A V K E C M P R K K V K G D V K A I I V R T K K P I Y R K D G S T I S F E				
UniRef90_E8ZJY9	V S V K S L S T S G N V K K G D V F K A L I V V R T R R P I S R K N G V M I S F D D				
UniRef90_UP100037C9377	G T V K E A E P R R I V K H D V R A V I I R Q K K E Y G R L D G S Y V R F D D				
UniRef90_Q4A5D1	C S V K K A L P S G D V K A G Q V L K A V V V R T K A P I R R G D G S Y L R F D D				
UniRef90_D5EJU9	C N V K E A S T D A S V K K G E V V K A V V V R T K A P I R R G D G S Y L R F D D				
UniRef90_M1E7V1	G V V K V A Q P H G M V K K S D I V K A V I V R T H K E I K R P D G S V I R F D D				
UniRef90_A9QBT8	A V I K E A A K D S S L E K S E V I R A V I V R T R Q F K R S C G T I R Y D R F D D				
UniRef90_D0J9I2	V T I K E A I S G G I V K K G Q V A K A I I R T K K T R R K D G S Y I S F D D				
UniRef90_V6DHU4	C A V K K A I P G G Q V K K G D V V T A V V V R A R K E R R A D G S Y I R F G R F D D				
UniRef90_K3ZA78	G S V K E A Q P R G K V K K G D V Y G V V V R A A M K K G R S D G S E V Q F D D				
UniRef90_K2FWL0	I T V K E A Q P F G I V Q G E V H S A V I R T R K E V R R Q R C G T I R F D D				
UniRef90_UP100036B9399	V S V K E A E P R K A V R K E V L R A V V R Q R C G T I R F D D				
UniRef90_K1XFQ8	A S V Q T A E P R K S V K K K D V V K A V V R A A M K R A D G S Y I R F D D				
UniRef90_V4UDL8	A S V K E A M P T G K V K K G Q V H A V V R A A M H G R S D G S E V R F D D				
UniRef90_B3E0J4	A S V K D A L P N G K V K K G E V V R A V V R T K S P I R R S D G S Y L K F D D				
UniRef90_V4L7Y1	A S V K E A M P N G K V K K G A V V Y G V V R A A M Q R G R V D G S E V R F D D				
UniRef90_UP100046421DF	C T V K K M Q H Q V A L L K K K K G D V I R T K S G V R R N D G S L I K F D D				
UniRef90_E0TJ38	V T I K E C N S K S K I K K G E I I Y N S L V I R T I K G I K R N D G S L I K F D D				
UniRef90_A9YUC5	V V V Q E A K P S N R V K R G D I C R A V V R T K Y P I Q R E R D G S V I R F D D				
UniRef90_M4QL29	V A I K K C L P R K R V K K G D V R K G I V V V R T K R R V R P D G S Y I W F E R F D D				
UniRef90_K2FRW6	G V V K K D A D P A G V V A D H E K V K I L I V R T H E V R R K D G S Y I R F D D				
UniRef90_M3IGM7	C V V K K K A R P S N R V K R R D I C Q A V V R T R A P Y R R K D G S V V R F D D				
UniRef90_A5E2M4	C V V K K K A R P E N K V V K R R D V C K A V I R Q K S P L R R P D G S V I R F D D				
UniRef90_V5RRK0	A V V K G A D S A G T V K D H T V V K A I V R T K K E V R R K D G S Y I R F D D				
UniRef90_W1QC18	V V V Q N A K S L N Q H K R G D I C R A V I R T K S P T L R P D G S V I R F D D				
UniRef90_M4QEJ4	V A I K D C L P R K K V K K G D V R R A V I R T K R R V R N D G S T I S F G R F D D				
UniRef90_UP10003C15781	V T V K S A A P R G R V V K K G E I Y N A V V R T A K G I V V V R T A K G I R R D G S R I R F D D				
UniRef90_K2FR02	A S V I E A I P E S Q F P A G T K V K A V I R T R H P L R R R D G S R I R F D D				
UniRef90_M4Q9X0	I T I K E C L P H R K V K K G D V K R A V V R T T K E I N R I D G T S I K F D D				
UniRef90_A0A059CK00	V S I K E A L P N G K A K K G D K F S A I V R A A M P R G R C D G S E I K F D D				
UniRef90_R4X7J3	C V V Q K A R T M Q K V K R G D I R H A L V V R T K K E V R R P D G R Y I R F D D				
UniRef90_G3B241	V V V K Q A R P N N R V K R R D I C R A V V R T K A P F R R P D G S T I R F D D				
UniRef90_A0A024JLE5	V V V Q K A R P S Q K L R Q G D V H A V V R T K Q P T R R S D G S I I R F D D				
UniRef90_W8VRA2	V A V K K A K V D K K V K K G E V R K G V I R T K K P F Q R S N Q M S I G F D R F D D				
UniRef90_X8DL57	A T V K D A I P G G T V K R G D V V K A V V R T V K E E R R R P D G S Y I K F D D				
UniRef90_O42867	A T V K K G K P D L R K K I M P A I V R Q R K A W R R R K D G V Y L Y F E R F D D				
UniRef90_U9TQG3	V V V K K A K P K L Q I R R G E V K K G K A V I V R T R K E T R R L D G R Y I K F D D				
UniRef90_Q9UX97	V S I K K G T P E V R K Q K F R A V I R Q R M P Y R R P D G T W I S F E R F D D				
UniRef90_I6N5N1	I S V Q K S K S T S K V L K G S V F R A L V R G T K K R Y K T R D G L V L S A R F D D				
UniRef90_L8GW62	A T V K K G K P E L R K K V T P A V I R Q R K P F R R Q D G V F I Y F E R F D D				
UniRef90_K2DKH5	A S V I V S D A T G S V V K K G E V V K A V I R T R K F E V R R N S G E Y V R F D D				
UniRef90_M7A605	A T V K D A I P G G N V V K K G E V V K A V I R T T K E R R R P D G S Y I R F D D				
UniRef90_F4P905	A T V K K G K P D L R K K V H P A V I R Q R K A W R R R D G V F L Y F E R F D D				
UniRef90_UP100046AA498	V S V R E A I P R G R M K G D I R K A V V R T A K E V R R E D G S V V R F D D				
UniRef90_A9BK61	A T V K K G K P E L R K K V T P A V I R Q R K F W R R R K D G V F I S F E R F D D				
UniRef90_Q5GSV4	V S T K S V N P K G K V E K G K V Y R A V V R V K N C I R K S D N S V I R F S D D				
UniRef90_Q0P311	V S V K E Q K Q T Q K V K K G Q I F K A V I L E T K F P I Q R K D G S S L K F Q R F D D				
UniRef90_O94292	V V V K K A R S G N K V K R G D I H H A I I V R T K S P V R R P D G R Y V R F D D				
UniRef90_D2V375	A T V K K G K P E L R K K V H P A V I R Q R K P W R R R D G T F I Y F E R F D D				
UniRef90_Q9G895	V S I K K A I S K K K V K K G Q I V T F A V I R T K K N I N R N D G S N V K F S D D				
UniRef90_J7H027	V S V K T V H F N S K I K K S Q I F K A L I R T K F L F N R Q N G E K I K F N D D				
UniRef90_D8R0T8	A S V K E A S G K K R K K G D V V R A V I R A R M Q K G R R R D G S H I R F D D				
UniRef90_B9KJ60	V S A R V V A P R G R V V K K G V Y K A V V R T K G P I R R L D G S T I R F S D D				
UniRef90_G6EM04	A T V K Q A T P G G A V V K K G D V V K A V I R T K T G A R R R S D G S Y I K F D D				
UniRef90_U7PK52	A T V K K G K P E L R K K V H P A V I R Q R S K P W R R R T D G V F L Y F E R F D D				
UniRef90_K0KXY6	V V V Q K A R P T S M K K G D I V H A V V R T K Q N V I R P D G S V M K F D D				
UniRef90_H6CA19	V V V Q K Q R S F N V V R R G D I H H A V V R A R K E K I Q R R K D G S L I R F D D				
UniRef90_W6MF4	V V V Q K A P S H R V V K K G D I C R A V I R T K H Q I R R P D G S V I R F D D				
UniRef90_A0A059LKU8	C S V K K A I K G K V N K G E V V K A V V R V K N C I R K S D N S V I R F S D D				
UniRef90_V4K7Z6	V T V K K G T P Q V R K Q I S Y A V I R Q R K R P Y R R P D G S W V S F D D				
UniRef90_E9BSQ4	C S V K K G K P E L R K K V L Y A V V R Q R K S W R R K D G T V I Y F E R F D D				
