

1 10 20 30 40

QUERY	F E T V N P L K V G K E F A S E P	V W F G D S D R A S L G V D K D V Y L T I P
UniRef90_D8MQ80	Y D T V T P I K A D K P F S T Q R	V W Y G E K K E V N L G V V A S D A S V T V P K
UniRef90_UPI00036374DF	Y E T V T P I K A N A P F A Q Q R	V W F G D E K Q V V N L G V V A K D A A I V T I P
UniRef90_D0ZA86	Y E T V T P I K V G Q P F T T Q K	V W Y G E R S E V P L G V V D K S A A V T I P
UniRef90_K8WVF1	Y E T V K P L Q A G V E F A S E P	V W F G D D N K V K L G V T E D L F L T I P
UniRef90_UP10004788CB7	Y E S H K L Y D A G K P V A T Q K	V W K G K A D E I R L G V V Q P L L V S T P
UniRef90_N8ZR94	F E T K N V K P A N Q V L A K S	V W F G K E N E V N V G L A E N F S V T T M
UniRef90_UP1000393E31E	F E T V A P H K A G E T F I N E R	I W M G N K D T V A L G V V D K D T Y V T L P
UniRef90_A0A021W9X5	Y E T H K L Y D T S K V I A Q Q K	V W K G Q T A Q V Q L G V V A E P L L V T V P
UniRef90_UP1000468FFF0	Y E T F T P I K A D A P F V T Q R	V W Y G D K K E V K L G A A K D V A I T V P
UniRef90_A0A014PSE6	Y E T V T P V K A D K P F T T H	R V W Y G D R K A I L L G V A G D A S V T L P
UniRef90_UP100047A7ADD	Y E T H K L Y D A N K P L A T P R	L W K G K Q D Q V P L G V V S E N V L V T V K
UniRef90_B0RNP5	F E T H S L Y A P G K V V T K Q V	W K G E Q D E V Q L G V V A Q P L L V S L Q
UniRef90_R1GM78	F E T V A P H K A N E T F V T E K	V W M G D T D Q V A L G V V S E D T Y V T L P
UniRef90_UP1000472436F	F E T I S P L K A G K D F A S E P	V W F G N T D R V L L G V V D Q N V Y L T I P
UniRef90_B4SJ20	F E T H R L Y E P G K A V A E H	K V W K G T T D K V Q L G V V A Q P M L V S V P
UniRef90_UP1000466E7A8	F E T H K L Y T A D Q R L H D A R	R V W E G K Q N T V G L G S L A K D L Y I T I P
UniRef90_N9CPY6	Y E T V R V Q P A N Q V L A K A K	V W Y G K S K E A Q I G L P E N F N V T M P
UniRef90_H0PYQ3	F D T A K L Y S A N Q E L S R F	R V W K G Q I N E L P V G F T Q D F V M S L P
UniRef90_C1D5T6	F D T P R L Y Q A N Q S V S T L	R V Y K G D A N D V N V G F A D D V Y V V T V P
UniRef90_K8WD16	F E T V T P I K A D A T L K K Q R	V W F G D T S E V D L G V V A D D V S I T I P
UniRef90_UP10002FAA092	F E T V S P H K A G E E F V K E K	I W M G D K S E I S L G V V N E D T F V T L P
UniRef90_S6AZL5	F D T H H L Y Q K G Q V V S S L P	V W K G S E N L L K A G V V A Q D V Y V S L P
UniRef90_B7V8B4	F E S R N F Y K K G T E L T K G L	V W K G S E H E V K A G L A E D L T M T L P
UniRef90_W8L349	F E T H R V Y E A G E P L T E A R	R V W K G E T K S V P L G L T E P F Y V S I P
UniRef90_F7RV57	F E T V T A Y S A G D E M A T Q R	I R W G G S A D E I K L G A G E D V V I T I L P
UniRef90_K2IXS7	F E T V T P F Q A G Q Q E F A T Q R	I R Y M G D V D Q V R L L G V L D A T P V T V P
UniRef90_UP100047FB3B	F E T H K L Y D A G K P V A V Q K	R V W K G K E D V R L L G L S E P M M V T L P
UniRef90_B2VC14	F E T V T P I K A G K A F A T Q R	R V W Y G D R K E V V S L G V V A Q D A A I T I L P
UniRef90_K6Y9S3	F E T V T P Y K A G D S F V S H	R I Y M G D K E T V D L L G I I N Q D T P I T I P
UniRef90_S6B9P3	F E T H R L Y A G G S R L T E A R	R V W M G E Q E K V A L L G L A E D L Y I T I P
UniRef90_UP100047AFDE7	F E N T T L R P A Q G Q S L A T T P	R V W F G Q T D K V S V G L A E N N M A V T L P
UniRef90_B4ET08	F E T V T P V K E N V P L T T Q K	R V W F G D T S E V D L G V V A D D V S I T I P
UniRef90_J7U2L0	F E T V R P M Q K D N P L V S E I	V R W F G D K D K V Q L G V V E N D V Y I T I P
UniRef90_W1NCD2	F E T L K L Y D Q G A V L N T P R	R V W E G A S N E L R V G V V D S D V Y M T V P
UniRef90_UP100047B7BF5	F E T I T P L Q A G K I L A D A P	R V W F G S E S T V K A G L D R D L S T T L P
UniRef90_E1VGT1	Y E N V R S Y S A G E V L A A P E	I R Y P G S T P T V K L G L D K D L V L T I P
UniRef90_I0DXL8	F E T V T P I K A D Q T L Q T Q R	R V W F G D K S E V A L G V V E K D T A I T I P
UniRef90_B2JC41	Y D A V R L Y K A N Q V V E T P	R V W Y K G S Q D T V K L G V V T T D Q Y I T I P
UniRef90_S6AM71	F E T Q S F Y Q K G A E L A K A Q	R V W K G A T R E V V K A G L A Q D L T M T L P
UniRef90_B8GMW7	F E T H R L Y E A G A A L T D A R	R V W K G A T D R V P M G L S E D D L Y V T V P
UniRef90_B5JW29	Y E T R K L Y A A G A S L N A P	R V W K G S I E N L P I G P A S D L Y V T I P
UniRef90_K0CA23	F E S Y K A Y S A N D V L A N P	R V W L G A A N T V R L G P Q K D D V Q L T V P
UniRef90_UP1000380D4FB	F E T V T P Y Q K G E V F A S Q R	R V W M G D K E Q V D L G I L T D T P I T I P
UniRef90_W0TM24	Y Q T H R L Y N A G T P L R T I	R V W K G E V E N G L G V V E Q D L Y Y V T I P
UniRef90_J7TFD6	F E T V A P V K A D T P L T T E R	R V W F G D I S E V P L G A E K D I Y Y V T I P
UniRef90_UP10004718BA9	F D T V Q L F H A G K P L G T E E N	R V W Y G N P H T V N V G S A K D V Y V S L P
UniRef90_W8ZEE1	F E T V T P H K A G D E I I T E R	R V W F G D K D Q V K L G V V D E T S Y V S L S R K
UniRef90_L7ZFV0	F T T V T H L F S A G Q S L G E E P	R V W Y G E S H R L P V G S A Q D Q S V I T I P
UniRef90_I2BAV3	W E T V T P I K P D A T F V T Q K	R V W Y G D T E A K L G A G S Q G S V I T I P
UniRef90_U4K801	F E T V S P H K A G E T F V S E K I	R V W M G D K D A V A L G V V A E D T Y V T I P
UniRef90_W7QHC2	F E T I T P Y D A G T K F A D Q P	R V W M G D K D T V R L L G I T Q S T Q I T I P
UniRef90_E6PU39	F D D L H V V T A N K P V L G A H	R V W K G E K D H V Q L G S F D T L A V S V P
UniRef90_G2DVL6	F E S H Q L Y P A N Q P I E N L R	R V W F G E Q E M L P V G P A T D V V A T I T I P
UniRef90_L1P4C0	F D T P K A Y D A G K A V A P V	R V I Y K G Q K D T V D T G F A E P V Y V T I P
UniRef90_K2JHI1	F E T V T A Y K A G D S F V N H	R I R V W G G D I D E V E L G V S E D V V I T I L P
UniRef90_UP100037383D6	Y E T H R L Y Q A G E V L T E A R	R V W K G E T E R V P M G V P D D L Y V S V P
UniRef90_A0A031LHU4	F E T V S V Q P A H K E L T T S K	R V W K G E T E R V P M G V P D D L Y V S V P
UniRef90_D2C1P0	F E T A T L I R S D T P F T T Q R	R V W L G S E K Q V V R L G V V A Q D A A M T V L K
UniRef90_U1KG69	F E T I T P Y Q A G D A F A D Q R	R V W M G N K E T V S L G I I M E D T P I T I P
UniRef90_Q48DM3	F E T Q N F Y Q K G T E L A Q A T	R V W K G T E R Q V K A G L A E D L S M T M P
UniRef90_Q82UJ9	F D T A H P Y K K D Q P V A N V Q	R I R V W K G A Q N K L K V G F D R D I Y F S L P
UniRef90_A9IH73	F D T V Q L Y G K S Q P G L D V	R V W E G T V E T V K L G P P H P V S L T L P
UniRef90_Q7MF20	F D T V S P T K A N Q P L A D T R	R V W M G E K N Q L S V G L K A E D I F L T T L P
UniRef90_I6Z8H3	F E T R T F Y E K G V E L A Q P K	R V W K G Q Q D K V A A G G L K A K D L T T L P
UniRef90_E6SYF3	F E T V T P Y K A G D S F I T Q K	R V W Y G D K S T D V D L G V V A T D T P I T I S R
UniRef90_UP0004113B2C	Y E T V T P Y T A G T S F V A H	R I R V Y M G D R D T V D L L G I I Q D T P I T I L P
UniRef90_I1XMJ2	F E T H Q L Y A A D E A I T Q T K	R V W K G Q T D Q L V N L G L A Q P L S I T I P
UniRef90_UP100040D2229	Y E T V P A Y S A G D K F V D Q R	R V W G G E Q D T V A L G I A Q D A V I T I L P
UniRef90_V5PX12	F D T L R V Y A A N Q V V V A T P	R V W K G K E S E L V K I G V V K K D T F I T V P
UniRef90_UP10004127CC8	F E T R P I Y K A N E K L S E T R	R V W K G E D T E V V A L G L K R D F Y V T F P
UniRef90_U7NG61	F E T L K L Y D R G S V L D T P R	R V W G G Q S N Q L R V G V V D R D V V M T V P
UniRef90_C0N758	F E T H Q L Y Q A N V Y G V T E S	R V W K G K Q D L V E L G L P T D L S V T V P
UniRef90_C8KYH4	F E T V K Q S L P A G Q A I K E E S	R V W Y Y G N A N K V Q L G S V Q D S F I T I P
UniRef90_C5BNN8	Y Q T H K L Y S A G D E I L G S A R	R V W G G D P K E L V L T I D H D I L A T I I P
UniRef90_UP1000380F4C5	F E T L T P Y N A G D Q L A N E R	R V W M G S Q E N I R L G V V G Q S T P I T I P
UniRef90_UP100047CBA50	F D A V K L F D A E Q P V A T P	R V W K G A A S T L K I G R T T P I V V T V P
UniRef90_G4E5R2	F E T H R L Y A A G Q P V L T E A R	R V W K G D A N A V P V G L T Q D L Y V T I P
UniRef90_I9DPG1	F E T L T T H K A G A K L A E Q R	R V W K G A K E T I V N L G L A N D A T L T L Q
UniRef90_UP10004112F79	F D A V K L Y G A N Q A V S E F R	R V W K G S Q N Q V K A G F A N D F V V S V P
UniRef90_L0M2U8	F D T V Q V L L Q N G K K V G T E R	R V W Y G D K E T I D L G T D Q D F W V A L L P
UniRef90_UP1000255A8DA	Y R T H Q L Y E A G Q V L Q D T K	R V W A G A R D Q V R L G L T Q D L A V T V P
UniRef90_Q9PBB4	F E T H T L Y E P G K V V I K Q K	R V W K G Q V S E V Q L G V V A R P L F V T V Q
UniRef90_R9PM30	F E T V K P Y K A G D S F V E Q T	R V W M A D Q D T V S L G V V N Q D I A L T L P
UniRef90_Q5P4C2	D T V K L Y S A D Q E L S R F Q	R V W K G Q A D D V A V G F L G D F V M S L P
UniRef90_C7R7K5	Y T N I T P F K A G Q S L R T A R	R V W K G A E E E V K V G L A Q D A G L T L L K
UniRef90_V3TT78	F E T V T P L R A D T P F T T Q R	R V W F G T T K D A R L S T A Q N A A L T I I P
UniRef90_A7N3J9	F D T V V P T Q A G K E V A T A R	R V W M G N Q D E L K V G V D R D I Y L T I I P
UniRef90_M5DKE1	Y D T V H L Y Q K E R E V T A I Q	R V W K G A Q N S L K T G F G Y D V Y F S L L P
UniRef90_D0YWG2	F D T V S P N K A N P L V S E K	R V W M G D T D T V E L G V T K D T Y V T L P
UniRef90_UP10003659DDDD	Y Q T H K V Y G Q G E V L Q T E R	R V W G G K E P N V G I A V E K D I F V T I I P
UniRef90_W0LHU8	Y E T A I P I K A D K T F V T Q K	R V W F G D V G E V P L G V V A K D A A V T I I P

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

UniRef90_D8MQ80 G Q L K N L K A S F T L S S Q P Q L T A P L K K N Q V V G N I I D F Q L D G K T I E

UniRef90_UPI00036374DF G Q M K N L K A S F T L S S P Q L E A P L K K D Q V V G T I I D F Q L D G K T I E

UniRef90_D0ZA86 G Q M K D L K A S Y T L S Q S Q L E A P L K K G Q V V G T I I D F Q L D G K T I E

UniRef90_K8WVF1 G R L K D L K A S Y D I A S N E L E A P L S K G Q Q V G T I I N F Q L D G K T I E

UniRef90_UPI0004788CB7 G K Y A Q L K P T M D V P K T V A P I E K G Q K I G T V K V T L D G K T I A

UniRef90_N8ZR94 G Q A G D I K T Q I S V Q P N E K E L E A P I K K G D V V G K L Y Y Q L E G K D V A

UniRef90_UPI000393E31E G Q A K N L K A S F V L E K E L E A P I K K G Q A I G T V K V M L D G K V I A

UniRef90_A0A021W9X5 G K Y A Q L K P S M D V P K S L V A P I K K G Q V V G V I D F Q L D G K T I E

UniRef90_UPI000468FFF0 G Q I K N V K A S F T L S Q P E L K A P L Q K N Q Q V G V I D F Q L D G K T I E

UniRef90_A0A014PSE6 G Q M K N L R A S F T L S Q P E L L A P L K K N Q V V G T I I R V T L D G K I I E

UniRef90_UPI00047A7ADD G D Y D K L K A T V D V P A T L A P F T K Q G Q V G T V K V S L E G K V I A

UniRef90_B0RNP5 G R Y K D L K P S M E V A K N Q A P I K K G Q Q V G T V K V S L E G K V I A

UniRef90_R1GM78 G K A K D L E A S F V L E K T L E A P I A K G D V V G K L Y Y Q V D G E D I A

UniRef90_UPI000472436F G R A K D L K A S Y V L Q N T E L H A P L K K D Q V I G T I I N F H L D G K V I A

UniRef90_B4SJ20 G R Y N D L K P S I D V P K T L E A P F T A G Q Q I G T V K V M L D G K L V A

UniRef90_UPI000466E7A8 G Q Y K N L K J E T T I K S D I R A P I T K Q G Q V G D L H V S L N G K V I A

UniRef90_N9CPY6 G K A N Q I K T Q L V V Q P K T A P L K K G Q V I G K Y V A T L D G K V I A

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UniRef90_C1D5T6 G A A S R I K V S M T S T Q P L A P V K Q Q G A V G K L T L D G K V I T E

