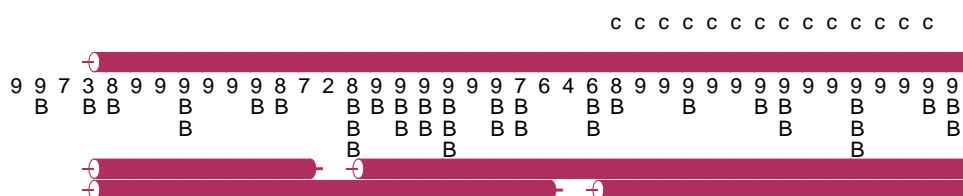


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V Q A [VN] E T N T A E D R E A I Q L E E I D N L S A E V D R I S E D T E F N T K K				
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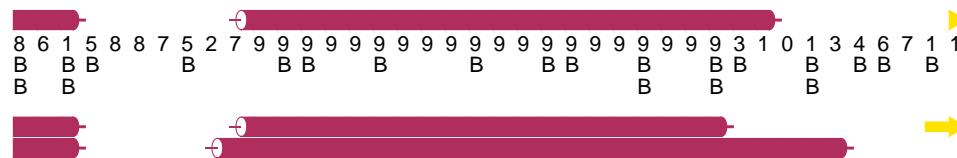
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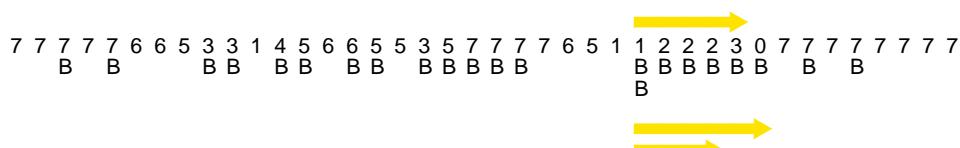
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	L	L	K	G	Q	T	G	Y	K	N	Y	M	A	A	H	D	A	G	L	Q	G	T	L	A	D	N	L	K	G	G	A	A	T	F	F	F	F				
	L	L	D	G	T	F	T	Q	Q	F	Q	V	G	A	N	A	N	E	T	I	L	I	A	A	T	A	N	L	R	T	S	V	Y	G	N	N	Q	N	L	S	A
	N	L	D	G	S	F	S	G	A	S	F	H	V	G	A	N	A	N	E	T	I	N	F	S	I	G	S	A	K	G	A	D	L	G	T	N	R	V	V		
	L	L	K	G	G	D	G	T	K	Q	E	Y	M	K	G	H	D	A	G	L	K	G	T	L	T	D	G	A	T	A	T	T	F	F	F	F	F				
	L	L	D	G	S	F	T	N	K	F	H	I	G	A	N	A	N	E	T	I	N	V	S	I	V	S	I	G	S	A	R	A	T	D	I	G	G	G	G		
	V	L	D	G	T	F	T	A	S	F	V	G	A	N	A	N	E	T	I	S	F	S	V	G	A	S	T	S	T	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	
	V	L	D	G	T	F	T	T	T	F	Q	V	G	A	N	A	N	E	T	I	S	A	S	T	S	N	L	R	T	S	V	Y	G	N	N	Q	N	T	S	A	
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
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	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
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	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N	I	T	G	V	T	N	L	T	N		
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	L	L	N	G	N	L	G	G	K	R	A	A	I	A	G	V	T	E	G	Q	A	N	F	I	S	T	T	S	A	N											

QUERY

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	130	140	150	160
Q K Y K V S D T A A T V T G Y A D T T I A L D N S T F K A S A T G G G T D Q K				
K A Y D V D S K A V T D G S G G K T L N I S G D A A A I K T A V G G T P T G				
K K Y D V D V K S E V A T P T A K L D I S G L D G A A L K T G T G S T G D T G S				
K A Y D V D V K D E A V T A G T F S V D S G V A I K S A T T V D V K T A L S T T G N D				
K A Y D V D V I S A T A A M F T D G T K N L T A P P D A T A A I K A A L G N P A A T G D S				
D A Y T P P K G T A V T R D V T T Y K N G G T T L T A P P N A A A I D T A L G T T G				
D P T K L K A A A T E T T T S F G G T P I T L K N A D T L D T A I A A K A Q G K T				
G D K A A T S D Q L V K D F G A T G T K D Y K L G T T D Y K V N V V T G G V K A				
V G A F A A A G A T T L A A G S I G T E D L G R G L S A Q T Y N L V V T H S A A A				
A T I N S S N V G I E K V E M D R T T T T S M G N G T T Q S F T V S D T A A K T Q				
G A S T T A G T G D G F G Q V T A T G T A S S A S T T Y R E D S T V T L D				
L G A A V V A D A A N N G V A A S N S I T G K D G K V T S I A T T A N M E A S K				
A A T T T G G K G D L T M G S T A N A L L G S T A A L L T T S R V A G G A I T N G				
G A A A G T A A S G G G A V V N G V S S G S V A I N G Y L G S E T I S V A A N A				
I T F V A P D K K K D V S V S D N N N L A K A L R D Q G V S V S A K T I I S T D				
T T D I K T D T D K T I A G K D Y H Y D K S T D T I S V I Q G K I E K N F N T				
N G A G P A A Q A V A T T P S A V V G V T V G A V A L N G S L G S A T V S V A				
M E G G G V M Q D A V T L A A T L P A A N G L T G G D F T L A G A N N G T M Y S T				
K V A A G A L D A G K S V T L G G K D Y T I G T D K T E V Q T A V D G L T A E G				
S H V G T S G S L S A A A D I S G G N G V A Q Q D L T I N G P N G T A T I				
G T I N Q A T A G T A N T V V A A Q T M T V S G S L G T E S I T V A A G A T A K T				
N G S G S G A S A T S W S T N G V T A G T L A V N G A L G S R N I T I N A N D T				
G K V G T H E V T F S T G V A G E V K G T A T N L N G T E T L A S L G I T D S				
S P A G S K P Q G E D I A D L N G V T F D K D Y S T L E A F V A D I N G T T F P				
F M N G V D Q E S L N A G V M K S T Q A G N G N T Y V S T Y I D L A G F D A S				
V A R F T G A A V P T A N A L S A G D L L I N G V D V A P S T A D				
