

QUERY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
UniRef90_G7KSG6	A	S	F	S	E	A	P	P	G	N	P	K	A	G	E	K	I	F	K	T	K	C	A	Q	Q	C	H	T	V	D	K	G	A	G	H	K	Q	Q	P	N	L	
UniRef90_M2VTN6							A	I	P	E	G	D	P	T	A	R	G	E	K	I	F	R	T	S	D	C	A	Q	Q	C	H	S	T	Y	N	I	S	G	A	V	I	N
UniRef90_B0WGTG4									P	A	G	D	V	E	K	G	K	I	F	V	Q	R	C	A	Q	Q	C	H	T	V	S	A	G	G	K	H	Q	V	G	P	N	L
UniRef90_E5S446							M	S	Q	I	P	K	G	D	P	E	K	G	K	I	F	V	Q	R	C	A	Q	Q	C	H	T	V	S	A	G	G	K	H	Q	V	G	
UniRef90_W6U7D9								A	M	P	K	G	D	V	E	K	G	K	I	F	V	Q	R	C	A	Q	Q	C	H	T	V	D	K	G	G	S	K	T	G	P	N	
UniRef90_UPI0001CBBE4F							M	G	D	I	P	Q	G	D	A	V	K	G	K	I	F	V	Q	R	C	A	Q	Q	C	H	T	V	N	Q	G	G	K	H	K	T		
UniRef90_UPI0004439AA7								S	G	D	I	E	K	G	K	I	F	V	Q	R	C	A	Q	Q	C	H	T	V	E	K	G	G	K	H	K	V	G	P	N	L		
UniRef90_N6TTC8								G	D	I	E	K	G	K	I	F	V	R	S	C	A	Q	Q	C	H	T	V	E	K	G	G	K	H	K	V	G	P	N	L			
UniRef90_V8P0B9								G	D	I	E	K	G	K	I	F	V	S	M	C	A	Q	Q	C	H	T	V	E	K	G	G	K	H	K	V	G	P	N	L			
UniRef90_UPI00044468F9									G	D	V	E	K	G	K	I	F	M	Q	K	C	A	Q	Q	C	H	T	V	E	A	G	G	R	H	M	Q	G	P	N			
UniRef90_G3CJT6								I	P	A	G	D	A	E	K	G	K	I	F	V	Q	K	C	A	Q	Q	C	H	P	V	G	K	N	E	K	H	K	V				
UniRef90_G3VSB9										D	V	E	E	G	R	K	I	F	V	Q	K	C	A	Q	Q	C	H	T	V	E	K	N	G	K	H	K	T	G				
UniRef90_V4BHC8							M	P	D	I	P	Q	G	D	V	E	K	G	K	I	F	V	Q	R	C	A	Q	Q	C	H	T	V	N	V	E	K	G	K	N	A		
UniRef90_UPI000273C0D9										G	D	V	E	K	G	K	I	F	M	Q	K	C	A	H	C	H	T	V	E	K	G	G	K	H	K	T	G	P	N			
UniRef90_J9K3P3										G	D	E	E	K	G	A	K																									

QUERY		N	G	L	F	G	R	Q	S	G	T	T	P	G	Y	S	Y	S	T	A	D	K	N	M	A	V	I	W	E	N	T	L	Y	D	Y	L	N	P	K				
UniRef90_G7KSG6		N	G	L	F	G	R	Q	S	G	T	T	P	G	Y	S	Y	S	T	A	D	K	N	M	A	V	I	W	E	N	T	L	Y	D	Y	L	N	P	K				
UniRef90_M2VTN6		H	G	L	F	G	R	Q	S	G	T	T	P	G	Y	S	Y	S	T	A	D	K	N	M	A	V	I	W	E	N	T	L	Y	D	Y	L	N	P	K				
UniRef90_B0WGTG4		H	G	L	M	G	R	K	T	G	Q	A	A	G	Y	K	Y	T	D	A	N	K	N	K	G	I	V	W	T	E	D	T	L	F	E	Y	L	E	N	P	K		
UniRef90_E5S446		N	G	I	V	G	R	K	T	G	Q	V	P	N	F	D	Y	T	A	A	N	K	N	K	G	I	V	I	W	T	R	E	A	L	F	E	Y	L	E	N	P	K	
UniRef90_W6U7D9		H	G	L	F	G	R	Q	T	G	Q	A	P	G	Y	D	Y	T	A	A	N	K	N	K	G	I	T	T	W	N	E	D	T	L	F	E	Y	L	E	N	P	K	
UniRef90_UPI0001CBBE4F		H	G	L	F	G	R	K	T	G	Q	S	K	G	F	S	Y	T	D	A	N	K	N	K	G	I	T	T	W	G	E	D	T	L	W	I	Y	L	E	N	P	K	
UniRef90_UPI0004439AA7		W	G	L	F	G	R	Q	T	G	A	D	G	Y	S	Y	T	D	A	N	K	N	K	G	I	V	I	W	N	E	E	T	L	N	V	Y	L	E	N	P	K		
UniRef90_N6TTC8		H	G	M	F	G	R	K	S	G	Q	A	P	N	Y	S	Y	T	E	A	N	K	N	K	G	I	V	I	W	N	E	E	T	L	N	V	Y	L	E	N	P	K	
UniRef90_V8P0B9		H	G	M	F	G	R	K	T	G	Q	A	V	G	Y	S	Y	T	E	A	N	K	N	K	G	I	V	I	W	G	E	E	T	L	N	M	E	Y	L	E	N	P	K
UniRef90_UPI00044468F9		G	G	M	F	G	R	K	T	G	Q	A	G	G	F	T	Y	T	Q	A	N	I	D	K	G	I	V	I	W	G	E	E	T	L	N	I	Y	L	E	N	P	K	
UniRef90_G3CJT6		N	G	L	I	G	S	K	T	G	Q	A	P	G	F	A	Y	S	E	A	N	V	S	K	G	I	T	I	W	S	S	D	T	L	F	V	Y	L	E	N	P	K	
UniRef90_G3VSB9		W	G	L	F	G	R	R	T	G	Q	A	S	G	Y	S	Y	S	E	A	N	K	N	K	G	I	I	I	W	N	E	T	N	L	V	E	Y	L	E	N	P	K	
UniRef90_V4BHC8		H	G	L	F	G	R	K	T	G	Q	A	S	G	F	G	Y	T	T	A	N	V	N	K	G	I	T	T	W	N	K	D	T	L	F	E	Y	L	E	N	P	K	
UniRef90_UPI000273C0D9		P	G	L	F	G	N	K	T	G	Q	F	P	V	F	Y	T	D	A	N	K	N	K	G	I	T	T	X	G	N	K	D	T	L	F	E	Y	L	E	N	P	K	
UniRef90_J9K3P3		N	G	L	I	G	R	K	T	G	D	A	P	G	Y	T	Y	T	D	A	N	K	Q	K	S	G	I	T	T	W	N	D	T	T	L	F	E	Y	L	E	N	P	K
UniRef90_R7QDE3		W	G	L	F	G	R	Q	S	G	S	V	E	G	F	A	Y	T	A	A	N	K	N	S	G	I	I	I	W	S	D	Q	T	L	F	E	Y	L	E	N	P	K	
UniRef90_E9BCZ0		F	G	I	V	H	R	P	S	G	K	V	E	G	F	A	Y	S	K	A	N	A	E	S	G	V	V	W	T	P	E</												

