

QUERY	1	10	20	30	40																																							
UniRef90_E8T310	L	K	R	R	E	A	E	A	N	L	P	T	P	W	G	D	F	L	M	V	G	F	E	E	L	A	T	G	H	D	H	V	A	L	V	Y	G	D	D	I				
UniRef90_A0Q3H7	I	I	R	Q	G	S	A	S	A	S	L	P	T	K	Y	G	D	F	F	E	I	I	G	Y	E	S	D	N	S	L	D	G	K	E	H	V	A	L	V	K	G	G	H	
UniRef90_W0JK50	I	K	R	Q	A	S	A	S	A	S	L	P	T	T	K	Y	G	D	F	F	E	I	I	G	Y	E	S	D	N	S	L	D	G	K	E	H	V	A	L	V	K	G	G	H
UniRef90_W8YT71	V	E	R	Q	V	E	V	N	M	P	T	T	D	F	G	D	F	F	R	A	V	A	Y	T	N	E	S	T	D	D	G	K	E	H	V	A	L	V	K	G	G	I		
UniRef90_D9RYK5	V	R	R	Q	V	A	R	T	V	L	P	T	P	Y	G	D	F	F	L	I	C	Y	E	N	D	L	V	T	D	A	N	A	Q	H	L	A	L	M	K	G	G	I		
UniRef90_Q3A4L4	V	R	R	Q	V	A	R	T	V	L	P	T	P	Y	G	D	F	F	L	I	C	Y	E	N	D	L	V	T	D	A	N	A	Q	H	L	A	L	M	K	G	G	I		
UniRef90_B5YHZ1	V	R	K	V	A	T	V	Q	L	P	T	T	D	Y	G	D	F	F	A	I	A	Y	T	T	L	V	D	D	K	V	H	L	A	L	V	K	G	G	D	I	I			
UniRef90_UPI00039C4498	V	R	R	V	S	E	A	E	L	P	T	T	S	Y	G	D	F	F	R	L	I	V	Y	E	S	D	Q	L	T	T	H	Q	E	H	V	A	L	V	K	G	G	I		
UniRef90_T2GBZ1	L	S	V	R	R	V	S	E	A	E	L	P	T	Y	G	D	F	F	K	A	I	A	F	Y	E	S	D	Q	L	T	T	R	T	H	L	A	L	V	K	G	G	I		
UniRef90_U5LED6	V	K	R	E	A	E	I	S	L	P	T	E	Y	G	D	F	F	K	A	V	G	Y	T	N	K	L	D	D	G	K	E	H	V	A	L	V	K	G	G	I	I			
UniRef90_R6FYT8	V	I	E	R	V	A	E	A	K	M	P	T	R	F	G	D	F	F	M	M	Y	G	F	V	N	K	L	D	D	G	K	E	H	V	A	L	V	K	G	G	I			
UniRef90_E4U4V3	V	I	T	R	E	A	E	A	T	L	P	T	R	F	G	D	F	F	R	L	V	G	Y	R	D	R	I	T	G	E	E	H	V	A	L	V	K	G	G	I				
UniRef90_D6MGJ5	V	E	N	A	A	E	A	H	L	P	T	R	F	G	D	F	F	K	A	V	G	Y	K	N	L	N	G	E	H	H	V	A	L	V	K	G	G	E	N	I				
UniRef90_F7Q1M3	V	I	E	R	V	T	Q	A	H	M	P	T	K	Y	G	D	F	F	K	M	V	G	Y	V	N	K	V	L	D	D	G	K	E	H	V	A	L	V	K	G	D	I		
UniRef90_W0F5I4	V	E	E	I	V	R	V	N	M	P	T	K	Y	G	D	F	F	L	V	A	F	K	D	K	N	S	N	N	E	H	L	A	L	I	K	G	G	D	I	I				
UniRef90_U4KPB0	I	I	E	K	V	A	E	A	K	M	P	T	R	Y	G	D	F	F	K	M	I	G	F	I	N	K	L	N	G	E	H	H	V	A	L	V	K	G	D	I	I			
UniRef90_K8E6E6	I	K	K	V	E	S	A	Q	M	P	T	K	Y	G	D	F	F	L	A	V	G	Y	E	S	L	I	N	D	G	E	K	H	V	A	L	V	K	G	D	I	I			
UniRef90_A3DBL8	I	R	R	A	A	E	A	K	L	P	T	K	Y	G	D	F	F	K	I	V	A	Y	E	S	L	I	N	D	G	E	H	H	V	A	L	V	K	G	D	I	I			
UniRef90_F7YVM8	I	K	K	V	A	E	A	Y	L	P	T	D	Y	G	D	F	F	Q	L	I	A	Y	E	D	L	I	T	K	E	D	T	H	L	A	L	V	K	G	N	L	I			
UniRef90_T0CS35	V	E	R	V	V	E	V	N	M	P	T	K	Y	G	D	F	F	K	M	Y	G	F	I	N	K	L	N	G	E	H	H	V	A	L	V	K	G	D	I	I				
UniRef90_UPI00037EC362	V	Q	R	V	I	A	E	A	Q	L	P	T	L	F	G	E	F	R	I	I	Y	E	S	M	I	L	D	T	Y	Q	H	I	A	L	V	K	G	D	I	I				
UniRef90_D7CLR6	V	R	R	V	E	S	I	R	L	P	T	Q	F	G	D	F	F	A	V	A	Y	E	S	L	L	D	D	G	K	G	H	L	A	L	V	K	G	G	E	W				
UniRef90_L0RAF4	V	T	R	E	A	E	A	E	L	P	T	R	W	G	D	F	F	K	A	T	A	F	H	S	T	E	D	D	N	R	T	H	L	A	L	V	K	G	E	I				
UniRef90_K2GA49	V	T	K	R	E	V	E	I	K	L	P	T	E	Y	G	D	F	F	R	A	I	G	F	T	N	D	I	D	G	Q	E	H	H	V	A	L	V	K	G	K	V			
UniRef90_W0ECT9	V	K	K	A	A	E	A	K	L	P	T	S	D	F	G	D	F	F	A	V	G	Y	R	S	L	L	D	D	G	Q	E	H	H	V	A	L	V	K	G	K	V			
UniRef90_A4SFY4	V	K	R	A	V	E	S	N	L	P	T	A	Y	G	D	F	F	R	L	M	A	Y	E	S	F	T	D	D	G	Q	N	H	M	A	L	V	K	G	D	I				
