

1 10 20 30 40  
QUERY A F A G V L N D A D I A A A L E A C K A A D S F N H K A F F A K V G L T S K S A  
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UniRef90\_UPI0002658DBF A L A G L V K E A D I T A A L E A C K A A D S F D H K A F F H K V G M S G K S A  
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UniRef90\_I7GAW8 Q L S E E Q V  
UniRef90\_K9LKT3 L G Q N P T D E E I R E M I K E V D E D G S I G F E E F L Q L M S K K T K Y E  
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UniRef90\_W4FZJ3  
UniRef90\_D2HEB3  
UniRef90\_A7SRU7  
UniRef90\_X2D2M1

QUERY	50	60	70	80
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UniRef90_M5XWM9	H G L K Q M F N N D T D D S G S I	T F E E L K T G L T R L A K K G S K L L S E T R		
UniRef90_K7V0Y9	E H L Y A A F Q Y F D K D D S G Y I	T M E E L E Q A L R E K G L G S K L L S E D G R		
UniRef90_J3NDH4	D H L Y A A F Q Y F D K D D S G Y I	T S D E L Q Q A C E F G G S K L L I E D V		
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UniRef90_D2HFG1	A E L Q D M I N E V D A D G N G T I	D F S E F L T M M A R K M K D T D S E E		
UniRef90_K9LM65	A E L T D M V N E V D A D G N G T I	D F S E F L T M M A R K M K D S D T E E		
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UniRef90_A5A717	A G L R E M F K A M D T D S G A I	T F D E L K A G L R K Y G S T L K D T		
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UniRef90_I1LD80	G G L K E L F K M I D T D D S G T I	T F E E L K A G L K S V G S N L S E S		
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UniRef90_U5EQS4	D E L K E A F K V F D K N D G L I	S S S E L R H V M T N L G E K L S E E		
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100  
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UniRef90\_I1HKU1 P M  
UniRef90\_V4UFM5 S M G S S Y K E E E L V R V M E D L D K D G F I S L S E F E T I C R T S S G A E  
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	50	60	70	80
UniRef90_B4JT33	EELR EAFKIFD K D E D G F I	S P A E L R F V M I N I	G E K L T D E	
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UniRef90_A0A022QEAE6	I E F Q E A F S L F L D Q N D R S G G F I	T I E E E L K A T V I R S L D	S Q N P T V E	
UniRef90_F1RYW2	A K F K E A F D R I L D K N K D G T I	N V Q E E L G A V M R S L	G H N P S E A	
UniRef90_UPI000441A230	S Q L K D F Q I L L D K N Q N G G F I	E E E E L K A Y F L Q R F E V G A R L T A T	G A R L T A T	
UniRef90_B9S4P7	A E F H E A F C L I L D K N D S D G F I	T E E E L A T V I Q S L D	G H P T K E	
UniRef90_MOSFZ6	E H L P K A F N Y F D K N S G Y I	E I D E L R E A I G	G L I E S E Q	
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UniRef90_R0HE42	T E L C E A F S A F D V D G D G C I	T A K E L G T V M R S L	G Q N P T K A	
UniRef90_H2MOW3	Q D I K K V F G I L D N D A S G Y I	E D E E L K F F L Q R F T P S A R V L T D K		
UniRef90_Q8RZB5	E D L R H A F R V F D A D G N G T I	S A A E L A R V L H G L	G E K A T V Q	
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UniRef90_UPI00046BDAFA	E E L L K A F K L F D D D A T G T I	T L N N I K R V A K E L	G E T L T D D	
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UniRef90_U1MKR5	E M I R E A F R V F D K D G N G V I	T A Q E F R Y F M Y F Q V H M G	S M Q F S E D	
UniRef90_UPI000359FEE5	D A L R E A F R I F D K D G N G L I	S A S E I R H I L C N L	G E K L T D E	
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UniRef90_B3N430	D E L K E A F R L Y D K E G N G Y I	T T G V L R E I L R E L D	D K L T N D K	
UniRef90_A0CW38	E K L Y Q A F K M L D L D G S G K I	D K Q E L Q T V L	G K S E K V I D E K	
UniRef90_UPI000441EB97	Q E I K E G F D L F D V V G S G T I	R D V K E L K I A M X A L	G F E P K K E	
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UniRef90_F7BCR7	Q E F K E A F N E M D T D N R D G F I	D K E D L G H D M L A S L	G K N P T D E	
UniRef90_M8BEA7	N E L A A A F R Y F D K D G S G F I	E I D E L R Q E L G	P N E Q	
UniRef90_W5KKS3	P E I R K V F K I L D Q D K S G F I	H D E L Q S F L Q N F S K G A R A L T A A		
UniRef90_J9IEW2	Q E L R R L F K A L D E N G D G V V	T R D E L R K F Q T T F G L E	G E F L	
UniRef90_C4R1N7	S E F K E A F S L F D Q N D G K I	T T S K E L G I V M R S L	G Q T P T E S	
UniRef90_U6IJZ9	S E L F K T F S			

