

QUERY	1	10	20	30	40
UniRef90_B4WW98	M	I	G Y A R	V S S L	D Q N
UniRef90_A0A017HVD8	M	K I	G Y A R	V S T A D Q N	L E R Q
UniRef90_A8QYU6	M	L I	G Y A R	V S T D D Q N	L D L Q I
UniRef90_UP100035FC6C0	M	L V	G Y A R	V S T D D Q S	L E L Q T
UniRef90_B9J694	M	K I	A Y A R	V S T L D D Q N	L N R Q I
UniRef90_J7K1R0	M	I L	G Y A R	V S T V D D Q N	L D G Q H
UniRef90_S5SPA1	M	K F	G Y A R	V S T D D Q N	L D L Q R
UniRef90_U4M4A7	M	K I	G Y A R	V S T D D Q N	L D L Q V
UniRef90_UP100047A9227	M	D I	G Y A R	V S T E E Q N	L D L Q R Q
UniRef90_UP10003489F1F	M	L L	G Y A R	V S T N D D Q N	L D L Q I
UniRef90_UP10003138274	M	I I	G Y A R	V S T D D Q N	L D L Q D
UniRef90_A3T359	M	I I	G Y A R	V S T D D Q K	L E A Q T
UniRef90_U9VIR9	M	L I	G Y V R	V S T N D D Q N	T A L L Q R N A
UniRef90_UP100028A35BE	M	L I	G Y A R	V S T T D D Q D	L R Q R A A
UniRef90_U7DD97	M	K I	G Y A R	V S T T D D Q N	A D L Q I
UniRef90_B6ZQK5	M	L I	G Y I R	V S T N D D Q N	T G L Q R N A
UniRef90_D3RB81	M	L I	G Y A R	V S T G D Q N	L D L Q K N A
UniRef90_N1KM34	M	L I	G Y I R	V S T N D D Q N	T E L L Q R H
UniRef90_UP1000225AA0B	M	Y I	G Y A R	V S T Q D Q N	L D L Q I A A L
UniRef90_K7VYV9	M	N I	G Y A R	V S T Q D Q N	T G L Q K D S
UniRef90_E6K216	M	R I	G Y A R	V S T S D Q N	I V L Q T D A
UniRef90_F5SXX4	M	L V	G Y A R	V S T T D D Q N	N L L Q R D A
UniRef90_R6QH69	R	I A Y I R	V S T T D D Q N	T E S Q K E L	
UniRef90_UP10002E40566	M	K Y G Y A R	V S T S T A G Q D	L Q T Q I D T	
UniRef90_A1TPT3	M	L I	G Y A R	V S T Q D Q D	T A L Q I D A
UniRef90_A0A011R5C3	M	R I	G Y A R	V S T A D Q S	L D L Q I D A
UniRef90_W7DMP8	M	I I	G Y A R	V S T T E Q D T	A L L Q I K A
UniRef90_Q2W212	M	F V	G Y A R	V S T Q D Q S	P Q L Q L
UniRef90_UP10002E8F8A8	M	L I	G Y A R	V S T G D Q D	L R Q R N E
UniRef90_A9BV72	M	L V	G Y A R	V S T Q D Q D	T A L Q I E A M
UniRef90_K8ETK0	M	I I	G Y A R	V S T S K D E Q	H L D R Q L D Q
UniRef90_K9V8U9	M	L I	G Y A R	V S T E D Q D	L D L Q M D A
UniRef90_B4WUS1	M	K V	G Y A R	V S T F E Q D	L D L Q L D A
UniRef90_S0KHH5	M	R V	A Y A R	V S T K E Q Q N	L Q R Q I A E L
UniRef90_B9JHH5	M	K I	G Y A R	V S T E D Q K M	D L Q L N A A L
UniRef90_F8L2X0	M	K F	G Y A R	V S T E D Q K M	D L Q I D E L
UniRef90_D7DSS0	M	I I	G Y A R	V S T K D Q N L	E R Q V Q D
UniRef90_U7N0P8	K I	G Y A R	V S S S K D Q N L	D R Q L A A L	
UniRef90_M5JDX7	M	K V	G Y A R	V S T S T G I Q N L	D L Q L D A L K
UniRef90_Q3L8Y8	M	L I	G Y A R	V S T T D D Q N	T P E L L Q L
UniRef90_M5DHN1	M	L I	G Y A R	V S T T D D Q N	L D L Q I D A L
UniRef90_M7N6F2	M	I I	G Y A R	V S T T V D Q N A Q L	Q M D A L K Q A G C
UniRef90_UP10004049C97	K Y	G Y A R	V S S I I Q G N L	T T A Q I N Q L	
UniRef90_F7UH03	M	K I	G Y A R	V S T T D D Q N L	D M Q R D A L A R A G C
UniRef90_UP10004701C4E	M	L I	G Y A R	V S T E D Q T L S	V Q I K N L K E A G C
UniRef90_J4T4T5	I I	G Y A R	V S T T G D Q D T A L Q I	L D Q L D A L R K A G C	
UniRef90_N8YFL7	I I	G Y A R	V S T T D D Q D L T N Q R T E L	L Q G A G C T R I F A E K R S G A	
UniRef90_G8PA22	M	K I	G Y A R	V S T T F E Q K L E S Q I	E V K E A G A E E V F Q E E K F T G T T
UniRef90_A0A024Q9A6	M	K V	G Y A R	V S T T K D Q S L E L Q D E A L	L Q K A G A E R I Y S E K E S G G K W
UniRef90_K0CTQ8	M	K I	G Y A R	V S S S E L Q S E D A Q L	D A L A N S G C E R I Y H E K I S G K G
UniRef90_E0MN91	L I	G Y A R	V S T T A E Q D V A L Q I	L Q L D A L N A A G V L R T F E D R G V S G T K	
UniRef90_N1M2W2	L L	G Y A R	V S T T L E Q N P D A Q V	D A L S A A G C S R V W D K A S G A T	
UniRef90_I0BB98	M I	G Y A R	I S T T A D Q T L D L Q L	D A L N K Y G V K V K V Q E K A S G A K	
UniRef90_X1NFF4	M N I	G Y A R	I S T H D Q N L G L Q E D A L	D A L K D A D C K E I F R D V A S G A	
UniRef90_G7ZIT2	L I	G Y A R	V S T T D D Q T T A A Q M D A L	R A A G C T T I V F E E K I S G A	
UniRef90_UP10003B5249A	M K	G Y A R	V S T T K A Q K M D L Q H	R R A G G C E R V F D D H G V S G A	
UniRef90_K22IF6	M K F	G Y A R	V S T T K T R G Q D L E G Q I	Q N E G C C E E I V Y Q E F V T G T K R	
UniRef90_UP1000262C75B	M	L I	G Y M R	V S T T G E Q N L D L Q R D A	D R A G G C D R V F D D V C S G R A T
UniRef90_T4VBT2	M	L I	G Y C R	V S T T N E Q N L D R Q I E S	L K K Y G C E K I V Y C D K A T G K N F
UniRef90_F6F2R0	M	L V	G Y A R	V S S S V Q G S L D I Q L	D L K D A G G C E V F S E K K T G T A A
UniRef90_F9S8F4	M	I I	G Y A R	V S T T S G Q S L E A Q L	K V C D K V F K E K E S G A K
UniRef90_B0TA24	M	L I	G Y A R	V S K T D D Q S T A A Q M R A	L K G A G C D R L F E E A A S G G R W
UniRef90_UP1000416F6A4	M	I I	G Y A R	V S T T T G Q D L D V Q L	M K L K A A G V D K T Y S E K K S G L D
UniRef90_A6VK84	M	F	G Y A R	V S T T Q D Q N V D R Q I D E	K A A G V D K T Y S E K K S G L D
UniRef90_W3V229	M	K I	G Y I R	V S T T N D D Q N S D L L Q R N A	L K A A G C Q K I F Y E K I S G R T
UniRef90_E6PJF0	M	L I	G Y A R	V S T T Q D Q N L E L Q R L	M S I N C E H D K I S G R T
UniRef90_V1F76	I I	G Y I R	V S T T I D D Q N I D L Q R N A	L A T S A N C C D R I F E D R I S G K I	
UniRef90_UP100046F4524	R I	G Y A R	V S T T E D Q H D L Q R D A	Q L A G G C R V I Y E D S A S G K N	
UniRef90_UP100037D20EE	L V	G Y A R	V S T T T P E Q H F E I Q E E R	L K Q A G G C K I F I F S E K C S G I S Q	
UniRef90_M9W3J6	M	I F	G Y A R	V S T T K D Q N L E R Q L A V	M I P E C C D K V I T E K E S G K S T
UniRef90_A0A031WMJ8	K I	G Y A R	V S T T K D D Q N L D N Q I D T	L K Y G C E K V F S E K I S G K A	
UniRef90_UP10004727801	M	K Y	G Y A R	V S T T S D Q D T I Q E T A	L Q K A G G C E I Y R G E K V S S G T S R
UniRef90_R6N9Q2	M	K V	G Y V R	V S T T T A E Q N P A R Q M E	L M K S L G V E K I Y Q E K R S G K N
UniRef90_B7J7PT	M	I I	G Y A R	V S T T D D Q N L D R Q I H S	L T E Y G C E K V I Q E K F T G T I R
UniRef90_UP1000376F66B	M	K Y	G Y A R	V S T T V H Q D L E G Q I Q K	M N E E G C E K I Y K D K F T G T K
UniRef90_I3BT18	L V	G Y A R	V S T T L D D Q D H T T Q I D R	L K V A G A C K K I F S E K K S G T S K	
UniRef90_F7MSF5	M	F G Y A R	V S T T T H Q N L D L Q I D E	M N K Y N C D E I I T D K I S G A K	
UniRef90_Q9WW47	M	K Y G Y A R	V S T T P D Q K L E N Q I D E	L K N S G A E I I Y Q E K F T G T T	
UniRef90_UP10003725D6E	K V	G Y A R	V S T T N D Q N I D L Q M V A	R L V C S R I F E D H G V S G S T	
UniRef90_B8EKZ3	M	Y G Y A R	V S T T T D D Q D A L Q K K A	L R A A G C A I I R A E K M T G T G T K L	
UniRef90_A8LU89	M N L	G Y A R	V S T T D D Q A T A A Q L D A	R A V G C E R V F F E E R A S G G R	
UniRef90_A7DV79	K I L	G Y A R	V S T T S T G Q S L D V Q L	M H V G C Q R I Y Q E K R S G R T	
UniRef90_P06693	M I F	G Y A R	V S T T D D Q N L S L Q I D A	L T H Y G I D K L F Q E K V T G A	
UniRef90_Q938U1	K V	G Y A R	V S T T S R D Q N L D R Q I A Q	M N E E G C E K I Y T D K R S G G S	
UniRef90_B5GMK0	L I	G Y A R	V S T T S T G G Q K L D R Q I D A	K A E K V F T Y T D K K S A K D	
UniRef90_UP10004112F42	M I V	G Y A R	V S T T L E Q N E R L Q T D A	L T A T G C C R I F T D H A S G A K	
UniRef90_H7F9M3	M I I	A Y A R	V S T T T T Q N L D S Q L N A	N H Y G C D I Y T E K G S G R N P	
UniRef90_W8HB76	M	G Y A R	V S T T A D Q D P T L Q T D A	T A A G G C F K I W T D V A S G A K	
UniRef90_A6NXH6	M K I G Y I R	V S T T Q E Q N T V R Q	M E S L G V D E V Y I D R M S G R N		
UniRef90_B9J6K8	M I F G Y A R	V S T T S T K Q N L D M Q L D E	M N R Y G C E E I V T E K E S G A K		
UniRef90_E2CSM5	M M V G Y A R	V S T T D G Q D L E P Q L Q A	K R A G G C K R I Y E E Q A S G G R W		