UniRef90_K8WD16 G Q L Q N L K V D I Q L T N D S L E A P V A K N Q V V G T I I N F L L N D E V I E

UniRef90_UPI0002FAA092 G Q A K N L A A S F V L D K E L K A P I A K G Q V V G K L F Y Q L N G K D V A

UniRef90_S6AZL5 G Q Y A R L K A S L V S K Q P L A P L S A G Q E V G T I I R L M L D D K P Y A

UniRef90_B7V8B4 G Q M Q K L Q A S M V L E P Q L M A P I Q Q G Q V I G K V E V K L D D K V I R

UniRef90_W8L349 G S Y E Q L Q A Q T E M D R L L E A P I Q Q G A S H G E M L V L G D E V V A

UniRef90_F7RV57 G Q R Q N L N A N F V L D N V L E A P L A E G Q V V G T V N L T L D G E D I A

UniRef90_K2IXS7 G S A G D L K A D F Q L D K E L K A P I A K G E R V G T V L H L K L D D K D I A

UniRef90_UPI00047EFB3B G R Y Q Q L K P V M D V P K Q V G P I G S V R R V M L G N Q V L A

UniRef90_B2VC14 G Q F K G L K A S F T L S Q P Q L T A P L V K N Q V V G T I I D F Q L N G Q S I V A

UniRef90_K6Y9S3 G Q V K N L K A N F E L E K S L E A P I A K G E V V G K L F L Q L E G E D V A

UniRef90_S6B9P3 R Q Y D K L S A R S E I E P D I Q A P V H K G Q A L G E V V V E L E G E T I A

UniRef90_UPI00047AFDE7 G Q A A N I K T Q L V I N P D L K A P I Q K Q G V I G K V V A N L D G K M L T E

UniRef90_B4ET08 G E L K N D L K A G F V L T D P E L H A P L T Q N Q V V G T V N F L L N D E V I E

UniRef90_J7U2L0 G R L K D L K A G F V L T D P E L H A P L A K N Q V V G T I I N F Q L D N Q I I E

UniRef90_W1NCD2 S R R E E L T A R L D I D K G L V A P I A A G Q Q V G T M E V R L G D E V V O

UniRef90_UPI00047B7BF5 G K K D G I V A V T R I L P D E A P I A K G Q A I G E V V V T L L N G E T I A

UniRef90_E1VGT1 G T Q Q D V K A E L D Y K P L E L K A P I A K G Q Q L G V I R V R V K D K V I V A

UniRef90_I0DXL8 G Q L Q N L K V S Y T L T N P S I E A P L A K N Q V V G T V N F I L N D Q I I V A

UniRef90_B2JC41 G M A D K A K P Q I E H A D P L I A P I A Q G Q Q V G T V K F V A D G K T L L A

UniRef90_S6AM71 G Q A K K L A A S M T L N P Q L I A P I K Q G D V I G K V E I K L E D Q V V H

UniRef90_B8GMW7 G R Y R D M Q A Q M E L D A S L E A P V Q A G E V V Y G E L I L D G E E V V A

UniRef90_B5JW29 G Q Y K N L K P S L D G V P N P L E A P V A K G T Q L G T I I R V K L L G E E V V A

UniRef90_K0CA23 D S A D R L Q A D M T I N P Q L R A P I E K G Q Q Y G T V T I R L L D D Q V V A

UniRef90_UPI000380D4FB G Q R K N L K A N F K L D K K L K A P L A K G D V V G T L H L Q L K G E D V A

UniRef90_W0TM24 G S Y D K L K A R V Q I R N S V M A P V S Q G Q K L G S I T L E H D G K V I V E

UniRef90_J7TFD6 G K L K D L K A T F E L D S T T L E A P L A K N Q V V G K I I N F I L D D K V I V E

UniRef90_UPI0004718BA9 G E I N N V K A K Y V L T N K E L L D A P L T Q D Q T I G E I Q V M D K D K Q I V A

UniRef90_W8ZZE1 N D T K K L T A S V E L N S E L E A P I A K G Q Q V G E I I I Y S V N D K E V G K I V A

UniRef90_L7ZFV0 S E A D K L K A Q Y V I N A A R L E A P V N K G Q T V G E I R L S D N G Q V V A

UniRef90_I2BAV3 G Q M K N L K A S Y T L T E P Q L T A P L K K G Q V V G T I I D F Q L N G K S I V A

UniRef90_U4K801 G Q A K N M T A N F V L T E K E L Q A P I R K G D V V G R I L F Y Q I E N E D I A

UniRef90_W7QHC2 G Q R K N L K T N I Q L D Q E L V A P V K K G T V V G K L F L Q L D G E D L A

UniRef90_E6PU39 G D G A K I K T T V Q R P D P L V A P P I A R G Q K I G T L Q V T L D G K P I A

UniRef90_G2DVL6 G A Y N K L S A H L E K S N E Q L K A P I A Q G A R I G D V V V T L G E N E V A

UniRef90_L1P4C0 G E G A K V K T V L E T V Q P V I A P V E K G Q V V L G K L K I T Y E G K V L A

UniRef90_K2JHI1 G Q R E N L K A N F E L E S E L E A P L A A G E V V V G Q V Y L Q L N G E D V A

UniRef90_UPI00037383D6 G R Y N A L Q A Q I E L D A G M E A P V R E G E V V Y G E L Q L I L D G E E V L L

UniRef90_A0A031LHU4 G Q A N A I Q T Q I A V Q P N L A N A P L Q Q G Q V V G K L T A T L D G K V I A

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S A P | L V A | L | D D | V E E A G F
E K P | L V A | L | Q A | V E E A G F
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Q R P | L V V M E A | V S E G G |
Q R P | L V V M E E | V K E G G W
N | P | L V A | L | E D | A | P | Q | A G F
Q A P | L V A | I | N A | V E E G G F
E Y P | L V A | L | N D | V Q E E G G |
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E A P | L V A | V | A A | V E Q A G F
E R P | L V A | T | S E | V E E G S F
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E Y P | V V A | L | Q D | V P | V | A G F
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Q Y P | L V A | Q | E | D | V K E G G |
D Y P | L V A | L | E | G | V A R A N F
S A D | L V A | L | N A | V E E G G F
T R P | L V A | L | E A | V E E G G |
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E Y P | L V A | L | D | E | V Q E G G W
Q R P | L I | A | L | D | A | V E E A G F
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E Y P | L V T | L | H | E | V Q E G G F
R | P | L V A | L | R | E | I | P E G G |
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R R P | L V A | L | E | S | V E T G G |
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Q R P | L V V Q | Q | Q | V E E A G F
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E Y P | L V A | L | E | S | I | N E G G |
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S F P | L V T | L | Q | A | V E K G G |
R Q P | L V A | M | A | T | V E P G G |
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Q Y P | L V T | L | E | E | I | Q E G G F
T A N | L | I | A | L | D | A | V E E G G |
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T E P | L V V Q | D | D | V E R A G F
E | V | D | L V A | L | E | S | V E Q G G |
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T R M | L V A | V | D | E | V E K G S W
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UniRef90_E8XQB4	T [V P L V A L E D V A E E G G []
UniRef90_A6VZ77	E R S V V A L E A V E E G G F
UniRef90_G4QH05	T Y P L V T L H E V Q E G G []
UniRef90_J2LT23	A [L P V V A L E S V G P G G F
UniRef90_R9VMD6	H W P L V T L D S V R K G G L
UniRef90_K2BNQ6	S K P L I A F D S T E Q G G G []
UniRef90_F5S5X5	E Q P V V A L Q D V G E S S G W
UniRef90_B2UE06	E F P V V A L E A V P E A G F
UniRef90_Q0ACA6	E E P L L A R E T V A E G S []
UniRef90_UPI0004753A72	Q S S L V A L N D V E E G S F
UniRef90_UPI00036542DD	E E P L A V M N D V A Q A G F
UniRef90_Q5X554	S K P L Y A L Q T V E S G G F
UniRef90_F7P0E3	E F P L V A L E D I E Q A G []
UniRef90_Q21FD7	E Y D L V A A T K V D E A G F
UniRef90_E8LHJ6	R A P L V A K E A V N E G G F
UniRef90_W1IX81	H R P L V V K E D V E E T G F
UniRef90_UPI0004732771	E [L P V L A L E Q V N Q A S []
UniRef90_W8X0U0	R R P L L V L H S V E E A G F
UniRef90_UPI000380D168	E Q K L F A A R S V E Q A G F
UniRef90_H0IZ03	E R Q L V A L E N V E E G G []
UniRef90_Q47JD1	E Y P V V A L E N I A L G N I
UniRef90_W0SAM4	E Y P V V A Q E A V P V A G F
UniRef90_E1SII2	H Y P L V A L S A V E P A G
UniRef90_Q011H5	S A N L K I M S E V Q E G G F
UniRef90_L0H118	R [V P A V A L E E V P A G N []
UniRef90_UPI000463A423	E K P L V T L E D I D E A G F
UniRef90_C6XB06	K R T L V A A K N V E V A G []
UniRef90_I1YHD3	K Q Q L V A L N E A E K G S W
UniRef90_Q6LR30	E V P L V A L E T V E E G G []
UniRef90_UPI0004776E9D	S V P L V T S H A V E A S N I
UniRef90_C9QE87	S A T L V A Q Q D V E E G G []
UniRef90_M7D9R2	D Q P V L A L N D V P E G G F
UniRef90_UPI00037D0659	Q [L P L V A L A D V P E G G []
UniRef90_A0A011RKF9	E Y P V L A L E A V P A A G I
UniRef90_UPI00034504C9	S Y P L M T L Q G V A T A G I
UniRef90_J0UCG4	E [V P L V A L D G V A Q A G I
UniRef90_A0A011PKH2	D Y P V V A L E A V P V A G I
UniRef90_Q2Y7I5	E H P L V A L E T V S A A N I
UniRef90_A5EYZ3	E A K L V S Q E S V E Q G G G I
UniRef90_W0V0P4	E [L P V V A L E A I P Q A T I
UniRef90_L8Y0X3	N T P L Y A Q E T V E Q A S F
UniRef90_A0L7N7	R Q P V V A K N E V P E G N []

	1	10	20	30	40
UniRef90_B2VFM4	F D T V Q L F H A G K E I G N E N V W Y G N P H R V A L G S D K D V F Y T L P R				
UniRef90_G2T942	F E T V T L L K A G Q P I S D A D V W M G E E E E T V P L V S V N D L K I T L P R				
UniRef90_UPI00036DE1BE	F E T T H R L Y E G N K P L G E A R V R K G V T S K V P V G L P E D L Y Y V T I P Q				
UniRef90_U4TGD1	F E G R E L Y H A D T K L S E R H V W L G Q S N T V P L G S L Q D V V V T V P R				
UniRef90_UPI00047720A4	F D D V H L L Q A G K A L V Q A P V W K G A V S T V P L G S L Q D V V V T V P R				
UniRef90_F3KYG8	F E T A E L L P A E R E R E M E K P E V W M G L A D Y L S V G V V D A L T L P R				
UniRef90_G2DT13	F D T P K L Y E A N Q T I S Q V K V Y K G A S N A V N V G F I D A A Y Y T L P R				
UniRef90_F5RG26	W E N A R L A L A E E V L E T P A V Y K G A A A S V Q V G P A H D A V V T V P R				
UniRef90_W5YR77	Y Q T E R L F R A G Q E L L E A R V W G G E N D G L S V G M T E D V Y V T I P R				
UniRef90_UPI0003766982	F E K A T P F Q P D A V V G T A K V A F G K A D T V V A A G L A A P W T L T V P R				
UniRef90_R8ARV5	F E T V Q L L Q A K Q D R A I T R E K V W Y G Q E Y K A E L G A G H N L F F T L P K				
UniRef90_UPI0004754481	F T R K L F F D G G N A L G T P R V Y R G A D T E V V A V G L A E D F F W V M V P P				
UniRef90_D3SBW1	E P Q R L F E A G T Q L G S P R V Y R G A D S E V V S V G L A E D F F W V I V P P				
UniRef90_UPI00039A592A	F D S V P L Y R A R Q V V K V I N I Y R G E Y P S V S M G F E Q D F H L L V P R				
UniRef90_A0A011PHG1	Y D A V Q L Y A K S E P V T T L K V W K G K E S T V K I G F P K D L V M A V P K				
UniRef90_W1B557	F T T V Q I L H R G K K V G T E R I W Y G D K E N I A L G T E Q E F F W M V L P K				
UniRef90_F9TDA7	F D T V S P S K V T D T L A E A K V W M G S E D L V P V G V D K Q V L I T L P K				
UniRef90_R4YK38	F E T H R L Y Q A G D S I K T L P V W F G E E T Q F D V G I A D D L Y I T I A R				
UniRef90_W1SKU7	Y Q T H P M F K R N Q T I G Q A K V S K G K E K S V E A V T S E P L S L L T K K K				
UniRef90_G2RIX6	Y T T K P L Y K K G D V T K I D V N K G S E D Q V T A V T S E P I S V L L K K K				
UniRef90_UPI00036B41F4	F D T T S L F G P D K P A Q T A R V Y V K G A T D S I A I G T L E P V A L A L P R				
UniRef90_A0YF23	F E T T H Q L Y S T G D A L T A T K I W A G A G D S I S L G V E R D I H L T I P R				
UniRef90_UPI0003685081	F D A V K L F E A G Q P V L S P A V W K G K T P V L K L G S F Q P L V V S V P A K				
UniRef90_Q476M1	F D T L R L Y D K Q G V L A T P D I Y K G K A G T V K I G V Q N E T F V T V P K				
UniRef90_A2SC14	F D A V K L F D A N Q A V V S P I V W K G S S S T A K L G S S A A V Y V S V P K				
UniRef90_W9UZJ0	Y N T H Q L Y P A N Q V L S Q P R I W G G S L D Q L K V G V S N K L A V T L P R				
UniRef90_U2EIV7	Y E S G H L F D A G K E I A E V R V W K G D D T M L L P V V A K G A V D V A F P R				
UniRef90_UPI0002892F59	Y K T H P L Y E R N Q V E A V A K V S K G S E K K I L K V T S E Q I S L L T K K				
UniRef90_D7DNG4	F D S K L V Y K Q G Q S I N Q L K V W K G T E N Q L I A S T V A N D L F V T V P K				
UniRef90_G6EZ34	F E N V K L F N K G E V I E T A P V W M G T S P T V P L V A G E D L V M T L P V				
UniRef90_Q1N084	F E S H R L Y E S K E S L Q T T D V W L G Q Q E T L N L L G V K E G A Y I T I P R				
UniRef90_H5TAD0	Y E S V V P F Q P N H I F A N H R I Y M G S K E T V N L G I N Q S T S M T V P R				
UniRef90_UPI00036DF3F7	Y E A V K L F D A G Q A V V T P N V W K G K E N T A R L G R S E A I V V A V P A				
UniRef90_UPI0004788D2A	Y Q T H P L F E K D H V L S Q M K V S K G S E K E V N L M T S E P I S V L T K K				
UniRef90_D3NVM4	F A S Y T L Y K G G E T I E Q V P V W Q G E Q D M V P V T V P Q N L S V T M A R K				
UniRef90_Q1QD12	U H I R F Q T Q A P A Q G Q F V S K V P V W F G E A K E I V E V A T G D N L Q L T T K K				
UniRef90_A1VIP4	F E A V K L F D A G Q A V V T P A V W K G K D A V V K L G R P E A I V V A V T A K				
UniRef90_G8SP94	F D D M R I F A A N D K V G D A Q V F G G Q S S T L P L V V K K D V E L L L P K				
UniRef90_UPI00037E5C33	Y Q T P K L Y D A N Q A L S K V E V F K G S E N Q L D V G F L E P V Y I T L P R				
UniRef90_UPI0003A7EAB8	E T R Q L F G G G E A L G T P R V Y K G R E Q E A P V G L A E D F W V V I P P				
UniRef90_UPI00039FD0B8	Y E T T H K L Y A A G E K L L D S E L W A Q G V D Q L P L G L A K Q V I V T I P R				
UniRef90_B7GKG4	Y E T K P L Y K K G E T I T M L P V S K G K K K S V A V V T S E P I S V L L K K				
UniRef90_F6D996	F E T T H K L Y G T D Q R L Q E T R V F G G A K D L I N I G V K D A V H V T I P R				
UniRef90_Q6IVQ5	Y A T Q K Y F D A D K E Y T T A K V W G G K N D N I S L G V V E D I S I T L P R				
UniRef90_UPI00034D9880	F A T H K L F D K D H V M A N V K I R K G N K H E V A V L T S E P V S I L T K K				
UniRef90_J6LGH3	F E A R P L F A K D Q P I G W A K V F G G A E G S V P L V A R A V S V L V P R				
UniRef90_UPI00037ECE33	Y E A H K L Y D G K K S L S D A R V W K G D V K E L P L G L T E D L Y A T I P R				
UniRef90_A0A024INQ3	F D T V R L L A A N Q P A A E P R V W K G K S D T V K L G R V E G V I V S V P A				
UniRef90_A8PKX3	F E S R K L Y N A G E N L A T T K V W F G E R S K V I E A G F A T D L Y V T L P K				
UniRef90_G7SRH9	F D T F K T L E A G K A I S E Q S V Y Y G D M G K V S L G V L Q D G F I T I P K				
UniRef90_C5D405	Y K T H P V Y K R N E I I A H V N V S K G K K K A I V A L V T S E P I S V L T K K				
UniRef90_F4GPU2	F D T K L Y D N T K P A V T A R V W E G E V E T V G L G S T T P T W V T V P R				
UniRef90_R6JS5H	F F N Y N L L N K G Q E I A E I P V V F G N E K E V R L V V P E T V K R T L K K				
UniRef90_K2L6M2	F F D N Y D L F D S G E V V W S A N V W L G S E A V K D V D L V D T D Q D I L L T L P R				
UniRef90_Q1YLP9	F F E V V L V T A G E T L G N V Q V R G G V S E T V G M A A E D L R M L V P R				
UniRef90_A4ENF2	F A Q K E V A E A G T R I A S A D V W M G E L P T I G L T V A D D F S L L V P V				
UniRef90_V4JYJ5	F E T H N P Y P G G L P E Q L R I W S G D T T E L P V G P L R D L F I T I P R				
UniRef90_B9NNL2	F V E R T V A K A D E P V A Q A R L W M G A E K T V G L V P E Q D L T L L F P V				
UniRef90_UPI0002F37ED8	Y E T T S P L Y K R D Q V V G E V K V A K G K D K T V K V V T S E P I S I L N E K				
UniRef90_Q16Z3	F A M R D I G K A G Q E F A K A D V W M G S S P Q V G L V A A E D M S V L M P A K				
UniRef90_H3SFJ8	Y M N V P L K K G D T I G S I R V E K G M V E S L D L V A Q R P Y H V L L K K				
UniRef90_UPI00047BEE4E	F D T P Q M Y Q A G Q S V A R V K V Y K G A E K E L V A G F L D N I Y T L P H				
UniRef90_X2H1W4	F E T A N P V K A D S A L V N Q T I W Y G D Q N K V P L G S L E G A Y V S V P K				
UniRef90_A4BJE2	F R T A E V H Q G G E S L H T M R I W G G A T K E L L S L G L T D D L K L T I A R R				
UniRef90_D8KAD5	F D T R S I Y Y A A K E A V T K V R V W Q G A N K E L P L G L T D D L S V T L Q R R				
UniRef90_W7QAN7	Y E T T L N L Y E Q G A V V L N T P R I W G G E R N E L R V G V D E N V F M T V P R				
UniRef90_K2EHS3	F K N Y K V Y G K G D V V D V A D V W S G A E K K V V S L V S N Q D I I F T M P R				
UniRef90_UPI00035E8E1E	Y S L L P I Y Q A G E A I G K V K V Q K G T S A Q L E L S A S A K P L N V L V K K				
UniRef90_D5X7D8	Y E A A N I A E Q G K K L G K I R V S K G Q W D W D V D A V T A S D V A I V V P R				
UniRef90_UPI0003B5EA80	F D N Y D L F F A K D E T V G S A N V W L G A E T K V D L V S D K D I I L T L P R				
UniRef90_J5K624	Y A T Q K Y F D P N K E Y V S A K V W G G R S E Q I Q L G V S D E I S I T L P R				
UniRef90_UPI000369F737	F E T F T V G H P G L K V G E A E V W I G E K P S V S L V V E K P L T I T A P V				
UniRef90_K6H2M6	F A T Q K L I S K Y T Q I T S A K V W G G R D D E V E A L G S A Q D I I L T L P R				
UniRef90_V5DX08	F E S H R L Y E G K K V I Q E T R I W K G E T E T L P L G L A D D L F V T I P R				
UniRef90_N0B456	F F S N V R L F D A G E V I G K A R V W G G K V W Y V P L G L A S N N D V M F T V P R				
UniRef90_V5FHK5	F E T I Q P H E V N S E V T A A R I W M G Q E N H L S V G V A E D V Y M S V R R				
UniRef90_R6HR75	F D N Y D L T K Q G K K I A E I P V W F G T E K S V E L V V S E N V K R T I K K				
UniRef90_UPI0002EF33EB	Y E T H P L F E R N V S I E K A K V S K G D M K K V D A V T S E P I S I L T K K				
UniRef90_UPI0002DCC27D	F F T R E L F K S G E V I D E A Q V Y G G A R G R V P L L A R E A V R V L V P R				
UniRef90_UPI00047AA9B6	Y N T V E V V K E D S V V G T V P V Q K G K G L E L N A V A K E D L A L L V K K				
UniRef90_F5LKD9	Y S N F P I F K A G D A I G E L K I S K G D V A S V P L T A T R S Y S I L M K K				
UniRef90_UPI00047659A3	F F T V T V G H P G L K V G E A E V W I G E K P S V P L V V A Q D F T M L L P H				
UniRef90_F7VB52	F E S A K I L S K G D V V E Q A P V W M G Q V Q T V P L P V V A Q D F T M L L P H				
UniRef90_Q1YSQ8	Y D T K T I Y S A G D I L K E A K V W Y G E E G F L N L T I A E N V T L T L P R				
UniRef90_UPI0003B47908	Y E T A S L F G P A A V V G T I K V Y K G A A S E V Q V G T L E P V R L T F P R				
UniRef90_UPI00045EA7A2	F E S P R L Y E G K K T L S D A R V W K G D A Q T V A L G L A E S L H A T V P R				
UniRef90_H6Q5E0	F N T I L S L K S E E I F L K K S V F F G N V D K V D A V T S E P I S I L M K K				
UniRef90_I2C7A0	F K T H P L Y K R D Q I V G T V K I K K G K Q K L V K L T T S E P I S I L L A K K				
UniRef90_C6CU53	Y T T H P I F K E G D T M G T I K V E K G A V R E I P L V A K H P Y S I L L K K				
UniRef90_UPI00034D53AC	Y D M V K L Y A G Q P V P D T P R L F K G V S N T L K V G V S D K F I T V P V				
UniRef90_X7EGG1	F A E K R I A E G G T R I A T A D V W M G Q P E V P L G V I A E T D V S L L V P V				
UniRef90_F3KT72	F E A V K L F E A N Q A V L T A S I W K G R A A E V R L G R P Q A I V V T V P A				

