

QUERY	1	10	20	30	40
UniRef90_T1ELU5	A N K Q Q N F N T G	I K D F D F W L S E	V E A L L A S E	D Y G K D L A S	V N N L
UniRef90_T1JGN9	Q F I W K T D V V E	S W I A D K E A Q V R	S E D Y G R D L S S	S V Q T L	D Q M
UniRef90_T1JGN9	A I K L F R F Y R E	C D D F K A W M A D K	E K M L T D D K T	D T V D Q M	D Q M
UniRef90_A0A023EWT2	A I K L F R F Y R E	C D D F K A W M A D K	E K M L T D D K T	D T V D Q M	D Q M
UniRef90_F4WS96	R E A A D L S A W I	R D K E S H A Q I K D	V G E D L E E V E	V E V M	
UniRef90_W4W6M1	A N K Q R T Y I A A	V K D L D F W L G E	V E S L L T S E D A	G K D L A S S V Q	N L
UniRef90_E2BFC6	A H E I Q R F N R D	A D A E T M A W I A E K D	V V L S S D D F G	R D L A S S V Q	T L
UniRef90_V9K787	A H E V Q R F H R D	V D E T K D W I R E K D A A L	N N D D L G K D L R	S V Q A L	
UniRef90_UP100046B808F	A A E V Q R F N R D	V D E T I S W I K E K E Q L M A S	D D F G R D L A S S	V Q T L	
UniRef90_L7M942	Q F M W K A D V V	E S W I A D K E T H V R	S E E Y G R D L S T	V Q T L	
UniRef90_G1P9D4	S L R A Y Q L V R E	A A E L L A Q W I K D K E Q V A Q V Q	E V G E D L E Q V	E V L	
UniRef90_C3YON1	S Y R L Q Q R F L A	D F R D L T S W V T E M K A L I N A D E L	A N D V A G A E A L		
UniRef90_U6IL85	F R E M E S I N A E	I K E I E G Q V Q S E D Y G K H L	F G G V E D L		
UniRef90_G3Q398	A Y R L H Q F Y R D	V E D E E D W I R E K E P V A A S N N	V G R D L I G V Q	N L	
UniRef90_J9JUV5	S L R L Q Q L F R D	V E D E E T W I R E K E P I A A S T N R	G K D L I G V Q	N L	
UniRef90_UP10002062D5F	R L L S R D I E E E	T W I N D K E L Q I N S H D F G T S L	H S V Q A L		
UniRef90_X1X417	A A A Q H T Y N R T	L D D A Y F K H E E L K K D L Q S Q Q	V G T D L R H C K Q	L	
UniRef90_Q7Q515	S Y L L Q Q R F L A	D F R D L T S W I N D M K A I I Y S D E L	L A K D V A G A E A L		
UniRef90_F2ULA6	A M K V Q Q F Y R D	A D E A E A W M A E R Q Q V A A D P S Y	R D P S N I I Q G K		
UniRef90_E9HMP5	A L Q L Q Q F L L Q D C E E L S E W I	Q E K N I T A Q D E T Y R S A K T V H S K			
UniRef90_Q4T9R4	S L E Y Q Q F V A N	V E E E E A W I N E K I N L V A S E D Y G D T L A A V V Q G L			
UniRef90_E5SH50	S E E F Q V F L G K	V E E E E A W I T E K Q Q V L S V E D F G D T M A A V Q S L			
UniRef90_V5GYS7	A G E I H R F N R D	V G D A L S R I Q E K Y A A I P E E T G K D L D A T Q G M			
UniRef90_V5GYS7	A G E I H R F N R D	V G D A L S R I Q E K Y A A I P E E T G K D L D A T Q G M			
UniRef90_T1JWB9	S C K A Y Q V V R E	A T E L A Q W I R D K E Q H A Q V Q T V G D D L E E V E I H			
UniRef90_R7THV3	S C K A Y Q L V R E	A G E L L A Q W I D N K E R V A L A E E V G D D L E E Q V E V I			
UniRef90_M9PGV6	S R R F Q Y F K R D	A D A E L E S W I H E K L Q A A S E E S Y R D P T N L Q A K			
UniRef90_W8AB01	F Y R E C D D F E	K W M K E K E R I I I N S D D G E G V V E N A			
UniRef90_W8AB01	F Y R E C D D F E	K W M K E K E R I I I N S D D G E G V V E N A			
UniRef90_B3S6I6	A H Q Y Y N F V N V	A E E T I Q W I N E Q I T T V S D D S Y K D L S N M Q G K			
UniRef90_P13395	L Q Q F S R D A D E	I E N W I A E K L Q L A T E E S Y K D P A N I Q S K			
UniRef90_E9G793	A Y T F H K F K A D	L R E L E A W V Q D M M N N K M E A T V L A N N S T D A Q A A			
UniRef90_E9G793	A Y T F H K F K A D	L R E L E A W V Q D M M N N K M E A T V L A N N S T D A Q A A			
UniRef90_UP1000298AF43	A N K A D L V V Q S	Y E S L L D Q R L N Q L E D Q L S Y V D Q G Q D L T G V N N Q			
UniRef90_M7CBN8	S H D L Q R F F L S	D F R D L M S W I N G I R G L V S S D E L A K D V T G A E A L			
UniRef90_B7P1U8	S L R V Q Q L F R D	V E D E E A W I R E K E P I A A S T N R G R D L I G V Q	N L		
UniRef90_D6WA70	A R N F Y Q F L Q D	Q E D E E A W I I E K Q R I C Q A G I T A K D L R G V L S L			
UniRef90_E5T2J8	A C K G Y Q L L R E	A N E L L A E W I R S K E Q L A T S H E I G Q D L E E V E V L			
UniRef90_Q176W5	K K L F E F I R E I	D D L Q E W I E M Q M T T A G S E E Y G T D V E H V E Q L			
UniRef90_UP100042C02E4	E L L Q L F H R D C	E Q A E N W M A A R E A F L N T E D K G D S L D S V E A L			
UniRef90_Q7QA48	E L L Q I F N R E A	D K I D A T T K S H E A Y L E Y D D L G N S L L D D V E A I L			
UniRef90_W4Y7J3	A Q K L V H Y L R E	V E E V M Y W I Q D K E P F A A S I E T G V D L E H V E V L			
UniRef90_E9Q447	A H E V Q R F H R D	A D E T K E W I E E K N Q A L N T D N Y G H D L A S V Q A L			
UniRef90_L7MFA2	A I R L F G F F R E	C S D F E A W M V D K E K M L T V E D P K E N N V E V R			
UniRef90_L7MFA2	A I R L F G F F R E	C S D F E A W M V D K E K M L T V E D P K E N N V E V R			
UniRef90_H3CBT9	Q F N W K A D V V	V E S W I G E K E N S L K T D D Y G R D L S S V Q T L			
UniRef90_V5GYK8	A H G V Q T F H V E	C R E T I T W I E E K T K L L Q A E D L G D D L T G I M T L			
UniRef90_H3C0G3	L Q Q F F R D S D E	L K S W I N E K M T A T D E A Y K D P S N L Q G K			
UniRef90_UP10003DEC020	A L S L Y K L F S E	S D G V E Q W I G E K N R M L E T M V P A K D I E D V V E I M			
UniRef90_E9FW64	D L Q L F Y R D T	E Q A D T W M A K Q E A F L S N E D L G D S L D S V E A L			
UniRef90_W5JMH0	R E I E A T M T T	I K A L Q A Q F A S E D V G P H L L G V V E E L			
UniRef90_W5JMH0	R E I E A T M T T	I K A L Q A Q F A S E D V G P H L L G V V E E L			
UniRef90_A0A024R889	S Y R F Q F F Q R D	A D E E L E K W I Q E K L Q I A S D E N Y K D P T N L Q G K			
UniRef90_UP10002658B5A	A L V L V Q F F L R	H W D E V M F W I S D K E S F A T S D D F G H D L E H V E L L			
UniRef90_D2A0Z1	S L Q L Q Q N F Q E	M L H I L D A M E E L K A R L L T D D Y G K H L M G V E D L			
UniRef90_H9K2N5	R F F N M V T R L	M I W M D D V V R Q M N T S E K P R D V A G V E L L			
UniRef90_G1SN11	L Y K M F S E A D A	C E L W D E K E Q W L N N M Q I P E K L E D D L E V I L			
UniRef90_T1IQM9	Q Q N F Q E M I Y I	L D S M E E L K V R L L S E D Y G K H L M G V E D L			
UniRef90_B0WRM4	S L R F H K F V F E	L D A E L Q W I N E H L P A A S S E V I G Q N L H Q A Q S L			
UniRef90_E0VWK4	R L Y G F Y K E C	D D F E K W I K D K E K M L T D D G M D N V E T A			
UniRef90_E0VWK4	R L Y G F Y K E C	D D F E K W I K D K E K M L T D D G M D N V E T A			
UniRef90_W4VR17	K L H E F L Q D I E	E L T E W V A E K Y S T A Q D D T Y R S A K T V H S K			
UniRef90_UP10003F09AF3	S L Q A H Q Y F A	D A N E A E S W M K E K E P I A G S E D Y G K D E D A A E S L			
UniRef90_UP10003EC2E76	S H R L H Q F F R D	L D D E E S W I K E K K L L V S S E D Y G R D L T G V Q N L			
UniRef90_UP100022F4331	Q Q I C R D S E	D E E A W I Q E T P S A T S T H L G K D L V A A K N L			
UniRef90_H0WUB1	W M E K K L L V S	S S E D Y G R D L T G V Q N L			
UniRef90_UP10003596ABA	Q E F F L R D T K	Q A E I L L T K Q E Y T L S H L E L P S T L E G S A A A			
UniRef90_G7Y6J8	A K R L H D F Y R	N M D D E A W I R E K K I L V S S E D Y G R D L I G V R N L			
UniRef90_L7MK44	A T S V E L F F H R	T C D D A R D W M A E K L Q K I D I E E V G R D M K T V Q A L			
UniRef90_L7MK44	A T S V E L F F H R	T C D D A R D W M A E K L Q K I D I E E V G R D M K T V Q A L			
UniRef90_M3YN55	A Y A L F Q F F Q D	L D D E E S W I E E K L L R V S S Q D Y G R D L Q G V Q N L			
UniRef90_T1ED35	K L Y L N R D I E	D T E Q W I A E R E V V A G S H E L G Q D F E H V T M L			
UniRef90_UP100032A1292	A N Q Q Q F F Q R N	R V E D I E L W Y E V E G H L A S D D E V D S N T D N V E A L			
UniRef90_UP10003EDDEDA	Q R F L S D Y E E L	S G W M K E K T A L I S A D E L P T D V A S G E A L			
UniRef90_D6W8J4	F Y R D C E Q A E	N W M S D R E A F L A S D E V D S N T D N V E A L			
UniRef90_UP100042BCF2B	F G R D A G M A E	A W L C S Q E P L V R S A E L G C T V D E V E S L			
UniRef90_T1PEL0	A S S V E L F N R T	T C D E A K V W M S E K M I Q L D T A V I S P D L K T V Q A L			
UniRef90_T1PEL0	A S S V E L F N R T	T C D E A K V W M S E K M I Q L D T A V I S P D L K T V Q A L			
UniRef90_Q21408	A G N E Q Q F F N R	N I E D V E A W L S E L E G Q V A S E D Y G K D L V S V Q N L			
UniRef90_A8PJ9H	A N K Q S K F M A	A V K D L E F W L G E V E S S L L A S E D Y G K D L T S I E N L			
UniRef90_H3BH26	H L A E K F R Q K	A S I H E A W S E G K E T M L K Q K D Y E T T L S D I K A L			
UniRef90_A8XJE3	A R Q F Q Y F K R	D A D E L N V W I L E K L Q T A Q E E N F R D P S N L Q A K			
UniRef90_UP10004436415	E V H Q F S R D A	S V A E A W L L G Q E P Y L S S R E I I G Q S V D E V E K L			
UniRef90_H3DNS6	S K E L H Q V R R	D L D L E D I L W I Q E R L P M A M S Q E H G S T L Q E V Q Q L			
UniRef90_UP100034FB1F9	A Q G V Q T F H I E	C R E T V S W I E D K K R I L Q Q D D L E M D L N G V M T L			
UniRef90_C3XQZ8	A L Q L Q Q F F L Q	E D G L Y W I N E K L L T A Q D A L P E G T R N L H S V Q A L			
UniRef90_UP1000398F02D	A R R F D R K A A M	R E A W L S E N Q R L V A Q D N F G Q D M P A V E A A			
UniRef90_UP10003956C11	R F F S M V R D L M	W M E D V I R Q L E A Q E K P R D V S S V E L L			
UniRef90_J9JN59	K E A F Q F F R D	V D V E D E K L W I A E K T P M A T S T E Y G N S L F N V N M L			
UniRef90_R7TS09	A S S I E L F Q N M	C I H E A L K D W I E K N A S L N V D D L G K D L H S V Q A L			
UniRef90_G7PM78	A H R A Q Q Y Y F D	A A E E A W M S E Q E L Y M M S E E K A K D E Q S A V S M			

