

QUERY	1	10	20	30	40
UniRef90_W0LMV0	Y T T F E Y S D	L N V S F D G E T L R V Q Y R I E N T G G R A G K E V S Q V Y I			
UniRef90_H9UAN7	Y T T F E Y S D A S V S A D D D G L T V R V T V T N T G E R A G A E V V V I Q V Y T				
UniRef90_K0UVY1	Y T T F E Y S D N L K L H R D G G D I V V T F E V K N T G N M V G K E V A Q I V Y V				
UniRef90_UP1000374EBD2	Y T T F E Y S D L S V V S S V D A G L T V A V T I T N T G G R A G R E V V V Q A Y V				
UniRef90_C6WQK8	Y T S F E H R D L T V S A S E A G I T A S V A V I T N T G E R A G R E V V V Q F Y V				
UniRef90_D6UOC0	Y T S F A Y G P L K A S A A N A S L Q V S L D I T N T G K R A G K E I V Q L Y V				
UniRef90_D7B174	Y T S F A Y S D L E L E Q D G A G I T A H L T V T N T G D R S G R E V V V Q F Y V				
UniRef90_F8PPC9	Y T T F E Y S G V E T S A E D G H F S V S F T V K N T G S V T G R E A A Q V Y I				
UniRef90_W8EWV2	Y T S F E Y G R L A V K P T S Q G A T A T L T V R N T G K V A G A E V V V Q L Y V				
UniRef90_R5EDQ7	Y T T F A Y S N L R L N A S E D T L T A T V V T V T N T G S R F G K T V V V Q L Y V				
UniRef90_UP10003B49F7	Y T T F E Y S G L E V E A A G P G L V V R V T V T N T G S R A G R E V V V Q V Y T				
UniRef90_UP100044175E3	Y T T F E Y S D L S T T A S E G A F S V S F T V K N T G A V D G R E A A Q V Y I				
UniRef90_E6UA77	Y T N F S Y S D L V I S A D D Q T L T V S C N I T N T G N R T G M E T V Q L Y V				
UniRef90_UP100042A699B	Y T S F G Y A G L E V A A S E S G L S V S L D V Q N T G S R T G R D V V V Q L Y V				
UniRef90_W4DZG4	Y T T F E Y S D L K A G P A G V T V T V T N T G S R S G K E T V Q L Y V				
UniRef90_R6Q0H4	Y T T F E Y S D L K A C S D L K I S T D K D T I T V S V D V T N T G S V A G A E I V V Q L Y V				
UniRef90_D4LM72	Y T T F E Y S D L K L I S K D T D D S V E I S F K I K N T G S I D G A E V A Q V Y I				
UniRef90_R7K9E6	Y T T F E Y S D L K L I S K D T D D S V E I S F K I K N T G S I D G A E V A Q V Y I				
UniRef90_D9TTJ4	Y T T F E Y T D I S T N K E E E T V R V K V K V N T G K R A G K E I I I Q L Y V				
UniRef90_UP10003B3EC41	Y T T F E Y S D L K L I S K D S E E G V D V S V T V Q V N T G S M A G K E I V V Q L Y V				
UniRef90_C6CV03	Y T S F A Y S G L L L S R D T D T L E V Q V N T G S M A G K E I V V Q L Y V				
UniRef90_UP10003475205	Y T S F T Y S D L E V S P E G K A W T V A F T V T N T G E R A G Q E E V A Q L Y T				
UniRef90_B5YC96	Y T T F E Y S D L K L I S K D D E E V L K V S V K V K N T G K V K G K E I V V Q L Y V				
UniRef90_A3XMX1	Y T T F E Y A D L K L I S K D T D E E V L E V Q V N T G A V V A G K E E V V Q V Y V				
UniRef90_UP1000368D1C7	Y T T F S Y G D A S A S V T A G D I E V R V T V T N T G E R S G R E V V V Q V Y T				
UniRef90_K7A2G4	Y T T F A Y G D L S I D A T N G T V S A S F T L T N S G E V D G E E V A Q L Y I				
UniRef90_L0EHB0	Y T T F E Y T E I S L V D K D R E T L R V C N I K V K N T G N R A G K E V V V Q L Y V				
UniRef90_D7B9W1	Y T T F E Y R D L R V S V S K D T E G L T I S L E V S N T G Q V A G Q E T V Q V Y V				
UniRef90_E8WZI6	Y T T F Q Y S D L K V H K G D E M A T V S L T V K N T G A R K G A E V A Q L Y V				
UniRef90_K5CIY6	Y T T F E Y S D L K I S P A N Q K T Y V T C K V T T N T G K R A G D E V V V Q L Y V				
UniRef90_F4H1R5	Y T T F R Y G D V T A E V T G E G A D R V D V T N T G G R P G A E V V V Q V Y V				
UniRef90_A0A022KTM4	Y T T F E L G D D L A V T S G A D G L D V T V T N T G E R A G R A V V V Q A Y V				
UniRef90_D6RVX0	Y T T F A Y S N L S V D K D T E T L K V C N I K V K N T G E R A G K E I V Q L Y V				
UniRef90_D6Y414	Y T T F R Y Q G L R V A E K G D A Y E V S V R V T N T G H R A G D E V V V Q V Y T				
UniRef90_C1F4B5	Y T S F Q Y S H L Q V S P E T A I Q V A F D V T N T G D R A G A D V A Q V Y V				
UniRef90_R5MMF3	Y T T F S Y S D L N V L N G N T Y D V T F T V T N T G K G C K G K E V A E V Y V				
UniRef90_UP100046F1A0D	Y T T F A Y S N L K V Y P D D D G K V T V S V D V K N T G K R D Q D V V V Q L Y L				
UniRef90_UP100046243B8	Y T T F A F S D L K V V A A D H F A V Q V E L T V T N T G S R A G S E V V V Q L Y V				
UniRef90_UP10004664435	Y T T F E Y T D L N V T S D A K G A Q V F T F N V T N T G D V V A G Q A V P Q L Y V				
UniRef90_D9WY02	Y T S F S Y G G L T A R A E E G S S V H V S F T V T N T G D V M A D E V A Q L Y T				
UniRef90_T5L4C2	Y T T F E Y G R A T A D V A D G D I V V R V D V T N T G D R D G R E V V V Q V Y V				
UniRef90_R9JW35	Y T S F S Y S D H L D K D T D I L M V N C K I K N T G S V A G R E A V V Q L Y V				
UniRef90_D5EXY0	Y T T F A Y S D A K I V E N G D A Y E V S V T V K N T G K H E G K E V V E L Y I				
UniRef90_D6Y408	Y T G F A Y S G L T L S A T E D T L T I A V T V R N T G P R V G E E V V V Q F Y T				
UniRef90_R5SX19	Y T T F A Y S D L E V T P T Q G D Y T V R L K V T N T G K R A G D E V V V Q L Y V				
UniRef90_UP100047D5E46	Y T T F E Y S D L F V N A E G A S F T I T N T G K V V D G A E I A Q L Y V				
UniRef90_R6R9V1	Y T T F E Y S D L Q L S K D T D T D T L T V S L K V K N T G N M A G K E I V V Q L Y V				
UniRef90_W0ZC23	Y T T F E T G D L R V E T T G D T A V T V S V L T V T N T G K A V V A G K H V V V Q L Y V				
UniRef90_UP10002487B6B	Y T T F A Y S E A Q P D D D G D G L T V S L T V T N T G K R A G R E V V V Q A Y V				
UniRef90_UP1000374AEDD	Y T T F T Y S G L R V T P P E E D G F A V A V T V A N T G S R T G R E T V Q V Y S				
UniRef90_A8LG10	Y T T F A Y S D L A V D P A R P E A R V E V V V T N T G R R E A A E V V V Q L Y I				
UniRef90_H8KSS6	Y T T F E Y G K V T A D K A D D K I T F T V N V K N T G T R E G S E V V V Q L Y I				
UniRef90_I3YLS6	Y T R F E Y S D L T L S S D S S G R I D V S V K I S N T G K V V A G K E V V V Q L Y I				
UniRef90_G2Z0K4	Y T T F E Y S D L K L S T T N D R I L M V Q A T I K N T G K Y A G T E I V V Q L Y I				
UniRef90_UP100037278AF	Y T T F G Y D G M S V R E D G D G F R V A L T V T N T G S R A G R E I V V Q V Y G				
UniRef90_V9LTQ1	Y T T F E Y S A P R V A K D N E E D V H A E V T V T N T G K V V A G S E V V V Q L Y V				
UniRef90_D4ZML4	Y T Q F K Y S D I T L S S T D D E I R V T V K V T N T G K R E G S E V V V Q L Y L				
UniRef90_I2JR13	Y T T F K F D N L S V S G D N N D V T V S F T V K N T G D Y T A K E V A Q L Y I				
UniRef90_W0ERQ9	Y T T F E Y G K V S S L D T A A D T L R V R L T V K N R G S R A G A E V V V Q L Y V				
UniRef90_H5TIV7	Y T D F D Y R D L S V T A S T E G L T V E V T I A N V G K V V D G R E V V V Q V Y S				
UniRef90_UP1000368D45A	Y T Q F A L T D I H L S K A C E Q G I T V T A M V K N T G K V V A G A E E V V V Q L Y L				
UniRef90_A5FJM5	Y T Q F S Y S D L K L S K S N E T I K V S F K L S N V G K V V A G E E V A Q L Y L				
UniRef90_F0ICT6	Y T T F D Y D K P A V A D D K G N A L E V S V K V T N T G K A S G K E V V V Q V Y V				
UniRef90_A0QVF5	Y T A F A F S D L L E V D S D S G P T V R V V A N V G P R A G R E V V V Q V Y V				
UniRef90_J9E3P0	Y T T F A Y R S N L K L S R D D A V L E V N V E I N T G E R L G K E V V V Q L Y V				
UniRef90_F5LGA8	Y T T F A Y S N L K A V Q N G G T V K V T F S V E N T G A M Y G K E V V V Q L Y V				
UniRef90_UP10004412DC4	Y T T F S F S H L A L S T T D F E L E V S V T V T N T G A V V V G S A V I Q V Y I				
UniRef90_UP100036A9A2E	Y T T F E Y S N L L N L T P T D G A V Q L S C D I T N T G Q Q D G E E V V V Q V Y V				
UniRef90_T1W5G1	Y T T F E Y S N L T V P S D G M V D V S V Q I T N T G D R D G E E V V V Q L Y V				
UniRef90_R7DFZ7	Y T T F E Y S N L K V S P E K G D I Q V S F D I T N T G K R A G D E I V V Q L Y V				
UniRef90_UP100035F7D92	Y T T F A Y S D I D L S A Q D G E V V N V S F S V T N T G T V V A G E E V A Q L Y I				
UniRef90_M3DFL8	Y S F S F S Y R E L T A D A T D S E V R V S F S V T N T G A V V A G E E V A Q L Y I				
UniRef90_E1WQP8	Y T T F A Y S D I H L S S T D D G E I T A T V T V T N T G S R D G A E V V V Q L Y I				
UniRef90_UP10003FD6709	Y T T F E F E D L K L A T D K G E I A V S F S K V K N I G G R K G V A I P Q L Y I				
UniRef90_UP100041F2667	Y T T F K Y S D L K V T E D G V S F S T V T N T G K R D G A E I A Q L Y I				
UniRef90_R9IM8S	Y T T F R Y S N L K L S E K K A V F D L T N T G D R D G A E V V A Q L Y I				
UniRef90_M9VDK1	Y T T F E Y S D I C L D L A Q D E T V L T V S F T V K N T G D R A G A T V P Q V Y L				
UniRef90_R6Q5Y2	Y T T F E Y S D I H L Q V D K D K D T V E V S V K V K N T G D R A G K T V V V Q L Y V				
UniRef90_R5FGE8	Y T T F E Y S D L K I N H E G E K V C L V K N T G A V V F G K E A V V Q I Y V				
UniRef90_C9Z820	Y T S F A Y D A L T L S A T D G A V D I S C L V R N T G D R P G T E V V V Q L Y T				
UniRef90_E6MQQ4	Y T T F E Y H G M T V K R N G N K L V V S V N V T G S V A G K E V A Q V Y V				
UniRef90_UP100035D149E	Y A S F S Y A D L A V R I E E G T A R V S C T V T N T G D L T A D E V A Q L Y T				
UniRef90_E6SVM4	Y T K F V Y S A L E M R K G T D V Q T V S C T V T N T G D R D G E E V V V Q L Y I				
UniRef90_R6CFU5	Y T T F E Y G N P K V K T E N G I Y T V T V D V K N T G T Q P G K E I V V Q V Y I				
UniRef90_Q6C391	Y T S F E L S N L S V S K K D D T V T V T V N V T G S K T G A E I V V Q V Y V				
UniRef90_M3FPC3	Y A E F A Y G N L T A R L G D G D L T I S F T V T N T G T V T A D E V A Q L Y V				
UniRef90_W4AN65	Y T Q Y E Y T D L K L S Q D T D R L S V T A K I R N I G R M A G K E V V V Q L Y V				
UniRef90_S3JXM4	W T S F S Y S P I T L R G K D G E I T L S V T V T N T G E R S G S E V V V Q L Y V				
UniRef90_R6SSN5	Y G D F E Y S D L S V V P S G D G V D V K F T L T H G K M A A A E V A Q V Y V				
UniRef90_UP10004154DCA	Y S E F T Y S A L T A E R A G D L V R V R S L T V T N T G A V V A S D E V A Q L Y V				
UniRef90_F8WWC3	Y T T F E Y S N I T L S A S D G T L T V K A T L K N T G S V V D G T E V A Q L Y V				

QUERY

UniRef90\_W0LMV0

UniRef90\_H9UAN7

UniRef90\_KOUVY1

UniRef90\_UPI000374EBD2

UniRef90\_C6WQK8

UniRef90\_D6UC0

UniRef90\_D7B174

UniRef90\_F8PPC9

UniRef90\_W8EWV2

UniRef90\_R5EDQ7

UniRef90\_UPI0003B496F7

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UniRef90\_D4LM72

UniRef90\_R7K9E6

UniRef90\_D9TTJ4

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UniRef90\_B5YC96

UniRef90\_A3XMX1

UniRef90\_UPI000368D1C7

UniRef90\_K7A2G4

UniRef90\_L0EHB0

UniRef90\_D7B9W1

UniRef90\_E8WZI6

UniRef90\_K5CIY6

UniRef90\_F4H1R5

UniRef90\_A0A022KTM4

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UniRef90\_UPI0004664435

UniRef90\_D9WY02

UniRef90\_T5L4C2

UniRef90\_R9JW35

UniRef90\_D5EXY0

UniRef90\_D6Y408

UniRef90\_R5SX19

UniRef90\_UPI00047D5E46

UniRef90\_R6R9V1

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UniRef90\_UPI0002487B6B

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UniRef90\_UPI000368D45A

UniRef90\_A5FJM5

UniRef90\_F0ICT6

UniRef90\_A0QVF5

UniRef90\_J9E3P0

UniRef90\_F5LGA8

UniRef90\_UPI0004412DC4

UniRef90\_UPI00036A9A2E

UniRef90\_T1W5G1

UniRef90\_R7DFZ7

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UniRef90\_R6Q5Y2

UniRef90\_R5FGE8

UniRef90\_C9Z820

UniRef90\_E6MQQ4

UniRef90\_UPI00035D149E

UniRef90\_E6SVM4

UniRef90\_R6CFU5

UniRef90\_Q6C391

UniRef90\_M3FPC3

UniRef90\_W4AN65

UniRef90\_S3JXM4

UniRef90\_R6SSN5

UniRef90\_UPI000415DCA

UniRef90\_F8WWC3

	50	60	70	80
K A P K G K	I D K P F Q E L	K A F H K T R L L	N P G E S E E V	I P V R D L
S L P G S A	V V R A P R E E L	K A F A K V A L	A A G E S R E V	E V H V
R A P K G K I	D K P Y Q E L	K G F E K T K L L	E P G E T Q K M	R R G D L L
G M P G S K	V G R P V R W L	A G F A S V T V	P Q G Q R C T V	P V S S L
A V E G S A V	V V R V P R E E L	K A F A A V R	G P G E S Q R V	E I P I
S V P G S S V	T T R P V R E E L	K G F A S L D	E P G A E G R V	R A A D L L
R D I K A S L H	R P E K E L L	K A F A K V A	N P G E T Q T V	G R E A L L
A K P D S A V	S R A P R E E L	K G F T G V T	E P G R S E R V	S R E D L L
S D P Q C S L	P R P V K E E L	K G F T K V V	L K A G E A K K V	N R D A L
H D D Q A S V	N R P E K E E L	K A F E K V F	K P P G E T K K T	G S D A F
G E K H S E V	V L R P V R E E L	K G F D K V A	L Q P G E S K D V	D K R A F
G R T A S A V	Q R A P R E E L	K G F A S V E	A A G E S R E K V	E I T V
R D V E S S L	P R P V K E E L	K G F V A	K P G E S K K V	K I D L
G D K E S S V	I R P V K E E L	K G F E K V S	R P G E T K K V	D K R A F
G L P G S A V	V V R A P R E E L	R A F A T V A	E P G E T R H I	S L D I P R E E L
R D V E S G V	V I R P E K E E L	K G F T K V E	A P S E T K T V	T F T L
A K P D A K I	F R P A Q E E L	K G F A R V V	L N P G E S R E V	T I P L
K D C T S S A I	R P E K E E L	K G F E K V V	N P G E E T K T V	T M E L
S D V E S T I F	R P E K E E L	K R F S K V V	L K A G E S K E I	K F T L
R D I Q S S V	T R P H E K E E L	K G F Q K I Y	V F N L	D K R S F F
S D K T G V E I	R P E K E E L	K G F E K I S	K P G E E K T V	T F K L
R D V D S T V M	R P T K E E L	K Q F A K V D	Q P G E A T T V	T L T L
G V E Q D Y P T R P R E E L	R G F A K V V A	E P G E S A R V	E L P L	T G R D L
R D V K S N Y I	R P E K E E L	K G F E K V E	P G Q E E K E V	V F Y L
A A P A Q L A D	K P S E E L	K A F G K T E V	E P G Q S E T V	S F K L
S L A G S H V	Q R P P R E E L	K G F G V I E	E P G A S G E V	A V T V
H D V F S S V	T R P V K E E L	K G F K R V A	K A G Q S K K V	T F E L P V N L L
R D T A S S V T	R P E K E E L	K G F Q K V S	P G E E T K T V	E F A L
R D V K S K L V	R P V K E E L	K G F A K L E	Q P G E T R T V	S V P L
G Q P H A S V	D R P V K E E L	K G F Q R V E	A P G E S R S V	Q F V L
R D V L S S V	T T Y E K N L	A G F E R V H	K P G E E T K S I	T F P I
R D P E A S V L R P A H E L	K A F A K V A	E P G E Q R T V	V A F T L	T A R D L
S V E G S T V T R A L R E E L	K G F G D K V F	E P G A S E Q T L	S I R I P L	R E D L
R D V E S S V I R P L K E E L	K G F D K V T	A P G G E E K T L	T F E L	G K R S F
G D P S A K I K R P V E E L	K G F E K V R L	E P G Q S K T V	V V T L	D H R A L
K A P G K G L N V P A Q E E L	K G F A K T R L	N P G E S Q E V	T I S I L P V E S L L	
R D V Y S S V T T P R K N L K G F S R V S	I K A G D T K T V	T F E L	T S D E L V	
S L P D I G L T T P R L Q R A F A K A R D	I L A P P G E S K R V	V L G L L	D K Y A V	
A N H A S H V P M P T K E E L R A F T K V A	V V A P G E T K P V	T L T L	N R R D F	
R A V H P S V V P R P R E E L D H R R V S	A P G E S A G L D Y E V	P V A A F	P V A A F	
A P A A S I V Q R A P R E E L K A F S S V A	A A G E T R T V E L V V R	R R E D L	R R E D L	
R D E I S S V R R P V R E E L K G F E K V E	E P G E E K T T I T F P L	D K R S F	D K R S F	
S A P D Q A A N K P V K E E L K A Y G K T K Q	L L A P G E S E T I T M T V	Q A A D L	Q A A D L	
H Q R T S R V K Q P L R A F A K A R D	V S I A P G E S R T V S V D V	P I A E L	P I A E L	
R D K V S S V I T Y D S Q R G F E R V S	V V A P G E T K E V T F R L	T P E D L	T P E D L	
G L P G A Q V F R P K K E E L K G F K K V F	K A G E S K K V E I P F	D D K T F	D D K T F	
A D K T G A A S R P V K E E L K N F V K V E	Q P G E E K T T V Q M Q L	D K R S F	D R R A F	
S T T A G P V V R R A A R E E L R A F T K V R	E P G E S S R T V E F A L	D R R D L	D R R D L	
A V P D S A Q V R V P R A L A G F G S V T	E P G E S S D L E I H L	S R E D L	S R E D L	
G G P A S S V A R P P R E E L R G F A P V T	A P G E S R E V V V R V	D A R A A F	D A R A A F	
S D P V A D V D R P V R E E L R G F R K V R	V V A P G H S E R V V I E L	D K A A L	D K A A L	
S D L K S S L P R P V K E E L K G F E K V S	K P G E T K T V T I T	D P R S L	D P R S L	
T A P A V L Q D K P E R E E L K G F A K T R L	A P G E S Q V V T F T L	D P R S L	D P R S L	
K D Q F G S V V R P V L E E L K D F Q K I T	L E A G A S K T I S F V I	D K E K L	D K E K L	
G G P D G S V V L R P V R E E L R G F A S V F	V T V R L	T R H D L	T R H D L	
R D V K S S I D R P E K E E L K G F E N K L V A	K A G E S K T V K F T L	N R R D L	N R R D L	
S A V N S S V I R P V K E E L K A F S K P E	L A P G E S G L V S M T L	S L Q D C	S L Q D C	
S D L K S A L P R P L K E E L K G F R K V M L	R P G E S R E V E F F L L	D R T S L	D R T S L	
S A V N S S V I R P V K E E L K A F S K P E	V T F K L	S L Q D C	S L Q D C	
G I E K S S V A R P V R E E L K A F A S I D V	K A G G E Q R V S I E V P	R D V L	R D V L	
H D K E A S V E R P I E E L K G F A K V F L	A P G E S K A V S L S L	N K R D L	N K R D L	
K D K F G S V V R P V L E E L R D F E K V K	N A G E S K T I E F T I	D K E K L	D K E K L	
M A P K G A V D K P A Q E E L K A F A K T H V	L V Q P G E S Q T T V M T V	Q K E D L	Q K E D L	
S K P D S Q I S R P P R W L A G F G S L S E	A P G E S R R T L E I P	R R T D L	R R T D L	
E P C T P S I S R P L R E E L R A F A K V H	L E S G E R R T L E I P	R R T D L	R R T D L	
H D E E C K W V R P E K E E L K A F A K L A	A P G G Q K K D V F S T L	E E R D L	E E R D L	
S L P D I G L T T P K L Q R G F T K A R D	P G E S Q T T V K L D	D K Y A V	D K Y A V	
R D D L A S M V R P V Q E L A G F N R V F	A P G E S Q T T V H F T M	R A D Q F	R A D Q F	
S D D L S S M M R P V A E L A G F R R V E	K A G E T K T V R F S M R	R A D Q F	R A D Q F	
K D K V S S V I S Y E S L R G F K R V S	I A A G A T T V T F S I	T P E L	T P E L	
R D E F S S T V R P C K E E L A G F K R I H	Q P G E T K N I T Q F T L	T L T L	T L T L	
R A V D P S V R R P R E E L L H R R V M T	T L E P G E T K R I T L H P E D L	G Y R Q L	G Y R Q L	
R D L V G S V T R P V K E E L K G F E K I F	L A P G E S T R L F F D L	P L S A F	P L S A F	
R D V L A S V V R P V K E E L K A F G R I V E	K A G E S R K V S F S I	T P E L	T P E L	
G K K H S G L I R P R K E E L K G F A K V W	K P G E T R T V T F T V	P V D M L	P V D M L	
S A K C D G V Y R P R K E E L K G F R K I F	V T F R L	H T D R L	H T D R L	
G F P D A T V D R C V E E L K A F L V E	D P G E E S R T V T F R L	T R R D L	T R R D L	
E A P E T E V V R S V R E E L R G F E K I F	L E A G E E E K T V T F T L	D E R A F	D E R A F	
G K I G S A V P R A K R E E L K A F E K I A	K A G E E E K T V T F T L	S E R D F	S E R D F	
A D P I A R L P R P V T Q L T G F T V R V	T F R L	H T D R L	H T D R L	
A A P K G R L E K P A K E E L K V F A K T R V	D P G E S Q T T V F H L	E V R D L	E V R D L	
R A V D P S V T R P R E E L L H R R V T	L A P G A S A K L S F D V	P L S A F	P L S A F	
C D E V A S V S Q P P I L K A F R R I F	K K G E S R K V T F L L	K K D D L	K K D D L	
S A P K G G L N K P E K E L K A F A K T K E	N P G E T T T S V T M E V	K A F D L	K A F D L	
S Q E K P S V P R P V K E E L R G F V K V E	L D A G K S D T V T V E L	D V D A T	D V D A T	
R A E S P S V P R P R E E L A G H R R I V T	L A P G A S T E L T F R L	P L S V L	P L S V L	
S D I E S T L P R P S K E E L K G Y A K V A	Q P G E E T T V Q F E L	D K R S F	D K R S F	
Uniref90_S3JXM4	R D N V A S M V R P V K E E L K G F E R V E	L E A G E S A T T L T F I L L	P V D M L	
Uniref90_R6SSN5	G E L C P S V P R P V K E E L K G Y A R V Q	G K G E S K S V T V H L	G K E A F	
Uniref90_UPI000415DCA	R A V A P S V V R P L R Q L A G H R R L H	A P G A A E R V E F G V	P V S E L	
Uniref90_F8WWC3	Q D I V G S V V R P V K E E L K G F Q R V A	K A G E T K T I E F K L T T D D L	T T D D L	

