

QUERY

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UniRef90_B3E9V4
UniRef90_F8CP14
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UniRef90_X0KKF9
UniRef90_F0S2B7

	50	60	70	80
E A L	W A P K P P P L D T	L A T L V A G N A A A T Q A L A K L L	G E A R F Q E E	
G D V	D N L D T T S L A S L	T A G N I A A T G G M A K K L L	K E N E F F A T Q	
G E T	E R F D T T S L A S L	T A G N I A A T G G L A K L L	G E K E F F P N Q	
	S A G Q T Q N I D T T S L A S L	T A G N V A A M G G L A K L L	G E N E F F P N Q	
E A I	W A P R P P A L D S V A T L	V A S N A A A T S A L A N M L	G E K A F F S E Q	
E A L	W A P R P P A L D D S V A T L	V A S N A A A T G A L A S M L	G E R A F F N E Q	
E A L	W A P R P P A L D D S L A T L	V A G N A A A T Q A L A K M L	G E S Q F S E Q	
G F T	H S L D T T A L A A L L A G S F A S T K E I A R L V	G E P E F S V L		
G D V	S G M D T T S L A S L	T A G N I A A T G G L A K L L	G E K E F F A I Q	
E A L	W A P R P P A L D D S V A T L	V A G N A A A T S A L A S M L	G E R T F S E Q	
G D V	K S I D A T S L A S L	T A G N V A A T D G L A K L L	G E K E F F S L L	
E A L	W A P R P P A L D D S L A T L	I A G N A A A T Q A L A K M L	G E P R F Q E I	
G D V	G A I D T T S L A S L	T A G N V A A T D A L A H L V	G E K E F F P V L	
E A L	W A P R P P A L D D S L A T L	I A G N A A A T Q A L A K M L	G E P R F N E L	
E A L	W A P R P P A L D D S I L A T L	V A S N A A A T H A L A E L L	G E A R F N E L	
G S M	D Q E K V V A S L A A L	T A A N Y G A T T A I A R L F	G E E E F F T L L	
G D T	T Q L D T S S F A T L	S A A D F A A T T Q L A T L L	G E K E F F S T L	
G D T	S G L D V T S S F C S S	A A S N I A A T A S M A R L L V	G E K D F T T L L	
G E V	E H D I T S L S S S L	T A G N V A A T G G I A N N L L	S E K E F T G Q	
G D	G N R Q D T T A L G A L I	I A G S F A S S Q Q I A K L L	R E E K D F R M L	
K N T	D E Y D K D S L G A L I	I A G N V A A T G G L A K L L	G E E K E F F S I L	
G E A P A	F D A T A F A S L	T A A D F S A N D Q L A R L L	G E R D F T T T L	
G D	S D E F D A T S L A A L	V A G N V A A T D G I A K L L	G E K E F F S V L	
G E V	E R F D T T S L A S L	T A G N I A A T G G L A K L L	G E K E F F S I L	
G	V G A D I D T T S L S S S L	V A G N V A A T G G I A K L L	E E E E F T G Q	
T S V	S E Y D T T S I A A L	V A G N V A A T D G L A K L L	G E K E F F S L L	
D S K K	H K Y D I Y S F A A L	A A G N F A T V D A M A K L V	G E R E F F S L L	
G E V	E Q L D I T S L A S L	T A G T I A A T S G L A R L I	G E R E F F P H I	
G G R G T A S F D F V T I S A L	A A G F F S A T Q E L A K L L	G E E E F F S L L		
G N T	D D M N T T V L S A L A A S D F A A T S E M A K L V	G E E E K F K L L		
D N G K	T R L D S T S F T A L	A A G N F A A V D A M A K L V	G E S E F F S L L	
G D K G	N L P L M I V L P L	L S T G F S T T G E V A R Q L	R E E D A T S V	
D D	G N C Q H D L Y S L A A L	A A G N F G A V N A M A Q I V	G E E E N F T L L	
G	S E S R S K A T T L G A L L A A G N F G A V N A M A Q I V	N E E K D F R S I T		
S D S I	R P E M Q H L G A L L A A T Y A S T R E M A R L L	N E D G F R T L		
G N	G T N V D T S L A A L	A A A N F G A T A Q I A K L L	G E E D F F S I L	
G G L L M D R	D L I E V F S V L L	A A S N F A T A Q I A K L L	G E R T F E V L	
G L T I G	L P T M V L L P L	L S T S F S T A G Q I T Q M L	R E T E S S A L	
G E L G I E	D L L P L A A L	A A A N F G A T E R M A N I I	G E R D F T T L L	
E S P A F S S	D D V T F A S L	T A G N V A A S E A L S K L L	G D K D L N H	
G S L P G V V	V E L V A P L	L A T T F S A T Q G L A R Q L	Q E Q R A N A A	
G N	P D S I D T T T F A T L	G S N A Y N A V Q F M A Q L V	N E E N N F T S M	
G	E E N G I D T T S L A A L	A A A N F G A T A Q I A K L L	G E E D F F S I L	
G S M	H M E D I F S L A A L	S A A N F A A T A E I A K L L	G E E D F F S L L	
D V	G S T D N L P M M I V L P L	L S T S F S T A G E V S R Q L	R E E D L S V	
D S P A F S S	D D I T F A S L	T A G N V A A S E A L S K L L	G D K N I L N H	
G	E G E Q F D L T T I A A L	A S G A Y L A N Q T I A N L V	H E N N F D S V	
D N G E C D H	D L Y S L S A A L	A S A N F A A V D T M A R L I	G E S E F F S L L	
S K F S Y F P A D V D G I G A I	A S A V F C A S E E Q G K N L	E L G D L E I V		
G D I T G	L D T S S F A T L	S A A D F A A T S Q L A S L L	G E T E F S T L	
G D I T S D V A Q N	I S A L A A G V F S A T N E L A R L L	G E K E F T T		
D A P A Y T S	N D I T F A S L	T A G N V A A S E A L S K L L	G D K T L N H A	
G H T S L P L P F L P L	L A T S F S T M V D Y T R Q L	H N D P G S G L		
D N I A R T G I D A E M I	G A I L A S S G F G S A E S M G N Q L	G Q Q G N L L N T		
M	P S G I D T E L I G A M	M S S A A Y G S A E R T A S E I	N Q G T L E Q M	
G R A G	I D A E M I G A I I A S S G F G S A E S M G N Q L	G Q Q G D L R M T		
S S G K	T R L D S T A F A L L A A G N F A A V D A M A K L V	G E P E F S I L		
G F I I Y S	F D I L T I S A L V C G V	F N S T M E L A R I V	G E D K F D Q F	
S N I	Q M D V D A L G A M A S T S V G T S E A M G I E L	S K G N F E Q V		
D	A E N E T D V G S V A A L L A A G D M M A T L E V G R I L L	G G K R A N L I		
G	P S S Q F D L I A L G S V M A G G L S A A Q E V A Q M L	G E Q E Y Q L V		
G K R I D E D R A E F	I A S L I S G M F G A A A E M S K M L S V E E L D	D L L		
G S	E A E N D L M A A L T A G S F A A T R E L A R T V G	G E E D F E A V		
S R R R D I N V T V V A A L	A A G N T L A L A E I I G R H L	G Q Q Q P G H L		
S K F S Y F P I D V D G V	G A I I A S A V F V A S E E Q G V N L	D L G D L D L		
G K N L D E T Q A E F	L A S I I S G I F G A A E M S K M L S V E E L D	D A I		
E V P G D I D S E L V A A M M S S A V F G T A E R S A E E M K H D P L Q Q V	G I G K L E Q I			
S S D V K D E R E A S R F A V V C A G V L G A L D Q L N H	I I I H E K N T F			
E D A I S G D I D T D A L G A M A S T G M G T S E A M G A E L	G K G Q L N Q M			