QUERY	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_G7KSG6	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
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UniRef90_B0WGTG4	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_E5S446	A	F	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_W6U7D9	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
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UniRef90_N6TTC8	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_V8P0B9	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_UPI00044468F9	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_G3CJT6	K	F	M	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_G3VSB9	K	F	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_V4BHC8	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_UPI000273C0D9	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_J9K3P3	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_R7QDE3	R	Y	L	K	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_E9BCZ0	K	F	M	P	G	T	K	M	S	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_B8M3N0	K	F	I	P	G	T	K	M	A	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_P00031	K	Y	I	P	G	T	K	M	V	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_UPI0004574B2C	K	Y	I	P	G	T	K	M	A	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_P00049	K	Y	I	P	G	T	K	M	A	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_T1HKX7	K	F	I	P	G	T	K	M	I	F	P	G	L	K	K	P	Q	E	R	A	D	L	I	S	Y	L	K	E	A	T	S
UniRef90_F4P822	K																														



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

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UniRef90_U1MK72	S	G	V	V	G	R	K	K	S	A	S	T	V	E	G	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K
UniRef90_G1XVX0	W	G	V	V	G	R	K	K	S	A	S	T	V	E	G	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K
UniRef90_K8PHQ2	N	G	L	F	G	R	K	K	S	A	S	T	V	E	G	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K
UniRef90_H1QEZ0	Y	G	I	V	G	R	K	K	A	G	H	G	D	K	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K	
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UniRef90_Q3YRE5	W	N	I	V	G	R	K	K	A	H	G	D	K	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K		
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UniRef90_8BUPUR4	Y	G	V	I	G	S	Q	A	G	A	V	E	G	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K		
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UniRef90_UPI00021A6C50	F	G	I	F	G	R	T	A	G	T	H	P	V	P	G	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K
UniRef90_J2HYU7	N	H	L	F	G	R	T	A	G	T	H	P	V	P	G	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K
UniRef90_D0D4Q8	N	G	I	V	G	R	E	I	A	V	D	E	G	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K		
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UniRef90_UPI00039F3D51	H	G	V	I	G	R	E	A	G	A	V	E	G	F	N	T	H	S	E	A	S	T	A	K	N	G	I	T	W	A	T	L	L	L	D	E	F	L	L	T	K	P	A	K		
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	90	100	110
UniRef90_Q3SVY7	E Y I	P G T A M S F	V G V P K D S D R A D L I A Y L R K N S
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UniRef90_G1XVX0	A L I	P G T K R M A F	A G L K N S A Q Q E V K D L T A F L K Q
UniRef90_K8PHQ2	G F I	P G N K M T F	A G L K D A K E R R A D V I A F L K V E T
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UniRef90_UPI0003336388	A Y I	K G T R M A F	A G I S K P Q Q D V A D L T A Y L K S L
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UniRef90_G8UJ37	K F I	P K N R M A F	A G L K K P A D I E N L L A Y L D S A S
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UniRef90_J2HYU7	L K V	K G T K M V F	I G L K K D D G E I L N L I A Y L K Q F S
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UniRef90_UPI00039F3D51	E Y L	P G T T M S F	A G L K V A Q Q R R A D L V I A Y I K A A
UniRef90_UPI000333C85A	A Y I	P R T E V I F	A D I K K K R K R A G L V I A Y I K K A
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UniRef90_G5ZWR5	K Y L	K G T R M A F	A G L K K D A D R R A N L V I A Y L K T F S N
UniRef90_E8RSG1	A T V	P G T K M G F	M G L K D E T E R R A D L I A Y L K K V E T S
UniRef90_UPI000380FBD4	E F I	A G S K M A F	A G I K D K Q Q R L D V I A Y I H S L
UniRef90_A1UU31	K E I	P G T T M S F	R G V K N D Q Q R A D L L L Y L R S L S
UniRef90_B8ICG6	G F V	S G T I M A F	A G V P S G A E R A D I L A Y I K T L S
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UniRef90_D4Z550	E F A	P G T K M T F	A G L G N P A D R A N L I A W L N T Q G S A
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UniRef90_K2FHP1	D F V	P G T K M S F	A G I K D D K E R V D L I A Y I M M K E S
UniRef90_F2J066	E A I	P K N K M A F	V G L K K K D D D L S D V L A Y I L S Q
UniRef90_A3JVA4	A F I	P K S K M S F	K G L K K K E K D R V N L A Y I Q T F S
UniRef90_E6YK46	Q A F	P G T I M S F	R G I K N D Q Q D R A D L L L Y L R S L S
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UniRef90_UPI00036C18B8	T Y V	P G T K M A F	A G I Q A P Q E R A D V I A Y I R S L
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UniRef90_V9TV24	K A L	P G N K M P V	F G L K N I Q D R Y D V I A Y I L E Q V
UniRef90_B8EJJ2	A L V	P G T K M I F	A G L P K E E D R D N V V I A F L S Q
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UniRef90_I3X706	A F L	P G T K M T F	A G L R K K D Q E E R A D L L I A Y L L A K
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UniRef90_UPI000467D4B0	K D V	P G T A M G F	A G L S D D E D R A D L I A Y I L S T M S N