UniRef90_A9NHT6	V	Q	K	A	A	E	A	K	L	P	T	K	H	G	E	F	R	M	V	G	F	E	N	A	I	S	G	E	H	H	V	A	L	V	K	G	D	I	I					
UniRef90_M1RET1	T	E	R	V	A	S	A	T	L	P	T	A	Y	G	D	F	F	K	V	H	A	Y	R	N	K	L	N	G	E	E	Q	V	A	L	T	M	G	E	W					
UniRef90_B0SGE8	I	H	L	E	V	E	A	N	L	P	T	A	F	G	D	F	F	K	I	K	A	Y	S	T	Q	L	I	N	D	G	K	I	H	M	A	L	V	K	G	D	I			
UniRef90_D7JD48	I	V	E	R	E	S	E	A	N	L	P	T	A	Y	G	D	F	F	R	I	V	I	F	K	Q	K	S	N	G	L	E	H	M	A	L	V	K	G	D	I				
UniRef90_C7LSH6	V	R	R	V	A	E	A	R	M	P	T	C	Y	G	E	F	T	I	V	A	Y	E	N	D	I	D	S	H	T	H	I	A	L	V	K	G	E	I	I					
UniRef90_UPI00047B1CA9	V	K	R	I	A	E	A	Q	L	P	T	R	Y	G	D	F	F	K	L	I	G	Y	E	S	A	L	N	D	G	K	H	L	A	L	V	K	E	P	I					
UniRef90_D2BDI9	V	K	K	I	T	E	A	E	L	P	T	S	H	G	L	K	A	V	A	Y	K	S	Q	F	D	A	D	E	H	L	A	L	V	M	G	D	I	I						
UniRef90_I0INH9	V	C	Q	V	A	E	A	D	L	P	T	E	Y	G	H	F	R	A	V	V	F	E	D	M	V	D	Q	G	P	H	F	A	L	V	K	G	I	I						
UniRef90_UPI00047004E7	I	E	R	G	E	V	H	L	P	T	A	F	G	D	F	F	R	N	L	I	P	F	R	Q	K	S	N	G	V	E	Q	H	M	A	L	V	K	G	K	W				
UniRef90_F4C810	I	N	K	E	V	S	V	K	L	P	T	E	W	G	D	F	F	R	L	V	A	Y	R	Q	Q	K	N	T	G	E	Q	H	L	A	L	V	K	G	S	W				
UniRef90_C1A8F5	V	H	R	V	A	E	A	R	L	P	T	E	Y	G	E	W	R	L	Y	G	Y	K	N	D	V	D	Q	R	E	H	I	A	L	A	Y	G	D	V	I					
UniRef90_W4QON3	V	K	K	E	V	E	I	K	L	P	T	D	F	G	D	F	F	R	A	I	G	Y	S	D	L	I	S	E	G	K	E	S	V	A	L	V	K	G	E	I				
UniRef90_G1WBQ7	I	E	V	G	E	E	V	D	L	P	T	I	Y	G	H	F	R	L	V	P	F	R	Q	K	S	N	G	A	E	S	M	A	V	I	K	G	E	W						
UniRef90_F4LXQ0	V	E	K	T	A	E	A	D	L	P	T	D	Y	G	Y	F	R	L	Y	C	Y	E	D	I	T	K	E	N	H	V	A	L	V	K	G	D	I	I						
UniRef90_M1GGM4	V	K	Q	V	A	R	A	N	L	P	T	S	K	F	G	T	F	F	V	I	A	Y	E	S	G	I	N	S	D	T	H	A	L	V	K	N	N	T						
UniRef90_F3ZYG7	V	K	R	V	R	T	D	I	H	L	P	T	K	Y	G	D	F	F	T	V	I	A	Y	E	S	L	I	N	H	D	H	V	A	L	V	K	G	D	I					
UniRef90_Q1NRI4	V	H	R	A	A	E	V	Q	L	P	T	M	H	G	E	F	Q	A	I	V	I	N	N	D	V	D	E	L	E	H	V	A	L	V	K	G	E	I						
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UniRef90_U2EBM4	V	S	R	E	A	E	A	N	L	P	T	E	Y	G	N	F	K	M	V	G	F	I	N	K	L	N	G	E	H	H	V	A	L	V	K	G	D	I						
UniRef90_K9SGY8	V	H	R	D	S	I	A	N	L	P	S	L	F	G	D	F	K	T	Y	A	Y	R	N	N	L	D	D	R	E	H	I	A	L	V	K	G	N	P						
UniRef90_R5P1M0	V	K	K	E	A																																							

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

QUERY	E	G	R	G	V	L	L	Y	H	90	Q	E	G	G	R	R	N	I	G	L	L	100	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	120			
UniRef90_E8T310	E	G	K	G	V	L	L	Y	L	R	Q	E	E	G	R	R	N	I	G	L	V	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_A0Q3H7	E	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	V	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_W0JK50	A	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	S	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_W8YT71	A	G	S	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_D9RYK5	E	E	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_Q3A4L4	E	E	G	S	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_B5YHZ1	A	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	L	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_UPI00039C4498	N	E	K	S	G	V	L	L	Y	L	R	Q	E	E	G	R	R	N	I	G	L	R	S	H	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K