R S A T V S G A A G N V T L A D L A D N Q F L T E G V Y T L T T V A N G S N D I				
E K A K V T S P A A I A D T V A P A S G K I T I N G E T V E I E K G T S L A D V				
P V T A N Q N Y N S T A P V G A S G T M S I N G S K V E I E A A D T Y A E A				
S A G K L K V H F G T G N N S S E D Y Y Y V Q I E N M T A E A L S L G S N A T A				
D M M S G T G K V S M V F S S A S G A D I T I A S V I S T S A G T G V G				
I N S N A T L A T K A S V T L T A T G V N T V D K S D S L T I I A N G				
G R V A G S V D S S A N G T I N V D G V N L K V K A G A L D G K T T I				
S L A K Y E G G A V R V G T D T V P A G V N G T V A I N G I E V E I S E G E T F				
T Y K S T G L T A G D S S S L E I K Y M T A D G S I N T I S V S V T D A T S A				
G E R Y T I G G T Q Y T I G A S T N Q E V A E A L H L T Q Y T T A T A G D T I S				
T N I E K F A E S I Q A K G V T D I R M G L V T Y G N D S Y T I E K F N G D K W				
K L L T A M G A V N L K F L N V D G V N D V G V T A A T I S T G L G K G I G A L				
P S G S V Y G G S T G A Y G N G L A Y V A S T S G A F S S G T M T I Y G S Q G S				
K F T A M G G V A L N F I A T N G G K D V S I E S V V I S T S A G T G L G A V A				
P A G A T N V R I E M D S L S A D D M Q L F T L D G R H L V G T P I I				
L T G Y K F K I V S E A T Q A T K G A L P F T D V V D K A T A G Q I Q I				
K R R D G N D V G I D S S D T L T A S W V K N G V T Y T G T L S P I G T G T V T				
S M A S I N T N N A S V I S A Q I N S I D A A I N K V S G Q R A D L G A A Q N R				
M E A T A G T Y S F T V V S N A T A S V S G I W N K I T P A T K D T S F S I				
K R R D G S S L S I D P Y D S V T A T W T K N G V T Y S G T I N P I L N T N I				
Y N I D I V E G D T L D T I M D K V M D G A N M A G G R A F A V S S L A N D T K				
F P S G V I S L A Y I P A G A K N I T I D S L S A D D I Q L F A R D G R H				
I S T A S A A A L T T G A A Q I T A M D S M L E K I G E A R S A F G A N I N R				
Q V N S Y I T R I N F S D N V A S D K Y E L T V N S L A T Q A T G S L A S A T K				
E V T S G A D F N S T A A I G V S G T M S V N G S T V E I A A T D I G E T Q I E				
Q Y I A V G E N G N I L S S S D G E N W S I S N I G G N E N L Y D V I T N G N Q				
K K Y D V K S E A V T P S A T L S T T A L D G A G L K T G T G S T T D T G S I K				
I K Q A A T R S T H N G T A A L T Q Q I I D A E E Q I T I V E S G R S V N F R T				
Y V D S T T T P G T N I T S N P G T P N T A V N L T T T P L T D A Q K N A I				



QUERY	170	180	190	
UniRef90_Q6V302	D G D L K F D D T T G K Y Y A K V T V T G G T G K D G Y Y E V S V D K T N G E	T G E I K D N K V Y H N S T D G K Y Y V E V A G Y T S G E N G F Y E V D A N P A	G T V S D K A T G K Y Y A T V S G L T D S A D T S K N G T Y E V N V S S T G D I	200
UniRef90_Q6V388	K D G K V Y Y D G T D Y Y A E I T F T D T A D Q T A K G G Y Y K V N V D D A T G	L S A T L S F K D Y Y A T V A G Y T N A A D T S K N G K Y E V N V D S A T G A V	A A G T A A V K F K D G N Y F V E V T G T T K D G L Y E A T V D A A G A V T M T	
UniRef90_Q6V389	G T V S D K A T G K Y Y A T V S G L T D S A D T S K N G T Y E V N V S S T G D I	P G T S P K G K G E G G I V A D A A Y V K V V G S D K T D E N G Y Y E V T V N K	G A D D V Y V G A S S G A L I T D A T N T A L S G G T T T G G A V A V L A K D V	
UniRef90_B4SW64	L S A T L S F K D Y Y A T V A G Y T N A A D T S K N G K Y E V N V D S A T G A V	T A E T A D V T G G T A I S G T Y T G D R N E T A M F R V T A T A G E V T G V	T A E T A D V T G G T A I S G T Y T G D R N E T A M F R V T A T A G E V T G V	
UniRef90_A9MU52	A A G T A A V K F K D G N Y F V E V T G T T K D G L Y E A T V D A A G A V T M T	G S A E E A D I I N S V K D S T G V T A Q A K T E A R L D L A G T Q T T A G	W N G G A T G L T G M T I E S S A N S S K Y N D Y K F E V K Q I G A G A T T A A G	