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UniRef90_D5BRT8	V	N	I	I	G	R	K	P	G	S	H	G	F	A	Y	S	A	A	M	T	E	F	G	G	K	W	D	Y	E	D	H	I	T	D	Q	F	L	K	P	G	K	
UniRef90_J2HBL0	W	D	V	L	G	R	K	P	G	S	H	G	F	A	Y	S	A	A	M	T	E	F	G	G	K	W	D	Y	E	D	H	I	T	D	Q	F	L	K	P	G	K	
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UniRef90_K2AXK4	N	G	I	V	G	R	A	A	G	T	I	E	G	F	K	Y	S	T	P	L	K	M	D	M	G	L	V	W	D	E	A	E	T	L	I	N	Q	F	L	K	P	K
UniRef90_UPI000478ECF4	W	G	I	V	G	R	R	K	A	S	Q	G	V	E	Y	S	A	S	L	K	K	D	A	G	G	D	W	T	F	E	E	L	N	L	F	I	S	N	P	A	S	
UniRef90_Q2GA61	A	G	V	V	G	R	K	A	G	A	A	N	F	K	Y	S	A	A	L	K	K	S	G	L	V	W	D	A	P	T	L	D	K	W	L	L	K	P	A	R		
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UniRef90_F7XWD1	W	G	I	V	G	R	A	I	T	A	H	K	D	F	T	Y	S	A	A	L	L	A	P	N	L	K	W	D	A	P	T	L	D	R	Y	L	Y	A	P	T		
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UniRef90\_UPI0002376318 A S S I H R G A K F Y N K C A S C H S I G R H E P R T A G P N L

UniRef90\_K8NS40 P A G S A A A G E K I F K G K C A A C H T T L E A Q G G K S G P G L

UniRef90\_G9ZYV7 A G N P D A E I F R A C I A C H T L G P E D G N R A G P T L

UniRef90\_D7PDM2 A E C H S V G I D E A S L F V E K W

UniRef90\_W8PIT7 A D K D R G R L V F G S C R T C H Y P D A F M G H N N G P N L

UniRef90\_R1CQ55 E G D A D N G A L I Y Q D A C G Q C H Q L N P G L N K K G P Q L

UniRef90\_A6UKS4 D I P D G D P I R G E W I Y K N Y C A G C H D L D S E Q L Q G P S L

UniRef90\_K0R0V7 S V A H A A S A P Q V T A G R T I F Q N N C A S C H T V D A K L S P L A G P G M

UniRef90\_B7RTG2 G D P E K G A A V F K K C A A C H Q V G D D A K N R I G P H L

UniRef90\_Q1Q9D0 D L A H G K A A A Q R A C A A C H T F E K G P T R V G P N L

UniRef90\_Q247Y9 A A R L A R G E Q V Y A R C A A C H A I E G N R T G P Q H

UniRef90\_A8TP70 A G D S Y R G E Q L Y E D Q C A S C H T L K P G S N K K G P Q L

UniRef90\_K9E0X0 S T Q A A G D P A R G K A A F S Q C A A C H A V E P S A N R V G P S L

UniRef90\_I4YSP8 T A S A A R G E R F Y S A C A G C H T P G R G G A P A G V G P N L

UniRef90\_E8TR43 H N F Q E G A G A K V G P S L

UniRef90\_F5SP36 A A G D A K K G A D V F A E E C G D C H S T V A G K N K K G P S L

UniRef90\_B0T5J3 L A N A N P E N G A A I A R R A C A A C H T F D Q G G R N G V G P N L

UniRef90\_C6UN54 R L F K N K C V V C H S L E K G G P V R V A P S L

UniRef90\_A7IIN0 T A R A A P N P N E I S P G R I A F N P C K A C H S L A Q G E H K V G P S L

UniRef90\_Q47FP8 A G A L P V P S A Y A A D G A N V F L T E C G E C H S V K P G K N K G P S L

UniRef90\_UPI0003726950 L A A L A D A H A E G E R L F R A Q C V G C H S I E P G R H L A G P S L

UniRef90\_A9DG73 A D P L A A Y A G D R G A D V F R A C V A C H T L S T T D V P R A G P T L

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UniRef90\_W4LUN6 A V P A A D S S R G A E I W K N C A V C H S L A P D D H S R A G P S L

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UniRef90\_W9HEW1 P V T G R T T F Q N N C A Q C H S V D P T L S P L A G P G L

UniRef90\_A5VDV6 S S A A H A Q Q D S V A I G K K L T T N N C A V C H S T F G K G E P N G Q G P N L

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UniRef90\_R9NY30

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UniRef90\_E0MPZ2 A A F A D H S G G D A A E G E K T F R K C A S C H A V G E G A K V K V G P P L