UniRef90_T2GBZ1	A	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	S	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_U5LED6	A	G	S	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	I	N	K	M	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_R6FYT8	E	E	G	K	G	V	L	L	Y	L	R	Q	E	E	G	R	R	N	I	G	L	V	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_E4U4V3	E	E	G	R	G	V	L	L	Y	L	R	Q	E	E	G	R	R	N	I	G	L	V	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_D6MGJ5	E	E	G	R	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	V	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_F7Q1M3	E	E	G	R	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	V	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_W0F5I4	E	E	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	M	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_U4KPB0	A	G	R	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_K8E6E6	E	E	G	V	L	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	M	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_A3DBL8	E	D	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	V	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_F7YVM8	Y	G	T	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	V	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_T0CS35	E	E	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_UPI00037EC362	E	E	G	C	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_D7CLR6	A	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	L	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_L0RAF4	E	E	G	Q	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	G	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_K2GA49	N	E	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	M	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_W0ECT9	E	E	G	R	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	L	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_A4SFY4	E	E	G	R	G	V	L	L	Y	L	M	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_A9NHT6	A	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_M1RET1	E	E	G	K	G	V	L	L	Y	L	K	H	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_B0SGE8	E	E	G	N	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_D7JD48	E	E	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_C7LSH6	E	G	A	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	G	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_UPI00047B1CA9	K	G	G	V	L	L	Y	L	R	Q	E	E	G	R	R	N	I	G	L	L	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K			
