

1 10 20 30 40

QUERY	UniRef90_T1FYH6	UniRef90_G3NDS5	UniRef90_F6R8R3	UniRef90_E9GB01	UniRef90_H3B558	UniRef90_A9V0Y7	UniRef90_S4R7F0	UniRef90_R1EMK5	UniRef90_Q6NVM4	UniRef90_J3JUS4	UniRef90_Q0UQG7	UniRef90_S4RMX4	UniRef90_H2TGT0	UniRef90_D5GH83	UniRef90_X8JDH7	UniRef90_E0VT79	UniRef90_UP100034F283E	UniRef90_G5APC4	UniRef90_UP10002657AE7	UniRef90_W5EB05	UniRef90_T1IPF9	UniRef90_J9K081	UniRef90_B4LU33	UniRef90_F4PBM8	UniRef90_F1KXD6	UniRef90_U5EUZ2	UniRef90_U4LN66	UniRef90_E9BYD2	UniRef90_V3ZQFQ1	UniRef90_M5G519	UniRef90_F2UPX5	UniRef90_R7TUB5	UniRef90_T1I199	UniRef90_R7YPF2	UniRef90_W5JB36	UniRef90_Q75L41	UniRef90_B7QL57	UniRef90_S2JGZ3	UniRef90_I1FF25	UniRef90_S8DFL8	UniRef90_S8ET5	UniRef90_S8AQR4	UniRef90_A7RQH5	UniRef90_M0SMU3	UniRef90_B3S128	UniRef90_D8RZC6	UniRef90_K1Q197	UniRef90_I117J0	UniRef90_A0A024JL23	UniRef90_I0Z4B8	UniRef90_H3A151	UniRef90_A9T3S4	UniRef90_UP10003F4992E	UniRef90_H6QVL6	UniRef90_H3FP07	UniRef90_V2XCJ4	UniRef90_A8XNT3	UniRef90_V7AEZ6	UniRef90_D3B6D7	UniRef90_L8HMG4	UniRef90_B6H4X2	UniRef90_C1EGX1	UniRef90_N1PX98	UniRef90_W9WNT4	UniRef90_G8ZPS7	UniRef90_G7DSB3	UniRef90_Q6CF38	UniRef90_E5A6K3	UniRef90_S7QG78	UniRef90_G0VI80	UniRef90_K1X3T9	UniRef90_UP10002036AB4	UniRef90_A3EXP7	UniRef90_T1KL07	UniRef90_F9XKY6	UniRef90_C3Z247	UniRef90_K5WZJ6	UniRef90_I4YES5	UniRef90_P54654	UniRef90_U9UZP6	UniRef90_W0T7W9	UniRef90_S3D981	UniRef90_UP100044139FD	UniRef90_P36621	UniRef90_L7IB32	UniRef90_A7TNC1	UniRef90_C4R2Z1	UniRef90_M7S6L2	UniRef90_R8BQ23	UniRef90_W7IH06	UniRef90_U5H316
P P R K E L V G N K W F I E N Y E N E T E S L V I D A N K D E S I F I G K C S E	P P K L E L E G K K W I V E H Y V N N N N I I I A E T E M K Q T V Y I F K C C E	P P V F E L D G K K W K V E N Q E D A Q S L V I E N T E L L K Q V V Y A Y I F K C C E	P P R K E L E G K K W M I E Y Q K N Q T G L V I T D T E M H Q V V Y A Y I F K C C E	P V L E L D G K K W R V E N H E N A S N L V I E D T Q L K Q V V Y A Y I F K C C E	P P V F E L D G K K W R V E Y Q H R G N H N L V I D C N N K Q T A Y I Y Y K C C E	P P V L E L D G K K W R V E N F E N P D Q P V K I E A S I V Q S I L I T R C C K	P P V L E L E G K K W K V E N Q E N V S N L E I A D T E L K Q V V Y I F K C C V	P P V F T R D G K K W L I E Y Q K N K T D L V V E D A E M M N N V V Y I F K C C V	P P R K E L D G N R W L I E N Y D S E S A L V E I D A E L N Q T I L I S R C C K	P V L E L E G K K W R V E Y Q E N A E G L L I E D T E L K Q V V Y V F Q C C V	P A L L E L E G K K W R V E N F E Q K H D L L I E E T E L K Q V V Y I F S C C N	P P K K E L D G S K W Y I E N Y E N E Q A L T L E D V E I I N H S V F I F R C C K	P P K M E L S G N K W S I E N Y E N D S A V V V E N D T E L K Q V V Y I F N C C K	P A R F G R E G K K W F I E Y Q K G N H Q L V V D D G A E M M N N V V Y A F K C T	P P V F T R D G K K W L I E Y Q K G N S N L V V E N A D M M N N V V Y M F R C C R	A L L E L E G K K W R V E N Q E N V S N P V I D N T E L K Q V A Y V F K C C V	P P R C E L D G K K W I V E F Q R D P V Q L V L D D V H M M Q V V Y V Y G C C Q	P P K L E L Q G R K W V I V E N Q V G R K D L A I D C S K Q S I Y V V F G C K	P P V F A R D G K K W L V E N Q K N N T N L V V D D G A E M M N N V V Y L F K C C V	P P V F T L D G K K W L I E Y Q K N N T G L R V E N A E L S N V V Y M Y R C C E	P A K L A L E G K K W L V E N Q G Q G K N L V I E G V E L L Q H V Y I Y N C H	P A K T W L E G K Q W N V E Y H K N N Q N I I I V E I S N M K Q T V Y V F K C C E	P P S F V R D G K K W L I E Y Q K G N Q N I I I V E N A E M M N N V A Y M F K C C T	P A K I E L E G N K W I V E N F E N D Q N I I I D N T E L N H S V F I F R C C K	P P K T E L E A K K W V V E N H V N N K D I V I L S D T T N T K Q T V Y V Y K C C V	P P V L E L Q G K K W L V E Y Q V D N K G I V I D Q T Q M K Q T V Y I F K C C V	P A K M E L E G K K W I I E Y Q E N E N S L V I I E N G E M G Q V I N I L F A C C K	P V F E L V G K K W T V E Y Q V D N H D I V I E G N I K Q S V Y I Y Y K C C E	P S R K E L D G N K W I I E N F D S P E G A I E I E A E I S H S I L I S R C C K	P P T F S R D G K K W L I E Y Q N N A N L L V E N A E M M N N V V Y M Y R C C E	P P R K E L V G S K W F V E N Y Q D G E A D P I I I E T E N K D E S S V F I G R C C N	P P K L E L E G K K W C V D Y Q V N N E Q I V L D Q T Q M N Q S V F C I Y Y K C C V	P A K T S L E A N K K W V V E N H E G N H Q V V I I E E T A I N Q A V Y I F N C C K	P P K C E L V N N K W I V E Y Q E G N S N I E I T P T N S K E A I Y I Y Y K C C N	P P K L E L Q G R K W M V E N Q V G R S N L V I I E E C D A K Q S V Y I F G C C K	P A K F A L E G N K W M I E Y Q E N E S A L T V E N V E L L N H S V F I Y Y G C K	P P K M E L D G N K W I I E N Y E N E D T P I L E E N V E I L N H S V F I Y Y S C C K	P P V F E L Q G K K W M V E H Q E G N K N L T I E G S M S Q V V Y I Y F G C C K	P P K F E L Q G R K W S V E N Q L G N K N L I I D D C D S K Q S V Y I Y Y G C C N	P P V F R L D G K K W I V E N Q E G N Q D L V I S D T N M R Q S V Y I Y Y K C C N	P V F E L Q D R K W V V E N Q T N N K E I I I I S E C N P R Q S V Y I F G C C K	F E L Q D K R W A I E Y Q E G N K N I E V A D T N L K Q T V Y A F K C C N	P A K F E L Q G R K W V V E H I G N K G L T I E D C D T K Q S V Y I D R C C N S	P P K K E L Q D S K W I V E H I F E N E H N L V V E A E I N Q A I F I D R C C N S	P P R T E C E G R K W V I E N H V G N P E I V I S D T N P R Q A V Y I Y Y K C S	P K C E L L G K T W A Q E Y Q D D V P N I I I S E T E L K Q V A Y I F N C N	P A R L E L D G R K W V V E Y Q V G N R N I I I D S C K P N E S I Y I F G C C K	P A K T E L V G N K W N V E Y H E G Q S S I V L E D T T E L N H T V H I F G C C K	P P K T E L Q G K Q W T I E H H K N N K N I V V T D D K K Q T M Y V F K C C E	P V K F A L E G K A W N I E H Y E D D K S L I V I D D T Q L N Q V V N I Y Y R C C E	P P P H K E L E G K Q W I V E Y F V D N R N I V I D V A D K K Q T V Y I Y Y G C C T	P P K F E L Q G R K W V V E N Q I E N K D L V I G E C D A K Q S V Y I Y Y G C C K	P P K F A L E S N K N W A V E H Q V G N K N I I I A E T D P R Q T V Y V Y Y Q C C T	P K F E L D G Q K K W K I E N Q V G N K N I V I E N P E V R Q T V Y I Y Y K C C H	P P R K E L E G S K W L V E N F D A P G E I I E L P A Q Q N Q S I L I S R C C N	P P K F A L D G K K W A V E H Q V G N R T L V I E D V N P K Q T V Y I Y Y D C C V	K K E L D G N K K W L I E N F D S P S A P I E I E V S L T Q S L L I I S K C C N S	P G R K E L D G N K K W I V E N F E N Q N E V I E P A E L N H S I L I F V G N C C S	P P R K E L V G N K W F I E N Y E N E S E P I V L E A N K D E S I F V N I F G G C C Q	P A K L E L E G Q K W L I E N Q M D N S I V I I D Q T E I N Q I V N I F E N C N	P A K T E L L D T K W F V E N Y E G D Q N I V I E G E M M N Q G V M I E N C N	P P K M E L D G N K W I I I D S F D P S E M L E I H A E I N H S I L I S R C C K	P A K F A L E G N K W M I E Y Q E N E S A L T V D N T E I S H T V N L F G C C K	P A R K E L L G N K W F V E N F E N E D E P I V V E A E K D H S V F I G K C T	P P V K K L D G N K W I I E N Y D N E P A P V E I E A S I S H S I L I S R C C N T	P A L L E L E G K K W R V E N Q E N A T N L V I I S D T E L K Q V A Y I F K C C T	P V F T R D G K K W L I E Y Y K D N H G L L V E G T E M M N N V V Y M F N C C T	P P K F E L E G K K W M I E H Q T G K K D L T V S D T E M S Q S V N I Y K C C K	P P V L E L N G K K W N V E Y Q K D R K D L A I T E A N M R Q T V Y V Y K C C E	P T K F A L E G N K W L V E N Y E N E T S L T V E N T D L S H T T V N I F N C C K	P A K L E L D G Q K K W F I E N H T G N N N I V I E D T K L T Q T V Y I F N C C K	P A V F A L Q G N K W S I E Y Q V N N K E I V V I A E P D S R Q T V Y I F G G C K	P P K K D L E N G N K W S I E N Y E N D T N I L I V E E D T L I S Q T V Y I F G G C K	P P R K E L L G N K W F I E N Y E D Q A E P L V I E A R I D E S V V F I G K C C V	P L G K T W A Q E Y Q D D V P N I I I S E T E L K Q V A Y I F N C N	P P R L E L E G K K W R V E N Q E N A T N L V I I S D T E L K Q V A Y I F K C C T	P P K F E L E G K K W M I E H Q T G K K D L T V S D T E M S Q S V N I Y K C C K	P P V L E L N G K K W N V E Y Q K D R K D L A I T E A N M R Q T V Y V Y K C C E	P T K F A L E G N K W L V E N Y E N E T S L T V E N T D L S H T T V N I F N C C K	P A K L E L D G Q K K W F I E N H T G N N N I V I E D T K L T Q T V Y I F N C C K	P A V F A L Q G N K W S I E Y Q V N N K E I V V I A E P D S R Q T V Y I F G G C K	P P K K D L E N G N K W S I E N Y E N D T N I L I V E E D T L I S Q T V Y I F G G C K	P P R K E L L G N K W F I E N Y E D Q A E P L V I E A R I D E S V V F I G K C C V								