UniRef90_G7YIU3	C S V K K G K P E L R K K V H Y A I L I R Q R K K I W R R T D G S H I M F E R F D D				
UniRef90_B6Q949	V V V Q K Q R N F N K V R R G D I R H A V V R A R K E I Q R R P D G S L I K F D D				
UniRef90_C5LAK1	S S V K K G K P E L R K K V L Q S V V I R Q R K A W R R R E G V F V Y F E R F D D				
UniRef90_H2BC35	A V I K K A I P S T R L E R S E V I R A V I R T C K E L R R D N G L L I R Y D R F D D				
UniRef90_D8LGN4	A T V K K G K P E L R K K V M P A V V R Q R K A W R R R K D G V F I Y F E R F D D				
UniRef90_U6N2G2	A T V K K G K P E L R K K V H P A V I R Q R R R A R R A E G Y F I Y F E R F D D				
UniRef90_M2NJ49	V V V Q K Q R N F N K V R R G D I R H A V V R T A K Y Q R P D G S V V R F D D				
UniRef90_M7PK55	V S V K K T T T T S L I K G S I S K A L I R T K H G F K S K N G S Y I R F D D				
UniRef90_U7PZC8	V V V Q K H R N G N R V K R G D I R Q A V V R T R Y P V R R K D G S V L R F D D				
UniRef90_Q8SRA7	V S V K K G K P E L R K K V H Y A I L I R Q R K K I W R R T D G S H I M F E R F D D				
UniRef90_Q6E6H8	C S V K K G R P D M R K K I V L C Y A V I R Q R K K A W R R R D G S Y I R F D D				
UniRef90_R5PAH0	V S V K N V P S S D L K G A V S K A L I R T K K E I R R R A D G S Y I R F D D				
UniRef90_C9SDJ6	V V V Q K H R S A N K V K R G D M R H A I V R T K K A S Q R R D G S V V R F D D				
UniRef90_J9HJP4	A S V K K G K P D L R K K V M P A V V R Q R K A Y R R R E G Y Y L Y F E R F D D				
UniRef90_UP10004736C42	A T V K D A I P N M G V K K S E V V K A V I R T K A K L R R N T G N S I R F D D				
UniRef90_K7MR50	A S V K E A H P N G K V K K G K V Y G V V V R A A M Q K G R C D G S E V K F D D				
UniRef90_B6JVA8	V V V H A K A K S N I K K G E L Y R A I V R R R P V K R P D G S W L R F D D				
UniRef90_P58139	A V V K K K A S P N K I K K S M I V F P A V I R R R P F R R A D G T W Q F E R F D D				
UniRef90_D3TB38	V S V K K G S P D M R K K V F P A V I R R R P F R R A D G T W Q F E R F D D				
UniRef90_K8EXJ4	U S V Q E T N P K N N T K G Q L F P K A V L I R T K R P K R Q D G T S Y T F Q				
UniRef90_S8BSL9	V V V Q R R Q A Q K V K R G D I R H A V I R R R P F R R P D G T W V A F E R F D D				
UniRef90_W3XHS2	A L V Q K Q A S A N K V K R G D I R H A L I R R R P V Q R P D G S V V R F D D				
UniRef90_Q9YHX0	A T V K K G K P E L R K K V H P A V I R R R P V Q R K S Y R R K D G V F L Y F E R F D D				
UniRef90_I2K2U1	A T V K K G K P E L R K K V M Q A I V V R R R P V Q R K P E R R R P D G T R V K F D D				
UniRef90_Q8TW20	C S V K K G T P D M R K K V M P A V V R R R P V Q R K P F R R P D G T W V A F E R F D D				
UniRef90_A3DNB7	V T V K K G T P E M R K Q V K K G D I R H A V I R R R P V Q R K P F R R P D G T W V A F E R F D D				
UniRef90_C5YAV2	A V I K D A V P K M P L E R Y E V I R A V V R R R C T R I I G D D R F D D				
UniRef90_M7N7X9	V V I Q K L R S S S M R R G D I R H A L V R R R P V Q R K S Y R R K D G V F L Y F E R F D D				
UniRef90_B7GDH3	C A V K K G K P E L R K K V M P A V V R R R P V Q R K A F R R K E G V F I R F D D				
UniRef90_B7VLE7	V T V K E A I P R G R K V K K G D V L K A V V R R R P V Q R K G V R R P D G S V I R F D D				
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	90	100	110	120
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UniRef90_Q4A5D1	D N A V V L I	K D D G T P V G T R V	F G P V A R E I   R E K Y P K   V S L A L E	
UniRef90_D5EJU9	N N A V V I I	N A D G N P K G T R I	F G P V A R E L   R A K Y M K   I S S L A P E	
UniRef90_M1E7V1	D N A A V V I I	D N Q G N P R G T R V	F G P V A R E L   R D K N F M K   I S S L A P E	
UniRef90_A9QBT8	D N A A V V I I	D K K R N P K G S R I	F G P V A R E I   R E V N F T K   I S S L A P E	
UniRef90_D0J9I2	D N A C V L I	N P S G E I M G T R V	F G P V A R E L   R D K E Y M K   V I S S L A Q E	
UniRef90_V6DHU4	D N A A V V I I	K D D I T P V G S R I	F G P V A R E L   R A K N F A K   I S S L A P E	
UniRef90_K3ZA78	D N A I V L V	N N K G E L I G T R V	F G P V P H E L   R R K K K H L K   L S L A E H	
UniRef90_K2FWL0	E N A C V L I	A S K K D P K G T R I	F G P V G K E V K E N G F S K   A S S L A E E	
UniRef90_UP100036B9399	D N A A V V I I	D G K E P K G G R I	F G P V P R E L   R E K G F D K   V S L A E E	
UniRef90_K1XFQ8	E N A A V V I I	N A K M E P N A T R I	F G P V P R E L   R E K G F E K   V T M A E D	
UniRef90_V4UDL8	D N A A V V L V	N N K A G E P T G T R V	F G P V P H E L   R R K K K H V S   L T L A	
UniRef90_B3E0J4	K N A I V I I I	D K E S N P K G T R I	F G P V A R E L   R E K N F M K   L S L A P E	
UniRef90_V4L7Y1	D N A A V V L V	D N K R Q P I G T R V	F G P V P H E L   R R K K K H L K   L S L A Q H	
UniRef90_UP100046421DF	E N A C V L I	R D D K G P R G T R I	F G P V A R E L   R E G N F M K   V S S L A P E	
UniRef90_E0TJ38	N N S I I L L	D N K L E I L G T R I	F G P V T R E I   R K N K F D K   I S S L A Q E E	
UniRef90_A9YUC5	D N A C V L I	N Q K D E P I G T R V	G S V V A R E L   R K K K N F G K   I S S L A P R	
UniRef90_M4QL29	E N G I A L L	N E Q G S P L G T R I	L G P V A K E L   R Q K N H L K F   V S L A S F F	
UniRef90_K2FRW6	D N A G V V I	D K Q G L P R G T R I	L G P V A K E L   R E A G Y N K   A S S L A R E	
UniRef90_M3IGM7	D N A C V L I	N K N G E P L G T R I	S S V V A K E L   R E A G Y N K   V S S L A P K	
UniRef90_A5E2M4	D N A C V L I	N K N K E P I G T R I	I N S V V A K E L   R E R G F N K   A S S L A P R	
UniRef90_V5RRK0	D N A A V V V V	D K D R N L I G T R I	F G P V A R E I   R D R G L L K   V S S L A K E	
UniRef90_W1QCI8	D N A C V L I	N Q K D E P I G T R V	N G V V A R E L   R K N F N K L   V S S L A P K	
UniRef90_M4QEJ4	D N A V V L L	N E Q G A P I G T R I	L G P V T K E L   R T S Q W S K   M S L A T Y	
UniRef90_UP10003C15781		E P I G T R I	F G P V T R E L   R T E R F M K   V S S L A P E	
UniRef90_K2FR02	D N A G I I L	S E S N P V G S R V	F G P V A R E L   R E K G Y T K   A S	
UniRef90_M4Q9X0	D N A A V V L L	T D Q G N P I G T Q I	R G P V A K E L   R K N S A W T K   V I S S L A S A	
UniRef90_A0A059CK00	D N A C V L I	V N K K D P V G T R V	F G P V P H E L   R R K K S   V K   L T L A E H	
UniRef90_R4X7J3	D N A C V L I	N N K G E P I G S R I	L G V V M G A E L   R T K K Y S K   I L S L A Q R	
UniRef90_G3B241	D N A C V L V	N K N G D P L G T R V	S S V V A Q E L   R R N S K Y T K   I A T L A P K	