UniRef90_D2BD9	A	G	R	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	H	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_I0INH9	A	E	G	N	G	V	L	L	Y	M	N	Q	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_UPI00047004E7	E	E	G	Q	G	V	L	L	Y	I	Q	E	E	G	R	R	N	I	G	L	M	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K		
UniRef90_F4C810	E	E	G	K	G	V	L	L	Y	M	N	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_C1A8F5	E	E	G	R	G	V	L	L	Y	L	D	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_W4QON3	E	E	G	R	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	M	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_G1WBQ7	E	E	G	Q	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	M	N	K	M	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K
UniRef90_F4LXQ0	E	E	G	K	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_M1GGM4	E	E	G	R	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_F3ZYG7	E	E	G	R	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	A	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_Q1NRI4	E	E	G	C	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_UPI00046EC933	E	E	G	K	G	V	L	L	Y	M	N	Q	E	E	G	R	R	N	I	G	L	I	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_U2EBM4	E	E	G	K	G	V	L	L	Y	L	R	Q	E	E	G	R	R	N	I	G	L	L	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_K9SGY8	A	G	C	G	V	V	L	L	Y	L	R	Q	E	E	G	R	R	N	I	G	L	L	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_R5P1M0	E	E	G	R	G	V	L	L	Y	L	R	Q	E	E	G	R	R	N	I	G	L	L	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G	Y	D	T	V	V	E	A	N	H	K	
UniRef90_C8X2R2	E	E	G	N	G	V	L	L	Y	M	R	Q	E	E	G	R	R	N	I	G	L	G	N	K	I	R	A	Y	A	Q	Q	D	D	H	G	G											

QUERY UniRef90\_E8T310 UniRef90\_A0Q3H7 UniRef90\_W0JK50 UniRef90\_W8YT71 UniRef90\_D9RYK5 UniRef90\_Q3A4L4 UniRef90\_B5YHZ1 UniRef90\_UPI00039C4498 UniRef90\_T2GBZ1 UniRef90\_U5LED6 UniRef90\_R6FYT8 UniRef90\_E4U4V3 UniRef90\_D6MGJ5 UniRef90\_F7Q1M3 UniRef90\_W0F5I4 UniRef90\_U4KPB0 UniRef90\_K8E6E6 UniRef90\_A3DBL8 UniRef90\_F7YVM8 UniRef90\_T0CS35 UniRef90\_UPI00037EC362 UniRef90\_D7CLR6 UniRef90\_L0RAF4 UniRef90\_K2GA49 UniRef90\_W0ECT9 UniRef90\_A4SFY4 UniRef90\_A9NHT6 UniRef90\_M1RET1 UniRef90\_B0SGE8 UniRef90\_D7JD48 UniRef90\_C7LSH6 UniRef90\_UPI00047B1CA9 UniRef90\_D2BID9 UniRef90\_I0INH9 UniRef90\_UPI00047004E7 UniRef90\_F4C810 UniRef90\_C1A8F5 UniRef90\_W4QON3 UniRef90\_G1WBQ7 UniRef90\_F4LXQ0 UniRef90\_M1GGM4 UniRef90\_F3ZYG7 UniRef90\_Q1NRI4 UniRef90\_UPI00046EC933 UniRef90\_U2EBM4 UniRef90\_K9SGY8 