	90	100
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UniRef90_A0A022QEA6	K L R D M I N E V D S D G D G S T I	E F E E F M T L M
UniRef90_F1RYW2	E L K E L I A R V D K D G D G S I	S F E E F L A A M
UniRef90_UPI000441A230	E T E K F L A A A D H D G D G K I	G A E E F Q E M V Q S
UniRef90_B9S4P7	E I R D M I S E V D F D G N G T I	D F Q E F L N I M
UniRef90_M0SFZ6	V I L D I I S D V D K D K D G R I	S Y E E F E M M M K A
UniRef90_H9JZC2	E I K R L I A D V D P D G L G T L	S F E E F L N L M
UniRef90_UPI0002C3658F	E A E Q M I R E A D L D G D G L V	N Y E E F V T M M
UniRef90_U6GNE8	D V L D V L K E L D T D G N G T I	D Y T E F I A
UniRef90_K4APC3	E I S D I V E A A D K D N N V T I	N Y E E F I A
UniRef90_X8JCU5	E L D E A F K V F D R D G S G Q I	S E E E L K A V M N S
UniRef90_C3ZEB6	E I R E M F R V F D V D G N G F I	S A A E L R R A M
UniRef90_R7THE8	E V D E M I S C A D T D S N G E I	N Y K D F I K M L L A
UniRef90_J9IVL5	V W H M M I S E V D F N G D G E I	S Y Q E F E R M M
UniRef90_R0HE42	E L Q D L V N E M D A D G N G T I	D F L E F L C A M
UniRef90_H2M0W3	E T K A F L V A A D G D S D G R I	G A A E F Q T L V L S
UniRef90_Q8RZB5	Q C R R M I E G V D Q N G D G L I	S F E E F K V M M
UniRef90_I1JF64	E I R E M I S E V D I D G N G R V	N F E N F L K I M
UniRef90_C5WMZ7	E L Q D M I T E V D A D G N G T I	E F P E F L N L M
UniRef90_UPI00046BDAFA	E L Q E M L D E A D H D G D G E I	N E D E F L R M M Q
UniRef90_F6HYQ9	D V K M L I E A A D M D G T G T L	N C D E F V T I
UniRef90_G5EEG0	M I R E A F R V F D R D G N G F I	T A D E F R Y F M
UniRef90_B3LYL1	E I D E M I R E A D F D G D G M I	N Y E E F V W M I
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UniRef90_UPI0003BB9BC0	E L Q E M I D K A D R D D G G E V	N E E D F L H V M K
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UniRef90_K4GH65	E I Q I F I A A G D K D S D G K I	G I T E F Q R M V S A
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UniRef90_G0Q5X7	Y W D D M I K E V D K N G D G E I	D Y N E F I D M M
UniRef90_U1MKR5	E V D D M I R E V D V D G D G E I	D Y E E F V K M M
UniRef90_UPI000359FEE5	E V D E M I R E A D L T G D G Q I	N F E E F V R I L E A
UniRef90_S9YKV7	E L Q E M I D E V D D S G S G T V	D F D E F L V M M
UniRef90_B3N430	D L D M M I E E I D S D G S G T V	D F D E F M E V M T G
UniRef90_A0CW38	Y W D D M I R E A D K N G D G E I	D Y S E F I E M M
UniRef90_UPI000441EB97	E I X K M I A E I D K E G I G T I	S F E D F L A I M
UniRef90_U3KA09	E I K K M I S D I D K E G T G K I	S F S D F L A V M
UniRef90_F6T4Y8	E L Q D M I S E V D A G N G T V	D F R E F L T M M
UniRef90_P86431	E T K A F L K A G D A D G D G M L	G L D E F A V L V K
UniRef90_Q8HZJ4	E L I E V S Q H V K M R M G R V	D F E E F V E M M
UniRef90_F7BCR7	Y L E G M M S E A P G P I	N F T M F L T M
UniRef90_M8BEA7	A L L E I I R D V D T D R D G R I	S Y Q E F E L M M K S
UniRef90_W5KKS3	E T K A F L V A G D M D G D G K I	G W E E F S A L V N A
UniRef90_J9IEW2	D I D N L L Q K I D I D G S G N I	D I K E F I T
UniRef90_C4R1N7	E L N D L I R E I D S N T D G S I	D F P E F L T M M
UniRef90_U6I2J9	E L M E M L K E G D F S G D G A I	D F K E F V T L
UniRef90_Q5CTY5	D L L A I L N D I D S D G S G S I	D Y T E F I A
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UniRef90_Q9C9U8	D C V R M I G H V D T D G D G N V	N F E E F Q K M M S S
UniRef90_G3TVC5	E V D E M L H D M D L N G D G L V	D F E E F V R M M
UniRef90_K8FER5	D V N E L V A M A D Q D G D G L I	D Y E E F V A M M Q A
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UniRef90_A0A022QN39	L R D A F E V F D M D K N G S I	S A E E L H N V L K S
UniRef90_A0BWL4	E I M N V I K S I D T D G S G T I	N Y T E F L A
UniRef90_UPI0004404E88	E L I E L S Q Q I L N M N L G H V	D F D D F V E L M
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UniRef90_Q229U9	I W L D L I G E T D A N G D G K I	S F E E F T E M M M
UniRef90_K4AFQ6	Q I N Q M I A E V D K D G S G T I	D F D E F V H M M
UniRef90_UPI00042B0109	E L T H M I E K I D V N G N M C V	D I D E F G E L Y H S
UniRef90_X6MW54	D I K D M I Q E A D T N G D G Y I	D F E E F V K M M S A
UniRef90_Q3SDW5	D L K E M L K E V D F D G N G M I	D F N E F L A L M
UniRef90_V4UVY1	E V K R V M D E I D T D G D G Y I	D F K E F S T F
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UniRef90_A7SX10	E L K A M I K A A D K D G S G D I	D L P E F I E L M A S
UniRef90_I1HKU1	E V A R M M E M D A D R D G F V	D L R E F A A F
UniRef90_V4UFM5	G C V A M I K P V D A D G D G N V	N F E E F R S M M
UniRef90_M4DP03	E A K Q L M E A A D V D G N G R M D	L Y E Y I
UniRef90_I3S3Q8	E C Q K M I G V D S D G D G M I	D F E E F R T M M M G
UniRef90_V4MDS8	D I E E M I E E A D R D K D G E V	N L E E F M K M M M