QUERY	50	60	70	80
UniRef90_B4WW98	E N R P I L Q K A L N F V E M G D R F I V E S I D R L G R N Y N E V I H T V N Y			
UniRef90_A0A017HVD8	A E R P G L D K A L D H I R K K D T L V I W K L D R L G R S L R D L L S I V E G			
UniRef90_A8QYU6	T K R P A L E A A L A Y L R P E D Q L V V W K V D R L G R S L L R E M L D T A H R			
UniRef90_UP100035FC6C0	M I R P G L E A A A L E F A R E G D V F V V W R L D R L G R S L V H I E M I A L			
UniRef90_B9J694	L S R P G L D Q A L R D L L Q S G D K L V V W R L D R L G R S L V H I A L L E R			
UniRef90_J7K1R0	H N R R E A F Q E A L Q F F V R S G D T F M V E A I D R L G R N Y D E I I E T V N Y			
UniRef90_S5SPA1	R A R P E L D R M L K E L L R S G D V V V V T K Y D R L A R S L K D L L E I V D L			
UniRef90_U4M4A7	Y Q R P G L R R A L R H V G R G D M L V V W R L D R L G R S L V D L I E I V N R			
UniRef90_UP100047A9227	A A R P G L A E A L A F A R A G D V L V V W R L D R L G R S L K E L V A L V D Q			
UniRef90_UP10003489F1F	I E R P G L A D A L A A A H A G D V L T V W K L D R L G R S L P H L V E T I N G			
UniRef90_UP10003138274	A N R P G L D E M L K N A R E D D V I V I W K L D R L G R S L K H L V E L L V T H			
UniRef90_A3T359	F S R P G L D Q M L D H I L R Q G D L V V V V T K Y D R L A R S L R D L L D I V E S E			
UniRef90_U9VIR9	R S R P Q L D Q M L D H I L R Q G D L V V V V T K Y D R L A R S L R D L L D I V E S E			
UniRef90_UP100028A35BE	S D R P G L K R V L R T L S E G D T L V V V W K L D R L G R S S M R H L V G L V E E K			
UniRef90_U7DD97	R D R P E L L A R M L D Q I R E D D V V V V T R L D R L A R S T K D L L D I A E K			
UniRef90_B6ZQK5	S A R P E L L D K L V H V R A G D A V V V I W K L D R L G R S L K H L V E L V G E			
UniRef90_D3RB81	T Q R P G L K R A L K K L K P G D T L M V W K L D R L G R S M R H L V A L T D E			
UniRef90_N1KM34	A R R P G L K R A L R R L R A G D V L V V W K L D R L G R S V R H L I A L I E E			
UniRef90_UP1000225AA0B	S E R P G L K R A M R A M S E G D T L V V V W K L D R L G R S V R H L I A L I E E			
UniRef90_K7VYV9	A D R P G L Q N A L D Q L R E G D T F V V W K L D R L G R S V K G L I D F V S V			
UniRef90_E6K216	K D R P G L K S A I E F F S R S R G D T I V V W R L D R L G R N M E D L I S I V N S			
UniRef90_F5SXX4	S S R P E L L D R M I A A A L R E G D A V V V W K L D R L G R S V Q D L I V T L V D G			
UniRef90_R6QH69	A E R P G L H Q A L Q Y A R A G D T I V V W R L D R L S R S L K D L L I E M V T L			
UniRef90_UP10002E40566	S D R L E L Q N M L V Y V R E G D T I Y V K D L S R A R N T K D L L E I V E K			
UniRef90_A1TPT3	K E R P A F G E L I Q E L K E G D T I V V T K D L D R F A R S T A D A I A T I K E			
UniRef90_A0A011R5C3	R G R Q E L A R C L A S L V K G D V L V V Y K I D R I A R S L F D L L E I L R Q			
UniRef90_W7DMP8	T N R P G L L A A A L S H L R P D D V L V I W K L D R L G R T V K G L V D F V G D D			
UniRef90_Q2W212	T D R P E L L K A A L D F A R N G D T V V V W K L D R L A R S T R Q L I E T V D M			
UniRef90_UP10002E8F8A8	A D R P E L L K A A L D F A R N G D T V V V W K L D R L A R S T R Q L I E T V D M			
UniRef90_A9BV72	V K R P E L T R M L D H L R T G D V V T V T R L D R L A R S T R Q L I D I A E Q			
UniRef90_K8ETK0	D R P V L W E C L G S I L R S G D Q F V F Y K I D R V A R S L S D L L K I L L D R			
UniRef90_K9V8U9	K S R P G I E E L L K I R T N D T V V V E S I S R L G R N T L D I L T L L Q H			
UniRef90_B4WUS1	A A R P G L L L A F E V A R T G D V L V V W R L D R L G R S L K D L L E T M E T			
UniRef90_S0KHH5	A H R P E W N N C L D H L R E G D V L V I W K L D R A S R S T K H L I E L A E D			
UniRef90_B9JHH5	E N R I V F Q E A L Q F I Q A K D I F I V E A I D R L G R N Y N E I I E T V H F			
UniRef90_F8L2X0	F E R R P G L D G V M K V L R K G D T L V V W R L D R L G R S L V R L I V Q F V D E E			
UniRef90_D7DSS0	E R P G L A L K L K E Q L R P K E D V V V W R L D R L G R S L K H L I D W F I E			
UniRef90_U7NOP8	R N R P E F T K M F D R L L S N E D I I I V T E L T R I S R S T K D L V E I V E N			
UniRef90_M5JDX7	T Q R P G L D G A L N Y V V R A G D Q I I V V I S M D R L A R S L I D L H R L V D E			
UniRef90_Q3L8Y8	K R Q G L E D A L R F V R T G D T L V V W R L D R L G R N M Q H L I K I V N D S			
UniRef90_M5DHN1	T D R P Q L A A V V M D A L F R P G D T L I V W R I I D R L G R S L S H L I D T V E S			
UniRef90_M7N6F2	A E R P G L L A K A L E M I L R E G D T L V V W R L D R L G R S V K S L V D L V G E D			
UniRef90_UP10004049C97	A S R P E L L D R M L D H R P G Q D E V V V W R L D R L G R N T R N L L A L I E D D			
UniRef90_F7UH03	E N R E Q F N L L L D I I E E G D T I V V T K L D R F A R S T K D A L N T I E V			
UniRef90_UP10004701C4E	S K R P E L L E A A A L A Y L R P E D V L V V W K L D R L G R S L V E M M R T I D K			
UniRef90_J4T4T5	R K R P E L L Q K L L K K I V K K G D I L V V H R L D R L A R S T Q H L I E I T D Y			
UniRef90_N8YFL7	D R L L G L A E A I I R Y V H D G D T L T V W K L D R L G R S S M K H L I E I I T E Q			
UniRef90_G8PA22	A A R P E L L E R M L D H I L R A G D T V T V T R L D R L A R N T S D L L N I A A Q S			
UniRef90_A0A024Q9A6	V E R P Q F N L V F K K L K D G D T L I V T K L D R L A R N T R E V L E I V V Q S			
UniRef90_K0CTQ8	D R V E L L Q R T L E L M I L R P G D T L I V Y K I D R L G R S L S D L I H L S A G			
UniRef90_E0MN91	V N R P E L L T R L L D S L L R T G D T V V I V Q R L D R L G R S L S D L I H L S A G			
UniRef90_N1M2W2	T E R R P G L M K T L A F I L R E G D T L V V W K L D R L G R S M T H L L Q T V A G Q			
UniRef90_I0BB98	T S R P E L L S D L F S H L R A G D T L V V W R L D R L G R S L P H L L E T V Q Q			
UniRef90_X1NFF4	D N R E Q L L Q I A L D I L G E G D T L V V Y K I D R L A R S T V K I L I Q V L D E			
UniRef90_G7ZIT2	T E R R P G L E E A L A Y L R E N D T L V V W K L D R L G R S I I Q H L I Q T I K S			
UniRef90_UP10003B5249A	T R R P E L L A R T L L A R L G R G D T L V I W K L D R L G R S L A H L L E V I E D E			
UniRef90_K22IF6	A R R P G L D Q A L Y C L R A G D V V I Y K I D R L G R S S V E H L A H L L E V I E D E			
UniRef90_UP1000262C75B	E K R K E F N E L I N R L S E G D T L V V T K L D R F A R S A N D A T S I I E D D			
UniRef90_T4VBT2	E R A G L D K A L D I M R D G D T L V V W K L D R I G R S L P H V V G L V G D			
UniRef90_F6F2R0	N R P E Y I K L K D A I R S G D T L V V H E F D R L G R N K R L T L K E I Q Y			
UniRef90_F9S8F4	D G R Q A L Q D A L D F C R E G D T L V V T R L D R L A R S V D L H N I V A K			
UniRef90_B0TA24	A E R P Q L T T M L D Y V R P D G D T V T V T K L D C R L A R N T K H L L E I V E Y			
UniRef90_UP1000416F6A4	A R R P Q L H R M L D Q L R P D D I V V V W K L D R L S R S L K D M L H I L V E K			
UniRef90_A6VK84	D E R K E L L A A A L E Y Y A R E G D V F V V T K V D R L A R S S A A H L H Q I V V R D M			
UniRef90_W3V229	M E R P E F L R M L D Q V R S G D L I I I T E L T R I S R S T K D L L N V V A L I			
UniRef90_E6PJF0	A D R P Q L T T M L D Y V R P D G D T V T V T K L D C R L A R N T K H L L E I V E Y			
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UniRef90_A5FU69	M I Y G Y A R	V S T D G Q S S V A Q V M Q L	K A G G C G K V F Q E T A S G A R T		
UniRef90_I6W239	L I I G Y A R	V S T A E Q D T A L Q T D A L	R K A G C E R V F E D T A S G A K		
UniRef90_A0A021XB92	V I I G Y A R	V S T S D Q S S L T Q I D A L	G A A G C V R I F E E K A S G A K R		
UniRef90_N0B3X9	M K Y G Y A R	V S T T W S Q D L T A Q I T A L	T K E G C D S I Y D E K F T G T K		
UniRef90_X8I471	I Y G Y A R	V S T E E Q S S L E R Q K I E L	E K Y Q V D F I I A E E K A S G K N F		
UniRef90_D4YGE3	I L Y G Y A R	V S T Q H Q D L N R Q I D L L	A E Q N C C N E I L T E K M T G T K		
UniRef90_Q937Z7	L L I G Y A R	V S T S D Q S S L T Q I D A L	R A A G C E R V W T D V A S G A R		
UniRef90_G2JBU2	M H I G Y A R	V S T S M Q E Q D A Q V I D A L	R A V G C K R I F Q E K A S G G C		
UniRef90_I7EK82	K I I G Y A R	V S T D T Q T H D Q G I I A A L	K A A G C D K I F T E V A S G A R K		
UniRef90_U2QBU8	M R Y G Y A R	V S T R E Q D E A R Q I K A L	K N K G V Q E I I I E K A S G G K N F		
UniRef90_K7RWE5	G Y A R	V S T A D Q T P D A Q V I D A L	R S A G A D P I Y T D H A S G G T		
UniRef90_UP10004685FB1	M K I I G Y A R	V S T T D E Q N I S L Q L D H A L	E K V P C D I I L T D K A S G A D D		
UniRef90_E3GIE8	M K Y G Y I R	V S T K E Q N E A R Q F E A M	K R A I L K T K Q L L M D K Q S G A D		
UniRef90_F9Z701	I I I G Y A R	V S T R D Q N S D M Q L D V	Q R Q D C V Q I F C E K I S G V		
UniRef90_UP1000363EBB7	K I A Y I Y R	V S S E G Q N T A R Q K K A L	K E A G C T I G Y E E K V S G A T T		
UniRef90_W1Q1L1	K Y G Y V R	V S T A Q Q K T D I Q Y E E L	R H Y G V C Q I F V D K T S G T T T		
UniRef90_I4F0P5	V G Y A R	V S T F E Q D P A L Q H D A L	T A A G A V R V F T D Y A S G A T		
UniRef90_W7ZWX9	M K Y G Y A R	V S S T V A Q D L S V V Q I E E	L K K E G C E V I F Q E K Y T G T K		
UniRef90_E8WSW4	L I I G Y A R	V S S T D D Q K L E V Q L D Q	L Q R L G V D R V Y Q E K A S G A D S		
UniRef90_UP100047DE3CF	M K I I G Y S R C	V S S T D D Q N T D H Q V D A L	R R A D V D K N I H I E H S G G A K		
UniRef90_Y1AI40	I V G Y A R	V S S T T G Q S S D T Q L E A L	C E K V F R E K V S G K N F		
UniRef90_R5IXD7	I F G Y A R	V S S S K E Q N E E R Q I L V A F	K G Y G I D E R D I Y V D K Q S G K		
UniRef90_F2ZG98	V L A Y V R	V S T E D Q S T D A Q R H S	A E L H N V E H W Y A D E A T S G M		
UniRef90_K9SP66	L F G Y A R	V S T S T Q S S L D I Q L K A L	K N A G V K P S R F S D Q A S G R		
UniRef90_D2B505	I I A Y A R	V S S T R D Q N P Q L Q L D A L	T E D G Y D V L F Q E K I S S R L		
UniRef90_Q0SBW7	M L I I G Y A R	V S S S A D Q N T D H Q V D A L	R R A D V D K N I H I E H S G G A K		
UniRef90_LOGTZ9	I I G Y A R	V S T T Q G Q D L D Q Q R S S L	A Q A G C Q R I F E E K I S S G S K		
UniRef90_B9NRJ4	M L I I G Y A R	T S T L D Q K Q A E T Q L E E L	A V Q G C E K V F Q V S S V D V		
UniRef90_UP100035B5AB0D	F G Y A R	V S T V D Q N L D T Q I D L	T K A G G C D Q I F Q D K I T G M S		
UniRef90_C7JI66	L I I G Y A R	V S T D D Q G T D A Q L N E L	R D A G C T M I F E K H A S G A D R		
UniRef90_J8SQ05	L I I G Y A R	V S T T D E Q D T F A Q I G E L	R R A G C A A I F E D R A S G A S		
UniRef90_C0C0G2	F G Y I R	V S T K D Q N E A R Q L A A L	A E Y H I P R S I D K Q S G K D		
UniRef90_A5VG09	R I I G Y A R	V S T T D Q D L D I Q L I G R L	K N A G C E I I R S E T G S G A S R		
UniRef90_R3WN89	V I I G Y M R	V S T T H Y Q Q K F D S Q Q Q A L	K D Y G V D K I F K E Y E S G R K S		
UniRef90_B1MA00	R F G Y A R	V S S T D D Q N P D S Q T D A L	R A A G C Q V I R S E K K M S G K S A		
UniRef90_UP10004779D77	V G Y A R	V S T R D Q N P D S Q T D A L	V A A G C E K I F V D Q A S G V L A		
UniRef90_UP10003F901DD	Y A Y I L R	V S S S L D Q N E A R Q L E A I	Q E L A I P Q K N I Y M D K Q S G K		
UniRef90_UP100038085F1	M L I I G Y A R	V S R E D Q D T T V Q V Q A L	T Q A G A E R I Y E E Q A T G S R W		
UniRef90_R9LXT1	M K V G Y V R	I S T K E Q N T A R Q D L L	M Q E L G V E R V F T D K V S G K N		
UniRef90_UP1000255917A	I I G Y A R	V S T T G Q S S L A V Q E E K L	C D K V F K E K R S G L D		
UniRef90_UP1000225AC71	M L I I G Y M R	V S S S D R Q T T D L Q R D A L	M Q A G V D P R H I F E D K A S G A K		
UniRef90_R2SCS7	M K Y G Y T R	V S T K S Q E L N R Q L D I L L	E K Y N C D E I L T E K I N G T K		
UniRef90_F7KV27	V Y I G Y V R	V S T K E Q N E D R Q I I A L	K A F P K E K N I Y M D K L S G K N		
UniRef90_I7DNW3	K I I G Y V R	V S S D K D Q T E A L Q V D A L	Q A E G C R K I F T D H G V S G G K		
UniRef90_UP10003605077	M L V G Y M R	V S S S D R Q N T D L Q R D A L	L A A G V D V R H L F E D R A S G A K		
UniRef90_R8WNA8	M I F G Y V R	V S T T A E Q N L G G Q T D A L	Q R Y P D A R I D E G V S G I T P V		
UniRef90_UP10004672E95	I Y G Y V R	V S T T L D Q N M E R Q L V E L	N K W G V E K N I Y C D R L S G K D		
UniRef90_UP10004027324	V L G Y A R	V S T N D Q D L E A Q R R R L	R E E A G A I R V F E D V I S G K S		
UniRef90_A3PYR7	R I I G Y T R	V S T T V T Q T L D Q K Q E A L	Q T A G V S K V F S D V M S G A R D		
UniRef90_B4U3A1	M K Y G Y I R	V S T K E Q N I D R Q L S A L	T K E V G D M K Q I Y I D K A S G K D		
UniRef90_G2I7G2	M K I I G Y A R	T S T V D Q D L E A Q V R R D L	Q A H G C E Q V F S E Q V S A T Q A D		
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UniRef90_Q0RYR7	M Y I G Y A R	V S T D Q Q D L T A Q Q H A L	L L K V S P E R I Y D H G L T G T I		
UniRef90_H2ERR9	M L I I G Y A R	V S T S K E Q S L D I Q I K Q L	K E L G C E K I F Q E N A S G K D S		
UniRef90_G2FRF0	G Y A R	V S S T V D Q N L D R Q L L S	L Q E A G C D F I Y Q E K I T G T K		
UniRef90_H1X8V1	M I Y G Y A R	V S S S Q Q D F D N G Q V A A L	M K F G A T K I Y S E K F T G T T		
UniRef90_UP100035C5063	K I I G Y A R	V S T T S T K H Q N L T S Q L D M	L K E A G C I K I F S E K I S G R K S		
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UniRef90_B6RAG0	M Q F G Y A R	I S T M E Q N E A R Q L V E Q L	R E Y G I K A D A V D K A S G V G		
UniRef90_A1A66	V I I G Y A R	V S T Q E Q D L A V Q L V E Q L	L R A A G V D K V F Y Q E K A S G A D		
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 T D R P E L K K A L K K L K A G D T F V I Y K L D R L S R G T K H L Q L M E E  
 T N R P G L M D L M A F V R E G D M V I V S R L D R F A R S L A D L F Q L L Q A  
 R A R P A L A K A F R Y M R A G D T L I V W K L D R L A R S L H D L L D I A D E  
 V K R P G F S E L F K F V R K G D T L I V P A V D R L G R D T I D V L T T V E T  
 A D R P A L D Y C L R A L S A G D T L V V W R L D R L G R S L P D L V R I V G E  
 Q R Q G L Q Q L L D I V R E G D T V I V E S I S R L G R K T L D I L S T I E E  
 K R I E L Q K A L K A V E K G D T F V I Y K L D R L S R G T K H L L T L M E D  
 A D R P Q L A A A L D Y V L R E G D T L V V W K L D R L A R S I K Q L I S T V E R  
 V D R P K F N E L L D R V S N G D T I V T Q L D R F A R N T K E A L E I I I Q E E  
 Q G R D E L K N N L L D F V R E G D V L V V T R V D R L A R S V R D L Q N I V Y E E  
 D R E E L M N A L R M M L R S G D K F V V Y K L D R L A R S T K R L I E I A D M  
 V I K P G L E D A L R Y Y L R A G D T L C I W R L D R L S R S L H D L L A L A E R  
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 F N R P P N Y R K L V K N N E G D C I D R L G R N Y D E I I D Q W R Y  
 T A R P G L D K K M L Q Y L R P G D T L V V W K V D R L G R S L T H L I Q L V E D  
 A D R K E L N T L L E T I K A G D T L V V T K A D R I A R S L S Q L E K I V T E  
 N R L E L N K M L D Y I R E G D T L Y I E S I S R L A R S T R D L L S I V N I  
 E G R T E L E T I L E F I V Q A G D T L V V A K L D R L G R S T R D V L N L I V H  
 E G R T E L E T I L E F I V Q A G D T L V V A K L D R L G R D T A D M I N L I N E E  
 D R A G G L I D A L A F A R E G D T L V V W K L D R L G R S S M K G L V D L A A E  
 D G R T E L E V L L E C V R E G D V V V V T R I D R L A R S V K D L Q D I V V L E  
 N D R L K L Q E M L E F I R E G D V I V V E S I S R L A R N T K D L L E I V E K  
 S D R P E L N R L K D K L R P G D I V V E S F S R L G R S T K D L L V T Y E  
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 A R A R W Q D C L E H L Q P G N I V L V T D L L T R L G R S T A D L S D I V T V  
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 D R V Q L R K A I D R L E A G D T L V V T R L L D R L G R S T R D L L N T L A T  
 A D R P G L A D A L A Y L R D G D V L A V W R L L D R L G R S S M P H L I E T I G A R E  
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 S N R P E L N R L L K D K L R P G D T V V V E S F S R S L G R S T R D L L I D L V T Y  
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 W D R P E L H R L L E Q L R K G D V V V W K L L D R L G R S S L P H L L T L E K  
 D R P V L A Q T L G Y R P H S D D V L T V Y K L L D R R V G R S S L P H L I Q I M D R  
 I G R Q K W Q K L L M S K V V V G D V I V V K S S L D R L G R N N N A E I K E T F E L  
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 R S R P K L A S A L A A V V G Q G D T L V V V R I D R L A R S L S H L L D I V E A  
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 D F H R Q Y Q K L L K K M Q R G D D L L Y V L S I D R L G R N Y K E I I Q N Q W R Y  
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 G K R P Q L K A C L E Y L R E G D T L V I S R I D R L A R S T V H L L H Q I A E D  
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 F E R P Q Y Q K K L L K K L D K D S V L Y I K S I D R L G R N Y Q S L S E Q W R I  
 A V R P Q L A R A I A A L D P G D V L V V T R I D R L A R S S R D L L N I V H Q  
 R Q R P G L Q N A L A A C R N T D T L V V T K L D R L A R S L P D A R D I V D E  
 E R T Q L N A M I D F S R D G D V I H M K V D R L A R N T D A L Q I S E Q  
 M D R P E L N R L L A E L L A G D T V I V K E L T R V S R S T Q D M L Q I V Q D  
 A N R P A L K R L L E R I T S G D V L V V T K L D R L A R S V R E G I K I I D R  
 E R D E L E N C M E Y M R E G D T L V I V A K L D R L G R T T K Q L E L S A E E  
 R E R P G L R A A L A A V R S G D T L V V V T K L D R L A R S L P D A R D I A A E  
 E R A G L A E A L A Y L R P S D T L V V W K I D R L G R S L P H L V G L V E N