50 60 70 80

QUERY				
UniRef90_T1ELU5	L K K H Q L L E A D I S A H E D R L K D [L] N S Q A D S L M T S A F D T S Q V			
UniRef90_T1JGN9	L T K Q E T F D A G L Q A F E E G I Q T I T S L K D Q L I S S K H S Q T P A I E			
UniRef90_T1JGN9	K R K F E T L L T D L S S S S F R V D S I D S A A K E L T G K R K S E T D E I R			
UniRef90_A0A023EWT2	K R K F E T L L T D L K A N E V R L A K L N E I A V Q L T S L G Q T E A A K I K			
UniRef90_F4WS96	Q K K F D D F N D D L K A N E V R L A K L N E I A V Q L T S L G Q T E A A K I Q			
UniRef90_W4W6M1	M K K H Q L V E A D I Q A H E E R I K D M N A Q A D S L I E S G Q F D A A G I Q			
UniRef90_E2BFC6	Q R K H E G L E R D L A A L E D K V K A L C T E A D R L M Q S H P E T A E Q T Y			
UniRef90_V9K787	L R K H E G L E R D L A A L E D K V K A L C T E A D R L M Q S H P Q S A A Q I Q			
UniRef90UPI00046B808F	L T K Q E T F D A G L H A F H E G I Q N I T A L K D Q L I A A N H N Q S E A I L			
UniRef90_L7M942	L K K F D D F M A D L K G N E V R L G E M N N I A N K L M T L G T E A A V K I Q			
UniRef90_G1P9D4	L D R H Q E H K G E I D A H E D S F K S A D E S G Q A L L A A G H Y A S D E V			
UniRef90_C3YON1	L Q K H Q L M E A H V K S L G Q R V D R V N V K G N G F I G S Q H A E S A T I Q			
UniRef90_U6IL85	I K K H Q A V M A E I T G H E P R I Q D V C Q T G E N M A Q Q G H F A A D E I K			
UniRef90_G3Q398	L K K H Q A L Q A E I T G H E P R I K A V T Q K G E A M V E E G H F A A E D V K			
UniRef90_J9JUV5	Q N K H Q A L Q A E I T G H E P R I V V A A L V D R G Q Q M V R S G H F A S Q Q I E			
UniRef90UPI0002062D5F	L K N H Q V V E T E I Q H W K Q K L D D L V F A G E E M A Q D G H F D A E N I L			
UniRef90_X1X417	L E R H Q E H K G E I D A R E D S F R I A L E S G E H I L K S E N A P T L V S Q			
UniRef90_Q7Q515	L E R H Q E H K G E I D A R V D S F K L T E A G R Q L L I E R E H Y A A A E V Q			
UniRef90_F2ULA6	V Q K H Q T F H A E V T A N E G R I F S V I N D G K R L I I G E S P P D H A T P I			
UniRef90_E9HMP5	W T R H Q A F E A E V S A N R T R I L V N D G K R L I I G E S P P D H A T P I			
UniRef90_Q4T9R4	L K K H E A F E T D F T V H R D R R V G D V C S N G G E L I I K K N N H H V N N I S			
UniRef90_E5SH50	I K K H G A F E V D L G V H R Q R I G E I M Q H G Q A L L I D S G N H H A Q T I Q			
UniRef90_V5GYS7	V R Q R Q E G F E N D L V A L E A Q L Q V L V D D S V R L Q A A Y P G N A E H I A			
UniRef90_V5GYS7	V R R Q R Q E G F E N D L V A L E A Q L Q V L V D D S V R L Q A A Y P G N A E H I A			
UniRef90_T1JWB9	Q K K F D D F Q S E L K S N E A R L R E M N E V A T K L A N L G T E A A V K I N			
UniRef90_R7THV3	Q R K F D D F Q K D L K A N E T R L V I E L N T I A E R L T A M G T E A A E K I K			
UniRef90_M9PGV6	Q K H Q A F E A E V S A H S N A I V S L D N T G Q E M I N Q Q H F A S E S I Q			
UniRef90_W8AB01	K R K F E K F L T D L S A A S K R I E E I D G A V E N F R R Q G H S Q L D K I I			
UniRef90_W8AB01	K R K F E K F L T D L S A A S K R I E E I D G A V E N F R R Q G H S Q L D K I I			
UniRef90_B3S6I6	L R K H Q A F E A E V S A N R T R I L D N V N N S G K A L I I E A E H P K T D K I E			
UniRef90_P13395	H Q K H Q A F E A E L L A A N A D R I Q S V L A M G G N L I D K K Q C S G D A V			
UniRef90_E9G793	L Q L H Q E R K A E I D G R Q N N F S A L K D H G R R L V Q Q Q H P S K D E I G			
UniRef90_E9G793	L Q L H Q E R K A E I D G R Q N N F S A L K D H G R R L V Q Q Q H P S K D E I G			
UniRef90UPI000298AF43	L K K L Q T M E N Q M E A W Y K E V G Q L Q V Q V A T I P Q T Q V K E T V T			
UniRef90_M7CBN8	E R H Q A F E I N N H E N R V R G V C Q A G E N M V A D G H F A H E E I N Q			
UniRef90_B7P1U8	L K K H Q A V L A E I N N H E N R V R G V C Q A G E N M V A D G H F A H E E I N Q			
UniRef90_D6WA70	Q Q K H V L M D E I K A R R N K F D Q L G A T G R Q L I A E K H P R S N E I Q			
UniRef90_E5T2J8	Q K K F D E F Q A D L R A H E V R L A E M M N K I S T A L L A A I G T E A A V K I R			
UniRef90_Q176W5	T A Q F E S F V S N M N S N E A R V N A C V A K G E S L L N E G N P N K D I I Q			
UniRef90UPI00042C02E4	I K K H E D F D K A I N V Q E E K I A A L Q S F A D D R L I I S A D H Y A K G V V			
UniRef90_Q7QA48	M K R H D F E N S L L G A Q D K I I L K N F S E G A D R L I I R N N H Y N A T Y I D			
UniRef90_W4Y7J3	Q K K F D E F Q K D L H A H E D R V A E V N S E A N T L I I E E G H P E T D T I			
UniRef90_E9Q447	Q R K H E G F E R D L A A L G D K V V N S L G E T A Q R L I Q S H P E S A E D L			
UniRef90_L7MFA2	K K K F E N F L T D M S A S K L R M D E I I D R Q V G E F V Q N K H S Q L D A I R			
UniRef90_L7MFA2	K K K F E N F L T D M S A S K L R M D E I I D R Q V G E F V Q N K H S Q L D A I R			
UniRef90_H3CBT9	L K Q Q E T F D A G L Q A Q Q E G I S N I S A L K E Q L L A A Q H V Q A K A I Q			
UniRef90_V5GYK8	Q R R L S G M E R D L A A I Q A K L I D A L D K E A R E I K Q E H P E E A D A I V			
UniRef90_H3C0G3	V Q K H Q A F E A E L S A N Q S R I V A V V N Q L A R Q L L H V E H P N S E Q I V			
UniRef90UPI0003DEC020	K H R Y N G F E K E M Y A N A S R V A V V N Q L A R Q L L H V E H P N S E Q I V			
UniRef90_E9FW64	I K K H E D F E K S L A A Q Q E E K I K A L D E F A S K L I I E G Q H Y A A E D V			
UniRef90_W5JMH0	L Q A H S L L E L Q V T T L G E T Q R R Y V R Q G E A F K R G D Y K D T S L L D			
UniRef90_W5JMH0	L Q A H S L L E L Q V T T L G E T Q R R Y V R Q G E A F K R G D Y K D T S L L D			
UniRef90_A0A024R889	L Q K H Q A F E A E V Q A N S G A I V K L D E T G N L M I S E G H F A S E T I R			
UniRef90UPI0002658B5A	Q R K F D E F Q K D M A S Q E I R V K Q V H E Q A D K L I T D S H P E H D L I A			
UniRef90_D2A0Z1	L Q K H N L L E A D I N I L G D R V K A V A N Q S Q R F L I D Y R P C D P A L V L			
UniRef90_H9K2N5	M N N H Q S L K A E I D A R E D N L M A C I N L G K D L L A R N H Y A S S S Q I K			
UniRef90_G1SN11	Q H R F E S L E P E M N N Q Q A S R V A V V N V N Q I A R Q L M H S G H P S E K E I K			
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90 100 110

QUERY	D K R E T I N G R F Q R I K S M A A A R R A K L N E S H R L
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UniRef90_C3YON1	K K L E D V S A N Y D R L K T R S G I R R S K L E D G L
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1 10 20 30 40

