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

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

QUERY

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	90	100	110	120
QUERY	L L A F Q P E E R I A Q V I Q I R G Y T D A P Y L V L A T R N G L V K K S K L T	E E G M V V T I T N Q G Y I K R I S L D		
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UniRef90_UPI000363035B	L L K V E K G E W I N A I I P V K E F T D T D Y L F F T T K D G I A K R T P L S			
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UniRef90_UPI000347B434	L N L A K D D K V I G M I V V R N A S T L L V V T N K G Y G K R S E L L D			
UniRef90_UPI00030CF29C	L L Q I E Q Q G E T V N A V I P V E A F D P D C Y L F F G T R Q G I V K K T P L D			
UniRef90_A5D6F1	L L P L E P N E R I T A I L P V R E Y E E G R H I F M A T A S G T V K K T A L T			
UniRef90_V9W1R1	L I Q I E K G E R V S A V I P V K E F S E D R Y L F F G T K K G I V K K T E L A			
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UniRef90_UPI00038F790E	L L Q I E N C V I T L T H F G Y V K R I P T D			
UniRef90_W8ULX2	I L P L E E G E R I T A I L P I K E F V D G K Y V F M A T T N G T V K K T E L T			
UniRef90_M8D8X7	L L Y I L N K G E T I T A V I P I R E L E E D S Y L L M A T R K G I V K K T S L G			
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UniRef90_U1KTG4	L L P L E A D E R I T T I L P V R E Y E E D K Y V L M A T A N G T V K K T P L S			
UniRef90_A0P6J4	L F P L M P G E K I N A I L A V K D F V D E Y I F M A T A K G T V K K T P L S			
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UniRef90_W0TQF5	L L Q L M P G E C I T A V I P L R K F E D G H Y L M M A T N G L V K K T P I K			
UniRef90_Q608R9	L L P L E E D M V T L S H Q G Y A K A Q S L D			
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UniRef90_A0A024PP11	T H Q G Y I K R L P S S			
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UniRef90_R9C9P5	T H Q G Y I K R L P A S			
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UniRef90_UPI0002887147	L L Q L N Q G E K I Q A I I T L K E F K E D S Y L M M G T K N G M I K K T S L D			
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UniRef90_B8GRR5	V T L S H A G Y A K Y Q P V S S			
UniRef90_P05653	V T L S H A G Y A K Y Q P V S S			
UniRef90_UPI0003F96386	L L P L E Q Q G E R I N A I L P V R E F D G S H Y V F M A T A S G I V V K K V A L G S			
UniRef90_C6Q077	L L P I E T N E K I Q A V I T F K E F D K T N Y F I M G T R Q G L I K K T Q V S			
UniRef90_E0WRC9	L L P L K E N E R I T A I L P V R E Y D A G H H V F M A T A C G I V V K K T A L D			
UniRef90_K4IJ84	L L Q L G Q G G E R I L E Q V L S L H G Y D D A D Y L V L A T R T G R V V K K T R I L D			
UniRef90_W7YBL2	T H T G Y I K R L P A N T			
UniRef90_K1ZGU4	L L P L A E G E K I N A I L P V R D Y R K D Q F V F M A T A K G T V V K V A L			
UniRef90_UPI0002E10F62	I L P L E E N E R I T A I L P V T E F S E D K F I F M A T G D G T V K K T S L A			
UniRef90_S7UU06	L L N F E A G E K I L T V L A V P E F Q P G S Y I M M A T R Q A V I K K T D I M			
UniRef90_R7FV83	L L Q L M P G E K I S A V I P I E K Y N D D E Y L L M A T K K G L I K K T P I K			
UniRef90_H2FWN1	L L P L G E D E R I T A I L P V K E Y A D D K A V F F A T R Q G T V K K T E L L			
UniRef90_B2THC0	L I A I E P D E K I Q T V L T V T D K R R D G Y L F M G T K Q Q I V K K T H L			
UniRef90_UPI000369D153	L L A L E A Q E K I T A V I P V R E F N E D Y Y L F M S T Q O L G T V K K S E L M			
UniRef90_UPI00040C3263	L L Q L G P D E S I Q T V L S I P N Y E V A K Y L V L A T C S G K V K K T A L S			
UniRef90_UPI0002627C65	L L Q L I E K G E W I N A V I S V S E Y S E D Y Y L F F T T R H G L S K R T K L L			
UniRef90_W4DDV9	L I Q I I E Q Q G E K I S A V I Q V E D G D S D K Y L F F A T R E G I V V K K T P L			
UniRef90_R5WDH5	L L Q L M P E E K I S A V I S L K E Y N D E E Y L F F M A T K S G I V V K K T H			
UniRef90_D9RYX7	L L P L K P Q E K V N A V I P I K D F G E A S Y L V M V T K R G L V V K K T L L S			
UniRef90_R9C367	V T L T H S G Y I K R I S A D			
UniRef90_T4W855	V T L T H S G Y I K R I S A D			
UniRef90_Q0AFR5	V T L T H S G Y I K R I S A D			
UniRef90_UPI00039B6A54	L V P L E Q H E K I N A V L P V K S F D D T R Y V F M A T A G G T V K K T P L S			
UniRef90_A0A010NFB3	L I G C C E P D E K V S A F I S V K E F N E D H Y V V M A T E K G M V K K T K L S			
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UniRef90_I3IHN2	L L A V E P G E Y Y V T A V I P V K D F N A G Q F M M F C T R Q G Y V K K T P L E			
UniRef90_UPI0003B434BA	L L E L K E D E N V T S L I P V R D F D E R Q L V M A T S N G I I K K T P L C			
UniRef90_R6RVA7	L L A F Q P D E H I T Q V L A I R D Y E Q A D Y L V L A T K S G L V V K K T R L T			
UniRef90_UPI000366BF9E	L L Q L I Q P E E K I T A V I P I N E Y K E D H Y L F M A T S S G V V V K K T E L M			
UniRef90_K2BTW6	L L P L E K D E L I T A I L P V A Q F D E N H F I F M A T Q N G T V K K V A L			
UniRef90_U2EL95	L L P L E A D E R I I S Q V L L P I K D F S T S Q N V F F A T R N G T V K K T A L E			
UniRef90_S2VV82	L L A F Q P D E E I S D V L A I K D Y D Q A D Y L V L A T K S G L V V K K T A L Q			
UniRef90_Q18C90	L L Q L S A D E K I A T L I P I D G N D N E Y L L L A T K S G K G L V V K K T K R E			
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UniRef90_D5EB23	L L E L A E G E S V N A M I P V H D F E N D R Y L F M G T R D G T V K R C S L D S			
UniRef90_UPI0003A72C78	M F P L Q P Q G E K I N V V L P I R S F P A D H Y V F M A T A Q G T V K K T A L D			
UniRef90_S2XGG8	L L G V D K E K V V T A M I Q M A S F E D D A Y F I F T T R L G V T K R T P V S			
UniRef90_UPI0003613A2E	L M A F K P D E K I A E V L S L K D Y T I S P F L V L A T K S G L V V K K T P L V			

QUERY	130	140	150	160
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UniRef90_G9QJF1	T Y R S Q R R K G I	R G V Q G M G T N	E D D F V E H L I T S T H	I L F F T N K G G
UniRef90_I1XKJ3	D Y S R P R A N G I	I A V D L L K	D D D K L V G V A L T D G E S D	V M L F S S N G G
UniRef90_A0LQS2	E F D S N R T G G I	I A I N L R	D D D V V I G A R L V S P D D E	L L L V S R K A G
UniRef90_F4D250	D F D S N R S G G I	I G I N L R	D D E D E L V I G A V L C S A D D D	L L L V S A E G G
UniRef90_D3FQI3	T Y R S Q R R K G I	Q G M G T N	D D D F M Q H L F T T N S H H	I L F F T N K G G
UniRef90_UPI000363035B	D Y D S P R S G G V I	I A I N N G A D D E	L I G A E L V S A D D D	L L L V S R K A G
UniRef90_UPI00046F3CCF	D F A N I R T N G L I	A I H L K E E D E L	L I S V K L T D G N K D	I I I G T K N G G G
UniRef90_UPI000347B434	S F A N I R R G G L	F A I N L R	E E D D E L I I H G V R L T D G N K E	I I V G T K R G G G
UniRef90_UPI00030CF29C	S F E N I R T N G L I	A I N L R	E E D D E L I I S V V R L T N G E Q H	M V I G T K K G G G
UniRef90_A5D6F1	E Y D T S R R D G I	I A I S L N	E E D D E L H L V D V K L T G G R E E	I I L A T R G G G
UniRef90_V9W1R1	T Y R S Q R R R G V G	M D T K N N D F	V E H L F V T N S H H Y	L M F F T D K G G G
UniRef90_I7A2W9	D Y R L T R R G G K G I	T I K K N G M K	A M K E V N D E L	V I I T T K G G
UniRef90_UPI00038F790E	D Y S N I R R V G L I	A I N L R	E E D D D D L I I S V K L T D G K Q E	I I G T A D G G
UniRef90_W8ULX2	E F S R P R S A G I	I A V N L	N N E E G D E L I I G V D L T D G S N E	V M L F S A L G
UniRef90_M8D8X7	A Y A N I R R G G L	F A V N L	R E E D D E L I I A V R L T D G N Q E	I I M G T R N G G
UniRef90_UPI00036B461D	E Y D S P R Q G G V I	A I I S L N	E E D D E L V I G A V L V S P T	D D L L L V S R Q A G
UniRef90_G8LUJ5	T Y K S Q R R G G K G I	I G L S T R E E	D F F V L F T T S T H	D Y I I L F F T S K G G
UniRef90_UPI0000E0FA14	Q Y S R P R A N G I	I I A V N L	N N D G N E E L I I G V D L T D G D S E	I M L F S D A G G
UniRef90_Q2RMJ1	E Y H T S R R D G I	I A I L N L	D D D D D L V I G V L V R T E G N N E	V M L V I T R R G G
UniRef90_UPI00030EA94F	T Y K S Q R R G G I	Q G M G T N	E D D D F V E H L L T P S T H	I L F F T N K G G G
UniRef90_R7CEY2	E Y A N V R K N G L	A A I T L	R E E D D D E L I I V E K L T D D K K D	I L V I T K D G G
UniRef90_F5RE14	D F S N P R K A G I	I A I V D L	D E G D A L I I G V A I T D G S D D	I M L F S D A G G
UniRef90_D3S9K8	D F S R R R S T G I	I A I V D L	R D D D D Y L V D V S L T D G Q M D	V M L V I T T A G G
UniRef90_Q39ZR9	E Y A N I R R S G G I	I A V N L	R E E D D E K L I I A V A L T D G R Q D	V L L A S R N G G
UniRef90_N0ATM7	S F A N I R N N G L	I A I L N L	R E E D D E L I I S V V R L T D G S K E	I I G T K K G G G
UniRef90_D5CTY4	D F A N P R K A G I	I A I S L N	D E G D F L I I G V A I T D G K H D	V M L F S D E G G
UniRef90_V6IU74	D F S N I R R K G G I	F A I T V R	E D D E D E L I I A V R L T D G E R	R D L I V G T K K G G
UniRef90_U1KTG4	A Y S R Q R A S G I	I A I N L N	E N E G D S L I I G A D I T D G T	N D I M L F T D H G G
UniRef90_A0P6J4	D F S N P R K A G I	I A I K L N	R A N G D Y L I I G A G V T N G E Q D	I I L I S S G G G
UniRef90_Q2BK80	N F S R P R A S G I	I A L D L	D D D D H L I I G A A I T N G E D D	V M L M T S A G G
UniRef90_I3BN95	E F S R P R T A G I	I A V D L	R D D G D K L V D V A V V T N G D N D	V M L F S T S S G G G
UniRef90_W0TQF5	T Y Q A Q R R R G K T	A T T T K	D E D D F V D K L F V A S T H	D T I L C F S S S T G G G
UniRef90_Q608R9	D Y R A Q R R R R G K	Q K A A T K	E E D D Y L E K L V V A T H	D T I L C F S S S S G G G
UniRef90_F9DV54	T Y R S Q K R R G I	I Q G M G T N	E D D D F V E H L L N T S T H	H D T I L L V E T S R G G
UniRef90_E6JAY4	D Y D S P R S G G I	I A V N L	R D D G D E L L V I G A A L A G P	D D L L L V S E E E G
UniRef90_UPI0003712851	Q F D T S R R D G I	I A I S L N L	E D G D S L I I E V K Q T D G Q	Q E L M L A T R L G
UniRef90_G2J4P7	D F S R P R T A G I	I A I D L	E E D E Y L I V V G V A I T D G D	Q D L M L F S D A G G
UniRef90_W0E165	D F S R P L S R G I	I A I D L	H E D E Y L I V V G V A I T D G D	Q D L M L F T S A G G
UniRef90_B1VDY1	D Y A T T R S S G G I	I A I N L	N E E G D K L I I G A Q L C S A E	D D L L L V S E E E G
UniRef90_Q47U17	E F D S A R S S G I	I A I N L	R E E D D E L I I A A R L V Y P T	D D L L L L I S S S N A A
UniRef90_A0A010ZK08	E F D S N R Q G G V I	I A I N L	R E E D D E L V I G A E L I N E N D	N D N L L L I S S S K Q A G G
UniRef90_UPI0003803F6A	T Y R S Q R R R G I	Q G M G T N	E N D F V E Q I L L T S T H	H D T I L L F F T N K G G G
UniRef90_G4E2F2	E F S R P R S N G I	I A V D L	R D E D D Q L V D V Q L T D G Q R	D I M L L T S A G G
UniRef90_A0A024PP11	T Y R T Q K R R G I	Q G M G T N	E E D D F V E H L V V S T S T H	H D T I V L F F T N K G G G
UniRef90_R1CAV0	K F D T S R R K N G L	I A I N L K	E D D D E L I I V S V K R T T G E N D	I I V T A H D T I L L F F T N K G G G
UniRef90_R9C9P5	T Y R A Q R R R G I	Q G M G T N	E E D D F V E Q Q L S S T S T H	H D T I L L F F T N K G G G
UniRef90_W9GN40	D Y D S P R S G G I	I A I N L R	D E G D G D E L L V I G A D L L S A R	D D L L L L V S R K G G
UniRef90_UPI0002887147	Q Y A A R R K S G I	I N A I N L R	D E G D G D E L I I S V V R L T D G N S E	I L M V T K N G G G
UniRef90_A1STY7	D Y S S S K S R A T Q G V I	S I K R N G K	V V G A V Q V D T N D E	I M L I T N R G G G
UniRef90_K2BL93	E Y R V T S R G G Q G V I	S I Q I S E R	R N G N V V Q V T R G E E	V V M L I T D R G G
UniRef90_B8GRR5	A Y R A Q K R R G K S A T S F K	I D L R Q D D Y L V N A A I T D G K Q R	V Q R V M L F S N A G G	
UniRef90_P05653	U F F E R P R P S G K I	I D L R Q D D Y L V N A A I T D G K Q R	V Q R V M L F S N A G G	
UniRef90_UPI0003F96386	Q Y S S R K N G L I	N A I N L R	E E D D E L I I G V R M T T G E S E	I I V F T K N G G G
UniRef90_C6Q077	C F S R P R K D G I	I A I N L	E D D D E L I I G V A L T D G S N E	V V M L F S T D G G
UniRef90_E0WRC9	E Y D S P R Q G G I	I A I V R L	M Q S D E L L V I G A A L C N A D D E	I I L V S R K G G G
UniRef90_K4J84	T Y R S Q R K R G G R G V G	G M D T K D Q	D F V K H L F V S N S H H Y	L L F F T D H G G G
UniRef90_W7YBL2	E F F S R P R S N G I	I A I A L E	L D A D D N D K I L I G V D I T N G Q E	V V M L F T N A G G
UniRef90_K1ZGU4	S F A N V R S N G L I	A V N L	R E D D S L I I G V D I T N G E D E	I I M L F S K E G G G
UniRef90_UPI0002E10F62	A F S R P R A G G I	I A I A L A P	P G D E L L I I G T R I T D G T	N N V F L G S A S G G G
UniRef90_S7UU06	E Y A N V R K T G L	A A I T L	R E E D D E L I I E V K Y T D S D H	D H D V F M V T K Y G G G
UniRef90_R7FV83	E Y A N V R K T G L	A A I T L	R E E D D E L I I E V K Y T D S D H	D H D V F M V T K Y G G G
UniRef90_H2FWN1	A F S R P L A S G I	R A I T L	E G D E L L I I G V D I T D G D N E	I I M L F S D A G G
UniRef90_B2THC0	E F F R N L R K N G L I	A I N L R	E N D E D L L I I K V K I T Y G D A N	V V M F V T Q N G G G
UniRef90_UPI000369D153	D F D T N R K R G G L I	I A I T L	S D N E D D L I I D V K L T N G Q Q D	I I M G T R R R G G
UniRef90_UPI00040C3263	E Y Y D S P R Q G G I	I A V R L	M P A D E L L I I G A A L C N A D D E	I I L V S R L L G
UniRef90_UPI0002627C65	Q F A N I R R K G G L I	A V G L	E E D D E L I I S V V R L T D G Q N	D D M M G T K N G G G
UniRef90_W4DDV9	D Y Y N I R R K G G L I	I A I N L R	E E D D E L I I E V K V L T D G Q N	L I I G T A R G G G
UniRef90_R5WDH5	E Y E N I R R K T G L	Q A I N L R	E E D D E L I I E V K V V T T N N E K D	I I L V T K H G G G
UniRef90_D9RYX7	E Y E S S S R K T G I	I A I T L	T S G D E L I I G V K L V G K K D E	L I L G T S H G G G
UniRef90_R9C367	T Y S A Q R R R G I	Q A M S T K	E E D D F V E H V N I T S T H S D	V V L F F T N K G G G
UniRef90_T4W855	T Y K S Q N R R G I	S A L T T	R E E D D F I I K E L I T T H T H S R	L L L F F T N K G G G
UniRef90_Q0AFR5	E F S R P R T N G I	I A V A L	L D E G D Y L I I G V A L T E G K H	D V M L F S D A G G
UniRef90_UPI00039B6A54	E Y A S N P R K K G I	Y A V E I	R D G D K L I I E A R V I S T G D N D	I I L L G T R N G G G
UniRef90_A0A010NFB3	D Y D T P R Q A G V I	Q A I N L R	D E D D E L I I V S S S K L I S A T D D	D D M L V S R K G G G
UniRef90_C0GI67	E F I N A R K R G G L I	A L S L A	E E D D E L I I D V R L T N G K Y E	V V E V A L V T Y H G G G
UniRef90_I3IHN2	A Y G N P K K G G G I	I A I T L	D E G D K L I I C V K L T N G K Q D	I I L G T E Q G G G
UniRef90_UPI0003B434BA	E Y D D S S R T R G G V I	A I I N D G Q	V D E L L I I A A R V I N V G E D D	L L L L V F T N K G G G
UniRef90_R6RVA7	E Y A N I R R K T G L I	A I T L	E V K F T D N D Q D V F L V T K N G G G	I I I I G T R N G G G
UniRef90_UPI000366BF9E	A Y S R P R V G G G I	I A V N L	D E E G D S L I I S T R L T D G N M D	I I L L A T H Y G G G
UniRef90_K2BTW6	E F F E N A R S N G K I	A L S L N	E E G D R L I I G V A L T D G K Q D	I I M L V S D A G G
UniRef90_U2EL95	Q F S R P R S N G I	I A I D L L	R D D D D A L V V G V D L T G G D D	D D M L F S S S G G G
UniRef90_S2VV82	D Y N K S Q N R R G G I	I A I N L R	D V N S V V S A K L V N A D Q H L I I	I I L I S K M G G G
UniRef90_Q18C90	E F F K N I N K S G G L I	A I I G L R	D R D D D D E L I I G V E L L T D G K Q D	V V E V L V T K E G G
UniRef90_H8Z8E4	D F S R P L S R G G I	I A I D L L	H E E D E Y L I I G V A V T D G H Q D	D D M M L F T S A G G
UniRef90_D5EB23	D F S N P R K A G I	I A I S L L	H E E G D E L L V N V L Q T D G N Q D	I I M L F S D D G G G
UniRef90_UPI0003A72C78	E F F S R P R K A G I	I A V D L	L D E G D Y L I I V G A A L T D G K H D	V V M L F S D D G G G
UniRef90_S2XGG8	G F F A N I R R A N G L I	S I S L R	D D D D D E L I I S V V R L T D G K K H I I G T R N G G G	I I I I G T R N G G G
UniRef90_UPI0003613A2E	E F D S P R T T G G I	I A I S L K	P G D E V V V G A S L V N N G D E L L L V I S T K G	I I I I G T R N G G G