90                    100                    110                    120

L A T R G I G F R S L T E N I D T T T S G	A A D T D D P T A N L M L G V L G S F	G M L V F N I F G S L	
L T T Q G V T V V F H K E G L R F	M G K F F T I M S A F		
F N E K N V N F I S I Q N N I D T S T S	G S S T G K L T L A I L G A V		
L A D K G V G F Q C V H Q S I D T S T A H	L S T P M G K A M L T M L A A V	G E F A F H M I A A V	
L R E R R I S F E S L T E K L D T S T A H	G S A T G K L T F H L F S A L		
L R S K G V S I S L R E G F D	P T G K A M L G M M A V I		
L E Q R G V G F E S V T E R E T	E D T P S G R L I F T L F S A F	M G K F F T I M S A F	
L T N R G I V F I S L K E N M D T T T	S P S G K L V F H I F G A L		
F D K R G I N F I S I E N N I D T S T S	G T P A G K A M F G M L S V L		
L D E M K V G F K S L T E S I D T T	G R L F F S I A G A F		
L F K A R I K I H I L N M G I	A M G E L Y F T I L S G I		
L N Q K G V V V L K A T E Q P I D T S T S	L K H K H I D I V V L D L P L D T R N K D N E I T G K F	D I V V L Q I L S Y V	
L R E N E V E F I S I Q D K I D T T	P Q G K M I F G I M A V L		
L H M E E I G L H S I T E L I D T T T P N	R E S M A N P M T K L L F D V L G A F		
F K D S K V V F K S L K E E V D T S T	P Q G R F V L T I F G A L		
UniRef90_B0NIS7	P M G K V V V L T V L G M V		
L K H K H I D I V V L D L P L D T R N K D N E I T G K F	M G K M V I T I L S A V		
L G K R G I A F K S L T D A G I D T S T	A G R F F F H V L A A M		
L T D R G V A V H I I N M G L F T	A A G K A F L D M L G V F		
L Q D K K V D L V S L K E N I D T T T	P S G Q F M L T I F G A V		
UniRef90_J2DIL7	P Q G K L M M T V F Q A F		
L E E R G A A L R R V L E P E I D T S G	D P M G K L L F N V L A A M V		
F Q N L G V A V V R F L D D D G I S T E G N	S A H G K L I F D M F A S L		
L D A R K V D L R S L T D G I D T K G T	P T G K L M L T M I G A I		
L R E R G V A L L R A T E Q P I D T T T	G E L L F S L F G A L L		
UniRef90_W1WNL5	P H G R L M L T V L G G L		
L K N K G V V F I S K K E N I D T D T	P A G R M V L T V F F G A L I		
UniRef90_W7BEJ1	P T G R L L I L N V M L S F		
F E E R T I K L I S V K E N F D T T T	Q Q G I S Q L L I S I F S W V		
L A A K G V A L C I G G S V H D P T	S A T G R L V L H V F F G A L		
UniRef90_A0AW16	P Q G R L M M T V F Q A F		
L G R R G I G F R S L A E P W L D T T T	P A G R M M M Q M V G S F		
UniRef90_X4V4Z4	L E A K G A G L A F R S L T E Q M D T T T P H	D P M G K L L F N V L A A M V	
L H A K G V T L Q I Q N L G D T A T	S A H G K L I F D M F A S L		
UniRef90_B1ZM42	P T G K L M L T M I G A I		
I K A R G L A F R S L T E Q M D T T T P H	G E L L F S L F G A L L		
I A E K G A G F R S L S D S W A D T T T	P H G R L M L T V L G G L		
UniRef90_I6W239	P A G R M V L T V F F G A L I		
UniRef90_A0A021XB92	P T G R L L I L N V M L S F		
I K D A G A G L R S L A E P W A D T T T	Q Q G I S Q L L I S I F S W V		
UniRef90_N0B3X9	S A T G R L V L H V F F G A L		
UniRef90_X8I471	P Q G R L M M T V F Q A F		
L E E K G V T V V F L K E N I D T S	P A G R M M M Q M V G S F		
UniRef90_D4YGE3	L E A K G A G L A F R S L T E Q M D T T T P H	D P M G K L L F N V L A A M V	
UniRef90_Q937Z7	S A H G K L I F D M F A S L		
L A A A G V G L R S L A E E I D T S	P T G K L M L T M I G A I		
I I E G A E A D F Q S L T E S I D T A T	G R L L F H L M G S L		
I L E T D G I G F H S V T E A I D T S T P G	S P A G R A L F E M A G V F		
UniRef90_G2JBU2	L L S K K Q V Y L E F I D D N D I L N T T E T D K L S Q K L V Q P I I L H	S A T G R L V L H V F F G A L	
UniRef90_I7EK82	L L S K K Q V Y L E F I D D N D I L N T T E T D K L S Q K L V Q P I I L H	P A G R M M M Q M V G S F	
UniRef90_U2QBU8	L G R R G V Q F R S L A E Q I D T T	G R L L F H L M G S L	
UniRef90_K7RWE5	S P A G R A L F E M A G V F		
UniRef90_UP10004685FB1	L L N Q Q K R A G L R I L T Q G Q G S M I D T T H S	S A T G R L V L H V F F G A L	
UniRef90_E3GIE8	E G R L M F S L L F A A L		
UniRef90_F9Z701	L L Q E M G V D I I V L D M P L L D T R K H K D L T G T L I A D I V L Q L L S Y V	P A G R M M M Q M V G S F	
UniRef90_UP1000363EBB7	L L E S K N I R I R S V K D N I D T T	D Y M G K F T M H I F A A L	
UniRef90_W1Q1L1	I I K N K G A G L K S I N E T W L D T S S	D N P M N E F L L T I F S G L	
UniRef90_I4F0P5	L L N S K G V Q V R F L Q D N N I F E A H E K P	S P L S L L M F N I L G A F	
UniRef90_W7ZWX9	P T G K L M L T M I G A I		
UniRef90_E8WSW4	L L G A R G I Q F P S L T E A I D T T T V G	G E L V F H I F A A V	
UniRef90_UP100047DE3CF	L L F E R D I K V H V L N V G L L E N T T	M G K F F L Q T L L A V	
UniRef90_B9NRJ4	P T G K L M L T M I G A I		
UniRef90_UP10003B5AB0D	L L T A K G V A L K V K L N I D L D T A T	P T G K L M L T M I G A I	
UniRef90_C7JI66	L L N E K K V E I V S L K E S L D T A T	P A G K F M L T V F F G A L	
UniRef90_J8SQ05	L L Q N K G V A L N I L N I G N T A T	P T G K L M L T M I G A I	
UniRef90_C0C0G2	I I K N I K A D I V V I D M P L L D T R K N K D L L G T F I S D L D L V L Q I L S Y V	G E L V F H I F A A V	
UniRef90_A5VG09	L L D E K G A S L R I L E P E V T T A G D	M G K F F L Q T L L A V	
UniRef90_R3WN89	S P Q G M L M T Q M L G A F		
UniRef90_B1MA00	F N E Q N I N F V S I E N N I D T S T	P Q G M R F F F T I I M G A F	
UniRef90_UP10004779D77	L L D Q K G A A L R I L D P E I T T	G G D V G R I V V T V L G M V	
UniRef90_UP10003F901DD	L L Q D H G V G L K A I S Q G I D T T T P G	G R L F F H L L A A I	
UniRef90_UP100038085F1	L L E D I G V D I C I L D M P L L D T R T Q Y K D L L G T F I A D L D L V L Q I L S F V	A A G K F I L A V F F G A L	
UniRef90_R9LXT1	L L S T L E V G F R S L T E A I D T T T	P A G R M M M Q M I G A F	
UniRef90_UP1000255917A	L L D A K G V Q F I S R K E N I D T S T	S P Q G M L M T Q M L G A F	
UniRef90_UP1000225AC71	L L R Q R G V E L K V I D Q Q H I D T S T A Q	A A G K F I L A V F F G A L	
UniRef90_R2SCS7	I I K K G K I S F R S L T E Q M D T T T P H	G K L M F S M L A A I	
UniRef90_F7KV27	F S E K N V Q V I S D K E K F D T S T	G E L L F S L F G A L	
UniRef90_17DNW3	I I K E E K K A D I V V I D M P L L D T R Q T G K D L L G T F I V A D M V L Q I L S Y V	P Q G K V M L T V F Q A F	
UniRef90_UP10003605077	I I L Q E R G I E F H A I T Q G D T R T	A V G R M I Y G Q L A V F	
UniRef90_R8WNA8	L L K D R Q V A V V S L T E G M D T T T A S	G E L L F H V F G A L	
UniRef90_UP10004672E95	L L K A K G I T L I S L R E G F D A T T	P A G K L M L T M L A G I	
UniRef90_UP10004027324	I I K I K K A D I V V I D M P I L D T R T N K D L I G T F I L I S D I V L Q I L S Y V	P A G R M M M Q M I G A F	
UniRef90_A3PYR7	F K A A A N L A F R S L E E G G L D T S	S A A G E L V F H V F G A L	
UniRef90_B4U3A1	L L A E R G V T L V S T S D G I D S S T	P A G R M M M Q M I G A F	
UniRef90_G2I7G2	I I K V K N V D I I V L D F P L L N T K H Q N N I T G K F L S D I V L Q I L S Y V	P A G R M M M Q M I G A F	
UniRef90_UP10003B6EBD0	V E A R K A G L V I L S M S G Q V L D T T	T P T G K L M L T M L G A V	
UniRef90_Q1QGU7	I I T K K G A D V V V I D M P I L D T R T M E K G L L G T F I S D L V L V L L S Y V	I I T K K G A D V V V I D M P I L D T R T M E K G L L G T F I S D L V L V L L S Y V	
UniRef90_Q0RYR7	I I E K K G K A T F R S L A E P W A N T	D T P Q A S A M L T I L A A V	
UniRef90_H2ERR9	L L T S R N A C L Q I G A S L H D P T	D P V G R L L F N V L A A M V	
UniRef90_G2FR0	N I D I N S D V G R V I Y T T I S A F		
UniRef90_H1X8V1	I I T A K G C Y I K S L N E S W L D T S	S P A G E L M L T I F A G M	
UniRef90_UP100035C5063	I I T K K G A I F H D L G	N S P S G H L L R N I M L T F	
UniRef90_U2T729	L L E K R S I D L E I I M M N V T T	K D P M G K M F F T M M S A F	
UniRef90_UP100037000A7	L L T R K G V T L S L S G G S I Y D P T	D P V G R L L F N V L G M V	
UniRef90_B6RAG0	F D K N G V A I R F L L D D G G I S T E G E	M G K M V V T I L S A V	
UniRef90_A1A66	I I T D K G A A L I R F L L K E G Q Y F S	T P T G K L M L T M L G A V	
UniRef90_T0HAW5	L L E E R H V A F K V L N I Q L D T T T S	P S G A L I F H I F A A V	

UniRef90_M4S5G4	A Q F E
UniRef90_S5SX54	A E F E
UniRef90_A0AGR8	A E M E
UniRef90_D4YZC0	A E F E
UniRef90_K2J0X0	A H M E
UniRef90_UP100037E9C7E	A E L E
UniRef90_S1HJY5	A E F E
UniRef90_J8Q4R7	A Q L E
UniRef90_E2Y811	A E M E
UniRef90_K8P2J7	T E F E
UniRef90_G6CEC9	A Q F E
UniRef90_UP1000471451A	S E F E
UniRef90_UP10002DCE159	A E F E
UniRef90_G9ABW5	A Q F E
UniRef90_UP10003695C1F	A Q F E
UniRef90_B0NIS7	A Q M E
UniRef90_UP1000471BEBE	A N F E
UniRef90_D7X059	A D F E
UniRef90_UP10004662FF1	S E L E
UniRef90_J2DIL7	S E M E
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UniRef90_A0A037UWP0	A E F E
UniRef90_W1WNL5	A Q L E
UniRef90_W7BEJ1	S Q F E
UniRef90_R4YVK7	A E F E
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UniRef90_B1ZM42	A Q Y E
UniRef90_A5FU69	A E F E
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UniRef90_N0B3X9	A E F E
UniRef90_X8I471	A E Q E
UniRef90_D4YGE3	S Q F E
UniRef90_Q937Z7	A E F E
UniRef90_G2JBU2	A E F E
UniRef90_I7EK82	A A F E
UniRef90_U2QBU8	A E H E
UniRef90_K7RWE5	A E F E
UniRef90_UP10004685FB1	A E F E
UniRef90_E3GIE8	A E V E
UniRef90_F9Z701	A E F E
UniRef90_UP1000363EBB7	V Q F E
UniRef90_W1Q1L1	A Q F E
UniRef90_I4F0P5	A Q M E
UniRef90_W7ZWX9	A E M E
UniRef90_E8WSW4	A T F E
UniRef90_UP100047DE3CF	Y E L E
UniRef90_Y1AI40	A T F E
UniRef90_R5IXD7	A E Q E
UniRef90_F2ZG98	A E L E
UniRef90_K9SP66	A Q A E
UniRef90_D2B505	A E Y E
UniRef90_Q0SBW7	A E F
UniRef90_L0GTZ9	A D F E
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UniRef90_UP10003B5AB0D	A E Y D
UniRef90_C7JI66	A Q L D
UniRef90_J8SQ05	A E F E
UniRef90_C0C0G2	A Q T E
UniRef90_A5VG09	A D M E
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UniRef90_UP10004779D77	A E F E
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UniRef90_B6RAG0	A Q F E
UniRef90_A1AS66	A T F E
UniRef90_T0HAW5	A D F E

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UniRef90_Q6UB85	K I G Y A R V S T Q D Q S L D G Q I D T L E E Y G C E R I F S E K A S G R K T				
UniRef90_UPI000468C033	I A Y T R V S T D G Q T L E A Q R H A I C Q R Y N W F T D A T S G A T K A				
UniRef90_A1VU96	V G Y V R V S T I I Q N T A R Q L D G V S L H K I F E D K A S G K N				
UniRef90_G9ZJF9	R I G Y A R V S T D D R H L D Q Q R D A L Q Q A G C S V I Y E E A A S G K S A				
UniRef90_UPI00037A578B	L V G Y A R V S T R E Q N L A R Q Q T A L T A A G C A K C F F D K A P G K N				
UniRef90_UPI000361118A	L G Y A R V S T A G Q D A S G Q I D A L N A A G C A R I F V E H A S G A K T				
UniRef90_UPI0003B4EDDO	M L I G Y A R V S T A D Q N P D H Q I D A L T G V D P A D I Y L D R A S G A K A				
UniRef90_Q9EV75	M L F G Y A R V S T S Q Q S L D V Q M K A L K A E G V R A R N R I F T D K V S G S				
UniRef90_F8L2W5	L G Y A R V S T R D D Q N L E L Q Q I N S L Q S A C K E E L I F T D K I S G A K				
UniRef90_F7JK44	Y G Y V R V S T S K D Q N I E R Q L I A L K N A I S E K H Y I Y L D R Q S G K N				
UniRef90_G9AC57	L I G Y A R V S T E D Q L H D A Q M D E L R A A G C H Q I Y Q E Q G S G A S				
UniRef90_UPI000465CCBE	M L F G Y A R I S T P S Q K F D L Q I D A L K E G V N E K N I Y K D V S S G A K				
UniRef90_X5MDA5	R V G Y A R V S T Q D Q K L R M Q L D G L N A V K C D L F S D H G V S G K T				
UniRef90_E8X800	V G Y V R V S S F E Q N E N R Q L E G L V D R V F L D K A S G K N				
UniRef90_V3CB97	M I I G Y V R V S T N E Q T V E N Q N K Q Q I A D A G Y Q V S K W Y C D E A T S G				
UniRef90_S6SAH5	M L V G Y M R V S S S D S Q N T D L Q R D A L L L S A G I D A R H F F E D Y A S G T				
UniRef90_M7MMU1	L I G Y A R V S T N G Q D S Q L Q R D A L E T A G C G R I F E D K I S S R A				
UniRef90_S9RBQ0	M K Y G Y R R V S S V D Q K L D R Q V L P G D I A E A N V F E E K I S G A R G				
UniRef90_D3CX62	M L I G Y A R V S T A D Q N P D H Q I D A L R A G V A E R D I H D L A S G A K				
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UniRef90_B7AR53	M E Y G Y V R V S S S K E Q N E N R Q L D A L K Q G I E D C N I F I D K Q S G K D				
UniRef90_UPI000406D762	M I I G Y A R T S T V E Q K A E A Q R E R D L K A A G V E R V F M E Q T S S V G P				
UniRef90_E7IG12	M Q I G Y I R V S T N D Q N T D L Q R N A L N C A G C E L I F E D K I S G T K				
UniRef90_UPI00029AE801	M I F G Y A R T S T H D Q Q L Q A Q I D E L L H K Q G C E R V Y S E Q V S G T E R				
UniRef90_R6U237	M V F G Y A R V S T K Q N E N R Q L D A L L K E Y G V A D N C Y I D K E S G K				
UniRef90_C5T352	I Y G Y A R V S T T T E Q N T A A Q L A A F R A R G I E S V E E K R S A V				
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UniRef90_UPI0003604B74	L R G R G A G G L R V L N L G G	G D V D T H T P M G S M V F T V M A A L	
UniRef90_J8CSA2	F Q E N E I D Y I I N M P I L D T R K F K D M I A N L I S E I V L T V L S W T		
UniRef90_R6E6X4	I K V I K A D I K V L D M P L L D T T L R K D L L G T F I A D L V L Q V L S F A		
UniRef90_I4MKB3	V Q Q T G A S I K S L T E P L D T	A G P I G L F M V Q V L G A V	
UniRef90_R5RH40	L L K K K E V E I I V L D F P L D T R N Q N G I T G K F I A D L V L Q V L S Y V		
UniRef90_D9Y8A1	L A E R G V K V H C L A L G G T D L T S S S	G K M T M T I L S A V	
UniRef90_X8DNV3	L L G Q Q G I V L R S L R E G I D T	G N A T G R M I A G V L A S L	
UniRef90_E7MQP6	M H A K G I A F E S Q K E K I D T S T	P S G S K L F L T I I A A L	
UniRef90_T1DCH6	L R E A G I G L R T L A D T I P I D T S K P G N A M S E L A I I L L S L F		
UniRef90_F7YM28	L L E K G V T P I S L D L P T A D	L S S A E G R M L Q M F S A F	
UniRef90_W8FIV6	L T A K G A H F R S L R D P I D T S T	P Q G M F S L Q V L G A V	
UniRef90_F6CGE3	M N A E G V I L K V L N I G T I D	N S P S G R L I F T V F S A F	
UniRef90_W9GIZ7	L H E R G V N I K S L T E P D I D T T T	P M G K A L F G I V A V F	
UniRef90_J2SRI3	L N E K G V S V R F H K E S I M F N G A D D K Y	Q N L M L Q M M G A I	
UniRef90_UPI000412D9E8	L K K K Q V D I V V L D F P L L N T R N G V E N T G K L I A D L V L Q V L S Y V		

UniRef90_H2G477	A E F E
UniRef90_W8US37	A E F E
UniRef90_Q6UB85	A E L E
UniRef90_UPI000468C033	A E L E
UniRef90_A1VU96	A E F E
UniRef90_G9ZJF9	A E F E
UniRef90_UPI00037A578B	A E F
UniRef90_UPI000361118A	A E F E
UniRef90_UPI0003B4EDD0	A E L
UniRef90_Q9EV75	A Q A E
UniRef90_F8L2W5	A Q F E
UniRef90_F7JK44	A Q N E
UniRef90_G9AC57	A Q L E
UniRef90_UPI000465CCBE	A E M E
UniRef90_X5MDA5	A E F
UniRef90_E8X800	A E F E
UniRef90_V3CB97	A S L E
UniRef90_S6SAH5	A Q Y E
UniRef90_M7MMU1	A E L E
UniRef90_S9RBQ0	A E M E
UniRef90_D3CX62	A E Y
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UniRef90_UPI00040731CA	A Q T E
UniRef90_A0A024J4F3	A E F E
UniRef90_A0A023MXW2	A E F E
UniRef90_R9NBR6	A E N E
UniRef90_B7AR53	A E N E
UniRef90_UPI000406D762	A Q F E
UniRef90_E7IG12	
UniRef90_UPI00029AE801	A E F E
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UniRef90_Z5G3U8	A E F E
UniRef90_D6ZD44	A E F E
UniRef90_UPI00036EAAA6	A E F E
UniRef90_UPI000478E5AC	A E F E
UniRef90_UPI000363650B	A D M E
UniRef90_S6JWA8	A Q F E
UniRef90_F1YWD5	A D V E
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UniRef90_W1H249	A E M E
UniRef90_K5C5B8	A Q F E
UniRef90_UPI0003681F14	A E F E
UniRef90_UPI0003638ABA	A E Y D
UniRef90_UPI00047546D3	A E F E
UniRef90_E7GBQ5	A H E E
UniRef90_Q4V0V6	A E E E
UniRef90_UPI0004714DF1	A Q L E
UniRef90_V5Z2Z5	A E F E
UniRef90_F0PI96	A Q F E
UniRef90_UPI000410724E	A E F E
UniRef90_Q8FLF1	A E F E
UniRef90_C0C0D0	A Q I E
UniRef90_F9EQ02	A E K E
UniRef90_R5QUL2	A E T E
UniRef90_UPI0003135691	A E F E
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UniRef90_E8YIU9	A E F E
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UniRef90_D7GGX3	A Q L
UniRef90_W6RR96	A Q L E
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UniRef90_R6E6X4	A E N E
UniRef90_I4MKB3	A Q L E
UniRef90_R5RH40	A Q L E
UniRef90_D9Y8A1	A E F E
UniRef90_X8DNV3	A E L E
UniRef90_E7MQP6	N E F E
UniRef90_T1DCH6	A Q M E
UniRef90_F7YM28	A E F E
UniRef90_W8FIV6	A Q L E
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UniRef90_W9GIZ7	A Q L
UniRef90_J2SRI3	A E F E
UniRef90_UPI000412D9E8	S Q I E