UniRef90_A0A024JLE5	D N A C V L I	G K S G D P I G S R V	S S V V V G K E L   R D K G F N K   I V A L A P R	
UniRef90_W8VRA2	T N S V V L I	N A Q K N P I G T R I	F G P V T K E L   R K S G F V R   V S M A P S	
UniRef90_X8DL57	E N A A V V I I	K A D N D P R G T R I	F G P S V A S C A T R   W P R   A S N A G T	
UniRef90_O42867	D N A G V I V	N P K G E M K G S A I	T G P V A K E C A D   W P R   A S N A G T	
UniRef90_U9TQG3	D N A C I L L	N P K G E M K G S A I	T G P V A K E C A D   W P R   A S N A G T	
UniRef90_Q9UX97	D N A V V I I	N P K G E M K G S A I	T G P V A K E C A D   W P R   A S N A G T	
UniRef90_J6N5N1	E N T A V L I	N K Q G N P V G T R I	I L G P I P K I L K K K N F M K   F V S L S S G	
UniRef90_L8GW62	D N A G V I V	N P K G E M K G S A I	T G P V A K E C A D   W P R   A S S A G T	
UniRef90_K2DKH5	D N A A V V I	E S R A N P I G T R V	F G P V G R E L   R E K K F M K   V S S L A P E	
UniRef90_M7A605	E N A A V V I L	K G E S D P R G T R I	F G P V G R E L   R E K K F M K   V S S L A P E	
UniRef90_F4P905	D N A G V I V	N P K G E M K G S A I	T G P V G K E C A D   W P R   A S S A G T	
UniRef90_UP100046AA498	R H A A V L L	N N N N E P I G S R V	F G P V V   W P R   A S S A G T	
UniRef90_A9BK61	D N A G I I A	N P K G E L K G S A I	T G P V A K E C A E   W P R   A S T A N C	
UniRef90_Q5GSV4	S N A A V V L V	N N Q G E P L G T R V	F G P V V K K L   P S G S F M K   M S L A V E	
UniRef90_Q0P311	R N T V I L V	S P Q L S P V G T R I	Q S F V P Y E L   R H K N L S K   I L A L A S	
UniRef90_O94292	D N A C V L I	V N K E C E P L G T R I	L S V V A N E L   R T K T H   H T K   I A S S L A P R	
UniRef90_D2V375	D N A G V I V	V N K E C E P L G T R I	L S V V A N E L   R T K T H   H T K   I A S S S A S C	
UniRef90_Q9G895	D N A V V L L	N S S L V P I G T R I	A G P V A K E C A D   W P R   A S S A S C	
UniRef90_J7H027	D N A A I I L L	Q N N Q G Q I I A T R V	V F G I I I K E I   R K S E K F S K   I S S L S N E D	
UniRef90_D8R0T8	E N A A V V I I	N K E G E P V G T R V	Y Y G P V A A E L   R A K K F V K   I L S L A D D	
UniRef90_B9KJ60	E N A A V V L V	N D Q D G P L G T R V	F G P V R K L   P V G E F T K   V M S L A V E	
UniRef90_G6EM04	D N A A V V I I	R D D K T P R G T R I		
UniRef90_U7PK52	D N A G V I V	N P K G E M K G S A I	T G P V G K E A A E   W P R   A S N S G V	
UniRef90_K0KXY6	D N A C V L I	N K N N E P L G T R I	S S V V S R Q L   K D K G Y N K   I S S L A P K	
UniRef90_H6CA19	D N A C V L I	N K N G D P I G T R I	S S V V V G S E L   R D K K K W S K   I L S L A P M	
UniRef90_W6MXF4	D N A C V L I	N K N K D P I G T R I	S S V V V G S E L   R D K K K W S K   I L S L A P M	
UniRef90_A0A059LKU8	R N A C V L V	N A K G L P I G T R V	V L G F V T H E   R A R Q M L K   V L S L A S R	
UniRef90_V4K7Z6	D N A V V L I	N Q D G T P K G T E I	I R G P V A R E A A E R   W P S   A K L A T I	
UniRef90_E9BSQ4	D N A G V I V	N P K G E M K G S I I	A G P V A K E S A D   W P K   I S T H A P A	
UniRef90_G7YIU3	D N A G V V V	N N K G E L K G S A I	T G P V A K E C A D   W P K   A S T A S S	
UniRef90_B6Q949	D N A C V L V	N K A G E P I G T R L	N G I V V G A E L   R G K Q W S K   L S L A P M	
UniRef90_C5LAK1	D N A G V V I	N E K G E M K G S A I	T G P V G K E C A E   W P K   A S A A P T	
UniRef90_H2BC35	D N A A V V I X	X X X X X X X X X X X X X I A L E L   K N F P K   L S L A P E		
UniRef90_D8LGN4	D N G G V V V	N N K G E M K G S A I	I N G P V A K E C A D   W P R   A S N A G S	
UniRef90_U6N2G2	D N A G V V I	C N N K G E M K G S A I	T G P V A K E C A E L   W P K   S A A A P A	
UniRef90_M2NJ49	D N A C V L I	N K G G E P I G T R L	S G I V V G K E I   R E K G W S K   I L S L A P M	
UniRef90_M7PK55	D N A V V M I	K D D M T P R G T R I	F G P V A I R N F Q K N N F S K   F I   S S L A E E	
UniRef90_U7PZC8	D N A C V L I	S K A G D P V G T R V	N G V V G Q E L   R R K K W S K   I L S M A T M	
UniRef90_Q8SRA7	D N A A V V L I	N N K G E L R G A Q I	A G P V P R E V A D M   W P K   I S S Q A S S	
UniRef90_Q6E6H8	D N A A V V V I	T N K G D P K G T Q I	A G P V P R E V A D I   W P K   I S S S N A P A	
UniRef90_R5PAH0	D N A C V L L	N N A G E L R G S R I		
UniRef90_C9SDJ6	D N A C V L I	N K A G D P V G T R I	I N G V V G A E L   R R K Q W S K   I L S M A P M	
UniRef90_J9HJP4	D N A G V I V	N P K G E M K G S A V	T G P V A K E C A E L   W P R   I A A N S G S	
UniRef90_UP10004736C42	D N A A V V I I	N E D K N P K G T R V	V F G P V A R E L   R D K N Y T K   V S S L A P E	
UniRef90_K7MR50	D N A V V L V	D K Q G Q P I G T R V	F G P V P H E L   R Q K K H V K   I L T L A G H	
UniRef90_B6JVA8	D N A C V L V	D K N R E P L G T R I	I L G V I A R E T R D K K L L E K   V S S L A P K	
UniRef90_P58139	E N A A I I I I	N T D N T L K G T N I	F G P V P R E L   L M N I G F T N   L N S T A K L	
UniRef90_D3TB38	D N A A V V I V	T P N G E T K G S E I	I K G P V A R E A A E R   W P R   I A A I S S I	
UniRef90_K8EXJ4	R N S A A L L	S A Q G S P L G T R V	Q G T A P F E V   R E K N F M K   L L V L A S T	
UniRef90_S8BSL9	D N A C V L I	N K A G E P I G T R I	F G V V G R E L   R D K K K W S K   I L S L A P M	
UniRef90_W3XHS2	D N A C V L I	N K A G D P I G S R V	N G V V G A E L   R R R K W S K   I L S M A P M	
UniRef90_Q9YHX0	D N A G V I V	N N K G E M K G S A I	T G P V A K E W A D   W	
UniRef90_I2K2U1	D N A G V I A	A N P K G E M K G S A I	T G P V A K E C A D M   W P R   I A A A S G V	
UniRef90_Q8TW20	D N A A V V I V	T P D G A P R G S E I	R G P V A K E A A E R   W P R   I G S I A S I	
UniRef90_A3DNB7	D N A V V I V	T P E G T P K G S E I	R G P V A E R   W P Q   L A N I A T L	
UniRef90_C5YAV2	D N A A V V I I	D Q K G N S Q G T R	E L R E L   N F T K I   V S S L A P E	
UniRef90_M7NX79	D N A C V L I	N K K G E P I G T R I	L G V V S A E L   K Y K G W S K   I L S L A Q K	
UniRef90_B7GDH3	D S A G V I V	N N K G E M K G S A V	V S G P V A K E C A E L   W P R   I A A N A G S	
UniRef90_B7VLE7	S N A C V L L	N D T T E P V G T R I	F G P V T R E L   R N A K F M K   V S S L A P E	
UniRef90_D5GJJ4	D N A C V L I	N K S G D P L G T R I	S G V V G R E L   K R K K W S K   I L S L A P A	

UniRef90_O21251	V L
UniRef90_E8ZJY9	V L
UniRef90_UP100037C9377	I I
UniRef90_Q4A5D1	V L
UniRef90_D5EJU9	V L
UniRef90_M1E7V1	V L
UniRef90_A9QBT8	I L
UniRef90_D0J9I2	V L
UniRef90_V6DHU4	V L
UniRef90_K3ZA78	I V
UniRef90_K2FWL0	I [
UniRef90_UP100036B9399	V V