QUERY	170	180	190	200
UniRef90_F6B3U8	Q S I R F S A T D E A	L R P M G R A T S G	V Q G M R F N I D	L L S L N V V R
UniRef90_C7RAM0	K A Y R L K V H E	V P E A G R T A K G	T P L V N L L Y I S T	V I P I K D F T
UniRef90_UPI0003640857	K V I R F D E A N	V R G M G R T A R G	V R G M K L P E G A K	V I Q M I V A E
UniRef90_G9QJF1	K V Y R T K G Y E	I P E F S R T A K G	L P I I N I E K G E W	W I T I C F L
UniRef90_I1XKJ3	M M I R F K E T E	V R S M G R T S T G	V K G I T L D D D D E	V I G M E L L H
UniRef90_A0LQS2	K V I R F P E T D	V R S M G R V S R G	V R G M R L A D G E Q	I I S L I I A Q
UniRef90_F4D250	Q A I R F F R A D D E A L	L R P M G R A T S G	V I G M R F H D D D A	L A M M V V R
UniRef90_D3FQI3	Q S I R F T A D D A A L	L R P M G R A T S G	V L G M R F N D G D R	L L S I G V V Q
UniRef90_UPI000363035B	K V Y R L K G Y E	I P E L G R T A K G	P I I N L L Q I E Q	V I P I E E F D
UniRef90_UPI00046F3CCF	Q S I R F T A S D E T	L R P M G R A T S G	V K G M S F R E G D E	L L S M N V V R
UniRef90_UPI000347B434	M L I R F P E T D	V R S M G R T A T G	V K G I T L L S D N D E	V V G M E I L E
UniRef90_UPI00030CF29C	M A I R F H E T D	V R L M G R T A T G	V K G I T L L A D E D D C	V V G M D I V E
UniRef90_A5D6F1	L L I R F D E N D	V R S M G R T A T G	V K G I T L L A N D D E	V V G M E I S A
UniRef90_LA1RFL	A L A I R F L E E E	V R P T G R V T Q G	V K G I N L V G D D E	V V G M E V A R
UniRef90_V9W1R1	K V Y R L K A Y E	I P E L G R T A R G T P I	N L I Q I E Q	V I P I E S F E
UniRef90_I7A2W9	M V I R Q A V K D	I R L M G R N T Q G	V R L I K L N E G D E	I A D I A R V A
UniRef90_UPI00038F790E	M S I R F P E S D	V R S M G R S A T G	V K G I A L L D D D D R	V I D I D V V D
UniRef90_W8ULX2	K V V R F P E S S	Q V R S M G R T A T G	V V R G I I N L N G D D D R	V I S L I I P R
UniRef90_M8D8X7	M S V R F K E S D	V R T M G R S A T G	V V R G I I S L D D D D D V	I D M D V I K
UniRef90_UPI00036B461D	M S I R F T A D D T A L	L R P M G R A T G	V V R G I M A L R E G D E	L L S M A L V R
UniRef90_G8LUJ5	K V Y R L K A Y E	I P E A G R H A K G T A I	V N L L Q L E P V I P	L K E Y K
UniRef90_UPI0000E0FA14	K V V R F H E E	Q V R P M G R T A T G	V V R G I R L E E D Q K	V V S L I V P Q
UniRef90_Q2RMJ1	K A I R F G E D E	V V R P M G R A A R G	V V R G I A L L D D D D M	V V G G L V K V R
UniRef90_UPI00030EA94F	K V Y R L K G Y E	I P E Y S R T A K G	L P I I N L L D I D K D E W I E E Y H	
UniRef90_R7CEY2	M C I R F K E T D	V R S T G R T S M G	V V R G M N I I D D G D E	V V A M Q L N S
UniRef90_F5REI4	K A V R F A E A D	V V R P M G R T A R G	V V R G M M L E D G Q S	V I C M L V S K
UniRef90_D3S9K8	K A V R F S E N D	V V R P M G R T A C	V V R G V R M E S D H	R V I A L L N V A
UniRef90_Q39ZR9	K S I R F H E E D	A R P M G R V S R G	V V R G M T L E D D D D V	G M E V I N
UniRef90_N0ATM7	M L I R F P E T D	V V R S M G R T A T G	V V R G M T L L D D D D E	V V G M E V L E
UniRef90_D5CTY4	R A V R F D E D D	V V R G M G R T A R G	V V R G M N L A K G G K	V I A L V A E N
UniRef90_V6IU74	M A I R Y H E T D	V V R A M G R T A A G	V V R G K A I T L D E G D E	V V V G M G I A D
UniRef90_U1KTG4	K V V R F N E K Q R D	S R P M G R T A T G	V V R G I K L M P D D V K	V V S L I V P K
UniRef90_A0P6J4	K A V W F D E H D	V V R S M G R N A A G	V V R G I K M P D D V K	V V S L I I A S S
UniRef90_Q2BK80	K S M R F R E E D	V V R P M G R T A R G	V V R G V K M D D G V K	V I S L I I P Q
UniRef90_I3BN95	K A I R F H E S D	V V R A M G R T A T G	V V R G I R L E E G Q E	V V N A L I I V G
UniRef90_W0TQF5	K V Y W L K V Y E	L P Q A G R N A R G	K P M V N L L P I F E E	V L P I R E Y Q
UniRef90_Q60R9	K V Y W L K V Y E	L P V A S S T A R G	R P F V N L L E E G E R I N A I L P I R	
UniRef90_F9DV54	R V F R K K G Y E I	I P E Y S R T A K G	L P I I N L I D F E K M I P I S E F R	
UniRef90_E6JAY4	Q S I R F H A N D D T L	L R P M G R A T S G	V V M G M R F N D G D V V R A D T S D Q	
UniRef90_UPI0003712851	Y A L R F P E S E V T	P H G R T A R G	V V R G I K L R P G D R V A M D V V R	
UniRef90_G2J4P7	K A V R F S E T D	V V R A M G R N A T G	V V R G M M L G E G Q Q V I S L V T C S	
UniRef90_W0E165	K A V R F S E D	Q V R A M G R T A H	V V R G V K L Q P D Q R V I S L V T P E	
UniRef90_B1VDY1	Q A M R F T A D D E T L	L L R P M G R A T A G	V V Y G M R F R G E D Q L L A M T V V Q	
UniRef90_Q47U17	Q A I R F P A S S D D S L	L R P M G R A T S G	V V I G M R F A E G D Y L L S S M D V I R	
UniRef90_A0A010ZK08	Q A I C Y F K A D D E T L	L R P M G R A T S G	V V I G M R F S G E D E L L S S M H V A R	
UniRef90_UPI0003803F6A	K V Y R L K G Y Q	I P E Y S R T A K G	P L V N V E Q D E W V N S M I L F V T	
UniRef90_G4E2F2	K A V R F S E G E	V V R A M G R T A T G	V V R G V R M Q P Q D K V I S L L T V A	
UniRef90_A0A024PP11	K V Y K A K G Y E	V V P E F S R T A K G	P I I N M L Q I E K V I S V I N E F S	
UniRef90_R1CAV0	M A I R F N E G D	V V R E M G R T A M G	V V K A I T L N K G D S I V D M S L V E	
UniRef90_R9C9P5	K V Y R L K G Y E	I I P E F S R T A K G	P I I N V E K D E W V N A I I P V S S	
UniRef90_W9GN40	Q S L R F H A T D E A L	L R P M G R S T S G	V V T G M K F R D A D S L L A M S V V E D	
UniRef90_UPI0002887147	Y A I R F N E K D	A R P L G R N T S G	V V G R G I N L R E D D I V V T M E V V D	
UniRef90_A1STY7	T L V R T R V S E V S V	V V G R N T Q G	V V T L I R T A E G E K I	
UniRef90_K2BL93	T L I R T R V D E I S V	V V G R N T Q G	V V G R L I N	
UniRef90_B8GRR5	K A Y W L K V Y E	L P Q G S R A A R G	G K P I E G E R I N A I L P V R E Y L	
UniRef90_P05653	K V Y R A K G Y E	I P E Y G R T A K G	P I I N L L E V E K G E W I T E F N	
UniRef90_UPI0003F96386	K A V C Y F E E D D	V V R P M G R G A T G	V V R G M T L L N D Q K I I A L I I G T	
UniRef90_C6Q077	Y A I R F N E R D	V V R P M G R T A T G	V V R G M T L L N D Q K I I A L I I G T	
UniRef90_E0WRC9	K A V R F S E S S	K V R S V G R K A A G	M R G I K L N D D D D R L V S L I I P Q	
UniRef90_K4IJ84	M S V R F S A D D S T L	L R P M G R Q T A G	V V Q G M R F R P G D E L L M D V I A K E	
UniRef90_W7YBL2	K G K V Y K L K A Y E	I P E L G R T A R G T A I I N L I Q I E Q V I P V Q E F E		
UniRef90_K1ZGU4	K V I F L S E E D	V V R S M G R T A R G	V V R G V K L Q K E Q Y Q V I S L I V V H	
UniRef90_UPI0002E10F62	K V V R F S E G H	V V R A M G R T A S G	V V R G I R L A E G D Q V V S I V P V S S	
UniRef90_S7UU06	K S I R F H E S E	I I R P T G R T A R G	V V R G M T L A A D D I L V G M E V L S S	
UniRef90_R7FV83	Q C I R F N E S D	V V P T G R T S M G	V V R G M N L V D R D E V I G M Q I D S S	
UniRef90_H2FWN1	K V V R F H E D	Q V V R A M G R T A T G	V V R G I R L G D D D S V V S L I V P R	
UniRef90_B2THC0	Y A L R F N E K D	V V R H M G R T A S G	V V K A I T L K G D D I A V C M D I A V	
UniRef90_UPI000369D153	Q A I V F S E K D	V V R V M G R N A H	G V G R G I N L E E G D V V V G M D T L L R	
UniRef90_UPI00040C3263	M S L K F R A D D Q Q	L R P M G R Q T A G	V V Q G M R F R E G D E L L M D V V S D A	
UniRef90_UPI0002627C65	Y L I R F P E D D Q Q	V V R S M G R N A A G	V V R G M T L A A D D I L V G M E V L S S	
UniRef90_W4DDV9	M S I T F S E N D	V V R S M G R S A T G	V V K G I T L D G D N D H V I G M D C V D	
UniRef90_R5WDH5	M C I R F K E T D	V V R P T G R T S I G	V V R G M N L G F E D E V V V G M Q M D T S	
UniRef90_D9RYX7	M S I R F S V E D V T	P T P T G R T A R G	V V K A I T L G E G D E V A S M D V T S	
UniRef90_R9C367	R V Y K L R A Y E	I P P D A G R T A K G	T N I I N D E R I E T V L T I R D D V	
UniRef90_T4W855	R V Y R L N A Y E	I P E A K Q A K G T A I	V N L L Q L N S D E K I A T M I S I D	
UniRef90_Q0AFR5	UniRef90_UPI00039B6A54	V V R P T G R N A R G	V V R G M K L G A E Q K V I S L V A D S	
UniRef90_A0A010NFB3	K S I R F S E E Q I	V V R A S G R K T M G	V V G M N L V D R D E V I G M D C V D	
UniRef90_C0GI67	Q S L R F T A T D E A N	L R P M G R A T S G	V V T G M K F R E E D E L L L A A D V V T	
UniRef90_I3IHN2	L S I R F A E E	V V R S M G R S A R G	V V G R G I S L G P G D K V M S L E E M E	
UniRef90_UPI0003B434BA	K A V R F S E T D	V V R T M G R V T H	V V K G I T L K D S D K V V R G M V I V D R	
UniRef90_R6RVA7	Q S I R F T A T D E A L	L R P M G R A T S G	V V T G M K F R D D D S L L L S M T V V R S	
UniRef90_UPI000366BF9E	Q C I R F H E T D	V V R S M G R T A M G	V V R G I N L D G D D E V I G M Q L N S	
UniRef90_K2BTW6	K S I R F P E T D	V V R A I G R V G R	V V R G M T L V K G D R V I Q V V S D N	
UniRef90_U2EL95	K V I R F A E R D	V V R E M G R N A A G	V V R G I K L K N D Q K I I A L I I P	
UniRef90_S2VV82	UniRef90_Q0AFR5	V V R P M G R A T S G	V V R G M K F R D D G Y L L S L D V V H	
UniRef90_Q18C90	M S I R F D E N D	I I R Y M G R T A M G	V V R G M L E D G Q S V I A M V A E D	
UniRef90_H8Z8E4	K A V R F N E E A	V V R S M G R T A H	V V R G V T L E E G Q R V I S L V I A E	
UniRef90_D5EB23	K A L R I S E E A	V V R S M G R T A H	V V R G V T L E E G Q R V I S L V I A E	
UniRef90_UPI0003A72C78	UniRef90_S2XGG8	V V R P M G R E E D	V V R G M K L A G P D V V S L D V V D	
UniRef90_UPI0003613A2E	M S L R F T A D D E S	L R P M G R S T S G	V V I G M K F R A Q D S L L T M A R V N	

QUERY

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	210	220	230	240
E G T Y	L L V A T S G Y A K R T A I E E Y P V Q G R G G K G V L T V M Y D R R			
E E A Y	L F M A T K Q G V V K K T N L S E Y D T S R R D G I N A I N L D E R			
E D G S	V L T A T E N G Y G K R T A M E D H P L R G R G G Q G V I S I Q M S E R			
E D W Y	L F F A T K Q G V V K R T P V S A F A N I R T N G L I A L N L R E H			
D G E E	V L I V T R N G Y G K R T H E A E Y R I Q G R G G K G L R T C R I T P K			
Q E G A	I L T A T E F G Y G K R T N L E E Y R V Q G R G G Q G V I S I Q T S A R			
P Q A Y	V F V A T T K G Y A K R T P I E E Y P L Q G R G G Y G V I T A K I T A E			
D D K F	V L V A T A G G Y A K R T P I E D Y P V Q G R G G K G V L T L Q Y D R R			
D N S Y	L F F L T K H G I A K R T Q L S S F A N I R R G G G L F A I T L R G			
T G T F	V F T A T D G G Y A K R T A V D E Y R V Q G R G G L G I K A A K I V E D			
E N D V	L V I V T K N G Y G K R T K E E E Y R V Q S R G G K G L K T C N I T S K			
E N H Y	V L S V T E K G F G K R T P I D E Y R I Q T R G G K G I K T S N I T E K			
D E D D I	L V V T K N G Y G K R T P I V E D Y R I Q T R G G K G L K T C N I T E K			
P D E F	L L S V T A N G F G K R T R L S E Y R A Q A R G G K G I I N I K T T A R			
S G H F	L F F A T Q Q G G I V K K T P L K D Y N N R K G G G L I A I N L R E			
P E E N				
P P E Q E	V L I V T A K G Y G K R T P V S E Y R T Q S R G G K G I K T L N V T E K			
G D G E	I L T V T E N G Y G K R T A V V E E Y P T K S R A T Q G V I S I K V S E R			
P P N A E	V L I V T A N G Y G K R T P V I E E Y R I Q S R G G K G L K T H N V T E R			
P P D S D	L V V A T A N G F I K R T A C D E Y R I Q G R G G F G T L A A A K T T D E			
E G L Y	L V L A T K N G I V K K T D L M E Y D H R K G G G L T A V T L K E			
G E G A	V L T A T E N G Y G K R T D I A E Y P A K S R A T K G V V S I K V S E R			
E D A E I	L V V V S E R G F G K R T T L E E Y R P Q G R G G K G I I T M N V T D R			
E D W F	L F F A T K D G I V K R S P L S S F A N I R R K G G G L I A L N L R D G			
Q G D C	L L V I S A N G M G M G K R T S M G E F T C Q N R G G K G V K C Y K I T E K			
N D E S	V L T A T E N G F G K R T R V T E Y P K H G R G T K G V I A I Q T S E R			
E G A A L	L L A T E N G Y G K R T R F D E F P V H R R R G G Q G V I G I Q T E G R			
P P G S T I	F T V T E N G F G K R T L D E Y R V Q S R G G K G I I T I K T T E R			
D N T D I	L I V T Q K G Y G K R T P A V E Y R V Q G R G G K G L K T C N I T E K			
E E Q S	V L T A T E N G Y G K R T P I S E Y T R H G R G T Q G M I A I Q T S E R			
E E Q L D	V L I V T E N G F G K R T A I S E Y R P Q T R G G K G L K T C N I T E K			
N D G P	V L T I T E N G Y G K R T T L E D Y P A K S R A T Q G V V S I K V S E R			
N E E S V	V L V A T E N G Y G K R T V L S E F F R K S G R G T Q G V K A I L Q V S D R			
E G G K I	L T A S E N G Y G K K T A V V D D F P V K G R G G Q Q G V I A Q Q C S D R			
E G E	L L I A T E N G Y G K R T R V V D E F S T Q G R G G Q Q G V I A I Q T S E R			
E D R Y	V F M A T E H G T V K K T P L T D F S R P R A N G I I A V D L R E D			
E E F D E A	A H F I F M A T A S G T V K K V A L S E F E R P R P S G K I A I E L R D			
E D H Y	L F F A T K H G V I K R T S I M G Y A N I R A N G L I A L G L R E			
E E K Y F	L L V A T E R G Y S K R T A L S E Y T A Q G R G G K G V L T L M F D P K			
P P D A D	V L V V T E N G Y G K R T P L A D F R P Q S R G N G M G I I L V K T T A R			
E D Q M V	L V L T A S D G G Y G K R T R A G E F R H T S R G T Q G V I A M D L T D K			
P P G T	V L S V T E N G Y G K R T T V D Q F P T K G R G T Q G V I A I R T S E R S			
E D S A L	L F V A T S G G Y G K R T P M E E Y P A K G R G G G L G V V A F K Y Q K S S			
E G E D	V L V A T E E G G Y A K R T P A D Q Y P V Q K R G G K G V L T A R I V E S K			
E G M D V	L V V A T E G G F A K R T P I E E Y P V Q G R G G K G V V T A R I V T K			
E D A F	L F F A T K Q G I V K R T P L M D Y A N I R T N G L I A L N I R E			
E G T	V L I A T A N G Y G K R T P V E E F P C K G R G T Q G V I A I K P S E R			
D D N Y L	L F F T T K Y G I S K R T T L Q T F A N I R R K G G L I A V G L R D			
E G D D L	L L V V S E K G Y G K R T S L D E Y R T Q T R A G K G I K T Y N I K S R			
E D D W Y L	L F F T T K E G I S K R S P L S S F A N I R N G N G L I A V N L R E			
E G D D V	V F V V F E N G L A K R T P V S D Y R I Q Q R G G G L G V Q V A K L S D K			
I E Q S	V L V V S S N G F G K K T L I S E Y S L Q K R G G K G V I T Y K V T E K			
E D L Y	V F M S T S S G T V K K T P L V D F S R P R S N G I I A V D L R D			
A E L Y	L F F T T K H G V S K R T S L S Q F A N I R R N N G L I A L S L R E			
E G S	V L N V T E N G F G K R T A L S E Y P V H R R R G G Q G V I A I Q T S E R			
E E Q Q D	V L V I S E N G F G K R T P V S E Y T P H R R R G G Q G V I A I Q T S E R			
K E G E	I L T I T K N G Y G K R T L A E E Y P T K G R A T K G V L S I K T S E R			
S E D D D	L L V V T D E G F A K R T A L S E Y R L Q G R R G N Y G V K A I A M V E G			
S D K Y	L L F A T R K G I V K K T P L E D Y I N R K G G L I A I N L R E			
P N G D I	L L T A K N G Y G K R T A I E E Y R S T G R G G Q G V I S I Q V T E R			
D G G D V	V L T V T E N G Y G K R T V I T E Y P T K G R G T Q G V V S I K V S E R			
H G Q T	L F T A T E N G Y G K R T L I D E Y P I Q R R R G G K G V I T I K T S K R			
Q G T E	L L V I S E Y P G M G K R T S I D E F T A Q N R G G K G V K C Y K I T E K			
G E G A I	L T A T A N G Y G K R T S L E E Y P T K S R A T L G V V S L K V S D R			
D E E E I	L L V I S E N G F G K R T P V N E Y K V Q H R G G V G L I T Y K I S E K			
S N G D V	V L T V T E E G F G K R T T A D D Y R H Q T R G G K G V I N M K V T E K			
S E Q D L	L L V V T T N E G F A K R T A I S E Y R L Q G R R G N Y G V K A L N L A E G			
K G L Q V	V L H V T N K G I G K R T P E D Q Y R R T N T R G G K G I F T C K L S D D K			
K E L E	V L I V T T K G Y G K R T P A G D Y R S Q T R G G K G I K T I N L T D K			
Q G P N I	L L V S E F G G M G K R T A V E D F S V Q H R G G K G V K C Y K I T E K			
V G S D	V L V I T E K G F G K R T P L D E Y R I Q T R G G R G I I T Q R V T D T			
S E G F L	L F M G T K Q G I V K K T P L S E F F K N L R K N G L I A I N L R D G			
D N S E	S E F L L L A T K K G I V K K T K R E E F K N I N K S G L I A I G L R E			
E N M T	V L T A T E N G Y G K R T S I T E Y T R H N R G T Q G M I A I N T N K R			
R E G T	V L V V T A T E K G F G K R T E I S Q Y R A Q K R G G K G V L T M K T T D K			
E N S Y	V F V V T E A G Y A K R S E V S E Y R V Q G R R G G L G I K V G K L V E D			
Q E T E M	M L V V T E K G F G K R T P F S E Y R A Q T R G G K G I Y T I R I L E K			
E N A S	L L T V C E H G F G K R T D F G E Y S A H H R G G Q G V I N I K T T D R			
D D S D L	L F V V T E G G F G K R T R V S E Y R V Q G R R G G L G I K V A N L V E A K			
Q G E A L	L L F V S E N G M G K R T A M T E F T P Q H R G G K G I R C Y K I T E K			
T A A T	L V T V T E N G Y G K R T E I D E Y R V Q S R G G K G V I T I K T T E R			
K D G T	L L T V T E N G Y G Q R T E V N D Y R E C G R G G Q G V I A I Q T T D R			
R D G D I	L T V T E Q G Y G K R T P V G D Y P L R G R G G Q G V L S L K Q S D K			
E D R D	L V V I T E G G F A K R S A I D T Y P T R G R G G G L G V K V A N L V D E			
K G T D V	L V V V S K N G F G K R T N I E E Y R S Q I R A G K G I K T Y N I S E K			
P G A	V L V T V T E K G Y G K R T P V E E F P T K G R G G K G V I A I R T S E R			
S D G T L	L L T V T E N G F G K R T P F D E Y R T L R R G G Q G V I T I F T D M R			
E T Q S	V L T A T E N G Y G K R T P I T E Y T R H R G R G T K G M I A I Q Q S E R			
P G Q E	V L V V T E N G Y G K R T P E E E Y R L Q S R G G G V G I K T S Q I T D K			
S E S F	V F T A T D A G Y G K K T P L E E Y R L Q S Q R G G G I G L K A A K I D E S			

QUERY		250	260	270	280
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UniRef90_UPI0003640857	N G A	V V S A V P V I D G D E	V M L I S K G G T L I	R T G V D I	V R I M G R N T
UniRef90_G9QJF1	D E L	I S V K L T D N S K N I	V I G T K N G L L I	R F H E K D V	V R S M G R T A
UniRef90_I1XKJ3	N G P	L V A I K T I S G E E D I	M L M T A G G V L I	R M D V Q D I	S R T G R N A
UniRef90_A0LQS2	N G Q	V V G A V Q V C D E E D Q	M L I T N G G T L V	R T P V K H V	V S L V G R N T
UniRef90_F4D250	R G D L	V G A L M V D E E D E	V L A I T V L G G V I	R T R V S E	V R P T S R A T
UniRef90_D3FQI3	R G T L	V G A L I V G I D D E	V L A I T S T G G V I	R T S A R E	V R K A G R Q T
UniRef90_UPI000363035B	D D E L	L H G V R L T D G G Q E	V I I G T K H G M A I	R F H E T D	V R L M G R T A
UniRef90_UPI00046F3CCF	R G S L	V G A L I V E E T D E	I L A I T L S G G V I	R T R V S G V	V R E T G R D T
UniRef90_UPI000347B434	N G P L	L V A V K T V T G E E D L	M L I T A G G V M I	R I A V D E	I S C L G R N T
UniRef90_UPI00030CF29C	N G K L	V A L K V V S E E H D	M I I T A S G V I I	R L N V D G I	S V T G R N T
UniRef90_A5D6F1	N G D V	V A L K S V N L D D D L	M L I T V H G V L I	R V S V E D I	S Q T G R N T
UniRef90_V9W1R1	N G P L	L V A I Q A V K G E E E	V M M I S A E G I I I	R L K A Q D I	P V M G R A T
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UniRef90_UPI00038F790E	N G P	I A G L K M V E D G E D	L M I M T A S G T M I	R M N M D T I	I S S M G R N T
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UniRef90_UPI00036B461D	R G E L	V G A Q V V T E G E Q I	F A I T S N G G V I	R I T S T D P R	R T G R A T
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UniRef90_UPI0000E0FA14	N G I L	V V G A V Q V N E D D E I	M L I S D Q G T L V	R T R A T E	V V S T V G R N T
UniRef90_Q2RMJ1	T G P	V A A V A V V K L E D E L	M L I S A E G I I I	R L G V E D I	S R Q G R N T
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UniRef90_R7CEY2	T G D V	I G A R A V N E D E I	M L I T T E G I I I	R I A C A D I	S I L G R I T
UniRef90_F5RE14	N G G V	V G A V L V E T T D E I	M L I S T G G V L I	R T R V A D I	R E M G R S T
UniRef90_D3S9K8	N G P L	V G A A R V L E D D E A M	M L I T T G G G T L V	R T P V D Q I	P L I G R N T
UniRef90_Q39ZR9	N G C Y	V D I M Q V T D E N D L	M L I T D Q G K L	R I P V A P F S	V I G R N T
UniRef90_N0ATM7	N G N L I	S M K V V T G E E D V	M L I T T G G G V L I	R M D V N D	I S S M G R N T
UniRef90_D5CTY4	N G K V	V A A T L V K P E D E I	M L I G T S G V L I	R T R V N E	I R E M G R A T
UniRef90_V6IU74	N G E L	V A L R T V E E N E D L	M I I M T A N G V I I	R M P V S G I	S K L G R N T
UniRef90_U1KTG4	N G K V	V V G A V Q V E D D N D E I	M I I I S N K G T L V	R T R V N E	V S T V G R N T
UniRef90_A0P6J4	N G I V	V I A K L V G D H E D E I	M L I I T T G G V L I	R T R V S E	R E L L G R A T
UniRef90_Q2BK80	N G S L	LAG A V Q V F D G D D	V M L I S D Q G T L V	R T G G D E	I S E L G R N T
UniRef90_I3BN95	N G D S I	G A V Q V R D E E C Q I	M L I I T D G G G T L V	R T P V A D	V S I V G R N T
UniRef90_W0TQF5	G D Q L I	G V D I T D G E R D I	M L F F S S A G K A I	R F N E S A	V R A M G R T A
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QUERY	290	300
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P E E E V A I T L T N K G Y I K R L P L S T Y R S Q R R M G T H E D D F V E H L
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E E D V V V T L S H L G Y A K Y Q P L T D Y Q A Q R R T K V K D E D F V E K L
P E E E N V M L A L T S K G Y I K R T T A D T F K S Q N R M T T N E E D N V E H L
A E E Q V V V T I T R T G Y A K R T K A D L Y R S Q R R A Q L K Q D D L V Q Q F
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130 140 150 160