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UniRef90_UPI000367F13B	M K A G Y A R	V V S T A D Q N C H M Q L	L T D L R Q Y C A T R G W D V Y N E Y V D T		
UniRef90_F0Z4G0	F G Y V R	V V S S K D Q N V E R Q L	V A M E S L K I P E K N Y V E K I S G K D		
UniRef90_E0H894	M Y L A Y L R	V V S S D D Q S L A R Q H K L I E N W D D L K I F E E K V S G K N I			
UniRef90_UP10002E1ECEF	K F G Y I R	V V S S R D Q N E G R Q L Q S M K E S G I F P H D I F L D K Q S G K			
UniRef90_X5LS97	R L G Y A R	I S T D E Q D E A L Q I R A L E A A G I D A L Y I D H G V S G A K			
UniRef90_UP100046ABC5B	R I G Y V R	C S T D K Q D L T T Q E A L V V K V S P D R I Y V D K G L T G S N			
UniRef90_I4S5K1	M L I G Y V R	V V S T N D Q N T A L Q R N A L L V S A G C E Q I F E D K I S G T K			
UniRef90_S5EIW4	V I G Y V R	V V S T S E Q T I E N Q K K Q I K E A G Y Q I G K W F S D E S V K A			
UniRef90_H8K684	V G Y A R	V V S S G Q S L S V Q L D K L K D C D K I F Q E K K S G L D			
UniRef90_Q58KG5	V F A Y C R	V V S T L D Q T T Q N Q R L E L N M A A G F A I E A R R L I E E T I			
UniRef90_D5EIC4	V Y L R	V V S T K E Q S V A S Q K A S L R G Y E T V L F E D Q A S G A K S S			
UniRef90_X6KRB0	R I G Y A R	V V S T V D Q D L D T Q I A K L K A E G C G I I R S E K V S G G S R			
UniRef90_R7G4J0	K Y A Y I R	V V S S K D Q N I A R Q V E A M K S S G I S E K D M F I D K Q S G K			
UniRef90_U7QW47	L L G Y A R	V V S T S H Q K L T I Q I S E L K A A G V R E D R F T D M I S G A			
UniRef90_D3G217	I G Y A R	V V S S E Q G N M A R Q I K E L E E F G C E I I Y Q D T K S G K D D			
UniRef90_A0A059L0J0	R V G Y I R	V V S T L E Q N T Q R Q L E H V Q V D R T F I D K A S G K D			
UniRef90_F0J852	M I F G Y A R	V V S T A A Q D L T A Q R A Q L A A V R C E K V F C E K I T G T H			
UniRef90_V5WYN1	A R V S T I D Q N L D R Q L S M L K E Y G C E K I I D E K F T G T V K				
UniRef90_E8T8S1	Y L R	V V S T L D Q N Q T D R Q R E L R E V I A G R T G W D I V Q V Y R D H			
UniRef90_UP100030E915A	M L V G Y I R	V V S K A D Q T T D L Q R D A L T A A G V P E Q F Y E D K A S G K K			
UniRef90_UP10003065002	M K V G Y A R	V V S T Q A Q Q D A R R Q D A A L T A A G C E R I F V D A W T G D S A			
UniRef90_C2GQD0	M Y G Y A R	V V S T K G Q S L N D Q V S Q S L M E I G I D K N I Y S E K F T G T T			
UniRef90_D5NZ01	M L I G Y A R	V V S T Q G Q S L D T Q T R E A L V A A C C D P D Y L Y T D T S G T K			
UniRef90_U4EYS3	L F G Y A N A S T N Q Q S L D T Q L K A L K S A G V E P S R I F S D K T F G G				
UniRef90_UP10003469FED	M N Y G Y A R	V V S S R E Q N L S S R Q I L A K E C G V L E S R I I T D K Q S G K			
UniRef90_E5Y718	Y G Y I R	V V S S S D Q N E S R Q Y M A M E Q G I A N H L F I D K L S G K D			
UniRef90_S6D4T3	I F G Y A R T S T L E Q E L E A A Q K R D L S L N G C E R I Y A E Q I S G S S T				
UniRef90_I3X1H8	L L G Y A R	V V S T G D Q D V A S Q T M R L E Q A G A I K V T D V K S G K S			
UniRef90_R4UL68	Y V R V	V V S T G H Q S I E Q Q R D A L T A A K P D R E F M D V A S G R A G			
UniRef90_Q1KY31	M L V G Y G R T S T V E Q E L V G Q E R D L T K A G C H R L F D E K M S G S R A K				
UniRef90_UP1000474C3E5	M I Y G Y A R	V V S T Q D Q N L E S Q S K N L I S R Y G I D H K L M I D E W I E V E			
UniRef90_UP1000225AA07	M L I G Y A R	V V S T D D Q L L D L Q R D A L E K A G C E R L F E D T T S G A K A			
UniRef90_UP100030330AB	M I G Y A R	C S T E Q Q D L T A Q R Q D A L L A V E P E R V Y V D H G L T G T N			
UniRef90_UP1000255E189	F A Y G R	V V S T L E Q S T D N Q L L A L Q Q K G F D I Q P Q R W F A E M P A			
UniRef90_I7CC69	M I G Y I R	V V S T V E Q N T A R Q L E G I M I V A A C E K I F T E K Q S G K S I			
UniRef90_UP1000370207A	M I V G Y A R	V V S S N D Q N L E R Q R Q L E N L K T F C A E K I F T E K Q S G K S I			
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UniRef90_UP100046A4659	I Y G Y A R	V V S T N D Q T T T N Q I Q E V Q A A G F D I P E Y R V M E E T C A			
UniRef90_T2LEB1	I Y G Y A R	V V S T S S S Q N L E E Q I A Q L V V D A V D P K N I Y S E K F T G T T			
UniRef90_R9G844	L L G Y T R	V V S T A G Q D P Q L Q F D S L L L S I G V Q K R D I F S D V T S G S			
UniRef90_T1W6A5	M K I L G Y I R	V V S T K E Q N I S R Q K N E L L N H G V E E R F L I D K S S S G K			
UniRef90_W1W428	F A Y C R	V V S T T G Q T T A N Q V Q E I K A A P Q R V I E E T V S G S T S S A			
UniRef90_UP10002556858	M F V G Y V R	V V S S P L D Q N P A L Q I D A L K A A G C E R I F E A T S G T N L			
UniRef90_M1X9X8	K I G Y A R	V V S S S K E Q N I D R Q L Q A L E G V V S K V F S D K L S G A T			
UniRef90_W6I3F8	M I Y G Y A R	V V S T N H Q D T E L Q L T A L K S A G C E K I F E E H A S G R K			
UniRef90_17JGM9	M I V G Y A R	F A Y C R V S T T G Q T T A N Q V Q E I L G A T G C T K L F S E R V S S V A Q			
UniRef90_I4SWJ9	M L V G Y A R	V V S T D Q G L E G Q V R D L N S R F E P E N I F V D K Q S G S H			
UniRef90_J2FYU0	I Y G Y A R	V V S T R S Q Y E D R Q M L S L V K A A G F D V L P Q R V V T E T V S S			
UniRef90_B0P6F2	Y A R	V V S T S D Q T T D N Q V L E V K A A G F D V L P Q R V V T E T V S S			
UniRef90_W0YPP2	Y F Y C R	V V S T T E Q T T A N Q I Q A F K D R G Y E V N E A F V V E D V V S			
UniRef90_A7K4V2	M I Y G Y A R	V V S T T G Q D D L A Q Q I A Q L T D A G C V K I Y R E K I S G A N			
UniRef90_T0KLL5	M K A G Y A R	V V S T D Q Q T L N L Q I E A M K K Y A Q A R E W H I E S E I K D T			
UniRef90_U1S6W2	M I Y G Y A R	V V S S N G Q D D T Q Q V I A Q L L A A G C V K V Y Q E K A S A A S			
UniRef90_T0HW11	K F G Y C R	V V S S V A Q H E D R Q L I A M M E L I P E C N I F V D K Q S G K D			
UniRef90_R6PUQ1	L G Y V R	V V S S A D Q N P G R Q Y E I I G W C D K T F E D K L S G K S R			
UniRef90_UP1000051055E	Y A R	V V S T E T Q S I Q Q G Q L N Q L T E Y C Q F Q G Y E V V D E Y T M E S S			
UniRef90_J7S564	K F G Y V R	V V S S S K D Q N E E R Q I V N M R N I G I D E R D I F I D K K T G S S			
UniRef90_K0FRW9	L I G Y A R	V V S T E D Q L N D A Q V D E L R A A G C H R I H Q E H G S G A S			
UniRef90_I3XH19	I L G Y A R	V V S S S D Q S T H S Q R S E I L A N H R E R W W S D E A T S G V			
UniRef90_T2L567	I F G Y A R	V V S T R E Q N L E R Q L V Q L R E F V P D E R Y I I T D K A S G K			
UniRef90_R5GK01	K F G Y A R	V V S T S Q Q S L E V Q K K A L K E G V R S S R I F S D V G S R A N K			
UniRef90_UP10003FC79F9	M I L I G Y A R	V V S T S T R S Q S L K T Q R D A L A A A C D S K H V Y A D T I S G A K			
UniRef90_U7JQ83	M L I G Y A R	V V S T D Q G T T E N N Q R L E L V A V A E R S G W E V V E V Y E D A			
UniRef90_S9TH83	M K I G Y A R	V V S S L D Q N L N Q I E V L E E F G A E K V F R E K R S G A T V			
UniRef90_UP100042806DF	M Y Y A Y I R	V V S S S V E Q N T A R Q E A A L K T D H P I D K I Y M E R A S A K D			
UniRef90_E0WV45	Y Y Y A R	V V S S S K E Q N I D R Q I A A F K A A Q G R D I I A D K G S G K D L			
UniRef90_R6ZA12	M I L I G Y A R	V V S T T A Q D L D A Q L A I I T A V D T D Q L F T D K L S G S A K			
UniRef90_A8ZQU2	F A Y A R	V V S T A D Q T A V N Q I R E I E A A G F R V V T E S I S G S V S A K			
UniRef90_A0A051TLB6	L I G Y A R	V V S T D Q D T T D Q A N S Y E A Q V D Y Y E H Y I K N H D G W Q Y V D			
UniRef90_A4QA52	L I G Y M W V S K A D Q T T D L Q R D A L K A G V D P D H M Y E D N A S G K K				
UniRef90_UP10003B3F9CC	K F A Y I R	V V S T R D Q N E E R Q I V N M R N I G I D E R D I F I D K K T G S S			
UniRef90_H5S981	F G Y A R	V V S T V K Q Q G I Q A Q V E K I K R F C Q M Q G W Q L L K I F K D E			
UniRef90_D0HF00	M V F A Y V R	V V S T S T K E Q N V D S Q L D I L K L Y P S A E V T Q E K V S G T V P			
UniRef90_UP1000237EE3B	M L I G Y A R	A G T D E C T L E E Q V W H L H D E G C E T I Y E D P L P E E E			
UniRef90_UP1000381A9D4	R I G Y A R	V V S T L D D Q D L D Q G V A R L K A E G C G V I R S E K V S G G S R			
UniRef90_L0IQ67	G Y A R	V V S T T D D T D Q A N S Y E A Q V D Y Y E H Y I K N H D G W Q Y V D			
UniRef90_E1MDP2	Y A R	V V S T G E Q T T T N Q I L E A E A K G F K V E A E R T V E E T I M			
UniRef90_W0M866	Y A R	V V S T G E Q T T T N Q I L E A E A K G F K V E A E R T V E E T I M			
UniRef90_U2QEA0	M K F G Y A R	V V S T S T A D Q T T D N Q L L E A N E A G C D E V Y C D I Q S G K N M			
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UniRef90_G7ZEM3	L I G Y V R	M S I D D Q K L D L Q I A A L I A A I R P N D V R S D K T N S L R			
UniRef90_R5F612	I Y A Y A R	V V S S S Q G Q N L D R Q I E A L L D Y E E R N I L V D K S S S G R D F			
UniRef90_UP10001FFDE62	R Y G Y A R	V V S T T R E Q N T D H T D L V A A V P P E N L F V E K V S G K L			
UniRef90_C1EZB6	F A Y I R	V V S S S K D Q N L D R Q Y R A L L Q P Y V T D E K Y I Y S D K A S G K			
UniRef90_K1DU10	R I G Y T R	V V S T V S Q T L D Q Q N A A L T A A S V T K T F S D T M S G A R			
UniRef90_F8KMR4	G Y A R	V V S T T D D T D Q A N S Y E A Q V D Y Y E H Y I K N H D G W Q Y V D			
UniRef90_M9R4V4	M K V A Y T R	V V S S A E Q S L H E Q K K K L I S Y C E I H D W N E Y K V F T D S S			
UniRef90_UP100040CB075	M I G Y A R	T S T L D Q N T A L Q F D A L R R A V D D E H I V T D H A S G S R			
UniRef90_W6TBE4	R I G Y T R	V V S S S K E Q H L D R Q L I A A L L K D V D K L F T D K L S G A N			

	50	60	70	80
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UniRef90_H0I0T7	W E R P E L Y R M I L D Q L   R E G D T V V V W K L   D R L S R S L K D V L H L M N R			
UniRef90_UPI000367F13B	R P G R D T L M K D V R A R R V D   V V L V W K L   D R W G R S L P D T V V T L Q E			
UniRef90_F0Z4G0	F D R P E Y K R L L K N L K E E D V L Y V   K S I   D R L A R N S K D T K D L L Q L			
UniRef90_E0H894	E N R P E L Q E L I S F I R E R D T I I I P S I   D R L A R N S K D T K D L L Q L			
UniRef90_UPI0002E1ECEF	N F N R E Y Q L L M K R M I R K G D I L Y I   H S S L   D R F G R N K E E I L Q E W N A			
UniRef90_X5LS97	T S R P R L D A M L A D L R R G D T V V V P K L   D R L A R S V P D A R D I A D A			
UniRef90_UPI00046ABC5B	R L R P G L D Q A L A A V R S G D T L V V V P K L   D R L A R S V P D A R D I A D A			
UniRef90_I4S5K1	A E R P G L K R L L R T L S E G D T L V V V W K L   D R L G R S M R H L V T M I E E			
UniRef90_S5E1W4	V E R K G F S D L L N Y Y V R E G D T L I V I G I L   D R L G R N T I D V L S T V E M			
UniRef90_H8K684	E T R S V L K N A I L D Y V R E G D T F T V T K L   D R L A R S T A H L C K I A E I			
UniRef90_Q58KG5	K Q R P G F M R L I D R M E P G D V L V V T K L   D R L G R N A M D V R A T V E Q			
UniRef90_D5EIC4	R E G L D A M M Y G V R K G K F C A I I C Y K   D R L G R S L P H L A Q L I A E E			
UniRef90_X6KRB0	D G R A E L A T I I D F L R P G D E L L V I T R L   D R L G R D T R D V L N L I Y E			
UniRef90_R7G4J0	D F F R E Y Q L L L K K L E E S G D E L Y I K S I   D R L G R D Y D E I Q E Q W R Y			
UniRef90_U7QW47	T D E R G L Q R L L T R A E K D I I I C T K M D R L   G R N T S D M I H I V D A			
UniRef90_D3G217	F D R E G F Q K M K R K I R E K D V L V V H D L S R L   G R N A K E I K K E W E E			
UniRef90_A0A059L0JO	I Q R L Q L Q D A L L A F V R E G D T V V V H S M D R L   A R N L D D L R G I V Q K Q			
UniRef90_F0J852	A D R P Q L R K L L A A I L Q P G D V V V T T A V V D R I   S R D T T D L L V V I A R Q			
UniRef90_V5WYN1	D R Q G L Q N L M N V I R A N D I V V E S I V D R I   G R K T L D I L S I I Q E			
UniRef90_E8T8S1	R P A F E A L C K D A A R R R F D V V M A W S V D R I   G R S L Q G H L V N I V H D			
UniRef90_UPI00030E915A	D D R P E L L A C L K A L R S G D T L I V W K L   D R L G R D L R H L V N I V H D			
UniRef90_UPI0003065002	V R G R E S R Q M D D M L R A G D R V V C T E L L A R A G G R R P A A L L T W L E D P			
UniRef90_C2GQD0	T N R P K F D E L T N K V R N G D T I T V T K L   D R L A R N T R E A L N V L D P			
UniRef90_D5NZ01	W Q R P G L D A A L S Y M R A D D T L V V T R L   D R L G R N L A E T V N T I A N			
UniRef90_U4EYS3	S N K R G L K L L Q M K V E K G D V I L V K K L   D R L G R D T A D M V S L I K K			
UniRef90_UPI0003469FED	D F N R E Y K S L L R K L L R K G D V L Y I K S I   D R L G R D Y H E I I V I Q W Q Y			
UniRef90_E5Y718	F R R P Q Y R T M L R Q L K P G D I L C T S I   D R L G R N Y E E I I Q Q Q W R I			
UniRef90_S6D4T3	N R P E L T R L M D M N M R S G D V L I I T K P D R L   A R S T S D L L S I V N E			
UniRef90_I3X1H8	M D R P G L A E L L A Y A R M G D T L A V V R L   D R L G R S L A E L L E T V K M			
UniRef90_R4UL68	S E R P G W A E C L A W W L R E G D V L V V A A V D R I   G R S V R E V A T A L A D			
UniRef90_Q1KY31	E R P G L A K A L E M L R E G D T L V V W K L   D R L G R S V K N L V D L V G Q R			
UniRef90_UPI000474C3E5	R P Q L E A A L E L F T R E G D V L V V T K P D R L   A R S T E D L L G I V R R S			
UniRef90_UPI000225AA07	G S S R Q S T Q A R K I D Q P M D I I I S S E L S R L   G R S L K E T L N T I E S			
UniRef90_UPI00030330AB	E R I G L T A L L G T L R K G D I V V V W R L   D R L G R S R K D L I R L V E Q			
UniRef90_UPI000255E189	R E R P G L R E A L A A G R A G D T L V V T K L   D R L A R S V P D A R A I A D E			
UniRef90_I7CC69	L H R P E F S K M A D R M E A G D S L I V L K   D R L G R D V Q D V L A T I E V			
UniRef90_UPI000370207A	R N R P Q L Q M L E H L R T G D T V H V H D I S R M A R N V G D L L E L V E S			
UniRef90_W9EUK0	E N R P V L Q E A L N F L R M G D R F V V E S I D C Y L G R N Y			
UniRef90_UPI00046A4659	R E R P G L A Q A L A A V R A G D T L V V P K L   D R L A R S V P D A R S I A D E			
UniRef90_T2LEB1	S E R R K G F Q K I L E R M E Q G D V L V V T K L   D R L G R N S D V Q S T V K M			
UniRef90_R9G844	T H R P F D L L N T I S S G D T L V V T K L   D R L G R D F A R N T R E A L N S I E			
UniRef90_T1W6A5	K T R R P G M Q R L L E Y A E A G D T V V V W R V   D R L G R S L I D V L N T V N G			
UniRef90_W1W428	Y F E R Q Y Q V V L K L A L R P G D E L Y I H E L D R L   G R N K K A I S D E L R Y			
UniRef90_UPI0002556858	S E R R A G F H K L L D R M E A G N V L V V T K L   D R L G R N A D V Q S T V Q L			
UniRef90_M1X9X8	M N R P E L Q R M I L N D A K N G D C Y M V Y K T N R L   A R N T S D L L T I V E E			
UniRef90_W6I3F8	D G S Q L E A A L G Y M R A G D T L G I W S I A H H L A R S F H Q L I K V V K K			
UniRef90_17JGM9	T E R P Q L Q A M L D Y I R E G D I V V V S E L L D R L   G R N N K D L T D I M N A			
UniRef90_I4SWJ9	S N R P V L K R L I T A M H T G D E L V V V W K L   D R L G R N V L H A L L M F Q Q			
UniRef90_J2FYU0	R D E L L A A A L E F V V R E G D T L V V T R L   D R L A R S T A D L L A I I A T			
UniRef90_B0P6F2	F E R P A Y M R L V K K L R K G D L L V I C S L   D R L G R N Y Q E I I L E Q W H H			
UniRef90_W0YPP2	S E R Q R G F Q K L L E R M E D G D V L V T K L   D R L G R N A M D V R S T V E L			
UniRef90_A7K4V2	G G V C A L E R K G F R I L I E H K V L K   D R L G R D N D V Q Q T I K L			
UniRef90_T0KLL5	A E R P Q L K R A I G A L L D D G D V L M V T A T D R L   A R N T R D L L N I L L H A			
UniRef90_U1S6W2	R P Q R E E L I N Q A K R R Q I D V I I V W K L   D R L W G R S V N D L F H T L N E			
UniRef90_T0HW11	A E R P K L K R A I G A L L D A G D V L M V T A T D R L   A R N T R D L L N I L L H A			
UniRef90_R6PUQ1	F N R P Q Y Q K L L R K G F D V L V Y A I D R L   G R N Y T E I I Q E Q W R I			
UniRef90_UPI000051055E	A N R A G L N K L I D Y Y A R E G D H R V A S L   D R L G R D A R D L Y S L V D T			
UniRef90_J7S564	R P E L Q R M L K D A N D G K L D C M V Y K T N R L   A R N T S D L L N I V E K			
UniRef90_K0FRW9	N M D R E Y Q I M K H M V R T G D T I V F D S L T T R L   G R S S M N D I L L E E F R Y			
UniRef90_I3XH19	T R A R P V L A K L L K D L A T G D V L V V V R   D R L A R S V S H L L D V I E D			
UniRef90_T2L567	L I P A L Q R V G F S E Y V V R E G D V L V V Y A I D R L   G R D T V D V L N T V Q F			
UniRef90_R5GK01	D F D R G T D E V A P R P L Q E G D L L V I T S L   D R L G R N Y T E I I K D Q W N Y			
UniRef90_UPI0003FC79F9	L D R E G L N L L R I K V V E E G D L L V L V T R L   D R L G S D T S E M I K L I K E			
UniRef90_U7JQ83	W S R P Q L T K A L E F M R P G D T L V V T R L   D R L G R N M R E A V N T I A D E			
UniRef90_S9TH83	G I S G A K G R D K R P R R K F D V V M A W S V D R L   G R S L Q D L V A F L S E			
UniRef90_UPI00042806DF	N E R S V F K E V L D F V R S E D Q L I V E F I D R L   R R N Y D E I I D T V N F			
UniRef90_E0WV45	I N R P Q L Q A M L E Q V K A G D T I I I H S I   D R L C R N M M D M C T I T T H			
UniRef90_R6ZA12	E R K G Y Q A L K S A I L R R G D T L V V K S   D R L S R N K A D I K N E L Q Y			
UniRef90_A8ZQU2	A R R P G L K A C L K Q P G N T L V V W K   D R L G R D L K H L V D V V G E			
UniRef90_A0A051TLB6	T D R P G L A A M L D Y A P A G D T V V V S A I   D R L G R S V A E V T R T I A E			
UniRef90_A4JB03	N Q R P G F L K L L D K M E E G D V L I V T K   D R L G R N A M D V R A T V E D D			
UniRef90_A4QA52	E D R P E L A S C L K A L R A G D T L V V W K   D R L G R N L R H L V N V V H D			
UniRef90_UPI0003B3F9CC	F N R P A Y K R M V R V K K D D L L Y I K S   D R L A R N Y E E I I Q N Q W R F			
UniRef90_H5S981	G V S A L D E R P A F E Q M M K N A V I V T R   D R L G R S V L D L V S T V T E			
UniRef90_D0HF00	A K Q R A G S V L L G K L R K G D T L V V W W   D R L G R D Y R D S E S T I R E			
UniRef90_UPI000237EE3B	K E R P G L T R L L Q V A R T G D I V V Y R   D R L A R S T Q H L L E I A E S E			
UniRef90_UPI000381A9D4	D G R A E L V T V M E F L R S G D E L V V T R   D R L G R D T R D V V L N L I H			
UniRef90_L0IQ67	D D R P G L A A L M A Y V R T S D T V V V W K   D R L G R N L W H I L Q T V K E			
UniRef90_E1MDP2	I Y T D E G I S G T S T K H R E G F N H M I S   D R L S R F A R N T V D S L T T V R K			
UniRef90_W0M866	E R P K F R A L V E H K L L E R S D A L V V T K   D R L G R N T S D V L T T I D R K			
UniRef90_U2QEAO	K R A E L Q K L I S K I R E N D T F V V T D   D R L G R N F T E V T E L L Y T K			
UniRef90_UPI0003667468	S E R I G E Q K L L E R M E H G D T L V V T K   D R L G R N A M D V R S T I E K			
UniRef90_G7ZEM3	S E Q P V L A G A L K A F R R S D T L M V W R   D R L A H S T K E L L P I G D R			
UniRef90_R5F612	E R T G Y Q L L K Q S L L R S G D T L V V K   D R L G R N K Q M I K E E L E W			
UniRef90_UPI0001FFDE62	A S R P K L D T L L Q G L V P G D E V V V T R   D R L K R I G R S Q Q H L L D L V R R			
UniRef90_C1EZB6	D M D R E F Q N M L K A M R A G D T L Y I K S   D R L G R N K A Q I K E Y L E Y			
UniRef90_K1DU10	T D R P G L A R L L E R R L E Q G D V L T V W K   D R L G R S L K H I S V V D E			
UniRef90_F8KMR4	M K R P A L L Q K L L M K H L S S F D L V L V Y K   D R L T R N V R D L L D M L L E E			
UniRef90_M9R4V4	R D E L T R S I D M L R T G D K L V V T K   D R L D R A R N V M H M G E L L Q L			
UniRef90_UPI00040CB075	D R P E Y Q A M K N H M R D R G D T L V V M S L   D R L G R N K K D I K E E L E Y			
UniRef90_W6TBE4	T Q R P A L L Q K L L T Y I R D G D I V L V T E L   D R L G R N N Q D L T K I M N T			