R D	F E I N T D A I G A S V Q V F V G G A A A K A A Q H V G H	L T N M V		
L S G	N I I D A E L V G A M V S A A Y G A A E R T A S E I	G I G K L E Q I		
S R Q R D I N V T V V A A L L A A G N T L A M A E I S R N L	G Q R Q P R L T			
E S A G N S S R V N I D E L G A S L A H A I N A T E E M G S E L K V N	F Q D M			
V S	S D I D S E L V G A M S S A V F G T A E R S S E E M K H E K L Q Q V	L Q Q V		
V S G	K V D I E A L G A M A S T G L G T S E A M G N T L G K G E L S Q M	L S Q M		
E G Q A S D R T I D V E S V A A M V A T I Y G T A L N V S N E V	V H E E A V D M V			
U	E L G S D M D A E I V A A R S S V I F G A A K E S V E L K Q E P L E Q V	G E Q E P L E Q V		
G N K I	Q L D D V V S L A A V A A A N F A T E Q I A R L I	G E R D F V L L		
G D	P S K I E L D A I S S L I A G S F G N S F E L G R A L H D P N T R H L			
A Q R S T Y D A I S I S A L L I S G T F A S S S N S I A N M L	N E P G F D T I			
A V P P D I D S E L V G A I A T T V Y G S G E R V V I D E M N L G D L E Q M	G F D T I			
Y A P K L E N L K P I A H R S A V I S A A V N G A L E Y L E N D S G R S I	G E S G G A V V			
D S R V P L E E Y K S E F T S I V S G I F G A S L E M S K L L E L E L D	G L G K I K Q A			
G S L G S D L D A T P L A V L S I A A F D S S R Q I G V M L	G G E K F Q S V			
E S T G S S A R I N I D E L G A S L A H A I N G L E E M G T E L N I N C	C F Q D M			
G M D I S D T Y S E F I S S I L S A L F F A S E E L T S M L D K N E M K D V				
G	P D P L P D L E P L G S L V A S L S S A A A Q I L E S L L G E S G G A V V			
L P S D V D A E L V G A M L S A A Y G A A E K A C E E I				
T D A E E P S Q L A A L V A T T L G L A R Q T T Q A T G R G R F R E A				
G F T K S F D T T S L S A L V A A S F A S T K A M A E V L G E T S F L V L				
S T M L K S N L S A E K L A A M S S A A V V G T S E R L S K I V E A G D F Q D A				

QUERY	90	100	110	120
UniRef90_S4XM28	V H Q G E R M G L Y V D E A G E H A [REDACTED]	L V L V F D E T A P L G K V K L H G K R A		
UniRef90_B3E9V4	F H E G E K A N I H I Q L V G N R V I L V V I F D S K S S L G L V R L R V R K A			
UniRef90_F8CP14	F H E G E K D N L H I S I V G G R V I L V V I F D N R S S L G L V R L R V K K A			
UniRef90_F0RJF5	[REDACTED] I H Q G E N G T L Y V E A V G E D S L L T L I F D S T V P L G R V K V Q T K K A			
UniRef90_E8U3J5	I H Q G E N V T L Y V E A A G D N A L L G L F D N S V P L G R V K V Y T K K S			
UniRef90_D7BH28	V H Q G Q T Q S L Y V E G A G E H A L L L V I F D N S T P V G R V K L F A R K S			
UniRef90_T0MSC9	F H Q G K K D H I H I S I V G G R V I L V V I F D D R T T I G M V R L Y A K E M			
UniRef90_Q1K476	F H E G E K D N I H I S I V G G R V I L V V I F D E R S S I L G L V R L R V K K A			
UniRef90_L0A123	I H Q G E K G V L Y V E S I I D K A L L V L I F D S S V P L G K V K L Y A K K T			
UniRef90_UPI00040486CB	F H E G E K D N I H I S I V G K R G I V V I F D Q N S S L A L V R L R V K K A			
UniRef90_UPI00037F8CB9	V H Q G E Q N G L Y V E E I G E V V L L T I F D N S A P L G R V K L T A K K A			
UniRef90_G2LI79	S H E G E R D N I H I S I V A Q R V I L V V I F D E R S S I L G L V R L R V K R A			
UniRef90_D3PSP2	L H Q G A T Y G L Y A E E V G D L A L L V I F D N T A P V G R V K L F G K R A			
UniRef90_F2NM63	V J K Q G E N Q G L Y V E E V N E M A L L V V I F D K S A P I G R V K L F G K K A			
UniRef90_I4C0F2	F H K G K V E N I H F S S N V G D E Y I M I T F N N N T H L G L V R L E V R K G			
UniRef90_X1Q5R6	F H Q G E K E N L Y V C L I A D R V I L A V I F D K R T T L G L V R V K T K N T			
UniRef90_UPI00046CFB3F	F H Q G K R D S I H I S L I G D R V I L A V I F G A E A S I L G M V R L R V R R A			
UniRef90_D0LUK8	F H E G E R T N V H I S I I A G R V I L L V L F D K R S S I L G L V R L R V N R A			
UniRef90_A9AYJ8	L Q Q G V R E N I F F I A L I D D Q W L T I F N K N G T H I G L V K V L T K K A			
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UniRef90_E4TJT7	F H E G E N E H I N I T L V D G K L I L V V I F D D S T S S L G L V R L L K M K K Y			
UniRef90_A1AT68	F H E G E K D N L H I S I V G G R V I L V V I F D S S R S S L G L V R L R V K K S			
UniRef90_A6GJ39	F H E G K D I S V H M T I V A R R I I L V V I F D K N T T H I G L V R L R V K K A			
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UniRef90_B5YEW3	F Q Q G K R N H L H I S H I E K Q V L L V I F D D S T T L G M V R L F A Q K A			
UniRef90_H1XYV5	F H E G E K R N V Y L S N N V G N D F F L V V V F D V S V T L G L I R I Y T K K A			
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UniRef90_B8FFB9	F H K G E S E S V E D D F L L I T F G N D V S I L G F L R L R V E E V			
UniRef90_D6TLA9	F Q Q G V Q E N I F T S M V E E Q W L L V I I F D K L T H I G L V K V L S K K A			
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UniRef90UPI0003B61D49	Y H K G K R D N H F S K I G K E F I L V T F G D E T P L G L V R L R V S Q V			
UniRef90_B3QWP1	F H E G E A R S I Y L L S L N E K Y I L E V I F K S T I P P G T I R I Y S K K A			
UniRef90_A5UQP0	Y H E G S H Y D L Y C F D I A Q R L M L V I V F D K S A K I I G S V W V Y A K R A			
UniRef90_A0LIT8	F H K G R E C N H F C F R M N D F I L V T F N N D V P V G L I R L G S S R A Y			
UniRef90_E8T3U7	F T E T E K E G I Y M I L I D G K Y I L V A I F D K Q T N L G L V R I K I K K Y			
UniRef90UPI0004785882	Y H E G E H Y D L Y A F N I I D Y R V S L I V F D K R V T L G T V W I Y A R R T			
UniRef90_B4CXC5	Y Q Q G E N F S T L M V N V D E N S L L V I V F P T H L T V G S M K Y Y A N P A			
UniRef90_F8AAL7	Y H K G K K D N I H F S R I I G K E F I L V T F T D E T P L G L V R L R V N			
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UniRef90_E1IEF7	I H A G V N Y D L Y C F D V V Q F R L L V V V F N N K I S I L G A V W I N S K R A			
UniRef90_F0S025	F T E T Q D E G I Y M A L L E G K Y I L V S I F D K G I N I L G L V R V K M K K F			
