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10 20 30 40

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UniRef90_UPI0004788258						M	Y	L	S	R	M	Q	P	I	N	R	R	G	A	Q	K	L	L	G	S	P	Q	A	M	H	A	A	V	L	S	G	F	P	P	A								
UniRef90_T0SJB8						M	F	I	S	R	I	P	L	N	K	A	R	Y	G	A	R	Q	L	I	G	S	P	Y	K	L	H	A	A	V	E	C	A	F	P	P	N							
UniRef90_B6XT65						M	Y	L	S	R	V	E	I	D	T	K	N	R	R	K	I	K	D	L	T	H	L	G	A	Y	H	S	W	V	E	N	S	F	P	E	K							
UniRef90_F2LZH3						M	Y	L	S	R	V	E	I	D	Q	G	N	R	Q	K	L	K	D	L	T	H	L	G	A	Y	H	S	W	V	E	D	S	F	P	Q	E							
UniRef90_R4RXN7						M	Y	L	S	R	V	E	V	I	D	T	K	N	R	Q	K	I	S	D	L	T	H	L	G	A	Y	H	S	W	V	E	D	S	F	P	Q	E						
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UniRef90_D5GXZ7						M	Y	I	S	R	V	E	I	D	T	N	N	R	Q	K	I	R	D	L	Y	H	L	G	A	Y	H	N	W	V	E	N	C	F	P	N								
UniRef90_I0URS6						M	T	Y	F	S	K	F	L	I	N	P	Q	R	R	G	A	K	L	L	S	S	P	Q	A	L	H	A	A	V	M	A	T	N	P	P								
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UniRef90_I7LC17						M	Y	L	S	R	V	Q	I	I	D	I	N	N	R	Q	K	T	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	D								
UniRef90_S4NMF0						M	Y	L	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	G	F	P	N								
UniRef90_N1ZDE2						M	Y	L	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	S	C	F	P	K								
UniRef90_G9WK75						M	Y	L	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	D	S	F	V	G								
UniRef90_UPI00037745EC						M	W	V	S	K	L	V	L	N	P	R	S	K	A	R	K	D	L	A	S	P	Y	E	M	H	R	T	L	S	K	A	V	S	Q									
UniRef90_C2CN15						M	Y	I	S	R	M	P	L	I	N	P	L	A	R	F	D	A	K	R	L	L	V	G	S	P	Y	R	M	H	A	A	V	R	G	A	F	P	P					
UniRef90_U3Q4B5						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	D								
UniRef90_I0RAB4						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	E								
UniRef90_W5XH21						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	E								
UniRef90_U7KON3						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	D								
UniRef90_F8LJ40						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	A	W	V	E	E	S	F	P	S								
UniRef90_R6TI96						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	D	W	V	E	K	C	F	P	E								
UniRef90_D8FH85						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	D								
UniRef90_UPI000466EBCF						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	D								
UniRef90_UPI000360AD1F						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	D								
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UniRef90_UPI00035DEFE8						M	Y	I	S	R	V	E	I	D	D	H	N	Q	F	V	M	R	E	L	N	H	L	G	A	Y	H	N	W	V	E	S	F	P	R	N								
UniRef90_W5WPN4						M	Y	I	S	R	M	E	I	H	P	R	R	G	A	R	E	L	S	S	P	G	K	M	G	A	V	M	D	A	F	P	R	A										
UniRef90_L0J770						M	Y	I	S	R	V	E	I	D	T	N	D	R	Q	K	I	R	D	L	T	H	L	G	A	Y	H	N	W	V	E	Q	S	F	P	E								
UniRef90_I6SWG3						M	Y	I	S	R	V	E	I	D	M	N	N	R	R	K	V	K	N	L	T	H	V	G	A	F	H	D	W	V	E	R	S	F	P	N								
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UniRef90_S4G4Y6						M	Y	I	S	R	V	E	I	D	T	K	I	L	P	Q	R	R	K	L	N	P	Q	A	M	H	A	A	V	A	A	S	F	P	D									
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UniRef90_S4XHH7						M	Y	I	S	R	V	E	I	D	T	R	F	N	T	A	R	G	R	A	L	S	D	P	Q	M	H	A	A	V	A	A	S	F	P	D								
UniRef90_L1MJS0						M	Y	I	S	R	V	E	I	D	T	R	F	N	T	A	R	G	R	A	L	S	D	P	Q	M	H	A	A	V	A	A	S	F	P	D								
UniRef90_K4NP2						M	Y	I	S	R	V	E	I	D	T	R	F	N	T	A	R	G	R	A	L	S	D	P	Q	M	H	A	A	V	A	A	S	F	P	D								
UniRef90_F4H8A3						M	Y	I	S	R	V	E	I	D	T	R	F	N	T	A	R	G	R	A	L	S	D	P	Q	M	H	A																

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

QUERY	90	100	110	120
UniRef90_UPI000479E820	P K P F H P A L	L K P G Q R L R F R	L R A N P A K R L A A T G K R V A L K T P A E	
UniRef90_C8XAY3	Y S K L L D R L	A V G Q Q W N F R	R A N P V R K A A H D G K R Q G Y V T V S Q	
UniRef90_UPI0004788258	Y D G L L D R L	Q E G Q R W A F R	R A N P V K A A K D I G K R V A H V T V A Q	
UniRef90_T0SJB8	Y S P F L G R I	I A L G Q H W F R	R A N P V K V N D G K I M G E V T A A Q	
UniRef90_B6XT65	Y E P F L E R I	E K V K Q N M I Y N F	R L V I A N P V L R K R K N G E R F P H I T I N Q	
UniRef90_F2LZH3	Y D P F L E K K	V K Q N M I Y N F	R L T A N P V H R V Q K N G K L Y P H I T I E K	
UniRef90_R4RXN7	Y D Q F L S S Q I	Q T G R V M R F	R L T A N P V H R V T E P G K V Y P H I T I A Q	
UniRef90_J3A256	Y D P F L S E N L	K P G D N F Q F	R V V L N P V I S H S K R G K V K A H V S A K H	
UniRef90_UPI0003A5D9F8	Y D R F L D N L	K R G Q K W W F	E L V I A N P T Y S E S K R G K V K A H V S A K H	
UniRef90_S2VX95	Y S P F L E N L	A E G Q Q F H F	R L T A N P V K Q E F G R G K R V G H K T P E H	
UniRef90_D5GXZ7	Y D H F L S S L	N Q G K Y R F	R L T A N P S Y R I T D K S K V V P H I T V L Q	
UniRef90_I0URS6	Y G R L L A K L	E E G Q E W G F	R L A A N P V K R Q V K S G K T W P H I T P V Q Q	
UniRef90_UPI00034C36E8	Y A P L L D R L	E E G Q T W A F	R L A A N P V H S V R Q P T K R T A H V T P R H	
UniRef90_UPI00046A4D4F	Y D S Y L N R L	N M G E K L R F	R L T A N P T Y K I Y G K S R V V P H I T V D Q	
UniRef90_I7LC17	Y D E F L E K I	E E Q G K K Y R F	R L T G N P T H K D S K T G R I M P H I T V G A Q	
UniRef90_S4NMF0	Y D P F L D Q V K	E K G Q I M Q F	R L T A N P T H A I S Q P G K V P H I T V N Q Q	
UniRef90_N1ZDE2	Y D D F L D K L	Y V G E I L R F	R L T A N P T R K I S V P G Q R M P H I T I A Q	
UniRef90_G9WK75	Y D S F L A S I	Q E G K K Y R F	R T T L N P V V A K E K R G K P V P L L T I E N E	
UniRef90_UPI00037745EC	P K P F T P V L	R E G Q V L R F	R L R A N P S K R A K D K R G E R V A L K T P A E	
UniRef90_C2CN15	Y S R F L E Q I	V I N G Q K W A F	R L E V I G N P V E S I K S C R G K V V P H I T A A Q	
UniRef90_U3Q4B5	Y S Q L L N R I	A I G Q Q W Q F	R L R A N P V R K A A T D G K R Q A F V T A N Q	
UniRef90_I0RAB4	Y T A Y I S K I	K K G M K L R F	R L R V I T N P V H A V M E D G K R G P H I T A E F	
UniRef90_W5XH21	Y D R F L N Q L	V E G K K Y R F	R L T A N P T Y R I T D K S R V V P H I T I L Q	
UniRef90_U7KON3	Y Q R F L D T L	M A G Q H W F	R L V I A N P T Y S E F K R G K I R A H V S A E H	
UniRef90_F8LJ40	Y Q H F L D N I	K T G C R M N F	R V V L N P V I S I S K R G V V K P H I V T I E H	
UniRef90_R6TI96	Y D E F M D K L	N V G Q I M M F	R L T A N P T H C K D G K V Y P H I V T V E Q	
UniRef90_D8FH85	Y D K F L D S L	Q E G Q T M R F	R V C L N P V V A K S K R G R L Y P C Y K I E D	
UniRef90_UPI000466EBCF	Y D S F I L D R L	Q L G Q R L R F	R L T A N P T H T I Y R H G R V V P H I T V A Q Q	
UniRef90_UPI000360AD1F	Y T P L L D R L	A A G Q R W A F	R L T A N P V V N R R R S Q R Y G H V T V N Q Q	
UniRef90_C8P618	Y Q H F L E Q I	K V G E L M R F	R L V I A N P T Y R T D G K V Y P H I V T V E Q	
UniRef90_UPI00035DEFE8	Y A P F L D K L	R N G Q R W Q F	R L R A N P V R S R T G R G K V F A H V T P E	
UniRef90_W5WPN4	Y T P L L Q G I	M R Q G T Y A F	R L T A N P T H T V N G Q K K R L A H V T V K Q Q	
UniRef90_L0J770	Y R N L L N R I	A V G Q V W A F	R L T A N P T F N G Y K T G K P L A H V T A K Q Q	
UniRef90_I6SWG3	Y D N F L N T L	K K G N R M K F	R V V A L N P V I S L P K R G I V K P H I T S E H	
UniRef90_UPI0004755B02	Y E P L L S R L	T K G D T W A F	R L T A N P V H S I R R P T K V T A H V G R Q H	
UniRef90_S4G4Y6	Y D K F L E Q I	K D G M R M Q F	R V T L N P V V V S I S D R G R V V P H I V T Y D Q	
UniRef90_U7LZ55	Y D R L L N S L	T K G Q R W F	R L V I A N P T Y S Q A K R G K V K A H V S V E H	
UniRef90_F1T4D4	Y D S S L L T S L	K K G D R L Q F	R V V A L N P V I S K R P R G R V V P H I V T H A Q Q	
UniRef90_K1A304	Y Q Q F L D N I	Y T G S R M K F	R V V L N P V I S L V K R G I V K P H I T S E H	
UniRef90_S2W330	Y D G L L N S L	E N D Q K Y A F	R L T A N P T H V S T E N G K R Y G H V T I E Q	
UniRef90_UPI00047BB7D5	Y D P L L Q R L	K A G Q Q Y S F	R L T A N P T H A V F R R G Q R R P H I V T V E Q	
UniRef90_S4XHH7	Y S A L L M S R I	M K G Q Q Y A F	R L V I A N P V H I V T E G G K R R V H Q K P E	
UniRef90_L1MJS0	Y D E F L E E I	K E G S V M K F	R V V L N P V V A L S Q G T K I K P H I V T V E Q	
UniRef90_K4NP2	Y E P L L T H M A	K G Q E W A F	R L R A N P A R Q V Y E D G K V M G H V T V D Y	
UniRef90_F4H8A3	Y G P F L D R L	A P G Q R W A F	R L T A N P T Q Y V V P R A K R V A H V S V P H	
UniRef90_M5J7L4	Y D N F L L A K I	A E K K T Y R F	R L T A N P S Y K V M Q P G K K Y P H I T V A Q Q	
UniRef90_UPI0002E67DB6	Y E K F L L E K I	K E G K T F R F	R V V A L N P V I S K M D R G K Y P C Y N I E D	
UniRef90_UPI0003461863	Y G G F L S R L	E A G Q T W A F	R L T A N P V H S I R E D T K P T A H V T P R H	
UniRef90_UPI000363610C	Y A P F L Q R L	D K A T V W N F	R L T A N P V H Y V R T N T K R T A H L T P K H	
UniRef90_F7V5D4	Y D K F L T S I	T E G G I Y R F	R V T L N P V K S I S K R G R R V V P E I T A T Q	
UniRef90_UPI00034BFD40	Y T P L L S R L	E A G Q R W A F	R L T A N P V H S I R R P T K V T A H R T P R H	
UniRef90_D1A5U1	Y G P F L S R L	A K G E E W A F	R L T A N P V H T A R R N T K I T A H V G M R H	
UniRef90_G5K129	Y D A L L S S I	K K G K R M G F	R V V L N P V I S L H K R G V V M K P H T T V E H	
UniRef90_G2KWT8	Y D P F L M Q I	Q E G Q I M Q F	R T A N P T H A I K R P P R I V P H I T I Q Q	
UniRef90_V7HV19	Y D K F L L D T I	K P D S V L K F	R T A N P V R Q F N G K A Y P H I V T V K Q Q	
UniRef90_UPI00040CE6BA	Y Q P L L E R L	A A G E T W A F	R L A A N P V R K P G E R S K R L G H V T V A H	
UniRef90_W5YA73	Y M P L L G S L	R K G Q Q W N F	R L V I A N P T K S E F K R G K V V S L V G N E G	
UniRef90_C7QEM3	Y A P F L D K L	T A G D I W T F	R T A N P V H S I R T R T K R T A H I T V R H	
UniRef90_K0JYJ1	Y R P L L D R I	T T G Q E W A F	R T G N P V V G N R R K R S Q R F G H V T A A Q Q	
UniRef90_9L1A2	Y D T W L D H I	E S G M V L Q F	R T A N P T H S I E P G R V V P H I V T I E Q	
UniRef90_G5ES68	Y G R L L A K L	E N G Q E W A F	R T A N P V K R H K Q T G K R Y P H I V T V A Q Q	
UniRef90_R6BML8	Y T P L L D R I	C Q G S R W Q F	R T A N P T Y S V P Q R G R V V C A H S T P Q N	
UniRef90_UPI00038316B4	Y K E F L D R I	A I G D T W G F	R T A N P V H D I H K P G K R T A H V T P R H	
UniRef90_UPI000406638D	Y G P L L E R L	E A G Q H W A F	R T A N P T F T R H E R G E R F S H L T A T Q	
UniRef90_C6R9L5	Y D R F L G S L	T Q G Q R W H F	R T A N P T Y S Q Q K R G K V K A H V S V E H	
UniRef90_K0NW0	Y E P F L N R I	A K N Q V L R F	R T A N P A F R G G K P B Y F A V D K	
UniRef90_UPI00046AE4F8	Y A N F I L N N I	S K H Q T F Q F	R T A N P T H T K D N H V Y P H V T I E Q	
UniRef90_E0NN50	Y D E F L N T F	K N D R M T F	R V V L N P N K S I S R R G K V I P L Q E D E	
UniRef90_F2NAL6	Y L P L L D S L	E Q G Q V W S F	R I K A N P V R K D G T V Q G H V T A E Q Q	
UniRef90_J2YZ75	Y D P F L S Y L	Q Q G M R A Q F	R T A N P T Y S V T Q S G K R Y P H I T S D Q Q	
UniRef90_UPI0003B5B10D	Y N P P F L N K L	E S G Q T W V F	R T A N P S R S I G K R G K L H G H V T V E Q	
UniRef90_A8M405	Y S R L L D S L	D K G Q R W A F	R T A N P A R A G R R N T Q R Y G H V T P V Q	
UniRef90_E8PQT4	P K P F Q P A L	R E G Q I L R F	R T A N P S K R A R D R G E R I A L K T R E E	
UniRef90_I0RNR6	Y D P L L E S L	R S G Q H W Q F	R T A N P V R S G W T D T K P L G H V T V K Q Q	
UniRef90_UPI0002485463	Y T T L L T G R L	M K G Q Q Y G F	R T A N P V V H T V T E G G K R R A H Q T A E Y	
UniRef90_K9EFU4	Y D R F L D N L	M V G Q E W T F	R T A N P V K R I R K R G K V L P H I V T V E Q	
UniRef90_G6CGS1	Y D G F L D K I	H D G Q I L M R F	R T A N P T H S I R R P T K V T A H I T P V H	
UniRef90_UPI00034A7E0F	Y K G F L D E G	L E T G Q T W A F	R T A N P T H S I R R P T K V T A H I T P V H	
UniRef90_E8WH21	Y G P F L D R L	T P G E Q W A F	R T A N P V H H I R R P T K R T A H I T P V H	
UniRef90_Q04AW8	Y E P F L S R L	S E G Q L L Q F	R T A N P V R R G G K P G S L I P C Y A V D E	
UniRef90_D8I942	L Q P V L D A I	T A G R K L A F	R T A N P T R C D N K T R Q R I P L R Q P A D	
UniRef90_K6UP10	Y A P F L S R L	A D G Q R W F	R T A N P V H V L R Q R G K V V P H I V T A H Q	
UniRef90_UPI0003830F76	Y T P F L D R L	T E G S V W A F	R T A N P V H Q I R R P T K R T A H I T P H	
UniRef90_D6YAN0	Y A P F L S R L	A K G D R W A F	R T A N P V H T D A E P T K I T A H V S P R H	
UniRef90_UPI0003123CDB	Y G P L L D Q M	A M G Q E W A F	R T A N P T R S A R K D T K R Y G H L T V T Q	
UniRef90_UPI0004057324	Y D G F L D Q L	A T G Q T W G F	R T A N P A H H A T E N G R K R A H V T A A Q Q	
UniRef90_U2L8N5	Y H H F L F S L	Q K G N R M R F	R V V L N P V K T V G N R G E T K P I Y T T E E	
UniRef90_S3BLK8	Y G T F L A R L	D K G S T W D F	R T A N P V H G Q K S T K R T A H V L P E Y	
UniRef90_B1VIX9	Y S R F L G K L	T R G Q R W R F	R T A N P T Y R K G G R G K V K A H V S V R H	
UniRef90_D3PQC5	S K P L L E H	L Q P A Q V L R F	R T A N P T V T K K K K R H G L K T L E E	
UniRef90_UPI00041746CC	Y S P F L A S L	D A G Q L W A F	R T A N P S Y S A S R R G Q R Y G H V T V E Q	