90                    100                    110                    120

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UniRef90_UPI000367F13B	I A S A G V R F I C T Q G L D T D N S	N P M G R A M L G M L Q V F		
UniRef90_F0Z4G0	I K E I G A D I M V L D M P L L D T R K G K D L V G T I A D I V L Q L L S F V			
UniRef90_E0H894	F R S K G A S I E I L D L P S F N G V T D P A L R D L L T N L V I E V F S Y V			
UniRef90_UPI0002E1ECEF	I K E I E A D I M V L D M P L L D T T Q Y K N S L G T F I A D L V L Q I L S W M			
UniRef90_X5LS97	F E H D G I T L V S R T E Q I D T S T	A M G R F F Y T V L A A Q		
UniRef90_UPI00046ABC5B	L Q S R G V K V N F R S L T D S I D T S T P M G A F S F T S W G R	D P M G K M F F N V L A T F		
UniRef90_I4S5K1	L L R N R G V N F R S L T D S I D T S T P M G A F S F T S W G R			
UniRef90_S5EIW4	L Q A K G V K V I S L R E E F D L S T S	V G K A M L T T M M A G L		
UniRef90_H8K684	L E E Q K S V A L K V L D Q N I D T	K D A T G R L I F N V L G A I		
UniRef90_Q58KG5	L L A S V G V R V H C L A L G G V D L T	S P A G K M T M Q V I A A V		
UniRef90_D5EIC4	L L D A N G V G L I V S D Q G I D T T D	Q N P A G R L Q L N V L M A V		
UniRef90_X6KRB0	C E Q R D A F V T V L D P H V S T R G E M G H M V L T V L G M I			
UniRef90_R7G4J0	L K K I N N D M I V L D F P L L D T R N Q N G I T G K F I A D L V L Q I L S Y V			
UniRef90_U7QW47	C Y K K G L A I R F L E N G L S T E G S	M G K M M I Q I L A A V		
UniRef90_D3G217	I R E E G A D I V V R N M P I L D T R N E G P G V G E L I S N L V L T T L L S W M			
UniRef90_A0A059L0JO	L L V K R G I R I E F V K E A L T F I G D D S P M A T L M L S V M G A F			
UniRef90_F0J852	I K D S G A G L R S L A E P F I D T T S D F	A E I V L A I L G V A		
UniRef90_V5WYN1	F E D I G V Q F V V S L K E N M D T R T S	T G K A M F Q Q M M C V I		
UniRef90_E8T8S1	L L H A L R V D L F L F L H Q Q Q G I D T T T	P A G K A M F Q Q M M G V F		
UniRef90_UPI00030E915A	L L T D R D I G L K V L T G Q I D T T T A S	G K L V F G I F A A L		
UniRef90_UPI0003065002	L L D R R G I E F E S L S E G I T L I P G N P N A V S R L L V T V L A A V			
UniRef90_C2GQD0	L L M S K G I K F N V L N I G I L E N S T I G K L V K T I L L A V			
UniRef90_D5NZ01	L L A E R D I N V R V L E P V L D T S R P A D	K V V V N V M A S L		
UniRef90_U4EYS3	F D D V G V A I K F L D D G I S T E G E	I G K M V V T I L S A V		
UniRef90_UPI0003469FED	L L T T K G I D I V V I D F P L L N T A E M H E G T R K F I L A D L V L Q V L S Y V			
UniRef90_E5Y718	I I R D M K V D I L V L D M P L L D T R R D K D L L G T F I S D L V L Q V L S F V			
UniRef90_S6D4T3	L L K G K G C E L I V L S S M G G Q K F D T S N P T S K L M L H M L A A I			
UniRef90_I3X1H8	L L R E R K I I D L L S L E E K I D T S S A A G E L V F H V F G A I			
UniRef90_R4UL68	L L T E R G I A I L R S L R E G V D T S T P T G R A V V Q I M S S I			
UniRef90_Q1KY31	L L H Q Q G V H F K S L T D A L D T A T P S G R F F F H V M A S L			
UniRef90_UPI000474C3E5	L L E G Q G Q V A L R I L S S M G G S E V D T R G P T G R L M L T T M L G A V			
UniRef90_UPI000225AA07	I I V Q E K Q A R L I L I K Q G L D I N P H N T T N N L T N K V L I T V F S M V			
UniRef90_UPI00030330AB	L L D A A G V G L H S L Q E S I D T A S N E T			
UniRef90_UPI000255E189	L L T A R Q V I S L S L Q G S V Y D P T D A I G R L L F N V L A M V			
UniRef90_I7CC69	L L A A R N I H H V K S L L D L E G V D L T S A A G K L Q L T V L A A V			
UniRef90_UPI000370207A	F F K A K G V A L K F Y K E N M T F T P D T N D A M Q D L M L T M L G G I			
UniRef90_W9EUK0	UniRef90_UPI00046A4659	D E V V G N P L L D K F M K D L I I Q I L A M V		
UniRef90_T2LEB1	L L A K R G V R L A L G A S V Y D P H D P M G K M F F N I L A T F			
UniRef90_R9G844	L L E T T K G I R V H C L A L G G A D L T S P A G K M V M S V L S S V			
UniRef90_T1W6A5	L L L D Q N I S I K V L N L G T I E N T P M G K M I V R T I L L S V			
UniRef90_W1W428	L L R D A G I N V R S I S D G I D P A T S T G R L M L N M L A T L			
UniRef90_UPI0002556858	F F K D N N I I I R I L D V P I D Y S T F N D G S M L E M I N N L L I E V L S T L			
UniRef90_M1X9X8	L L E S K G I K V H C L A L G G V D L T S A A G K M T M G V L A S V			
UniRef90_W6I3F8	L L H R Q N V E F F S L S E R M E V K N S T G K L M L Q I L A S F			
UniRef90_17JGM9	I I Q Q K N A T L E L V I N L P S M S G I E D D N L R R L I N P H G Q L I Y Q I F G A F			
UniRef90_I4SWJ9	I I L Q E K G I N F R S I T D G V D L K T A S G R Y N F R N I L S A			
UniRef90_J2FYU0	L L E G K G V A L R I I L D F G G Q A V D T T S P S G R L I V T L F G A V			
UniRef90_B0P6F2	L L T H K M I D I V V L D M P L L D T R G R R D L L D T L I S D L V L Q L L S F V			
UniRef90_W0YPP2	L L A S R G I R V H C L A L G G V D L T S A A G K M T M Q V L S A V			
UniRef90_A7K4V2	L L M D K G I N I H C L D L P H N D L N S P E G Q L M L K M F L A F			
UniRef90_T0KLL5	L V K E A G A G G F R S L A E P M V D T T S Q F A T G R A M A G L L A I F			
UniRef90_U1S6W2	L L N G L G V G F I S L T E A L D L T T A D V I I A V L G I V			
UniRef90_T0HWI1	V V K E A G A G G F R S I A E P M V D T T S Q F A D V I I A V L G I V			
UniRef90_R6PUQ1	UniRef90_UPI00051055E	UniRef90_J7S564	I I R e K K K A D I V V L D M P L L D T R R G K D L M G T F I S D I V L A L L S Y V	
UniRef90_UPI000051055E	L L T G K G C T V T F V S E N I T V S K D G S S P M Q E L F L T F L S G M			
UniRef90_YEENKIN	L L Y K I N V E F F S L T E K I E I A S S T G K M L Q I L A S F			
UniRef90_I3XH19	I I Y E E N K I N L E F L K E P F I N V T A T N D I I Q S A V R K A T A T I L L S A F			
UniRef90_T2L567	L L E K R G V H F R S L R D P I D T S T P Q L R Q R E V F G K V L			
UniRef90_R5GK01	M M Q S K G V S I I S L S R E G F D L N T P I G K A M L T M L A A M			
UniRef90_UPI0003FC79F9	I I K T L K A D I K V I E I P F L D T T S T N G N L D K F I A E L T L Q I L S Y V			
UniRef90_U7JQ83	F F S E L L G V Y I R F I K E G I S T E G T M G K M V V T I L S A V			
UniRef90_S9TH83	L L G Q R E M N V K C L D P E L D T S R P Q D R V V I N I M L S L			
UniRef90_UPI00042806DF	V V H V L G V D L F L H Q Q G I D T T T P A G K A M F Q M L G V F			
UniRef90_E0WV45	L L K Q K D V Q L V I T S S L P I M S E A I G N P L L D K F I K D L I I Q I L G M I			
UniRef90_R6ZA12	UniRef90_UPI000237EE3B	L L R N Q G V S L L V F L K E Q S M R E K N N P M Q E L Q L H M M S A F		
UniRef90_A8ZQU2	F F K D N G I R L K V I D L P T T M T E L G Q E W V F E M V N N I L I E V L G T I			
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 R D R P E L G R L L D H L R A G D V T V T R L L D R L A R S T R D L L D I A E R  
 D R P E L A R I L E D V L R A G D T L V V W K L D R L A R S L K K L I A T A E D E  
 R P E G S R V V D L V A L G K V Q H V A L K L D R L F R S A V D A L T T T E E  
 Y D D P G F S G G G N T E R P G L K R L M V Y K I D R L T R S L A D F S K M V E V  
 N R E K L N E L I N N L K A G D T I Y V T D L T R I T R S T K D L F L L I E K  
 F N R P E L E K A L D N L R E G D V F V V W R L L D R L G R S L P H L I E T V N G  
 A D R P Q G K R L L G V V E K G D M V I T P K I D R L M F R S A S D A L G T L E E  
 F K R P L F A K L V D R L E A G D V L I V T K L D R L G R S L D V R S T V E K  
 S D R P Q L E E L K R H A R R G D T V V V H S L L D R L S R D L N H L L E L V D F F  
 K K R P G L I E A R G A L K S G D T F V V L S I I D R A F R S T I E G L T V L D E  
 G D R P Q L A A L I R H V R T G D H V V V A S M D R L A R S L V D L N T L V Q Q  
 E R P E L H R M L D H R E S T D V V V W K L D R L S R S L K D V L T T I M E R  
 A S A S D F T G R K A W T A L M K E A Q V W K L D R A F R S V I H A V N S M Q M  
 S P R P V Y A D L I K H S R P G D V I V V A A V D R L G R D V P A M S D T V R E E  
 N F D R E Y Q T M K K I L I R E G D I I Y F D A L D R L G R N Y K E W K H I T R E  
 F D R P E W N A K L K R S I L R S G D V L F I K S I I D R G R N K T S I L E Q W K W  
 E G I S G T K I R D C E S D R I D F I I T K S I S R F A R N T M D C L E L V R Q  
 R I E R Q K V M A L A Q A R K I L D M V L V T E M T R W G R S T D L I Q T L Q D  
 D K R P A Y R E R M M A E M D E W D V M V V L K M D R I H R N S R N F M N M M D E  
 R P A L Q R M I R D V K M D G K L D K I I T W K V S R I A R N N R D L L N L L K I  
 T N Q E G F Q E M M M K F I R E G D I V V V T E L K R L G R N N K E L T E T M N L  
 E G I T G T K K E K R P E L L R M I A D C K S I I S R F A R N T D C L D L V R R  
 T V I N G S E R P E V T G L R K G D E L I V W W F D R L G R N Y H D A R E M A Q M  
 G S T K A L E R E L F K N L I E Q K L E K G K L D R L G R D N D V Q Q T V K Y  
 N R P S L K N M I I N L A L G D E V L V D D I S R L A R S L K D L N E L L H Q  
 D G I S G T N T K K R E G F N E M I N D C M S I S R F A R N T D C L K Y V R Q  
 G W S A K D L E R P Q M K Q N I D I V L V Y R L D R L T R S V L D L Y L L Q T  
 A Q R P E L K E C L N Y L R E G D T L V V Y K L D R L G R S L K N L I A L L D E  
 V L K P A Y M E M C E Y A R P G D E I I V W R L D R L S R S L I T L I C E L Q A  
 E D R P E F Q S M M N F C R Q G K I I I T K S I S R F A R N T A I V L E T V R E E  
 D G I S G L S R K N R D G F N R L I E D T K S I S R F A R N T L D T I S T I R K  
 T A R P K F Q E M L S Y V R E G D M I V V H S M D R F A R S L K D L V T E V D Q  
 D N R P E F Q R M L E K Q G N I D I I T K S I S R F A R N T T V M L Q I V R E  
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 G Y S A K D L N R P F E E M M K M I K V Y R D L R T R S V L D L Y Q I L K D  
 A G Y S A K N T D R P N F Q N M M H L V W K I D R I S R N L I D F C D M Y E E  
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 D R P E L H K A L E Q L R E G D V L V W K L D R L S R S L K D L L T I L E E Q  
 G Y T G T N M D R H V E N Q K I N V L V V Y K L D R L S R K Q D V L Y L L E  
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 G V I S A K D L Q R P E R Q N K M D V V L V Y R L D R L T R S V L D L Y Q L L Q T  
 R P Q G Q K L I K D A K N N K F D T L L Y K L D R L G R S A R I T L N S I H L  
 R P E L K R M I E H I K K G L I D C V L V H R L D R L T R S V L D L Y T L L D V  
 F N R P S Y Q T M K R I L R K G D L L Y L D A L R D R L G R D Y E G I I Y E W K H  
 S N R P E W I K L L K I V H A G D T I V F D S V S R M S R N A E E G F N T Y M E  
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 E R H G L E A M L N Y I R E G D I V V V T E L D R L G R N N Q E L T D M M N M  
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UniRef90_F0YZ99	V I Y I R V S S E R Q S L D G Q K R Y I D C A E R Q G M K V L A V Y V R T				
UniRef90_UP100016C43FD	Y T R K S T E E N S L D A Q R E A G E A F V R S Q A G E G E G W T G G N T D				
UniRef90_K8PFH8	Y T R K S T E H N S L D A Q R E A C E A Y I K S Q T S L G W K V L P Q P				
UniRef90_E7IF47	M L I G Y V R V S T D N Q T D L Q R N A L V C A G C E Q I F E D K L S G T K				
UniRef90_UP1000255643A	A Y C R V S T D L E S L E T Q K S H Y E N Y I I R L Q D N W E L A G I Y F D				
UniRef90_U2LLW2	A Y A R V S T D E Q S Y A A Q I S Y T E Y I L K G R E D W E F V G V Y T D				
UniRef90_UP100041CC521	UniRef90_UP10003A944A8	R V S K E S Q S F E R Q I S D L R A H F K N N Y N V I G E F N E K			
UniRef90_UP1000366079F	Y T R K S S D E N S L D A Q R E A C E A Y I V A S Q R H E G W K T L G A R S				
UniRef90_C3DDF3	K V G Y I R V S S K D Q N L E R Q T A A L K K E K C F R I F X D T V S G S S				
UniRef90_Q0BZ44	I Y G Y I R V S T K D Q N E Q R Q L H K M E R G V E A R R I F V D K A S G R H				
UniRef90_G0VLN7	Y T R K S S E E N S L D A Q R E A C E A Y I A S Q R H E G W K L I P A H				
UniRef90_A7GKW7	A Y C R V S T D S D E Q L Q N S Y K S Q V T Y I L N I K K K N K D W V				
UniRef90_F7UY75	Y V R V S T K M Q S S E A Q L Y D L R Q Y A K R E N L R I L H E Y I D R				
UniRef90_UP1000248D356	A Y C R V S T D K E S Y T N Q V N H Y T Q H Q S S N E W D M V D I Y A D				
UniRef90_S0JB16	V Y T Y T R V S T A M Q S L D A Q K A R M K A Y A D Y N D E I V G T Y E R I				
UniRef90_UP100046323DC	M R V G Y I R V S T V E Q N T A R Q L D G V D V E K T F T E K A S G R D				
UniRef90_UP1000424D04F	A Y T R V S H T S Q S L S N Q V S H Y S Q L I Q S N P E W S Y V G V Y S D				