1 10 20 30 40

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UniRef90\_H6C6B8 S E E E I  
UniRef90\_C5XQA7 L R G E Q L  
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UniRef90\_V9EAY5  
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UniRef90\_B7PZE1 A M G E R P S P S Q L A R I V R Q I D S D G S I D F Q E F L F F M S H K G L S K  
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**UniRef90\_B9N0A1**

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**UniRef90\_W5FRW8**

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**UniRef90\_C3ZQ11**

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**UniRef90\_A0A022RLK4**

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**UniRef90\_GOR4W4**

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**UniRef90\_A5AW02**

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**UniRef90\_A2FAT5**

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**UniRef90\_J9I241**

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UniRef90_M0TYF8	D	C	R
UniRef90_I1K205	E	T	D
UniRef90_D8LRB7	E	F	E
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UniRef90_V9EAY5	Q	I	R
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UniRef90_C5LUZ9	E	L	Q
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UniRef90_UPI00042C1E56	E	L	A
UniRef90_L5LD38	E	L	I
UniRef90_D8SCB9	E	L	E
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UniRef90_Q3HNM6	E	V	D
UniRef90_E9ATE9	Q	A	F
UniRef90_P25070	E	T	V
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UniRef90_A0DZS4	E	V	D
UniRef90_D2DSN4	E	V	E
UniRef90_W5J9F5	R	T	D
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UniRef90_UPI00035A0A59	E	L	R
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UniRef90_G0V877	E	L	I
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UniRef90_C1E7M4			F	D	G
UniRef90_A0A059BXM3			D	G	D
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 G L P Q R K R  
 A V G G E L S T E D A E A A V I S A D T D G F E D F Q R L M E G S N S E E K K  
 T L N F D D F C T L L K K K P A T K  
 T V L G H Q V S D E  
 G F T S Q E N  
 E  
 M G V K V S E K N L Q E I I A E V D E D G S L E F E E F C A L A A K F L I E E  
 S L G M S P T I T E L K K Y F S E N N G K L H F P E F L K V M H R V E K L P  
 L G V S L P A S A F K D L V H R F N A N D I N M S E S L A R F I P T T T S D  
 I S E R I D A G Q G G E I H Y S E F L A A M S A R M H E  
 L G H H P T D D V L E M A M E E L D Q D G F L N F P E F M E F C Q M Q P Q G  
 L A K T E L T E E M I  
 Q L A N I S V E E L  
 I F D T D G N G E V D F K E F I Q Q F S V K G D K E  
 L P G E E T  
 K L K E S L V L E I V Q A I D S D G L V D F T E F V A A A L H V H Q L E  
 S L G K D V S D D V L D S M I N E S P G T I N F T V F L T L F G E K M D P E  
 A S T L N E N E L  
 D D M L K D V V K A M D K N G V I Q Y E E F R V F V  
 S E L R E A F R V I D H D G T L S Y S E L S K L I R L V S P S D  
 G L T A D E V  
 D K N G E L D F S T F L T I M H M Q M K E V  
 L N D K D Q S G S I S L E E L I V A L R L N G T E Q  