QUERY	130	140	150	160
UniRef90_UPI000479E820	K A W L E R R L E E G G F R L L E G E R G P W V Q I L Q D T F L E V R R L L Q			
UniRef90_C8XAY3	Q I D W L L R R A S E N A N G F R L L E E E S G P A L R V T Q R K F N R G G S K V T			
UniRef90_UPI0004788258	Q I N W L L R A S E N H G F R L L E E E S G P A V T V T E R G V V S F G R R V T			
UniRef90_T0SJB8	Q L K W L S D R A E Q Y G F S I D G S G D D L Q C Q V K N R R K E R F R H T V			
UniRef90_B6XT65	Q K E W L I K R S E R A G F K L S E N S F E I K E R D F V P L Y H K G N R P I R			
UniRef90_F2LZH3	Q L Q W L I D R S A S H G F T L I N D Q N D Q P D V V V K E R H K E N F K R T V			
UniRef90_R4RXN7	Q K E W L I N R A K N C G F E I I K D E S I Y F D V V S R D F H K G T K R V V K			
UniRef90_J3A256	Q E K W L I D R A E K N G F T L L T T A D G Y Q F D V V G R D R H K G Q R R V V K			
UniRef90UPI0003A5D9F8	Q M Q Y L M D R S E K N G F S L R E G D F S V V E R G Y E V L K K S T M K P V V R			
UniRef90_S2VX95	Q L Q W L H D R S E G A G F S L F D E G S G N V P A V D V T R S Q L S F G R R V S K			
UniRef90_D5GXZ7	Q I R W L L D R S E K Y G F D L E D D E E T Y E M N I T S R D W P R L R R K V V K			
UniRef90_I0URS6	Q T K W L L D R S E K Y G F D L E D D E E T Y E M N I T S R D W P R L R R K V V K			
UniRef90UPI00034C36E8	Q S A W L R E R A S Q W G F E I I P A E G Q E L E D A P R R D T G G H V G R V T P			
UniRef90UPI0046A4D4F	Q M G W L L E R Q E R L G F E V P R E D G A G R V H N R Q A R F F N K R V P V P			
UniRef90_I7LC17	Q M K W L T E R V E K H G F R I V Q D O T G E L S R D W P L L R R K N G R V V R			
UniRef90_S4NMF0	Q R K W F E R K A E L S G F K I L N F D V V S R N W L R L K K K K S R L L E R V V R			
UniRef90_N1ZDE2	Q R Q W L A E R A A K L G F Q V M D S E E L E N F D V V S R D W P R G H R T I R V			
UniRef90_G9WK75	Q K K W F L D R T K S N G F K V G T Q E N H P E F D V V N R E W W H K G S G T A R V V R			
UniRef90UPI00037745EC	Q S R F L L D R A E K N G F S L I N S D D F V K E R K F E T L K K G M K D T P V			
UniRef90_C2CN15	K T F W L E R K L V E G G F R L C T D E E A P M V R I L Q D T F R K S G H L I Q			
UniRef90_U3Q4B5	Q C E W L L K K S M A G F S I I A V D E S V V E R N N L R F S K R D G A K R V S T K			
UniRef90_I0RAB4	Q M E W L M K R S D Q N G F T V L Q E E C C G P A L R V V Q R Q K E R F E T V T V			
UniRef90_W5XH21	Q K K F F M D R T L K N G F E V V I E D V N I V E R G F E V L R K S G A K P V V			
UniRef90_U7KON3	Q T N W L L E R T K K H G F E V R D S E E V Y K L N I S E R D W P R L R R K I V K K			
UniRef90_F8LJ40	Q L N W L H K K A A Q S G F E V I E T G V V T E R W T D H F Q R S K Q T G R P V V			
UniRef90_R6TI96	Q M D F L V K R S E K N G F S L V I G E S F S I V E R G Y E V F Q P K E P K P V			
UniRef90_D8FH85	Q S K W L L D R A K G F D I L E S D G I P S F S V I N R E W Q K G G R S V V R			
UniRef90UPI000466EBCF	Q T S F L K S R S L K N G F E I I N N E D F S I T E R S H K L L K K G M K N I V R			
UniRef90UPI000360AD1F	Q S K W L V D R S A K A G F E L P E G E L R K T F N V V Q R D W P D P K G R Q V V T			
UniRef90_C9P618	Q N D W L R D A T R N G F K I A E G T G G P D L A V H R R R T W F K P F G R Q V T			
UniRef90UPI00035DEFE8	Q E N W L R Q K A A A G F E F M T A D G S D F T D L V S R D W P N H Q R Q V V R			
UniRef90_W5WPN4	Q K Q W L M A R A E G C G F A V K P E E V V H T D W K T F R K A T Q G Q H R V V			
UniRef90_L0J770	Q T Q W L V D R A E S M G L V F P P E A E D Q P A L S V V G R K F P P R K G K T V T			
UniRef90_16SWG3	Q E H W L L S R A E R A G F R V P P D Q S H D V T S I R V T N R F T K G G H R V V			
UniRef90UPI0004755B02	Q M K Y L K D R S E K N G F L L D E A F L I V E R G Y E V F K K S N P K P I V T			
UniRef90_S4G4Y6	Q M N F L L K R A Q K L G F V L R D D E F T I V E R G Y S L F T K S K K P I V T			
UniRef90_U7LZ55	Q L E W L Y R R A E N A G F E L A P R E S D D V S D D E R P R W S N G N R R V V			
UniRef90_F1T4D4	Q I E F L A S R A Q K Y G F S L E A G F D I V E R G F S V F R K S Q K P I V T			
UniRef90_K1A304	Q M N Y L V E R S D K N G F S L I K E D F S I V E R G Y E V F K K K A V K P I V T			
UniRef90_S2W330	Q K N W L L R K A S Q H G F K I R D P H D L V V H D R K V K T F R R Q G K T V T			
UniRef90UPI00047BB7D5	Q T T W L L E K S S K A G F T I L P S E Q A Y N L R L V D R H R I K F S R Q V V T			
UniRef90_S4XHH7	Q L Q W L L D R Q D V M G I R F L G E E E S V T A S V V R L V F N R K G R V V			
UniRef90_L1MJS0	Q M K Y L L D R S S K N G F E L E E S N F S I V E R G Y E N F Y K D G Q K V V T			
UniRef90_K4INP2	Q L S W L E T H S E R N G F A L L G S S D E S V S Q R R K E Q F A H G S S K V V T			
UniRef90_F4H8A3	Q E K W L T E R A E S A G F H V D S D V A A P V L R V T R R T T H Q F S R R V V T			
UniRef90_M5J7L4	Q K K W L A E R Q E K L G F E F I F R E T V P S F E I V E R A H P L L K R G M R N V V T			
UniRef90UPI0002E67DB6	Q R K F F L L D R S L K N G F E L K D E D F Q I V E R A H P L L K R G D R V V P V			
UniRef90UPI003461863	Q A G W L L K K Q E Q C G F E V V R A E V D G Y E L L V H D R R K G K R M R V V P			
UniRef90UPI000363610C	Q L Q W L L Q R Q D T G G F R I L A K P H D R Q L T E H G D E H Q G S R G R V V T			
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UniRef90_V7HV19	Q R K W L L D R A E A N G F T L D D N Y F T I V S R D Y V P L K R G S R S R G C V T			
UniRef90UPI00040CE6BA	Q Q D W F V R Q A E R H G F S F E E L A L V V R D R K T W T F N R E G S M V T T			
UniRef90_W5YA73	Q A Q W L L D R A K G G F A L K E C A I V E R S H L R F N K G E E S R R R R P V T T			
UniRef90_C7QEM3	Q L G W L L K Q E R A G F T I C E D M D E Y Q V V V H D R S L D F T K K V V T T			
UniRef90_K0JYJ1	Q T A W L L L A R A E R H G F T V P L G E H E P D V A V R G R T S R Q R A T V V T			
UniRef90_I9L1A2	Q K R W L L A D R A L L R A G F E L V T R A E A P F D V V S H D W P R K G R S V V T			
UniRef90_G5ES68	Q Q A W I R R A P Q W G F E V I P A E E C P M V S S R Q D L A F A R R R N K V V T			
UniRef90_R6BM18	Q I E W L L K R Q S E K Y G F I L S E E F G I T K S V W Y R K K G S S G K N V V T			
UniRef90UPI00038316B4	Q I G W L L K R Q E Q A G F E I V C T P P E R Q L T Q R G H E H Q S S R R H P V V T			
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UniRef90UPI00046AE4F8	Q K K W L L D R T A K N G F E I C N E T E K Y L F D I V E R D R K N G R K V V T			
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UniRef90UPI00035B5B10D	Q R Q W L L G S R L E R A D R L G F A L N P D E S T Y S V T V T Q R S R P V F G R R V V T			
UniRef90_A8M405	Q V E W L L T R A E R N G F G V V R Q T D G E L R R V H R F T R G H T Q R P V V T			
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UniRef90_K9EFU4	Q J A W L L E G R A S N A G F E V L W D G A N S A G V P F R R P N R E R H R D R V V T			
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UniRef90UPI0003123CDB	Q T D W L L K R V E R L G F T I P T P A P D V A I R G D R R K F D R Q G T T V			
UniRef90UPI0004057324	Q A T W L L D R S D R L G I R L T D D H A T P T F Q V I E R S T R T F R R R T V			
UniRef90_U2L8N5	Q M N Y L I E R A E K N G F L N A E D F S V V E K G N V V L K K K A N Q S S T V			
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UniRef90_B1VIX9	Q I G W L L Y R K A D A G F G V L A P R L D D E V S D E E R S R R W S E F G R P V V T			
UniRef90_D3PQC5	Q L E W L R E H G A G W G F S I V L G A M V V Q S E R V R M Y H D G S P I V V T			
UniRef90UPI0003830F76	Q S B W L L D R Q D R G G F L V L E K P P E R R H V Q H G D S F H K R G N R V V Q			

QUERY	170	180	190	200
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UniRef90_T0SJB8	L S R V A V F E G I L E V I D P I A L Q N T L	I Y G L G R E K A Y G M G M I L T V I		
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UniRef90_D5GXZ7	L S R V T F E G I L E I K D L Q F K Q A M V	T G I G R E K A F G M G G L L T V I		
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UniRef90_UPI00034C36E8	L T S V T F D G R L R I T D P D T L R H A L L	V S G I G R A K A Y G C G G L M T L A		
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UniRef90_I7LC17	L S S S V T F E G I L E V E D D L E Q F K Q A L	V K G I G R E K A Y G M G G L M T V I		
UniRef90_S4NMF0	L S R V T Y E G L L R V D D D L D T F K Q T L	M N G I G R E K A F G M G G L M T V I		
UniRef90_N1ZDE2	L S C V T F E G I L E I T D L K K F K N A M I	N G I G R E K A Y G M G G L L T V I		
UniRef90_G9WK75	I S Q V S Y E G I L T V I D A E Q F R K A L	D G I G K K K A Y G C G G L L T V I		
UniRef90_UPI00037745EC	V Q A V L F E G T L E V V N P E K A L Q T L	S R G I G P G K A L G L G L L S L R		
UniRef90_C2CN15	L R T A R F R G Q L V V T N A K A L N K S L	Q Q G I G R A R A Y G C G G L L T L R		
UniRef90_U3Q4B5	L A T A V F K G Q L E V T D A E A L R R A L	C H G I G H A K G F G C G G L L T L S		
UniRef90_I0RAB4	V V K A T F E G V L L T V V D E D K F K S L L	E N G F G K K K A Y G F G G L M T V I		
UniRef90_W5XH21	L S R V T F D G I L Q I T D L S K F K L A L	L I N G I G R E K A Y G M G G L L T V I		
UniRef90_U7KON3	I A K A R F S G T L R V T D A T A L R R T A L	T Q G I G R A R G Y G C G G L L T L A		
UniRef90_F8LJ40	L S K V V Y E G T L T V S D E T L F K K I L	T E G I G K K K A Y G F G G L M T V V		
UniRef90_R6TI96	L S K V T Y Q G Y L K I V D I D L F R S A L	L K G I V G R E K A F G M G G L M T V I		
UniRef90_D8FH85	L N Q V T Y E G K L K I I D I D K F K K I L	T Q G M G R E K A Y G F G G M M T V I		
UniRef90_UPI000466EBCF	L S R V T F E G E L Q I T N L E A F K E V L	T T G I G R E K A Y G M G G L L T V L		
UniRef90_UPI000360AD1F	L A T A V F E G V L E V A D P A L R H A L	H G I G P A K G Y G C G G L L T L A		
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UniRef90_UPI00035DEFE8	L R T A T F E G V L S I T D A E R F R L A L	T S G I G R A K A Y G C G G L L T L A		
UniRef90_W5WPN4	I S K V T Y E G I L E V R Q A D A L R S V L	T D G I G R A K A Y G C G G L L T L A		
UniRef90_L0J770	I G T A T F D G V L E V R D I D A L S H T	T D G I G R A K A Y G C G G L L T L A		
UniRef90_I6SWG3	L I K T V Y E G T L T I S D D V D R F R K V L	T E G I G K K K A Y G F G G M M T V I		
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UniRef90_U7LZ55	I A T A R Y R G T L E V K D P E A F R H T	L I E G I G K K K A Y G F G G M M T V I		
UniRef90_F1T4D4	L V K A V Y Q G F L T I E D V E L F R N A L	T H G I G R A R G Y G C G G L L T L A		
UniRef90_K1A304	L I K V V Y E G V L T V S D A D L F K K L	I N G I G K K K A Y G F G G M M T V I		
UniRef90_S2W330	L N V A S F S G S L E V T D A E L L R T A L	V W M G I G R A R A Y G C G G L L T L A		
UniRef90_UPI00047BB7D5	L H R V T F Q G L L E V V S D E A A L R A T	L T Q G I G R A R A Y G C G G L L T L A		
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UniRef90_K4NP2	L V T A Q F D G Q L R V T D A Q F Q R C	L R Q G I G R A K S F G C G G L L T V A		
UniRef90_F4H8A3	L A A A Q F D G V L V V H D A D V L R R T I	A I G I G P G K A Y G C G G L L T L A		
UniRef90_M5J7L4	L S C V T F E G I I R V T D A K K F K K A L	T S G I G R E K A Y G M G G L M T V I		
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UniRef90_F7V5D4	L S K A T Y E G I L K I T N R D V F Y H T	T R G L V G R K K K A Y G F G G L M T V I		
UniRef90_UPI00034BFD40	M V T A T F D G R L K V T D P E A L R R M	T T G L G R A K A Y G C G G L M T L A		
UniRef90_D1A5U1	L V T V T F D G R L E V T D P D A L R R T	L T R G L G R A K A Y G C G G L M T L A		
UniRef90_G5K129	L I K V V Y E G I L T V N D A D L F R R T L	L I E G I G K K K A Y G F G G M M T V I		
UniRef90_G2KWT8	L S R V T F E G I L R V K N L E E F K Q T L	E N G V G R E K A F G M G G L M T V I		
UniRef90_V7HV19	L S R V S F E G I L K V T D V D S F K D I L	V N G I G R E K A F G M G G L M T V V		
UniRef90_UPI00040CE6BA	L A T A V F E G R L T V D P E A L R A A L	T T G L G R K A K A Y G C G G L M T L A		
UniRef90_W5YA73	L Q A V R Y R G V L E V T D P D Q L R Q V L	V D G L G R G R A Y G C G G L L T L A		
UniRef90_C7QEM3	I L T V T Y D G R L R I D D P D K V R A V	L V D G L G K A K A Y G C G G L M T L A		
UniRef90_K0JYJ1	L S T A V F E G R L E I A D P D A L R A A M	T T G L G P A K G Y G C G G L L T L A		
UniRef90_19L1A2	L S R V T F E G V L R V D A E I F K Q T L	T T G L G R E K A F G M G G L M T V I		
UniRef90_G5ES68	L I R K A Q F D G A L R I T D V E L F R Q S L	T K G L G R E K A Y G M G G L L T L A		
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UniRef90_C6R9L5	L S M A T F E G V L E V K D P A V M R Q V	M L A G I G R A K A Y G C G G L L T L A		
UniRef90_K0NW0	I A T A R Y R G T L E V V S D P D A L R A T	L V N G I G R A R G Y G C G G L L T L A		
UniRef90_UPI00046AE4F8	L N R T V Y E G V L Q I T D L S K F R N V	L T E G I G R E K A F G M G G L M T V I		
UniRef90_UPI00046AE4F8	L S R V A F S G S L K V T D E S L F Q E L L	V R G I G R E K A Y G M G G L M T V I		
UniRef90_E0NN50	L I K A E Y Q G E I T I T D V E K F K N A L	T T G I G K K K A Y G F G G M M T V I		
UniRef90_F2NAL6	L A T A F F D G L L E I T D V V E F R K V L	C S G I G R A K S F G C G G L L T I V		
UniRef90_J2YZ75	L S R V S F E G Q I E I T D L S T F K N T L	V N G I G R E K A Y G M G G L L T L I		
UniRef90_UPI0003B5B10D	I N K T V Y E G I L R V T D V E V F R N S L	T V N G I G R E K A Y G C G G L M T L A		
UniRef90_A8M405	L V T A T D G V L E V D E P T L F R G V	T A G I G R S K A Y G C G G L M T L A		
UniRef90_E8PQT4	V Q A V L F E G V L V V V D P A K A L E T	T R G I G H A R A Y G C G G L L T V A		
UniRef90_I0RNRR6	I A T A T F E G H I E V T D P E A L R W A L	T R G I G P G K A L G L G L L S L H		
UniRef90_UPI0002485463	I V R A G F Q G I L E V V V D R D R L E A	T L R W A L T R G I G R A K S Y G C G G L L T L A		
UniRef90_K9EFU4	I R R V Q F E G N I L R I I D V G A F R Q T	L L T I S G I G K A K A Y G C G G L L T L A		
UniRef90_G6CGS1	L S R V T F E G I L R V E N A E T F Q K T Q	L T C S G I G K A K A Y G C G G L L T L A		
UniRef90_UPI00034A7EOF	V V T A T F D G R L T V T D P D A L R R T L	L T C S G I G R E K A Y G C G G L M M T V I		
UniRef90_E8WH21	L V T V T F D G R L E V T D P E K L R R T	L L T C S G I G R E K A Y G C G G L M T L A		
UniRef90_Q04AW8	L N R T V F E G R L K I S N L D Q F K A M	L T C S G I G R E K A F G M G G L M T V I		
UniRef90_D8I942	I E P V R F D G H I V T D P A A F T D A F	L T C S G I G R E K A Y G C G G L L T L A		
UniRef90_K6UP10	I S R V Q F D G A L T V T D V G L F R E A L	L T C S G I G R E K A Y G C G G L M T L A		
UniRef90_UPI0003830F76	L V T V T Y D G Q I L T V T D P D R L S A T	L T C S G I G R E K A Y G C G G L M T L V		
UniRef90_D6YAN0	L V T V T Y D G Q L L E V T D P D A L R R T	L T C S G I G R E K A Y G C G G L M T L A		
UniRef90_UPI0003123CDB	L T L A T Y E G R L R V A D P D A L F R R T	L T C S G I L T H G I G S A K A G Y G C G G L M T L A		
UniRef90_UPI0004057324	L G V A T Y E G V L Q V T D P Q L L Q Q A L	L T C S G I L T H G I G S A K A G Y G C G G L M T L A		
UniRef90_U2L8N5	L N K A V Y E G T L T I S D V E L F K N I L	L T C S G I L T H G I G R E K A Y G C G G L M M T V I		
UniRef90_S3BLK8	L L A V T Y D G R L L E V T D P D A L R A L	L T C S G I L T H G I G R E K A Y G C G G L M T L A		
UniRef90_B1VIX9	I A K A R F T G T L E E V T D P E L L R Q A L	L T C S G I L T H G I G R E K A Y G C G G L M T L A		
UniRef90_D3PQC5	I L Q S V L Y E G H I K I T D L E A F K H T L	L A A G L I G H A R A Y G C G G L M T L A		
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QUERY	P
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UniRef90_C8XAY3	P
UniRef90_UPI0004788258	P
UniRef90_T0SJB8	P
UniRef90_B6XT65	P
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UniRef90_G9WK75	P
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UniRef90_UPI000360AD1F	P
UniRef90_C8P618	P
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UniRef90_L0J770	P
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UniRef90_UPI0004755B02	P
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UniRef90_U7LZ55	P
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UniRef90_E8WH21	P
UniRef90_Q04AW8	P
UniRef90_D8I942	P
UniRef90_K6UP10	P
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UniRef90_D6YANO	P
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UniRef90_UPI0004057324	P
UniRef90_U2L8N5	P
UniRef90_S3BLK8	P
UniRef90_B1VIX9	P
UniRef90_D3PQC5	P
UniRef90_UPI00041746CC	P