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UniRef90_E1L3Q4	E Y S L Q H P G G Q G V T T I I A M T S K V A C R V Y G P Q H E L M I M S E E G
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UniRef90_UPI000363CC38	A Y S R P R R D G I I A I N I N K D G D S L L G A E L T D G D S N I I L A N Q G G
UniRef90_UPI00028A0C56	T Y N A Q K R R G V Q G A N T K E D D D F V E N I I T T P I L N L L F F T N K G
UniRef90_R5FF58	E Y Q H R G G G M G V T A H K T K E D D D F V E T M F T S T H D D L M F F T N M G
UniRef90_UPI0003733E28	S Y A N I R A N G L I A I N L D E E G D E L I I G A A V S D G K Q E I M L G S N S G
UniRef90_U4TR25	E Y P I K G R G I K T V N V T K K N G P L A G L T V V D G S E D M L L I T N T G
UniRef90_UPI0003703272	E Y R N I R S N G I I I A I S L E D G D S L V D T K L V E P G A E I V L A T R S G
UniRef90_E3DL18	E Y N T N Y T G I I A I N L R E N D E L I I G V R V I E A K E N I F L V I T R N A
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UniRef90_R5HA5	E F F D N I R K G G L I A I N L R E E D F V M S V E L S N G D D E F I I A T K K G
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UniRef90_E6X3J4	E Y S N I R S V V G V R A I N D E N D E L I I D A K I I K P D K W L F V V T K K G
UniRef90_W1VAD1	E F T A Q K R G G R G V Q G T G V K D D D F V L V L V S T S T H D H L L F F T N K G
UniRef90_D6Z5P0	E F S R P V R R G K I A L T F R E D D E I I A A A L T Y G D N E I L L L S R K G
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UniRef90_Q2JUN0					
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UniRef90_T0S1E6					
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F V A S T H N Y L L F F T E Y G K V F W L K V Y E I P E G G K T T K G R A I Q N

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

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

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90 100 110 120

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UniRef90_B8JCU8	L V Q L A P G E K V A A I L P V R R L P E P P F V F M V T R K G L I K K T R L L E
UniRef90_E4L1H8	S N K G Y I K R L L A Q D
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UniRef90_F6GJK3	L I N I E Q D D K V M A F I C T Q D Y V N N H Y V I M A T K K G Q V K K T S L L E
UniRef90_F7PT51	I I T V T S R G Y Y V K R L P V D D
UniRef90_A4AAR3	I N L A D G H R M I S L L V P D A R G T V L T V S E N G Y G K R T T P V D D
UniRef90_D3QGZ7	A I E L L A N D E S I S T M I A V N D E S E G N Y L I F A T K N G I V K R S A L S
UniRef90_F9V9L5	L L K L D E G E K I Q T V I N V K S D E E R Y L F F T T R K G L V K R T N T Q
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UniRef90_A1V9C1	L L P L E K D E W V T T V L S V R E F A E D R F F L F V T K R G M V K R S S A S S
UniRef90_U2KUF5	L L P L N A G E K I A A V L T T P D F D E G K Y V V M I T R N G K I K R T A L L S
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UniRef90_UP100037FA0F1	L L K L D D N E R I Q T I I N V K D D F K D K F L F F V T R Y G M I K R V S V S
UniRef90_D1VRK5	L L N L D K G E K I T S V I N V E E F D P N Y Y L L M V T E K G L I K K T S N K
UniRef90_UP1000464A5A5	V T L S H A G Y A K R Q P V T
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UniRef90_M4XQG8	I L P L V K E E N E R I P I P N G E F S A D K F I F M A T A S G V V K K V S L L D
UniRef90_A1BPQ5	L I N L R A D E K I M A I I P T P D F D E S K S L V F F T R N G V I K R T S L N T
UniRef90_UP100016C0206	L L H L N V D E K I S A V F P V K Q N E H E R Y L T M I T K G L I K K T N I T
UniRef90_R5SUH8	L L N L E K N E K V A A L I R V A N D E V S N N L V F A T K S G L I K R T A I S
UniRef90_UP10003B75DF7	L L E M Q P D E Q I A E I L D I R D Y A V A Q Y L V L A T R D G L V K K T D L L T
UniRef90_A3U9V0	I M E L Q K G E T I R A Y I N V K T F D D P L F I V M A T A R G L I K K T E I S E
UniRef90_I0K0S6	F L E L K P T E E I A S M L R I S S W D K N D Y I F F C T K G R V K K T P V T
UniRef90_W4T8I9	L I N I E P D D K I K A Y I R T N N L K D A E Y Y V V M V T K N G T I K K T S L E
UniRef90_H1HU61	L L Q L Q A D E K V T A M I S Y R K K G G A K Y L F M A T K Q G M V K K T E L S
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UniRef90_D7GHE5	L L S F L P D E K I A Q V L A L R S Y E D A E Y L V L A T K Q G L V K K T A L S
UniRef90_E4T907	I D Y S G G E M S I E D F I P N E E V V L T I S H A G Y I K R T L L S
UniRef90_B4S3A3	U M E L Q K G E T I R A Y I N V K T F D D P L F I V M A T A R G L I K K T E I S E
UniRef90_UP10004292660	D M I P N E E V V I T V S H Q G Y Y V K R T A L L S
UniRef90_D8J640	E G G D T V L H E D L I P E E D S L I L V T E D D Y V V K R M P V S S D
UniRef90_U2P9Y9	P E D F Y P N D P V V I T V S H M G Y I K R T P L L
UniRef90_Q2JUN0	A I T L N P G D D I V S M D I I F E R L A N P W V L V I T K E G R G K R S A I D
UniRef90_R5RSD1	P E D F Y A D D D E V I T I S H F G Y I I K R T P L L
UniRef90_T0S1E6	U N I Q U I D E S I Q T V I N V S D R S D D A Y L F F T T R H G I V K R T S V K
UniRef90_UP100036974F4	I V F N A E D F E V E D M I P N E E M V I T I S N E G Y M K R T P L K
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UniRef90_A0A021W7Q6	W L A L E A G E Q V Q A V L P V R A Y D D S H F V F F A T R N G M V K K T P L
UniRef90_R5A226	L I Q I E K D E R I N A I I K V E K E N T Y K C L L F S T K Q G L V K R T L I S
UniRef90_H7EI19	I L Q V N A N E E I T A I V V M S D Y T D S Q Y I F M A T Q N G I V K K C K T T
UniRef90_UP100029AAC3	L A H D K D E V V G M I A V V N N P E V T V L V V S E K G Y G K R T D I E
UniRef90_S8N2H7	L L K L D E G E T I Q T I N A R E D V A Y K Y F F T T Q Q G I V K R T S V S
UniRef90_M5T9Q8	L L Q M E P D E Q I A Q C L A V R D F N Q P G H Y V M A T R S G L V K K T P L E E
UniRef90_C7PUW6	L I N L P T D D K I R A I I D I K D F I S S H Y I V L C T A N G I I K K T L L E
UniRef90_U2KH67	U N I Q U I D E S I Q T V I N V S D R S D D A Y L F F T T R H G I V K R T S V K
UniRef90_E4T126	L L S F S Q G E Y I A S V V T L S D L D H D K Y I F M C T K Y G I V K K T A V E
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UniRef90_R6ZW0H0	I E T I S G E V D I E D L P V E D S V V T Y T H N G Y I K R A P V
UniRef90_UP100036E625A	V L E L Q P K E K I A A L I R V E S H S D E K F L L F A T E N G T I K K T E L S
UniRef90_F215D3	L L N L Q E D E Q V R G V I N V K E T D S E D Y F F F V T K Q G T V K R T P V
UniRef90_UP10002FEB72C	L L E L E K E E K I K A M I A V V K K D D S G S A N Y V F A T K N G L V K K T A T S
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UniRef90_P72524	L L K L D E D E S I Q T V I N V S D R S D D A Y L F F T T R H G I V K R T S V K
UniRef90_E4XU22	U N I Q U I D E S I Q T V I N V S D R S D D A Y L F F T T R H G I V K R T S V K
UniRef90_Q7MAA9	L I Q I G A D E K I M A T I T T Q D F N E D K S L M F F T K N G I V K R S N L S
UniRef90_L8K1L2	L I N I E P G D K V R A V I N V E S L T D E K Y V M M C T E N G T I K K T S L L K
UniRef90_Q1WVP0	L L D I S A D E K I Q T V I N I P A D D K E M Y L F F I T R Q G T V K R T S V S
UniRef90_C8N118	L L N I D S A A E K I Q A I I S V P E S D E E R Y L F F T T L R G T V K R V R L
UniRef90_J4UXA1	M L N L D D D E R V S E I L P V E E F S D D K F I F M A T R K G I T K K T N L S
UniRef90_W5X8G3	Y I N I V G G E R V T A T I S V K D L N I D G Y L T M I T R H A E I K R T S L
UniRef90_UP10003B48C86	L I D I A P D D R V R A V L S V D D F L N S H Y V L M A T R K G Q V K K S V L L E
UniRef90_B7KBQ0	M L P I P K N E K I T S M L A V S E F S E D C Y L I M L T R Q G Y I K K T V L L
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UniRef90_P48371	G M R L P A D G K I V S L I T F A P E T E E S Q V L T A T A N G Y G K R T P I A
UniRef90_A0A011PGU6	L L A D D Q Q Q V L S L L V A D N D Q Q T V L V A T E N G F G K R T A L A S
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UniRef90_R5DLZ6	N T P M A V F I T H Q G Y L K R I S L D
UniRef90_UP100037C73AF	T Q K G Y I K R L N P E
UniRef90_B2URM6	L L D L Q P E E A I A A I L R L E R R V D E K N V V F A T K D G T V K K T S L N
UniRef90_K2A3Y2	E N I G S F R A E D L I P N E Q V V I T L T K T N Y I K R V P L I A
UniRef90_UP100037FB88D	V L P L E S G E K V T A M I H C R E F R E D A Y L M L S T R N G T V K R I N L A Q D
UniRef90_UP10003B48441	V I Q I E P G D K V R T V I N V D D Y I N N N Y L V M C T E Q G V I K K T T L E
UniRef90_Q11UG4	D M I P D E Q V V I T I S H A G Y I K R T P L L K
UniRef90_I0WG51	U N I Q U I D E S I Q T V I N V S D R S D D A Y L F F T T R H G I V K R T S V K
UniRef90_A0A023WZQ3	U N I Q U I D E S I Q T V I N V S D R S D D A Y L F F T T R H G I V K R T S V K
UniRef90_R5YGS4	L L P L E G G E T I S S M N C G R G D E E M V I S I S K G G Y L K S V P V
UniRef90_G2EHR0	U S L A N D K D E V I G M A V E N P Q E E S V L V V S E K G Y G K R T Y L D
UniRef90_B5JQR1	D M T P K E G C F I T I S H K G F I K R V S D
UniRef90_UP100045EB484	L L A F Q P G E Q I A K V L D L R N Y E V G E Y L V L A T R R G L V K K T R L L S
UniRef90_W2C6L9	U N I Q U I D E S I Q T V I N V S D R S D D A Y L F F T T R H G I V K R T S V K
UniRef90_R6PTM3	V L P L E Q D E Q I T A V V P V S D F K S V I S N L I M L T Q K G Y I K R I S L D
UniRef90_R5GFY2	L L N L D A D N R V N A V L R V K D F V N T H Y L T F F T K S G L V R K S R L K

130 140 150 160

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UniRef90_R6M8J9	E F Y N I R T N G K R F I T L R D D D E L I S V K G T T T G D N D I L M A S S N G
UniRef90_B8JCU8	Q F A R P R A A G I I A L G I E E G D E L I A A R L T D D R S H I L L S T A R G
UniRef90_E4L1H8	E F F R A Q K R R G V Q G T G V N D D D F V K E L V S T S T H D T L L F F T N K G G
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UniRef90_F6GJK3	Q Y S R P R T N G I N A I T I K E D D V L L E A K L T T G E S S Q V M L A L K S G G
UniRef90_F7PT51	T Y K S Q N R G G M K G M A T Y E E D F V E H M I F T S S H D K I L V F T N L G
UniRef90_A4AAR3	D F P T K G R G G K G V I A M E R N G R L V I G A L Q V F S G D E L M L I S N Q G
UniRef90_D3QZG7	N F S H I N K N G K I A I I G F K E D D E L L I A V R L T D G Q Q D I L I G T A H A
UniRef90_F9V9L5	Q F A N I R T N G L K A K L N L R E G D E L L I N V L L T S G K E N I I I G T H N G G
UniRef90_R7C014	E F E Q V K R A G K A A I S L L E G D S L I G V A I T D G K H D V M L F S D A G
UniRef90_Q047E9	E F F Q N I R R S G G L I A L T L R D D D G D E L L N N V L T T D G K Q N I L I G T H L G
UniRef90_A1V9C1	L Y A R A R K G G L I A V G L R D D D D E E L L I M V R E I H N D D H V V L T T G G G
UniRef90_U2KUF5	D Y K N V R K N G L I A I G L D E G D E I I A A V R L T N G S N R L F V A T R N G G
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UniRef90_E6PCR5	E F F A N V V R R R N G L I N A I N L D E E G D E L L I A V D L A T G T R D I I L C T R A G
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UniRef90_D1VRK5	E F F K N I R Q N G L I G I K L R D D D K L I I V S H L V R G D E E I I L V T K E G G
UniRef90_UP1000464A5A5	A Y R A Q R G R R N A A A T K D E F D I D Q L W L V N T H D T L L T F T S A G G
UniRef90_E6U5D1	E V P M N V A N I L P V A Q D E N I T A M I K V P K F E E D C Y L V M V T K K G G
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UniRef90_UP10003B75DF7	A Y D T D T N R S R G V I A I N L R E G D E L L I I S V A M L A D E H D E L L L V I S K K G G
UniRef90_A3U9V0	E Y K T P Q N R G G V K A S T T R N E D F L E D M F V G T N H Q Y I M I F F T Q K Q G G
UniRef90_I0K0S6	D F Q N I R R K G G I I T A I S I D E N D K L I I D C M F T D Q G K E V L I T K E G G
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UniRef90_D8J640	A F D P P Q G R G G K G I I N L K E G D R V S K V F R A N T H D Y L L C T N H
UniRef90_U2P9Y9	D F R E E Q A R G G V V G S K G A R H R E Q D F F I I Y P A T M H Q T M L F F T K K G G
UniRef90_Q2JUN0	H F R R Q N R G G K V I A T K F R Q E S A A L R I V N A E D E I I L L V T A R G
UniRef90_R5RSD1	E Y K T P Q N R G G V V S A T R D E F D I E H L Y V V A N M H S T M L F F T E Q Q G
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UniRef90_UP100036974F4	E Y R T P Q G R G G V V G S R G V V T K Q D D D Y P E H L F I A S S H N F L L I F T E
UniRef90_F8KZS0	E F S H P R R K G I I W A L L D I V E G D E V V T A R L V S D S Q I M L F T Y H
UniRef90_A0A021W7Q6	E F A Y R P L A R G K I A I N L D D D G D A L I V D V A L T N G Q R E V M L F A S N G G
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UniRef90_S8N2H7	E F S N I R R Q N G L I R A I N L K E N D E I L I I N V L L I D E N E D V I I G T R T G G
UniRef90_M5T9Q8	Q Y S R P K R G G I I A I K L R E G D E L I V D A A V V G P N D E M L L V I T A D G G
UniRef90_C7PUW6	D F S R P R Q N G V V N A I T I N E G D Q L L E A K L T N G N S Q I M M A I K S G G
UniRef90_U2KH67	A Y K N Q G K G G K G S S N S A K L V E D D Y I L F V A S T H H D Y I V F I S T E G G
UniRef90_E4T126	E F F K S G R S G I I V A M K L R E N D E L V L S T V I T T D N D I T I A T R N G G
UniRef90_R6NV11	A Y N T A R K G G G I I A L E L N E G D E L I I L A W V R L T D G N Q R E V I V A T K N G G
UniRef90_R6ZWHO	T Y K T P Q K R G G G K G V M K Q R E E D D F V E E L F I A S T H H D H L L F I S N K G G
UniRef90_UP100036E625A	A F K N H R K R G G I I R A I K I L E E D R L I E V K L T T G E N N N V I L I T R N G G
UniRef90_F215D3	E Y F N I R R N N G L I I A I N L R D D D E L L V A V L Q T S G E D D N I I I G S H
UniRef90_UP10002FEB72C	U Y R A Q R G R S A T A I K E E D F V E K L W V V N T H D T L L A F T S L G
UniRef90_H1LHF3	E F F T N I M K K G K I A I V L N E N D E L I I L I G V K E T T G D E D I I I A A S N G G
UniRef90_UP100036380BD	E F A N I R S N G L K A I I H L K D D D Q V I I N V L I V D K D Q N I I I G T H K G G
UniRef90_P72524	E Y R Y R L K G M E T K A T G K D E P D F V E H L F S V Q A H D Y I L F F T N T G
UniRef90_E4XU22	E F F K N I R S V G I I R A I I N L D D D N D E L V T A R I I D S N K E I F V A T Y K G G
UniRef90_Q7MAA9	A Y S R P R Q N G I I N A I T V R D G D R L L D V K L T N G D N H I V I A K R N G G
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UniRef90_C8N118	E F F K N I R T N G L K R A I Q L R E D D D E L I I R V V V T S G N D G I I I G T Y H
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UniRef90_W5X8G3	D F A N I R R N N G L I I A F D I E E G D E L I G W A L K T R G N D D V I I I T R E G G
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UniRef90_P48371	E F F A N I R T N G L K A I I H L K D D D D E V L I S V Q I T D G T Q N I I I I A T H H N G G
UniRef90_A0A011PGU6	D Y S R K N Q G S I I A I N T G E R N G D R V A A T L V G E T D D L M L I I T S G G
UniRef90_I0KQA7	D F R H S T Q G V K A I I A A S E R N G K V V A A R L V R D E D E I M L I I T T G G
UniRef90_R5DLZ6	E F F A F R P L A R G K I A I N L D E G D A L I V G V G L T D G Q R D I I I F A S N G G
UniRef90_UP100037C73AF	T F F E R Q N R R G K S G I K T K E D D D I Q H F F T A M M H D K V L F F S S K G G
UniRef90_B2URM6	D F A N Y R K A G I I A I N L E E G N S I L V N A E L T S G A D E I V L V T H D G G
UniRef90_K2A3Y2	T Y R R S Q N R G G V V M A T K E E D V V E H L L V A K T H D N I M F F T D K G
UniRef90_UP100037FB88D	E F F R S Q K R G G R G V Q G T G V N D D D F V R E L V S T S T H D S M L F F T N G
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UniRef90_Q11UG4	A Y S R P R S G G I I N A I T L H E G D R L L D V K M T G N D D I I I V A T K K G G
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UniRef90_A0A023WZQ3	T F F R K Q G R G G V V G V M D L K E G D Y I D H H L F I T T T H H Y M L F F T N K G G
UniRef90_R5YGS4	E Y A N I R R T G V I A I A I T L D E E G D E L I I R W V K M T G N D D I I I V A T K K G G
UniRef90_G2EHR0	D P Y R I T N R G G K G V K T L S I T E K V A I K S V S D D E D L M I I N K S G G
UniRef90_B5JQR1	E F F R T Q K R G G K G V Q G G N T Y E D D F V I F T A N T H D T I M F F M N N G
UniRef90_UP100045EB484	E Y D S N R S G G I I I A I N L R R P D E L V S A A L V D E D S E L L L V I S R K G G
UniRef90_W2C6L9	E F F R A Q T R G G V V G S K G S E T R E E D F V E H I Y P A S M H I L F F T A K G G
UniRef90_R6PTM3	N F E N I R R K S G I I I A I G L E D D G D T L C W V Q K A Q D N D E V I I G T S C G
UniRef90_R5GFY2	D F S R P R Q S G I I I A I K L R D D D K V V S V M L S N G K C D F V L G S R K G