UniRef90\_R5P1M0 UniRef90\_C8X2R2 UniRef90\_E4RMQ3 UniRef90\_K1XTX6 UniRef90\_G1UTA0 UniRef90\_UPI000237987D UniRef90\_R5NAK4 UniRef90\_B2RIG7 UniRef90\_D5EEZ1 UniRef90\_UPI000370BB60 UniRef90\_H1CZS0 UniRef90\_W4LPS7 UniRef90\_R7EYA1 UniRef90\_C1E9D4 UniRef90\_U5QI87 UniRef90\_UPI0004767010 UniRef90\_UPI0002E63394 UniRef90\_UPI0003FC2603 UniRef90\_Q10WC5 UniRef90\_Q2SA07 UniRef90\_UPI0002C2F887 UniRef90\_A7Z675 UniRef90\_W1UVI6 UniRef90\_Q11WK6 UniRef90\_E4L0Y7 UniRef90\_D4J7R6 UniRef90\_E3PVH5 UniRef90\_L8JIY9 UniRef90\_W1SLW6 UniRef90\_UPI0003757215 UniRef90\_Q1J1M9 UniRef90\_C4Z8N1 UniRef90\_UPI000289FE2F UniRef90\_D8F1Q1 UniRef90\_R7CD12 UniRef90\_I0ALF3 UniRef90\_I5B5D4 UniRef90\_A4X639 UniRef90\_A8ZTU8 UniRef90\_UPI0001744E2A UniRef90\_M7NJE8 UniRef90\_I5AV54 UniRef90\_A8LE27 UniRef90\_UPI000363AE19 UniRef90\_I6Z7Q6

130 140 150 160

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



QUERY	A	G	L	N	V	E	R	V	P	L	V
UniRef90_E8T310	Y	G	L	E	E	V	R	V	P	I	E
UniRef90_A0Q3H7	Y	G	L	E	E	V	R	V	P	I	E
UniRef90_W0JK50	Y	G	L	E	V	V	R	V	P	I	E
UniRef90_W8YT71	Y	G	L	S	V	V	R	V	P	I	Q
UniRef90_D9RYK5	Y	G	L	E	E	V	R	V	P	L	K
UniRef90_Q3A4L4	Y	G	L	E	V	V	R	V	A	I	E
UniRef90_B5YHZ1	Y	G	L	K	V	V	R	V	P	I	E
UniRef90_UPI00039C4498	F	N	L	E	V	V	R	V	P	I	E
UniRef90_T2GBZ1	Y	G	L	E	V	V	D	R	V	P	I
UniRef90_U5LED6	Y	G	L	E	V	S	E	R	V	Q	L
UniRef90_R6FYT8	Y	G	L	E	V	V	R	V	P	L	Q
UniRef90_E4U4V3	Y	G	L	E	V	V	R	V	P	L	Q
UniRef90_D6MGJ5	Y	G	I	N	I	V	R	V	P	L	E
UniRef90_F7Q1M3	Y	G	L	E	E	V	R	V	P	I	Q
UniRef90_W0F5I4	Y	G	L	E	I	V	E	S	V	P	I
UniRef90_U4KPB0	Y	G	I	E	I	T	N	R	V	K	I
UniRef90_K8E6E6	Y	G	L	E	V	V	D	R	V	P	I
UniRef90_A3DBL8	H	G	L	E	I	V	E	R	V	P	I
UniRef90_F7YVM8	Y	G	I	E	I	V	E	R	V	P	I
UniRef90_T0CS35	Y	D	I	E	I	V	E	R	I	S	I
UniRef90_UPI00037EC362	Y	G	L	K	V	V	R	V	P	L	V
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UniRef90_L0RAF4	Y	G	L	E	V	T	Q	R	V	P	I
UniRef90_K2GA49	Y	G	L	E	V	T	D	R	I	P	I
UniRef90_W0ECT9	Y	G	L	E	V	I	D	R	V	P	I
UniRef90_A4SFY4	Y	G	L	E	I	V	E	R	V	P	L
UniRef90_A9NHT6	Y	G	L	E	I	T	S	R	E	P	I
UniRef90_M1RET1	Y	G	L	E	V	V	E	R	V	P	I
UniRef90_B0SGE8	Y	N	L	H	I	V	T	E	R	V	P
UniRef90_D7JD48	Y	G	L	E	I	T	E	V	V	P	I
UniRef90_C7LSH6	Y	G	L	K	V	E	E	R	I	S	I
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UniRef90_I0INH9	Y	G	L	E	V	V	S	R	V	P	L
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UniRef90_F4C810	Y	G	L	E	V	V	E	N	V	A	L
UniRef90_C1A8F5	Y	G	L	V	L	T	D	R	V	R	I
UniRef90_W4QON3	Y	E	L	E	V	V	D	R	V	P	L
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UniRef90_F4LXQ0	Y	G	L	T	V	T	E	C	V	P	I
UniRef90_M1GGM4	Y	G	I	H	I	T	E	R	V	P	L
UniRef90_F3ZYG7	Y	G	I	E	I	V	E	R	V	P	L
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UniRef90_UPI00046EC933	Y	G	L	E	V	V	E	R	V	P	L