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UniRef90_R7C5Y6	M Y L S R V E L D I S K K Q T Q V A L S A R N K F H G A I E N T F F G E				
UniRef90_G0M0J8	M Y L S R V E L D T T N R R R K T R D L T H C G A Y H N W V E H S F P D E				
UniRef90_Q0W583	M Y L S R L I L N P R T R A V R R D L A D C H E L H R T I L I G F P D L				
UniRef90_UPI000476FC32	M Y L S R V T L S L S R V D A I A F A S S P Y R I H A A V E E Q A F P P Q				
UniRef90_UPI00037EFD03	M Y L S R L Q L N P R P R H K Q A R T D L A S P P Y Q L H A T L C W A F A E				
UniRef90_UPI0002192EC8	M Y L S R F T M P Q R P R G S R E L V A N P Q A L H A A V V M A C C W P D R				
UniRef90_H0R5C4	M Y M S R I A L N R R R R G A M K L L T S T R H A M H A A V V M S A C P G				
UniRef90_U1FGK8	M F L T Q F D I N V A R R D A M R L L A S P E R L H A A V V L S A F P P G				
UniRef90_UPI000348CDD8	M F L T R L Q L D P G R P G T R R L L A S P R T V H G A V V I K A F D G K				
UniRef90_R5IV38	M Y L T R M E L N T K N M D T I R L L G S Q E K I H G L V E S G F S G E				
UniRef90_D7B2M5	M Y L T R F F N T H R P G A R K L L S S P Q A L H A A V V M G S Y A D L				
UniRef90_N2B3U2	M Y L S R V P L D L S K R K T Q I A M A S P N K F H G A V V E E S F S G N				
UniRef90_G2GEA3	M F L T R F F R I N T A R M G A R R L L T S P Q S L H A A V V M A S F A E R				
UniRef90_H2GHK1	F T K V L I N P A R R Q G R K Y L T P H M L H A A V V M H G F P P D				
UniRef90_A7ABA2	M Y L T R I Y L N P H R R G A K Q L L M R S R Q T L H A A V V L N C P P S				
UniRef90_C3PF96	M T T L T K I L I N P Q L R Q G R K L L T N P H A M H A A V V S A A F P P D				
UniRef90_D7CSJ6	M Y L S K L Q L N P R A K Q A R R D L L A N P Y E M H A T L S W A F A G				
UniRef90_D4MKY8	M Y L S R V Y L D L S N R N T L K A V N S R S V L H G A V V E A A L T D D				
UniRef90_UPI0003454E21	M F L T R I R L N T A R A G A R K F L I S P R A M H G A V V T K A F E G				
UniRef90_D9X2P2	M F I S R F R V N T A R P G A R R L L S S P Q A M H A A V V M S S F P D T				
UniRef90_L7LM20	M Y M S R I A L N H R R R G A V K L L G S R H A M H A A V V M S S F A P P G				
UniRef90_D3LV74	M Y L S R V K V D D E N F R K V R A L T E S S R P Y E L H D D W V E R C F P E E				
UniRef90_D3SKA3	M Y L S L L R L L N P R S K R A L T E S S R P Y E L H D D W V E R C F P E E				
UniRef90_UPI000344D697	M Y L T R F F R I N T A R M G A R R L L T S P Q S L H A A V V M A S F A E R				
UniRef90_Q03C59	M Y L S R V Q V N T N D H Q I F K H L T H L G A Y H D W V K R S S F P R E				
UniRef90_D0WFC7	M T Y L T R F P I N K T R D A R R L L A S P Y Q M H A A I A G S F P H C				
UniRef90_W1V8E2	M F L T K I E L D P S R R Q A R R Y L G S P V M H A A V V L K A A G A T				
UniRef90_A0A023CZE7	M Y L S R V E I I A T K N R Q K I K D L T H L G A Y H N W V E Q S F P D E				
UniRef90_B4V4P4	M H L T R F F R I N T A R L G A R H L L C S P Q R M H A A V V M S S F A G A				
UniRef90_UPI00037B61D3	M Y L T R F F E F N T A R G S R E L L A S P H R L H G A V V Q A A F P T D				
UniRef90_UPI00037E551B	M Y L T R F F R V N T A R A G T R Y L L S S P Q R L H H A A V V L A G F P G L				
UniRef90_F0GWL4	M Y L S R V E I L D V Y N R R R K M R D L K D L N S Y H G F V E S C F P E E				
UniRef90_F8E3A0	M Y L S R V E I L D V Y N R R R K M R D L K D L N S Y H G F V E S C F P E E				
UniRef90_Q2JWC6	M Y L S R L I L N E R Q L L V Q R E L S N A H A L L H Q R I M H G F P D Q				
UniRef90_UPI000475FB48	M T T F T K I L I N P A R R Q G R K Y L T N P H A M H A A V V R Y S F P D D				
UniRef90_UPI000317E1D8	M Y L T R F F R V N T A R A G R F L L S S P Q R L H H A A V V L J A G F P G L				
UniRef90_K2C8I0	M Y L Q R I Y L N S R C R E A R R D V S S D P Y E M H S T L C R A F A A A				
UniRef90_J7L4F7	M Y L T R F F R L N T H R A G A R K L L S S P Q T M H H A A V V L I G G L P E E				
UniRef90_W7IYR9	F L T R F E I N K A R G A R D L L S S P Q T M H H A A V V L I G G L P E E				
UniRef90_Q1EQJ3	M F L T R F F R V N T A R A G R F L L S S P Q T M H H A A V V L I G G L P E E				
UniRef90_U1PU14	M F L T R I Y L N P Y R R G A R K L L M R S R Q T M H H A A V V L N C F P P G				
UniRef90_B1VNZ6	M F L T R F F R V N T A R A G R F L L S S P Q T M H H A A V V L N C F P P G				
UniRef90_D1CGD5	M Y L T R F F R V N T G R S E G R R L L G S P H R V H G A V V N A S F P P S				
UniRef90_W5XRF5	M T Y L S R L R L Q P R H R D V Q K D L S N C H A L L H S R I L S A F P P L				
UniRef90_D9UET3	T V F L T R F F R L N P A R V G A R R L L G S P P Q S L H A A V V V A G A F P P D				
UniRef90_UPI00036DAF89	M F I S R F R V N T A R S G A R R L L S S P P Q T L H A A V V M S S F P P G				
UniRef90_E3BSS5	M Y L S R V E I D L Y N R R K K I R E L K H I G C Y H G W I E D A F P P D E				
UniRef90_K7QUL2	M W I S K L V L N P R S R A A R R D L A N P Y E M H R T L S R A V S E A				
UniRef90_K6WN60	M F L T R F A I N R A R R G A R H L L A S Q Q R M H A G V L A G F P P G				
UniRef90_B8HWH7	M Y L S K L V L N E R D R T V Q R D L S N V H A L L H Q R I M Q A F P P D E				
UniRef90_D1NT12	A R I G A R Q L A A S P Y K L H A A V V E A S F P P H				
UniRef90_U2KWI7	M Y L T R I Q L D L T K T K T M Q A L V A P K L F H G A I E C A				
UniRef90_S3AY30	M Y L T R F F R L N T G R S G T H R L L A S P H Q M H G A V V M N M S F P T A				
UniRef90_X8HU75	M F F T R F F P I N V T R R E T T R R M L A S P Y R M H H A A I A G S F P T A				
UniRef90_D1CA19	M Y L S R L I L N P R S R E V V R R D L A D C Q Q L H R S V M G S F P N L				
UniRef90_D6ZIM7	F T K I L I L N P A R R Q G R K L L S N P Q A M H H A A V V V R A C F P P D				
UniRef90_UPI0002629ADA	M I T F S S I P V N P H K R G R G R L L S N P Q A M H H A A V V V R A C F P P D				
UniRef90_N6Y562	M F L S K L V L D P A H P Q A R R D L L A N P Y E M H R T L S R V Y A E S				
UniRef90_UPI00036012E6	M T T F T K V L L N P Q R R G A R T L L L N P Q A M H H A A V V V R S A F P P D				
UniRef90_UPI00036043B6	M Y L S R L R P S L R S R D Y R R D L A D V Q H M H R T L M S V F P E V				
UniRef90_C1DS10	M Y L T R L T L D P R S A Q A Q R R D L L A D A Y E M H R T L L V R A F V T D				
UniRef90_A4XYT8	M Y L T R L T L D P R S A Q A Q R R D L L A D A Y E M H R T L L V R A F V T D				
UniRef90_UPI0002912ADB	M Y L T R L T L D P R S A Q A Q R R D L L A D P Y E M H R T L L V R A F V Q D				
UniRef90_R6Q6M2	M Y L T R L T L D P R S A Q A Q R R D L L A D A P Y E M H R T L L V R A F V Q D				
UniRef90_H7F006	M Y L T R L T L D P R S A Q A Q R R D L L A D A P Y E M H R T L L V R A F V P D				
UniRef90_UPI00039D0EC8	M F L S R L T L D P R N A Q A Q R R D L L G D P Y E M H R T L L A R A F V P D				
UniRef90_C0VRW4	M T T F T R V F V N P Q K R H G R K V L T N P E A M H H A E V V R G L F P P D				
UniRef90_C6WMQ8	M F L T K L T V D V R S R E F R R D L A N L H E M H R T V T M S G Y P R V				
UniRef90_S3Y6P4	M F L T K I D I D T G K R L A R K Y L G S P Q V M H A V V M K T V C G E				
UniRef90_UPI00037E75CC	M Y L S K L T L N P R C R E A L R D V S S P P Y E L H R T L L S H A F Q T E				
UniRef90_Q5YRB7	M F L S R V V P L N P A R Q G T R K L L S S P P Q A A H H A A V V L L A F F P P Q				
UniRef90_UPI0004770137	M Y L S R T F I L N P R R K G A V P F L G N P Q K I H A A V V L Q A F F P Q A				
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UniRef90_H2KA43	M Y L T R A R I L N V A R P G A R R L L G S P Q A L H H A A V V L S S C F P K E				
UniRef90_Q4JWK1	M H L T K I E L D L H R R F A R K L L S S P P Q V M H A V V V M K A C Q P G				
UniRef90_U1QC11	M H L T K I E L D L H R R F A R K L L S S P P Q V M H A V V V M K A C Q P G				
UniRef90_F7QBQ3	M F L T R K I D L D L H R R F A R K L L S S P P Q V M H A V V V M K A C Q P G				
UniRef90_U4QRP8	M F L H R L H D L R H G A V V R R D L S D P Y Q L H S T L C R A F P P S				
UniRef90_UPI000383052E	M F L T R F F R I N P L R A E S R V L L A N P R A M H H A A V V V G G G P G S				
UniRef90_C2BET7	M Y L S R V E I V D L N N R R K M K D L T H C G Y H G W V E H S F P P Q E				
UniRef90_S2ZEAT7	M T T F T R I Y L N P Q K R Q G R K V L M N P E A M H H A E V V R G L F P P D				
UniRef90_G7U8L6	M F L T Q F D I N V A R R D A M R L L A S P E R L H H G M V V E S A F P S L				
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UniRef90_H1HVD2	M Y L T R M E L D T D K R S T R R L L S S R S K I H G M V V E S A F A G				
UniRef90_UPI0004071D93	M F L T K I D L D P A R R L L A R K Y L G S P Q V M H A V V V L K A T G G G D				
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UniRef90_UPI0003668FB7	M P Y L S R I R I N P L R T H S R R L L A S P H V L G A V V Q G G F P G				
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	50	60	70	80
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UniRef90_R7C5Y6	D D E R L R N L W R I D K K M Y L L L S R L K P D L S N L V K Q F G E T K E			
UniRef90_G0M0J8	I H K G R Q R H L W R I D R K N Y L L L S P T R P V L K D F V A G T A V T K S			
UniRef90_Q0W583	N G K G G E G V L H R I D I H P R L L V Q S P E R P D L T H L Q R F P D Y L T			
UniRef90_UPI000476FC32	A A R T R G R I L W R I D D E A W L Y V L S P E R P D L T H L R E Q A G W V R D			
UniRef90_UPI00037EFD03	P E Q S P P R F I W R I E E G P T V L V Q S V E M P R W E K L L Q R F P D Y L T			
UniRef90_UPI0002192EC8	G H D G D G R V L W R I D H N H E L Y V V S R D A P S F D H R E Q A G W V R D			
UniRef90_H0R5C4	T P T E G E R T I L W R I D R D Q E L L I V S P A E P C L Q H L A E Q A W A T R D			
UniRef90_U1FGK8	Q S T S D D R T I L W R I D H D A R L L M I V S P L Q P D L T T L N E Q A G W S A D			
UniRef90_UPI000348CDD8	K T E G Q G R V L W R I D Q K L Y L Y V V S S T E P D L S H V P E H P V Q T R A			
UniRef90_R5IV38	R K R N L W R I E Y R L Y L L I S P D R P D L S I G V R R Y G Q T K D			
UniRef90_D7B2M5	L P S G G P R V L W R I D R N A R L Y V V G P N R P D L T H V V E Q A W Q T H E			
UniRef90_N2B3U2	R E R N L W R I D T K M Y L M I L S V S K P D L S G I A E Q F G E T R E			
UniRef90_G2GEA3	P D H Q G D R V L W R I D Q Q S R L Y I V S P G R P D L T H L V E Q A W Q T K P			
UniRef90_H2GHK1	C D T S T E R I L W R I D H E H I L Y V V G P E K P T I D H I V E E A G W D V D			
UniRef90_A7BA62	V D P G A P R V L W R I D R P P A L Y I S S P V A P D P S H I V E E G G V V I R D			
UniRef90_C3PF96	I D T D E A R L L W R I D R N G H L Y I V G P E K P T A S G I V E Q A A Q S L D			
UniRef90_D7CSJ6	R E G G R P L W R I E Q S R R L L V Q S L T P P D W P H P D Y A T L D A Q S			
UniRef90_D4MKY8	R S R K L W R I D S E L Y L M I L S N Q K P D L S V I A L Q A G E T R E			
UniRef90_UPI0003454E21	A P E A G A R V L W R I D R N S Y C Y V S P E R P D L T H V V E Q A W E T R D			
UniRef90_D9X2P2	P E P D A P R V L W R I D Q R A R L Y I V S P D R P D L T H L V E Q A W Q T R P			
UniRef90_L7LM20	T E S A E G R V L W R I D R R D D L L I V S P S E P C L V H I G E Q A W A T R D			
UniRef90_D3LV74	F E Q K R K R K L W R I D T D R Y L L L I V S E T T M P D I A G M V P G S G A I K E			
UniRef90_D3SKA3	A D G G P G R V L F R L D M N E Q V L L Q S E K K P F W T N L N G Y T E F V T E			
UniRef90_UPI000344D697	A E P P G G P R V L W R I D R N A F L Y M V S P S R P E L T H M V E Q A G W T H D			
UniRef90_Q03C59	I A A G T R R H L W R I D S R D Y L L V L S P D A P E L A Q L V A G T A Q T K D			
UniRef90_D0WFC7	L D S G K K R V L W R I D G S A R L Y I V S P D K P S L V I G L D E Q I W E T R S			
UniRef90_W1V8E2	A S S G P G R V L W R I D E T M S L Y L L T P S R P D C S F L D E A A A R T L D			
UniRef90_A0A023CZE7	I N G E R K R H L W R I D Q K N Y L L V L S N Q P D E G Q L E K G T V K I K S			
UniRef90_B4V4P4	I P S E E S R I L W R I D R N S L L F I V S E E R P D L T H L V E Q A W Q T Y D			
UniRef90_UPI00037B61D3	R R E A R P R I I L W R I V D H R A L L Y L V S P P Y E P D L T H V V E E A W Q T K P			
UniRef90_UPI000375E51B	P P A A R P R I I L W R I V D H T R R L Y V V S P D R P D L T H L V E Q A W E S R H			
UniRef90_FOGWL4	I E K G R T R K L W R I D K K T Y L L I Q S Q I K P N K E L E K G T S L C K D			
UniRef90_F8E3A0	I D E S Q S R V L W R I D H Q R T L Y I V G P E K P D G K H I A E Q A A Q S L D			
UniRef90_Q2JWC6	P P R S D W H I I L Y R Q E P D G T I L L V Q S V I Q P D W S R L P Q G Y P E V K I			
UniRef90_UPI000475FB48	I D Q T G Q R I I L W R I V D H D H I L Y I V G P E K P T A T H I V D E A G W T A D			
UniRef90_UPI000317E1D8	P T D P R P R I I L W R I V D H S D R L Y L V S P D R P D L T H L V E Q A W E S R H			
UniRef90_K2C8I0	D E K C P P G F L W R M E N E A K L L V Q S N S V A N W S G I N Y K D W L A K P			
UniRef90_J7L4F7	D G R G E G R V L W R I V D R N A L L Y I V S P S R P E P T H M V E Q A G W T R D			
UniRef90_W7IYR9	T P T D E G R V L W R I V D Q D E H L Y V L S P H E P D L T H L V E Q A G W T R D			
UniRef90_Q1EQJ3	I P S A P D R I I L W R I V D R N A A M L Y V V G P Q R P D L T H L V E Q A G Q T Y H			
UniRef90_U1PU14	S D A A A P R V L W R I V D R A A A L F M S S P V P P D P S H I V E E G G V V V R E			
UniRef90_B1VNZ6	R D G S G P R V L W R I V D R N T T L Y V V S P N R P D L T H L V E Q A W T T F A R			
UniRef90_D1CGD5	P T P S S P R V L Y R L E E A P T V I V Q S R L E P D W S R L P E G Y A E C K R			
UniRef90_W5XRF5	V S T D E S R I I L W R I V D E N S T V L Y I V G P E K P S L E V I E Q A G W A A D			
UniRef90_D9UET3	P Q Q R P D R V L W R I V D Q Q A R L Y Y V V S P D E P D L T H L V E Q A W Q T R P			
UniRef90_UPI00036DAF89	L P S D R P R V L W R I V D Q R S R L Y I V S P D R P D L T H L V E Q A W Q T R P			
UniRef90_E3BSS5	R D K P R S R K L W R I V D N K C Y L L I L S E N K P D L E K L E K H S A C T K N			
UniRef90_K7QUL2	L K E G R E R L L W R I V D P S P V V L V Q T L T E P D W S V L E E D Y A E I F P			
UniRef90_K6WN60	A D P G R V L W R I V D E S P E L F I A S A A R P D L T H L V E Q A W D T A D			
UniRef90_B8HWH7	Q P R A D W N V L F R Q E P D S I V L V Q S E I E P N W T H L S Y N Y P Q L T S			
UniRef90_D1NT12	A P R A T D R I L W R I V D H N R W L Y V V S P S Q P D L L H I V E Q A W E T K D			
UniRef90_U2KWI7	E P E G R T R K L W R I V D T N Q Y L L I L T E P S L P D F S E V V R Q F A E T K K			
UniRef90_S3AY30	P P R G G P V R L W R I V D H A P A L F I V S P Q R P D L T H L V E Q A W T T Y A			
UniRef90_X8HU75	L E G E R G R V L W R I V D Q Q A C L Y I V S P T C P S L V G L N E Q A W Q T R D			
UniRef90_D1CA19	A A P G D A R I I L Y R L E T H P R R L L V Q S A I E P T W S Q L P A D Y P D C K P			
UniRef90_D6ZIM7	M N Q N Q G R V L W R I V D Q R S H L Y I V G P E K P T A V H I V E Q A A Q S A E			
UniRef90_UPI00026294ADA	L A E H D A R V L W R I V D R A F T L Y I V G P E A P D L D V V G D Q A G W T A D			
UniRef90_N6Y562	P D G P P A R F I W R I E H T T T V L L Q S A T P G R W R C L Q E G Y L H A Y			
UniRef90_UPI00036012E6	I S Q E D A R V L W R I V D H R G H L Y I V G P E K P D A S N I V E Q A A Q S A D			
UniRef90_UPI00036043B6	V S G G S A R L W R I V D R T H V L L V Q S A L E P N W G D V P S D Y A E T R E			
UniRef90_C1DS10	E R D A P G R F I W R I V D P S P T L L V Q S C Y P E S G D W D V L Q Q R P A E C K A			
UniRef90_A4XYT8	E H S A P A R F I W R I E A T P V V L V Q S T L Q S A G D W S A L Q P N Y L Q E I E			
UniRef90_UPI0002912ADB	G E Q T P P R F I W R I E P T P V V L V Q S E E A A Q W S S L E K G A V E M L E			
UniRef90_R6Q6M2	R R R R L W R I V D L D R L Q K L Y L L Q L S E E M P D L S G V V E Q A P E S R N			
UniRef90_H7F006	A E Q T P P R F I W R I E P D P V V L V Q A L E P A D W S V L E K G S A E T R D			
UniRef90_UPI00039D0EC8	A D T P P P R F I W C L E P T P T L L V Q S A R E A D W S F L Q A T P G Q P V A			
UniRef90_C0VRW4	L P S D N G R V L W R I V D Q E H I L Y I V G P E R P D T A E L A D R P A Q T A D			
UniRef90_C6WMQ8	E D G S P A R V L W R I V D A T P T Q Y V Q S L T R P D W T G L P E S P A E V R S			
UniRef90_S3Y6P4	S T E T Q G R V L W R I V D E G S T L Y I L S P S H P N V A N I A R E A A R T L D			
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UniRef90_UPI0004770137	P P N Q G P R V L W R I V D T D P V L W T L A P Q R P D F D S H V V E P F G W T R E			
UniRef90_F9MXH3	R G K G R G S R S K L W R I V D N E H Y L L V L S E E K P E E S L V K G S I L E I K D			
UniRef90_H2KA43	L P A A P P R V L W R I V D R N K F L Y I V S P D R P D L T H F V E Q G W E T R P			
UniRef90_Q4JWK1	V S E K E R I I L W R I V D D E H F V Y I V G P D S C D P T K I I A E Q T P Q K A S			
UniRef90_U1QC11	G E S P P G R V L W R I V D S G S F L Y I L S P S P E L T Q L E S D T A R T L D			
UniRef90_F7QBQ3	R D E V P P R F I W R I E P E P V V M V Q S T V E P D W R V L G K K A P E T K E			
UniRef90_U4QRP8	Q K C S E G E F I W R I E P E P L I L V Q S Q T L P D W T R I N L K G W L A K A			
UniRef90_UPI000383052E	P D R E R E L L W R I V D H R P Y L F V L T R S K P D W T H I V E V K A G W V R D			
UniRef90_C2BET7	N D I R T R K L W R I V D N K Y Y L L I L S E Y I P D K E K L V I E S T E V K D			
UniRef90_S2ZEAT	I S T A D A R V L W R I V D Q H D H L Y I V G P E R P E T A E L A E R I A Q T A D			
UniRef90_G7U8L6	Q S S N G A R T L W R I V D H D A R L L M I V S P L R P D L T A L N E Q A G W S A N			
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UniRef90_UPI00034700E2	A E Q T P P R F I W R I E P T P E L L V Q S A H P A H W E A L A A G Y L Q A W E			
UniRef90_Q67RN9	L D E A R A Y F I Y R L E L N R Y L Y I V Q S R V E P D W G R L P A G Y P A V K R			
UniRef90_H1HVD2	G R E R R R I W R I V D S R L Y L L V L S E E K P N L E A V H E Y G L T R D			
UniRef90_UPI0004071D93	D G S G P G R V L W R A D R G P T L Y L L S P S E P D C T Q I V A E A G A T L D			
UniRef90_UPI0002E6F59A	K D R Q F I Y R E E L Q R F V L S Q E R P A E S A I F D V Q			
UniRef90_UPI0003668FB7	P P G A E R T I W R I D Y R P H V Y V L S R S R P D W T H L V I E S A G W V R D			
UniRef90_F9EI48	T D D G S G R V L W R I V D R G A T L Y I L S P S E P D C S Q I V T E A A R T L D			