	50	60	70	80
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UniRef90_G2T942	A A R R D M V A K A V F E T P I P A P I I	Q A G D R I A T L V L T G P D M A K L		
UniRef90_UPI00036DE1BE	K H F N E L K A E T Q I D K G V F A P L	N K G D T V G N L N I S L A G E S I L		
UniRef90_U4TGD1	G D A D K L K A N M V F D D A L K A P I	V K G Q K V G E L K V T L E G K S V A		
UniRef90_UPI00047720A4	G D A A R I Q T T M Q R N D P L V A P L	D A G Q R V V G T L L N V A L A G K P M G		
UniRef90_F3KYG8	G E R R N V A Q V V T L N E P L S A P I I	K R G D E V G R V S L R L D G E Q I Y		
UniRef90_G2DT13	G E G K N I K P I L E T V Q P V L A P V	H K G Q V L G K L K I M N G D K V L A		
UniRef90_F5RG26	G Q A G K V T R E I I V D K P V I A P V	A A G Q K L G T L K V A I D G K P A G		
UniRef90_W5YR77	G S R D S L E S T V E L D S V I K A P I	S M G D E L G Q V T V K L G D D V V V		
UniRef90_UPI0003766982	G Q Q V Q T A V E I K P D L E A P V	A K G A V I G K V V A T S N G K P V		
UniRef90_R8ARV5	G A A H E L R V R Y T L K D K D L K A P V	A K G T E V G V I E Y V Y H D Q V I G		
UniRef90_UPI0004754481	G R E E N N L D A S M E V R Q P L E A P L	A V G D P V G E V V V R L N G E V L L		
UniRef90_D3SBW1	G R G D N L E A T M E L N Q P L E A P L	A A G A A V G E V Q A R L N G E L L I G		
UniRef90_UPI00039A592A	G S A A R V K A E I M T Q Q P V V A P I	N R G Q R L G T L R L T L D G K P L G		
UniRef90_A0A011PHG1	G F G P K I R T E L V A Q Q R L M A P V	A L G Q V L A T L K V S I D D K A Y G		
UniRef90_W1B557	A E I P H I K A K Y T L D G K E L T A P I	S A H Q R V G E I E L Y D R D K Q V A		
UniRef90_F9TDA7	G G A N K L K A E I E Y N G E L V A P I	N Q G E T V Q G V I Y S I D G E E V A		
UniRef90_R4YK38	G A K E Q L E V E T L T N E F I E A P P L	N T G E S Q G T L T I R L E D K V L A		
UniRef90_W1SKU7	G E K T K D V E Q K I E L Q K K L K A P I	S K G D K V G T I K L M K D G K V I L		
UniRef90_G2RIX6	G N A A K D V K T E V K M N E K L N A P I	Q K G D K I G T L T I K K D N K V V N		
UniRef90_UPI00036B41F4	G N A A R V Q L A A T V N A P I V A P L	A K G Q T L G T A T T L D G K T L L K		
UniRef90_A0YF23	G K H K D I E A V M D L A E F I K A P V	S A G N E Y G E L V I R L D G E E L L		
UniRef90_UPI0003685081	G T A A Q I K T Q V A R P D P L V A P F	S K G Q S V G S L K V L R G D Q P L F		
UniRef90_Q476M1	G T G G R L K P V L E R Q E L I A P I	I A A G Q V G S V K L M D G N T K V A		
UniRef90_A2SC14	G D G D K L K T D I S R T D P L V A P I	A K G Q V V G S I V T A N G A P V A		
UniRef90_W9UZJ0	G K E D E V E V T L D L P R S I K A P I	E I G Q E L G R V V V S L N G E E L T		
UniRef90_U2EIV7	G Q R D A L L T T S A E I L P S T L L A P I	K K G E R L G T L E I K Y D T K T L T A S E		
UniRef90_UPI0002892F59	G E K V D D V Q K E I V V D E K L N A P I	K K G D E I G K L V I K K D G K V V		
UniRef90_D7DNG4	G D Y A N V K A V M S S T Q P L I A P I	K K G Q V I G S V K F I L N G K T I E		
UniRef90_G6EZ34	G W R N K M Q V A L D Y N A P I A A P I	T K G Q P V A S L S I Q N G G Q A		
UniRef90_Q1N084	G Q K G N L D V E F T I D E V I K A P V	G M E F G R I K V S L D D K V L M		
UniRef90_H5TAD0	G Q A D Q L S A S F E L T S V E A P M	S L T L D G E T T I A		
UniRef90_UPI00036DF3F7	G M A G R L Q T Q V T R P D P I V A P L	G E V G L L K V S L A D Q P L L		
UniRef90_UPI0004788D2A	G E K V D D V T Q E I L M K N D I K A P V	K K G D E L G T L Q L K K D G K L I A		
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 D Y P | L V | A L Q D | V | G [] A G L |
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UniRef90_B4RKF3	F D T P K I Y P K G K T V V A Q I Q I S G G S K K T V R A G F L K E A Y I T L P				
UniRef90_B6IMK2	F T S V A L F K A G E M I D T L P V W L Q G A A E T V P A V L D Q E L K I T L P				
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UniRef90_K2HRM4	F V Q K Q V V R Q G Q P I V A T A S V W L G E S D S V G L V A A R D A A L L I P				
UniRef90_X0RK23	F E T A R L I Y K A G E E P V A M A E V W I G A A P E V A M A P E R D L I V T V				
UniRef90UPI00036E459A	F E N K T L I E T A G E N N I S T A E V W L G D L D E V P L I T T Q K D V R L T L P				
UniRef90_A5V315	W Q S K P V V P K G R K V Q T A E V Q L Q G D E R V G L V A P K D L V V V T V P				
UniRef90_R5YAN8	F D N Y K F F N E N Q I M A E V P V W Y G T V K T D A V V P E K V V R T L I K				
UniRef90UPI0004690619	F Q T H P I Y K K G D L L D E V H I D K G V L T N V K M V V P H Q I S V L A N				
UniRef90_T0J749	F A A V P I V N Q G T V V E R L K V N K G L E K E I V Q L V A A Q D V D L N L I V S				
UniRef90_U5N7P1	F Q P V R L F D A N Q P V V T P A V W K G K D S Q V A L G S T T A V V A V P A				
UniRef90_M3AE90	W E T Y A L F K A G E V I P D A E V W L Q G A Q G A V D L T V A N D V S V L L L P				
UniRef90_F6B9L1	Y K A V N L A E E G Q V I K V I K V D K G D L E K V K V I T Q A P V G L V V A P A				
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UniRef90_E5WI80	Y K T H P M Y E R N H V L G K V A V S K G E K K M V E A L T S E P I S L L T K				
UniRef90_W8UGS1		T Q K V W F G D T G Q A E L G V A E D A A I T I P V P R			
UniRef90UPI000362BA26	F V A R E V A D A G D E I V S L R V W E G K T K E A R L G S K N K V A I T V P				
UniRef90_Q4FLY3	F D L V E I T K A N T P V E D I D V W L Q G K K D T I V K T Y I K N D I Y K T P				
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UniRef90_B1M5B1	F E P R Q V F A P G E T V A E A S V F G G Q Q S S G V P L V A K K P V R V L L P				
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UniRef90_L9S6S2		M G S E R I W Y G D K E K I A L G T E Q D F W M A L P			
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UniRef90_W4DDJ0	Y K L H T I H K E G D T I G T V R I E K G V K S Q L P L V A K E D Y S V L L R				
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UniRef90_R5Q2P8	F D N Y T V L K D G V K V V D V P V W L Q G E Q K S S V E A V P A E K V V L T P				
UniRef90_F8F8C7	Y T N L P I Y K T G D A I G E M K V G K G E V P V P L T A K H S Y S L L K				
UniRef90_G6X163	F E N A T L F R R R G Q V D H A P V W M G E H K D V P L V A G S D I V M T L P				
UniRef90_I8ANA8	Y E T K R L Y D R Y Q I V Q Q V N V Q K G S Q P K L A A V T S E S I S V L N K				
UniRef90_D9TQV2	F E T K K V V E A G K I Y G T V K V L K G E Q D Y I N A V A N T D E Y V L L K				
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UniRef90_G0JQ99	F I D H P V Y T A G E K V R E I T R S D L S P M H I P V G V E Q A V N L T V P				
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UniRef90_W7ZMW8	Y S T E T L Y K K G D V L G E A T V V K G S K S T T L E A V T E D Q V S I L L L K				
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UniRef90_D3P6S0	F K L Y P P L R K G E L V E Q A P V W M G A E D S V P V T V D A V T V T M A				
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UniRef90_A8FET2	Y T T H P L Y K R G Q D V A E I K V S K G T K K K I Q L V T S E P I S L L T M N				
UniRef90_B0K148	Y E S V K V V A S K G Q S F G N V K V L K G K R E A V S V V C R D D E Y I L I K				
UniRef90_U4V5W6	F D D V L L Y P P N E I I G E A Q V F F G G A L A H P P L K V K D R V V E L L P				
UniRef90_U2YBS7	F A T R K L F P A G T K I A S A K V Q N G S E T K V P L V A A H P V V I S Y E R				
UniRef90_S5YRG7	F T M R T V V P K G E I V A E A P V W L Q G D R S R V G L T T A D G V K V L L I P				
UniRef90_B1C6J3	Y K A E N V V E K D K K A V A D V E V N K G N K D K V S A V A K D N I S T L M N				
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UniRef90_B9KGV1	F E T K V F P A G S V V G E V K V W N G R K G T V Q M H V R D D V V I S Y P R				
UniRef90_W4QI45	Y E T H K L Y D R G Y V M A D V N V S K G D K K Q V A A M T E S V S V L L T K				
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50 60 70 80

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UniRef90_G2KMR4	A M R N D L K V S V L Y K G P L Q A P V K K G D V V G A L K I E A P G L H P F
UniRef90_E0MKD2	G F R D R L K A D I V F Q G P I K A P V E A G T R I G K L Q V S V D G E V T Q
UniRef90_B6AXF7	T T G [V] K V V A E V I Y N G P I T A P I E K D Q Q I A E L V I T P P S L P E T
UniRef90_W7X925	G E G A R L K T E V T R P E P L V A P L L R G Q A V G T L L K V T L N G A P V A
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UniRef90_I9C2W4	G E N K N L Q K Q V V A D S T I T A P I V Q G Q K C G E L L V L R D G K E I L G
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UniRef90_B0U839	G S A D R L T A R V V Y Q G P L K A P I E A G R E V A R L K V T R G E Q Q V L
UniRef90_A0A059KPN9	G E A A Q V K T Q L V V R T D P L I A P L S Q G Q Q V G T L K V L S G T R V L A
UniRef90_Q1100	G E S Q S F S A R I V Y N G P I I S A P V E E G V A V G N L Q I W I G D T L S Q
UniRef90_UPI00047A6022	G I S I E D V T E H V D V E K T L Q A P V K K G D T V G T L K L E K D G E V L V
UniRef90_UPI00034AD7F	G D D A R I V A R V N Y D G P L Q A P I A R G T R V G T L R V W R G E T L T V
UniRef90_W0P7T9	G M E D K V Q T I T Q I N G K L V A P L A K G Q T V G S V Q F V L N G K V L K
UniRef90_D0D6C3	T P G T T L E A E V V Y T G P L K A P I A Q G Q Q L A E L I I R P E G L P E H
UniRef90_W9BVM0	T A D T D K V S L K V V Y Q G P L K A P I A K G Q Q V A S L I I V S A P D M Q R Q
UniRef90_X6KWL1	L S A N G L D A E V V Y T G P I E A P V R Q G Q K L A E L I I R P E G L P E R
UniRef90_T0I0T2	G G H E K V A L A V H Y R G P L V A P I R K G D Q V G E L E I K V E G L A P G
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UniRef90_C9RZW7	G Q S V E Q I E K V I K V K D N V K A P V R K G D E L G V I L K Q D G K E I L
UniRef90_U0F331	A M K D A L K Q E V V V E T Q L Q A P I A A G G D S L Q G V I W S L N G E Q V F
UniRef90_B4RKF3	K E A K M A E Q I L E T I Q P I P A P V K K G Q I L G K I K I R Q N G H T L A
UniRef90_B6IMK2	A Q Q R N L K V T L L S D G P V V A A P V P K G T R I G T L R I E A P D F T T Q
UniRef90_UPI00046744C5	L G S D D V E A E V V Y T G P I I R A P I E K G Q P L A E L I F A P E G L P E T
UniRef90_K2HMR4	L E Q G G G I S A E A T Y L D P L P A P L E A G Q E V G T L T I S L A G L P D T
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UniRef90_UPI00036E459A	R A V Q N L D V R V M Y N G P V P A P V Q K G A Q I A T L R V N G P D M D A I
UniRef90_A5V3I5	G L G S D L K T K V V Y Q G P I K A P F K K D H I A D L V V S G P D M V P Q
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UniRef90_UPI0004696019	G E S V D S Y T T R V E G I S G L K A P L Q R G D K I G K V V I E K D G K V E V
UniRef90_T0JT49	G Q S K N L Q K K I V A D S S V N A P I T E G Q K C G E L V V I K D G Q E V G
UniRef90_U5N7P1	G S Q S Q L A T Q V L R K D P L V A P I V K G Q Q I A T L Q V R R N E E F Q L
UniRef90_M3AE90	R N R P E M K V T T I Y N G P I A A P V K A G Q E V G K L V V T A P G M V P V
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UniRef90_A0A058ZJY4	I I P P G D L P A H I E Y N N P I T A P I A A G Q E L G T L I I D V P G M D A A
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UniRef90_UPI000362BA26	G R E D E V Q A I T Q I N Q K L V A P L Q R G Q Q V G L V Q F V L D G H I M K
UniRef90_Q4FLY3	A K K R L L K V S L N Y N G P I Q A P P I K K D D I L G K L K L I F D G E L I E
UniRef90_UPI000470DA65	G D S K E F T K D V Q I S A P L R A P I N Q G Q K I G V L T V K R D G K E V G
UniRef90_Q4PKA5	V D F K D L L Q N Y I Y Q G P I K A P P I K K G D V I G S I E I I S N D S P V L
UniRef90_B1M5B1	G S S D R V S A R A I V Y T G P L T A P V E E G Q R V G I L R V Q R G D T V A L
UniRef90_A0A011SX7	F N R R D K L T A R I V Y Q G P L P A P V E E G Q Q I G A L R I W I G D T L S Q
UniRef90_L9S6S2	A E I P P H I K A K Y V L D R K E L E A P I A A H R Q R V G E I E L Y D R D K L I A
UniRef90_UPI0001E8961C	U N I T D D V E K I I T V D E N V K A P V K K G D K V G K I V L K K G G K V L S
UniRef90_W4DDJ0	G V T Q E G I R H E L V L N E Q V K A P V A E G Q T V G K L V V Y Q G N D V L K
UniRef90_C7DCE3	L I K Q D D I T A E V V Y D G P I E A P I E E G A Q L A E L V I T F E G L P E T
UniRef90_E0XPB7	T S F K D L T V N Y N Y S N N I Q A P I Y A G Q T I G T I E I V S N E E V V F
UniRef90_UPI000287C5E8	G V A A D M T L K V V Y Q G P I K A P P I K A G Q H I A D L V V S T P D M P Q Q
UniRef90_A3X5U8	L A G S E I E A E V V Y S G P I D A P V T K G Q R L A E L V V Q P E G L P E I
UniRef90_UPI00047652B9	T N R E R L V A R V V Y D G P I S A P I D K G T P V G K L K V W I G D T L S Q
UniRef90_R5Q2P8	G E Q N K V T A F V K Y D A P L K A P V A K G Q K V G S I T S A P E R D D V
UniRef90_F8F8C7	G E A A D G I R H E V Q L L P D L K A P V A A G Q P I G K I V V Y K G D Q V I N
UniRef90_G6X163	G W Q Q R S H I G V D Y S S P V I A A P V R E G Q V V C G A L V I S A A G M P D I
UniRef90_I8ANA8	G D R N S E A K S V I T L H N N I K A P I K K G Q P V G E L K I M Q H G K V V T
UniRef90_D9TQV2	G E A K N I K Q E I I I N K Y V E A P I K V G A K I G T I K I Y D G N N N L I K
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UniRef90_W7ZMW8	G E D S K E P V V N T S F D E T I A A P I Q K G D V V G N L T V E I D G K T V V
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UniRef90_D3P6S0	A D R N S L H V V A T I A E P L P S P V R R G D V V G R L R I D Y D G A V R Q
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UniRef90_A0A059IK03	V G G S Q V V S A K V I Y D A P L K A G T K V A D L V V S A P G L Q D R
UniRef90_UPI0002624BE9	G H F S D L Q R V V E L N P N L Q A P L K K G T V V G T L V F Q L D G K T L K
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UniRef90_F7QMZ3	N G S D K L V A R I V Y T G P V R A P V Q P Q G Q R I G V L K V W R G T N I A M
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UniRef90_U4V5W6	N G R D R L K A R I V Y K G P L D A P V A D D Q V G V L Q L E L N G S I L R
UniRef90_U2YBS7	G T T P D I A M M K I H Y N G P L Q A P V K A R A A V A E L E I T I K G Q R P F
UniRef90_S5YRG7	G A Q S G V T A E A V F N G P I E A P I K A G T R V G D L V I Q I P G T G E S
UniRef90_B1C6J3	N E N K E Y K S D V K L D N K K I N A P V K K G D K L G S V I V S D G D K V I G
UniRef90_Q8D327	G K E K E I K K E Y I F F D S T L K A P L K K Y Q Q V G K I F F K L N N S I I Q
UniRef90_B9KGV1	D L S K S V K A F I S H K S T I A A P V K K G Q E I G T L A V Q I P G M A D K
UniRef90_W4Q145	G V K I D D V V E R I Q L N D D L R A P I E K G A V I G T L Y I E K E G Q V L N
UniRef90_C8WFU5	T A S D Q M K V K V V Y Q G P I K A P I A Q G Q H I A D L V V L T S D T P P Q

