

1 10 20 30 40

QUERY	UniRef90_UPI0002E1D8FF	UniRef90_I3BTX3	UniRef90_D3FXY3	UniRef90_F8ABQ3	UniRef90_Q8EN41	UniRef90_V6M9G7	UniRef90_L0E0Y0	UniRef90_S6AEX6	UniRef90_M7P6T5	UniRef90UPI00037CC676	UniRef90_V6MGF9	UniRef90UPI00037B5423	UniRef90_I3BTB7	UniRef90_U5LFD7	UniRef90_S5Z686	UniRef90UPI000473E8C5	UniRef90_Q2W913	UniRef90_W4BGM8	UniRef90_W7LB30	UniRef90_E6W162	UniRef90UPI000366EC00	UniRef90_V4IK55	UniRef90UPI0004779F9E	UniRef90_X2GTD6	UniRef90UPI00030914B8	UniRef90UPI00046EBC0C	UniRef90UPI00035FFDA0	UniRef90_K2FMD9	UniRef90_W5YMG8	UniRef90_I3CIZ9	UniRef90_B5EMQ1	UniRef90_G0AJ60	UniRef90UPI0003B3326B	UniRef90UPI00034A25C3	UniRef90_F5SJW6	UniRef90_R9BYK7	UniRef90UPI00047BC85A	UniRef90_E0RLE7	UniRef90_F8GLC4	UniRef90_H5WQS3	UniRef90_B4SEA0	UniRef90_P54433	UniRef90_H8WD67	UniRef90UPI00037DE97A	UniRef90UPI0002E9EE18	UniRef90_P54436	UniRef90UPI00047CF4	UniRef90_W6KA82	UniRef90UPI0003B7A214	UniRef90UPI0001E89C64	UniRef90UPI00034D27BD	UniRef90_A4EQT8	UniRef90_M1F8J5	UniRef90_E5WEV5	UniRef90UPI0004741D53	UniRef90UPI0003656A69	UniRef90_D9SCE7	UniRef90UPI0004269A17	UniRef90_A8FP60	UniRef90_J8JLM1	UniRef90UPI000473E070	UniRef90_H5TAL0	UniRef90_W0SI79	UniRef90_V9VTM1	UniRef90_R0DYY3	UniRef90UPI00047A9161	UniRef90_A6GT94	UniRef90_E7RJM1	UniRef90_A4A3J2	UniRef90_B8D132	UniRef90_E7RJM3	UniRef90_R9CTL4	UniRef90_Q8EN39	UniRef90_A1SKU9	UniRef90_Q15MV9	UniRef90_B6IRB1	UniRef90UPI000361F90C	UniRef90_X2GXTO	UniRef90UPI0003FFFFAF	UniRef90_H6CJ83	UniRef90UPI0003167AE3	UniRef90_F2FA59	UniRef90_B7GG08	UniRef90UPI000373EE3A	UniRef90UPI000370A880	UniRef90_L0EKL4	UniRef90_W0H6H6	UniRef90UPI00042273E3	UniRef90_Q1LQ79	UniRef90_I8U913	UniRef90_Q3B6V8
	L F S S P D H T L D A [L] G L R C P E P V M M V R K T V R N M Q P G E T L L I I A	T I T P D K V L D T S G L N C C P L P V L K T K K A L E E L Q P G Q I L L E V I S	M S T A T Q T L D A R G L L N C C P L P V I L R T K K A L N S L L Q T G D T L Q I Q A	M T I K A D H V L D A K G L L S C C P M P V K T K K A L D G L I E P G Q V L E V Q A	K A D V T L D C K G L L S C C P M P V L K T K K A I Q K M E K G Q I L E V L G	V K V L D A K G L L A C C P M P V R T K K A I G E I N S G E I I I E I L A	T I P D K V L D C K G L L A C C P M P V K T K K A I E Q M E A G Q V L E M Q A	M A N F D Q E L D A S G L L N C C P L P V L R A K K T L A A M E A G Q V L H I I A	N Y D K E L D A R G L L N C C P L P V I L R T K K A L A E I S A G Q V L K V A A	M E N V A K T L D A K G L L A C C P M P V V R V K K A I E E L S A G E I I L E V V V	E A E K F I D A K G L L A C C P M P V V R V K K A I N E M E S G Q I L E V H A	N S T K I I D A K G L L A C C P M P V I V R V K K A M D E L A P G E I I L E V H A	M M N A N K V L D A K G L L A C C P M P V K T K K A M E E L A S G E I I L E I I A	M S D F K Q E L D A R G L L N C C P L P V I L R T K K A I I N G L A S G E V L L K V I A	N S N K V L D A K G L L A C C P M P V K T K K A I I G E L E S G Q I V L E E V L A	N A T K V L D A K G L L A C C P M P V I V R A K K A M D E L Q S G E V L E V H T	Q F N K E L D A R G L L N C C P L P V I L R T K K A L A E M L T G Q V L H V I A	M S N T V L D V K G L L N C C P L P V I V R T K K Q E M K G M E A G Q V L L E I H T	K T N F T V D A K G L L A C C P M P V I V R T K K A I I N D L N P G E V L L V I A	F S A P D H T L D A L G L P C P E P V M M V R K T V R Q M Q A G E T L L I I A	M S I T A N E V L D A K G L L A C C P M P V I V R T K K A I I T N L E A G Q V M E V Q A	K A D L V L D A K G L L S C C P M P V I L R T K K E I I G K I I Q A G Q V L V Q D G	P D Q V M D A C G F C C P E P V M M L L H N R V R E L Q A G Q V L L E V L A	M S I K A D F Q L D A K G L L S C C P M P V I V R T K K A M A E L A D G Q I L L E V S A	N A D K L L D A Q G L L A C C P M P V I V R T K K A M N D M E T G Q V L L E I H A	L F S Q A N H T L D T L G L R C C P E P V M M V R K T I R H M Q E G E T L L I I V A	Q F K D K D L D A R N L N C C P L P V I V R T K K A L N E L T A E Q V L K I T A	M S I T T D M Q L D A K G L L A C C P M P V I V R T K K T K T M K D L E A G Q V L L E V Q A	E F F D A E L D A R G L L F C C P E P V M M L L H N R I N D V E P G H L L R V V I A	M V E F T K E L D A S G L L N C C P L P V I L R A K K V L N T M Q L G E V L L H V L T	M V Q E D K V L D A R G L L N C C P L P V I L R T K K A L G E L T S G Q V L K V V I A	M V M E F N K E L D A R G L L H C C P L P V I L R T K K A L A D M L S G E V L R V L A	M S I K V D V Q L D C K R L S C C P M P V I V R T K K M M D Q L E P G Q V I E L Q A	M S I K A D V V V D A K G L L A C C P M P V I V R T K K A M A E L L E P G K V M E V Q A	K A D L T V D A K G L L S C C P M P V I V R A K K G I D D Q L N A G E V V M E L I T	E A T K V L D A K G L L A C C P M P V I V R T K K T M K T L E P G Q V V I E V Q A	Q A D H I L D C K G L L A C C P M P V I V R T K K K A M N E L V P G K I M E V Q A	M Q K I D K E L D A R G L L V C C P L P V I L R T K Q S L A G M T S G Q T L K I V I A	N F D K E F D A S G L L A C C P M P V I V R T K K S L A D M A S G Q V L V K V L A	M S E T A N I E L N C E G L L N C C P L P V I L R T K K A I I D S L L N S G E I I L K M T A	M M K A T I V L D A K G L L A C C P M P V I V R T K K K R M K D L K A G E V L E I H A	M L I M A D R T L D A S G L L R C C P M P V I L R T K K T L E N L S M T P G E E L V V V A	K F D Q E L D C K G L L R C C P M P V I V R T K K T M D G M S S G D V L K M I S	N A N K I L D A Q G L L R C C P E P V M M V R K T I R T M Q E G E V L L V T A	K S D K V L D A K G L L A C C P M P V I V R T K K A M N E L E S G Q I L E V H A	M E V T V N R V L D A R G L L N C C P L P V I L R T K K A M M N S L D P G Q I M E I Q A	V E L D T K G L L N C C P L P V I L R A K K Q A L G Q L I E P G Q V L L E V L C	N V N K V L D A K G L L A C C P M P V I V R T K K A L N E V V N V G E I I L V I T	F D Q A D H V L D A M G L R C C P E P V M M V R G T V R K M R Q G E T L L I I T A	M S D F D A T L D A I G L L N C C P L P V I V R T K K R K R L Q A L G P G D V L Q I L A	M E N P D A E L D A R G L Y C C P E P V M M L L H S R I L D V P A G G I L R V T A	N A A K V L D A K G L L A C C P M P V I V R T K K A L G E I E S G Q V L L E V H T	K A N V L D A K G L L A C C P M P V I V R T K K A M N D V E A G Q V L L E V V Q A	M S E E N T Q E L D T L G L R C C P E P V M M I R K T V R K M Q P G E L L A V I I A	M T M F D V E L D A R R R V C C P L P V I L R T K K S L S A M S S G Q V L L R I L A	D F D R E L D V K G L L N C C P L P V I L R T K K A L A E M T S G Q V L L K V L A	F S E A Q H Q L D A I G L L R C C P E P V M M V R K S V R K M A Q G E T L L I I A	M S I K V D T H D C K G L L A C C P M P V I V R T K K A M G A L Q S G Q V I E I E A	N V T K Q L D A K G L L A C C P M P V I V R T K K A M M N E L Q T G E V L L E V I A	F S K A D K H L D A L G L R C C P E P V M M I R Q V V R N M Q Q G E T L L I I V A	N F D K E L D A R G L L N C C P L P V I L R A K K S L A E L Q P G Q V L L R I I I A	M T E I K E T L D A I G L L C C P L P V I L R A K R K R L K S L E P P G H V L L Q L L A	M T D F D A T L D A I G L L C C P L P V I L R A K R K R L E P P L G E G V V R I L A	Q V D L S D C K G L L A C C P M P V I V R T K K A I E S V V Q S G Q V V V E V Q A	N F D R E V D A S G L L N C C P L P V I L R T K K A L A E M Q S S G Q V V L K V T S	M V Q I D F T L D A K G L L A C C P M P V I V R T K K T M K S M D S G K V L E I L A	E N A V A T L D A R G L L N C C P E P V M M L L H K A V A E L A A G E R L L V L A	M S S N R V K L D A C G L L Q C C P G P V M Q V Y H K M E E L L K D G D I L E V T A	N A T K V L D A K G L L A C C P M P V I V K T R K E M K T M E S G E V L L E E I L A	Q V N A V V D V L S C C P M P V I V K L K K A I E Q L D S G Q I L E I E I H V	K T D H Q V D A K G L L A C C P M P V I V K T K K A M N N V K A G E I I I M L V E A	M E H Q I S L T I D A K G K K C C P M P V I V L L T S K G I K Q I A A G E I I M L V E A	M T S N A N H Q L D A I G L R C C P E P V M M V R L S I R N M Q L G E T L L A I S A	D A D R S L D C T G L V C C P L P V I V L R A R K V L S G M A P G Q V L V A V S A	D K V D A E V D A R G M N C C P L P V I L R A K K K A L S A M Q S G Q V V L R V L A	N S N L Q I D A K G L L S C C P M P V I V K T K K A M D T L L A S G E I I L E V Q V	T I K S D S V L D A K G L L A C C P M P V I V K T K K A M K D V G A G Q V V I E V Q A	M S S N A D Y I L D C K G L L A C C P M P V I V K T K K V M K E L K A G G Q V M E V Q A	N I A K V L D A K G L L A C C P M P V I V K T K K A M N E I E S G Q V V L E I H A	N I T Q T L D A K G L L A C C P M P V I V K T K K A I D K I I N S G E V L L E V L V	M N V Q A T T T L D A C C P G P V M K V Y Q T M E Q L K D G D V L L E V V K A	E F D K E I D A R N L N C C P L P V I V L R C K K G L L S E I E A T Q T L K V L I A	K A D S K L D T S G K C C P M P V I V V E T N V A L K K I I M K P G E V L L E V V R A	Q T D R V L E C E R L S C C P M P V I V V K T K K A M E E M K P G E V L L E E V R A	M S E P D A T L D A S G L L N C C P E P V M M L L H Q K V V R D L H A G G L L K V I A	E S N K V L D A A E G L L A C C P M P V I V V K A K K E I D N L N A G D I I L E I H A	L F Q Q A D H T L D A L G L R C C P E P V M L V R L Q I R K M Q A G E T L L I I L A	M S A A A A T E L D C K G L L N C C P L P V I V L K T K K A I D A L Q S G E V L K M M A			