	90	100	110	120
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UniRef90_R7C5Y6	Y D V L L N R I T E Q S V W Q F R L V I A N P T K C L K K R G K R V A H V T P E H			
UniRef90_G0M0J8	Y D A W L D Q I E V G M V M R F R L T A N P T H S I H P K G R V V P H V T I E Q			
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UniRef90_UPI000476FC32	Y A P V L E R I A S G Q L W Q F R L K A N P A R K V F V D G T I Q G H V T E A Q			
UniRef90_UPI00037EFD03	H P P P L E H L Q P G Q V L R F R L R A N P T V T R K D P R K R H G L K K V E E			
UniRef90_UPI0002192EC8		C T V N P T T A I R T R G K R V A E V T A E Q		
UniRef90_H0R5C4	Y T A F L L E S V E A D S S Y A F R L T G N P T R T L T D D G K R V G H Q T V A H			
UniRef90_U1FGK8	Y D P F L R G L Q P G S T W Q F R L C T V N P T T A I R T R G K R V A E V T A E Q			
UniRef90_UPI000348CDD8	Y A P L L D R L E K G Q T W N F R L L A A N P V R S V R T D T K R T A Q L T V A G			
UniRef90_R5IV38	Y T P L L E R V K N D T W W H F K L V I A N P T R S V G E R G K V K A H C S L K Y			
UniRef90_D7B2M5	Y S G F L K R L E A G Q T W A F R L T A N P V H S I R P T K L T A H V T P R H			
UniRef90_N2B3U2	Y D G L L N R I K E G S V W H F R L L A A N P V H S M K T R G K V V A H I S E K Y			
UniRef90_G2GEA3	Y A S F L T R L L T A D D T W T F R L T A N P V H S I R R P T K R T A H V T P R H			
UniRef90_H2GHK1	Y D R L L S Q L T K G Q K W N F E L V I A N P T H T I P K R G K V V A H S T A A K			
UniRef90_A7BA62	M S F L E E G L W A G Q R W G F R L C V N P T F R A R G R K K V L A H V T Q D Q			
UniRef90_C3PF96	Y T R L L G S L Q K G Q R W R F E L L A N P T Y S Q S N N G R G A H V S V D H			
UniRef90_D7CSJ6	P K P F E P T F K A G Q Q L L R F R L R A N P T V T K L D P R K R L G L V T L E A			
UniRef90_D4MKY8	Y D G L L G R I K K G D I W Q F R L T A N P V K T K Q G Q G K R A V T I V D F			
UniRef90_UPI0003454E21	Y A P F L A R L E S G Q R W A F R L T A N P V H S I R R P T K V T A H R T P R H			
UniRef90_D9X2P2	Y A P L L D R L L A A G D R W A F R L T A N P V H T P R P R K L T A H L T P V H			
UniRef90_L7LM20	Y T T F L E S L S A G E E Y V F R L T A N P T H R M D G R K Q I V G H V T S A Y			
UniRef90_D3LV74	Y D A F L Q R L K E N Q R M R F R L V T L N P V R T E G K R G R L F P H V T V A Q			
UniRef90_D3SKA3	C K E F K P A L A P Q G V L R F R L R A N P T K R S K S T G K R E G I L K T E E			
UniRef90_UPI000344D697	Y T G F L S R L E A G Q T W G F R L T A N P V H S I R R E T K R T A H V T P R H			
UniRef90_Q03C59	Y D P F V T A L R Q G Q R L R F R L T A N P T R A I A T P G Q R G P H V T V A Q			
UniRef90_D0WFC7	Y D T F L S R I L E I G Q E Y A F R L F A N P V L S R S T R G K R I G H L T V L Q			
UniRef90_W1V8E2	Y E P F L S K I T E H Q V W A F R L A A N P S R A I S Q R G K R Q G H V T V E Q			
UniRef90_A0A023CZE7	Y N R F L D A I K I G E I M R F R L T A N P S Y S V S I K R G R V Y P H L T V K Q			
UniRef90_B4V4P4	Y K N F L D G L T T G S T W N F R L T A N P V H H V R R T R K R T A H R T P R H			
UniRef90_UPI00037B61D3	Y R P L L E K L D V G Q E W A F R L T A N P V Y Q T K K R S K R L G H V T V R Q			
UniRef90_UPI00037E51B	Y R P F L G R L A K G D H W A F R L T A N P V H S I R R P T K R T A H V T A R H			
UniRef90_FOGWL4	Y D K F I D S L E E G M K A R F R L V K L N T V I S K D E R G R I V P V P T R D L			
UniRef90_F8E3A0	Y E R F L G A L T K G Q R W Q F E L V A N P T Y A E R E R G K V K A H V T A D Q			
UniRef90_Q2JWC6	F D L R P E V L S K G R C F Q F R L R A N P S K R D K K T R K I V G F F R S E D			
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UniRef90_K2C8I0	P D P A L D T L A E G R E F R F R L R A N P V H S I R R P T K R T A H V T Q E Q			
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UniRef90_W7IYR9	Y T P L L D R V A I A D R Y A F R L T A N P V R S Q R R S Q R Y A H V T V A Q			
UniRef90_Q1EQJ3	C V N P T F R R A G R K I L A H V T Q E Q			
UniRef90_U1PU14	Y A P F L D R L E N K S V W N F R L T A N P V H S I R R P T K R T V H V T P R H			
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UniRef90_E3BSS5	Y D E F L N S L K E G M R A K F R L K L N T V K S V Y K K R G R V A P V S L D G			
UniRef90_K7QUL2	P K A F E P T F Q P G Q V F R L K A N P S K R L V A T G K R I A L K T W L			
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UniRef90_B8HWH7	V N F V T S R L E P G R A F Q F R L K A N P S K R D K Q S R K L I G M F H Q A D			
UniRef90_D1NT12	Y T P F L D R L A Q G Q Q W H Y R L C V N P V R N A A T D G S R Q A Y V T V R Q			
UniRef90_U2KWI7	Y D V L L D R I T N G S K W Q F R L K A N P V V A Q S K R G K P V A H I T T A Y			
UniRef90_S3AY30	Y G D F L D R L T A G D T W S F R L T A N P V Q H I R K P R K R T A H L T P R H			
UniRef90_X8HU75	Y A P F L E H L A M G Q R Y A F R L V A N P T V S R S A R G S R L P H L T V V Q			
UniRef90_D1CA19	V G P I Y D A L D A G M V L T F R L R A N P T K R I K P D G K R V E L R T E A D			
UniRef90_D6ZIM7	Y D R L L Q G L K K G Q Q W N F E L V A N P T K S R L P R R R G K V V A L L S A P D			
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UniRef90_UPI00036012E6	Y A P L L G S L L R G Q Q W R F F L R C T A N P T R V R D R G R R V A L H D E K S			
UniRef90_UPI00036043B6	M D S V F S A I T P G R T L H F R L T A N P T R V R D R G R R V A L H D E K S			
UniRef90_C1DS10	L D L E A L R P Q W R Y R F R L T A N P T V T R A G K R R G L L G E A E			
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UniRef90_H7F006	I S P E G G W L Q A E E C Y R F R L F A N P T V T R D G K R R G L L M A E E A			
UniRef90_UPI00039D0EC8	S K R L D K L L V P G S R Y R F R L L A N P T V T R A G K R R G L L T G E T A			
UniRef90_C0VRW4	Y D K L L S S L A K G Q Q W C F R L L A N P S I S L K T G G K R V P L A R I D Q			
UniRef90_C6WMQ8	L D P L L D A I E P G R V L A F R L L A N A T K D P G R G R L V R V A H R T P E A			
UniRef90_S3Y6P4	Y N P F L S K L A A Q G Q I W A F R L T A N P T H A K S R R G K R Y G H V T V E Q			
UniRef90_UPI00037E75CC	L K P I S P A F S V G Q T L A F R L V A N P T K K E K R E G K R V A L L N I E Q			
UniRef90_Q5YRB7	Y G P L L D R L A V V D Q Q W H F R L T A N P V R A A M T R G K R R G L L T V A G			
UniRef90_UPI0004770137	Y A P L L N R I A E G Q R Y V F R L T V N P T K A K V K R G T V V P L V G A N N			
UniRef90_F9MXH3	Y D P F I E K L R E G M Q A K F R L K L N T V K S L A D R G R R R G R L V P D E			
UniRef90_H2KA43	Y G P F L D R L T T G S S W S F R L T A N P V H Y I R R P T K R T A H V T A T H			
UniRef90_Q4JWK1	Y N R L L E A L A D G Q Q W H Y E R L V L N P V A A R G T R G K L T A L V G E A A			
UniRef90_U1QC11	Y E G F L D K L S N G Q H W A F R L S A N P I H S V P T R G K R Y G H V T V E H			
UniRef90_F7QBQ3	I D P A V L I E L G R Y Y R F R L F A N P T V T Q Q G K R Y G L Q T E P E			
UniRef90_U4QRP8	D P P I D L S F K S G Q Y F R F R L Q A N P C V T R N G K R F N P E E			
UniRef90_UPI000383052E	Y T A L L D Q I A T G R E F A F R L T A N P V Q N K R R R G F R M A H R T A A A			
UniRef90_C2BET7	Y D E F L L A S L K E G I R A K F R L K L N T V I A K I K R G R I M P V P N E K			
UniRef90_S2ZEAT	Y D K F L L A R I T K G Q K W N F A L T A N P T R K I K D R G K R V P L V K L D Q			
UniRef90_G7U8L6	Y D P F L Q A L R S G S T W R F R L C T I N P T T A V R K R G Q R V A E V T A E Q			
UniRef90_A1ARH5	L K E R L D L K A E Q R F R F R L R A N P C V T K N G K R L G L K Q D E			
UniRef90_A0A022MPR4	Y A P L L E R L T A G D R W A F R L T A N P V H T I R R P R K V T A H L T P I H			
UniRef90_UPI00034700E2	T R P L L S G L M A Q S R C F R L W A N P T V T R E G K R R G L V A E A D			
UniRef90_Q67RN9	V D E A Y A R I T E G R V L R F R L R A N P T R K I K D R G K R V P L S G L D A			
UniRef90_H1HVD2	Y E P L L A R I T K Q S R W R F R L V A N P T Q S I L S R R G E V R A C V G A E Q			
UniRef90_UPI0004071D93	Y S P F L A T L D A G Q V W A F R L T A N P S Y S A P R R R G K R Y G H V T V E Q			
UniRef90_UPI0002E6F59A	C R S F S P A L S V G Q T L R F R L R A N P T I C K A G K R H D L L M E A A			
UniRef90_UPI0003668FB7	Y E P L L K R L A E G Q E Y A F R L T A N P V R N T V K R G F R V A H R T A Q A			
UniRef90_F9EI48	Y S P F L E R L D A D Q L W A F R L A A N P S Y S A S R R G K R F G H V T V E Q			

	130	140	150	160
UniRef90_I0RUY8	Q Q L W L L N R A E K A G F R	I V D A V D L A V V D R G V R F R R Q N Q Q V T		
UniRef90_R7C5Y6	Q K E W L V R Q A E K H G F Q I	S G E S L Q I M D S T W M M F N K R G E R M V R		
UniRef90_G0M0J8	Q K K W L E D R A T R A G F E L	I R R S N V E S D T I H K L A F H H T E N S V R		
UniRef90_Q0W583	Q I L W L K R K G A A G G F E L	M S T K R F S E L S D V K V Q K N A R E N R L T		
UniRef90_UPI000476FC32	Q R S W L L D R A E A H G F R I	A Q T E E G F D R L V V S H R F K R K E G V V T		
UniRef90_UPI00037EFD03	Q L E W L H R Q G Q K G G F T V	L G A M V A Q S Q R V R M F K H G G G S P I V		
UniRef90_UPI0002192EC8	Q R A W L E D R C D R L G V S F P R	T E S G E P T V V V K V T F R R G R G R V		
UniRef90_H0R5C4	Q R Q W L V D K G V T N G F E	V V T S S A D P D A L A L E E Q F R R Q S S E V R		
UniRef90_U1FGK8	Q L A W F I G R A E R H G F A V	P V K D Q A R V T R R E V L R F R R Q G S T V V T		
UniRef90_UPI000348CDD8	Q T K W L L E R Q E R L G F E V	V V Q T T R D H E L M V H N R R G T G E R N R V V P		
UniRef90_R5IV38	Q E E W L L D R A Q K H G F E L	P E N F Q I V E R I F R K G K E Q G K N K V S P		
UniRef90_D7B2M5	Q A G W L L L Q R Q E R C G F E I	V R K D A E Q Q L L P G Q D D R R G K R M K V P		
UniRef90_N2B3U2	Q I E W L K R Q A E K R G F R L	P D T V V R E S N W K I F S K H N S R Q K V V R		
UniRef90_G2GEA3	Q L D W L L Q R Q K D A G F A L	V E H D R G D L S F G K R G E T D D R A H Q V V K		
UniRef90_H2GHK1	Q L E W L H R K A E S M G V S F G T L	E N S S A Q V V R S R P N G E R G N R V H		
UniRef90_A7BA62	Q T Q W V L E R A E K C G F R V	L T A E L G G E L P V L E D S F K R G E R R V		
UniRef90_C3PF96	Q L E W L Y S R A E K V G F A V	E D E T A I V E R R T L D F R K G G N R R H I		
UniRef90_D7CSJ6	Q L A W L Y R Q G E R G G F A V	L G A M V T S S E R V S A H K P P K D G R R I		
UniRef90_D4MKY8	Q K Q W L M D R A E K N G F C L	S E D S F D V V Q N K W C R F F K K D N R V V T		
UniRef90_UPI0003454E21	Q L G W L L Q R Q E A N G F Q I	T A K P E E R R A V R D R H A H R F G K T V		
UniRef90_D9X2P2	Q M G W L L D R Q K R L G F F I	C E K P A D R R L L P E G T T H R R D K P V		
UniRef90_L7LM20	Q R Q W F T E R A E R H G F E L	V A S A G D D V E D P R E E V F R R G Q R Q V		
UniRef90_D3LV74	Q M K F L Y D R A V V K N G F S L	V P D E F T I V E R L Q K N R N I E H R R P L		
UniRef90_D3SKA3	Q V E W L R K K G M N G G F E V	C E V F T V D E G F A K D T D T D N A G H H T N		
UniRef90_UPI000344D697	Q A G W L L Q K Q A G R G F E V	G R D D S G F D K D P R P R H K G A R M R V P		
UniRef90_Q03C59	Q M A W L S E R A A A L G F E L	P D D D G P Q F Q I V G R D R R A Q G K P V		
UniRef90_D0WFC7	Q A A W L I N R A Q R N G F E V	L T N L D G T A R L I V S H Q K L R S G R P I		
UniRef90_W1V8E2	Q R Q W L L S R A A A Y G F R M	P V S V G S S L T V V R A R P V F G R R V		
UniRef90_A0A023CZE7	Q R Q W L L N E R S E K A G F K I	R D D D G F A F D I V C R D H P E K G H V M R		
UniRef90_B4V4P4	Q M G W L L S R Q E Q A G F R I	I L E T P A D R R R V T V R D E Q R R R F G K R V P		
UniRef90_UPI00037B61D3	Q T E W L L T R C E R L G F R I	M P A V V G G P D V A V Q G R R V W T F R R D V		
UniRef90_UPI000375E51B	Q L G W L L G Q Q P R H G F E L	L P G V A P D A E D P L H R D G G R R G D A V		
UniRef90_FOGWL4	Q R Q W L L Q R Q E A N G F Q I	A D F F L L A R T D K N G F K V S P N D F D I F E K E L L P Y K K V N K K P Y S		
UniRef90_F8E3A0	Q L G W L Y Q R C Q S A G F A L	L A P R V G D G T V A E R E R D R W S G R K N V R		
UniRef90_Q2JWC6	Q L E W L R R Q G F Q H G F E V	V L A A E G I P S P Q I F G I K K G L S G P V		
UniRef90_UPI000475FB48	Q I K W L H R K A E A M G V S F Q E I	E N S T A Q V V E R R P D G T K G A R V H		
UniRef90_UPI000317E1D8	Q L G W L L Q Q Q T R H G F E L	A P G A T P E A E D P Q Q N R G R R P G S P V		
UniRef90_K2C8I0	Q T E W L K K K G K S H G F N I	I C A L Q I S Q E Q T L K G Y Q R G N H P I S		
UniRef90_J7L4F7	Q A G W L L Q Q Q E R W G F E V	V L R K E E V D P A R P E R P G R K G A R M R V P		
UniRef90_W7IYR9	Q T Q W L L D R V D N H G F T V	T Q P A G D P V A V R A R H T W R F A R E T R T V		
UniRef90_Q1EQJ3	Q L G W L L Q R Q E A S G F R V	I T K P A D H R H T E H G D E H Q K R P N R V		
UniRef90_U1PU14	Q T K W V L L D R A E R C G F K I	L E S A D L G G E L P V L E D F R R G N G L V R		
UniRef90_B1VNZ6	Q M N W L L A R Q E K A G F E V	V V R P E G D A Y E L I V R D Q P L Q F R R V		
UniRef90_D1CGD5	Q I D W L I R K G D Q H G F K L	L V S I T V R Q Q A T H G W R R D A G G N R R L		
UniRef90_W5XRF5	Q L E W L Y K K A P S A G F E V	A P I P E S P D A E L G S S Q S G N R R S R T Q		
UniRef90_D9UET3	Q V E W L L N R Q E E A G F A V	V L E R E D L P P I D A Y E V T A H S R K H Q V K		
UniRef90_UPI00036DAF89	Q M G W L L D R G Q R I G F R V C E K P A E R R L L P E G T T H Q K R P R P V			
UniRef90_E3BSS5	L N S F F I E R T E K T K N G F F V K D D F E R I I R R E E R F E H Y A E D K I N Q			
UniRef90_K7QUL2	K V G W L L E R R L Q E G G F R L E R E E G P A V R I L Q D T F W E V R R R V			
UniRef90_K6WN60	Q E E W F L T T R A Q A L Q G F E L P A G T M G V P D V V V K N R R D D R G R E V			
UniRef90_B8HWH7	Q I A W L L E R Q A E Q R G F K L L Q G V D V I P T N V F G M K E K G K P P I Q			
UniRef90_D1NT12	Q I D W F E R R A A A N G F S L P E R D S V R V I D R Q R H K F R D R K N Q V			
UniRef90_U2KWI7	Q E E W L L E K Q A A K H G F A L E E D Q L V T E S K W Y R F R K G D S R Q Y V			
UniRef90_S3AY30	Q V R W L L E R Q E K A G F E I G D E H E V I V H N K V P H Q F R K G D A P V			
UniRef90_X8HU75	Q E A W L L V G K A R N G F E V L L Q D E K G I P R L I V S F R K E S Q R K S I T			
UniRef90_D1CA19	Q L A W L R R K G E Q C G F E V L S V E P V P D V R A V R G S K V Y G R R R M T			
UniRef90_D6ZIM7	Q L A W L H S K A E M G V S F G T L E E S T A Q V G E R E S I S F K R K V H			
UniRef90_UPI0002629ADA	Q Q E W L L M D K A V S C G F E L R T T R R E D L S F S R R T E R G R G S G T V			
UniRef90_N6Y562	Q V A W L L A R Q G R Q H G F T P L H A R I V R S E H A T H H Q G R G G Q R I			
UniRef90_UPI00036012E6	Q V E W L L V K R A P E A G F R L D A A T T G Q E N L R F R R G R G S N H V I			
UniRef90_UPI00036043B6	Q R L G W I L A R K G E Q N G F V I P A T S D G A M A V I G Y K S S S A G R N K I			
UniRef90_C1DS10	Q L A W L L Q R Q E R H G F A V K A V L V S A S D L L D S R R K G G A P I V			
UniRef90_A4XYT8	Q L A W L S R Q G E R H G F E V E A A L V T A S D V L A S H K G D S R I S			
UniRef90_UPI0002912ADB	Q L A W L L E R Q G A R L G F S V E E A A L V A G S E L L H S R K G N S R I S			
UniRef90_R6Q6M2	Q K Q W L L D R A A K H G F A L T E D S F T V T R V Q W H H F A K H G T R P V			
UniRef90_H7F006	Q L A W L L A R Q G E R H G F T V E E A A L V T G G S E L L R S R K Q S S R V			
UniRef90_UPI00039D0EC8	Q L E W L L Q R Q E R H G F T L E E A A L V T A S D M L R G R K E S S V I S			
UniRef90_C0VRW4	Q I D W L L Q R S E K N G F K V L P D S A E P D L R I A N R K V M R F K R T V			
UniRef90_C6WMQ8	Q V S W L L A R K G Q R H G F A L R D R P D G V W S A P R M T G R K K A G R P I			
UniRef90_S3Y6P4	Q T N W L L D R A P P S Q G F V I L V L G S E D V G T D P G H R H A D G N G R D R V			
UniRef90_UPI00037E75CC	A N V W L L R R K G E Q H G F Q V L Y A T T D D F W L G A D R R S Q G K N A I P			
UniRef90_Q5YRB7	Q M G W L L Q D K S A S S G F R L G T C R D V P D A V I T E R T T E R F R R R T V			
UniRef90_UPI0004770137	Q I T W F A D R A P K W G F E L L P G P V V E I R D S Q K L K F W R G G K P V			
UniRef90_F9MXH3	L I P Y F L S R A E K N G F H V D E G D L K I V A R S Q E K D Q E D T R I K L D			
UniRef90_H2KA43	Q M G W L L D R Q E R C G F R I L E H H G D R Y E L I V R D R R N A G K A P V S			
UniRef90_Q4JWK1	Q L E W F N T K A K S C G F T P L E T L I V E R K T L R F S K K N P K G R Q V V			
UniRef90_U1QC11	Q R K W L L E R T G K Y G F S I A G A D R D R P V F Y R N R D G Q R R D R V			
UniRef90_F7QBQ3	Q Q T W L L E R K A A K C G F E V Q N V L V T A S D V V H V K N D V I C			
UniRef90_U4QRP8	Q M R W L L S R K G E Q H G F S F P P T S S E Q S Q E M M L Q G R Q H N G N G I R			
UniRef90_UPI000383052E	Q L D W F L T R A E R W G F E I N P A R E V R I T A H R R H S F T K N G K R V			
UniRef90_C2BET7	L N G F L V D K A Q R N G F E V K T D E F G I S Y F M N F D K E D K K K S R K N			
UniRef90_S2ZEAT	Q I K W L L Q D R S A K N G F S L F E G S E A P D L R I T R Q E V L R F S K T V			
UniRef90_G7U8L6	Q L T W F I G R V E R H G Y G T V P N D Q G A P S A Q V T R R F R R Q R S T V			
UniRef90_A1ARH5	Q E K W L L K R K G A Q H G F C L P E F L S F D Y Y E S S E D R K Q H S D N S I R			
UniRef90_A0A022MPR4	Q M G W L L D R Q E R L G F R V C A K P A D R R L L P E G T T H G G R G D R F E			
UniRef90_UPI00034700E2	Q L A W L L A R Q G E Q H G F S V E T V L V T G Q D M L E S R K A D T R L T			
UniRef90_Q67RN9	Q L G W M E R K A R E H G F E L L E A T V A A A G A S E R V R S Y T T G R T			
UniRef90_H1HVD2	Q E S W L L K R A E K N G F M L E E G R A V V G N S W H F H K R E E K D K S V S			
UniRef90_UPI0004071D93	Q R R W L L E R T P R Y R G F E L V P V S G A A V D D A R R N P D R D R R D R V			
UniRef90_UPI0002E6F59A	A L A W L L S R Q G E Q H G F S L C E N S N V D A Y R Q Q I R R E K A R Q M I Q			
UniRef90_UPI0003668FB7	Q L D W F L L G H T D R W G F G V S G S R T D P A V R I T A R R R H S F T R R V			
UniRef90_F9EI48	Q R Q W L L S R A P P G Y G F E L V P A E S A N L V V V R R E R P I F S R R R V			