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

80

50 60 70

I S R H N E Y R A E I D T H D D A F S K F Y K T G Q A L V Q Q G H F □ A K E I Q
K H R Y D G F D K E M N A N A S R V A V V N Q L A R Q L V H V E H P Q A P R I Q
K W K H Q A F M A E L A S N K E W L D K I L E K E G M Q L I S E K P E T E A V V K
L K K H Q M L E N Q M E V R K K E I E E L Q T Q A Q A L S Q E G K S T D E V D
K A E H E A L K G E I T E A R E D T F S N V L D L G E A M V Q T G H Y A A S E V E
K A E H E A L K G E I T E A R E D T F S N V L D L G E A M V Q T G H Y A A S E V E
Q R K H Q N F Q D L Q T L Q S Q V Q A I S D E S S K L Q A S Y A G D A K E I T
Q K K F D E F Q T D L K T N E P R L R D I N K V A D D L L F E K L L T P E G A Q
L Q K H S L V E A D I N V L G D R V K Q V V Q N S Q K F L N Y K P C D P S I I V
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M K Y H Q G I K A E V D A R G K N F T D C I E L G K K L L Q R K H Q D S P E I S
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I Q K H A A F D A E L L S N S P R V Q S V I H E G E R L I R G E H F A K D E I A
U n i R e f 9 0 _ A 8 J N J 6
K I Q H D A I Y G E I E A R E D K F R Y L N E L S D S M V Q T G H Y A A A D V E E
K I Q H D A I Y G E I E A R E D K F R Y L N E L S D S M V Q T G H Y A A A D V E E
L Q K H Q T F D A E L L S A N S S R V V S S V I E E G E S L I D A K H Y A S D E V L
F H S H K G L E R S L A V M E D S K V K E L C A R A D K L M L S H P P E A S Q I Q
V K K H Q S L E Q A L L E D Y A Q T I H Q L A N S S R L M V N S E H P E S E R I T
U n i R e f 9 0 _ U P I 0 0 0 4 4 0 B A A D
Q R K L F G M E R D L L A A I Q D K L L D F L R G E A Q K L V K D H P E N A A D I L
L K K H R A L M S D L E A F K S T I D E L R K Q A L Q C K Y E H S S G Q L G R
I K K N Q T L Q K E I I Q G H Q P R I D D I F E R S Q N I V D S S S □ S A E A I R
M K K H E A I E A D I I S S Y E E R I V G V V I E L A T E M E E E N Y Y D □ R R I A
W E R F N E F A Q D T A A V G E R V A K A N G I A D D L I H A G H H S D S A T I A
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I K K Q E D F M T T M D A N E E K I N A V V E T G R R L V S D G N I I N S D K I Q
U n i R e f 9 0 _ E 3 L C P 1
H Q K Q Q A F E A E L H A N S D R I A A I Q A G N N L I E N A K C G G G E V S A
U n i R e f 9 0 _ U P I 0 0 0 3 E E 0 5 0 1
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U n i R e f 9 0 _ U P I 0 0 0 3 F 1 5 8 E D
L A K H H V L Q N D V L A H Q S T V E A V N K A G N D L I E S S A E E A S S L Q
V R K H E A I E T D I V A Y S G R V Q A V D A V A A E L A A E R Y H D I K R I S
U n i R e f 9 0 _ F 1 N V 5 8
L K K Q E E L E Q D I A S H R D R L L Q E L V N T A Q E F Q Q E K H F L A D E L I Y
U n i R e f 9 0 _ W 6 N W W 7
Q R K F E D F L K E L G N H Y R I S E I I N Q A A D K L V I E D G H T E H D Q I
U n i R e f 9 0 _ Q 7 K V 6 9
L R K H E G F E N D L V A L E A Q L Q V L V E D S V R L Q A K Y P S N A S A I A Q
U n i R e f 9 0 _ U P I 0 0 0 3 5 9 5 A 7 A
I L R K H E A F E K L L A S Q D E K M M S L Q E Q A S R L G K A D G L E G Q K I Q
U n i R e f 9 0 _ U P I 0 0 0 3 8 B E F F F
L R K H S L L E S A V A A R Q N Q V D T L T D M A A H F E E I G H P D S G N I R
U n i R e f 9 0 _ V 8 P F R 6
T K K N Q T L Q K E I I T G H A P R I E E V V D R G E S M L A E G D G D F R D T E
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L Q K H S L L Q E L Q V T A L G E S S Q R R L R Q A A Q H L A Q P Q N K E V P L L Q
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D E K F T E F A S E T S I I G Q E R V S A V N Q M V D E L I D Y G H S D A A T I A
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L K K H D T F E V D L Q Q L H K Q R V D D L I R Q G Q Q L I D S G N H H G P R I K
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U n i R e f 9 0 _ V 5 H G 7 9
I A E H Q Q F M R E M D E Q Q V N K D K T I A L A Q E I L I A K C H P D A T V I R
U n i R e f 9 0 _ W 5 K 3 5 6
I K K H E D F L T T M E A S E E K I I N G V V E S G R R L L V S D G N A N A D K I Q
U n i R e f 9 0 _ U P I 0 0 0 1 C B B D A 4
L K K L E A L D L D L E S F R N T V Q H L E V L L S S G G L L E R E H F E S K D I E
U n i R e f 9 0 _ U P I 0 0 0 1 C B B D A 4
L K K L E A L D L D L E S F R N T V Q H L E V L L S S G G L L E R E H F E S K D I E
U n i R e f 9 0 _ T 1 J T G 8
L K K H E A F E K S A A A Q E E R F A A L V R L
U n i R e f 9 0 _ U P I 0 0 0 4 5 7 3 1 C 0
I K N H Q G I K S E I D A R D V S F N I S I E M G N T L L E K K H Y A S D E V
U n i R e f 9 0 _ L 5 K R 8 1
L K K Q M L E R E M A V R E K E V E A I Q A Q A K A L A Q E D Q G A G E V E
U n i R e f 9 0 _ U P I 0 0 0 3 3 4 6 1 7
H K F E E F Q E E L N I R K G K V D R V N Q Y A N E C A Q E K H P K L L E I K
U n i R e f 9 0 _ O 1 5 0 2 0
L N K H T A L R G E M S G R I G P L K L T I E Q G Q Q L V A E G H H P G A S Q A S
U n i R e f 9 0 _ G 3 P G 6 1
M N Y H Q S L Q S E V E A R S R S T L E C I E M G K T L L A A R N P A A E E I K
U n i R e f 9 0 _ U P I 0 0 0 1 D 3 9 5 9 1
Q R K L R G M E T D L A A I Q A K L D S L Q K E A D T L A E E H P E E A D A I R
U n i R e f 9 0 _ U P I 0 0 0 2 2 B 0 5 5 4
Q E R F T K F A S E T S I N Q Q R M E Q V N K M V N E M I D C G H S D A A T I A K
U n i R e f 9 0 _ F 6 Q 8 8 1
I R K F E D F L V A M D D N N Q D K I L K T V A S G N E L I N G N I Y S D K I K
U n i R e f 9 0 _ G 3 W 7 Y 3
M K K R D D L D K A I I S A Q E E K I N S L K S F A E R L I I D G D H Y A K E E I A
U n i R e f 9 0 _ H 2 T Z A 2
I K K N Q T L Q K E I I Q G H H P R Y T D I F E R S Q H V L L R E D G P T A E P I R
U n i R e f 9 0 _ H O V 4 N 0
I A Q H K I L Q E D I L L R Q K N V D Q A I L N G L E L L K H T T G D E V L I Q
U n i R e f 9 0 _ T 0 M E E 3
R D K F R E F S R D T S T I Q E R V D S A N A L A N G L I I A G G H H A A R A T V A
U n i R e f 9 0 _ U P I 0 0 0 2 9 8 A B E F
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U n i R e f 9 0 _ W 5 K P D 2
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I A Q H A A L R G E V E R A G E Y S R L R T L G E E V T R D Q A P Q C L F L R
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R D K F R E F S R D T S T I Q E R V D S A N A L A N G L I I A G G H H A A R A T V A
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Y L K H Q A F E N E V Y S R A D Q M E G V I S L G N S L I E R R A C D G N E
U n i R e f 9 0 _ A 7 S 1 C 0
I T K H E A V E R E M T A R N A Q T K A V A R N G E E L L E A V P Y A T D T I Q
U n i R e f 9 0 _ F 1 R Z U 8
L Q V K Q T F T M E I R H K D L I D E L V N S G H Q L M S T S E E E K Q A M K
U n i R e f 9 0 _ F 6 S 9 F 7
L N R H Q V I L A D I D S H E P R I H A I T E R G N K L V I D E G H F A A E D V A
U n i R e f 9 0 _ G 1 P 5 6 6
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L K K H H D F E K M L A A Q Q E E K F A Q L S R K T R E M N L L K Q T D T E E S E
U n i R e f 9 0 _ B 4 J 2 I 5
F K K H K L E A E I K G H Q P M I N K A L Q G G Q S L V A Q Q H P E S K N V E E
U n i R e f 9 0 _ I 3 J I G 5
L S Q Q R A L E D E M S G R A G H L Q H T I A E Q G A M V K A G H F G A T K I Q
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Q R K L D D V D T D M K I D D A K I K S I S T L A D K L A R Q G Q T G V I
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L K K H K A L E H E I E V Y K N L M L E I G K T A K T L P L P G S I Q F D E V D
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U n i R e f 9 0 _ U P I 0 0 0 3 E E 2 E E 1
G K K H K D F L A E L E E S R G V M E H L E Q Q A Q G F P Q E F R D S P D V T
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L K K H E A F L V D L K A F G N S I Q A L R D Q A E A C Q E Q Q
U n i R e f 9 0 _ W 4 W I D 4
L K Q H E K F E N T L H A Q D D R L K A F S D T A D N I N N
U n i R e f 9 0 _ F 1 K R 9 5
R K R H E A F E S D L G A H Q D R V E Q I A A I A R E L N N L R Y P N V I A A I N N
U n i R e f 9 0 _ U P I 0 0 0 3 5 9 6 F 8 2
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90 100 110