50            60            70            80

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UniRef90_R2MM31	Y R T E L E K A L K C L K K G D T L L I V Y N L   A R L L   S R S S R Q L V N L M S E
UniRef90_UPI000467B12F	D G R R G L Q G C L K K A L R S G D T L V V W K L   D R L L   G R D L R H L V N T V D D
UniRef90_K6TXM0	I D R P A L N K M K L E V N E G D I I Y C E S I   S R L   G R N V D D L   R S T T C D Y
UniRef90_W8IB15	R A E R R K I M A L A Q A R Q I D A V L V T E L   S R W G R S T V D L L   N T L R E
UniRef90_W4CFE2	F D R P R Y Q A M R L M L R E G D L V Y V D A L   D R L   G R D Y D G I I A E W K Y
UniRef90_V8FR76	E G R K E F N K L L N I I K E G D M I I F D S V S R M S R N A E E G Y K L Y E Q
UniRef90_B7AT59	E G I S G T N T K R R E Q F K K M I A D C K S I   S R F A R N T Q D C L A Y S R K
UniRef90_R5Y3I0	V Y A D E S I S G T Q D Y K R S N F M R M I S I   S R F A R N T L D T L   K Y V R M
UniRef90_UPI00037DBAF4	D A S G A T T N R E G L Q N R Y D V F L V Y R L   D R L S   S R K V A D V I A L L A A
UniRef90_R9BTL8	T Q R P Q F Q K Q K A D V K A K K I N S L V C Y   D R I S   S R N V A D F S T T L E L
UniRef90_UPI00047C7848	R P A L Q E L L K D C S Q K K F D I V L V W K L   S R L S   S R K L K D T L Q L I E D
UniRef90_F8DMY0	D G I S G T D T K K R N Q F N Q M I D D T K S I   S R F A R N T I D C L Q Y I R E
UniRef90_R9JHZ8	E G I S G T N L R K R E G F N R M V N D T K S I   S R F A R N T V D T L T T V R T
UniRef90_E4A1X2	M N R P A L N E M L S K L H E I D A V V V Y R L   D R L S   S R S Q K D T I T L I E E
UniRef90_R5FXD7	E G I T G T N T K R R E G F N R M C I T K S I   S R F A R N T L D T I K Y V R E
UniRef90_F5RNC9	E G I S G T N T K K R D G F N Q M I I T K S V S   S R F A R N T V D S L Q N V R K
UniRef90_UPI00046ADAB2	Q K R P E A Q K L V N E L K P G D T I V I A K L   D R G F R D T A D C L N T V K W
UniRef90_F7MJ37	N N R E K Y S K L K D K L R T N D I L V I T D L   D R L L   G R N A D D V I M E L K E
UniRef90_W3ZY61	A L A A V T S A A A A I D G R Q V V L T T P K F   D R F A R N M A E A G Q T L T E
UniRef90_A4X6D7	D A S G A T L D R P G L T K R F D L L L V Y R L   D R F S R R I R D L A T L M D D
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UniRef90_E2NUL7	D G I S G T N T K N R E E F N R M I E D C K S I   S R F A R N T L D C L K Y I R Q
UniRef90_UPI00037D0B16	Y D D G G I S G G T M D R P R I D M V V V Y K I   D R L T R S L A D F A R L V E Q
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UniRef90_D9R5W6	L Y A D E G K A A T G T K F R D S F N D M I S I   S R F A R N T V D C L R I I R E
UniRef90_K2DVG6	D R P G L H K A L E Q Q L R E G D T F V V W K L   D R L G R N V K N L I E L V T S
UniRef90_Q8KW50	R S A R A N R I I L D L A Q A R Q I D A I L V S E L L S   S R W G R S T Q D L L D T L N K
UniRef90_E1QK30	Y D D G G F S M A D I E A G G I D C V V V Y K V D R L S   S R S L L D F S R L M E I
UniRef90_G4HIF3	E A I T G T Q I K D C M D G K D I M V I T K S I   S R F A R N T V D T L K Y V R M
UniRef90_T3WSU6	T N R P G I K Q Q D A T E N K F D L V I V W K L   N R I S R K L L D I L N I V E L
UniRef90_W7DAP4	K R R K E L E N L F L R M R A G D T L V V T K L   D R L S R T T K D L L E I S E F
UniRef90_W4Q472	G I S Q G Q L L R D A S Q K E F D I V I V W K T N R L A R N I L D T L K I I I E L
UniRef90_R9JW39	D R P R Y M V L V I E D V L R E G D I L L V T E L   D R L G R N K R D T M E Q I R K
UniRef90_F8JAB1	Y D D G G L S G G T M E R P K A Q I V V V V Y K V D R L T R S L A D F A K I V D I
UniRef90_E9SG16	E G I T G T S T K H R D G F N R M I K D C K E V S   S R F A R N T V D T L N Y T R K
UniRef90_A0A011PD08	E A D R P G L A K A M K M L R E G D A L L V V W K L   D R L G R S V K Q L V D L V
UniRef90_Q4MV72	G R P E L N R M L E F F L R N E D T V V V T D L   T R L S   S R S T K D L I E L A E L
UniRef90_I7KJZ0	E G I S G T S T R R R Q G F Q S M V I I T K S V   S R F A R N T V D T L T T V R A
UniRef90_R8QZ77	K Q K P L L D E L L S K I A P N D T L V V T R M D R L   G R N N I I Q L L Q L V E Q
UniRef90_E2Z9T3	R K A F K Q L M E D V Q W N R I D R I L F K I L D R W F R S V R D Y Y K A Q D I
UniRef90_I8V157	E Q R P G L A A L L D Y A R E G D A I V V V G I   D R L G R N A A E V M T T I R E
UniRef90_UPI0003B5B4D9	F E R P G Y Q T M K R I L R K G D L L Y L D A L   D R L G R D Y Q E W K Q I T R E
UniRef90_U1WMG0	L N R P K M Q R M M H D M T K K H F D V V Y K I   D R L V R S V T D L H N L L Q L
UniRef90_W8TNF8	E G I S A T T T K R R D G F N R M I I I T K S I   S R F A R N T V D T L T A V R Q
UniRef90_C8WB71	A E R P G L E A L N F M R E G D K F I V W R L   D R L A R S L K E L I T L V D N S
UniRef90_UPI000378CDF6	M D R P A L I N M L D Y V R S G D T L Y V H S I   D R L A R N L G H L N E M V T S
UniRef90_U2CHD5	F A D E G L S G T T L R R P R F A E I I L T K E   V S R F A R N T V D A L Q V T R R
UniRef90_R4YE12	Y W R P G L R K A I R R L R P G D S L L V V W K L   D R L G R S V R D L I T L V S E
UniRef90_R6LSH0	E F Q R M L A D I Q D G K D D S V Y V L V F K L   S R F G R N A A D V L N S L Q L
UniRef90_Q1QQ23	Y D D P A Y S G G N L D R P A V R R V V V V Y K I   D R L T R S L A D F A K I L V E T
UniRef90_V6EXE6	Y D D G G F S G G T L E R P G L R R V V V V Y K I   D R L S R S L M D F S K L V E V
UniRef90_UPI0003B2EA9E	A D R P G F G T L L S Y I R E G D T L Y V Y A L   D R L G R D A L D V Q A T V R K
UniRef90_A0L6Z5	Y D D G G F S G G N L D R P K I D M V I V Y K I   D R L T R S L L D F S K L V E R
UniRef90_E6PH16	G E S K A L D Y C K A Q R E G F R K M V E D T   K S V S R F A R N T V D S L S T I L K
UniRef90_R9KGZ7	E G I S A T G I A K R E G F R K M V E D T K S V   S R F A R N T V D S L S T I L K
UniRef90_UPI00035C1B5C	P G L S Q L F Y Y L E N H R D I E G V L I F K L   D R L A R D L Y I Q E H L I K Q
UniRef90_UPI0001E2CBF2	I Y A D E V E K R E D F K R M I E D A K D R K F D R F A R N T K D S L E Y T R K
UniRef90_B815Z3	E G I S G T Q A E N R I E F Q R M I I I L T K E   I S R F A R N T K D S L E Y T R M
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UniRef90_M8DYN6	G F S A K D T K R P A L Q R M L G D I R V Y R   L D R L T R S V L L D L Y R L L Q D
UniRef90_UPI0003690F0A	Y D D G G F T G G N M E R P G I D C V V V Y K V   D R L D R L S   S R S L D F A R M M E L
UniRef90_UPI0002F010F9	I N R P S F K N M M K D A K E K K F N I C Y R   L D R I S V A D F S S T L E E E
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UniRef90_A7GKW7	F A D Y A D E A D C M N G E L D M V I T K S I   S R F A R N T L D T L K Y V R M
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90                    100                    110                    120

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UniRef90_K6TXM0	A E M E
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UniRef90_W4CFE2	A E Q E
UniRef90_V8FR76	
UniRef90_B7AT59	A Q D E
UniRef90_R5Y3I0	A Q Q E
UniRef90_UPI00037DBAF4	A E F E
UniRef90_R9BTL8	A Q L E
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UniRef90_R5FXD7	A Q E E
UniRef90_F5RNC9	A Q E E
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UniRef90_U1RB32	A Q E E
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UniRef90_E1QK30	A Q F E
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UniRef90_R6LSH0	A E I E
UniRef90_Q1QQ23	A Q F E
UniRef90_V6EXE6	A Q F E
UniRef90_UPI0003B2EA9E	A D M E
UniRef90_A0L6Z5	A Q F E
UniRef90_E6PH16	A Q F E
UniRef90_R9KGZ7	A Q E E
UniRef90_UPI00035C1B5C	S E L E
UniRef90_UPI0001E2CBF2	A Q D E
UniRef90_B815Z3	A Q D E
UniRef90_N8Z2B4	A Q F
UniRef90_M8DYN6	A Q W E
UniRef90_UPI0003690F0A	A Q F E
UniRef90_UPI0002F010F9	A Q L E
UniRef90_D0R0F3	A Q D E
UniRef90_S2W1F8	A Q E E
UniRef90_UPI0003658A22	A Q F E
UniRef90_L0FY09	P E V E
UniRef90_M2KS33	A Q L E
UniRef90_UPI00036CFD85	A Q L E
UniRef90_M1R0J8	D E F
UniRef90_R3UAF7	A M M E
UniRef90_F0YZ99	A E L E
UniRef90_UPI00016C43FD	A Q F E
UniRef90_K8PFH8	A Q F E
UniRef90_E7IF47	
UniRef90_UPI000255643A	A E D E
UniRef90_U2LLW2	S Q E E
UniRef90_UPI00041CC521	S R T E
UniRef90_UPI0003A944A8	A Q F E
UniRef90_UPI000366079F	
UniRef90_C3DDF3	A D Q E
UniRef90_Q0BZ44	A Q F E
UniRef90_G0VLN7	A Q Q E
UniRef90_A7GKW7	A Q Q E
UniRef90_F7UY75	A E M E
UniRef90_UPI000248D356	A Q D E
UniRef90_S0JB16	A E I E
UniRef90_UPI00046323DC	A E F E
UniRef90_UPI000424D04F	A Q E E