QUERY	50	60	70	80
UniRef90_T1FYH6	Q V L V Q K G K V N A I S L S E T E S C S V V L D S S I S G M D V K S N K F			
UniRef90_G3NDS5	N S T I T V K G K V N A I T M D N C K K C G L V F D E S I S S L D F V N C Q S V			
UniRef90_F6R8R3	K S C L Q V K G K I N S I I L D N C K K M G L V F D D V V G I V E I I N S K D I			
UniRef90_E9GB01	G S T I Q V K G K V N S I V L D S C K K T S I V L D S S V V S S V E F V N C Q S V			
UniRef90_H3B558	N S T L Q V K G K I N S I T L D N C K K T G L V F D D V V G I V E V I V N C R D I V			
UniRef90_A9V0Y7	D C T I Q V K G K I N S I S T V D S C K K L G L V F D D V V G I V E L I N C K S V			
UniRef90_S4R7F0	N S T V N I K G K I N S I E G K A N A S I D N S F R T S I V L D T L V S S V D V I K C P N F			
UniRef90_R1EMK5	N T T I I I E G K A N A S I D N S F R T S I V L D T L V S S V D V I K C P N F			
UniRef90_Q6NVM4	N S T L Q V K G K I N S I I V D N C K K L G L V F F D A V G I V E I I N S K D V			
UniRef90_J3JUS4	N S T V Q V R G K I N S I T M D S C K K T S I I V F D N L V S S M E F N C Q S V			
UniRef90_Q0UQG7	N T T I Q V H G K T N A I S V D N S S R T I V D S L V V G I V E V I I N S K S V			
UniRef90_S4RMX4	N S M L Q I K G K I N S I I D N C K R L G L V F F E N V V G I V E I I N S K S V			
UniRef90_H2TGT0	S C T L Q I K G K I N S I I V D N C K K L G L V F F E N V V G I V E I I N S K S V			
UniRef90_D5GH83	N T T I Q V K G K I N A V S L N E C G K T N I I V D N L V S S I E V I K S N N F			
UniRef90_X8JDH7	N T T I Q V K G K I N N I V S V N C K K T S V L I E S L V A S S I T S S P S F			
UniRef90_E0VT79	D S T L V V K G K I N S I F L D S C K K T A V V F D S V V S I E F V N C Q S V			
UniRef90_UP100034F283E	D S A L T V R G K V N G V V L D S C C T K C A V V F D D N L V S S I E F V N C Q S V			
UniRef90_G5APC4	N T T L Q I K G K I N S I I V D N C K K L G L V F F D D V M G I V E I I N S R D V			
UniRef90_UP10002657AE7	N S V I I V K G K I N S I S V D N C K K L G L V F F D D V M G I V E I I N C Q S V			
UniRef90_W5EB05	D S V L Q V K G K V N N I F L D S C K K T A V V F D D V A F E V V N C N G V			
UniRef90_T1IPF9	N C T I Q V Q G K V N N I V V L D Q C C K K T A L V F D S L V A A L E L V N C Q S V			
UniRef90_J9K081	N S T I T V R K N K I N S I V M D S C C K K S S V V F E S L V V S S A E F I V N C Q S V			
UniRef90_B4LU33	G S T L T V R G K V N N I V M D S C C K K C S L F L D S V L V S S I E F V N C Q S V			
UniRef90_F4PBM8	D S T I Q I K G K A N A V T V D G G C K K T G V L E D N V L V S T V D I N S K S V			
UniRef90_F1KXD6	N S V I Q V K G K V N S I T L D S C K K T S I V F D S L L S S Q V E V I N C Q S V			
UniRef90_U5EUZ2	D S T L Q V K G K I N G V I L D S C K K C S V V F D S L V S S I E F V N C Q S V			
UniRef90_U4LN66	N S T I Q V K G K V N L I T I N E C V K T N V A D S L V S S G L E L I K S Y G F			
UniRef90_E9BYD2	G S T I Q I K G K V N A I T V D G G C K K T G V L E D N V L V S T V D I N S K S V			
UniRef90_V3ZFQ1	N S T I Q V K G K V N S I I M D S C C K K C G V V F D D I L S S S M E F V N C Q S V			
UniRef90_M5G519	N S V I Q V K G K V N A I T M V N C E K T S I L C E S V V A S V G I T S S K S F			
UniRef90_F2UPX5	K T T I K I S G K V N S I T L D N C K K V G V F D S A V G F D V V N C K S V			
UniRef90_R7TUB5	Q S T I Q V K G K V N S I V F L D S C K K T A V V F D G V I S L D F I V N C Q S V			
UniRef90_T1I199	D S T L T V K G K V N S I V F L D S C K K T S V L V D S L V I S S I E F V N C Q S V			
UniRef90_R7YPF2	N T T L R I T G K F N A L S L D N S A R T S I I V D S L V V S S I D V I K C P N F			
UniRef90_W5JB36	G S T L Q I K G K V I N S V V M D S C C K K C S L V F D T M V S S A E F I N C Q S V			
UniRef90_Q75L41	N I F I Q L K G K V N S I V T I S S C K T K S V V F E D I V S V E F I N C Q S V			
UniRef90_B7QL57	N S V I V V K G K V N S I V I N S C K T K S V V F E D I V S V V E F I N C Q S V			
UniRef90_S2JGZ3	N S T I R I K G K V N A V T M D S C C T K C G I A V D S T V S S T V D I V N S K S F			
UniRef90_I1FF25	K S T I K V H G K L N S I V I D S C C K K C R V G L V F D S T I S C V E A V N S Q S V			
UniRef90_S8DFL8	E S V L H I R G K V N N I T I D K C C K C R V G L V F D V D V A C E I V N C D S V			
UniRef90_S8ET55	S S T I I I K G K V N A V T I L V N C I K T S I L V I E N V S V T N S P S F			
UniRef90_S8AQR4	N T T L Q I K G K F N A I S M N E C E K T N V V L D H L V S S I D V I K S K K F			
UniRef90_A7RQH5	D S V I L Q V K G K I N S I T L D N C K K C A V V F D D A I A T V E F V N C Q S V			
UniRef90_M0SMU3	D S V I L Q V K G K V N S I A M D T C C T K K S A I V F D H V M D V A C E I V N C N G V			
UniRef90_B3S128	N C V I Q V K G K V N S I T L D N C K K C A V G V F K D V V A S A C E V V N C C T S V			
UniRef90_D8RZC6	G S V I Q V R G K V N N V T F D K C S K T G L V F K D V V A S A C E V V N C C Q S V			
UniRef90_K1Q197	N C V I Q V K G K V N N I T L D N C K K C A V G V F K D V V A F E V V N C C Q S V			
UniRef90_I1IJ70	D S V I L Q V K G K V N N I T M D S C C K K T A I V F F E N A I A S C E I V N C T S V			
UniRef90_A0A024JL23	N C T I Q I K G K A N A I T I N G C C K N S I G V V A E S L V I S V D I I K C K K L			
UniRef90_I0Z4B8	N S T I Q V K G K V N A I S V D N C K K L G V F D D V V G I V E I I N S R D I			
UniRef90_H3AI51	R S T L Q I K G K L N S I I V D N C K K C S L V F D D V V A C E I V N C T S V			
UniRef90_A9T3S4	N S V I Q V Q G K V N A I A F D K C A K T G V V F E D V L A T C E I V N C Q S V			
UniRef90_UP100034F4992E	N S V I K I S G K V N A I V S M V G C K K T A V V L D T A V S T L S C I T S S P S F			
UniRef90_H6QVL6	N S T I Q I K G K V N G I T L V S C K T K T S V L L D S V V S S L C I T S S P S F			
UniRef90_H3FP07	G C V I Q V K G K I N S V T L D A C K K T D V I L D A V A Q V E T I N C S S V			
UniRef90_V2XCJ4	N T V I Q V K G K V N N I T L D G C C K K T S V L I D S V V A Q C E T V N C Q S V			
UniRef90_A8XNT3	N S V I Q V K G K V N A N S I T L D G C C K K T S V L I D S V V A F E I V N S N G V			
UniRef90_V7AEZ6	N S V I Q P G K V N N I T I D K C C K K T S V L I D S V V A F E I V N S N G V			
UniRef90_D3B6D7	D S V I Q V K G K V N N I T I D G C C K K T A I V F F E N A I A S C E I V N C T S V			
UniRef90_L8HMG4	D S V I Q V K G K V N S I M L D S C C K K T S V L I F E N A I S V A E V V N C A S V			
UniRef90_B6H4X2	K T I K V T N K A N A I A I L D N C V G L S I V L D S L V I S L D V I K C P K F			
UniRef90_C1EGX1	D C V I Q I K G K A N A I T L D K C A K T G V V F E D V L A T C E L V N C V S M			
UniRef90_N1PX98	N T T I I L R G K A N A I S I I D N C P R T Q I L V D T L V S S L D V I K A P K I			
UniRef90_W9WNT4	K C V I K V N G K A N A I S I I D N C T C N L S I V L D S L V S S L D V I K C P N F			
UniRef90_G8ZPS7	N L L I Q V K G K V N A I S L N E C D N T S V I V D S T I V S G I D L I K C I K F			
UniRef90_G7DSB3	R S V I Q I K G K V N A I S S L V S C K K V S V L D S T I V S A L A V T S S P N F			
UniRef90_Q6CF38	N S T V Q I K G K V S A V S L N C K K L G L V F E N L V S S G V D V I R C K D Y			
UniRef90_E5A6K3	N T T L R I H G K A N A I S L D N S S R T S L I I D S L V S S V D V I K C P N F			
UniRef90_S7QG78	N T T V Q I K G K V N A I T M V N C T K T S V L V E N V I S V S S V T K S P S F			
UniRef90_G0VI80	K V M V Q I K G K V N A I T F S E T E S C I V L D S S I S G L D I I K S N K F			
UniRef90_K1X3T9	K T T I I V K G K A N A I S I D N S P R L S L V I D S S L V S S V D V I K S A N F			
UniRef90_UP10002036AB4	N S T L Q I K G K I N S I T L D N C K K L G V F D D V V G I V E I I N S R D I			
UniRef90_A3EXP7	N C T L T V K G K I N S I T L D N C K K L G V F D D V V G I S S E F V N C Q S V			
UniRef90_T1KL07	D C L V V I K G K I N S I T L D N C S C T K L S I V F D D V V G I S S E F V N C Q N I			
UniRef90_F9XKY6	N T T I I L R G K A N A I S I D N S P R L Q I L V E T L V S S V D V I K S P N F			
UniRef90_C3Z247	N I T L Q I K G K V N S I S L N E C D N T S V I V F D D V V G I S S G L D I I K C Q R I			
UniRef90_K5WZJ6	N S T I I V K G K V N S I V T L D N C S C K K T S V L I E N V I S S S I T T S P N F			
UniRef90_I4YES5	N S V I Q V K G K V N A V N L V G C H T K T S V L L E N V I S S S I T T S P N F			
UniRef90_P54654	N S L V Q I K G K V N A I T L D G C C K K T S I V F E N A I S S S C E V V N C N G V			
UniRef90_U9UZP6	N S T I Q I K G K V N A I V V I D T C T K I G V L V D S V V S S V A I D V V N N K S F			
UniRef90_W0T7W9	N T T V Q I K G K V N A I V T I N E C C K S K T R L S L V V L D S L V S S V D A V K S Q N F			
UniRef90_S3D981	K S T V V I K G K A N A I S I D N C K K T R L S L V I I G S L V S V D V V K A S N F			
UniRef90_UP100044139FD	N C T I Q V K G K V N A V N L L N C K K T R L S V L V E S V V I S S S A I T R S P S F			
UniRef90_P36621	N C T I I K G K L N T V S M S N C K R T S V V V F D D V V G I S S E F V N C Q N F			
UniRef90_L7IB32	G T T I R H G K A N A V T I E N T S R V L I I D S L V S L D V V T D V V K S Q N F			
UniRef90_A7TNC1	S V M V Q I K G K V N A I S M N E S D N T S V V L D S L V S S G L D V V T D V V K C T K F			
UniRef90_C4R2Z1	N S T I T R G K V A A V S L T Q C S K V G L V V D S L V S L D V V T D V V K S R G F			
UniRef90_M7S6L2	N T T V I V K G K A N A V T I E N T A R L S L V V D S L V S S V D V V K S S N F			
UniRef90_R8BQ23	N T T I I K G K V N A I S I D N C K K T R L S L V V D S L V S S V D A V K S Q N F			
UniRef90_W7IH06	N T T I Q I K G K V N A I S V N S P R L S V L L E S T V S A I T S S P G F			
UniRef90_U5H316	A S V L Q V K A K V N A I S I V N S P K L S V L L E S T V S A I T S S P G F			