 N V K K A D V Q K L M Y Q Y S K D G E I D S D E F L Q I M N M K F K E K  
 A E Q L S A E Q L S A E H L S E N G T I E F N E F I K M F N D K D Q E Q  
 M G Q P F D R Q L D E L I D E V D E D G R L E F E E F V Q L A K F I V I E E  
 E E Y K R A F N F D A D G R I T I D E L E K A M Q K C G Q K P  
 S M G S R P S H E C I E E V F E D L D G N G K I D F D E F L L L V R R Y E K E  
 N L T G R E I  
 D N N R D G T V D M R E I L C G L S S L R N S R  
 E V E L M M Q Q Y D K D G Y I D L E E F A D L Y K H I G S Q E  
 A E Y V E N M F K A F D G D N T I D F L E Y V A A L N L R G K L E  
 S N E Y I E Q M F E T F D K D G Y I D F M E Y V A A L S L K G K V E  
 E N M L G D V F K T V D G D G K I Q Y E F R T F V E T A E  
 E Q V E R I L D D C N K S G K V D F T E F L M A A T N K D L S K  
 E  
 G F N P S H K T I E K Y W N K T T E F L T F N H F I E I I K Q E R N S K  
 D S N K D G F I D F L E F I A A L N L R G K I D  
 D V E A D N T I N Y S K F L S R Y R I E N P A M  
 D R E I D L Q E F K A A L N V K E S F F  
 A L G M K S D D V F V R M M F N D K D G D G R I S F Q E F L D T V V L R G K T E  
 A F G Q N S E K E I L Q A G D K N A D S G L D F E E F V Q Y L Q D H E  
 L S D E Q K  
 A L F D S D G S G T I T L Q E L L E A L T L H G N P M  
 I S L D H V L E A L G E T K E E R  
 S L G F E A K N Q T I F Q M I S D L D K N G T I D F E E F L D M M M S D K D T R  
 A I F D D D G G G T V D F Q E F V A A F S G R G G R E  
 E F A E A L G L K A N S M  
 G S V F K N I E I S D I V E A D D Y D G N I N W E F I A V T V P L N K T E  
 E F K K I Y A N F F P Y G D A S  
 E I N D D Q A K R I F Q A M D F D G Q I D Y T E F I A S F I N N P E F Q  
 A L G F E M S E D E I T R M I A E V D K D G S I D F D E F S H M M T A K R D I K  
 S L D Q N P T E E E L Q D M I N E V D S D G T I E F G E F L N L M A K K M K E E  
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 V V A F N M T P R Q V  
 E S M F R A F D G D N T I D F L E F V A A L N L R G D M E  
 T K I E L N E E Q K  
 A L S M K P D A E F V K K I F N L V D K D G F I S F R E F V D M L V L K G S S E  
 M V V A S A A S P  
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 G N L S R D D V K M V M E S E E L P E S F S S N E L A G L F D E K E P S L  
 I F D K N K D G T I S F E E F V T G L S A S D N E  
 L S L M P S N C E L E E L L R S V D T N N S I S Y E Q F C Q I S S K K E K D E  
 M S V H E A  
 S N A Y I Q T L F R T F D D D G F I D F M E Y V A A L S L V L K A Q  
 A L G Q N P T N A E V L K I L G H P K N D E R V D F E T F L P M L Q A V A K S R  
 L Y Q M I A D F D S D G I I E F R E F V R M M S T H K D T D  
 L G A S P T P G E V G R H L H K L D R N S E L D F S T F L T I M H K Q M Q Q E  
 A A N M N S E P S  
 T K E E M  
 G L T A D E I  
 Q E M S R E E Q D L L K D T D Q D D Q L D F E E F M Q Y L S L R G K M E  
 K D H E  
 V V K Y Q L G Q H E L  
 A L G Q N P T N A E V L R V L E E M N A K M L D F E T F L P I L Q H I S R N K  
 N K E  
 E F E E V L K A M N M S S L I P  
 K D  
 M S K E Q I  
 D F N G D G Y V D V D E F I T V M G M N G S E  
 D G T I E F R E F I Y A L S V T S R L E