UniRef90_B9XCH6	Y Q Q G E K F S M L V M N V D E H V L L T T I F R A A V G V L G A V K Y Y A M S S			
UniRef90_S7TQ76	F H K G E K E S I H F S K V V K K D F L L I S I F G T R V S I L G L L R L K V A E A			
UniRef90_X1DRC8	T S E F S G G K I F A S S C G P K G V L T L I S D P D I N I L G L I R L I L K R S			
UniRef90_X1C8C5	F Q Q G Q R E H I Y V C L I A N R V I L A V I F D Q R T N L G L I R V R T K N T			
UniRef90_I0GKU5	F H Q Q G E T N H I S L I T Q N A L L A M I F D N K L P I G A I R F W A K K T			
UniRef90UPI0003B5205A	F T E T E D E G I Y M S L L D G K L I L V I I F E K A S N L G I R V K L K K K Y			
UniRef90_A9B1N1	Y H E G D I Y D F Y I F D V G R Q F L L V M F D K T I K L G T V W L Y A K R A			
UniRef90_V4J5C4	M I E V A E G P V M F A P V G S E A F L V I V A D K D T N I L G W I R L T I K K N S			
UniRef90_A6UUV6	M I E G E H G K T L M T D A G E G I L V V L T D S K V N L G L I R I N I K R S			
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UniRef90_F0TAF1	M I E G E K G K T L M I D A G E G I L V V I T D I E I N L G L I R I E M R R S			
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UniRef90_A5G6T2	F I E Y G K A V I M C R P V G D A I A A V I A P D A S K L G I R H K T K K Y			
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UniRef90_C5A1W7	T L E E S P K G K I I T V E A G E N A V L T V L T D P K V N L G L V R I Y L K R N S			
UniRef90_E3GVY0	M I E G S R G K M L M K D V G E G I L V V L T D E D V V N L G L I R L E M R R S			
UniRef90_I4C3G9	F Y K G H N E S F H F S R V G T E Y I V T I F D N D Q L S G L L R L K			
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 S E A Q L E R M R Q S L K D L A L A P D V Q C A I L A D M S G L V L S H W
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 E V L G E L V R V P Q V T G A L A A S V D G L V L A Q D
 M N K Y E E V L Q E L I K A S G I E G A A I V S L D G L P I A S
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 V P E E D L A A V R D E L H R L T R V P Q L T G A L A A G V D G L V V A H D
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UniRef90_A9WGJ6	S R R R D I N V T V V A A L A A G N T L A L A E I G R H L G Q Q R P G H L
UniRef90_J1REJ8	L P D I E P D G L A A L T A A A I G V A K R L T E A T G Q G D F E E S
UniRef90_O28772	E A E S I F S D D D E V Y A A L I A D A F N K A S E V L S K S S D E P E L L
UniRef90_UP10003686AA1	T P N V E P E G V A A L T A A A I L G V A Q R L A D A T G Q Q G A F R E L
UniRef90_O67700	V L P A N A E E D K V A A M S A A I L L S L G E R V V E E L G K G T M E Q I
UniRef90_A0LUI7	A L P A D M D E D R V A A M S A A L L S L A E R A T Q G L G R G A L S Q V
UniRef90_S5VHL6	T P G L D P E G L A A L T A A S L L G V A V R V A D A T G N G D F R E L
UniRef90_D6TLB0	E G M T R D G K D N M E A V G A I M T T A L S T A E A L G Q E I S R G G V V G V
UniRef90_A8AB07	S Q M G K E I D P E S V A A M V V S V Y G A L Q R F A E F N L G E M D M A
UniRef90_C0QS51	V L P E D V D E D R V A A M G A A I L L S L G E R V T A E L E K G E L E Q L
UniRef90_A8VJ1	V L P E G I E E D R V A A M G A A I L L S L G E R V A S E L N K G G L E E Q L
UniRef90_E6WU10	D A A M P Q G M D E D R I G M S A A L L S L G E R T A R E L G R G R L L E R V
UniRef90_K2R393	S R T P P D V D A F S A L C S T I L G A A E A A S T Q M K T G S V S E V
UniRef90_D3DGT2	L K P G L E E D R I A A M S A A I L L S L G E R V A E E L A K G G L E Q I
UniRef90_G2P3Z8	T A V E A E G V A A L T A A A I L G V A Q S L A G A T G R G T F R E L
UniRef90_D6T133	G I L H S E D E E V V G A M S A A A F G S I T S F T E Q I S N G E T S H V
UniRef90_UP10003B6E606	Y L P S D M D E D R V S A M S A A I L L S L G E R V A R E E L E K G I P Q Q V
UniRef90_B2V5J7	V L P P S S A D E D R V A A M G A A I L L S L G E R V T S E L N K G N L E Q L
UniRef90_T0L8W6	L H S G I Q D D T V G A L A S S I I S S V Q K S L E M K Q T P L R Q V
UniRef90_X1RVX2	F S D N T D A G R V A A M A A T A L G L G K R I N D T L G T G S L N E M
UniRef90_Q9RWQ0	M N K P N D M E T V G A I V I G G Q S S I G T E L E V G K I L E Q S
UniRef90_B3QPW2	F S D N T D A G R V A A M A A T A L G L G K R I N D T L G T G D L S E M
UniRef90_F0RPG1	A P D V E P D G V A A L T A A A L G V A V R L A D A T G R G E L R E L
UniRef90_K4RA57	L S G G G T D I P E G I A A L T A A A L G V S L R L A D S T G R G G F R E L
UniRef90_V6K5U6	D S P E A E H V A A L T A A A L G V A V R L T E A T G Q G G F K E L
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UniRef90_D7C0M7	L Q N G A D P D D L A A L A T T Y G L G R Q V G F R L G Q Q G D F Q Q S
UniRef90_D9T7G5	D L P A P L N P D D L A A M A A T A F G L G R Q A S H R L G Q Q G D F R Q S
UniRef90_F4F2X7	L I E D E D A E V L G A M S A A V F G E I D K A T K R I G I G T L V D A
UniRef90_A9AXD5	U E G M Q R E N A P E V D F L G G A A T S A M A S A R A L A D H L Q R G A V E E V
UniRef90_F2NNZ8	L K P G I E E D R V A A M S A A I L S L G E K V T E E L Q K G T L L E Q I
UniRef90_A8USR5	E A N L P Q D L D P D A V A G M C A T S F R N S V T T A K V L G S G K V K H V
UniRef90_I0GK83	A T S S V L N I D D D V L A A M I T T A Y G S V I Q P G A E L H I G E P E I V
UniRef90_A2BJ86	T A G I E P E E G V A A L T A A A L G V T Q S L A D A T G R G A F R E L
UniRef90_D9WUX8	T P G V E A E E G V A A L T A A A L G V A I R M T E A T G R N G F R E L
UniRef90_UP100035E6790	T P G V E A L P T G V D E D R V G A M S A A L L S L G D R A G R E L A R G S L D R I
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UniRef90_H8GZC4	S A M L P S T M D E D R V G A M A A A M L S L G D R T A H E L G R G E L E Q V
UniRef90_I3CFS3	E S V S K E G A A D L D F V G G A A T S A M A S R A L A D H L K K G E V E E V
UniRef90_E4U8Z8	S R G V E P E G V A A L T A A A L G I A L R T D A T G Q G G F R E L