QUERY	90	100	110	120
UniRef90_T1FYH6	G I Q V N H S L P Q I S I D K S D G G N I Y L S K E S L N T E Y T S C S T A I			
UniRef90_G3NDS5	K A Q V L C K V P T I N V D K T D G C M I F L S K D S S L D S Q E I V S A K S S E M			
UniRef90_F6R8R3	K I Q V M G K V P T I S I I N K T D G C H V Y L S K D S S L D S C E I V S A K S S E M			
UniRef90_E9GB01	Q M Q V L T K V P T I S I I D K T D G C Q I V Y L S K D S S L D V S I V S A K S S E M			
UniRef90_H3B558	K I Q V V L S K V P T I S I I N K T D G C H V Y L S K D S S L D S C E I V S A K S S E M			
UniRef90_A9V0Y7	Q I Q V T G K V P T I S I I N K T D G A Q V Y L S K D S S L D A Q I V T A K S S E L			
UniRef90_S4R7F0	Q V Q V V L G K V P T I S I V N K T D G C Q I Y L S K D S S L S C E I V S A K S S E M			
UniRef90_R1EMK5	A L Q V M G T L P T L L D Q V D G A S I Y L S K D S S L A T E I F S S K S T S S V			
UniRef90_Q6NVM4	K V Q V M G K V P T I S I I N K T D G C H V Y L S K D S S L Q C E I I S A K S S E M			
UniRef90_J3JUS4	Q M Q V M G K V P T I V S I D K T D G C Q V Y L S K D S S L D V E I F T S K C S S V			
UniRef90_Q0UQG7	A I Q V V I G T L P T I L D Q V D G A T S P Q E S S L D C E I V S A K S S E M			
UniRef90_S4RMX4	Q L Q V E G K V P T I S I I N K T D G C Q V F L S P Q E S S L D C E I V S A K S S E M			
UniRef90_H2TGT0	Q L Q V V L G K V P T I S I I N K S E G C Q V Y L S K E S S L H C D I V S A K S S E M			
UniRef90_D5GH83	A I Q I M G K A P N V D Q C G G T V Y Y V S K E S S L D M E I F T S K A S S A I			
UniRef90_X8JDH7	T V Q I T G T I P T I I Q V D N S D S G Q I Y L S Q D S S L N V E I V S S K S S E M			
UniRef90_E0VT79	Q M Q V V L G A V P T I S I I D K T D G C Q I Y L S P E S S L D V E I V S S K S S E M			
UniRef90_UP100034F283E	K V Q V M G K V P T I F S S I N K T D G C H V Y L S K N S S L D C E I A S A K S S E M			
UniRef90_UP10002657AE7	K A Q A M G V I P I F S S I D K T D G A H V Y L S E S A K S S E V			
UniRef90_W5EB05	E V Q C Q G N A P T I S I I D N T A G C Q L S L G A S I T S A K S S E M			
UniRef90_T1IPF9	Q A Q V M G T V P T I I L D K T D G A L L Y L S P Q E S S L M D A E I V S S K S S E M			
UniRef90_J9K081	Q M Q V V L G K V P T I I T D K T D G C Q M Y L S S K D S S L T T E I V T S K S S E L			
UniRef90_B4LU33	Q M Q V V L G S V P T I S I I D K S E G G C Q M Y L S S K D S S L G V E I V S S K S S E M			
UniRef90_F4PBM8	Q V Q I T G K A P I L V V D K T D G F G V Y Y L S K E S E D A F T A K S S E M			
UniRef90_F1KXD6	Q I Q T L G T M P T I S I I Q K T D G C Q V Y Y L S S K E A M A A E I V T S K S S E M			
UniRef90_U5EUZ2	Q M Q V V L G K V P T I S I I D K T D G C Q V Y Y L S S D S L G V E I I S S K S S E M			
UniRef90_U4LN66	A I Q V L G K V P N V Q I D Q C G G Q V Y Y V S E E S L L D V E I F T S K T S A V			
UniRef90_E9BYD2	Q V Q V V L G A V H T I L V D K T D G A Q I Y L S K D S S L E A E I V V S S K S S E M			
UniRef90_V3ZFQ1	Q G Q V V G K V N T V V S V D K T D G C M I Y L S S K D S S M G A E I V T A K S S E M			
UniRef90_M5G519	A L Q I T G T A P T I M L D S V D S G Q I Y Y L S K D C L G V E I V S A K C S A I			
UniRef90_F2UPX5	Q V Q V V E K V P T V V S I D K T D G C Q V Y Y L S A T S L D T E I V S A K S S E M			
UniRef90_R7TUB5	Q A Q V T G S M R T V T I D K T D G C M V Y L S K E S S L D A E I V T A K S S E M			
UniRef90_T1I199	Q M Q V V L G K V P T I I T D K T D G C Q M Y L S K D S S L M D V E I V S S K S S E M			
UniRef90_R7YPF2	A V Q V L L G T L P T L M L D Q V D G A T V Y L S K D S S L G T E I F T S K C T S V			
UniRef90_W5JB36	Q M Q V L G K V P T I I S V D K T D G C Q M Y L S S Q S S L G V E I I S S K S S E M			
UniRef90_Q75L41	A I Q V A Q Q V P Q I T I D K S D T G V I Y L S K D S S L Q T E L F T S S T S S I V			
UniRef90_B7QL57	K A Q S L G R V P P T I A V D K T D G A H V Y L S E K S S L D V E I V V T S K S S S E V			
UniRef90_S2JGZ3	A L Q V F K V V P T I A S V D K C G S E I V Y L S K E C L G V E I L S A K S S S E L			
UniRef90_I1FF25	Q I V T T G Y C P T I S I I S V D N T S G C Q V F L S K E S S L N C E I V S A K S S E M			
UniRef90_S8DFL8	K V Q C Q G T A S P T I S I I S V D N T S G C Q V F L S K D S S L K A S I T T A K S S E V			
UniRef90_S8ET55	A L Q I T G S A P T I Q L D S T D S G Q I Y Y L S K D C L G V E I T T A K C S S I F			
UniRef90_S8AQR4	A F Q I I M G M V P T I T V D Q C D G G T L Y Y V G R E S S L G I E V Y T S K T T A F			
UniRef90_A7RQH5	Q C V Q N G K V P T V V S I I D K T D G C Q V Y Y L S K D S S L Q S E I V T A K S S E M			
UniRef90_M0SMU3	E V Q Q C G S A P T I V S I I D N T S G C Q V Y Y L S N D S S L G T E I T T A K S S E I			
UniRef90_B3S128	K V Q V N G A V P T I V S I I G N T D G I Q V Y Y L S K E A M Q T T I I S S K S S E M			
UniRef90_D8RZC6	E V Q C Q G M A P T I A I V D N T N G C Q L Y Y L S R E S S L K A S T T A K S S E I			
UniRef90_K1Q197	Q G Q V V M G K V P T I S I I D K T D G C L I Y Y L S K D S S L D T E I V T A K S S E M			
UniRef90_I117J0	E V Q Q C E G S V P T I S I I D N T S G C Q V Y Y L S N S E L E A S T T A K S S E V			
UniRef90_A0A024JL23	G F Q V T G K I P T I S I I D Q S D S C Q V Y Y L S K D S S L D I E I Y T S Q T S S V			
UniRef90_I0Z4B8	Q A Q A T G V V P T I A S V D K C G V Q I Y Y L S A D S S L G V D I T T A K S S E V			
UniRef90_H3A151	Q L Q V V L G K V P T I S I I N K T E G C H V Y Y L S S E S S L K C E V S A K S S E M			
UniRef90_A9T3S4	E V Q C M G T A P T I S I I D N T N G C Q L Y Y L G L K S D S L D A A T T A K S S A V			
UniRef90_UP10003F4992E	E V Q I T G T P T I Q I D T T D S G S I V Y Y L S K E S C M E V E I I T S K T S S I V			
UniRef90_H6QVL6	T V Q V V L G K C P T I M I D A T D G G Q Q V Y Y L S K E S S L E V E I I L T A K T S A L			
UniRef90_H3FP07	K I Q T L G E M P T V V S I I Q K T D G C Q V Y Y L S E A A R D A E I V T S K S S E M			
UniRef90_V2XCJ4	Q I Q I T G T A P M I L S I I Q K T D S T D S G C Q V F L S K D S S L Q A T I T T A K S S E M			
UniRef90_A8XNT3	Q I Q T L G E P T L L S I I Q K T D S T D S G C Q V F L S K D S S L Q A C E V T S K S S E M			
UniRef90_V7AEZ6	UniRef90_V7AEZ6	E V Q C Q G A A P T I I S V D N T S G C Q V Y Y L S K D S S L Q A T I T T A K S S E I		
UniRef90_D3B6D7	E I Q V T G K V P S S V V S I I D K C S G A Q I V Y Y L S K D S S L A T E E I V T S K S S E M			
UniRef90_L8HMG4	Q V Q V T G K V P S V V A I D K T S G C Q V F L S A E G F D T E I V T S K S D E M			
UniRef90_B6H4X2	A V Q V L D G T V P T T L L M Q V D G D G A A V Y Y L G Q Q S S L S T E E V F T S K C S A V			
UniRef90_C1EGX1	Q V Q C T G A V P T I V A I D K V D G C Q V F Y L G P K S Y G A E I T T A K C S S E V			
UniRef90_N1PX98	A L Q I T G A V P T I Q L D Q V D G A Q I Y Y L G A Q S S L A T E E V Y T S K C S S I			
UniRef90_W9WNT4	UniRef90_W9WNT4	Q I Q V D G V P T I T L L D Q V D G A Q I Y Y L S N E S I L G T E E I F T S K C S A I		
UniRef90_G8ZPS7	G V Q V E N T L P Q I T L D K C G G N I Y Y L S K D S S L Q A E E I Y T S C S T A I			
UniRef90_G7DSB3	I V Q I L G R V P T I I I D A T D V G Q I Y Y L S K E S S L D V E I I T A K T S S I			
UniRef90_Q6CF38	A I Q V T G V T P M V T I D Q S D G G Q Q I Y Y L S K E S S L I G A E E V Y T S Q T T S L			
UniRef90_E5A6K3	A L Q V L G T L P T I L L D Q V D G A T I Y Y L G K S D S S L Q E T E V F T S K C S S V			
UniRef90_S7QG78	A I Q I T G K A P T I Q I D S T D S G Q I Y Y I S K D C L D V E I I T T A K C S S A I			
UniRef90_G0VI80	G I Q V T E S L P Q I S I D K S D G G N I Y Y L S K D S S L N T E I Y T S C S T A I			
UniRef90_K1X3T9	A M Q V V L G V L P T V L M D S V D G A Q I Y Y L S K E S S L Q T E E V F A S K C S G I			
UniRef90_UP10002036AB4	K V Q V M G K V P T I S I I N K T D G C H V Y Y L S K E S S L D C E I V S A K S S E M			
UniRef90_A3EXP7	Q M Q V V L G N V P T I S I I D K T D G C Q M Y Y L S E K S S L G V E I I S S K S S S E M			
UniRef90_T1KL07	Q A Q S M G A V P T V N V E K T D V V I E I Y Y L S N A K S S L N A E I V T A K S S S S V			
UniRef90_F9XKY6	A I Q I T G A V P T I L L D Q V D G A S I Y Y L S K E S S L A C E E V F T S K C S S V			
UniRef90_C3Z247	Q A Q V I G K T P I F N V D K T D G C Q V Y Y L S K D S S L D T E E V V G A K Y S E L			
UniRef90_K5WZJ6	T L Q I T G S A P T I Q L D S I D S G H V Y Y L S R D D C L G I E I T T A K C S S S I			
UniRef90_I4YES5	T V Q I L G L A P T V T V D N T D V G Q I Y Y L S K Q C L D T E E I I T A K T S S I			
UniRef90_P54654	E I Q V T G R V P S I A I D K T S G C Q I Y Y L S K D S S L E T E E I V S S K T S S S I			
UniRef90_U9UZP6	Q L Q I Q G K T P T V I V I D Q T D S G Q I Y Y L S E E C F D V E I L T A K S S S I			
UniRef90_W0T7W9	G I Q V E Q S L P Q I T I D Q C D S G S I Y Y L S K D S S L Q A Q E I F T S S S T G I V			
UniRef90_S3D981	A L Q V D G F G L P T I L M Q V D G A Q I Y Y L T K E S S M S T E V F T S K C S S V			
UniRef90_UP100044139FD	A L Q I T G S A P T I Q L D T T D S G Q I Y Y L S K D C L N V E I I L T A K C S S S I			
UniRef90_P36621	G C Q V V M N H V P M V I V I D Q C D G G S I Y Y L S K S S S L S S E V V T S K S S S N I V			
UniRef90_L7IB32	UniRef90_L7IB32	G L Q V V M G T L P T V L M D Q I D S A Q I V F F S R E S A S T R I F T S S S T S S N I V		
UniRef90_A7TNC1	G I Q V Q Q S L P Q I T L D K S D G N Q I Y Y L S K D S S L M D A E L Y T S S S T T S S N I V			
UniRef90_C4R2Z1	G V Q V V L G N V P T I T I D Q S D N G Q I Y Y L G A E S L G T E E Y A S S T T S S N I V			
UniRef90_M7S6L2	UniRef90_M7S6L2	A L Q V V L G A L P T I M L D Q L D G A Q V Y Y L S Q E S S G T R I F S S S K S A G I I		
UniRef90_R8BQ23	A L Q V V M G V P T I V M M D Q I D G A S I Y Y L F S R E S A S T K I H S S K S A G I I			
UniRef90_W7IH06	A F Q V V L G S V P T I T V D Q S D G G T L Y V G K D S T G I E V Y T S K T T A F			
UniRef90_U5H316	T V Q I L G K V P T I L I D G T D G G M I Y Y L S K E S L G T E I I T A K T S A L			