50            60            70

QUERY			
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UniRef90_F8ABQ3	T D P G S R N D L P G W C E R A G H E	G E R E D A G F I R F Y I K K G	
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UniRef90UPI00037B5423	T D K G A K N D L S A W A T S G G H E	N N T E E D G V L K F W I K K G	
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UniRef90_B5EMQ1	T D P G A V K D F E A F A K Q T K N P	E Q A E A A G E F I F F I Q K A	
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UniRef90F5SJW6	T D P G S V K D F Q S W V K Q T N H E	H R E E E G G V Y T F Y V V K K A	
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1            10            20            30            40

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

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UniRef90_E0ID42	T D P S T L R D I P K F C C L F L G H E L I E Q Q Q T E K N Y I F Y I R K A	
UniRef90_C0ZH88	T D K G S L N D F T A W V V K Q T G N E L V S H E V E N G V Y K F L V K K	
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UniRef90_K9DR2	T D Q G A K A D V I A W S K S T G H E L L E Q K E E G G V L T F W I K K	
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UniRef90_UP1000373B0A	T D P G S I E D F A V F C C R A T G H L I E Q Q T S G P V H R F L I R K A	
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UniRef90_UP10003B5E76D	D D P G S K N D I P P G W S G K G G N E F L G M E D S E G Y T R Y F V K K G	
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A D Y T L E A E G L R C P E P P V M M V R K T I R S M K D G E K L L V I A  
F D N T D H T L D A V G L R C P E P P V M M M I R G M V R R M M L G E T L L V I A  
Q A S K V V D A R G T A C C P G P I L A A K K G I V E V K P G E V M E I L A  
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K A D Q S L D C V G L Y C C P M P I V K T A E K I K Q L R Q R E V L E E V F A  
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D A D A R V D A R G L L R C C P M P I L M A K R G L N A L E V G Q T L H L L S  
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V D A C C G L Q C C P G P I M K l K Q A V D S M A E G D C I E E V V A  
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L D A R G L S C C P I P V L K A N K R L R S M E S G E K L R V L T  
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I D A T G L L C C P L P I V L K l R k r i g a l l a p g q q C I E M L A  
M S N K H T L D C S N L L C P M P I V I R T Q N A L K E L I N E G D T L E V I C  
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L D C S G M Q C C P G P I M K V F E T M K E P H G S V M E V S A  
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UniRef90_UPI000470A56C	T D P A T Q R D I [P] Q F C S F G H R L A S Q T E A D G I F R Y L I E I G				
UniRef90_Q1QER0	T D P A T T R D I [P] N F C R H L G H T L V H Q Q E T A D A G C T H Y L K R				
UniRef90_UPI000367E7F2	T D P G A P R D F Q A F A V Q T G N A L L G Q Q E A D A G C T H Y L K R				
UniRef90_K6WEH2	S D P G F A [D] A P A W A S K N G H R L V D I E P E G P G Y V A T M R K G				
UniRef90_A3WIG8	D D P A T R R D I [P] Q F C E F M E H K L V Q Q S V A D T P F R Y W I E K				
UniRef90_UPI00038068A3	T D P G S V R D F Q A F A K Q T G N A L L S H V Q T G R E F V F L M R R				
UniRef90_F7VE38	T D R A S I V D F Q V F C R E T G H A L V A F T D E N G T L S F T I R R				
UniRef90_X5DYD4	T D M G F M K D V K S W C N M T G N K L V S V S A E K G K V K A L I E K K G				
UniRef90_K2MYY0	T D P L A V I D I P A F C C S E H G H Q L V S T Q A A E G G H R F L V E R G				
UniRef90_K2N3N7	T D P L A V I D I P A F C C S E H G H Q L V S T E S M E G H R F L V E R G				
UniRef90_UPI000463DA79	S D P G F Y E D V N A W C K S T E N Q L L N R S R E N G G N V T A V I R K G				
UniRef90_A6UVM3	D D V G A K E D V P A W C N R T G N E L L V E M T E E N G I L A F K I K K				
UniRef90_L0KCW6	T D P G F T A D I K A W C Q S T G N T L L V T T G N Q G S E F T A E I K K				
UniRef90_R6E050	T D P G F P R D A A A W C S S T G N Q L L S K E A S G G K S V V I I E K G				
UniRef90_Q8TYN6	D Y P P A K D N I I R R F A E E N G H E V V L D V E E G E D H F V I Y I K K				
UniRef90_F2L6E9	T D P A A D P D I K A W A K R T G H E E V V V A S E K T E G Y L R I L V R R				
UniRef90_A6FS49	D D P A A V I D V P H F C A E A G H E L V S T D T R D G V Q V Y L V R K A				
UniRef90_UPI00037853A0	T D P G T L S I D I P H T W C R I N Q V E V L T S T E E I D N Q I I F T I K K				
UniRef90_H3SBZ3	T D K G S L N D F Q A W V K K T N H E M V G Q E E E Q G V Y K F Y V R K K				
UniRef90_UPI0003606AC0	S D P G F S E D I R A W C H R T G N Q L L D L K K E K G I I T A T V Q K G				
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UniRef90_UPI0003F7FC1C	T D P M A A I D I P H F C R Q K G H R L V G E E K D G S V L R F T I A K K				
UniRef90_UPI000400ABE8	T D P G F L R D A A A W C S S T G N R L L V S Q E S S G G K S V T V I Q K K				
UniRef90_V6ASA4	D D P N A E E D I S R W V K R N G H E L L V G L Q K R D S E L E F S I K K				
UniRef90_L0NJD8	S D P L A G I D I P H F C R E E G H E L L V Q S E K T S D G H R F C I R K G				
UniRef90_E6N2T0	T D P A S K P D L E A W A R K T G N R I L I S V E E S G S V I Y R F L I E R				
UniRef90_I2BUE4	T D A G S Q R D F R T F A K L A G H T L E H E D A A E G V Y R Y W L R K A				
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UniRef90_R7EP63	T D A G F A R D A S A W C D T T G N K L I E K H D E K G R Y T V V I E K G				
UniRef90_A0A017RWMO	T D P A F T N D I K A W C S R T G N T L L G S E K T C C D Y V V Y I K K G				
UniRef90_I3XCL0	T D P L A V I D I P H F C S E D G H R L E Q A A S T A G G H R F L I R K				
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1            10            20            30            40

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UniRef90_B5ZSJ0	D L R G L K C C P F P V I K T R K K L A A M A S G T L I R V D T	
UniRef90_U7UAZ8	F D R D F D V T G I S C P G P M L K □ K E A M D M L P D G E V G R F T A	
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UniRef90_A0P4R4	M I N F D A E V D A T G L K C C P M P V I L R K L E N R L A S G A V L K V T A	
UniRef90_U2ZND0	M T D I P D A E L D A T G L S C C P L P V I L R T R K A L R R S M V P G E T L H V I C	
UniRef90_B0U34	UniRef90_I3IHZ5	K A D E T L D C F G L M C P M P I I F K T A N K I K D I E □ G K V L E I A

	50	60	70	
UniRef90_D7N914	T D P G F I R D I	D S W C K N T G N T	S R N E Y K G N Y F A S I	Q K G
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UniRef90_UPI0003B6E27D	T D P A V I D I P H F C S E S G H	V L G S G D I G P S Q Y Y L I	R R	
UniRef90_Q0F2X8	S D P A F G R D I	R A W A K K T G N D	S V K A E K G L V T V L L	R K
UniRef90_B5ZSJ0	T D P L A V I D M P H F C N E D G H	H E L V E T E K T E T G H R F L I	K K G	
UniRef90_U7UAZ8	S D P G F W Q D S E A W C	C R S T G N T	H R E K S N G Q V K V W V	R K G
UniRef90_H1RK71	D C P Q S I N N I P L D A R N H G Y E V L	E I Q Q D G P T I R Y L I	R K	
UniRef90_J3Z3N0	D D P A T S R D I P S F C R F M K H	V L L G Q T	D K L P H Y L L	R K
UniRef90_U4KT53	S D P G F Y K D I	Q A W A S K T G N T	T N I Q K E N K T I I A T L	Q K G
UniRef90_D3SL10	D D P G V V E D I P A W C K A T G Q E F L	G M Y E E G G E Y H	L F V R K	
UniRef90UPI00037B44A7	D D P A A A I D I P H F C N E A G H	H K L I S K E P E D G G S I	R Y K V K	
UniRef90UPI000364F4D4	D D P A A E D D I A N W A R K L	G H E V V K M E K N G N E I	R F E I	
UniRef90UPI000288BEF9	S D P G F Y E D I K S W C L T T N N K	L V N L N K D K K A N I T A	L I K K	
UniRef90_C3XAC9	T D P A A V R D F H F F G N Q T G N I	V I G E S E D D K G	V F S L I V K R	
UniRef90_X0ZWJ5	D D P A A E E D L K R F A K R T G H	K V I K F E K N R D I	I R F L I K K	
UniRef90_Q2R11	D D L A A E F D L P A W C Q E A G H	T L V A I E P R E D Y Y S F L	I R K	
UniRef90UPI00036EE2F9	T D P G S W R D F E S F A A H A S H	H R L	A R R R S D N V Y H Y	
UniRef90UPI000373C136	T D P G V M Q D I P A W C R I N G H	K V L	E S R A D N G E Y V I V L	
UniRef90_C5D620	M D Q G A K N D L T A W I N V S	G H E L V	D Y K E E N G V W K F W V	
UniRef90_B4WY48	T D T G S A S D I P A Y L R Q S C	H E L V	R M Q E S K G R Y C F V	
UniRef90_X7E6L9	T D P S T T R D I P K F C Q F	L G H K L	R	
UniRef90_S8LGW1	S D F G F S A D I E A W C Q N T G N T	L L S N R	E N G K V I A S I	
UniRef90_A0A024KCR3	T D P V A K I D I P L F C M Q Q G H	Q C	R Q E D E A G A M R F V	
UniRef90_D3T111	T D S G S M S D I Q G W A D G T G V	E L L	L D Q Q E G D E L Y T H F V	
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UniRef90_F8I1Q8	S D Q G S A K D I P E W V K	R K A G H E	T A H Y V	
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UniRef90_D3DFH5	T D P G F E L D I K N W C A Q T G N E	L L S V K R N G N Q V V V E	I K K	
UniRef90_A3SAZ0	D D P A A I I D I P H F C A E A G H	H S L E	S Q A M D E T P Q A Y V I	
UniRef90_K5D717	T D P L A V I D I A H M C C N E D G H	R L V	H R F R I	
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UniRef90_R7H1U8	T D A A F P R D A E A W C R T T G N R F L	R F L	G R H S E S G V Y I A M I	
UniRef90_M1E4F6	S D E G T N E D L P L W A E K V	H E F L	E K Y W K L Y V	
UniRef90_M0D519	D S E G S L T D V P E W A E E A G N E	L L L G N I E E A G Y W K L Y	V E K A	
UniRef90_W4HK49	D D P A A V V D V P H F C T E A G H	H A L E	D R A E D G P R M I W H I	
UniRef90_E1R3S2	D N S S A V T N V T R Y A E H A G G Y K	V I	G T E E Q E G A F T I S I	
UniRef90_S6HR60	T D A G S V R D F S V F I E H S G H	M L	E R Y E S E Q Y Y Y Y F I	
UniRef90_G5GA63	T D A G F S R D A E A W C Q T T G N N	F I	T S T I	
UniRef90_E1V867	T D P A T T R D V P K F C Q G F	L H	K Q D G T I E A F L	
UniRef90_A9IK33	T D P K A T R D F Q A F A K Q S G N	A Q H	R R G Q D Q G T V L H F L	
UniRef90_B9KNM6	T D P M A V I D I P L F C A E A G H	H E V	L	
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UniRef90_G8QY71	S D P G F A A D V Q S W C T L	T G N D	G A S A D A G V D A Y L	
UniRef90_K2ADS2	T D K M A M A I D I P H F C Q G A G H	D F L	E F T E R G E G W S I T V	
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UniRef90_C6CZY4	T D P G F Y E D I K A W A G M T S N K	V E K T K Q Q D G T	I E A F L	
UniRef90_Q9HI35	T D A G T K K D A P A W I Q K S G Q E	L V	G V F D R N G Y Y E I V M K K	
UniRef90_U2V6Q7	N D S S F E N D I K A W T Q K T G N	I L L N T I	K G I T S A F I	
UniRef90_F6BFY0	S D P G F E N D I K T W C Q R T G N	A L L N L Y H E G K I	I V A D I	
UniRef90UPI00047C0E30	T D P H S E I D F K A Y L A R T G D H	H D	E C F E A D G V F T F L	
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UniRef90_V4XR56	T D P G S V S D I A G W A T E T G V	E L V	Q T G D E G T D V F T H Y V	
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UniRef90UPI00046E61D5	T D P G A K H D I P A W C R V H	D H E	A L E E D D G E I R	
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UniRef90_F9Z912	T D P G F V R D V G S W A K M T G N R	L V	E S L G V S H D K V K A I	
UniRef90_B8KRR0	T D P S A Q R D V A S F C R F L	N H E	V R K A	
UniRef90_G6EXX3	T D R R S A I K D F Q D F C R Q T G H	A L L	E T H E G D D R F E F V I	
UniRef90_F3ZVB0	S D P G F E G D I K V W C C Q R T G H	K L L	A F S D Q G G T S L S F L	
UniRef90_G4FCG4	T D P A T T R D V P K F C Q F	L G H E	I K R	
UniRef90_V4YDU5	T D K G S M S D I N G W A A G T G V	E L L E	Q D T S E S N Y L Y F I	
UniRef90_E6N699	T D P P A A K S D V Q A W A R K T G N	V I	E Q I V E E Q G G Y I	
UniRef90_E0MSD7	D D P L A G L D I P A F C N E Q K Q E	L V	T Q T E G D D V N R F T I	
UniRef90_U6BGU2	S D P G F L P D V Q A W A K K L	G H T V	R R	
UniRef90_M0BJU0	T D S G S M S D L A G W A E G T G V	T L L	D Q V E G D D V Y K H Y V	
UniRef90UPI000477E12C	T D P M A A I D I P H L C Q Q D G H	R H R	E K G	
UniRef90_D3FSG0	T D K G A L N D L P A W S E K A G H	H T L	R Q D R S G E G L R F	
UniRef90UPI000262C928	T D P S T L R D I P T M C R F M H	H Q L	I E R G	
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UniRef90UPI000381AFA9	S D F G F S A D I E A W C K N T G N	T	D E E V D D G Q W E V Y I	
UniRef90_A5FXT1	T D P R A V V D F R D F C R D A G H	A L L I	E K G	
UniRef90_K1JPL2	T D R H S L A D L A E F F C R Q T G H	E L V	S W S E V K G V I F S T I	
UniRef90_I4YUH5	T D P L A G I D V P N L I R E T G D I	L E	R D F L	
UniRef90_L9YD98	T D S G S M S D I Q G W A G G T G V	A L L E	E Q V A D D D R Y I H Y V	
UniRef90_J3YT34	D D P S T N Q D I V N F C R F M D H	T L L I	A K K L K K P Y R Y L	
UniRef90_W4DMR4	S D P G F Y E D I K A W A R M S N H	T L L L	Q L T K P T G M I E A Y L	
UniRef90_S3BNB8	D D E A A R L D I P A W C E M T G H	T F E	R K G	
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UniRef90UPI00045EC558	T D P P A A H L D I G V Y S D Q S G H	K I	E F A R H A G Q Q I F Y I	
UniRef90_W0NZP6	D D P S T T R D I P N F C Y F M N H	T L L L	E F E I K I K P Y R Y L	
UniRef90_A0P4R4	T D K D A K K D F D F F C K Q T G H	K I L	K K G	
UniRef90_U2ZND0	T D A G S Q R D F R A F A R L	G H E	S L E D H E S V T T F F I E K A	
UniRef90_B0U3J4	T D P L A A I D I P H L L H E T G D R	L	R E E E E G G V F R Y W L	
UniRef90_I3IHZ5	T D E G I K K D I V S W C N T T G N E	L L G	E A E E E I H V F I	