90

UniRef90_K2JK41	D Y P L L A G A D V E E L G L
UniRef90_A0A023D5G0	R V A L V A G R N V A K L G L
UniRef90_G2KRM4	E V P L V A G A D V A E L G L
UniRef90_E0MKD2	E T P L Y A A E D V G T G T I
UniRef90_B6AXF7	R I P L V I A A N D V P A G G F
UniRef90_W7X925	E V P L S V L E T V E E S G
UniRef90_I0HXK9	Q I P L Q V L E P V G L A G I
UniRef90_I9C2W4	K V D L V I A E K N I E K A S L
UniRef90_Q89LM4	E T P V Y A A E A I G T G S
UniRef90_UPI00040A5A89	K S A I T A N T T I E K A G W
UniRef90_K8E0A3	K V D L V A G R E V K K A S
UniRef90_UPI0002556118	Q V P L V A L E E V K E G D F
UniRef90_UPI0004041F8D	E V S L V L T E D V D E A S L
UniRef90_I3EA50	E S P L V I A N K N V E K A T W
UniRef90_B0U839	D M P L Y T A E S V G P G S M
UniRef90_A0A059KPN9	E V P V T V L E P V A Q A G M
UniRef90_Q1100	E I P L L A A E S V V K G T L
UniRef90_UPI00047A6022	E T K L V I A S V D V E S A S W
UniRef90_UPI00034AD7F	E T A L T A A E D V V A V G D F
UniRef90_W0P7T9	Q E S L N V L E D V P Q A G F
UniRef90_D0D6C3	R V P L F A E H E V V A G G G F
UniRef90_W9BVM0	V M P L V I A G E A V V E E A G F
UniRef90_X6KWL1	R V Q L V I A A G N V V E A G G F
UniRef90_T0I0T2	R V P L Y A G K D V V G A G
UniRef90_A6FPR5	R V P L V I A A E D V P R G G F
UniRef90_A6CMX0	E T P L I A K E D V P Q A S F
UniRef90_G214S3	R I P L I A G A A V V P R L G L
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UniRef90_U0F331	A A P A V S Q V G V V E Q G S F
UniRef90_B4RKF3	E K E I V A L E N V E E K
UniRef90_B6IMK2	E I P V L A G A D V V E R M G F
UniRef90_UPI00046744C5	R V D L V A D R S I E N G G F
UniRef90_K2HMR4	T V P L L A E N A V V P V G G F
UniRef90_X0RK23	S V P L V I A V E A V V E R G G
UniRef90_UPI00036E459A	D V P L Y A A T D V V E R L G F
UniRef90_A5V3I5	K L P L V I A D Q D V V G T A G F
UniRef90_R5YAN8	K I P L V I A K D N V V A K I G
UniRef90_UPI0004690619	E V D I V A T E D I P R A S M
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UniRef90_M3AE90	E V P M V V A A A D V V E K L G F
UniRef90_F6B9L1	K V N L V I A A D N V P K A S
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UniRef90_E5WI80	E S P L V I A K E D S S M E A S W
UniRef90_W8UGS1	Q R P L V V L N E V V K E G G F
UniRef90_UPI000362BA26	E D P L V V V E A V V V E Q A G L
UniRef90_Q4FLY3	E Y D L L A Y E D V V K L N
UniRef90_UPI000470DA65	K V D I V A G E S V V E V A G
UniRef90_Q4PKA5	V T D L V I A L D Q V V E A K G F
UniRef90_B1M5B1	D Q P L F A G A A V V E P G T L
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UniRef90_L9S6S2	Q W P L V T L E S V V G K G G M
UniRef90_UPI0001E8961C	E S D L V I A A K D S S M E A S W
UniRef90_W4DDJ0	E Y E L K A G E T V V A K A G W
UniRef90_C7DCE3	R L P L V I A D R S V V A K G G F
UniRef90_E0XPB7	S T E L V I A L K E I V K S K G F
UniRef90_UPI000287C5E8	R L P L V I A A T D V V A E A G F
UniRef90_A3X5U8	R L P L V I A E Q D V V A T A G F
UniRef90_UPI00047652B9	E T P L Y A A E S V V G V G S L
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UniRef90_F8F8C7	E F P L E S P V E V V K K A G W
UniRef90_G6X163	R V P L Q A G R S V V G Q L G L
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UniRef90_UPI000225FCEF	R L P L L A A S D V V A R T G
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UniRef90_UPI00046E9916	E V P L L A A E N V V E R P G
UniRef90_F6IPN0	R I P L Y A G R D V V G K A G
UniRef90_UPI00046AF194	R V P L V I A S D A V V E P G G F
UniRef90_D3P6S0	Q V D L V I A G A D V V P A S S
UniRef90_X2H717	R Q N V V A L D N V V G E A S
UniRef90_UPI0003746B44	Q D P L V V V E P V V E Q A S F
UniRef90_UPI0002D9695B	E A P L V I A Q T E V V E R S G L
UniRef90_A0A059IK03	T I P L V I A A S T V V R R G G
UniRef90_UPI0002624BE9	T V P V V S M V S A E K A G W
UniRef90_UPI0003B64AF2	R I P L L T E A A V V G Q A S F
UniRef90_F7QMZ3	E S P L V I A A E P I A T G S
UniRef90_D6V6I1	E V P V H A G Q S L G T G S M
UniRef90_A8FET2	E S P V Q A K E G M E K A G
UniRef90_B0K148	K F N I Y P Q E V V E K A N F
UniRef90_U4V5W6	D V P V F T A Q S V V D E G S L
UniRef90_U2YBS7	R T E L V I A A Q A V V A R A N W
UniRef90_S5YRG7	K M P L I T A T D V V D S A G
UniRef90_B1C6J3	T S D L I A N E D V V E R V G
UniRef90_Q8D327	Q H P L L V L E N V V D S G N □
UniRef90_B9KGV1	V F P V Y A A T E V V E A L G
UniRef90_W4Q145	K T N L L A E S S E V V Q E A S W
UniRef90_C8WFU5	V T P L V I A E K T V V E K A G F

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UniRef90_A3JTF9	F I Q K T I	A T P D D I T	D A P V W M G E V T K V A L V I P A A P L E L L P V		
UniRef90_M2U978	F E G A Q L	Q P P G K V L A Q A V Y N G S K D T I S L T A K D G A M L T L P K			
UniRef90_UP10003A4CED8	F T N V P I	Y K K G D V I G T L K	V E K G K K A N L P L V I A Q R S Y S V L V R K K		
UniRef90_UP100036F7F37	F K A Y K L F	A P P G D E A A R A N V F M G K S D T V A L T V K D P A N I G M H K			
UniRef90_C8WXD8	Y K S V Q V	Y P R G H V V G Q V A	V K R G T R D R V E A V T A E P V A F V T E R R		
UniRef90_K7YRD8	F N N Y K L F	D S G Q T V E Q A E W F G E Q N T V S L T T E K E L V I T M D R			
UniRef90_L0NF39	F E T K L L F	F S P G E V V G Q V S V Y G G E T R Y L D L V A R E P V D I Y L P T			
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UniRef90_R6MM79	Y A V N T Q I	T A G D E V Q K I A V E K G V D K E V G V V A G D S C S T L V K K			
UniRef90_H8GQE2	F E S P R L Y	E G K T S L S D S K A W K G D V R T V P L G L A E S L Y V T V P R			
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UniRef90_UP10001DD1078	F D S T L L V	R K G K P A A S A Q V Q N G A V D Q L P L V I A Q D I R V A T P R K			
UniRef90_H0J786	F D N L S L D	K A G V A L G T P A I W E G E Q A T I P V G V T E D V V L T R P K			
UniRef90_UP10001E2DECE	Y E T A D V N	K K G E L V S E I S V K K G L T S K A A G V I G N D V K I L L P R R			
UniRef90_D6ZYG1	F E S R L L F	E P G Q I V G E A T L Y G G E R G G A P L T G T G P I R V V L V P R			
UniRef90_G4R9N6	F E R I P A F	A N G A V V G Q A S V Y G G Q E A S V G L V I G E G S I D I Y L P R			
UniRef90_V9VU34	F A K K T V A	Q E G V P I A E A E I W R G A E E Q S V G L V P A K D L E I L L P S			
UniRef90_F6BPA5	F E K K R R L	F A D G E T I G E A S V Y G G A D S R V A L V A G S P V D V L L P V			
UniRef90_UP10002EE3A70	Y R T H P M F	D R N Q P L V K I S V S K G S Q A K V E A V T S E Q I S I L T T K K			
UniRef90_UP1000262CDA8	F S G Q T V F	A A G Q G P L P E S K V W F G E S E M V E L A P T E P L Y V T L P L			
UniRef90_UP100047B4DBF	F T N V P I Y	K K G D A I G E F T I E K G A T K K P L V A K H S Y S I L L R K			
UniRef90_UP100047C8A41	Y A T K K L F	D R H Q I V K E I K S K G N K H K L P V V T S E T I S L L L K K			
UniRef90_UP10003B60246	F E D R Q L F	A D E E I V G E A S V Y G G Q A G K V D L V A K G A V S V F I P V			
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UniRef90_UP1000472F513	Y T M K S I V	K S G E V I G T L P I E K G T Q S S L Q I R A D K P Y S V L V K R			
UniRef90_UP1000466EAB9	Y E S V K I A	N K N D R V G K L N L D K A D D D N K V D L V V K D D L T A L V K K			
UniRef90_K2LKR6	F E R T E I F	A A G E T I G R V S V F G G E Q P D L A L R A E G P I A I F K P I			
UniRef90_K0IY32	F Q L Q Q L Y	T E Q T V T D M E I I K G E V N R I D V Y P K Q N A S I L T T K K			
UniRef90_E6SLU7	F A P V E L V	R A G E T V G E V A V T G G R Q D R V A V V I A A Y G L R W L V P R			
UniRef90_UP100036B1CC1	F A E R E L G	A A G T Q L A E A G V W M G A E T S V G L T L A D D L R V L L P A			
UniRef90_L7VSH6	Y E I L L K I E	R K D A I A G N V N V K K G Q L T L T P V A Y E D N K S V L L L K R			
UniRef90_M1Z6K8	Y D S I T I T	G K K G D I L G K V N V H K G D I P Y I E A V L E K D S Y I L L P K			
UniRef90_UP10003C1B01E	F E K R H L I	S K D E V V V G S V S V Y G G D A S Y V D L S P K E D V S V L V P			
UniRef90_UP1000466FDBD	Y D N Y K L Y	K E G Q Q I T N V N I H K G L N K A V G I Y S D K D I S I P L K K			
UniRef90_U3TUU5					
UniRef90_R7L646	F Q Y S K F S	N E N D I L K S I S V Q K G V K D S I D L A Y E T S V G A L V K K			
UniRef90_L0B4W0	F D T V S I	S E Q D E S Q I K A K V W G G T V D K V N L L G P I E K V W L T V P R			
UniRef90_L0LK11	F K S Q R I F	A D G E V I G H A S V Y G G A A S T V V G L Q A K I P V D V Y V P			
UniRef90_A3WC70	F D R E R L Y	A N G E V V V A R A R V Q G G N S R S V A L L Q T E R D V F V N V P K			
UniRef90_J9Z074	F Q L V D F Y	K E G E V V L E A S T W L G K Q E K V K L S A Q Q D I S V S I P K			
UniRef90_UP1000248C823	Y T N L P I Y	K T G D S L G D L R I G K G E A P V P L T A T H P Y S L L L K K			
UniRef90_A0LHU5	Y T L V Q P F	P Q G Q P V T T V K V W K G Q R D Q L P G L Y P Q E A A G F L V S Q			
UniRef90_W3RFZ4	F E V R T L F	A A D Q V I G Q A K V F G G E S T S V V G L K S P V P V M L M V Q R			
UniRef90_Q2CCC0	F L T E A G T	R I A E A D V W M G A A S T V V G L T S P E P V K V M V Q K			
UniRef90_UP100042A2862	F E W R N L F	L E A G T R I A E A D V W M G A A S T V V G L T V A E D V V S L L V P V			
UniRef90_A3DK95	Y K P Y E L L	R A N Q E L G R V K V Y K G K K D S V P V V A V E S I K M P L S R			
UniRef90_UP10003B2EE27	W R L K P L F	A K G K R V V E T A E V Q G G S S T V G L V A P N D L A V T V P			
UniRef90_F8FQU5	F E S K Q I A	A A G A P I S T V N I K G G V E T E V P V T E Q E M K L V V K K			
UniRef90_B9MJZ9	F S M Y S P Y	S K G Y C F G K V V K V N G I L E K E V E A I L S T D V K L I V K K			
UniRef90_UP1000288AE10	Y T N Y P I V	K A G D S L G V I V N K G E Q R I V P L T A N H Q Y G V L L K K			
UniRef90_R5AAD0	Y S A E K G L P	A G K E M G R I P V T K G M E D S V S A V V Q E E I S I L L K K			
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UniRef90_H4FBL8	F E M R E L F	K A G E V I S E A S V Y G G A R S T V P L V A A Q P V L V Y Y V P			
UniRef90_A0A059FW67	Y E L L K T I A	P E S V A L P E Q K V W L G Q Q G L V P V S L A E P M L I A G H K			
UniRef90_F9Y4S5	F A L Q D L G	K A G D I I G T A D V W M G A A P R V Q L A L G Q D L Q I L V P T			
UniRef90_G6Y3C5	F E K T E I F	A K D E V V V G E A V F G G A K S G V V A L K A K G P V E I F L P			
UniRef90_G2ITJ0	W R S R P L A	R K G A V L G Q A Q V Q G G W A R Q V D L V A P R D L V A T I P A			
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UniRef90_UP10003069C85	W K T K P V V	T K G R A V G D V L V Q G G D A S H V A V I A P N D L N I T L P A			
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UniRef90_V6J4P2	Y T T K P L L	S K N K M V A M V K V N K G D H S Q V P I V T E K P A V L L L K K			
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UniRef90_S9K4RL0	F S T Y A L V	K A D A L P P V P V S L G Q T A V Q P V A S E S S L L L E K			
UniRef90_F6CPC0	V T L G A E G E	E V A Q Q L V P A N G L T G R V P V I V A A P V E V V D L A R			
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	50	60	70	
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UniRef90_UPI00036B83B6	T E K E T A Y Q K E W R L P A Y V T A P I V	T K G Q K V G E L V I T R E G K E M A		
UniRef90_A8MFG8	G E E A K V H K E I V L P E F I N A P I V	K K G D T V G E I I V K L D E T E V G		
UniRef90_A3JTF9	V G S D K L N A L V E Y H G P I Q A P V	S A G Q E V G K L V I K R E G L T D Q		
UniRef90_M2U978	A I V S D V N A R I V Y K S P L P A P L	Q A G Q E V G K L V I V Y R G P E V M T		
UniRef90_UPI0003A4CED8	G D A G S N I R H E L V L D S G V V A P V	K A G Q R V G K V I V Y R G P E V M T		
UniRef90_UPI00036FF7F37	S L R S E M K V R V N Y D G P V A A P I	S R G Q V V G H V L V K S G G Q I V A		
UniRef90_C8WXD8	S S K T A Y T T E I Q W M T L K A P V	L K Q G V L A Q L R I S I P N R E D Q		
UniRef90_K7YRD8	I S R K E M Q V S V E Y D S P I L A P I	E T P P R L S G R I V Y Q W P L R A P I		
UniRef90_L0NFI39	G L D P Q M S A K V V Y Q G P I K A P I	S E G Q P V G M L K I S A D E R L V R		
UniRef90_F3WVR3	G Q E D N I T K E I K I D E T I T A P I	K A G Q H I A D L V I N S P D M P A Q		
UniRef90_R6MM79	G S A G D V K T A I R V N A P I V A P F	E E A G Q K I G T M T I S R D G E V I A		
UniRef90_H8GQE2	N N P D R L A A R I V Y H W P L P A P V	F E A D R E V G T L R L F A G S R L L R		
UniRef90_UPI00036C879E	G D G A R P E L T V R Y D G P L P A P V	A K G E A V A T L E I A V P G M E P S		
UniRef90_UPI0001DD1078	G Q Q P P E R R L V L N E P L V A P V	A Q G A V V G R L E L V E G D R V L Q		
UniRef90_H0J786	G Q K T K I I R Q V A L E N S I T A P L	G Q K T K I I R Q V A L E N S I T A P L		
UniRef90_UPI0001E2DECE	S G D E R V T A K I R F D G P I R A P P V	K A G Q K V G E I I Y M I E E K E I S		
UniRef90_D6ZYG1	G N R R C L S A N I T Y A A P I L P P V	E K G Q Q L A Q L D V Y R G D Q L A L		
UniRef90_G4R9N6	L A G G T I E G E V V Y A G P I E A P V	R A G D R L A Q L N L C D D Q I I Q		
UniRef90_V9VU34	K N P E R L T A R I V Y K W P L N A P V	S K G Q R L A E L V L Q P D D L P E V		
UniRef90_F6BPA5	G E T V D D V V H E I V I N E N I E A P I	A A G Q Q V G V V K L W N G D K L L R		
UniRef90_UPI0002EE3A70	G R E S A I Q A T L D A P D T L D A P L	Q K G D E I G K L L K K G E K I L L		
UniRef90_UPI000262CDA8	G D A G K G I R H E L V L N R V Q A P V	E A G A I V G N V K M L G E R I I L A		
UniRef90_UPI00047B4DBF	G E E T S K V R K E I K T D K N L S L P I	Q A G D P V G K L V V Y R N N E V I K		
UniRef90_UPI00047C8A41	S N P D R L S A R I V Y R W P L M A P V	K K G D E G T L K Y K N G K I V T		
UniRef90_UPI0003B60246	N L R D K I K V R V E Y K D M I P A P I	S A G G R V L R		
UniRef90_Q5GSZ5	K R T D L V S A T L R Y D G P L R A P L	T K G T R I G T M E V T I E G K P A L		
UniRef90_UPI0003724D49	D N S Q R L V A R V V Y T W P V R A P V	N L R D K I K V R V E Y K D M I P A P I		
UniRef90_A0A021X3V4	D G A A E G L R H E V Q L Q E H L K A P V	H K G Q T I G K L V Y Q K D K V L K		
UniRef90_UPI000472F513	G E S K D F K K V I K L E Q N P K L P I	G E S K D F K K V I K L E Q N P K L P I		
UniRef90_UPI000466EAB9	T E A D R L V A R I V Y Q G P V P A P V	T E A D R L V A R I V Y Q G P V P A P V		
UniRef90_K2LKR6	G E D L S L I E T K I E I N D Q I M A P V	A A G T R I G T L K V W I G D T L S Q		
UniRef90_K0IY32	D E P A P P V R R T V E P E G A L P A P V	K K D E V V G S L E Y L N D Q L I D		
UniRef90_E6SLU7	S G T D G Y S A E V A Y T A P I T A P I	D E P A P P V R R T V E P E G A L P A P V		
UniRef90_UPI00036B1CC1	G Q R D K V K E E I R L L P E Y I N A P V	A R G A R A G T L V I R V G D Q V V D		
UniRef90_L7VSH6	G N S G N I S K E I L L P E F E S P A P L	S I G D R A G E M V L L L E N K E I L		
UniRef90_M1Z6K8	N N P E R I S G R I V Y R W P L N A P L	G Q R D K V K E E I R L L P E Y I N A P V		
UniRef90_UPI0003C1B01E	D E V D R I K V E Y N I P K T L E A P I	S I G D R A G E M V L L L E N K E I L		
UniRef90_UPI000466FDBD	G Q M K N L K A S F T L N A P Q L E A P L	G Q R D K V K E E I R L L P E Y I N A P V		
UniRef90_U3TU55	G E S K N V E Q T I I N I P E I S A P I	G Q R D K V K E E I R L L P E Y I N A P V		
UniRef90_R7L646	S R L L S D V K F I V E R I D P I T A P I	G Q R D K V K E E I R L L P E Y I N A P V		
UniRef90_L0B4W0	E T P D R L S A R I V Y R W P L T A P V	G R I L S E L S L R V E Y D G P L R A P F		
UniRef90_L0LK1	T H I S D M K V E I L I I E P I P T P V	D S G D H V A T L V V D V P G M E P A		
UniRef90_A3WC70	G E A A D G I R H E V Q L R T D I K A P I	T H I S D M K V E I L I I E P I P T P V		
UniRef90_J9Z074	A Q K A Q L R W E I Q A P A E I T A P V	G E A A D G I R H E V Q L R T D I K A P I		
UniRef90_UPI000248C823	S G G D K I V A K I T Y L G P V R A P V	A Q K A Q L R W E I Q A P A E I T A P V		
UniRef90_A0LHU5	L S Q G G G V A A E V V Y T G P V E A P V	S G G D K I V A K I T Y L G P V R A P V		
UniRef90_W3RFZ4	N G N E K L I A R V I Y K G P V R A P I	A A G D E I A E L R I T R A D L P E V V		
UniRef90_Q2CCC0	E E K E K L R T E L T I D E T I K A P V	D I G G E W E T K A E L L P A M D A P V		
UniRef90_UPI00042A2862	G M G G G V L G A K K V V Y D G P I K A P I	A A G E K V G E L I Y L L H G K E V G		
UniRef90_A3DK95	G T P D D V T Q A V A D E A K L T A P V	G L S P E D L E Q K F S I E E P V E A P V		
UniRef90_UPI0003B2EE27	G D E S T V E S K V T L L P Q Q I S A P V	Q K G Q P V V G V V K V W R G D T I A V		
UniRef90_F8FQU5	G E G E E D I R Y E V Q L N P E L N A P V	G E G E E D I R Y E V Q L N P E L N A P V		
UniRef90_B9MJZ9	D I G G E W E T K A E L L P A M D A P V	G L S P E D L E Q K F S I E E P V E A P V		
UniRef90_UPI000288AE10	G L S P E D L E Q K F S I E E P V E A P V	Q K G Q P V V G V V K V W R G D T I A V		
UniRef90_R5AAD0	N N P D R L Q A K V V Y R W P L D P P V	G E G A Q I A S L S V F S G E R L L R		
UniRef90_R6T3C9	A A F E K A K T E I V V L E K P L E A P I	A A F E K A K T E I V V L E K P L E A P I		
UniRef90_K6PS87	T S A N E M T E V V Y N G P I A A P I	K K G D R V G K L V V T L E G R P P V		
UniRef90_H4FBL8	A N R D R D L T A K I V V Y D G P V S A P V	T S A N E M T E V V Y N G P I A A P I		
UniRef90_A0A059FW67	S A N G P V K G R I V Y N G P V K A P I	A E G A Q I A S L S V F S G E R L L R		
UniRef90_F9Y4S5	G S Y D T V K T F F S H D N T I S A P I	A A F E K A K T E I V V L E K P L E A P I		
UniRef90_G6Y3C5	K K G Q E I G K F H I Q I P G F T E Q	K K G D R V G K L V V T L E G R P P V		
UniRef90_G2ITJ0	G E K M N V K A K I K Y Y H G P L K A P I	T S A N E M T E V V Y N G P I A A P I		
UniRef90_Q3YQW5	G Q N K D I V Q S V Q L T D S I I N A P V	A E G A Q I A S L S V F S G E R L L R		
UniRef90_J0YQH9	G N K Q T L R H E L Q P P S L K A P V	A A F E K A K T E I V V L E K P L E A P I		
UniRef90_R6QB52	G H H Q K I T L A V R Y K G P Q A P I	K K G D R V G K L V V T L E G R P P V		
UniRef90_L0K4C2	G E N V E G I T E R L E I N E I P A P V	G E N V E G I T E R L E I N E I P A P V		
UniRef90_R6QEE8	G W Q S S R V Q V Q G V D Y S S P L I A P V	K K G D T I G T L Y V E K D G K I L S		
UniRef90_E0RDAO	G L T P K L T G K I V Y Q G P V K A G F K	G W Q S S R V Q V Q G V D Y S S P L I A P V		
UniRef90_J9L7F6	S A S G G L S G E V V F T G P F R A P I	G L T P K L T G K I V Y Q G P V K A G F K		
UniRef90_E6TYK4	E N A I N V K A K I K Y R G P L K A P I	S A S G G L S G E V V F T G P F R A P I		
UniRef90_UPI00047D7EB1	G N K Q T L R H E L Q P P S L K A P V	E N A I N V K A K I K Y R G P L K A P I		
UniRef90_UPI0003069C85	G N K Q T L R H E L Q P P S L K A P V	S E R A K T E L S V S W S G P V P A P I		
UniRef90_UPI000469E0CF	G N K Q T L R H E L Q P P S L K A P V	G V K N P D I R H E I Q L D P N L K A P V		
UniRef90_J1JDS0	G N K Q T L R H E L Q P P S L K A P V	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_G5ZW41	G N K Q T L R H E L Q P P S L K A P V	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_D3E7D7	G N K Q T L R H E L Q P P S L K A P V	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_E0ICF5	G N K Q T L R H E L Q P P S L K A P V	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_F9ZRI6	G N K Q T L R H E L Q P P S L K A P V	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_UPI00028A15E7	G N K Q T L R H E L Q P P S L K A P V	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_S9S226	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_UPI0003746AF5	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_W7YWD5	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_V6J4P2	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_A3PLT8	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_Q67NE3	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_Q214D5	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_UPI00039AA42E	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_A9D928	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_G4KRL0	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_F6CPC0	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		
UniRef90_R7IBA2	T I L G N G V E A S V A Y Q G P I A A P I	G N K Q T L R H E L Q P P S L K A P V		

