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I L L E N S A P S S F S F K L K A A T D A D E G T N A R I T Y N
V R E N L E V G Y E V L T I R A T D G D A P S N A N M R Y R
S S V S S P L P E D S P L Q G T V V A L F S I R D R D I R V G S K I T Y F
S Q T A Y R A S F D E N V P V G G T R V L S V S A A D A D E G S N G V I T Y S
V E Y R M S I K A N V A K G S L V T Q I R Q A S D P A D A D E G S N G R I T Y S
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Y F V N L L E N S I R G S V V V K L S A V D K D E G S N G K I V Y Y S
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P Y E A F T V E N L P G G S R V I Q I R A S D L D S G T N G Q V M Y S
S Q T L Y Q A R V P E D A P V G A S V L Q V T A A D A D E G T N A D I R Y R
I Y T A T V A E N R D P G E P V I R V S A T D E D S E E N A V V W Y S
V T V Q V F V M E N D N A P V G H V I G K L H A L D A D S G Y N A W L R Y E
T I V I P E N M E P G A S I Y A F Q A S D K D S G T P N S E L V I Y S
F P S D V A V K E D M L V G T N I L K I K A Y D A D S G F N G K V L Y Y A
Y K V R V F E N A P Y A T S V I T V N A T D L D S G L N S E I A Y S
V P Y E M R V S K P E D L P A G Q P I I Q Y T A Q D P D T F L Q Q T L R Y A
Y T V F V K E N N P P G C H I F T V S A R D A D A Q E N A L V S Y S
Y Q A T V P E S I P V G Y S V L T V S A T D L E S N E S I S Y R
G Y L V A K V T A T D A D S G Q N A R L S Y Q
A S D A D V G E N A V L T Y R
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T I S S V T S S I V A E N A P P G T V V I A L F Q V H D R D S G L N G V V T C S
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UniRef90_H3CD58	L	L	S	Q	E	P	K	N	L	F	A	I	N	P	V	T	G	V	I	R	V	N	G	L	D	D	R	E	A	T	E	N	Y	Q	L	K	A	H	A	V		
UniRef90_W5NPX7	F	I	S	E	K	Q	S	P	L	F	Q	L	N	E	N	T	G	E	I	S	T	A	K	R	L	D	D	R	E	K	I	S	M	Y	N	I	L	T	V	A	A	S
UniRef90_UPI0003C11990	F	S	S	D	A	V	T	K	I	L	F	I	D	R	N	T	G	E	I	N	V	E	G	L	D	D	F	E	E	S	N	R	Y	E	F	E	I	E	A	O	S	
UniRef90_W5MK81	L	L	S	G	N	E	R	M	N	F	V	M	D	S	K	T	G	A	I	T	L	S	N	H	V	R	K	Q	R	M	E	P	V	H	S	L	N	V	S	V	S	
UniRef90_UPI00042C6D49	L	D	Q	S	Q	S	V	E	V	F	T	I	N	M	E	T	G	W	I	T	T	L	K	E	L	D	H	E	K	R	D	S	Y	Q	I	K	V	V	A	S		
UniRef90_G1KLE4	G</																																									

UniRef90_UPI000454AB75 D R G D P A R A S T C F L V I H I E D
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UniRef90_K7J800 D L G K P K L S S T A K V I I T V S D
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UniRef90_H3CX61 D S G S P A K H S L V S A F I H V V
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UniRef90_UPI00034F904E D G G G Q A N F A L V P V T I E V R D
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UniRef90_UPI0003C11990 D G A Q I P M L S H C N V V V K V I D
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UniRef90_A0A016V1Z0 D G N G V M S T N N A T V N