QUERY	130	140	150
UniRef90_T1FYH6	N V N L P I G E D D D Y V E F P I P E Q M K H S F A D G K F K S A V F E H		
UniRef90_G3NDS5	N V L V P P D P Q N E F R E F P I P E Q F R T Y W N G S K L V T E I T D		
UniRef90_F6R8R3	N V L V P P N K D G E F K E L P V P E Q F K T V W D G Q K L V T T S T E		
UniRef90_E9GB01	N V L V P P H D G D Y V E Y P I P E Q F K T T Y N G K G L T T I S E		
UniRef90_H3B558	N V L V P P K D D D F S S E F P I P E Q F K T V W N G Q K L V T T V T E		
UniRef90_A9V0Y7	N V S V P P K D D G D F V E F P I P E Q Y K S V Y D G S K F V T E A T D		
UniRef90_S4R7F0	N V L I P P H D K D F K E F P I P E Q F K T V W N G K K L E T V A T E		
UniRef90_R1EMK5	N I N L P P E E E D Y T E H P I P E Q F K T F I K D G K L V S E I V E H		
UniRef90_Q6NVM4	N I L V P P T S G G E F S E F P V P E Q F K T V W N G Q K L E T T V T E		
UniRef90_J3JUS4	N I L L V P P K G D D Y V E H A V P E Q Y K T R I T P N K L L H T E I V E H		
UniRef90_Q0UQG7	N I N V P P T E D D S V E N A I P E Q I R S Y I K N G K V V S E I V E H		
UniRef90_S4RMX4	N I L V P P D H D D Y R E F P V P E Q F K T V W N G H K L V T E A S E		
UniRef90_H2TGT0	N I L V P P Q E D D E F K E F P V P E Q F K T V W N G S K L V T E P T E		
UniRef90_D5GH83	N I N V P P V G E D W D Y Q E C A V P E Q L K T T I K G G K L V T E I V E H		
UniRef90_X8JDH7	N V S I P P V E E D G V F V E R A V P E M L R T T V Q N G K L V T N I V E H		
UniRef90_E0VT79	N V L V P P T G T G D F K E F P V P E Q F K T T V S K Q G L L T T T A V E H		
UniRef90_UP100034F283E	N V L I P P K A N G D Y T E H A I P E Q F K T V L K P A G L T T T P V E		
UniRef90_G5APC4	N I L I P P K E G G D F N E F L V P P E Q F R T L W N G Q K L V T T V T E		
UniRef90_UP10002657AE7	N V S V P P S G P D G D Y V E C A I P E Q F K S V W N G K G M K T D I L D		
UniRef90_W5EB05	N V L V P P S D E D G D W V E H P L P Q Q Y H L F E D G Q F T S P V S H		
UniRef90_T1IPF9	N V L I P P K D G D Y L E F P I P E Q Y K S K W N G R G L A T E I V E H		
UniRef90_J9K081	N V M V P P K A D G D Y S S E Y P I P E Q F K T T I G P K G L N T V V I E Q		
UniRef90_B4LU33	N V L L P P E E N G D Y V E C A L P E E Q Y K T F I N G K T L K V C L D		
UniRef90_F4PBM8	N V L I P P Q G A D G E Y V E R A I P E Q F K T V F K N G A L A T V A V E H		
UniRef90_F1KXD6	N V L V P P T D T N G D F M E F P V P E Q F K T V F D G K K L Q T T V S D		
UniRef90_U5EUZ2	N V L I P P K A N G D Y T E Q P I P E Q F K T L I K G N T L L N T T C V E		
UniRef90_U4LNN66	N I Y I P P A G E D G D S A E R A V P E Q L K H T I R N G Q L V S E I V E H		
UniRef90_E9BYD2	N V L A P P V D A G G E F R E F A L P E Q L K S V W D P K R M I T T V V E H		
UniRef90_V3ZFQ1	N I L I P P T D D G D M K E F P L P E Q F K T T W N G K T F Q T T L T E		
UniRef90_M5G519	N V S I P P E E E E G V F K E L A M P E Q L R T T V S G G R L V T T V V E H		
UniRef90_F2UPX5	N V L I P P E G D N G D Y K E M P V P E Q Y K T K V V N G S L A T E A T D		
UniRef90_R7TUB5	N I L V P P D S G E F K E F A V P P E Q F K T V W N G Q K L V T		
UniRef90_T1I199	N V L I P P K A N G E Y Y P I A E E Q F K T L V S G K G L V T T P V E		
UniRef90_R7YPF2	N I N L P P L D G G D Y T E H A V P P E Q I R S Y V K D G T L V S E I V E H		
UniRef90_W5JB36	N V M I P P K G T S G D Y T E Q P I P E Q F K T V V K G T S L S T I C V E		
UniRef90_Q754L1	N V N I P P T G D D G D F E E H P I P E Q L K H T F S S N G R L L N S A I F E H		
UniRef90_B7QL57	N V S V P P A G S N G D Y R E I P V P E Q Y K S I W N G K S L T T S V I E H		
UniRef90_S2JGZ3	N V L V P P D A E D S D F K E V P V P E Q L K T T I V D G K L I T V T V E H		
UniRef90_I1FF25	N I S V P P T G D E G D F S E F A L P E Q F K S L W N G K K F V T E C T D		
UniRef90_S8DFL8	N V L V P P A S E E E D W G E H A L P Q Q Y V H V Y K D G Q F V T S A V S H		
UniRef90_S8ET55	N I S L P P D E E D G V F T E H P I P E M F R T V I Q N G K L I T N A V S H		
UniRef90_S8AQR4	N I Y V P P G E E D D D Y V E C P I P E Q I K S S I K G K G L V S E I V E H		
UniRef90_A7RQH5	N I L V P P Q Q A D G D Y V E N P P I P E Q Y K S V W D G K A F V T T P V		
UniRef90_M0SMU3	N I L I P P A G P P D S D W V E H S L P Q Q Y L H N F K N G E F T T A P V S H		
UniRef90_B3S128	N I S T P T G N D G D M V E N A V P E Q F T T V W D D K K		
UniRef90_D8RZC6	N V L V P P S T A E D D D Y V E H A L P E Q F V N V Y E D G R F V T T P V A H		
UniRef90_K1Q197	N V L V P P K D D G D F T E F A L P E Q F K T T W D G S K F N T V		
UniRef90_I1I7J0	N A L V P D N S E G D W T E H P L P Q Q Y I H A F K E G Q F T T L P V S H		
UniRef90_A0A024JL23	N V N I P P K E D D E F K E T P V P E Q L V H R L S Q Y K N G K F V T A P V S H		
UniRef90_I0Z4B8	N I L I P P Q D D D Y R E F P V P E Q F K T I W D G S K L V T E A A E		
UniRef90_H3A151	N V L V P P A T E D S D P V E H A L P E Q F K L N S F K D G Q F T T T P V S H		
UniRef90_A9T3S4	N I S V P P T G E E G G D F E E K P I P E Q M R S K I V S G K I I T E I V E H		
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UniRef90_H6QVL6	N V L V P P G P D G D F V E F P V P E Q F K T V Y K G G K L V S		
UniRef90_H3FP07	N V S L P P V E E E G V F A E Q P V P E M L R T C V K D G K L V T T V V E H		
UniRef90_V2XCJ4	N I S V P P Q T T D D G E Y V E F P V P E Q F K T T F V N G K L V T V V S D		
UniRef90_A8XNT3	N V L V P P G A E D G D W V E H S L P Q Q Y H V F K D G H F E T T S A S H		
UniRef90_V7AEZ6	N V L V P P I A T E N D D M V E I A I P E Q F K T V I Q G T R L V T E S M S H		
UniRef90_D3B6D7	N V V L P P G N P N D D I I P I P E Q F R T L I K D R K L V T E A V A H		
UniRef90_L8HMG4	N I N L P P P E D G D T K E C P L P E Q F K S Y L K N G V L V S E I V E H		
UniRef90_B6H4X2	N V V V P P A G S D A D A I E T P V P E Q F V T T R D P G K W V P P M G H		
UniRef90_C1EGX1	N V I L P P G E E D D S K E V P L P E Q I R T Y V K G G K L I S E I V E H		
UniRef90_N1PX98	N A V L P P K D E D D S K E L P F P E Q I R S V I K N G S L V S E I V E H		
UniRef90_W9WNT4	N V N Y P P V G E D G D F V E F P L P E Q L K H T F G E G K L N S N V F E H		
UniRef90_G8ZPS7	N V S L P P D G E E G M F T E K A V P E Q L K T V V Q A G K L I T T V Y E H		
UniRef90_G7DSB3	N I N I P P T D D G D Y E E V P V P E Q L I H K I V N G K L V T S V V D H		
UniRef90_Q6CF38	N I N L P P R D D G D Y G E E A L P E Q I R S F I R D G R V V S E I V E H		
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UniRef90_T1KL07	N V S V P P D A N G D F V E H P I P E Q F K S I W T G S S F K T E P A D		
UniRef90_F9XKY6	N L V L P P P E E A D D S K E C P L P E Q I R T Y I K G G K L L M S E I V E H		
UniRef90_C3Z247	N I L V P P D E S G E F T E F A I A E Q F K T V W D P K K M N T V P T E		
UniRef90_K5WZJ6	N V N L P P V E E G V F S E A P I P E M F K T T I Q D G K L V T T A V D H		
UniRef90_I4YES5	N I S V P P Q G D D G D F V E K P I P E Q L K T I V K D G R L Q T T V V E H		
UniRef90_P54654	N V L I P P A T E N D D L V E L A I P E Q Y K T S V K G N K L H T E S T S H		
UniRef90_U9UZP6	N V N L P P G G E E G D Y A E R P V P E Q L K T T I V N G K L V S V P V E H		
UniRef90_W0T7W9	N I N T P T G P D G D F V E V P L P E Q M V H S F V E G K L Q T K I Y E H		
UniRef90_S3D981	N I N L P P K D E D D D S E E L A I P E Q L R T Y I K D G K V V T E I V E H		
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UniRef90_P36621	N I N V P P N E E G D Y A E R A V P P E Q I K H K V N E G E L V S E I V R H		
UniRef90_L7IB32	N V N V P P I G A D D D Y K E L P L P S Q M C H Y Y D E G E L V N E I V E H		
UniRef90_A7TNC1	N V N L P P V G E D D G D Y V E F P I P E Q L K H T F A N G K M N S V V F E H		
UniRef90_C4R2Z1	N I N V P P D E D G D F R E M A P P E Q F K H T V A G G N L Q T T V V E H		
UniRef90_M7S6L2	N L N V I A G P D D D Y R E L P L P F Q C S Y Y D E E K V V V N E I V D H		
UniRef90_R8BQ23	N L N I I S G P D E D D Y K E L P L P S Q M C H Y Y D E E K V V V N E I V S H		
UniRef90_W7IH06	N V Y V P P G E E D D D Y I E C P I P E Q I K S S V K G K T L V S E I V E H		
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UniRef90_C5DZN6	P P R K E L	L V G N K W F I E N Y E N H A E P V I E G K H D E A I S R C S			
UniRef90_E9EZ35	P A K K G L	L E G N K W T I E N Y D R E T L P E I E T T L T Q S V L S R C N			