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UniRef90_N1MKC8	V M P L V A G A D V A E A G M	
UniRef90_UPI00036B83B6	R Y P L L A A Q D V P P A S L	
UniRef90_A8MFG8	K I D I V S K E D V E K S S G	
UniRef90_A3JTF9	S F P L V A K D A V Q S G G F	
UniRef90_M2U978	V I P L V A G E A V E E A G F	
UniRef90_UPI0003A4CED8	E F A V E A P E N V G R A G W	
UniRef90_UPI00036FF37	T F D L V A A N A V E R K G L	
UniRef90_C8WXD8	N V P V V A K D D V P K A T F	
UniRef90_K7YRD8	I V P L V A K N N I D K L N	
UniRef90_L0NF39	E V E L V A A H P V G S G T L	
UniRef90_F3WVR3	R L P L V A D K D V S E A G F	
UniRef90_R6MM79	D I D L N A S S A V E K K G L	
UniRef90_H8GQE2	Q K D L I A L K A V G E G S	
UniRef90_UPI00036C879E	E V P L Y T K A A V E E G T L	
UniRef90_UPI0001DD1078	T M P L Y A A R D V P E A G L	
UniRef90_H0J786	T R P L V A A E A A A Q G G W	
UniRef90_UPI0001E2DECE	R V D I V S D R N I E K T S F	
UniRef90_D6ZYG1	A V P L I A A E S V P E G	
UniRef90_G4R9N6	S A P L Y A A E A V E Q G G G L	
UniRef90_V9VU34	R L P L V A E S D V P A G G F	
UniRef90_F6BPA5	E V P V K T A R A V E P G T L	
UniRef90_UPI0002EE3A70	E S P I V A A E E V A V A S W	
UniRef90_UPI000262CD48	E S P V A V A E A V P E G G F	
UniRef90_UPI00047B4DBF	E F P V E S P V T V N R A G W	
UniRef90_UPI00047C8A41	K S P L I A S D N I Q S A S W	
UniRef90_UPI0003B60246	E V P L Y T A H G V E Q G S L	
UniRef90_Q5GSZ5	T I P L Y A V N D V Q E L N Y	
UniRef90_UPI0003724D49	Q R D V F V G E D V P E G T F	
UniRef90_A0A021X3V4	E V P V K T A G T V G V G T L	
UniRef90_UPI000472F513	E F E I Y S D T D V Q K A N W	
UniRef90_UPI000466EAB9	E V D L I N T K D I K K A S Y	
UniRef90_K2LKR6	E T P L Y A A E D V A V G T L	
UniRef90_K0IY32	S V D L V A G A N V E R A N	
UniRef90_E6SLU7	R I P L V T A R A V E	
UniRef90_UPI00036B1CC1	R V P L V A D R D V A P G G	
UniRef90_L7VSH6	N I P L V A T T E E V E K A T W	
UniRef90_M1Z6K8	R I K P L V S K A K A D K A G F	
UniRef90_UPI0003C1B01E	E V P L Y T K G S V G K G S L	
UniRef90_UPI000466FDBD	S T D V K A M E N I K R K D F	
UniRef90_U3TUU5	Q R P L V A M E D V P E A G F	
UniRef90_R7L646	K V N I I A N E S V E K N N I	
UniRef90_L0B4W0	V V P I V S L Q N V N K A G L	
UniRef90_L0LK1	E L P L Y T K E S V G D A G F	
UniRef90_A3WC70	H L P L L A A E S V G D A G F	
UniRef90_J9Z074	Q Y P L L A S E N I E Q K G F	
UniRef90_UPI000248C823	E F A L E S P V N V K K A G W	
UniRef90_A0LHU5	T V S L F S Q E D L P G G W	
UniRef90_W3RFZ4	E T P L L A E N S V A S G S M	
UniRef90_Q2CCC0	R P L V A E S D V A R G G F	
UniRef90_UPI00042A2862	E Q P L Y A A E S V A T G S	
UniRef90_A3DK95	R S A V K T A E A V P E K S Y	
UniRef90_UPI0003B2EE27	T L P L V A E S D V G E A G F	
UniRef90_F8FQU5	T V N L V A A Q D V E K G S W	
UniRef90_B9MJZ9	V Y D L L A K K D V Q K R N L	
UniRef90_UPI000288AE10	E F P L T S P V E I E K A G W	
UniRef90_R5AAD0	R T D L I T A E A V E E K A N I	
UniRef90_R6T3C9	T V D L L A Y N D V E	
UniRef90_K6PS87	R I P L L S G A A V E	
UniRef90_H4FBL8	N V P L Q S A S S V E V G T L	
UniRef90_A0A059FW67	E A P V I A E A D V K K L G F	
UniRef90_F9Y4S5	T V P L V A E T D V P A G G F	
UniRef90_G6Y3C5	E T P L L F A A E S V G V G T L	
UniRef90_G2ITJ0	S L P L V A K E E V S E A G F	
UniRef90_Q3YQW5	I P I Y A T R T V N K I S F	
UniRef90_J0YQH9	E K T V L A G N N V Q E G G F	
UniRef90_R6QB52	S V P L V A A K T V E L S T F	
UniRef90_L0K4C2	T V N L V T T K E I K Q A S W	
UniRef90_R6QEE8	N V N I V A E K S V G K	
UniRef90_E0RDA0	E F N I T S P V A I E K A G W	
UniRef90_J9L7F6	R V P L Y A G R D V A K G G	
UniRef90_E6TYK4	E T T V V A E E D V S E A S L	
UniRef90_UPI00047D7EB1	V L P L V A A E D V G Q A G F	
UniRef90_UPI0003069C85	T V P L V A A Q T V Q P G G F	
UniRef90_UPI000469E0CF	E K P I F S G S S V R E G S F	
UniRef90_J1JDS0	R L P L L A A E D V R Q L G M	
UniRef90_G5ZW41	E F E L T S P V K V E K A G F	
UniRef90_D3E7D7	E F E V Q A P V S V A K A G W	
UniRef90_E0ICF5	T V P L V S L V P V D R A G W	
UniRef90_F9ZRI6	K T P L V A G E N V K R A G W	
UniRef90_UPI00028A15E7	R L P L V A E T A V P A G G F	
UniRef90_S9S226	E F E L K S P E Q V G K A G W	
UniRef90_UPI0003746AF5	R T P L L I K E S V K Q A S W	
UniRef90_W7YWD5	R V P L V A E G S I G S G G L	
UniRef90_V6J4P2	R M E L V A P E A V G K A N L	
UniRef90_A3PLT8	E M P L Q A A E A V A T G	
UniRef90_Q67NE3	E R P V F A A Q D V R E G T L	
UniRef90_Q214D5	E T P L Y A E N A V G K G	
UniRef90_UPI00039AA42E	E V P L V A G E D V P R V T W	
UniRef90_A9D928	UniRef90_G4KRL0	R A A L V T G Q D V P K K G F
UniRef90_F6CPC0	K L N C V A A E D V P R P G F	
UniRef90_R7IBA2		