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UniRef90_UPI0003EDEAA4 D G G G L S A E C T V I V Q V I D
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UniRef90_UPI0003F07C86 D L G T P R L K T Q H N I T V T V S D
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UniRef90_UPI00045454E6 D R G V V P L Y T T I E V Y V E V D D
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UniRef90_UPI000457256D D R G R P P R S S I A K V T I N V I D
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UniRef90_UPI0001D55C89 D Q G V V P L S S F I E I Y I E V E D
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UniRef90_S9Y236 D H G Q P P L S A T V T L T V A V A D
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UniRef90_UPI00045E14F5	L	L	H	L	P	I	A	S	L	V	S	I	N	A	D	N	G	H	L	F	A	L	R	S	L	D	Y	E	A	L	R	A	F	E	F	R	V	G	A	V	
UniRef90_M4AXU5	I	V	S	G	D	L	Q	Q	Q	F	S	I	H	P	R	N	S	G	E	I	S	V	R	T	A	L	D	R	E	E	L	P	H	Y	S	L	T	V	Q	A	A
UniRef90_W5N063	I	Q	H	L	H	F	R	D	R	K	K	V	H	R	D	N	S	G	M	V	T	N	S	V	L	D	R	E	E	S	R	V	E	Y	N	L	T	V	J	A	K
UniRef90_H3CNT4	I	R	Q	S	D	P	R	D	V	F	S	I	N	R	T	S	G	V	Y	V	N	K	P	L	D	D	Y	E	A	Q	A	F	E	H	L	T	V	S	A	T	
UniRef90_Q9Y5E5	L	L	K	A	T	E	P	G	L	F	G	V	W	A	H	N	G	E	V	R	T	A	R	L	L	S	E	R	D	A	A	K	H	R	L	V	V	L	V	K	
UniRef90_I3J0F1	L	A	V	D	P	V	P	K	L	L	R	P	D	R	S	T	G	L	I	Y	V	K	G	P	L	D	R	E	S	L	S	N	S	F	Y	T	V	I	A	R	
UniRef90_UPI00004A40A9	I	Q	D	D	L	P	F	L	L	K	P	S	V	E	N	F	Y	T	L	V	T	E	S	P	L	D	R	E	S	Q	A	E	N	I	T	I	T	V	A	R	
UniRef90_UPI00042D0434	F	K	S	T	P	G	K	A	K	F	S	L	N	H	N	T	G	L	I	S	I	L	E	P	L	K	R	Q	Q	A	H	F	E	L	E	V	T	T	S		
UniRef90_F6YSE3	I	Q	S	G	N	E	A	R	L	F	F	L	P	H	V	G	Q	L	Y	L	N	A	T	A	S	S	L	I	G	T	E	F	E	W	L	M	I	V	V	T	
UniRef90_I3JHU1	L	E	N	A	G	T	H	F	K	I	R	P	T	S	G	V	I	E	T	T	G	A	F	D	R	E	E	Q	E	F	Y	E	L	V	V	E	A	R			
UniRef90_W5L8U6	L	G	G	G	S	A	R	E	L	F	D	V	D	A	R	T	G	R	V	E	V	R	G	D	V	D	Y	E	E	S	A	L	H	Q	I	Y	V	Q	A	R	
UniRef90_UPI0004540FF4	I	T	S	G	N	P	Q	S	G	F	A	I	H	P	K	T	G	L	I	T	T	T	R	K	L	D	R	E	E	Q	Q	E	H	V	L	E	V	M	V	A	
UniRef90_UPI00045E5889	L	E	P	S	I	D	S	A	L	F	G	I	S	P	Y	T	G	W	I	Y	L	R	R	Q	L	D	Y	E	S	T	K	T	Y	R	F	R	V	F	A	W	
UniRef90_UPI0003333F31																																									
UniRef90_UPI0003945CA0	I	T	G	N	Y	R	G	V	F	A	L	G	L	V	G	G	E	M	Y	V	K	G	P	L	D	R	E	E	C	N	L	Y	N	I	N	T	I	T	A	S	
UniRef90_UPI0003500365	L	T	P	N	P	Y	F	S	L	K	T	R	K	D	G	G	E	L	I	D	K	A	L	D	R	E	E	K	E	Y	H	K	L	N	T	V	T	A	L		
UniRef90_I6MZ87	I	L	P	S	Q	F	S	D	R	F	V	I	N	K	T	T	G	D	I	F	F	S			D	L	A	L	N	Q	S	F	N	L	E	V	V	I	A	E	
UniRef90_UPI00046B32E8	I	S																																							
UniRef90_D6WAG5	F	I	D	S	F	N	N	H	F	K	M	A	S	D	S	G	Y	I	V	T	L	A	K	P	L	D	R	E	E	H	P	E	V	R	F	T	L	T	A	L	
UniRef90_G5BMG8	L	T	P	Q	V	P	F	M	L	V	S	T	F	K	N	Y	I	S	V	L	D	S	A	P	L	D	R	E	T	L	S	D	Y	E	V	V	V	T	A	R	