QUERY	90	100	110	120
UniRef90_W0LMV0	A S F N G E E W V V	E A G E Y E V R	V G A S S S R N I	K L K G T F S V G E E R R F
UniRef90_H9UAN7	G Y W D T R V W V V	E G G A Y A V E V	G A S S S R D I	R A T V S V E V G A D G V R
UniRef90_KOUVY1	A S F N G H C W V V	E K G E Y E I R	G A S S S R D I	R L V G K Y V L D
UniRef90_UPI000374EBD2	A Y W D A E R W V V	E G G E Y V V S V	G A S S S R D I	R L T A T V T L T G D E P L
UniRef90_C6WQK8	A Y F D D H Q W V V	E A G T F E V L V	G A S S S R D I	R L T A S V E V V G D E P A
UniRef90_D6UOC0	S Y W D A D R W V L	E S G E Y E V T V	G A S S S R D I	R A S A T V A V T G D E T P
UniRef90_D7B174	A Y W E A D R W V V	E G G E Y V V S A	G A S S S R D I	R G T A T F E L T E T S R W
UniRef90_F8PPC9	S F Y D E R Q W V V	E A G K F D V F V	A A S S S D D V	R V T A A I A V E G D A L R
UniRef90_W8EWV2	R F Y D E K Q W V L	E P G Q F T L Q V	G S S S R D I	V R L S A Q V E L T K S F T W
UniRef90_R5EDQ7	A Y W N A Q D W H V	K T G E F T I E V	G Q S S S R H	R Q T G T V K L
UniRef90_UPI0003496F7	A Y W D V D W R V I	E G G E Y T V E V	G S S S S D	D V S A A V N V T S T V R V
UniRef90_UPI00044175E3	S F Y D D R K W V V	E A G G V F E V L V	G A S S S S D	R L L K A T A E L K N T L T W
UniRef90_E6UA77	A Y Y E T N D W F V	E Y G E F E I M I	G A S S S R D I	R L L S G S V Y V N S K T K L
UniRef90_UPI00042A699B	A Y W N A S G W T V	E T G S S Y T V E V	G A S S S R D I	R L L S A S V A V A G D D V V
UniRef90_W4DZG4	A Y Y N V D D W H V	E S G F E L L I	G S S S R D I	A S R T S V T V Q S T Q E F
UniRef90_R6Q0H4	R Y W N T N H W E V	E G G G C Y E L R	G A S S S C	R L L R A A I T V E G T A A P
UniRef90_D4LM72	A W Y N T H D W F A	A S G E Y K L L V	G T S S R D I	H L E G R I H L N S S Q E L
UniRef90_R7K9E6	A Y Y N V D D W H V	E S G G D F K I M V	G A S S S R D I	R L L E K T V S V E
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UniRef90_UPI0003B3EC41	A Y W D T K E W Y A	P S G N Y I S I	G A S S S R D I	R L L T A E V D V T
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UniRef90_A3XMX1	A S F D A Q S W V A	E K G T Y T V K I	G A S S S L D	Q L L K E D F T I A E D I T
UniRef90_UPI000368D1C7	A Y W D A D R W V V	E G G E Y T I E V	G A S S S R D I	R A T V A A A V D G D E V R
UniRef90_K7A2G4	A F Y D D A D M R V	E P G E I N I M I	G S A S D D	R L L E E S F E I N G E V
UniRef90_L0EHB0	A Y Y N T D N W H V	E T G E F E I L A	G S S S D R	A L K A V V H V T S T E A V
UniRef90_D7B9W1	A Y Y H P G Y W T	E D G E F E I L V	G A S S A G D	R L L R K T V T L E S T
UniRef90_E8WZI6	S F Y S V H G W V A	E P G S F D L A V	G S S S R D I	R L L E S H F V L G
UniRef90_K5CIY6	E L L N A D H W V V	E P G E F T L M I	G A S S S T D	R L L N G T L T V S G
UniRef90_F4H1R5	A Y W H P R R W A V	E G G T F V V E V	G A S S S R D I	R G T A T V E V V G E P L W
UniRef90_A0A022KTM4	Q F W S D G T W V V	E T G T Y A V D V	G F G S S R D I	P L L R A E V E V E V L G D
UniRef90_D6RVX0	A Y Y D P K D W M V	E T G A F E I L I	G R S S S Q D	V L L A E T V V M V R S T V S R
UniRef90_D6Y414	A L W D R N K W T V	E T S A H D V M V	G A S S S A D	R Q R A T L H V K G E R
UniRef90_C1F4B5	A Y W S E H G W E V	E P G K F T V F A	G D S S S E N L	P L L K G S F E V K
UniRef90_R5MMF3	A S Y N E K A W V T	T S G T Y T F K V	G A S S S R D I	K L L E K A V K V K
UniRef90_UPI00046F1A0D	S L W N R Q M K V V	E P G D F V V M V	G S S S A N L	T L L K K F T V I G Q
UniRef90_UPI00046243B8	S Y W D T Q Q W K A	P K G T Y G V H V	G K S S S E D I	V L L E S E F Q V E K E F T W
UniRef90_UPI0004664435	S W W C D H R W R A	D S G D E Y V M L	G E S S S R D M R L	Q T K L T M D
UniRef90_D9WY02	G F W D R G R W R V	E P G A Y E L L A	G A S S S E D	D V R T T V T L D G E P T L
UniRef90_T5L4C2	A Y W D V D R W V V	E G G G T Y A V D V	A A S S S R D I	R S T A S V E V V S G D
UniRef90_R9JW35	A Y Y E T H D W F V	E S G K F F V E I	G A S S S R D I	R L L S A E V E V T G T I E L
UniRef90_D5EXY0	A S F D E S A W V V	A A G E Y Q F L V	G A S S S A D	K A T L K A T V K A Q Q T
UniRef90_D6Y408	A F W D R G R F V V	E E A P H R V M V	G R S S S R D I	R L L T A A F T V K G E R
UniRef90_R5SX19	Q L L D R N M W T V	E P G E F E F M V	G A S S S Q D	R L L K Q T V R
UniRef90_UPI00047D5E46	R Y F N T N K W E V	E E G S Y I M V	G A S S S A D	R L L T G N V S K A E T T K E
UniRef90_R6R9V1	A W Y N T Q D W Y A	T A G K Y E I L A	A A S S S R D I	R L L A K T V N V V S T T E L
UniRef90_W0ZC23	A Y W D S A G W V V	P A G D Y A I Q I	G D V S R I	V A E Q T I I T L A G D I R V
UniRef90_UPI0002487B6B	A Y W D A D R F V L	E P G R Y V V H L	G S S S R D I	R A E V E V D L E G E E V A
UniRef90_UPI000374AEDD	A Y Y S E R E W R V	E G G D Y V I A A	G A S S S R D I	R L L S A E V V T V A G D
UniRef90_A8LG10	S Y W S T R Q W V V	E P G E Y G I H V	G S S S R D I	P M T Q T N L D
UniRef90_H8KSS6	S F F D D H E W V A	E P G D F E A L I	G A S S S A N L	K T K T A F K L
UniRef90_I3YLS6	C S F R S G I W V A	E A A G R Y E V K I	G A S S S Q D I	R Q R A S F T L L G K E L V V
UniRef90_G2Z0K4	S F Y N A D Q Y V A	E P G T F E I I M I	G A S S A A D	R L L K S T F E L
UniRef90_UPI00037278AF	A Y Y S E R E W K T	E G G R Y R I E A	G A S S S R D I	R A S V A L D V E G D
UniRef90_V9LTQ1	A Y Y D R K D W V V	E E G D F E I L L F	A S S S R D I	V
UniRef90_D4ZML4	S F W D T H D W L A	E P G F E F V L L	G S S S V E D I	R Q K A I F T
UniRef90_I2JR13	S Y F D E N K W C L	E A G K Y E A Q V	G S S S D D	H L I G D F E V P K T V Y F
UniRef90_W0ERQ9	S Y F D D H E W V A	E P G R F E V L V	G A S S S G D I	R S K A G F E L K
UniRef90_H5TIV7	A Y W D V H R F V V	E G G T Y R I D V	G A S S S R D I	R L L H A D V D V D G D E H
UniRef90_UPI000368D45A	S F W D T N D W L A	E T G E F E V F M V	G S S S S D D	R L L T A E F T
UniRef90_A5FJM5	S F Y N D K E W T	E P G D F E L M I	G S S S A D	K L L R S D F E L
UniRef90_F0ICT6	A S F N E R A W I T	D A G N Y V F H I	G A S S S R D I	K G S A M L K I G K I V R
UniRef90_A0QVF5	A F W E S Q G Q W G V	E P G D Y T V S V	G A S S S R D I	R L L H A T V T V E G D V
UniRef90_J9E3P0	A H Y D V D F R V F	V V E S G T Y R I C I	G A S S S R D I	R L L F G D V Q I E S T T P P
UniRef90_F5LGA8	A Y Y N T K Y W V A	E T G Y F Q F A L	G S S S R D I	R I R E R V
UniRef90_UPI0004412DC4	S W W D T Q Q W K A	P G I Y G V H V	G K S S S A D	V L L E G E F A L E E Q G F T W
UniRef90_UPI00036A9A2E	A F L D V D M W V V	E A G Q M T V N V	G A S S S A D	R L L T G S F D I E
UniRef90_T1W5G1	A F L D V N M W L V	E A A G T M T V L V	G A S S S T D	R A T G S F R I E D S A V I
UniRef90_R7DFZ7	E I L D N M N N W N V	E P G E F E V R I	G A S S S E D	K L L K S F R I V A E
UniRef90_UPI00035F7D92	R T I L T R N Y W V V	E P G K F E V V M V	G P N S S D D A P L	T
UniRef90_M3DFL8	A F W D V G R W R V	E P G A Y E L L A	G A S S S E D	R L L T G E F F V
UniRef90_E1WQP8	K F Y N Y D Q W V V	P G F D V M I	G G N S R D I	V R L S T T V V L E G E S R P
UniRef90_UPI0003FD6709	C F T G E G Y R I V	E P G E H E L L Q L	G A S S S A D	K V K A R F L L K G E
UniRef90_UPI00041F2667	R Y F S T G K W E V	E G G D Y Q I Y V	G G N V K D I	R L R A K V E V T G K T R K
UniRef90_R9IM8	R Y F N T N Q F E I	E S G K Y I E L I	G A S A T D	A L E E G S I I S R E G T I E E
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UniRef90_R6Q5Y2	A Y W N T H D W Y A	E E G T Y K V M I	G E N A D Q M C V	P L L T G E V I L L D A P T V R
UniRef90_R5FGE8	A F Y N A G R Y V V	E K G E Y K L E A A	A S S E D	R L L T G I V S L D G E T L E
UniRef90_C9Z820	A Y T G P D H R I V	E P G D I T V M L	G A S S S T D	R L L T G T L R R L T G P V R
UniRef90_E6MQQ4	A S Y D E H Q W L A	D A G T Y T F F V	G F S N I E D	I K G K S T I N L P
UniRef90_UPI00035D149E	A F W D V G R W R V	E S G P Y D L L V	G A S S A D	V R L R T T V T L E G E
UniRef90_E6SVM4	A I Y D D E M Y V V	E P G D F K V M V	G A S S D D	R L L K G K F R L
UniRef90_R6CFU5	A S Y N E N S W V I	D G G N Y Q F L I	G A S S R D I	A K T L D V V V T G
UniRef90_Q6C391	S F W N E S K W T S E	A D K Y H I H V	G T S S S A G K H	L E G E F E V K K T K N W
UniRef90_M3FPC3	E F F W D V A H W R	E P G A Y E L L A	G A S S S E D	R L R L T T V T V D G E V A P
UniRef90_W4AN65	A Y Y D A Q D W I V	E T G E F E I L I	G S S S R N I	E L K D T V V V E S S T V L
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UniRef90_R6SSN5	A F Y D V D D F R V	N A G K F R I M V	G A S S S V G D I	R L N T E V T
UniRef90_E6MQQ4	A F Y G R D V K K A E	K G D F N V W V	G G H S N A T L	V R A V A V V T V D G E Q
UniRef90_UPI0004154DCA	A F Y G R D V K K A E	K G D F N V W V	G G H S N A T L	K G T F S V T E
UniRef90_F8WWC3	A F Y G R D V K K A E	K G D F N V W V	G G H S N A T L	K G T F S V T E

QUERY	K P
UniRef90_W0LMV0	V P
UniRef90_H9UAN7	
UniRef90_K0UVY1	L P
UniRef90_UP1000374EBD2	R P
UniRef90_C6WQK8	V P
UniRef90_D6UOC0	L
UniRef90_D7B174	L P
UniRef90_F8PPC9	K
UniRef90_W8EWV2	
UniRef90_R5EDQ7	K
UniRef90_UP10003B496F7	L P
UniRef90_UP100044175E3	
UniRef90_E6UA77	
UniRef90_UP100042A699B	L P
UniRef90_W4DZG4	
UniRef90_R6Q0H4	N P
UniRef90_D4LM72	
UniRef90_R7K9E6	
UniRef90_D9TTJ4	K
UniRef90_UP10003B3EC41	
UniRef90_C6CV03	K
UniRef90_UP10003475205	R
UniRef90_B5YC96	K
UniRef90_A3XMX1	
UniRef90_UP1000368D1C7	L P
UniRef90_K7A2G4	
UniRef90_L0EHB0	K
UniRef90_D7B9W1	
UniRef90_E8WZI6	
UniRef90_K5CIY6	
UniRef90_F4H1R5	
UniRef90_A0A022KTM4	
UniRef90_D6RVX0	K
UniRef90_D6Y414	
UniRef90_C1F4B5	
UniRef90_R5MMF3	
UniRef90_UP100046F1A0D	
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UniRef90_D5EXY0	
UniRef90_D6Y408	
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1 10 20 30 40