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UniRef90_UPI0001CE0C00	S K R L T V Q T K F M E L L E P L N E R K H N L L A S K E I
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UniRef90_K7ISG3	E K C S Q L L D E R Q K L H T A W Q Q K K I H L D Q
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UniRef90_A8JNJ6	E K C A A M L D E R Q K L H A A W N K K K I I M L E Q
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UniRef90_UPI0003442C87	Q M K E D L V S N W G H I R A L A T N R Y A K L E A S Y
UniRef90_H2VOK1	L R Q A Q V D K L Y A G L K D L A E E R R G R L Q E R L R L
UniRef90_UPI000440BAAD	A R Q D E L D A A W D T L K Q T L K A R E E S L G E V S K L
UniRef90_J9FAU8	E C V M A L
UniRef90_F6V016	Q R L A D L K E Q W G C L I E E T E N R H R R L E E A H R
UniRef90_W5NBC3	A R K D N I L R Q W G L L K E L V S G R R T R L E K N L V L
UniRef90_B0WDS4	E W K D G L N E S W Q D L L E L I E T R K A M L A A S R E L
UniRef90_UPI0004444C87	G R L A E I Q E V W E E L N A T M K R R E E S L G E A S K L
UniRef90_W6UQF7	A K Q S R V D K M Y A G L H D L C L E R R L R L E E I L K L
UniRef90_UPI00039919FF	E K V D S I D D R H R K N R E A A S E L L M R L K D N R D L
UniRef90_E3LCP1	A R L K A L N D Q W D L L V K T T E K S Y R L K E A N K
UniRef90_UPI0003EE0501	E W K D G L N E A W A D L L E L I D T R T Q I L L A A S Y E L
UniRef90_UPI0003F158ED	N K L E V L N Q R W Q N V L E K T E Q R K Q Q L D G A L R
UniRef90_UPI0003EC6914	A R Q H N V A R L W D F L R Q M V A A R R E R L L V S L E L
UniRef90_F1NV58	E R V D Q L V Q R Y K S L R D P L Q E R R G S L E A S R
UniRef90_W6NW7W7	K K R D E V N E A W H R L N T L A A N R K E C L F G A H Q
UniRef90_Q7KV69	Q Q D K V V A A W N D L K E R S T A R G D R L A A S S D L
UniRef90_UPI0003595A7A	H K L D V I H E R K R Q I K D L S Q S R R E K L Q T A L L L
UniRef90_UPI00038BEFFF	A R Q E S L V T R F E A K E P L T T R
UniRef90_V8PFR6	E C L N Q L K V S W S T L Q E E T L K R L R R L E E A
UniRef90_U3JTX4	A P K E Q V H S R L Q E L Q E L A A A R G K K L D E T L V L
UniRef90_C3ZQA4	T R Q A Q I D K L Y A G L K H L A E E R R G K L D E T L Q L
UniRef90_E2APU2	Q K L E L L N S T Y D E L L V E N S K E R K A R L E D A R
UniRef90_E2APU2	Q K L E L L N S T Y D E L L V E N S K E R K A R L E D A R
UniRef90_Q00963	E R L N A I L K D G W E E L H Q M W E N R Q V L L S Q S L
UniRef90_E0AHA7	K K I Q E L R S A W Q E L K E A V K D R K G D L G E S E K
UniRef90_A0A016TA39	R K R D M I L D R W E R L K A A L T E K R S K L G E S Q T L
UniRef90_H3BDJ8	E W K D G L V N E A W A D L L E L M E T R A Q M L A A S H H E L
UniRef90_H2U145	D R V S H L E F S Y Q E L I T Q L A A E R R A R L E E S R R L
UniRef90_W2SZM5	D R C D Q L L N R L R E I Q D M A G R R L Q K L R D D
UniRef90_H9KF21	A R Q N E I K E L W N Q V Q T K A K E R R S R L E D A
UniRef90_H9KF21	A R Q N E I K E L W N Q V Q T K A K E R R S R L E D A
UniRef90_V5HG79	H W V T I Q S R W E E V S L W A R Q R Q K L E D H L R
UniRef90_W5K356	E K A D S I Q E R H Q K N K Q A A N D L L T K L K D N R E L
UniRef90_UPI0001CBBDA4	Q K Q A E V E A S Y E E L K Q L S A K R R S M L M E H R K L
UniRef90_UPI0001CBBDA4	Q K Q A E V E A S Y E E L K Q L S A K R R S M L M E H R K L
UniRef90_T1JTG8	UniRef90_UPI00045731C0
UniRef90_L5KR81	R T S R A V E E K F R A L C Q P M K E R C Q R L Q A S R E
UniRef90_UPI000334617	S K Q D E V N A A W E R L C N L A L K R R E S L S N A A D L
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UniRef90_G3PG61	E K L D K V Y A K Q Y E L L S E K W D K H W D V L Q Q L L E
UniRef90_UPI0001D39591	Q R F A Q I T E C Q W Q E L R I I L Q E R D A A M A E A K E L
UniRef90_UPI00022B0554	E W K D G L N E S W A D L L E L M E T R R Q M L A A S H H Q L
UniRef90_F6Q881	E K V L L I E D R H K K K N N E K S Q E A A I L L R D N L D L
UniRef90_G3W7Y3	D R L L Q R V L D R W N A L L K G Q M M A E R A K L G D
UniRef90_H2TZA2	Q R L T E L Q L L W Q Q I R E E T E K R H K R L S E A H K
UniRef90_H0V4N0	D K L E A I K A R H K D V L K L I S T D V A V T L E Q A L E L
UniRef90_T0MEE3	E W K D S L N E A W A D L L E L L D T R G Q V L A A A H E L
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UniRef90_H2W9T2	T R R Q A L I D R R A R I L E T S L Q R E K S L A D S Y R L
UniRef90_E1BMN5	E W K D S L N E A W A D L L E L L D T R G Q V L A A A H E L
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UniRef90_A7S1C0	K K L D K V L K N Y D A I C Q M N S E R Y L Q L E R A Q S L
UniRef90_F1RZU8	S R V K S M N E N M E S L Q A R A A Q R Q C D L L E D
UniRef90_F6S9F7	Q D L L D D V N A R W K T L N K K V A Q R A A Q L Q E A L
UniRef90_G1P566	Q K D K S K I V R V P S L K R K S S D K R
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UniRef90_B4J2I5	E R L I S D L Q A Q W A A L E Q L A A V R K K R L E E A L A L
UniRef90_I3JIG5	E R R D A F I A K W H S L Q G A L N N Y R M K L A A A L E I
UniRef90_U4UPX6	E R R D A F I A K W H S L Q G A L N N Y R M K L A A A L E I
UniRef90_U4UPX6	A P Q E V Q H S K L R E L L E L A T A R G K K L D E T L G L
UniRef90_M7C541	E R L T D A E E C W E N L D K K F L Q R K A R L S Q A E Q
UniRef90_UPI000387085D	N R L Q A L R E L Y Q V V A Q A D L R R Q R L Q D A L D L
UniRef90_W5PC91	E R R N Q V L A R R M A V K D A A Q R R R A A L K A S
UniRef90_W4WID4	S R C K A I C D Q W D R L L G S L T Q Q R R K H L E E A E Q I
UniRef90_F1KR95	A R T Q N I E T Q W E E L K E I S Q A R Q D A L G G A K E
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UniRef90_A7RGP6	A I Q K Q T F E R N V I E L Q A W I	E E V E N A L A S E D Y G K D M R S V N N L		
UniRef90_G3S8T8	A A Q K F Y L F L S K A R D L Q N W I	S S I G G M V S S Q E L A E D L T G I E I L		
UniRef90_UPI000359E1BD	A A A R F G R K A G M R E E W L	S E N Q R L V A Q D N F G N D L A A V E A A		
UniRef90_UPI0001CE2BD5	S Y H Y Q V F R R D A D D L E K W M L	E E K L K I A E D K S Y E D P T N I Q G K		
UniRef90_W5LQ08	Y Q A Q Q Y F D I T E V E A W L S E Q E L	H M M N E E K G K D E P S T L Q L		
UniRef90_G3T8R3	Q V F R R D A D D L E K W M L	L E K L K I A E E K S Y E D P T N I Q V K		
UniRef90_H2N587	Q F Q Q Y L A D L H E A E T W I	R E K E P I V D N T N Y G A D E E A A G A L		
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UniRef90_UPI0003F1B133	Y L Q E C A D T L E W I	G D K E A I V T S A E L G E D W E R T E V L		
UniRef90_F6YQ80	S R R L W K F F W D M G E E E A W I	R E Q S R L L L S D D Y G K D L T S S L R L		
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UniRef90_UPI000440C588	A H I F H L F L R D V K Q A E A F L	N N Q E S A L A H V E L P T T V E T V E A A		
UniRef90_N6UQY7	A G E I H R F H R D V A E A L Q R I	Q A K I A A L G N D L G R D L N S A I A L		
UniRef90_U6ICW1	A S D V H K F F A M V R E L Q L W M D T	I T R E T E M T I K E K P R D V S G V E L L		
UniRef90_R7TST9	S L Q L Q K I F Q E M L Y I L D W M D	E I K A R L Q S E D Y G K H L M G V E D L		
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UniRef90_H2M6X9	S H R F W N F L W E V A E L E S W I	K E K E H I F S S L D Y G K D L T S V L V L		
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UniRef90_W5NK45	A T E F F H N S L L Q D F I N W L	T T Q A E Q T L T M A S P A S I L E T I M F Q		
UniRef90_UPI000333F8BE	D L K Q F F N H D L E E L E W I	P T A C D E S Y K D P T N I Q R K		
UniRef90_UPI0003B56AAB	A C N L H Q F F Q A D A D D I D T	W M L D V L R I V S S V D V G H D E F S A Q A L		
UniRef90_H3BC31	A N K L Q K F F L Q D L D D F Q A W L	F K A Q K A I A S E D M P N S L P E A E Q L		
UniRef90_UPI0002037FB6	S K R L W K F F W E L D E A E S W I	K E K E H I Y S S L D Y G K D L T S I L I L		
UniRef90_UPI0003C49FF	K Y Q Q H Y E E A S S G L L S G L	Q T S E I A V S S E P I A V D P K N L Q R Q		
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UniRef90_H0ZL53	S L Q L Q E F F N R D A A E L L I W M E E	K Y K I A S D E S Y R D P T N V L R K		
UniRef90_UPI0003C46E01	S R I L E E F Y S K L K E L S C L L G G A E E	H E E S Q T V V G M E T D I I N N Q Q		
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UniRef90_L5KUF8	E F A H K A S A F N H W C E N T E E D L S	E P V H C V S L N E I R Q L		
UniRef90_UPI0003F18819	A L D L Y T V F G E T D A C E L W M G E	K E K W L A Q M E L P D T L E D L E V V		
UniRef90_U6HW10	E V Y H F A R D A A I A E A W L V A Q E S	F V K S P D L G D S L D E T L A L		
UniRef90_I3JTN2	Q F Q D A L E L S L S W L	T D T E E L V A N Q P P S A E F K V V K A Q		
UniRef90_U3JTX5	A S R L Q Q F F R D V D E E L A W A R E	K E P L P M A S S K D Y G K S L V T V Q S L		
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UniRef90_I3MGZ4	S R E Q H Q F F H R D V E D E I L W V	T E R P M A S S M E H G K D L P S V Q L L		
UniRef90_M7BUF2	Q A Q G F F H G E V I E D M Q Q W L	T D T E Q L L A S K P V G G L P E T A R E Q		
UniRef90_UPI000246FB5	E L Q N F L Q N F C Q E L T L W I	N D K L L T S Q D I S F D L R N L H N K		
UniRef90_S9YQG2	Q F Q G D A D D L K A W L	Q D A H R L L S G S D D V G Q D E G A T R A L		
UniRef90_K7G531	A A Q Q F F H E T L E P L V E W L	T T T E K R L L A S E P I P I G T Q A S K L Q Q Q		
UniRef90_T1FWK8	H D L Q Q V Y E S Y A D Q A D Q W L	A T K E S F L A N E D L G H S L S S V D D L		
UniRef90_M7AMX7	A S K L Q G F F L R D L D D F Q A W L	S R T Q T A V A S E D V P A T L A E A E Q L		
UniRef90_UPI0002659289	A L K L F G L S R D I D D L M Q W I	A E R E V V V A G S Q E L G Q D Y E H V T N L		
UniRef90_H3BEP2	H L L F L R D V Q Q C Q N S L	Y N Q E T T L A H A E L P D T V E G V T K A		
UniRef90_B4H9W7	A V E Y F Q Q F A D A D D V D N W M L	Q D E K H K S L S D N N I S K D L H G V E S Q		
UniRef90_UPI0003317C76	A H A V Q M F F H R E A D D D T K E Q I	D T R I V S S E D V G R D E A N V Q S L		
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UniRef90_Q6XDA0	A H E A Q Q Y Y L D A G E A E A W I	S N Q E Y V L T H T S M P N S L Q A A E A A		
UniRef90_UPI0003AEC7C7	R Q A K G F F H G E I E D L Q Q W L	S E Q E L L Y V F S D E P K D E E G A I V M		
UniRef90_W5MU74	A L E I Q V F F L A E L S E L G S	R Q A K G F F H G E I E D L Q Q W L S T E R L L A S K P V G G L P E T A R E Q		
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UniRef90_UPI00042C17B9	L Q Q L F Q D M L H G I K W M D E M K A R	L D A R R L L M S S D D M G H D E Y S T E L L		
UniRef90_UPI00020359E8	Q L K R E V E D D L E Q W I A E R D	V D V A A S S Q E L S P E F G K H L L E A E D L		
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UniRef90_M3Y5X2	Q A Q G F F H G E I E D M Q Q W L	K D T E Q L L A S K A V V G G L P D T A R E Q		
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50 60 70 80