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UniRef90_E8U4E1	T P G V E A E E G L A A L T A A S L G V A L R M A E T A T G R G G L L R E L
UniRef90_D6M500	L A A D M E E T R V A G M T A T T L L S L G G R A A T E L G R S H L Q E V
UniRef90_H0TZT3	M P Q G M D E D R V G A M S A A L L S L G E R S A R E L A R G A L L E R V
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UniRef90_B5EMS2	A V L P A S M D E D H V G A M S A A M L S L G E R S A K E L L A R G A L L E Q V
UniRef90_L8XXY8	A V L P T T L D E D R V G A M S A A M L S L G D R S A K E L L A R G A L L E Q V
UniRef90_Q3JB22	L P S G M D E E R V S A M S A A M L S L G E R I G S E L L A R G G I D R R L
UniRef90_L8N006	L P A G L D E D R V G A M S A A M L S L G D R T A S E L L G R G D L L D Q V
UniRef90_W0TQN2	A D V P G G V Q G E K L A F A A S T I L N T A E A A A E N L G E G K L L G R L
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UniRef90_D6X618	L S S G D P N R L S A M A A T A L G L G K R I C E T Y G G G E F R E N
UniRef90_B3E0Z3	T L L P S H L N A D R V G A M S A T T L L A L G T R A V H E L A C G E L D Q V
UniRef90_G2DID4	M L P Q G L E E T H I A A M S A A M L S M G S R T S M E L K R G K L L Q Q L
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UniRef90_B5YE96	T P G V D P E G L A A L T A A A L G V A V R V D A T G H G G F R E L
UniRef90_H2JKR6	A L P K S V D E T K I S A M T A T L L S L S E R A I I D M R K G D F H Q L
UniRef90_X1HGY3	T P G V E P E R V A A L T V T A L G V A V R M A D A T G Q G D F R E L
UniRef90_UP100037DAE19	E S L R A E Q A P D I D F L G S A A S T A L A S A R A L S Q E L E R G E V E E V
UniRef90_D3PR31	M K K N L D R E A I A G V L H E L V S A I K L M G D Q F G G A E L R E A
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UniRef90_M3CAQ6	L A D L D P D G L A A L T A A A V G G L A T R L T D A A G R G G F E E S
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UniRef90_O26695	D S A D A P R V A A M A A T A L G L G K R I S Q T T E L G S S L E E T
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UniRef90_UP10003B606FE	M G D G T D A N R V A A M A A T A L G L G K R I N D T L G S G D L T D M
UniRef90_A0A010ZS87	T F G V Q P E G M A A L S A T T L G L G K R I S D R T G L G E M Q E T
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UniRef90_I3BU79	L P G G M D E D R V G A M S A A M L S L G D R T A E E L L A R G A L L E Q V
UniRef90_E8N075	L P Q G V E E D R V S A M S A A M L S L G E R I A N E L G R G S L L E Q V
UniRef90_UP100035D338E	L P D I E P D G L A A L T A A A I G V A K R L T D A T G Q G G F E E S
UniRef90_K9WAH1	L P G S M D E E R V S A M S A A M L S L G E R I G R E L G R G E M D R V
UniRef90_S3XPC6	F S E G D A D R V A A M A A T A L G L G T R I T E R T N L G Q L A E S
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UniRef90_Q9RSE4	F S D T D V D P N T F A A M L A S M V G S A E T A L K S L G S K N L L D R V
UniRef90_D6GW20	M P E D V D P N T F A A M L A S M V G S A E T A L K S L G S K N L L D R V
UniRef90_X1F1A3	K F K F S E D N T S V E K I G A I G G A V F V A G E E Q G H I L G Y G S I N L Q
UniRef90_X1IDU6	M L P Q G V D E K R I A A M T A T L L T L S K K A I E M K K G N F N E T
UniRef90_F6D7X7	L S Q D T D E K R L A A M G A A I V G T S Q R T C E L S R G N L N E I
UniRef90_U6EB45	N S R T P P D V D A F S A L C S T I M G A A E A A S R Q M A T G G V S Q V I
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UniRef90_UPI0003686AA1	L V R G E D G Y V A T Y A A G D Q A V L T L A E D R V N V G R I H L E G R R A			
UniRef90_O67700	T I K G D K G Y V V I T E I G Q D A V L T L A G Q D S K L G L I Y M E I K K A			
UniRef90_A0LUI7	Y I E G E N G T V F L V I A A Q D E G V L V A V T S A G A K V G M M L Y E I R L A			
UniRef90_S5VHL6	L V R G A Q G Y V A T Y A A G R T A V L T L T K D R V N V G R I H L E G R R A			
UniRef90_D6TLB0	V M E Y E Q G L V S I D P L G D F A L M V T L F D N A S N I L G R I R H L V R T S			
UniRef90_A8AB07	T A E Y S R S R N M M L L T D I G D A M V V V I T D R T A L L G R I R Y E L K K Q			
UniRef90_C0QS51	Y V K G S K G Y M I F T G I K D L A V L G V L A P S S N A K I L G L L L M E I K R A			
UniRef90_A8VJ1	Y V K G T E G Y V I F T G V K D F A V V L G V L A P S S I K L G L L L M E I R K T			
UniRef90_E6WU10	L V Q G E H G Y V I M T A A G E E A V L T V L T R A E V K L L G L A F L D I K R A			
UniRef90_K2R393	S L K T E K G N I V L I P A G S K A I L T T L T E T E A Q I L G L I L Y E M E E K			
UniRef90_D3DGT2	T I K G D N G Y V I L T G V G H D A V M V V L A D N N A K I L G L L L M E I K K A			
UniRef90_G2P3Z8	L V R G E N G Y V A T Y A A G S T A V L T V L A G D R T N V G R I H M E A R R S			
UniRef90_D6T133	V I E T K K G T I Q M E A A G D L I L I V T T T G K G N M G R V R L E M K K A			
UniRef90UPI0003B6E606	T I K G D K G Y I V I T S A G E E A V L M V I T N D K V K L G L L L Y M E I K G A			
UniRef90_B2V5J7	Y I K G S T G Y V I F T G I K D V A V L G V L A P V I N A K L G L L L M E I Q R T			
UniRef90_T0L8W6	T V E A S Q G K F F L T D V E V G V L V V T T E P S V N M G L V R L E I K N A			
UniRef90_X1RVX2	Y I K G S N G Y L L V M Q A G P N A V V L T V S T T K E V R L G L I I L L D C R R T			
UniRef90_Q9RWQ0	S V S G V D G Q V F I Y S V G A K G V L A V V A P A G T N L G L L L H M E A R D A			
UniRef90_B3QPW2	M V E Y E N G I L L S M D G N A I L T I V A Q G Q N A M L G N I R Y Q V G K M			
UniRef90_F0RPG1	S V S G S T G Q V Y I A T G R K G V L A V V A P S G M N L G L L H M E A R D T			
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UniRef90UPI00036CB62F	L V R G A H G Y V A S Y A A G P S A V V L T L L A E G Q V V N V G R I H L E G R R S			
UniRef90UPI0003C77A5B	T V R N A G G Y L S V Y A I N G E A L L A V V V G T D S I N V V A R L H L H A P T T			