1                    10                    20                    30                    40

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UniRef90_Q2KY73	F D L E	V D A S G L	L N C P L P I	L R A K K A L A Q L V S G Q L L	R V I T
UniRef90_A0Z1V4	E V V D A	T G L L K C C	P E P V M M L H N A I	R K A Q P G G H V L L Q A	
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UniRef90_W0DFC9	E K V L D	L S G L L M C C	P L P I V I T S E N I K R K L	K E G E V I T V I S	
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UniRef90_UPI0004723F8A	D A C G L L Q C C	P G P I M K V Y E A V	R Q M S P G E R L	E V K A	
UniRef90_B9JTM6	E P E D I L	D L K G L L K C C	P L P I V L K S R K R L S G M A V	G S R L I V E T	
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UniRef90_Q11FL2	M S Q E R R	V L I D A R G L L A C C	P G P I T E I V K A Y R N A K	N G D V L E E V W A	
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UniRef90_C4L109		D A C G L L Q C C	P G S I L K L K K S I D E I	A P G E R V E L L I S	
UniRef90_U5CGH1	Q I D A R G L L	P L P I V L R L R L R M A L	P R G T R V T L L L A		
UniRef90_A1B551	Q I D L L S G L L	P L P I A L K T R K A L R D L	E P P G D V L A V I A		
UniRef90_UPI0002EA7BA8	M S T D Y D E	T A D V K G L L N C C	P M P V V K A K Q A V D S L E	P L G S V V A V L S	
UniRef90_M0C451	M T T P D K E	I D A R G S S H C C	P G P I M M E L I R G I K S V	P L G S V V A V L S	
UniRef90_A9WEQ8	K P K R V I D	A R W T P C C	P G P I P L L E A K D G I	G H L K E G D V L E I R S	
UniRef90_I4CD87	M I E F N L E	V D A S G L T C C	P G P I L L E A K K G I G K V	K V G E V L E V Y S	
UniRef90_G3ISN2		D A R G S A C C	P G P I L L E A K K G I G K V	K V G E V L E V Y S	
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UniRef90_UPI0004664A7C	K Q L N Y S G L	L Q C C P G P I V N L S Q T I	Q P G E Q V E V I V		
UniRef90_U7PDC3	A D Y E L N A	C R L P L V I K T Q N R V	R E L A H G D V L E V L A		
UniRef90_K2HHA7	M D N A M K T	L L D T R G K L C C P F P P L V	E A K K Q M A L M T S G D V L V I D Y		
UniRef90_G9Z5V6	D Q Y D V I L	D A R E D R C C P M P L P V	D S M S E G E E L I V I O G		
UniRef90_A6UVB5	E L Q V S G T	T V C C P L P I V L R T K L T	R K L T L A S M A A G E Q L E V L A		
UniRef90_A6VX29	Q Q L D A R G L	S C P Q P V L M T K K A L E A S P	S A K C F E I I V		
UniRef90_R6BGP3	Q I V D A R G L	S C P Q P V L M T K K A L E A S P	S A K C F E I I V		
UniRef90_K1YZ18	S P E I F K D	L L D R G V A C C P M N F V	K T K V E L L A R M Q I G D F L R I I L L		
UniRef90_UPI0003B7B4B6	E E I T D S	L L D K G V A C C P F N Y V	Q A K V R L E T M D I G Q L L E I I T I		
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UniRef90_D5EMU0	T T E T I V K	L L D A T G L A C C P G P I L R	K T K K A L E Q L K E G E E L E V V I G		
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UniRef90_UPI00039F8117	V T V D A L G	T Y C C P V P V I E L L A K V I G E V P T G G V V T V L A			
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UniRef90_UPI00036F6CB6	E I Q L D T R G	K L C C P Y P P L I Q V Q K A I E L M I N G D I L L I I K Y			
UniRef90_UPI00037944E7	D T L V D A R G L	R C C P L P V I R L L A A A A K D L P A G T E L T V L S			
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UniRef90_C5BQV9	P D Y R I D M Q G	E P C C P Y P P A I N T L E A M K E L N A G E I L E I I S			
UniRef90_W0SDV5	A H V T L D M R G	V S C C P G P I V Q A K K L L D D G M K A G E V V L Q L V S			
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UniRef90_G5ZZ28	V D Y R G L	K C C P L P V I L K A R R A L S Q L T A G Q T A E F L A			
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UniRef90_X1K293	T S K P K R T L	D C M G L Y C C P I P L F Q T R A E I D K L Q V G E I L E V L S			
UniRef90_C0N419	H E Q L D A R R	M R M L C C P M P V I K T Q N K V A M M H A G D V I D V I I C			
UniRef90_UPI0003809515	E L D A T G	L L C C P L P V I K L Q K M I K S I K E K E R I K L I I T			
UniRef90_E4T4W6	D Y R G V A	C C P M N F V K T K Q E L A T M K S G E L L E I V L S			
UniRef90_Q8ZUU6	K V L D V R G	K F C C P V P V M E T A K A I T Q I E L Q G D V L E V L A			
UniRef90_UPI0003A78126	T L D T T G	K F C C P F P L M E A K K H I E Q L G S G D L L V I I N V			
UniRef90_D0GM34	E Y T L D C	G E A C C P I P L I K A Q K K F E T M E T G D V L I I N V			
UniRef90_J2VH62	E V Y D L R G	L N C C P L P V I L K T R K K L A L A T A G T R L W V E T			
UniRef90_Y8MDZ8	K Q F D R G L	Q C C P G P I V N I S K E I N N I S T G E Q I E V T V L			
UniRef90_UPI00047B0992	D L R G V A	C C P M N F V Q T K I L L S T M K S G E I L D I I L L			
UniRef90_UPI000249182A	T I D D Y F	L N L E G E P C C P F P A M K T V D A Y D D M K D G E V I I E I I S			
UniRef90_UPI00047E0879	I D A C G	L Q C C P G P I M Q L K K N Y D L I G E G D R L E I I K V			
UniRef90_14A424	Y T L D I W G	E M C C P P I I K T Q R K L K E M A C G D R L V V L E T			
UniRef90_F6B8I8	A E Y Q V N A	R G L Q C C P G P I V Q L F G T Y K K C N S G D T I V I E V			
UniRef90_10IL05	U N I D	H L D L R G V K C C P F N F V K T K L K L E G M A P G Q V L K V V L			
UniRef90_K8NDY7	H R L D L S G	G L K C C P L P V I R T R K A L L K S M Q P G D S I E V V C			
UniRef90_F4LUM2	A E V Y Q V N A	R G L Q C C P P I I K T Q N K K L E I L N V G D I L I V Q I			
UniRef90_M1RF85	E T V D T R G	L F C C P L P T F V S R K R K L K E I L P V G E K L M V M A			
UniRef90_A0A033TRM1	K Q L N Y S G	L Q C C P G P I V N I S K E I K N I E V G E Q I E V T V			
UniRef90_O29697	E A N E V L D	R G E V C C P F T F I E T K L K L E E M K S G E I L R V I I			
UniRef90_D1AY15	E F T L D C	G E A C C P V P L I R T Q G K M E E L E I G D V L V V S I			
UniRef90_C7R4P8	T V D A R G	R R C C P I P V V R L A R H V Q E L A P G D E V V V V L A			
UniRef90_UPI0002EE269B	A T A G R R	L R G L K C C P L P A L H T R K A L R G L K A G M L L V V E C			
UniRef90_UPI0003C747CB	E L V V D A L	G K R C C P V P V I E L A K V I G D V P V G G T V R V L A			
UniRef90_UPI00037A3383	V I V D A C	G L Q C C P G P I R E L K K H Y D T L S P G Q R L T I K V			
UniRef90_E0RN92	D F R G V P	C C P I N F V K A K L V L E P L R T Q G K M E E L E I G D V L V V S I			
UniRef90_UPI000369A32D	D A P L R	L D L K G M K C C P L P A L H T R R A L A R A A P G A V I I L V E C			
UniRef90_D3RZ17	V I D L R G	L T C C P E P I I K L R Q E M S K F K P G D V V E V L T			
UniRef90_B8DZ70	M D V K P	N Y T L D V R G E V C C P V P D V E T K R K L K T M Q S G E I L E V L I			
UniRef90_K2CMQ1	K T L D V S	G L Q C C P G P I S Q L R K A I D A E K G Q A V E I I L S			
UniRef90_A0RNJ4	E I T Y T L	D I Q G E A C C P M P A V A T L E V P L T P T M K R G E V L E V C			
UniRef90_G8PHM9	V E L D L R G	L N C C P L P V M K T R K H L K R M A K G D Q L V V K A			
UniRef90_A71NJ5	D Q T I D A S	G L Q C C P L P A L R T R K A L K A A A A G G T R L V V T C			
UniRef90_UPI00037B4B39	D Q T I D A S	G L Q C C P L P A L R T R K A L K A A A A G G T R L V V T C			
UniRef90_M7YBJ1	M A D D P D S	V L D L S G L L C C P L P V L R A R K A L R R L P A G R T L V V T C			
UniRef90_U2N0P8	V I D A C G	L Q C C P G P I R E L K K H Y D T L S P P G Q R L T I K V			
UniRef90_UPI0004184F84	D L R G V P	C C P I N F V K A K L V L E P L R T Q G K M E E L E I G D V L V V E C			
UniRef90_D6Y986	P A L T I D A L	G L Q C C P L P A L R T R K A L R K L A K G D R L V V V E C			
UniRef90_UPI00037C878A	A H H I V D A R	G L Q C C P M P V I K L Q Q Q V R Q S L P G E L I S I E C			
UniRef90_D4CUR2	I E K E E D Y L	D L S G L L C C P L P V L K I K E K I D K L Q E N E E L K V V K V			