UniRef90_K1XFQ8	I V
UniRef90_V4UDL8	
UniRef90_B3E0J4	V V
UniRef90_V4L7Y1	I [
UniRef90_UP100046421DF	V L
UniRef90_E0TJ38	V L
UniRef90_A9YUC5	V V
UniRef90_M4QL29	V [
UniRef90_K2FRW6	V V
UniRef90_M3IGM7	
UniRef90_A5E2M4	
UniRef90_V5RRK0	V [
UniRef90_W1QC18	V V
UniRef90_M4QEJ4	V L
UniRef90_UP10003C15781	V L
UniRef90_K2FR02	
UniRef90_M4Q9X0	V L
UniRef90_A0A059CK00	I [
UniRef90_R4X7J3	V V
UniRef90_G3B241	
UniRef90_A0A024JLE5	T   V
UniRef90_W8VRA2	V I
UniRef90_X8DL57	
UniRef90_O42867	V V
UniRef90_U9TQG3	V V
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UniRef90_I6N5N1	L I
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UniRef90_K2DKH5	V L
UniRef90_M7A605	V I
UniRef90_F4P905	V V
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UniRef90_A9BK61	I I
UniRef90_Q5GSV4	V L
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UniRef90_D2V375	V V
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UniRef90_U7PK52	V [
UniRef90_K0KXY6	A   V
UniRef90_H6CAI9	H   V
UniRef90_W6MXF4	V V
UniRef90_A0A059LKU8	V L
UniRef90_V4K7Z6	I I
UniRef90_E9BSQ4	I V
UniRef90_G7YIU3	L [
UniRef90_B6Q949	H   L
UniRef90_C5LAK1	I V
UniRef90_H2BC35	V L
UniRef90_D8LGN4	I V
UniRef90_U6N2G2	I [
UniRef90_M2NJ49	H   L
UniRef90_M7PKK5	V L
UniRef90_U7PZC8	
UniRef90_Q8SRA7	I [
UniRef90_Q6E6H8	I I
UniRef90_R5PAH0	
UniRef90_C9SDJ6	
UniRef90_J9HJP4	I V
UniRef90_UP10004736C42	V I
UniRef90_K7MR50	I [
UniRef90_B6JVA8	L V
UniRef90_P58139	I I
UniRef90_D3TB38	I V
UniRef90_K8EXJ4	T   L
UniRef90_S8BSL9	H   L
UniRef90_W3XHS2	
UniRef90_Q9YHX0	
UniRef90_I2K2U1	V V
UniRef90_Q8TW20	I V
UniRef90_A3DNB7	V V
UniRef90_C5YAV2	V L
UniRef90_M7NX79	V V
UniRef90_B7GDH3	I L
UniRef90_B7VLE7	V L
UniRef90_D5GJJ4	Y   V

1 10 20 30 40

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UniRef90\_Q70MM4  
UniRef90\_D2Z231  
UniRef90\_G7DYD1  
UniRef90\_S5SY08  
UniRef90\_B2MWV9  
UniRef90\_M9LMA9  
UniRef90\_D9IXF2  
UniRef90\_F4NSA7  
UniRef90\_H1XLC3  
UniRef90\_UP1000441270A  
UniRef90\_M1VBV5  
UniRef90\_M7B1P5  
UniRef90\_M4FIQ1  
UniRef90\_D3BMX5  
UniRef90\_K5VUZ9  
UniRef90\_T0LVM5  
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UniRef90\_UP10003D05C22  
UniRef90\_G6EXK5  
UniRef90\_Q84JG5  
UniRef90\_R1FB35  
UniRef90\_E3EZC3  
UniRef90\_A2SPL2  
UniRef90\_E1RKD3  
UniRef90\_X1QES5  
UniRef90\_P0DJ53  
UniRef90\_S9Q188  
UniRef90\_D7E8S5  
UniRef90\_Q0W1X8  
UniRef90\_J1ANJ7  
UniRef90\_J9DPU5  
UniRef90\_J419F1  
UniRef90\_D5E6R7  
UniRef90\_B3T594  
UniRef90\_F0LHB8  
UniRef90\_M5G601  
UniRef90\_G0VAN9  
UniRef90\_B0R666  
UniRef90\_Q649A4  
UniRef90\_M7XMP2  
UniRef90\_A1RXG2  
UniRef90\_F1LWL3  
UniRef90\_X5HJG2  
UniRef90\_D5LX16  
UniRef90\_I4Y9F7  
UniRef90\_F3IM60  
UniRef90\_A0RVY3  
UniRef90\_G1Q074  
UniRef90\_N0B957  
UniRef90\_TOYCW9  
UniRef90\_D8J9J5  
UniRef90\_Q5KJU6  
UniRef90\_V4FID4  
UniRef90\_M7T8U2  
UniRef90\_G4TUL5  
UniRef90\_A7TFI8  
UniRef90\_T1E8D7  
UniRef90\_A8BS37  
UniRef90\_X1GES3  
UniRef90\_S3BZE0  
UniRef90\_Q94Z10  
UniRef90\_H5TFC0  
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UniRef90\_UP10003D784BB  
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UniRef90\_C1KRI2  
UniRef90\_P54037  
UniRef90\_F2Y9U0  
UniRef90\_Q673R8  
UniRef90\_O26121  
UniRef90\_Q9TAK1  
UniRef90\_I2H1X5  
UniRef90\_P35996  
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UniRef90\_A4ZHB7  
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UniRef90\_W5PIF4  
UniRef90\_UP100036BEECA  
UniRef90\_Q7YN74  
UniRef90\_D8UCL0

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

I I D N S G G L V A E C I N V L R Y S S M G L G R V G D E V V

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

		50	60	70	80
UniRef90_B8D5W0	V S V K K G P E M R K K	V F K A I V V	R Q R R P Y K R P D G T W V A F E		
UniRef90_G8DKB5	V S V L S S K P K E H I Q K G E	V K L A L I V V	E T K K E L G R I N G T R S F S		
UniRef90_Q9TCB2	V T V K K A N S Y K G K A G Q V	V Y R G V I L V	E T K K E V T R K D G S L F S F D		
UniRef90_T1R7E6	V S I R R V K K K I K V R E G E	V V H A L V V V	R T K S R L V R Q N S T Q L Q C Q		
UniRef90_R0GMF5	G S V K E A I P K G K V K K G K V V Y G	V V V V V V V V	R A A M Q K G R V D G S Q V R F D		
UniRef90_A0A016PFP4	V V V Q E Q R G S N K V K R G D I R H A V	V R T R Y P T Q R P D G S I V Y F E	V R T R Y P T Q R P D G S I V Y F E		
UniRef90_Q70MM4	A T V K K G K P E L R K K V P G E V I Y G V	I V L R T Q S K Y R R R N S T F I N F K	V R Q R K A W R R R K D G V F I R F D		
UniRef90_D2Z231	L S I Q K L R K R R K V P G E V I Y G V I L R T Q S K Y R R R N S T F I N F K	A I V R Q R K A W R R R K D G V F I R F D			
UniRef90_G7DYD1	A T V K K G K P E L R K K V H Q A I V R Q R K A W R R R K D G V F I R F D				
UniRef90_S5SY08	I S V K K S L Y S N K I R K G E F N A V I I R T L Y R F R K E D G T I I N F N				
UniRef90_B2MWV9	I S V K R A T P Q N K I K G S I H K A I I V R T S Y K T H R Q N G F S V F F D				
UniRef90_M9LMA9	V V V Q K A R P T Q T K V R R G D I R H A V I V R T K K E M T R P D G R V F I R F D				
UniRef90_D9IXF2	T V V L K A Q S K A K I K T S S I V K G V V V R T R K K Q R K R K N N V Y V K F D				
UniRef90_F4NSA7	C S V K K A K P I Q K L K K G D V R A L V V R R Q R K E V R R L D G S Y I K F D				
UniRef90_H1XLC3	M T V K D A I P R G K V K K G E V Y D A V V R R T R K G V R R P D G S L I R F D				
UniRef90_UP1000441270A	V T V K K G K P E L R K K V P M A V V V R Q R K A W R R R K D G T Y M F E				
UniRef90_M1VBV5	A P V K K G K P E L R T K V H P A V L I W Q R K S Y R K D G D				
UniRef90_M7B1P5	A V I K D A L P Q M P L E R S E V I R A V I V R T R C E F K C E D G I I I R Y D				
UniRef90_M4FIQ1	A T V K K G K P E L R K K V P M A V V V R Q R P Y R R A D G S I I S F E				
UniRef90_D3BXM5	A S V K K G G P D V R A K V Y A V V R Q R P Y R R A D G S I I S F E				
UniRef90_K5VUZ9	C V V K N A R P A V K V R R G D V R R A V I V R T R K P V R P D G R I I R F D				
UniRef90_TOLVM5	A S V K K G G P D V R A K V Y A V V R Q R P Y R R A D G S I I S F E				
UniRef90_Q9HIR9	A S V K K G T P E M R S K V Y A V V R Q R P Y R R A D G S I I S F E				
UniRef90_UP10003D05C22	V A V Q E V A S T S T I K K G E V S Q A M I V R T R K E I A R K D G T I I R Y D				
UniRef90_G6EXX5	V S V K E A I P R G K V K K G E V H Q A V V R Q R P Y R R A D G S I I S F E				