170 180 190 200

UniRef90_G5H6D0	R C Y W L K V Y A I P E G S R S S K G R A L Q V I Q I E P D D K I R A Y I N V R
UniRef90_UP100035E098D	K A I R F P E E K V R P M G R T A S G V R G I T S E E D E V I G M I C V E P
UniRef90_R6M8J9	R M V R F N E N S I R V M G R G A S G V R G I N L D G G F L V G M E V V K
UniRef90_B8JCU8	M A I R F E E S D V R P M G R T A Y G V K G I T L E A G D E V P A A A E G E
UniRef90_E4L1H8	R V Y R L K A Y E I P E Y G R T A K G L P I V N L L K L D I I N A R K E D I
UniRef90_UP1000319F0EA	R A I R F N E S T V R P M G R T A T G V R G I R H D K D E V V G M V S I E N
UniRef90_F6GJK3	K A I R F E E A K T R P M G R G A S G V R G I R L Q D D E V I G M I A V N D
UniRef90_F7PT51	K V Y K L R G F S F P Q F G R N A K G M P L V N L L S L E E I I P I K D F T
UniRef90_A4AAR3	T L V R T Q C D Q V S Q L G R N T Q G V R I I R T K E G E T L
UniRef90_D3QGZ7	S L I R F R A E T S L R P L G R T A A G V V K G I T L R E G D T V V D V A H S E
UniRef90_F9V9L5	F S V R F E E A V V R D M G R S A T G V K G V S L L R E G D F V V G T A I V H
UniRef90_R7C014	K A V R F D E A C V R S L R G T A R G M G G M R L E G E D R V I A L L V A E
UniRef90_Q047E9	Y A V T F N E N D V R S R S M G R T A A G V R G I N L R D N D Y V V G S D I L E
UniRef90_A1V9C1	M A I R F A C P D V V R P M G R S A T G V K G V A L S G D D R V V V A C A V L P
UniRef90_U2KUF5	M A I R F A D E S D V V R P M S R S A H G V K A I T L R K G D A V V S M A R E R
UniRef90_UP1000470A042	K V Y R I K A Y E I P E Y G R T A K G L P I V N L L P I D N D E T V E A M I
UniRef90_UP10003B3D370	Q A I R F S A A D D Q V R P M G R A T S G V T G M K F R S D D E L L S M A V I R
UniRef90_E6PCR5	M A V H F N E Q N V R A M G R N A R G V K A M T L E S G D E I I M D V I E D
UniRef90_UP100037FA0F1	Y S V R F K E T D S R S S M G R S A T G V K G G L N L R K G D V V V G A S S I D
UniRef90_D1VRK5	K S I R F S T D E L R D Q G R N T M G V K S M N L D E D T I V S S D I V G
UniRef90_UP1000464A5A5	R V F W L P V H Q P D A G P H A R G R P I V N W P L E A D E K V Q A V L P Y T
UniRef90_E6U5D1	I V K R T S L K E Y D T A R K A G V I G I L L E E D D E L V G V L L T D
UniRef90_M4XQG8	R V V R F A E T A V R A M G R T A T G V R G I K L S D K D R V V S L V I P R
UniRef90_A1BPQ5	Q C I R F E L E K T R D Q G R S T R G V R G I K F K I D T D V D A D V I D N
UniRef90_UP100016C0206	L G I M F E G K N I R P T G R T A K G V R A I N L S K E D Y V I S A T I P K
UniRef90_R5SUH8	R M V R F N E N S I R V M G R G A A G V R G I N L E G G Y L V G M S K A V
UniRef90_UP10003B75DF7	M S L R F E A T D E A L R P M G R S T S G V K G M S F R A G D Q L D V T T D D D
UniRef90_A3U9V0	R C F W M R V F E I P E S K T S K G R A I Q N L I N I E P D K V K A F I C T Q
UniRef90_I0K0S6	Q S I R F S E T L V R V S M G R N A A G V I G I N L R E G D E V V G A A V V D
UniRef90_W4T8I9	K C I R F P E E K V R E V G R G S I G V R G I L L E D G D E A M I V V N D V
UniRef90_H1HU61	Q S I I L F S E E T V V R V T G R N S Y G V K G I A L R E G D A V V V A M Q L T A R
UniRef90_R8VTS5	R A I T F D E T E V V R A M G R Q A A G V R G I R L A D G D Y V V G A A R A R
UniRef90_UP1000360DA4A	K A I R F R A D D E Q M R P M G R T T S G V T G M R F R E G D E L L S M S V V P
UniRef90_E4T907	K C Y W L R V F E I P E G S K T A K G R A I Q L I N I E P D D K I K A Y I R T N
UniRef90_B4S3A3	Y A V R F A E R D V R A M G R T A M G V K G I T L D D D E Y C I S M V T K R
UniRef90_UP10004292660	K L F W Y A I P E G T K T A K G R P I Q N L I N I E S D D K I R S I I Q V D S L
UniRef90_D8J640	K A Y Q I R G F D V P E M S R T A R G K S A V N I D P D E E L T A V V N T D
UniRef90_U2P9Y9	R C Y W L K C Y E I P E G G G K D S K G R A I Q N M L N I E P D D A I N A I L R N
UniRef90_Q2JUN0	I V M R Q L A K A I P T Q S R E A T G V L V Q R L D P E D S I
UniRef90_R5RSD1	R C F W L K V Y E V P R S S K G R A I Q N V L S I P D D K L K A I I N V P T L T
UniRef90_T0S1E6	Q V F S K K V Y T I P E G T R T S K G R N L A N I P G G D K V T E I I C V P
UniRef90_UP100036974F4	M G K V F W L K V Y K V P E G G K T S K G R P M Q N L I Q I D K V I N V N N L K
UniRef90_F8KZS0	M A V R F D Q G K V P R M G R T A R G V K G V T L K D D D Y V V G C E A V N D
UniRef90_A0A021W7Q6	K A V R F A E S G R E D R S T G R N S R G V R G I K L A K G E S V V S M I V I D
UniRef90_R5A226	R M A R F N E N E V R I M G R T A T G V K G I N L S D D I C V G A E V S E
UniRef90_H7EI19	Q A I L V P P E T T V R P M G R S S T G V T G I R L S D G D E L A A A I R V E D
UniRef90_UP100029AAC3	I V I R I P V S A L R V M G R A T Q G V R L I S S L K G D D E I I A S V T K I D
UniRef90_S8N2H7	Y S V R F K V N A V R N M G R T A T G V R G V N L R E G D K V V G A S R I V
UniRef90_M5T9Q8	M A I R F R E S D S R P M G R N T S G V K G I N L M G D D R L V G M V V T D
UniRef90_C7PUW6	R A I R F P E N T V R D T G R G A I G V R G I E V D N D D E V V V G M I C V N
UniRef90_U2KH67	K A Y W L K V H E I P E A G R N S R G V H I K S I G G N E E I A T V V S L R
UniRef90_E4T26	K T I Q F E S K E V R D M G R T A T G V R G I T L E E D D Y V V S M E V L T
UniRef90_R6NV11	L A I R F E E T D V R P M G R Q A R G V K A I S L R E G D C V V G M C V V A
UniRef90_R6ZW0H0	L M Y R L K C Y E I T E G S K S R G V N L V N L L P L A E G E K I A A M T D F E
UniRef90_UP100036E625A	K S I R F N E T D A R S M G R V T T G V R G I S L A N D D K V V G L S I I E
UniRef90_F215D3	Y A V S F A E D D V R S M G R T A T G V R G I L R D Q D Y V V G A S I L G
UniRef90_UP10002FEB72C	K V A R F H E S D I I R P M G R K S I G V K G M N V D G G Y V V G L A T S K
UniRef90_H1LHF3	Y A V S F K A A D V R S M G R S A T G V R G I R L R D S D Y V V G A D T L K
UniRef90_UP100036380BD	R V Y W L K V Y K I I P E A G P N S R G R P I V N L L Q L E E I L P V H E Y R
UniRef90_P72524	Y A V R F N Q S A V R G M S R I A T G V K G V N L R E G D T V V G A S L I T
UniRef90_E4XU22	R V Y V F E L P E G S R T S T G R S I K N V L N L K P D T D N G N D I T F R E
UniRef90_Q7MAA9	M C I R F P V E D I R E I G R V A R G V T G I R F K E D E D Y V A G A T T I
UniRef90_L8K1L2	K A I H F H E S D V R P M G R T A S G V R G V T L E S A D D V V G M V C I S R
UniRef90_Q1WVP0	Y A V S F D E K D I R S M G R S A A G V R G I R L R D N D Y V I G S A I L E
UniRef90_C8N118	N A V S F H E D K V R A M G R T A S G V R G V S L R D G D Y V I G M D I L T
UniRef90_J4UXA1	K L I R F N E T K V R A M G R T A R G V K G M K L K K D Q R L I S L N V A D
UniRef90_W5X8G3	Q S I R F N E Q D A T S R S R A A G G V R A I S F K E D D R V V S A A M V D
UniRef90_UP10003B48C86	R A V H F H E D D V R P T G R N T R G V R G I T L G D D E R M V G M V S V A
UniRef90_B7KBQ0	M A I H F K A D S E Q L V P T G R T A R G V K S M K L K G T D E I I I S E E T N
UniRef90_UP10003817A97	R A I R F P E E K V R S T G R G A I G V F G I D D D A T D E V I G M V C V N
UniRef90_UP100029B0AD2	M A I R F S Q T D A R S M G R D T T G V R G I R L R K K D D F L I G M V L A D
UniRef90_Q040E4	Y S V S F A E N D V R Y M G R S A A G V R G I R L R E G D L V V G S D V L E
UniRef90_P48371	V L I R T K V I E Q I R E T G R A A A G V K L I N L D E G E T L V S S E R V A
UniRef90_A0A011PGU6	V L I R T R V R E I R E I G R A T Q G V T L I A L D A G E K L
UniRef90_I0KQA7	K T V R F G E D K V R S M G R T A T G V R G I K M P N G D A V I D G A D D A
UniRef90_R5DLZ6	T V Y S L S V Y D F P E G G R Q S K G I P I V N V L P I V P V S N F S
UniRef90_UP100037C73AF	K V F S L P A Y E V P Q A S R T A K G R A I Q N L I N I E T D D K V K A F I C T Q
UniRef90_B2URM6	M S I R F P E E D L R T Q G R N T I G V R G I R P R A G D Y V V A L A I V D
UniRef90_K2A3Y2	R O L F A A K V Y D L P A A S R Q A K G Q N I V N I S P D E K V T T I I T Q S
UniRef90_UP100037FB88D	Q G K V Y S L S K G Y E V P E Y G R T A K G L P I V N L L R L D I I N V N K E D S
UniRef90_UP10003B48441	M A I R F P I S D V R V M G R D A V G V R G I K L R P G D F V V G T E V C G
UniRef90_Q11UG4	R A I R F N E S K V R P M G R T A A G V K G V T L A H D K D V V V V A V S S
UniRef90_I0WG51	K C F W M K V Y E I P E G S T S K G R A I Q N L I N I E T D D K V K A F I C T Q
UniRef90_A0A023WZQ3	K V Y R L K V H Q M P R M S R T A K G R H I A N G E R I A A V K A T K N F D
UniRef90_R5YGS4	U N I R F N E N D A R P I G R T A R G V K A I E L A E G D E V I G V A T V E
UniRef90_G2EHR0	M S I R F P E E D L R T Q G R N T I G V R G I R P R A G D Y V V A L A I V D
UniRef90_B5JQR1	I A I R M A V A D L R V M G R A T Q G V K L I N L K G S D S I A A V V A K V M
UniRef90_UP100045EB484	R V Y V E K V Y E I P E G S R T S K G R Q L Q K E E Q I A A M I C V K E I T
UniRef90_W2C6L9	Q A V R F Q A S A D Q L R A M G R A T S G V T G M R F R D D E L L A M D V I T
UniRef90_R6PTM3	R C F W Y E I P E G A K N T K G R A I Q N F L N D S D D R V N A F I R I K N L
UniRef90_R5GFY2	R A V R F S E S V L R P L G R S S M G V R G M R L E E D G D E A V C I K K P

210 220 230 240

UniRef90_G5H6D0	R [L] D D K E Y V D N N Y I M C T K A T R [L] E A Y S R P R Q N G V N A I T I K D
UniRef90_UPI00035E098D	D K A D [V L V V S E N G Y G K R S S I E D Y R I T I N R G G K G V K T I I N M T E K
UniRef90_R6M8J9	P D E D [V L V I S E Y Y G G K K T P I E E Y R I T I N R G G K G V K T I I N I T E K
UniRef90_B8JCU8	Q A H T V L T V T A N G Y G K R T E L A E Y R V Q T R G G K G L I T I K T T E R
UniRef90_E4L1H8	D N K F F F T T R Q G [L V K R T N A S E F G N I R Q N G L R A L N L K D G
UniRef90_UPI000319F0EA	S E S T L L V V S E K G Y G K R T D I E D Y R V T I N R G G K G V K T I I N V T E K
UniRef90_F6GJK3	M D S N I L L V V S E N G Y G K R S S L E D Y R I T I N R G G K G V K T I S I T E K
UniRef90_F7PT51	E R D Y L V F A T R N G T V K R T E L S Y A N I R V N G I K A I N I N D
UniRef90_A4AAR3	
UniRef90_D3QGZ7	S E D E V L V V T E N G Y G K R T P V G E Y R L S N R G G K G I K T A T I T E R
UniRef90_F9V9L5	D E Q E V L V I S E K G [L G K R T I A S E Y P V K G R G G K G K V M N I T D R
UniRef90_R7C014	D D Q M V L T A C E S E K G Y G K C T P I S E Y T R H A R N T K G M I A I A T T E R
UniRef90_Q047E9	P D S E V L V I S E K G Y G K R T A A S E Y P V K G R G G K G I K T A N I T E K
UniRef90_A1V9C1	G D D T I M S I S S N G Y G K R T R I E L Y R L Q S R G G K G V K N F R V T P K
UniRef90_U2KUF5	E G A S L L T V T E N G F G K K T A L S E Y R Q M S R G G G L G T N Y K V D E E
UniRef90_UPI000470A042	Q G G F L F F A T R N G T V K R T P L E D F Q N R Q N G I R A I T L R D
UniRef90_UPI0003B3D370	S D A F V F T V T D G G F A K R T A V S E Y R R Q G R G G G K A M R L N E D
UniRef90_E6PCR5	E R K E V L L V T S Q A F G K R T P I D D Y R H T S R G G K G V K A F K E R E D
UniRef90_UPI00037FA0F1	D E Q E V L L I T E K G Y G K R T S A R E Y A T K H R G G K G M K T A N I T E K
UniRef90_D1VRK5	D G N Y L L T V S E N G F G K L T E L K E Y R P Q N R G G K G F T Y K I S E K
UniRef90_UPI000464A5A5	E G H Y V F F A T R N G T V K R T P T E F F A F R L Q R G K I A I N L D E G
UniRef90_E6U5D1	G S A H I L V G T R N G V A R F V E T D A R P M G R A A H G V K A I S L E G
UniRef90_M4XQG8	T E G D I L T V T Q N G Y G K R T V I S E Y P V K S R A T K G V V S K V N E R
UniRef90_A1BPQ5	E E Q E I L T V S E K G K G I G K R T T I E E Y R L T N R G A S G V I A M K L S P K
UniRef90_UPI00016C0206	E G E Q I L I A T K N G I G K R T R I D E F F K S Q R R G G K G L I Y K V D D K
UniRef90_R5SUH8	D N Q Q V L V V T E N G Y G K K T D I S E Y R I T I N R G G K G V K T L N I T D K
UniRef90_UPI0003B75DF7	G A R F V F V V T E E G G Y A K R T A V D Q Y R L Q N R G G G L G K V A K L S D D
UniRef90_A3U9V0	D L K D E D Y I I N S H Y V I M A T K K G Q V K K T S R P R I G I N A I T I K E
UniRef90_I0K0S6	E R A T L L V V G E K G I L G K R T S F E E Y R R Q R K G R G G Y G I K T M K T T E K
UniRef90_W4T8I9	E N E T V L V V S E K G Y G K R T A V E D Y R I T I N R G G K G V I T L N I T E K
UniRef90_H1HU61	Q G E E E L L T V T A Y G M G K R T E L T E F H A Q N R G G Y G N L C H K L T D K
UniRef90_R8VTS5	K G A Q V L S V T E N G Y G K R T L V E D F S I H H R G G G G I L L H G L T D K
UniRef90_UPI000360DA4A	K N R F I L S V T E N G F G K R T P I D E Y R T T N R G G Q G V A N I E C S K R
UniRef90_D7GHE5	A E R Y V F T V T N G G F A K R T P V G D Y R V Q N R G G L G K A M R M D D E
UniRef90_E4T907	D Q M Y V V M I T K N G T I K K T S L E A Y S R P R T N G I H A I E I R E
UniRef90_B4S3A3	S D T S L L A V T D N G F G K R S L V D D Y R L T R R G A R G V I T L K A H E K
UniRef90_UPI0004292660	S D Q D Y L L N N H F L V M I T K R G I I K K T T Y S R P R T N G I I A L N I R E
UniRef90_D8J640	D F D D E E F L T M V T E N G Y V K R T E A S A F E R V R S S G L I A A S L E E
UniRef90_U2P9Y9	D D D F V N S H Y V V F A T K N G T V K K T S L Y S R P R T N G V I A I N I T E
UniRef90_Q2JUN0	
UniRef90_R5RSD1	D E E Y I N N H Y I I L A T K E G I I K K T S L Y S R P R Q K G V N A V N I R E
UniRef90_T0S1E6	K G E Y I I F A T N K G L V K K S S L E D Y S N I K Q S G L K A I K L Q D G
UniRef90_UPI00036974F4	D E D Y I N N H Y M A T T K G V I K K T T L E A Y S R P R Q N G I N A I T V R E
UniRef90_F8KZS0	G T E T I L I V I C E N G F G K R S N V E D F R Q T N R G G V G V R S I I T S E R
UniRef90_A0A021W7Q6	G D G D I L T A S Q R G Y G K R T P V D E Y P C K G R G T Q G V I A L K T T E K
UniRef90_R5A226	E N K Y L L V V T E N G Y G K K T I V I N E Y R E T K R G S K G V K T L N I S E K
UniRef90_H7EI19	D A T N A L L V V T E R G V G K R V E F S D F N S H N R G T G G Q R I F G D T G C
UniRef90_UPI00029AAC3	H E E
UniRef90_S8N2H7	N G Q E V L I I T E K G Y G K R T E A S E Y P T K G R G G K G I K T A N I T A K
UniRef90_M5T9Q8	P N A T L L T V C K N G Y G K R T P F G R Y R T Q K R G G K G L R D I K T S E R
UniRef90_C7PUW6	K E D T V L V V S E K G F G K R T D E E Y R I T I N R G G K G V K T I N I T E K
UniRef90_U2KH67	E F S E E K H L F M A T A N G V I K K V K T S D F K N A K T R G I I A I S L D A
UniRef90_E4T126	G A P F L T V T S N G Y G K C S L V S D Y R I Q S R G G K G L K L S K V T P K
UniRef90_R6NV11	N D D L I L T A S E T G F G R I S N V S D Y R L Q S R G G K G L T N Y H T E K
UniRef90_R6ZW0H0	D D K F V V I V T K N G K I K R T P L S A Y R N V R K N G L I A I G L D D
UniRef90_UPI00036E625A	E G A T L L V V A S E K G I G K R T T F E E Y R Q Q T R G G K G I I T M R T T D K
UniRef90_F215D3	P D Q D V L V I T E K G Y G K R T P A D E Y S I K H R G G K G V K T V N I T E K
UniRef90_UPI0002FEB72C	E G S H I L S V T E K G Y G K K T P I A D Y R R M S K R G A K G V L T I N V S E A K
UniRef90_H1LHF3	P N S E V F I I S E N G Y G K R T A A V E Y P I K G R G G K G L K T A N I T E K
UniRef90_UPI00036380BD	E D H Y V F F A T R N G T V K K T P L T E F E F Q L Q K G K A A I S L D E
UniRef90_P72524	D Q D E V L I I T E K G Y G K R T V A T E Y P T K G R G G K G M Q T A K I T E K
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UniRef90_W5X8G3	E N M T L L V V G E H G Y G K R T P L S D Y R V Q G R G G S G I L T M N C T E K
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UniRef90_UPI0003817A97	K D D N I L V V S E N G F G K R T P V D E Y R I T I N R G G K G V K T I N V T E K
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UniRef90_P48371	E D E S E L
UniRef90_A0A011PGU6	S V Q Y I L T A T E N G Y G K R T P P D Y P R K G R G T Q G V I G Q T T E R
UniRef90_10KQA7	H D L N L I M L T K K G Y I K R I E L D N F S N I R R N G I I A I G L E E
UniRef90_R5DLZ6	U V K Y L V M A T K N G I K K T A L E E F K N L R S S G G L I A I R L K K G D
UniRef90_UPI00037C73AF	P Q K T L L V V A S E N G L G K R T S F D E Y R I T Q G R G G T G K T M N C T D K
UniRef90_B2URM6	K D Q K L F F M G T K F G V V K K T L I E A Y E N V R K T G L I A I K L N D
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UniRef90_UPI00037FB88D	H G E A L L L T V T E N G Y G K R T M V D D Y S L Q G R G G F G N K N Y N I T E K
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UniRef90_10WG51	E A D Y L V F A T K E G T V K K T R F Q D Y N T P L K N D G I A I A I N L A E
UniRef90_A0A023WZQ3	E G K S I L T V S E T G F G R V S D F D N Y R V Q S R G G K G L I N Y H T E K
UniRef90_R5YGS4	K D D
UniRef90_G2EHR0	E D F N L V M C T K H G T V K K T N L A A Y K N F R K G G I G I N I D E
UniRef90_B5JQR1	D E S Y L V T V T D G G T A K R S D M H D Y R R T K R G G G V R A A R L P D D
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 UniRef90_UP100037FB88D G | D | E | L | L | N | V | L | L | T | N | Q | G | E | D | V | I | I | G | T | K | L | G | Y | S | V | | V | R | F | K | E | D | | L | V | R | N | M | G | R | T | A | T
 UniRef90_UP10003B48441 T | G | S | V | V | A | T | V | L | K | V | P | R | D | D | V | L | I | I | S | D | D | G | T | M | | M | R | T | G | A | D | Q | I | | S | I | Y | S | R | V | T
 UniRef90_Q11UG4 T | G | D | G | L | V | S | L | L | G | V | V | N | D | Q | Y | Q | I | M | I | I | N | K | S | G | I | T | | R | T | M | A | V | S | D | L | | R | V | M | G | R | A | T
 UniRef90_10WG51 D | D | E | L | L | E | A | L | L | T | T | G | K | S | Q | V | M | L | I | V | T | R | D | G | K | A | M | R | F | R | Q | S | D | A | R | A | M | G | R | A | T
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 UniRef90_B5JQR1 G | D | S | L | I | T | V | K | L | T | N | R | D | S | E | L | V | I | V | T | H | L | G | K | S | I | | R | F | H | E | S | D | | L | R | E | Q | G | R | A | T
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	290	300
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UniRef90_R6M8J9	Q G V R L I N L K D D T K V S G T A I V	
UniRef90_B8JCU8	Q G V R L I T L E K E E Q V V G V A R V A E	
UniRef90_E4L1H8	T G V R G V K L R D G D L V I G A S R I S D	
UniRef90_UP1000319F0EA	Q G V R L I T L K G E D S I A S V A K V	
UniRef90_F6GJK3	Q G V K L I N L K G K D S I A A V A K V	
UniRef90_F7PT51	T G V R G I N L D K D E C A V G M D T I Q D	

UniRef90_A4AAR3	Q G V R L M R L G N E Q F V S T V A K V	
UniRef90_D3QGZ7	Q G V K I M R L D D D A Q I I V T F A L V E	
UniRef90_F9V9L5	Q G V T L M D V R G D D R L I H I V R V A E	
UniRef90_R7C014	L G V R L I K V D D G A Q V A S I T A V P	
UniRef90_Q047E9	M G V M L V R L D E G A I V V G F D R V D E	
UniRef90_A1V9C1	K G V R V M R V N E G Q K V V A F T R T E	
UniRef90_U2KUF5	A G V R G I R L T S D D Y L I G M D S F E E	
UniRef90_UP1000470A042	M G V K F V G V R G E D S V I A I A L N P E	
UniRef90_UP10003B3D370	K G V R L Q R L G E G D E V I A I T	
UniRef90_E6PCR5	Q G V K V M R L D N N A K I M T F A L V	
UniRef90_UP100037FA0F1	M G V K L M N L N D S K V V I A K	
UniRef90_D1VRK5	T G V R G L R L A E G E S V V S L V A E	
UniRef90_UP1000464A5A5	K G L T S Y N L N E K T G P V A G L R V V E	
UniRef90_E6U5D1	Q G V R I R T A E D E Q V V S L E R V C E	
UniRef90_M4XQG8	S G V I V N V D S N D K V V S I A K C P	
UniRef90_A1BPQ5	K G V K L I N L T D G I H V V C M E K V A E	
UniRef90_UP100016C0206	Q G V K L I N L R E N Q C V S S I A V V	
UniRef90_R5SUH8	M G V V F A K F A D D D R I I A I A K N S E	
UniRef90_UP10003B75DF7	S G V R G I R L A D E	
UniRef90_A3U9V0	Q G V R L V Q L L D S D D K V T S I A R V V	
UniRef90_I0K0S6	Q G V R L I N L K K N D E I A A I A K V E	
UniRef90_W4T8I9	S G V K L M N L E R D G R I A G I A M V K E	
UniRef90_H1HU61	Q G V I V M R T G E D V K V I S I A R	
UniRef90_R8VTS5	Q G V R L F D V D E G E K V V S V A L L S E	
UniRef90_UP1000360DA4A	M G V K F V G V R G K D E V I A I A	
UniRef90_D7GHE5	I G V R G I S L E D N D E V I G M I V V N D	
UniRef90_E4T907	S G V R L I R L M Q G D K I S A T A R V P	
UniRef90_B4S3A3	T G V K A I T L N D K D Y V I G M V C A S E	
UniRef90_UP10004292660	R G V N G I K L Q G G D S V V G L V T A D E	
UniRef90_D8J640	T G V R G M R L D D N D Q V V G M V V V	
UniRef90_U2P9Y9	UniRef90_Q2JUN0	

UniRef90_R5RSD1	T G V R G I N L D E D D Y V I G M	
UniRef90_T0S1E6	Q G V K G I N I D E T E K I I G M E L I D D	
UniRef90_UP100036974F4	S G V R G I S L A P E D S V I G L V C V E D	
UniRef90_K8KZS0	Q G V K L A N L K E G D Y L V A I Q K L E	
UniRef90_A0A021W7Q6	Q G V T L M R L A E D E T L Q T I E R V	
UniRef90_R5A226	K G V K L I N L K N N N K V A S I S I V	
UniRef90_H7EI19	S G I K V I N L T E P D F V V G F D K I S	
UniRef90_UP100029AAC3	UniRef90_S8N2H7	