UniRef90\_UPI00047EE0A9 S D P G F S K D I K S W C D S T G N T L L K S E F D N K E F V A Y I Q K G  
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 UniRef90\_A0Z1V4 T D P S T Q R D V P Q F C K F L E H Q L L S A D E A A G R Y S Y L I E K  
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 UniRef90\_Q11FL2 T D P L A V I D I P N L L N E M G D S L E S T E R A G D R I V F V I E K A  
 UniRef90\_V4K4I5 T D P G F K P D V E A W I K R T G N Q L L E L K E E K D K I V A V I K  
 UniRef90\_C4L109 S D P G F F A D I E A W A K K T G N K L V S K Q F V N G R V E A I L Q K G  
 UniRef90\_U5CGH1 S D P G F L R D S A A W C K Q T G H K L I A Q T E A S G R F S T V V E K  
 UniRef90\_A1B551 T D P A A V I D I P H F C A E S G H R L V S R E L A P G E T E Y V V E R G  
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 UniRef90\_A9WEQ8 S D P G S A K D I P I W V Q K A G H E F I G A F P E Q G F T R F V V R K  
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 UniRef90\_G3ISN2 T D P P A A H D F G V Y A D Q T G H Q I Q L I R E S N K Q V F Y F K K  
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 UniRef90\_A6UVB5 D Y K P A L E N I T R F A E E H G H T V V S A E E T E N G F K L I I I K K  
 UniRef90\_A6VX29 C D A G S L K D I P Q Y T A L V G F T L L S T C E D N D V Y T F V I Q K  
 UniRef90\_UPI000469B847 UniRef90\_R6BGP3 S D A G A W G D I P A Y L A L S D H A L I S R E E T A G D Y R F L I  
 UniRef90\_K1Y18 D D G E P V D N V P R S V K T E G H G I V S R E R Q G G D H W Q V V I E K  
 UniRef90\_UPI0003B7B4B6 D D G E P I E N V P V S L T N D G H E V V D T K K V G K H Y R L T I R K G  
 UniRef90\_I1XIA5 T D P G A L S D I P A W A R I P H Q I V G T V K E S D E I M L T V Q V G  
 UniRef90\_D5EMU0 S D A G F K N D I P P F C K A N G Y E F I S A E K E K G I V T G R L R  
 UniRef90\_F6BED1 D Y K P A L E N I K R F A E S N G Y T V V T A E E T E N G F R I V I K K  
 UniRef90\_V6J241 S D F G F H K D I V A W A N A T G N Q L L T N D I V G N K V V A T L V K G  
 UniRef90\_UPI00028875E0 T D P G V K H D I P A W C R V H G S V L G I E E R D E K I V L L I E K  
 UniRef90\_UPI0003B75D70 T D P G I L N D V P A W C R I N G H Q I Q D S W R Q G D E Y H V L L T V G  
 UniRef90\_UPI00039F8117 D D E A A R L D I P A W C E M T G H E Y L G S E G N G F R V R R  
 UniRef90\_C7R5I1 S D P G F A H D G P A W A G A N G H E I I L D L T P H G P G Y R M T M R M G  
 UniRef90\_UPI000366E387 T D E G S G A D V P E W V N K V G H E I I I S N E K I D G V W H I K I R K A  
 UniRef90\_D0L204 T D L G A P A D F E A Y C A Q T G H E I I I G V E R E A E F F K I T L A K K  
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 UniRef90\_UPI00036F6CB6 T D P A A K H D V P A W C R M R G H E H V S R D E D W D G W A V T V R L G  
 UniRef90\_UPI00037944E7 S D P G F Y E D I Q S W A T T M S H H P L L E I S R N G G T I T A L L R K A  
 UniRef90\_UPI000464FFFF D C P Q S I N N I P I D A K N H G Y K V L L I D S D G P T I R Y L L Q K  
 UniRef90\_C5BQV9 S D P G S E R D V K T F A K I S L H T L L H F E R Q D E L Y I Y V L Q K  
 UniRef90\_W0SDV5 D C P G S A D D I T S W A R A G A A D L V F S H E S G G V H E F Y L R R  
 UniRef90\_C4LGA2 D C T Q A T D A I P R W A A T D G H E V T N F E T D D A G W T T V R K G  
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 UniRef90\_F8DDK1 T D P G S M S D L A G W A A A T G V E L V D Q E E G D E I F T H Y V R K  
 UniRef90\_X1K293 D D P A A E E D L K R F A R R T G H E I I I R L E R K D D R L R  
 UniRef90\_CON419 UniRef90\_UPI0003809515 T D P G A L I N D I P A W A R I P N G H E I I I N T V Q T D D E I L T S V R V G  
 UniRef90\_E4T4W6 D D P A A I V D V P H F C N E Q G H H L I E I S D Q N G C G L F L I E R G  
 UniRef90\_Q8ZUU6 T D D G Q P L I Q N V P G S V R N E G H Q V V S V I Q E G L F W K V M I R K  
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 UniRef90\_Y8MDZ8 T D D P G F N S D I K S W A K Q T G N T L V N L T E E A N V I N A I I Q K  
 UniRef90\_UPI00047B0992 D D D G Q P I A N V P G S V K C S E G H E V L S Q N S A G D H W K V T I R K  
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 UniRef90\_F6B8I8 D H S C T S R A I V L W A R E H G H E I E E S E V S N G I W R L E I T K G  
 UniRef90\_I0IL05 D P G E P I K N V P R S A Q E E G H E I L S I S E R D G L F D L R L K K A  
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 UniRef90\_F4LUM2 D H S C A M K N V P E W A R K E G Y P V E L E E I E E G R Y D I Y I E K K  
 UniRef90\_M1RF85 D D K A F K F K D I E L W S F E T G N K L I D F K E E N G Y Y V A I I E R G  
 UniRef90\_A0A033TRM1 T D P G F L S D I K S W V K Q T G H T L V E L D E S N N G I N A I I Q K  
 UniRef90\_O29697 D H E P A V R D V P R S V E Q E G H E V L S V E K V G E E W S I L I K K  
 UniRef90\_D1AY15 D H S C A M K N V P E W A R K V G H N V E I E E I D D G E W E L I I E K  
 UniRef90\_C7R4P8 S D P A A Q W D P I P A W A R M K G H V C S A A E V T H D P W E V R  
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 UniRef90\_UPI0003C747CB D D A A A R L D I P A W C Q M R G Q E Y V G E E P A D R G A A H V V R R  
 UniRef90\_UPI00037A3383 T D Q A F G Q D L I N A W C N M V G A K L I D V D H S G G V I T A T V E K  
 UniRef90\_E0RN92 D D G Q P L E N V P A S L E G E G H E V V W K R K E G A A W R H V R K A  
 UniRef90\_UPI000369A32D T D P M A A I D P H L I A R Q D G H V L E A Q A Q A E G V L S F R I R K G  
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 UniRef90\_G8PHM9 T D P M S A I D P H M C Q E D G H V L I E S K M V G D V R Q F K I E  
 UniRef90\_A71NJ5 T D P M A V I D P H L I A Q T G A A I L E E E R T V A E G L F V L R K  
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 UniRef90\_M7YBJ1 T D P M A M I D P P N L V R E E G A R L D G A E R S G D R L R F R I  
 UniRef90\_U2N0P8 D N E I A K E N L E K M A K E M G Y K Y E G E K L S E D H Y E V K I I K G  
 UniRef90\_UPI0004184F84 T D P L A V I D P H L V R Q T G D I L E R Q E S A D G L Y I F E I M R  
 UniRef90\_D6Y986 D D P A A Y T D I P A W C R L K S H R H V G T E R P E G G W A F H V R R  
 UniRef90\_UPI00037C878A T D P G A E K D I S S W T R V N K H T L V H V I T T D D G C R I F I K  
 UniRef90\_D4CUR2 S D P G F Y N D I Q A W S K V T K N T L L S L D K K D G L T Y A T L Q K G

1                    10                    20                    30                    40