UniRef90_Q84JG5	G S V K E A I P K G K V K K G M V V Y G V V V R A A M P K G R A D G S Q V K F D				
UniRef90_R1FB35	A T V K K G K P E L R K K V M P A V V V R Q R R T W R V D G G Y I Y F E				
UniRef90_E3EZC3	V S V K E A I P R R G R V K K G D V R K A V V V R T A K E V R E D G T A I V R F D				
UniRef90_A2SPL2	V T V K K G T P D M K R K L V R A V V R Q R K E F R R P N G L R V S F E				
UniRef90_E1RKD3	V S V K K G T P D M R R K L E K A V V R Q R K E I R R I N G L R S F E				
UniRef90_X1QES5	V T V K E A D P R G M V K K H Q V Y Q A V V R Q R K E L R R K D G S Y I R F D				
UniRef90_P0DJ53	C S V K G S P K L R K K V L Q A I V V R Q R P W R R R D G V F I Y F E				
UniRef90_S9Q188	V K K S R T G P N N K V K R G D I H H A V V R T K F P L R R A D G R Y V R F D				
UniRef90_D7E8S5	V S V K K G T P E M R K Q L Y A V V R Q R K E Y R R P S G L R V S F E				
UniRef90_Q0W1X8	G S V K K G T P E M R K T V R C C V V R Q R K E Y R R P S G L R V S F E				
UniRef90_J1ANJ7	V S V K K G T P D M R R K L I K A V V R Q R K E M R R P S G L R V G F E				
UniRef90_J9DPU5	C T V K K G K P D I R K K T M P V V V R Q R K S W R R R E G L V Y F E				
UniRef90_J4I9F1	A S V K K G K P E L R K K T M P V V V R Q R K S W R R R E G L V Y F E				
UniRef90_D5E6R7	V S V K K G T P E M R R Q L H A V V R Q R K E F R R P D G T R V S F E				
UniRef90_B3T594	V I V K K G P P E M R R Q T Y D A V L R Q R K Y P V R S N G N R I M F E				
UniRef90_F0LHB8	A T V K K G P P D I R K K T M P V V V R Q R K E Y R R P D G R V K F E				
UniRef90_M5G601	C V V Q R A R P I P I R K G E V R R A V V R T K K E F R R P D G S I V R F D				
UniRef90_G0VAN9	C C V V Q K A K P T N R V K K G D I V H A I I R T K Q N M M R P D G S Y V S F G				
UniRef90_B0R666	V S V T K G T P E M R R Q V L E A V V R Q R K P I R R P D G R V K F E				
UniRef90_Q649A4	V S V K K G T P E M R R Q V L R A V V R Q R K Y K R P N G M R V S F E				
UniRef90_M7XMP2	V V V K K K A R A A N K V R K G D V R R A V V R T K Y P T R R P D G R Y I R F E				
UniRef90_A1RXG2	V S I R A G K P P E L R K Q V M R A V V R Q R R P Y R R P D G S W I A F E				
UniRef90_F1LWL3	A T V Q K S R P Q L R K K V H P A M V I R Q R K S C Y R G D V S Y I Y F E				
UniRef90_X5HJG2	V S V K K C A P S G K V S A G S Y Y R A V V R V K R L P S V V F S				
UniRef90_D5LX16	A P V K K G K P E F R K K V M P A G V I R Q R K P F R R K D G T F I Y F G				
UniRef90_I4Y9F7	V V V K S A K P A N K I R K G D I R R A V V R T K Q Q I R R P D G R F V R F D				
UniRef90_F3IM60	V T V K E A I P R G K V K K G Q V M T A V V R T R H G V R R A D G S I I R F D				
UniRef90_A0RVY3	V V V K K G P A E L R K Q V H G A V V R Q R K Y P V R L G V R V A F E				
UniRef90_G1Q074	A T V K K G K P P E L R K E V H P V V V R Q R K S Y L R K D G V F I Y F E				
UniRef90_N0B957	V S V K K G T P E I R K Q V H Y A V V R Q R K E F R R P D G T R V K F E				
UniRef90_TOYCW9	V S V K K G T P E M R R Q V L H A V V R S R S P I R R A D G T R L R Q F E				
UniRef90_D8J9J5	V S V T K G T P E M R R Q V L E A V V R Q R K S I R R P D G T R V K F E				
UniRef90_Q5KJU6	C V V Q N K A R P I Q K I R K G D I R R A V V R V K T T Q R P D G S Y V R F D				
UniRef90_V4FID4	V S V K E A I P N S K V K K G D V M K A V V R T V K E V K R P D G S Y L K F D				
UniRef90_M7T8U2	V S V K K G S P D M K R Q L N A V V V R Q R R A F R R P D G T M V E F D				
UniRef90_G4TUL5	C V V Q R A R P I S K V K R G D V L R A V V R S R K P V M R P D G R F V R F D				
UniRef90_A7TFI8	C V V Q R A R P T N R V K K G D V L R A V V R T K Q R N M R P D G S V A F G				
UniRef90_T1E8D7	A T V K K G K P E L R K N G N A S R R Y S A A K T H S V D V T V F L Y F E				
UniRef90_A8BS37	I T V G R D G K P E L R R K V T P A V V V R Q R K V W R R K D G V W Y F Q				
UniRef90_X1GES3	V T V K K G P D L R G T I L K A V I V R Q R K M Y R V D G T R L S F E				
UniRef90_S3BZE0	V V V Q K Q R S A S D V K R G D V R Q A V V R T R Y P T R R K D G S V I R F D				
UniRef90_Q94Z10	V A V Q S L R P R Y K M N K S E V H H G V V V Q T R V Y R N K S G S S Q S F G				
UniRef90_H5TFC0	M K E A I P R G K V K K G D V L T A V V R T R K G V R R A D G S T I R F D				
UniRef90_UPI00027F9C62	A T V K K G K P E L R K K V H P A V V R Q R K S Y R K D G A F L Y S E				
UniRef90_B2XX50	V V V K K M P V N L K V K K S D I C F G V I V R T K Q N V R D G S I Y L S N D				
UniRef90_UPI0003D784BB	A S V K E L H Q K H N V K A Y K V K K A V V R T A M P F S R C Y R G D S V I K F D				
UniRef90_G4RL07	V V V K E G K P E M R K Q L F R A I V V R Q R K P F R R P D G T W A F E				
UniRef90_C1K1R2	V S V K S R Q K S K V K K G H Y K A V V C E T K M G G R A D G S Q M C S C				
UniRef90_P54037	V T V K K G T P E M R K Q V L P A V V R Q R K E I R R P D G T R V K F Q				
UniRef90_F2Y9U0	G S V L Y T H Q Q M K F K K G S V L R A I C R I A N S H R L R S D G Q R L R F Q				
UniRef90_Q673R8	V T V R R G T P E T R R Q I F N A V V R Q R R P F R R V D G T W Q F E				
UniRef90_O26121	V S V K K G T V D M R R E V L N A V V R Q R K E Y R R P D G L R V K F E				
UniRef90_Q9TAK1	L S I R G I R S G R R V K A G Q V S L A V V R T K A W T K F K D G S Q S R F Q				
UniRef90_I2H1X5	C V I Q Q A R P T N R V R R G D V H A I V R T Q R N M R P D G S V A F G				
UniRef90_P35996	C V I Q K A K P N R V K K G D I C H A I V R S K Q R N M C R K D G S T V A F G				
UniRef90_UPI0003649595	V S V T R S V K T K V R K G E V H R A L V V R Q R D P F R R S D G T Y I R F D				
UniRef90_R7QR53	L S A K K L R I N Q K K K G D L F K A I H T A Y Q K K S T I G N I L K F D				
UniRef90_A4ZHB7	A T M K K G K P D L R K K V M P A V I R Q G K P W R R K V G V F M Y F E				
UniRef90_UPI0003D28CC8	V V V Q K A K P I P A N Q R G D V R H A I V V R T K K E A Q R P D G R V K F D				
UniRef90_W4SN78	UniRef90_A8PT91	V V V Q K A K P I P A N Q R G D V R H A I V V R T K K E A Q R P D G R V K F D			
UniRef90_UPI00036B300D	V V V Q K A K P I P A N Q R G D V R H A I V V R T K K E A Q R P D G R V K F D				
UniRef90_K1TW84	UniRef90_W5PIF4	V V V Q K A K P I P A N Q R G D V R H A I V V R T K K E A Q R P D G R V K F D			
UniRef90_UPI00036BEECA	UniRef90_Q7Y7N4	V V V Q K A K P I P A N Q R G D V R H A I V V R T K K E A Q R P D G R V K F D			
UniRef90_D8UCLO	UniRef90_Q7Y7N4	V V V Q K A K P I P A N Q R G D V R H A I V V R T K K E A Q R P D G R V K F D			