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UniRef90_F4F2X7	T V R N D G G Y F A V Y A V G A H A L L S V V G T D T I N V V A R L H L H A P P V			
UniRef90_A9AXD5	I I D A K D G S I L L L E A R D V I L T V V T Q R M V N L G L V K I E M R R A			
UniRef90_F2NNZ8	M V E Y P E G P I L L V I P V G E S Y M L V T L L D S V Q S L G R I V R F Q L K R V			
UniRef90_A8USR5	T I K G E E G Y I V L T G I Q G Q D A V L T V L A S N A A K L G L L L M E I K K A			
UniRef90_I0GK83	L I E T E T M D F I I F S S I G N G F L A V V V S S R K V N L G F L R I K I D K A			
UniRef90_A2BJ86	T M E Y S N H Y V I L I V D A G E Y I L A L L A D R R A I L G R I L R Y E L R R Q			
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UniRef90UPI00035E6790	L V R G E A G Y V A T Y A A G S Q A V L T L L A E D R I N V G R I L H L E G R R A			
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UniRef90_H8GZC4	L L D L G S G P L L L T P L G R Q L L M T A F D D V A N L G R I V R F A V V K R A			
UniRef90_I3CFS3	L I K G D K G Y V L L T H A G P D T V V V S V V A K P T A K L G L I F L D V K R A			
UniRef90_E4U8Z8	M V E F D E G P M L L E P I G A T Y S L V L L L A G A Q N L G R I V R F Q L K K V			
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UniRef90_B5EMS2	M I K G D N G Y V L L I H A G P D A V L T V I A R K E A K L G L V F L D A K R G			
UniRef90_L8XXY8	L V K G A S G Y V I M T S A G N D A V L V S V M C K S N A R L G L I F L D I K R A			
UniRef90_Q3JB22	L I K G D H G Y V L M T Y A G D E E A V L T V M A K P R A K L G L I F L D V K R A			
UniRef90_L8N006	Y I V E G E K G Y G I L T S C Q G D E A V V L L V L A S K A A K Q G L L M L E I K R V			
UniRef90_W0TQN2	L V K G K D G Y V L M V Y A G N E A V V T V L V L A K S H A K G L I F L D V K R A			
UniRef90_H819C7	V V D D E R R L L V R G A D E R N L L V V L A D Q G G G N I I G P V I A E A E E A			
UniRef90_F6D7Y0	I V E T D F G K I I I E E V G D H A I I V I L T E D N V N I G M V R I T L K K A			
UniRef90_D6X618	L V R G E A G Y V A T Y A A G S S A V L T V L A E P R I N V V G R I L H L E A R R A			
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UniRef90_G2DID4	M V K G E H G Y V L L S S Q A G N K A V L A L M A K E S S K L G L I F L D A K R A			
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UniRef90_W0JIN0	L P A N F D E D R V A A M S A A M L S L G E R I A S E L	E L E K G V P E Q V		
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UniRef90_A9AUB2	M S A D V N A D R M G A I A A T T M M G V T T R V V N D L	K I G K A N E A		
UniRef90_Q2JLG1	L P V G M D D E E R T S A M S A A M L S L G E R I G K E L	L G R G A I E R V		
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UniRef90_A9WCW0	A L P A D V E E D R V S A M S A A M L S L G E R I A S E L	R R G Q L D Q V		
UniRef90_UPI000478AF9D	L R Q G T D I D R V V G G V S A A L Q A L G N R A T K E	S C G K L D Q I V		
UniRef90_B3QVU2	D D I L P S N L D E S R V V G M I A S I L T L G R V S A E	M K G D L E Q V		
UniRef90_UPI000474B17F	A L P P G M D E E R V V A A M S A A M L S L G E R I G S E	L S R G S I E R V		
UniRef90_UPI00035E4FCA	A V L G E G V D S D R F G A M C A S L L A L A S R A A H E	V Q R G E L K M V		
UniRef90_U9W7N1	A V L P P S Y M D E E R V S A M A A A A L V S L G E R I G S E	H E L L R G N V N Q I V		
UniRef90_E9UXZ9	G G M S A N V A D P L A A M T A G V I S L G N N I A R E	V G E P G C D Q V		
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UniRef90_X1XE0	L P P G W V D P E A V A A M V T L I L L K A S Q R A T K E	E Q G Q F F T A		
UniRef90_K7QTS1	K E E G A P E A D L L S A R A A T V L L G T A K A L G Q K A L	G Q E G V E E V		
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UniRef90_UPI00034A1C58	I P P G S M D E E R V V A A M T A A I L L S L G E R I G R E	L S R G T I D R I		
UniRef90_K9XV16	V L P P G E M D E E R T A A M S A A M L S L G E R I G K E L	L V R G T I E R I		
UniRef90_U4TD99	P T G V D E D R V V G A M S A A M L S L G D R A G E L A R G S I D R I			
UniRef90_X1HILO	I L P P S S A D D M R L L A A M T A A L C S L S E R A I G E	M G L G E F E Q S		
UniRef90_B4VTU0	T T L P P S N M D D E R V S A M S A A M L S L G E R I G K E L	L V R G A I D R I		
UniRef90_UPI00037C402F	A H G I E P D G L A A L A A A H L A L A R R F A H A V N H G E L	R E S		
UniRef90_H1XT52	V A P E Q K E N L D L A E I I P I I S K F I S T A Q D N G K E F E F G H T E E I			
UniRef90_Q0W784	E I P P G D A H P E T F A A M S A V M L S A A E T A Y I E	E G Q A I P D R L		
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UniRef90_I0GJW8	L P P D A E E D R V V A A M S A A I L L A L G E R A L D E L K K G T I L E Q A			
UniRef90_UPI000300FEC4	V L P P G G M D E E R T A A M S A S A M L S L G E R I G R E L A R G N V E R I			
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UniRef90_E8W2B9	A A T V H P E S I A A L S A A T L S L G Q R L A H E A E G G T L L R D V			
UniRef90_A1ITJ4	T M L P S H L N S D R V G A I S A T L L A L G S R S V Q E L A C G E L			
UniRef90_UPI00037D7050	S S A M S Q D L A E I L A A A G A S S M Y S V A A G T G R F G S G A V V Q Q V			
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UniRef90_L0A0K1	G F R I D S T V A L Q G R E V V S G M A S L S G G E W R D V			
UniRef90_E4N2T3	A S A L E A E S V A A L T A A A L G V G S R L T E A T G Q G A F R E L			
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UniRef90_UPI0003725020	K S L G R E D S E H L A A I A S A L H S L A R G V G E R F D K G E L L Q Q T			
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UniRef90_UPI0004033F34	D H G I E V D L N R V A V Q A T V F G V S S R M G S L N L G V V S S E L			
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90 100 110 120