UniRef90_Q6VMU2	P G T S P K G K G E G G I V A D A A Y V K V V G S D K T D E N G Y Y E V T V N K	L E K S L N A K T A K T G V S A D A R T V A S V K T F S A A G A M S F S L N G S	S A G S S T V T I A A G A S A K A K A E Q Q I N A E T G K T G V T A S A K T E I D	
UniRef90_K8QRK7	G A D D V Y V G A S S G A L I T D A T N T A L S G G T T T G G A V A V L A K D V	T S K D I A A D I N S K T A D T G V T A T A T E V D L A F A A S G S Y T L N L	T S K D I A A D I N S K T A D T G V T A T A T E V D L A F A A S G S Y T L N L	
UniRef90_X4ZQF6	T A E T A D V T G G T A I S G T Y T G D R N E T A M F R V T A T A G E V T G V	A A G V T T A S K E Y V L E L N G S D A K A N Y K V I L T D A E A G K F E I Q D	A A G V T T A S K E Y V L E L N G S D A K A N Y K V I L T D A E A G K F E I Q D	
UniRef90_UPI0001850950	W N G G A T G L T G M T I E S S A N S S K Y N D Y K F E V K Q I G A G A T T A A G	A K A A N T D G T I A E D K I A S V T I N G A T Y V T G A A S Q D S S K T V F K D	D S S A K T I A D Q V N A V Q A N T G V T A S A R T E V E V E L N I A T A G S Y T L	
UniRef90_Z5XQC1	S A G S S T V T I A A G A S A K A K A E Q Q I N A E T G K T G V T A S A K T E I D	D S S A K T I A D Q V N A V Q A N T G V T A S A R T E V E V E L N I A T A G S Y T L	V V G V D A G D T A G E L E T K I N A V S S E T G V T A T A T E V D L A F A A S G S Y T L	
UniRef90_Z9K462	T S K D I A A D I N S K T A D T G V T A T A T E V D L A F A A S G S Y T L N L	V D Q V T V N G K T Y T Y T K K G G T G K T D E G W V E G T T A T I T K A S L S T F T	D Q V T V N G K T Y T Y T K K G G T G K T D E G W V E G T T A T I T K A S L S T F T	
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UniRef90_H8W9W8	D S S A K T I A D Q V N A V Q A N T G V T A S A R T E V E V E L N I A T A G S Y T L	I A E K L N N I S N D T G V N A T A V T N A K L T V G A T G A Q S F Q L F G K K	I A E K L N N I S N D T G V N A T A V T N A K L T V G A T G A Q S F Q L F G K K	
UniRef90_R9LAR7	V V G V D A G D T A G E L E T K I N A V S S E T G V T A T A T E V D L A F A A S G S Y T L	S K A M A D N I N L Q T A N T G V T A S A R T E V D L S F A S V G S Y T F E L R	S K A M A D N I N L Q T A N T G V T A S A R T E V D L S F A S V G S Y T F E L R	
UniRef90UPI0004103EEB	D Q V T V N G K T Y T Y T K K G G T G K T D E G W V E G T T A T I T K A S L S T F T	G L A V G D T G S E T G L K G L T L N S T V A D L M N A I S T Q T N S T A E L V N	G L A V G D T G S E T G L K G L T L N S T V A D L M N A I S T Q T N S T A E L V N	
UniRef90_B9MGC5	S G S V I T A D T E A S T I A N A V N N V S G E T G V S A T A R T E V T L D N L	N N E G P V K A Q Q L P F S V A S A V D L S A L P S Y I D V A G H S V D L T T G	N N E G P V K A Q Q L P F S V A S A V D L S A L P S Y I D V A G H S V D L T T G	
UniRef90_K1YM08	I A E K L N N I S N D T G V N A T A V T N A K L T V G A T G A Q S F Q L F G K K	K V I S D L D G K G F Y A T C C A G C Y A R R Y S I K F S A D S D T N S S T M S G N	K V I S D L D G K G F Y A T C C A G C Y A R R Y S I K F S A D S D T N S S T M S G N	
UniRef90_D6E544	S K A M A D N I N L Q T A N T G V T A S A R T E V D L S F A S V G S Y T F E L R	G I S T A N A S G S A L A I A N A I N Q A G T G A V T L T D A K G K G N N V I D I G F S S	G I S T A N A S G S A L A I A N A I N Q A G T G A V T L T D A K G K G N N V I D I G F S S	
UniRef90UPI0003B30842	G L A V G D T G S E T G L K G L T L N S T V A D L M N A I S T Q T N S T A E L V N	Y T Q L R D L G S N V N V D V Y T T T D A A G K T Q G T V Q K D A Y L N F E S K	Y T Q L R D L G S N V N V D V Y T T T D A A G K T Q G T V Q K D A Y L N F E S K	
UniRef90_E8RGRD4	N N E G P V K A Q Q L P F S V A S A V D L S A L P S Y I D V A G H S V D L T T G	F E K I R N A A E A G E T T V V Q I D G T S G A L S F T A D R Y G M S S	F E K I R N A A E A G E T T V V Q I D G T S G A L S F T A D R Y G M S S	