	170	180	190	200
UniRef90_I0RUY8	L S V A T F E G S L E I T D V N A M R S T L T Q G L G R A K A Y G C G L L T L A			
UniRef90_R7C5Y6	A L A V T Y E G L L K V T D V E R F R T A L I D G I G R E K A Y G M G L L T I			
UniRef90_G0M0J8	M S R V T F E G L L R V K D V T A L K R T L T M G I G R E R A F G M G L M T V			
UniRef90_Q0W583	F G S V L F E G T L K V T N A E K F L E T L K S G I G S G K A Y G F G L S L A			
UniRef90_UPI000476FC32	L T T A Q F D G V L E V T D A E A F R H V L G F G L G R A R G F G C G L M T I A			
UniRef90_UPI00037EFD03	L Q S V L Y E G H L K I A D L E N F K Q T L A T G I G H A K A L G F G L S I A			
UniRef90_UPI0002192EC8	L Q R A T Y D G L L E V T D P G A L R T V L C E G L G R A K A Y G C G L V T L			
UniRef90_H0R5C4	L T T V R F D G E L K V T D P N A L R R A L C H G I G R G K A Y G C G L L T L			
UniRef90_U1FGK8	L A V A Q V D G V I Q I Q D A D A A R E A L V H G I P A K G Y G C G L M T L A			
UniRef90_UPI000348CDD8	L Y S V T Y D G R L R V T D P E A L R S A L V S G V G K G K A Y G C G L L T L A			
UniRef90_R5IV38	I K G V T Y E G L L K V C D E E K F K E L L V A G I G R G K A Y G M G L L T I V			
UniRef90_D7B2M5	V V T A T F D G R L T V T D P D A L R R T L C A G I G R A K A Y G C G L M T L A			
UniRef90_N2B3U2	L L E V T F E G I L Q V E N T D I F K D S L L L H G I G R G K A Y G M G L L T I A			
UniRef90_G2GEA3	L T R V T Y D G R L R V T D P D A L R R T L T F G L G K A K A Y G C G L M T L A			
UniRef90_H2GHK1	L V I T A R F S Q Q L E V V D A D K L R A T L I G G V G R A K G Y G C G L L T L A			
UniRef90_A7BA62	L G V A T F E G V L E V T D P D A M R R V L T H G I G R G K A Y G C G L M T L A			
UniRef90_C3PF96	I V T A R Y R G T L E V T D S A L L R S T L T H G I G R A R G Y G C G L M T L A			
UniRef90_D7CSJ6	L L Q S V T Y D G H L R V T D V D A F L T T L E C G L G H A K A L G C G L S V A			
UniRef90_D4MKY8	L L S V T F E G L L E V T D E E L F R N M L V N G L G R G K A Y G M G L M T V			
UniRef90_UPI0003454E21	L T S V T F D G R L E I T D P G A L R R M L T A G L G R A K A Y G C G L M T L A			
UniRef90_D9X2P2	I V T A T F E G Q L E V T D P D A L R R A L T Q G I G R A R G Y G C G L M T L A			
UniRef90_L7LM20	L V T A S F E G R L R V A D A D L L R R A L T H G I G R A K G Y G C G L M T L L			
UniRef90_D3LV74	L S K A V A Y E G L L T I T D A V R F R Q V L V A G F G K K K A Y G F G M M T V I			
UniRef90_D3SKA3	M L S V R F D G L L R V T D S D A F Q S T L R D G I G S A K G F G F G L L S V A			
UniRef90_UPI000344D697	V V T A T F D G R L T V T D P E A L R R A L C A G I G R A K A Y G C G L M T L A			
UniRef90_Q03C59	L S R V S F E G T L V V S D L V R F K E T L A T G I G R E K A F G M G L L T V			
UniRef90_D0WFC7	L S T A Q F D G F L R V S D P D L L R S A L V N G I G H A K G F G C G L L T L A			
UniRef90_W1V8E2	I N R T V F E G L L Q V T D P D L L R T A L I S G I G R S K A Y G C G L M T L A			
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UniRef90_B4V4P4	L V T V T F D G R L E V T D P A A L R R T L T L G L G K A K A Y G C G L M T L A			
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UniRef90_W7IYR9	L S T A T F E G L L E V T D P Q A L R T A L V H G L G P A K G Y G C G L L T L A			
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UniRef90_Q1EQT0	S I W L T R I V P D L R S R D A R R D L T G A V G L H R R L M A L F P D A
UniRef90_UP1000472CF06	M Y L S R V P D P R S R E A R R D R D L T G D V H E L H R T I L R A F P P A
UniRef90_UP100036D6C8D	S V W L T R I V P D P R S R E A R R D R D L T G D V H E L H R T I L R A F P P A
UniRef90_UP1000363C086	M T Y L S R I R L N P L R T K T Q S F L R N R Q A L H A V I L G G L S R Q
UniRef90_Q2FNT6	M F F S K M T L L D R E A A L S R D L V T G P Y Q V H E V I W D L F A D H
UniRef90_X2HBF6	M Y F S R V T L K L N Q Q K M Q N S G P Y A I H Q W L W Q L F P P N
UniRef90_UP10003764DA3	M Y L S R V R I V L N S R G T L F E I A G A Y A A H Q L L W R L F P D H
UniRef90_Q7N8H4	M Y L S K I V L R Q S S Q T A A K L S A N V Y T S H Q L L W K L F S
UniRef90_W8KR76	M Y L S R V V V D L N S R G T L F E I A G A Y A A H Q L L W R L F P D H
UniRef90_A0LM55	M Y L S L S L D R L H R G T M R L L S D I Y L L H K G I M S G F T R C
UniRef90_UP10002D5207C	M Y L S K V S F Q A S Q Q A R Q L L K G V Y S T H Q M L W Q L F T E E
UniRef90_A6W167	M P F L T K I P V N P Y R T A S V R L L G N P H L I H G A V S A G V P G D
UniRef90_UP100046CBAD9	M F L F A S A L H L D R R A V K L K I T D A Y S L H R V V Y S L F P D V
UniRef90_A5F3T0	M T F L S Q V F I N K T E A A R R I S D S Y A W H Q V I W K N F M N C
UniRef90_I5B5K0	M T Y L S R I W L N P L R T G A Q A L K K N P Q R M H A A V L G G L S R Q
UniRef90_Q2JH26	T T K F Y L S L L T L S P I D L A W N R V T D P Y S I H R I C G L F G E K
UniRef90_R7IKU0	M Y L S R V R V A T R N A L V K L L S G D A Y A N H Q L L W R L F T Q E
UniRef90_L0WIV4	P L L S R I V P D P R D H A R R D V A N P Y A M H Q T L A R V F A E H
UniRef90_M1PRH4	M Y F S M I S P S A R E A A Q Q W A A G P Y S E H Q W L W R F F P A E
UniRef90_A0A011QM20	S L W L T R L A P G P A S R T A R K E L A G L P S I H R R V M S L F P D E
UniRef90_UP1000200049E	T T Y L T R L I P H P S S R L A Q Q E L T S H A S L H R R V M S L F P D E
UniRef90_UP100036A0507	T T W L A R L T L D T S R A D V R R E L R D A V M H R R V M S L F P D E
UniRef90_UP100036A905F	T L W L T R I P D Q R H R D V H C D G D D A V N L H R I M S L F P D E
UniRef90_E4N250	T L W L T R I P D Q R H R D V H C D G D D A V N L H R I M S L F P D E
UniRef90_I0VU51	T L W L T R I P D Q R H R D V H C D G D D A V N L H R I M S L F P D E

	50	60	70	80
UniRef90_F4F6M1	A D Y E R P R T I L	W R L D T P A H L Y I A S P G R P D L T H L V E Q A W T T R E		
UniRef90_I2NBH9	D D A E G P R P R V L	W R L D H N A R L H V V G P D R P D L T H L V E Q A W T T R P		
UniRef90_Q47P18	L P S D G P R P R V L	W R L D R T S R L V I V S P P P K P D L T H L V E Q A W E S Y D		
UniRef90_R9ZMP6	Q A P A S R F L	W R L E S T P T L L V Q A A S E G N W S V L Q A G E P Q S K S		
UniRef90_E4N5A8	A P G D R I I L	W R L D T D P Q L L V L T P G K P D W T H L V E Q A G W V R D		
UniRef90_G3IX71	E D A D R E F I L	F R V E Q G A Q V V L L Q S A I Q P Q S G E Q S P A L L A		
UniRef90_E4R498	T D S S R V L	W R L D Q P S R Y I V I V S P N V P D A E I L R Q E G L G V T C S		
UniRef90_F0RQX4	G E E E G E R L L	W R L D D G P H G I L V Q S V T R P S W D A V S A R Y F H D V Q		
UniRef90_S5THV4	N H E N R D F I L	F R V E V G S K I L L Q S A T K P H L S E N S P I I L D		
UniRef90UPI0003656F57	P G R C K H G V L	F R L E P M P T V L V Q S A T Q P D W N E L P E T Y L Q P A H		
UniRef90_C7MTM6	P E A E R P L	W R W D R P P Y L L V L T H T V A D W T H L V E Q C G W T R D		
UniRef90UPI0003047D22	P D S E R V L	W R L D H R P H F V L R S K P D W T H L V E S A G W V R D		
UniRef90_I4EM57	A A N A R E Q F L Y R V E S M P R	V L V Q S R S P D W S A L D A A G G A C K S		
UniRef90_D2TKK8	Q E R Q Y L Y R R E E V Q G R F F V L I S A K P P V S D D L F R I E			
UniRef90_X4RB16	V V V K N E R I L	W R L D H Q H T L Y V G P E M P T A A H V E E A G W T A D		
UniRef90UPI000365613D	P L P D G E R I L L	W R Q Q D P T P T L L V Q S V T P P D W G A L D E G Y L Q G W D		
UniRef90_F2NLA6	L G T Q K E R I L L	W R L E P P P V V L V Q T L S T E P N W G A L E T D Y A E V F P		
UniRef90_I0HLZ2	D G S G V A R F L	W R L E D A P S V V L V Q S I V P G Q W D S I D T R A G Q T K H		
UniRef90_Q1J366	G V E G A P R A L	W R Q E D R A T L L V Q S L T A P D W E A L N A R H P W E V K		
UniRef90_K1XQ7	K K L P P N S F L	W R L E P E R K V I Q S R E L P E W T R I N L T D W F A E N		
UniRef90_N9VME5	E Q T A P E R F L	W R L E P T P Q L L V Q S Q T A G N W G P R Q G E V Q E K H		
UniRef90UPI0003A6D31E	R D G A G P R V L	W R L D Q A P G L I S S S P G R P D L T H L A E Q A W T T F A		
UniRef90_B7KJ27	N N R S E A K I L	Y R L E G S I F V Q S K N K P D W T Q L P K G Y T A E E I		
UniRef90_AOA022MRM8	P D G G G P R V L	W R L D Q A P A L L I S S S P T R P D L T H L A E Q A W T T F A		
UniRef90UPI00036E593B	S T D E R V L	W R L D H R P E L V V L T V D A P D W S H L V E Q A G W V R D		
UniRef90_E3D0F9	E G K S R A G L L	W R L D R T L C V I A Q S E A E P N W G F L Q E C C P A V R S		
UniRef90_G2PH26	A A E Q A R G V L	F R I E Q G P H L L I Q S Q A Q P D T T A L P V G Y G T T K P		
UniRef90_Q0RTG6	P V T E R V L	W R L E H R A E V L L I T E S R P S W E H L I E Q A G W V R D		
UniRef90UPI000368D1E9	S P R A R A G L L	F R L D H D P T L L V Q S R T A P N T A H L P T G Y A R T R Q		
UniRef90_Q825C0	G P D P R A R F L	F R I E D T P H I I L L Q S A H E P D T R L P D G Y G Q T R P		
UniRef90_M3CDI6	P V T E R V L	W R L E H R A E L V L T Q S R P S W Q G L V E D A G W I A D		
UniRef90_U1SLA7	A L D A P E R F L L	W R L D G S G I L Y V S P V P M D P S L I V E T A G V T V R D		
UniRef90_A5UR13	P D N V P A R I L L	Y R I E P I S R L L V Q S R E Q P D W S H I P D G N P A L R R		
UniRef90_Q2MF30	P T T E R S L	W R L D A D P H L L V V L T Q S R P D W N H L V E Q A G W I A D		
UniRef90_V5FA01	Q Q S E R Q F I Y	R Q E L M P V F W V L S R F A P D E T N A Q W Q I Q		
UniRef90_D6FKF9	U P R A E A G V L	H R V E H A V V L I Q S T L P D T T R L P R G Y A T T R C		
UniRef90UPI00035E231C	P V T E R V L	W R L D H R P H L F V L T A S R P S W A H L V D A A G W I A D		
UniRef90_H0BRL1	A P D P R A R F L	F R T E D T P H L L I Q S T H E P D T S R L P D G Y G T T R P		
UniRef90UPI00046C54EA	S D S E S A P F Y K F D S P R I	L V F S T K A P D W R K V L E E I P E S N N L P D G Y G T T R P		
UniRef90_I1WBE3	S T K E R T L	W R L D T D G R Y I V S A V A P D A T V L P R G Y A T T R C		
UniRef90UPI00036ECAB7	U P R A E A G V L	H R V E H A V V L I Q S T L P D T T R L P R G Y A T T R C		
UniRef90_V4HXX8	K P D D R V L	W R M D H R P H L F V L S P T R P D W T H L V E Q A G W V R D		
UniRef90_AOA016QUW7	G V E G E A R I L	W R L E E R A L L V Q S V T A P D W G A L N A R F P G Y L D		
UniRef90_B4TX1	E Q E L R Q F L	F R E E A H G G F M L S A I P P S Q H S L F L I E		
UniRef90UPI0003814452	P V A E R V L	W R L D H R A E E V L V L T T D S R P S W H H L V E A G W I A D		
UniRef90_D0KFE4	P Q R S F L	F R Q E T K S L F Y L L S E Q A P Q V D H N L F R V E		
UniRef90_A9GV72	A G P H P R R V L	F R V D E R F V L L V Q S A T R P D F T R L P E D Y P A I R E		
UniRef90UPI00047A0697	V T A S E G R V L	W R L D P T L Y S S P T P P D P A S L L A E Q A G L I R R		
UniRef90_V4HDU9	L G P D P R G V L	F R L E D T P R L L I Q S Q H E P T D L N P E H Y A T T R P		
UniRef90_R9LQB2	I Y E R K K S I L	W R I D E K K Y L L I S K D P K D P K K L E D Q F L E T K D		
UniRef90_C7LYW5	V P Q E A G R T L	W R V D G D P L Y V V S A V Q P Q F A H F A A S V G Q T K P		
UniRef90_A7MKF9	A Q R Q Y L	Y R R E N G F C F Y L L S A S A P E R T H P L F E I Q		
UniRef90_D1A6Q6	L G P E A R R V L	F R L E E R P T L M Q S S E P A L E K P A S Y A R C K S		
UniRef90_D5ZNS3	L G D Q A R G I L	F R A E E T P Y L L L Q S R T Q D L N L P P D Y A D T R P		
UniRef90UPI000376C6C2	S G E Q R V L	W R L D H R P E L V V L V L T V G V P D W M H L V E Q A G W V R D		
UniRef90_K8B3V7	U P Q A K R E F L	F R T E H Q A L L L Q S A L P P V D A P V A H I I A		
UniRef90_M7PF39	S E D S R D F L	F R V E Q G A D V V I V Q S Q W Q P Q P S D A V E L Q E E A G W V K S		
UniRef90_W1TQ94	Q W E G P P R I L	W R L D H Q Y L Y I Q S P V R P D L T Q L Q E E A G W V K S		
UniRef90_M9FPC2	P Q E K R P F L	F R Q E A R G G F F M L S S T P P P V S T A V A T V I K		
UniRef90_F7XPH1	P D D K R D F L	Y R Y E N V P T F Y V V S K S I P P A N N L S Y F N I D		
UniRef90_D3RIT4	Q Q T A R Q F L	F R Q E A Q G C F F V F L S T T P P L S Q H S L F V I E		
UniRef90_Q12Y47	E D D K R K F I	Y R Q D S M P S F Y L V S E N E P L S D E L N V W D I D		
UniRef90_A5FZH9	A D R K R D F L	W R E E R P G H F L I I L S P D R P G D G G G L C T V E		
UniRef90_Q46897	P D A A R D F L	F H V E K R N N H V L L Q S A Q M P V S T A V A T V I K		
UniRef90_H1G5B5	P D A S R P F L	F R L E R Q A E V L M Q S S L E P V A S G G C S T V A		
UniRef90UPI000362AD89	E D A E R D F L	F R V E Q G A S V L L Q S L M P E G G D Q S P L I L A		
UniRef90_Q1EQT0	D V D A G A R L L	W R M E E D R S L L V Q S R V R P D W T R L P H G Y A K V T C		
UniRef90UPI000472CF06	G P D P R A Q F L	F R I E D T P H V L L Q S T H E P D L T R L P D G Y G T S R P		
UniRef90UPI00036D6C8D	P T P E A A R V L	F R L D P L P R L L V Q S R H A P D W S F L P D G Y G P A V R E		
UniRef90UPI000363C086	A P D P R A R F L	F R V E D T P H V L L Q S T H Q D L D L A R P A N Y G L S R T		
UniRef90_Q2FNT6	P V T E R V L	W R L D T T N R L L V L T E T R P S W E H L V E Q A G W I K A		
UniRef90_X2HBF6	P D R K R D F L	Y R A E R D P V V Y L L S A R K P V Y E G N V W N I L		
UniRef90UPI0003764DA3	P Q G K R I F L	F R E E R G Y Q Y Y L L S E V A P L S N H Q L F L I E		
UniRef90_Q7N8H4	V T R N F L	F R Q E N N E C F V Y V L S Q T S P Q T L A C H D L F I V D		
UniRef90_W8KR76	T D E K R Q F L	F R Q E N N E C F V Y V L S Q T S P Q T E S P L F E V E		
UniRef90_AOLM55	Q G P R P F L	F R Q E M E P L F Y V V L S D R E P V P V S G L L Q A Q		
UniRef90UPI0002D5207C	G D G L R I V L	F R V E P E N R I M V Q S D G S P S W E L F T E R H P C V I D		
UniRef90_A6W167	K E R S F L	F Y R L E K P F Y I L S S V K P P V S T A V A T V I K		
UniRef90UPI00046CBAD9	D E R S F L	F R E E Q S A A F F V L S S V K P P V S T A V A T V I K		
UniRef90_A5F3T0	P R A E R L L	W R L E K D P S I I V L T S T R P D Y T H M S E K Y G W T Y D		
UniRef90_I5B5K0	R S P E E S G I V Y A D Q H G R K V L V V S D R M P N A S V D G V H G E V V			
UniRef90_Q2JH26	D G K P R S F L	F R I D D A G R L V L V L S D T K P S S D F D G N W Q I		
UniRef90_R7IKU0	P V T E R V L	W R L E H R A E V L V L T E T S T P S W E H L I E Q A G W V R D		
UniRef90_L0WIV4	K G S A P S G I Q W R L	R D Q T R V L I L S S K V P P P S T P M F G S L E		
UniRef90_M1PRH4	E E R P F L	F R Q E M E P L F Y V V L S S R E P E P V S G L L E C Q		
UniRef90_AQA011QM20	P D A P P A R F L	F R L E P R P T V L V I S D R A G N W E R L P P R Y G H A Q		
UniRef90UPI000200049E	K G S P R D F L	F R R M T N P R F Y V V S K R A P Q L L N D A W L V Q V		
UniRef90UPI00036A0507	P A R A R Y Q V L Y R V E D T A R L L I Q S N H R P D P A R L P D G Y L T T R P			
UniRef90UPI00036A905F	I P E Q A R G V L F R V E D T P R L L I Q S N Q P P D P A R L P A Q Y A T T R P			
UniRef90_E4N250	P K I E G A R V L H V E Q A R E L M V Q S N T K V A P G R F P N G Y A A S R D			
UniRef90_I0VU51	V P S T E P R I L	F R T E T G R Q I L L Q S S R E P D L A Q L P A G Y A A T K P		