UniRef90\_H0HKZ0 D A A A G K T V F N K C R A C H N A D V E K D K I G P H L

		50	60	70	80																																									
UniRef90_X6KVL4	D	G	V	F	G	R	E	□	G	S	V	E	G	F	K	Y	S	G	T	M	A	G	M	G	G	V	W	D	A	E	A	L	H	A	F	L	A	K	P							
UniRef90_Q133I0	Y	G	I	V	G	R	E	K	R	G	E	G	R	G	F	N	F	S	A	A	M	K	A	S	K	G	G	E	W	T	F	E	E	L	D	K	F	I	A	S	P					
UniRef90_K8PGA2	A	G	L	W	N	R	K	A	G	T	L	P	S	G	F	N	Y	S	P	A	L	K	A	S	G	□	I	T	W	N	F	D	T	T	L	N	N	E	F	I	A	S	P			
UniRef90_D7A1X1	Y	A	V	V	G	R	A	V	A	S	□	G	F	A	Y	S	S	A	A	M	K	A	H	G	G	E	W	T	F	E	Q	L	D	N	N	F	I	A	S	P						
UniRef90_E0TE40	W	G	I	V	G	R	D	□	A	S	H	G	G	F	Y	S	S	A	A	□	Q	G	□	L	E	G	D	W	T	Y	E	R	L	D	P	Y	L	I	E	N	S	Q				
UniRef90_A5ECM3	T	K	V	V	G	R	R	A	G	S	V	E	G	F	Y	S	S	A	G	F	A	K	A	D	F	T	W	D	E	A	R	L	D	G	A	W	L	T	E	N	P					
UniRef90_A3PM96	N	G	V	V	D	R	A	V	A	S	V	A	G	F	Y	S	S	D	A	M	V	A	H	A	A	T	W	T	□	E	E	L	D	A	Q	F	V	L	T	E	N	P				
UniRef90_Q126Y3	A	G	V	W	G	R	R	A	G	T	A	A	G	F	Y	S	S	D	A	L	K	R	S	E	□	I	V	W	T	E	K	S	L	D	A	W	L	R	K	P	A					
UniRef90_UPI000367B141	R	G	V	V	G	R	R	A	G	A	V	P	G	F	D	Y	S	P	A	L	R	A	S	R	L	V	W	T	R	Q	S	L	D	A	Q	W	L	R	K	P	E					
UniRef90_UPI00040D89DE	M	G	V	V	G	R	P	A	G	S	A	E	S	F	H	Y	S	S	E	A	M	K	A	G	L	V	W	D	E	A	N	L	D	A	Q	Y	L	R	K	P	R					
UniRef90_U1H0E3	Y	K	V	V	G	R	H	A	G	Q	A	D	G	F	K	Y	S	S	A	G	F	A	K	A	D	F	V	W	D	E	A	K	L	D	A	Q	W	L	T	E	N	P	Q			
UniRef90_V4NPA9	K	G	V	V	G	R	□	A	A	V	P	S	G	F	Y	S	S	T	P	□	K	A	K	G	E	R	W	S	E	A	Q	L	D	S	E	Y	L	□	S	P	S					
UniRef90_UPI00046D1981	M	G	V	I	G	R	P	A	A	S	V	S	S	Y	S	S	S	S	E	A	M	K	A	F	G	H	V	W	D	E	A	T	M	D	S	E	Y	L	□	S	P	K				
UniRef90_B0KNJ6	H	D	V	V	G	R	T	P	G	S	V	P	G	A	N	Y	S	S	Q	A	M	K	S	R	Q	A	S	W	T	A	Q	A	□	I	G	A	F	I	E	Q	P	Q	K			
UniRef90_UPI00047A5890	F	G	V	V	G	R	K	A	A	A	V	P	G	F	Y	S	S	S	D	A	L	R	A	Q	S	A	W	W	T	P	E	Q	L	H	S	A	F	I	E	G	Q	P	K			
UniRef90_F2IVJ1	W	A	V	V	G	R	K	P	A	S	V	S	G	F	Y	S	S	S	A	A	M	N	A	F	H	D	A	W	T	□	E	Q	L	D	S	A	F	L	T	E	N	P	R			
UniRef90_C6BR83	A	G	V	L	G	R	K	A	G	T	A	D	G	F	Y	S	S	S	D	A	L	K	Q	S	G	□	L	V	W	D	K	R	N	L	D	A	W	L	E	N	P	A				
UniRef90_J2XQC1	A	G	V	V	G	R	P	□	I	G	S	V	P	G	F	Y	S	S	T	A	G	L	T	G	A	K	S	T	W	N	□	E	Q	L	D	D	Q	F	L	T	A	P	A			
UniRef90_S6AQL8	Q	D	V	V	G	R	Q	V	I	G	T	A	Q	G	F	Y	S	S	T	□	L	E	Q	A	K	S	F	A	W	N	A	E	K	L	D	D	A	F	L	S	G	P	M			
UniRef90_X5XCX7	W	G	V	V	G	R	D	K	A	S	M	A	N	M	R	Y	S	S	D	T	L	L	A	□	L	E	G	V	W	T	Y	E	D	L	N	T	Y	L	□	E	P	M				
UniRef90_F1ZB00	W	G	V	V	G	R	K	A	A	S	A	K	F	N	Y	S	S	S	A	A	L	K	A	Q	K	□	I	T	W	N	D	A	A	L	D	K	W	L	T	G	P	M				
UniRef90_A4EE76	Y	G	V	V	N	R	P	V	Q	F	Y	D	D	F	N	Y	S	S	G	A	L	□	I	E	A	A	E	□	V	W	T	P	E	E	L	N	A	F	L	E	N	P	R			
UniRef90_UPI000333EFF7																																														
UniRef90_Q28K11	A	G	I	V	D	R	P	K	M	H	S	A	D	G	F	K	Y	S	S	D	A	L	L	A	□	L	E	G	A	W	T	P	E	N	S	I	S	S	F	I	L	T	N	P	R	K
UniRef90_B6AX76	N	A	L	□	M	G	R	K	K	G	S	□	E	G	F	K	Y	S	S	K	A	A	A	E	K	G	R	T	W	D	A	T	E	N	S	S	F	I	L	A	K	P	K			