UniRef90_J1E9A9	K V I S D L D G K G F Y A T C C A G C Y A R R Y S I K F S A D S D T N S S T M S G N	E D A I S R I S G Y W A A D L Y Q T F K P L E E S G D I T T D D F N E L I N D Y	E D A I S R I S G Y W A A D L Y Q T F K P L E E S G D I T T D D F N E L I N D Y	
UniRef90_L5MVV4	G I S T A N A S G S A L A I A N A I N Q A G T G A V T L T D A K G K G N N V I D I G F S S	A L A N E I N K S T D A T G V S A S W S L T Q T G D S A V V I S G T T G V I T N	A L A N E I N K S T D A T G V S A S W S L T Q T G D S A V V I S G T T G V I T N	
UniRef90_A0KKF1	Y T Q L R D L G S N V N V D V Y T T T D A A G K T Q G T V Q K D A Y L N F E S K	K T Y N V G T T A G Q T Y D D L A K K I T S T V D G A T A T W D S T A G T F K F	K T Y N V G T T A G Q T Y D D L A K K I T S T V D G A T A T W D S T A G T F K F	
UniRef90UPI00041F85C3	F E K I R N A A E A G E T T V V Q I D G T S G A L S F T A D R Y G M S S	G N T S Y T A A L K V T A G K V D G K I T A D T T Y A I N K D T T T V T I N G K	G N T S Y T A A L K V T A G K V D G K I T A D T T Y A I N K D T T T V T I N G K	
UniRef90UPI000378201D	E E V Y N K L R E G A E R G E V N L L V V D D P S T G G K P E D G G Y I P P S D	E E V Y N K L R E G A E R G E V N L L V V D D P S T G G K P E D G G Y I P P S D	E E V Y N K L R E G A E R G E V N L L V V D D P S T G G K P E D G G Y I P P S D	
UniRef90_D5WVR7	L N A N K D F K E N A T L T L A A G S L T W A G K D G K P E T H F K I L E V S L T	L N A N K D F K E N A T L T L A A G S L T W A G K D G K P E T H F K I L E V S L T	L N A N K D F K E N A T L T L A A G S L T W A G K D G K P E T H F K I L E V S L T	
UniRef90_R715P0	I D G K T Y T I N A D D I G T D I A N A K V T N G Y L A K L I T K G S T V K Y N S	I D G K T Y T I N A D D I G T D I A N A K V T N G Y L A K L I T K G S T V K Y N S	I D G K T Y T I N A D D I G T D I A N A K V T N G Y L A K L I T K G S T V K Y N S	
UniRef90_D4KTU3	C T K F E E L N E T L L N N L K N D A W E E N G M T A M Q L V I A N Q Y D F R E S S	C T K F E E L N E T L L N N L K N D A W E E N G M T A M Q L V I A N Q Y D F R E S S	C T K F E E L N E T L L N N L K N D A W E E N G M T A M Q L V I A N Q Y D F R E S S	
UniRef90_G7Q747	A E N I N K V A D K T G V R A T Y D V T W K A S K A I S S G G L I K S T I N G V V	A E N I N K V A D K T G V R A T Y D V T W K A S K A I S S G G L I K S T I N G V V	A E N I N K V A D K T G V R A T Y D V T W K A S K A I S S G G L I K S T I N G V V	
UniRef90_W6EIB9	G A V T V W S S G E S A A S V A Q S V N Q V A N L T G V N A Q A Y T S V A F N V N	G A V T V W S S G E S A A S V A Q S V N Q V A N L T G V N A Q A Y T S V A F N V N	G A V T V W S S G E S A A S V A Q S V N Q V A N L T G V N A Q A Y T S V A F N V N	
UniRef90_E7RIY4	E A I N K N S D N L L G G V V R A D Y T V I A A G A N A I A A G D I T S L T I N G V	E A I N K N S D N L L G G V V R A D Y T V I A A G A N A I A A G D I T S L T I N G V	E A I N K N S D N L L G G V V R A D Y T V I A A G A N A I A A G D I T S L T I N G V	
UniRef90_R5LM81	E T D D S P T D H V W A S R G I S D V E T A N K F L T E E N G F Q P G A S Y D A	E T D D S P T D H V W A S R G I S D V E T A N K F L T E E N G F Q P G A S Y D A	E T D D S P T D H V W A S R G I S D V E T A N K F L T E E N G F Q P G A S Y D A	
UniRef90_R9IY87	N G E V I D I K E G Q T F E D V Y I A N I R D Y C E C Y T P D M N V D V V P V N A A G V E	N M I S L I T S Q H A T F H S T G A D V G V D E Y G R T V Y T P D N Q P A L T I	N M I S L I T S Q H A T F H S T G A D V G V D E Y G R T V Y T P D N Q P A L T I	
UniRef90_R9M220	L E H T I I N N L G T A A E N L T A A E S R I R D V D M A Q A M M E F	L E H T I I N N L G T A A E N L T A A E S R I R D V D M A Q A M M E F	L E H T I I N N L G T A A E N L T A A E S R I R D V D M A Q A M M E F	