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 Y T T F G Y G A A T A T A T A T G [ ] E V R [ ] P V T N T G R R D G R E V V V Q V V  
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 Y T T F A Y G R A V V D K A D E T L T V T V P V T N T G N R E G A E I V V Q V L Y I  
 Y T T F E Y G K V H A D K T D G K I T F T V S I K N T G K R E G A E V | A Q | L Y I  
 Y T D F S Y K N I K V N K T N K T V T V S M K L S N T G E M A A N E I V V Q V L Y I  
 Y T Q [ ] S Y S N L S L S A A D D T L K I S V Q V E N T G V V D G D E V V V Q V L Y I  
 Y T S F A Y R D L V V D E D G V T L T V S V T N T G S R A A D D E V V V Q C Y T  
 Y T S F E Y G D L Q [ ] S P S G E T A T I S V T L T V S V T N T G S R A A D D E V V V Q L Y I  
 Y T T F S Y S S P T L S S T Q E K I T L H L S K V V T N T G S V Q G K E I V V Q L Y I  
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 Y T T F D Y T G I K V E K D N D T L K V F V K V V T N T G N R A G K E I I Q L Y I  
 Y S T F E Y S S L M I I D S D T E E V E V S V V D V M N T G S V E A K E T V V Q L Y I  
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 Y T T F S F A N P S V R [ ] V G N N V E V S I T V K N T G S V V A G K E V | A Q | V Y V  
 Y T T F K Y G R P T L S S A P N G H L L T V A V T N T G K R A G K E L V V Q L Y I  
 Y T T F G F S D [ ] T L S K Q N E T L L T A T V T V T N T G N Y E G E E T V V Q L Y I  
 Y T S F A Y S D M N A S E A T G S V A V S M T V T N T G E R R G T E V V V Q L Y G  
 Y T T F A W S D L T V D A D D G E F T A S [ ] T V R N T G D R A G T E V V V Q L Y G  
 Y T S F G Y S D I K V S S E E G V T F F N I N T G E V A G K E V | A Q | L Y V  
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 Y T Q F E F S G [ ] S V S D D K D G K I T V K V V T V K N T G K V V G A E V V V Q V Y V  
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 Y T T F A Y T N L Q I T K K D K T F D V S F D V T N T G N C [ ] D G D E V | A Q | L Y L  
 Y T T F A Y S D L K I Q A G N N E D N I S C T V T N A G D R D G E D V V V Q L Y L  
 Y T S F E Y S K L L E M N K D G D V V N I S L N V K N A G S I [ ] N S D E V I Q L Y V  
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 Y T T F E Y A N A K I S C D D G S S L T A S V E T N T G D K A G F E V V V Q L Y L  
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 Y T E F A I S D A S E K C Q N G L M V T A N V K N I G E I S S G G I V D G T E I P Q L Y L  
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 Y T S F D Y S E M K I Q R S N G E M T V T A T I E N T G Q R A G H E V V V Q L Y V  
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 Y T T F A Y G D L S I H A T D G P I A I S V E E V T N T G K F A G D E V V V Q L Y G  
 Y T Q F E M K K L K A P T K S K L L S L S V I E V T N T G K R E G A E E V V V Q L Y I  
 Y T K F D I S G S K V S V D D D N L T T V S S V V N V K N T G K I D G S E E V V V Q F Y I  
 Y T N F S Y S N V T L D K S N D T I T A S V S V T N Q G T R D G A E E V I V Q L Y V  
 Y T D F S L S N L K V S P E G Q P V E V S V L D V K N T G S R V G D E I V V Q I Y V  
 Y T N F Q L S D L K I I S S P S S S V E V S V V K V V T N T G K I A G S E E V V V Q L Y V  
 Y T S F E Y S D A K I A Q K D D A Y D V T V T V K N T G T Y E G K E V V V E L Y V  
 Y T T F D Y S N L E V K T S D E S L H I A F E V A N T G K M D A D E I I A Q V Y I  
 Y T T F E Y S D T I L S Q N G Q S T I T A S V M V T N T G K I D G S E E V V V Q L Y I  
 Y T Q F S Y S Y A N L A L S A E G E T L H V A F D L T N I G D C E G K E I V V Q L Y V  
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 Y A S F A Y T D L T A E A D D G T L R V S F T V T V R T T V K N T G M A G K D V V V Q V Y I  
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 Y T T F E L D K L S E D K D E V M I Q V K V R N T G H V A G S E E V V V Q L Y I  
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 Y T S F E Y S E L T L S K K T D V V N V T N T G N F D G D E E V V V Q L Y I  
 Y T T F T Y S D L H I S P S H G D I H V S C K I K N T G K I D G D E E V V V Q L Y I  
 Y S S F A Y G N L A V E K V G D Q L A V S F E V K N T G K M D A A E E V | A Q | V Y V  
 Y A S F E Y S D I K L L S S A D G E E V K V S V V D V T N T N G A H A G E E E V V V Q L Y T  
 Y T T F E W G E L T L D P V D G E A T A G I V T V T N T G D R A G T E E V V V Q L Y I  
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UniRef90_10H1P8	S   L   P   G   S   R   V   R   R   A   P   R   E   L   K   A   F   A   S   V   E   Y   I   P   A   G   E   T   T   E   V   V   L   T   I   D   R   E   D   L			
UniRef90_I7A254	R   D   L   V   G   S   V   T   R   P   V   K   E   L   K   D   F   R   K   I   V   N   L   K   P   G   E   Q   K   E   V   S   F   T   I   P   V   E   R   L			
UniRef90_R9HXW5	S   D   L   K   S   S   V   P   R   P   V   K   E   L   K   G   F   E   K   I   V   N   L   K   P   G   E   Q   K   E   V   S   F   T   I   G   K   D   A   L			
UniRef90_X5KAW2	A   D   H   K   A   S   V   L   R   P   P   V   K   E   L   K   A   F   K   K   V   Y   L   K   A   G   Q   S   K   T   V   T   F   T   L   D   A   D   A   F			
UniRef90_UPI0002D27B89	A   Q   L   N   S   R   V   K   R   P   I   K   Q   L   K   G   F   Q   K   V   N   L   T   A   G   Q   S   Q   T   I   E   F   T   L   P   V   A   E   L			
UniRef90_W4DN89	G   K   Q   D   A   R   V   F   R   P   V   R   E   L   R   G   F   E   R   V   H   F   L   K   A   G   E   R   Q   R   V   H   I   A   F   D   D   K   T   F			
UniRef90_D1PKW1	H   D   V   K   S   K   L   P   R   P   E   K   E   L   K   G   F   A   K   V   D   L   A   A   G   E   S   K   N   V   T   D   I   N   I   D   R   Y   A   L			
UniRef90_F8DD72	H   Q   H   L   D   S   K   V   E   R   P   Q   L   E   L   E   G   F   K   R   V   H   I   L   P   A   G   G   V   Q   N   V   T   S   F   V   L   N   K   R   A   F			
UniRef90_A7ELV7	R   K   K   N   S   L   V   I   R   P   E   K   E   L   K   G   F   A   K   V   S   Y   L   E   P   Q   G   E   E   R   V   T   I   H   F   T   L   P   E   D   L			
UniRef90_UPI0004796C7A	R   D   T   E   S   S   V   V   I   R   P   E   K   E   L   K   G   F   A   K   V   S   Y   L   Q   P   G   E   E   T   R   R   I   H   F   T   L   P   E   D   L			
UniRef90_UPI00047A6A14	Q   A   P   K   G   A   Y   E   K   P   A   K   E   L   K   A   F   A   K   D   K   I   Y   L   K   P   G   E   E   S   T   L   K   M   V   I   E   K   R   D   L			
UniRef90_L5NBC9	R   D   D   K   A   S   V   V   E   R   P   R   K   E   L   K   G   F   R   K   I   A   N   L   M   P   G   E   T   R   T   V   T   F   D   I   T   T   K   D   L			
UniRef90_R6KUQ8	R   D   V   V   G   S   V   S   R   P   M   K   E   L   K   G   F   S   K   I   V   N   L   K   P   G   E   S   K   Q   V   S   F   E   I   T   P   N   D   L			
UniRef90_A7VPK6	R   D   L   Y   A   T   M   V   R   P   V   L   I   E   C   M   G   F   Q   R   V   D   D   L   D   P   G   E   T   A   T   V   A   F   E   V   P   M   S   L   F			
UniRef90_D3DXA6	H   D   P   V   A   V   S   V   Q   P   V   V   Q   R   L   V   G   Y   A   R   L   D   V   E   P   G   E   E   R   R   V   R   V   T   V   P   A   D   V   A			
UniRef90_D3IGR2	R   C   Q   S   K   A   I   F   R   P   D   K   E   L   K   G   F   E   K   C   A   Q   P   G   E   T   K   T   I   T   Q   Q   L   P   I   A   D   L			
UniRef90_H9CTG4	R   D   M   K   S   S   V   V   A   T   P   I   K   Q   L   F   G   F   E   K   C   A   Q   P   G   E   T   K   T   I   T   Q   Q   L   P   I   A   D   L			
UniRef90_UPI0003B600AD	R   D   V   V   G   S   V   S   R   P   M   K   E   L   K   G   F   S   K   I   V   N   L   K   P   G   E   S   E   T   L   K   M   V   I   E   K   R   D   L			
UniRef90_UPI0004646D9D	H   D   P   V   A   V   S   V   Q   P   V   V   Q   R   L   V   G   Y   A   R   L   D   V   E   P   G   E   E   R   R   V   R   V   T   V   P   A   D   V   A			
UniRef90_UPI0002E6486E	R   C   Q   S   K   A   I   F   R   P   D   K   E   L   K   G   F   E   K   C   A   Q   P   G   E   T   K   T   I   T   Q   Q   L   P   I   A   D   L			
UniRef90_G1WDN8	R   D   M   K   S   S   V   V   A   T   P   I   K   Q   L   F   G   F   E   K   C   A   Q   P   G   E   T   K   T   I   T   Q   Q   L   P   I   A   D   L			
UniRef90_A0A059KP29	A   D   V   H   S   R   V   V   E   R   P   A   Q   E   L   K   A   F   A   K   L   H   N   L   Q   P   G   E   S   A   V   A   T   L   T   L   G   E   R   A   F			
UniRef90_A5FA08	H   D   E   Y   A   S   I   V   R   P   I   K   E   L   K   G   F   E   L   V   N   L   K   K   G   E   T   K   T   I   T   Q   Q   L   P   I   A   D   L			
UniRef90_L8X6K6	S   R   P   I   G   P   I   T   H   P   K   L   E   L   R   A   F   G   K   A   A   D   L   E   P   G   A   S   T   T   V   K   L   S   F   G   K   Y   G   V			
UniRef90_E6WX48	A   P   V   K   P   Q   R   E   R   A   L   K   E   L   R   G   F   Q   R   V   H   L   Q   P   G   E   S   R   T   V   T   F   S   I   P   E   R   D   L			
UniRef90_I6ZMD5	S   A   P   P   N   G   R   L   P   K   P   Y   Q   E   L   K   G   Y   A   K   T   G   L   L   Q   P   G   K   S   E   A   L   E   I   T   F   D   T   A   A   L			
UniRef90_R7A794	R   D   M   Q   S   K   E   P   R   P   L   K   E   L   K   G   F   D   K   V   Y   L   L   Q   P   G   E   S   K   Q   V   T   I   G   L   S   E   D   A   F			
UniRef90_R6C0X4	R   D   I   V   G   S   I   I   T   R   P   V   K   E   L   K   G   F   Q   R   V   I   H   L   K   K   G   E   S   K   K   V   S   F   K   I   L   T   P   E   L   L			
UniRef90_G9BYB4	R   D   V   E   S   S   V   V   I   R   P   D   K   E   L   K   G   F   A   K   V   Q   L   E   P   G   E   E   K   T   T   V   S   F   E   L   D   K   R   A   F			
UniRef90_R8BW23	E   P   K   Q   K   K   V   N   R   P   I   K   E   L   K   G   F   T   K   V   V   A   L   L   E   A   G   E   S   K   E   T   V   S   V   E   V   E   T   K   A   A			
UniRef90_H1HKE0	R   D   D   Y   S   S   A   T   R   P   V   K   E   L   K   G   F   E   R   I   A   L   K   A   G   E   T   K   T   V   T   F   L   I   T   P   E   S   L   L			
UniRef90_C2FZL5	R   D   L   L   S   S   V   S   R   P   V   L   E   L   K   A   F   K   K   E   F   I   L   K   A   G   E   T   K   K   I   H   F   T   L   D   P   Q   E   L   L			
UniRef90_C4FGA2	A   P   G   K   A   A   V   S   R   P   R   H   E   L   L   K   G   F   R   K   V   V   F   L   K   G   G   E   S   A   E   I   I   S   L   D   L   D   E   R   A   F			
UniRef90_N2B809	R   A   K   C   S   G   V   Y   R   P   A   K   E   L   K   G   F   R   K   V   V   F   L   K   A   G   E   S   Q   K   V   T   I   P   P   L   D   D   K   A   F			
UniRef90_U2NQA9	H   D   E   L   A   S   T   V   Q   P   L   L   Q   K   H   F   E   R   A   P   I   L   K   R   G   E   T   H   R   F   S   F   T   L   T   A   D   D   L			
UniRef90_UPI00046A7E5C	Q   D   M   V   S   S   V   V   A   T   P   D   I   M   L   K   D   F   E   K   I   S   R   L   R   K   G   E   S   K   R   V   T   F   I   L   G   K   E   Q   L			
UniRef90_X1JVF2	S   F   P   D   S   K   I   E   R   P   V   K   E   L   L   K   G   F   K   R   V   H   L   I   P   A   G   E   S   I   T   V   T   I   P   L   T   A   D   K   L			
UniRef90_A7MP08	R   D   K   V   A   S   L   V   V   R   P   V   Q   K   E   L   K   A   F   G   R   V   V   S   L   L   A   P   G   E   S   A   R   V   T   F   R   I   P   V   D   M   L			
UniRef90_UPI0004741F47	S   P   L   N   S   K   I   E   R   P   I   K   E   L   K   G   F   K   K   I   F   L   Q   P   G   E   T   K   E   V   S   I   P   L   D   S   R   S   L			
UniRef90_UPI00029A2FDC	R   D   R   V   G   S   V   V   R   P   V   K   E   L   K   G   F   E   K   I   H   L   K   A   G   E   T   K   T   V   E   F   S   I   D   E   E   M   L			
UniRef90_UPI0004135D14	G   Q   K   D   P   G   I   V   R   P   V   R   E   L   R   A   F   T   K   V   V   E   L   L   M   P   G   E   S   K   E   V   S   F   D   L   T   K   R   A   F			
UniRef90_A0A031JEQ0	H   D   R   E   A   S   V   T   T   R   P   V   M   E   L   R   G   F   R   R   V   V   T   L   K   P   G   E   T   R   K   V   E   F   T   L   G   P   D   D   F			
UniRef90_R9GRA7	S   D   V   K   S   S   V   V   E   R   P   L   K   E   L   K   G   F   Q   K   I   Y   L   R   S   G   E   Q   Q   T   I   K   F   V   I   H   P   E   D   L			
UniRef90_X1R8K9	N   D   R   V   A   S   V   V   T   T   R   P   V   K   E   L   K   G   F   Q   K   R   I   T   Y   L   E   P   A   E   E   T   K   T   V   E   F   E   L   L   T   E   L   L			
UniRef90_UPI0002629709	S   V   P   D   S   R   I   T   T   R   P   P   E   L   R   E   L   K   G   F   A   E   V   E   L   E   P   R   E   S   A   R   V   V   A   I   D   I   P   A   E   E   L   L			
UniRef90_UPI00036826BC	A   N   H   T   S   H   A   P   M   P   T   K   E   L   R   G   F   T   K   V   I   A   V   V   E   P   G   E   T   K   P   V   T   L   K   L   T   R   Q   D   F   L			
UniRef90_K2T2B9	Q   P   V   K   P   A   V   D   R   P   E   K   E   L   K   G   F   T   K   V   Y   L   Y   L   Q   P   G   E   S   K   T   V   S   V   P   I   D   S   R   S   L   L			
UniRef90_D4L2L5	S   N   P   A   E   G   V   E   R   P   Y   Q   K   E   L   K   G   F   E   K   T   A   D   L   A   P   G   E   K   E   K   V   K   I   W   I   P   W   R   E   L   L			
UniRef90_D8PNW5	G   F   P   E   G   S   G   E   P   P   R   V   L   R   G   F   E   E   V   A   V   L   K   A   G   E   S   K   Q   V   E   M   K   L   A   A   R   D   L			
UniRef90_W0ABL2	S   M   P   A   A   A   A   E   P   P   R   Q   L   K   G   F   A   R   I   S   L   Q   P   G   K   S   Q   T   V   E   F   P   L   D   A   R   S   L			
UniRef90_UPI00047C3C2E	S   P   Q   T   V   G   V   Y   R   P   K   R   E   L   K   G   F   A   K   L   Y   L   E   P   G   E   S   K   E   I   A   Q   Q   L   D   T   R   S   F   L			
UniRef90_G9IS30	R   D   M   V   G   S   V   V   S   R   P   V   K   E   L   K   R   F   N   R   I   T   L   K   P   G   E   T   R   N   V   S   M   T   F   P   V   E   E   L   L			
UniRef90_S0DEQ7	G   A   P   A   A   G   F   T   R   A   T   E   E   L   L   J   A   F   A   K   T   A   E   L   A   P   G   A   S   E   T   V   V   M   H   F   S   A   E   D   L			
UniRef90_H1LJU0	G   N   R   T   S   Q   I   E   K   P   I   K   T   L   A   N   F   V   K   V   S   L   V   P   G   E   E   K   T   T   V   S   F   E   L   D   Q   R   A   F			
UniRef90_UPI00047A0763	E   K   L   A   S   S   I   D   R   P   A   Q   E   L   R   S   F   A   K   T   R   N   L   K   A   G   A   T   D   S   I   S   I   R   L   P   V   R   E   L   L			
UniRef90_R7IKW5	H   K   P   N   A   E   I   F   R   P   A   K   E   L   K   G   F   Q   R   V   H   L   E   K   K   G   E   E   Q   E   I   T   I   K   L   R   K   D   L   L			
UniRef90_B3JKC6	Q   L   P   S   R   N   E   L   M   P   I   K   E   L   K   G   F   R   R   I   T   L   K   K   G   E   E   Q   E   I   T   F   D   I   T   E   K   D   L   L			
UniRef90_R5KH35	R   D   P   V   A   S   I   A   R   P   V   K   E   L   K   G   F   S   R   V   T   L   K   A   G   E   S   R   Q   V   T   F   D   I   T   E   K   D   L   L			
UniRef90_UPI0003822A44	S   E   K   N   P   A   V   I   R   P   V   K   E   L   K   G   F   R   K   T   E   L   T   P   G   A   S   Q   V   V   E   F   E   I   A   Y   R   D   L   L			
UniRef90_L8PN81	R   A   V   E   P   T   V   P   R   R   E   L   V   A   H   G   R   V   R   L   E   P   G   E   R   E   E   L   T   F   E   V   P   L   S   A   F   L			
UniRef90_F8P5H2	S   M   P   H   T   E   T   T   H   P   P   I   N   R   F   K   K   V   K   D   V   L   K   P   G   E   S   I   K   V   H   E   L   D   K   Y   A   V   L			
UniRef90_UPI0003828F3B	S   A   P   Q   G   N   L   V   K   P   G   I   E   L   I   N   F   G   K   T   K   L   L   Q   P   D   E   S   E   T   L   S   F   D   I   N   A   R   D   I   L			
UniRef90_R6Y2G0	G   D   K   L   S   S   L   P   R   P   V   K   E   L   K   G   F   E   K   V   Y   L   A   P   G   Q   S   R   T   V   T   F   E   I   D   P   G   M   L   L			
UniRef90_UPI00037A219D	H   Q   A   K   S   N   V   V   Q   P   I   K   S   L   R   G   F   Q   R   I   V   Y   L   E   A   G   E   T   K   H   V   T   I   T   L   P   V   S   Q   L   L			
UniRef90_UPI000470C612	S   Q   D   L   Y   G   S   V   V   R   P   V   K   E   L   K   G   F   K   K   V   T   L   L   Q   P   G   E   T   K   S   E   V   I   S   F   T   I   T   E   A   D   L   L			
UniRef90_UPI00029A7A87	S   D   L   K   S   S   L   P   R   P   A   K   E   L   K   A   F   K   K   V   V   S   L   Q   P   G   E   T   K   S   E   V   T   F   T   I   D   K   S   A   L			
UniRef90_D4W318	S   D   L   T   H   L   T   I   R   P   I   K   E   L   K   D   F   V   K   V   E   L   L   Q   A   G   E   T   K   E   V   Q   M   T   L   D   K   R   A   F			
UniRef90_F9D684	A   A   P   K   G   S   L   E   K   P   A   K   E   L   K   A   F   A   K   T   R   T   L   L   Q   P   G   E   T   Q   T   V   T   Q   M   T   L   A   T   R   D   L   L			
UniRef90_D6TR04	R   D   D   V   A   S   V   A   R   P   D   R   L   L   G   F   A   R   I   S   L   L   A   P   G   E   C   R   Q   V   T   F   T   V   H   P   S   R   L   L			
UniRef90_L1PKN8	S   A   P   A   K   S   M   D   K   P   A   L   E   L   L   K   A   F   A   K   T   E   L   L   S   P   K   Q   S   Q   T   L   S   F   T   L   S   P   E   S   L   L			
UniRef90_Q6BWY6	S   K   D   E   S   D   V   I   R   P   V   K   E   L   K   G   F   E   K   V   H   L   K   A   G   A   D   S   T   T   V   S   K   L   S   L   K   D   I   V   L			
UniRef90_M3B1M3	K   D   M   I   A   S   V   D   P   N   I   Q   L   K   G   F   E   K   V   M   F   H   A   G   E   T   K   D   V   K   I   S   L   N   V   S   D   V   L			
UniRef90_E6QP34	G   D   P   S   A   K   V   S   R   P   V   K   E   L   K   A   F   A   R   V   S   L   A   P   G   E   S   K   H   V   A   L   H   D   R   R   S   F   L   L			
UniRef90_M5G5T4	K   P   T   A   T   H   L   T   Q   P   Q   Q   L   R   A   F   G   K   A   K   D   L   L   A   P   G   A   S   T   T   I   A   L   K   L   S   K   Y   A   V   L			
UniRef90_W0FRC1	S   A   P   P   D   K   A   A   N   K   P   V   K   E   L   K   A   Y   A   K   T   K   N   L   K   P   G   E   S   E   T   T   L   T   L   S   V   K   A   A   D   L   L			
UniRef90_D5KJA4	S   P   T   Q   E   N   Q   N   I   R   P   I   Q   L   Q   G   F   A   R   I   S   L   L   K   A   G   E   R   K   K   V   K   V   K   L   Y   T   E   Q   F   L			
UniRef90_G8T8X1	R   D   L   A   G   S   V   T   R   P   V   K   E   L   K   G   F   Q   K   V   I   S   L   L   N   A   G   E   M   K   K   V   E   F   T   I   T   E   N   D   L   L			
UniRef90_L8BCT0	T   A   P   K   G   E   L   I   R   E   V   R   A   L   L   K   A   F   S   K   V   S   L   L   A   G   E   T   R   R   V   E   L   A   L   P   V   A   D   L   L			
UniRef90_R6VJK9	N   A   P   K   G   A   M   E   K   P   S   R   E   L   L   K   A   F   A   K   T   R   L   L   K   A   G   E   T   E   V   V   E   M   S   I   P   L   A   D   L   L			
UniRef90_L7FIY5	R   A   P   E   S   P   V   A   R   P   R   R   E   L   L   A   H   R   R   I   T   L   L   A   P   G   A   S   A   F   V   S   F   E   L   P   P   L   S   C   L   L			
UniRef90_R5KJ61	S   A   P   G   K   D   M   D   K   P   A   R   E   L   L   K   G   F   A   K   T   R   K   L   L   K   P   G   E   E   K   L   V   T   L   S   L   N   K   E   S   F   L			
UniRef90_UPI0004727CB6	H   D   V   E   S   K   I   D   K   P   E   K   Q   L   K   A   F   K   K   V   V   F   L   L   K   D   G   E   S   K   H   V   T   F   L   L   N   S   D   A   F   L			
UniRef90_UPI0004749B0B	K   D   E   K   S   S   L   P   R   P   Y   K   E   L   K   S   F   Q   K   V   F   F   L   K   D   G   E   S   K   H   V   T   F   L   L   N   S   D   A   F   L			
UniRef90_UPI0004661BCA	S   D   P   P   V   A   S   V   V   R   P   A   R   W   L   A   G   W   A   R   I   R   L   E   P   G   E   A   A   R   I   V   E   F   E   V   H   A   D   R   T   L			
UniRef90_F4KRA1	R   D   K   V   R   S   I   T   T   P   P   V   K   E   L   K   G   F   Q   K   V   I   M   L   K   K   G   E   S   K   H   V   T   F   L   L   S   V   E   D   L   L			
UniRef90_A6KWP7	R   D   E   I   S   S   V   V   T   T   Y   T   K   V   L   L   R   G   F   E   R   I   S   F   L   K   K   G   E   E   Q   T   V   H   F   R   L   R   P   Q   D   L   L			
UniRef90_W4US57	H   D   V   Q   S   T   V   P   R   P   L   K   E   L   K   G   Y   E   K   V   F   F   L   K   K   G   E   S   K   R   L   S   L   V   L   D   E   R   A   F   L			
UniRef90_UPI000311CCB7	R   Q   M   V   G   S   I   T   R   P   V   K   E   L   K   G   F   E   K   V   H   F   F   L   E   K   G   E   T   K   T   V   S   F   T   L   K   S   E   D   L   L			
UniRef90_F0M6Z1	H   D   P   V   A   S   V   V   R   P   E   Q   R   L   V   G   Y   A   R   I   V   P   L   E   P   G   E   S   A   R   V   T   F   V   P   A   D   V   T   L			
UniRef90_F3S5Y2	G   R   P   S   P   P   L   N   R   P   V   R   M   L   R   G   F   R   S   I   V   F   F   L   R   S   G   E   S   K   A   V   T   L   S   F   T   R   R   D   L   L			
UniRef90_R5KJ61	K   D   I   T   G   S   V   V   T   R   P   V   R   E   L   L   K   G   F   E   K   T   V   V   L   K   K   G   E   K   K   T   V   I   F   E   I   S   A   E   D   L   L			