UniRef90_D1ARY5	1	M K Y Y Y A R   V S T A K Q N   L A R Q   E L F K E   L G G N K   I F E E K R S G A N F
UniRef90_S9S9W3	10	Y T R K S S E E N S L H A Q R E A C E A Y I A S Q R S E G W V L V R D Q
UniRef90_G7MAZ8	20	Y C R V S T P E Q S I G E Q K R I L S D E C I K H G D T I Y K V Y A D E
UniRef90_D4J8N9	30	Y V R V S T S Y S S L P M Q R Q E L I A Y A K L M F G I E D Y V I F E D
UniRef90_R5GV45	40	A R V S T N M Q D Y D R Q I N E L T R L A K R N G W E I A A S F N T E
UniRef90_R5TK60	1	A Y A R V S T D E Q S Y S S Q I N H Y T N Y I K S N P D W E F A G V Y A D
UniRef90_UPI00046740C0	10	A Y C R V S T D D S E E Q I T S Y E A Q K A Y Y T Q K I E E N P D W E M K K
UniRef90_R9MVT2	20	A Y C R V S T D D Q S F E S Q R R F F K Q Y I E R N P D W E L Y K I F A D
UniRef90_V7IBC0	30	Y C R V S S E E E S L E N Q I H Y T N Y I R S N P D W Y Y A G V Y S D
UniRef90_J1AM31	40	M K V A Y L R V S T Q E Q S L E R Q H E D I Q E F F E D K I S G S K T K S D E R
UniRef90_UPI0003B3E07E	1	I Y G Y A R C S T D E Q D I D R Q R R E L K N M G I G E D K L I F W E Y E R K
UniRef90_K7WKU3	10	M K A G Y V R V S T R E Q D L E E Q T A R V E R A G A I V F S D V E S G R S D
UniRef90_F4AC05	20	M I Y G Y A R C S T D K Q D I T R Q T R E L L K A L G V E K D N I Y F E Y A S G T
UniRef90_F9ZK85	30	L I G Y V R C S T N R Q M V L Q Q I D A L R D A G C L H I Y K D K A V R A T A
UniRef90_W8U8P4	40	A Y C R V S T A D E S L E N Q T I H Y T N S I R T N P D Y Q F A G V F L D
UniRef90_H1YL2	1	M K V A Y I R V S T D E Q S R Q S E E V L R R Y C E I N N I S I R K T I F E D
UniRef90_V9UMQ2	10	I A Y V R V S T D D Q T T E A A Q R H A I S Q R F N V S E W F S D E A T T K A
UniRef90_UPI000360A7D8	20	M I Y G Y L R V S T D K Q T V E N N Q R F E I E E F A Q K R N I T I D E W T S E I
UniRef90_I4AC24	30	A Y G R V S S E D Q T I I E N Q I D F G N K Y C D L H G I K L E E W Y L D D
UniRef90_UPI0003693B0A	40	Y V R V S T E E Q S I L Q A Q I S D L E R Y A Q Q N N F E I V S R Y V D E
UniRef90_B6FWT2	1	M K A A Y V R V S T T Y Y S I L P V Q R Q D I N Y A K Y A F N D D Y K I F E D
UniRef90_V2Y7R6	10	A Y C R V S S D D Q S Y A A Q I R K Y T E E I G G H D G W K L V D I Y A D
UniRef90_B1QVR0	20	M K A A Y S R K S K K G E S I E N Q I E M C K E Y D E F I Y E D E G F S G G N
UniRef90_R6MQ77	30	A Y A R V S T D D Q S L T N Q R E Y F E S Y I K S N G D W E F V E V Y F D
UniRef90_B2TRZ8	40	Y L R V S T E E Q S M D A Q K A D L T D Y A K K H N Y E I L D Y Y V D K
UniRef90_R5QU51	1	A Y A R V S T D E Q S L E T Q K E H Y D N F I S A N S E W E Y A G L Y D
UniRef90_A0A024DLH2	10	M K V I Y R R V S T D M Q S L D M Q K L R E Q Y A K S Q D W V V N D Y C D E
UniRef90_K4KXV8	20	Y P R V S T E M Q S L D G Q K S N L R R F A D R E E M E I V N I Y E D R
UniRef90_A0A009JH40	30	
UniRef90_T3D353	40	
UniRef90_L2TGZ6	1	Y V R V S T H Y Q S L P F Q R Q E L I N Y D D Y E I F E D A G Y S G K N
UniRef90_UPI0003B6CD0C	10	M L G Y V R V S T D E Q G L E A Q E A A L L V A E A E R R G W D L T I L R D E G
UniRef90_W1W6P0	20	M I Y G Y I R V S T D K Q T V E N Q R F E I N R F I K K S K L H V E S W I E E T
UniRef90_U7VEE3	30	
UniRef90_F4XA19	40	
UniRef90_ROAZC1	1	K I G Y I R V S S E D Q N L A R Q K Q Q L L E I G M D I I F E E K I S G A T M
UniRef90_D9R694	10	A Y C R V S T D S E E Q I N S Y T A Q K A Y Y T Q K I E E S P D W E L A G
UniRef90_R9KI14	20	A Y C R V S T E E Q S Y E V Q V E Y Y T N H I Q G N P E W I F A G I Y A D
UniRef90_A6TQR3	30	I F I Y S R K S K R G E S V E N Q I A M C R D Y I Q R N I D E G Y S G K N T N
UniRef90_A6NTN9	40	M K I A Y S R K S K K G D S V E N Q I T T C K E Y I E K H F G E S S I M V Y E D
UniRef90_K2BLN0	1	M K Y I Y L R V S T D E Q S I I E N Q R R A C K D Q K T D H K V K Y Q D K G Y S G K N
UniRef90_L0HJZ6	10	M K I I Y A R V S T E E Q S I L H A Q R E A C A A Y I A S Q K H E G W V Q L P E H
UniRef90_K2NYH3	20	L I G Y A R V S T D E Q A T E A Q E I E L R A T G W A I I V Q K H G S G A S R
UniRef90_N6UHM8	30	A Y C R V S T D E Q S Y E A Q V S Y T S Y I N S N P E Y E L A G I Y A D
UniRef90_T0IJ84	40	M I I G Y L R V S T G K Q H L A N Q D E I R R F A E S R K L V V D H W V T E V
UniRef90_B0MTG1	1	K I G Y V R V S S S V D Q N P K R Q L Q Q M K E I G I D I I Y E E K V S G A T Q
UniRef90_R8L8G8	10	M I A A Y S R K S K K G E S I E S Q V Q I C K E Y A K N N L K I S S F I I Y E D
UniRef90_U5RZJ8	20	V G Y A R C S T A H Q T T D A Q V A A L K A A G C A V V F Q E T I S T R T E
UniRef90_UPI0002002CDC	30	V I G Y A R V S S T D D N G L E V Q K E A L N F C D K L Y I E K E S G G K Q E R
UniRef90_UPI000362A805	40	R I I G Y I R V S S F D Q N L D R Q L D G I S T D R T F I D R A S G K S R
UniRef90_V5FJV4	1	V A R Q S V E K Q S V E S Q L E F C R Q A F R T Y I D R G F S G K D T R
UniRef90_R6N740	10	M Q V A Y A R V S T K D Q D T E N Q L R Q L R D Y C R K Q D W P I T T E Y I D R
UniRef90_Q1ISK9	20	M K I I Y I R V S T L H Q S L P M Q R K D I A Y S K L I L N T D D Y V I F E D
UniRef90_D4N18	30	A Y C R V S T Q E Q A E E Q I A R L K A A G A M E V L I D I E S G R N D
UniRef90_H1CHZ6	40	M K I I Y I R V S T Q E Q A E E Q I A R L K A A G A M E V L I D I E S G R N D
UniRef90_UPI00034B0772	1	V Y G Y A R V S T Q E Q A E E Q I A R L K A A G A M E V L I D I E S G R N D
UniRef90_W6LTY3	10	M Q V A Y A R V S T K D Q D T E N Q L R Q L R D Y C R K Q D W P I T T E Y I D R
UniRef90_T0JQD9	20	M K I I Y I R V S T L H Q S L P M Q R K D I A Y S K L I L N T D D Y V I F E D
UniRef90_UPI00047A2411	30	A Y A R V S T Q E G S L E N Q I E S N P E Y E Y V G V F A D Q G I T G T K
UniRef90_R0A5B5	40	I A I Y S R K S T D K E S I K N Q I D F C K N Y C A T H F T V D K F I I Y E D
UniRef90_C0QM77	1	A Y C R V S T D D H S Y D A Q M E Y Y K G L I Q K N P D W E F C G I Y W G
UniRef90_B8FU52	10	M I F A Y I R V S T D Q Q T V E N Q R F E I K K H V G E W I E E T I S G T K K
UniRef90_F4C9P1	20	A Y A R V S S D S D D Q D Q N S Y I A Q V D Y T T K N L H E G W E L A D
UniRef90_A0A023RDK1	30	I Y G Y L R A S T D E Q D A N R A K E Q L I E F A Q S Q G Q Q I A G W F V E N
UniRef90_K0G018	40	A Y A R V S S K D Q N E E R Q I E N M K H L G I E D R D I F I D K Q S G E
UniRef90_V9HIP1	1	V Y G Y A R C S T V E Q A E E Q E R L L T E W C S K M D Y L V T K C Y S D R
UniRef90_UPI00047962F9	10	M R V A Y I R V S T E E Q S Q R N Q E E M L R R Y C E N N E D H S A K S F I R P
UniRef90_M1ZFX2	20	A Y C R V S T D E Q S Y Q A Q V H H Y T E L I K K N K E W E F V D I Y A D
UniRef90_A9KQ42	30	Y I R V S T E E Q S L E A Q R E A L T K Y H D M E I T G V Y I D E G I T
UniRef90_E9SGF4	40	V V I Y A R V S T E H E A Q L S A L E N Q L D W Y K P L L E Q H P E W T
UniRef90_UPI0003B46981	1	A Y A R V S M E T Q R L H S L A A Q I S F Y S D L I Q K N P E W D Y A G
UniRef90_UPI00037B685C	10	R I G Y V R V S S F D Q N P E R R Q L E Q V S V D R L F T D K A S G K D
UniRef90_A5FFM0	20	Y I R V S T D E Q S Q R N Q E E M L R K Y C G I N R I Q I R N V I Y E D
UniRef90_Q11QW2	30	A R V S T E T S K Q D T E R Q L S D L N E V C T R N Q Y D L V N T F T E T
UniRef90_R4K298	40	I A A Y C R V S T E A N S Y E T Q V S H Y K E L I Q K D P S W E M A G I F A D
UniRef90_R5U315	1	Y A R V S T E H E A Q I S A L E N Q V Q Y Y D N L F Q Y H P E W K
UniRef90_L5NTW2	10	M K I A Y I R V S T D D Q N A D R Q R D S L E T Y D E D E I T W Y V D I D S G S
UniRef90_L0FUP7	20	M R V A Y I R V S T D D Q S Y Q E E V L R K Y C E F Q N I Q V G R V I F E D
UniRef90_F7K3Q7	30	M R V A Y I R V S T D Q E S Y E N Q V R F Y T E S I N S N P E Y T C A G I Y A D
UniRef90_F2JIX8	40	I Y G Y A R C S T N E Q D I N R Q K R E L K A L G G V V E K N I Y W E Y E T K
UniRef90_K5Z1H4	1	M I Y G Y V R V S T D K Q S T E N R Q R F E I E K F A K A K S M R I D R W V E E T
UniRef90_M1QRK1	10	V I I Y A R V S S D R Q D V D A Q L K A R D Y A A R N G Y V V V K E F V R P
UniRef90_D4KUM7	20	M I Y G Y I R V S T D K Q T V E N Q R F E I N N F C E R E K I K I D G W I E E T
UniRef90_E5UNF8	30	M I Y G Y I R V S T D D E D Q I K S Y N S M V K H Y T E L I Q N N E Q W V F D K
UniRef90_E9SP5V	40	L V G L V R V S T D R Q E V Q R Q H D A L D S V C V R V F E E A I S G T R K A
UniRef90_UPI000380C37F	1	Y R R V S T E E Q S L G N Q A D K L A A F A E Q Q G Y A V V R D Y V D P
UniRef90_H8H2N3	10	Y T R K S H E E N S L D A Q R E A G E A Y I E S Q K L Q G W K A I P Y R
UniRef90_L0R6I8	20	R I G Y V R V S T L D Q N E K R Q L E G Q V L D R V F T D K A S G R D
UniRef90_A6LN32	30	A Y A R Y S S D R Q S I E A Q L E K I R K Y C E E K I D R A Q S A A T D K
UniRef90_F0MC62	40	Y T R V S T D L Q S C E S Q E Q K I R S F V K S Q N N W Q V C K V Y S D
UniRef90_X1000	1	A Y C R V S T D E Q S Y Q V Q I E Y Y T N L I N S N P E W T L A G I F A D
UniRef90_E6UCQ9	10	

50            60            70            80

UniRef90_D1ARY5	E D R E A W D E L I E C V R S N D V I V V K N L D R L G R N A K E V R E C L V K		
UniRef90_S9S9W3	Y D D G G I S G E D I E D G L V D V V V Y K I D R D L S R S L A D F A K L V E V		
UniRef90_G7MAZ8	G I S G K N I K K D A E E G K F D S V L V W K M N R I S R S L K D V L N I V D L		
UniRef90_D4J8N9	A G Y S G K N T D R P E F Q N M M H L L C W K I D R V S R N L D F A S M Y Q E		
UniRef90_R5GV45	R T E L L R M V E Y V E V N N I D K V V V A E L S R L G R D T L Q V L E V I E M		
UniRef90_R5TK60	E G I S G T Q V K K R T E F M R M I D D A K S I S R F A R N T L D T L K Y V R L		
UniRef90_UPI00046740C0	U N F N K M I A A C K R G K I D T I L T K S L S R F A R N T V D C L E T V R M		
UniRef90_R9MVT2	E G I S G T G N T K R K E F N R M V A C A K H G D R F A R N T L D S I Y Y T R D		
UniRef90_V7IBC0	K G K S G T D M S K R I G F N R M I R N C K S I S R F A R N V V T M D I V R Q		
UniRef90_J1AM31	I G F N Q L K R Y L E I N E D V R D I L V L E L S R R L G R K N N D I Q N V V E D		
UniRef90_UPI0003B3E07E	L D R A E F Q K L L D I Q P G D S I A V T E V S R L T R S T K H L C E I L Q I		
UniRef90_K7WKU3	K R K E F N K M I Q C K Q G K I T E V I C T R I D R L G R S V V G I H K A I A I		
UniRef90_F4AC05	K V D R E Q T R L M D I V V E G D I I V A T E V S R I T R S S K Q L C E I I E F		
UniRef90_F9ZK85	K K R P G L M A V R K A L K S G D T F V I T S I D R A F R S T I D A I I F L D D		
UniRef90_W8U8P4	R G K T G T S T V N R Y G F N K M I R H C K S V S R F S R N V V T L N I V R L		
UniRef90_H1YL2	H S A K T F V R P Q W Q R G K D L I L F T K W D R F S R N A P D A Y Q M I N T		
UniRef90_V9UMQ2	L Q R E G F K A L H A Y A R K G D T V V V A A I D R R L G R D T L D V L E T V E A		
UniRef90_UPI000360A7D8	I S G T K K A D E R E R L E K G D I L I I S E L S R R L G R N L L Q I M S I L N D		
UniRef90_I4AC24	R K D G K R L L E D A K A G K I K T L L I Y K L D R L G R S A R I I L I N S V Y E		
UniRef90_UPI0003693B0A	G F S G K S I L E G R P Q M H S F E A I L I Y K L T D R L S R N T K N S I E L A E S E		
UniRef90_B6FWT2	A G F S Q N M M D R L R S R E F S H I F V W K I D R R V S R N L L D F C D M Y E E		
UniRef90_V2Y7R6	E A V T G T R M D K R E D F N R M M S D C H Y K V S R F A R N T K D C L A T L R E		
UniRef90_B1QVR0	I N R P E F K Q Q M M K D S H K F D V I I C Y R L D R I S R N V S D F S T L I D K		
UniRef90_R6MQ77	E G I T G T Q T K K R G F N R M I N D C H K E V S R F A R N T V D T L N Y T R M		
UniRef90_B2TRZ8	R K D L Q R M I E D V K L N K I D I F T K L D R W F R N V R D Y Y K I Q E V		
UniRef90_R5QU51	E G V S G T K V K D C E D G K I D R V I T K S I S R F S R N T A E C L E M V R S		
UniRef90_A0A024DLH2	G Y S F Q Q Q M I R D M K K K Q F D I I L V Y R L D R F T R S V S D L H S I L K I		
UniRef90_K4KXV8	P A F K Q M L L D I E N G L E I D Y V L V Y K L S R F G R N A A D I L N S L E H		
UniRef90_A0A009JH40	C Q P I C N S A I V V H S M D R F A R S L K D L V T E V D Q		
UniRef90_T3D353	T D R P A F K D M M N R V R N K E F T H I W K I D R I S R N L L D F C D T Y E E		
UniRef90_L2TGZ6	A S G K Q V N P G L R N A L E Q D G L V V A K M D R V S R S S L L H A V E I L D T		
UniRef90_UPI0003B6CD0C	P N K R N L G K L I S K T R K G D I I C H S E L S R S L G R N M F M I M S I L N I		
UniRef90_W1W6P0	P V F Q E A L N F V R M G D R F V E S I D R L G R D Y D E I I E T V N Y		
UniRef90_U7VEE3	N R L E L Q N M L K E I E C G D V I Y V T D L T R I T R S T H D L F L L I D L		
UniRef90_F4XA19	I F A D E G I T G T S M K K R K E F N R M I S L S R F A R N T V D C L E T V R M		
UniRef90_ROAZC1	E G I S A T S T K R R D D F N R M I R D C H C M S I S R F A R N T L D C L G Y V R K		
UniRef90_D9R694	D G K S A T Q T K K R D D F N A M I D A C H C M S I V S R F A R N T V D A L Q C I R K		
UniRef90_R9KI14	R P R F Q E M M Q E I R N G G C H Y K L V C Y K L D R L G R N L A D L A N L V E T		
UniRef90_A6TQR3	E G F S G G D T D R P Q F Q K F D V L I C H C Y R L D R I S R N I S D F A G T I E M		
UniRef90_A6NTN9	T N R P A F Q Q M M A D V E R I Q K I V Y R L L D R F S R S I A D F G R L W E I		
UniRef90_K2BLN0	G R S G R N I D R P A F Q N P V E A I I V Y K I D R F A R N V G D F S N I R K Q		
UniRef90_L0HJZ6	R E Q L Q R A L T F L E E G G A D I L L V W R L D R L T R S I I D F Q K I		
UniRef90_K2NYH3	Y D D G G L S G G N M D R P G V D Q I V Y K I D R L T R S L A D F A K L V E R		
UniRef90_N6UHM8	A R P A L S K L L R E I N A G D T L V V V V		
UniRef90_T0IJ84	A G I S G T N T K K R E Q F N R M I A D C H S E L S R F A R N T L D T L T F V R M		
UniRef90_B0MTG1	V S G K K S E R D R R R L K K N D T L I V T E I S R L S R T L T D I M A I M G K		
UniRef90_R8L8G8	D R A E L Q N M L N D L R E G D T I Y V T D L L T R I T R S T R D L F E L V D Y		
UniRef90_U5RZJ8	E G F S G G N T K D A R K E K F N F L I C H Y R L L D R I S R N V A D F S T T L E L		
UniRef90_UPI0002002CDC	U N K R P Q L Q A A L N A L V D G D E L V V A K L D R L G R D Q R S V I N R L H D		
UniRef90_UPI000362A805	P Q L Q K A A K D Y A E S G L E T S F I V Y K L D R L T R K M L H L S A I I S E		
UniRef90_V5FJV4	I E R P Q L E E M L Q F A R E G D T I I V H S M D R R L A R N L D D L R T L V R N		
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1 10 20 30 40

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UniRef90_V71633	Y A R V S T R D Q S L E A Q V I A Y Y T N Q L V R I Y A D K G V S G T N	
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UniRef90_V7PW37	V I Y L R V S S R E Q S L E S Q E K V C R E Y C R R N G Y E V L Q V F N R T	
UniRef90_G9WI2	M Q Y G Y A R A E K I Y Q E K F T E T T	
UniRef90_B6ET15	I F G Y L R A S T K E Q D A K R A Q D S L K V F I E D K G A R I I A G W Y I E N	
UniRef90_W2BUL3	V V A Y A R I S F E T E R T P R S L S L Q V S Y Y S K L I Q S T P G W R Y A G	
UniRef90_B1KTW2	M L Y A Y H R T S T E D Q H L D R G L K E I N E F I A N H N I E L V G E I Y T D	
UniRef90_I2PX27	L I F G Y A R I L S S G D Q Q T A P Q I R A L E E A G C K K I F E E S A S G G R W	
UniRef90_UP10001FFDE4F	R V G Y A R C S H L T Q E L Q S Q L D A A A G I G R D K F A E K V S T R	
UniRef90_UP1000470AAC7	Y V R V S T E D Q S L A E Q R D A C Y R R A V S L G A A S I L E F A D E	
UniRef90_S6H5P6	Y A Y L R A S T K E Q N A N R A K N A L I Q F A N N H D L V I S A F F A E N	
UniRef90_G4L285	Y G Y N R V S T K D Q H L D R G T E A I I K K F C Q T K I F E D K Q T G R T F	
UniRef90_G8AYE1	Y G Y I R V S T D E Q S L D G Q R E T I R S L C E K F V D A G V S A K I P L	
UniRef90_X1R1U5	V V G Y C R V S T E N Q K E E K Q E Q N I K D Y A K K D N Y K L V K I F S D E	
UniRef90_M9L8V4	M R V A Y I R V S T D E Q S L N E Q Q E R L S A Y C K A M G W Q T P T F Y I D D	
UniRef90_B1QS28	Y S R K S R E T E S I E N Q I I L C K E Y C C N R N Y L G E E I E Y I I Y	
UniRef90_Q9XJF6	Y I R V S T M E Q S I P A Q T D K L K A F A K A D M A V A K V Y T D P	
UniRef90_Q8PTF2	M I R I Y Y R V S T K D Q D F D M Q Q K A V K D Y S S C I Y Q D F G I S G T I	
UniRef90_R7KEM4	Y S R K S K K G E S I E N Q I E L C K N Q L I N K Y N I K E E N Y N T N	
UniRef90_UP10004636125	Y S R K S R R G E S I E N Q I Q M C K E Y Y A I K N I G L S E N E F V I F	
UniRef90_D7IYP6	Y S R V S T E I Q D Y G K Q T D E L K D Y E V K Y I F E E K V S G F K D	
UniRef90_A1TJ10	V I Y T R K S T D P Q S L Q V Q R D L C A A Y I A S Q A Y E G W H L L P E Q	
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UniRef90_UP100025565C2	A Y C R V S T D D Q S L E A Q K T H Y E E Y I T S N P E W E L A G I Y Y D	
UniRef90_C9A9E8	I I Y I R V S T D E Q S L N E Q Q E R L S A Y C K A M G W Q T P T F Y I D D	
UniRef90_A6EJ99	M K V A Y C R V S T D D Q S L K N Q Q E Y F A S F I Q K K E E E N W K F A G I Y	
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50            60            70            80