UniRef90_UPI000367A73C	E   L   D   T   R   G   L   <b>C</b>   P   <b>L</b>   P   V   L   K   L   R   K   L   I   E   S   T   K   Q   K   E   K   I   K   L   L   T
UniRef90_Q39VC1	T   I   D   L   R   G   V   T   <b>C</b>   P   T   N   F   V   K   A   K   L   A   L   E   M   V   D   T   G   E   V   V   E   F   L   L   T
UniRef90_UPI00030263C3	M   A   T   E   K   R   <b>V</b>   L   V   N   A   K   G   A   F   <b>C</b>   P   G   P   L   L   E   L   M   K   A   K   A   E   S   G   T   I   L   E   L   L   T
UniRef90_N0E203	M   S   S   <b>H</b>   H   D   A   R   G   Q   K   C   P   L   P   V   I   A   L   A   R   L   A   A   D   L   P   A   G   S   R   I   E   V   L   A
UniRef90_K6DUP6	M   V   W   E   P   D   L   L   Y   D   A   G   P   T   G   C   G   E   L   I   M   N   L   F   L   T   I   K   K   M   E   S   G   Q   I   I   E   V   I   S
UniRef90_W6E189	D   L   S   D   G   V   A   C   C   P   M   N   F   V   K   T   K   M   E   L   S   K   I   G   S   G   E   V   L   E   I   L   L   T
UniRef90_W8T7X9	E   S   H   I   Q   I   N   A   C   G   L   Q   C   C   P   G   P   I   T   K   L   Y   S   V   M   N   E   A   K   D   G   Q   I   I   E   I   S   V
UniRef90_B5EN42	E   R   I   V   D   A   R   G   S   F   C   C   P   G   P   L   M   E   L   I   S   S   M   K   M   M   S   V   G   D   T   L   E   L   L   S
UniRef90_F4XXG7	I   S   S   L   P   D   D   Q   L   D   L   R   G   T   P   C   C   P   I   N   F   V   R   T   K   L   Y   L   E   K   M   A   P   G   A   L   L   E   V   W   L
UniRef90_F8CP80	D   A   A   V   H   I   D   T   R   G   A   L   C   C   P   M   P   I   L   E   L   A   K   A   M   R   A   L   A   P   G   T   L   V   E   L   V   S
UniRef90_F6B936	K   E   I   N   N   R   G   L   A   C   C   P   Q   P   V   I   N   T   K   R   A   L   E   E   I   I   P   Q   G   T   I   I   S   I   V   V
UniRef90_UPI00037755BB	T   L   D   V   M   Q   V   C   C   P   F   P   L   V   E   A   K   E   I   K   I   S   A   G   D   E   L   V   I   N   F
UniRef90_I6ZE22	M   P   P   L   L   K   A   K   L   E   L   N   R   L   D   S   G   A   V   L   K   V   I   A
UniRef90_C8X7H3	L   D   C   T   G   L   A   C   C   P   G   P   I   M   A   L   Q   A   R   M   A   E   L   A   P   G   D   E   V   L   A   H   V
UniRef90_10HOU6	T   L   D   C   L   Q   G   R   C   C   P   L   P   V   I   K   L   A   K   A   M   P   D   V   P   <b>□</b>   G   E   I   V   R   V   L   A
UniRef90_UPI000363A9BF	M   T   E   A   T   E   Q   R   I   D   L   T   G   K   R   C   C   P   L   V   I   T   A   L   A   E   A   V   A   T   L   K   P   G   E   T   E   A   Y   S
UniRef90_K9R5K9	S   P   D   Q   A   Q   D   L   R   G   T   P   C   C   P   I   N   F   V   R   T   K   L   R   L   Q   Q   M   Q   A   G   E   L   L   E   V   W   L
UniRef90_UPI00035D8822	T   S   T   P   D   Q   A   Q   M   D   L   R   G   T   P   C   C   P   I   N   F   V   R   T   K   L   R   L   Q   Q   M   E   P   G   Q   L   L   E   V   W   L
UniRef90_K9XP02	A   D   A   H   L   D   L   R   G   T   P   C   C   P   I   N   F   V   R   T   K   L   R   L   E   Q   M   P   P   N   S   L   L   E   V   W   L
UniRef90_UPI0004718F07	T   V   V   N   A   I   G   D   A   C   C   P   I   P   V   I   K   T   K   K   A   L   Q   E   L   E   G   S   E   V   I   V   V   L   V
UniRef90_F7QK46	D   L   D   T   L   T   G   L   K   C   C   P   L   P   V   I   K   T   K   K   A   L   Q   E   L   E   G   S   E   V   I   V   H   C
UniRef90_X0W351	K   A   D   V   K   L   D   C   F   G   L   C   C   P   M   P   I   V   Q   T   A   K   K   I   K   E   M   K   I   G   E   V   L   E   V   I   S
UniRef90_XOTGA3	Q   A   A   K   V   V   D   A   R   G   M   S   C   C   P   G   P   P   L   L   E   A   K   K   S   L   G   S   V   A   V   G   E   T   I   E   I   L   S
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UniRef90_I5B748	K   I   V   D   A   R   G   L   L   S   C   C   P   Q   P   V   I   M   T   L   D   A   I   K   S   G   S   D   G   E   E   V   I   V   L   V
UniRef90_UPI00034B9669	T   T   T   D   A   L   L   D   L   R   G   T   P   C   C   P   I   N   F   V   R   T   K   L   R   L   E   K   M   S   P   G   Q   P   L   L   E   E   V   W   L
UniRef90_X1FB82	M   S   N   N   Y   N   K   L   L   D   G   L   V   C   C   P   L   P   V   A   R   T   K   K   K   L   N   E   M   Q   S   G   E   I   L   E   E   V   S   G
UniRef90_UPI00034BC4EE	M   S   D   R   P   L   V   T   V   E   A   T   G   R   K   C   C   P   I   P   I   I   M   L   A   G   R   I   R   E   V   P   <b>□</b>   G   T   V   I   V   A   V   T   A
UniRef90_L9XXC4	T   T   E   P   D   V   T   I   D   S   R   D   A   T   C   C   P   G   P   L   M   D   L   I   G   R   V   K   T   L   E   P   G   T   V   V   E   L   Q   T
UniRef90_F6FWK4	A   A   P   D   E   V   V   D   A   R   G   L   R   C   C   P   L   P   V   I   R   L   A   A   R   A   R   E   L   L   P   P   G   T   L   V   T   V   L   A
UniRef90_A1AWE5	H   N   L   D   A   K   R   R   L   L   C   C   P   M   P   V   I   R   L   S   E   M   I   E   K   I   K   N   S   D   I   I   E   I   L   L   A
UniRef90_G4RFJ9	D   I   V   I   D   A   R   G   L   K   C   C   P   L   P   V   I   K   L   K   E   K   A   L   A   G   V   G   A   G   N   T   I   A   V   L   A
UniRef90_D6Z1Z7	N   L   R   G   V   N   C   C   P   M   N   L   V   Y   T   K   V   A   M   K   D   I   L   Q   P   G   E   I   L   E   I   I   L
UniRef90_K4ZH29	T   <b>□</b>   D   F   T   L   D   L   R   G   E   P   C   C   P   Y   P   P   V   I   Y   T   L   E   T   L   Q   D   M   E   K   G   Q   V   L   Q   V   I   A
UniRef90_F7NP37	A   E   F   T   I   D   A   L   G   E   A   C   C   P   L   P   L   L   K   V   Q   K   K   W   P   E   L   Q   R   G   D   V   L   V   V   N   I
UniRef90_UPI000362EFEB	K   V   I   D   A   C   N   T   F   C   C   P   G   P   L   M   E   L   I   T   H   M   K   Q   A   N   V   G   D   T   I   E   L   L   S
UniRef90_N1JSS1	E   V   T   K   S   V   D   V   R   G   E   V   C   C   P   P   P   V   D   V   E   T   K   R   A   L   K   K   M   K   S   G   E   I   L   E   V   W   I
UniRef90_F3NRM8	V   V   V   D   A   L   G   K   H   C   C   P   I   P   V   I   E   L   A   K   V   W   E   R   V   P   V   G   A   V   V   R   V   L   S
UniRef90_E0TEW0	M   T   E   S   P   D   L   R   L   D   L   R   G   L   R   C   C   P   I   P   I   I   M   L   A   G   R   I   R   E   V   P   G   T   R   I   E   L   S   T
UniRef90_I4BWT8	V   E   V   D   A   R   G   L   S   C   C   P   Q   P   V   I   E   T   K   K   A   I   E   K   T   S   S   G   E   I   H   V   L   V
UniRef90_K0C9D3	K   Y   D   I   T   L   D   A   K   G   L   N   C   C   P   L   P   L   L   R   L   K   Q   Q   L   Q   K   S   S   P   G   D   I   I   K   M   L   A
UniRef90_X1T1T7	D   A   V   G   L   Y   C   C   P   M   P   I   V   K   L   K   L   G   L   E   E   T   N   T   D   E   T   V   E   L   L   I   Q   F
UniRef90_C8KY08	N   I   I   L   N   L   I   G   L   R   C   C   P   E   P   I   M   I   R   K   T   I   R   D   M   K   D   N   E   K   I   I   L   I   L   S
UniRef90_B8D9M5	Y   V   L   D   T   N   G   H   C   C   P   F   P   L   M   E   A   K   K   K   I   I   E   L   E   T   G   D   E   L   L   I   Q   F
UniRef90_Q8FLY1	N   I   I   L   N   L   I   G   L   R   C   C   P   E   P   I   M   I   R   K   T   I   R   D   M   K   D   N   E   K   I   I   L   I   L   S
UniRef90_UPI0002892A3A	A   E   Q   K   I   D   V   K   G   E   T   C   C   P   V   P   P   L   V   E   A   K   K   A   M   E   T   I   E   L   E   G   E   I   I   N   F
UniRef90_UPI0002EB6504	V   V   V   D   A   R   G   L   Y   C   C   P   V   P   P   L   V   E   A   K   K   A   M   E   T   I   E   L   E   G   E   I   I   N   F
UniRef90_U6EDS3	K   I   L   E   T   T   G   M   V   C   C   P   F   P   L   V   E   A   K   K   A   M   E   T   I   E   L   E   G   E   I   I   N   F
UniRef90_A0A021VUA6	V   V   V   D   A   R   G   L   Y   C   C   P   V   P   P   L   V   E   A   K   K   A   M   E   T   I   E   L   E   G   E   I   I   N   F
UniRef90_O30050	K   Q   V   D   C   I   G   L   Y   C   C   P   E   P   V   F   R   A   R   K   A   M   E   S   E   V   G   E   I   I   E   I   L   A
UniRef90_I2MX28	V   L   D   T   L   G   R   R   C   C   P   I   P   V   I   E   L   A   K   L   L   P   R   V   P   V   G   T   M   I   T   V   L   S
UniRef90_D5EB69	E   V   D   T   R   G   E   T   C   C   P   V   P   V   L   E   C   R   K   A   L   R   K   A   P   G   D   I   V   E   I   E   G
UniRef90_O29695	V   V   V   D   A   R   G   S   Y   C   C   P   G   P   L   M   E   M   I   K   T   L   Q   V   E   V   G   E   V   V   E   V   L   S
UniRef90_UPI0003B44C9D	T   I   K   A   D   E   N   V   D   V   T   S   L   V   C   C   P   N   T   F   V   K   T   K   V   V   L   D   E   L   D   E   G   Q   I   L   A   V   R   L
UniRef90_UPI00037ED5A4	A   E   Y   K   L   D   C   L   F   E   A   C   C   P   C   P   L   P   L   L   K   A   L   K   Q   L   N   K   M   E   I   G   D   V   L   I   M   H   T
UniRef90_T1BV06	V   V   V   D   A   R   G   S   W   C   C   P   G   P   L   M   E   L   V   R   V   I   K   E   E   E   V   G   T   E   F   E   L   L   S
UniRef90_D1Y7W9	S   I   T   P   D   V   T   I   D   S   R   G   A   T   C   C   P   G   P   L   M   D   L   I   G   K   V   K   K   A   D   P   G   T   V   V   E   L   M   T
UniRef90_M0HK91	M   S   T   Y   T   L   E   T   N   G   A   V   C   C   P   F   P   L   P   L   K   T   K   V   A   L   R   T   M   K   P   S   S   E   S   V   Y   I   L   A
UniRef90_F5SPH6	E   E   L   N   L   T   G   L   S   C   C   P   G   P   L   L   G   L   K   A   K   M   E   T   I   T   Y   G   E   K   I   K   V   I   A
UniRef90_C7MHD4	I   S   E   S   G   K   K   L   D   V   R   G   M   F   C   C   P   S   P   A   L   Q   T   T   V   E   L   S   K   M   Q   V   G   E   I   L   T   V   L   A
UniRef90_UPI0003A24C36	D   K   I   L   D   C   M   G   L   S   C   C   P   L   P   V   V   K   T   K   K   E   F   S   F   T   E   K   G   T   L   T   V   K   V   I   A
UniRef90_B3T7X5	Y   L   L   D   A   M   G   A   V   C   C   P   F   P   V   I   E   A   K   D   A   I   Q   E   I   D   T   G   E   A   L   V   I   D   F
UniRef90_M1NP54	V   V   V   D   A   R   G   L   A   C   C   P   F   P   V   L   V   E   A   K   K   A   L   R   K   A   P   G   D   I   V   E   I   E   G
UniRef90_W3APS5	K   Q   V   D   C   I   G   L   Y   C   C   P   E   P   V   F   R   A   R   K   A   M   E   S   E   V   G   E   I   I   E   I   L   A
UniRef90_D5ECL5	D   K   I   L   D   C   M   G   L   S   C   C   P   Q   P   V   L   V   E   T   R   K   A   L   K   D   L   S   G   G   Q   V   E   I   L   V
UniRef90_UPI00034BC05D	M   S   E   S   I   I   V   D   A   R   G   L   S   C   C   P   Q   P   V   L   I   R   L   A   Q   R   L   H   E   V   P   I   G   A   V   I   A   V   T   A
UniRef90_Q8CU26	K   T   F   N   Y   S   N   L   Q   C   C   P   G   P   I   V   N   I   S   K   E   I   K   N   I   A   L   G   D   Q   I   E   E   V   V   V
UniRef90_Q0G4V1	L   D   L   T   G   L   K   C   C   P   L   P   T   L   K   A   R   K   A   L   N   G   P   A   G   K   Q   V   R   I   L   I   A
UniRef90_V6JPX1	D   A   P   S   L   L   V   V   D   A   L   G   K   L   C   C   P   L   P   V   I   E   L   A   K   V   I   G   D   V   P   V   G   G   T   V   T   V   L   S
UniRef90_M0JTN5	T   E   A   D   T   T   V   V   D   A   R   G   A   T   C   C   P   G   P   L   M   D   L   I   S   E   V   R   A   V   N   I   G   T   V   I   A   L   L   T
UniRef90_A0A023WV0	A   K   P   N   L   S   L   D   L   R   G   E   H   C   C   P   Y   N   A   I   A   T   L   E   T   L   E   T   M   Q   P   G   Q   L   L   E   E   V   V   T
UniRef90_M1LS29	S   I   K   F   D   Y   V   D   A   K   G   L   K   C   C   P   L   P   V   I   L   R   A   K   K   A   L   S   Q   M   Q   S   G   Q   I   L   R   I   I   T
UniRef90_G8AG11	S   P   D   F   L   F   D   I   T   S   E   V   T   F   V   V   K   L   S   V   E   R   M   A   A   G   Q   T   L   E   E   V   R   L   L
UniRef90_L8MR10	M   C   I   Q   A   I   K   S   I   D   L   R   G   V   P   C   C   P   L   S   F   V   R   A   K   L   H   E   K   L   E   A   G   Q   L   L   E   E   V   L   L
UniRef90_W7KUZ6	K   P   D   E   V   L   D   V   R   G   E   S   C   C   P   V   P   E   M   M   A   S   K   K   L   K   K   M   K   A   G   Q   V   L   L   E   E   V   L   T
UniRef90_A5EQ19	T   G   L   K   C   C   P   L   P   V   I   L   R   T   K   R   K   A   L   Q   S   L   A   A   G   E   R   L   E   I   C   C
UniRef90_W0DEG1	A   D   R   E   L   D   R   G   E   C   C   P   F   P   T   F   V   V   K   S   K   L   V   L   E   Q   M   E   L   G   Q   V   L   L   E   V   V   I   L
UniRef90_Q7MRW0	I   I   D   V   R   N   L   G   C   C   P   E   P   V   I   R   T   K   K   A   L   D   A   L   G   T   E   G   I   L   E   V   L   I   G
UniRef90_UPI0003672B62	V   L   D   C   R   G   L   L   C   C   P   A   P   I   I   A   L   A   R   R   I   G   D   V   P   V   G   A   L   L   G   V   A   A
UniRef90_J2GY15	M   A   E   D   R   L   I   D   A   R   G   H   R   C   C   P   V   P   T   L   R   L   R   R   A   L   E   E   A   A   P   G   S   H   V   R   L   L   A
UniRef90_R7D6M5	M   S   G   Q   R   Y   T   V   N   A   M   G   E   Q   C   C   P   I   P   V   V   K   T   K   V   L   D   S   I   Q   G   D   A   E   I   K   V   L   V
UniRef90_K2MDT0	T   A   T   P   D   H   K   I   D   D   T   N   D   V   C   C   P   M   T   E   F   V   R   T   R   L   K   L   E   T   M   T   S   G   Q   V   L   E   E   V   T   L
UniRef90_K2B812	T   P   N   V   K   I   D   C   S   G   L   Y   C   C   P   M   P   V   I   N   A   Q   S   E   L   E   N   M   P   G   G   Q   I   L   E   I   T   A
UniRef90_U7G0R7	Y   Q   I   D   A   V   G   L   V   C   C   P   L   P   I   L   R   F   K   K   R   T   Q   G   L   P   S   G   T   Q   V   I   E   F   L   I   A
UniRef90_UPI00047AC115	A   Q   H   I   L   E   T   D   G   Q   V   C   C   P   F   P   L   V   E   A   K   A   A   I   E   S   I   P   A   G   D   E   L   V   I   N   F
UniRef90_UPI0003D138D	K   V   D   L   Y   I   D   A   T   G   L   V   C   C   P   L   P   V   I   L   R   F   K   K   R   E   C   K   Q   L   S   K   G   Q   V   V   H   V   R   T
UniRef90_B2A0W8	M   A   E   K   D   V   K   T   V   D   A   R   G   F   S   C   C   P   Q   P   V   I   N   T   K   K   A   L   S   E   E   F   D   E   L   Q   V   L   V
UniRef90_UPI0003B3B260	U   I   D   V   R   N   L   G   C   C   P   E   P   V   I   R   T   K   K   A   L   D   A   L   G   T   E   G   I   L   E   V   L   I   G
UniRef90_M0ENH0	E   P   T   D   T   V   V   D   A   R   G   A   A   C   C   P   G   P   L   M   D   L   I   G   R   I   R   S   A   T   A   G   D   V   V   L   L   L   S
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UniRef90_H9UIN3	A   D   Q   V   L   D   I   Q   G   D   V   C   C   P   Y   T   F   V   K   S   K   A   A   V   E   Q   L   A   S   G   Q   V   I   E   I   H   L