	90	100	110	120
UniRef90_UPI0003B34D1B	R Y Y N T G K W E V E G G K Y R V M I	G S S S A D   R A C A D V E I   E G T T		
UniRef90_I0H1P8	A Y W E T R R W V V E G G T Y H V A V	G A S S R D I   R S E V T L E V   P A D A A R		
UniRef90_I7A254	K F F D N M N Y V L E P G K F K L M V	M E T E F E L L		
UniRef90_R9HXW5	S F Y D D H E W V A E P G K F E V I V A	A S A A D M K S K V S F E L K		
UniRef90_X5KAW2	S F F D A H Q W L A E P G E F E A L V	G A S S S D I   K T K M K F T L		
UniRef90_UPI0002D27B89	N Y W D E K D W V V E S G D F D I L I	G S S S Q N I   H L K K T L V L		
UniRef90_W4DN89	A F W D R E Q Y C V E N G E Y M V L I	G R S S A N I   Q L S A Q L S V Q G D V		
UniRef90_D1PQW1	R Y W N A N R W A V E G G V Y R V E V	G A S S T D I   R L T G T V E K E A T T D Q		
UniRef90_F8DD72	S F W D R Q R V R V E R A T H S V L V	G S A S D D I   R V Q G S I R V D G E K		
UniRef90_A7ELV7	G Y W D D S Y W V A E E G K F E A W V	G A S A A D I   R H K I P F E V K E T F T W		
UniRef90_UPI0004796C7A	A Y W D A H E W R V E K E P V R I L A	G G S S D K L   P V Q A T L Q I D T A G E Y		
UniRef90_UPI00047A6A14	A Y Y E C E D W Y V E E G E Y E I L V	G K S S R E I   L L K E T V N I K S S Q K L		
UniRef90_L5NBC9	A Y Y N V E D W Q V E T G D F D I L I	G K S S K D I   V L L K D T L H V R S T T V I		
UniRef90_R6KUQ8	E M L D D M H W I V E P G E F E V L I	G S S S E D I   R L K G K F E		
UniRef90_A7VPK6	A W Y H P E R W Y A S G E Y E I L I	G S S S R E I   R L S K T V C M E N T		
UniRef90_D3HXA6	A S F D E S Q W K A D A G T Y V F K F	G A S V E D I   R A T S S L K L D G		
UniRef90_D3IGR2	Q F F S E H R W V A E P G T F K A Y V	C A S S E D V   R G T A A F E L		
UniRef90_H9CTG4	K F Y N Y D K Y E W E P G D F E I I M	G S N S R D V   K		
UniRef90_UPI0003B600AD	A F L D V D M W R I E A G E V E L L S	I   R A T R R I T I T D T A F V		
UniRef90_UPI0004646D9D	S F T G R D H R V V E P G D L E L R	D A R L T A T V T L T G P V R		
UniRef90_UPI0002E6486E	R Y F N T N Q W E I E S A D Y K I M	G A A S S D D I   R L R E D V I F I E G T E A P		
UniRef90_G1WDN8	Y L H N A M Q R V V E P G D F E V Q I	G A S S A D I   L L R D T L H V G		
UniRef90_A0A059KP29	A F F D A E R W V A E A G E F R L L	G A S S R D L   R A E L A V T L T H D		
UniRef90_A5FA08	G F Y N E G T Y L V E P G T F K I I V	G G S S D K L   D K G L Q S G F E I K E		
UniRef90_L8X6K6	S F W H D D T W R A D A G E Y S V L V	V D L P L S A S F K L   K Q T F S W		
UniRef90_E6WX48	R V Y D E G R Y T V D P G R Y E V Q V	G A S S A D I   R A S V P L E V A		
UniRef90_I6ZMD5	A S Y D E S K W V M E P G D Y L L R V	G A H S R A T E V A A V L R L E G E A V V		
UniRef90_R7A794	Q Y F N A K Q W V F E K G E F E I L V	G A S S S D I   I R L A E K I K		
UniRef90_R6C0X4	K F Y D Y D N Y V C E P G D F N V M	G S N S Q D V V S V   L K F T V T E		
UniRef90_G9BYB4	A Y W N T E D W H V E T G E F E V L L V	G K S S R D I   V L S A A L Q V Q S T V P L		
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UniRef90_D9VM5	S D P V A S V V R P Q Q W L A G F A R V E	P P G A A A R V A F S V H A D R T	
UniRef90_UP100035CBAF3	Q D L Y G T T V R P V R E E L K G Y R K V Q	L A P Q E S A K I E F V I T E Q D L	
UniRef90_Q06B35	S T P R G H L P K A A Q S L M G F A K T S	L A A G E S E T V E I A F D V R D M	
UniRef90_C7N7A4	S V P S G K L D Q P P Y Q L A A F P T	C D V T M R F A M E D L	
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UniRef90_B8MD19	S A P N S P T P R P I L H F E K V V S	L A P G E E S V I T I D K Y A T	
UniRef90_S2JU28	S F P E S A G E P L K N L R G F E K V F	K K D S E S S S K V E F E F S K T E L	
UniRef90_J3JHJ1	R D V A A S V V R P V K E L K D F R K I L S	Q P G E E K R V S F T I D A K A L	
UniRef90_W7YP78	H D V T A A V V R P V K E L K G F E K K I T	L K A K E S K T V T F L L T E N E L	
UniRef90_C7ZDL0	N Q V N P R L G R P V R E E L K G W D K V V	L V R A G E T V T A R A T L D K V S V	
UniRef90_V2WWU3	T F P D G A G E P K K V L R G F E E V K	A S G A S Q K V E M R L S E K E I	
UniRef90_W4CE73	S D V A S K V T R P A R E E L K A F D K I V K	L A P G E K Q T V L F T V G P E Q L	
UniRef90_H8KLV0	R D M A G S V A R P V K E L K G F Q K V V	F L L K K G E S K E I S F T I T E E Q L	
UniRef90_R9J3N4	K A P G K E A V R P V L E K G F T K V V	F L E P G E E K Q V E I E I S S D L	
UniRef90_UP100035D556A	K D M V G S A V P V M E L L K G F E K V A	L E V G E S Q E V S F T I D A N D L	
UniRef90_C5BY61	R D P V A S V T R P V A Q L V G F A R V E	L E P G E E V E V T F R V P T A R E L	
UniRef90_W1QC11	H H N R P A I I R R P F K E L K G F S K I V	F L E A G G S S Q K V C I S I D G K A T	
UniRef90_G6E741	H D R A A S V T R P V R E E L K D F R K V V	F L L A P G Q S E T V Q F T L T R A D L	
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UniRef90_R5BG45	K A P G R D M D K P F R E E L K G F T K T G T	L A P G Q Q S E T V R I R I P R S R L L	
UniRef90_Q1NAJ4	H D K V S S V T R P I K E L K G F E R V V S	L K P G E V R T V R F T I T P E S S L	
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UniRef90_S7Z969	S S P E S P T P R P V K E L H G F E K V V	F L Q P G E G K M V A I R L D R Y A T	
UniRef90_X0GXD1	A P P T M A V A R P V K E L K P F R K V V	L V K A G E A K R K I T L D M D T V S T	
UniRef90_A5CM17	H D V H A R T V R P P R V L L A F D R V V	P L L A A G E A R R L S V R I P T A M L	
UniRef90_UP10002C86589	R D L V G S T T R P V K E L K G F Q K V V	F L L K K G E T K K T I T F K I T P E D L L	
UniRef90_D1CB40	Q D V V A S V S R P T N M L L G F T K V V R	L L D P G Q S K K L T F I V H P S R L L	
UniRef90_S6RFW6	H D V V A A S I V S R P V K E L K N F D K V V	M L E P G E E K V V T F T L S E D D L	
UniRef90_A0R2K2	E D P V A S V A R P T R Q L M G Y A R V V T	V P A A S A V T V T F G L H A D R T	
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UniRef90_R1E1K26	R D L V G S S V A T P V K Q L Y A F H K A A I	R D L V G S S V A T P V K Q L Y A F H K A A I	
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UniRef90_G3XZP0	G F P T A A Q Q P V R R Q L R G F E R V E	T P S S E S A S H R P V R S L R G Y G K T H D L A P G E S V E V E V K L D K L A L L	
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UniRef90_F6C8Z4	G I P G D D H T P L K Q L R G F E K Q L I K	S G P S E G V V L R P A R E E L K G F Q K V V R I K A G E T A T V K F P L V R I E F D R Y T F	
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UniRef90_H2IJ37	N A P E V K L K K P T I E L K A F N K T N L L	N A P E V K L K K P T I E L K A F N K T N L L N A G Q S E T V T F F Q L R R R D I L	
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UniRef90_W6WC63	R C D A P R L K R P V R E E L K A F A K I S	R C D A P R L K R P V R E E L K A F A K I S L K P G E S R K V I F H I T P D M L L	
UniRef90_R6PXS2	R D K V A S I S R R P V K E L K G F Q R I H L	R D K V A S I S R R P V K E L K G F Q R I H L A A G E S S K E V I F H I T P D M L L	
UniRef90_I0QTS7	R Y H Q P R L A R P H Q E L K G F C K V E	R Y H Q P R L A R P H Q E L K G F C K V E L A A G E S R R I T L Q F H I T P D M L L	
UniRef90_UP10004714F1F	K D L E A S V D V P I H E L K G F S R I K	K D L E A S V D V P I H E L K G F S R I K Q P G E T T T V T F F T L T P R Q M	
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UniRef90_R5JUA1	R D K I S S V S T P I K Q L K A F K K V F	R D K I S S V S T P I K Q L K A F K K V F I K A G E E K K K V T L E V P M S E L L	
UniRef90_F4F9W0	H D L V A S V T R P V A Q L L G Y R R I H	H D L V A S V T R P V A Q L L G Y R R I H E P G E S V T V E L S V P T T R L L	
UniRef90_D9WJ02	G S P K T T A P Q A V R S L L G G Y Q K V H	G S P K T T A P Q A V R S L L G G Y Q K V H R A G Q Q S K T V R I Q V D A Q Q L	
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UniRef90_UP100040E7374	H D L F A S V T R P V K E L K G F E L T E	H D L F A S V T R P V K E L K G F E L T E I K A G Q Q T K T I T F A I N Q K T I	
UniRef90_UP1000472EC27	H A L L S S R V Q R P L K Q L M G F E K I H	H A L L S S R V Q R P L K Q L M G F E K I H A A G Q Q M H T V A F T L P V A G L	
UniRef90_A0A031JNX2	H Q R V G T S S R P V R Q L K K F A R V A	H Q R V G T S S R P V R Q L K K F A R V A P G E T T K H M Q F T L T A D D L	
UniRef90_R5A442	G F E N S A V D R P V K Q L R G F K R V S	G F E N S A V D R P V K Q L R G F K R V S L K A G E E K K Q V E I P V S L E K K L	
UniRef90_Q0U3I9	G F P P S S A P G T P P R Q L R G F E K V H	G F P P S S A P G T P P R Q L R G F E K V H E V G E T Q T V G F E L M R R R D L	
UniRef90_K2AZ75	N P V A A A V E R P T R E E L K A F A K V H	N P V A A A V E R P T R E E L K A F A K V H L G P G E V R R V V L G L S P R D F	
UniRef90_D7W4A9	R D L F G K V V R P V K E L K G F Q K V F	R D L F G K V V R P V K E L K G F Q K V F I K K G E S K K I D F K L T P E D L L	
UniRef90_UP1000440761A	T L P P P N G T A T P E R Q L R G F T K V R	T L P P P N G T A T P E R Q L R G F T K V R D L S P G G S N Q I A K V H D K Y A V	
UniRef90_UP100036F17DC	S F A D R G N E E P I K K L Q G F D K T F I	S F A D R G N E E P I K K L Q G F D K T F I N S D E T K K I E I C L D S R N F	

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UniRef90_R5PU42	E Y Y N T E K W A I E E G T Y E I Q V G K S S E D I V L   K D R   T I K			
UniRef90_N4UXH4	A S Y E R H Q W C V E K G D Y E V I V S D S S T D K A L   R G S F S V E E T F W W			
UniRef90_K1TJ93	R F Y D R E R F A V E E Q G R Y T F M A G A S S E D I R   L   T K   D V S G E			
UniRef90_R8BMV8	G Y Y D T N A W I A E E G T F K V L V G A S S A D I R   R T T A F E V K E S F T W			
UniRef90_L2FD33	S F W D A Q Q W R L P E E G G F D V W V G A S S R D L   K L   N G T F T I			
UniRef90_UPI0003745B25	A Y W S D H T W R V V A G E Y G V E V   A T S S R D I V S R E T V E L Q G D			
UniRef90_I8XPP9	A F Y N I N M K V V E P G D F G L W V A T D S Q S			
UniRef90_C4RCS2	G G W D E S R R V V E D A A H S V L V G R S A T D I   R   L   V G T L T V			
UniRef90_D9VM5	S F T G L D R R R V E P G E I G V A V G R S S G D L   P   L   R G S F T L   R G P V R			
UniRef90_UPI00035CBAF3	E Y C Y N A R E W T A E E G D F K V Y V G T H S G S T L   E Q T F E L			
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UniRef90_C7N7A4	A S Y D D Q A Y I L E P G S Y I L R V G S S S V D T Q A E A E V V L D R Q V T V			
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UniRef90_R7J871	S Y W N E N D F V V E S G M Y E I Q I G A S S S S D I R Q R I Q F S I K			
UniRef90_E3QZL2	S Y W S R S K W L A E A G D Y V V I V A S S S R D E I L R A S F N L S E T F F W			
UniRef90_B8MDI9	S L W D E S M W K S E G G E Y E V L V G T S S V D I L G K A V L K V P E T R Y W			
UniRef90_S2JU28	S V W D T K T W V I P S G K F T L H I G A S S R D I R Q T A S F T L			
UniRef90_J3HJH1	Q F Y N T R E H V A E P G E F Q V Q V G L D S K D V K T A T F T L			
UniRef90_W7YP78	G F Y D E G N F M V E P G G W F D V M V G T S S L N G L K G S F E L K			
UniRef90_C7ZDL0	S Y W D D D K W V I E D A E F H T A A K D S R D E G V T A T F R S S K A F Q W			
UniRef90_V2WWU3	S V W D T Q S W K R P A G T Y T V H V G A S I K D R L T G T F			
UniRef90_W4CE73	Q Y I G P D L R V V E P G A F K V L V G K H V N D T L S T D L T V R G			
UniRef90_H8KLV0	K F F N T E K Y V I S E P G A F K V F I G T S S A			
UniRef90_R9J3N4	D Y W N G D S W E L E G G D Y E I L V G T S S E N L P F W L P L R V T G T V R R			
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UniRef90_S6RFW6	A F Y N E M Q F V T E P G Q Y I F R V G S S S V D I R H E L D V T L P G E T T Y			
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UniRef90_R5NR95	Y T T F D C K L V D A A V D G D T I K V H T T V N T G K V V A G S E V I A Q I Y I V				
UniRef90_D5UL28	Y S T V E Y S D L T I A Q P D G A V R A Q V T V T N T G S R P S H E I V V Q A Y V				

50                    60                    70                    80

UniRef90_UPI0004085707	R G P Q G G V L R P D R E L K G F A K V R L G A H E S A T I R I D F D R Y T F
UniRef90_S3CFK8	S L P T S S P A A P P K Q L R G F D K V K L E A G G T S G T V T F N L R R K D L
UniRef90_K1WHR8	R Q H A P S I R R P L K E L K G F T K V V Q L A S G E S K R V D I T V E T K A A
UniRef90_U2L1Q7	N D I V S S V A R P V K E L K G F R R V T Q L R G F E K I I W L K S G E T K S V T I R L T T K E A F
UniRef90_R5RQ82	T D M V S K E E R P L K E L K G F E K I I W L K S G E T K S V T I R L T T K E A F
UniRef90_V3UYS6	R D V L A S L V R P I Q K E L L K A F Q R I I W L A A G K S A V L E F H I P T D M L
UniRef90_K1Y0Y9	R D I Y A S V T R P V K E L L K G F N K I I F I M A G E T K E V V F K I S K E Q L
UniRef90_R5F2F9	R D K A S T Y V T P V K Q L L R D F K K I E L A P G E T R T V Q L Q V P I S D L L
UniRef90_B8N5S6	G I P N G P V R Q L L R G F E K I V E N I L P V G Q T V T V E F A L G R R D L L
UniRef90_Q5WI16	R D Q F A S V A R P I K M L A D F K Q I I F I R S G E T G T V Q F S I S S E D M L L
UniRef90_G8QUC6	H D A V A S I V R P V K E L L K G F A R I I S L Q P G E E K S E V T F V L P S D M L L
UniRef90_D1TSX3	H D N A S R L D R P E Q K E L L K A F E K I V S L S A G E E K K R V A F K L D K R A F
UniRef90_G1WC58	H A K Q S T S T R P V K E L L R A F R K I I N I L K A G E E K Q T V N F T L T P E D L L
UniRef90_W3XLP8	G I P G T D V P V R Q L L R G F E K I P T I C V G E E T A T V E F A I T R K D L L
UniRef90_A0A023NDK8	R D V A G E V V R P M R E L L K G F V R L E L A P G E S A D A V F T I T E E Q L L
UniRef90_D5EXF9	A A P N K K L N K P E K I R N Y A K T S L Q P G Q T E T V T M L V K V E D L L
UniRef90_D6KBM4	H D P V A A V T R P D M R L G Y Q R V E L Q P G Q T E T V T M L V K V E D L L
UniRef90_R5S4A2	R D K K S S V E R P V K E L L K G F C K V S L K P G E E K E V S F T I I D R S A L
UniRef90_L1LZ38	Q D V A A S M S R V P V K E L L K N F Q K I I L L K A G E E R T V T F R I S E D D L L
UniRef90_C7QYM5	S D L V T S V S W A D K F K A F T Q V E V Q P G Q S V T A T V Q V P V A D C
UniRef90_UPI0003669CC4	H N T V A V S V S Q P V R E E L L K G F H R I I L L Q P G Q T Q H L D F K L H Y D D L L
UniRef90_R6V0P9	K F P D Q G I K T P L K Q L K G F K R V H I K K G A T E Q I S I E I P K E E L L
UniRef90_S3D1C5	G F P P S S A P S T P V R Q L R G F Q K Q T L V A G G A S T T V K F E L R R K D L L
UniRef90_C6X6D0	R D L V G T I T R P V K E L L K G F Q K I V F L K K G E S R R K I V T F N I T P E D L L
UniRef90_H1Y184	R P L H P S V Y R P I H E I T N K N G V D F E L G A D A F
UniRef90_UPI00036FA721	H D P V A S V V Q P V Q R L G Y V R L D L A P A E S A R V H L T V P V D L L
UniRef90_J3E9R3	Q D V A G S M I R P I K E L L K N F Q K V V Q L K A G E Q K V I I H F S I S E D D L L
UniRef90_F9F2U8	R L A N S E I E L P N K R L R F Q K V E I V K P G E A R V T F R F H P D L S
UniRef90_M7SK06	R D E I S S V V V P N I Q L K G F S K V E I I A A G A T E T V E I E L D V A E L L
UniRef90_H9XVR4	Q D K V G S I V R P V K E L L K G F Q R R V S I L K G G E T K V V E F K L S A D E L L
UniRef90_G9P166	S A P D S P T H R P T K E L L H G F E K V V F L E A G G E E K E V V Q I A I D Q Y A T
UniRef90_S3D249	S L P A S A P G T P P K Q L R G F E K V V Y L E P P G A S S T V T F P L M R R D L L
UniRef90_X0PG75	G K P T S N V I R P A K E L L K G F Q K V V Y L E A G G Q Q R R I I H P F D E Y T F
UniRef90_W4C5G9	R D V T G E V V R P M R E L L K G Y V K L A L A P G E S G T A T F T L N E E Q L L
UniRef90_UPI00046A008E	R D L V S S V A T P L K Q L Y G F E K K V V D L A P H E S R E E I Q F R L L P I C D L L
UniRef90_D6E5R8	C P I E S D V I R S H E L L K G F Q K I V Y L L H P G E E K E V I L E L D E R S F
UniRef90_G2YFD7	Q Q Q N P S I R R P N K E L L K G F E K V V F L L K A G E E K R V E V D I I E K Y A A
UniRef90_E4RHG6	Q D V S A S M S R P V K E L L K N F Q K V L M L E P P G E T R T L T F F R I S E D D L L
UniRef90_H1H62	N D P V A S I T R P V K E L L K D Y Q K V V M L A P P G E T T K K I T F N I T P E A L L
UniRef90_R8BBU7	G I P G D D T P A R Q L R G F E K V V P S I Q P G E T V T V Q F P L T R R D L L
UniRef90_W0LBD4	S A P Q G E L L R E P Q A L L K G F T K I I S Q P G E T R T Q V T L K L H W K D L L
UniRef90_X5DCM0	R D Q T S G I I T P I K A L L K G F E R I V I S L D K G E I K T V T K F N L D K Q T I V
UniRef90_D5EUD1	A A K Q S K V D R P V K E L L K A F Q K V V Y L Q P G E T R T N V T L T I G A D A V
UniRef90_K6UKR3	G Q P A R I A G P P K A L L A D F T K V V T L N P G E R K R V T M K L S A R V L L
UniRef90_B2B788	G I P G T R E E K P M R Q L R G F E K V V L V G V G E T K K V V F E L L T R R D L L
UniRef90_F4H4T8	H D V V T S A T W A E K E L L K A Y R L V D L A P G E S V V V D L T L P V A D C
UniRef90_S3CIP2	H I P G G P V K Q L R G F E K V V E I V A G E S A D V T F S L L T R K D L L
UniRef90_M7SP21	A I P N S P P Q K Q L R G F D K L T I S L S P D E S G P V Q F E L T R R D F
UniRef90_C0B9K3	S A P E G K L D Q P Y Q T L R G F D K L T I S L K P G E K Q T V V E L S F L L T D L L
UniRef90_G0L0T0	S A P E G K L D Q P Y Q T L R G F D K L T I S L K P G E K Q T V V E L S F L L T D L L
UniRef90_E8RTN8	H D V L S E R V R P Q K E L L R N F K R V V A I L K P G E T K Q I V S I L K I G A Q Q L L
UniRef90_UPI000347AD74	A A P K S A G W E A P R R R L V G F R K L V S L L S K G Q Q S Q T V V S I L T V D P R L L
UniRef90_K9GBG6	R Q L H S R T D Q P L K R L R D Y T R V S V P A G G T V T A E L T V D A S D L L
UniRef90_C6D479	S Q V N P R L S R P P K E L L R G W D K V V L V Q P G E T V T A R A V L D K I S V L
UniRef90_R6CL45	K H N K P S S Y D A P S K K L V A Y E K V D L T A G E H K I V N L T V D P K D L L
UniRef90_UPI00036059DC	R D M V S S V M T P V K Q L K A F T K V V G L R P G E S K K V T L S I P V S E L L
UniRef90_UPI0003B358AD	R V I E Q S R V V K R P S K Q L L A F R R V V K L L A A G E S K Q I S F S I K L A E L L
UniRef90_UPI000410603C	H Q R Y G T S T R P I L K G F E R R V V A P I P A G G T S T V T S F D L G P D Q L L
UniRef90_Q0UU79	S D P W A E V V R P L K E L L I G F T R V V A P I E A G Q S A R V T F T V H A D R F
UniRef90_F7K3I9	K D I K S T L P R P E K E L L Q A F G K V V F L Q P G E T T K N V N L K L N K H S V
UniRef90_W9NQL4	R D C Y A S M V R P V M E L L A G F C R T F I I R A G E V K K L C F R M K L S Q F
UniRef90_UPI000319D610	T L P H S A P E T P L R Q L R G F E K V V F L E S G E S K T V G F E L M R R D L L
UniRef90_R5JC19	H D V V T S V T W A R K E L L K T Y R Q V A A P G E Q R R V A V E V P V S D C
UniRef90_V6J8E7	G K T G G I V E R P E K E L L K Q F K K V V F L K A G E S I T K M L L S K D A F
UniRef90_R8B8I2	R D L S A S V S R P V K E L L K G F Q N I V F L E P G A A R D L T L E I A P T A L
UniRef90_G3Y4D3	G I P G N A P V R Q L R G F D K V V P F I N A T K T A T V S F E L T R R D L L
UniRef90_UPI00046AD179	V D E I A S V V V P N R L L K G F E K V V V I P A G G S K S V S I D I K V E D L L
UniRef90_J8Q858	R D Q M A S I S R P V K E L L K G F K R I T I L K P G E S Q T I T F P I D V K A I I
UniRef90_L7HSW0	R A E R S R V K R P L K T L L D F T R V V H I L Q S G E K K Q I V E F T V P I S K I L L
UniRef90_R1EJQ4	G I P E E G A P V R Q L R G F A K P S I E P G A E A T V E F E L T R R D L L
UniRef90_I2B856	S F P A A A G Q P V R Q L R G F E K V V H I L A Q G E Q R D V T F Q L R R R D L L
UniRef90_D2TGV8	A P P S G E L I R E E Q A L L K G F T C V V Q L Q P G E S Q I V T M M L P V R E L L
UniRef90_L2FFC1	R D K V A S M V R P V K E L L K A F Q R V V G L D A G A R A T T L T F Y L L P V D M L L
UniRef90_E3QSBS	S F P A D T T P T P P K Q L R G F E K V V P F I A V G A S K T V G F E L M R R D L L
UniRef90_UPI0004051127	T L P S G A A V S P P K Q L R G F E K V V R L L A A G E S A T A T F N L R R K D L L
UniRef90_R5RZL8	G K E D S Q I Y R P T K E L L K G F F N K V V Y L L K A G E S K R I F I P F D T Y T F
UniRef90_F2II6	K D V V G S R T R P V R E L L K G F F K K I V Y L E A G A S A V V T F E I T P E S R
UniRef90_M1W0T9	K S K G S A Q A Q P I I A L K G F Q R I S L N S K E S K I I H F T L N P Q L F
UniRef90_W9Z880	R I P G A P P K Q L R G F D K V V S I P A G Q D A V V R F E L T R R D L L
UniRef90_UPI0003F99C94	G Q I N P R L H R P V S E L L K G W E K V V F V P V G Q T V T A R M K I D K V S L L
UniRef90_N4VJS2	S A P Q G K L G K P E R Q L I G F K K T A E L L P B Q G T Q R I I I E F S A D E M
UniRef90_S7VXH7	S F P S E A A Q P P R V L R G F E K V V N V R P G Q S A D V T F G L R R R D L L
UniRef90_U6RBG5	H D K V G S V T R P V K E L L K G F Q K V V F L K K G K S A D I T I S I P K K E L L
UniRef90_UPI000441618C	G K N G E S V E R P L K E L L K A F K K V V Y L L K P G E S S Q K V V F N L S D D A F
UniRef90_I9GBU2	S C P A S A G E P P R V L R G F A R P F V R R G A S K S V S I E L T K R D I L
UniRef90_F8DAS8	R Y P E T G T Y M P L K Q L K G F S R V H I L K K G K S A D I T I S I P K K E L L
UniRef90_Q0TFX6	A K A A A P V P T P E R E L L V G F E S V S I L G A G E S T A V T V S L E A E D F
UniRef90_UPI000372CF17	G V P N S P P K K Q L R G F E R V V G L L Q P G E S V E V E F F L L H R R D L L
UniRef90_UPI0003661D4B	K L D Q S R I Q R P L R T L Q A F R R I H I L A A G Q S S V V T F E L P V N E L L
UniRef90_M3DE44	R A E Q S R V K R P L K Q L L A F R R V V E I E P G A A R R V T F R F H P D V S
UniRef90_R5NR95	H D P Y S T L A K P E K E L L K A F E K V V K L A P G E K K D T F A I A I R D L L
UniRef90_D5UL28	S D L V T S L T W A D K E L L K A Y R H V D V P A G E S V V V D V E V P V A D C