UniRef90_S8N2H7	M G V K V M R L D Q E A K I V T V A L V E Q	
UniRef90_M5T9Q8	Q G V R I M S V D K D D E L I A V V R V P	
UniRef90_C7PUW6	Q G V R L I R L D D S D E I A A V A R L D E	
UniRef90_U2KH67	R G V S G L K L A V G D E L T A A V R V D E	
UniRef90_E4TI26	Q G V K L M S V A D D E I V S F A I V K E	
UniRef90_R6NV11	K G V T L M R I G E N D K V V T V A R A P	
UniRef90_R6ZW0H0	H G V R A I H L R E G D Q V V S M A R V R E	
UniRef90_UP100036E625A	M G V K L V E T G K K D K L Q A I A P V	
UniRef90_F215D3	Q G V R L M R L D E A A H V S T M A	
UniRef90_UP10002FEB72C	K G V R L T N L S D S D A V V S	
UniRef90_H1LHF3	L G V H I R M D D D A K V A T M A K V E	
UniRef90_UP100036380BD	S G V R G I R L A A G A Q V V S L L V V E	
UniRef90_P72524	M G V K V M R L D Q D A Q I V T F T T V A	
UniRef90_E4XU22	A G V T G I R L R K D D Y V V G M A I V S E	
UniRef90_Q7MAA9	S G V I I V N V S D D K V V S I A R C P	
UniRef90_L8K1L2	Q G V K L I R L N E N D E I S S V E K I P	
UniRef90_Q1WVP0	L G V R L I N L G A D S I V S T M T K V E	
UniRef90_C8N118	L G V R R M R L D Q D A I V S S L A I V	
UniRef90_J4UXA1	Q G V K I I T P K E N E K L T E C V T I P E	
UniRef90_W5X8G3	Q G V K L V N L A A G D S V S S I A R I V	
UniRef90_UP10003B48C86	Q G V R I I N L K S K D A I A D I T R V V	
UniRef90_B7KBQ0	T G V R V Q R L D E D D A I A A V A L V P	
UniRef90_UP10003817A97	Q G V K L I R I D E G D Q I A A I S K I Q E	
UniRef90_UP100029B0AD2	Q G V R V I R L E E T D K L V S M A R I P	
UniRef90_Q040E4	L G V R L I R L E G N A K V A T L A K V E	
UniRef90_P48371	UniRef90_A0A011PGU6	

UniRef90_A0A011PGU6	Q G V T L I R L S K D E K L Q A V E R M	
UniRef90_10KQA7	R G V T S M K L R T G D E I V G C D I V P	
UniRef90_R5DLZ6	S G N K G I R L K T D D E V I G M G I V E	
UniRef90_UP100037C73AF	Q G V K L M T L N E G E S I Q D I S I V	
UniRef90_B2URM6	A G V R G I K L R P G D E V I T M D V I P Q	
UniRef90_K2A3Y2	T G V R G V N R E N D L V I G A A V I T D	
UniRef90_UP100037FB88D	Q G V R V M N P G P G C K V I S L A K	
UniRef90_UP10003B48441	Q G V R L I K L Q D G D S I A S V A K	
UniRef90_Q11UG4	S G V R G I S L D E Q D E V V G M I A I E	
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UniRef90_A0A023WZQ3	K G V R V M R V S E G E K I V T L T P V	
UniRef90_R5YGS4	UniRef90_G2EHR0	
UniRef90_G2EHR0	R G V R G V K L S E K D Y A Q A M E V V	
UniRef90_B5JQR1	T G V V L I K P D A G D R I L A V A R N V E	
UniRef90_UP100045EB484	A G V R G M T L D D D E V V G M	
UniRef90_W2C6L9	T G V K I Q N L M E G D T V C T I N K I V D	
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1 10 20 30 40

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UniRef90_E0NRN6	P N D P V V I T V S H G Y I K R T A L S E F K E Q R G S R T R E E D F T E F L
UniRef90_Q9L7Q5	A P E D V V V T L S H A G Y A K R Q P V S A Y R A Q K R G G T K E E D F I D H L
UniRef90_B21R9	P N E E V I I T V S H Q G Y V K R T A L T E Y R T Q G R G G T K E D D F T E Y L
UniRef90_A3HTG5	P E E E C L V V V T E D D Y I K R M P A D R F D A Q H R G G K K E G D R V S T V
UniRef90_C7NP30	P V E D C V I T L T H F G Y I K R Q L M D S Y R T Q R R M T R R E E D F V E E L
UniRef90_R9LB38	
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UniRef90_A0A011RR67	
UniRef90_UPI00037E57C2	T L S H N G Y M K R M A I S E F K A Q N R M G T N T D D F V E T L
UniRef90_UPI00037FA34A	V I V T L T H N G Y I K R M P T S E F K S Q N R M G V H E G D F I E Q L
UniRef90_U2JZ56	A N E K S I V L V T E Q G Y I K R M P I S T F E A Q S R A K M K E D D A V E H F
UniRef90_B2RJ49	E E D V L I T L T R G G Y I K R I P T N V Y K K Q N R M T T R S E D Y V D T L
UniRef90_B8G337	A D D D M I I T L S H M G Y I K R T P L S E F R T Q K G S D T R E E D F V E Y I
UniRef90_K2E3T7	
UniRef90_R7GJW7	Q E Q C I F F A T K K G I I K R T S V S Q F Q N I R T N G L T E G D E L L Q V
UniRef90_F4BL77	V I V T L T S K G Y I K R L P S S E F K S Q R R M G V H D D D F I E T L
UniRef90_E2Z9D9	P N E R M V L T L T R R G Y I K R I N A N V Y H T Q N K M A T K D E D A V N H L
UniRef90_R6TJ75	
UniRef90_R5GGF5	A D D E V V V I T I S H G Y I K R T P L A E F R A Q A R G G V R D A D F I E Y I
UniRef90_R7K8Y6	K E D V V I T M T H E G Y V K R L P V A E Y R S Q H R G G T K E E D F I E E M
UniRef90_D5EPI4	P N E G C M I T V T H K G F I K R T S L D E Y R S Q K R G G K G E D D F V E H L
UniRef90_R3U6X5	
UniRef90_X5JFE5	A N E K A I I L L T E Q G Y I K R M P V N T F E A Q S R A T R K D D D T V E H F
UniRef90_N1ZIG6	E E T S V F T L S H L N Y I K R T P L M T Y K S Q K R M N T R E E D F V K D L
UniRef90_C4GCC6	I I I T F T K F G Y I K R M S A D N F R A Q K G M E T K D D Y I V E L
UniRef90_UPI0004712FB1	R E D M V L T V S H K G Y I K R V P L S T Y R P Q R R M Q T R D E D F V T Q V
UniRef90_L0F3S6	D E E V V V T M S H R G Y I K R I P L S T Y K S Q R R M A T R E E D F V E H L
UniRef90_F9EJS0	D E E L I I I T Y T N K G Y V K R L E A S K Y K A Q R R G G T E D D Y A E K I
UniRef90_C4GEH9	P P R D M V V T L T H G G Y I K T Q P T S D Y Q A Q R R A A T K D E D F I E T L
UniRef90_R5ZZ05	
UniRef90_F3H376	E E E R V V T I S H G G Y A K T Q P L A V Y Q A Q R R T G I K D E D Y I A H L
UniRef90_Q0B0Y9	D H E V V I T L S S N R G Y V K R Q P L D T Y R S Q K R T T I R A E D F A H D V
UniRef90_A5UR92	P D V R V L I T L T D R G Y V K R Q S P D I Y R T Q R R A T I R E Q D V V R H I
UniRef90_W1Q1D6	V L I A L T S N G Y I K R M T Q D E F Q V Q N R M G M S D N D N I Q T L
UniRef90_F5WQN6	P V E D I V V T M T M N G Y I K R T T V D S F N T Q N R G G T Y D E D T V D Q F
UniRef90_S6AY64	E E E R V V T I S H G G Y A K S Q P L A A Y Q A Q R R T G V K D E D Y I E H L
UniRef90_A0YQ86	
UniRef90_B4VPJ9	
UniRef90_UPI0003817D3E	
UniRef90_U7UTU8	P R R D M V V T L S R G G Y I K S Q D L A D Y D A Q T R G G M T K D D E V A E L
UniRef90_K1JQP3	P P R E M V V T L T H G G Y I K T Q P T S D Y Q A Q K R A A T K D E D F I E T L
UniRef90_D3ENM4	
UniRef90_F5S9N6	
UniRef90_17CF66	
UniRef90_J0SB03	
UniRef90_L0K4U9	
UniRef90_UPI0003FD8536	R E D M V V T V T M E G Y I K R T P L D T F R A Q N K M A T K D E D A V T H L
UniRef90_L0ICV0	P E E E V L I V M T E D D Y V K R M P V S N F D P Q G R G G V K E D D R V T T V
UniRef90_F9N614	A D E E M V I T L T R Q G Y I K R M N A N V Y R N Q H K M K T K D D D Y V A Q I
UniRef90_V6EYH4	A R E D M V V T V T N T G Y I K R V P L S T Y R A Q K R M S M K D E D F L S Q V
UniRef90_UPI0003B4C8D6	A D E S M V I T I S N D G Y I K R T A L A E Y R T Q G R G G V K Q D D F T E H L
UniRef90_L7VMV9	D E Q M V L T I S N K G Y I K R T P L S E Y K R Q R G A S T K N E D F L E H I
UniRef90_R6YDP7	A D D Q M V I T I S H L G Y I K R T P L S E F H A Q N R G G T R D E D F I E H I
UniRef90_H3RS71	V V T L T H N G Y I K R L P V D E F K S Q N R M G V H K D D F I E H L
UniRef90_F2NXS7	E E D M V I I L I S K L G Y I K R V S V S Q Y K S Q G R A K L V I E E D Y I N Q M
UniRef90_J5XTL9	P N E Q V V I T I S N A G Y I K R T S V N E Y K T Q K R K A S A T R D K D F I E H L
UniRef90_K2E8H5	A K E D V L V T V T K T G Y I K R V S K N T Y K A Q R R M T T K E E D E I D H L
UniRef90_R5APD5	A D D D M I I T I S H L G Y I K R T P L N M F R A Q R G S N T R D T D F I E Y I
UniRef90_F0IFE1	V I M A T K K G I I K K T A L E Q Y S R P R Q N G I K E D D E L L E A
UniRef90_F2KZE1	
UniRef90_R7F500	P D D E M I I T I S H L G Y I K R T P L A E F R A Q H R G G V G E A D F I E H I
UniRef90_K1ZD83	P A E E T I V A L T K S G Y I K R M P L A T F K T Q K R M T I K D T D E I H L
UniRef90_R2SGE5	V V I T L T N N G Y I K R V S N S E F R A Q R R M G V H D E D F V K T L
UniRef90_D5VCB9	P E Q T V V L T V S R T G Y A K T Q P I S D Y Q A Q K R T A M K E D D V I E H L
UniRef90_E2CR96	R E D M V V T V S H N G Y I K R V P L A T Y R A Q R R M A T K D E D F V T R L
UniRef90_UPI000370DBAF	
UniRef90_V4ZTU5	
UniRef90_K1X2I5	
UniRef90_K9ZWD9	A V E D M V I T M T R A G Y L K R T K L D A F R A Q G R G G R G E E D T N T R V
UniRef90_R4PVW2	P E E E A V V V L L T T E N Y I K R T L L T E Y R R Q R G M T T K E E D V I A Q L
UniRef90_V4J458	E E D M A V M V T H S G Y I K R N S V S L Y R A Q H R G G K G E D D F V T N L
UniRef90_C3JD53	A D D E M I I T I S H L G Y I K R T P L R D F R S Q K G S T T R E E D F I E Y I
UniRef90_D1AIT4	D E E V V V T L T D K G Y V K R T P L D V Y R A Q K R G G I G E D D I K D M
UniRef90_H2CFZ0	
UniRef90_R5DBP1	
UniRef90_I0IKD6	
UniRef90_K7QVY1	D E P V V I T L T A Q G F L K R I P L E A Y R A Q G R G K T K E E D E A T H V
UniRef90_G4L3L6	A V E D M V I T M T R A G Y L K R T N M D A Y R A Q S G G K L R D E D I N T R V
UniRef90_UPI00036D30BE	D E N V I L T L T N K G Y V K R M E V S K Y K A Q K R G G T E D D F V E S I
UniRef90_C6JLF1	
UniRef90_R5BKE4	
UniRef90_F4GM87	N E E V V V V I S N K G F I K R V V A E E Y R S Q K G A K L I N D D F V E H L
UniRef90_J9Z8K2	P N D P C Y I T L T Y Q G Y I K R V S H D A Y P T Q R R G G L K E D D A V I I T
UniRef90_UPI0003B63E04	A D D E T V I T L S Q R G Y V K R T P L S N Y Q S Q K R G G T G D G D F V H N F
UniRef90_E7ACJ3	
UniRef90_W0FLN6	P K E A A I I M I T R D G Y I K R L T P D T F K Q Q H R G G K K E E D S V D Q L
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  F I A N T H D Y M C F T N L G R C H W I K V Y R L P E G G R N S R G R P I N N
  L V A N S H T T L L M F S S K G K V Y W L K T Y E I P E A S R A A R G R P L V N
  L V I T S A L A T L L F F T N Q G R V F T T R A F Q I P E S S R Q A K G M P L V N
  L A A S T M D D L L F F T D R G K V Y Q I K A H E L P D A S R T A K G [P] L V N
  V S C S T H D S L L F F T N K G K V Y Q S K G Y D I P E Y G R T A K G [P] V V N
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90 100 110 120

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UniRef90_F9EJS0	E F F K N I N S N G L I A I K T K E E D D D I I F V I E D V V N K E E I I I A T H D
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UniRef90_B4VPJ9	S F A A Q R A T R G K A A A R M K E E D D G V E H F L T C C D H D S L L F F S D
UniRef90_UPI0003817D3E	S Y R F R G G K G R R G I N M K A E D D V V Q A L F I C S T H N Y L L V F T D E G
UniRef90_U7UTU8	V Y H T Q N K R G I K G M G T K D E D A V N H L L F T S S L T V L F F T N F G
UniRef90_K1JQP3	A F R N A R L K G I I A T T L D E G E T L I V G V V A V S D G G D D I M L F S D A G
UniRef90_D3ENM4	S F D Q Q R A T R G K A G A K I K E N D D V V E H F L T C C D H D V V L L F S D
UniRef90_F5S9N6	A F K N V S V K G I K A I A L R D G D S L V G V V A K T S G S S D I M L F S N L G
UniRef90_I7CF66	Q F D P Q Q G R G G K G I V A G D V K T D D S V V V F R A N T H D Y L L C F T N Q G
UniRef90_J0SB03	A Y R M Q H R G G K G V I G M A T K E D D V V V F V A S T H D Y L L C F T N K G
UniRef90_L0K4U9	T Y R K Q H R N G K G I I G T K P K E E D D L V V V Q I G S T H D Y F L F F T N Q G
UniRef90_UPI0003FD8536	A F A N I R T N G K I A M K F E E E G S E D I G V S S L T T E E D D D V L L I A T K Q G
UniRef90_L0ICV0	E F D N I L T T G I I A A S L E D E G D E L I V D V E V T D G T N D L V I G T E Q
UniRef90_F9N614	E Y R N I R R G G L I N A V A L D E E G D Q L I I S V V G L T Y G N Q D V V L L G T K K G
UniRef90_V6EYH4	D F V D I R A N G K I A M K L N D G E Q L I I A V Q P C S D S D D I V L L A T R L G
UniRef90_UPI0003B4C8D6	A Y S R P R T A G I N A I T T N E E G D R L L D V Q L T S G N S E V V V A L L R S G
UniRef90_L7VMV9	Q Y S K P R I H G I K A I S I R E G D K L L E A K L T N G Q C E I I I L A I K S G
UniRef90_R6YDP7	Q Y S R P R Q N G V N A I T I R E E D D R V I I E V R M T N G N E V I I A N R N G
UniRef90_H3RS71	D F R N I R S N G L K A I Q L H D D G D E L I V H V N I I D G Q Q N M I L G T R L G
UniRef90_F2NXS7	D F K N A K S R G M Q A V R L D E E G D T L L V S A I L L S T G K D E L L L V I S R R G
UniRef90_J5XTL9	Q Y S R P R Q N G I V A I T I R E E D D R V I I E V R M T N G N E V I I A N R N G
UniRef90_K2E8H5	Q F E N I R S S G L I A I K L Q G T D S L I I S A H L S F G S D N V M L L T K K G
UniRef90_R5APD5	A Y S R P R R D G V V N G I I I R P D D D Q L I I N V A L T D G N S Q I I L L A N R N G
UniRef90_F0IFE1	D P Y R I T N R G G K G V K T I S I T E K V V A I K S V S Q E D D L M I I I N K S G
UniRef90_F2KZE1	D F K E Q A R G G V V G S K G A R T R E K D F Y I Y P A T M H Q T M L F F T R K G
UniRef90_R7F500	A Y S R P R T N G V N A I I I R E G D Q V I Q V R L T D G N A D I M L A N R K G
UniRef90_K1ZD83	K Y E N I K S N G L I A I K L T D G D S L V W V N K T S G S D H I I L L V S R D G
UniRef90_R2SGE5	A F A N I R S N G L I A I G L K D D G D E L L V S V L E T D D G E S N I I I G T H T
UniRef90_D5VCB9	Q F A N I R A G G L I R A I D L A E G D T L I I G V A I T D G E Q E I M L F S N E G
UniRef90_E2CR96	D F T Q I R N R G K I A M K L E D D G D E G I I V N V A T C S E H D D V M L T T A A G
UniRef90_UPI000370DBAF	D F R A Q S R G G V G A K G S D T R E E D F V E Y I Y S A S M H L M F F T D Q G
UniRef90_V4ZTU5	E F S P Q R R G G K G I I G A D Q G D R V S S V F V A N T H D Y L L C F T T H
UniRef90_K1X2I5	T Y K A Q K R G G K G I I G S D V N E E D D L N F I S G N T H D N I I L F F T H
UniRef90_K9ZWD9	D Y A N I T S A G L I A I N M M E G D E L I I G V G I V K D G E H V V L I A T A E G
UniRef90_R4PVW2	D Y A N I R T N G L I I T K L D D G D E L I R W I K Q T S G E N D V V I I S T S A G
UniRef90_V4J458	E F A R P L K K G K R A L T I I N E G D E I I L S A H L L G G D D T V F L I S H H
UniRef90_C3JD53	A Y S N P R S K G V F A I K L N E E G D S V V S V R L T N G K T E I I L L A N K G G
UniRef90_D1AIT4	I L F A S I N K A G I K A I G L K D D D D E L I F A G L T S G T D E I I F L A T R E G
UniRef90_H2CFZ0	T F F K R Q K R G G K G V K G A S M K K E D V I K L I S H T H D N L L L F S N K G
UniRef90_R5DBP1	E Y T A Q S K M G K K G I T T R D E D T V V D V F T A S T H D Y L L F F T D T G
UniRef90_10IKD6	A Y P T Q N R G G K I G V T L K D D D A V I S T L S P T M H E T I I L F F T D I G
UniRef90_K7QVY1	E Y R N I R G S A G L I A I R L H P E D R L I G V A L A D P D E V I I L A T R E G
UniRef90_G4L3L6	E F F T Q N R R G V V Q G M G I H D Q D F V T T L V S C S T H D N L L F F T N A G
UniRef90_UPI00036D30BE	D Y G N I T S A G L I A I N L Q P G D E L I I G V G I V C E S D H I V V L I A S R E G
UniRef90_C6JLF1	E F F K N I N N S G L K A I K K E D D D I I Y V G L I E K I D Q V F I A T K Q G
UniRef90_R5BKE4	V Y R N Q H K G G V V G M K T K E D D Y V V Q I S H T H D N L L F F T T A G
UniRef90_F4GM87	A F R N A K S R G V V R A L F L D E G D I I M V Q S E L M T D G D D M M F E V T A G
UniRef90_J9Z8K2	A Y S S I R Q S G I I A L T L R E E G D R L A Q V L V A D A D S H I V V L V A T R R G
UniRef90_UPI0003B63E04	L Y G N C R S T G I K A V T L K E H D E L M T V K E V P S D A D C L L I S A D G
UniRef90_E7ACJ3	V Y E Q R R K G K N S G N T H E D D D F I E S F F I A N T H D T I I L F F T D T G
UniRef90_W0FLN6	E F F R N L I R K N G L I A I A L R E E G D E L I I G V R L S N G D D E M L V S T R K
UniRef90_K2BXY5	A F E N V R R R S G L I A I T L K G K D A L E W V K P S T G N D N I I L A T D N
UniRef90_UPI00034C8D0E	A F A N V R R S N G L I A I S L E D D D D E L R W V R R A R P E D D D L I V G T Q Q
UniRef90_V6DFDS2	V Y Q H R G G K G K M A M A S L D D D N D D V D M F V A R N H D E L L F F T N L G
UniRef90_F2NLE8	E Y Q N L T A S G L I A I N L V D G D T L I I Q V G V A Q E D A E V I I L A T R N
UniRef90_V7PW94	G F K D V R R R S G L I A I K L D K D D E L E N V L P I S K G D D V M L A T T L G