UniRef90_F5L9V0
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 UniRef90_Q67L74
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 UniRef90_E6YQY2
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 UniRef90_N1ZHJ2
 UniRef90_W8YY75
 UniRef90_UPI0003C7E1D7
 UniRef90_UPI00047D3954
 UniRef90_C9RCM3
 UniRef90_F7XWS7
 UniRef90_I2C0D1
 UniRef90_J2L926
 UniRef90_F1Z9X6
 UniRef90_A817W1
 UniRef90_T0YCZ6
 UniRef90_UPI00047C37D7
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 UniRef90_K4KQM6
 UniRef90_R7GDX5
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 UniRef90_J0QSE0
 UniRef90_P38422
 UniRef90_E0XTE1
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 F V T V K P Q M P E V K P V R V W K G A A N E V T L Q A G G T T L V L E K
 Y Q D L T P T F D G K E L E P I K V W Y G S P S K V S V E L G D G G V I T V P R
 F D L K T V F T R G E T V G Y A S V Y G G A Q N S V P L I V K E P I S F M L S K
 F E E V D I F G I G E T V V G E A S V F G G V K S G V P L K A H E K V S I L V P V
 F Q R V T I T K G D E P V D K V K V T M S R Q D E V N L K P Q G S I T R T L P K
 Y E I K K G L Q Q G E V V G E L P V Y K G M E N S V E I V V K E E I S M L G Q K
 Y A N Y P I L K K G E S M G M L T I E K G V K S K L P L T A Q N N Y S I L M K K
 F D L V N I S K A N E P F E K V D V W L G K V D K V D V Y T N Q D I Y Y K T I K K
 Y E S T L I C N K G D I L K Q I P I E K G K K E K V N I L A K D D L Y V L V K K
 Y Q A V P L L P E G A R V A T L P V E K G M E D R V D I L T S R E D L K V L F P R
 F Q Y H I F A K A G A V I T Q V P I W N G A D L F V N A V I S E D L L K V L F P R
 F S M K D L Y P E G S Q V K T I D V E K G K D K Q V D I V T D K A L S I P V K S
 F E S R Q V F A D K E V I G A A S V Y G G T A R T V D L I I A K A P V S V Y V P
 W D S R P I L T A G A K V G Q A V V Q G G G S T R Q V P L V T G S E L S L L P R
 F Q Y K L L F A G D T E V G R A S L W G G A V V G S V P L V T G S E L S L L P R
 F E S R T I L F R K G V V P V R V L D A Y K G G K S T V S V G F A R D I W V T T P I
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 F N T K V V A P M G Q N F G S V A V I Y Q G Q A D D V A V K T G A N L Q V L L E K
 F R Q I T A F E A D E V V V A E A S V Y G G E K G G V A L K A Q G P I R V L I A R
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 Y V S K R M A E K D K P L A Q A N I P D A K Q E E V E V A P V Q D F Y V T L K N
 F D L K M I F K N G E T V V G R A S V Y G G A Q N F V P L I V K E P I I F M L S N
 Y E T H P L Y K K R N Q T V A K V K V K K G K Q K F I E T T S E P I S I L T K K
 F K T E K L F E K N E P L K S V Q V I A G K K D N V N V G I S E D V V L T L Q R
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 F K N Y E Y I I K K G Q P L Q Q L D V H K G V L D K P I Y S D S D I T L P L K Q
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 W Q S K P V V K S G R V V V G Q A N V Q M G D A T K V D L V I A P R A V A V S V P A
 Y T F R E V V K S G Q V V V D K V R V G K G A V E D V G A A A Q Q S A G F C V R K
 F Q V M P M Y K K G E T V V E S L T V D K G Q T P K V N V V T P Q A V S L L L M K K
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 K L P A I P V K N G V S E T V I P Y I S K D F S Y T L C
 Y A T H S L Y K K G E N I L G K V K V S K G D V K E I N A Q T G E P V S L L T K K
 Y E V K S V V A P K K V V A E A P I K K G V K T Q V P L V T E S G V A F V V P K
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 Y E A A V V A E K G D I V G E M R I A H G T P E T V H L V I A G E K M T A L T A K
 Y K F I K V Y S K G E Q V K S L R V F G G K S K Y V I A E T E E D I Y V P L R
 L V R R R E P L R D V P V W R G S R M T V A V A P E K D I S L L I P P
 Y E S I T V V K K G D I V G E I K L P M A K P E K V K L I A N E D L K I L L E K
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 Y S K K E L Y P K G Y Q L K T L P V V K G K E K T V S I V T D K P L S V L V K S
 F S F K S F G N G S D V I Q T V S N K G V K D H V E A I L E N S A G T L I E K
 F D S I K V V E K G S I Q K I L P V E K G H L E N V N I V P E D V S L L I E K
 Y T N H P I F K V G D T I G S V K I V E K G S V E S L S I V A K Q Q Y S I L L R K
 F S M K E I Y A E G K Q V K T V I S V E K G K D K E V V G I V T K K A F S P V M V R K
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UniRef90_T0YCZ6	G H E K E T R E V L T T L Q P V	V A P V	D V G Q K M G A L K V Y Y A D Q W V N	
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UniRef90_B113X1	G E K E G V D F R V E L P S W P A A P L	K Q D E A L G S Y V V L H N G K E V L		
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UniRef90_P38422	G E D M M D N V K K E I K M K D N I S A P I	Q Q G Q E L G T L V L K K D G E V L V A		
UniRef90_E0XTE1	D Q R D S L R Y E V T A D T T V L A P V	N S M D K A G T V R V F D D N N I V Y Y		
UniRef90_V6MD16	G E A A E D F Q K E V V L N K T V N A P V	Q K D Q V V G H I F I S K D G N E V S		
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UniRef90_K4LIP4	G K E R E A R L K I I L P D Y I S A P V	G K G T L L G E L Q V V S E G R V V D		
UniRef90_L5N150	G E S A D T Y T K E V V M N R S V N A P V	S K D Q V V G H I F I T K D G R E V V N S		
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UniRef90_A1HTN2	D D K D Q F R T V V E A P A K L E A P V	V I A G Q K V G V V K T F Y R D K E I L A		
UniRef90_R7K210	G E S G D Q I E R R I E Y K K D L T A P I	R K G D M I G R I V Y T M N N Q T L L E		
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UniRef90_A5D2S8	N G R E R P E K A V E I K K D V I A P V	Q K Q G Y L G R V T I L V K G E V I G		
UniRef90_UP10003B40E9E	G E D P N S Y Q K K W M W R S L Q A P I	K Q Q G Q V L G K M Q L V K D G R P V Q		
UniRef90_C8W3C4	K N G N E L K R R L V L N K N I K A P I	K K G Q K L G E L I F S D G E T D I A		
UniRef90_UP10003F4F939	G E K D Q Y N A V Y E I D E S I L T A P I	S K G D K V G T M T V E Y T G K E S V		
UniRef90_R1ARM8	G R E D E I Q K V L D I P E E L S A P I	S I Q G Q V L G T V K F T L D G E T L I A S		
UniRef90_M5E2Q1	G R E K E I S Q E V K V K D S L T A P I	E K G G V L G E L T V Y N G E K V I S		
UniRef90_T1C578	L D Y H S L R Q R M Q L A K S T A P F	D T K F A V G T L R V M L H G R L L V		
UniRef90_UP10003B30E6C	G F G M E R K T S V E A L P G L S A P L	K A G Q Q V G Q N L V V T M P G Q Q P L		
UniRef90_C0GDY6	N E A D V L R Y E F V N V A E P L R A P V	S A G D E V G T M E V Y F G T Q R I A		
UniRef90_D1PLR0	E G G A A L T E Q V F N L P D H L T A P P L	K Q Q G D V V G T V V T L T I E G E S I		
UniRef90_E6SK22	T D A G E V V R T R V E V M Q E P L V A P V	E K K G Q R V G T L T I E D Q G R V V L R		
UniRef90_W9AGL3	D E A D A Y S I K Y T I D E D E L A A P V	K K G D V V G T A E L V Y E G E N D G		
UniRef90_R5HG49	A E A G K V V S T T L S I P D T L Q A P V	E K K G Q E L G S L T V L V D G K E N Q		
UniRef90_W7YTA4	G T D A K T V K T Q V I P E D K L V A P I	K K G S K V G T A T Y T Y D K A Q V K		
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UniRef90_A7VBH1	G E K A D D V K K T P I Q E E L T A P I	N K G D V I G K M E Y S I N G R V L G		
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UniRef90_UP1000255936C	L S A E G I A S E V V I F D G P V K A P V	I A G Q E L G H I L L R P E G L P E K		
UniRef90_R7KMG0	D K G M K G F S A T V S R L D P L V A P I	K E G E R I G E I T V Y F N K K I V A		
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 V|Q|P|I|L|A|L|E|D|V|V|E|A|P|W
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1 10 20 30 40

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50 60 70 80

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UniRef90_R5QF98	N E K D K Y K L R V V Y N G P I E A P V	G E E Q L Y S P V I T F S D E D L V A P L	
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UniRef90_F6BHB0	G S L K N D V D L E I N Y K G P I A A P V	G E E Q L Y S P V I T F S D E D L V A P L	
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UniRef90_W4VDN8	G M E N K L S F H L T Y D S P V S A P I	G E E Q L Y S P V I T F S D E D L V A P L	
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UniRef90_K5UWN7	G E K D E Y E P V L V L D K K E L T A P I	R D R D G V T A E L V Y E G P L N A P V	
UniRef90_C0D3H8	G E A K N L K A S F V L E K E L E A P V	Q E G D L V G H L E V S L P D G R E L	
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UniRef90_C2W2N4	G R Q V E R Q V S L R T P L R A P L	R D R D G V T A E L V Y E G P L N A P V	
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UniRef90_R7NIS3	S E K G K I K T V I K A P D K V E A P V	Q E G D L V G H L E V S L P D G R E L	
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 UniRef90_R6ZLJ8 Q S P L V S G D K V K T A T W
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UniRef90_E6YHV1	F E S K K I I Q K N G T V E K V N L N K K G D K F F L A K A S E D V N I I V P K			
UniRef90_R5LVX3	F A P P Q V L D E N E L I Q E V P V A L S K Q S T V A V H P A E S A D A M L P K			
UniRef90_UP1000289BED6	Y E P M R V M K K D A L I D T F K I V K G R Q S E V K L A Y G D A V K L L P K			
UniRef90_R6DUH1	M R T V L G N E D K V C S V N V Y G E A D K V D L V P E F E Y S T M L S K			
UniRef90_UP100046F4C30	F A N C K A Y H E K Q P L K K Q K A A H S I A G E V L L P R I E K N F T Y T I T Q			
UniRef90_R6VCS0	Y A T H T P V K S G A V F A R A K L K Y R P E D K I D L V A T R S V R E L V R R			
UniRef90_R6DPS2	F E V K Q V V A P K A V L A T V P V L K G K N K D V S V V T D A G V T F I V P K			
UniRef90_J0MZ1	D A L E D L R I E G G V E D T V P V R Y Q S E F R Y L D T E			
UniRef90_D3F318	Y K S I T I Y K A D D I K G E K S V K F A R P G K I K Y K L A N D Y S I T A M K			
UniRef90_UP100035E679F	F A N Y S L Y T D E E F E D I V T G G K E N L T K G V S S G F S V V V S K			
UniRef90_R6X5A3	Y R R V R P L R K S T V V G R L P L V R Y R D T K V D I V A A T V T R T A E R			
UniRef90_E0E1U9	E I I S T N T P L C E I E V V G G E Q K H V S L G L A C V T H F P F T P			
UniRef90_R7FYE7	V L L P M A I K D G K T E S V E L L M Y D G Q F S Y V A L R			
UniRef90_UP100047E2BDE	E T V V F D N K D Y V V P I V G G R V N E V T A F V K D K I S T T L A K			
UniRef90_R6GNE1	F K L T K Q L D K G V P I E T A P V K N G V E L T V P A V T S N A V M T L T K I			
UniRef90_D4J897	F E S K Q V A T K D G E V E Q I P M S Q T G D K F I I G K A K D D L T L V C P K			
UniRef90_R6GFM8	F E T K R L V Q A G Q C L G T I V E V L S G E G G S V D L V A G E D F Y Y P V A R			
UniRef90_M8DT37	R A G D G V G Q V A V A R G R Q P A V E A R L A G D L T A L V P P			
UniRef90_Q0TPF0	K I K E V Q V K R Q G E E Q A V D I Q A E K K F K Y I D S S			
UniRef90_R6GX9	Y E A V K L H S K D K A M D V V T E T R G K P R Q I K L Y P E K D V V V L K K K			
UniRef90_K6PM54	F A Y T T L L E S S E E T A E V E V M N S D G N S V L V H P K T D C V L L W C K			
UniRef90_F3B9W8	F T S E E L F P K G Y Q I E E L P V T K G K E S E V E I A T N T S V Q S M I K E			
UniRef90_L5N1G2	Q V P V V G G V R D S I S V N G A F T A G A S V L A			
UniRef90_U2KQ75	F E Y K K L Y S K G E I I G E A P R D K K N I K L T C S K D I V I P I K K			
UniRef90_N4WVN8	Y S V K N I I S K G N K I G N I Y I N L G K E E Y A D I S S L E D I N V N S Q			
UniRef90_R6NCX8	Y A S V K I I A A V S D Y T S T V P V T E T Y N K K V T I A P S E D V Y Y T L P K			
UniRef90_K2BUC7	F E S K K V V A K D E E I E T I P L N K K G D K F F I A K A N E G L N I T L E K			
UniRef90_A0A037Z9L3	F E Y K K L Y S K G E I I G E A P R D K K N I K L T C S K D I V I P I K K			
UniRef90_R6VB43	Y S V K N I I S K G N K I G N I Y I N L G K E E Y A D I S S L E D I N V N S Q			
UniRef90_R7M5Z9	F E S K K V V A K D E E I E T I P L N K K G D K F F I A K A N E G L N I T L E K			
UniRef90_G4KPR0	Y A S V K I I A A V S D Y T S T V P V T E T Y N K K V T I A P S E D V Y Y T L P K			
UniRef90_R5AEC4	F A T Q R L A S A G E A A E T V P Q L P G H Q T A N A L L S R S V W Y T F A Q			
UniRef90_R5GIF8	F A T Q R L A S A G E A A E T V P Q L P G H Q T A N A L L S R S V W Y T F A Q			
UniRef90_D5WQB8	F E S K K V V A K D E E I E T I P L N K K G D K F F I A K A N E G L N I T L E K			
UniRef90_L0K5X0	F E S K K V V A K D E E I E T I P L N K K G D K F F I A K A N E G L N I T L E K			
UniRef90_UP100028A26D4	F E S K K V V A K D E E I E T I P L N K K G D K F F I A K A N E G L N I T L E K			