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50            60            70

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

1            10            20            30            40

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UniRef90_L7UAR2	M S E S V A T L	D I T R E V C	R T K L R L E T L L E A G A V L E I I L	
UniRef90_B1Y6K3		M P I V K T K K A L A G L S S G Q V L R I L S		
UniRef90_B3E5S1	K T I D C R G Q A C P A P V I	A T K K K A L E E S A A G V C V L V		
UniRef90_K6D8B5	M E T P H A V C D G G D L D C C G L L L I I K K A M D P L S D G Q I L E V R S			
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UniRef90_T1B8F4	M A T I D I D S R G S A C P G P I T	D L A R A Y K S A N G D M I V L L A		
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UniRef90_R9M150	T V N A M G D N C C P I P V I	K T K K A M Q A L T G P E T I I E V L V		
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UniRef90_R7UN38	H E L D T C G L F C P E P V M M L H N K I R D M A P G E V V R V L A			
UniRef90_F2L098	Y E L D L K G Y V C P Y P Q M Y T S Q A L S K L P K G S T I R V I I			
UniRef90_A6P2N1	K L L D A R G L L S C C P E P V I	M T R K A M A T G E S A Y Q V V V		
UniRef90_Q31LG4	M S Q P D D R L D L R G I V C P I N F V	R T K L K L E Q M P A G S L L E V W L		
UniRef90_X1FGW2	R K L L D C S S G L V C P M P V A	K T K R K L L E M K S G E L L E V S G		
UniRef90_E1JYU2	E V T L D C R G L A C C P G P V L R C K E C V E A P D R P Q T I T V T I V			
UniRef90_D4H3D9	E I D A R G L A C C P Q P V L M I K A E L E K I L E E G V V T I L V			
UniRef90_W7Y9L3	N K K I D C R N M A C P Q P V L	R T K K A I G T L A A G Q V L E E L Q A		
UniRef90_B9L5P7	E V D C R G K K C P E P L I	E T K K A L E E M D E G I L L E V L V		
UniRef90_D9S190	A P A G T L D S R G R R C C P L P I I	M T K K A L D S I D R G R V V A I I V		
UniRef90_I9KQ94	N K T V D A R G M A C P L P V V	D L A R A F G S V V P G D T I T L W A		
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UniRef90_B6IUQ8	M A T N P K V P D L R G V P C P L S F V	R A K L Q I E K I L A A G E Q L E I I W L		
UniRef90_F3Z194	M E E Q T T E L D L K G E V C P F T F V	K T K L Q L E E Q M G S G E V L T V I F		
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UniRef90_D5EAM0	A K H L L E T D D G Q V C P F P L V E A N Q A M E Q I P T G D E L V I D F			
UniRef90_B8FWU1	S P D A K I D L R G T P C C P L P V I	E L A K N I R N V G V G E V V R V L A		
UniRef90_I3Vvx0	R E V D A R G L L C C P E P V V L	R T K L Q R E Q M A P G A V L E V W L		
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UniRef90_R4KC88	K T I D A R G L Q C C P L P V I	K I V D V G E V L I I E T		
UniRef90_U2UVP9	K I T Y S L N L Q G E A C C P Y P A I	E T K K V L K E L T D G M V E I F V		
UniRef90_K9F1M2	H K L V D C R G L A C C P H P V I	A T L D V L P K L K S G E I L E V L C		
UniRef90_X1F4L1	E K K I D C M D E I C C P M P L L	E K T I K E I K K I D V G E V L I I E T		
UniRef90_UP10003B3FAE7	K P K R V L D F R G E T C C P I P E L	K P K R V L D F R G E T C C P I P E L		
UniRef90_L8J5P8	V V D A R G L R C C P L P V I	T T R R E L K E L T N G E T L L V I V		
UniRef90_N2A1I6	K I L V D A R G L A C C P L P V V	R L A A A A R D R A A G T R L T V W S		
UniRef90_UP100037E0024	T I L D C L G Q R C C P L P V I	M R T R E L E K L R P G E T L L V V A C		
UniRef90_UP10003D3E993	K V D K E L D I R G E V C C P F T F V	T V D A K Y G S Y C C P E P V I		
UniRef90_D6KBD8	E L V L D A L G K R C C P I P V I	R L K L Q W L R E A Q P G Q V V T I R L		
UniRef90_R51B9	K T V D A R G L L S C C P E P V I	A T H T D T L G L K C C P Q P V I		
UniRef90_D0LX13	D F R G K R C C P E P V I	K V D C R G L A C C P Q P V I		
UniRef90_W8TAG6	E R I I D A R G L S C C P Q P V I	K Q L D C R G L A C C P Q P V I		
UniRef90_F7YYK0	E K F L D L C Q G Q C C P V P E I	T D A K Y G S Y C C P E P V I		
UniRef90_R6LWV6	T V D A K Y G S Y C C P E P V I	M T K R E L E K L R P G E T L L V V A C		
UniRef90_UP1000478BC48	L D L T P W R C C P E P V I	R L K L Q W L R E A Q P G Q V V T I R L		
UniRef90_E8T3R5	V K V D C R G L A C C P Q P V I	A T H T D T L G L K C C P Q P V I		
UniRef90_M7T7T1	K V D C R G L A C C P Q P V I	K V D C R G L A C C P Q P V I		
UniRef90_A7HOB1	Q L D C R G L A C C P Q P V I	K T K N A I G G L K E G E E L E I I L L		
UniRef90_D3UH41	S A I T Y H I N L L G E P C C P Y P A I	K T M E A L Q K L Q K G E I L Q I I S S		
UniRef90_D9VT09	D A L G L R C C P Q P V I	D A L G L R C C P Q P V I		
UniRef90_Q8ZUM3	K T I K I S G A H C C P Q P V I	E L A R A I V T V P V G G T V T V V S		
UniRef90_TOLEX2	V K L P T L G L V C C P F P L V	E L K K A I A D V P I L G G F I E V I		
UniRef90_E1W1Q6	V S L D L S G V A C C P M P V L	I D A R G M R C C P M P V L		
UniRef90_M2TLA7	P S T T I D A K G L K C C P M P V I	K T K I K L S G M A I G S Q L E V I L		
UniRef90_UP1000363A4D3	H E K V D C R G L P C C P Q P V I	K T K I K L S G M A I G S Q L E V I L		
UniRef90_UP10004631ACF	M S Q A E E A L D L R G T P C C P I N F V	R T K L K L E Q M A E G A L L E V W L		
UniRef90_D6SNM5	S E G R Y A L D T M G A V C C P F P L V	E A K D V M N T L Q P G D E I I A F		
UniRef90_UP100036C80F5	V N A L Q G D A C C P P V V	E A K D V M N T L Q P G D E I I A F		
UniRef90_S5SWK6	T V D A M G D H C C P I P V V	K T K K A L G K L Q G A G Q I E V L V		
UniRef90_10RAK8	K T I D A R G L L T C C P Q P V I	E A K D V M N T L Q P G D E I I A F		
UniRef90_R5QGV9	Q A D A Q L D L R G T P C C P I N F V	K T K K A L G K L Q G A G Q I E V L V		
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UniRef90_J2UDA8	UniRef90_R6GTV0	Q S A T T P I E I N A L Q G Q P C C P M P L L	M L K R E L K K L Q S G K Q L F I L L K S	
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UniRef90_F8AKG6	UniRef90_F8AKG6	M V E I T D T L D C T G D V C C P Y P D V	M M V R K T V R S M Q A G E T L L I I A	