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UniRef90_K9SGY8	F	G	I	E	V	V	G	R	L	P	L
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UniRef90_E4RMQ3	Y	G	L	E	V	T	E	R	I	P	L
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UniRef90_G1UTA0	Y	G	I	E	I	V	E	R	V	P	L
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UniRef90_R5NAK4	Y	G	L	E	I	V	E	N	V	P	L
UniRef90_B2RIG7	F	G	L	E	I	V	E	N	I	P	L
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UniRef90_H1CZS0	Y	G	I	T	I	T	E	R	V	P	L
UniRef90_W4LPS7	Y	G	L	E	V	V	D	R	V	A	V
UniRef90_R7EYA1	Y	G	L	K	V	V	E	T	V	P	L
UniRef90_C1E9D4	F	G	L	T	V	V	G	R	V	P	L
UniRef90_U5QI87	Y	N	L	E	V	V	D	R	V	P	L
UniRef90_UPI0004767010	Y	G	L	K	I	S	E	R	V	P	H
UniRef90_UPI0002E63394	Y	G	I	E	V	I	E	R	R	P	I
UniRef90_UPI0003FC2603	Y	G	L	E	V	T	E	R	K	A	I
UniRef90_Q10WC5	Y	G	I	E	I	V	D	R	V	P	L
UniRef90_Q2SA07	L	G	I	E	V	V	E	R	V	P	L
UniRef90_UPI0002C2F887	Y	G	L	A	V	I	G	R	V	P	L
UniRef90_A7Z675	Y	G	L	S	I	S	E	R	V	P	L
UniRef90_W1UVI6	W	G	I	N	V	T	S	R	V	P	L
UniRef90_Q11WK6	Y	G	L	E	I	T	E	A	V	P	L
UniRef90_E4L0Y7	F	G	M	I	I	K	E	R	V	P	I
UniRef90_D4J7R6	F	D	L	K	I	I	E	R	V	P	L
UniRef90_E3PVH5	Y	G	L	E	I	T	D	R	V	S	I
UniRef90_L8JIY9	Y	G	L	E	I	V	E	N	V	A	I
UniRef90_W1SLW6	Y	G	I	E	V	V	E	R	V	P	L
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UniRef90_Q1J1M9	F	G	L	E	V	V	E	R	V	P	L
UniRef90_C4Z8N1	F	G	M	E	I	S	E	R	V	P	L
UniRef90_UPI000289FE2F	Y	G	I	E	V	V	N	R	I	P	I
UniRef90_D8F1Q1	Y	G	L	K	V	T	G	R	V	P	I
UniRef90_R7CD12	F	G	M	E	I	V	E	R	V	P	L
UniRef90_I0ALF3	Y	G	L	E	I	V	E	R	V	P	L
UniRef90_I5B5D4	Y	G	L	S	V	V	E	Q	V	P	L
UniRef90_A4X639	Y	G	L	T	V	T	E	R	V	A	L
UniRef90_A8ZTU8	Y	G	L	S	V	V	E	Q	I	P	I
UniRef90_UPI0001744E2A	H	K	L	H	I	V	E	Q	I	P	I
UniRef90_M7NJE8	Y	G	I	R	I	T	E	R	L	P	I
UniRef90_I5AV54	F	G	L	E	I	H	E	R	V	P	L
UniRef90_A8LE27	Y	G	L	R	I	V	E	Q	V	G	L
UniRef90_UPI000363AE19	Y	G	L	K	V	V	E	Q	L	P	S
UniRef90_I6Z7Q6	Y	D	L	E	L	I	E	R	V	P	I

	1	10	20	30	40																																										
UniRef90_B4WQK9	V	K	R	E	A	V	A	E	M	P	S	K	F	G	E	F	K	V	Y	A	Y	R	N	Q	L	D	G	S	E	H	I	V	A	L	V	D	P	D	E	E							
UniRef90_A3YZN9	V	R	R	Q	A	E	A	E	M	P	S	A	F	G	Q	F	R	A	I	G	Y	R	N	Q	L	D	D	D	S	E	H	I	V	A	L	V	K	H	P	E	E						
UniRef90_K9YK18	V	V	R	E	T	V	C	N	F	L	P	S	Q	E	F	G	D	F	Q	N	I	H	V	Y	R	S	L	L	D	G	I	Q	H	I	A	L	V	K	G	D	E	V					
UniRef90_Q255Z7	V	V	Y	P	R	E	S	A	R	L	P	T	E	Y	G	D	F	N	I	H	V	Y	R	S	L	L	D	D	G	I	Q	H	I	A	L	V	K	G	D	E	V						
UniRef90_UPI0003FDD3A6	V	E	R	V	V	E	T	K	M	P	T	R	Y	G	E	F	V	M	Y	G	F	I	N	K	L	N	G	E	H	H	V	A	L	V	K	G	D	I	V	E							
UniRef90_H2FWW4	S	V	T	R	M	A	N	S	K	L	P	T	P	W	Y	G	T	F	T	L	V	G	F	E	E	K	G	T	D	D	K	C	H	V	A	L	V	K	G	D	V						
UniRef90_D2RNY5	V	H	R	T	A	N	V	A	L	P	T	S	K	Y	G	T	F	R	A	I	G	Y	R	S	L	L	D	D	G	I	Q	H	I	A	L	V	K	G	D	V							