G T D L S G I E K K V L P D N S L E A P V K K G Q K A G K V Q Y L L G G K T I G
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UniRef90_F7K8N1 E Q D E V H M E L E V P D S L T A P V E A G K T V G W E T Y Y V N G E V Y A
UniRef90_UP10002E2DD13 G K N A K V E T E L L V V N E K K L N A P I E K G E E T V G Y I N V K Y D G D N Q S
UniRef90_S0EYX2 K A H A S L G L Q M R L N P I S A P V Q P G E K V G E A I G L V N G G V P V V
UniRef90_R7B196 T D T G R I K C T E E Y A D G L D A P V Y E G D V V G Q M V Y E L D G N I L G
UniRef90_X8JA21 E G S D S L V K T E S V I F D N V E A P L K A G D K V G E Y R I Y V A D E L T G
UniRef90_R6PWH8 N A V D S V E T T V T I L D D K V K A P L T K G E E I A T V T Y T I D G K E V A
UniRef90_R7MM67 G V D T S L I K R D I E Y Q T D I Q A P V S K G E K L G V V H L K Y S G E E I A
UniRef90_B1C3S3 A N D Q K Y T T K I V Y K D N L L P V K K G D I V A T L T V L C D D K E I T
UniRef90_V9G16 G D G S N V T F A G A L E S E T L T A P V A T N T K A G T V T Y E Y K I E G L K
UniRef90_R6L825 G H S I S D V K K E I S L P E K T E A P V K K G A K V G E V I Y T A G D K E L L G
UniRef90_L8FSL1 Y P A N Q K I R G E I V Y Q G P L K P P V K K G D Q V A M F R V T S S S E P I A
UniRef90_B6G1L1 G Q T V T D E F T F K T D L Q D T S L P I S A G D K I G E F Y I Y K N G E K F K
UniRef90_R5QB75 N Y N P S D K Y K Y H L K D L T A P V K K N Q K A G T M D V Y Y R D T K L E
UniRef90_B11A48 A Q L P A L E K E V R L K K T L E A P I A P G E K V G E M A F R I N G R L L E G G
UniRef90_R6TUF1 D R E N D I K L E W T L L D S G T L T A P V Q A G Q E V G M L R V T Y M G E F I G
UniRef90_R6SIN4 G E D F S A I E K E L Q L E G P V E A P V G E G D I F G Y L V Y T L D G E G L G
UniRef90_R6SN97 G I S N T K Y K T S V K V D K I V L P L K K G D V V G K I S V L D N N K V V A
UniRef90_D3FQ17 G Q N D Q Y S V E L G L D Q E E L V A P L E A G E A V G T L S L S F E G E Q Q E
UniRef90_UP1000465A676 UniRef90_A9KMT7 G S N P A N I T K E I K M S E S L E A P V S I T D V I G E I T Y Y Y E G K E I G
UniRef90_A5N7L4 G K E N K I T C R C V I N K N K R Q Y K K G E K V G Y C D V Y I D G E L K G
UniRef90_R5AD66 G A E G E V S R Q V Y L A P F L Y A P I K I G D T V G E I R W Y L N G T L L G
UniRef90_B0PFX4 A D K D A V K Q D V T L L P D E T G Q L L G R V V V H I E G S K L C
UniRef90_X8IRY8 G D R A K I K V K I K R D W L A K A P L K A G D K V G V A K V Y V D G R Y T S
UniRef90_R7FAL3 D V D T T A V Q K T I Q L E K N V Q A P V K A G E Q L G T M E L K F S G E V I A
UniRef90_Q8EU78 D E K D L Y H L E Y N I D Q D E L V A P V E A N E A I G T A K L V Y D G E T E G
UniRef90_R6BCL6 N I D V T N V R R I A Y Y N N D Y V T A P I E K G A K M G T L K L L I Y G S E L G
UniRef90_U4WM37 G E E A K V T P R V E Y K P L T A P I K K G D V I G T V Y D T E G K S D G
UniRef90_F4A2P0 V S E I I Q P S V H L P S S I T A P I K E G D V V G S V D Y M I G K Q K V A
UniRef90_R5TNA5 S D A S L K Y D I E F E K G K I E L P L K K G D V V G N I I I K N G N N V V G
UniRef90_UP100036DFE3D UniRef90_UP10001E894CE D S I R D L V K V E V V Y D G P L K A P L I E G D V V G K I I V S G P G M K D V
UniRef90_R9KH13 G N K D N F K P Q F E I N E K E L T A P V K E G D S V G V M T V T Q E G Q E G A
UniRef90_R5ID61 G A D F T K I E K T F K L K D T L D A P V A E G T E V G K I V Y T L E N K E I G
UniRef90_ALASQV UniRef90_UP100036603F A L A S Q V O T A V T V D E S V Q A P V K A G Q R L G T M T A T A G E R L L A
UniRef90_K0AW10 D D S S H F S I Q I K P D R Y V K A P T Q K D T V V G Y V S I L Y D G Q E V K K
UniRef90_D8GR57 G Q A L S K K I L N M F D H I S A P V K K G D V V G E I I E Y G D N I K
UniRef90_R9LX75 G K E S K I T Y K C V I D K N K Q Y K K G E K V G Y C D V Y V N G E A L G
UniRef90_W7D218 G A G E W L E T R I E L N R P L A A P V L A G T S V G Q A V F T L D G A K E V G
UniRef90_R6TYZ1 T T E T K L V E K V M L D E K T I D A P V K K D T K V G I M A V Y V D G K K T D
UniRef90_R5I102 A E T E R V Q K V I S L E E G L A A P I K K G E K I G T V S Y M L G E Q T L L A
UniRef90_R6M1A7 G S D L S G I T K T E L L P E S V E A P V A S G D V I G R A V Y K L G D R E L L G
UniRef90_UP100047910AE S E E K R N I T Y K A N I D K I V A P V K K G D K V G T I D I E D N K I I I L G
UniRef90_T4VZ29 D E T L N S Q I T F K E I N Y P I K K G D V V G V I K Y Y N N G E I I L G
UniRef90_R6DUH1 G N E E N L N T Q L T I L K E L E Y P I V K K G D V L G V I K Y Y D N G E I I L G
UniRef90_R5WW39 D V I N D E M E K V I N L F N D T V E A P V E Q Q G Q V L G T M V L K Y Q G E E Y G G
UniRef90_R5NXP4 G T T F D K I K K K L I L P N E V K A P V K K G Q V V G K I G E L V Y Y Q E N R E L L G
UniRef90_B3SEY0 S D S E T V Q Q R F V P E S G L T A P V A R G D M V G T L Q V S I G D T R L A K
UniRef90_R6B2H2 N Y D K M K L F L T E F Q E P I K A P I K Q Q G Q V I G K L N I M K N N V L I K
UniRef90_UP1000470B7A1 N D D K K Y S F N I L V K P I K A P V K V G D I I G Q M I L E G G I E K E
UniRef90_R6TD44 G E N M Y K P V F T L D K T K L N A P A K K G T A V G T L S V Y L Y G K K S S
UniRef90_C0ZH51 G T Y H M V E C D F T A E E K I D A P V K N G E T A G E I R Y T M G G E V I L
UniRef90_L5MQH9 G T E A K Y T P T V T F Q E L T A P I Q Q G Q V V G K I V L K E E G M K E A
UniRef90_E6YHV1 G A E T K F T P T V T Y Q E L T A P I K Q Q G Q V V G K I V L K E E G A K D A
UniRef90_R5LVX3 K K T L N D V K A I R Y H G P L K A P I N I Q G Q K I G I Q F A D K Q F L V
UniRef90_UP1000289BED6 G E E A D I T R Y R Y P S E L E A P V A A G T P V G S A D Y Y I E G E L L K
UniRef90_R6DUH1 G N N S K I D R K C V Y N K N N K G F K K D N E I G Y C E F Y Q D G K V C G
UniRef90_UP100046F4C30 D D V S A L T R T V T L D N E T A L A P I A A G G D R L G E I T V S Y G D T T Y V
UniRef90_R6VCS0 G E N M D V R V K L E M E E D K I V A P I K K G Q I I G K A Q I R Y D N E L G Y
UniRef90_R6DPS2 N V K D S D I K L E T K C V Q D A V D A P V K E G T I L G T A S I S Y N G E E L T
UniRef90_J0MZM1 N E N P K D I K R S I Q Y K K N L Q A P I K E G D V I G K I I T Y T L N E E T I G
UniRef90_D3F318 D E I A R L V Q M V E L P H F V Y A P I R E G E M V G S V S Y W L D G K M I I
UniRef90_UP100035E679F G T S P Q I K T T V T N D P T L V A P I P R N A V V G S L T V R A G G R I V A
UniRef90_R6X5A3 G N S L D G V K K T I E L P E E A Q A P V A K G A E A G R A V Y L L N G V E I G
UniRef90_E0E1U9 T D S S N T K Y T Y K Y N F D K L L E M P V K K G D I I G T M N I F K N G E M V S G
UniRef90_R7FYE7 G D V G K I E K V T D V P E K L S A P I V K G E K I G T V Y I L D G K S I
UniRef90_UP100047E2BDE S E K L Q T R V I G L P R D V E G P L R R G A R L G T I E V L Q R G K V V A
UniRef90_R6GNE1 D E A M S L R F E F E L P P C V L A P L Q K G E K I G K L H I Y Y N N R L L F
UniRef90_D4J897 G E N L E N I H H S K L Q L D E S L F P P F E A G T K A G R L I Y Y L D D T E I G
UniRef90_R6GFM8 G D K N K I E K V V E V P T F L Y A P L K Q Q G Q V I G K V K Y K L N D Q I L A
UniRef90_M8DT37 G S E S K F T P T V T F Q E L T A P L K K D Q V I G K V A F V E E G T K E A
UniRef90_Q0TPF0 G M S D K I E K K V V L D E S K K K I K E F D T I G Y C E Y Y L D G E L L G
UniRef90_R6GXL9 G E T L E V Q F P G P G F V Y A P V T A G Q E A G T A H V L L E
UniRef90_K6PM54 G L V P R V R R V L E L A R Q V E A P V A A G Q R L G T A S L V L D G W P L A
UniRef90_F3B9W8 G S D L S N I K K K V K M K E N I S A P I K K G E K L G R V I Y Y L N K K E I V A
UniRef90_L5N1G2 N E K K A D Y Q T E L K K G Q V D I P M D K G T H M G W V A V K K D G Q E V V A
UniRef90_U2KQ75 S V D I T A V Q T V I H L D K N V M A P V K K G D E L G M M E L K F S G E T I A
UniRef90_N4WVN8 G E K D L Y Q L R Y E I N E E N L E A P V E E G E K V G E A V L E Y T G D A E Q
UniRef90_R6NCX8 E E E S G I E K R I E V P A F L Y A P V R K G Q T V G K L T Y E I N G K V L A
UniRef90_K2BUCK G Q Y S Q L K P E I D L N K S I S A P I K K G D V V G A L T I R M Q N N I V A
UniRef90_A0A037Z9L3 D C N Y K T S V K V P E E I K D D V A K G D K I G S I F V F K E D K L I F
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UniRef90_R7M5Z9 N Q D N E A K F T Y E I E T D N V T A P L S K G S V V G K I T V Y K D G K Y F N G
UniRef90_G4KPR0 G E K L E V R F E L P E S L R A P V A A G T S A G Q A V F S L S G K E V G
UniRef90_R5AEC4 G T D A S A V T V K T D I P E G V E G A V K K G Q T L G T L Q L S Y N G K T Q
UniRef90_R5GIF8 S L N K T V S R Q I N W F E D P V Q A P K N K G Y Q V G E L Q L M L D G E V I S
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UniRef90_UPI0002E2DD13	G V P I V M K E D L D K A N W
UniRef90_S0EYX2	Q V P L V A A A D T V E K A G ◻
UniRef90_R7B196	T I D I V A A A D T V E K A G ◻
UniRef90_X8JA21	T V D L V V K E D V
UniRef90_R6PWH8	Q M P A Y A G A D I E K G T ◻
UniRef90_R7MM67	S I D L V A V S D V K R
UniRef90_B1C3S3	S Y N L Y S D N D V E K A T Y
UniRef90_V9G16	E V N L V T S E E V E K A G W
UniRef90_R6L825	R L T I L Y A E D I E R A G Y
UniRef90_L8FSL1	E T P L Y A D Q D
UniRef90_B6G1L1	T I D L V A K N D V
UniRef90_R5QB75	T I S L N T T Q A V D E S G
UniRef90_B114A8	Q V D L T A G Y R V A R K P W
UniRef90_R6TUF1	E V P L V V
UniRef90_R6SIN4	R V A V T A E E P V E R A G F
UniRef90_R6SN9	T Q D L V A T K N V D K ◻ N F
UniRef90_D3FQ17	G V P M V T D T A V E K A G W
UniRef90_UPI000465A676	S Y D L Y S D N D A S K A T Y
UniRef90_A9KMT7	K L S I T A A T P V G K A G Y
UniRef90_A5N7L4	K V D L H S D R D V K K P G ◻
UniRef90_R5AD66	S A P V L A G E S A E K E G F
UniRef90_B0PFX4	E Y D L V A A D A V D R
UniRef90_X8IRY8	D A L L V V K H D V E S G
UniRef90_R7FAL3	T V P L V A V S N I D R
UniRef90_Q8EU78	E F T L V T D E A V E K S N W
UniRef90_R6BCL6	S V D L L I A A E S V E E
UniRef90_U4WM37	G V D L L I A A E D V E E G S W
UniRef90_F4A2P0	S A N L L I A P Q S I
UniRef90_R5TNA5	K M D A V V N E N I K T ◻ G F
UniRef90_UPI00036DFE3D	V S D A V L A E T V D K M G F
UniRef90_UPI0001E894CE	T V E L V T K E G V E K A N W
UniRef90_R9KH13	S V A I I I A A E T V E R A
UniRef90_R5ID61	E I P L V A P E D V P A R T F
UniRef90_UPI000366603F	K E N L L I S S R N V E K ◻ S
UniRef90_UPI000366C479	R V D L L L A D E S V P
UniRef90_K0AWI0	K M D L V V N E N I K K S N F
UniRef90_D8GR57	K V N L Y S D R D V K K ◻ G ◻
UniRef90_R9LX75	R V D L L L C G R T V P
UniRef90_W7D218	T I N I V T K D N V D E A N W
UniRef90_R6TYZ1	T T D I L L A D E F V E K ◻ G Y
UniRef90_R5I102	T V D I L L C S E D I A A A
UniRef90_R6M1A7	T V E A T V K E D I A K A N ◻
UniRef90_UPI00047910AE	S V N I V S A N D V D N A S F
UniRef90_T4VZ29	S I D I I V S A K D V D D A S ◻
UniRef90_F4XD82	T L D L L I A D S S V E R
UniRef90_R5WW39	R I P V I Y A E N V K K A G Y
UniRef90_R5NXP4	G Y P V Y A A E T V D K K N F
UniRef90_B3SEY0	E V E L V A S ◻ D V S E A G F
UniRef90_R6B2H2	S L P I T V M E S I K K A N ◻
UniRef90_UPI000470B7A1	G V K L V T K D E V E K A N W
UniRef90_R6TD44	E G K I V A C K E V K K M N F
UniRef90_C0ZH51	G V D I V A G Q A V E E A S W
UniRef90_L5MQH9	D Y D I V A S Q E V E E A S W
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UniRef90_R7FYE7	T S D I L I A A E N V D K ◻ T F
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UniRef90_U2KQ75	E V P L V A V S D V S R
UniRef90_N4WVN8	R V D V V A T N A V E K S N W
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UniRef90_R5GIF8	T I P L E T E S D I D
UniRef90_D5WQB8	T V P L V S D R A V N
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 F E Q K I F T T V E E Y K S V E V T D G I G D S V G T R I E G E L S M L I S
 F K N I R L V D P E K I V A E I P V K Y A T T D F V S L V P A E T V Y S L V P T
 F A D H V V A K K D Q Q I K P V P V H N G K A G T V N A V F A G N V T M T T Q N
 F A N Y K I E E D N S K I K S V R V K K G E I K K I K P K Y S S N Q K V L L P K
 F S N E I M L K A G E N L D R L S V S G G K Q S D I A L T V D R N I A R F V A R
 R N I F E K T Y D Y K E I L K V E N G L Q E S V G T Y I P F E V N R L L S D
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 L A S A G R D F R T L P V T G S L V R F V P V Q V E R D V R Y P L
 Y T L M Q V Y P E S P L A P I P V L L G T V G Q I Q P E L E R E C R V L V R K
 F S K Q V L F E E G Y Q V E T I P V V K G K E N E V E I A S G E A I D A M V R D
 Y E Y K K F F A K D E V V G E Y D L V N I N S R K I Q L A A E E D I I L P V
 D K L P S V P V K G G I L D E L P I V Y K E P F R Y L D I A
 F D N Y R V F S A D E Y L Q D I E V E N G E K T K I R V K V K G F T Q T I V K A
 Y E R R E I I A D T S K I K E I S I K N G L K E K V L L K T G N K A A F L V K K
 Y E N I K L I S K D E V L T N L S I S N E N V P V I S S E D L F V T F P T
 T V I D E K T I V D E V N I W G K D R L K L S P A T S Y S T I L P S
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 F E H V K I T K A E R V S R R A W V T N G Q Q A S V D L Y P A R D I N F P L I N
 R
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 Y E L V P K L E S G L V V S S G H H L A K T R D F D I V T G D Q I T I L K K K
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 Y D K Q E I A E V G K M G E I K M T R S P V K E I A A G L G E G Y S G V F S E
 V Y E Y D R E F P N V T V E E A V P E N G R L Y Q E V S I P L L V K E
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 Y K V N R I I Y D G M A V N Q W P V S G G E C Q V V G Q S F T D V D T V V P A
 V A G G I T D T V P L Q L E D D F S W T V T R
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 Y S L Q S I L T K G A K V R T L D V T L A K E Q K I A I T N L N D V S A F L P N
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 Y H L E K K L I D T S K P M I E I E V V H G K K D V V Q G Y P D E E F E Q L I S K
 S K Q L V V S T E D V F R Q P V A L S K E D C V M L Y P A E N A E A F L P S
 Y K T V K L S S I L N E I S Q A L P V V K E N D K T V K I K P T E D I Y E T V P I
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UniRef90_A6NUQ2	A A D E R V T V K I D L P D Q V E A P V E E G D I A G S L T Y Y V D G R E V G
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UniRef90_A5N7M0	G F K Y T T K I I K P Q K I A Y N V K K G D I L G M L C V Y E N D D K K I Y
UniRef90_R5NYW0	T N P D Q I E K Q V I A Y E N L K A P I V Q E G D A V G V V Q Y S C N G T C S
UniRef90_R4KTT6	N E K P E V V R S V E L S D N I N A P L N E G D K L G E L V L T A G G G E
UniRef90_W6RWFO	G E D F K L E Q K I I L D E K K K Y A K A G E I I G S C E F Y N G S N L I V
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UniRef90_C7H5Y7	G T A S A L R A E L T L P E A L E A P V E K G Q T V G K V S I F Q D D T L L N
UniRef90_U2B731	Q D E V R M E A E I P E T M E A P V L A G K T V G F E T Y Y V N G E V Y A G
UniRef90_R5EC91	V D T K Q I K K K Q I T V K D Q A P F K K G D V V A K I E Y S L D G T V L G
UniRef90_R5SJ41	D E Q S Y K P K R K I C Y R K H L Q A P I V K E G T I I G S V Q Y T L N D Q E I I A
UniRef90_D3G146	G E R D N Y I P V V T F D Q E E L I A P V E K G E K I G T I S L E Y V G E N I A
UniRef90_R7PDT9	G E G E Q A R V V K K V P S I L M A P V R E G Q Q V G T V V D Y Y L G E V L V K G
UniRef90_A5Z61	G R D L S K V T K K V F V N K K V K P V K K N Q K V G V Y I E Y Y F N D K S I G
UniRef90_D4LCY5	G D L R Q L M V Q V Q V E P F L Y A P V P E N A R V G N L A Y Y Y E G R H V A
UniRef90_R5J922	G Y K V G E L T Y E L D V K N L K A P I V K K G E I V V G N L T V K E D G K I I N
UniRef90_G5KC62	N Q K I H Y L T Q I F G K Q E Q L K A P I V K K N K K V V G S I S L K
UniRef90_UPI00018507D1	G E K E M Y S P V F T E A S D E L T A P V E A G D V V G T L Q L A Y E G E H L G
UniRef90_U2F487	D G S A L K K T V N I P P F L Y A P V E A E G Q V V G E I L Y T A G E G E A L
UniRef90_R6ND02	G N D L N L I E K K K L S L P E E I K A P V T Q G K E A G T L Y Y T L N E K E I G
UniRef90_C9RCN1	G E P V E K Q I C L T R A L R A P V Y P G S P L G E V I F L W R G Q E L G
UniRef90_D4JUS3	E Q K D K I T A E I Y M P K F I Y A G L A A G E K V G E L H Y L N G N T I A
UniRef90_R6QH93	D E V S R L Q W Q T E L P E T L E A P V E Q G E Q I G T A T L E L D G E I I A
UniRef90_S0JF82	E K T D E E V R T I Y E I P P E Q V K A P V K E G Q Q L G K V T Y Y L G E R Q I G
UniRef90_S0J4P5	G S D L S A I T K E L V L P E A A D A P V K K G Q T A G K V V V Y K L N K K E I G
UniRef90_D5D925	G Q K D H T K I N F V M N D Q K V V A P I K K G E T V A Y V V S A Y V G G Q T T D
UniRef90_R5EGJ6	G Q M K N Y V M N Y T V I E G G G L T A P I K K D D Q I A T M E V W Y Q N S C V T
UniRef90_R7H4T6	N G T P P D V A W A V E S A P F F Y A P V T N G Q Q A G T L V G T C N G R E A I
UniRef90_F7Q1A6	U G I K D L E Q D I E Y T I P K N G A K A G D T I G K I T I Y K D G D P Y
UniRef90_F8DQN7	D T K T N Y T G T Q Y K K K K L E A P I W K G E R V G N L R I T L N G E P L
UniRef90_R6B6Y1	D R K D I K Y T T E V K L N N V K A P I E K G S K V G E L I L K Y D N N T Y
UniRef90_R6M4X1	G E H A E D V V K K K L E M R D P L T A P V D S G E E L G K M S Y Y I G E R C I G
UniRef90_R5W8X3	U S E N A D S V S K K I D I P E K I T A P V K K G D E L G E V S Y Y A G K R F I G
UniRef90_W0EE72	I D K D K I E K R V Q W T R S T H L P I Q A G E E L G V F E V W L N G Q K
UniRef90_R7HG48	A S D K P S N Y K F K I L V D K I T A P V K K G D V I G K V K V L N D N D I I S
UniRef90_R5QV29	D F N K D D L E Y K Y S F K K L E A P V K K G E K V G D L V I G K V K V L N D N D I I S
UniRef90_R6H6X2	N V S D E S Y E P E I K L E D N I S A P I V Y Q G Q I L G K I V Y N I D G L E Y
UniRef90_E3H8W8	N W G V E T R K T Y I K S I S A P I V E K G R I L G S Y Q L I V N G K Q V K
UniRef90_R5CWS1	D T K D Q L E Q T V T L K N E V A D A P I T R G Q E M G T L T I S Y N G Q V C V
UniRef90_N1ZE12	D F D I N K I K K I I D C P E N L V V P I N K N D T I A T V T F Y Y E N I P I K
UniRef90_R7MJ10	N V S E L S N I V V L P Q F V S A P I K R G Q K I G C I G F Y N K D T L V Y
UniRef90_I7KU90	N D N N D I E K K K I N V V S N I E K F T K G E T L G S I D I Y K N N N L L K
UniRef90_R5TD81	E E E K S L K T V S E E L P D T L E A P V L K K G Q T V G T V T Y R L Q G E T V K
UniRef90_UPI00037A7AB3	G D T S A V K A Q A T L D E T E L V A P L V Q Q G T K V G T V K Y T M E Q E L E K
UniRef90_R9LVD7	G D R V E V R A V A A P L V F A P V E Q G D L L G H L T I C C N G E P V A
UniRef90_B2TKI7	E D K D K L N T Y I K F E N K N L R L S F N E G D V I L K G T V Y L N D K E L C
UniRef90_K1UE30	D E T D S L E A T P N L P E A V D A P I K A G D V V G S M T Y S Y N G T S Y G
UniRef90_C9RAU3	E E R A F S L P R W Q V H L N P R L P V P R A G E R V G E V L V I T T G K G E G M
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90