UniRef90_UPI00032890C4	L	S	L	S	P	S	F	S	L	V	N	K	E	K	Q	D	G	E	L	A	L	E	K	P	L	D	R	E	Q	Q	S	Y	H	R	L	V	L	T	A	V	
UniRef90_B5DIW2	L	G	E	G	K	H	L	T	E	F	E	V	R	S	A	G	E	I	C	I	A	G	E	L	D	D	F	E	R	R	S	Y	E	F	P	V	L	J	A	T	
UniRef90_Q8CE10	L	V	I	E	N	P	L	S	S	Y	V	S	I	N	S	D	T	G	V	L	Y	A	L	Q	S	F	D	Y	E	Q	F	Q	N	L	Q	M	Q	V	K	A	S
UniRef90_H2RZM6	I	V	E	P	F	A	H	N	Y	F	A	I	D	S	N	T	G	A	I	R	I	T	T	A	L	D	Y	E	Q	R	N	A	F	H	F	T	V	Q	V	H	
UniRef90_UPI00044239BB	F	V	D	E	Q	V	E	R	F	F	N	L	D	R	R	T	G	E	I	T	T	K	D	F	D	F	E	Q	R	N	A	F	H	F	T	V	Q	V	H		
UniRef90_UPI0003AB6E0F	I	I	D	G	N	T	D	E	Y	F	A	I	N	E	M	S	G	E	L	S	T	T	R	A	L	D	R	E	Q	V	S	N	F	T	L	A	I	L	C	K	
UniRef90_UPI00042AF30D	I	P	H	D	L	P	F	V	L	K	P	S	V	E	N	E	F	Y	T	L	V	T	E	M	P	L	D	R	E	S	H	S	E	Y	N	I	T	I	T	V	T
UniRef90_F6WDK1	I	E	A	G	N	T	G	N	T	F	K	I	E	P	L	I	G	L	I	T	V	S	K	E	P	D	M	T	T	M	G	Q	F	V	L	S	I	K	V	T	
UniRef90_D2A0X7	L	I	P	G	N	T	S																																		
UniRef90_E0VP03	L	Y	D																																						
UniRef90_H9KTN9	I	T	S	A	N	E	A	R	F	S	V	G	T	I	D	G	L	L	R	V	V	G	K	L	D	R	E	T	V	A	N	Y	S	L	E	E	V	I	A	N	
UniRef90_UPI0003BCF603	M	L	T	S	V	P	Q																																		
UniRef90_F1R1E0	I	T	D	A	S	L	P																																		
UniRef90_D3DP12	L	T	D	E	A	S	G	A	F	T	I	D	P	M	S	G	T	I	K	T	S	N	T	L	D	R	E	A	R	S	Q	H	T	F	S	A	V	A	R		
UniRef90_UPI0003EC2488	F	A																																							
UniRef90_UPI00046B1C31	L	S																																							
UniRef90_H2LWG4	L	T	E	G	D	A	V	G	H	F	E	V	D	S	E	S	G	E	I	M	L	E	G	S	L	D	R	E	K	E	V	A	H	L	L	L	T	A	L		
UniRef90_I3K3L8	L	S	G	E	G	A	M	S	I	F	S	I	D	E	D	T	G	D	I	H	T	K	R	L	D	R	E	Q	Q	A	Y	Y	T	L	R	A	Q	A	R		
UniRef90_E1BJP8	F	P	K	I	T	K	Q	K	I	F	Q	L	D	S	H	T	G	E	L	S	T	L	D	G	L	D	Y	E	E	S	G	Y	E	M	E	V	Q	A	Q		
UniRef90_I3JAH7	M	L	S	G	A	G	K	E	S	F	A	V	I	D	Q	N	S	G	E	I	R	S	K	I	P	F	D	F	E	K	V	N	T	F	S	F	V	A	V	A	V
UniRef90_UPI00046C1DF7	Q	N	A	G	K	S	H	S	A	F	K	I	I	P	L	S	G	E	I	L	I	V	K	P	L	D	F	E	C	I	E	K	Y	E	I	G	V	R	A	T	
UniRef90_UPI00046B592D	F	K	D	R																																					
UniRef90_UPI00034F415F	F	D	D	D	S	A	R	K	I	F	D	I	N	P	T	G	E	I	Y	L	K	G	F	V	D	Y	E	V	T	K	S	Y	E	L	F	V	K	A	I	V	
UniRef90_U3ICD8	L	R	E	G	T	G	L	S	I	F	R	I	E	K	D	T	G	T	I	R	T	I	G	P	L	D	R	E	G	T	S	H	Y	W	L	T	V	L	J	A	L
UniRef90_G3V9R7	I	S	Q	S	S	H	F	H	V	M	R	V	N	D	P	Y	P	E	L	V	L	D	K	V	L	D	Y	E	E	Q	P	E	L	S	N	I	L	T	A	L	
UniRef90_H9FGM4	I	P	G	N	L	P	F	K	V	E	K	L	V	D	N	Y	R	L	V	T	E	R	T	L	D	R	E	L	I	S	G	Y	N	I	T	V	T	A	T		
UniRef90_UPI000350C8AF	I	I	N	K	L	A	D	E	K	F	S	L	D	N	K	G	H	I	T	T	L	Q	K	L	D	R	E	T	E	R	V	I	A	I	K	V	M	A	K		
UniRef90_UPI0003EC411A	V	V	G	S	V	P	F	K	L	K	S	N	Y	K	N	D	Y	S	L	V	V	D	G	P	L	D	R	E	T	T	S	A	Y	N	V	T	I	T	A	T	
UniRef90_W4VVR2	G	G	E	G	H	F	G	L	T	T	S	R	D	N	I	Y	L	V	V	V	E	R	P	L	D	R	E	E	Q	S	V	Y	E	L	S	I	V	E	A	T	
UniRef90_Q9Y5G7	I	P	R	S	L	P																																			