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UniRef90_C5P5C3	P P R K H L	L D G N K W F I E H Y D S P E G V I E I S A Q L T Q S I L S R C N			
UniRef90_C5DCT7	A R K E L	V G N K W F I E G Y F E N V E T P T I E V N K D E S V Y G N C S			
UniRef90_M5ED13	P V K A L	L E G N K W T I E H Y F E N E P H I V V D G T E I G H T V N F H C Q			
UniRef90_B7Z214	L A G D V E T H E Y Q E D R N D L V I S E T E L L K Q V A Y F K C E				
UniRef90_C1HA05	P A R K Q L	D G S K W Y V E H Q D S P A D I I E I P A Q L S H S I L S H C N			
UniRef90_A0A016VZP0	P V V E L	D G K Q W N V E Y I V G N R N L V V N A T D K K Q T V Y Y G N C Q			
UniRef90_J7S2H3	P P R K E L	S G N K W F I E N F E G Q E E K V I V I Q A Q K D E S V F V G N C T			
UniRef90_N1JIW8	P S V K K L	E G N K W F I E N F E N E P P V K I E A S T T Q C I S R C S			
UniRef90_H2XY10	V L R L	E G K K W V V E N Q E N A A D L K I E N V E M F H T V Y Y R C N			
UniRef90_B6JYT5	R L E L	E N T K W F V E N Q T D D N H N I I L E N V E L N H T V Q F N C C S			
UniRef90_W6MXY0	P A K K E L	I D T K W L V E N F D P G E V I T I E G E M M H Q S I L G K C S			
UniRef90_G8JUH0	P R Q E L	Q G S K W F I E N Y E D Q T D P V I E A N K D E S V F G H C K			
UniRef90_E5SI21	P P V L T C	D D K K W L I E N H V D N K D I K I E I T D M K Q V M Y Y R C E			
UniRef90_T4ZYP2	P P K R D L	E G N K W T I E N Y D G E H Q P V E E A S L A Q S V L S R C N			
UniRef90_G9NN71	P A S K V L	E A N K W T I E N Y D K E P E P V E I D A S I T H S V L S R C N			
UniRef90_G1KCH2	P V L E L	E G K K W R V E Y Q E D G L I A D T E L K Q V A Y F K C N			
UniRef90_U6HVD0	K L E L	I G N K W V V E N Q V G N R E I V I E A K E K K E T V Y F K C V			
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UniRef90_C7ZPQ7	P A K K E L	E G N K W T I E N Y E K E P E P I E I E A S L T H S V L S R C N			
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UniRef90_C5FHD7	P S R K Q L	E G N K W F I E H F D S P A D I V E I S A S L S S Q S I L S R C N			
UniRef90_K5Y4R1	P P K F T L	D G S K W I L V E N Q V K A E L N H S I L S R C N			
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UniRef90_U6IC50	P K V E Q I	G K N W N V Q Y F V G N L D V V V V E K K E T V Y Y K C Q			
UniRef90_W1QKJ2	L V D N K W M V	A N F E N E S D I I T I D G E M Q Q S I I F I A N C A			
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UniRef90_UP10004407696	P S K F V L	E G T K W T I E Y Q E N E P A L V V E N T E L S H I V N L Y G C K			
UniRef90_E4WUL8	P V F F E L	D G K K W M I E Y Q R G N K G L Q I D G N M K Q T V Y V F R C C Q			
UniRef90_K7IQU8	P P V F M R D	G K K W L I E Y H K G N K N I V V E N T E M M N V I Y Y F R C C Q			
UniRef90_R7QP74	P P L C E L	Q G K K W T V E N Q D D N R A L E I K C E S M R H T V Y V Y R C E			
UniRef90_A8NH62	P P K F V L	E G N K W L I E W Q E N E S Q D E P I E V E M S H S L I S K C T			
UniRef90_B2B330	P P K V L	E G N K W T I E N Y D S Q D E P I E V E M S H S L I S K C T			
UniRef90_U1GTM8	P P R K D L	D G N K W I L E N F D N A S D V V E I Q A Q L S Q S I L I S R C T			
UniRef90_UP1000359EADF	P P K M E K	N G A K W F I E N M E N R D L K I D A S T K T S V C M A Q C K			
UniRef90_L1K1A5	P V F K L	E G S K W R A E Y Q E D R N D L V I S Q T E L K Q A A Y F N C C			
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UniRef90_K0KEY5	P I V E L L	Q D S K W I I K N V E G D H G I V I N G E L D Q S V F I A D S K C			
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UniRef90_A5DAM8	P P K K E L	D G N K W N I E N F E N D R A I V V D Q T E I N Q T I V Y Y F N V K			
UniRef90_M7XY86	P P K K E L	D G N K W I I E H F D N E P E M I E I E A S S Q S I L S R C S			
UniRef90_L8G719	P P K K E L	D G N K W V V E N Q G R K N L V I N Q L E T D M T Q S V F I F G C K			
UniRef90_W9S8N2	P P K L E L	Q G R K W V V E N Q G R K N L V I N Q L E T D M T Q S V F I F G C K			
UniRef90_U7Q533	P A K K E L	D G N K W T I E N Y D K E A G P I E I V V N I N Q S I L S K T A			
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UniRef90_A5E156	P P K K E L	D G T K W I I Q N Y T K D D Q T I A I E T E M H Q S V F I G N C S			
UniRef90_G7YM97	P V M E L L	R G N K W V V E N Y Q N Q H L K I T E T P K Q T V Y M Y K C V			
UniRef90_A0A058Z7H4	T T E L L	G N K W D V Q N H Q G T I T I E S Q E T R Q T V Y Y Y N C S			
UniRef90_K3XC52	P V C E V	R N G N W Q I E Y Q T A A A P L T V S D I N M K Q Q V Y Y L Y K C T			
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UniRef90_G8Y0U3	P P K K E L	D D T K W I I N N F E D V S E P I T I E A E K H Q S I F V F N C C K			
UniRef90_D8PWN9	P P A K L	A L E G K W N V E Y Q E N E P A L T L D V Q M Q T V Y V I Y G C V			
UniRef90_D7FIY2	P P K L E F	Q G M K W I V E N Q G S S S G V V T V E T D D K K H Q V Y Y I Y G C V			
UniRef90_M3IQG2	P A K K E L	D G T K W V I Q N Y T K D H S P I V I E V E M H Q S V F I G N C S			
UniRef90_G3AHT7	P P K K E L	D G T K W V I Q N Y T D A S E P I I A V E M H Q S V F I G N C Q			
UniRef90_A8XEJ6	P K I L W D G K	V W K L E H Q V E N R D V V V E V K D K K E A I Y Y K C T			
UniRef90_H2YWX0	P K I L W D G K	V W K L E H Q V E N R D V V V E V K D K K E A I Y Y K C T			
UniRef90_G0NJR7	P R I F	W D G K W K L E D F Q V G N K N A V V S V K E K K E S V Y Y V Y K C C L			
UniRef90_UP1000440C7FA	P S K F A L	E G N K W V I E Y Q E D V S R L D V E N V E M N Q T V N L Y G C K			
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UniRef90_F0VMP1	K L E L	Q G D T W R V C N F V D K K D I I K I D A T M K Q K V Q Y I R D C K			
UniRef90_E1ZTS9	R L E C	E G R K W V V E N Q V G N R E I V I E Q M Q P K Q V V Y Y N C S			
UniRef90_I2GXV4	P P R K E L	L G S K W F I V E N Y E D Q I E P V I V D T E R S Q T V Y F N C C N			
UniRef90_T0QVB9	P P I C E I	R N G N W F V A H Q K D V F T L S D V N L K Q Q V F I F N C C N			
UniRef90_C5M2U4	P K K E L	V D N K W Q I L N Y S H A D S I I T I D V E P Q Q S V F I S N C C D			
UniRef90_D8TLU8	F A L	W V V E N F S G R Q D L L V E N N A P K N S V Y V Y G C T			
UniRef90_R1CZS5	P A K M E L	D K R W C V E Y Q K G A K D L C V S E V G P R H T V Y L F K C E			
UniRef90_B5RUK6	P K F E K	D G K K W Q V E W Q S G A H D L K I T D A L N Q S V Y M Y Q C			
UniRef90_D2V1W7	P V V L E	E D K K L I V E N R E N V S N L V T D H I E L K Q V A Y I H K Y V			
UniRef90_G1U519	P T R K E L	D G S K W M V E N F T D V S G P I V I D T E M S Q S V F I G N T S			
UniRef90_C4Y6Y9	P P K C E Y	Q G C K W N V E N Q T K E S V C S V E T D P K Q Q V Y Y K C Q			
UniRef90_K0TR62	P P K K E L	D G S K W I I Q N F T Q N Q A P I I I E T E R S Q T V Y F G C K			
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UniRef90_UPI00044176B2	P R C E I	V R D N W V V E N Y H N E A D V L E L H V T M K Q L V Y S S C C S			
UniRef90_C5L6G9	P A K K A L E	E G N K W I I E N Y D A A G N V E I E A S S Q S I L I F F K C C T			
UniRef90_Q7SAN3	P I I L W D G K	W R V E H L V G N K N A V V E T E M K E A I Y I F F K C C T			
UniRef90_E3MGH8	P A R K E L	D G S K W I I E N Y T D E V Q S T I E A E M H Q S I V F G N C E			
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UniRef90_G8BV95	G I Q V E Q S L P Q I T I D K S D G G S I Y F S K E S L N T E L Y T S C T T S V				
UniRef90_C5DZN6	G A Q V E Q S L P P Q I T I D K C D G G N I F L S A E S M N A S L Y T S C T T S V				
UniRef90_E9EZ35	A L Q V I G T L P T V M L D Q V D G G Q V Y L S P S S I G T R V F T S K S S G I				
UniRef90_B8M2E3	A L Q V D G V V P T L L D Q V D G G A T V Y L S P S S I L F T S S K T T G T				
UniRef90_C5P5C3	A L Q V D G V A P T V M L D Q V D G G G T I Y L S Q S S I L T S C C T T S V				
UniRef90_C5DCT7	A V Q V E Q S L P Q I S I D K S D D G G T I Y L S Q S S I F T S C C T T S V				
UniRef90_M5ED13	A A Q V T G Y T P T I I D S T D G G Q V Y L S E Q G L Q T E I I T A K S S S S L				
UniRef90_B7Z214	Q I Q V M G R V P T I S I N K T E G C H Y L S E D A L D C E I V S A K S S S E M				
UniRef90_C1HA05	A L Q I D G V V P T I L D Q V D G A T I Y L S E S A L I T S C C S S E M				
UniRef90_A0A016VZP0	Q I Q T L G E M P T L S I Q K T D G C Q V Y L S T S K N A E I I T S C C S S E M				
UniRef90_J7S2H3	G I Q V E S F V P Q I T I D K C D G G N V Y L S K D S L C T D I C T S C C S S E M				
UniRef90_N1JW8	A M Q V L G T P T I L M D S V D G A Q V Y L G K D S L G T E I F S S K S T G I				