UniRef90_O31062	N G E V I D I K E G Q T F E D V Y I A N I R D Y C E C Y T P D M N V D V V P V N A A G V E	N G E V I D I K E G Q T F E D V Y I A N I R D Y C E C Y T P D M N V D V V P V N A A G V E	N G E V I D I K E G Q T F E D V Y I A N I R D Y C E C Y T P D M N V D V V P V N A A G V E	
UniRef90_W8T4A9	N M I S L I T S Q H A T F H S T G A D V G V D E Y G R T V Y T P D N Q P A L T I	D M I G L I T A T D A G I F E T S A H V G F D E Y G K P V Y T P D N Q P A V V S I	D M I G L I T A T D A G I F E T S A H V G F D E Y G K P V Y T P D N Q P A V V S I	
UniRef90_A7H0H9	L E H T I I N N L G T A A E N L T A A E S R I R D V D M A Q A M M E F	T N G S D Y A G Y K P D T S Y T G N R L V I M T E Q Y G R D Q Q L D V T C S N K	T N G S D Y A G Y K P D T S Y T G N R L V I M T E Q Y G R D Q Q L D V T C S N K	
UniRef90_C6NYH4	N G E V I D I K E G Q T F E D V Y I A N I R D Y C E C Y T P D M N V D V V P V N A A G V E	T E H T V N N L S N M K E N T D M A N G R I L M D A D F A Q E S T N M T K N Q M L	T E H T V N N L S N M K E N T D M A N G R I L M D A D F A Q E S T N M T K N Q M L	
UniRef90_C5F0W7	D M I G L I T A T D A G I F E T S A H V G F D E Y G K P V Y T P D N Q P A V V S I	P D A E G T I S I N G V S V A V K A D M T Q D E Y I Q A L Q K A A T T A G T T M	P D A E G T I S I N G V S V A V K A D M T Q D E Y I Q A L Q K A A T T A G T T M	
UniRef90UPI0003666884	T N G S D Y A G Y K P D T S Y T G N R L V I M T E Q Y G R D Q Q L D V T C S N K	R S K A D G S L T F T D A Y G S D A T L K C L S F S N Q A L A N Q F A L I S D A S S	R S K A D G S L T F T D A Y G S D A T L K C L S F S N Q A L A N Q F A L I S D A S S	
UniRef90_R7C7Y1	L T G T P A E G A D A D I V W S A N G V T D E T T M N T A V I T Q N N G F L P N	L V I A F G D T G S L Y T S N D G I S W N S Q T F T T D G V W N Q P Q L Q L L D G	L V I A F G D T G S L Y T S N D G I S W N S Q T F T T D G V W N Q P Q L Q L L D G	
UniRef90_U2M11	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	
UniRef90_D3T750	L E H T I I N N L G T A A E N L T A A E S R I R D V D M A Q A M M E F	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	
UniRef90_R5S833	N G E V I D I K E G Q T F E D V Y I A N I R D Y C E C Y T P D M N V D V V P V N A A G V E	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	
UniRef90_F5RQ92	D M I G L I T A T D A G I F E T S A H V G F D E Y G K P V Y T P D N Q P A V V S I	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	
UniRef90_R7N956	T N G S D Y A G Y K P D T S Y T G N R L V I M T E Q Y G R D Q Q L D V T C S N K	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	
UniRef90_Q6D372	L T G T P A E G A D A D I V W S A N G V T D E T T M N T A V I T Q N N G F L P N	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	
UniRef90_Q9AET1	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	
UniRef90_C4Z9J4	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	
UniRef90_G2T5W2	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	
UniRef90_W7LHD0	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	
UniRef90UPI0003EB2C27	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	D G K V V Y N S T S K N Y Y V E V E F T D A T D Q T N K G G F Y K V N V A D D G G	
UniRef90UPI000318AD92	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	
UniRef90GZM9X5	A F R D A S G T S E D R K A D I T N I L C G G N V V Y T T A G V G V I T S F K Y T	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	T A G T N I E Q T M N Q L S S N A M K E A G V N V E L I R P K G D A A S R N A P Q T N	

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
inssm

QUERY	210	220	230
UniRef90_Q6V302	V T L A G G A T S P L T G G P A T A T E D V K N V Q V A N A D L T E A K A A L		
UniRef90_Q6V388	D G T V T F A T G A T K I T A K P A D V E V T T V Q S K P I A L S A E V K T Q		