	90	100	110	120
UniRef90_UPI0004085707	R H F D S N A W Q E E S G E W T V M	I G K D A Q D I V L   S A P   E R T E G V A P		
UniRef90_S3CFK8	S Y W D A K G W V V P   S G T F T V N	G A S S R D L   R L   K G T F N V S		
UniRef90_K1WHR8	S F W D E A M W I M E K G A Y E V I V	G S S S A D A A L K A G F E V G K T S W W		
UniRef90_U2L1Q7	A F Y D V D M M K K I E P   G E F K V M	G G S S K D E D L   Q V T F N V K		
UniRef90_R5RQ82	Q Y Y N E K K W V F E K G D F L   K I	G A S S Q D I R L   E Q K I K L		
UniRef90_V3UYS6	N F T D I Q R R I V E P   G E F E V Q I	G A S S A D I R A K G V V M T R G T T H V		
UniRef90_K1Y0Y9	A F Y D I N M K T V E C   G M F E L M	G Q A F D K I M L   S H K F E V V K		
UniRef90_R5F2F9	Y L V D E N Q R F V E A G E F I L E V	G Q A S N N I I L S K T I T I G N D E I V		
UniRef90_B8N5S6	S T W D A Q E W L L Q S G T Y Q V Y	G R S S R D L   P L   Q G E F T I		
UniRef90_Q5W16	K F Y G T S M F E S E P   G D F E V Y Y	G T S S Q E T P L   T F N F A L		
UniRef90_G8QUC6	S F V D G I Q R I V E P   P G T F E I M	G K S C Y E I V W R Q E I F V T G T V R		
UniRef90_D1TSX3	S Y Y D E D N W V L P   G L F T L R I	G R S S R D I H A E T P L I V K S S T		
UniRef90_G1WC58	K Y F N H D Q Y V C E P   G S Y D I M	G D N S E N V Q T A E L K V		
UniRef90_W3XLP8	S V W D A Q K W N L Q E G D Y S I S V	G R S S R D L P L   T G T I L S I		
UniRef90_A0A023NDK8	R Y H H S D T Q A S D P   G T F Q V F	P N S R D T L A E S F R L		
UniRef90_D5EXF9	A S F N E K A W K T D A G R Y N F L I	C S S A N D V E A K A S A N V K G		
UniRef90_D6KBM4	A F T D T G R R V V E P   P G D L E L R	A A S A A D V R H T A R L T L T G P P R		
UniRef90_R5S4A2	S Y F D A H Q W M A E P   G A F E A I V	A A S A T D I R G R V E F K L T E		
UniRef90_L1LZ38	K F Y N S Q N K Y A A E A G E F N V Q	G L D S E S S V Q Q Q S F E L		
UniRef90_C7QYM5	T I V D A R R R V V E P   G E F E L L	G P S S R D E D L		
UniRef90_UPI0003669CC4	A F Y N A D K R V V E P   P G T F D V F	G G G S M A D K A G S F T V		
UniRef90_R6V0P9	R L W D D Q Q F Y T P   S G T Y H F M	G K S S D N I C L Q K T A E L		
UniRef90_S3D1C5	S Y W D A K R W V L P   A G N F K V E V	G A S S K D L R L S G S I V V T		
UniRef90_C6X6D0	K F Y N N A K Y D W E P   G E F E V M	G T S S S D V Q		
UniRef90_H1Y184	S C Y N T G S W Q L D   P G E Y E I Q I	G S S S R D L R L K T L V Q V		
UniRef90_UPI00036FA721	A S F T D G H R I V E P   G E L E L R	G A S S T D P R L T A H V R L T G A V R		
UniRef90_J3E9R3	K F Y N A Q K Y Q A A E P   G E F K V E	G L D S R D V K Q Q		
UniRef90_F9F2U8	G Y Y N N A K Y Q V E S G E Y I F W T	G S S S K L T D L K A T I T L		
UniRef90_M7SK06	G L W D L G E Y V V E P   G D F T I L V	G S S S A D F R A N T L T T V		
UniRef90_H9XVR4	A F Y G R D V K K V E V G D F N I W V	G G D S N A S L K G S F S V T E		
UniRef90_G9P166	S F W D E S M W K S E E G T Y D V L V	G T S S S Q E I L G R G K L I I V P E T R F W		
UniRef90_S3D249	S Y W D S Q D W L I P E G E F G F S	G F S S R D I K L T A G L T V		
UniRef90_X0PG75	R F Y D T Q S W Q V E A G T Y Q M M V	G H N V H E A V T S T Y D L K		
UniRef90_W4C5G9	R Y H H S D S R R S D R G E F H I L V	G A N S R D T Q K K S F R L		
UniRef90_UPI00046A008E	A L H D R N L R V V E A G D F E I Q	G E S S S D H I L L R D T L R V T D D R T		
UniRef90_D6E5R8	S V Y D V E K F S M L S G K Y Q I C	G A S V H D L Q L K A N M E V V G N S Y F		
UniRef90_G2YFD7	A F W D E E A W V V E K D A Y D V L V	G W N T S E L A E L K A T F E V E R T E W W		
UniRef90_E4RHG6	K F Y N G Q Q R V A E P   G E F N V Q	G L D S Q A V H Q Q S F E L		
UniRef90_H1HN62	K F Y N H H V Y D W E P   G F N L Y I	G T N S D D V V K		
UniRef90_R8BBU7	S V W D A Q K W Q L Q K G Q Y K V F	G S S S R N L P L E G S S L A V G		
UniRef90_W0LBD4	A C Y H P G I W I V E S G I Y R I K L	G K S S R D I S L E S D L Q V L G E P Q Q		
UniRef90_X5DCM0	T T W H H D D Q A A E H N N F M I M V	G G S S D D I K L T G K L S F A G		
UniRef90_D5EUD1	S Y Y D E N S W C A E P   G T Y E A L I	S Y Y D E N S W C A E P   G T Y E A L I		
UniRef90_K6UKR3	S V F D T H Q F V N L A G E R T V L	G D S A A N L P L V G K A V V T R T T		
UniRef90_B2B788	S V W D A Q K W R L G K G E Y N V E	G G G S S R N L P L S G K F T V		
UniRef90_F4H4T8	T I V D R H R R V V E P   G D F D L L V	G P S S R D V V L L R G R F T V A		
UniRef90_S3CIP2	S E W S E Q A W M L Q Q G S Y N V W	G P G Q F D I M V G L D S K H L K V A L T V K		
UniRef90_M7SP21	S V W D S Q K W V V Q E G D Y T I F	G A S S R D L P L A G E V T I I G		
UniRef90_C0B9K3	A S Y D E E Q W I L E Q G E Y S L R	S V W D S Q K W V V Q E G D Y T I F		
UniRef90_G0L0T0	E Y W N D G K W T I E P   G Q F D I M V	M G N S S R D T E V C G V I S V Q E T		
UniRef90_E8RTN8	A V I Y D E S E W V I A P   G T Y E V Q L	G A A S D D I R T R V K V T L A G Q R		
UniRef90_UPI000347AD74	A F W D R G R E V V E K A K H E L M	V G A S A D D I R H R A R L F V D G E R		
UniRef90_K9GBG6	S Y W D D N K W V M E N A E F C V A A A K H	D G V V A T F R S G S E Y Q W		
UniRef90_C6D479	A I W D V N D Y V L E K K G S Y S L M	A I W D V N D Y V L E K K G S Y S L M		
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UniRef90_UPI00036059DC	A V W D R E R F V I E N A Q Y T L A G P S S E E	P V S A A L E V S G E T		
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UniRef90_V6J8E7	A F V D R N H W V T E P   G D F E V M V	H D I C V Q K N V R I		
UniRef90_R8B8I2	S F W D A Q K W K L Q G Q N Y T V S	H D I C V Q K N V R I		
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UniRef90_S7VXH7	S Y W D A Q K W A V A K G K Y T L S	G A S S S R D L Q L K A V L T I		
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UniRef90_L8E4C5	Y S T F E Y Q D L	Q I K Q E G Q S V V E	V S V K N I S N V A G E E V V V Q L Y I		
UniRef90_C5B8H2	Y T R F T L S E	L T L S A P N G K I E A S I	T V T V T N T G A P R A G A T V V L Q L Y L		
UniRef90_K2QPJ6	Y T T F D Y S K F Q	L P S K N E S I E L S	V E V T N T G A Y D D G D E V V V Q V Y L		
UniRef90_V4NN21	Y T Q F A Y S D V	V K V T G G K S L T I S F K V	T N T G K V V A G K D A P Q V Y Y L		
UniRef90_UPI000375F439	Y T D F D L T D Y	V D Y P A G P V G V	S T A T V E V S V N T S A V A G A E V V I Q L Y V		
UniRef90_S8BQ60	Y S S F K V G K P	V L S T D G S F T A T V E	V M I K N T G R C D G K E V V V Q L Y V		
UniRef90_A6KYD3	Y T T F D Y V D C A	L S A A S D T L K V S V M I	K N T G R C D G K E V V V Q L Y V		

50            60            70            80

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

90                    100                    110                    120

UniRef90_G1WKW4	R Y W D A H A W R V   D Q G D Y E I L L V   G S S S R D   I R R S C S   H L A A D T A P			
UniRef90_UPI00040DC351	A F T G R D Y R   V E P G V V E F R L   G R S S A D V V H S L E C T   L T G D T R V			
UniRef90_I8Y3R8	S F Y H E K V F I T E P G E F K L F   G A F N G S S D N L R A T S F E L L E T R			
UniRef90_UPI00037B1E6F	A I   W D R D R F C L E A A Q Y T F E A G T S S A D I R L T A A V E I A G E V			
UniRef90_R5AL01	A F V H D G H W T L E K G D F R I   I Q A G N Q T V N V N C T A T			
UniRef90_C1F1B0	S L V D E G K R S V Q P G V Y S I F V G G S Q P T G A K Q Q T V N L T			
UniRef90_W0IL81	A Y F D A G A F R A E P G G Y Q L V V A A N A T D I R			
UniRef90_A5Z4B8	A S Y D D S C Y V L E A G D Y N F Y V G N S V K N N K L A Y T Y K V E E			
UniRef90_W4DZA0	A S F D S D C W L M E E G R Y I I W A G T S V M H V Q K A G E F E L T E N R T L			
UniRef90_N2IXR1	K F Y N A D K Y A A E P G A F K V Y I G L D S E E E V K			
UniRef90_J5JB4	S V W N A Q Q W Q L Q R G T Y T I E V G T S S R D L P L K L S L E I			
UniRef90_S3FFA9	R Y L Q P N T F D A D P G T F T L F V G P N S R D V L A K S F E L K T K T R			
UniRef90_UPI00037E8459	A F H N Q N Q M K V T E P G D F E L W I A K D A A S G L K G R F T V			
UniRef90_I0XBm9	I L F D S G K Y I A P S G T Y E I Q I A A S L S D V K L S E K I T V K G			
UniRef90_W3WIP4	A Y W D D R C W R V E K G V H E I A V G T S S R D L A I V L S L E I P E E F S F			
UniRef90_UPI00035DD299	A Y W D D G G W Q F E A G D Y V L R L G S S A T D L P L A L T V T L			
UniRef90_C6WE31	S F T G R D V R I V E P G E L R L L V G C S S E D V R W E Q S V R L L G A T R V			
UniRef90_G1XH86	G I W S T E K W V V E A G D Y E V L I G T S S D E L K P A G K I T V K A A W S W			
UniRef90_G2NWP9	A S Y A D G T R V V E P G A L E L R L A S S S A D V R H T V P L T L T G P E R			
UniRef90_UPI000371AB89	A Y W D A D R W V V E G G S Y T V S V G A S S R D L R S S V D V S V E G D A F T			
UniRef90_UPI00045E7A8C	S F I G L E F K R V E P G D F T V M V G N Q S			
UniRef90_W7SP45	A H W D T N A F T A D P G G Y E V L V A R S A G D V V L T A P L A V S G			
UniRef90_UPI000471C2DE	S M I N R D N L V V E P G W F T I S V G G A A T T S V V T G R F N V T G			
UniRef90_V4NEA7	A I F D S K T W S I A A G E Y Q V I L A K S A T D P V S M V K V T L A G Q K Y			
UniRef90_E4R3Z0	T I I A D A N R I V E P G E F E L L I G H S S R R D D L K T T F T V A			
UniRef90_R7YP22	S I W N T Q Q W E L Q R G N Y N V W V G A S S R D I R L S T T L T I			
UniRef90_W0JVR7	S I W D S R Q Q V V E R S T Q A V L V G S A S D D I R R W G R L R V D G E R			
UniRef90_G4H9S9	E L I G P D M K V E P G E F R I R V P D S			
UniRef90_D6B148	A S F T E G H R I V E P G A L E L R L G P S S T D T R L V A R L T L T G P V R			
UniRef90_C1F7X7	Q Y W S Q H R W T Y D P S T Y D V W V G D D S T A T M H A K F V V T			
UniRef90_UPI000248F5D0	M F V N E E K W V I A E P G E F V I K I D S L T K T I E L K			
UniRef90_UPI00047A1FAF	S I V D A G R R V V E A G E F E L R V P G S S R D A D L R S T F R I T			
UniRef90_E9URA9	A F T D R S T R V V E P G D V E W V W V A A S A G E K V A T A			
UniRef90_UPI00026C63BF	A I W D R D R Y C V E A G E Y T L L A G A S S A D I R L E H P V N V R G E V			
UniRef90_UPI00029ADBC7	A F V G A D K W L E E G D F K V Q V G E E V V D V V C A E T K K W			
UniRef90_UPI00037970AF	K F Y G D M T R K A E S G K F K L W V A Q H S A D N A N E L E F E L K			
UniRef90_J3NHH1	S Y W D V Q E W V I P K G E V G V S V G F S S R D I K L T T S F T			
UniRef90_H8KSZ1	S F I N Y D L K R V E P G D F D L Q I G D Q K A S F T V T E			
UniRef90_K4QVC8	S F T D R N L K V V E P G G L L E L R L G T S S A E V L H T A R L T L S G P V R V			
UniRef90_R1EDL9	S Y W D A Q E W A V A K G T Y T F S V G A S S R D L R G E A T L E I			
UniRef90_U4TJM5	S E W D D D Q F V F V L P Q G Q R T V I V A T S S A A E V A A T V T L Q G T S R T			
UniRef90_C7ZHU6	A F W D E E T W V V K A G E Y Y Q F S V G R S S T E L V A T S M V Q L E R K T F			
UniRef90_R6MAQ3	Q I W D E H K F I L P D R D M V L E I G T S S S D I R L R T S F R T K E			
UniRef90_U1Z167	R H W D T G A W Q V E Q G A W S V L V G S H V D D L P L R A T V E L D G T V P P			
UniRef90_U3HQW3	A F V N A Q Q R V A E P G E F E V Q I G L D S E Q V E R A S F T L			
UniRef90_C9KS15	S C V D E N I R K V L P G T V K I Q V G G C S P V A T L T A P L K T V E T			
UniRef90_F0M695	G F T G R N E R V V E P G E V L L G L G A S S T D I R I T H S V Q L S G E A R V			
UniRef90_FORST1	S F I G E R M R V L E S G S Y E L F V G K S C D D I V F T N E L S I L G E D K V			
UniRef90_W3X2A1	A F W D E H M W I M E K D T Y E V Q V G S S S E E I A Q T A E F E V L E T Q W W			
UniRef90_R5KY19	A S Y D D S C Y V L E A G D Y E I I L V G N S V K K C E S V F T Y Q L D D			
UniRef90_W9TNW9	K F V D A Q Q R V A E A G E F E V Q I G L D S Q R V Q			
UniRef90_M3B352	S Y W D T Q Q W T I A P G S G V Q V G L S S R D I H V E D S F T			
UniRef90_R0IGD4	S Y W D E R V W R I E P G S Y G V V V G D Q K T S F E V S E G R V W			
UniRef90_W4DV96	M F Y G D D Q L V F E P G D F D I M L G A S S S D			
UniRef90_L2FS32	S Y W N E E Q W L A E K G T F R I I I S K S G D D E A L S A E E L E E D F S W			
UniRef90_B8H9A2	A H Y D G G W Q V E P G T F R I L V G R H S A D			
UniRef90_FOR433	A F V D D G K W L E K G D F R I Q V G D Q T M N V S C A T T			
UniRef90_K8ACK1	N F T N E G A R I V E P G E F E I Y I Y I G A N S G D I R R R G L I T V E G D T R			
UniRef90_D2UEV7	S D V D R G Q R A V E A G D Y R L F V G G G Q P D T Q V S G S F S I Q G T T			
UniRef90_I2DVY6	S V W D T S H R Y V A R G T V Y V G A S S R D I R L Q G S			
UniRef90_UPI00047C8B79	A I I D N G K R T V E P G D F T L Y V G P N S V G Q S A K K V E			
UniRef90_E8RU64	S R F D A Q K W M Q P A G R Y D I S V A Q D A E D T G L T A S A Q M K A A T R			
UniRef90_F2LQT0	S V W D E G K W R Y V P G S S V Y V G A S S R D I R L Q			
UniRef90_C6LDN4	A S Y D A Q A Y V L E E G D Y E I S I S L R T D S H T V V D T Q T Y T V D E T V V Y			
UniRef90_D7NBZ2	T F I G A D M N T I E P R P D C I G S A S D N I L L K S T I N			
UniRef90_X8JR49	S Y W N E Q K W S L I S G T T S V W G P S S R S K K L T G S I L A I			
UniRef90_A3XP90	S M I N D Q E Q V V E P G W F T L Y A G G G Q P N K K Q T E S			
UniRef90_R6NWY0	A S Y D R Q A W V L E K G E Y K I Y A A S D I R E H Y G E F T Y T L G K D K V I			
UniRef90_Q6C1I2	A I I D V Q S W R V Q R G E Y S V Y I G H S S R E F E L C T F T L			
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UniRef90_S3CCT0	Y T D F A V D S A S V E G T S K K [V] V V S S A T V R N T G Q A A G E S V Q V Y V				
UniRef90_G9NNT3	Y T T F Q W D N F T S A W D G D T C [T] V T V D V T N T G S V [A] G K D V V Q V Y I				
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UniRef90_UP10003617C7A	Y T R F D Y K D L T V Q D R G G V R A E F T V T N E G P R R G A D V P Q F Y L				
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UniRef90_UP100047B6A02	Y T K F E Y F N L V I D E K D N L I S C K F T I K N I G D V S G A E I S Q C Y V				
UniRef90_UP100035DB1DD	Y T H F S Y S G L S V R K A P D T L I A S F T V K N D G H M A G A E V P Q V Y L				
UniRef90_UP1000348A9E3	Y T E F E I [P] V R A G E S G G V I R V D V K V T N M G N R S G K E V V Q L Y Y				
UniRef90_UP10004778189	Y A T F E Y G D A E A T A E Q T V T V P V E N V A D R P G R E V V Q A Y V				
UniRef90_M0JMM1	Y T T F E V S D I H L D R T S G Q I E A E V T V K N T G N C T G T E T L Q L Y I				
UniRef90_D4KM09	Y T H F N Y E E P A L T I D A E K V T V K C R I T N T G V M N G K E I V Q L Y T				
UniRef90_UP1000418E723	Y T S F H Y S E P M L S A A G G Y V S L S V E V T V T N T G T R S G A E V V Q L Y I				
UniRef90_UP10003797A03	Y T K F A Y S R V H A D T A N G Q V T V H V D V T N T G S T P G A T V A Q L Y A				
UniRef90_D8HPV7	Y T T F E M A D L Q A E P L A T D I T V T L S V S N T G D V D G A A I P Q L Y V				
UniRef90_C9SU53	Y T D F E Y S Q M A I T P S K S T L K V S V K V T N T G D V A G A H S V H F Y T				
UniRef90_C7ZQ56	Y T T F T Y S D L E I W P V G T A Y G F H V T N T G A R D G A E V S Q L Y L				
UniRef90_M5G493	Y T D F K Q E I K D V K E A D G K [E] V T V E I V N T G D V A G K D V A Q V Y Y				
UniRef90_UP10003772E09	Y S E F E Y G D L E L E K T Q E G F K A T V E I K N I G E Y D G T E T V Q L Y I				
UniRef90_A5Z7X3	Y T S F S E Y T D L Q V S T S G G S L T A S V S S V T N A G D R A G D D V V Q V S A				
UniRef90_V4GU9	Y T D W E Y E S L D A T A D R A T V T L R N T G T R P G R E T V Q I Y L				
UniRef90_V6JRQ2	Y T T F A T V F T A L R A G D H G V E V D L T V T N T G D R T G R E V A Q L Y A				
UniRef90_D1PRZ4	Y T D F L Y R D L A L S P T C A N L S V S V V V E N T G Q R D G E E V V Q L Y L				
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UniRef90_R5RK85	UniRef90_9OKTX9	Y T D F E I S G S V K N V D E N S V V V D T A V K N T G D C Y E G K E V V Q I Y I I			
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UniRef90_C6D195	Y A D F T Y K D F S A P S S A S S F N V S V E I T N E G S I A T S E V V Q L Y A				
UniRef90_L7I5D2	Y T T F G Y S N L K I E K S S A V V V R V T A E V E N T G G V D G A E V A Q L Y L				
UniRef90_R6C464	Y T R F N Y S N D R V I E R G D T L R V C F N L K N S G D M D G D E V V Q L Y V				
UniRef90_UP10003778AC2	Y T S F H Y G P P K L D K D G E T A T V S V S I R V N V G E R P G V A M A Q L Y Y				
UniRef90_W0FJV1	Y T D F A F E D L K L S M D E E D L K I S L D V V N R G T V V P G K K A C L I Y Y				
UniRef90_R2P4F2	Y T Q F S Y S N L Q V E Q T Q T P L K I S V S V K N E G S V V P G E E T V Q L Y I I				
UniRef90_A0A010R9J3	Y T T F E Y S D I K V K E A W D I V A T V S T S I S V T N S T G S L Q G A E V A Q M Y I				
UniRef90_D8PU51	Y T D F E Y S N L V I S A V D A F T V E F D V T N S T G D L F G G E I P Q L Y V				
UniRef90_A9GX43	Y T R W E I L D V E A P A A G A A L E A R V V R V R N V G T R R G R H V V Q L Y L				
UniRef90_UP1000370E824	Y T R F A I S D A Q F K V E K D Q I I A T C Q V K N T G E V V T G D E T V Q L Y I I				
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UniRef90_J4UCT8	Y S K F K L S D L R V D K E D T L Y V A R V K V K N V G K V H A A E V P Q L Y M				
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UniRef90_UP10003617863	Y T T F E T R G L S V D K A G E N V T V R V S V K N T G A Q K G K E T V L L Y L				
UniRef90_F8NLG7	Y T T F E Y S Q V D I S A H E P A F K V T F H V K N T G S L S G T E I P Q L Y I				
UniRef90_F6C8Z8	Y T D F S Q E M G D V S V D K A G E N V T V R V S V K N T G A Q K G K E T V L L Y L				
UniRef90_C9S9B2	Y T T F Q Y E G L G A T A E E D A L R C S V T V K N T G R V V A G Q E V V V Q L Y V				
UniRef90_R2TA18	Y S Q V D Y S G L T L S S K E E T L E V S V K V K N S S E R T T V V E T V Q L Y V				
UniRef90_S3C196	Y T T F S Y G N L S V T K A N S T V T V T A N V S N T G K M A G A E V A Q L Y I I				
UniRef90_R6DR78	Y T E F E I S A N T V E K S N D K F I F N V S V K N I G N T I G R E V V V Q L Y L				
UniRef90_I0HEE6	Y T T V V Y D G L T I V I T A D G A V R A S V R L T N T G T R P A L E T V Q A Y V				
UniRef90_R6S4N7	Y T A Y Q Y A N L K V D K A S D E I T V S V D V T N V G K M A G K E A V V L L Y S				
UniRef90_Q47XR4	Y S Q F C Y T K I K L L N N K G G A V E V V S A T I N N V G N Y N A E E V V V Q L Y I				
UniRef90_UP1000237C8DE	Y T D F T Y S N L T L E K S G E S V R L S F D L T N E G E Y D A D E V V V Q F Y I				
UniRef90_G2T521	Y T Q F S L V V Q S V T E T E Q A I R A F V L V T N T G D Y S G K E V V V Q M Y Y				
UniRef90_W4S8H0	Y T T F A Y A Q P Q L S S A D Q T L T I T R V T N T G R V V A G E E V V V Q L Y V				
UniRef90_V4ADV1	Y S S F K Y S N L E I I D T S G S N V T V S F I V V N T G Q Y D G D E V C Q M Y I L				
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UniRef90_UP10003B4CC1A	Y T T F E Q K Q N F V R L T D D G K V E A T V T V K N T G S V P G K E V V V Q L Y A				
UniRef90_Q8AAC1	UniRef90_Q8AAC1	Y T D F A Y S D F S V S G G D T V T A S F T V T N T G P R D G D D V P Q L Y L			
UniRef90_Q0BAK2	Y T E W A Y E S L D T P E P G R P F T A T V R V R N A G A R R G G E V V V Q V Y L				
UniRef90_W2EZY0	Y T T C E L T E P V L S R D G Y T V E V S V T R N T G E R D G R Q V V Q V Y A				
UniRef90_V6KKE4	Y T T W S W D A T E R D G D D L V V V R V T N T G E R D G R Q V V Q V Y A				
UniRef90_E8NDE1	Y T S F D V S A S V E K K E N G V K V R V K V K N I G E R T G K T V A Q V Y Y				
UniRef90_R7BV45	Y T S Y D Y N N M E L S Q N D E T I L V S I T V Q N V G K M A G E E T V V Q L Y L				
UniRef90_UP100047B37E1	Y A K F Q Y D D I K L S K D G E T I D A Y V T V K N V G E Y A G T E T V V Q L Y I I				
UniRef90_A9KJT1	Y T D F H I S E P V L N K N G E K I V A S V K V K N C G E R S G A E T I Q L Y I I				
UniRef90_R6RMX1	UniRef90_R6RMX1	Y T T F E L R D L A V G V D G E T V K V T V R N T G K L A V A T V P Q L Y L			
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UniRef90_J9NCU5	UniRef90_J9NCU5	Y T T F E L R D L A V G V D G E T V K V T V R N T G K L A V A T V P Q L Y L			
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UniRef90_F8A462	UniRef90_F8A462	Y T T F E M S V L T E D L T N G T L L S F E V T V T N T G D V A G K D V V V Q V Y Y			
UniRef90_A6LBA5	UniRef90_A6LBA5	Y T T F D Y K N A K L S K D N E S V T L S F D I A N T G K M D G D E V A Q I Y I Y V			
UniRef90_Q12653	UniRef90_Q12653	Y T T F D Y S E L E V D A W D I V A T V K F T V T N T G D V A A A A E V P Q L Y V			
UniRef90_R7S1V9	UniRef90_R7S1V9	Y T T F N Y T G L T L S K T N E D F D V T V T V H N T G K V V D G K E V V V Q V Y M			
UniRef90_D0TV8M	UniRef90_D0TV8M	Y T D F L I S E P V V K D S K T P L E V C V K V K N T G K Y A G K E T V V Q L Y I			
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UniRef90_L2F9W0	UniRef90_L2F9W0	Y S T F E H S A L D V N D E N A K I T V A V T V H N T S D V V A G S E V V V Q V Y V			
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UniRef90_UP10002F3251C	UniRef90_UP10002F3251C	Y T Q F Q H G A L K V D A H G A Q L Q A T V E V T V T N T G S R A G A D V V A Q V Y V			
UniRef90_UP10004780F5C	UniRef90_UP10004780F5C	Y T A F G Y A D M T A D E E G G P I R C S V T V R N T G A D R R G A E V V V Q L Y A			
UniRef90_R2V787	UniRef90_R2V787	Y G T V S Y E E L T L S T T E K L S I S I K L K N T G K T S E Y E R L E T V V Q L Y V			
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UniRef90_B6QW86	UniRef90_B6QW86	Y T N F S I S N L L V S A K V S S G K V V S V T I Q N T G K V V A G R A V P Q V Y L			
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UniRef90_R9NZV8	UniRef90_R9NZV8	Y T N Y S Y S N L Q I Q K S A E N V E V T A S V Q N V G G M Q G D E V A Q L Y V			