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 UniRef90\_F8AKG6

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

1            10            20            30            40

UniRef90_W9E1I7	I	D	V	R	G	Q	T	C	P	V	P	L	V	E	C	R	K	A	I	R	K	A	P	G	D	E	I	V	I	T	G								
UniRef90_UP10003600022	K	L	L	D	I	T	K	E	T	C	P	M	T	F	V	K	V	K	L	A	L	A	K	M	D	E	G	Q	E	L	E	V	I	L					
UniRef90_KOGAW3	Y	Q	L	D	L	M	V	Y	S	C	C	P	L	P	L	M	A	K	K	A	A	Q	L	P	Q	H	A	T	L	V	I	S	L						
UniRef90_N9AKY9	UniRef90_X0Q5W5	M	I	D	N	A	D	Q	T	V	D	A	R	G	L	A	C	P	M	P	L	M	L	K	R	A	L	K	S	H	P	G	E	T	F	L	L	K	S
UniRef90_C9RA31	P	D	Y	R	L	D	M	V	G	E	P	C	C	P	E	P	V	L	M	V	K	R	E	M	E	R	L	G	G	K	G	R	I	K	V	L	V		
UniRef90_F9N4U2	D	Y	Q	L	N	L	T	K	Y	L	C	P	L	P	I	V	M	V	Q	K	A	M	A	S	G	D	S	E	Y	T	V	Q	S						
UniRef90_A6VN72	E	V	I	D	L	R	G	V	E	C	C	P	M	N	F	V	K	A	K	V	A	M	A	P	L	D	E	G	K	V	L	E	I	Y	L				
UniRef90_D9QS18	E	R	V	D	L	R	A	L	R	C	C	P	E	P	L	I	R	V	K	L	W	L	R	E	A	T	G	D	E	R	E	L	L	L					
UniRef90_N9TZF0	K	E	V	D	V	R	G	L	S	C	C	P	F	P	V	I	K	V	K	A	L	D	E	G	K	E	S	I	L	V	I	I	V						
UniRef90_X1JP92	UniRef90_UP100022608B5	S	D	A	P	P	L	L	D	I	T	S	E	T	C	P	M	T	F	V	R	T	R	L	A	D	G	L	P	A	G	G	L	R	V	T	L		
UniRef90_R5XE05	V	D	A	M	G	D	Q	C	C	P	I	P	V	I	K	T	K	K	A	K	E	L	T	T	T	L	V	E	V	H	V								
UniRef90_C0D214	L	D	E	R	G	K	Q	C	C	P	L	P	V	V	E	T	K	R	A	L	E	A	A	G	P	G	E	T	V	E	V	V	V						
UniRef90_G2LPT8	N	I	K	L	N	L	I	G	L	R	C	C	P	E	P	I	M	I	R	K	T	L	R	T	I	N	I	D	D	N	I	L	I	I	S				
UniRef90_B3EN76	H	S	I	D	I	T	R	E	R	C	P	M	T	M	V	K	V	K	L	K	L	A	Q	I	E	E	G	D	I	L	D	V	L	L					
UniRef90_R5UK91	T	I	D	E	T	V	D	I	T	D	V	V	C	P	M	T	F	V	K	A	K	V	A	M	E	E	L	E	G	Q	V	L	S	V	H	M			
UniRef90_C4ZDA9	A	E	M	E	I	D	V	R	G	Q	T	C	C	P	I	P	V	V	K	T	K	A	I	E	A	L	T	Q	P	D	T	V	E	T	L	V			
UniRef90_Q46BR1	MM	K	M	V	D	T	R	G	F	S	C	C	P	M	P	V	V	M	V	K	N	E	I	E	K	T	K	A	E	Q	I	E	V	M					
UniRef90_E0QLX9	M	I	D	T	E	T	A	R	L	D	I	T	G	E	T	C	P	M	T	F	V	R	T	R	L	A	D	R	L	P	G	G	Q	L	R	V	R		
UniRef90_A9HFB8	Y	E	V	D	A	R	G	L	S	C	C	P	E	P	V	M	L	T	Q	A	L	K	S	H	G	N	D	T	V	K	V	L	V						
UniRef90_R6RMD4	M	S	E	E	G	V	F	V	D	A	R	G	L	A	C	P	E	P	V	V	R	T	Q	H	A	I	Q	S	N	P	D	G	V	E	V	L			
UniRef90_R5APD6	A	H	G	L	Q	C	P	G	P	L	L	K	V	N	E	V	M	S	G	L	D	T	G	K	Q	M	E	I	T	V									
UniRef90_UP10003FC3147	T	P	D	H	K	I	D	I	T	K	D	V	C	P	M	T	F	V	R	T	R	L	K	E	T	M	T	Q	G	Q	V	L	E	V	T				
UniRef90_R51X86	Y	E	L	G	T	V	G	M	V	C	P	F	P	L	I	E	A	Q	K	K	M	E	E	L	A	G	D	E	L	K	I	D	F						
UniRef90_K2LWF9	K	E	I	N	T	V	G	L	R	C	P	E	P	L	M	I	V	R	E	R	L	R	V	H	S	G	D	A	I	T	I	T	A						
UniRef90_F8AZ35	H	E	I	D	T	G	E	V	C	P	M	T	F	V	R	T	K	L	L	E	R	A	H	S	G	D	L	V	A	V	R	L							
UniRef90_R7BXC0	M	N	K	S	I	E	T	L	D	R	G	T	P	C	P	L	N	F	V	R	T	K	L	R	Q	D	Q	V	P	L	W								
UniRef90_S2XZB7	V	D	R	G	Y	L	C	P	M	P	V	V	M	V	Q	N	A	I	K	K	D	N	P	A	A	L	E	V	L	V									
UniRef90_UP100035C5E9F	Y	E	L	G	T	V	G	M	V	C	P	F	P	L	I	E	A	K	K	A	L	E	A	S	A	P	G	E	K	V	E	V	V						
UniRef90_G2TGC6	K	E	I	D	T	G	E	V	C	P	M	T	F	V	R	T	K	L	L	E	R	A	H	S	G	D	L	V	A	V	R	L							
UniRef90_M5TDR9	M	N	K	S	I	E	T	L	D	R	G	T	P	C	P	L	N	F	V	R	T	K	L	R	Q	D	Q	V	P	L	W								
UniRef90_C3WD67	V	K	V	D	A	I	G	Q	V	C	P	V	P	L	V	E	C	R	K	A	R	T	L	S	E	G	D	Q	I	E	V	T	A	S	V				
UniRef90_K9RQM6	UniRef90_UP100046D135A	Q	T	I	D	T	G	V	C	P	M	T	F	V	R	T	K	L	R	Q	Q	L	P	D	Q	V	L	D	V	W									
UniRef90_R5IPK4	V	E	L	G	T	V	G	M	V	C	P	F	P	L	I	E	A	K	K	A	L	E	A	S	A	P	G	E	K	V	E	V	V						
UniRef90_D3HC30	K	F	L	D	M	R	G	Q	V	C	P	V	P	E	I	T	T	R	K	E	L	A	R	K	N	M	K	E	L	S	I	K	F						
UniRef90_B1KQD6	V	I	D	L	T	P	F	R	C	P	L	A	V	K	V	L	A	L	K	A	L	Q	D	Q	P	G	I	C	S	L									
UniRef90_D9QHC2	V	I	D	A	R	G	H	R	C	P	V	P	S	L	R	L	R	K	A	L	Q	D	Q	P	G	I	D	T	F	R	L	L							
UniRef90_C8PMA5	D	Y	T	V	D	A	R	G	L	S	C	P	E	P	V	V	R	T	K	A	F	D	A	H	Q	N	F	T	V	L	V								
UniRef90_UP100037E0C89	I	T	E	E	I	A	T	K	L	D	R	G	T	P	C	P	L	N	F	V	R	T	K	L	R	E	Q	M	P	R	G	E	W	E	V	W			
UniRef90_UP10003DE1A3	E	Q	R	I	D	A	K	G	L	A	C	P	K	P	V	I	L	A	K	K	A	L	E	D	T	C	N	R	G	D	V	V	L	I	T				
UniRef90_B9K9Z3	K	F	L	E	D	E	E	T	D	R	G	L	F	C	P	Q	P	I	E	V	R	T	F	S	E	S	L	D	G	Q	T	F	K	V	L	A			
UniRef90_Q2NS58	K	K	L	D	V	I	S	Q	V	C	P	F	P	V	E	I	A	Q	S	A	M	A	L	Q	V	G	D	E	L	V	I	D	F						
UniRef90_A6TJA2	K	V	N	K	E	I	D	A	R	G	M	N	C	P	L	P	V	I	H	T	K	K	A	L	E	S	I	D	Q	G	K	I	T	T	I	V			
UniRef90_X1HL34	E	Y	D	E	E	T	D	R	G	L	F	C	P	Q	P	I	E	V	R	T	F	S	E	S	L	D	G	Q	T	F	K	V	L	A					
UniRef90_UP100036E433D	M	T	I	N	F	N	S	V	L	D	V	R	H	E	D	S	P	I	T	R	K	E	A	D	L	P	S	G	D	I	L	K	V	I					
UniRef90_C9M6X3	T	I	D	A	R	G	L	S	C	P	E	P	V	V	R	T	R	R	A	V	V	S	A	P	A	E	F	Q	V	I	V								
UniRef90_R1ASD1	K	E	V	D	A	R	G	Q	A	C	P	K	P	V	I	M	T	K	N	S	L	N	E	I	T	D	G	T	I	T	T	I	V						
UniRef90_A8H407	K	E	L	D	T	Q	Y	R	C	P	L	P	V	L	V	K	V	K	L	A	K	Q	L	A	G	E	C	R	V	V	L								
UniRef90_A0Q2F8	K	E	L	D	C	Y	E	A	C	P	V	P	L	V	K	V	K	A	V	K	E	L	A	M	G	D	I	L	H	S									
UniRef90_F7RPY6	A	N	Y	K	L	D	I	T	K	E	H	C	P	M	T	F	V	K	T	K	I	E	L	A	K	L	E	V	V	L	L								
UniRef90_E4T4U2	Y	E	V	D	A	R	G	S	C	P	F	P	V	V	M	V	Q	N	E	V	K	K	A	P	D	T	L	D	V	L	V								
UniRef90_R5S0W6	H	E	V	N	A	M	G	K	C	P	I	P	V	V	M	V	Q	N	E	V	K	K	A	P	D	T	L	D	V	L	V								
UniRef90_R7CP75	M	E	N	D	N	I	I	V	D	A	R	G	K	A	C	P	V	V	M	T	K	K	V	I	D	N	A	V	T	V	I	V							
UniRef90_B5Y733	M	G	A	D	C	P	V	E	F	T	D	T	G	A	R	C	V	T	M	L	K	I	R	A	L	E	P	R	A	K	L	E	K	V	L	S			
UniRef90_UP10003B6DA76	M	E	N	D	N	I	I	V	D	A	R	G	K	A	C	P	V	V	M	T	K	K	V	I	D	N	A	V	T	V	I	V	V	L	S				
UniRef90_K9SMT5	M	G	A	D	C	P	V	E	F	T	D	T	G	A	R	C	V	T	M	L	K	I	R	A	L	E	P	R	A	K	L	E	K	V	L	S			
UniRef90_C7R592	K	T	V	D	A	M	G	D	A	C	P	V	P	V	I	M	T	K	K	V	I	D	E	L	K	S	M	S	S	G	E	T	G	T	E	V	L	W	
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UniRef90_S3YNY5	Y	V	D	L	R	G	L	I	C	P	Y	P	Q	L	Y	T	A	K	V	I	K	S	V	E	D	G	A	V	I	D	I	L	V						
UniRef90_A8MD37	I	D	L	R	G	L	I	C	P	Y	P	Q	L	Y	T	A	K	V	I	K	S	V	E	D	G	A	V	I	D	I	L	V							
UniRef90_S0S6Q5	N	Y	K	L	D	V	S	G	L	A	C	P	V	I	K	L	K	F	K	A	E	V	N	E	S	L	I	V	A	L	K	A	E	G	T				