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UniRef90_UPI0003F178F6	H K K F E D F R M E L E I R K G K V V A V N Q Y A N E C A E E N H P Q L P L I K
UniRef90_A7RGP6	I K R H Q S L Q M D I A R Y E D R V S E L K Q A G E F V A A E H F L K D E I A
UniRef90_G3S8T8	L E R H Q E H R A D M E A E A P T F Q A L E D F S A E L I D S G H H A S P E I E
UniRef90_UPI000359E1BD	T K K H E A I E T D I N A Y E E R V S A V V A V A S E L E Q E N Y H D I D R I N K
UniRef90_UPI0001CE2BD5	Y Q K H E S F V A E V Q A K S R V I P D L E E I R E A R F A E G H F A H E T I K
UniRef90_W5LQ08	L K K H L V L E Q T I E D Y A E T I G L L S Q Q C R Q L L E I G H P D S E Q I S
UniRef90_G3T8R3	Y Q K H E S F E A E V Q A K S K V L P E L E E I R E E R F P E G H F A H E D T K
UniRef90_H2N587	L K K H E A F L L D L N S F G D S M K A L
UniRef90_G3WES5	Q R K H K A F E D E L R G L D A H L E Q I M K E A E D M V A Q K H F G Y P Q I E
UniRef90_UPI0003F1B133	H K F F E F Q A D L E T Q K R K L D G M N Q Y A N Q C A E E K H P D L P L I K
UniRef90_F6YQ80	I S K H N A F R G E M S G H R G P L Q Q T V A E G E E L I S K G H F G A G E I E
UniRef90_UPI0001DEC7DB	L A K Q D T L D A S L Q S Q Q D R L S E I T D L R D Q L V S A Q H S R T K A I E
UniRef90_UPI000334670B	V Q K Q V F E E E L A A N E N L L N N L E K T G Q E M I E K G H Y A S E N V A G
UniRef90_NGTP01	L Q K Q H K A F E R E L L G A N E G Q L R S V S K L G S A L I A Q D S Q H K D D V G
UniRef90_UPI0003C19F03	L Q K H Q T F E E A E I L A H E E I I T G V N S I G E A L I S R R H V K S A E I R
UniRef90_UPI000440C588	L K K H K E F T T M E I N L H R K A V I E A G E S L I S Q S N I Y S D R I R
UniRef90_N6UQY7	F R K H E T F E N E L V V L E A Q L Q F L V E D A S K L Q K I Y P T N K N K I Q
UniRef90_U6ICW1	M N N H K S L K A E I D A R E E N F S I C S L G R T L L N R R H P R E E E R
UniRef90_R7TST9	L Q K H S L L E S D I H I V G E R V K T V N G N A Q R F H E A D P C D P E V V K
UniRef90_V4CHJ2	L K K H K E V T E E L K S K Y H T S I E A L H E Q A A S L G E Q D R E S A D V Q Q
UniRef90_13M3Y9	I A M H K A I Q E D I L L T K P H V D Q V L Q N G L E L L K Q T T G D E V L I Q
UniRef90_UPI0003944503	L K K H E D F V S T M E A N E D K I D G A L Q A G Q R L V D S K N L Y S G K V Q
UniRef90_UPI00034FC49	Q Q R F E T L E A E M M N L A S R I A S V E N V A G Q L L T D Q R N E N S I R
UniRef90_H2M6X9	Q S K H S A F E D E L A A H S R G Q V L A E G E K M I Q A N H F G S P K I Q
UniRef90_G1KIS5	L Q Q H T A V K E E I D Q H R D D Y R S V K D I G T R V T Q G Q T A E Y Q Q L E
UniRef90_H0WG20	L D R H Q Q H K H I I N S Y D D R F Q S A D E T G Q A L L D A N H E A S D E V R
UniRef90_UPI0003599741	I C K N Q N L R R E I I Q V H R P R V D E V L E R A A A V A T I K S P E A E G V R
UniRef90_W2T4B2	L N Q H A A I R E E I D G Y A E D Y K K M R A M G D R V T Q D Q T
UniRef90_A0A016U557	M Q K Q Q M I E T E M I K K A H H I D Q L M E M E P Q L E E M H P D E L E D I R
UniRef90_W5NK45	I D E H K V F V T E V N S H R E Q I I E L D K T G T H L K F S Q K Q D V V L I K
UniRef90_UPI000333F8BE	Y L K H Q T F E N E V Y G R A E Q V E G V I N L G N S L I E R E A C D G E T M K
UniRef90_UPI0003B56AAB	V K K H K D V A A E I I S S Y R P
UniRef90_H3BC31	L S Q H K A I K D D I N R H E E D Y Q K V K D T G A A V T H G H T D P D L L K
UniRef90_UPI0002037FB6	Q R K H K A F E D E L R G L G T H L Q Q T I K E G E T M I A Q R H F G A S Q I R
UniRef90_UPI0003C49FF	L E E T K A L Q G Q V S N H Q V A I E I K L K K A A E V L L D T R G P D K D E I Q
UniRef90_UPI000441AF6C	K W K H Q A F M A E L A S N Q G W L E K L D E E G Q Q Q L A K Q K P Q Y E D V V F
UniRef90_H0ZL53	L K W H E A A E K E M L A N E E H F T T L I K K G N K L V Q D N H Y A A V S V Q
UniRef90_UPI0003C46E01	L N I F K V F Q E D I E T L Q V K Q Q E V N W L G Q G L I Q S K N A S T E N L E
UniRef90_I3IX16	L K R H E A F E K S T A T W E E R F S A
UniRef90_L5KUF8	Q K D H E A F L A S L A R A Q E D L N F L R E L N Q Q I K T L N V S S S P Y T W
UniRef90_UPI0003F18819	Q H R F D I L D Q E E M M N L K T Q I D G V N Q A A N S L V I E S G H P R S E E V K
UniRef90_U6HW10	L K K H L A F E K A V A T Q E E R F I A L Q K E T M L E L K A K E R T P E S E A
UniRef90_I3JTN2	I Q E Q K L L Q R I L L D D R K P T V E L I K K E G G K V A E A E S V D K E K V A
UniRef90_U3JTX5	Q E K H Q S L E N E I N S R D A L T K A V I S T Q G K L V R G G H S A S R K I L
UniRef90_G1P234	L Q Q H A A I K D E I D G H Q D S F E R V K A S G E K V L Q G Q D P E Y L L G
UniRef90_I3MGZ4	M K K N Q T L Q K E I L Q G H E P R I A D L T E R Q R T L A A A G P E
UniRef90_M7BUF2	L N T H I E L C A A F E A K E E T Y K C L M Q K G Q Q M L A R C P G S A E N V E
UniRef90_UPI0002C46FB5	W L K H Q A F P V A E L A S H Q G W L E N T D A E G K Q L M E E K P Q F A A T V T
UniRef90_S9YQG2	E K K H K D F L D E L C A A F E A K E E T Y K C L M Q K G Q Q M L A R C P G S A E N V E
UniRef90_K7G531	I S Q H K V L E D D I I T H N K S L Y M A I N G Q S L K N S S K E D K D M V Q
UniRef90_T1FWK8	I K G H Q S F Q T T L E A Q
UniRef90_M7AMX7	U N I F I R E I H Y K D D Y Q S M R A M G Q E V T Q G Q T D A Q Y L Q
UniRef90_UPI0002659289	L S Q H E S I R N E I H Y K D D Y Q S M R A M G Q E V T Q G Q T D A Q Y L Q
UniRef90_UPI000395883D	R E R F K A F E E T L A S G N E R V D K A N A Q C D Q Q I N Q G H S D N A T I A
UniRef90_H3BEP2	L K K H K D F T T T L E L N L Q K V Q L V L Q A G E S L R R Q R N L H S D R V A
UniRef90_B4H9W7	L R K H E A L E H E L S G N E Q Q L Q E L I D A A D A V M D R C P P A Q Q A V Q Q
UniRef90_UPI0003317C76	L K K H K D V A D E L K N Y A E V I D A L H K Q A D S L K L N E A E K A N V D
UniRef90_G1LAM8	Q R Q H E A F E R D L L P L G E K V T V L G E T A E R L I E S H P D A V E D L Q
UniRef90_H9GD14	I K K H E D F F M S T M E A N G E K I K G L V D S G R K L I M E D S L H T E K I Q
UniRef90_Q6XDA0	L K R H L R Q Q R T V E E Y G R N I K Q L A G R A Q S L L S A G H P E G E Q I I
UniRef90_UPI0003AEC7C7	L N A H L E F I C A A F D G K E E I Y K S L V Q R G Q Q V L E R C P Q S A E N I D
UniRef90_W5MU74	L R K L D S V D L D L E S Q R P K L E S S L Q E T G A K L E R Y G H P N S H L V N
UniRef90_H2Y425	M K K H E A F E S D L L A A H Q D R V E Q I A A I A Q E L N D L D Y H D T E T I N
UniRef90_UPI00042C17B9	L Q K H K L L E A D M A L Q A E K V H A V S A A A L A F A N G D P C D P Q V I R
UniRef90_UPI00020359E8	R D K H F R E F A R E T S I G Q E R V D Q V S L T L E D L I D A G H A E A A T M A
UniRef90_UPI00032908EC	M K K R D D L D K A I T A Q E G K I T D L K H F A E Q L I A D D H Y A M E E I A
UniRef90_W5N7P3	L K K H R D L H D E A L L K N G A T L E T L S K Q A D S L I P E E L R N T P D I Q
UniRef90_UPI0002B8E5FC	L K K H E A F V A T M A S G D E R I E S V L R D A E K L S D E E H H A A D R I I K
UniRef90_S4AAS9	V R K H D E F T A D L G V H Q E V K S I L A I G E R L L Q Q G H Y Q A P A I A
UniRef90_L5MH19	L K K H E G L D N D F A V H E A R V Q N V C A Q G D Q L V I A Q H S Q S K A I E
UniRef90_UPI000392D44B	T N K H K S M L G E L G S R R A L L H Q T M K R G E Q I L A K K C F S P S G I Q
UniRef90_H2ZPE2	L K K H A Q V Q E E L T K Y E G V I K A L H D E A D G L T E K D R E S V E V Q
UniRef90_V8PJ1	I H A E M L V L Q E E I K I R K D N V D Q A I Q N G L L L K Q T T G D I V V I Q
UniRef90_UPI0002653E04	R R K F E N L L I D L V I A N Q G R V E R I N K M A D R F V E T G H S K Q G E V R
UniRef90_UPI0002653E04	R R K F E N L L I D L V I A N Q G R V E R I N K M A D R F V E T G H S K Q G E V R
UniRef90_Q8MRH2	I K K H E A L M R D V G T F D D V I I N L R K D A E K C K L Q T P W D K D D E A
UniRef90_UPI0002BDDDF9	I K K H K Q K L L E A D V A A H E D R A R E L S R H A I L L L Q S D A L D E D A V K
UniRef90_H2XRN5	I S Q V R T L Q K D V D K H R G L L E L L N N A A D S L L E V S Q A D E D V I R
UniRef90_W5NK47	I S Q V R T L Q K D V D K H R G L L E L L N N A A D S L L E V S Q A D E D V I R
UniRef90_G3TOR1	M K Y H Q G I S A E I E T R S K N F S A C L D L D G K S L M Q R Q H Q A S E E I T
UniRef90_UPI0002B4B1E4	K K R H L I L C N K I S C Y E P F I V S K I D H G N A M I T E N H P R S N E I E
UniRef90_F6ZN81	L R D H Q Y L L I E L Q R E K D R I E L Q M G Q Q A L Q Y E S S S T P E V R
UniRef90_UPI0003890872	M K K L N E F R S G M T V D D A H I K T I N A L A M K L E R Q N K E E V K T I Y
UniRef90_H2URT2	I S Q H K A L Q S D I E L R K K N V E Q A I C N G V E L L L K Q T T G D V M V I Q
UniRef90_M7B699	R Q E H A A I K E D I R H E G D Y H S I K E T G E R V T H G Q M D P E Q L Q
UniRef90_T2MJ15	L D A H F E I K T I E Q H V D Y D N Y N L L V I S E G P K Y I H D D H L Q T Q S L R
UniRef90_E5S822	I K Q H D G V T E E L Q N G R N S L D Q L Y A Q A E Q L P E A A R A G P D V A
UniRef90_UPI00022B66A9	Y R K H Q A F E N E V Y G R A E E V E E A V K L G K S L I E R K A C D G E T V Q
UniRef90_M3Y5X2	L A K L K R V E D Q V N V R K E E L G E L L A Q V P S L G E E A G G
UniRef90_F6ZYR7	Q R R H C A Y E H D I Q A L S A Q V Q Q V Q D D G Q R L Q K A Y A G E A E E I Q
UniRef90_UPI00039422D6	L I A H L E L C S A F E A K E E L Y R E L Q N K G H Q L L T M M P E S P D S N T