UniRef90_H2M317	F	S	G	G	N	T	D	N	C	F	N	I	D	E	M	Q	T	G	L	I	S	V	F	L	P	M	D	R	E	K	R	D	H	Y	L	N	I	T	I	Y	
UniRef90_U3KF67	I	I	G	G	N	A	E	N	L	F	S	V	E	S	E	T	G	S	L	V	L	N	S	A	L	D	R	E	T	A	T	S	Y	Q	L	V	L	A	S		
UniRef90_E0W399	L	I	T	G	R	H	E	N	L	F	T	I	D	S	K	T	G	W	I	K	I	E	Q	S	L	D	Y	E	N	F	K	S	I	K	L	T	V	M	A	E	
UniRef90_G3QVN8	D	R	D	V	S	A	S	S	F	S	L	N	P	Q	T	G	A	V	H	A	T	R	S	F	D	Y	E	Q	T	Q	T	L	Q	F	E	V	Q	A	R		
UniRef90_F2Z4A3	I	S	G	G	N	D	S	S	C	F	T	I	D	M	E	T	G	V	L	K	V	L	S	P	L	D	R	E	V	M	D	K	Y	T	L	N	I	T	V	I	Y
UniRef90_H9H1R0	L	L	R	A	T	E	P	G	L	F	A	V	G	A	Q	S	G	E	V	R	L	R	R	P	P	T	E	R	D	A	A	K	Q	K	L	V	V	L	V	R	
UniRef90_UPI0003501AD4	L	D	T	S	D	E	D	L	F	Q	I	N	P	T	S	G	V	T	A	K	E	S	I	L	G	L	E	N	Q	V	I	N	F	I	V	I	A	K			
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UniRef90_UPI00045E14F5 D A G S P A L S S
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UniRef90_D3DP12 D C S I Q S R S T T V I I K V Y V T D
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UniRef90_UPI000333D89B D L G T P P L S T L G T V T V S V V
UniRef90_UPI000298BC6E D G G T P A K S G T M T V I V N V L D
UniRef90_UPI00045DAEFA D G G Q P L S A T A T L L
UniRef90_UPI0004571B9E D H G K P S L S A V A R L V I
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UniRef90_W4X2V5	S Y T Y F L S E H A E		R G Q F V T V V T A S D P D Y V D E K L T Y I		
UniRef90_UPI0000F2B4F6			G Y L V T K V V V V D A D S G Q N A W L S Y H		
UniRef90_E2C0G6				I L T V N A T D D D T E E N S R I R Y Y	
UniRef90_M4A1K9	Y T I N M A E N	T P I G T L V V N L N A T D L D E G S N S E I V I A			
UniRef90_U3K0L5	Y T F S A S E	D L P E G S E I G S V K A F A E D P I I Y S L V K G T			
UniRef90_UPI0003AF0FCB		V P E	D A T V G S S V L Q V A A A D A D E G T N A D I R Y R		
UniRef90_G3T1M1	S Y K V T I S E D M	P L K S P I C K V T A T D A D L G Q N A E F Y Y S			
UniRef90_I3N0H4			V G Q V V A K V R A V D A D S G Y N A W L S Y E		
UniRef90_G5BN31			T A V A R V Q A R D A D E G A N G E L A F D		
UniRef90_E9HFS0	P T I E V S F S E S A N T G T R V I L D T A T D G D A G E N D V T T Y E				
UniRef90_F1KPK7	F T V K E G E A	E K L I T T F A A S S N I S S Y G I Q Y G			
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UniRef90_UPI0004549E5E	V T I T S L F S P V N A E D S P A G T V I A L L N V H D S G Q N G E V T C S				
UniRef90_H0YR89	Y R V K V P E N V P P	Y T S I L L H I Q A R S P E G L R L I Y N			
UniRef90_G3W6R2			A F D P D I G M N S L Q N Y Q		
UniRef90_W2T4I0	N Y S A S I P E	D I P V G T S F M Q V S A I D L I G N N G I V D Y F			
UniRef90_N6UFF5	V V Y E A F L K E N R	P E G E L L C Q V V A K D R D S P R N A I I V Y S			
UniRef90_UPI000440E0BD	P V E I S E S	A A V G T R V P L D S A T D L D T G E N G L H S Y S			
UniRef90_UPI000393E36B		E D V P V G T I V A Q V T A S D L D S G Q N G R F S Y S			