	90	100	110	120
UniRef90_B8D5W0	D N A [V] I L   T P E G T P K G T E I	I R G P   I   A R E A A E R W P Q I   A N   L   A S M		
UniRef90_G8DKB5	Q N G A V L L   N A Q G Q I   L G T R I	L Y P   V T H E   L R E K R   L V K I   L S   L A P S S		
UniRef90_Q9TCB2	R N V V A L M T P Q E N P M G T R I	T G F P A S Y E L   R A K G K M K F I   A L S S S		
UniRef90_T1R7E6	E N S V V L M T N K N K P F A T R V	G L P   V P R   L R H   S K F M K V A S L   S A G		
UniRef90_R0GMF5	D N A V V I V N P D Q G P T G T R V	F G P   V P H   E M R   L R Q Q   L K I   L T   L A Q H		
UniRef90_A0A016PFP4	D N A C V L L N N K A G D P   V G S R I	N G A   V G A E   L K R K K W S K I   L S M A P M		
UniRef90_Q70MM4	D N A G V I V V N N K G E M K G S A I	T G P   V A K E   C A D   L   W P R   I A S N A S S		
UniRef90_D2Z231	K N S V A L V T N Q   L R P   V G T R	F G P   V T R   L R T S K F M K V A S S   L S G G		
UniRef90_G7DYD1	D N A G V I C   N P K G E M K G S S I	A G P   C A K E   A C D   R   W P R   I A S N A N A		
UniRef90_S5SY08	D N S V V L F   N N N K K D   L L F T   R I	F G P   V L K E L   K		
UniRef90_B2MWV9	E N A I I L V N K K E E   L L T T   R I	F G P   I G S E L   R R K   N   L   L K   I   L S   L G S V		
UniRef90_M9LMA9	D N A C V L L N N K K P   L G T R   V	N G V   V A N E L   R A A G   W G K I   A S L   A P K		
UniRef90_D9IXF2	D N A I V V I D D R K N P   I G T R   V	F G A   V A S E L   R G K D F A R   I   S   L   A P D		
UniRef90_F4NSA7	D N A V V M L N N K Q G Q   P L G N R   V	M G   L   I   A R E   C   R Q K R W A K   V   A M A P K		
UniRef90_H1XLC3	G N A A V L L N N N K Q E   P I G T R   V	F G P   V T R   E L   R S E K F M K   V   S   L   A P E		
UniRef90_UP1000441270A	D N A A V V L L N N N K R E   M L G T   R V	T G P   V A K E   A A D   I   W P K		
UniRef90_M1VBV5	D N A A G V I V N P   K G E M K G S A I	T G P   V A K Q   C   T D   L   W P R   I A S N A G S		
UniRef90_M7B1P5	D N A A G V I V H N K G E M K G S A I	T G P   V A K E   C   S D   L   W P K   V A T   N A G		
UniRef90_M4FIQ1	D N A A A V V I I D Q K G N P   K G T R   V	F G A   I   A E E   L   R E L   N   F T   K   I   V   S   L   A P E		
UniRef90_D3BMX5	D N A G V T C   N P K G E   V K G N   I	L G P   V A K E   C   S D   L   W P K   V A T   N A G		
UniRef90_K5VUZ9	D N A A A V L V N N K R E   M L G T   R V	G G L   V S A   D   L   R   M K G   W G K   V   S   L   A P K		
UniRef90_T0LVM5	E N A A A V L V T P   D G E   V R G S E   I	K G P   V A R E   A A E R   W P R   I A A   I A S T		
UniRef90_Q9HIR9	D N A A A V L V T P   D G E   V R G S E   I	K G P   V A R E   A A E R   W P R   I A A   L A S I		
UniRef90_UP10003D05C22	D N A A V I L M D A K G E   P I G K   R I	F G P   V A K E   L   R D   L   G   Y   R   N   I   T   M A E E		
UniRef90_G6EXK5	K N A A V A L I N N K Q S E   P I G T   R	F G P   V V   R   E   L   R   A R K   F   M K   I   S   L   A P E		
UniRef90_Q84JG5	D N A I V V V G I K N Q P   T G T   R   V	F G P   V P H   E M R   L   R K   Q   L K   I   L S   L A Q H		
UniRef90_R1FB35	D N A A G V I V N V K G D   L K G S A I	S G P   V A K E   C   A D   L   W P R   I A S A A G T		
UniRef90_E3EZC3	R N A A A V I L N N N M E   P V G T   R   I	F G P   V V   R   E   L   R   A K N   F   M K   I   S   L   A P E		
UniRef90_A2SPL2	E N A M I L L N E N G D   P V G T   R   I	F G P   V A R E   V   A E R   F   P   K   V   G   S   M   A T   I		
UniRef90_E1RKD3	D N A A M V I I N E R G E   P K G T   E   I	K G P   V A R E   V   A E R   F   P   K   I   G   S   M   A T   I		
UniRef90_X1QES5	D N A C V L L N N K D K E   P R G S   R   I	F G P   I   P   K   E   L   R   E   R   G   Y   T   K   I   I		
UniRef90_P0DJ53	D N A A G V I A N P   K G E M K G S Q   I	T G P   V A K E   C   A D   I   W P K   V A S N A G S		
UniRef90_S9Q188	D N A A C V L V N N K D R E   P   I   G T   R   I	L S   V   V A N E L   R   M K N   H   T   K   L   A S   L   A P R		
UniRef90_D7E8S5	D N A A V V I T D   S G F   P K G T   D   I	K G P   I   A R E   A A E R   F   P   K   V   G   T   T   A S M		
UniRef90_Q0W1X8	D N A A V V I C   D E R G E   P K G T   E   I	K G P   V A R E   V   A E R   F   P   K   I   G   S   T   A T   I		
UniRef90_J1ANJ7	D N A A V V I I D E R G E   P K G T   E   I	K G P   V A R E   V   A E R   F   P   K   I   G   S   T   A T   I		
UniRef90_J9DPU5	D N A A G V I V I L P   N G D   I   K   G   T   Q   I	A G P   V P   R   E   V   S   E   M   W   P   K   I   S   S   Q   A S   A		
UniRef90_J4I9F1	V H A G V I V N P   K G E M K G S A I	T G P   V A K E   C   A D   L   W P R   I A S N A G T		
UniRef90_D5E6R7	D N A A V V I T D   P   T   G F   P   K G T   D   I	K G P   I   A R E   V   A E R   F   P   K   I   G   S   T   A T   I		
UniRef90_B3T594	D N A A A V V I I T A E G E   M K G T   D   V	K G P   I   A S E   A A E R   W   P   R   L   A N   V   A S M		
UniRef90_F0LHB8	D N A A A V V I T T E D   G   V   P   R   G   T   E   I	R G P   I   A R E   A A E K   W   V   R   L   G   G   I   A S   I		
UniRef90_M5G601	D N A A A V V I I D K K G E M   I   G T   R   I	G G V   V S   A   D   L   R   R   R   G   W   G   K   I   A S   L   A P K		
UniRef90_G0VAN9	D N A A C V L I N P   K G E   M   I   G T   R   I	M G C   V   G   R   E   L   R   E   K   G   L   N   R   I   C   S   L   A S K		
UniRef90_B0R666	D N A A A V V I I D D   L   G   E   P   R   G   T   E   I	K G P   I   S   R   E   V   A   E   R   Y   G   T   I   A S T   A T   M		
UniRef90_Q649A4	D N A A A V V I T D D   D   G   I   P   K   G   T   E   I	K G P   V   A   R   E   V   A   E   R   F   P   K   I   A   S   A   A T   I		
UniRef90_M7XMP2	D N A A A V V I I N H   K   K   E   M   I   G   N   R   I	G S   V   V   A   A   E   L   R   A   K   G   W   G   K   I   V   S   L   A P K		
UniRef90_A1RXG2	D N A A A V V I I T P   E   G   E   P   K   G   T   E   I	R G P   L   A   K   E   A   A   E   R   W   P   K   L   S   A M   S   I		
UniRef90_F1LWL3	E D A E V I V V N N K G K M   M K G S A I	T G P   L   A   K   E   H   A   D   S   W   P   R   I   A S N A G S		
UniRef90_X5HJG2	D N A A V V L L N Q Q N E   M   I   G T   R   I	F G P   T   D   S   L   L   R   K   R   G   F   A   K   I   S   S   L   S Q E		
UniRef90_D5LX16	D K A G V I V V N N K G E M K G S A I	P G   P   F   A   K   K   C   A   V   L   W   P   R		