90 100 110

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UniRef90_A7RGP6	D R A A D V A E R F E Q L V E P A T E R E L R L Q D S L A L
UniRef90_G3S8T8	K K L Q A V K L E R D D L E K A W E Q R K K I L D Q C L E L L
UniRef90_UPI000359E1BD	A R R D N V L R L W N Y L L E L L Q A R R M R L E L T L S L
UniRef90_UPI0001CE2BD5	S H L E H L R M L W D I L L E L L T Q E K G F F L L R E L K L
UniRef90_W5LQ08	K R Q S Q I D R R L Y V S L K D L V D E R K C G L E Q Q Y W L
UniRef90_G3T8R3	A H L E E L R R L W D I L L K E L A Q E K
UniRef90_H2N587	
UniRef90_G3WES5	A R I R E V S A W D Q L K E L A A F R K K N L Q D A
UniRef90_UPI0003F1B133	L K Q D E V N T A W K R L L S L A G Q R Q E T L A N A A D L
UniRef90_F6YQ80	E R I K E V K G Q W T E M E A L A E D R E R R L R E A Y
UniRef90_UPI0001DEC7DB	E R Y D A L L R R W E Q L L E A S A A H R Q E L L E
UniRef90_UPI00034670B	A R V S E V A N L W K E L L E T T A Q K G T Q L H E A N K
UniRef90_N6TP01	A I V Q Q L N D S W K N I L V G E S L E K G K R L L K Q A
UniRef90_UPI0003C19F03	R N I S R L Q E R W G L L K K A V V A R G K M L E D S R
UniRef90_UPI000440C588	E R V D L L A T R G N Q N R D L A Q Q W L S K L N D Q W E L
UniRef90_N6UQY7	Q Q Q A L V V E A W N G L K E R A D L R K D Q L Q A S V D L
UniRef90_U6ICW1	D K C I Q L V T E R V L L E Q W N E R N E N L H
UniRef90_R7TST9	D R M S H L D A A Y E E L L A A D R R A R L H E S R K L
UniRef90_V4CHJ2	S R L G S I S D K R Y Q E L L E L A K L R K Q R L L D A L S L
UniRef90_13M3Y9	D K L E A L K E K Y K D I T T M S T D V A K T V E Q A L Q L
UniRef90_UPI0003944503	E K M G S I Q E R H D K N K R R A E E V S E K L R D N R D L
UniRef90_UPI00034FC49	D M Q D Q L N S R W N E F R K L V D Q K K G A L D S A L
UniRef90_H2M6X9	E C M E D L G R Q W Q Q L E E L A A F R K Q N L Q D T
UniRef90_G1KIS5	Q R L Q G M D T G W N A L C K M W D S R E K F L N Q C L
UniRef90_H0WG20	E K M A I L A N N W A A L L E L W D R R Q H Q Y E Q C L D L
UniRef90_UPI0003599741	C L E R L G T M W A E L Q E Q T E R R Q Q T L D A T Y Q L
UniRef90_W2T4B2	
UniRef90_A0A016U557	A H R L A V Q E Q L Q R L Q A P L D D R R R Q L E
UniRef90_W5NK45	N L L I S V Q S R W E K V V Q R S V E R G R I L L D D S R K
UniRef90_UPI000333F8BE	G Q L E E L E K H W D Y L L E R T I D K G Q K L T E A
UniRef90_UPI0003B56AAB	
UniRef90_H3BC31	Q R L K G L D T G W D E L H Q M W D R R K N F L S Q G L
UniRef90_UPI0002037FB6	T R I E E V K A L W A Q L Q E L A S F R K K N L Q D A
UniRef90_UPI0003C49FF	K T L L D D I V G R Y D S L S K S V N E R N E K L Q U T L T
UniRef90_UPI000441AF6C	Q K L K D L H Q L W D M S L Q A T T E E K A Q H L F D A N R
UniRef90_H0ZL53	E K M S E L K K K W R E L L Y G K M I E R G K K L D Q T L V L
UniRef90_UPI0003C46E01	H D L E E V N T R W K T L N K K V A Q R A A Q L Q E A L
UniRef90_I3IX16	
UniRef90_L5KUF8	L T M E V L E R I W K H L T D L I K E R E Q E L E E S R Q L
UniRef90_UPI0003F18819	Q Y Q D H L N T R W Q A F K T M V L K Q R E A V D S A L R
UniRef90_U6HW10	A R K K A I D Q K
UniRef90_I3JTN2	K E I E C L G Q R W D T L L K K A E N R H K Q L E
UniRef90_U3JTX5	
UniRef90_G1P234	Q R L E G L G T G W D A L R R M W E S R G H F L A Q C L
UniRef90_I3MGZ4	L A Q L Q E M W K R L S H E L E L R G K R L E E A L R
UniRef90_M7BUF2	Q D I N N L K V K W D S V Q T K L L S E R K A K L E E A L N L
UniRef90_UPI0002C46FB5	Q R L E D L H Q L W D E L Q D T T Q K K T Q Q L S T A R
UniRef90_S9YQG2	E S R G T L Q D L Y Q Q V V A Q A D L R Q H R L Q D A L D L
UniRef90_K7G531	E K L D S S Q A R Y I E I Q E K S N S R S E L L Q Q A Y
UniRef90_T1FWK8	E K L A G V M N R W E K V K Q Q T T L R L Q K L N D S
UniRef90_M7AMX7	Q R L E A L D T G W K E L G Q M W E N R H H L L S Q A Y
UniRef90_UPI0002659289	Q W R D T I N D A W A D L K E L M K T R S Q V L K A F W E L
UniRef90_UPI000395883D	E A M E G L R A K S Q R N H Q L A Q E W T R R L Q D H L E L
UniRef90_H3BEP2	E K Q Q A V V E N W E I L R G K V E Q R R G A L Q Q A S S L
UniRef90_B4H9W7	K R L E A I D S R Y K E L T E L A K L R K Q R L L D A L S L
UniRef90_UPI0003317C76	R Q R V E L N E A W A D L R G R T E D R K E S L S E A Q K F
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UniRef90_H9GD14	E K V N S I D S R H R K N Q D A A Q D L L A R L R D N R E L L
UniRef90_Q6XDA0	R L Q G Q V D K Q Y A G L K D M A E E R R R K L E N M Y H L
UniRef90_UPI0003AEC7C7	Q D I N N L K E K W E S V E T K L N E R K V K L E E A L A L
UniRef90_W5MU74	E S L Q P V W D Q Y Q S L Q Q L S A E R R A A L E E
UniRef90_H2Y425	D R C R D I C D E W D R L L G S A T Q K R R T A L E
UniRef90_UPI00042C17B9	S R V S H Q L C H Q E L L A M A A E R K A R L E Q S K R L
UniRef90_UPI00020359E8	E W K D G L N E S W A D L L E L I D T R M Q L L A T S Y D L
UniRef90_UPI00032908EC	A R L Q R V L D R W N A L K A L M I A E R T K L G D
UniRef90_W5N7P3	R R L N D I R D L Y V D L L S R S E L R K K K L Q D A L A L
UniRef90_UPI0002B8E5FC	E R A E K I A E R R A K N K E E A E E V S A M L R E N L A M
UniRef90_S4AAS9	S R M E S V E N G L A V L G D L S L K R R S R L D D A L K F
UniRef90_L5MH19	E R H A A L L R R W E Q L L A A C A A H R Q K L L E
UniRef90_UPI000392D44B	E K M R E V C L R W K K L E E V T G L H Q Q R L Q E A L
UniRef90_H2ZPE2	E R L R S V D S R Y K E L L D F A K L R K E K L I D A R A L
UniRef90_V8PJ1	D K L E G I V A R Y K D I N N S S E V F K T L E E A L Q L
UniRef90_UPI0002653E04	S R Q K E V K E Q W K R L L E L K A E K E K M L E G A
UniRef90_UPI0002653E04	S R Q K E V K E Q W K R L L E L K A E K E K M L E G A
UniRef90_Q8MRH2	K Y I L L V L E E L H Q T L N E A W S E R A R D L T E A H Q L
UniRef90_UPI0002BDDDF9	E K V V I L H E
UniRef90_H2XRN5	A K R D A T E Q R F S T L K D M T R N R R T K L Q E S M K I
UniRef90_W5NK47	D E K A S I N K K V D N M T E Q L Q K K D S L E E T V Q
UniRef90_G3TOR1	E K L Q Q L V S R S K E M K E K W E T R W E R L
UniRef90_UPI0002B4B1E4	L L K S T L S A K W N C L K D L S N E Y Q A N L D E A L
UniRef90_F6ZN81	D A L I T L S K E Y Y N A L G D L W V E R N K R L Q Q G L E L
UniRef90_UPI0003890872	Q R R K Q L N E K W T S F H G N L N T Y R R K L E G A L E I
UniRef90_H2URT2	G K L E G L K T K Y S E I N S M S G N V L K K L E Q V L N L
UniRef90_M7B699	Q R L Q G M E M G W S A L C K M W D S R G K F L A Q C L
UniRef90_T2MJ15	Q Q M S D L R D D W T R L H E L W H A R K I L L E Q S
UniRef90_E5S822	D R L G Q I E K R Y A E V M E L G S M R K Q R L L D A L T L
UniRef90_UPI00022B66A9	N Q L D D L E K D W K F L R E T T D D K G K K L E E A
UniRef90_M3Y5X2	D T D M S I E R R F L D L L E P L E R R K K Q L E S S R
UniRef90_F6ZYR7	R H M Q A V V A E A W A Q L Q A S S S G R R Q L L D T
UniRef90_UPI00039422D6	E Q L A N L K E K W E A V Q A K V A E R K V K L E E A L T