UniRef90_Q210C1	F	G	V	V	G	D	H	□	I	G	E	G	R	N	F	N	F	S	S	A	A	M	K	A	K	G	G	S	W	T	F	D	A	L	N	S	E	F	L	A	S	P	K			
UniRef90_UPI00039A3D67	H	G	V	V	G	R	T	A	G	T	L	P	S	G	F	N	Y	S	S	D	A	M	K	A	A	G	□	L	V	W	D	E	A	N	I	L	N	S	E	F	L	A	S	P	K	
UniRef90_U6GM55	Y	G	V	Y	G	R	T	A	G	S	G	P	R	T	D	S	S	S	Q	A	□	I	K	D	S	G	□	I	V	W	T	D	□	I	T	L	M	R	Y	L	K	A	N	P	K	
UniRef90_X0RSM6	W	G	V	V	G	R	D	□	A	T	T	A	G	Y	D	F	S	S	S	S	V	□	L	T	G	□	L	E	G	D	W	T	□	E	A	L	S	G	F	L	E	S	P	K		
UniRef90_S6BIH7	H	G	L	V	G	R	K	S	G	S	□	L	A	G	F	Y	S	S	S	Q	A	M	K	T	K	G	V	E	W	Q	L	D	S	L	E	Q	F	I	T	Q	P	D				
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UniRef90_T0IWM2	Y	G	V	Y	G	R	P	M	A	Q	S	A	R	Y	S	Y	T	S	T	A	A	L	R	D	A	G	G	R	W	D	A	R	T	L	D	A	W	L	A	R	P	Q				
UniRef90_U4UR76	H	K	I	□	M	G	R	Q	A	G	S	□	L	N	D	Y	N	Y	S	D	A	L	K	N	A	N	D	F	V	W	T	□	V	I	T	R	E	F	E	Q	G	P	N			
UniRef90_C7R6R3	E	G	I	□	G	R	K	V	G	A	V	E	G	D	Y	S	S	S	N	A	L	K	E	A	N	D	F	V	W	T	E	□	E	V	M	A	N	W	L	A	K	P	E			
UniRef90_T1W897	N	G	V	A	G	R	P	A	G	S	V	P	G	F	N	Y	S	S	A	A	L	K	A	S	K	□	L	R	W	D	A	T	L	N	Q	F	L	A	A	P	S					
UniRef90_D5VJP5	A	G	V	V	G	R	K	A	G	S	A	P	G	Y	N	F	S	S	S	N	A	M	K	A	S	G	□	I	T	W	T	P	D	Q	L	D	A	F	V	K	A	P	G			
UniRef90_F7QIS0	Y	G	V	I	E	D	□	I	G	H	G	R	N	F	N	F	S	S	S	A	A	M	K	G	K	G	K	W	T	Y	E	A	I	N	K	F	I	T	S	P	K					
UniRef90_Q2N7K5	Y	G	V	V	G	R	E	A	G	A	□	L	P	N	F	G	Y	S	S	D	A	M	A	S	A	D	F	V	W	D	E	A	R	L	N	A	Y	L	G	D	P	N				
UniRef90_E2CRN0	A	G	V	F	G	R	K	A	G	G	A	E	G	Y	K	Y	S	S	D	A	M	□	L	N	S	D	V	I	W	D	A	T	T	L	D	H	V	L	K	D	V	P				
UniRef90_UPI0002376318	V	G	V	V	G	R	R	A	G	A	□	L	K	D	F	D	Y	S	S	P	A	L	R	S	S	K	□	I	L	W	T	R	A	T	L	K	A	W	L	N	P	E				
UniRef90_K8NS40	A	G	I	F	G	R	K	□	A	S	□	L	P	D	Y	N	F	S	S	E	A	L	K	K	M	D	□	I	V	W	T	P	E	T	V	A	K	F	E	V	G	P	A			
UniRef90_G9ZYV7	A	G	V	F	G	R	A	A	G	S	V	E	G	F	A	R	Y	S	S	Q	A	M	R	D	S	G	□	I	T	W	D	E	S	T	L	D	R	E	Y	L	A	N	P	R		
UniRef90_D7PDM2	H	G	L	F	G	R	K	T	G	Q	V	E	G	F	Y	S	T	S	T	D	A	N	K	Q	K	G	□	I	T	W	E	E	S	T	L	D	F	E	Y	L	E	N	P	K		
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UniRef90_R1CQ55	G	G	I	□	J	G	A	D	A	G	K	R	A	G	F	K	Y	T	S	P	A	F	T	A	A	S	F	T	W	T	D	K	A	M	S	E	Y	L	K	N	P	K				
UniRef90_A6UKS4	H	G	L	F	G	R	K	□	A	□	L	A	D	Y	P	Y	S	S	S	P	A	F	R	R	M	D	□	I	V	W	T	P	E	T	V	S	K	F	E	L	G	P	S			
UniRef90_K0R0V7	P	S	M	G	□	L	R	Y	C	C	□	D	A	G	H	G	N	S	S	A	A	□	L	N	E	R	H	□	T	□	P	L	K	A	K	H	Q	A	N	A	S					
UniRef90_B7RTG2	S	G	I	F	G	K	V	A	A	K	Q	P	G	F	Y	Y	S	S	S	Q	Y	F	R	E	A	G	F	V	W	T	P	Q	L	L	D	S	W	L	E	A	P	M				
UniRef90_Q1Q9D0	M	N	I	Y	G	A	P	A	A	E	□	L	A	D	Y	T	S	S	S	E	G	□	L	K	A	S	G	W	V	W	D	A	Q	T	L	D	T	Y	I	E	A	D	A	E		
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UniRef90_A8TP70	N	G	L	I	G	R	T	A	G	A	□	L	P	G	F	K	Y	S	S	K	A	M	Q	A	G	G	M	□	V	W	T	□	E	T	L	D	A	Y	L	E	S	P	R			
UniRef90_K9E0X0	F	G	V	V	G	R	K	A	G	I	□	P	G	F	G	Y	S	S	S	G	A	L	A	K	A	G	A	W	T																	