	90	100	110	120
UniRef90_F4F6M1	Y D G L L A S L R A G Q E W A F R L T A N P T H S E A K E T Q R F G Y L R E H E			
UniRef90_I2NBH9	Y G P F L D R L E T G G V W S F R L T A N P V H Y I R R P T K R T A H I T P H H			
UniRef90_Q47PI8	Y T P F L S R L A K G D V W A F R L T A N P V H S I R P T K L T A H I T Q R Y			
UniRef90_R9ZMP6	L A L R Q W L E S D I S Y R F R L F A N P T V T R Q G K R Y G L V G E E Q			
UniRef90_E4N5A8	Y S P L L A Q L A L G R E Y A F R L T A S P V Q N T S K P T G R L P H R T A A H			
UniRef90_G3IX71	Q R E Y I L N I Q N D Q R L R F R L R A N P I K T I K D S S K R V P L I H E E Q			
UniRef90_E4R498	Y E P F L S R L E C G Q E W G F R L K A N P T H S P G K R G K R T G I I R A E E			
UniRef90_F0RQX4	V K P F L T G L Q A G Q H L A F K L K A N V T V N R W R D G K R E A L R G A K E			
UniRef90_S5THV4	M R D Y C P A F S K G Q R L R F R L R T N P I K T I K D S T K R V P L L H E E Q			
UniRef90_UP10003656F57	T K P V S V S L A V G Q T L A F R L V A N P T K K E K R E G K R Q G R V D E A A			
UniRef90_C7MTM6	Y T P L I R Q L G E G R E F A F R V T A N P V Q N V P K P R G R R K G H R T A A H			
UniRef90_UP10003047D22	Y T P L L D R V A L G R E F A F R L T A N P V Q N R P R G L R L G H R T A S A H			
UniRef90_I4EM57	I A T A Y D R V Q A G D E F V F R L R A N P T R R I I H E K G K R V E L Q R E E E			
UniRef90_D2TKK8	C R A F S P E L R V G Q R L R F S L R A N P T I C K T G K R H D L L M D A H			
UniRef90_X4RBI6	Y D R L L T R I Q K G Q E W N F E L L A N P T K T I N R G R D R R A H L S I L E			
UniRef90_UP1000365613D	V R T L D P A L M P G R V L H F R L H A N V T V R R D H S A R H G L H R P E E			
UniRef90_F2NLA6	P K P F N P H L R P G Q T L R F R L R A N P A K R V A R T G K R I A L K N P E E			
UniRef90_I0HLZ2	I D L K S V V Q P G R T F F R R L R A N P A V V K R N G R R W G L H D S A E E			
UniRef90_Q1J366	T V D L A P A L T P G R P L R F R L R A N V T V R K L D R S R R H A V R G P H E			
UniRef90_K1X6Q7	P S P P F D H L K N G N Q F R Y R L R A N P S V C Y E H D			
UniRef90_N9VME5	F A P E Q W L E P P A G S Y R F R L Q A N P T V T R D G K R R G L C Y E H D			
UniRef90_UP10003A6D31E	Y G E F L D S L A E G D V W A F R L T A N P V H H I I R R P T K R A A H V T V R H			
UniRef90_B7KJ27	T E M D Y E K I I K K G D Y L Y F R R L L G N P V Q K P Q K K T V R R F L S N K D A			
UniRef90_A0A022MRM8	Y G E F L D S L R Q G D V W A F R L T A N P V H H I R K P T K R T A H V S P R H			
UniRef90_UP100036E593B	Y G P V L E E L S E G R E F A F R V T A N P V Q N V P R R G R R T G C R T P A A A			
UniRef90_E3D0F9	L D P L W S R L V A G T V W Q F L R A N P T R K V K S N G R R L P L D T E E D			
UniRef90_G2PH26	L T P L L D G L R A G R P V R Y R I I A A S A V R K P G K T T K P I V P L T G A A Q			
UniRef90_Q0RTG6	Y Q P P L L D R I Q A G R E F A F R L R A N P V A A P R P R G V R V A H R T A G Q			
UniRef90_UP1000368D1E9	M T P P L L D A L R P G L T V R Y R I L L G N A V A K R C G R N S K Q A I V L R G A D A			
UniRef90_Q825C0	L D P P L L D A L K P G L T I R Y R C T A S P V R K P G A N T R A V V P L N G A A			
UniRef90_M3CD16	Y S P P L L H R V V I E E Q E F A F R L T A N P V Q R R W P R G V R V A H R T T A Q			
UniRef90_U1S1A7	T G A F L E A L S P G Q R W G F R I T V N P T F R D T K Q R K T L A H V T I A Q			
UniRef90_A5UR13	I D D E Y A R I R S D M M Q F L R L A N P T R R L S N R G K R V A L L R E E E			
UniRef90_Q2MF30	Y N P P L L R R L R A G Q E F A F R L T A N P V Q N T R T P D K R L G H R T A A M			
UniRef90_V5FA01	T K P P F T P Q L T A G Q R L A F K L R A N P T V W N N T T K K R H D H Y M Q Q A			
UniRef90_D6KFK9	Y A P P L L R Q L L A T G R S F A F R L T A N P V Q N T N R P D K R L G H R T A T A Q			
UniRef90_UP100035E231C	Y A P P L L G R L A Q G R E F G F R L T A N P V Q V S I P R R G F R V A H R T A A Q			
UniRef90_H0BRL1	L D V L L D A I R P G L T I R Y R C A A S P V R K P G A T T R P V V A L T G T A			
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UniRef90_I1WBE3	Y E P F L D R L E C G Q E R V F R L T A N P T K T L P T R G S R T P L V K V D D			
UniRef90_UP100036ECAB7	L G P P L T A L L E V V G M R A R Y R I V A N P T R T T D E G R K Q R R Q L V G D H			
UniRef90_V4HXX8	Y T P P L L S Q L A V V G R E F A F R L T A S P V Q N T A T P T K R M G H R T A A A			
UniRef90_A0A016QWU7	H W D L A G A L R P G R P L R F R L R A N V T V R R P P K S R R H A L R G P H E			
UniRef90_B4TDX1	T K P F N P Q L T N G L E L D F Q L R A N P V I T R N G K R S D V V M M N A A			
UniRef90_UP10003814452	Y T P P L L Q R L L A L G K E F A F R L T A N P V Q H V Q R R G I R V A H R T A A H			
UniRef90_D0KFE4	T K P P Y Q P Q W R D G M T L A F S L R A N P V I T R D G K R S D V L M D A R			
UniRef90_A9GV72	V G S E R A R I I R A G D F F R F S L R A S P T R R I R R R N G R R V E L R D D A S Q			
UniRef90_UP100047A0697	I D G G L L D N L V A G Q V W S F R I T V N P V F R K A E Q G K K R P H V T V Q Q			
UniRef90_V4HDU9	L D T L L N A L Q P G R T L H Y R C V A S P V R K P G A E T R R V V A L S G T A			
UniRef90_R9LQB2	F D V F L N K L E N G G E W H F H L K A N P V Y R E I D P K K K R Q C Y S A E K			
UniRef90_C7LYW5	Y G P L L D R L E T G Q V Y A F R L L A A N A V R S G R S D T K R H G H V T I T Q			
UniRef90_A7MFK9	T R P F A P A P D E G T A L R F S L R A N P V I T R N G K R H D V L L M E Q A			
UniRef90_D1A6Q6	L A P P L L N G L R E G G V N V H Y R I V A N A T R K L G R N T K Q V V P L H G A E			
UniRef90_D5ZNS3	L S P P L L D A L R P G L P V P R Y R I D A N A V R K P R K T T K P V V A L T G P A			
UniRef90_UP1000376C6C2	Y A P V L D G L S E G R E F V F R V T A N P V Q N T R Q R G R R M G H R T A A A			
UniRef90_K8B3V7	S K P F E P V L N V Q Q S L R F R L L R A N V V K T I K D K R C R V P L I K E E E			
UniRef90_M7PF39	T R E L H L S L Q A G Q R L R F R L R A N P I K S K I K D E R K R V P L I H E D Q			
UniRef90_W1TQ94	Y Q Y F L E Q L A E G S S S W N F R L V I A T P T R A V K K R S K R V P I V R D D D			
UniRef90_M9FPC2	T K L F K P Q L A L G L V L D F Q L R A N P V I T R N G K R S D V M M N A A			
UniRef90_F7XPH1	V K T Y D P K I N P G Q H F L F S L R A N P V V V K R D E N G K R H D V V M D E K			
UniRef90_D3RIT4	T K P F N P Q L T E G L I L D F Q L R A N P V I T R D G K R S D V M M D A K			
UniRef90_Q12Y47	V K Q Y D P L L K S G Q K L A F S L R A N P I V V S K R D E Q H R H D V V M D E K			
UniRef90_A5FZH9	S K E F A P A L S A G D R L G F S L R A N A V V S R G E R G K R H D V V M D V L			
UniRef90_Q46897	T K Q V E F Q L Q V G V I P L Y F R L R A N P I K T I L D N Q K R V P L I K E A E			
UniRef90_H1G5B5	T R P F Q P Q V A E G Q P L R F R L R A N P V K T I Q D N G K R V P L I D E Q Q			
UniRef90_Q2FNT6	Q R E F G L N V P K G Q R L R F R L R A N P I K T K I K D S N K R V P L L H E E Q			
UniRef90_X2HBF6	L Q P A L A A A E A G R R R L S F R L V A N P T R S G R G R G K R R P I H D P K E			
UniRef90_UP1000362AD89	Y Q P L L N Q V A R G R Q F A F R L H A N P V S T T K K R G V R V P H R T A A H			
UniRef90_UP1000349997A	L Q P A L A A A E A G R R R L S F R L V A N P T R S G R G R G K R R P I H D P K E			
UniRef90_Q1EQT0	L D P P L L D A L E P P G L T V R Y R C V I A S P V R K P G A T T R E V Y P L S G A A			
UniRef90_UP1000472CF06	I I A H E Y A R I T P G S V L R F R L R A N P T R R I R K R G K R V D L R R E A D			
UniRef90_UP100036D6C8D	L D D L L S A L R P G L T L R Y R C A A S P V R K P G A T T R A V V P L T G A H			
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UniRef90_UP10003764DA3	T K P Y Q P K L T A G M K L F F Q L R A N P V I V F K N G K R S D V L M N A A			
UniRef90_Q7N8H4	T K P W Q P Q L S S G M Q L M F Q L R A N P V V V T R Q K N K R S D V L M D A A			
UniRef90_W8KR76	T K A F Y P Q L K E G Q R L A F K L R V N P T I C I T D P G K R Q R H M M E N A			
UniRef90_A0LM55	T K R F S P A L R A G H S Y R F R L R A N P V T V A K S E R G R R R A D V L M A A A			
UniRef90_UP10002D5207C	M R T F S P A L R A G H S Y R F R L R A N P V A V K R N G K R Y G L I R D E T			
UniRef90_A6W167	T K P F L P K L V K K M K L A F S L R A N P V T V C I D K E G K R Q R H L M Q Q A			
UniRef90_UP100046CBAD9	Y D R R L L S R L D V G Q Q Y H F R L T A S P V Q N K R R R G H R V P H R T V A Q			
UniRef90_A5F3T0	S K T I V S A F L H H Q T Y R F R L V Q N P V R K D K Q S G K R I A V K G R Q D			
UniRef90_I5B5K0	K T V S P N F L D H Q C Y R F Q I K T N P T M R R A S D R R R I G I Y S E D R			
UniRef90_Q2JH26	Y Q P L L D R L H T G R E F R F R L R A N T V S A P R P R G V R V G H R T A A H			
UniRef90_R7IKU0	T K E L P D G F L D S R Y Y R F Y V R V N P S I F H H V S R N V E P V R G D E N			
UniRef90_L0WIV4	UniRef90_M1PRH4	S K P F D P Q L S S K G D R L L F K L R A N P T V A R K H D G R R H D V L M D A K		
UniRef90_A0A011QM20	S K P Y D P A L Q T G R E L L R F R L R A N P V T A R K R G Q R V G I H D D L E			
UniRef90_UP1000200049E	T R E Y A P R P A T G T H W R F E L R A N P V V T I S S D G K R H D D V V M Q R K			
UniRef90_UP100046CBAD9	L D S L L D A L L Q D G L P L H Y R C A A S P V R K P T A N T R A V V A L L K G A A			
UniRef90_UP100036A0507	L D P P L L D A L E P P R R T L H Y R C T A S P V V R K P G A T T R A V V P L N G T A			
UniRef90_UP100036A905F	I E P P L L N A L A H G R R R L S Y R F C A D A N P V R R P G H T R P L V A L H G R H			
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UniRef90_I0VU51	C R S F A P E L C T G Q Q L C F N L R A N P T I C K A G K R H D D L L M E A H			

130 140 150 160

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UniRef90_I2NBH9	Q L G W L L D R Q K R S G Y R V L E K P A E K R L L P G G R T L Q G R P H R V K
UniRef90_Q47PI8	Q K K W L Q R Q D A A G F R V V E K P A E K R R L P E G D E H E R K G R P V S S
UniRef90_R9ZMP6	Q L A W L L A R Q G E R H G F V V E A A L V T F S E V L G S R K G Q T R I S
UniRef90_E4N5A8	Q L A W F L D R T T R W G F T V P E A R T D T D R D R R T F T K P G T R T P V T
UniRef90_G3IX71	Q Q A W L L E R K Q A F A Q L E T L I M Q S E P I L Y F R K A K E G R S G K
UniRef90_E4R498	Q Q E W L F H Q A R R A G F H M P E L P E V L V R H S V R E K F R R K G S T V T
UniRef90_FORQX4	Q V E W L L E R Q G E R G G F S V V G A D I A Q S G N V R L Y K A R G S T P M T
UniRef90_S5THV4	K Q E W L L E R K L K G L A E L E T L I I Q P E P A L Y F R K V K E K R S G K
UniRef90_UPI0003656F57	G M E W L G R K G E Q H G F R V L Y A T S D D F W L G R A A S G R A A K Q R L P
UniRef90_C7MTM6	Q Q R W F L L E R A E R W G F Q V P E A D D V P D M R I T Q R Q R R K G K P V I
UniRef90_UPI0003047D22	Q L R W F L L E R T E R W G F T V P P A R F V P S V R I T E R R R H S F A K H V T
UniRef90_I4EM57	Q I G W L L Q R K A E G G G F A L Q T V H A M R E D P E T K A R G R K N G D K L R
UniRef90_D2TKK8	Q Q Q W L L A S Q G E Q H G F S L S E V N V D S Y R Q Q Q I R G K S R P P I Q
UniRef90_X4RBI6	Q M K W L L F G K A E S L G V D F G S A E Q P T F Q V T E S K T L N F R D R R V H
UniRef90_UPI000365613D	Q L E W L L D R Q G G R A G F N L L G A D I I R A G R I R T R K G R Q L I T
UniRef90_F2NLA6	K L A W L L A R R L E E G G F R L L G G E N G Y R A R I L Q D V F L E A R K K L Q
UniRef90_I0HLZ2	Q L E W L L Q R Q G D R R H G F R I N G A D C S C K A R L D T R Q R S G G A R I T
UniRef90_Q1J366	Q L E W L L S R Q G E R C Y G F A V L A A D I V H S G T V K T R K G S A T I T
UniRef90_K1X6Q7	Q T K W L L F Q K G E K K G F P I T V H L S E E Q M L S G N V R N G R P I L S
UniRef90_N9VME5	Q L A W L L A R Q G E R H G F T L L Q A L V S G G S T M Q Q G R K G D S R L S
UniRef90_UPI0003A6D31E	Q L D W L L K Q Q E R A G F T V G E P E E W E Y Q V V V H D R T P V R G R D V
UniRef90_B7KJ27	Q I Q W L L M N H L K G T I L Q E C Y V S A S S D I R G Q C K Q S K R I F
UniRef90_A0A022MRM8	Q L G W F L L K H Q E R A G F T V R T A V E G Y E V T V H D R T P V R F G K P V
UniRef90_UPI00036E593B	Q R G W F L L E R A Q R W G F V P H S P C S P E V R I T D R R R H S F P K H V
UniRef90_E3D0F9	E L R W F L L R K A A E G G G F Y L A P G E E S R R L R V C R E T P L K G S R G M
UniRef90_G2PH26	A D D W W I L R Q A R Q S G L T I H T V H S T P L D A A R G E H A Q G K H H I
UniRef90_Q0RTG6	Q L A W F T D R V D R W G F T P L T T E T G P A V Q L N A R E R L T F R K R V
UniRef90_UPI000368D1E9	A E H W W T A Q U R K A G L A L H T A D T L T A W H G P A G T M R K D R T A V H
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UniRef90_M3CD16	Q L D W L L F R Q A K R R H G F T I P P A V S L V S R D I L R F R K K Q N G P R V
UniRef90_U1SLA7	Q T Q W L L D R T E A N G F S V L E D E A G E R V D G A N E K F Q H D G T Y V
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UniRef90_Q2MF30	Q L R W F L L T R T L K W G F D V P E A V R I I I A R E R R S F S K R D G K P P V
UniRef90_V5FA01	Q L N W F L L C D R L E Q W G I S L D V L P D I E A Y T Q H Q S D K K M K Q R I Q
UniRef90_D6KFK9	Q L N W F L L W L F K R C E R H G F S I P P A T S P L D D I R I T R Q R R S F G K H V
UniRef90_UPI00035E231C	Q L N W F L L T R T A R W G F D I P T A P S P L D D I R I T R Q R R S F G K H V
UniRef90_H0BRL1	A D E W W L L R Q A D N S G I K P L T H H S H P L D A I R G Q R R P T G A Q N I R
UniRef90_UPI00046C54EA	Q L Q W I L A K R G S E N G F E I L L D V I E S S D N S N S A F K T K V T E K H K I P K
UniRef90_I1WBE3	Q E E W I L F D K L R K A G C H M T E Q P E L R I D S G L V S F R R K S S R V T
UniRef90_UPI00036ECAB7	Q R E W L L V W H R R Q E E A G L E L E S A M L T R E Y R L V G D K S Q R S R R P H Y
UniRef90_V4HXX8	Q L D W F L L T R T D R W G F D I P A T R S D P E V R I T A R H R H S F Q K H V
UniRef90_A0A016QUW7	Q L G W L L A R Q G E R C Y G F D L Q G A D I T H S G T L K T R K G G A T L
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UniRef90_UPI0003814452	Q L A W L L A R T E R H G F A I P S T T A P A R E T L R F R K T P H G A Q V
UniRef90_D0KFE4	H Q A W L L V R Q G E N A G F T L S S C C V D G Y Q R H R L N K P G Q S A A I V
UniRef90_A9GV72	A V A W L L W H R R Q E E A G L E L E S A M L T R E Y R L V G D K S Q R S R R P H Y
UniRef90_UPI00047A0697	R L D W L L R R K A M A G G F E L C G A E D G P K L T G R G S G A S E Q R Q Q L
UniRef90_V4HDU9	Q R Q W L L D D R T E A H G F R I L E G S E L E R R R I E R F D R G H G R D K V
UniRef90_R9LQB2	A D E W W L L R Q T Q T A G L P T T H H S T P L D T L R G Q Q P D K H G H R I
UniRef90_C7LYW5	Q V E W L L E R K R S D T N G F K I L E V M P V K K E N I R F K K S D K N T V
UniRef90_A7MFK9	Q L G W L L A R S E Q H G F T I R T G S T G E P D V A V R M V F R R Q G Q R V
UniRef90_D1A6Q6	A L A W L L D A Q G E K G G F R I S Q A C V A A Y R Q Q Q V V K K R G E L I Q
UniRef90_D5ZNS3	A D E W W R R Q A D A A G L V L R S L H S R Q L D T G T G R R S D N N R V
UniRef90_UPI000376C6C2	Q R G W F L L E R A H R W G F E V V E P R E V R I T D R K R H S F V K N G R K V
UniRef90_K8B3V7	Q L Q W L L Q R K L N E A A L Q K Q A C A M P E K P M F F E K A N M G G G K
UniRef90_M7PF39	Q K S W L L A R K L S D A V L H T V T Q P E L P L N F R K Q K E Q R S G K
UniRef90_W1TQ94	R L N W L L A S R A E G W G F E I P Q V S A D P S A R F Q R G K S G K P G S L V
UniRef90_M9FPC2	A Q E W L L E K Q G E Q H G F R I L P Q E A D F A Q W Y R F I R R N N E N P I A
UniRef90_F7XPH1	Y R E W L L N K K G L K N G F T F D R N V R A D G Y Q T H N F K K P K G S G Q I K
UniRef90_D3RIT4	Y H A W L L E R Q G Q Q H G F R L I E P C V Q A Y Q Q H R F V R H N R E E P I T
UniRef90_Q12Y47	F R E W L L L R K G D M M G F S I N A E Q R V D A Y Q N H K L F K P K G K H V
UniRef90_A5FZH9	R H A W L L V R Q G E R H G F V V E G Q P A C D G Y E A I R V L R G R G E K P L
UniRef90_Q46897	Q I A W L L Q R K L Q G N A A R V I E D V H P L S E R P Q Y F S G D G K S G K
UniRef90_H1G5B5	Q S L W L L Q K K L E G V A S L Q E T M V M S R K V L H F R K G K A G K
UniRef90_UPI000362AD89	Q R A W L L E R K L Q D F A K L E T L I V Q P E P M I Y F R K S K E G R S G K
UniRef90_UPI000349997A	Q V A W L L I R Q G E R H G F V I P A A S D G A P D V S V E P R R G D S R L K I S
UniRef90_Q1EQT0	A D E W W L L R Q A D T A G L K S L T H H A Q P L D P A Q G T R G P H K E Q R V
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UniRef90_UPI0002D5207C	A L N W L L D D R L N K W G I S L T Q L P D I K A Y T P E R I K K P S G K I M S
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UniRef90_UPI00046CBAD9	Q R R W F I E R A R A R G F E I L P D E V D Y Q V A V V E R R D V R F R K R I T
UniRef90_A5F3T0	I A Q W F I E R A A K W G F E V H P Q H L Q I D S I E V Q Q F N D K H G R K I T
UniRef90_I5B5K0	L R E W L L E K K A K Q N G N F K I E P H S L S I G S P M D E I F V R N R T R G K
UniRef90_Q2JH26	Q T W L L T D R L D R W G F T L D T D E P A P A L R L T A R E R E K T G R R V
UniRef90_R7IKU0	I I Q W F A D R A P R W G F S V D P G A V E V T S K K V V T F R K D N S K V
UniRef90_L0WIV4	W Q Q W L L R N R S E D W G F S L D S A L Q L S G Y R Q H Q W Q R K Q R Q I C
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UniRef90_UPI000200049E	A D E W W H R Q A D Q A G L K T L L R S Q P V D A A R D R Q R A K H S N R I H
UniRef90_UPI00036A0507	A D D W W H R Q A R A G L K I Y T H L S H P L D A A V G R S G T G G G Q K V
UniRef90_UPI00036A905F	A D E W W T R R Q A E T S G L T L T L H S T P L D A A T G H R R Q H Q Q R V H
UniRef90_E4N250	Q Q Q W L L A A Q G E R S G F T L L D T S V D A Y R Q Q Q L R R E N S R Q L I Q
UniRef90_I0VU51	Q Q Q W L L A A Q G E R S G F T L L D T S V D A Y R Q Q Q L R R E N S R Q L I Q

	170	180	190	200
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 M Y L S K V T M V S S T Q T A Q E L A N G V Y A S H Q L L W K L F A D Q
 M Y L S R V R M L K D N Q N Y R N Y V Y T N L Q Y F H K W V E E S F P N E
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 M F A S V L N L D R K A V N H L I K D P Y A V H R V V Y S L F D D E
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 M H Q W L W E L F P G G

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 S L W L T R L T P D L R R G D V L N D L N D A H L M H R R V V M S L F P D R
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UniRef90_D8K5Y7	R R D Y P L S L H S G Q F L R F R L I A N P I K T I R D G S C R V P L L Q E E Q E			
UniRef90_A0A034T0N3	S R P L P D D F L A H R H Y R F A V T V S P T R R D N Q S R Q L K P V K G R E A S			
UniRef90_R5EFF8	S I E F P E K I L N A K R C F K I T V N P T V K K E G K V P I K D F Q S			