UniRef90_I4Y9F7	D N A A G V L I I N P   K K   E   L   L   G   S   R   I	S G   V   I   A   H   E   V   R   Q   K   G   W   G   K   I   A   S   V   A   P   K		
UniRef90_F3IM60	G N A A V L L S   S   K   Q	G N A A V L L S   S   K   Q		
UniRef90_A0RVY3	D N A A A V L T T   P   E   G   E   M   M   K   G   T   D   I	K G P   V   A   A   E   A   S   E   K   W   P   R   L   A   N   L   A   S   M		
UniRef90_G1Q074	D N S G V I V N N K E E M   M   K   S   S   A   I	T G P   V   A   K   K   C   A   D   L   W   L   R   I   A   S   I   G   G   S		
UniRef90_N0B957	D N A A A V I T D   P   N   G   N   P   K   G   S   E   I	I R G A   V   A   R   E   A   A   E   R   F   S   R   I   G   T   L   A   A   A		
UniRef90_TOYCW9	D N A A A V I T T   E   T   G   E   L   K   G   S   Q   I	K G P   V   A   K   E   A   A   E   R   W   S   R   V   A   A   A   S   S   L		
UniRef90_D8J9J5	D N N A A V V I I D D   A   E   D   P   R   G   T   E   I	K G P   I   P   V   A   R   E   V   A   E   R   F   G   S   V   A   S   T   A T   M		
UniRef90_Q5KJU6	D S S A A V V I I D D   N   N   K   G   E   M   L   G   T   R   I	V I G   P   V   A   S   E   L   R   R   Q   F   M   K   I   I   S   L   A P K		
UniRef90_V4FID4	D N S A V L I I T N   Q   M   E   P   I   G   T   R   I	F G P   V   A   R   E   L   R   A   R   Q   F   M   K   I   I   S   L   A P E		
UniRef90_M7T8U2	D N A A A V I V T P   T   G   E   T   K   G   S   M   I	K G P   V   P   V   A   I   E   A   A   E   R   W   P   K   I   A   S   A   A S   M		
UniRef90_G4TUL5	D N A A A V V I I N K   K   N   E   L   I   G   T   R   I	G G V   V   S   S   D   L   R   N   K   G   W   G   K   V   A   L   A P K		
UniRef90_A7TFI8	D N A A C V L I I N K   T   G   E   P   L   G   T   R   I	M G V   V   G   R   E   L   R   K   A   L   G   Y   N   K   I   C   S   L   A S R		
UniRef90_T1E8D7	D N A A G V I V N N K G E M   K G S A I	T G P   V   A   K   E   C   A   D   L   W   P   R   I   A   S   N A G   S		
UniRef90_A8BS37	D N A A G V I I N P   K   G   E   L   K   G   S   S   I	T G P   V   A   K   E   A   A   D   R   W   P   K   I   S   T   T   A E   C		
UniRef90_X1GES3	D N A A G V I I N P   K   G   E   L   K   G   S   S   I	T G P   V   A   K   E   A   A   D   R   W   P   K   I   S   T   T   A E   C		
UniRef90_S3BZE0	D N A A C V L I I N K   A   G   D   P   I   G   S   R   I	R G P   I   A   R   E   A   A   E   L   F   P   K   I   A   S   I   S   L   A P E		
UniRef90_Q94Z10	S N S V A L I I T P   Q   L   K   P   L   G   T   R   I	S A V   L   P   S   R   S   L   R   G   L   K   W   A   K   L   A   A   M   A   K   K		
UniRef90_H5TFC0	N N A A V V L L I N A N K   Q   P   I   G   T   R   I	F G P   V   T   R   E   L   R   G   D   S   F   M   K   I   I   S   L   A P E		
UniRef90_UP100027F9C62	D N A A G V T V I N N K G K M   M K G S A I	I G P   V   P   V   A   K   E   C   A   D   L   W   T   Q   I   A   S   N A G   S		
UniRef90_B2XX50	D N A G V T V I N N K G K M   M K G S A I	I G P   V   P   V   A   K   E   C   A   D   L   W   T   Q   I   A   S   N A G   S		
UniRef90_UP10003D784BB	E N A I A A L L I N K   H   G   R   P   I   Q   K   R   V	F G P   V   P   Y   E   L   R   K   K   W   M   I   L   T   L   L   S   K   Y		
UniRef90_G4RL07	D N A A V V L L I T P   E   G   D   P   K   G   T   E   I	R G P   V   A   M   E   A   A   L   R   W   P   S   I   A   N   L   A   S   I		
UniRef90_C1KRI2	R N T A V V L L I T P   Q   T   P   L   G   S   R   I	Q G   I   T   P   Y   E   L   R   M   K   K   H   T   K   L   L   S   L   S   R		
UniRef90_P54037	D N A A V V I I T P   D   P   G   N   P   K   G   S   D   I	K G P   V   A   K   E   A   A   E   R   W   P   G   I   A   R   I   A   K   I		
UniRef90_F2Y9U0	Y P A V A I I I T K   N   G   V   P   R   G   T   K   I	F G P   L   P   K   E   L   R   E   Q   G   Y   I   R   M   S   L		
UniRef90_Q673R8	D N A A C V L I I T N   E   R   G   E   V   R   G   S   D   I	K G P   V   S   R   E   A   A   E   R   W   P   R   I   A   A   T   A K   Q		
UniRef90_O26121	D N A A A V I V S   P   E   G   V   L   K   G   S   E   I	R G P   V   A   K   E   A   A   D   R   W   P   S   V   G   S   A   A   S   I		
UniRef90_Q9TAK1	R N C A V I V I T R K   K   Q   I   L   G   T   R   V	F G P   V   S   R   Q   L   R   K   K   Y   L   R   I   L   L   S   L   A S		
UniRef90_I2H1X5	D N A A C V L I I N K   T   G   D   P   L   G   T   R   I	L G   I   V   G   R   E   L   L   R   A   K   G   M   N   K   I   C   A   L   S   S   R		
UniRef90_P35996	D T A A C V L I I N K   N   G   E   P   L   G   T   R   I	M G C   V   D   R   T   L   K   D   K   G   Y   N   K   I   C   S   L   A S   R		
UniRef90_UP10003649595	D N A A A V L I I D A   K   E   P   R   G   G   R   I	F G P   V   A   K   E   A   A   D   R   W   P   S   V   G   S   A   A   S   I		
UniRef90_R7QR53	D T A A A I I I N A   D   G   T   P   V   A   T   R   I	R G P   V   S   S   A   A   L   D   R   K   R   Y   L   R   V   L   S   L   A S		
UniRef90_A4ZHB7	K N C   L   I   L   N   N   Q   N   K   P   L   G   T   R   I	F G P   V   T   S   E   F   R   K   Q   K   N   F   K   L   S   L   A S   N		
UniRef90_UP10003D28CC8	D N A G V I V I N P   K   G   E   M   M   K   G   S   A   M   T	G P   I   G   K   R   E   E   R   W   P   G   I   V   S   L   A P E		
UniRef90_W4SN78	G N A A V L L I N N N K Q E   P   I   G   T   R   I	F G P   V   T   R   E   L   R   S   E   K   F   M   K   I   V   S   L   A P E		
UniRef90_A8PT91	D N A A C V L I I N P   K   G   E   P   L   G   S   R   I	N G V   V   S   S   E   L   R   D   R   G   W   G   K   I   L   S   L   A S   K		
UniRef90_UP100036B300D	D N A A C V L I I S   P   T   E   E   M   R   G   T   R   I	F G P   V   G   R   E   L   L   R   E   K   Q   F   M   K   I   V   S   L   A P E		
UniRef90_K1TW84	D N A A V V L L I N N Q   N   K   P   L   G   T   R   I	F G P   V   A   R   E   L   R   D   Q   Y   M   K   I   I   S   L   A P E		
UniRef90_W5PIF4	D N A G V T V I N N K G E M   M   K   G   S   A   I	T G P   V   A   K   E   C   A   D   L   W   P   G   I   A   S   T   A G   S		
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UniRef90_R0GMF5	I V
UniRef90_A0A016PFP4	I
UniRef90_Q70MM4	F V
UniRef90_D2Z231	V I
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V G A V I N C A D N T G A K N L Y V I A V N G I K G R P A A G A G D M I V  
P A A G S G D M I V  