UniRef90_G3WR61	V E V P E S	I P V G S L V T R V H A H D R D S G P A L V F S			
UniRef90_UPI000333FEC9	T V S E D D P P G G V I A I L S T T D A D S E E I N R Q V T Y F				
UniRef90_F7GZT7	T V T E N C E A	G T S I V T V K A F A P D S M O D S M K Y S			
UniRef90_UPI0003C2AEC7	T V P E D A S P	G K L I I Q I S A T D A D I R S N A E I T Y Y			
UniRef90_UPI00029D660A		G Y L V T K V V A V D A D S G H N A W L S Y H			
UniRef90_G3PXB2	Y N V S I P E H	G D V G S C F L Q V V A T D A D G P E F S E L L Y S			
UniRef90_UPI0004545AC1	L E I S E S V N P G M R T I L E	S A K D P D I G V N S L S K Y Q			
UniRef90_UPI0003C26A8B	N A P V F E K A N C N G S	I P Q D V A M V S A I D I D E L Q R H V K Y E			
UniRef90_UPI000440BB7A	Y S I S I H A N V R	V G T N I L R V N A T D P D D G R N G Q V E Y S			
UniRef90_UPI0002C32094		Q I P E N S	P E T V V A V S V S D L D S E E N G K I C Y		
UniRef90_A4KCN7	S F I S N E T L K I A E S A A V E G T R F P L E S A H D P D V G S N S L K L Y T				
UniRef90_UPI000388AE92	Y T F S V P E	D V P E G S V G T V K A R E P L N T F E V I S Y T			
UniRef90_I3LJ26	S Y S V Y L P E N N L	R G M S I F S V S A H D P D S D E N A R V V Y S			
UniRef90_G3UEW0	Y K V Q V R E D S	P I G F L I V R V S A T D I D I G A N A Q I S Y S			
UniRef90_UPI000457566E		G Y L V A K V T A T D A D S G Q N A R L S Y Q			
UniRef90_UPI000441B18E	N Y S I I I Q E N K	P I G Y N I Q Q L V V T D K D S S H N G P F L F T			
UniRef90_UPI000333A693		S I P E N S P E T V V A V F T V F D S D S G D N G K M I C S			
UniRef90_UPI0003502BFC	V T S I T T P I S E D S	P S G T V V A L I E A H D V D S G E N G E V D C Q			
UniRef90_UPI0004446CBD	Q F Y L S E N N A A	G G T I F S V S A T D I D M N E N E A I S Y H			
UniRef90_A7S3G3	Y S A K V D E N S A	L G T F V L Q V F A T D R D S G T N A Q I K Y S			
UniRef90_F1KPG5		P P G S E I I R I E A K D S A G R Y G H I N Y			
UniRef90_L5LCY6	Y S T S I S E N N P N	I T K V A I V N A I G N R L N E P L K Y S			
UniRef90_G5C697	S V L E G A R P	G T S V M Q V T A T D E D D A I N G V V A Y S			
UniRef90_S7NNQ0	S V S E	D V L V G T E I L Q V Y A A S R D I E A N A D I T Y S			
UniRef90_W5KRT4	S Y E A F V V I E N N T	P G L S I F T V K A S D A D S N Q N A R V S Y I			
UniRef90_UPI000273C9A5	F P Q S I D I L E G	V P I N T T V A L A A F D Q A G F N G K L V I V			
UniRef90_H2THC0	Y V V Q V P E D M A P N	T E I L Q V T A T D Q D R G S N A V V H F S			
UniRef90_UPI0004542F9B		E N A R N	G T L V V R L N A S D L D E G S N S Q I L Y S		
UniRef90_S9WLA4		G S E I I S L A T A D R D S G V Y G T V A Y E			
UniRef90_UPI0003443A2C			P E A F D P D I G V N S L O G Y Q		
UniRef90_H2S049	W V I P E I N V A E N H K G P Y P L K I	S Q I R S N D K L K K I F Y S I T G P			