130 140 150 160

UniRef90_G4SY61	R Q N W L E R K Q S W A D S L V T R P C P P L Y F Y K K D E E N P K G H S G K
UniRef90_F3QND6	A A E W L K R Q G T G A G F S L I S S N V E S Y Q G K C V Y G K N G D R I T
UniRef90_UPI000474770C	Q M K W F L E R T N G W G F V V P T A S G L A R L S V V R R E D N R F Q H R V T
UniRef90_Q1R113	A A R D W L A E R A P R F G F E L P V A P E M G A Y Q R O H E L K K S D R R E P I R
UniRef90_I3B0C7	M H Q W A E R K L A Q A G A R L D A L D I L D V H A T R F N R Q G R K L T
UniRef90_K1Z6D7	K K H W L E K R A E G N G F K L V S T H D G S K T I R V Y T Q H M A G K K E I S
UniRef90_UPI00036CC167	Q Q N W L E R K Q S S A D S L M R P C H P M Y F Y K K D Q E N P K G Y G G K
UniRef90_K7SNJ1	Q F S W F L R R A D Q W G F T V G S S E A P S V R I V E R G H E R F S R R V S
UniRef90_UPI0003B45328	I A A W F V V E R A Q A W G F I V E Q T Q L Q I D R V E V L R F Q D K S Q R N K V
UniRef90_UPI0003755C5E	Q L Q W L H D R S E G A G F S F D E G S G E T T V I G R R N Y E A G K N K V
UniRef90_D3VAX8	A Q A W I Q D R L A N W G F R F D F M P P D M E R Y T Q H R S F K S S G Q K I E
UniRef90_W0V8W9	K R E W L N R R A P P D S G F K V L A A D V D S Y R Q Q K E K K K G A D K P I E
UniRef90_M3E0J6	A D Q W W A R R A H Q A G L H T T A L P T P V A A V H S S G D S T A A V
UniRef90_G4F7Z3	A R E W L E N R A E T W G F S L P V T P E L G A Y R Q H V L N K G S G K P V
UniRef90_U1VYS3	F H A W L Q E Q G N R H G F R L N D F T H V V S F Q S Q R L S R R R N G E K P I V
UniRef90_I2BC80	Y Q A W L E R Q G E Q H G F R L P A Q P A S L Y Q Q H S F T R K Q Q E A P V
UniRef90_H8H3R2	Q L A W L D R Q G D R H G F E V L G A D T G T G R V R T R K G R T T I T
UniRef90_UPI0003809716	A K G W L A D R Q R S W G L T D F L P D A S N Y R Q H R S L K P N G R E I K
UniRef90_UPI000463A5C9	S A W F C S R A E K W G F R V E P Q H I Q V D S I N V L R F T A G D K K T V
UniRef90_UPI0003456053	A R A W L T Q R A S G A G F T P V K P E L G A Y R Q H V L N K G G D D Q Q V
UniRef90_F2GBG6	A L N W L E K R L D E W G Q T L D F Q P S I I D G Y T Q H K V Q K K R H P I Q
UniRef90_H8Z8M6	R Q E W L K D R A D Q A G F A L E A L H V D G Y R Q H R L S K R G Q G R P I Q
UniRef90_A8LYZ8	A E Q W W Q R K A E A T G L D L R H L R A Q P Q P A A R G R A P V R
UniRef90_UPI00047B1176	A E N W L A N R L A E W G I D C Q P D V E C Y T R H V Q K K N H Q L
UniRef90_B0S4B5	K K Y L I D R S E K N G F E V L E C T L I Q S G Y D K L V K D N Q K A P
UniRef90_D3RPL6	Q K S W L I Q R L K D V A E V E A V A V T P H P P L Y F R K A N R G G K
UniRef90_UPI0003D3A5FD	H H A W L T R Q A Q E R G F S L P V S P R V D S Y D S V V I P R T L Q Q K A A T
UniRef90_UPI0004625D55	V M K W F M D R S E K W G F S A N N R H L Q V N K M D V L Q F K K N H H L
UniRef90_R8VUM6	R I A W L L A R K G V Q N G F E L N C Q E L E G G Q L T G R H T Q E R G G R M Y
UniRef90_V5FMA4	Q V E W L Q R K L N G A N V T V T S I D S H V T N S R K S S H
UniRef90_H2CA10	A K E W L I G R S E A L G F S V N H V L V E R Y R R L Q T R K K D T K M T
UniRef90_Q1JX12	W R Q W L E R K L A G C A E L E T L I A E K R L P M N F R K A K E R R V G K
UniRef90_D0FP55	L M Q W L V R K L E G A A V L N S A S V S K E P A L C F N K Q A V A G K
UniRef90_B8GIV2	M K T W L A N Q G N A K G F S L Q D A V R V D G Y T Q H R F V K P K K K Q M V Q
UniRef90_G2DH45	K Q R W L A E R L A R H G A N L E A V R V D G Y Q P Q S S H K K G A K K P I T
UniRef90_W7PYH5	T E W F L E R C E S W G F R T L P A T L E V G R V D Y Q D F K G K Q D R D I T
UniRef90_D4B1H8	A I E W L L S H Q G E Q H G F S L R E V N V D A Y R Q Q Q I R R E K S R Q M I Q
UniRef90_I4CC95	R F E W L A A K A E H A G F G V D R R L V S V E G Y R Q H Q L R K G K N H L I R
UniRef90_C4X918	I A Q W F I Q R A A R R W G F D V D P G L Q V E A M E V L Q F K D K G G R Q V
UniRef90_UPI000374F2F1	A R A W L E D R A N R N G Y R L V A P P Q V S S Y R Q H T S R R K G Q I R
UniRef90_UPI0003781D81	I A D W F L K R A D S W G F Q V T P Q T L Q I E A I D V L R F E G K S G R L V
UniRef90_UPI000362E1FD	A E E W W R L R A A K A G L R L Q S G L V T P R H P L V S R L R T R A G L R T R Q
UniRef90_UPI000395CF63	A A Q W L C D R S Q W G V T F D N V P T I E G Y T Q H Q S R K K S G A H V Q
UniRef90_B5GAA2	A E E W W L R R A A S A G L D I H K I H T E L D D A G N R H D K Q R I R
UniRef90_H5V6L7	Q H Q W L I R K L S L A A R L E H E S T S E L P L F F S K N G T G G K
UniRef90_D6AWD2	A V E W W E R Q S S A A G L E A L H I N A E P L P A V R G R Q T S G E R R I Q
UniRef90_UPI000362B52B	Q V A W L Q R K L A D A A D V T S E M L T L T N H A P L Y F R K G N R P G K
UniRef90_E1VHQ4	G R N W L V E R A E T L G M V V R E E S L M Q D G Y R Q H R L T R K G N S I Q
UniRef90_UPI00036BB05C	Q R S W L L D R E A H G F R I A Q T E E G F D R L V V S H R F K R K E G V V T
UniRef90_UPI000407BE79	G T E W L A E R A E R C G F E I E S V H A D G Y R Q H R L Y K P G A D R P I S
UniRef90_D7AIG2	L R A W L K R K L E G V A V I E A V E V E K R P A M N F R K A R E K R V G K
UniRef90_Q314I5	A C R W L L A R Q Q A L G L S I E S A A I L V E G C K V E R F V K R A T R V V S
UniRef90_UPI000262F05A	A I A W W Q R A T A A G L E P V T V S C S P R P F P T R I T R S A P Y
UniRef90_B8IZA5	Q N A W L D R K A A A A N G F E V L P G M R S I D P S T R Y S F R K D H R S G T
UniRef90_K9AH15	Q V N W L A K R A A K L G F D V G V T Q L D P D F R V G E R R L M K F K K K V T
UniRef90_W9V6Z0	A I D W L T A R L E R I G I D F D V E P V N V C G Y S Q Q R T H K K T G R Q P I S
UniRef90_U3AX27	I V Q W F I S R G E S W G F S V N A D Q L Q V E Q V R V L Q F E A K H R V T
UniRef90_F5SVZ3	A K H W L I S S R G E S W G F S V N A D Q L Q V E Q V R V L Q F E A K H R V T
UniRef90_A0A022MU53	A A R W W A D R A S A S G L A L R P S T S D P M T A Y H A P A S R R G R R V P
UniRef90_D2C274	Y Q A W L V R Q G E Q W G F E V N A N C R V D G Y Q R Q R W Y K P Q T E P V S
UniRef90_Q47PJ5	A E E W W H S R A A A N G L E L L S T Y A Q T L D D V R D P G T A D R S R K I R
UniRef90_W4MBY7	Q L G W L N R K L H G A A H L E M A E I C A P R P L Y F R K R G K A G K
UniRef90_W0E2I6	Q Q Q W L I R K L A G A A E I E H A V V Q P H P P S H F R R K Q R S G K
UniRef90_D3V5E3	V Q A W I Q D R L T S W G I Q F D P D V E R Y T Q H R C R K S S G Q K V A
UniRef90_E7S0G0	G L K W L I L E R A A H W G L R V D E R S V H A L R P G R W E T G E K H K A I Q
UniRef90_UPI00039432EE	V H Q W F D A R L S Q W G I R D T Q P D I Q S Y T Q H G S R R E K H R H H V T
UniRef90_UPI00037EC94E	A D Q W W L R R A A D V G L Q L H I L T P T N M P P I R P R Q D P D S M R
UniRef90_M3DHW7	A D E W W T R R Q A D T A G L K P L T L H S H P L D T A H T R T P N S G Q R I R
UniRef90_M6YAL8	Q I E W L K R Q G Q S S G F E L I Q T E H G Q E I S R F Q I T Q K K D K N S G H N I K
UniRef90_UPI00045EB613	L K K W L Q R E A E K N G F R I L S T V A Q G Y L Q H H F K K R Q I K
UniRef90_H0BT87	V A Q W F L Q R G A Q W G F E A S P E H L Q I D K L Q V L Q F K D K A Q R P V T
UniRef90_N1WLJ4	Q I E W L K R Q G N S A G F E I Q T E H G Q E I S R F Q I T Q K K D E H D I K
UniRef90_B8FDH8	L H E W F L K K A P G L G F E V E P H S L Q V Q S R M G V E A Y A K D G T M R T
UniRef90_K2CMB7	L R D W L F W R K G E P G G F R I E T K E L E I R P M V E S H F R K N E H S A Y
UniRef90_I2N7Z8	A D Q W W H R R A N T A G L D H I I T P T N V H P V R P R G A E A P P M R T
UniRef90_UPI0002554C54	L V E W F C S K S E S W G F G L T E Q E S L Q I Q F T G V Q T F D K Q N G Q V T
UniRef90_A5GKB0	L R A W L V R K G E P G G F R I L V E E R S L E I S P M V E S H F R K K G Q S G Y
UniRef90_W0TNQ2	A E E W M Q R Q G E Q H G F E V S E L L V A N H S H K V R K P G D D N L R Q
UniRef90_E6QU42	C A V W L D G V G K R N G F E I A L T D E E P Q R K L Q V D T Y K H N H N C C
UniRef90_Q6LWA0	Q I Q W L Q R K L R G A N V T V T A L E S V L V K S R K S F T
UniRef90_M3DI08	A L A W W Q R A H Q A G L T L A T D I T P A R F P R T R R A H K P G E Q A H
UniRef90_UP1000369B62A	Q R A W L A R K L A D A A V E S V A L L P H Q P L F F R R G N R A G K
UniRef90_V6KHH8	A V A W W S R R S A E A G L D V H T A L A T S L R A A R V R K G V G P R H A L T
UniRef90_D8PDH7	C Q T W L Q R A R A E R L G C S F L E D S I R V D G Y Q T W R Q S G L K G I E
UniRef90_Q8KB24	V A A W F G G K S Q S W G F S V D P A R L D V R M L P V M Q F S K Q G D R T V T
UniRef90_UP100037B539E	H T G W L A R Q G A R A G F Q L A D F A V A D Y S V P L P A H V G A R K Q P Q
UniRef90_A1SV70	Q V Q W L Q R K L S G A N V T V T A M D D L M V R S K K S Y N G
UniRef90_UP100037A0EE0	Y H W W L I D R G S R M R G F D I Y P P K L H S N G Y R W N L P K K G R G A G
UniRef90_H6SKX2	G V A W L E A R A A A C G F A L A R H H D D T P L V R V T G Y R P H R L A R P L R
UniRef90_D8K5Y7	Q E A W L S R K L S G A A M L E S V P T L R P P L Y F R K N G K A G K
UniRef90_A0A034T0N3	I A D W F I E R A A N W G F Y I D P E R I Q V D D V R V A Q F K G N A E R A I T
UniRef90_R5EFF8	V R S W F C E K G I K N G F L V E S A I V N D I H A D I F D K H G Y K V T