UniRef90_K2AR03	I	K	K	E	V	E	T	E	L	E	T	E	Y	G	K	M	K	M	I	V	Y	R	S	L	L	D	D	G	K	E	H	I	A	L	V	K	G	D	I	V							
UniRef90_M1AXY0	V	E	H	A	S	A	A	R	L	P	T	M	W	G	P	F	R	A	H	C	F	K	S	L	L	D	D	G	I	E	H	A	M	V	K	G	D	I	V								
UniRef90_F2NXG5	I	E	R	V	A	E	A	N	L	P	T	K	Y	G	D	F	R	L	Y	G	F	I	D	T	L	T	G	E	H	H	E	A	L	V	K	M	G	N	I	V							
UniRef90_UPI000471EF04	I	E	K	G	V	E	A	A	L	P	T	T	F	G	D	F	R	I	P	F	K	Q	K	S	N	G	V	E	H	H	V	A	L	V	K	G	D	I	V								
UniRef90_UPI0002F765E2	V	E	L	V	T	K	A	K	L	P	T	K	Y	G	E	F	D	I	L	G	F	V	N	Q	L	N	G	E	H	H	V	A	L	V	K	G	D	I	V								
UniRef90_Q1YU35	L	R	F	I	E	S	S	A	R	L	P	T	R	W	G	T	F	D	I	H	G	F	E	D	P	F	K	G	E	H	I	A	L	S	K	M	G	D	C								
UniRef90_K2AM23	V	H	L	V	A	Q	S	K	L	P	T	D	F	G	Q	F	S	I	K	V	F	E	N	D	V	D	D	Y	E	H	H	I	A	L	L	M	G	E	T	V							
UniRef90_F9N5A7	V	S	I	A	A	E	T	K	L	P	T	K	F	G	D	F	R	L	Y	V	R	S	L	L	D	D	H	K	E	H	I	A	L	V	K	G	D	V	V								
UniRef90_A2YXW3	V	E	R	V	C	V	T	P	L	Q	L	Q	W	G	S	F	Q	S	Y	C	Y	K	S	L	L	D	D	G	M	E	H	I	A	M	V	K	G	D	V								
UniRef90_N2B7U3	H	V	R	E	A	A	A	R	M	P	T	H	Y	G	D	F	M	T	Y	G	Y	T	D	D	L	T	G	Q	S	H	V	A	L	V	K	G	E	I	V								
UniRef90_G7LZW4	L	S	V	T	K	E	V	E	A	K	L	P	T	K	Y	G	D	F	K	V	L	A	F	S	E	K	N	S	K	C	H	V	A	L	L	K	G	E	L								
UniRef90_UPI0003704E70	I	V	K	E	T	E	I	N	L	P	T	A	Y	G	D	F	K	V	L	V	A	Y	T	E	K	N	S	G	K	E	H	V	A	L	V	K	G	E	L								
UniRef90_UPI000376BC5D	V	E	K	A	I	T	V	S	L	P	T	V	F	G	H	F	S	L	T	A	F	R	D	V	L	T	G	Q	E	H	V	A	L	T	K	G	S	W	L								
UniRef90_A6F6P7	M	S	I	K	F	A	A	S	K	L	P	T	P	F	G	T	F	T	M	H	G	F	E	D	S	E	T	G	K	E	H	V	A	L	T	Y	G	E	L								
UniRef90_W5Y0X6	V	E	R	V	A	Q	T	V	L	P	T	E	F	G	K	F	T	A	Y	G	Y	R	G	L	V	N	G	I	E	H	V	A	L	V	F	G	D	P									
UniRef90_R8VSR8	H	V	V	R	E	A	C	A	E	M	P	T	R	F	G	D	F	R	I	Y	G	Y	I	N	D	L	T	G	E	H	H	V	A	L	V	K	G	E	T	V							
UniRef90_X1JA99	L	P	T	V	I	G	E	F	T	A	I	A	Y	K	S	D	I	D	P	D	E	H	H	V	A	L	V	K	G	D	I	V	K	G	D	I	V	K	G	D	I	V					
UniRef90_UPI0003B51915	I	E	R	V	D	I	N	L	P	T	V	F	G	E	F	T	A	I	A	Y	K	S	D	I	D	P	D	E	H	H	V	A	L	V	K	G	D	I	V								
UniRef90_Q9Z734	V	S	K	I	S	S	A	R	L	P	T	I	Y	G	D	F	T	I	H	V	Y	E	S	L	L	E	G	M	Q	H	H	V	A	L	V	K	G	N	V	V							
UniRef90_UPI00037AFDB2	M	S	V	S	Q	V	A	E	S	R	L	P	T	P	Y	G	E	F	I	M	Y	G	F	E	D	S	G	T	G	K	E	H	V	A	L	T	M	G	D	L							
UniRef90_A3MZA2	V	S	K	F	I	S	V	V	K	M	P	T	K	Y	G	E	F	M	A	H	S	F	V	E	V	I	S	G	K	E	H	V	A	L	V	K	G	D	L								
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UniRef90_F0K703	I	K	R	E	A	E	A	K	L	P	T	K	Y	G	E	F	K	L	V	G	Y	K	S	L	L	D	D	N	K	E	N	L	A	I	V	K	G	E	L								
UniRef90_UPI00037ADC95	Q	V	T	R	V	A	E	A	R	L	P	T	Q	H	G	E	F	V	A	V	G	Y	Q	S	L	L	D	D	G	V	I	E	H	V	A	L	V	R	G	D	L						
UniRef90_K2DAV0	V	K	R	V	I	K	A	K	L	P	T	V	F	G	D	F	D	I	Y	G	Y	I	N	E	L	D	K	T	E	H	V	A	L	V	N	L	E	E	L								
UniRef90_B8G828	I	T	R	A	M	A	J	L	P	T	K	F	G	H	F	E	A	H	I	V	Y	L	D	A	E	Q	E	Q	I	A	L	T	C	G	D	I	V	K	G	D	I	V					