10 20 30 40

UniRef90_B0W7C6	Q F A D A L Q A L L D W L R K T K A R L A E D P V H G D L D T V T T L	
UniRef90_E2AVR2	D I D D L L D W F R E V D N Q L E A E P P S S E P E I I R V Q	
UniRef90_X1WG23	Q F Y R D L E D E D L L W I E D K L Q A T A T K D W G T S L Q S I Q S I	
UniRef90_B5M765	Q F M W K A D V V E S W I A D K E A H V R S E D F G Y L T S V Q T L	
UniRef90_UPI0003C4385F	L Q R F L Q N S F E V A A W I N E K N S I A L D E S W K D P S N L Q T K	
UniRef90_UPI000441D2A0	S K E L H Q I S H D L E D E L I W V Q D R I S L A M L K D Q G H N L Q T V Q Q L	
UniRef90_V4A360	A Y Q A L L F N R V A D D L M S W M D E V E N Q L E S E D H G K D L T S V N N L	
UniRef90_UPI00038C0C2C	R F Q D A L E S L L S W M A D T E D L V A N Q P P S A E F K V V K A Q	
UniRef90_UPI00038EA9EB	A H K F Y L F L S K A S D L E N W M K D I G G M V S S R E L P S D L T G T E I S	
UniRef90_UPI000298B332	A L Q A Q Q Y Y S E A A K I E S W L A D Q K L Q L A N E E K G L D E E S T L Q L	
UniRef90_W4XP18	UniRef90_UPI0002C36018	E S W L E D M M S V L T Q S V V S S D V H A V D A A
UniRef90_G4VDE6	Q F S R D A S V A E A W L I A Q E P Y L A S R D F G H T V D S V E K L	
UniRef90_UPI0002590676	E V Y E F A R D A E I A D T W L T S Q E A Y L N T D L G E T L D E T L A L	
UniRef90_UPI0003C27CB9	K A M E F H E T L Q N N L L E F L Q E A E D K F A R M P L G S D I D E V K K Q	
UniRef90_G3Q8U4	A N R S D L Y A Q S Y A D L E M W I N E T E Q Q L Q A D D Q A K D L A S T N I M	
UniRef90_E0VIH8	A N K A E L F T Q S C A D L D K W M G G L E Q Q F Q S D D Y G K D L T S V N I L	
UniRef90_UPI000333BD8A	H V A K D F Q D K L V P I V E W L D K A E K R I K E M E V P T D E E K I Q D R	
UniRef90_UPI000454A47D	L Q Q F N W K A D V A E S W I G E K E A S L K T K G N G A D L T A F L T P	
UniRef90_UPI0003D0D958	H Q F Q Q M S K H F Q A W L D K K E E Q R N A P P I S A R F D V L E S L	
UniRef90_UPI00034F3C1D	A E Q V Q V Y F N D C R E L M V W A N E M Y A L V I S E E L A N E V L G A E L L	
UniRef90_UPI0003C81280	A S S F Y Q F S A D T M E L A G W L Q D T Y R I V S S D D F G H D E Y S T Q S L	
UniRef90_UPI000443DA6F	E L Q L F R R S C D Q A E S W M A A R E D D L R A G D N S S L D T L E A L	
UniRef90_U1NAK2	F H N S L Q D F I V W L T Q A E Q T L M V S P A S L I L E T I M F Q	
UniRef90_V5FZX7	R L G Q F Q H A L L V W I S K T D K T L D E K P V A G D P Q I L E I E	
UniRef90_K7GBQ7	S Y E T H Q F L S E L V E A E S W M A E R A F I L E T S D C G K N E E S T Q V S S	
UniRef90_K7GBQ7	S Y E T H Q F L S E L V E A E S W M A E R A F I L E T S D C C G K N E E S T Q V S S	
UniRef90_UPI000265826B	A K Q V H T F G K N A D E L I D W M V E K A D V F A D E C G H D L E T I Q S N	
UniRef90_V4A6K8	A R N F N E K H N D F L K W I A K I E P E I A K E S K S G D E E D	
UniRef90_UPI0002ADAB7A	L Q K L F Q D M L H S I D W M D E I K A H L S A E F G K H L L E V E D L	
UniRef90_M4AN88	R D L L Q H F L Q N T Q D L T T V W I N E K M L T A Q D T S Y D E A R N L H S	
UniRef90_H2R9A4	A L D L Y T V F G E T D A C E L W M G E K E K W L A E M E M P D T L E D L E V V V	
UniRef90_UPI000388F652	A N H S D L Y A Q S F S D L D R W I G E M E T Q L S Q S D E Q G T D L T S T N R L	
UniRef90_V9K782	A L S L Q N Y Y L E C D E T K V W I C E K T K L I E S Q E L L G N D L T G V M T I	
UniRef90_K1QHA2	A Y E L Q F F N K E A D N I D S V S S G H E K F L D Y A D L L G E T V D D V E T L	
UniRef90_T1EDY8	K K K R Q F E L D A N E E L S W I E E R I N R A N K S E V G K D L S A V Q S L	
UniRef90_V9K7K6	Q F W E T Y E E L W P W L Q E T L T F I S Q L P T P A E F E T L K Q Q	
UniRef90_UPI0003C39176	Q F S D A L G E L E W L K K A K Q R L N E D P V H G D L E T V V Q G L	
UniRef90_W4XS01	UniRef90_UPI0003402F0	A L S I Q N Y H L E C T E T Q A W M R E K T K V I E S Q G L G N D L A G V L A L
UniRef90_M3ZV24	A L A V Y R M F S E V N A C E L W I D E K E Q W L E K M E I P E K L E D V E V V	
UniRef90_UPI0003C2A4D8	S Y E L H R F Y H D A R Q A L A Q V Q H K Q A Q L P D E L G R D L N T A E A M	
UniRef90_UPI00044396BE	Q F S T E T D D V A A W L Q D A Y R L V S S E D F G H D E Y S T Q S L	
UniRef90_F6TXQ5	Q E L E E A A W A R E K E H A R A L P P P G T E L D G L L A W	
UniRef90_A8QD19	L Q M F L R D A K Q A E V M L S Q Q E N Y L S K D E T P T S L E Q A E N M	
UniRef90_UPI0003D0C404	Q A A V Q Y Q D G L Q A I F D W V D A G N K L A T M S P I G T D L E T V K Q Q	
UniRef90_UPI000203B0BF	A Q K L V Q Y L R E C E D V M D W I N D K E A I V T S E E L G L D L E H V E V L	
UniRef90_U4UQ65	K F Q E A L D G L L A K W L A D T E E L V A N Q P P S A D Y K V V K A Q	
UniRef90_UPI000393F04A	A E D V Q K Y L S Q W T E L M A W K L E M S L V R G E P Q S S E G S D L E Q L	
UniRef90_W5QFK2	Q Y Q Q F Q Q S S A D S L Q A W M K A C E A K L L S D T V A S D P G V L Q Q Q	
UniRef90_I3NDR0	S R M E E V Q K E A C S V L Q W L E S K E E V L K A M D A S L S P E T V K A Q	
UniRef90_UPI0003ACC5A9	Q K A Q K Y Q W H V E D L M P W I E D C K A K M S D L R V T L D P V Q L E S S	
UniRef90_UPI00038ED713	UniRef90_UPI0003D0CA42	A K Q F H E T A E P I S D F L S V T E K K L A S E P V G T Q T A K I H Q Q
UniRef90_F1N6H4	Q Q A Q G F H S E I E D F L L D L T R M E T Q L A S K P T G G L P E T A R E Q	
UniRef90_UPI000454BEB0	Q A A V Q Y Q D T L Q A M F D W L D N T V K L C T M P P V G T D L N T V K D Q	
UniRef90_E1FSY4	R F M I M V R D L L L W M N E V K R E M T S Q E R P K D V S G V E L L	
UniRef90_A1Z9J3	K K Y S Q T S E T F L A W R T A E D K L A D L T P G V S K A K L E T R	
UniRef90_UPI0003833696	A V D L Y E F Y H Y H D M E M N W I N E R L P I A H S T N C G K S L D V A Q N L	
UniRef90_UPI0003833696	A V D L Y E F Y H Y H D M E M N W I N E R L P I A H S T N C G K S L D V A Q N L	
UniRef90_H3CH00	A R R F D R K A A M R E T W L L E N Q R L V A Q D N F G Y D L S A V E A A	
UniRef90_UPI0003958D2B	E Q F R F L R A A R D L R L W M D G M H Q L Q A R E R R P R D V T A A E L L	
UniRef90_A8Y467	S L E Y Q E M R R E A D E V M G W M H E K A K L V A S D D A L A P S A I P H R	
UniRef90_B3MHF6	D A E K L N A R V Q A L F D W L D H A E H K L R A K N A P D D E K V S R E M	
UniRef90_UPI0003C1AC02	Q K A L R Y K E H V E N L Q P W I T E C E N K E S N I K I C L D P G Q I E N S	
UniRef90_B4N5W8	A E P F W K Q L N S V M K T L K D L E E T L S Q E P P A A Q P Q D I K K Q	
UniRef90_Q9QXZ0	Q F W E T Y E E L S P W A E E T L A L I A Q P P P A V D H E Q L R Q Q	
UniRef90_D6WPG8	H E A E R L H K S V H M L L D W L S E A E R Q L R V G S T P E D E A T A Y E Q	
UniRef90_G5AM9J	K Q A E E F R D A V H M L L E W L S E A E Q T L R F R A L P D D T E A L L Q S L	
UniRef90_H9KKAO	K F Q E A L D G L L Q K W L A D T E E M V M S N Q P P S S D Y K V I K A Q	
UniRef90_UPI00046B143F	R V E D F Y R K L K V L N D T T S A A E A E A L Q W V V G T E V E V I N Q Q	
UniRef90_V8N7P6	A Y K A L Q F L H I V D E A D K W L E D L D S E M K I P E S S D N L L I L N D L	
UniRef90_G7PAZ4	A Y K A L Q F L H I V D E A D K W L E D L D S E M K I P E S S D N L L I L N D L	
UniRef90_B5E0Y2	F R D L Q D H E W C Q N K L Q K L L A A D Y G S D L P S V K E E	
UniRef90_A0A044UCE8	Q R I F H E M V Y V L D W C D E I K A R L L S E D L G Q H L M D V E D L	
UniRef90_W5KLR5	L Y Q F Y R D I E D E L A W I Q D K L Q A T N S K D L G T S L Q S T Q A L	
UniRef90_UPI0003EBEB55	D A L R F H S Q A R D L L S W M D G I S G Q G Q A A D K P R D V S S V E V L	
UniRef90_B4JW24	K A M E F H E T L Q N L L K F L T K A E D K F A H L A V G S D I D A V K R Q	
UniRef90_U6PE02	S R K W H Q L A F D V D C E L Q W I A E K K P I A C S E D T G R N L T E A L N M	
UniRef90_G5EFW3	K L L R F Y R E C D E F E R W A K E I E V S L A D E P S P E H V A A F	
UniRef90_Q25432	S Y D L Q R F F L S D F R D L M S W T N G M K T L V A S D E L A K D V T G A E A L	
UniRef90_F7AP31	S S K V Q K F L V D L F D F E T W L Y R A Q Q A T A S E D I P T S L P E A E K L	
UniRef90_F7CGH6	Q A A V Q Y Q D G L Q A L Y D W V D I A T L K V E S P P I L G T D L V T V K Q Q	
UniRef90_UPI0003C2706D	A C K G L H F Q R S I E D M E K W L D D V E S E L K V P Y A S S D L I V L N N L	
UniRef90_UPI00034FE61D	R S Q Q F Q Q A V V N A E Y A W T E E A E N K L R S L G H I R L E Q D T T A Q	
UniRef90_UPI0003AFCC00	A H G F Q G F L R D A R Q A E G V L S S Q E Y V L S H T E M P G T L Q Q A A D A T	
UniRef90_E2C0F1	R E A E R L H K A V H V L L E W L S D A E M K L R F A P L P E D E Q E S R N Q	
UniRef90_UPI00046CCD09	R E F D A S L N R L R D A L Q G I S D N L D D L P L D K D P E E Q	
UniRef90_UPI0003C1B0C0	Q Q F Q Q M S K D F Q N W L D G K R Q D L I A Q T P I S A K L D T L Q S M	
UniRef90_D0UN85	P I A A S T N R G R D L I G V Q N L	
UniRef90_G3VXY1	F Q N S L Q D F I N W L T L A E Q S L N V P P P S L I L S A V L A Q	
UniRef90_U3IIH7	A L L I K Q Y F A D V S E V E S W L Q E Q R S L L A I S E D F G K D G A G V M V L	