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UniRef90_G7YM94	E	Q	W	K	N	C	F	Y	R	F	D	R	D	R	S	G	S	I		D	A	N	E	F	Q	M	A	L	R	T	F	R	Y			N	L	S	D	N																																								
UniRef90_A5AVZ9	Q	E	I	K	E	A	F	D	L	F	D	T	D	G	S	G	T	I		D	A	R	E	L	N	V	A	M	R	A	L	G	F			E	M	T	S	F	Q																																							
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UniRef90_B9R8W6	E	E	L	L	R	Q	A	F	G	M	Y	E	T	E	G	S	G	F	I		S	P	A	S	L	K	R	M	L	S	R	L			G	D	S	K	S	L	T																																							
UniRef90_D2VH59	D	R	Y	R	E	I	F	Q	L	V	D	R	D	G	G	S	G	I		S	Q	E	E	L	G	T	L	M	R	T	L	L			G	L	K	P	S	E	E																																							
UniRef90_K1PXR8	H	D	M	K	Q	A	F	D	L	F	D	K	N	H	D	G	S	R	I		S	S	D	E	E	L	G	R	V	L	R	T	L			G	H	D	H	S	Q	E	E																																					
UniRef90_Q7XZG8	G	E	L	L	R	E	A	F	R	V	F	D	K	D	G	D	G	Y	V		S	A	A	E	L	K	R	S	V	L	R	R	L	G	M	E			E	G	A	R	H	E	G																																			
UniRef90_8H4B8	D	E	L	K	E	A	F	R	I	Y	D	K	Q	G	D	G	Y	I		T	S	T	K	V	L	K	E	I	L	R	E	L	D			N	K	L	X	E	E	K																																						
UniRef90_J9JN51	N	E	I	L	A	F	K	A	N	D	R	Q	H	S	G	T	I		H	S	K	H	L	K	H	L	L	Q	G					W	G	E	H	L	N	E	S	K																																						
UniRef90_A9UP17	E	N	L	R	I	A	F	K	A	F	D	T	D	R	S	G	S	I		S	R	A	D	E	L	K	S	M	L	E	K	L	D	H	R			P	T	N	A																																							
UniRef90_C5KN15	K	Q	L	R	E	M	F	A	R	M	D	T	D	A	T	G	K	I		T	S	A	D	N	L	R	E	V	L							G	E	S	Y	D	G	T																																						
UniRef90_C3ZF80	E	D	Y	R	Q	A	F	E	A	L	D	T	D	G	S	G	Y	I		G	V	D	E	L	R	V	I					F	E	S	T			G	A	K	V	S	E	R																																				
UniRef90_A9NZH0	E	E	L	L	E	D	V	F	K	R	F	D	A	N	D	G	G	K	I		S	S	S	E	L	G	D	I	L	R	S	M					G	G	R	V	G	P	R																																					
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UniRef90_Q7PP00	K	I	L	K	D	A	F	D	A	F	D	I	E	K	K	G	S	I		S	L	E	V	I	G	T	I	M	E	L	L					G	Y	G	M	S	E	E	V																																					
UniRef90_Q9JJG7	D	E	I	L	R	E	A	F	R	V	L	D																																																																				