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 V P P S G G I D R P I K E L G G F A K V | F L Q P G E S Q T | V T I T L D R T N A |  
 V P P S G G I D R P I K E L G G F A K V | F L Q P G E S Q T | V T I T L D R T N A |  
 Q S P Y T D Y D K A N N V E K G F G K T E M I | L Q P G E T G T | V T V T F D K E Q L |  
 T F T V S G A T P R Q R L V G F K N T G V L | A P G E K I H | V T L P V A A A D L |  
 T L E D P A G P R M R L L G F E R V | V D L E P G E S Q T | V S L T V D P R L L |  
 S F P P I P S P M P T N V L | R G F D K I | W L E P S E S Q T | A S F L L T R R D L |  
 S A P Q G K L G K P A K A L G G Y V K T R | L L Q P G E S Q K | V T I A L Y M D D M |  
 E H T V E A P S E P L K K L Q G F D K I | I F L T P Q G E E K E | V E I I L N A R S F |  
 G V N Y N G E P P R R L V G W H K V | Y L N P G E A R Q V N V V I P E R F Q |  
 R A P Q G L G K P L E V L G A F G K T D | L L V A G Q S Q I | L R L E L P A A D M |  
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 S F A D T P A G T P V R Q L R G F E K V | P L A A G E T K T | V H F G L M R R D L |  
 S P P S N S L T H P E V T L Q A F T K T G V L | L P G K S E T V T V E M D K Y A V |  
 G F P P S A G E P P K V L R G F E K T T | I K S Q N T A V V V V L G L L K H D I |  
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 S R P D S E V E R P A L W L A G F A S V E | A E P D Q T V D V A V T V E P R A F |  
 G F S S N S R V D R P V K V L R G F K R I | T L A P G Q L E T T V E I T C P I E K I |  
 S Y P E E S N A P V R N L R G F E K I A | L L D A G A S E T V H F L L T R R D L |  
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 S T R P Y T G I E K A S V N L A A F E K T K E L K A F D K I | M L Q P G E S R I V E L T V D L K A C |  
 Q D V T G S V V R P V K E L L K A F K K V | V E L T A G E E K E V V F T V T R E D L |  
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 S K P C G K L G N P E K I L V A F V K T A E L K S G E S E T I E L I V E T N Q L |  
 S D L V T S V T W A S R E L L K A Y R Q V | T V P P G E S M T V E L E V P A S D C |  
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 S L P R A T G E D R P E K E L K K F T K V | Y L R P G Q R Q D I H L V L S K N Q A |  
 T A P Y H G V E K P A T Q L V D F D K T R E L L K P G E S Q D V D F T F V I A D D L |  
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 R D C I G S V V R P R K E L K G Y Y Q K V | T Q P G E S E A K K V T F E I D E E M L |  
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 G F P S S A P S T P V R Q L R G F Q K | T L V A G G A S T T V K F E L R R K D L |  
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 S F P T S T V P R P V K E L K G F R K I | W V G V G K E D K R F Q I H L D P K A C |  
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 E P P A G S H D R P V R W L G G F A G A H V A P G A T T Q V V R V R V D A T A F |  
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 T P P K T G V E R P P K S L V A F D K I | H L N P G A Q K E I Q L S F K R D G A |  
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 R I V P G A A S A R L A G Y A K V F L K P G E H R T L S I P L E P R L L |  
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 R W E E S S V P V P R W Q L V A F R R V | A V P A G R E T K L F F Q V T A E Q R |  
 S F P D N G L P T P V K V L R G F D R T D I L K P G H S V K L R F D L R R M D V |  
 G D L D D P Q E P P K R L V G W D K V G L R A G E T R R V R I V I P A E M R |  
 R P A G D T V T P T K E L K G F A K V Q V E A G E S A I A E I S L D F R A T |  
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90                    100                    110                    120

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UniRef90_A9KJT1	R F C D D L S F G S E K G F E H V Y L G T D S		
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 Y G E I V Y S A I D M G T A G G E L T V T A T L R N S G R H E A T E V A Q L Y V  
 Y S S F E Y G S P A I S R S G S R V E V C V E V K N S G K L K G D E V V Q L Y I  
 Y T Q F D W Q V V S V S E K L G Q L L V Q V D L T N V G K R P G K E V L Q V Y G  
 Y T T F E V R S L R V E S G N N G L E L A A E V E N T G D T A G K T V V Q V Y V  
 Y T R F A I G K G S L S K A D G K V T L T V P V S N V G K R T G D E V V Q V Y V  
 Y T T F S L A N E S L P C V G T E Y E I H V D I T N S G N R P G A Q S V Q L Y V  
 Y T R F H F S D L R L S R R R T A I R V S A R V S N V G P V A G A D V A Q L Y L  
 Y S T V K L S D L K V S K D F E N V N V S I K I V T N T G N Y D E E V V Q C Y V  
 Y T S F S Y D R L R A S S N P S V L A V S V S V T N A G S V T G K E V V Q V Y I  
 Y T T F E L S R F D S T E T A E T S Q A A V E I T N T G T I T G I A V P Q L Y I  
 Y T E F G S D G T N S L Y D V I A E V T A Q V T N T G D V L A C E V A Q L Y V  
 Y T E F K Y G T V T P S V T G D R L S V E V T V T N V G A R D G A E T V H W F I  
 Y T E F E S E I A K V E D N G E K I S L Q V N V K N I G D T A G K Y T A E I Y Y  
 Y T T F E Y S D L T L S T T N D S I N V S V T V T N T A G S M A G K E T V I M L F L  
 Y T R F A Y G E P E I V T P D A M L E V R A S V T N H G T R P G R A V A Q L Y V  
 Y T D W S Y E S L E A T P A R A R V R V R N T G S R H G R E V V Q I Y L  
 Y S T V E L S N L Q V P A E F D G I D I S V E I T N T G S Y D E E V V Q C Y I  
 Y T D F E F G E A L L I S K A G E K V E I T I P L T N V G K M D G A E V V Q V Y V  
 Y T S F K Y D Q L K M P S K G K S V V S V R I T T N T G K M A G E E V A Q L Y L  
 Y T R F E Y S T L R L N S T H G A L K A A V T V T N R G T R P G K E V V L V F V  
 Y T T F A K S I I G M K E E D G V I T I R V S V K N T G E V P G K D V I Q I Y A  
 Y T T F D W S N M Q T T W S G D E C T V T V D V E N T G D M A G K D V V V E I Y A  
 Y T T F E F K N A K A E V G E K T V T V D V T N T G K R D G S E V V V Q I Y V  
 Y T K F E Y S D L K I V T A D D N L V F E V N V K N I G D R A G K E A V M L F S  
 Y T E F E I E N A V Y D S E N G N I N I S A T V T N V G N C T G K E V V Q V Y V  
 Y S R V V Y R E L Q V I E D G G A H R A Q V T L A N T G A R P A T E V V V Q V Y T  
 Y T T F K Y G Q A K V E K S G E M V T L I I P V T N T G Q M P G D E V V V Q V Y L  
 Y T T F D I S N K K I I S A G Q D L N F K V N V K N T G K Y D G A E V I Q V Y V  
 Y T Q W V Y E T L V A T E E S V S V T V R N D G T R P G R E V I Q I Y V  
 Y T S F S Y S A V K A Q A Q A G A L M V F S V T N T G Q R A G K A V P Q V Y V  
 Y T Q F N F S D L T T I K A G D S L S V Q V D I T N E G D V D G E E V L Q C Y I  
 Y T V F V I E P E D L H W T A D A A V L T I H V K N M G D C A G K E V V V Q V Y V  
 Y T T F E Q K L E S V D V Q G G T H A T A K V N V T N T G D V A G K S V V Q L Y V  
 Y T R F A Y K N L K V T G G M T L T V S F D V A N S G A R A G A D V P Q V Y V  
 Y T N F A I R F E Q M Q M E G T K I H V Y T E V E N T G R Y D G K E V V Q I Y V  
 Y S R F S H T D P A V A W D E G A L E L A V T V T N T G T V V E A A E V V V Q V Y A  
 Y T D W R Y D D A E V E G D D Q G L T I D V T L T N T A G T R D G R E V V V Q V Y L  
 Y T R F E Y S D L T L S K A I P V L T V E Y T V T N T G S R F G G E A S Q V Y L  
 Y T D W E Y V D D L S L A T D S V T V T A H V T V E N A G E T A G E H V V I E I Y N  
 Y T T F E M S D L T A E P D D S V L T I K A K V T N T G L I T G G V V P Q L Y V  
 Y T D F E I S N V K L S T D T K E G I R V E A N I S N V G E Y D S A Q T I Q I Y V  
 Y T T F A Y A Q A R V S S A T D T V E V S A L V T N T G D Q V G D E V V V Q L Y L  
 Y T T F A V S D T K A T V D N G A L S V G A T L R N T G K V P G K G V V Q L Y V  
 Y T T F R Y D P P V L S A A D G R I V T I L R V H N K G F R D S D E V V Q L Y T  
 Y T T F E R R D L E L T E T D G T V S V A M T V E N V G S R P G E D V I Q V Y G  
 Y T K F E Y E N T V L I E D A D H V D I K T I K N T G K M D G T E T V Q V Y V  
 Y T T F D Y S G L S V N G S E T A A S V T F T L T N N G T V A G H E I P Q L Y I  
 Y G T V V Y S E S T L T L N S K T E D L N I S I K L K N T S S Y E Y L E T V Q L Y I  
 Y S T F H Y S Q L Q V S D T H T H L G V N V T L T N V G P W E G A E V V V Q V Y L  
 Y T T F T Y S A L S L S K T S D S L T A T I T V T N S G A L A G K E T V M L F L  
 Y S A F A C S Y S D L T L V T N T D G A T A T V T I T N G E R T A H E L V V Q Y T  
 Y T T F A V S D T K A T V D N G A L S V G A T L R N T G K V P G K G V V Q L Y V  
 Y T T F D W T V G D A S A S G T T I T V P V T V K N T G S V V A G K E V V V Q L Y A  
 Y T E F E Y S V P V I L D K K N I T F S V N V K N N G K C N G K D V V L F F V  
 Y T T F E W S N M D V S W S D D T C N I T V N V K N T G S V S G K D V V E I Y A  
 Y T T F E I S D V K V D G G S Q R A I V S V T V T N T G N V D G T E V I Q L Y I  
 Y T T F S L D S V D V D L A A K T V T A K V T V T N T G D V S G K S V V Q L Y D

50                    60                    70                    80

UniRef90_M1VV47	R   P G   K A K Q   L R G F T K	E F   L   K   V   G E K A R   V   S F S   L   T   R   R   D   L
UniRef90_UP10004560BC3	S F P K   S A G E P P K   V L   R A F D R T E	L   K   V   G E T K E   V   S F K L   S H Y D L
UniRef90_G4UAN7	S Y P D S P   V D F P V K   V L   R G F D K   V	Y L   E A G K S A K   V   E F N   T R R D L
UniRef90_R5GTK4	S A P A S P F T K P K K Q L   V   A F S R V	V   P R G E R   V   T   E   S F R A D D L
UniRef90_G2NTN8	R D P V A S I V Q P V R R L   S G F R R   V S	L   G A G K T T T   V   R F R L   S A E E L
UniRef90_U1LEK7	E K P Q G T   L   G N P A R S L   V   A F D K T D T L	L   A P G E R   A T   T   T   S I   P A T D F
UniRef90_F6ICQ5	D F P D   A P G T P N   A L   R G F Q K   V S	L   Q P G E T R   T   Q   V   T F T L   S P R D L
UniRef90_R7AW66	N K V G D E G G   P V K T L   R A F K R V   F V	L   P A G G K T A N   V   R   T   L   S K K D L
UniRef90_C6IVM6	E A P Q G V L   G K P A R A L   G A F A K T K L	L   Q P G E T D   V   L   T   L   Q L   P V R R M
UniRef90_UP1000288FB52	R P V R T P   V   W P R T L   E L   R A F Q G   V D	L   A P G E T R   T   T   V   S I   H   G A D Q L
UniRef90_G3JBH2	S H   G G E G E P V   P V R V L   R G F D R I E R I	L   P A G A T A T   F R   V E L   T R R D I L
UniRef90_D4DIE6	S F P V I S I   D F P N R V L   R N F E K V	L   Q P G Q S K E   V   T   L   S L   T R K D L L
UniRef90_F3PVC8	R K R D D T   D G P N K T L   R A F K R V   N I L	L   P A G K T   V   N   V D F E L   K D K E L
UniRef90_D4M6W6	D E Y A S   I   R P Q K I   L   G F K R V   T	L   C P   G E T K K   I   I   I   S F R   L   D Q M
UniRef90_C6LE60	Q K P Y N Q I   E K A A V E L   V G Y G K T Q M L	L   E P P G A S E T   V   T   V E   V   P   E Y F L
UniRef90_A9NG66	N A P Q G   L   G K P K M V L   A A F A K T R E L	L   E P K E N   Q   I   E I   K   I   D   L   Y N L
UniRef90_R6FNL6	R R P G D K   E G P S H A L   R G F K R V   V A	L   I   A K G N T T   D   V   E   L   A   L   S P E D F
UniRef90_R9NAL5	E T I C A P   V   V R P A K E L   I   R F R K V   V A	L   F   E P G R E   R E   I   E F A I   S E R K E F
UniRef90_G7XU16	S F P E E K I   D F P V   V R   V L   R N F T K V   V A	L   E P P G E A Q T   V   S M S L   S R K D L
UniRef90_S0L7C7	R D I V G K V   V R   V P R   V L   R N F T K V   V A	L   D   A P Q E E S Q T   V   V R F E L L   T T D Q L
UniRef90_X0CDA9	S L P K E S V   P T P   Q   V   L   R G F E K V   V R	L   R P G E E S K K   V   T F E L L   L   R   R D V
UniRef90_A5L4M2	S R K V S S T   T R P   Q R E L   K A F A K   C H	L   L   E G H   E R R K T   T   V   R   L   E   I   D   A D D L
UniRef90_L7EV53	R P L R T T V   W P   R T L   E L   R A F E S   V D	L   L   A P Q E E R R T   T   V   T   F   H   L   G P E Q L
UniRef90_X1DME5	Q D V K   C S V   E R   P L K E L   K G F K K   I	L   Q   E V   G E E K Q T   T   V   F   K   L   E   K   R D L
UniRef90_UP1000372FEA6	Q S P P Y T G I   E K P A V   Q   V   G F G K T   K E	L   A A G E S E T   V   K   I   T   V   D   E   E N L
UniRef90_W9WZ98	S F P N E   I   E T P   V   R V L   R N F T K   I E	L   L   E A G S E Q   V   V   N   L   T   L   T   R   K D L
UniRef90_N4VM67	V L P Q D S V   P K P   V   Q V   L   R G F E K   V	L   F   L   E A G E S T   K   V   V   V   E   F E L L   L   R   R D I L
UniRef90_R5CE03	G A P Q G   L   L   G K P A K   V   L   C G Y Q   K   T R	L   L   Q P G E S Q   L   I   S   E   T   P   A K D
UniRef90_Q1N783	Q D I T A S I   T R P   V   R E L   K A F Q R   V T	L   L   K P G E S R   E   V   R   F T   I   R   R E E E L
UniRef90_D3ED29	Q A D Q S G I   T R R   L   R E L   K G F K K   V   M L	L   E P P G D S T   T   T   V   T   F   K   L   G F E E E L
UniRef90_R5WC29	M A P Q G K   L   G K S K R   H   L   V   F E K   S R   L	L   L   Q P G E T   Q   R   L   R   L   A W K M E D M
UniRef90_W7V0G1	H D P   L   S A   L   T   K   P   V   C   E   L   C   A   F   R   K   V   V   Y   V   G   P   H   Q   T   V   T   V   H   M   H   V	D   R   R   A   F
UniRef90_F8N9D1	R D   V   N   D   A   D   G   P   L   K   S   L   K   A   F   R   R   V   V   S	T   A   E   T   F   T   K   L   D   E   R   T   F
UniRef90_B8I618	E P E K K   D   G   S   P   I   R   T   L   K   G   F   E   K   T   Y   L   N   P   D   E   T   K   T   I   T   F   K   L	G   M   P   A   S   S   G   Q   P   P   R   V   L   V   G   F   R   R   V   V   M   L   A   S   R   A   S   K   V   V   H   F   T   I   T   P   Q   E   F E
UniRef90_T1CC72	G M P A S S   G   Q   P   P   R   V   L   V   G   F   R   R   V   V   M   L   A   S   R   A   S   K   V   V   H   F   T   I   T   P   Q   E   F E	K   D   L   E   S   K   Y   A   V   D   N   Y   S   L   S   G   F   K   R   I   E   L   L   K   K   G   E   T   K   N   V   L   M   T   I   D   R   K   S   F   B
UniRef90_U5MYB6	C P P   T   N   G   A   W   R   P   I   R   E   L   K   G   F   K   V   V   F   L   E   S   S   P   G   E   T   R   E   T   V   F   V   Q   I   D   V   D   T   F F	G   F   P   D   A   T   I   D   R   C   V   R   E   L   K   A   F   R   R   V   V   E   L   L   K   P   G   Q   R   Q   T   T   V   T   V   A   L   T   R   R   D   L   L
UniRef90_W7N2K4	S F P Q D   T   T   P   T   P   V   P   V   K   V   L   R   G   F   T   K   V   V   A   L   D   A   G   E   T   T   T   V   I   N   F   E   L   L   T   R   R   D   L   L	T   P   P   C   D   G   N   P   R   P   V   K   D   L   R   S   Y   C   K   V   F   V   S   A   G   Q   T   T   E   V   T   F   F   N   L   D   K   Y   A   F
UniRef90_W4UDR1	A F P E   S   E   G   V   W   L   R   G   F   D   K   L   Q   Q   L   E   A   P   G   E   T   R   T   A   T   F   P   L   R   R   K   D   L   L	A   F   P   E   S   E   G   V   W   L   R   G   F   D   K   L   Q   Q   L   E   I   R   T   G   E   T   K   T   F   R   F   D   I   D   E   R   D   F
UniRef90_W3XR3	S D P Y   C   S   I   T   R   P   V   K   E   L   K   H   F   E   K   Q   L   I   R   T   G   E   T   K   T   F   R   F   D   I   D   E   R   D   F	T   P   P   Y   Y   G   I   E   K   A   S   M   N   L   M   Q   F   A   K   T   K   L   L   E   P   G   E   E   Q   T   L   Q   I   E   F   L   Y   E   D   M
UniRef90_W9Z758	T Q   P   Y   R   S   F   N   V   P   D   V   K   M   L   K   F   T   K   I   A   L   D   A   G   A   S   Q   T   V   S   F   T   L   T   A   E   D   W	T   Q   P   Y   R   S   F   N   V   P   D   V   K   M   L   K   F   T   K   I   A   L   D   A   G   A   S   Q   T   V   S   F   T   L   T   A   E   D   W
UniRef90_S8EZD8	A P   L   T   R   P   A   E   R   P   D   R   W   L   A   G   F   A   T   V   E   A   A   P   G   E   T   A   E   A   E   I   A   L   P   R   R   A   F	G   Q   P   V   A   S   R   S   F   N   V   P   D   V   K   M   L   K   F   T   K   I   A   L   D   A   G   A   S   Q   T   V   S   F   T   L   T   A   E   D   W
UniRef90_R6J4Q7	S L   G   G   P   E   D   P   V   K   V   L   R   G   F   E   R   L   P   I   E   P   G   A   S   A   T   F   R   A   E   I   T   R   R   D   L   L	A   P   L   T   R   P   A   E   R   P   D   R   W   L   A   G   F   A   T   V   E   A   A   P   G   E   T   A   E   A   E   I   A   L   P   R   R   A   F
UniRef90_V8BXU6	S L   S   P   Q   N   E   V   N   F   P   V   R   V   L   R   G   F   E   K   V   V   E   L   L   K   M   G   E   K   R   L   V   R   F   D   I   S   R   R   D   L   L	S   L   G   G   P   E   D   P   V   K   V   L   R   G   F   E   R   L   P   I   E   P   G   A   S   A   T   F   R   A   E   I   T   R   R   D   L   L
UniRef90_G4YS69	K D   L   E   S   K   Y   A   V   L   N   H   S   L   A   G   F   K   R   V   V   S	K   D   L   E   S   K   Y   A   V   L   N   H   S   L   A   G   F   K   R   V   V   S
UniRef90_A9W5Q3	K S   L   T   N   P   D   A   P   I   K   S   L   K   G   Y   V   R   Q   E   L   I   K   A   G   K   S   E   K   V   R   I   T   L   E   P   E   S   F   E	K   S   L   T   N   P   D   A   P   I   K   S   L   K   G   Y   V   R   Q   E   L   I   K   A   G   K   S   E   K   V   R   I   T   L   E   P   E   S   F   E
UniRef90_L8EZ75	I   N   Q   N   K   T   I   K   A   P   L   K   T   L   K   G   F   E   R   I   N   L   K   S   G   E   S   K   T   L   T   F   T   L   S   P   E   D   L   L	I   N   Q   N   K   T   I   K   A   P   L   K   T   L   K   G   F   E   R   I   N   L   K   S   G   E   S   K   T   L   T   F   T   L   S   P   E   D   L   L
UniRef90_H1V7S0	S Q   K   F   R   R   A   S   V   P   E   T   K   L   K   A   F   K   K   L   D   E   L   A   P   G   A   S   Q   D   V   E   F   V   L   T   P   E   D   W	S   Q   K   F   R   R   A   S   V   P   E   T   K   L   K   A   F   K   K   L   D   E   L   A   P   G   A   S   Q   D   V   E   F   V   L   T   P   E   D   W
UniRef90_B2W6A5	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_G7LX90	Q S   P   Y   T   G   L   E   K   S   A   V   Q   L   I   L   G   Y   G   K   T   E   V   L   D   P   G   A   S   E   E   V   T   I   E   F   D   P   L   Y   M	Q   S   P   Y   T   G   L   E   K   S   A   V   Q   L   I   L   G   Y   G   K   T   E   V   L   D   P   G   A   S   E   E   V   T   I   E   F   D   P   L   Y   M
UniRef90_R5K222	D A   P   D   H   P   L   V   F   P   R   R   L   A   G   Y   T   R   V   V   L   L   A   P   G   E   E   Q   V   V   H   D   I   P   P   D   R   F   F	D   A   P   D   H   P   L   V   F   P   R   R   L   A   G   Y   T   R   V   V   L   L   A   P   G   E   E   Q   V   V   H   D   I   P   P   D   R   F   F
UniRef90_UP100047ADA39	K K   K   G   D   A   D   G   P   T   K   T   L   R   A   F   K   R   V   V   N   I   D   K   G   Q   T   E   N   V   K   F   E   L   L   S   G   K   Q   L   L	K   K   K   G   D   A   D   G   P   T   K   T   L   R   A   F   K   R   V   V   N   I   D   K   G   Q   T   E   N   V   K   F   E   L   L   S   G   K   Q   L   L
UniRef90_V9EMV9	R K   V   D   D   D   A   A   P   K   R   R   L   R   Q   F   T   K   T   I   S   L   E   P   G   E   T   K   T   V   R   L   E   V   V   P   A   H   D   L   L	R   K   V   D   D   D   A   A   P   K   R   R   L   R   Q   F   T   K   T   I   S   L   E   P   G   E   T   K   T   V   R   L   E   V   V   P   A   H   D   L   L
UniRef90_UP100036000D1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_R5HNL3	S H   E   N   P   R   I   I   R   P   A   K   E   L   K   D   F   A   K   V   V   F   L   K   S   G   E   T   K   S   V   S   V   E   M   P   L   L   E   V	S   H   E   N   P   R   I   I   R   P   A   K   E   L   K   D   F   A   K   V   V   F   L   K   S   G   E   T   K   S   V   S   V   E   M   P   L   L   E   V
UniRef90_W8CJ28	S D   V   V   A   S   V   V   P   D   V   R   R   L   R   Q   F   T   K   T   I   S   L   E   P   G   E   T   K   T   V   R   L   E   V   V   P   A   H   D   L   L	S   D   V   V   A   S   V   V   P   D   V   R   R   L   R   Q   F   T   K   T   I   S   L   E   P   G   E   T   K   T   V   R   L   E   V   V   P   A   H   D   L   L
UniRef90_R5RV56	E A   P   Q   G   S   L   G   K   A   T   K   V   V   E   F   D   K   T   K   A   L   L   P   T   E   K   K   D   M   I   E   F   S   I   P   V   S   R   I   I	E   A   P   Q   G   S   L   G   K   A   T   K   V   V   E   F   D   K   T   K   A   L   L   P   T   E   K   K   D   M   I   E   F   S   I   P   V   S   R   I   I
UniRef90_R5JES3	U n i f e r g o _ U p i 0 0 0 3 7 8 1 1 C 9	U n i f e r g o _ U p i 0 0 0 3 7 8 1 1 C 9
UniRef90_UP100037B07828	E P   S   E   Q   M   P   A   R   P   K   R   W   L   A   G   F   A   I   A   E   G   E   S   G   D   V   V   T   V   T   I   D   L   P   K   R   H   M	E   P   S   E   Q   M   P   A   R   P   K   R   W   L   A   G   F   A   I   A   E   G   E   S   G   D   V   V   T   V   T   I   D   L   P   K   R   H   M
UniRef90_UP1000418D25D	U n i f e r g o _ U p i 0 0 0 4 1 8 D 2 5 D	U n i f e r g o _ U p i 0 0 0 4 1 8 D 2 5 D
UniRef90_Q8A3E5	U n i f e r g o _ U p i 0 0 0 3 8 0 D 8 C 9	U n i f e r g o _ U p i 0 0 0 3 8 0 D 8 C 9
UniRef90_UP100037811C9	U n i f e r g o _ U p i 0 0 0 3 5 9 3 D 6 4	U n i f e r g o _ U p i 0 0 0 3 5 9 3 D 6 4
UniRef90_R9K3X8	U n i f e r g o _ U p i 0 0 0 3 6 1 3 B 6 E	U n i f e r g o _ U p i 0 0 0 3 6 1 3 B 6 E
UniRef90_R5IB34	U n i f e r g o _ U p i 0 0 0 2 7 0 8 2 8	U n i f e r g o _ U p i 0 0 0 2 7 0 8 2 8
UniRef90_C6CRV8	U n i f e r g o _ U p i 0 0 0 4 1 8 D 2 5 D	U n i f e r g o _ U p i 0 0 0 4 1 8 D 2 5 D
UniRef90_UP10003631B6E	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_L2FAC5	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
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UniRef90_K9P4Y4	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_UP100037CC014	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
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UniRef90_D2RV76	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_L2FAC5	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
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UniRef90_V4PRH5	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_E3QFP3	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_W7SWV8	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_C7NNE6	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_R7WT7	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_S7Q6E8	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_R2R7R9	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_M5FTN4	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_K3WVG8	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_UP10002002438	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_C7QZB5	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_UP100031927F9	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
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UniRef90_UP10002C3FAE4	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_UP10003B6F07E	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
UniRef90_M7TQ49	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1	U n i f e r g o _ U p i 0 0 0 3 6 0 0 0 D 1
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90                    100                    110                    120