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UniRef90_I0H1C9	T I H N Q N Q G Y L S V Y A I G D L A L L A V I G D G G L N I A R L H L E A R P V		
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UniRef90_UPI00040BC030	Y V E G T K G Y G I L I S C G E D A V L L V L A S E S V K Q G M L M L E I K R L		
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UniRef90_FQQYS6	I V Q Y T K D T L L I I A P L S K D L I L T A I A K P E P N L G L I L L E I E K L		
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UniRef90_E8U5Z8	V I D V E E G P V L L T S L G D R L L I I T C F D D V A N L G R I R F S L R R A		
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UniRef90_B3QV65	L L Q S T D G T V G V G V S A G P K M V L M V S M G K D S N L G I L N H Q S R R R		
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UniRef90_W0JIN0	T V K G D K G Y I L L T S A G S E A V L V I L A K P D V K L G L L Y L D I K N T		
UniRef90_X1J871	T S E		
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UniRef90_UPI000478AF9D	M V K G D D G Y I L L V I R A G E E A V L M L T A R E D A K L L G M I L L K A R Q A		
UniRef90_B3QVU2	L V K G K H G Y I V L G S A G A E A V I A V S C N S Q V K L G L I F L E L K R A		
UniRef90_UPI000474B17F	L I E G E Q G Y S I L M D C G Q D A L L L V L A H K S A K Q G G L Q L E I K R I		
UniRef90_UPI00035E4FCA	M V E G E M G L M L L I H A G E D A I L A L A A K P S K N L G M I F L D A R K V		
UniRef90_U9W7N1	A I I D G E E G Y Y C I L S N C G E E A V F L V L A T R M V K K G I L N L E V K R A		
UniRef90_E9UXZ9	M L K F H T G H F L F M G I G D L A G F A V L V G A G A N L G V V A H K M A Q M		
UniRef90_Q8DHG9	L V E G S N G Y G I L T S C T E D A V F V L V L A D A S A K L L G L I N L E I K N V		
UniRef90_A1VJ62	I L D G S L G P M L L T R A G E T T G V L A V A A T P S A K L L G Q L I L D T R T T		
UniRef90_X1XE0	I I I E S A K G K I I L F S E V E V E G N I I L T I I A T T D A K L L G I I N L K L G A A		
UniRef90_K7QTS1	U n i f e r 9 0 _ K 7 Q T S 1		
UniRef90_V71GL9	M V E Y P E G T L L V P L S G H H L L F L D G M R S L G R A R L G L K K K A		
UniRef90_UPI00034A1C58	I V K G T D G Y I L L I I Q A G E D T V L V V T A R E S A K L L G L I L L D A R R A		
UniRef90_K9XV16	M I E G D Q G Y A I L V S C A D D A V V L L V L A N K N A K Q G V L M L E I K Q V		
UniRef90_U4TD99	L V E G D R G Y S I M V G C G N E A V V L L V L A S K A A K Q G G L L F L E I K R L		
UniRef90_X1HILO	M I Q G E K G Y V I M T S S G E E A V L T I M A K P N A K L L G L I F L D I K R A		
UniRef90_B4VTU0	Y I K G S S G K Y L I I L H A G E D R V L S V S T T D K I D K L A P I L Y K H Y K Q		
UniRef90_UPI00037C402F	Y I V E G N Q G L S I L T S C G E D A V F L V L A T Q Q A K Q G G L L M L E I K R A		
UniRef90_H1XT52	V V E C D R G Y I T T Y T A G P T A L L T L V T S G D A N L A M V H L E A R R C		
UniRef90_Q0W784	F A Q F E K G L I R L A R I I A Q N Y Y I L V T L G D E F A N G S L I R L E S K K L		
UniRef90_I2MZH6	I V E T D E G K L I I I M G A G E R S M L V A L T A D A K A G L G H H L T V E M N R A		
UniRef90_X0TP58	L V R G E R G Y V A S Y A A G S S A V L T T L A G P R V N I D R L H R E A R R S		
UniRef90_UPI0003FE68E2	Y I R G D N G Y V I L I M S V G E E A V L T A L A R K D A K L L G L V F L D M R R V		
UniRef90_F0TAD7	M L K F G T G H L L F M S I G R L A G L A V L V G E G A N L G A V A H E M T K F		
UniRef90_I0GJW8	L I E S L N G K A L F I N L E N V H L I V L M K N H S N V G L I L V S S K R A		
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UniRef90_Q1IZL4	L V R G A N G Y V A T Y A A G T A S L T V L T L A Q D G V N V G R L H L E G R R A		
UniRef90_S3B0U8	L L D L E G G P V V L L T P H G D Q V L L T A F D E V S S L G R I R F S V R R		
UniRef90_O27856	L V V H G E L G Y V A T Y A A G P A A V V L T L L A D E R I N V G R L H L E G R R T		
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UniRef90_D7BG23	H I Q G T D G H I V L M A A G E K A V L T A L I T A Q A K M G V L L M D M R H A		
UniRef90_UPI000464755A	S L E Y Q G R N V F L A K L S S D N F L V L I I N S A T T P G T V R Y M V Q K A		
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UniRef90_L0A0K1	I T E F G E G Y L L V V S S I A G R A C L A V V T A A D C D L G L V G Y E T T M L		
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UniRef90_M2WUH1	I T R G E R G Y T A T Y A A G A Y T V L T L L A G S Q A N V G R L H L E		
UniRef90_A0ZIC5	V I E L E N A V L F V T A A G N A N A C I A L Q A S A T A N L G M V A Y E M N L T		
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UniRef90_Q1ZL6	T T A S T D N L L V A E H A G L L R A A N A A Y G E T L G G G A A R E L			
UniRef90_UP1000477958C	R D F P E E H A E Q L A A I A S G L Q S L A L G G A K L F G K G E C Q S L			
UniRef90_D9T9D3	P D L A P D Q V D Q L A A V I S G L A S L T V G A A R L M S A G R V R Q Q			
UniRef90_D7E2L6	G A S L P G A I D E E R V S A M S A S M L S L G K R I G L E L A R G T V N R I			
UniRef90_X1F6A2	I L P R K Y N E T R I S A M V A T L L S L S E R T V I D M I G I F K Q I			
UniRef90_UP1000344C616	L P S E G A E Q E T V S A I S A T M S T V A E T I A T E F N Q G F V E Q I			
UniRef90_D2TIT9	L E E Q D R A S M R R L A A M T S S L L S I G V A M F K E R S G A Q R L L			
UniRef90_J0GK01	S S L D N P P E L S Y A L S S L R G Y L N D L L D S T K M G K F V D S			
UniRef90_R9BAX3	V H K K D S Y N S T K L A A V S S S I L A M V A A F M N E I H L E G C Q S I			
UniRef90_UP100034A267D	A D I D R D R A E R V S A A I T S G F S S L A K G A R K Q L G A E E V R Q T			
UniRef90_X0S8G9	F H A S V E E A S I A A M V A S I Q S V G Q L A V R E L R Q G D L K A I			

	90	100	110	120
UniRef90_M2Z9C2	V V R G S G G Y L A V Y S V D S T A L L V V L G D E G L D V T R L H R A A L L T			
UniRef90_M3CCF0	M I E F D G G V L F V T A A G D E N C L C L V L G S A A A D V G D I A Y E M			