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UniRef90_UPI00022F5EE1	V Y V T S V K E E N	T V N V E I L R L T V Q D K D N S P N W R A N Y T			
UniRef90_Q7QL19		S V P E	I N A I G S E I L K V L A T S K D T G I N A E I T Y S		
UniRef90_W5L618		L K E N N V P G F	Q V L T L E A R D I D L D L S G K V S Y S		
UniRef90_B0YN97	T S L F S P K E N G E D A L P	G T V V A V I S A A D R D S G A N G Q I Q C Q			
UniRef90_L5M4Y2	T F Y V K E N L Q P	N S P V G M V T V M D A D K G R N A E M S L Y			
UniRef90_UPI0003318D4F	S Y S T Y I P E N S	P R G A S I F C V T A Q D P D S I E N A Q V N Y A			
UniRef90_UPI0003599EED	T V T S S V N S V P E N S	P S G T V I A L L N V Q D Q D S G E N G Q V T C F			
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UniRef90_V8P817	Y Q A T I S E	L A P N L T Q V L R V S A S D V D E G N G L I H Y S			
UniRef90_UPI0003C12387	Y S V E I P E N	I Q L H T P V V H V Q A N S P E G L R V I Y S			
UniRef90_UPI000332FBB5		E N T P I G T T V M S V A V D P D D G E N G Y V T Y S			
UniRef90_G1U6D4	S I S V P E N N S P	G T Q L T K I S A T D A D S G R N A E I N Y L			
UniRef90_L5JWY1	S Q A I Y H T Q A P E N S Q	V G S T I A K V S A E D V D S G V Y A D I S Y S			
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UniRef90_W5MF91	V Y E V N V D E D A D V G F A	V V T V S A N D D D E G A N A K L R Y Q			
UniRef90_B4MDC5	S Y S S E I L L E N V L	V G K E V V T V S A K D I D S G N N G L I E F S			
UniRef90_R4GJ27		N R S G S F P G V I G R I P A R D P D V S D S L T Y S			
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UniRef90_UPI0004546714	T I K M P E S	A T I G S T F L I E N V Q D L D I G S N S L Q E Y S			
UniRef90_Q9Y5G5	S L F S P	V L E N S L P G T V I A F L S V H D Q D S G K N G Q V V C Y			
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UniRef90_A0A044VDP4			L A R F V A T D K D S G D N G R I S Y Q		
UniRef90_UPI000203A36A		T F F E N S P D T F I M E M T A V D L D D T N V G L N A L T Y R			
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UniRef90_L5L2L1	V Y R V Q L S E F S P P	G S R V V M V K V T R A F P N			
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UniRef90_F1QFP4	Y E A F V V I E N N T P	G L S I F T V K A S D A D W N Q N A R V S Y I			
UniRef90_UPI00045750E4	V S Y T A S V G E	D T P L R S S V A K V T A T D A I G S N G E F Y A			
UniRef90_UPI0004575242			T F I A L V R V T D P D S G E P G S L K C S		
UniRef90_F7CS68			G V G E Q I T T V S A I D A D E L Q L V R Y Q		

		50	60	70	80																																					
UniRef90_F7HPN4	I	S	P	N	S	Y	F	R	V	L	T	R	K	R	S	D	G	E	L	V	L	D	K	A	L	D	R	E	A	E	A	E	L	R	L	T	L	T	A	L	80	
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UniRef90_W4X2V5	I	V	G	G	N	E	D	Q	Q	T	Y	N	S	D	Q	S	T	G	L	S	L	I	N	M	Q	N	F	G	E	Q	K	L	S	M	L	N	V	S	V	T		