UniRef90_D4MVE9	V	V	C	E	V	I	A	Q	L	P	T	K	Y	G	T	F	E	A	H	G	Y	V	D	Q	R	S	E	K	H	V	A	L	V	K	G	E	I	V	K	G	D	I	V				
UniRef90_V5C315	H	L	D	D	L	V	Q	T	P	I	P	T	R	H	G	E	F	L	H	Y	S	N	T	I	D	D	K	E	H	I	A	L	V	K	G	D	V	V	K	G	D	V					
UniRef90_B9KYF8	Q	C	V	A	E	T	T	L	P	T	R	Y	G	R	F	Q	L	R	A	Y	R	R	L	G	G	D	I	D	L	A	L	V	H	G	D	V	V	K	G	D	V						
UniRef90_W1NDF0	M	T	I	R	V	I	A	S	R	L	P	T	P	W	A	T	F	M	H	G	F	E	D	E	A	T	G	K	D	H	I	A	L	T	L	G	D	I	V	K	G	D	V				
UniRef90_B1VDP5	T	V	E	R	S	T	E	A	R	L	P	T	T	R	G	E	F	R	A	V	G	Y	T	S	L	I	D	G	T	E	H	V	A	L	V	H	G	D	V	V	K	G	D	V			
UniRef90_A4G2N4	V	H	V	E	R	L	A	E	A	R	L	P	L	E	A	G	E	F	T	A	V	G	Y	R	D	T	V	A	G	D	E	H	V	A	L	V	K	G	D	L	V	K	G	D	L		
UniRef90_UPI0003FCFA07	V	S	R	E	A	I	A	R	L	P	T	E	F	G	E	F	N	I	Y	A	Y	R	D	L	L	D	G	S	E	A	T	A	I	I	D	P	D	K	V	K	G	D	I	V			
UniRef90_BOJKL4	L	E	Y	A	T	S	C	A	L	P	T	P	W	A	G	E	F	L	H	A	F	I	E	H	A	T	G	K	E	H	L	A	M	T	L	G	D	I	V	K	G	D	I	V			
UniRef90_W0V8N9	V	E	P	V	A	T	S	T	M	P	T	A	F	G	D	F	R	A	V	A	Y	R	S	V	L	D	D	G	T	E	H	V	A	L	V	K	G	D	V	V	K	G	D	V			
UniRef90_H6RLJ5	V	T	R	V	A	E	T	R	I	P	N	R	Y	G	E	W	R	A	Y	G	Y	A	S	A	L	D	D	G	G	E	H	V	A	L	V	Y	G	D	L	V	K	G	D	L			
UniRef90_W2EZV4	V	Q	R	E	V	T	A	N	L	P	T	K	Y	G	N	F	K	A	A	Y	N	D	K	I	E	K	E	Y	V	M	I	K	G	E	I	V	K	G	E	L	V	K	G	D	I	V	
UniRef90_D1AMP9	V	E	C	V	S	V	T	S	M	P	T	K	Y	G	D	F	T	A	Y	C	Y	V	N	K	L	T	R	E	H	H	M	A	L	V	K	M	G	D	I	V	K	G	D	I	V		
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UniRef90_UPI0003B3303A	V	R	C	H	T	S	D	V	D	F	P	T	S	R	Y	G	R	F	L	A	Y	E	S	I	N	S	R	C	D	L	A	V	V	K	G	D	V	V	K	G	D	V					
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UniRef90_N8VUN8	M	P	L	E	F	V	A	T	S	R	L	P	T	A	F	G	D	F	N	I	S	V	F	Q	D	P	A	T	G	E	E	H	V	A	L	S	K	G	E	T	V	K	G	D	I	V	
UniRef90_E4L7W3	M	S	V	K	Y	I	A	T	S	K	L	P	T	P	W	G	V	F	A	M	H	G	F	E	E	T	A	T	G	K	E	H	V	A	L	V	M	G	D	L	V	K	G	D	I	V	
UniRef90_Q080N2	N	L	E	F	V	S	S	C	A	L	P	M	P	W	A	T	F	Q	L	H	A	F	V	D	H	I	S	G	K	E	H	L	A	L	V	L	G	D	V	V	K	G	D	I	V		
UniRef90_J3CYJ1	L	P	T	Q	Y	G	D	F	Q	L	C	Y	Y	A	N	T	H	D	D	G	K	E	H	L	A	F	Y	K	G	D	I	V	K	G	D	I	V	K	G	D	I	V					
UniRef90_UPI000466FC36	V	T	A	Y	T	E	S	S	R	L	P	T	A	W	G	E	F	E	M	H	G	F	E	D	A	E	S	N	K	E	H	V	A	L	V	L	T	L	G	D	V	V	K	G	D	I	V
UniRef90_I017G1	L	T	A	R	Y	T	E	S	S	R	L	P	T																																		

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

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

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

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

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D I K V F L P P I G G L T A Y I F G N P A Y

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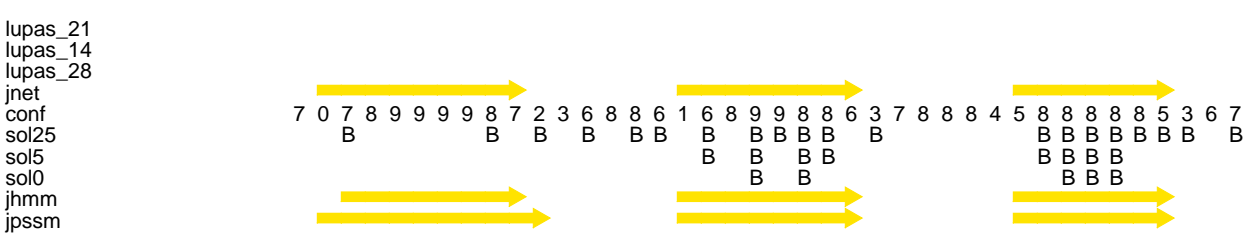
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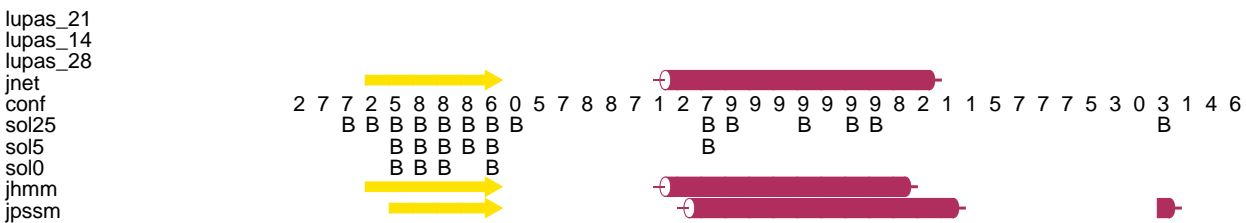
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