UniRef90_H2XY10	K V Q C Q G Q M P T V S I D K T D G C I Y L S N E C L N C E V T A K S S S E M				
UniRef90_B6JYT5	G C Q I M E K V P M V V I D K C D G G S I F V S K Q S L D T E F V T S C T T S L				
UniRef90_W6MXY0	E I Q V V D K I P L I S I T I D K S D G G Q I Y L S K S S L D V E Y T S S T T A L				
UniRef90_G8JUH0	G I Q V E N A V P Q I S I T I D K S D S G V I Y L S K S S M H T E I F T S C S T S I I				
UniRef90_E5SI21	Q I Q T M G T M P T L V L Q K T D G C M V Y L S K E A L N C E V I T S K T S E I I				
UniRef90_T4ZYR2	A L Q V L G T I P T V M L D Q V D G A Q I Y F S K E S T G T K L F T S K S D G I				
UniRef90_G9NN71	A L Q V L G I V P T V M L D Q I D S A Q I Y L S K E S S S L D C E V S A K S S S E M				
UniRef90_G1KCH2	Q I Q V L G K V P T I S I I D N K T E G C H Y L S E Q A K D A D I T A M S S S E V				
UniRef90_U6HVD0	Q V Q V T G L M P T I S I D K T N G C H Y L S K E S S S T R G T E F S S K C S N I				
UniRef90_W2S479	A V Q V D G F F L P T I L D Q V D G A Q V Y L S T A S L G T E I T A K S S S E I				
UniRef90_A0A022RUK8	E V Q C Q G S A P T I S V D N T A G C Q L Y L S K D S L E T S T A K S S S E I				
UniRef90_M9MCE9	A V Q I T G R A P T I L M D S C Q L Y L S D K S L D S E I A A K C S A I				
UniRef90_C7ZPQ7	A L Q V L G T I P T V M L D Q I D G A Q I Y F S K E S T G T K V F T S K S A G I				
UniRef90_G4LVI8	K I Q C Q G L S T V N I D K T D G C Q V F L S E E S K Y A D V I T A K S S S E V				
UniRef90_UPI00045610A1	A A Q I T G S T P T V L L D S N D S G Q L Y L S K E S S S T R D T E I A A K C S A I				
UniRef90_G2Q2Y4	A L Q V L E T I P T I L M D Q V D G A Q I Y L S K E S S S T R V Y S S K S S A S I				
UniRef90_C5FHD7	A L Q I I D G A V P S V M F D Q I D G A Q I Y L N A G S M D T E V L T S K C T A I				
UniRef90_K5Y4R1	A L Q V T G V V P M I Q V D N T D S G Q I Y L S K E S S L T A E I T T A K C C S A I				
UniRef90_C1MP27	Q V Q C M G T V P T V A I D K V D G C Q V F L L G E K W S A E V T T A K C C S E V				
UniRef90_U6IC50	K V Q V T G V V P M I S I D Q S E S G S G L Y L S A S S L D T E I T A K S S S E M				
UniRef90_W1QKJ2	E V Q V T D S V P M I S I D Q S E S G S G L Y L S R D A L N A Q V T A K S S S E M				
UniRef90_O02096	Q I Q T L G E L P T V S S I Q K T D G C H Y L S R D A L N A Q V T A K S S S E M				
UniRef90_T2MFW9	K V Q I D G F A P T I S V D K T D G A Q I V F I L N P A C L E S Q V T A K S S S E M				
UniRef90_UP10004407696	A V Q I T G T G A P T I S V D K T D G A Q I D V E I T T A K C C S A I				
UniRef90_E4WUL8	Q S Q V T G K C P I N S V D K T D G F Q M Y Y L S K A S L Q C E I T A K V S E I				
UniRef90_K71QU8	Q M Q V L G K V P T I S I D K T D G C Q M F L N K D T L D V E I T S K S S S E M				
UniRef90_R7QP74	K V Q C T G K A P S I T I A G C Q S V T Y F M S K E S V N A M V I T S K S S A A I				
UniRef90_A8NH62	T L Q V T G T A P M I Q V D S T D S G Q I Y L S N S S N A E I T T A K C C S A I				
UniRef90_B2B330	A L Q V M G K I P T V L L D Q V D G A Q I Y F S K E S S K S T R V F T S K S T G V				
UniRef90_U1GTM8	Q V Q V D G V V P T V L L D Q V D G A T V Y L G N K S S L N T E V F T S K C T G V				
UniRef90_UP1000359EADF	Q A Q V N R T V P T V S I D K T D G C Q I F L S E K S L D T E V S A K S S S E M				
UniRef90_L1K1A5	E I Q I L D W T P M I S T D G C H A V I V Y L S Q R C V D V A V T S K C S S E L				
UniRef90_G3SD18	Q I Q V M G R V P A I S T N K T E G C H T Y L T E D A L D C E V S I I S S S K M				
UniRef90_K1VCJ5	E V Q I T G M C P T V Q V D T T D S G N I F L S K E C M D T E V V T S K T S A L				
UniRef90_K0KEY5	G I Q I L D K V P Q I S I D K C D E G Q I Y L S K N S L E T E V Y T S S T T A L				
UniRef90_A0A024UGE9	Q V Q C K Q Q V P S V A I D K T D G A L V Y L S Y E G R N A Q V T S K S S S E M				
UniRef90_M7P4X3	E I Q I S G Y T P T I T L D Q C C D N S Q I Y L S P K C L S T E I T S K F S S I				
UniRef90_A5DAM8	G V Q V T G V V P M I S I D C C D E G S S I Y L S Q E S I D A Q V Y T S S T T M				
UniRef90_M7XY86	T V Q I L G R V P T V L L D G N D G G Q V Y L S R D S L D C E V T A K C C S A I				
UniRef90_L8G719	A L Q V L G T P T I D Q V D G A Q M Y Y L G K D S M K T E V F S S K S S S S E V				
UniRef90_W9S8N2	E V Q C Q G S A P T I S V D N T A G C Q L Y L S K D S L E A S I T T A K S S S E I				
UniRef90_U7Q533	A L Q V L G T I P T V M L D Q V D G A Q V Y L S K E S T S A Q V F M S K T E G V				
UniRef90_FOXF31	A L Q V L G S I I P T V M L D Q V D G A Q I Y L S R E S T A T Q V V M S K T D G V				
UniRef90_A5E156	G L Q V T G L V P M I S I D K S D E G S I Y L S S Q E S I D V Q F T S S S T A L				
UniRef90_G7YM97	Q V Q S M G Q L Q T V N V D K T D G C Q I Y L S S Q S S L Y A D I T A K S S S E L				
UniRef90_A0A058Z7H4	Q F Q I L E K C P T I N I D K T D G L Q L Y L S K D A I D I D I L T A K S S S E L				
UniRef90_K3XC52	Q V Q S K G R V P S V A I D K T D G C Q V Y L S N D S L D V V F V T S K S S S E M				
UniRef90_U4U6B2	Q V Q M F G K V P T I S I D K T D G C Q V Y L S N D S L D V V V V S S K S S S E M				
UniRef90_G8Y0U3	G L Q I L G T P M V N V D K S D E G S I Y L S K D S L D V V F S S C S S L				
UniRef90_D8PWN9	A I Q I T G V C P T I Q L D S T D V G Q I Y L S K D S L A V E I T T A K C C S S I				
UniRef90_D7FY12	Q V Q V R G S V P S V A I V D K T D G F L C Y L G K D G L E T T F V T S K S S S E M				
UniRef90_M3IQG2	G L Q V L G L V P M F S I D K S D E G S I Y L S K E S I D C Q F T S S S T T A L				
UniRef90_G3AHT7	G L Q V T G F G P M I S I D K S D E G T V Y L S K E S I D G D F T S S S T T A L				
UniRef90_A8XEJ6	Q V Q T L G E L P I I S I Q K T D G C H V Y L S R A A S D T Q V V S S K S S S E M				
UniRef90_H2YWX0	T V Q C Q G Q M P T V S I D K T D G C L I Y L S N E C L D C E I S A K S S S E M				
UniRef90_G0NRJ7	Q V Q T L G E L P T I S I Q K S D G C H F L S R E A L T A Q V V A S K S S S E M				
UniRef90_UP1000440C7FA	T L Q I T G N A P T I Q L D S T D S G Q I F L L S K D C L G V E I T T A K C C S S I				
UniRef90_A3M087	G L Q I V G V V A I I S I D K S D E G S V Y L S K E S V D A Q V F T S S T T A L				
UniRef90_W4Y147	K L Q I L G Q A H I V N I D K T D G C M V Y L S E N C K G A E I S A K S S S E M				
UniRef90_F0VMP1	K F Q V Q G T C H S I A I D K C S G V W D L Y V S K E S K D V E I T T S K S S G E M				
UniRef90_E1ZTS9	E V Q C T G A V P T V A V D K C D G C Q L Y L P R G S L E T D I T T A K S S S E V				
UniRef90_I2GXV4	G V Q I D S Y I P P Q I T I D K S E G G T I Y L S T D S L N A E I Y T S C S T A L				
UniRef90_T0QVB9	Q V Q C K G K V P S V A I D K T D G C L V Y L S Y E G R D V Q V T S S K S S S E M				
UniRef90_C5M2U4	G I Q V L G L V P T I N I D K S D E G T I Y L S K E S V D C Q V T S S T T A L				
UniRef90_D8TLU8	Q L Q T T G T V P T I S I V E K T D E A Q L F L S Q Q A S G Y H R A K C S S I				
UniRef90_R1CZS5	T L Q T L V K V P T I S T V D K C D A T T L I L N R E S L D C E I V S A K S S A L				
UniRef90_B5RUK6	G L Q V V G T V A M I S V D K S D E G S I Y L S Q Q S I D A Q I Y T S C A T S L				
UniRef90_D2V1W7	Q V Q I R G A A P I L S I D K T D G I V Y Y L S K E A I I N C R V V S A K S S S E M				
UniRef90_G1U519	K Q V V M G K V P T I S I S K M N G Y H T Y L S K N S K I D F R A K S S S E M				
UniRef90_C4Y6Y9	G I Q I T G V V P L V T V D K S D E G S I Y L S Q K S I D S S V V T S N S T A L				
UniRef90_K0TR62	Q V Q A T N V C P S F S I D K T D G I V V Y L S K D A I Q S S F V T S K S S S E M				
UniRef90_H8X4X5	G L Q V I G L V P M I S I D Q S D E G S I Y L S T E S D C Q Y T S K T T A L				
UniRef90_UP100044176B2	T L Q I T G S A P T I S I D S T D S G Q I Y L S K A C A D T E I F S A K C C S A I				
UniRef90_C5L6G9	R V Q T I G H V P C I S I D K C S G V Q L Y L S K A S L D C T T T S K S S S E M				
UniRef90_Q7SAN3	Q L Q V N E T I P T V L L D Q V E Q A T I W L S K E S I S T R V F Q S K T D N V				
UniRef90_E3MGH8	E I Q T L G D L L T V V S I Q Q T D G C N I F L S R D S L K A K I A S K S S S A V				
UniRef90_G3BF49	G L Q I L G T V A D V S I D Q D C G L Q L Y L S Q D S A I D I Q V V S S T T A L				
UniRef90_A0A059LB74	E V Q C L G T V P S L V A A D A T E G L Q L Y L E D A A G V Q T T A K C C S Q I				
UniRef90_F0WQ25	Q A Q C K G I V P S V A I D K T D G C M V Y V S W E G R D V N F I T S K S S S E M				