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UniRef90_R6B3S1	S V N I V Y E D T V D A A D Y
UniRef90_B115W2	Q V P V L V A A D V P R
UniRef90_UPI0003148EB4	E Y K L Y P E K D I E K E N F
UniRef90_R7BIB4	I F P I T A S E D V R Q V G F
UniRef90_R6NI66	E I D L V S R S Q I K R S F F
UniRef90_UPI000287E127	Q L P V V A G A Q V D K S G
UniRef90_R6QN19	T I P L K S D K N V K S V S F
UniRef90_W1GF64	H Y P L V T L E S I N K G G
UniRef90_R7BTK9	K V G I I A S E D A E R M S F
UniRef90_R5LLW9	E L P I L T K G S V K E K T F
UniRef90_Q1KT23	Y L P L I L N Q S I D
UniRef90_R6D2G4	E I P L I A T E S V N R
UniRef90_R8DPF3	Q V D L V T K S E V E K I N
UniRef90_A6NUQ2	S T Y L V Y S H S V E R
UniRef90_F4XF76	T L A I L S S Q E V Q R
UniRef90_UPI00038189B1	E V P V H T T D E V E R S N W
UniRef90_U2D4X3	S K A L I A N N N V G K E N L
UniRef90_R9NL7	S V S I L A D V T I D K A
UniRef90_R6CFL4	T V E I C A A E D V
UniRef90_D4MZL3	S V P I Y A K Q S V K Q
UniRef90_A0A017RUY2	K V P L I A S T D
UniRef90_R6RYA4	T V D L V A A E T I D Q
UniRef90_R7EPD4	S T D V C A E Y D
UniRef90_S0FKU9	K V E L V A A S S V E K
UniRef90_UPI0002E7236B	K Y P L R A K D S F E S K S M
UniRef90_R6FSW6	E V N I V S E E C V N K M N Y
UniRef90_E9SGV1	E I D L I S T T K V E R
UniRef90_R7JRX8	S V A I L Y G A D V A R A G M
UniRef90_R5LI79	T V K L I T E S D L E
UniRef90_10GRC6	H V D M L A E N V N S G
UniRef90_V9B1G4	V E P L V V Q E D V E R A G F
UniRef90_UPI0002F29580	V A S L E T M E A
UniRef90_C9LYK2	R I P L L A E K S V G R G
UniRef90_UPI00047BD6DD	R V D L V T T E D V E R S G W
UniRef90_R6MFR1	E V D I I S E N D I
UniRef90_UPI00028A0E3A	S T E L V A L K E I K S K G F
UniRef90_R5EC86	I L P L Y A K E N
UniRef90_A0A037Z9L6	K G K I Y C D R E I K K S G F
UniRef90_F0HH75	T I P L T V S E P V E K N S F
UniRef90_A3DET4	K I D A V A S R D V E E K
UniRef90_R7BWW7	A I P V Y T K Q N I K R
UniRef90_R6LK53	S V P V Y A T E G V G E L T F
UniRef90_R7KA76	R Q K L V T I N S V E K K S F
UniRef90_A5N7M0	S A A L I A S R D V K I R G F
UniRef90_R5NYW0	E V I L Y A E R S V P K
UniRef90_R4KTT6	R V P L L A V Y P V D R
UniRef90_W6RWFO	K V D L Y C D R D I S K G S I
UniRef90_R5MS93	E E D V T I S Y D L E K C N L
UniRef90_C7H5Y7	E Y E V K A A A D A P L L T F
UniRef90_U2B731	Q L P I T T A A D V
UniRef90_R5EC91	C V D L V A E E N I E E
UniRef90_R5SJ41	S L P I V A A Q S I K K A
UniRef90_D3G146	Q V D V I T N E A I E E A G F
UniRef90_R7PDT9	R F P V Y A V Q G V E K M N L
UniRef90_A5Z6I1	K S D I V S V T N V E K A
UniRef90_D4LCY5	D V P L Y T V D A V A
UniRef90_R5J922	K V D V T V D K N I D K A G I
UniRef90_G5KC62	
UniRef90_UPI00018507D1	Q T N M I T D A G V E K A N W
UniRef90_U2F487	R V E I V A S Q G V P K K G F
UniRef90_R6ND02	S I R V L Y D T T I P K A T Y
UniRef90_C9RCN1	R V S L V A G K E V L E R P W
UniRef90_D4JUS3	T A P L Q T A E S
UniRef90_R6QH93	E P P L T A Q S E A P
UniRef90_S0JF82	E V P V Y A A K A A E K
UniRef90_S0J4P5	S V N I L F Q K G V K K A L F
UniRef90_D5D925	S T P V V T N E S V E K A G W
UniRef90_R5EGJ6	E V E L Y A M A D V R A T G
UniRef90_R7H4T6	R I P L V A A Q T V P A A S
UniRef90_F7Q1A6	E V E L T V T E D I E K A G I
UniRef90_F8DQN7	T Y S L Y S A N D V R R G N F
UniRef90_R6B6Y1	T Y D L V I H D E V K K A T F
UniRef90_R6M4X1	S V P I Y A A E K V D S M S M
UniRef90_R5W8X3	K V M I Y A D D S V D E I N I
UniRef90_W0EE72	S V P L V A E R E
UniRef90_R7HG48	Q V D L T V N E N V L K A N L
UniRef90_R5QV29	Q E E Y A T T K E I E K D T F
UniRef90_R6H6X2	S A D L K A A H N V D I S S F
UniRef90_E3H8W8	E G K I Y A A E S V G K E K F
UniRef90_R5CWS1	T V P L L A Q A D V
UniRef90_N1ZE12	T V E L L A D H S V
UniRef90_R7MJ10	E T E I I A K N D V D K T S M
UniRef90_I7KU90	S V P L I A N E D
UniRef90_R5TD81	T F P V Y L T E D V E K I T F
UniRef90_UPI00037A7AB3	T V N L L T V E D A E K A G W
UniRef90_R9LVD7	E L P L T A A Q P V E
UniRef90_B2TKI7	K L D L C A G
UniRef90_K1UE30	
UniRef90_C9RAU3	K I P V V A G N A I
UniRef90_R9MKA5	S I D I V T E E T V N

1 10 20 30 40

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UniRef90_R5QCE5	V V K G K E K E V K L E L K K N E I I P L K A K
UniRef90_R7MV18	W E S K T I A K K G Q A I G Q A H V I D G K S K Q V T A V A K S D F N I I Q K K
UniRef90_Q1WVM1	D A K V K Y G K Q S S V S A I G N D L S L W V P K
UniRef90_UPI00036CC775	Y Q Y R E V Y R E Q N L K P I P V E N G I S P E T G I G Q E K S L K L L M K E
UniRef90_G51FD0	E T R K I V D S E K F V K K V E T K S A S Q G F I E L V P K E N L E R
UniRef90_A8SIL4	D T L P K L K V K G G V E D T V V S L R Y D K E F R Y L D L N
UniRef90_R5QLB6	V T P D E V L P P V P V T L G V R G T V Q P V L T S E N T L L V E K
UniRef90_R5SEY3	A Q I P V I G G K T A S L F A R E T V P C T A T V P
UniRef90_S3JZZ4	
UniRef90_R7JRY5	
UniRef90_R6TPV1	E R V P L T G E N G V A G T V S V T G G L S E T V G Y H S N G A V S A D L V K
UniRef90_N1ZPB5	Y K K E I I A K E G Q E L K P T T V L Y S Q K E S V P A I L A D G F E G L F S Q
UniRef90_B8FQZ8	E T L N Y V Q A G E T I E F P A E N S E P I K A F A Q N P I Q I S I L K
UniRef90_R5R5Z3	Y S Y Q D I F Q K K E F E N I P V Q E G Q Y P G M E I G E Q A D F P L L L R K
UniRef90_R6PDR6	F G S C K L Y E Q K E K L P Q I P V E G G V L E K V P C A Y E K E F R Y L D T E
UniRef90_D4LSV0	
UniRef90_R6IN25	Y R L V T L S A D P K K I T Q I T V K N G V Q K I L N P A V P A K Q Q L L C A K
UniRef90_D0GN03	K K I H T M G E E I G E F K I K D S P K R K I K G V L A E N V Y
UniRef90_A7GVD6	F E K K K L L D K N N T I S V V K G K E D A V S I A P E K E I E V V T K K
UniRef90_R7GRY1	Q T L L D C E K E Q G E V S V E N S E D N A F V L V R P K E N C I L L W C
UniRef90_S0FG38	Y S N Q L I I D R N E I I K K V V V Q D A A D D Q L D L V T N G K V E A I L P N
UniRef90_UPI0002895165	F K M Q E V U M P A G Y T F K T I A V K D G Q K K E V V A I E A S K A I S F I A N K
UniRef90_R2S060	L K K I D V K D G K E T S V A L A L K N P V K V W V K N
UniRef90_F0Z5V6	G T A A V K N G T E T D V P L G A D R D W K L L L K T
UniRef90_Q894L6	Y E Y K K L H S K G E V V V A K A P K D K K N I D L V C K E D I I I P T E K
UniRef90_E6SK25	F Q P V D G G R R G Q V V V G R V A V H D G S R R A V A A R L D G D L S A L V P P
UniRef90_R7QZA5	I A E P D V R L E T V C Y C V K N G A D P S F Q L K P D M E L Q Q A L M E S
UniRef90_Q9KGN7	F T H T E V L P A G A E A Q T L P V S S G K E R E V S I S T S E P L H A V V R N K
UniRef90_E6LDK2	T I S V K V D G E Q L K V A V G L D N E V T V W V K K
UniRef90_E6U3N9	V R V T D G A R D T V V A V R C Y C D P A V S A A L R A
UniRef90_W4QYM1	F S H L E L V N A G E G S E S I A V A S G K E R E V A I S S V D S L S T V V K N
UniRef90_T0V8W0	W E Q V P I L S A G D Q L A T V A V K N G K E L T V P I A V K N D L S V W V P K
UniRef90_UPI0003B73D67	E S R A L V E K G A E V D S I E I E G G Q E E S I D V T A G E E L E L
UniRef90_C7RDP5	Y S C E K V L L D T N K S L D T I D E I S A K Q G Y I E L Y P K E N L S I I
UniRef90_UPI000468E884	Y V Y K E F A K A G D L L P E L P V R K G V K K E I V K V A L L G G P L H T V V H K
UniRef90_UPI000477D0A2	Y E A R T L V A K G K S Y S T A K I V I D V G K E K T V S S I A E K S L T V I E K K
UniRef90_R6SF12	I P V E K G Q S E I L G E G A K E D M Q M L L
UniRef90_R5GUY7	F D Q R S L Q Q P D L P K T L L V E N G Q L A E V S L C P K K E I R M L L S R
UniRef90_UPI00047824CF	F K Q K T L L K K G Q S Y S I P V T D G K S D K V S S V A A D D L K V V S K V
UniRef90_L7ELY7	Y S Y K K L C S V N D N I P K A A I N K K D N V K L S L K E D I V L P C
UniRef90_UPI00035E5523	Y E K K T I L K K G Q T V D K V S V R D G K V K T V K T I A A K D L T I I R P I
UniRef90_B1R1B6	Y S F V K L L Y D K G Q E V A Q Y D V T K N L T V P L L I N K T L E Y P V L K
UniRef90_R7L7I5	F D N Y K K L L E P E D V V K E I N V A D A T K D T L K V K S P E N A I T A I I D K
UniRef90_UPI00047B012E	F E N K V V E K D N N P I E V K V N L N K K G D K F F L A K S S G N L N L I V E K
UniRef90_N2BC65	Y E Q K D I T N Y D Y K P N A V P I E N G A G K D R L L K T K M Q L Q L T I R Q
UniRef90_UPI0003826543	F E T K Q V V A P K T T V E G T E T K K A K N I D V P V V T D Q G V S F V V P K
UniRef90_R7BBD5	N S K L K T V K V K N G V D K S I T P K C E L N K K L L L P K
UniRef90_E8K0L1	F A L Q T I V K Q G E S Y S K S P V Y D G K Q D T V T A V A K E D I K I V Q R L
UniRef90_R6UJ08	L Y P K G T K L L K T Y T M E N G K P S S V N L V T L K D L V Y V F E K
UniRef90_K2PHY4	D D L P S L P V Q D G K K N S I D L V A G K D F S A V V P N
UniRef90_G4HQ19	F E V K E V Q P A G A T V D K V Q V K K G K G K E A K L V I T D R A L T F V V P K
UniRef90_F4XBR4	Y H M E E A V K A G Q S L C S L P V S G S L V P F V S L L K A E E T L R W P V
UniRef90_C0D1Q4	Y Q M K D V Y E E Q R F S P V P V T G G L T D H V S S T T G R E L K L L L
UniRef90_Q185T0	F N M K K V I I D K D S F I G K Y I K G M K E L E V T L K A K D E L Y T I L K D
UniRef90_D4K348	Y E A A P L P K L E A Q P L Q I T V K G S A A G S V P L Y S A L P E T V L V E K
UniRef90_R5JF29	F K S I I Y K K S D I K G Q K K V R F A K P G T I K Y S L A N D Y V V T T S Q
UniRef90_G5JW91	Y E L T T L I H K G E S Y S K L K V T D G K K A V Y T A V A Q K D F S V V R N K
UniRef90_A4XKH0	F R K E E L F K Q N Q I I G K V M V D K V N K K W I D G Y I K S S F Y V L K N Q
UniRef90_F0GVL2	Y S C E K V L L D T N R S V E S V E E V S A K Q G Y I D L Y P A E D L T I I S K
UniRef90_R6QMJ8	T Q E L P F L L K E
UniRef90_R6ZIN7	F S V C S I Y Q D A E E I K H A S V E A G V K D E V S I K K S E D F Y M F L E S
UniRef90_R6K984	F N N Y D L I S K G L G K V N V Y K G D K L T E T L T T Q K E P K F V V P K
UniRef90_W7C3P7	K P L P N I A V E E G G V K E E L A C D Y E G T F R Y L D T K
UniRef90_R6RBY5	E N I K L F P M H E E L L T Y T F L I K A K K K D T P I V T K S E I N L V V D K
UniRef90_R7DHN6	F K V V K L L P G E I G Y V K V K N G K S D W V K V G T T Y Q R Y W V D L
UniRef90_E4S7N1	Y N E K K I I A S G T K F Q I E I P N G T K K K I N V G V S E G Y T T L I S E
UniRef90_D4M639	Y Q F R K L T D K N I A I A L A K V P I F S G D K E Y A D L Y P D K S F T D I L N K
UniRef90_A5Z6H8	E F K T A P V H Q G K E L T V P V Q T E N A V T V W L H S
UniRef90_C6JLA4	F E T I K L I N K N D V L D T Y K I N D E I S I P L L A K D D L Y Y T K S K
UniRef90_S0NGX8	F T L R K I V V Q Q G D A Y S K A P V Q D G K E D T V T A V A P E D I Y I I E R V
UniRef90_R9C1F5	F E K Q K L L V N K N T I S V V K G K E D Q V T V A V A P E K E I T V I A K K
UniRef90_UPI0001DD0274	D V A V V G G V S D S V K C K V G H A S A V L L N
UniRef90_UPI00037EDA33	F K C A T I V D K E K Y T D T K K V L F T K Q H E L I Y E P K N S Y K I F L E K
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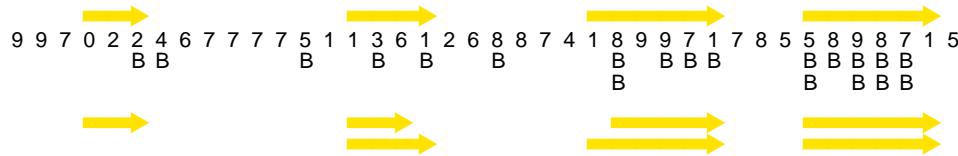
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E V E I I Y T D R E I
T V D I V A Q N D Y K Q [L S [L
E V P V A V D T G I E K A G W
E V N C L S F Q E V D R Q D F
E K E V I N N E
Q V T M V A G Q E V E K S [I F
S A D A Q T T T E V K K A N [L
R I P V I Y S E S I
S L Q F T A E E N I E K
E G N L T V K K S T K K [L S Y
T C P V K I K Q S V K K I D F
T V N L V T S K S I Q K A N
S I D L L A T Q D
T V P V R T T E K I D K
Q V P M I L S E Q
K V P V V Y G A T I E Q
R I P V L Y A E S V A R [L C F
T L K L V I A A S D
Q A Q L E T V E K V E K A N W
T V D L F P D R E I
Q V I K A I S T Q T I Q K A N
S R P V Y T A K S V K
K V I N L L S G
K L V M V T N Q S V K K A N F
S Y N L Y
S Y T V
T E D I L T A E G K K K I D F
T G D L L I N K D A K K [L S [L
S Y P V Y P A A S V G K V T F
R R D I T A A E N I
R L P V V I Q R S V G K I D F
R V G L W I T R P I S A K P W
S T P V Y A
T I N L V I A K N D
T L N L S S D S D
K V D V C T D R D V K S P G [L
R A P L K S I E D C L K A
E T D I Y A E K E I E K G T I
Q T D L V T V T G V E R N A F
S L P I T A A N T I K E K N Y
K K D V F P Q K S I E K S S I
E Y E V V R A A V D A A K [L T L
H F P L T A K T D V E R A N
K V K I I T S D R N I R K S G I
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E I P L I V K S D V K R [L S F
  
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8 5 1 4 1 0 3 5 5 6 5 6 8 9 9
 B B B B B B B