170 180 190 200

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UniRef90_E0NRN6	R A V R F D E K A	V V R T M G R V S T G	V V R G M R L D G G D D E M V V V N E A	
UniRef90_Q9L7Q5	R V Y R L K A Y E	I P E Y G R T A K I	V N L L K L E E D G E T I Q T I I N A R E	
UniRef90_B21R9	K T V R F S E N T	V V R S M G R T A T G	V V R G I K L T E G E E E V V S L I I A E	
UniRef90_A3HTG5	R A I I H F P E T A	V V R P M G R T A T G	V V K A I T T G Q D D F V I G M V C A S	
UniRef90_C7NP30	M T I I R F D E T E	A R Q M G R T A R G	V V R G I D L R D G D N V A G V V A T D	
UniRef90_R9LB38	M A I I R F D E Q D	A R P L S R T A R G	V V K A I T T L D E G D E V I G M A R V R	
UniRef90_E0RRS3	K A Y Y L K V H E	I P E G S R V S Q G K S	V V Q L S P D E Q V S A V V S V E	
UniRef90_A0A011RR67	Y A V S F H E D E	V V R S M G R S A S G	V V R G M R L R E G D Y V V G M D K L S	
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UniRef90_UPI00037FA34A	R S I I H F R V N H	L R P L G R A T R G	V V R A M S L R N G D S L V G M A P P Q	
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UniRef90_B8G337	K V Y Q I K A H E	P D S S R T A K G	L P L V N L E P G E Q V T S M V R E F	
UniRef90_K2E317	R V F V K L P A Y E	I P Q T S R T A K G	L P L V N L E P G E Q V T K E E E K S	
UniRef90_R7GJW7	V T I I R M H C A D	I S Q T G R A A Q G	V V K L I I R L R D D Q H V S S I A I V E	
UniRef90_F4BL77	Y A V S F H E K D	V V R N M G R T A G G	V V R G I L R R E N D Y V V I G V D L L T	
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UniRef90_R5GGF5	R A I I R F A E D A	V V R T M G R T A T G	V V R G M D E E G D E V M V V C V N D K	
UniRef90_R7K8Y6	N C I I R F S E K D	V V R P T S R T A M G	V V R G K S I E L P E G A E V V D M A V L K	
UniRef90_D5EPI4	Q S I I R F P E T D	L R D Q G R N T R G	V V R G I K K S E N D K V V A I E I V D	
UniRef90_R3U6X5	K V Y R A K G Y E I	I P E Y G R T A K G I	P V I N L L G I D I I A V E G Q A E	
UniRef90_X5JFE5	M A I I H F R C S H E Q	R L P L G R A T R G	V V R A M K L K K G D Q L V G M D I N I	
UniRef90_N1ZIG6	M G I I K F H E S D	V V R P M S R Q A M G	V V R G K A I T L K Q N D Y V V S S V K I T	
UniRef90_C4GCC6	Q C V I R F H E S D	V V R G T G R S T M G	V V I G I N L S D Q D C V I A M Q L A S	
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UniRef90_F9EJS0	K A L I R F N E N E	T A A P K S G N G	V V R P S G R G S G G L R G M R L P E A Q K N	
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UniRef90_F3H376	I S I I M F D E K Q	V V R S M G R T A A G	V V R G M R L S K D D Y V V G L D R Y R	
UniRef90_Q0B0Y9	Q T I I R F R Q E E	V V R P M G R P A T G	V V I G I A L A E G D R V V V S M D L A R	
UniRef90_A5UR92	Y A M T F F A E T D	A R I I M G R T A T G	V V R G M K L R E G D Y V V V G A A V L N	
UniRef90_W1Q1D6	U H I F F W M Q N E	V V R S M G R T A S G	V V R G M K L R E G D Y V V V G I A T D R E	
UniRef90_F5WQN6	K A V R F D E N E	V V R S M G R T A S G	V V R G M K L R E G D Y V V V G I A T D R E	
UniRef90_S6AY64	K V I I R F K E K	N V R I M G R L S R G	V V R G M R L P E G Q R L I S M L I P E	
UniRef90_A0YQ86	R I I L D I I E S E A I E L K E R	H G S P R R T E I E H T E G E L E D T D L I A N S		
UniRef90_B4VPJ9	R G V V Y S L R A Y Q I	P A A S R T A R I	V V Q M L P I P H D E K I T S V V P V S R	
UniRef90_UPI0003817D3E	R L I Y W L K A M Y I	I P D G I A N R G K S I M N L I N F A P G E K V	V S S V V V A V R D	
UniRef90_U7UTU8	R V Y R L K A Y E I	P E A S S R N S K G V A I N L L P G E K V N A L I D L	D P I V D T D A F G D	
UniRef90_K1JQP3	K C A R F S E S S	V L R P M G R A A H G V I G M R L D E G Q S V I S L I V T N		
UniRef90_D3ENM4	R G V V Y A T T N A Y Q I	I P S S S R T S Q M L S I S K S E K I T S I I S V S E F K		
UniRef90_F5S9N6	K A I I R F N E T N K G I I	R P S G R G S G G L R G M K L P E N G R I V S V A E L L G		
UniRef90_I7CF66	A V Y R L K T Y E	I P E M G R T A R G K S A V N I L L D L D P I V D T D A F G D		
UniRef90_J0SB03	R I I Y W M K V Y D I P E S A K G K A I V N L L N L N D E L V S A V I P L R K F D			
UniRef90_L0K4U9	Y V H K L K G Y Q I	P E S S R Q A R G I P M I N L L D L D P I V D T D A F G D		
UniRef90_UPI0003FD8536	K A I I R F A S T D V R E	F Q S R D S T G V R G A R L A E G D E V R M K E F E D		
UniRef90_L0ICV0	M T I I R F D E T E	A R A M G R T A R G V N G I K L E G D D A V A G L V A T T		
UniRef90_F9N614	M A I I R F H E S D	V V R L F M K R A A R G V K G I L N L N T G D E V V V G A S I I H		
UniRef90_V6EYH4	K A I I R F Q V G D V R V	F K G R D S T G V R G I I R L D D A D Q V I S S M S M S E		
UniRef90_UPI0003B4C8D6	R A V R F P E S	K V V R S M G R T A A G V R G I T G D E Q D R V V V G M V C I A		
UniRef90_L7VMV9	K A I I R F S E D	K V V R S M G R T A A G V R G I T G D E Q D R V V V G M V C I A		
UniRef90_R6YDP7	R A I I R F H E S A	V V R D M G R T A T G V R G M T I D G G D D E V V V G M I C I K		
UniRef90_H3RS71	Y A V S F N A E D	V V R S M G R S A A G V R G A K L R E G D E L C I R I H T E		
UniRef90_F2NXS7	Q A L I R I N E E D	V V R P M G R S S S R G V A G L K L S E G D E L C I R I H T E		
UniRef90_J5XTL9	K A I I R F P E E	K V V R A V G R S G S G V R G I I S F D D E A N D M I T I E N P		
UniRef90_K2E8H5	M S I I R F P E A	N V V R P M G R A T T G V T G V K F D A D D D H L I G M E V F P		
UniRef90_R5APD5	R A I I R F D E S	K V V R E M G R V S T G V R G M T I D G G D D E V V V G M I C I K		
UniRef90_F0IFE1	M A I I R M S V E A	K L R V V M G R A T Q G V R L I N I K E N D S I A A V A K V M		
UniRef90_F2KZE1	R C Y W M K V Y D I P K N A K G R A I Q N M L S L E A G D A V N A F L R I R G L			
UniRef90_R7F500	R A V R F H E S R	R V V R E M G R M S T G V R G M T L D G E D D E V I G M I T G		
UniRef90_K1ZD83	K S I I R F K E N D	V V R P T D R D T M G V R G I L L K G D D Y I I S M E S F G		
UniRef90_R2SGE5	Y S V I T F A E A A	V V R D M G R T A A G V R G I L R L D E D Y V V V G V A P I T		
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UniRef90_E2CR96	Q C I I R F P V G D V R V	F V V A G R N S V G V R G I R L A D G D K V I S M Q I L H		
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UniRef90_V4ZTU5	Q V V Y Q L K T Y Q	V P E M G R T A R G K S A V N V L D L D D E M A V V N T		
UniRef90_K1X2I5	R V F Q T K V Y D	P Q G S R T A K G K L I M Q N F N I S A V I A Y P D G N T		
UniRef90_K9ZWD9	Q A M R F D A N D	V V R D T G R A T Q G V I G I R L R E E D K V V S M V P S E		
UniRef90_R4PVW2	Q A V V R F N E S E	C Y R P M G R A A R G V R G V R L R P N D I V V M D V V T V		
UniRef90_V4J458	L S I I R F H E S D	V V R T M G R I A A G V R G I L K L K D S D Y V V N V L A S D		
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UniRef90_R5DBP1	K V Y R K K G Y Q I	P E S G K T A R G T N I V N I L Q V E Q M L H Y R E A G		
UniRef90_10IKD6	K V Y R L K V H E I	P E G Q R A T R G K S I R S A P D E K V T Q L L S I R		
UniRef90_K7QVY1	M A I I R F P L E E	V V R A T G R D T Q G V T G I R F R P G D G V V S L V A V K		
UniRef90_G4L3L6	K V Y K A K G Y E	V P E Y G R T A K G I P V I N F E R I Q T I I A L P N E S		
UniRef90_UPI00036D30BE	Q A M R F D A A E	V V R D T G R A T Q G V I G M R L R E D D V V V S M A L V P		
UniRef90_C6JLF1	Y S I I R F N S D	N V V R P T G R D T M G V K S I T L R P G D L V S A L L I K D		
UniRef90_R5BKE4	R V Y R L K G Y E	V P E A S S S R G T A I N V L P L N V G E A V T T M I D M N		
UniRef90_F4GM87	R G L R L A G G D	V V R A M G R A S R G V R G M K L L G D D T V I G L L K V D		
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UniRef90_E7ACJ3	Q L I H W L K V	Y K I P E M G R N A I G R N L I D Q P G E S I K A T I P T K		
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UniRef90_UPI00034C8D0E	M A I I R F N T G D	Q I R P L G R A T R G V R A M T L N P G D L L V S M D I I C		
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UniRef90_F2NLE8	Q A I I R F A L T E	V V R A T G R A S Q G V R G V R L K D G D E V V V S L I V V P		
UniRef90_V7PW94	Q S I I R F K E S D	V V R E M G R T A G G V V R A I K L G K G D F V I G V D R V P		

210 220 230 240

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

250 260 270 280

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UniRef90_U2JZ56	T G Y V V A A K I V N N E D E L I M I S M Q G E V I R L A V K Q I I S E L G K R T
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UniRef90_J5XTL9	
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UniRef90_H2CFZ0	G D E L V D V E V T D G E S D I V L I A T A T R G M T I R F D E S E V R P M G R S A
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UniRef90_K7QVY1	G D R L I A Q V M V G E P G T D I I I A T K G G K G I I L P M D D F R S M G R T A
UniRef90_G4L3L6	V G T L A A L L K V K G T E D I L V L S K R G L A L R T P V A E I R T Y S R A T
UniRef90_UPI00036D30BE	D D E L V N V N L S T S G D D V V I I G T H N G Y S V T F K E E A V V R D M G R T A
UniRef90_C6JLF1	T G K L V T L A R V A G D E E L M V L T E K G T V I R T R V E E V V R T T G R N A T
UniRef90_R5BKE4	T G A V V S V L P V T E G E E L L M A I T S T S G Q I V R M P L D T I I A L Y G R A T
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UniRef90_J9Z8K2	T S Y L V N A L A V N D E N D V V V I T M Q G Q T I R I H V N I L S T Q G R N A T
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UniRef90_UPI00034C8D0E	D Q E L V A L R I V V S G D D E M M I V T S R G I V V M R Q R A G I I P T Q S R M G A T
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UniRef90_F2NLE8	V Q G Q L V A A L L A V E G D E D I L L V L L S R R G L A I R T R V D Q V V A Q Y S R A T
UniRef90_V7PW94	T G K L I V A K I V G D E N E I I A V S Q K G Q V I R V D L K S I I P T S G R Q T

290 300

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UniRef90_Q9L7Q5	T G V R G V K L R E D D R V V G A S R I Q D
UniRef90_B21R9	Q G V T L I R L S N G E K L Q A V E R
UniRef90_A3HTG5	Q G V R L I K V G D S D Q I S S V
UniRef90_C7NP30	M G V T I M D V A A D D T V A S V D V P
UniRef90_R9LB38	G G V R V M R V A Q D S R V V T L A R T P
UniRef90_E0RRS3	R G V T A V K L E P G D E V C G A V P V E E
UniRef90_A0A011RR67	Q G V R L M K L E E G N F V S T L A K V E
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UniRef90_UP100037FA34A	T G V R V Q R L D E D D A I A A V A L V P
UniRef90_U2JZ56	S G V K L K D I N R N D K I V A I A R Y V E
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UniRef90_B8G337	T G V I G I N L A E G D R R V V S M D L A E E
UniRef90_K2E317	T G V R G I R L K G D D E V I Q M D V I K
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UniRef90_F4BL77	L G V R V I R V A E D V K V S T M A K V
UniRef90_E2Z9D9	S G V K I Q R L E E N D K V A A L D T I S
UniRef90_R6TJ75	M G V R G I R L R E G D Y V V G A A R
UniRef90_R5GGF5	Q G V R L I N L G K N D T I S S V C H V S
UniRef90_R7K8Y6	Q G V K V M R L G N K D E L I G I S K V
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UniRef90_R3U6X5	S G V R G I R L R E D D Y V V G A A T M D E
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UniRef90_N1ZIG6	Q G V K L T N L N E N V S V V G V
UniRef90_C4GCC6	S G V K L I D L K G D D E V A S I S V V
UniRef90_UP10004712FB1	Q G V T L F K T A Q G E Q V V S V T A L I E
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UniRef90_B4VPJ9	R G V K A M K L R S K D E L I S M A Q V V E
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UniRef90_D3ENM4	R G V K S M R L K K K D E L I S M
UniRef90_F5S9N6	A G V K L I N L D E G T T L V S I E R V A E
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UniRef90_F9N614	S G V K T Q N L D E G D K I A S V A V I S
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UniRef90_K2E8H5	Q G V I I M R F N K G D T I A A A T V L S
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UniRef90_E2CR96	Q G V V F K T A D G E N V V A V E G I S E
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UniRef90_K9ZWD9	Q G V K V M D I G K G D R V I S A F P V K
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UniRef90_H2CFZ0	S G I I G I R L E K G D S V I G M D V V V E
UniRef90_R5DBP1	V G V R G I R L R E G D Y V V G A A R
UniRef90_I0IKD6	S G V K G I K L A P N D L V V G A E T I Q D
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UniRef90_E7ACJ3	R G V R G M R L E G D F V I G
UniRef90_W0FLN6	Q G V R I M R L A E G S T V V G V C R
UniRef90_K2BXY5	Q G V R L M R F K E K D Q V A S V A
UniRef90_UP100034C8D0E	T G V R V Q R L D S D D S L C A V T I V
UniRef90_V6DFS2	S G V I G I R L H E D D Y V I G M E V L S D
UniRef90_F2NLE8	S G V K I M N L Q E E D I A A C F V I
UniRef90_V7PW94	Q G V T I M K L R D G D S I A S I T

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UniRef90_K1X2I5	
UniRef90_K9ZWD9	
UniRef90_R4PVW2	
UniRef90_V4J458	
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UniRef90_R5DBP1	
UniRef90_I0IKD6	
UniRef90_K7QVY1	
UniRef90_G4L3L6	
UniRef90_UP100036D30BE	
UniRef90_C6JLF1	
UniRef90_R5BKE4	
UniRef90_F4GM87	
UniRef90_J9Z8K2	
UniRef90_UP10003B63E04	
UniRef90_E7ACJ3	
UniRef90_W0FLN6	
UniRef90_K2BXY5	
UniRef90_UP100034C8D0E	
UniRef90_V6DFS2	
UniRef90_F2NLE8	
UniRef90_V7PW94	

1 10 20 30 40

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 UniRef90_X1KK03 V V V T L S N R G F V K R V P S H L Y T L Q K G M E T R E N D A V R L L
 UniRef90_W3RG28 R E D M V V T V S H A G Y V K R V P L S T Y R A Q K R M Q T R E E D F V S R L
 UniRef90_Q9RT53
 UniRef90_G8QYU0
 UniRef90_L8MWI9 A N R E T I V M V T E Q G Y V K R M P V D T F T A Q H R A T R K D D D A I A H F
 UniRef90_UPI000379432B Q E D I V I T V S H N G Y I K R S P L E S Y R S Q K R M S T R E D D F V E H L
 UniRef90_Q7VFP2 P N E K V V V T M S H R G Y V K R V L L K T Y E K Q N R G G T H D D D F I E S F
 UniRef90_B1WTN4 A N E Q A I I L L T E Q G Y I K R M P V S T F E A Q Q R A K I K D D D V V E H F
 UniRef90_K4RHU7 P V E N I M I S L T E K G Y I K R L A V N T Y R T Q N R M T T N E E D N V N K L
 UniRef90_R5YQB0
 UniRef90_R5QF75
 UniRef90_K7WM65
 UniRef90_U2RGL1 D E D V V V T L T E K G Y V K R V A T D T Y H S Q R R T N T V E D D V I K D M
 UniRef90_L0AC50 M T E D D Y V K R M P I E T F D P Q G R A D V K D E D R V A T V
 UniRef90_UPI0003792398 T L S N N G Y M K R M A L S E F R Q A N R G G T N A D D F V E T M
 UniRef90_J0BH7 A E H Q A V V T I T H R G Y V K R I A A E E F R Q Q A R G G R E E Q D F T T E V
 UniRef90_C6HYH3 P D E P Y I V T L S Y E G Y I K R M P D A V L P T Q R R G G L K E D D C L I A T
 UniRef90_K1MKP7 P E S K V K L I A L T N N G Y V K R M D Q D E F Q V Q V R R G G R G E D D N I Q T L
 UniRef90_UPI0000683550 A S E D V I V T V T K D G Y V K R T S L R S Y A A S N G Q A M K D T D R L L A M
 UniRef90_F2I195 E E K V I V T V T N K G Y I K R T P L T S I R A Q K R G G T R E E D F V S Q L
 UniRef90_UPI000471AC0F A N E R S V V V L L T S G G Y L K R M P V R E F A A T N L G T R G K T E Q V R L F
 UniRef90_R5XE38 P V E E S I L L T L T N M G Y M K R M T V D T Y K A Q N R M S R R E E D V A K T M
 UniRef90_M1XKV1
 UniRef90_UPI00035D39BA Y V K M S L S E F D P Q H R G G K K S G D R V S T V
 UniRef90_M7P597 P M V V T L T R E G F I K R V P I L S A F R A Q K R M A T R E E D A V T R I
 UniRef90_M4SEK4 K E K I L I T I T H K G Y I K R L N L D T Y K K Q N K G G M N R D D F V E H F
 UniRef90_A0A031HLL3 R E E M V V T V T M G G Y I K R T P L E A F R A Q K R M G T K D E D A V I A L
 UniRef90_D3L3I6 R E E D M V V T V T V Q G Y I K R T P L D T F R A Q K R M A T K D E D A I T S L
 UniRef90_A8LK19 P E E D I V V V L S K D G Y I L R R A S L G D Y H L Q G R G G K Q K D D E V E M F
 UniRef90_G7QH10 R E E D M V V T V T S G G Y I K R T P L V E F R A Q R R M A T K E D D V V T T L
 UniRef90_UPI0003B36B2F A D E E I V I Q I T Y D Q F I K R L P I D T F K R Q K R G G K K R D D V I K I M
 UniRef90_R6YYC3 R E E M V V T V T L G G Y I K R T A L A S F R S Q K R M A T K D E D A V T E L
 UniRef90_H2J6N9 D R S I L I A L T N T G Y I K R M D P S E F K V Q N Q R M S T K E D D S V Q I L
 UniRef90_A2C3M0 E E D L V I V L T Q W G Y I K A M K S S E Y K V Q N Q R G G K S D N D F I I I Q V
 UniRef90_C5CHA8 A N E R S V V V L L T E T G Y I L K R M P V N E F E A T S R G T R Q G E E E V K K F
 UniRef90_W1JKF4 P D D E V V V T V T K C K G Y I K A T P L E D Y R K Q G R G G T T D A D F V T N V
 UniRef90_UPI0003B680B1 R E D M V V T V T H G G Y I K R T P L D A F R T Q S G M A T K D E D A I T K L
 UniRef90_UPI0003157C2D R E E D M V V T V T V Q G G Y I K R T P L D A F R A Q A R M A T K D E D A I T E L
 UniRef90_F7YV04 D E E I V L T L T Q K G Y I K A T S L R D Y R T Q R R G G T S E D D E I T M V
 UniRef90_A8F431
 UniRef90_UPI000382CBE3 R E E M V V T V T L E G Y I K R T P L D A F R A Q A R M A T K D E D D V I T K L
 UniRef90_UPI0003764F28 P R E E D M V V T V S H G G G Y I K R V P L V T Y R A Q R R G G K G D E D S V T R L
 UniRef90_N6UQK8 A P E E M V V T V S H S G Y I K R V P L N T Y R A Q R R M A T K D E D F V T R L
 UniRef90_B6BJD8 P N E P M V V T V T H R G Y I K R V P L T Y E K Q K R G G T Y E D D F I E R F
 UniRef90_F6IPQ1 R E D M V V T V T M D G Y I K R T P L S T F R A Q N R M A T K D E D A V T T M
 UniRef90_R5Q2P1
 UniRef90_P22446 Q E N V V I T M S T N G Y L K R I G V D A Y N L Q H R G G T Y T D D S I S Q L
 UniRef90_R6JV81 R E E E M V V T V T E A G Y I K R V P L N A Y K A Q K Q R M A T K D E D F V T R L
 UniRef90_UPI00037DCB6A A V I E D M V V T V T S S G Y V K R T P L D T Y R A Q R R M A M K D E D Y V T T V
 UniRef90_W1SBG0 P S E D I V I V T V T K H G Y I K R T S G R S Y A A S N G Q A M K D S D R L L A Q
 UniRef90_V9TT58 P R E E L V V T V S H A G Y I K R V P L V T Y R A Q K R M S T R E E D V V S Q L
 UniRef90_U2ZBX3 P R E E M V V S V T H G G Y V K R V A L N A Y R T Q H R G G M K D D D A V V G V
 UniRef90_C6XHB2 R E D M V V T V S H L G Y V K R V P L S V Y V A R Q R R G G M R D E D F V T D L
 UniRef90_E4UDV3
 UniRef90_A9BGA4 D E D V V I V L T K W G Y L K A P S S E Y K V Q G R G G I S D E D D V K E V
 UniRef90_UPI00036241D1 P H Q E M V I T I T T Q R G Y V K S M T L D T Y K S Q S G M A T R E A D I L Q H L
 UniRef90_D5E4S4 P V N T I V I T T S V K G Y V K R M K L D D Y N V Q N R M K T Y A D D D I S T I
 UniRef90_Q97BB5
 UniRef90_D2Z564
 UniRef90_UPI000225AD00 A S E D I V L I S V T K E G Y I K R T S I R S Y A A S N D F A I K E D D H L V S L
 UniRef90_P35810 A E E E Q V I T L S K E G Y I R R L P I D T F K A Q N R A G L K D E D N V E Q L
 UniRef90_H0UP1 P E E D I L V T L S K D G F L R R S P L E N Y N L Q N R G G L K D D D E V G Q M
 UniRef90_B1V9B7 Q K E I I I T I T N K G Y I K V T D A E F Y R Q Q K R M K I Y E E D F I E H L
 UniRef90_K1U221
 UniRef90_R7PRJ8
 UniRef90_A7GZV8 P N E N M V V T I T H R G Y I K R V P S K Q Y E K Q K R G G T Y D D D F I E S F
 UniRef90_T0MW66 P L E E E C V L I I L T E K G F L K R I A L E E Y R A Q R R G G K R S E D F P K N I
 UniRef90_UPI000374385A A S E D I V I T V T E Q G Y V K R T S I R S Y T A S S N F T I K E N D H L I S L
 UniRef90_K2FKE9 M G V K E I T D E L Q E
 UniRef90_Q0G042 P R E D M V V T V S H G G Y I K R V P L S V Y R S Q R R G G K N D E D S V T R L
 UniRef90_M1KS07 A S E D V Y V V T V T K D G Y V K R T S Q R S F A A S N G Q G G M K D T D R L I I H Q
 UniRef90_B1X5H0 A N E R S V V V L L T E N G Y L K R M P V S E F E A T N R T K N Q G D E G V K L F
 UniRef90_K5XVH0 Q M V I T L T R D G F I K R T P L E V F R Q Q N R A A T R G D D I V T R S
 UniRef90_D1Y742
 UniRef90_B2IY50 P A E E A I L E F T Q R G Y V R R T Q P S G R K S K A E N G L H D N D F I I Q T
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 UniRef90_S2XV88
 UniRef90_UPI0002E8953B P P E P A I L E F T Q R G Y V R R L A P G S K K A K A E T I T G D N D F I I Q T
 UniRef90_D4TPX8 P Q K E I V I T L S S N N Y I K R I D L E E Y R E Q R R G G T Y Q D D D I Q D V
 UniRef90_B3PN30 P P E E V T L E L T Q R G Y V K R L Q V N G K K P K V D N G L A D N D F V M Q T
 UniRef90_G6FUN9 A S E D I V I T V T K E G Y V K R T S P R S Y A A S Q D F G M K E T D L L L Y Q
 UniRef90_UPI0002D67580 P D E E T I I T I T R D G Y I K R V P I D T Y R P Q R R G G R K E E D K V S Q L
 UniRef90_I9C900 Q E D M V V T V T S G G Y I K R T A L A D F R A Q R R M A T K E E D V V T T L
 UniRef90_X1HJG3 E D V Y V T L S N E G Y I K R T S K L S F T R S E A T G L K E R D Y L R Y L
 UniRef90_A3V610 P E E D V V V T I T R G G Y A K R T R V D E Y R A Q K R A A L R G E D V V R N F
 UniRef90_UPI00035C3EC A D E Q V A V T I S N T G Y I K R T P I S T Y R Q Q R R M K T R E E D F V A Q L
 UniRef90_K1E3E5 P N E E S V I I L S E K G L L K R V S L D E Y K S Q R R T N T R D N D S V K S V
 UniRef90_UPI00047A155A
 UniRef90_1A5N0
 UniRef90_Q6KZ52
 UniRef90_UPI0004719DB8

UniRef90_G7Z4U7
 UniRef90_X1KK03
 UniRef90_W3RG28
 UniRef90_Q9RT53
 UniRef90_G8QYU0
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 UniRef90_K4RHU7
 UniRef90_R5YQB0
 UniRef90_R5QF75
 UniRef90_K7WM65
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 UniRef90_K1MKP7
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 UniRef90_UP100035D39BA
 UniRef90_M7P597
 UniRef90_M4SEK4
 UniRef90_A0A031HLL3
 UniRef90_D3L3I6
 UniRef90_A8LK19
 UniRef90_G7QH10
 UniRef90_UP10003B36B2F
 UniRef90_R6YYC3
 UniRef90_H2J6N9
 UniRef90_A2C3M0
 UniRef90_C5CHA8
 UniRef90_W1JKF4
 UniRef90_UP10003B680B1
 UniRef90_UP10003157C2D
 UniRef90_F7YY04
 UniRef90_A8F431
 UniRef90_UP1000382CBE3
 UniRef90_UP10003764F28
 UniRef90_N6UQK8
 UniRef90_B6BJD8
 UniRef90_F6IPQ1
 UniRef90_R5Q2P1
 UniRef90_P22446
 UniRef90_R6JV81
 UniRef90_UP100037DCB6A
 UniRef90_W1SBG0
 UniRef90_V9TT58
 UniRef90_U2ZBX3
 UniRef90_C6XHB2
 UniRef90_E4UDV3
 UniRef90_A9BGA4
 UniRef90_UP100036241D1
 UniRef90_D5E4S4
 UniRef90_Q97BB5
 UniRef90_D2Z564
 UniRef90_UP1000225AD00
 UniRef90_P35810
 UniRef90_H0UP1
 UniRef90_B1V9B7
 UniRef90_K1U221
 UniRef90_R7PRJ8
 UniRef90_A7GZV8
 UniRef90_T0MW66
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 UniRef90_Q0G042
 UniRef90_M1KS07
 UniRef90_B1X5H0
 UniRef90_K5XVH0
 UniRef90_D1Y742
 UniRef90_B2IY50
 UniRef90_W7YIL2
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 UniRef90_D4TPX8
 UniRef90_B3HNE1
 UniRef90_G6FUN9
 UniRef90_UP10002D67580
 UniRef90_I9C900
 UniRef90_X1HJG3
 UniRef90_A3V610
 UniRef90_UP100035C3ECC
 UniRef90_K1E3E5
 UniRef90_UP100047A155A
 UniRef90_1A5N0
 UniRef90_Q6KZ52
 UniRef90_UP10004719DB8

50 60 70 80

This figure displays a sequence alignment of UniRef90 proteins across 80 positions. The alignment is color-coded to indicate conservation: blue for highly conserved positions and red for more divergent positions. Key positions highlighted include 50, 60, 70, and 80. The sequence starts with F/V/A/N/T/H/T/P/L/L/F/S/N/R/G/M/V/Y/K/L/K/V/Y/R/L/P/L/G/N/P/Q/A/R/G/K/A/F/V/N. The alignment shows a high degree of conservation in the first few positions, followed by a more variable region around position 50, which includes a yellow-highlighted C at position 50. The region around position 60 is also highly conserved. Positions 70 and 80 show some divergence, with a yellow-highlighted C at position 70 and a blue-highlighted P at position 80.