UniRef90_Q6V389	A V T M T A S T T K E T T P T G I T A V A Q V Q K P V A A P S A I Q D Q L T A		
UniRef90_B4SW64	T F V D T T K D T V T A G S V E V Q N V H T K A A G A L P D L A D A K A A L T K		
UniRef90_A9MU52	T F N A A P T K A T V T G D T T V T K V Q V N A P V A V S T D V K K A L E D G G		
UniRef90_Q6VMU2	A N K A T V T G A S T V T E N T Q I V D A V T P T P V D T V A A A T A L T N A G V		
UniRef90_K8QRK7	D P T S P D A G T L T G N K A V T Q P Q A K D L T D V T T V K G N D A A E V K		
UniRef90_X4ZQF6	T Q G N T F T W K G T T W K A N S D T D A N G N G S F T A N I D G K D L T L S I		
UniRef90_UPI0001850950	D L S L D G G T T W S S Q T V T N G A G S S T V A Y K G T T V T F D T G G G N A		
UniRef90_Z5XQC1	S I N E S S K T I T L S L A S D H A T A V T A V E V N A A F T T A G I G D L T A		
UniRef90_Z9K462	D P I S F E I N G E K I S F V A T G S A T G D E A A M A E A I N K A T D E H G V		
UniRef90_A1K915	T I S A T T S S V I T D Y A S V A E A I N E K S G A H G V T A T I D D T L G L V L		
UniRef90_H8W9W8	V T F S A A N T S Y K F D I A S D N S T A V T I S F T T G A N D K D G L A S A V		
UniRef90_R9LAR7	T A D N E S A Q S V S F T I D A T S G Q D S L S A A V A A I N D Q S S K T G I T		
UniRef90_UPI0004103EEB	L D G N K V A E A T V G V I K A G E S A V M T A K T V T A A L S A N E V I Y E F Y		
UniRef90_B9MGC5	L G E E E F T L D E I K A K A V V D G A K V G V G K D T A G T R T A V D K S I D K		
UniRef90_K1YM08	A L L G D N S T P Q T V S F T L P S T T G A D R L S A A V Q S I N D Q S A K T G		
UniRef90_D6E544	D V G A Y S F N I L Y G S N T T G A V V S G T I T S A S D L T V N A A A V N D M S		
UniRef90_UPI0003B30842	S T L A Y G K K G A A N P L T I A N G D K V T T T P K T G A S A S Y T A A E M D S		
UniRef90_E8RGD4	G G D G T V A F N L S S S S N T A V S I S A G V T Q S D L T N L A D A V V N N R T		
UniRef90_J1E9A9	N T T G E T I S A N I T N L S D L T E L A D A I N S K A A E T G V I T A E L A A D		
UniRef90_L5MVV4	S E N T P T A P A L G Q S V S F N I S A I N T S D G L S N A I S A I N E Q S A K		
UniRef90_A0KKF1	N G Q L V V Y R D S A S A T Q I N I K Q T T A S A T S A T N I L A S I N G D A T K		
UniRef90_UPI00041F85C3	I D M T G W D P V N P T A K N S A I L M A T V A Q R I N S T A Q A A G L G F Y V S		
UniRef90_UPI000378201D	N R I Y T V G I Q G A A T P G E M D R I R K A T K G S S Q L G N P N N H Y T W F		
UniRef90_D5WVR7	A I A G G S F N G T E Q I T I N G V N I L S C A V V I A A N D G T S		
UniRef90_R715P0	G A I S T A S A A T V T I S A S G A D L S E T A N T A G L V I G V Q M T K A D S L		
UniRef90_D4KTU3	E A G A S R K V E V Y C D N K D L A D F L G I D T N S N N M K A V G K D A E I E		
UniRef90_G7Q747	S I L E I G F D N Q Q L A A A L G F T A S G G N S V V E D P E N K G S Y V Y G Q		
UniRef90_W6EIB9	P A Y L L S E R M T E W S I P T S Q A T F D A I R Q R Y L D L P S E G Y P D S Y V		
UniRef90_E7RIY4	G V T I A L S S L D V K A N D S S G T L V D A L N Q Y S A T T G V S A S V N S E G		
UniRef90_R5LM81	E S N D A N A D Q S I S V A E T T L G A L D G T K D F T T A A T D T G S N A S G		
UniRef90_R9IY87	N Y T V A N N G Q A A T L Y D A N G A Q V T A I D G A K V T V T A T S I N		
UniRef90_R9M220	L A T G G F L V F V S D E Y G S S T E M N I Q C D D Q D L A A F L G I A T		
UniRef90_O31062	V N G V A L T S G D T V G V A V T A G V D D T F G I D F S G A T A G S K N Y F E		
UniRef90_W8T4A9	G N E V T R F S T S Y N S S T G I D D A N V T L I K A T A A Y K M V A X L K A		
UniRef90_A7H0H9	A V S S K H I I L T D E F G D D N E K Y D E T L K R V K D T G I Q V H G V Y N		
UniRef90_C6NYH4	K I G D L E V K A N D S N G A L V N A I N S V K D Q T G V E A S V D A E S G K M		
UniRef90_C5F0W7	T S T G D I S F S L G N G T S G S L N N A V S I S A D V T S S S A S G M S S L V		