	170	180	190	200
UniRef90_G4SY61	I V P V T F E G	V L I V Q E P D K F I	G Q V Q Q G I G P A K A F G C G	L L S V A
UniRef90_F3QND6	F S I M D F S G	V L E I C D P E K F L	L L I G F G K E K A F G C G	M L I R
UniRef90_UPI000474770C	H R L A V F E G	I L E V A D P D R L R H S	S F G M G S G K A H G A G	M T L
UniRef90_Q1R113	F S S V D Y E G	L E V T D P R R L I E T	L A H G V G R A K A F G C G	M L L R
UniRef90_I3B0C7	F H T V E Y T G	V F T V T D R D K L T H A M	L F N G M G K A K A F G C G	M L I K
UniRef90_K1Z6D7	F T T V D F T G	E L V V T N P E L F K K T	L V S G I G H G K A Y G L G	M L L R
UniRef90_UP100036CC167	I V P V T F E G	I L I V Q E P D T L T Q	V K Q G I G P A K A F G C G	L L S V A
UniRef90_K7SNJ1	L D V A T F E G	E L E V T E P G V M T R T	L L A G I G K A K A Y G C G	V T L A
UniRef90_UP10003B45328	L A Q A H L Q G	T L Q V V S P D L F A A S	T R G I G R G R A F G C G	L L Q I V
UniRef90_UP10003755C5E	I T T A R F E G	E L E V T D A D Q L R Q T	L V S G I G R A K A G Y G C G	M T L A
UniRef90_D3VAX8	F S S V D F Q G	V L T L S D R D L F L E Q	Y S K G F G R A K S F G C G	M L I R
UniRef90_W0V8W9	F S T V D F G S	G E L E V T D V A L F L Q T	L R Q G L G H A K A F G C G	L L V
UniRef90_M3E0J6	H H L V R Y D G	T A I V T D P D A L A E A	V L T G I G R A K A S Y G A G	L S L A
UniRef90_G4F7Z3	F S T V D Y E G	L L E V T N P G K L V E T M	A H G I G R A K A F G G G G	L L L R
UniRef90_U1VYS3	F S T V D Y A G	Y L T V T E P T L F L Q A	R M A H G I G R A K A L G C G	L M I K
UniRef90_I2BC80	F S T V D F D A G	T L Q V T N V A L F G S A L	F N G I G K S K A L G C G	M L M V
UniRef90_H8H3R2	L Y T V A F E G	A L Q V L N P V A L A G A	V R G G L G H A K S G C G	L L S L A
UniRef90_UP10003809716	Y S S I L D Y E	G V L T V T D A A K F L Q R	Y A Q G F G R A K A F G C G	M M L R
UniRef90_UP1000463A5C9	L Q Q A T V S G	R I L T V T Q A E H Q F H A	T R G I G R G R A F G C G	L L Q T
UniRef90_UP10003456053	F S S V D Y E G	L L E V T Q D P A A L M E T	L A N G L G R A K A F G C G	F L L R
UniRef90_F2GBG6	F S S V D Y Q G M	L T V Q W Q D P L K F I N	L Q Y A Q G F G R A K G M G C G	M M R
UniRef90_H8Z8M6	F S T L D Y Q G I	L R V T D T E R F L Q S L	T Q T G I G H A K A F G C G	L L I R
UniRef90_A8LYZ8	H A I T L F E G	Q A V I T D A D Q V R A A	V L A G I G R G R S F G C G	L S L A
UniRef90_UP100047B1176	F S S V D Y F Q	G L L T I A D P D K F L Q S	Y A R G F G R A K G M G C G	M M I R
UniRef90_B0S4B5	V N K A V V E	G V L A V K D V D K F K E I	L T I N G F G K R A K A Y G Y G	M T L
UniRef90_D3RPL6	I L C A T F E G	L L T V L D P N A L V A L L	E N G L G P A K A F G C G	L L L V
UniRef90_UP10003D3A5FD	F G V M E F E G	I L T V T D P K L F L I S	R N G F G R A K S F G C G	M L I R
UniRef90_UP10004625D55	L S K A T M E G	V I Q V D K E K F S T A F Q	Q Q G I G R G R A F G C G	L Q I V
UniRef90_R8VUM6	L D Q Y H Y Q G	T L Q I I D I R Q F Q K A I	Q E G I G P G K S Y G L G	M L L L N
UniRef90_V5FMA4	S R F V T F E G	V L Q V I N S E Q V Y S A L	V M G I G R K K H A G A G	L L S L A
UniRef90_H2CA10	F G I I M D F S	G V L L T V T D E E P F R R	S L L K G I G H G K A F G C G	L L L L R
UniRef90_Q1JX12	I Q P V R F Q G	V K L V K E N E A A L M D I	E N G I G P A K G F G C G	M L S L A
UniRef90_D0FP55	I Q P V C F E G	I L Q V T S E T H F Y Q C	M A D G I G P A K S M G C G	M L S I A
UniRef90_B8GIV2	I S T L D F T G	L L T V T D P E R F T T A L	F N G I G P A K G F G C G	L M M V
UniRef90_G2DH45	H S S L D F E G	T L Q V E D P E P F T Q L	L Y T G L G P A K A F G C G	L L V R
UniRef90_W7PYH5	V A K A D L R G	V L E V T D A Q L F R Q S F	A R G I G R G R A F G C G	L L Q V V
UniRef90_D4B1H8	F S S V D Y S D	G L L V V S D P T T F L Q	R A G I G R G R A F G C G	M M M K
UniRef90_I4CC95	L S T M D F T G	I L T V T H P D L F V T A	L F G G I G P A K G F G C G	L L L I R
UniRef90_C4X918	L G K A T V Q G	G L L T V T D R Q K F Q H S	F H H G I G K G R A F G C G	L L Q I V
UniRef90_UP1000374F2F1	F S A I D F E G	I L E V T D P E R F H Q S	L S H G I G R S R A F G C G	M W M I R
UniRef90_UP10003781D81	I G K A H V Q V G	Q L T V T I N S Q Q F R N S	K F N G I G K G R A F G C G	L Q I V
UniRef90_UP1000362E1FD	F H L A Q F D G	E A E I H D V I S A L R R A	M W E G I G R G K S Y G C G	L L S I L
UniRef90_UP1000395CF63	F S S V D A R G	T L Q Y S E R F L E Q Y A	K G F G I G R A K A M G C G	M L I R
UniRef90_B5GAA2	H A R T R F D G	T A T V T D P D A L R T C	T A T V T D P D A L R T C	M L S L A
UniRef90_H5V6L7	I Q P M N F E G	I L T V T S V P A L L S L	N N G I G P A K S M G C G	M L S I A
UniRef90_D6AWD2	H A R T Q F D G	S A R V L D A E L L R E	K L A T G I G R G K A Y G C G	L L S V A
UniRef90_UP1000362B52B	I I P V L F E G	V C T V H D V E Q L R I F	W E K G I G P A K A F G C G	L L M L R
UniRef90_E1VHQ4	F S T L D Q Y G	V A Q V A E P D R L R C	A L L D G V I G H S K G F G C G	L L L V K
UniRef90_UP100036BB05C	L T A Q F D G	V L E V T D A E A F R H V	L G F G I G R A R A R G F G C G	M T I A K
UniRef90_UP1000407BE79	M S T L E F N G	V G L R V A N V E R F E	T L T H R G I G P A K A F G C G	L L L V
UniRef90_D7AIG2	V Q A V S F H	G V L S V T D P V G L I S	L S L I N T G I G P A K A F G C G	L S L A
UniRef90_Q314I5	L G I M M D L Q	G Q T A E V K D P Q L L L Q	A L F Q Q G V I G P A K G F G C G	L L L I R
UniRef90_UP1000262F05A	F T L T Q F D G	D G L A R I T D T T H L T	H L K N G I G R A K S Y G A G	L L S L A
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UniRef90_B6B784	V D D G S P G V L W S V D L K A V L V V Q S R V P G D W T S I P R A A L T A E H	P P R D G D R V L W R L D Q A P T L L V S S P S R P D L T H L V E Q A W T T F A	G Q S V E	
UniRef90_A9HLC4				
UniRef90_UPI000476D8FD	P D R R R D F L W R Q T E P A H F M V L S A R E P	V D T H G L F D I E		
UniRef90_UPI00036BF019	E P D P R A Q H V W S L D N R L V L I V Q S R V Q P	P D W S F V P R A A L T D I T		
UniRef90_UPI00036640EE	U N I T R D F L W R Q T E P A H F M V L S A R E P	V D S H R V F E I E		
UniRef90_C0WJZ7	L G D Q A R K V L F R A E H T Q R I L A Q L S C A P R V D N L A H G T P E C R N	P E R R R D F L W R Q T A P G Q F M V L S A R E P	V D R H A I F D I E	
UniRef90_D5QGJ9	R N A T R D F L Y R R E D L G A R F L V L S H R L P D	Q D S P L F N V E		
UniRef90_UPI0002EF7A67	E N S P R D F L F R R M D I D P R Y V L S K R S P Q L L	N G A W R V Q		
UniRef90_C7JIG8	P T A R R E G F L F H V E G T R P F I V R S R V P P E D G L	P T A R R E G F L F H V E G T R P F I V R S R V P P E D G L	G G I W T L T	
UniRef90_I1D1R4	P D R K R D F L F R E I D A E N Y L A L S A R E P	V D H K G V W R M A		
UniRef90_G214Z3				
UniRef90_UPI0003655E75	P D R R R D F L W R Q T E P A H F M V L S A R E P	V D D G A V W E I E		
UniRef90_A0A011R524	E P D P R A Q H V W S L D N R L V L I V Q S R V Q P	V D E G V V V V R D		
UniRef90_B6IW2	C R S F L F L E K T L S Y Y L V L S E D S P A V P M K G E I T S R H I P	P D R K R D F L F R E I D A E N Y L A L S A R E P	D D L G V W H M A	
UniRef90_G7Q6E9	Q D E T R H F L F R E E T G N Q F Y L L S Q Q A P R Q D H	N F R V E E		
UniRef90_H1LYW8	P T P T Q V P F L F R A E V R P L L Y V L S S D E P R	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H	D T S G K W R I E	
UniRef90_H8FVT7	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H	E E R K R D F L W R E E R D G S F I L T L S A R P P	L Q S D L F Q P H R	
UniRef90_S2ZAL9	E A R D A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H	R D R R R D F L W R A E G A G K F T L L S L R P P T A S R V F E A P	D F L I R R E
UniRef90_UPI000467C869	P E R K R D F L F R R D G A N C F L A V S E R P P V K S	R E G R L L W R L E P P A V I L V Q T P Y T P D L S Y V L E R G L G H A E	R D R R R D F L W R A E G A G K F T L L S L R P P T A S R V F E A P	R E G R L L W R L E P P A V I L V Q T P Y T P D L S Y V L E R G L G H A E
UniRef90_F4GL09	P D R K R D F L F R E I D A E N Y L A L S A R E P	S A R Q D F K V L Y R L D Q E Y L L V Q S D I K P M C D G I F E M V S Q Y D	P D R K R D F L F R E I D A E N Y L A L S A R E P	S A R Q D F K V L Y R L D Q E Y L L V Q S D I K P M C D G I F E M V S Q Y D
UniRef90_V3TU98	C R S F L F L E K T L S Y Y L V L S E D S P A V P M K G E I T S R H I P	P D A S R D F L F H V T E R Q P F A L V R S E R Q P	P D A S R D F L F H V T E R Q P F A L V R S E R Q P	P D A S R D F L F H V T E R Q P F A L V R S E R Q P
UniRef90_I3Y6A5	Q D E T R H F L F R E E T G N Q F Y L L S Q Q A P R Q D H	V D H P C P R L G G R	V D H P C P R L G G R	V D H P C P R L G G R
UniRef90_UPI000288EBFD	P T P T Q V P F L F R A E V R P L L Y V L S S D E P R	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H
UniRef90_W6IBD4	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H	E E R K R D F L W R E E R D G S F I L T L S A R P P	E E R K R D F L W R E E R D G S F I L T L S A R P P	E E R K R D F L W R E E R D G S F I L T L S A R P P
UniRef90_K4QSD2	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H
UniRef90_UPI0003B3DAAC	P E R K R D F L F R R D G A N C F L A V S E R P P V K S	R D R R R D F L W R A E G A G K F T L L S L R P P T A S R V F E A P	R D R R R D F L W R A E G A G K F T L L S L R P P T A S R V F E A P	R D R R R D F L W R A E G A G K F T L L S L R P P T A S R V F E A P
UniRef90_UPI00046301AD	R D R R R D F L W R A E G A G K F T L L S L R P P T A S R V F E A P	R E G R L L W R L E P P A V I L V Q T P Y T P D L S Y V L E R G L G H A E	R D R R R D F L W R A E G A G K F T L L S L R P P T A S R V F E A P	R E G R L L W R L E P P A V I L V Q T P Y T P D L S Y V L E R G L G H A E
UniRef90_E4UAR1	R E G R L L W R L E P P A V I L V Q T P Y T P D L S Y V L E R G L G H A E	S A R Q D F K V L Y R L D Q E Y L L V Q S D I K P M C D G I F E M V S Q Y D	R E G R L L W R L E P P A V I L V Q T P Y T P D L S Y V L E R G L G H A E	R E G R L L W R L E P P A V I L V Q T P Y T P D L S Y V L E R G L G H A E
UniRef90_UPI000414283F	S A R Q D F K V L Y R L D Q E Y L L V Q S D I K P M C D G I F E M V S Q Y D	P D A S R D F L F H V T E R Q P F A L V R S E R Q P	S A R Q D F K V L Y R L D Q E Y L L V Q S D I K P M C D G I F E M V S Q Y D	P D A S R D F L F H V T E R Q P F A L V R S E R Q P
UniRef90_H6SSN6	P D A S R D F L F H V T E R Q P F A L V R S E R Q P	V D H P C P R L G G R	P D A S R D F L F H V T E R Q P F A L V R S E R Q P	V D H P C P R L G G R
UniRef90_UPI00020D926F	V D H P C P R L G G R	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H	V D H P C P R L G G R	V D H P C P R L G G R
UniRef90_UPI000369FB6B	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H	E E R K R D F L W R E E R D G S F I L T L S A R P P	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H	G T D G D P G V L W S V D L K A V L V V Q S R V P G D W T G M P K G A L T A K H
UniRef90_W5TGY3	E E R K R D F L W R E E R D G S F I L T L S A R P P	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H	E E R K R D F L W R E E R D G S F I L T L S A R P P	E E R K R D F L W R E E R D G S F I L T L S A R P P
UniRef90_F8ET03	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H	P D H P C P R L G G R	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H	A P D A R A Q M G W S V D L K A V L V V Q S R V P G D W A G M P R G A L T V K H
UniRef90_C2GEY9	P D H P C P R L G G R	V E D G Q P E A L N L R E S T L I V V Q A N V P A D W S R I	P D H P C P R L G G R	P D H P C P R L G G R
UniRef90_UPI000477925B	V E D G Q P E A L N L R E S T L I V V Q A N V P A D W S R I	K P R E K L N V L F R L E T P P Y L L I Q S A V V S P D E A L M N I S G L Q C K E P	V E D G Q P E A L N L R E S T L I V V Q A N V P A D W S R I	V E D G Q P E A L N L R E S T L I V V Q A N V P A D W S R I
UniRef90_I3QZ89	K P R E K L N V L F R L E T P P Y L L I Q S A V V S P D E A L M N I S G L Q C K E P	I D N G D A D T L I N F K E A A L I L V V Q S R I A G N W A H M P N A A L R E E P	K P R E K L N V L F R L E T P P Y L L I Q S A V V S P D E A L M N I S G L Q C K E P	K P R E K L N V L F R L E T P P Y L L I Q S A V V S P D E A L M N I S G L Q C K E P
UniRef90_T0XZB5	I D N G D A D T L I N F K E A A L I L V V Q S R I A G N W A H M P N A A L R E E P	Q S D N A R N I L F R L E Q E P Y F F I Q S S I K P S N H N L D K H I E T R Q	I D N G D A D T L I N F K E A A L I L V V Q S R I A G N W A H M P N A A L R E E P	I D N G D A D T L I N F K E A A L I L V V Q S R I A G N W A H M P N A A L R E E P
UniRef90_K0ESA5	Q S D N A R N I L F R L E Q E P Y F F I Q S S I K P S N H N L D K H I E T R Q	A P Q K M G R I L F S E N T T E V I L L S L P E K P M P Q K N F S G T	Q S D N A R N I L F R L E Q E P Y F F I Q S S I K P S N H N L D K H I E T R Q	Q S D N A R N I L F R L E Q E P Y F F I Q S S I K P S N H N L D K H I E T R Q
UniRef90_X0PB36	A P Q K M G R I L F S E N T T E V I L L S L P E K P M P Q K N F S G T	M V L I S E T K P S W D H I V E Q A G W T K S	A P Q K M G R I L F S E N T T E V I L L S L P E K P M P Q K N F S G T	A P Q K M G R I L F S E N T T E V I L L S L P E K P M P Q K N F S G T
UniRef90_J7L987	M V L I S E T K P S W D H I V E Q A G W T K S	F L I E E	M V L I S E T K P S W D H I V E Q A G W T K S	M V L I S E T K P S W D H I V E Q A G W T K S
UniRef90_UPI00047EF258	F L I E E	G A E H P R G I L F R I D H A P F F L I Q S R E P P Q L N P H E A A M K E V E	F L I E E	F L I E E
UniRef90_G2DH33	G A E H P R G I L F R I D H A P F F L I Q S R E P P Q L N P H E A A M K E V E	S E K N P R D I L F R I L D Q A P F F L V Q S K T R P	G A E H P R G I L F R I D H A P F F L I Q S R E P P Q L N P H E A A M K E V E	G A E H P R G I L F R I D H A P F F L I Q S R E P P Q L N P H E A A M K E V E
UniRef90_E1CG21	S E K N P R D I L F R I L D Q A P F F L V Q S K T R P	V G E G E L A G L V	S E K N P R D I L F R I L D Q A P F F L V Q S K T R P	S E K N P R D I L F R I L D Q A P F F L V Q S K T R P
UniRef90_V4NFA2	V G E G E L A G L V	S P V R E P V L S S	V G E G E L A G L V	V G E G E L A G L V
UniRef90_G5LSY8	S P V R E P V L S S	N A A Q I L A	S P V R E P V L S S	S P V R E P V L S S
UniRef90_J7KTD1	N A A Q I L A	T P S S R A Q I L H T E T N T L T L V I Q S R V P G D W T A L P A S A H I T P H	N A A Q I L A	N A A Q I L A
UniRef90_H7EB14	T P S S R A Q I L H T E T N T L T L V I Q S R V P G D W T A L P A S A H I T P H	A P K P F R H F L I A Y T A H D A E G L K L A A E M A A P D V H A A L G L D R F A	T P S S R A Q I L H T E T N T L T L V I Q S R V P G D W T A L P A S A H I T P H	T P S S R A Q I L H T E T N T L T L V I Q S R V P G D W T A L P A S A H I T P H
UniRef90_S2W2K7	A P K P F R H F L I A Y T A H D A E G L K L A A E M A A P D V H A A L G L D R F A	L Q G E G A P F L W R R D Q E D R Y Y V L G P E L G Q	A P K P F R H F L I A Y T A H D A E G L K L A A E M A A P D V H A A L G L D R F A	A P K P F R H F L I A Y T A H D A E G L K L A A E M A A P D V H A A L G L D R F A
UniRef90_UPI0004696D85	L Q G E G A P F L W R R D Q E D R Y Y V L G P E L G Q	E E S P F F E I S	L Q G E G A P F L W R R D Q E D R Y Y V L G P E L G Q	L Q G E G A P F L W R R D Q E D R Y Y V L G P E L G Q
UniRef90_C0W6T9	E E S P F F E I S	S P K P R Q G L L A Y S D Q P P A L L H D N A A L A T P D V A R A L G L N S L A	E E S P F F E I S	E E S P F F E I S
UniRef90_UPI0004764076	S P K P R Q G L L A Y S D Q P P A L L H D N A A L A T P D V A R A L G L N S L A	E D R S R N N I L F R Y E Q A P Y F L V Q S D C D V V A P D L E G V I E T K Q	S P K P R Q G L L A Y S D Q P P A L L H D N A A L A T P D V A R A L G L N S L A	S P K P R Q G L L A Y S D Q P P A L L H D N A A L A T P D V A R A L G L N S L A
UniRef90_C7MQD7	E D R S R N N I L F R Y E Q A P Y F L V Q S D C D V V A P D L E G V I E T K Q	A P K P R Q G L L A Y T D S T A E T L Q E S T S L A T P D V A R A L G L N S L A	E D R S R N N I L F R Y E Q A P Y F L V Q S D C D V V A P D L E G V I E T K Q	E D R S R N N I L F R Y E Q A P Y F L V Q S D C D V V A P D L E G V I E T K Q
UniRef90_UPI00037CDFEB	A P K P R Q G L L A Y T D S T A E T L Q E S T S L A T P D V A R A L G L N S L A	T P N P R Q Q I L L Y T A T N T L T L V Q S R V P G D W T T L P A T T F L T P P	A P K P R Q G L L A Y T D S T A E T L Q E S T S L A T P D V A R A L G L N S L A	A P K P R Q G L L A Y T D S T A E T L Q E S T S L A T P D V A R A L G L N S L A
UniRef90_M8MKE4	T P N P R Q Q I L L Y T A T N T L T L V Q S R V P G D W T T L P A T T F L T P P	P E A K R D F I F R L S E R G R F L I V S E R Q P V F D D R V	T P N P R Q Q I L L Y T A T N T L T L V Q S R V P G D W T T L P A T T F L T P P	T P N P R Q Q I L L Y T A T N T L T L V Q S R V P G D W T T L P A T T F L T P P
UniRef90_UPI00034A4836	P E A K R D F I F R L S E R G R F L I V S E R Q P V F D D R V	W E I R	P E A K R D F I F R L S E R G R F L I V S E R Q P V F D D R V	P E A K R D F I F R L S E R G R F L I V S E R Q P V F D D R V
UniRef90_C2KP48	W E I R	E G E Q N P R I L F R L E T A P R F V V Q S D I S P A V D K L P K G	W E I R	W E I R
UniRef90_A0A025I796	E G E Q N P R I L F R L E T A P R F V V Q S D I S P A V D K L P K G		E G E Q N P R I L F R L E T A P R F V V Q S D I S P A V D K L P K G	E G E Q N P R I L F R L E T A P R F V V Q S D I S P A V D K L P K G
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UniRef90_S3ZBD2				
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UniRef90_UPI00037FB333				
UniRef90_I3Y7Y7				
UniRef90_E0DC97				
UniRef90_A0A011MSE1				
UniRef90_K0YQR7				
UniRef90_C7RP63				
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90 100 110 120

UniRef90_UPI0002F70182	S R P F A P [V] L A P G D R [L] G F A L R A N P [V] V S R S R R G Q R H D V V M D A A
UniRef90_U3HIE9	S K P Y A P Q L E R D E W L R F D L R A N P T V N V R H R S R R H D V L M H A K
UniRef90_G2T674	T K P Y A P A F R E G Q R F G F T L R A N P A T A V K Q R G K R V D A I M H A K
UniRef90_N6X3T3	T D D F [L] D S L R E G Q L W S F R V T V N P T F R R G R K R V D A I M H A K
UniRef90_B6WQ61	[I] A P A F L Q H G T Y A F D L L A N P T R K V T R N G K R L A L L D E T S
UniRef90_V4Y8V0	Y D N C L N T L K K G N R M K F R V A L N P V I S L P K R G R G V K P H V T S E Y
UniRef90_F5RE52	T R S Y V P D L A E G T R L N F D L R A N P V I A R E G R G K R H D V V M D Q K
UniRef90UPI00036E8CBA	T K P Y Q P H L P A G T W L Q F D L R A N P T V N R G E A G R R H D V L M E K A
UniRef90UPI00035C1A64	S R P V A D S F L E H D R Y G F K V I V N P T R R E S A S R K L V P V K G R E A
UniRef90_M6V4Q9	I S P T F I Q V G T V L R F S L T A N P T K K R K D K S K R I G I Y H K K G
UniRef90UPI0003759F5F	C K P Y E P K L R E G D L Y R F D I R L N P T R S P E G R G K R Q D Y V M H E E
UniRef90_S9SDP8	
UniRef90_B8IMR1	T K P F A P [V] L A A G D R L A F V L R A N A T R T V T E P D G R K R H R D V E A
UniRef90_D8NR17	T K P Y A P Q L R E G E R I R F E L L R A N P T V S V G Q R S R R H D V L M D A K
UniRef90_U1KK22	T Q T Q P E Q L K E E G L V Q F S L R A N P T V D I T P K G R R H D V L M H A A
UniRef90_F9NUQ1	Y S P F [L] Q A L R S G S T W R F R C T I N P T T A V V R K G Q R V A E V T A E Q
UniRef90_G2IXW9	T K P F A P K L A E G D E I A F A L R A N P T V A R A Q G P G R R S V R M Q Q A
UniRef90_D5RPS1	S Q P Y T P N L A A G D R L H F V L R A N P V I S R S E R G K R H D V V M D A L
UniRef90UPI0003456D8F	[I] S E F L S Q P T Y Q F D L Y A N P T K A I K K N R Q R I T W L D E F S
UniRef90_B3ENH7	S K P I D E T F L M F D R Y F R S V I N P S R R E S K S R K I I A I R D R N E
UniRef90_A0A011N0V5	S R E Y A P I L R P G D Q L L Q F D L R A N P V V T V T D G S R R H D V V M H A Q
UniRef90_D3D4C6	L G P F L D S I T T G A A V V Y R L T A N A A K R G G R N G K I I P L R G A A
UniRef90_C6HV94	T R P V F S S F L N C D H Y L F E V I V N P S K R D N H S G K I M P V I G R E N
UniRef90_M9X9J2	S K P I L E H L Q P A Q V L R F R L R A N P T V T K K K R K R H G L K T L E E
UniRef90_B6B784	V R E L A P D L R R G D Q V S F I L R A N A T K D R G E K R R R V D V V M Q Q A
UniRef90_A9HLC4	T R P F D P L L K E G D R L R F L R A N A T V D R K T P G R R H D V V M D A L
UniRef90UPI000476D8FD	S R A F E P P R L R T Q G Q C L A F R L R A N P V V V A R R E D A K R Q A A H M D E A
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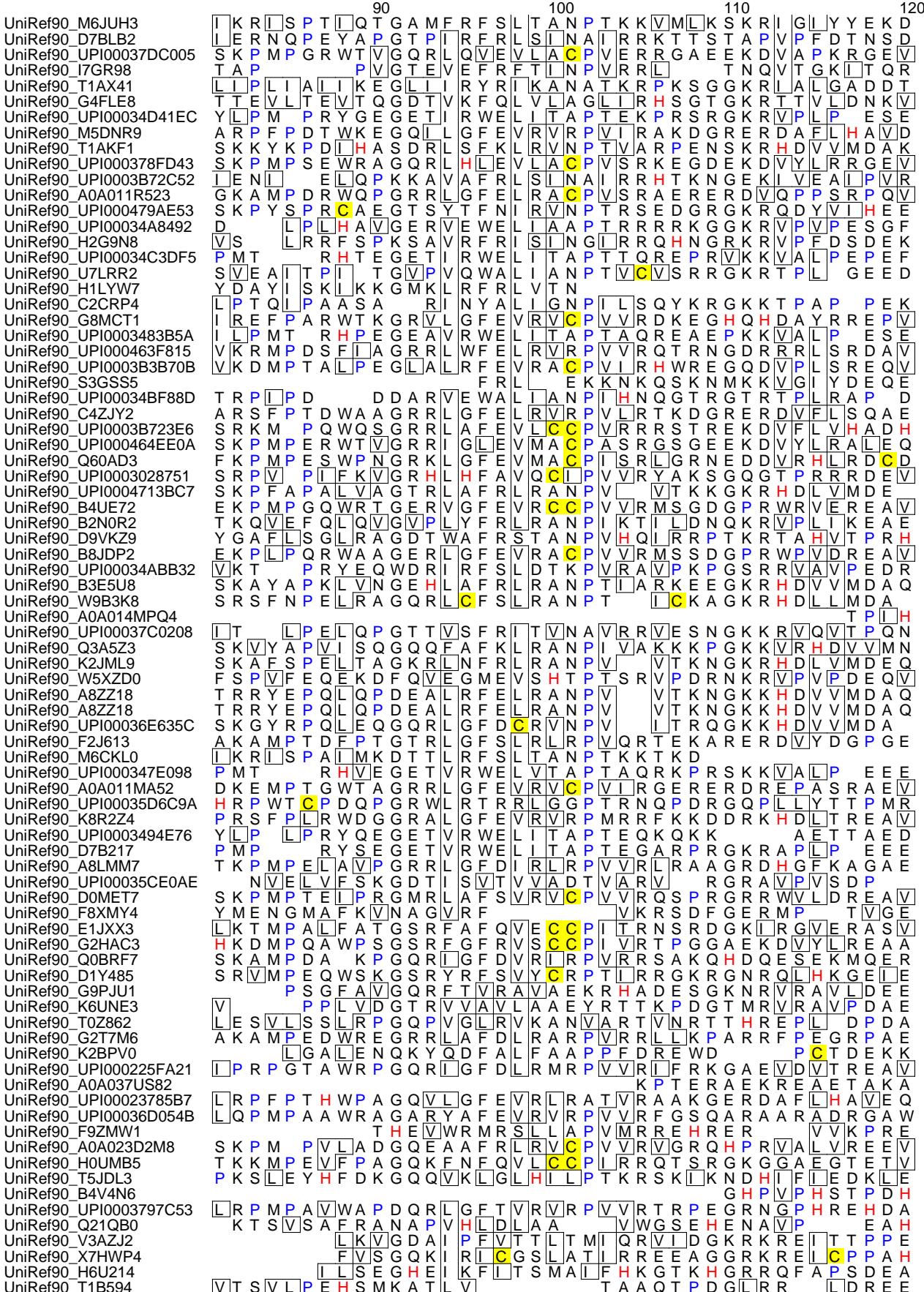
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Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 1 to 40. The y-axis lists UniProt IDs. Colored squares indicate the frequency of each amino acid at a given position: red for A, blue for C, green for D, yellow for E, black for F, purple for G, brown for H, grey for I, pink for K, orange for L, light blue for M, dark blue for N, cyan for P, light green for Q, light pink for R, and white for S/T/W/Y. Yellow boxes highlight specific residues or motifs.



lupas_21

lupas_14

lupas_28

jnet

conf

sol25

sol5



130 140 150 160

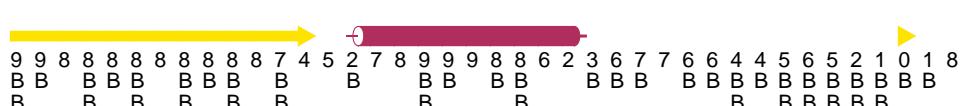
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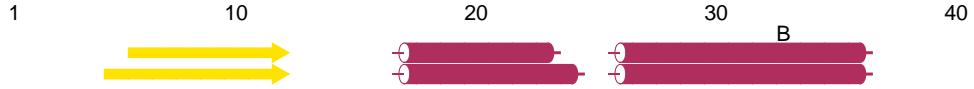
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