130 140 150

UniRef90_UPI0002B49D29	N V L V R G S D P G D W V E H A L P Q Q F V H V L K D G R I E T T P V S H
UniRef90_G8BV95	N V N Y P V G E D D D Y V V E F P L P E Q I K H S F G D N K L Q S S V F E H
UniRef90_C5DZN6	N V N L P V G E D G D F V E F P V P E Q M V H T F G N G K I N T T I Y E H
UniRef90_E9EZ35	N L N I L S G P D D D Y K E V P L P S Q I C S Y Y D E N K L I N E I V A H
UniRef90_B8M2E3	N I L L P P K E D G D T K E C P L P E Q I K S Y V K D G V L V S E I V E H
UniRef90_C5P5C3	N I V L P P K E D A D A K E C P V P E Q I R S Y V K D G V L V S E I V E H
UniRef90_C5DCT7	N V N L P I G E E G D F V E F P V P E Q I K H S F A D G K L K T T V Y E H
UniRef90_M5ED13	N V S V P A G E P G E L E E P L P E Q I K H T L Q R S S T K S E V V Q H
UniRef90_B7Z214	N I L I P Q D G D Y R E F P I P E Q F K T A W D G S K L I T E P A E
UniRef90_C1HA05	N I V V P P K E D D D S K E L P V P E Q I R T F I K D G V A V S E I V E H
UniRef90_A0A016VZP0	N L L I P P M A D G D F A E F P V P E Q F K T T F N G S K L V T C V S D
UniRef90_J7S2H3	N V N L P V G E D D D Y V E F P I P E Q I K H S F A N G K M N S A V L E H
UniRef90_N1JW8	N L N I L D A D D D D Y K E L P L P E Q I R T W D G G K V M N E I V E H
UniRef90_H2XY10	N I S V P R E D G D F D E F P I V E Q F R T I W N P D K F I T T G T E
UniRef90_B6JYT5	N I N I P T D D G D Y K E C A M P E M L K H T V N E G F V T E V I R H
UniRef90_W6MXY0	N V N V P T D G E D L A E L P I P E Q F K T F A D G K I T S T I V E H
UniRef90_G8JUH0	N V N V P T G D D D F V E H P I P E Q L K H S F T D G K L I T N V F E H
UniRef90_E5SI21	N L L I P T E D G E F E E R C V P E Q F K T V W S G T A L K T T P S E
UniRef90_T4ZYR2	N L N V V T G P D D D F K E V S L P S Q I C S Y Y D E G D L V N Q I V A H
UniRef90_G9NN71	N V N I L A G P D D Y K E V P L P S Q I C S Y Y S E E K M V S E I V A H
UniRef90_G1KCH2	N I L I P Q D G D Y
UniRef90_U6HVD0	N I H V P K R D G D F T E Y A V P E Q F K T K V
UniRef90_W2S479	N I V V P P G D E G D S K E F A V P E Q I R T V V N G K G L Q S E I V E H
UniRef90_A0A022RUK8	N V L V P A S E D G D W G E H A L P Q Y I H V Y K D G Q I V T T P V S H
UniRef90_M9MCE9	N V S L P V Q E E G F E E L A L P E Q L K T V D
UniRef90_C7ZPQ7	N L N V I S G E D E D Y K E V P L P S Q I C S Y Y D E A K L V N E I V A H
UniRef90_G4LVI8	N I L I P K G T D D F E E F A V P E Q F K T N F T G K G L K T V C S D
UniRef90_UPI00045610A1	N V N V P G G E E G F E E Y A L P E Q L K F T I D K S K I R S E I V V H
UniRef90_G2Q2Y4	N L N V L T G D G D D Y K E L P L P S Q I C S W W D E G K V V N E I V S H
UniRef90_C5FHD7	N I V L P P K E D S D A K E C P V P E Q I R T V V R D G A I V S E I V D
UniRef90_K5Y4R1	N V S L P V E E E G V F S E H P I P E M L R T V V R D G K L V T A F V E H
UniRef90_C1MP27	N V T V P A G S A E E A T E T A I P E Q F V T R R E D G K W R T V P M G H
UniRef90_U6IC50	N I L L V P V G D G D Y T E Y N V P E Q F K T K L V L D H L E T K V
UniRef90_W1QKJ2	N I N V P E S D D M K E L A V P E Q F K H T V K N G K L V S T V V E H
UniRef90_O02096	N I S A M L E D D D E Y T E M A L P E Q F M T K I V G K K L V T V A S E
UniRef90_T2MFW9	N I C V Y R K P D G D F T E Y P L P E Q F K T V W S P N K F L T S T M D
UniRef90_UPI0004407696	N V S L P G E E E G V F V E R A M P E M M R T T I K D G K L V A T I V E H
UniRef90_E4WUL8	N V M V P Q Q G D D Y T E K A V V E Q F K T V W D K K Q M I T T P V E
UniRef90_K71QU8	N V M V P I G N N D Y T E Y P V P E Q F K T K I T E K G L S T V A V D
UniRef90_R7QP74	N L V R P P D D D D I V E T P I P E Q F C T T F K K G A F V T E A V E H
UniRef90_A8NH62	N V S V P G E E D G V F D E H P V P E M L R T V V K D G K L V T T V V E H
UniRef90_B2B330	N V N V I G E D D D Y K E L P L P N Q I C S Y Y D E E K M V N E I V S H
UniRef90_U1GTM8	N V L P P R E E E D D K E C P L P E Q I R S V V K N G
UniRef90_UPI000359EADF	N I M V P Q Q G S G D I K E F A L P P E Q F K T V Y N G K Q M V T T Q P S D
UniRef90_L1K1A5	N V L V P A S D A E D P T E L P I P E Q Y E T R I R N G Q L V T T C V A H
UniRef90_G3SD18	N I L I R Q C G N D R E F P V P E Q F K T A W D G S K L V S E P
UniRef90_K1VCJ5	N I S I P A G E D G D F V E R P V P E Q M R S R V V D G K L V T E I V E H
UniRef90_K0KEY5	N I N V P P D D E N D D F K E L S V P P E Q F K H T F N N G K I S S S I V E H
UniRef90_A0A024UGE9	N V A F P A S A N E D Y I E R P I P E Q F V H R I T D D D T V T S T V S
UniRef90_M7P4X3	N V H V L E E K N G D Y I E H H I P E M L K S T I L N G K L V T N F V E H
UniRef90_A5DAM8	N I Y V P K D G D F V V E L A V P E Q F K H S V K N G S L T S E V V E H
UniRef90_M7XY86	N V S I P E E G E E G V F V P V P E Q F K T V V R D G K L H T V V M E H
UniRef90_L8G7I9	N L N I E G E E G D F K E V A L P E Q I R T Y I N E G Q L I S E I V E H
UniRef90_W9S8N2	N V L V P S G P D S D W I
UniRef90_U7Q533	N L N I I T E E E G D Y K E V P L P S Q I C S Y F D K G E L V S E I V S H
UniRef90_FOXF31	N L N V P D G E N A D Y K E V P L P S Q I C S Y F D K G T L V S E I I A H
UniRef90_A5E156	N I N V P E A N D D Y K E L A V P E Q F V S T I K D G K L V S S I N E H
UniRef90_G7YM97	N V L V P K V N G D Y E
UniRef90_A0A058Z7H4	N V Y T P K T E D D D H L E T P L P E Q F K S T F C K E T W I T E T I K H
UniRef90_K3XC52	N V V A F P S G P G D E Y Y V E R P I P E Q F V H R I T P E L T V S S D V S
UniRef90_U4U6B2	N I L I P A A N G D Y I E Q P I P E Q Y K T T I L P N K L K T V V V E H
UniRef90_G8Y0U3	N I N V P E K D D Y Y E E P V P V P E Q F K H T V K N G K L Q S E V V E H
UniRef90_D8PWN9	N V S L P G E E E G V F E E Q P V P E M L K T V V Q G G K L V S S I V E H
UniRef90_D7FY12	N V V A F P K P D S D E Q M E M P I P E Q F V H T I K
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UniRef90_W6KP49	D V Q V A E A A P S V V V E	N S S T V N I Y L P E H S R E T D I F S T R I L T T V		
UniRef90_V6LGF7	R V Q V S F S P T F N I E	N C D T I K L F L H Q N C K D S E I L T Y Y A S G I		
UniRef90_L0PC94	T F Q V L D Y I P T I T L	D Q C S Q I Y L S S N H L N T E I I T T K Y D S I		
UniRef90_J9FLW9	F V T V K L Q I P Q M A V E	R S N V Q V F L F E S A R N C K I H T T S S Q S V		
UniRef90_W4WWU8	Q M Q			
UniRef90_J4CDM7	K V R V K T T L P A C S I	D K S Q Q V S F W I S R E N A S M I M F S S K S G D M		
UniRef90_V5GIF4	K V M Q			
UniRef90_M1V5P3	R L H F T G C V P S I S I	D N C D S I V L Y G M P G Q V I T C C A T A V		