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UniRef90_G3WR61	F	T	K	G	N	P	G	N	K	F	T	I	D	H	N	T	G	A	V	I	L	A	K	P	L	D	F	E	E	G	H	E	Y	E	L	L	V	E	V	S		
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UniRef90_UPI0003C2AEC7	M	L	H	G	T	G	A	E	K	F	K	L	S	P	D	T	G	E	L	K	T	L	M	P	L	D	R	E	Q	Q	A	V	Y	N	L	L	V	K	A	T		
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UniRef90_I3LJ26	I	Q	G	T	P	L	S	S	Y	V	S	I	N	S	D	T	G	V	L	Y	A	L	R	S	F	D	Y	E	Q	F	R	D	L	H	L	R	V	I	A	S		
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UniRef90_Q7QL19	I	I	G	N	E	H																																				

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

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

		50	60	70	80																																						
UniRef90_M7BTC6	L	T	S	S	E	H	F	T	L	D	L	Q	K	N	E	L	V	L	K	K	P	L	D	R	E	E	T	A	M	H	R	L	L	T	A	T							
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UniRef90_UPI0003EC11FA	L	R	S	D	R	L	P	L	E	M	F	H	I	D	P	V	M	G	V	L	T	V	K	A	N	V	D	R	E	E	Y	T	A	F	E	N	I	T	R	A	E	V	
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UniRef90_E7F284	I	M	Q	R	D	G	A	S	P	F	T	I	S	N	A	S	T	G	V	I	S	T	A	V	S	F	D	R	E	K	R	M	R	Y	E	L	S	V	E	A	C		
UniRef90_B0W5P8	L	K	E	G	D	T	D	F	F	K	I	N	A	S	T	G	V	I	S	T	A	V	S	F	D	R	E	K	R	M	R	Y	E	L	S	V	E	A	C				
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UniRef90_R7VDI9	S	V	D	L	L	Y	P	A	M	F	Q	V	H	P	E	S	G	T	L	R	N	L	Q	E	F	D	R	E	K	R	M	R	Y	E	L	S	V	E	A	C			
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UniRef90_H2T3Z7	I	I	N	D	F	N	L	N	F	S	I	N	G	S	T	G	T	I	Y	V	L	R	S	L	D	R	E	E	D	R	Y	L	V	V	E	A	R						
UniRef90_F1LPE5	I	A	A	G	N	E	D	K	N	F	S	I	Q	P	D	G	R	L	I	V	L	R	D	L	D	R	E	T	E	A	F	S	F	I	V	K	A	S					
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UniRef90_UPI00027FC4F9	L	K	G	E	D	T	D	F	F	K	I	N	A	S	T	G	V	I	S	L	L	R	A	L	D	R	E	M	Q	A	E	Y	L	T	L	V	J	A	M				
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UniRef90_U3I6I5	L	S	S	Q	H	A	Y	F	K	V	N	R	T	T	G	A	V	I	K	K	V	D	F	D	D	G	R	D	I	S	L	V	I	A	A	S							
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UniRef90_K7FN34	I	V	S	G	D	E	D	S	Y	F	M	L	D	G	Y	G	Q	I	T	L	V	K	P	L	D	R	E	N	K	D	N	H	L	I	G	V	L	A	E				
UniRef90_F1PAT8	I	S	G	G	N	D	Y	A	F	S	M	E	Y	D	T	G	M	L	T	L	T	N	K	F	S	S	D	I	S	K	V	Y	K	L	N	L	T	A	S				
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UniRef90_UPI00027FC4F9	L	K	G	E	D	T	D	F	F	K	I	N	A	S	T	G	V	I	S	L	L	R	A	L	D	R	E	M	Q	A	E	Y	L	T	L	V	J	A	M				
UniRef90_L9L2G8	V	L	D	G	L	P	F	F	S	V	D	P	Q	T	G	V	V	R	T	A	I	P	M	D	R	E	T	Q	E	E	F	L	V	I	Q	A	K						
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UniRef90_U3I6I5	I	L	S	S	E	G	F	S	I	D	H	K	N	G	S	V	F	T	T	K	P	M	S	Q	L	K	N	N	I	H	L	L	I	A	A	M							
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UniRef90_H2U8Q6	I	T	Q	G																																							