	50	60	70	80
UniRef90_B0W7C6	V E H H K Q L E S D L D K R S A Q M Q S V M K T G K D L E K S D E T R E T S			
UniRef90_E2AVR2	L K E H K A L N D D I S S Q K G R V R D V I S M A K K V I R E N H E D T S T I I R			
UniRef90_X1WG23	V K K H L V V M Q E I E N R T P L I M A V I Q E A G Q N L V R G R F H A S R E S S			
UniRef90_B5M765	L T K Q E T F D A G L G A F Q E G I Q S I T Q L K D Q L V A A D H D Q T A A I I M			
UniRef90_UPI0003C4385F	L Q K H Q T F H A E I M A N R N R I D S T K A E G E K M L Q E G H Y V P E A I V Q			
UniRef90_UPI000441D2A0	I K K N Q N L R R E I Q V H K P R M E E V L E R A G S I A S K S P E V D S V R			
UniRef90_V4A360	L L K K H Q Q L E Q D I S N H Q E K V Q D V M D A V Q V F K E A K P L K A E L Q			
UniRef90_UPI00038C0C2C	I Q E Q K L L Q R L L E D R K S T V E V I K R E G E K I A A S E P A D R V K L L S			
UniRef90_UPI00038EA9EB	L E Q H Q E H H R E M E A E T S T F Q A L E E F G R E L I D S G H S N S L E I E			
UniRef90_UPI000298B332	L K D H Q S M E E S V E T Y A E K V G G S L S Q Q C H L L E I A H P E S E K I V M			
UniRef90_W4XP18	T K R H E A I T A D V M A R K E R F A D L E S M A L E L A K E G Y H R E R E V T			
UniRef90_UPI0002C36018	I K K K H F A F F E R A A A T Q E E R F R E L E K □			
UniRef90_G4VDE6	I K Q L A N F K A E V D P H M V K V E A L N R Q A A E L T E R S S E Q A A A I I K			
UniRef90_UPI0002590676	I K K L T R L D E Q V N E R Q K E M E E L L S Q A P P L R G D M P E V D V			
UniRef90_UPI0003C27CB9	L K K Q Q M L E K Q V E V R Q K E V V E L I Q T Q V K A L G Q E V K D T D E V A			
UniRef90_G3Q8U4	I K E H E D L H S E I L R K K P T L M E L T E V A D T L M S □ G E D E A A T V A			
UniRef90_E0VIH8	L A K Q D A L D A S I Q S Q Q E Q L S K I L T D L K D Q L V A G Q Q H S Q A K A I I E			
UniRef90_UPI000333BD8A	I K R H E E Y K K R E I E K Q W L K Y E E M Q Q T G N N L V K N G H F M S M E I E			
UniRef90_UPI0004544A7D	V K K H R A E T V E I E K H K V A V L G L R Q Q L S E L G A E Y R D Q V D V Q			
UniRef90_UPI0003C81280	I K K R D D L D K A V V T T Q E N K I T G L E L F A E R L L D N D H Y A K E E I A			
UniRef90_UPI000443DA6F	I D E H K M F V T E V N S H R E H I I E L D K A G T H L K F S Q K Q D V V L I K			
UniRef90_U1NAK2	L L Q K H A L L E S D I N I V G D R V K N V N G Q A E K F T S P G P D P S L V E			
UniRef90_V5FZX7	L A K L K V L I N D I Q A H Q T S V D T L N D A G R Q I I E S G A E E A S A T Q			
UniRef90_K7GBQ7	L R K L E A T K L L D V D G F K P R I E E K L L Q E T G T K L L I N S D N P E S S T M L			
UniRef90_K7GBQ7	L R K L E A T K L L D V D G F K P R I E E K L L Q E T G T K L L I N S D N P E S S T M L			
UniRef90_UPI000265826B	A R L H D G F E R D V L A T K K Q V D Q T Q A E G K R L W D M F P D A R E H L Q			
UniRef90_V4A6K8	H L Q I L M D E L E N I Q P I L E E I I N N D G T E L V D L A P G D A L R I D			
UniRef90_UPI0002ADAB7A	□ Q K H K L M E A D I A I Q G D K V K A I I T A A T □ K F T E Y Q P C D P Q V I Q			
UniRef90_M4AN88	K W K H Q A F M A E L A S N K D W L N K V D Q E G E L □ M E S K P E F E P I V K			
UniRef90_H2R9A4	Q H R F D I L D Q E M K T L M T Q I L D G V N L A A N S L V E S G H P R S R E V K			
UniRef90_UPI000388F652	L J K K L M R L D E Q V S R R K R E M E E L L L S Q A P P P R G D V H E A D I L			
UniRef90_V9K782	Q R K L C G I E R D L L A A □ E S R L P E L Q T E A H K L A S E H P E H A V D I L			
UniRef90_K1QHA2	F K R H E D F E N T L L V Q D E K L K D L D E M A D K R I A E G H P D K D H D H I D			
UniRef90_T1EDY8	□ N K N K T M Q Q E I V H H E P R F E G V C D E G H E L M E V D P E N A A H Y N			
UniRef90_V9K7K6	Q E E L R Q L R E L I A E H K P H □ D K M N K T G P Q L L E S P R E G L A I Q			
UniRef90_UPI0003C39176	C E H H K H I E Q D L Q K R A A Q M Q G V L K T G R D L E R S G N P D V G			
UniRef90_W4XS01	V L D T E M S □ Q A E R M K K L S Q E S K E L A D Q G Q H F D T D K I K			
UniRef90_UPI0003402F0	Q R K L A G T E R D L E A I A A R V D E L T R E A N A L A T G H P A Q A P A I H			
UniRef90_M3ZV24	A H R F E S L D Q E M N S L M G R I L D V N Q I V Q Q L D G G H P S S A E V			
UniRef90_UPI0003C2A4D8	Q R S H S A F E H D I Q A L S A Q V Q Q V Q E D A G R L Q K A Y A G E A E D I V G			
UniRef90_UPI00044396BE	L K K H K G V T E A I D K H R L H V V A L R K H M V V L S L Q Y R D Q E E V Q			
UniRef90_F6TXQ5	L R D A Y R L A A G G D F G H V N H T V Q Q L V E G G H P S S D E V R			
UniRef90_A8AQD91	L K R H Q D F L L T T M D A N D E K □ K A V V L K T G R D L E R S G N P D V G			
UniRef90_UPI0003D0C404	I E E L K Q F K S E A Y Q Q Q I E M E R L N H Q A E L L K L K V T E E V D K V Q			
UniRef90_UPI000203B0BF	Q K K F E E F Q T D L L A A H E E R V N E V N Q F A G K L I Q E Q H P E E E L I K			
UniRef90_U4UQ65	L Q E Q K F L K K M L D R Q N S M S S F S M G N E I A E A D P S E R K A I E			
UniRef90_UPI000393F04A	I L K K H D E Y R V Q I D R Q L I K S T A I L K Q K G S R L I E D G N F M S E K V E			
UniRef90_W5QFK2	F A T T K Q L Q E E L A A E H Q V P V E K L Q K V A H D L M E I E A P D R K H V Q			
UniRef90_I3NDR0	A E S N K A F I L L E E Q N S P K V Q E V K Q A L A E L L M T N S Q E A E N W K			
UniRef90_UPI0003ACC5A9	L L R S K A M L S E V E K R R S S L E I I L N S A A D L I I N S S E T D E D D I R			
UniRef90_UPI00038ED713	V F Q K E L L G K R T G T V Q V L K R S G R E L I E N S R D D T T W V K			
UniRef90_UPI0003DC042	I I R H K A L N E E I I N R K K N V D Q A I K N G Q A L L K Q T T E E V L L I Q			
UniRef90_F1N6H4	L D T H M E L Y S Q L K A K E E T Y N Q L L D K G R L M L A T D E T D R D L I R			
UniRef90_UPI000454BEB0	I N E M K E F K V E V Y Q Q Q I E M E K L N H Q G E L M L A T D E T D R D L I R			
UniRef90_E1FSY4	M N N H Q S L K A E I D A R E E N F N V C I S L G R D L L N R K H Y A S S E I K			
UniRef90_A1Z9J3	I L R D L Q T F R S E V W K V H S G E F E N T K G L I G E T F L L S S C D □ D K E P I K			
UniRef90_UPI0003833696	L L Q K H K E L Q A E V V N A H K Q Q V Q R V L D K G K A M V I G Q H P S A Q K I S			
UniRef90_UPI0003833696	L L Q K H K E L Q A E V V N A H K Q Q V Q R V L D K G K A M V I G Q H P S A Q K I S			
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90 100 110

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UniRef90_UPI00044396BE	V R L G E V E Q L Y T E V A E V A V A V L R Q Q W L H D A L
UniRef90_F6TXQ5	S C Q D H L N S S W
UniRef90_A8QD19	K K A R N I E E R R E A N R E K A V L S F N K [] K D S L A L
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UniRef90_U4UQ65	K Q L K D L I G R F D A L L T E G A Q Q Q R T L D D L E H A M K
UniRef90_UPI000393F04A	Q R I C E L E E M R V E K V W E E T R L L Y Q E D L E []
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UniRef90_E1FSY4	K K L I K L T E R A E M M R R W E D R W E Y L Q
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UniRef90_G5EFW3	V R Q H K I N A M W D N L E R L R K Q R G V R L E A T E R
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UniRef90_UPI00034FE61D	D K L K N L G K Y D K I C H L N A E R N L Q L E R A V S L
UniRef90_UPI0003AFCC00	E K A D S V E R R H K N Q E A V Q Q L L G R L R D N R E
UniRef90_E2COF1	H W I T T I L I Q S R W E E V A T W A Y Q R N Q R L E
UniRef90_UPI00046CCD09	G K L A S V G K L Y N N L Q K K L D H R K A E I E G N L R
UniRef90_UPI0003C1B0C0	S Q L S D L K V N W E E L N K Q A A D R Q D K I K D C L Q
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UniRef90_U3IIH7	N L L V S V Q S R W E K V V Q R S V E R G R A L D D A R K

1 10 20 30 40

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

	50	60	70	80
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90 100 110

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UniRef90_UPI0003297BC4	K W I R T L K K Q W S H L T D E V T G H R D R L Q A A
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UniRef90_T1PLK8	K M L C E L K D Q W T R V L S K S I E R Q R K L E E A L L L
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UniRef90_UPI000388AD09	K M L D D L N S R W A R A N Q V T A E R Q Q K L L E K S
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UniRef90_W5U6Z4	E K L R A L R G E R E R L T A N W E S K Q K W L E N T Y Q
UniRef90_UPI000395D689	D R V S H L E M C R R E L Q V L A A R R R A L L E Q S R S L
UniRef90_UPI00029907D7	S R L L T T L K Q D W E E L L N Q R I S D R E S R L K
UniRef90_F6XSC1	N Q L V N L K S N W N E L L G K Q S S E R H G K L K D C L Q
UniRef90_UPI000359EE19	A E M K S L D K R W S A V A G N A G D R M K T L E E M A E L
UniRef90_UPI00046C10EA	S Q L V G L L K T H W D E L L S K Q V T D R N S R L K D C L Q
UniRef90_UPI00034F3EF4	H S L K T L L K S R W D N V T A R A S D K K I K L E I A L K
UniRef90_UPI0003C3AB04	K Q L H D L M K R F D A L T D G A E Q R E K D L E E A M E
UniRef90_UPI0003315D11	E A V T R M L E K S Q E N Q L R A H Q W M E K L H D Q L S L
UniRef90_Q4SSG3	Q N L S I L Q N K W A S L N A K M D D R R A K L D E A V A L
UniRef90_UPI000292AFC3	N R V N H V H G C L A E L Q E Q A A R R R A E L E A S R S L
UniRef90_UPI00046B970D	Q P L T E V N R R W E N L L K G I V E R Q R Q L L E N S L
UniRef90_H0XEK4	E R L Q E L R G I W G E L Q A N C Q R K A A K L Q E A
UniRef90_UPI00046B54FC	A Q R S H I E A T W E R L D K A V K T R T E N L A A A
UniRef90_W5K6X2	H W I T I I R A R F E E V L T W A K Q H E Q R L E T A L T
UniRef90_A1Z9J1	N L L V S V V Q H R W E R V V S K K A A R T R A L D H G Y K
UniRef90_C3YBC3	E P L H D M N K R W E G L Q R S I V D R Q H K L E A A L
UniRef90_UPI0004572D66	R R K Q Q L N E R W T N F Q G N L N K Y K K K L E A A L E
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UniRef90_H9JRL1	E K C G A L M E E R A R L E R A W A A R Q V A L D Q
UniRef90_F1KPH2	S K Q I K L E K L Y K D L K E E C A H R R V L L V D A
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UniRef90_A0A023FX27	E R S A E V L A A W D R L R Q L Q A Q R A E R L A K A L
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1 10 20 30 40

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UniRef90_A9UR27	Q R L E F L H N C E E E E A W L	Q R L E F L H N C E E E E A W L R E R R Q L V E D T A I L G R D L R Q I S A A		
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UniRef90_UPI00045DEB96	S K E L H Q V A H D L D D E L A W F K G P L P L A M Q T E R G N G L Q A V Q Q Y	S K E L H Q V A H D L D D E L A W F K G P L P L A M Q T E R G N G L Q A V Q Q Y		
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UniRef90_UPI000383660D	R L R H F E Q Q G F R E V K T A L D T V Q K I A T F T D V G N S L A H V E H L	R L R H F E Q Q G F R E V K T A L D T V Q K I A T F T D V G N S L A H V E H L		
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UniRef90_UPI00032AFB56	UniRef90_UPI0003AF3DA	L K K D L Q V D T L V P L R Q K E A V A L S E D Y G R D L D E C K A L		
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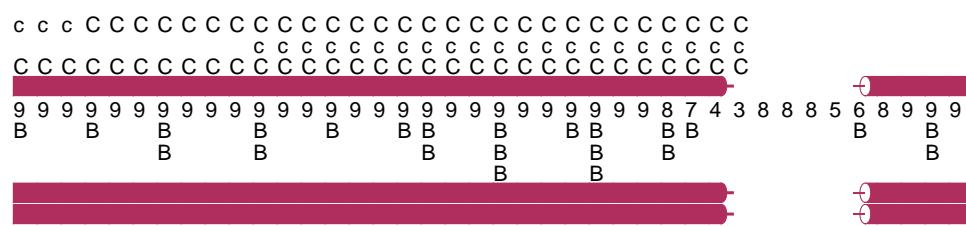
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