UniRef90_C7QGE1	V I R A A G G H V V F V A S I G E N A L L A V V G D E G L D L A N L R R E L P G A			
UniRef90_Q47PZ9	V V E M D N V F L F V L S A G H G A C L A L V A D S S C D V G L V A Y E I N R L			
UniRef90_F4XX53	Y V E G K E G F S V L T S C G E E A V F L V L A S K A A K Q G V L M L E I K R T			
UniRef90_J7L023	V V E M E S A Y L F V T G A G R G A C L A V L A E E S A D V G L I A Y E M N V L			
UniRef90_A9AYJ9	V L E Y D Q G L I L L E P V S S D A M L V V L T S S R E L L G K L R Y M A Q A H			
UniRef90_M9SQJ6	L V R G E K G Y V A T Y A A G S S A V L T L L A E D R I N V G R L H L E G R R A			
UniRef90_W5TK90	V I E L E S G F L V V T E A G N G A C L A L L A D I E S D L G L I A Y E M N			
UniRef90_UP1000288615D	T T R S A D R H I V V L A V N D R A L L T V V G D D G L D V P R I Q R E I H P T			
UniRef90_X1DCR8	N I K G I N G W L L V V Q A G M N A C L T V S T T A N A K L G L I F L D M K R A			
UniRef90_Q47M44	V V E M E H A Y L F V T G A G S G C L A V L A G E G S D V G L I A Y E M N V L			
UniRef90_UP1000311067C	M I E F E E G V L F V T S A G E G S C L C V L T G P G A D L G H V A Y E M			
UniRef90_UP100035D5873	M A E F P G G V L L I V P A G E G A H L A V I A A E D A D V G M V A H Y M N E L			
UniRef90_E4N1H0	M V E L E R G Y L F V A A A G Q G S C L A V F A E P E A D L G L I A Y E M A R L			
UniRef90_C9ZAE2	V V R C G S G H V I V V A V G E R A L L T V M G D D G L D L A A F Q R E S P A T			
UniRef90_D6A9Z0	L I E T V T H I A L I T Q A G E N A M L V V K T D P D A D M G V V S E A T H R L			
UniRef90_B8FFC3	L V Q T E N A W V L T R F L N P E Y Y L V I A V G R E S T L G N V V R M V A G K Y			
UniRef90_UP100035CB23E	V V N G T D G Y A V I Y A A G W T S L T V L A G A P D V N V G R L H L E S R P A			
UniRef90_X0ZAK8	L M E S E T S K V F L A S L D S D Y F L T V T T A P R V N L A A L F I E M K D N			
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UniRef90_X1L1V3	T T T G D K K F A F C S E G P R S I L T T V A Q D Q S T S D N A L K V Y S A H V			
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UniRef90_UP10002EAEE49	M L E A G G G K V L M L A L P S Q L L L M T A C D Q R C V V G K V L W R A K E C			
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UniRef90_UP1000382908C	V V E M G R G Y L L V M S A I R D G S I L A T I L A G Q D A D V G V I G Y E M A K L			
UniRef90_UP1000464AAA0	S L Q A S E G R V F I Y L V G N K A C L S L V T L P D S N T G L I Q L E V S D T			
UniRef90_UP1000363EFC3	V V E M E H A Y L F V T G A G S G A C L A V I A D E G S D V G L I A Y E M N V L			
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UniRef90_B8GDV2	V I H A K E G K I M I T D A G E R R L L I T T I L N P T			
UniRef90_W8ADS5	M T E Y A D G M I F I T A A G A G A L L G V S T T Q D V D V S L V A H R M N E L			
UniRef90_Q5YW84	V I E L D R A V L F V T S A G D N A C L A L Q Q A E A N A N L G M V A Y E M N V T			
UniRef90_UP100034C1640	V V E G E R G Y G I L V I G C T Q K A I L L V L A S S A A K Q G I L F L E I K Q A			
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UniRef90_UP1000345C59C	L V E M E H A Y L F V T A A G E G A C L A V V L A S E D A D I G L V A Y E M N M R			
UniRef90_UP100034CCB37	V V E M E Q A F L F V T A A G E G A C L A V V L A A G D D A D V G L V A Y E M N M R			
UniRef90_UP1000374DA67	V V E L E D G L F F V V P A G S G S C L A V L S E A G A N A G V T Y E M T M L			
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UniRef90_D9V6N8	V V E L E R G Y L V V C T I S I G C S L G V L A N K Q A S L L G T I A Y F A N R A			
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UniRef90_UP10003826640	M V E L D E A M L F V T S A G A N A S I A V L G E A T A D W G L V A H E M N L T			
UniRef90_UP1000361EE5E	L L D V D G G P V L L T P M G D Q I L L A A F D D V A S L L G R I R F A V R R L			
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UniRef90_UP10004121FDF	T F E T E L G T V V F Q S V G G H A I L C M V L D K S A L L G R			
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UniRef90_D2TIT9	T L E G E K S N I L I F V V V Q N E L V L T L V T S A E E P L G Q Q F W L I R Q L			
UniRef90_J0GK01	F I D G S V G R I I F N S L K N G D L L V V F A S N V S N L G M I K F E M S N A			
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UniRef90_M2Z9C2	E R V R S I L A A V A N
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UniRef90_UPI00035D5873	V E Q
UniRef90_E4N1H0	V R R V G E
UniRef90_C9ZAE2	V E Q L S K V L A A D V A N
UniRef90_D6A9Z0	A S R V G R E L A
UniRef90_B8FFC3	S K E L D E I F R
UniRef90_UPI00035CB23E	A R A I A D H L K P A V A
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UniRef90_X1D7X9	S L E I S K L L K K
UniRef90_H6R0B3	A D R V G H E L G S
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UniRef90_W7T2B0	T D R I S S I L
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UniRef90_E4MZY1	V G R I G E H L T A A
UniRef90_UPI000377816C	G A R I G E L V D A V A A
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UniRef90_D9V6N8	S E V L T P A L V E E L K N
UniRef90_Q0W6U3	
UniRef90_UPI0003826640	V Q R M
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UniRef90_D7E2L6	I T E I K S V L
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UniRef90_UPI000344C616	P E I K K A A L E G
UniRef90_D2TIT9	S S E I S E I
UniRef90_I0GK01	I Q Q I E N I
UniRef90_R9BAX3	S N R I S D
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Sequence logo showing the conservation of amino acids at each position of a protein sequence alignment. The x-axis represents positions 1, 10, 20, and 30. The y-axis lists UniProt IDs. Positions 10, 20, and 30 are highly conserved with 'A' (blue), while position 1 is more variable.