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S V L T C A D N S G A K S L M L I N K V G K A G K K G R G V G D I I M  
F I Q M R T V L K V V D N P R A K K V M L V D T I I  
M G D V I V  
T M L K V A D N S G A K E I K C I G H V R K S V S R L G D I I R  
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M I T F I T N L K I A D N T G V L N V Q C I K V L G G H K M R V A I S G K P I V  
P G S I I T C A D N T G A K T L M I I N K L G K G R I R S A G I G D V V I  
I N V G S W I V V A D N S G A K I A K V V N I R N Y H R Q P K C G I G D T I F  
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I N S R L R C V D N S G A K P P R C I H V Y N K Q R V G N V G D K I I L  
M I Q N C S K L R V I D N S G A N S V K C F K N L K Y Q N N N K L N A I I K V S  
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R G G G M G D M V T  
I Q K L T R V R V V D N S A H R P P K C I H V Y N K T G V G K V G D K I L  
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I Q K M T R V R V V D N S S L G N T P Y H R P P R V I H  
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C V G D M V M  
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D M V L P A V I V R Q C K P W R P K D G V F M Y F E  
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V S V Q S L Q R Q R H R V N K S E I I H G V L V Q T R R F Y Q V D G R V I R W G  
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K D K Q V V K A V I I R T R K E T R R P D G T Y V R F D  
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G I I K E I S F K S S F K Y S E I V Y G F V V R L K K T Q N I Q N R Y N Y I F N  
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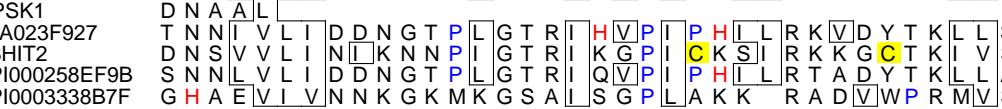
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UniRef90_K4BGM4	
UniRef90_S4R9P5	
UniRef90_B6UI98	
UniRef90_I7IHJ4	
UniRef90_A8U9S7	
UniRef90_L0PA74	
UniRef90_G1M7C9	
UniRef90_U3K9W3	
UniRef90_UP10002658AB3	F V
UniRef90_E9HJT4	F V
UniRef90_M3ZUJ3	F V
UniRef90_U6GI25	
UniRef90_U6HLE4	F V
UniRef90_D1LDN3	
UniRef90_V5HR88	F V
UniRef90_W7U0N0	
UniRef90_V5I0X4	
UniRef90_U7DW33	
UniRef90_C9JD32	
UniRef90_R7U059	F
UniRef90_UP10002C3244C	I
UniRef90_H7CDF0	
UniRef90_B0WL56	F V
UniRef90_A0A026X392	F V
UniRef90_F4W3T1	F V

UniRef90\_D8M6Y5  
UniRef90\_K7IPC6  
UniRef90\_J1PSK1  
UniRef90\_A0A023F927  
UniRef90\_Q8HIT2  
UniRef90\_UPI000258EF9B  
UniRef90UPI0003338B7F  
UniRef90\_V4ZZZ6  
UniRef90\_Q17CT6  
UniRef90\_M1BA92  
UniRef90\_M1JZX8  
UniRef90\_B3MYV1  
UniRef90\_U6IGD2  
UniRef90UPI0001925EF7  
UniRef90\_U6LIT4  
UniRef90\_H0AEI8  
UniRef90\_A0A059B212  
UniRef90\_Q9C4D5

Sequence alignment of MIF and MIF-like proteins. The alignment highlights conserved residues (black squares) and specific residues (yellow boxes). Key conserved regions include the N-terminal domain (residues 1-10), the DSEGRP motif (residues 10-20), and the C-terminal domain (residues 30-40). Specific residues highlighted in yellow are Cys-10, Cys-20, Cys-30, Cys-40, and Cys-100.

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  
jpssm

UniRef90_D8M6Y5 UniRef90_K7IPC6 UniRef90_I1PSK1 UniRef90_A0A023F927 UniRef90_Q8HIT2 UniRef90_UPI000258EF9B UniRef90_UPI0003338B7F UniRef90_V4ZZZ6 UniRef90_Q17CT6 UniRef90_M1BA92 UniRef90_M1JZX8 UniRef90_B3MYV1 UniRef90_U6IGD2 UniRef90_UPI0001925EF7 UniRef90_U6LIT4 UniRef90_H0AE18 UniRef90_A0A059B2I2 UniRef90_Q9G4D5	 <p>The sequence alignment shows the following pattern of conservation and variation:</p> <ul style="list-style-type: none"> <li><b>Position 90:</b> UniRef90_D8M6Y5 has C, UniRef90_K7IPC6 has S, UniRef90_I1PSK1 has S, UniRef90_A0A023F927 has T, UniRef90_Q8HIT2 has D, UniRef90_UPI000258EF9B has N, UniRef90_UPI0003338B7F has G, UniRef90_V4ZZZ6 has H, UniRef90_Q17CT6 has S, UniRef90_M1BA92 has R, UniRef90_M1JZX8 has K, UniRef90_B3MYV1 has S, UniRef90_U6IGD2 has S, UniRef90_UPI0001925EF7 has R, UniRef90_U6LIT4 has D, UniRef90_H0AE18 has D, UniRef90_A0A059B2I2 has D, UniRef90_Q9G4D5 has A.</li> <li><b>Position 100:</b> UniRef90_D8M6Y5 has G, UniRef90_K7IPC6 has V, UniRef90_I1PSK1 has V, UniRef90_A0A023F927 has I, UniRef90_Q8HIT2 has P, UniRef90_UPI000258EF9B has P, UniRef90_UPI0003338B7F has P, UniRef90_V4ZZZ6 has V, UniRef90_Q17CT6 has V, UniRef90_M1BA92 has P, UniRef90_M1JZX8 has V, UniRef90_B3MYV1 has L, UniRef90_U6IGD2 has V, UniRef90_UPI0001925EF7 has V, UniRef90_U6LIT4 has E, UniRef90_H0AE18 has E, UniRef90_A0A059B2I2 has V, UniRef90_Q9G4D5 has E.</li> <li><b>Position 110:</b> UniRef90_D8M6Y5 has V, UniRef90_K7IPC6 has L, UniRef90_I1PSK1 has L, UniRef90_A0A023F927 has A, UniRef90_Q8HIT2 has A, UniRef90_UPI000258EF9B has L, UniRef90_UPI0003338B7F has L, UniRef90_V4ZZZ6 has A, UniRef90_Q17CT6 has L, UniRef90_M1BA92 has L, UniRef90_M1JZX8 has V, UniRef90_B3MYV1 has V, UniRef90_U6IGD2 has V, UniRef90_UPI0001925EF7 has V, UniRef90_U6LIT4 has V, UniRef90_H0AE18 has V, UniRef90_A0A059B2I2 has V, UniRef90_Q9G4D5 has V.</li> <li><b>Position 120:</b> UniRef90_D8M6Y5 has R, UniRef90_K7IPC6 has R, UniRef90_I1PSK1 has R, UniRef90_A0A023F927 has K, UniRef90_Q8HIT2 has S, UniRef90_UPI000258EF9B has S, UniRef90_UPI0003338B7F has S, UniRef90_V4ZZZ6 has S, UniRef90_Q17CT6 has S, UniRef90_M1BA92 has S, UniRef90_M1JZX8 has K, UniRef90_B3MYV1 has K, UniRef90_U6IGD2 has K, UniRef90_UPI0001925EF7 has K, UniRef90_U6LIT4 has K, UniRef90_H0AE18 has K, UniRef90_A0A059B2I2 has K, UniRef90_Q9G4D5 has S.</li> </ul>
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lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
inssm

UniRef90_D8M6Y5	
UniRef90_K7IPC6	F <input type="checkbox"/>
UniRef90_I1PSK1	
UniRef90_A0A023F927	Y <input checked="" type="checkbox"/>
UniRef90_Q8HIT2	
UniRef90_UPI000258EF9B	F <input checked="" type="checkbox"/>
UniRef90_UPI0003338B7F	I <input checked="" type="checkbox"/>
UniRef90_V4ZZZ6	V <input type="checkbox"/>
UniRef90_Q17CT6	F <input checked="" type="checkbox"/>
UniRef90_M1BA92	
UniRef90_M1JZX8	<input type="checkbox"/> I
UniRef90_B3MYV1	<input type="checkbox"/> Y
UniRef90_U6IGD2	F <input type="checkbox"/>
UniRef90_UPI0001925EF7	
UniRef90_U6LIT4	
UniRef90_H0AEI8	
UniRef90_A0A059B2I2	
UniRef90_Q9G4D5	<input type="checkbox"/> L

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf 9 9  
sol25 B  
sol5  
solo  
jhmm  
jpssm