[illegible]

	1	10	20	30	40
UniRef90_H8FWY0			NQ	C	K
UniRef90_F8JH86		A D D D D	P E L	A F N G	H
UniRef90_W1RZU2				C	K
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UniRef90_UPI00037026E9	A Q Q	P G S D D A A Q Q A F N N S		C	R
UniRef90_V6F780				C	K
UniRef90_K2LW18	M A	P A M A G D A E K G E	K V F F K K	C	A
UniRef90_T2L3N9			E R L F Q Q R	C	G
UniRef90_G7ZAU8			K D V F F K V	C	M
UniRef90_L0B363	L	P E G S A K R G A K L F F K K Y		C	Q
UniRef90_A0BU26	E I	P N G D L T K G R I F F N H		C	A
UniRef90_UPI0003683020			E N G A D L F F K N	C	L
UniRef90_UPI0004774237			L F F E R	H	C
UniRef90_B8GVJ9			Q Q L F F		Q
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UniRef90_UPI000262B08E			G A G V F A S E	C	A
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UniRef90_K9HWZ0			D A A G E K V A K R	C	I
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UniRef90_UPI00039FC390			A H A D G S S T F L S E	C	A
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UniRef90_Q07RZ1	S S	G A A S A Q D A A N G E K V F K Q		C	M
UniRef90_S9QU48			A A F S G D A A A G E Q Q F A R Q	C	V
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UniRef90_G6YFB5				C	H
UniRef90_A0LDB7		K A G A K E	A Q K	C	T
UniRef90_G1XXD9		N G A T	I F K K	C	A
UniRef90_M4S503				C	A
UniRef90_A8LIG4	A	P A A Q A G	P A K I D A G A A L Y E A E	C	R
UniRef90_UPI00047B1A52	A T S	L S A Q E G D	P A N G K K L F N T N	C	A
UniRef90_UPI0004781C0E			G A K L T R R K	C	G
UniRef90_J2J9H0	A	V A D H A	C G A N L E R G A R L F K A	C	V
UniRef90_UPI000464DEF1			A Q D A T G D A E A G E R A F N Q	C	K
UniRef90_A0A033V5E1			A A T S S Q A E G E K V F N K S	C	A
UniRef90_A0DNX0			D I P N G D L E F G R K M Y G Q A	C	A
UniRef90_UPI0003689C93	A T F	L A L P A G D	P A K G E K E F R K	C	K
UniRef90_F5LCI3			A A V P A D A K G E E I F K Q K	C	L
UniRef90_P00091	S	I G T A S A Q D A K A G E A	V F K Q	C	M
UniRef90_A0A021X8Q8				C	T
UniRef90_M9RIF9		Q A A T G D A E A G E Q Q F D R Q		C	V
UniRef90_UPI000462C23F				C	M
UniRef90_D2HGH2				C	H
UniRef90_A3V2J3		G D A A N G E E Q F N R Q	C	V	A
UniRef90_A9HIV3	A D A	V A H A D P K A G Q A	L A A R M	C	A
UniRef90_G6EB33			T Q C K V	C	H
UniRef90_B9NTA3	A	L P A Y A E G D A D A G K K A F	N K	C	K
UniRef90_A3SJR0			A E G D P E A G E K A F K K	C	R
UniRef90_D7BAM6	A F Q	P P A P T D A A K G Q Q L F N A Q	C	T	A
UniRef90_D7CV76	T	V A Q T L G A E A A A G R E L F K T K	C	A	T
UniRef90_B2V5W3			G D A A K G K E L F M A N	C	A
UniRef90_D3PP67	A F Q A A T	P T D P V R G Q E L F Y K Q K		C	A
UniRef90_Q00499			Q E G D A A K G E K E F N K	C	K
UniRef90_P86320		S G D A A A G E K A F R Q		C	I
UniRef90_A0A017HLH5			D A A A G E E H F N R Q	C	I
UniRef90_V5I3T4				C	A
UniRef90_G8NDQ5	A A K A Y T	P P V A D A R G Q E V F Q Q N		C	A
UniRef90_A0A8V2			T G D A A K G E K A F I Q	C	A
UniRef90_X7FE89	A A	P A V P P E S D A A R G Q A V F N A G		C	G
UniRef90_A8V421			G N P K N G E N I F K Q N	C	Q
UniRef90_A9DZ60			A T G D A E A G E K V F R K	C	K
UniRef90_UPI0002F4D069	S A E A Q A	P Q G D L A A Q G Q E I F A T S	C	I	A
UniRef90_W0DHP7			A K E G R E L F I Q N	C	A
UniRef90_U2YZL1	A	P A L S Q D I A N G E M Q F G R Q		C	V
UniRef90_J9HQQ2				C	H
UniRef90_X0RJ95	A E	P A E P E D V A A G Q E V F E Q S		C	I
UniRef90_R0F7F2			A M A E G D A E K G Q K A F N K	C	K
UniRef90_UPI0004013197	A F A E G D T G D	P A K G E K E F R K		C	K
UniRef90_X6HRM3				C	H
UniRef90_C6D2I7	A A	L Q A P P S D P A I K E A F V S K		C	L
UniRef90_Q4E9Z4			Q N A S F E K K S A A F K K	C	I
UniRef90_UPI0003792718	A K K T Q	P A T A S A R E G Q K V F N K S		C	I
UniRef90_K2QJJ4			Q D Q P E A D P A A G K T L F N T Y	C	A
UniRef90_U2Z605	A A M A Q D	I T G D A A E G E A Q F A R Q		C	V
UniRef90_UPI000469819F			A Q Q G R E I Y A N Q	C	I
UniRef90_Q3J164			Q E G D P E A G A K A F N Q	C	Q
UniRef90_H0F4P4	A S K A R	V G D A R A G R N A I Q Q Y		C	V
UniRef90_A3X6L5			E G D A A K G Q K L F N K	C	K
UniRef90_T2KHP8			A Q G D P A K G K A L F N S N	C	A
UniRef90_R1B9U5			S G S S D A G A K L F K A K	C	A
UniRef90_K0W479	A A A A	P M E G D A A A G K L V F M S K		C	A
UniRef90_G2PJT5			A G A V E G D P V K G K Q L F N Q N	C	A
UniRef90_UPI000424CE8A	A A E	V S A G E A D A K G K Q L F N Q D		C	A
UniRef90_UPI00037401EB	A	V A A A P S T T E A K A G A S L F I T K		C	I