UniRef90UPI0003F0EAE3	Q A Q V R			
UniRef90_A2F422	K I Y C E G V V K T I T C	D K D C D S L E I Y L N E A S L K V Q L I S S Q S T G I		
UniRef90_A7AWI2	M V R V S S N L P S A A I	D K C Q Q V A F W I T S A N A E T I M F T S K S G D M		
UniRef90_L1IPP2	E L V V V G E S V R R I S V	D K C A K C E V T L C A E L M D A E I I S K A S A G V		
UniRef90_W4Z980	K L Q V			
UniRef90_H9J1X9	L A L V L G K V P T V S I	D K T D G C Q I Y L S P E S L D V E I V S S K S S E M		
UniRef90_E9AGV5	E V L I E T S A P G V H A A K V S G L T I H L A E E C N T P I V T R M A S N V			
UniRef90_I7J663	K I I V T K N L P S L V I D	K S D S S I T Y V P E E S A N L K I T T A K S G D L		
UniRef90_L1JQM3	V L V V V G G E S P F I E L	N C K G V G L L L S H E S M D G P I E L V R S G G V		
UniRef90_X6LA55	T L W L Q D K K V			
UniRef90UPI00021A55AB	T L T V A K K V P T I T I	D R S S C I H L H L H E P N V M S I I H T V G V L D V		
UniRef90_L1J7W0	D L V I G A E L P G F L L	R N I R G A S L T F C P D N I D G A I E S V N C S E V		
UniRef90_X6N3H1	T L F V K G S V P S I S V	D K C S Q P R L V I Y Q G A L D K Q I I T S M V T D M		
UniRef90_L1K258	N F A V A G D V P P V K L L	Q R L Q S C N V I A T W D G L K E P I E T H T C K G I		
UniRef90_A9V3Z9	D A S F K V K I G T M Q L	D M S S D L S L F D Q K H F G C I I W A G C H R L		
UniRef90_E9CE43	T I K S T Y R C C T I	S D M S T D C S F H V S Q E D I Q S E A T A R K		
UniRef90_X6M024	K I S V V G S T P S V S I	D Q C D A T T L I L N R E S L D C E I V S A K S T L		
UniRef90_R1CVG2	T V H L N H H I P T I Q A D G C T G C E L V L R D R R G F H L Y T A K T T Q M			
UniRef90_L8H632	T L F V V G G S P L T S L E Q C I E C R M G T V E S P T E I R M R R C M S I			
UniRef90_I3ED83	R A A F T G T C R T I V V V D A C	D N V M L V V P A E S T V R V V V S S A S T R V		
UniRef90_T0QJ03	L F V L G A C P M A V L E Q C V E C R I G V V G K K A E M R L R R C A S L			
UniRef90_H8ZGD5	Q V S V A R C R T I T V D V S T D V T L	C Q L E D A S V Y L Y S S T E P I I E T S		
UniRef90_D8LQ02	T I I A P C R T I M V S G S T L	T D T H D G V A F L L Y S S H S N Q I		
UniRef90_D6QXB9	R L V T Y T R C L F L S	S I T D S T I Y S S V A T N P V M V N C S G I		
UniRef90_E4XAHO	D A I I H V P V G T I Q V D V C	E D C D V V F Q K K A D F G T A V W V G C H N F		
UniRef90_F2UKP8	T V V C A V Q Q F R A R D C	E D A S V Y L Y S S T E P I I E T H T C E G I		
UniRef90_D0NLT4	S L N V N A E I P V L Q I E C S T N I S I Y I	V A I K N F A Q D V I E T H T C E G I		
UniRef90UPI0001925C84	T I A I A G K L P P V Q I K F S K G I S I V A I K N F A Q D V I E T H T C E G I			
UniRef90_L1I9M1	N I S L N S Q V Q T I Q I D H C K N I N L	E I T F E S S T K T T D C E D C E N V T L L F P S R D T I G S I Y H A T T S G L		
UniRef90_U9TQZ3	K I C C K G I A D S Y H L E S C H D C Q L T D T H D G V A F L L Y S S H S N Q I			
UniRef90_X6N2I6	T V H A A A V S I I I T	E D C E N V T L L F P S R D T I G S I Y H A T T S G L		
UniRef90_K8F156	T I I A V C R R I S V S S S T L C T F H	E I I C E S A I A T T Q V D D A T E T V T H P A R R A L G A V V F A T S R D V		
UniRef90_Q00V14	K I V V I N D Q V K T L Q V D M T S R M S I F D T R D S L H S I W S G V N D M			
UniRef90_A0A023B7F8	K L S I V K K V K T L Q L D S V K N C R I T I I V C R R I S V S S S T L C T F H			
UniRef90_C3Z3Z8	K V N I N D Q V K T L Q V D M T S R M S I F D T R D S L H S I W S G V N D M			
UniRef90_D2VN87	K I V V I N D Q V K T L Q V D M T S R M S I F D T R D S L H S I W S G V N D M			
UniRef90_Q86IB4	K I V V I N D Q V K T L Q V D M T S R M S I F D T R D S L H S I W S G V N D M			
UniRef90_K1Q9K5	K I V V I N D Q V K T L Q V D M T S R M S I F D T R D S L H S I W S G V N D M			

7 8 8 5 3 0 2 2 4 3 6 7 6 2 5 8 7 2 7 8 8 8 5 3 7 8 8 8 7 3 5 8 9 8 6 1 7 7 1 2

UniRef90_D8M9H7
 UniRef90_A8INA3
 UniRef90_M2XAT1
 UniRef90_S0B1R9
 UniRef90_V9II22
 UniRef90_F0Y8I9
 UniRef90_W7TVS0
 UniRef90_D2W6G5
 UniRef90_UP0001E44D69
 UniRef90_U6KUB0
 UniRef90_G4TS7A
 UniRef90_W2TSB8
 UniRef90_B0ETB8
 UniRef90_Q5CD15
 UniRef90_W7K2F2
 UniRef90_K4E1G4
 UniRef90_W7AG41
 UniRef90_Q4Q0K2
 UniRef90_B6AA37
 UniRef90_S9WRW6
 UniRef90_G0U7L1
 UniRef90_S9UIQ3
 UniRef90_F7DT09
 UniRef90_UP00027F211D
 UniRef90_W7A0Y8
 UniRef90_Q38A49
 UniRef90_E4X5P0
 UniRef90_J3QAR9
 UniRef90_W6L968
 UniRef90_UP00006CA55C
 UniRef90_S9XEL0
 UniRef90_B7G1U9
 UniRef90_A0A023AZU5
 UniRef90_L1LB06
 UniRef90_G5DY10
 UniRef90_A0BQ80
 UniRef90_W8C2J7
 UniRef90_P40125
 UniRef90_W6KP49
 UniRef90_V6LGF7
 UniRef90_L0PC94
 UniRef90_J9FLW9
 UniRef90_W4WWU8
 UniRef90_J4CDM7
 UniRef90_V5GIF4
 UniRef90_M1V5P3
 UniRef90_UP0003F0EAE3
 UniRef90_A2F422
 UniRef90_A7AWI2
 UniRef90_L1IPP2
 UniRef90_W4Z980
 UniRef90_H9J1X9
 UniRef90_E9AGV5
 UniRef90_I7J663
 UniRef90_L1JQM3
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 UniRef90_L1J7W0
 UniRef90_X6N3H1
 UniRef90_L1K258
 UniRef90_A9V3Z9
 UniRef90_E9CE43
 UniRef90_X6M024
 UniRef90_R1CVG2
 UniRef90_L8H632
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 UniRef90_Q00V14
 UniRef90_A0A023B7F8
 UniRef90_C3Z3Z8
 UniRef90_D2VN87
 UniRef90_Q86IB4
 UniRef90_K1Q9K5

130 140 150

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

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

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

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

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

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

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

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

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

N| V N H P K M A D D V K K A A L P
 R| L S F A D S E D

S| L H

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

K| L Y F S D E A G F E Y P E Q E L S D Q F T T R F I K G V L T T E



sol25
sol5
sol0
jhmm
jpssm

1 B B 10 B B B B B 20 B 30 B B B B B B 40



sol25
sol5
sol0
jhmm
jpssm

The diagram consists of four horizontal rows of four boxes each. The first row is labeled '50' above it, the second '60', the third '70', and the fourth '80'. Below each row is a thick yellow arrow pointing to the right. The boxes are arranged in a grid pattern: Row 1 has boxes B, B, B, B; Row 2 has boxes B, B, B, B; Row 3 has boxes B, B, B, B; Row 4 has boxes B, B, B, B.

sol25
sol5
sol0
jhmm
jpssm

sol25
sol5
sol0
jhmm
jpssm