UniRef90_G7Z4U7
UniRef90_X1KK03
UniRef90_W3RG28
UniRef90_Q9RT53
UniRef90_G8QYU0
UniRef90_L8MWI9
UniRef90_UP1000379432B
UniRef90_Q7VFP2
UniRef90_B1WTN4
UniRef90_K4RHU7
UniRef90_R5YQB0
UniRef90_R5QF75
UniRef90_K7WM65
UniRef90_U2RGL1
UniRef90_L0AC50
UniRef90_UP10003792398
UniRef90_J0IBH7
UniRef90_C6HYH3
UniRef90_K1MKP7
UniRef90_UP10000683550
UniRef90_F2I195
UniRef90_UP1000471AC0F
UniRef90_R5XE38
UniRef90_M1XKV1
UniRef90_UP100035D39BA
UniRef90_M7P597
UniRef90_M4SEK4
UniRef90_A0A031HLL3
UniRef90_D3L3I6
UniRef90_A8LK19
UniRef90_G7QH10
UniRef90_UP10003B36B2F
UniRef90_R6YYC3
UniRef90_H2J6N9
UniRef90_A2C3M0
UniRef90_C5CHA8
UniRef90_W1JKF4
UniRef90_UP10003B680B1
UniRef90_UP10003157C2D
UniRef90_F7YV04
UniRef90_A8F431
UniRef90_UP1000382CBE3
UniRef90_UP10003764F28
UniRef90_N6UQK8
UniRef90_B6BJD8
UniRef90_F6IPQ1
UniRef90_R5Q2P1
UniRef90_P22446
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UniRef90_UP100037DCB6A
UniRef90_W1SBG0
UniRef90_V9TT58
UniRef90_U2ZBX3
UniRef90_C6XHB2
UniRef90_E4UDV3
UniRef90_A9BGA4
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UniRef90_D5E4S4
UniRef90_Q97BB5
UniRef90_D2Z564
UniRef90_UP1000225AD00
UniRef90_P35810
UniRef90_H0UP1
UniRef90_B1V9B7
UniRef90_K1U221
UniRef90_R7PRJ8
UniRef90_A7GZV8
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UniRef90_Q0G042
UniRef90_M1KS07
UniRef90_B1X5H0
UniRef90_K5XVH0
UniRef90_D1Y742
UniRef90_B2IY50
UniRef90_W7YIL2
UniRef90_S2XV88
UniRef90_UP10002E8953B
UniRef90_D4TPX8
UniRef90_B3PN30
UniRef90_G6FUN9
UniRef90_UP10002D67580
UniRef90_I9C900
UniRef90_X1HJG3
UniRef90_A3V610
UniRef90_UP100035C3ECC
UniRef90_K1E3E5
UniRef90_UP100047A155A
UniRef90_1A5N0
UniRef90_Q6KZ52
UniRef90_UP10004719DB8

90 100 110 120

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

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

170 180 190 200

UniRef90_G7Z4U7	K C I R F P V D D [V] R V	F A G R T S T G V R G I K L A D G D E V R Y E E L K Q	
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UniRef90_W3RG28	Q C I R F P V T D [V] R V F S G R T S M G V R G I A L A D G D K V I S L S I L H		
UniRef90_Q9RT53	R V F H E K I Y D L P E A G R D A K G T H I R N L L P G A S V L S V S G F D		
UniRef90_G8QYU0	K A Y Y T K V F E I L P E A S K T A K G T S I K N I L Q V D T T E K I T S I I		
UniRef90_L8MWI9	M S I I R F R T D H E Q L R P M G R D T R G V R S M R L T G D D L I V S M D I L I P		
UniRef90_UPI000379432B	K C L R F P V N S L R L F S G L N S G G V K G I K L D K D N S V N F N D L Q E		
UniRef90_Q7VFP2	M C I R F G V E E L R E I G R V S R G V T G I K F K E D C V I A A T T I A N		
UniRef90_B1WTN4	M A I H F Q A D N Q Q L R P L G R A T R G V K A M K L K K G D E L I S M D E T T		
UniRef90_K4RHU7	Q L Y W L K V Y R I P E M G R N A A L V N L I D L Q P G E R I K A T L A T K		
UniRef90_R5YQB0	R M V R F N E K E V R L M G R T A S G V K G I E L D N S Y V I G A E V A D		
UniRef90_R5QF75	K G K V F A K K A Y M P E A G R T A K G T N I V N G E F V T S V I S I D G F G		
UniRef90_K7WM65	R V L E I I E T E I S Q I K T S F A T P R R T V I T H G E G D I D D I D L I A N		
UniRef90_U2RGL1	V A I R F S E E D V R S M G R T A A G V K G I D L R K D D I V V A A A I I D		
UniRef90_L0AC50	M T I R F A E D E V R A M G R T A R G V N G I K L R P D D F V I G A D I R P		
UniRef90_UPI0003792398	Q A A S F K E E V V R S M G R N T A G V R G I K L R P D D F V I G A D I R P		
UniRef90_J0IBH7	M A I R F R A D D A R A M G R N A A G V K G I A L G S G D S V V G V V R C D		
UniRef90_C6HYH3	M S I R F E A D N I R P T G R A T R G V R A I I R L S P D D S V V S F E E V S		
UniRef90_K1MKP7	Y A M A F H E E N V R P M G R T A T G V R G I R R L R K D D Y V V A A D V F N S		
UniRef90_UPI0000683550	Y A L W F D E S E V S I I V G V R A A G V K G M N L K E G D Y V S G Q L I T S		
UniRef90_F2I195	K S L R I N A S K I R I F K G R S S S K G I K G I K L K N N D K V I S L T V L N		
UniRef90_UPI000471AC0F	M A I H V S I N D N Q L R S M G R T A R G V R A M A L R Q G D Q V I G M D Q A E		
UniRef90_R5XE38	M S I C F N E A D A R L I G R T A R G V R A I I R L A Q G D Y V V G F A A Q I		
UniRef90_M1XKV1	M T I R F S G A D A R P M G R S A R G V N G I D L R D G D R V A G L V A A A		
UniRef90_UPI00035D39BA	R A I R F A V G D E L R V F A G R T S T G V R G I R R L G A G D E V I S L S V L R		
UniRef90_M7P597	K S I R L K E N S I R T T N R K S S G V I G M R M D K D E Q V G A A V V C H		
UniRef90_M4SEK4	K A I R F E A T A V R E F Q S R T S T G V R G M T L K E G D E V I R F A E L Q A		
UniRef90_A0A031HLL3	K A I R F A A T D V R E F Q S R T S T G V R G V S L L A E G D E V I R A A P W K		
UniRef90_D3L3I6	Q A L R T S E Q F E F R P M G R Q A R G V R A I R L S E S S D V L V G C E P L Q		
UniRef90_A8LK19	R A I R F R T T D V R V F K G R D S T G V R G V R L A E G D R V V V S M A V I R		
UniRef90_G7QH10	L A L R I E G N I I R A Q G R T A S G V V T G M R L A E D D A I V G L S K Y K		
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UniRef90_R6YYC3	K V C M F K E E E V V R S M G R T A S G V K G M N L E E G G H I V G V A T S L		
UniRef90_H2J6N9	M S L R F R V S D V R P M G R S A A G V R S I K L R E N D E V V N A V M V D		
UniRef90_A2C3M0	M T I H F R L N D S E L R P L G R S A R G V K S M N L K S G D S L V S M D S E S		
UniRef90_C5CHA8	M V I R F P I S Q I V R P M G R T A A G V K A M A L R G D D E V V T I V L P V		
UniRef90_W1JKF4	Q C I R F P V P D V R V F T G R T S T G V R G V S L L A E G D E V I M Q A M A D		
UniRef90_UPI0003B680B1	K A I R F R A T D V R E F Q S R A S T G V R G I T R L S E G D Q V M Y E E L K A		
UniRef90_UPI0003157C2D	K A I R F P G E D V R E F Q S R A S T G V R G I T R L S E G D Q V M Y E E L K A		
UniRef90_F7YY04	M A I R F S M S E V R P M G R A A M G V K G I E L R E N D E V V G M V S I P		
UniRef90_A8F431	K A Y I L K N Y E I E L T G R D T K G K P I L N E E D E S V L T M I S F D		
UniRef90_UPI000382CBE3	K A I R F A A D E V R E F F Q S R N S T G V R G I A L K G D D A V I S L S V L H		
UniRef90_UPI0003764F28	Q C I R F S V P E V R V F A G R N S I G V R G M N L A E G D R L I S M A I L R		
UniRef90_N6UQK8	Q C I R F P V S D V R R H S M G R R A A G V A D D E D I V G D D E R Y M E L S N N		
UniRef90_B6BJD8	Q C I K F D I E K T R E Q G R S T R G V R G I K F K H D E V I D A N I I A N E		
UniRef90_F6IPQ1	K A I R F A G D Q V R E F T S R T S T G V R G M T L K G D D R V R F A E L Q E		
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UniRef90_R6JV81	K C I R F P V T E V R V F V G R S S A A K R I Q A E R G G D C E V Y R E M K E		
UniRef90_UPI00037DCB6A	K A I R F R K A T D V R R F V G R T S S G V R G I R L A E N D E R V I S M A I L R		
UniRef90_W1SBG0	Y S L W F H E E E I S I V G V V R A A G V K G I N L K D S D F V V K I L T L D		
UniRef90_V9TT58	K A I R F R R V K D V R V F H S R T S L G V R G R L K T G K D K V V S M S I L P		
UniRef90_U2ZBX3	R A I R F R K A D D D V R V F K G R D S K H A N A M R R A A G D E D E A T V P D A		
UniRef90_C6XHB2	Q C V R F P I S A I R V F A G R N S V G V R G I S L A K G D Q V I S M A I V L		
UniRef90_E4UDV3	F V Y K E K V R L P I G S P Q S R G K A L I N I L S L Q Q G E R I T T I M P L P		
UniRef90_A9BGA4	M S L M F N S S Q V R T T M G R T A T M G V N S I K L R E G D E V I N V V K V D		
UniRef90_UPI00036241D1	M A A R F S V S D L K Q R S R M A G G V R G I R L D S E D K V V S M D I V I		
UniRef90_D5E4S4	N V V K F S S S N D L R P L G R S S F V G V R G I T L A E G G K V L T A S S D K		
UniRef90_Q97BB5	R V F K I K A Y E I P K K S R T S S A G A F L K L Q Q N E R V T M K A P A D		
UniRef90_D2Z564	R V F A I K G Y I I S E S R T G K G K L I G K Y I I S L E N D E R V V V S M K T R R		
UniRef90_UPI000225AD00	Y G L W Y H E S E V P V G Q R A A G V K A I Q L K D G E F V V G G Q V F D		
UniRef90_P35810	Q A V T F P I S C F R A M G R G T H G V K G I T L A E G D E V I S L L W L K		
UniRef90_H0UP1	K A A H V D E S E F R P M G R A A R G V K A M K L A P D D R I I A A W T V A		
UniRef90_B1V9B7	N A I C Y C D E S Q T R K T S R Q S Q G V I G M D L K K G E F L I G F D P N S		
UniRef90_K1U221	K L Y R L R G Y E I P E A G R T A K G T A I V N L L S D A I I P I Q N F A		
UniRef90_R7PRJ8	R V Y M F D I P E S N N R N S K G S A L I N F I P S T P G E K V T F D V D N A		
UniRef90_A7GZV8	M C L K F K L G V R Q M G R T A R G V T G I K F K E D E V V G A A V I E S		
UniRef90_T0MW66	K A S M F N S E E V R S T G R G S M G V K A M R L K A K D R I I S A F S L P		
UniRef90_UPI000374385A	Y G L W Y H E S E V S I G Q R A A G V K A I Q L K A D E F V V N A V L M Q		
UniRef90_K2FKE9	M V Y K L K T W R L P L A G R T A K G K A M V N I L P I A Q G I S I A A L W		
UniRef90_Q0G042	Q C I R F P T T D V R V F A G R N S V G V R G I S L G K S E T V V S M A I L R		
UniRef90_M1KS07	Y G L W F G E D E V N V F V G A R A A G V K G I N L K D G D T V V V S G Q I L L H		
UniRef90_B1X5H0	M T I H F R I I D E E L R P L G R N A R G V R A M N L R D N D S L V S M A S P A		
UniRef90_K5XVH0	R C I R F Q I S D E T L R F S G R D S T G V R G I R L G K D D E V V M S I C V L R		
UniRef90_D1Y742	R V F A I K G H M V P E T K S G K G R K V E Q F I S L S E G E T V V E I L I L G R F		
UniRef90_B2IY50	R V L R F A T N D E Q L P I M G R T A M G L Q A F R L L K N Q Q M V G C V T V G		
UniRef90_W7YIL2	R A I R F N E S K V R C I G R T G L G V R G I T T K D E V V G M I C V K D I		
UniRef90_S2XV88	N Y I I Y Q P I H E L P D L D G Q H S S I V S L D S N E T I K A I P I E N F D		
UniRef90_UPI0002E8953B	K Y I I Y Q P I H E L P E I R W K D L G Q H V S S M A N E T I K A I P I D N F D		
UniRef90_D4TPX8	R C L R F A I V N D D Q L P V M G R A A M G L Q S F R I L K S Q Q I I S C V T I E		
UniRef90_B3PN30	R I N R F R N V A D V R E M G R V A R G V G G G I R L S D D D K V V V S S S K		
UniRef90_G6FUN9	R L L R F R K V N D E Q L P I M G R T A M G L Q A M R L R Q Q E T M I G A T F D		
UniRef90_UPI0002D67580	Y S L W F S E E E V N I V G V R A A G V K G I N L K E N D Y V V N G C L I S		
UniRef90_I9C900	K V Y R L K V Y R L P E G G P T T R G R P I V N L D K D E T I R T V L A L P		
UniRef90_X1HJG3	L S I I R F H E N N L R S A G R A A G V V R G I R L T G D D K V V V G M T L A R		
UniRef90_A3V610	R A I R F P T T D V R V F K G R D S T G V R G I R L Q G D D K V V V S S M S I I R		
UniRef90_UPI00035C3EC	M S I I R F S E D E V N P M G R A A A G V V R G I Q L K E G D E V V S C E W I S		
UniRef90_K1E3E5	M S V R F H A T D D V L R P M G R S T S G V T G M K F R D G D		
UniRef90_UPI00047A155A	M A L L R F S E F Y D K D R P M G R N A G G N K G I T L K K G D F V I G T A V T P		
UniRef90_1A5N0	K A Y A L R G Y Q I P E G S K Q S K G V P F I N I V E G G E K I I S I I D A G		
UniRef90_Q6KZ52	K A A V F L S D E V P L T S R S S R G V K S M K L N G S Y V I S A F P V K		
UniRef90_UPI0004719DB8	K A Y K I R A H N I P E A S K Q S K G T A F V N D N E K L V S F L D V P D		

210 220 230 240

UniRef90_G7Z4U7	K E Q Y I L T V S D R G Y G K R S S S Y E Y R I A G R G G Q G I W N M E M G E R		
UniRef90_X1KK03	P K A F L L V V T A N G F G K L T P I S G Y P R Q K R A G S G V R T F K L T E K		
UniRef90_W3RG28	H E Q F V L T I S E N G Y G K R T S S F E Y R T T G R G G K G I V A M S V N G R		
UniRef90_Q9RT53	Q P G S F I F A T K S G V I K K S L I T D Y A N I T S A G I A I N L Q P G		
UniRef90_G8QYU0	S F K E F S E D T Y L M M A T R H G V I K K V S L N R N A K T R G I I A L N D E		
UniRef90_L8MWI9	Q G P W V L V V T R G G Y G K R V P V S Q F R I Q K R A G K G I R V T K F K S G		
UniRef90_UPI000379432B	H E E F I L S I T S N G F G K R S S A Y E Y R I S S R G G K G I T G I L T T P K		
UniRef90_Q7VFP2	D T D K L L T V S E R G I G K Q T L A G E Y R L Q S R A G K G V I V M K L T P R		
UniRef90_B1WTN4	E G P W I L A I T N G G Y G K R V P I S Q F R L Q R R A G M G V R A I K F K S K		
UniRef90_K4RHU7	D F S P D K S L V F F T K K G L I K R T N L S A F G R V R G G V R A I V L D E D		
UniRef90_R5YQB0	S S K L L I L V I T E K G Y G K K T E D E Y R L T H R G G K G V K A L N I T D K		
UniRef90_R5QF75	E N E Y F V M V T K Y G V I K R A N V M D F E F M R R G G K L A M N L D E		
UniRef90_K7WM65	E K A I I L V T E Q G Y I K R M P V N T F E S Q S R A T R G K A G A K V K D		
UniRef90_U2RGL1	P K L S V L T V T E E G Y G K R T K L G E Y R V Q S R G G K G I I N L K M N E K		
UniRef90_L0AC50	G D D G L L T V T R N G Y G K R T P I E E Y S T Q S R Y G K G L I D I K T E G R		
UniRef90_UPI0003792398	E G H K V F V I T E K G Y G K R L T P V E D Y E L R N R G G V G V I T L N I T E R		
UniRef90_J0IBH7	Q D D D L L S V T E N G Y G K R T P T A E Y S V Q G R R G G K G R R D I K T T S R		
UniRef90_C6HYH3	D S D D L L L V T T E K G F G K R V D T N L F R L Q K R G G K G V R I A K V T P E		
UniRef90_K1MKP7	A G E E I L V V T E N G Y G K R T A V E E Y S L K N R G G L G V Q T V R L S E K		
UniRef90_UPI0000683550	K D E S I V V A T Q R G A V K K M K L T E F E K A T R A K R G V V I L R E L K A		
UniRef90_F2I195	H E E F I L T T E N G Y G K R S S S Y E F R E S G R G G Q G L I N I I S S E R		
UniRef90_UPI000471AC0F	P A P W V L V A S A H G R G K R V A M E E F P L Q A R A G M G R R A L K F R G S		
UniRef90_R5XE38	D G F K L L T V S E T T G F G R K S E F S D Y R V Q S R G G K G L I N Y R C E Q		
UniRef90_M1XKV1	A D D H L L T V T K N G Y G K R T P L S E Y R R Q S R Y G K G L I D I K T D E R		
UniRef90_UPI00035D39BA	H E E F V L T V T S G G Y G K R T S A Y E Y R V T A R G G Q G V T G M A L T R R		
UniRef90_M7P597	P E Q D I L V V T E F G Y G K K T Q A S F Y K P Q Q R G G K G V K T L K I T D K		
UniRef90_M4SEK4	R E Q F I L T V C A N G Y G K L S S A Y E Y R R T G R G G Q G I T N I D N I A R		
UniRef90_A0A031HLL3	E G E F I L T V T Q N G Y G K R T S A Y E Y R R T N R G G Q G I T N I V S A G R		
UniRef90_D3L3I6	E G M A I L F I S E K G V G K R T S F D E F P L H H R G G S G V R A M R L S S R		
UniRef90_A8LK19	H E D L I L T I T E G G T G K I S S S H D Y P V R G R G G Q G V T A M D K A M R		
UniRef90_G7QH10	E G E D I F V V S E E G Y G K R L G F E E F A A K G R G G K G M A Y L K I T E K		
UniRef90_UPI0003B36B2F	T D E F I M T V C A N G Y G K I S S A Y E Y R R T G R G G Q G I L I N I D N I A R		
UniRef90_R6YYC3	E G E N I L S V S E K G L A K M T N Y K E Y R L T K R G S G K G V I T M R I T E R		
UniRef90_H2J6N9	N E K S L L L I T K Y G F A K R V D F K D F R L L Q N R G G V G L K C V K E T S R		
UniRef90_A2C3M0	E G P W V L V A S G S G L G K R V P M T Q F R L Q K R A G M G L R A I K F R K D		
UniRef90_C5CHA8	D E R Y L F T A T E R G V G K R T P L S E Y R P Q H R A G M G V K N I Y G L E R R		
UniRef90_W1JKF4	Q E Q V L V T V S V N G Y G K R T S S S Y E Y R R T G R G G Q G I V A M S V N N R		
UniRef90_UPI0003B680B1	A E E F V M T V C A N G Y G K R S S S A Y E Y R R T G R G G Q G I T N I D N L K R		
UniRef90_UPI0003157C2D	R E Q F I L T V C A N G Y G K L S S A Y E Y R R T G R G G Q G I T N I D N I A R		
UniRef90_F7YV04	N E N C L T V T T K G F G K R T P V A E Y R L Q N R G G I G Q K T L S E V E K		
UniRef90_A8F431	E W G D L V L V T K S G R L T P L K E F N T T S R G I R A I T F S D S		
UniRef90_UPI000382CBE3	C E E F I L T V C A N G Y G K I S S A Y E Y R R T G R G G Q G I T N I D N V R R		
UniRef90_UPI0003764F28	H E E F V L T L S E F G F G K R S S S Y E F R T S G R G G K G I R A I S R L G D		
UniRef90_N6UQK8	H E Q M L L T V S E K G F G K R S S S Y D F R I I S G R G G K G I R A T D P S K T		
UniRef90_B6BJD8	D E Q E I L I V A E K G I G K R T D A G E Y R L T K R G S G G V I A M K M T S K		
UniRef90_F6IPQ1	R E Q F I L T V C A N G Y G K M S S A Y E Y R R T G R G G Q G I T N I D N I A R		
UniRef90_R5Q2P1	E D E D V M F A T R S G N V R R N K L S D F V D V K A N G K I L A M K L D E		
UniRef90_P22446	N G S L L L S V G Q N G I G K L T S I D K Y R L T K R N A K G V K T L R V T A K		
UniRef90_R6JV81	K E Q F I L S V T S T G Y G K R T S S S Y E Y R R T T G R G G Q G I A N M E M S A R		
UniRef90_UPI00037DCB6A	H E Q Y L L T L A E D G M G M K R S S S Y D Y R C M N R G G Q G V T A Q N L S R K		
UniRef90_W1SBG0	K N E E T I V I A T Q R G A V K R M K L K E F E K A T R A K R G V V I L R E L K S		
UniRef90_V9TT58	C F E H L T V T T K G F G K R T L I N H Y R L T N R G G T G I S N I T L T D K		
UniRef90_U2ZBX3	D D E F I L T V T D T G F G K R S S A Y E Y R R T G R G G Q G L T A H G L G G R		
UniRef90_C6XHB2	H E Q F I L T V S E K G F G K R T S S Y D F R I S N R S G K G R A T D V S K I		
UniRef90_E4UDV3	E D D E Y V V F A T K L G N V R R N K L S D F V Q V N R S G K I A M K L D E		
UniRef90_A9BGA4	E G K K L L L I T E R G Y G K R V S F H S Y K P Q N R G G I G V K T V R D I S R		
UniRef90_UP100036241D1	P G A K L F V V S R K G F G K L T A I E Q Y R K T R R G A K G V K T L K I T D K		
UniRef90_D5E4S4	D G D F I L S I G T K G F G K L T P S E E F R L L K R G G K G V T A I N A D K		
UniRef90_Q97BB5	R G E H L V L V T R N G F V K K T P A D P V F D A K S S G L K I I T L D G		
UniRef90_D2Z564	G Q E F L F F L T T R R G I A K R L P S S E L D N L T R A G R R V V T L D E		
UniRef90_UP1000225AD00	D E P S L V V V T Q R G A C K R M K L R E F E K S S R A K R G L I M R E L K N		
UniRef90_P35810	A G N K I L T I T E K G Y G K R S E P G S Y R V T R R G S K G V R N L N V T D K		
UniRef90_H0UP1	P D E N L L L V S E T G I G K R T K P E E F P I H H R G S G G V Q A M H L G A R		
UniRef90_B1V9B7	K D Q S I L L V M T E K G Y G K I T S V N Q Y R I Q S R N G K G S K T I K I N S K		
UniRef90_K1U221	E G K Y L L M A T K N G L I K K T P L K E Y D S S R K T G L S I T L K D		
UniRef90_R7PRJ8	D L D T A K Y L F M V T K K G F V K K T E T V E Y K N I R Q N G L I A V K L R E		
UniRef90_A7GZV8	N A Q E I L S I S Q K G I G K R T N P E E F Q S H R R G T G G V L C M K Q S K K		
UniRef90_T0MW66	E G N S L L T V S S S N G I G K R T N P E E F Q S H R R G T G G V L C M K Q S K K		
UniRef90_UP1000374385A	E N R H F V T T Q R G A C K R M T I G R F E K S S R A K K G L V M L R E L K S		
UniRef90_K2FKE9	E E D L Q I V F A T S D G D V R Q N D L S D F T N V M R N G K I A M K L P E		
UniRef90_Q0G042	H E E M I L T V S E Y G Y G K R S S S Y E F R T S G R G G K G I R A T D T N R L		
UniRef90_M1K07	E T D S L L V L V T Q R G A I K R M N L S E F E K T S R A K R G V V M L R E L K K		
UniRef90_B1X5H0	A G P W V L V A S A G L G K R V P V N Q F R L Q R R A G M G L R A M R F R R K		
UniRef90_K5XVH0	H E E I L L T V T D S G F G K R S S A Y E Y R V T G R G G Q G V A N I T N A K R		
UniRef90_D1Y742	P D N C V V L V I T T R R G I A K R M D K S E L Q N L T R A G R Q I M T L D D		
UniRef90_B2IY50	K D D H L L L V T Q E G Y A K R M A A S Q L R A A N R G D L G T Q A L K F A S K		
UniRef90_W7YIL2	T Q E D V L V V S E K G F G K R S K I E D Y R I T N R G G K G V K T M K I T D K		
UniRef90_S2XV88	E N R Y I L A V V S K L Q I K R S T L V E Y Q V Q R Y S R A L N T M N L K K		
UniRef90_UP10002E8953B	E D R F I L A V V S K F G Q I K R S T L A E Y Q V Q R Y S R A L N T M N L K K		
UniRef90_D4TPX8	Q E E N L L L V T Q E G Y A K R I S S G S L R A G N R G D L G I Q M L K F H N K		
UniRef90_B3PN30	D G A Y I F S L G A K Y G Y G K L S L V I E S Y R K T K R N A G V I T L N E D K		
UniRef90_G6FUN9	T E E N I L L V T Q L Q G Y A K R L P T S V V R L A N R G D I G T Q T F K F A S K		
UniRef90_UP10002D67580	D D E L V I V A T H R G A I K K M K L K E F D K G T R A K R G L I M L R E L K K		
UniRef90_I9C900	E D E T E W F A T A K G N V R R N A M D A F S N V P S N G K F A M R F D E G D		
UniRef90_X1HJG3	D D C E L L V I A T G K G Y G K R T P L V N Y K K Q G R G G K G I K T M N C N E K		
UniRef90_A3V610	H F E A A E R A A Y L K M R R A M H D Y P V R G R G G M G V A A M D K A M R		
UniRef90_UP100035C3EC	G D E E V V V V S D L G Y A K R S L V A D Y P V Q G R G G K G L F T E F F K E G		
UniRef90_K1E3E5	S A E Y R A K R R D E L A A E K N L A K D L A K V R A E D A A T E A L Q D K E		
UniRef90_UP100047A155A	S F E D D L Y L A T I T K K G I F K K T P L S L F S N V R R N G L L A F K L Q E		
UniRef90_1A5N0	D D D T I L S I T E N G L G K R T R A T E F P P E H H R G S S G V Y L F K E N E K		
UniRef90_Q6KZ52	Y G K N L Y L T T V T K K G I K K T N L D S F V N I R R N G L K A F R L L E		
UniRef90_UP10004719DB8			