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UniRef90_K7GP26	E E I L K A F K L F D D D E T G K I	S F K N L Q A V A K S E L G G L L T S K G D		
UniRef90_H3EEV6	E D F V E G L S H F D K E G N G M I	N V A E L Q R H L T T T L G E R L S S D E		
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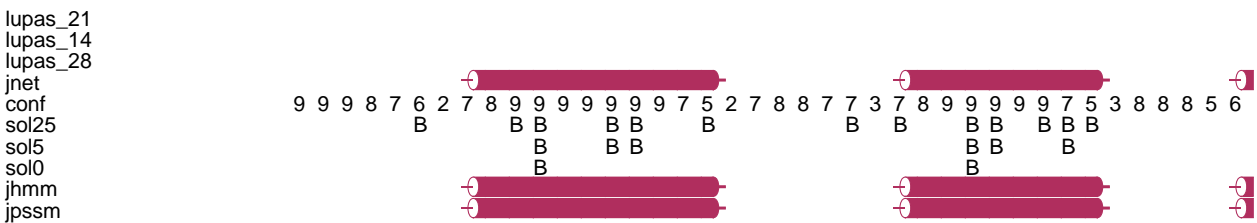
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UniRef90_E0YL14	LI	DMLVR	KYDRFGRGTLLFDDFIQ																									
UniRef90_A0A022RIP9																												
UniRef90_K4EC66	E	VNSFMSNF	S LDKDGRIS EEEFL																									
UniRef90_B3S068	E	LQNMID	VAD CDGGDQIS KDEFMIIMQ																									
UniRef90_E3K7S0	E	LKIL	RDRHDKQGGLIEFNEF																									
UniRef90_M3WUZ2	V	LR	EFFQKMDKNGDGI VTLDEFLE																									
UniRef90_K7IMM9	K	VDR	MFQKMDGNK DGVVTLS EFME																									
UniRef90_W9RQD3	V	I	ESITIEEADTKH DGGKIDKEEWRSLV																									
UniRef90_C5LPQ3	S	I	LRLEFR	ITIDADGKISFDEF C																								
UniRef90_F8C956	E	LEIA	VDIVDTDR	TGKILSWNEFKAWWNS																								
UniRef90_P34368	E	A	CA	LJQAADTQGRGKATIH EEFITM																								
UniRef90_UPI0003346C08	R	V	DRIL	FAMMDK																								
UniRef90_Q6C6B6	I	D	DF	FKA LDRDKDGYI C FDEWRDFL																								
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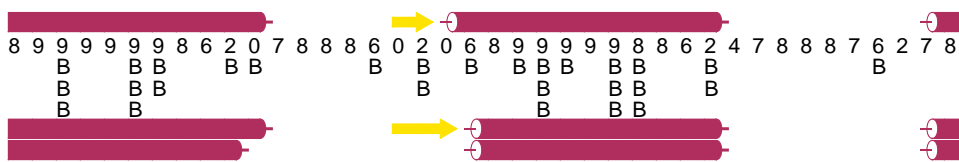


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UniRef90_K3WY98			D T D N D G F V D F C E L S S G I S V R G S Q H		E R
UniRef90_F6X892					
UniRef90_UPI0001CBACCE					L P Q E D E
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UniRef90_L8H847	A F G R Q L K E S D L D R I G A E F K R H N T H V E D E L L				
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UniRef90_G3HKG2	E V I M K A F R K L D K T G D G V I		S R E E A M K K L V Q V P A G K E K L V E E		
UniRef90_L1IMS3	Q T I K A L F E T F D A N E D G F I		T P K S L K R M L S R L		G E S K S I D
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UniRef90_W9SWS7	R L R E I V Q Q V D K D K N G T I	E L Q E F I E L
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UniRef90_V9FG36	H V D R I F H L M D T N A D G V V T	P D E L A R
UniRef90_G6CLA5	I L Q V S F M L F D L D K D G F I	S E Q E L T T I L Q A
UniRef90_UPI00033392F3	T I E A I L D D A D V N Q D G K I	D I S E W K N F V
UniRef90_A8TWY2	T V K M L M N M F D V D R S G T I	G F N E F C G L W R
UniRef90_S8ESR8		