UniRef90_UPI0003666884	S I G N I T G V Q A N D K D N R L V Q A I N A Y K D T T G V E A S V D K D G R L		
UniRef90_R7C7Y1	S S F A D A T G K Y D V A M P P V D Q E Y A G M Q I T Y S G D R D R A F N S D E		
UniRef90_U2M111	C E L A A A T N L S F T S V I Y G A S Q K L N I T T D N A N L A Q K L G I N G V		
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UniRef90_F5RQ92	T S T I P G V E G Q V S G I T F R V M G R D G H M R N D V N A V L D D F R E T V		
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UniRef90_G2T5W2	G N G N G L V Q D P A T K Q W I Y G S Q Q T D A S G K T T T S V P N G S D M E L D		
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UniRef90_UPI0003EB2C27	A V T M T A A T T K E A T T P T G I T E V T Q V Q K P V A A P P A I Q A Q L T A		
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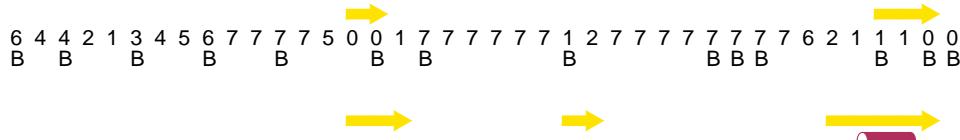
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QUERY

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250 260 270 280

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



QUERY

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	290	300	310	320
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Several mutations are highlighted in yellow, such as at position 340 (C, S, T, Y, P, A, D, E, R, K, H, F, I, L, V, M, G, W, Q, N, S, T, C, Y, P, K, R, D, E, F, G, S, T, D, E, A, I, V, L, D, P, T, A, S, K, A, E, G, H, N, F, K, A, Q, P, D, L, A, E, A, A, A, T, T, T, E, N, P, L, Q, K, I, D, A, A, L, E, G, K, T, Y, T, A, A, K, A, K, D, H, N, F, K, A, D, P, D, L, A, E, A, A, A, K, T, T, T, E, N, P, L, Q, K, I, D, A, A, L, E, G, K, T, Y, T, A, A, K, A, K, D, H, N, F, K, A, D, P, D, L, A, E, A, A, A, T, T, T, T, E, N, P, L, Q, K, I, D, A, A, L, G, G, K, T, Y, T, A, A, K, A, K, D, H, N, F, K, A, D, P, D, L, A, V, V, A, A, A, T, T, T, E, N, P, L, Q, K, I, D, A, A, L, D, G, K, T, Y, N, A, S, K, A, A, G, H, H, D, F, K, A, Q, P, E, L, A, E, A, A, A, K, T, T, T, E, N, P, L, Q, K, I, D, A, A, L, D, G, N, T, Y, Q, A, S, D, V, K, G, H, H, N, F, Q, S, G, G, A, L, S, E, A, V, T, T, K, T, E, N, P, L, Q, K, I, D, A, A, L, V, V, T, A, T, D, G, K, T, Y, S, V, D, L, Q, G, K, S, L, K, T, D, S, I, A, I, S, T, 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lupas_21
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QUERY	A	Q	V	D	T	L	R	S	D	L	A	V	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	N	N	L	T	S	A	R				
UniRef90_Q6V302	A	Q	V	D	A	L	R	S	D	L	G	A	V	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	N	N	L	T	S	A	R			
UniRef90_Q6V388	A	Q	V	D	A	L	R	S	D	L	G	A	V	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	V	N	N	L	S	E	A	R		
UniRef90_Q6V389	A	Q	V	D	A	L	R	S	D	L	G	A	V	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	V	N	N	L	S	E	A	R		
UniRef90_B4SW64	A	Q	V	D	A	L	R	S	D	L	G	A	V	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	V	N	N	L	S	E	A	R		
UniRef90_A9MU52	A	Q	V	D	A	L	R	S	D	L	G	A	V	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	V	N	N	L	S	E	A	R		
UniRef90_Q6VMU2	D	K	A	L	S	S	Q	R	S	N	L	G	A	I	Q	N	R	F	D	S	T	T	N	L	G	N	T	V	V	N	N	L	S	S	A	R		
UniRef90_K8QRK7	S	Q	V	D	T	L	R	G	D	L	G	A	V	Q	N	R	F	D	S	T	T	N	L	G	N	T	V	V	N	N	L	T	S	S	A	R		
UniRef90_X4ZQF6	E	K	V	S	A	E	R	S	K	L	G	A	Y	Q	N	R	L	E	H	T	T	N	N	L	N	T	S	S	E	N	L	T	A	S	E	R		
UniRef90_UP10001850950	T	T	V	S	E	E	R	S	K	L	G	A	Y	Q	N	R	L	E	H	T	T	N	N	L	N	T	S	S	E	N	L	T	A	S	E	R		
UniRef90_Z5XQC1	A	N	I	D	A	Q	R	A	G	L	G	A	V	Q	N	R	F	S	H	T	T	S	N	L	A	N	I	S	E	N	V	S	A	S	R			
UniRef90_Z9K462	A	Q	I	D	S	Q	R	A	S	L	G	A	I	Q	N	R	F	G	H	T	T	S	N	L	A	N	I	Q	E	N	V	S	A	S	R			
UniRef90_A1K915	A	A	V	N	G	Q	R	A	K	F	G	A	L	Q	S	R	F	E	N	T	T	A	N	L	Q	T	T	S	E	N	M	S	A	S	R			
UniRef90_H8W9W8	N	T	I	N	S	Q	R	A	K	F	G	A	I	Q	S	R	F	E	S	T	T	S	N	L	E	S	T	S	N	L	S	A	A	Q				
UniRef90_R9LAR7	R	K	V	S	T	Q	R	A	D	L	G	A	V	Q	N	R	L	E	H	T	T	K	N	L	D	N	I	I	E	N	T	T	A	A	E			