250 260 270 280

UniRef90_G7Z4U7	N G S I V A A F P V E S N H Q V M M V T N G G Q V I R M P L H D V R V A G R K T
UniRef90_X1KK03	T D E V V A A K L T S L S Q Q V M I I S A D G I V I R T P A K E I T I Q G R S T
UniRef90_W3RG28	N G K L V A S F P V E E S D Q I V M L V T D A G Q L I R C P V D G I R I A G R S T
UniRef90_Q9RT53	D E E L I G V D I Q Q D G D D V V L A T K N G Q A M R F E A T L V R D T G R A T
UniRef90_G8QYU0	G D E L L Q C E F F V Q E G D E V M L I T K N G Q G L R F S Q S D V R A M G R A S
UniRef90_L8MWI9	Q D Q L A S L C L V D E Q N E L M I V T S R G I V M R Q S T D A I A C Q S R T A
UniRef90_UPI000379432B	N G K V V D S F I V E K N D Q I I L V S D K G Q L I R V S I N Q R I A G R S T
UniRef90_Q7VFP2	T G K L V V S V V N I N D E E N D L M V L T S S G K M I R V D T E A I R K A G R N T
UniRef90_B1WTN4	T D C L A S L H V V N A E D E L F M A S S K G L C I R F G I V E E V R Q I G R V A
UniRef90_K4RHU7	D A L V T A Q I L S S N T Q E L I I T T N S G I V I R L D V N K I S T L K R N T
UniRef90_R5YQB0	N G L I V A F K S V V G D E D I I I A T R E G K A V R F N E N E A R V M G R T A
UniRef90_E5QF75	G D E L L Y V R K T A G E S D I I I I T T N S G I V I R L D V N K I S T L K R N T
UniRef90_U2RGL1	D D T I E H F L T C C D H D S I L F F S D R G V V Y C L R A Y Q I P V S S R T S
UniRef90_L0AC50	T G K I V D V K I V D N E T E V M L I T S E G T L I R T R V D S I S V I G R S T
UniRef90_UPI0003792398	N G P V T A I K A V S E D D H L V L M S E D G Q V R T R V D E V S T V G R N T
UniRef90_J0BH7	N G H L M G L A T I K G D E D I M V I T D S G I L I R F R A S D V V S T T G R N T
UniRef90_C6HYH3	N G R V V T I K R V E P G D G L V C I T S S G G M I V R I A S D D D V R Q T H R D S
UniRef90_K1MKP7	T G A V V V A I L K V T E R D D I D V V T D T G R V I R I P S E E I R K V G R G A
UniRef90_UP10000683550	S G Y L T G L V S T D G S E D I M I M T D T G V V I R F D I N D I S Q T S R V T
UniRef90_F2I195	N P H R I S G F V V Q D S D T I Y L Q T E K S F I E T I K V G D I R F S D R Y S
UniRef90_UPI000471AC0F	N G N I A A S Y S V K N D D D I M L I T N K G Q M I R C A V S D I R L T G R N T
UniRef90_R5XE38	G D A L I S L R I L G E A D D E V L L V S E Q G V I V R L Q T D R I S Q Q S R A A
UniRef90_M1XKV1	F G K V V A M I A P V S D D D N D V I M I T S D G I V I R T H A D Q V S T F L R P S
UniRef90_UP100035D39BA	N G P V C S I N A V S E G D G L V I M S E S G Q I M R T H V G E V S T V G R N T
UniRef90_M7P597	N G S V V A S F P V R D G D A L M V T D A G R T I R P V D D I R L A G R A T
UniRef90_M4SEK4	K G H L V A L K T I F P N E E E L I I I S Q C G Q V I R I E A N K V S T T S K N T
UniRef90_A0A031HLL3	N G P V V A S F P A L T S E Q L M L V T D Q A K M I R L G L D T L R V I G R G S
UniRef90_D3L3I6	N G P V V A S F P A H S G E Q L M L V T D Q A K L I R M S V G D T R V I G R G S
UniRef90_A8LK19	T G S L V G A W S V T E D D E D V M I V T S K G R V T R I A V R N V P V L S R T A
UniRef90_G7QH10	G G P L V A C F P V E I D D Q I M L A T S T G Q S I R C P V D G I S F R S R A A
UniRef90_UP10003B36B2F	N G F S V G T G S V G S S E D E I I I I T Q Q G M T I R I I N A F D I S K L G R T A
UniRef90_R6YYC3	N G D V V A S F P V V A Q G Q L M L V T N Q A K M I R L G L T M R V I G R N S S
UniRef90_H2J6N9	T G A L I A I K T V K G D E S L L I I S T D G G T I M K T E I K Q I S V L L G R N S
UniRef90_A2C3M0	I G D I V K A L A V T D D E S H V I I V F T K L G K A I R E E V I S S I L S R Y A
UniRef90_C5CHA8	G D E L V G L R V L G K G E E E L L L V I S E R G V I V R T S A D K I S Q Q S R A A
UniRef90_W1JKF4	T G Y V V G S L V V T N E D E I I I I V T K N G M S I R I P A A D I R P T G R V T
UniRef90_UP10003B680B1	N G N L V A S F P V E D A D D Q I M L V T D K G Q L I R C P V E G I R I A G R S T
UniRef90_UP10003157C2D	N G P V V A S F P A H N G E Q L M L V T D Q A K L I R M S V G D T R V I G R N S
UniRef90_F7YV04	N G P V V A S F P A T K G H Q L M L V T D Q A K M I R M S L V G D I R V I G R N S
UniRef90_A8F431	V G T L A G V D V V T D P Q E V V L L M T K N G Q S I R L S V S A I S V L G R T A
UniRef90_UP1000382CBE3	D V V V V S A T L S S S E S D Q I M L V T D Q A K M I R F P L V D K D V R Q M G R S A S
UniRef90_UP10003764F28	N G P V V A S F P A T K A D Q I M L V T D Q A K M I R M P L T S L R I I G R G S
UniRef90_N6UQK8	I G R L V A A F P V E A G D Q I L L I I S D R G Q M I R V P V E G I R I A G R A T
UniRef90_B6BJD8	A G K L V A A F P V E A Q D Q I M L V S D K G Q L I R V P V N G I R I S G R S T
UniRef90_F6IPQ1	T G K Y V Y G C L M V D E S M D M A M A L T K A G K M I R V D M Q T I S K S S R N T
UniRef90_R5Q2P1	N G P V V A S F P A S Q A E Q L M L V T D Q A K L I R L P L E T M R V I G R N S
UniRef90_P22446	G D T L I D V K I C T D D D Q D I L L L A A K G G K S I R F P V S E V R V S G R T S
UniRef90_R6JV81	T G P V V T T T T V F G N E D L L M I I S S A G K I V R I S L E Q L S E Q R K N T
UniRef90_UP100037DCB6A	N K E I I V S S F P I E D D D N Q I M M V V T D G G Q L I R C P I L R P V K D I R I V S R S S
UniRef90_W1SBG0	D D G R L V R S F S I E D D D N Q I M M V V T D G G Q L I R C P I L R P V K D I R I V S R S S
UniRef90_V9TT58	N P H R I M G F V V A N D D E D V F I Q T D K G H L E T L K T A E I H F S D R Y S
UniRef90_U2ZBX3	K G L V A G S F P V R E K D Q I M A V T D R G Q I R C P I S D L R E T R R Q T
UniRef90_C6XHB2	A G R L T A A F P V E D S D E L L M V T S R Q M I R T R V D Q V R I V G R S S
UniRef90_E4UDV3	N G A L V I A V F P V E D D D N Q I M L V I S D K G T L I R V P V N E I V R I A S R A T
UniRef90_A9BGA4	G D E I I L S V E T C M E G N D V I I I I T F T K K G K A I R R V N V I N V L G R I T
UniRef90_UP100036241D1	I G P I V A T M S V E D E G R D I I I I T F T K K G K A I R R V N V I N V L G R I T
UniRef90_D5E4S4	T G P V V A A A H L V L D A P E V M I V T E Q G I I E R L K M S E V P V K G R I T
UniRef90_Q97BB5	A G D L I F A K F V K P N D E A L I I I I T A A G T T I R I L I S Q I V S V T S R A T
UniRef90_D2Z564	D D E L I V S A S T I D T D T N M F V L I I I I S S D K G Q V I R T R V D E F R P M G R S A S
UniRef90_UP1000225AD00	G D E I I A Q I I L P T S G M D D I I I I T F T K K G K A I R R V N V I N V L G R I T
UniRef90_P35810	K H R I V G F A T Y E N D T I T I T S T S K G E T V K V Y P L E P N S D R Y S
UniRef90_H0UP1	I G A A V F V E S V A D D D Y D I I I I T S K D G Q V I R I K A A D I R L T G R N A
UniRef90_B1V9B7	T G R L I A A L K T A A S S Q D I I I I S S D K G Q V I R V S I S D I K N T K K A T
UniRef90_K1U221	T D E L I D V R L T D G E D N I I V L V T S K G M C T F D E K D V R P V G R A T
UniRef90_R7PRJ8	D D E L I D V R L T D G E D N I I V L V T S K G M C T F D E K D V R P V G R A T
UniRef90_A7GZV8	G D S L V T V T V H H V A G G E K V F L A T T K D G M G M C Y C P E S D V R A M G R A T
UniRef90_T0MW66	T G E L I I G V V M V V D D E M D L M A L T S S G K M I R V D M Q S I R K A G R N T
UniRef90_UP1000374385A	T G P I I A V A L P V K E G E D I I I I M T R N E M T I R I V N S K I K L Q S R V T
UniRef90_K2FKE9	K H R I V G F D I V D S E D V I T L V T A K D E I H E V K P M E L P I S D R Y S
UniRef90_Q0G042	G V S L V N A A I A D E N D D Q I M L V T A L G R A I R F P T T E I R V K S R G S
UniRef90_M1KS07	D G A L V A G F P V E N E D Q I L L V T D R G Q V I R V P V D G I G M K G R A T S
UniRef90_B1X5H0	N H R A V V G V F A C A L A D M I A A E T E K G E R I E I A V K S I R A N D R Y S
UniRef90_K5XVH0	G D V L V G L K V L G S R E E L L L V T S E K G V I V R M Q A D I P Q Q S R A A
UniRef90_D1Y742	N G T A V A A S F V R P G D D V I M L V T N G G R L I R V P A D Q V R L T G R T A
UniRef90_B2IY50	G D D I I A R I R C T N G L D D L F L V S A M G R G L R I S E D E I R T M G R S A
UniRef90_W7YIL2	T D N L I A G M V I A I A S G E V I V A L V T N K E R V V R I P V E T V P I L G R D V
UniRef90_S2XV88	T G E L I I S I K N V T D D N D L M I I I N K S G I T I R L A L S E L R T P G
UniRef90_UP10002E8953B	G D Q V V M Y I I D L V T E D F V I I V T H S A Y A V R F N M Q E E V P V T G V K T
UniRef90_D4TPX8	G D E V I I H I D L V T Q S D D V I I V T H S A Y A V R F N M Q E E V T V T G V K T
UniRef90_B3PN30	T D N L I A G M V I A I A S G E V I V A L V T N K E R V V R I P V E T V P I L G R D V
UniRef90_G6FUN9	A G K L V I Y A A A V H G V E D L I I I M T Q S G I A I R I S L R D I V N V I G R N A
UniRef90_UP10002D67580	T D Y D I A G M V L A K P G S E V A L V T N H Q R V V R L Q V D T V T N S A K D T
UniRef90_I9C900	D H R I V G M T I I G K E T E E I L L F T S R G H V E K V G L S T L S Y S S D R Y S
UniRef90_X1HJG3	D D Y D L V G V A L L E P S D D V L L A S R Q G K A I R F A G D D V V R F T S R T S
UniRef90_A3V610	T G K I I G G P L V T S F P V E M S D Q I M L V T S T G Q S I R V P V E G I S F R S R S A
UniRef90_UP100035C3EC	K S A L L K A F V V K E P F D L T L V L A S G D K A S F S T E Q T P I D E R K S
UniRef90_K1E3E5	UniRef90_UP100047A155A D D K V K A A R K A L E S D E I L S V T E N G F G K R T N V E E Y R L T N R G G
UniRef90_1A5N0	G D Q L V R A F V A A E G D N I I L V A N N Y K N I A L F N I D V R A L G R T A
UniRef90_Q6KZ52	T G K L V M A L P V K D D D E I I I V T K N D Q T I R I K S S D I S L L S R F A
UniRef90_UP10004719DB8	N D E L V K A F I V S D E D E I L I A N N E K N I V K F K A N S L R Q V G R N S

290 300

UniRef90_G7Z4U7	L G V T L F R V G A D E R V V S V A T I A E
UniRef90_X1KK03	Q G V K L M K L A E G D R V V A I A A
UniRef90_W3RG28	Q G V V F D T A E G E R V V S V E H P
UniRef90_Q9RT53	Q G V G I R L R E G D E V V S M A L V P
UniRef90_G8QYU0	H G V R G I R L L G K D E V A G L L K V P
UniRef90_L8MWI9	R G V R L Q R L D A S D A I V G A T L V P
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UniRef90_K4RHU7	R G V I G M R L R A G D E V I G
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UniRef90_M1XKV1	K G V V V M R L D D D D R V A G V D V V P D
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UniRef90_A0A031HLL3	Q G V T L F S V A K D E H V V S A A R I
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UniRef90_G7QH10	V G V R I V D L K D N D K V Q D F T V L G E
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 K G E S I C Q L N R D E R I I S V V E V E

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

□ K K K Y A E E R R T E □ Q G E □ E E □ K □ D □ A

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

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

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

170 180 190 200

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

210 220 230 240

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

T | G | K | F

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

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R G S	
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Q G R S I F D L M R S E K V I R V	
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I M K N G K V K R I S D R V K S Y D Y I
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UniRef90_M7MSK4

50 60 70 80

This figure displays a sequence alignment of protein variants from UniRef90, focusing on positions 50, 60, 70, and 80. The alignment is organized into four columns: 50, 60, 70, and 80. Rows represent individual UniRef90 entries. A vertical scale bar on the left indicates the position of each entry. Yellow boxes highlight specific mutations at positions 50, 60, 70, and 80 across the sequences. The alignment shows how these mutations vary between different species and entries, providing insights into protein evolution and function.

90 100 110 120

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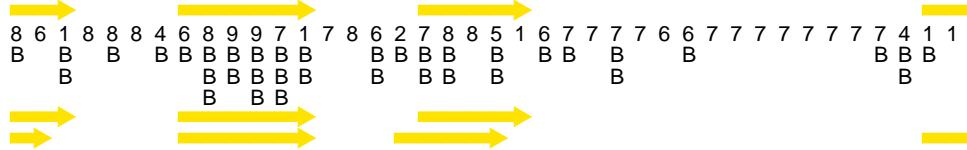
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V P T S A R G E I G A V T S T G R M I R V P V V D M P Q V E V T S Q G V I K V A D	D S N G R S Y S T P A H T L P S A R G N G E P L T T	A K G K T V Q N V A F I D S N G R S Y S T P A H T L P S A R S Q G E P L T T	R G K S N Q P V V F M D S S G R S F A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

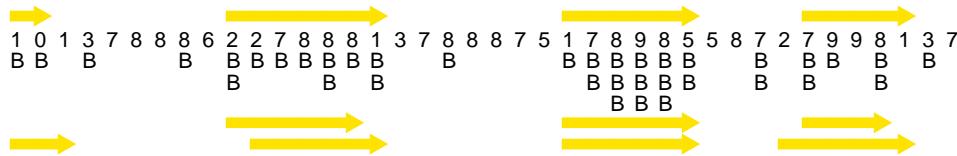
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A D Y	L A L S N R Q E K I L A L V S L E S E R A I A L G T R E G I V K R V T P G			
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R L Q	S A P E V R F V S V L A V E	A D K T I L L T N T A G Y G F V T T L E		
Y V D	L P K G E E P V T I V P I G D A P V F A V G T A A G V	[] V K R V T		
R L Q	S A P E V R F I A V I A A E N D Q M	V L L S N T A G Y G F V T R F D		
Y V G	L T D R S E Q V L A L V A S D S S I P	L A L G T A Q G V V K R L S V G		
L I E	L D A G T H V T H F F A G P V G A S	V L L A N T G G Y G F I A T V E		
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L L H	N S D D E E V I T I L P L P S P N D T K I K L L A T R K G [] V K R W N G D			
S V D	G Q A E Q V V D V L V V P P A D Q D F S V G I L L S S D G R F K R L A G Q			
Y I P	L D K E D E I [] I N U E F A N V A E H F I I A S T S S G K G F V I P A E			
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K D H F	G L K G K I I F A K T L H F E F N Y L I F L T N K N S I K K T K K E			
Y L S	L A D N E K I I D S F K F D S E S E I F I Y T K S G Y G F I A L E K			
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L I S I	G E K S E R E C D Y G Y V S D G N D K F L F L V T E K G K V K K L K A N			
V V H	C S K S I T G M A K F E E S K K Y L I V C S E N G K M K I I N N D			
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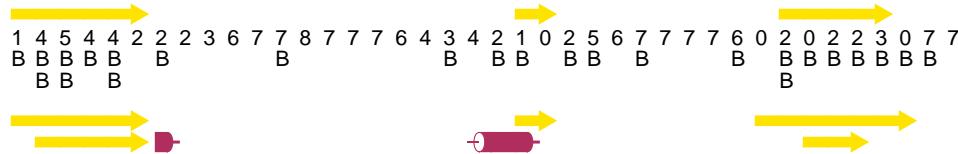
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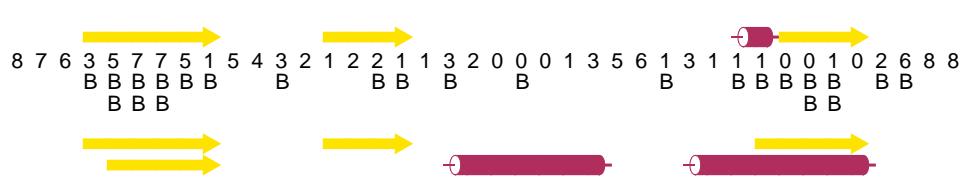
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Sequence alignment of UniRef90 proteins. The alignment shows conservation of amino acids across various species. Colored boxes indicate conserved residues: blue for Phe, red for Tyr, yellow for Cys, and black for other residues.

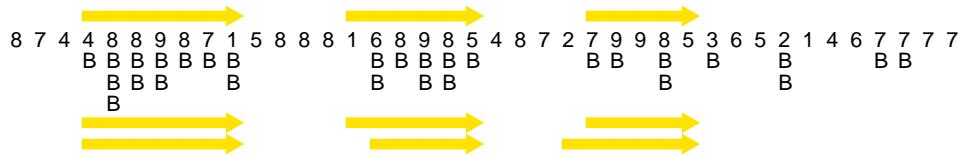
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