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UniRef90_G4UAN7	S Y W D V Q N W V I M E G E Y T F H V G Q S S R D L [P] V S V T		
UniRef90_R5GKT4	S F W N K N K D S F D L F S G C Y T L M A G A S S A D I   R R T A D I Q I N G S E Y		
UniRef90_G2NTN8	G F W T Q D P F L L Q K G E [R] V F A G N S S L A K R G R T L T I T		
UniRef90_U1LEK7	A S Y D D D N S F V L E A G T Y E L H [L] G T D V R S A R P V F T Y N V D		
UniRef90_F6ICQ5	S S V T P D V R K V L K G H Y R V T V G S G S A A T R S A D F S V E K A V T L		
UniRef90_R7AW66	E W W N E T T H S I Q P G E Y Q V W I G S S S D E K D L S		
UniRef90_C6IVM6	A S Y D D G C Y V L E A G N Y E L H V G N S I R N T E R V T V D G		
UniRef90_UP1000288FB52	K L I G A D L E A F V P D E [E] V R V G E S A R H A L A A V P L T L K		
UniRef90_G3JBH2	S N W D A Q N W V W T D A P K T L W V G S S S R N L P L S A K L Q		
UniRef90_D4DIE6	S Y W S Q Q N W V I P A G K F K I W A G Q S S R D L P L T G E F		
UniRef90_F3PVC8	E W W D T N T M R V C A G D Y D I M V G G S S Q T E D L		
UniRef90_D4M6W6	A F P D K G N W I L E R G R F I F E I G Y S S R D I I D T Y E Y T L E		
UniRef90_C6LE60	T S Y D A G V Y I L D E G K Y Y F T A A D N S H		
UniRef90_A9NG66	A S F D D S S F V L E K G [L] Y K F Y I G N S S R H		
UniRef90_R6FNL6	E W F D T E T N T M R E G E Y E I I L Y G G T S D V N K L K K T I T I E		
UniRef90_R9NAL5	V F Y G E D M E P I D G G P [L] R I T V G N S S Y N A A G S V D F T V G G S V		
UniRef90_G7XU16	S Y W S V Q N W V M P D G G D F E I W V G Q S S R D L P L R G		
UniRef90_S0L7C7	F Y V H S Q E W S T E P G E F H V W I A P N S Q E G V K T S F T L		
UniRef90_X0CDA9	S Y W D V Q T W I P S G D I S F K V G F G S S R D T R A I S K V S L K		
UniRef90_A5L4M2	K F Y G S Q C F M Y E E G E V D V Y V G G G S S L A T D K V T V T L K		
UniRef90_L7EV53	A Q V G T D E R A V L P G S V I E I R V A Q S A R E A L T A E P L T		
UniRef90_X1DME5	S F F D E D C W K A E K G I F K I I V G S S S R D I R L Q T E E		
UniRef90_UP1000372FEA6	K V Y D E G T Y I V E E G Q Y Y F T A A T D A H		
UniRef90_W9WZ98	S Y W S T Q N W V M P D G P F T L A M G R S S R D L P L Q G T Y		
UniRef90_N4VM67	S Y W D S Q A W V V P E G T I L H H I G F S S R D I R A T A K H V V		
UniRef90_R5CE03	A S Y D D S A W I L E K G S Y A F F L G T D V R S A E L E F H Y V L E A D R I V		
UniRef90_Q1N783	L F L G Q D M Q T V E P G F E R L W I A P S A Q A E G V S D I F T L A		
UniRef90_D3ED29	A I W N R N M Y D V V P C R V S I V V G G H S D W E S G V V E L K V K		
UniRef90_R5WC29	A S Y D D S A Y V V L E Q G G D Y F F Y L G N S V E N V K L D H T Y S Q T Q D Q V V		
UniRef90_W7V0G1	E S W D P D R W T L E D G E Y V L		
UniRef90_F8N9D1	S L F D S A S N T V R P G K Y V V Y Y G T S S R D S D L K		
UniRef90_B8I618	S E F R P H E W V F V P G N Y T I H I G T S S R E L P I A I A L A L		
UniRef90_T1CC72	W W W G H G G W T E S A G T Y R V Y M G D S S A N L P L R G S V T V S A P K I F		
UniRef90_U5MYB6	A V N D E G E R I L D S N K N F K L F V G I S Q P D K R S V E L T G		
UniRef90_W7N2K4	S H W N E E S W A V V D K G E Y V G E V V G		
UniRef90_W4UDR1	S Y W D I H S W T V E P G T V R V E V G A S S R D L P L V A D I A L D A P Q V H		
UniRef90_W3XR3	S F W D S D Q W V I P Q G G E F V F M A G F G S S R D I K S T		
UniRef90_W9Z758	S Y F D T D K W K M P Q G E F R L H I C F S S A E T L Q T V S V T N P E T R Y W		
UniRef90_S8EZD8	S L W S T Q L W Y I P E G E I Q L Q V G A S S T K L Y L T T T W S		
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UniRef90_V8BXU6	A S Y D S S C Y V L E E G E Y E I S L C S D S H T V L D S Y K T T V D R D I I Y		
UniRef90_G4YS69	G V Y P Q I K V A E D A D Y V I A I N T T A A A N P L C A T F T L A		
UniRef90_A9W5Q3	G Y H E P D T L V V E A G T Y L A H V G G D S L A T R S A G F T V E T G W R G		
UniRef90_L8EZ75	E I W D E R T R R F I D G T Y A I E A A R S V T D R R L T A R V T V A		
UniRef90_H1V7S0	S N W D T Q N W V I S K Y P K K V W V G S S S R D L P L S A S L		
UniRef90_B2W6A5	S Y W D R Q N W V M P M G V F G V G V G F G S S R D L R V E E T		
UniRef90_G7LX90	A V D D A G E R I L D S K K F K L F V G V S Q P D E R L S A N I E L A		
UniRef90_R5K222	A Y Y N A D V D K V F P G K Y Q I L Y G N S S R D M D L S S D L E V T		
UniRef90_UP100047ADA39	S H I T D E G I S Q E N G E I K I A I G G H Q P D E A N T S T S S I		
UniRef90_V9EMV9	S Y Y E P H Q R W A E P G E F V V S V L P S S T D A		
UniRef90_UP100036000D1	A S Y D N K A Y V V E A G D Y E L M L M E N A H A K I G S E I F T V R D S I I Y		
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UniRef90_R5RV56	A F V G Q D C W R L E K G Q F R I G C G G Q S I M I E C K E T		
UniRef90_R5JES3	A S Y D D N S Y V L E A G K Y A V Y I G N S I R N T Q E C L N F G L N D T L E V		
UniRef90_UP1000370828	Q H W D A G A M R T E A G R Y R V L A G P S A A G C P L L A E V E L A A P P R P		
UniRef90_UP1000418D25D	V W W N E K T Q S L D A G D F E L L I G K S S K D S D L Q		
UniRef90_Q8A3E5	E F F D T N T M R I M P G K Y E I M Y G N S S D I P S G N K L S V T		
UniRef90_UP1000380D8C9	Q Q W A E G W Q T M P G E Y L V H A G H S L A D L R I G G V V H V T		
UniRef90_UP100037811C9	A V F D R G R W K T I A A G E Y E V I L A E A A D A P V A T V K V R L P		
UniRef90_UP10003593D64	A F W Q G G K W V I K A G G M S L F C G G Q Q P N Q K L S G T F T I T D S I T L		
UniRef90_R9K3X8	T S Y S E E K Y L L E A G G Y R F Y V V G N D V N A P F C G E L V L D S E M I I		
UniRef90_R5IB34	A S Y D D E D A W S L E A G D Y Y F A I G N G A H E A		
UniRef90_C6CRV8	A S Y D D S A Y V V L E A G T Y R I Y V G N S V R N V S A V A		
UniRef90_UP10003631B6E	S R W D D K G W H L V G G R Y H V A L A R A A G D A A L T A D A T M T D Q R F		
UniRef90_R7G2S9	T S Y R D A A T V V L E K G E Y V I R L G N S S R N T R V C G I L R L S S E		
UniRef90_K9P4Y4	A W F D R D A F V L E S G R H R L V V A R H A E D		
UniRef90_UP100037CC014	E R W D A N A W T T V P G T Y R L A I G R H A A D P H I T T T L T L		
UniRef90_UP100037A3589	T K W A Y G N W R E V N G P Y Q V F V G G S S A D T P L T R R I		
UniRef90_D2RV76	E V V P G D P R V V E A G E Y E L A V G A D S D D A D A T A T L T V G K T		
UniRef90_L2FAC5	S Y Y D E R T W V I P E G V V K F H V G F S S R D I K A T		
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UniRef90_E3QFP3	S I W D S Q N W I V P T G R Y K I W V G E A S D K L F L		
UniRef90_W7SWV8	S F F D S Q D W V L E T A E H E V L V G G H A		
UniRef90_C7NNE6	G F Y K P E G H V L E G D T Y H V T V A G M E A A F T V E		
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UniRef90_S7Q6E8	S F W N A Q K W E V P Q G G S F G I T A S T Y A G V F R M S S T L		
UniRef90_R2R7R9	Y Y Y M K D M F G T E P G D F I V F V G R N A N D T Q Q E Q F E L		
UniRef90_M5FTN4	P I W V K G W V W E K G E Y V L R A G T S K N V Y L N A S F V V G		
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UniRef90_C7QZB5	A T W D T R T H A V T G G D Y D W V W G T S R T R R I V T H L S L D C D		
UniRef90_UP100031927F9	A S Y D D H S Y V L E P G C Y K F Y L G G S V R		
UniRef90_R7II30	A S Y D Y R D Y E L E A G E Y T L Y V S R N A H E L K L A A D V Q I G T D		
UniRef90_UP10002C3FAE4	S S F D E H S W I L H K G T Y K L E I C K D A N T I I R T T E F I I D K E		
UniRef90_UP10003B6F07E	K A Y D A K T Y I F D A G D Y Y I T A A K N A H		
UniRef90_M7TQ49	T W F D V E G W R V V D K G A Y E C Y V G T S S R H I V A T V Q I V V A		
UniRef90_W4N6L5	A S W D S G T Y I L D A G E Y V F T I A D N A H D A		

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UniRef90\_Q1N783  
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UniRef90\_W9Z758  
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UniRef90\_R6J4Q7  
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UniRef90\_G4YS69  
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 Y A T F S Y R D P K S S A S R E T L E V V C E V | E N T S S I P A D E V V Q L Y V  
 Y T A F K F S D M K I P K A G S D L N V L V T I T N M G N L | A S D E V L V Q C Y L  
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 Y T H F I Y G S P V A S K S N D K F Q V S V S V T N V G D R D G K E T V F W Y I  
 Y T T F T I S D V T L E G T S S G V L V R A V V A N I L G D V L G S E V V Q V Y V  
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 Y T T F N Y T N L E L S S T T D D F T V T V T V E N T G P V D G K E V V Q V Y V  
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 A V I A P G G K V T V F D L K N T G T R T A D E V A Q L Y Y  
 Y S N F T Y S N L S L E Q H P E V T T I R V T V E N V G E V E A A E V A Q L Y L  
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50            60            70            80