UniRef90_UP10004103EEB	K	T	V	S	A	Q	R	S	A	L	G	A	V	Q	N	R	L	E	H	T	T	K	N	L	D	N	V	V	E	N	T	T	A	A	E			
UniRef90_B9MGC5	A	F	I	S	G	E	R	A	K	L	G	A	L	Q	S	R	F	E	T	S	T	A	S	L	N	I	T	S	E	N	L	S	A	S	R			
UniRef90_K1YMO8	N	M	I	D	S	S	R	G	D	L	G	A	I	Q	N	R	F	E	S	T	T	A	N	L	Q	N	V	S	E	N	L	S	A	S	R			
UniRef90_D6E544	Q	K	V	S	D	Q	R	S	S	L	G	A	V	Q	N	R	L	E	H	T	T	D	N	L	D	N	V	V	E	N	T	T	A	A	E			
UniRef90_UP10003B30842	S	G	I	A	T	Q	R	A	D	L	G	A	V	Q	N	R	F	D	S	T	T	A	N	L	E	S	I	S	Q	N	V	T	A	A	R			
UniRef90_E8RGD4	S	F	I	D	T	E	R	A	N	L	G	A	I	Q	N	R	F	E	S	T	T	S	N	L	Q	N	I	S	E	N	V	S	A	A	R			
UniRef90_J1E9A9	A	F	I	I	N	G	E	R	A	K	L	G	A	L	Q	A	R	F	E	T	A	I	S	S	L	N	I	T	S	E	N	L	S	A	S	R		
UniRef90_L5MVV4	E	T	V	S	S	E	R	A	K	L	G	A	F	Q	N	R	L	E	H	T	T	I	N	N	L	G	T	S	S	E	N	L	T	A	A	E		
UniRef90_A0KKF1	K	Q	L	G	V	Q	R	A	R	L	G	A	Q	A	N	A	L	D	A	R	V	R	N	L	A	N	A	N	E	N	L	S	A	A	R			
UniRef90_UP100041F85C3	A	Y	V	S	A	E	R	S	R	M	G	A	Y	Q	N	R	L	E	H	T	T	V	R	N	L	A	N	V	V	E	N	T	Q	A	A	E		
UniRef90_UP1000378201D	K	Q	V	N	S	I	R	A	G	L	G	A	I	T	N	R	L	E	H	T	T	Q	N	L	Q	G	I	S	E	N	L	S	A	S	R			
UniRef90_D5WVR7	N	T	V	S	T	A	R	S	N	L	G	A	I	Q	N	R	L	E	H	T	T	I	N	N	L	G	T	A	A	E	N	L	T	A	A	E		
UniRef90_R715P0	N	N	V	S	S	V	R	A	K	L	G	A	Y	E	N	R	L	E	H	A	T	I	S	N	L	D	T	S	N	E	N	L	T	E	A	A	E	
UniRef90_D4KTU3	S	K	V	S	E	V	R	S	R	L	G	A	Y	Q	N	R	L	E	H	T	T	V	S	S	L	D	T	F	E	N	M	T	G	A	Q			
UniRef90_G7Q747	I	N	K	D	K	A	R	A	S	L	G	A	V	Q	N	R	L	E	H	T	T	S	S	N	L	Q	I	Q	A	E	N	L	M	A	S	E		
UniRef90_W6EIB9	E	S	L	D	G	I	R	A	S	I	G	S	V	Q	N	Q	L	E	S	T	T	S	N	I	S	V	I	Q	V	N	V	T	S	A	E			
UniRef90_E7RY4	K	S	V	S	S	E	R	S	K	L	G	A	V	Q	N	R	L	E	H	T	T	S	N	I	N	T	S	A	E	N	L	T	A	A	E			
UniRef90_R5LM81	N	K	T	S	M	V	R	A	T	F	G	S	I	Q	N	R	M	E	H	K	T	I	E	N	L	T	T	N	E	N	L	T	D	A	E			
UniRef90_R9IY87	A	K	V	S	E	V	R	S	S	I	G	A	Y	Q	N	R	L	D	Y	A	V	I	S	S	L	D	T	A	S	E	N	L	M	T	Q			
UniRef90_R9M220	D	K	V	S	E	Q	R	G	V	L	G	A	T	Q	N	R	L	E	Y	T	I	S	N	L	D	T	A	S	E	N	L	M	Q	S	A			
UniRef90_O31062	Q	R	V	S	S	A	Q	R	A	E	L	G	A	V	Q	N	R	L	E	H	S	I	K	N	L	D	N	V	V	R	N	T	E	A	A	E		
UniRef90_W8T4A9	A	K	V	S	S	K	R	S	E	F	G	A	Y	Y	Q	N	R	L	E	H	S	I	K	N	L	D	N	V	V	R	N	T	E	A	A	E		
UniRef90_A7H0H9	K	T	L	D	L	V	R	S	D	L	G	S	V	Q	N	Q	L	Q	A	T	V	N	N	I	T	V	T	Q	V	N	V	K	S	A	E			
UniRef90_C6NYH4	Q	Q	L	N	E	Q	G	T	Q	L	G	A	V	Q	Q	R	V	E	S	A	L	S	N	E	Q	T	T	N	N	D	Q	S	A	Q				
UniRef90_C5F0W7	K	Q	L	D	T	I	R	A	D	L	G	S	I	Q	Q	M	Q	S	T	I	N	N	I	T	T	Q	V	N	V	K	S	A	E					
UniRef90_UP10003666884	S	Q	I	D	T	Y	R	S	H	Y	G	A	M	Q	N	R	F	E	G	A	V	A	G	Y	E	Q	S	S	L	A	L	Q	A	A	Q			
UniRef90_R7C7Y1	Q	Q	V	S	S	I	R	A	K	L	G	A	Y	Q	N	R	L	D	S	A	I	S	L	D	E	T	S	Q	N	L	T	E	A	A	E			
UniRef90_U2M111	I	R	A	T	D	Q	A	V	I	G	A	Y	Q	N	R	L	G	F	T	V	S	T	V	L	S	Q	E	K	I	A	T	T	A	A	R			
UniRef90_D3T750	R	Q	I	S	T	A	R	K	L	G	A	Y	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	N	N	L	S	S	A	R				
UniRef90_R5S833	I	R	A	T	D	Q	A	V	I	G	A	Y	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	N	N	L	S	S	A	R				
UniRef90_F5RQ92	N	Y	V	N	S	A	R	S	K	L	G	A	Y	E	N	R	F	D	H	T	T	K	N	L	E	V	S	S	N	V	T	K	A					
UniRef90_R7N956	K	T	L	D	G	Y	R	S	E	Y	G	S	Q	M	N	R	F	E	S	V	T	V	L	S	Q	E	K	I	A	T	T	A	A	R				
UniRef90_Q6D372	E	Y	V	S	G	V	R	S	R	I	G	A	F	Q	N	R	L	E	S	A	E	S	S	L	S	E	T	S	N	L	D	F	G	E	N	M	T	D
UniRef90_Q9AET1	A	R	V	S	E	T	R	S	N	L	G	A	Y	E	N	R	L	E	Y	S	T	N	S	L	D	E	F	G	E	N	M	T	D	A				
UniRef90_C4ZQJ4	S	Q	I	D	T	Y	R	S	H	Y	G	A	M	Q	N	R	F	E	G	A	V	A	G	Y	E	Q	S	S	L	A	L	Q	A	Q				
UniRef90_G2T5W2	U	R	V	S	E	T	R	S	N	L	G	A	Y	E	N	R	L	E	Y	S	T	N	S	L	D	E	F	G	E	N	M	T	D	A				
UniRef90_W7LHD0	U	R	V	S	E	T	R	S	N	L	G	A	Y	E	N	R	L	G	F	T	S	S	N	L	V	V	A	S	E	N	V	Q	A	Q				
UniRef90_UP10003EB2C27	A	Q	V	D	A	L	R	S	D	L	G	A	V	Q	N	R	F	N	S	A	I	T	N	L	G	N	T	V	N	N	L	S	S	A	R			
UniRef90_UP1000318A92	N	D	V	A	A	N	R	G	Y	M	G	A	F	Q	N	T	L	E	S	N	L	N	L	R	N	A	H	E	Q	V	V	S	S	Q	A	R		
UniRef90_G7M9X5	Q	K	R	R	S	E	V	G	S	M	Q	N	R	M	E	S	A	Q	T	N	N	E	S	Q	N	Y	N	L	T	A	T	A	A	R				