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

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

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

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UniRef90_A5I250	D Q S C I G V M A E E W A K Q N N Y E I K V I E V D N G E W E V Y I Q K			
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UniRef90_G9WLX9	D N Q T C V E N L R R L A G K Y D F T V A N E S L S D T H F L V K M E			
UniRef90_E3C9L1	S E Q I A T E N I S K M A K Q L G Y K Y S V E Q K G D H E W N V T V E K			
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UniRef90_C0QF38	D S E A S K E N V S R A A V S Q G C K V V D I A Q D G E E Y T I			
UniRef90_U7VFZ1	D N K I S K E N I V E K F S K E M G F S T T R E E N G I F F I Q I N K			
UniRef90_E2ZAH7	D S R T A M E N V T R Y V S H N G Y T V V S T A E G D D Y K L V F K K			
UniRef90_C9PPU0	A S Q T S Y Q D V A L L C E K E G Y K I L N I Q Q T S L D Y S L V I K K			
UniRef90_C7MPI3	D N E T A V E N L G N L A K S L K A A S E H E R T P E G D F A V R I M K			
UniRef90_S7TZ37	D N E P A K E N V S R F L S T Q G Y A V D V I A A S G A A W V L T G T R G			
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UniRef90_T0CSD1	D N H A A C Q N I K R F M E N S G Y E V Y I K E I D D E F I I			
UniRef90_T1BK63	D M G E P A E S V P R T C E E E G D L V L E L			
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UniRef90_R6RT14	D N E I A V Q N L T R L A S S K G L K S F A E K K E I L F I V K I			
UniRef90_A8LFD4	D D P A A A A D V A A W C R M R M G H D L L T A A P G A G P G S Y L V R R			
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UniRef90_B1QVJ4	D N S I A V E N L K K L I A K S Q G F F T N V K E E N G S F S V V F N K			
UniRef90_R6PEK4	S E P H Q R T N V E K F A K D H G K K V S T K E V G S E F E I V I			
UniRef90_K4L0M3	D N E T S K I N V E R F L L R V A G Y R V E V D H E Q P N Q Y S L K I K K			
UniRef90_R9LY12	D N E I A V Q N L T R M A A G H N L T A C WE K T G E R E Y V V			
UniRef90_A0LNS3	D N P A A K E N V S R F L L A R A G Y A V S V S E Q G E T F E I T			
UniRef90_K1YIL7	R E P S V S D D L P P W C R M S G H E Y L G K T A A A G Y T R Y F V K K G			
UniRef90_A8ZUD1	D N E A A R Q N V E R F L L S S Q G Y Q D M Q V E Q S D D T W T I T R K			
UniRef90_Q0AV74	T S S V S K E N V S K L A R S S G Y Q V T M K V D A K N E W E M E L R K			
UniRef90_V9H2R1	D N E V A K N N I L R L A K G L K L S S F E E E N G L Y T I Q L S K G			
UniRef90_S6A3C0	D N E T S K E N V I R F C E K M K A V T K L F A V D D G W K I E V V S K			
UniRef90_A6FEK9	T D P G S R Q D I P K F L I S L G Q A V V E L E N S P L M L R I K V T K			
UniRef90_X1AE03	D F P A A L K N I P E S C K R Q N L K I K E V N P E K H E W I L I L K K			
UniRef90_B8DJK3	D N Q A A R E N V T R F L L S T Q G Y T V V S P D A G D G L W R L R G V K G			
UniRef90_Q1ZJR2	T D N N T L R D I P K F C D A L N Y R L H A V H T V Q S Q H T F L I E K			
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UniRef90_Q973M1	D N P A A I E T L P E V A R L F N C R Y E I I Y N M G D Y A S F V F T K			
UniRef90_Q30ZZ0	D N A A A K E N V T R F L L G T R G Y A V T A T E T P Q G A W K L			
UniRef90_Q3A914	D F S R S V R N I V D L L A V R L K Y E Y D L E E I S P G I W E V S V I K G			
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UniRef90_L2F824	T D P N S T H D I L A F C R H A G H M C Y S T S V I D G K T C V I			
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UniRef90_D1BR40	D N E V S R D N V A K F G K S R G Y G V E V R Q D G K D F Y L T L			
UniRef90_K6T772	N N L E T I D E I A I A L P E M G G K L V D Q G L D G E K H Y L V I E K			
UniRef90_E6VX73	D N E A A K D N V S R F L L G T R G Y R V E T A Q S D R Q Y L I T G T R A			
UniRef90_D8F0T9	D N V A A K E N V T R F M E H Q G F V V S T T K D G E D F H V			
UniRef90_K9D2E3	D N E V S R D N V T K F G K S R Q C E V T V V T D D K T H Y L T L V			
UniRef90_S7UY84	D N E A A V Q N V S R F L L A A K G Y A V A V D A L G S G W L I V G S R G			
UniRef90_R5LJK2	D D E V A F H N I T D F L K N N G I T Y T N E G M N F K I K K			
UniRef90_C4XM75	K G E E P L R N V P A A A T R D G Y S V L D V F V E Q D V Y C V R I R K			
UniRef90_F2LA40	T E T S V E G G D L P A W C R M T G N Q L V S W T R Q G R L R S F I V S K G			
UniRef90_C5EK44	S E N H T K E N V R K Y G I S Q G K K V T V E P D G R G F R L I I E			
UniRef90_E1W1L1	N R Q S A V E N F V V F C E E N Q C E L V D Q H L S E Q I F E V C L K K			
UniRef90_G5HSZ6	D H S C V V E S I S D Y C R K Q K L Q I H V V E P M N G I W E L Y I E			
UniRef90_J3A375	UniRef90_UPI000371D5FD	D E T D G S K N D V P A W A K A G H E L L D V I E E D G Y W A I Y V E K A		
UniRef90_C0QXR3	N D T G S I N D I P K L T K Q G Y H Y Q K T H I E K G I V E I C V			
UniRef90_R5TD62	D D E V A F H N I T D F L K N N G I T Y T N E G K N F K I I			
UniRef90_E4RKX7	D H T C S M T N I P E W A R K			
UniRef90_E3GH96	D H S C T V K S V R E F C A G M Q M A C V C D E V M N G V W E I T V S R			
UniRef90_I7CW10	T D S G S M S D I Q G W A E G T G V T L L E Q V T D A D Q Y I H Y V E K A			
UniRef90_X0ZKT3	T D P G F K A S V E A Y A E N E A V T L L Y L G K E Q G K L V A T L E K			

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UniRef90_C0C688	K E V D A R G L S C C P E P L M L T A D A L K D A K E A V K V L V		
UniRef90_E3PRP9	E I D C L G D M C C P V P I L K L K D A I K T A S A N Q T I K L I T		
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UniRef90_F0T854	M T Q K D I E L D V T G Q T C C P G P V I I V G D K L A S M Q V G Q R V E I D S		
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UniRef90_UP100046F84E9	K P D K V V D L R G E E C C P V P E I T L K R E L M K A N R G E I I E A L T		
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UniRef90_UP1000237C417	T I D T K G K L C C P E P L I M A R N G L R E V K E G E K I L V I S		
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UniRef90_X1EX89	UniRef90_F4G007	M S S E K E F V L D V R G E E C P [P E M K A A K E L Q K I S S G R L V V L T D	
UniRef90_L0WMV6	N T V E V F Y D A R N L P C C P M P L L K A K V T L R H V T D N Q A L Y L I A		
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T D A G G L K D I P A F C Q Q G Y E L V Q Q			
S S E S N I E D F R L L C E E Q D □ S F V V I T N Q S Q R S I K I T			
D N P V A A G N V T R F L E G R G F R V T R E D T P E G T L I			
D N D A A R Q N V S R F L E H H S Y R V S S E Q Q G G R F R V V			
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T D A G A P E D I P A W C R L T S N P L L Y Q D			
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S D P H S E I D V I T R Y C Q N Q L A C K L T K I S D H E F H Y L I E			
D P G E P E E M V V P G L R R G H A V T V E R L G P D R V R L L V			
T Y A P C G D D V N A W C K E K G Y V F S G L S R D E D I W K I A V T K			
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D N P V S A S N V T R F L E S Q G Y S V T P G G E V P R L V L K			
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R G P T P L D N V S R S I L K L L G H V V E E I Q T E A D G M T H R L			
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D N D A A V E N V S R F L S F H G F E V S V D T D G			
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D N E A A V E N V S R F L S F Q N F Q V			
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D H S C S S S V A H F T S K F N Y P C N V R Q L E Y G I W E I I I E K			
D D D M A P H N L K K L A I Q K Y D Y N V V E S G D N E W K V T L K K			
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D R G E P E A M V V P G L V E A G H R V E I I A Q E N T W L R L M V T C G			
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S D S G A R C D I P R F L H N N G Y I T D I L V D D N T Q L V M M V K K G			
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D D P D I K R D I L K I L P P L S H K K L A L N D E G T F Y R V Y I K K			
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D N D I A L D N L Y Q F A R G R Q W S C S H V E D G D G Y A V T I A K			
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Sequence logo showing the conservation of amino acids at each position of the protein sequence. The x-axis represents positions 1, 10, 20, and 30. The y-axis lists UniProt IDs. Positions 1, 10, and 20 show high conservation of Cysteine (C), while Position 30 shows high conservation of Methionine (M).

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
inssm

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UniRef90_B1ZWR3	D R K P V H L L A E L D T R G F T H A S H E Q A D G S W L N T I K K		
UniRef90_N8ZMB9	S D P H S E I D I L R Y C E I H Q I N C C F K K I S E N E F H Y L I E		
UniRef90_F2L0F3	D D Y T C Y L M L R R L A A L N D V K I L G A E E G D V F V L L L E R		
UniRef90_G8S861	D D P A A A N D I P A W C R M K G Q E F V A G H G Q R F D V R R		
UniRef90_G0HMM6	D K P F V D M L G K L E E A G Y Q V E L K E V G G S F V L R I T K		
UniRef90_F5SW84	N T G D A V D E V F N S S L T Q D G Q Q C E I T S T E G L T T T L R V R R		
UniRef90UPI00036677C8	N E P A F S L D L E S W C K H T G N Q L L R I Q R E G K I S K A W R K K G		
UniRef90_N9LJZ0	S D P H S E I D V T R Y C Q I Q Q L Q C Q V Q K V S E N E F H Y L I E		
UniRef90_A9B9L6	D K G E P E K M V L P G L R D A G H K V K V I L D E I D W L R I R V		
UniRef90UPI000401FA30	A D P A A P I D I P A W C H L T G H A Y L G		
UniRef90_G7VFT3	D D Y M C Y M M L R R L M A L N D V K I L E A E E G G P Y V L V V E K		
UniRef90_K5V5K9	V D K S S K H D I V K Y L R N Q G Y T V D C Q A S P E H F T L T V		
UniRef90_N9D1S5	S D P H S E I D V L Y C E I H Q L S C Q L I R V S E H E F H Y L I E		
UniRef90_N9UY14	D D P N A A R E V A A L A E Q G W R V D D A G P M G E A A R W R V R R		
UniRef90_W0AIP4	D D P A A P G E L A R L V A A N G W S I		
UniRef90UPI0002D36ABC	D R R P M F L Y E E L D E K G Y S H S T I E L E D G S F Q I T I K K		
UniRef90_G5HFG3	D A A H T R D N I V K L A K E Y G R E		
UniRef90_C6IW96	N D R V P V F L I E E L N S L G C T Y T V E E Q P D G T A K V Q I R K		
UniRef90_A6QCL4	K N P I P F I D L A S E Q G F Q T L S R E D E T G N W H I L I A K		