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UniRef90_W7D6X1	H D Q E A S I T R R K K E L K A F R K V E I I G A S E T V I E V T L E I G L A E L
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UniRef90_F8TUE1	R D R V A S R V R P V R E L K R F A K I A L A P G E S R E V E F A L S R A D L
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UniRef90_R5Z4Y0	Q H E E A D A Y E P G Y Q L K G I Q T V T Q P K E T K R V T I S L K A R D F
UniRef90_R7VDU3	S W P N D S L N I P K P E I Q L V G F S R Y V G N G Q S V K V E F K V K A D Q M
UniRef90_W0ETX8	S Y Q G Q P I K K P L K A L K G F Q R V W L N R G Q S V K T I K F L L T P D A L
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UniRef90_S8A303	C Q G E E D D P V R V L R G F R R I S V D A G G T T N V I F T I L R R D I
UniRef90_S8E4U6	T D E I S S V V T P N Q L L A G F T K V L I P A G G A E T V T M Q I N S T Q L
UniRef90_C5C2X5	R D H V A A V S R P L T E L A G V V R V P L A A G A A E R V T F R L D R G S L
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UniRef90_R6JIA1	C R P D D K E G P Q K T L R G F Q R V S I A K G K T Q N V Q I E L P Y D S F
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UniRef90_R5M9W3	R R P G D K E G P S H A L R A F K R A N I A K G A T S N V T V S L S K E D F
UniRef90_K3W7L6	I Q P Y R S I S V P E V K Q L K F K F K K I S L D A G A S T T V E F T L T A A D W
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UniRef90_W2WG61	T Q P Y R S I S V P E V K Q L K F F S K I S L D A G A S Q T V T F E L T A A D W
UniRef90_UP1000359B4D2	S W V N E S L P V P Q L Q L A Y F T R V F I P S Q Q Q T R M L S I T I S G E S M
UniRef90_UP10003B76634	S A P Q G L L K K P A R E L L G D F A K T R V L A P G E A Q L L T L S V S K Y E L
UniRef90_V3ZVC7	K W V K P R V E T P R I Q L V D F S R R H F P K H T R Q T I H F T I K A E N M
UniRef90_F6FR64	L A P Q D L P L P P A R R L L V I A F E R V R L E P G E R R E V R L S F D V A R L
UniRef90_UP100046438EA	S A P E V N L K K P T I E L K S F A K T N K L D A G A T Q Q L T F T I P A E Q L
UniRef90_UP1000287E8E4	S V P G R E G A P I R S L L K G Y Y Q R V H L A A G E T K T L T F A L E P R D L
UniRef90_W2RY75	S I P N A P K M Q L R G F D R V G P L Q P G F M R Y E T F Y L T R R D L
UniRef90_G9MQB5	L G R V S T V T Q P V K Q L V G F Q R V Y L D A G E K K S V S I K L E D R Y L
UniRef90_I8XYP1	S S P E W E K E G L K E K L V D F K R I F I K K G E T K S V N F N I S K N D L
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UniRef90_R8BE04	Q F P D I P Y E T P I Q L R D F E K T A T L A P G E S T T I E L S L T R K D V
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UniRef90_Q96UK7	S F P E N T I E F P V R V L R N F E K V E L A S G E W T T V N M S L T R K D L
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UniRef90_M2ZMP3	E I P V P D G G M P N T R T L R G F K K Q Q L T P G Q R W D V V F D L R R K D I
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UniRef90_G1K037	S Y P D I G V T P R L Q L K G F A K A K D V A P Q G S S L T V S I K L N K Y A V
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UniRef90_UP10003AACACE	H D M Q D E N G P I K S L L R G F C R V N L K A G Q K Q V A K I C L N K K S F
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UniRef90_C5FCX3	E G A E V T V T V S N N G K M A T D D V V Q L Y I
UniRef90_B6QB23	Y T S F Q I W H V K V E G K S T K A V I S A T V T N L G D Y G G A E V L Q A Y M
UniRef90_C0S9Y3	T Y G D V R V T S A E G D L T L A V T A E N A G N A V T D E V L Q I Y V
UniRef90_UP100040C8809	Y T S F Q I W H V K V E G K S T K A V I S A T V T N L G D Y G G A E V L Q A Y M
UniRef90_C6LL99	Y G I F V Y S Q L T Y K Q E G D S Q S G Q V M V A N R G E F D A D E V V Q V Y L
UniRef90_R8BS96	Y T T F E L L G G W T L S T A S A T L H V S V V L T N V G P R E G D E A Y F A P L
UniRef90_W4PNR1	Y T T F H K N C H A C V A T F N L T V T N T G A I S G E D V I L T Y V
UniRef90_V4A5L0	Y T S F T Y G P P R L E G D T V R A D V T N T G Q R Y G R T V A Q L Y I
UniRef90_R1E8N1	Y T T F N I G E A K L T K N G E A I Q L R V P V A N A G K T D G T E L L Q V Y I
UniRef90_D0N9B0	T Y G D V Q V T T A E S D I E L E V K V V E N H G R E T E E V V Q V Y I
UniRef90_L8PLL5	Y S D V T Y S K L A A P E T G D D L S L N V T L N N R S K Y N A N Q V T Q V Y V
UniRef90_H1YFS0	Y T Q L R Y D N I T V A S D T G K L L V T G Q V T N T G N Y D A D E I V V Q L Y I
UniRef90_R6RG03	Y A D L I F V A L E A S G Q S V S V A V T L E R D G A W P A H E V V Q V Y A
UniRef90_UP10003662434	W S D V A L E A S G Q S V S V A V T L E R D G A W P A H E V V Q V Y A
UniRef90_UP1000380F247	L N F T V D V K N T G D R V S D Y T A M A F V
UniRef90_D4CQC5	F T L S V T V I N T G S V A G K E V V M V F L
UniRef90_C7MC88	D T I L E L D V T V Q N T G S R H G K A S V Q A Y I
UniRef90_Q2UR38	E D K I A L E V E V Q N T G D K D G S E V V I V Y S
UniRef90_S3DXV1	T V T A Q V H N S G T L N G E E V P Q L Y V
UniRef90_V5IM00	Y A N F E L T A V N W D R Q A K T V T A T V K V T N E G Y P A E K S V V Q V Y A
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UniRef90_W9CML1	Y T T F D F E K V S A D K Q H D T I Q V A V V Q L K N T G R M A G K E V V Q V Y V
UniRef90_R7II73	Y T A F E S R V A G Y E A F G S V I K V C V K V N V G S Y A G K H V V G I Y A
UniRef90_UP10004711162	S S F A L S T L V S E A N T A G V T F R V N V K N T G K V G S D Y V A L L F S
UniRef90_A0A024G275	Y G K I K Y S N L T I S S E D K P V K I S L D I E N L S D Y D R K E T V V Q L Y I
UniRef90_J9FTC2	Y A D L I V T D L R L N T P N K S I H V M A V V K N R S D R D G L A V V Q C Y I
UniRef90_R9MQ23	T F A V R V T N T G K M T S D Y V A L L F A
UniRef90_K5JMD6	Y T T F R R D Q L T V E A P E D D L V V T V R V A N E G E R E G T D V V Q L Y G
UniRef90_D1YK97	T A S P D G E A V K I T A R I R N G G K M E T E D V L Q V Y V
UniRef90_K6QXB9	E F S S G S L S K D A P I K I T V T I K N L S N I S G K T V V Q L Y I
UniRef90_UP10004410FC5	Y S T F E Y S S I P L D K A N T T V K V S V D V T N T S P V D G T E V V Q L Y I
UniRef90_S3D3K2	Y T T F Y R S D V H I D T S G E P I T A S V V A G A E V V Q L W V
UniRef90_T1WAC8	Y S N F S A G G L T A S A A G D Y L R F G V P V S N E G P V P G S Y V V Q V Y L
UniRef90_N2A2T9	Y T S F S Y E S L R V S A E D A E D Y I T V T V Q N N G T V A G A D V V Q V F I
UniRef90_UP10003B6BE47	Y S K L K Y S N Y S F K E S D K L I T I T F N L E N L S N Y K T K E V I Q I Y R
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UniRef90_C7ZHP6	Y T E F R F S N L E F S T G Y N S V K V A V D V E N T G Q R S G H H V A Q V Y
UniRef90_K2SFM1	Y T Q T I K S V T V D R S N G N I T A V V E V K N N S N Q D G K F L T Q L Y V
UniRef90_A9V273	V S V L I T V S N T G N V A S D Y V A L L F L
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UniRef90_UP100042B6EB5	Y G K V A Y G N A T V T K K H S P M T V S V D L S N D G N M P D E V V Q V Y L
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UniRef90_E3QKN1	Y T T F A V D N I I A S V D K E S I Q V A V N V Q N T G R R P G R F I A Q A Y A
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UniRef90_V8BN90	Y T R F Q Y H G A H A L A K A D L Q T V T V A N V G A T S G D E V V L I F L
UniRef90_A0A024UQC2	Y T T F E T S L A N L S R S N A G Y N V T I E V E N T G T V T S D Y T A M A F V
UniRef90_F4GLH6	T A F S G G A V R V T H A G L S L S V G M D V K N T G S R D G S H T L L V F A
UniRef90_B8MWY2	R R V E V N V T N V G R V A G A D V V Q V F V
UniRef90_Z9JNX3	Y T T F E Q D S V E V D L A A K T A T A T V T V T N T G A V V A G K D A V Q L Y V
UniRef90_TOSB39	Y T T F H K A C R S C V A S F E I T V T N L G D V V E G E D A I L I Y A
UniRef90_B6HIR6	Y A K F E I E S I Q W N R D K H V V E A K V K V T N L G S D E S K D V V E L Y A
UniRef90_A0A022S5V3	Y T T F V Y S G M S V Q A D A G N V M V G F T V T N T G A R G R G S R A G L C G
UniRef90_F2UIW6	Y T T F E Q D S V E V D L A A K T A T A T V T V T N T G A V V A G K D A V Q L Y V
UniRef90_UP100047AAD05	Y T T F H K A C R S C V A S F E I T V T N L G D V V E G E D A I L I Y A
UniRef90_G5A9X0	Y T T F V Y S G M S V Q A D A G N V M V G F T V T N T G A R G R G S R A G L C G
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S | Q G T D V P T P V R V L | R G F E K L A | L N P G G W A V I | N F P L T R R D V  
 T | L P Q K E M E K E C Y R L | A G F A R T G L | L Q P G E S S Q Q L | R V V T D Q K Q M  
 E | F S D S R T A T P H F Q L | C A V N A I R | L E S G E S K M I | S V D I D R Y W L  
 S | Q Q T R A S G T P E T K T M L K F T K V D L | A P G Q S T S V T F S L S V A D W  
 L | G R V S T I T Q P V K Q L V G F Q R V Y | L E A G Q Q K K T A N I Q L | E D R Y L  
 T | F P D S P G V W L R G F D K L K S I | P P G G T A T A T F A L | R R K D L  
 R | D E V T T V V R P M I E L L D V K V V K | L E P P N Q K V I V T T F T I | D K K D L  
 E | F P P R S A G E P P K V L R G F G R E Y V | E K Y Q T K E V K F H | S Q Y D A  
 S | A P Q G K L G K P A K A L I A F E K T D L | L A P G T S Q I L H I S F P I S Q M  
 I | Q P Y N S L N V P E M K Q L K F S K I S | L E P G Q T Q N V N F T L | T S D D W  
 S | L G G P N D P P V V L R G F N D L | I P R G R S R A V R F K L | T R R D V  
 S | L G G P E D P K V Q L R D F D R M R | I E P G E T T R Q F T G R L | T R R D L  
 H | D R V A S L T Q P V R R L R N I Q K L R | V G A G E T A T A R F T L | D R S Q L  
 S | L G E G E P P K V L R G F D R L T | I A P G A S A T F T V D L | T R R D V  
 L | P D L P L P T P R R V L V A Y A R V S | L A P G E T R D V E L A F G L D R L  
 E | L P T D G V D A P S R Q L R Q F E K T T G | L E P G E S E T V V M N V T R K D V  
 R | F L E D K E A P L K T K L R A F R R R V S | L E A G E R Q D I R F F L S P A S F  
 K | D H Q A S V V S R V I E L K A F N K V K | I Q A Y Q S K Q I S I H | T S D A F  
 Q | S P Y N G V E K A S V I E L C G Y D K T E S | L E P P G Q S E K V T I T I S K E E L  
 K | R N A D S D G P V K S L C | D F Q K V S | L K A G E S K E V T F T L | Q D N A F  
 R | R D T A D D A P V M Q E L A G F E K V F | L E P G E E K Q V E I A V E L | Y G M  
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 Q | P Y R L I S V P E V K M L R K F K K I D L | L E P P G I T Q E V T F T L | T A D D W  
 S | L G G P N D A K V V L R N F D R F T L | L A A G E A K I W T S I L | T R R D L  
 F | D E N R P T T P E Y K R L R A F E K I I W L | L A S G E E R T T V L T V S P E E L  
 Q | Q K V R T Y V P E V K N L V E F T K I I F L R V | G E K T T V T F I L K Q E A W  
 A | L P A S L G E P P K P R L V G W T R V A | L Q P G E A R T V S V A V P A Q R F  
 E | L P A E A A N T P K L Q L R Q F E K T S T | L A P G Q G E E V L R M E L T R K D L  
 R | R L I T R T W P R T L E L C A F E G V | G L A P G E R R T V T L P L E G  
 H | D P V A S V T R P D V R L I G Y Q R L L E | L A P G E A R R V T F G F H A D L A  
 N | L G G P N D P V R V L R N F D R L | S I D T G M S A T F V A D I T R R D L  
 R | S G A S R V K R P L K T L C G F Q R I | C L E P E G T R T I T F T V R V K D W  
 H | D E K S R L P R P E K E L V A F E K V Y | L E A D E T R H I S I K L D K Y A  
 E | I P D L A P N T P K L Q L R Q F E K T S N | L V P G Q G E E V L K M E L T R K D L  
 E | L P A D G V D L P P R Q L R Q F E K T A | L A P G E S V T L S L P V T R K D L  
 S | F P S D V V D E P L A E M R N F Q K V E | L Q P G Q A V V N V S L S L T R K D L  
 K | D K E F E L A I P N A C L C G F K R V H | V E A G S E Q V K V T I A V D A K A F  
 K | C T D S A N A V P N P A L A A F G R I H | L E A G E E K K T I E M T V P A R A F  
 S | P K E K G R D S A P R S L V G F V K V F | V P K G E A R V A N I E L D K R A V  
 S | S I R P V K E L K G F E R I S | L K K G E S R T V S F D I T A D K L  
 K | W N S P S V T T Q N I Q L V D F N R V T | L A K N D L A I V K F S I A P Q D M  
 S | L A A P G V P H P I K A L W G F E R V S D L | G S G E S A T V T F S L G A R D L  
 E | P P A G E G G R P L K S L V A F E R T P | L I A A G Q R A T A K I C L E A K A F  
 R | R L R T P V W P R A L E L R G F C | V G L A P G E T R T V T L D  
 R | R K V D D P D G A S K T L R G F K R I | P V S A G G K T E M V T L D L P P K T F  
 K | D T D S P L A V R N Y S L C G F K R V A | L Q T G E S K T V K F T I T P N R A M  
 R | M P D A P I E V P Q V I E L K G F S K D S V S A N G S Q S V A L T L P A Q A L  
 S | H P N I T D A P T R S L V G F Q R V H | I P K G Q Q K R N V Q F S V Q A P E L  
 S | L P A G E L E K E H R R L I G F R K T A L L S P G Q E S E E F L L R I P I Y L L  
 T | Y P H D L L G P L P A L R L I G S R V V E V P A S G G G V R A R L E I P W T R L  
 N | T T A G G P A P H P N K W L V G F D R L S A V E P G S A K T M V I P V T V D S L  
 Q | H P S D S P D T P V I Q L R N F E K T T E L V P G G N Q V L S I G V T R R D L  
 Q | F P T D S Y D T P I I Q L R D F A K T K E L G T G E S E T V T L R L R R K D L  
 K | P P D G I V G T P F Q Q V V E F E R R V F F V A A K Q S Q K V N F E L N C K S L  
 K | L G G P N D P L I V L R G F E R L S I D A G S T A T F T A D L T R R D L  
 K | V I R P A R E L K G F A R V H | L E A G K E K A V T I T F D E Y T F  
 Q | L P Y E E E A E K S A I Q L I G F G K T G E L S A G E S E E V K V T I D E Y L F  
 Q | Q K T R S H V P E V K N L K A F E K I F L P G I T E T V T F Q L Q Q D A W  
 R | D M V S S V M T P V K Q L K A F T K V A | L R P E E T R E E V H L S I P  
 G | R K D N E E A A P R R S L I G F E K T K T L R P Q E E T E V F F L E I P M D R L  
 N | T T A G G P Q A P L K Q L V S Y T R V K G I A P G Q S T E A E L K V T L G S I  
 H | Q E T A S I V Q P V K R L I D F T K I A I S G H S S K H V E F Y I N A S Q L  
 H | Q K V G Q T V R P I K Q L I D F L K V I P A N S T K T V E F N L T S D K L  
 S | G T F G P A P H P N K Q L V A Y T R V H G V A P K Q S T I A E L T V T L G A I I  
 S | F P Q T S P T P R R V L R G F E K M F L E P G T S A R M Y F E L Q R R D V  
 H | D V A A T V T R P V A Q L L G Y H R V T L R P G E R V V V R F R V P  
 K | D L L D Y P G A V L H P T L A A F A R V R L K P G E E K K Q I G L T V D R T R F  
 E | D K I A E V A R P V R E L K G F T K V S V E P P L G C E E V V F E I T D K D L  
 V | D T I T S V D V P N R K L K A F K K L Y I K A G E T A V R L P V S I Q E I  
 I | A P Q T D V N R P V R E L K G F R K V F L Q P G E T Q T V R L D V E K K A T  
 L | Q R V S Q I T Q P A K Q L V A F S R L Y L E V G E E R T V D L E V E D R Y L  
 K | T T P G A D N P I K S L C G F E R V F L K P G P E T T S I Q F P V T P H D L  
 E | I D E S K T Y Q A K R E L V A F D K V F L M P F E K I D V S I E V K K R D L  
 V | P P E E V T G T H I K Q L V G F E R V F L Q A N E S K N V K F V L N C Q S I  
 G | Y P N M A E Y P P R R V L L G F E S V Y L R A G E L R R I F V D A S L R P I  
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 R | S N A G P T Q P Q T K L C G F K R V H V R A G A E T E V T I K L D K K A F  
 K | D L D S E F A T T Y P R L C G F K R V H V R A G A E T E V T I K L D K K A F  
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 S | P P P S L H N E T E T R L L K R F A K I W L A P G E S T V V R F D I T P S D W  
 K | D M D S P L A V I N H A L A G F R R I T L A P G E K T S R T I V I E P E A F  
 V | T N L P D F P T R V L L G F A P V D L D V G Q K T K M R F L A S T R P L  
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 K | E A T R Q R H V P E A K R L V F F D K V R L A P G D S T T V R A T L S L Q T L  
 N | T K A G P S P H P N K Q L V A F E K V R V A A G G Q E R V A V A R I H V I C K F L  
 S | P P G G W A P H K Q L V A F E K V R V A A G G Q E R V A V A R I H V I C K F L  
 E | P K T P A L G A P I K T L I G F E R V F L N P G Q W T I V Q F S V N A H D L  
 S | V P Y T D Y D R E H L V E K A F G K T E I I E P G A S E T V T L T A D L Q Y M  
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 S | L P Y T T A E K S A I Q L I G Y G K T K N L K A N E S E T I T T A D D Y L F  
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90                    100                    110                    120

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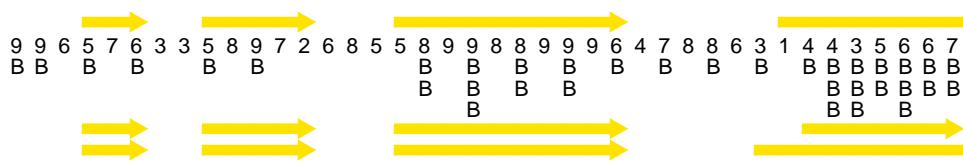
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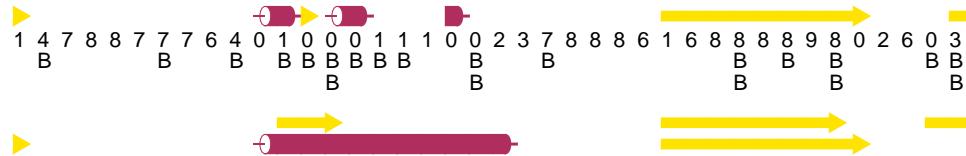
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UniRef90_U7PLP9	A G E Y G P A P F P R K T L A A Y R R L	R N V A P G K T T T A L S L S L G N L	
UniRef90_E3F272	H N L P N G Q R K L L A F A K V V V P	G A E V S A T L K I M P E G F	
UniRef90_I1IM07	R W P N A T A G R P E R Q L I G F K K E H	L K A G E K A H I K F E I P C E H L	
UniRef90_M0WSA4	R W P N A T G G R P V S Q L I G F R T Q H	L K A G E K A S L T F D V P C E H F	
UniRef90_M0JQ77	H R I D S D D D D Q P E A Y G V N R N V T L	A P G E S T R V R F E I E Y	
UniRef90_Q7XJH8	S T P P K G T K S S E K Q L I G F K R V H	V V F A G S K Q R V R M N I H C N H L	

lupas\_21  
 lupas\_14  
 lupas\_28  
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 conf  
 sol25  
 sol5  
 sol0  
 jhmm  
 jpssm



Sequence alignment showing UniRef90\_07XJH8 (blue) and UniRef90\_D7NDB9 (black). The UniRef90\_07XJH8 sequence is highly conserved across most positions, with significant divergence at positions 110 and 120.

Position	UniRef90_07XJH8 (Blue)	UniRef90_D7NDB9 (Black)
90	E F F D E N T N T V H E G N Y D L L Y G D K R V E I R	E F F D E N T N T V H E G N Y D L L Y G D K R V E I R
100	A R T A E N D L V L Y P G R Y T L E V G E S Q Y P T A S F T V T G K E T I	A R T A E N D L V L Y P G R Y T L E V G E S Q Y P T A S F T V T G K E T I
110	S T V D S G K R S V N P G D Y H V T I G	S T V D S G K R S V N P G D Y H V T I G
120	S R V D D K N T V L F P G S Y A L L V	S R V D D K N T V L F P G S Y A L L V
130	A S Y D A K T Y I L D E G D Y Y F T A A A G S H E A	A S Y D A K T Y I L D E G D Y Y F T A A A G S H E A
140	G V D T A Y K L L P S G M H T I M V G D D H G L S I P L Q I N L E T K	G V D T A Y K L L P S G M H T I M V G D D H G L S I P L Q I N L E T K
150	K I W D E K G F Y L H P G	K I W D E K G F Y L H P G
160	A L W N E S V K K R E	A L W N E S V K K R E
170	A L W S D N T W V V E P G D F A V K V G T S D T T Y L N A T M T V	A L W S D N T W V V E P G D F A V K V G T S D T T Y L N A T M T V
180	N L V E K T A Y V V H S G E H A I V V G D G D S A V S F P V E I E	N L V E K T A Y V V H S G E H A I V V G D G D S A V S F P V E I E
190	G M F D R H E W V I D A H E L E I M V G T T A S N A T S V W R V T A A N E I V W	G M F D R H E W V I D A H E L E I M V G T T A S N A T S V W R V T A A N E I V W
200	A Q W N A A N W A V A A G D Y A F S L G F S S V M L V R H A D V R L P	A Q W N A A N W A V A A G D Y A F S L G F S S V M L V R H A D V R L P
210	S V W D V Q N W V V P G A T Y T I W I G E A S D Q L F L	S V W D V Q N W V V P G A T Y T I W I G E A S D Q L F L
220	S F A N D Y G E R V M P G D H M L M V G D A T H S I T V E T	S F A N D Y G E R V M P G D H M L M V G D A T H S I T V E T
230	T S V D E Q G Q T R V Y G G T T F T L Y A G I S Q P D E K L T G T	T S V D E Q G Q T R V Y G G T T F T L Y A G I S Q P D E K L T G T
240	A R T D E G N R V L Y P G K Y E L A L N N E R S V V L P L S L T	A R T D E G N R V L Y P G K Y E L A L N N E R S V V L P L S L T
250	A R T A E N D L V L Y P G S Y K L E V D V G Q D F P T A T F T V S G K E K V	A R T A E N D L V L Y P G S Y K L E V D V G Q D F P T A T F T V S G K E K V
260	U n i R e f 9 0 _ B 6 S W K 9	U n i R e f 9 0 _ B 6 S W K 9
270	S V A D R N V R R V P V G E H R L M I G E L T H S V S L	S V A D R N V R R V P V G E H R L M I G E L T H S V S L
280	U n i R e f 9 0 _ U P I 0 0 0 4 2 B 4 4 1 6	U n i R e f 9 0 _ U P I 0 0 0 4 2 B 4 4 1 6
290	S R A N E D G M V I E E G P H F L S I G	S R A N E D G M V I E E G P H F L S I G
300	Q I V D S S A Q I V L P G G H T I L V G D S	Q I V D S S A Q I V L P G G H T I L V G D S
310	S I W D T Q D W K V P A G K I K L W I G A S V G D L K	S I W D T Q D W K V P A G K I K L W I G A S V G D L K
320	S V V D R G I L R R I P M G A H S L H I G D V K H S V S L Q A S I	S V V D R G I L R R I P M G A H S L H I G D V K H S V S L Q A S I
330	Q H I L R R R S R V V E S G E F E L R V G P N S R R A A K Q H Q A F	Q H I L R R R S R V V E S G E F E L R V G P N S R R A A K Q H Q A F
340	S V V D Q G I L R R I P I G E H S L H I G D D K H S I S L Q V T L	S V V D Q G I L R R I P I G E H S L H I G D D K H S I S L Q V T L
350	Q Y W D G W R D I A A P R L F A G R S A A D V A F D L S L P V P E Q T E	Q Y W D G W R D I A A P R L F A G R S A A D V A F D L S L P V P E Q T E
360	A R V D E H D S W L F A G D Y Q L V L D I G D G V L S H S F S L T G	A R V D E H D S W L F A G D Y Q L V L D I G D G V L S H S F S L T G
370	A R T D A G N L V L Y P G K Y T L L L D E P T Q S T F E L T G D	A R T D A G N L V L Y P G K Y T L L L D E P T Q S T F E L T G D
380	R V W D G G W T Y P Y R T A D L A I G R S G A D I R L M L A I T L E	R V W D G G W T Y P Y R T A D L A I G R S G A D I R L M L A I T L E
390	U n i R e f 9 0 _ I 1 I M 0 7	U n i R e f 9 0 _ I 1 I M 0 7
400	S R V R E D N K V I D R G S H F L R V	S R V R E D N K V I D R G S H F L R V
410	S R A R E D K K V I D A G S H F L K V G K D E H E I S F E A	S R A R E D K K V I D A G S H F L K V G K D E H E I S F E A
420	T V T D S T D Y D P V E P L K L Q A Y V G L Y S D D A R A S T A M S V K	T V T D S T D Y D P V E P L K L Q A Y V G L Y S D D A R A S T A M S V K
430	S R A D E G V R R I P I G E H S L H I G D D H K H K I S L H I D	S R A D E G V R R I P I G E H S L H I G D D H K H K I S L H I D

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UniRef90\_I1IM07  
UniRef90\_M0WSA4  
UniRef90\_M0JQ77  
UniRef90\_Q7XJH8

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