lupas_21
lupas_14
lupas_28

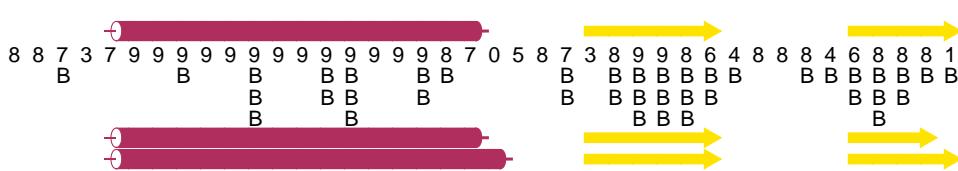
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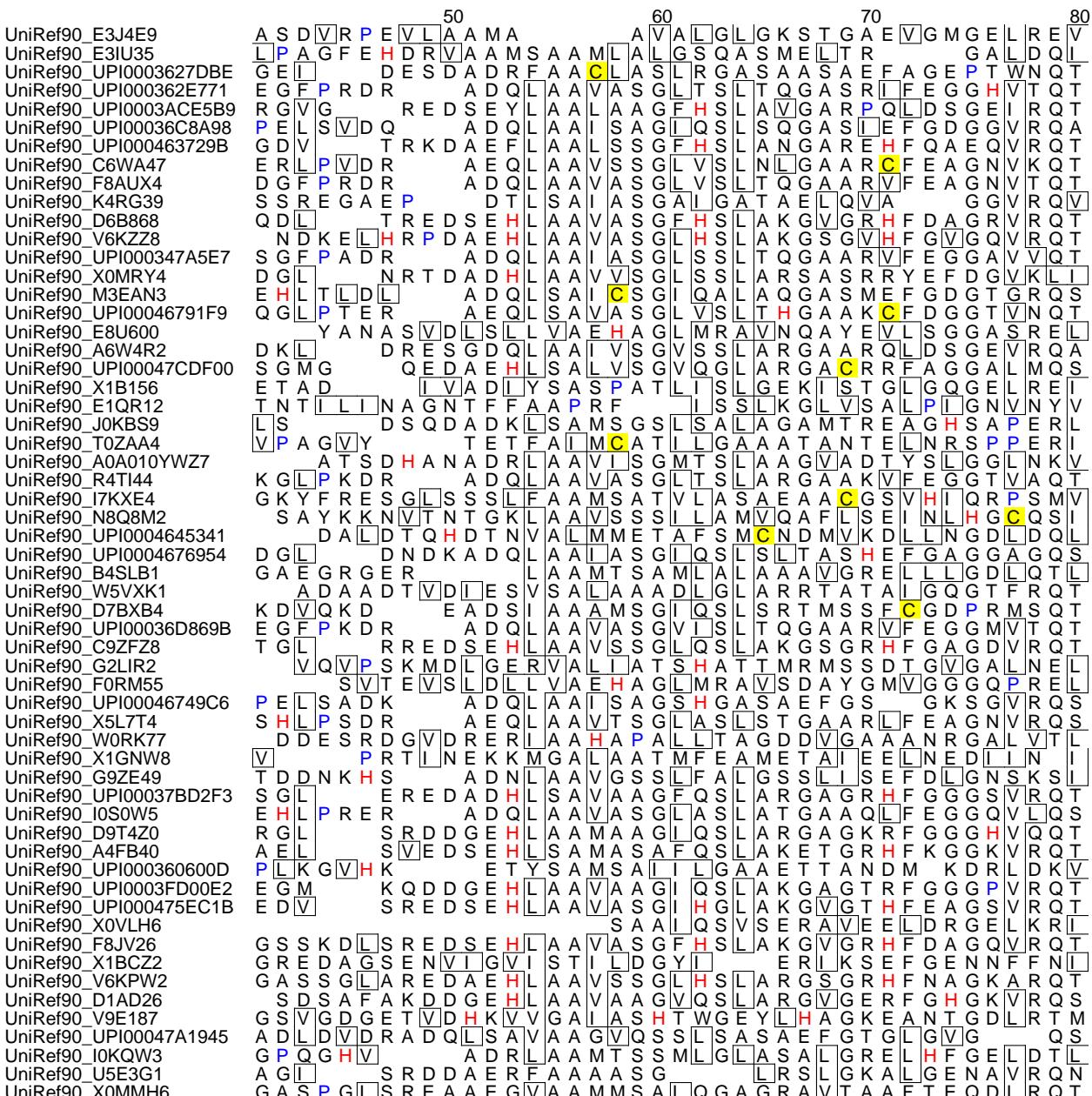
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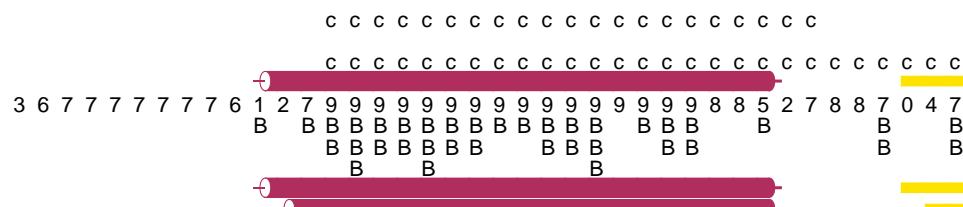
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lupas_21
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