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UniRef90_R5QRY6	E G I T G T R M D K R D G F L Q M I E D C R K I S R F A R N I T E T L S V V R E	
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UniRef90_R5J6W1	N T K P E F D K L L K S L K A D D T I V V T R L L D R F A T S I G D T F E I I R D	
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UniRef90_W4LZX7	UniRef90_U2RIB6	N H E F D C V L V W K F D R F A R S V T H L L R A L E E
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UniRef90_A0A058ZLF4	T D R P G F T Q M I E D A K K Q K F N I C Y K L D R I S R N V A D F S A L T K D	
UniRef90_F2NW95	E T A A K S G R P V F N Q M L R Q L K R I H K I D R S A R N L K D W S I V S E	
UniRef90_D6XZG2	P D K R E L G R L L S H I R K D D L I I C S E L S R L G R S L F M I M S I L N L	
UniRef90_UPI00036C1ABA	Q G K S G T S T V K R P A F N R M M R M C K S V S R F A R N V T D T I D A I R A	
UniRef90_H2HWB0	R V R P G M D D L L S H L R P G D E L V A T K L D R L L C R S I V G I H E L L A D E	
UniRef90_UPI000344F3E7	F D R P I L N Q L I D I A E D G D T I L V E Q L D R L L T R S S E D W E K L K N K	
UniRef90_R5EYY7	V S G K K N Q K E R N Q L K P G D T L I V T E I S R L L S R T L L T E I M T I M G K	
UniRef90_10XC65	P S K R T L G R L L G N V K G D L I I C S E L S R L G R S M F M I M S I L N R	
UniRef90_R6NV47	P A F Q K M I N D A K N N P E F K A V L V H K T D R S R N L S D S I Q Y K K L	
UniRef90_W1WCE0	D E G Y S G G N T N R P K F K E M I K D C Y K L D R I G R S V A Q L S N M F E L	
UniRef90_W2VGY4	L Y D R Y I K K R K N F M R M M Q D A S K N K F D R F A R N T V D T L Q Q T R I	
UniRef90_R9LVP6	I Y D F Q R L L G D C R G R V D K I L V K S I S R F A R N A V D C L K T I R A	
UniRef90_J8FJR7	D R K E L N Q L L E V I K A G D T L V V T K A D R I A R S L S Q L E T I V T E	
UniRef90_B1Y2K6	E D R P K L F D L I N D A H P G D V L L I E Q V D R L T R N A T D R E K L L F K A	
UniRef90_16SBC1	V S N N I C E K V I K E M R Q G D T L V I C Q L H R R L G K S T R Q L T E L T Q L	
UniRef90_UPI000304CDC	T D N R P Q V I E R I Q Q R Q C D V L C C Y R L N R R L H R N L K N A L K L M K L	
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UniRef90_X6DXG5	L K R P E L D R L L M R D C H P A D V L L V E Q V D R L S R N E A D W E K L R A D	
UniRef90_R5HUY5	G H S G K G D L M R P E M Q R K I D K L V A K V D R L T R S N Y D G F W L L N Y	
UniRef90_U7UL07	T A K R E S F N R M I D D C K I D M I L T K S I S R F S R N T V D C L K Y T R E	
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UniRef90_E2NDE5	I S G A K K N E E R Q V L T E C L E Y C T E L S R L L G R S T L Q V L R S L E V	
UniRef90_A0A024ELQ8	R P Q L E R L R D R A A L G L V D R L Y V L S P D R L S R K Y A H Q A L L M E E	
UniRef90_R9LJ69	R K E F L R M M A D A E H H L F D M V V V K D I S R F A R N T V D L L Q N V R R	
UniRef90_V7PW37	E L Q K M I R F C E I N K R Q I S K I V F Y N V S R M S R V A A D Y L I L K R N	
UniRef90_G9WI2	T K R P E F N K L L K V L K A D D T L I I T K L D R F A R N T K E A L E F I I Q E	
UniRef90_B6ET15	V Q R P E L M R L Q D A E K G D A L I I E Q V D R L S R L N D D D W E T L K E	
UniRef90_W2BUL3	V F S D S G V S G T T T N R A G F Q E M L A K I S R F A R N T V D L L E V C R E	
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UniRef90_I2PX27	D R P E L H R L L G Q L R E G D T L V V W K L L D R L L S R S L K D L L R I L L D Q	
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UniRef90_S6H5P6	E K R P E L F R L L E I A Q K G D I V L V E Q I D R I S R N D D D W S S L K S I	
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UniRef90_X1R1U5	A I S G G S E L E N R P N E D I E A I V I F K L D R L A R D L Y I Q E H L I K K	
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UniRef90_Q9XJF6	G F S G A K M E R P A L Q E M I S D I Q V Y K L D R L S R S Q K N T L Y L I E D	
UniRef90_Q8PTF2	A D R P A Y Q R L L S E I V S F D T I C Y E V S R L W R D L E E Q S R A T K S	
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UniRef90_A1TJI0	Y D D G G Y S G T Q V R Q G A V D M V L V Y K I D R L S R S L R D F L N L I S L	
UniRef90_R7M8N6	E G I S G R M I R D A K L G K F N L I I T K E I S R F A R D T L D S I S F T R K	
UniRef90_W1VDG7	I Y T D L G Q T G T T T H R N I D I I I L T K S I I S R F A R N T V D L L A T V R D Q	
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90                    100                    110                    120

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

90                    100                    110                    120

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UniRef90_H0JXJ1	L K D A G V T L V S A T E N I D E T P S G M L L H G I M S S I		
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UniRef90_N9HJA6	L V K R G I A I Q F V K E N V T F T A Q S I S I D N L M L Q L M G A F		
UniRef90_UP1000467EB05	L N E M H I S F I S I K E Q F D T S S P M G R A M M Y I A S V F		
UniRef90_UP10003030ABA	C M E K K I N V Y I A K Q N L A Q A N G M A G F L F C D L P D I D A T T S A G R L I L S V M A S V		
UniRef90_B5IL91	A Q V N G I K L L S V T E N L D G S P E S V I L E S L L E G M		
UniRef90_E0ID85	L K V N G I K L L S V T E N L D G S P E S V I L E S L L E G M		
UniRef90_B6WSV9	L N Q R D V S V S F H K E G L T F S A G K A E D P F Q K L Q L Q I I G A V		
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UniRef90_B2HDG6	A Q A Q G W S L V V V L D I N L D L S T A A G R M M A R T I L V N F		
UniRef90_U1WW2W	F E K N G S E L S F T D T E Y D K S P E G I L F F N I L S A I		
UniRef90_L0GST3	I D S K G L R I V A L D L P T S H Q G I A D T K G D E F T G R M L V D M M A A I		
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UniRef90_G5JK73	C Q K H H V H L L S V Y D G F F N M N Q S F D E F L L I I Y A A L		
UniRef90_F6DTY9	L V G Y G A F F L S K E N Y D S R T D D D L Q R R G L H L R I A T G A W S G F D L A A D D P Q T K L F V T M L A G V		
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UniRef90_R5TEL6	L L P H P V G V F F E T E R L N T F D P K S E M V L S F M A T L		
UniRef90_W7VR54	L K K K Q V A F R S L T E N I D T T T P		
UniRef90_R5RTN1	C L K S G V K L Y S I K E G Y S F D D S I N S Q V L C F A F G L T A D I		
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UniRef90_K6X944	L K D A G V E V Y F Q K E N I Y T F D A K G E L L I T I M S S L		
UniRef90_UP10003F94401	UniRef90_K6X944	L I S A G V T L V S A T E S E N I D Q T P S G M L V H G I M S S I	
UniRef90_E3H8B6	L K D P P V G V F F E T E N I F T L D E N S E M A L S F I A T L		
UniRef90_F4YAK5	L D Y N N I E F E S M T E D F L N G N N P T S R M M I G I G S L		
UniRef90_A3J612	F K E H G V G Y K S I S E N I D T S N T S G E V L V T M F G L I		
UniRef90_B5ZWW7	L E K K L G V K V Q A I E Q P I D L S I P E N K A M		
UniRef90_G4RLJ5	I D R R G V R V V V S L D L P T S H Q D E F T S R M Y S A L N G M M L D V L A A V		
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UniRef90_UP10003B4A3FA	L R K N G V Q V I S I N E P T E N T P V G R L M E G M L E G L		
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UniRef90_C0E5J2	L E K N G V H L V S A M E P I S Q G P E G I M V E S M L I G M		
UniRef90_E9P5U5	F D E C C O N V R L I S T S E N I D Q T P G S M L L H I M S A I		
UniRef90_Z4YVE1	F E K A G V E V I F L N H K T E N N P E S K L L L G M Q G L V		
UniRef90_UP10002F83AB7	L N S K D A Y F L S L K E G I D T S R K R H L H F Y E T V K H L V P E S I I L E S V L E G M		
UniRef90_I3VTS4	L K K N G V I I S V L E Q I D D S P E S I I L E S V L E G M		
UniRef90_K4SWY0	UniRef90_V4FH48	I R Q K D I R V V A V V N V P T T W L A S G H N D F D S A I N D M L L D M L A A V	
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UniRef90_UP1000475EAD8	I K D K E V R V V V S L D L P T S H T D F T S R M L G A I N D M L L D M L A A V		
UniRef90_H7BUV7	L K E L G I G V T F E K E N I D S L D A K G E V L L T I L S S L		
UniRef90_I8ZZ50	L K A L D K P V A V Y F E D I A I N T L T Q T G E L L M V V M A A I		
UniRef90_V5TAD9	C L M A N A N I I E I R D D K L V K D D S D S V Q D T F F K V L F A Q		
UniRef90_UP1000475F538	F Y R K G V V H V H F H K E G L T F T G E D N P T Q L Y F Q T I G A V		
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UniRef90_H1CKL5	L R D L G I G V C F E E Q G I D T A Q M S G E L L T A I F S M I		
UniRef90_H2J979	L K E L G I A V F F E K E H I N S L S E K R E Q M L T I L S S L		
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UniRef90_S0JGE9	F Q K Y H V E F V S S T E K F D T S T P I G R A M L N I C I V F		
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UniRef90_H1Y3I3	UniRef90_UP10003602CE9	L R L L G V E P Q A I E Q P L D P S I P E N K I M M A F	
UniRef90_UP1000249047A	UniRef90_UP1000249047A	I Q S K K V K V V A L D L P T S W M D D I Q S R I F E A I N G M M L D L L A A I	
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UniRef90_B0UKM4	UniRef90_W8T662	L K E D N V S I F F E A E N I D T S L N Y N S L L L H T Y A A I	
UniRef90_R5AJG2	UniRef90_R5AJG2	L A R L D I S F V S I K E Q F D T S T P M G R A M M Y I A S V F	
UniRef90_K2T0S6	UniRef90_K2T0S6	I D S K G L R I V A L D L P T S H Q G M Q D T K G D E F T G R M L G A I N S M L	
UniRef90_R6NBG3	UniRef90_R6NBG3	L R R N G V K V V S A T E N I S D G E G I L L E S M L E G M	
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UniRef90_R9KMB6	UniRef90_R9KMB6	L T	
UniRef90_R7HIU9	UniRef90_R7HIU9	L E K Y G G C D L D C K D D D S N T L T S T G R M C I R L T T A F	
UniRef90_R5UTE2	UniRef90_R5UTE2	S I E K G I T I H S I K E G Y K F D T S I N S Q V L A F A F G L C	

UniRef90_I2PZ26	A E Y D
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UniRef90_B5XQB7	A
UniRef90_H0JXJ1	A E F
UniRef90_J3B9D4	S E F
UniRef90_UP100036B1EF5	A Q F E
UniRef90_Q5XBF3	A Q E E
UniRef90_B8I433	A Q D E
UniRef90_N9HJA6	A Q F E
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UniRef90_E0ID85	A E Y
UniRef90_B6WSV9	A Q F E
UniRef90_G8IEF3	A E N E
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UniRef90_B2HDG6	A E Y E
UniRef90_U1WWWW2	A A Y E
UniRef90_L0GST3	A
UniRef90_H2J8S8	A Q G E
UniRef90_A0A037BHF8	A E M E
UniRef90_E5BK19	
UniRef90_D9QI49	A Q F E
UniRef90_G5JK73	A E <span style="border: 1px solid black; padding: 0 2px;">L</span> E
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UniRef90_UP100037D672A	<span style="border: 1px solid black; padding: 0 2px;">L</span> E F
UniRef90_F2UYR0	A E F
UniRef90_R5TEL6	A Q E E
UniRef90_W7VR54	
UniRef90_R5RTN1	
UniRef90_UP1000479FBB4	A N W E
UniRef90_K0YX17	A Q E E
UniRef90_K6X944	A E F
UniRef90_UP10003F94401	A Q E E
UniRef90_E3H8B6	A E N E
UniRef90_F4YAK5	G S <span style="border: 1px solid black; padding: 0 2px;">I</span> E
UniRef90_A3J612	
UniRef90_B5ZWW7	A
UniRef90_G4RLJ5	A A M E
UniRef90_R6TVU3	S Q <span style="border: 1px solid black; padding: 0 2px;">L</span> E
UniRef90_Q3ZA45	D E F
UniRef90_UP10003B4A3FA	
UniRef90_R9NA94	A Q N E
UniRef90_U7S2J8	A Q N E
UniRef90_R9L6Z1	S E F
UniRef90_K2MI84	A
UniRef90_UP10003FFEB82	A E F
UniRef90_UP1000473E8A5	N E <span style="border: 1px solid black; padding: 0 2px;">V</span> E
UniRef90_C0FTP9	A Q <span style="border: 1px solid black; padding: 0 2px;">L</span> E
UniRef90_V9UQB4	A
UniRef90_C7H8A3	A E Y
UniRef90_C0E5J2	A E F
UniRef90_E9P5U5	A E Y E
UniRef90_Z4YVE1	
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UniRef90_I3VTS4	A E Y
UniRef90_K4SWY0	A
UniRef90_V4FH48	S E <span style="border: 1px solid black; padding: 0 2px;">I</span> E
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UniRef90_F3JG13	A
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UniRef90_H7BUV7	A Q G E
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UniRef90_V5TAD9	
UniRef90_UP1000475F538	A Q F E
UniRef90_C7PN42	S Q Y D
UniRef90_UP10003F81193	A Q Y E
UniRef90_H1CKL5	A Q K E
UniRef90_H2J979	A Q G E
UniRef90_I4MXS9	<span style="border: 1px solid black; padding: 0 2px;">V</span> E M
UniRef90_A3J5Y8	P E <span style="border: 1px solid black; padding: 0 2px;">I</span> D
UniRef90_T0IIIV2	A Q <span style="border: 1px solid black; padding: 0 2px;">L</span> E
UniRef90_A1YRL8	A E M E
UniRef90_S0JGE9	A Q <span style="border: 1px solid black; padding: 0 2px;">L</span> E
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UniRef90_X0ZM61	D E F
UniRef90_UP10003602CE9	
UniRef90_H1Y3I3	
UniRef90_UP1000249047A	
UniRef90_UP100047064E4	A
UniRef90_B0UKM4	A
UniRef90_W8T662	A Q D E
UniRef90_R5AJG2	S Q <span style="border: 1px solid black; padding: 0 2px;">L</span> E
UniRef90_K2T0S6	<span style="border: 1px solid black; padding: 0 2px;">V</span> E M
UniRef90_R6NBG3	A E Y
UniRef90_UP1000471986A	N E F
UniRef90_R9KM86	
UniRef90_R7HIU9	S Q N E
UniRef90_R5UTE2	A E <span style="border: 1px solid black; padding: 0 2px;">I</span> E

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UniRef90_Q1Q7U0	Y V R A S T K D Q D A K R A L S D L Q S Y D D N H V E Y V E H F S G T				
UniRef90_A0A022GM94	Y G R V S T T D Q T T E A Q A L G I P L D H V H V D E G V S G Y H V A P				
UniRef90_Q7CTG4	A Y L R A S T K E Q Q D A G R A K T Q L E S F A K D R G F S I A A F Y V E N				
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UniRef90_X1RUU6	M K I A Y Y L R V S T K G Q E L Q A Q R A I E H Y I V K E Y L E S E S G K N I				
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UniRef90UPI000400B8E3	A Y C R V S T D N V N Q T L Q K T H Y E G F I K E H P G W E L V D I Y A D				
UniRef90_E1XJI9	A Y C R V S T F D E S Q S G S F E L Q K Q T Y T E R I N S N P D W L M A G				
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UniRef90_G5DS99	Y V R V S S K S Q K L D R Q E E N P E L G S F C K I I L A D Q I S G K T				
UniRef90_U7H5E0	M F I A Y L R A S T Q E Q N A E R A K A S L I Q F A E Q H G Q R I A A F Y T E N				
UniRef90UPI0003B69D1D	Y A R Q S T D S I S T E S Q V E F C E A A E H P R Y I Y I D K G Y S G K N				
UniRef90_E3H9N3	V I Y A R F S S E N Q S I D A Q I R A I Q E Y R A N N N I E I I E I Y T D R				
UniRef90_K2BSX8	Y A Y L R V S T E M Q D D V E N Q K L G I L E Y C N T R F V Q E T K S S R V S				
UniRef90UPI00036C7BAD	G Y A R R S T D E Y A R V V S S D E Q S L G N Q V S Y Y E D L I R R N L P W T F V P G Y I D				
UniRef90_R6MQH7	Y V R V S T E M Q D D V E N Q K L G I L E Y C N T R F V Q E T K S S R V S D R G F S G T T R				
UniRef90_T1WWA3	S D K S D S I I D N Q F R M N R E Y C E S F K F S G Q V D S W Q Q F				
UniRef90_R5Z7N2	L G Y C R V S T Q R Q H E R R Y I D K L K Q Y G L T E E Q I H W D I E S G A				
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UniRef90_R6TU22	M H V A Y V R V S T T S Q S L D S Q I T L C K K K A Q E L G Y S N S Q I I I Y R				
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UniRef90_H7C6P1	D G Y S L E A Q K E R L M K F A E F Q E M E V V R E Y C R P				
UniRef90_U2EMU9	M K F G Y G R E S T D R Q S I E A Q F E L A I R D E C K R N K I L I E				
UniRef90UPI0002DBBE58	M K F G Y G R E S T D R Q S I E A Q F E L A I R D E C K R N K I L I E				

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UniRef90_Q1Q7U0	L D R P A L T L L L S D A E E G D I L L V E S E D R L S R S Q D D F S I L L K Q R			
UniRef90_A0A022GM94	A D R R E W A I L E R R L R G D V L V V R W L D R I S R R Y D E L H A T M R R			
UniRef90_Q7CTG4	E K R P E L F R L L S D C S P N D V L L T E Q V D R L S R N E A D W E A L K S E			
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UniRef90_D1PPD5	F D E G F S G G N L N R P D F R R M M V Y R L D R I S R N L S D F S A L I E			
UniRef90_G5DS99	F E R P N Y Q L L K K I I T E G D N I I I V S S L D R F G R N Y L E G R K E F T E			
UniRef90_U7H5E0	V H R P E L M R L I A E S G E G D I V L V I E Q I D R L A R L K Q Q D W D T L K R			
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UniRef90_D8GW91	E A G G F S G E D I D I R P E M T R L R E D I K P D R L S R E L I D K L T V C R E			
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