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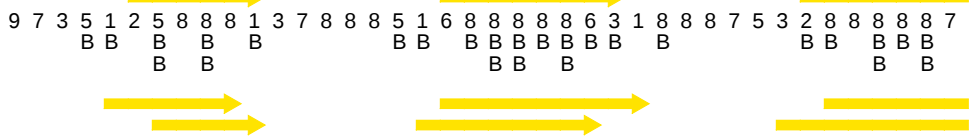
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UniRef90_UPI0003F06416	I	T	G	N	I	G	S	F	E	I			N	N	T	G	E	V		F	A	I	A	D	L	D	R	E	I	T	P													
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UniRef90_UPI0003F07501 L T M L E N S P G T T V A D V G D I V A E D S D E G S D G I V I T Y S
UniRef90_UPI000359CA01 N Y D T T I Y E D L D A G T S L F T L E A E D L D G T D V N F V I S R
UniRef90_F2TZ07 V G E N E P V G T E V A Q V K L S A A T E Q S H E Q Y T F S
UniRef90_UPI0002B47A53 F H V P E D L E L G Q F A F Q L Q A Y D L D N D P L T Y Q
UniRef90_D0NE00 F E I A E N P A I G T M I G E L T A T D P D D Q I T F E L A F P
UniRef90_UPI0003EC5848 I H L K E E A E P G K V L F K P K V Q D V D S N I T R Y
UniRef90_UPI00035A1251 I T I P E N L A P G T S A G K L E A T D L D L G A A G T V S Y S
UniRef90_U3E955 Y T V H V Q E N Q I M E H L P L V P N I T D D D A T E G N R L R Y E
UniRef90_V3ZIH1 I K A T D A D E P P N N V V R Y E
UniRef90_T1HAK4 P V E V S E G A A V G I P L E V P V D E D V G A N G L Q S V R
UniRef90_L9K798 F Q A K V S E D V A I G T K V G N V T A K D P E G L D I S Y S
UniRef90_E7EN24 N Q S F P I D E N S K K G T F V G R V I A T D P D S N S W Q I I D G
UniRef90_K9RDG3 S Y S V T I D E N F P V G G S I I D L N A T D A D G E I V T Y K
UniRef90_UPI0003594C55 V P Y N T E L Y E N T T V G D V I Y R V Y A S D A D S G S N S Q M V I F S
UniRef90_UPI0001CBADC4 P A P T S I S E L I A V G T T V L R A S A T D R D I G A S G N V Q F F
UniRef90_C3YFV1 T P Y E T S I S E L I P I G S T I F D I R A L D P D A G V N G L A E Y F
UniRef90_G6D2C9 R E E L N P I I V T P P I Q A I D Q D R N I G I L L Y S I L V
UniRef90_UPI000273D8EC P Y S A E V S E A A E I G D S V T N V T A I D G D T G D T V S Y E
UniRef90_W4YZ09 S Y S A Y I L E N N L R G A S I F S L T A H D P D S Q E N A Q V T Y S
UniRef90_Q207L4 T V A E N S P A G T V V G T L S D T D P D A G D G A A F T S I V S Q
UniRef90_H9FG19 T T A S F D E N A T G T V Y T A V A A D P D N S T I I Y S
UniRef90_Q89NW9
UniRef90_Q0ALR4

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm



	1	0	7	8	8	8	7	3	2	8	8	7	1	6	8	8	0	5	8	9	8	8	6	1	5	7	7	7	4	0	6	8	8	8	8	9	9	8
lupas_21																																						
lupas_14																																						
lupas_28																																						
jnet	→								→								→													→								
conf	1	0	7	8	8	8	7	3	2	8	8	7	1	6	8	8	0	5	8	9	8	8	6	1	5	7	7	7	4	0	6	8	8	8	8	9	9	8
sol25	B	B							B	B	B	B			B	B	B	B	B	B	B	B	6	1	B	B	B	B	B	0	B	B	B	B	B	B	B	B
sol5										B		B					B	B	B	B	B				B									B	B	B	B	B
sol0																		B							B										B		B	
jhmm	→								→								→													→								
jpssm	→								→								→													→								