	50	60	70	80
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UniRef90_F8JH86	Y G V V Y G R K A G T V P G Y A Y S E S L K K D S G I T W N V T A L N D D Q W L A N G P N Q			
UniRef90_W1RZU2	R G I A G R K A A S L V P G Y A Y S D A L K K A S G I T W N V T A L N D D Q W L A N G P N Q			
UniRef90_UPI000478D1B2	A G V I G R K V A S R A G Y S Y S A A L S A S H R G L T W D D A R T L D G E W L A S N P F			
UniRef90_J2D5F3	A G V T G R K A A S T G F A Y S S A L K K A S S G L T W D K R L T D M F L A S N P M			
UniRef90_UPI00046EB147	A D V V G R T V A S L P G Y A Y S A A L R Q A H G A Q W D D Q R L T S D W L T S A P D			
UniRef90_UPI00037026E9	N K I V G R K A G A L P E N Y N Y S S M K E A G F V W D Q D K L T R F M L K J A D P K			
UniRef90_V6F780	A G V F G T K A G N Y P E F K Y S D A H K A S G L T W D E A N L S K Y L A D P K			
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UniRef90_G7ZAU8	H G V V G R P A A S V D G F K Y S G P M K E K G L T W T A N E N L D A Y I K A P K			
UniRef90_L0B363	F N V Y C R T A G T E D V S G L S D G L Q N A G I V W N D A N L M R Y M K N P E			
UniRef90_A0BU26	R T V Y L R N G S K K F S N Y S G K D T A Y K F Y W T R K K L W E F L E N N Q N			
UniRef90_UPI0003683020	F K V F G R K S G L I E G Y N Y S E S M K T I D I V W D E Q N L T K F L E N N Q N			
UniRef90_UPI0004774237	G G V V G R A A A S L V P G Y P Y T R A L K A S Q L R W D A A T L T S S F L A A P T			
UniRef90_B8GVJ9	A G V V G R K A A S F P D F Y T Y S A A L K K S G I T W T A D K L D A Y S K A P T			
UniRef90_UPI000299E6D2	T G V L N R K M G S V A D G Y S D T G L Q M A G V N W D K E K I F S W L G N P Q			
UniRef90_M2YE30	G V V G S K A G T A A A G F K Y S P T L V A W G K S W D A N L A A Y L A N P K			
UniRef90_F4WTA4	N G L I G R K T G Q A P G F L Y T D A N K A K D M K Y S			
UniRef90_UPI000262B08E	F G V V G R R A G S V P D Y A Y S D A M K K S Q W T W S D K L R S Y L S Q P S			
UniRef90_Q47YK6	V G V I N R K A A S L P R F A Y S E A L Q K S G L T W T E A N L L R R W M A G N D R			
UniRef90_I1X5E9	N G L D G R T A G T V D R Y R Y S K A V K A G G L R W N T E T L T E Y L R K P R			
UniRef90_R1BLY1	N Q N R Q S Q V A G F K Y T T M F D Y L A N P K			
UniRef90_F0BII5	F G I V N R P A G T V A D F S Y S A D L K P G K G T W S T A S L K D F L K D S K			
UniRef90_UPI000248C902	N G F A S R E L V A G L T P H N D E A N L K Q W I S D P Q			
UniRef90_K9HWZ0	F G V I E R G P G T A E G F K Y S K A A V D A G L T W D D A N L M A Y L E D P T			
UniRef90_A0A022THN4	S G L F E R K S G Q V E G F S Y T D A N K E K G V T W D E Q S A M D V F L S A S P Q			
UniRef90_L7FSE1	H G V V G R I S G S L A G Y A F S E A M V K S R L T W T Q S A Q M D K I Y L S A S P Q			
UniRef90_UPI00039FC390	F G V V G R P A A S V P D Y T Y S D A L K K S H L W T W T P A Q L K I Y L S A S P Q			
UniRef90_A3VLZ3	N G V L N R A A G T F A D Y P Y S D A L R G A G F V W T S G A L K A W M E D N D			
UniRef90_Q07RZ1	T G V I G R K T G T A P G F A Y S P L N K N A Y G V W T Q D L I V Q Y L P D P N			
UniRef90_S9QU48	W Q A V G N R P A H V E G F A Y S P A M K A Y G V L W A E D N L V H Y L L D P T			
UniRef90_UPI00047E365D	T G F G D K E R I A G I L D H N K E N L K K W I H D P Q			
UniRef90_G6YFB5	K G V V G R K A G T A P G Y V Y S S A M K A A G L V W V T N L A E Y L K N P K			
UniRef90_A0LDB7	V D I V E R E V G S S K G F C Y S S P G N K E N P K V W D E V S L Y R F L Y A P Q			
UniRef90_G1XXD9	F G V V G R P A G S I S G Y S Y S P A V Q A K G L V W S E D N I V A Y L A N P H			
UniRef90_M4S503	W G V G R K P A S L T G Y T F S P A L A Q K L Q Q P W T R A T L I A F I T D P R			
UniRef90_A8LI44	N N I V G R A A G I V E D Y D Y S I A L E A S G I V W T P A A L R A W M E D N D			
UniRef90_UPI00047B1A52	E S R L A E E Q G L D R Q W L Y S W I H N S A G M V K S G D A Y A N Q I Y N			
UniRef90_UPI0004781C0E	K G I V G R A P T I S G V P F E R W D E Q S L D Q W L E D P T			
UniRef90_J2J9H0	K G V V G R K A G S L Q G Y N Y S P A M R E E G L V W L A K D L S E F L S K P S			
UniRef90_UPI000464DEF1	W G V I G R E A G A V E D Y R Y S S G M G E A G L V W T E D E F T A Y V Q D P T			
UniRef90_A0A033V5E1	T N F G D R D L I A G Y L K H D E N L K K W I K D P E			
UniRef90_A0DNX0	R N A F L R L G S N K K F N Y S G W D L R A R R L Y W T R K L W D F L Q N P N			
UniRef90_UPI0003689C93	Y G V V G R K A G T E E G F K Y S D A L I E A G E V W T T E D L E H Y I T D P N			
UniRef90_F5LCI3	N G Y A D R E M L A G V L D H N D E N L K K W I K D P N			
UniRef90_P00091	G G V V G R K A G T A A G F T Y S P L N H N S G E V W T A D N I J N Y L N D P Q			
UniRef90_A0A021X8Q8	V G I I D R P A A S L G D Y R Y S E A M K E K G L R W D E A A L S A Y L A G P T			
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UniRef90_UPI000462C23F	N G L D G R K S G S V A G C S Y S D A N K N S G I T W D E S N F L D Y I K E P K			
UniRef90_D2HGH2	H G P F G Q K S G Q A P G F S C T D T N K N K G I T R G E E T L M E Y L G N H K			
UniRef90_A3V2J3	Y G L I G R V L G S N E D F K Y S D A L G E A G E V W N E A N F V G Y V Q D P T			
UniRef90_A9HI09	Y G V P G T A L G D M P E Y E F S A A L A A H K E R W T D D A S S W L E G P			



		90	100	110
UniRef90_H8FWY0	E T I	P G N K M A F G G L K N	P A D V A T V I A Y L	K T L
UniRef90_F8JH86	A V V	P G N N M F S G L P D K K Q R A L I I K F L	A S D T	
UniRef90_W1RZU2	A M V	K G T K M P F P G L S D P A R R K R V I D Y L	A T T L	
UniRef90_UPI000478D1B2	A F A	P G T R M S L S G V P D P A N D R A D I I A W L	K T L	
UniRef90_J2D5F3	T K V	P G T R M S L S V A D A R Q R A D L L A F L		
UniRef90_UPI00046EB147	R Y A	A G T R M S F A G L P D P Q D R A D A I A Y L	H T L	
UniRef90_UPI00037026E9	E V V	S G N K M Q P Y G G V S A E E A G K I V A Y L	Q A A S	
UniRef90_V6F780	G T I	P G N K M V F A G I K N P D D L K A V V A Y V	K G L	
UniRef90_K2LW18	A K K	E R S K M T F K L K K E D E I A D V I E Y L	K	
UniRef90_T2L3N9	E V V	P G T R M T V T V P D D T Q R A A I I D Y L	E	
UniRef90_G7ZAU8	E I V	P G G T M A F A G L K D D A K R A D L I A F L	A E	
UniRef90_L0B363	R Y V	N K I G M N F S G L P K F Q D R V D V V H F L	R D L T	
UniRef90_A0BU26	K M F	P D T N M Q L D G V K D P F M L A S V I D Y L	Q	
UniRef90_UPI0003683020	A V V	P G T R M F I S P M S K N D I Q D L I L Y L	K K	
UniRef90_UPI0004774237	R Q V	P G T A M T V A V P D A A E R D A L I A F L	A T	
UniRef90_B8GVJ9	K V V	P G T K M L L G A P N D A E R A A V I A Y L	A S V	
UniRef90_UPI000299E6D2	S Y I	R S T R M S V K L S D E Q A R R D V I A Y L	A T	
UniRef90_M2YE30	E T I	P G N K M V F A G T K N P D D V A A L I A Y M	K T L	
UniRef90_F4WTA4				
UniRef90_UPI000262B08E	K A L	P G G K M K Y D G L D D A K Q L Q D L I A Y L	H S L	
UniRef90_Q47YK6	I L V	P G T R M R H V Q I L T D L A E Q N Y L L A Y L	K S L	
UniRef90_I1X5E9	A F L	K G T R M S F A G M K D A D Q L A E L V A W L		
UniRef90_R1BLY1	K Y I	K G T N M A F P G F K K E K D R A D C V A Y L	N T	
UniRef90_F0BII5	A T F	P G N K M K Y E G L E D E K E L D A L I A Y L	N T L	
UniRef90_UPI000248C902	S V K	P N T K M P Q V G L K D D Q I N D V I K Y L	N S L	
UniRef90_K9HWZ0	A H L	A R S K M T F K L K P E D D R Q N V I A Y M	K T L	
UniRef90_A0A022THN4				
UniRef90_L7FSE1	S L V	P G N A M P Y G A V S D P A E R A A I T C K L	A N S N N	
UniRef90_UPI00039FC390	S A I	P G T K M K Y D G L E D P K E L D A L I A Y L	N T L	
UniRef90_A3VLZ3	G F L	P G T K M R H V G I D D P T V Q D F I V T Y L	A S L T	
UniRef90_Q07RZ1	A F L	K G T K M T F K L A D E K Q R K D V A A Y I A T		
UniRef90_S9QU48	T H L	A R S K M A Y K V R D E G Q A R D I A A Y L	A T	
UniRef90_UPI00047E365D	K V K	P G N N M P F G G K L S D E D I D A V A D Y L	M S L	
UniRef90_G6YFB5	K K V	P A N K M G F P G L K N P D D I K N V I A Y L	K S V S	
UniRef90_A0LDB7	S H I	P H T R M L F R G V R D D Y K R A A L I G H L	K R L	
UniRef90_G1XXD9	K Y L	G D N K M P F S L A D E Q Q R R D V A Y L	K S L	
UniRef90_M4S503	K I A	P G N R M A Y A G Q K D P A V A A A L A D Y M L	S L	
UniRef90_A8LIG4	G F M	P G T K M R H V G I E D R T V Q D F I I A Y L	T S I S	
UniRef90_UPI00047B1A52	E Y N	G T A M T A F P Q L S E Q Q I D D I L A Y		
UniRef90_UPI0004781C0E	G I K	P N T L M L I P G I K S A K E R S A I I E Y L	K Q	
UniRef90_J2J9H0	R K L	P G T T M R F S G L W G I E I D D L V S Y L	E	
UniRef90_UPI000464DEF1	G Y L	A R G K M S F R L R D E E D A A D I W A W L	A S V S	
UniRef90_A0A033V5E1	S V K	P G N K M T G Q Y K V S D E D I D A L S A Y L	M E	
UniRef90_A0DNX0	K M F	L D T N M Q F D G I Q D P R T L G S I I D Y M	Q Y L T	
UniRef90_UPI0003689C93	K Y V	E K T K M T F K M A K N Q A D V V A F L	A Q H S	
UniRef90_F5LCI3	S E K	P G T L M P K V P L E D N Q V N E L V K Y L	N S L	
UniRef90_P00091	A F L	K K T K M T F K L A N E Q Q R K D V A Y L	A T L	
UniRef90_A0A021X8Q8	K M I	P K T R M A F S G L K P G D A D D V I A Y L	R S L	
UniRef90_M9RIF9	G W L	R G A K M A Y R V R D A Q D A I D I Y A Y L	A T F G A	
UniRef90_UPI000462C23F	A R V	P N T K M A F A G I K N E		
UniRef90_D2HGH2	K S I	P G T K M V F T G I K K T G E K A D M I A D L	N K A T	
UniRef90_A3V2J3	G W I	A R G K M A Y Q V R A E Q D A Y D L Y A Y L	A T F S	
UniRef90_A9HIV3	R F A	P G T R M A F P G V A D A A D R A A I I A F L	H T L S	
UniRef90_G6EB33	K M V	P G T K M V I S Q P N A A K R K E I I D Y L	E T L	
UniRef90_B9NTA3	A F L	K K S K M T F K L R K G G E D V Y A Y L	V S V S	
UniRef90_A3SJR0	G F V	K G A R T R M T Q K L K A E D A A D V A A W L	A S V	
UniRef90_D7BAM6	G M K	P G S L M P P F P Q L S A E D A R S I A A Y L	E S L	
UniRef90_D7CV76	A I K	P G S Y M P T L W A P D D A E I A A L V A Y L	H S L	
UniRef90_B2V5W3	E S T	K N P K L A M P P M L S D E D V A N I I A Y L	S S V	
UniRef90_D3PP67	G M K	P G V K M P A F P N L S D E D V K A I A A Y L	M S	
UniRef90_Q00499	P W L	A K T K M T F K L G K N Q A D V V A F L	A Q H S	
UniRef90_P86320	G Y K	A R G A M T H K V R K E D E A V D I Y A Y L	A S L	
UniRef90_A0A017LH5	G F L	R R S K M A F Q V R D E Q E A H D L W A F L	A T F S	
UniRef90_V5I3T4				
UniRef90_G8NDQ5	S M K	P G V K M P G F P Q L S E G D L E A L V R Y L	E G L	
UniRef90_A0A8V2	D P R	A R G L M T Y N A R D P Q E V K D V Y A Y I	S K L S	
UniRef90_X7FE89	A I K	P G A M M P G Y D H L S D D D L S A L A A Y L	E G L T	
UniRef90_A8V421	N K N	P K F A M P M S Q L S D Q Q I A D I I A F L	E T T A N	
UniRef90_A9DZ60	K F L	A K S K M S Y R L K D E E D A K N V W T Y L		
UniRef90_UPI0002F4D069	E Y K	P G N L M P Q P E D L N D Q E L S A L A E Y L	M G L S	
UniRef90_W0DHP7	K V L	P G T M M P V M T G R P E E T A K I I A Y L	R S V S	
UniRef90_U2YZL1	A W L	A R G K M A Y R V R D P Q N A T D I E A Y L	A S L	
UniRef90_J9HQQ2	D F A	P G N G M A F A G I A S G K D R Q D I I A Y L	K	
UniRef90_X0RJ95	S L K	Q G T L M P Y E G Q I N D E D M E A L I A Y L	K S L T	
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G I Y N G S V M T A F G L N L S E T E D I I A S N I V S M Y L L S  
A V K P G T T M P A V L L A A D D E L I R A N I V I A W L G T L  
G I K P G A H M P V V D L N G D E E L I R A N I V I A W L G T L  
T H K P G Y C F M P T M D L T S G P E E L I R A N I V I A W L G T L  
A V K P G N T M P N P K D L S S D E E L I R A N I V I A W L G T L  
H F K Q G S L M P A M Q L S S D E E L I R A N I V I A W L G T L  
A I K P G A Q M P A F G M L P S E E K D I V A A D I V I A W L G T L  
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H I K P A S R M P R V S L T S G E E L I R A N I V I A W L G T L  
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H V K P E N L M P P F E L F T D D E E L I R A N I V I A W L G T L  
V H N Q D S A M P P F G L L S S A A E L I M D I V I A W L G T L  
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