

QUERY	1	10	20	30	40
UniRef90_K0J080	S N A M A D L L N V L K D K L S G K N V K I V L P E G G S D D E R I L L T R A A A Q L Q A	M S N L F D T L K E R L T G N T K R I V L P E G G S D D E R I L L T R A A A Q L Q A	L V I E K A R A S A K K R I V L P E G G S D D E R I L L T R A A A Q L Q A	H K K R I V L P E G G S D D E R I L L T R A A A Q L Q A	V L P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI0003B65DBE					
UniRef90_UPI0002DD62BF	M N E L F S S I V I K E K V K S A K K K S I V L P E G G S D D E R I L L T R A A A Q L Q A	M G H L F D E V K A K V N G S A K D K S I V L P E G G S D D E R I L L T R A A A Q L Q A	E L V Q R A R S T R K Q H I V L P E G G S D D E R I L L T R A A A Q L Q A	I V L P E G G S D D E R I L L T R A A A Q L Q A	V L P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI000225BCDF					
UniRef90_I4CBT7					
UniRef90_C6BYL9	S K V T P K M F E K L V Q K A K A N K R Q T I V L P E G G S D D E R I L L T R A A A Q L Q A	F Q S E L I E R A R N D R R T I V L P E G G S D D E R I L L T R A A A Q L Q A	M S N L F T G L K E K V S A S N V S I V L P E G G S D D E R I L L T R A A A Q L Q A	T E I V R V M L H K A R K S P K K I V L P E G G S D D E R I L L T R A A A Q L Q A	M S N L L N V L S D K L S G K N V R I V L P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI000473FAEB					
UniRef90_I6ZSC8					
UniRef90_A0A033UHQ1					
UniRef90_K7WP15					
UniRef90_UPI0003680053	M S D L F T S L K N K T V Q G Q D N K K I I F P E G G S D D E R I L L T R A A A Q L Q A	E I L Q R A K A N P Q H I V L P E G G S D D E R I L L T R A A A Q L Q A	D V M T P M F E Q L L E R A R T D K R H I V L P E G G S D D E R I L L T R A A A Q L Q A	D L F D N L K E R K V A G A N K T I V L P E G G S D D E R I L L T R A A A Q L Q A	S I M Q T I W E K A R Q D K K R I V L P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI000299DD1C					
UniRef90_D8LS5					
UniRef90_R7RRJ1					
UniRef90_R2SCQ5					
UniRef90_UPI000224L4K2	M F E F E L L A R A R G E K K R I V L P E G G S D D E R I L L T R A A A Q L Q A	Q L K T A K S Q K K H I V L P E G G S D D E R I L L T R A A A Q L Q A	D L F T A L K E K V V G T G R K I V L P E G G S D D E R I L L T R A A A Q L Q A	E L L A R A K S D R R R H I V L P E G G S D D E R I L L T R A A A Q L Q A	D L F T A L K E K V V G T G R K I V L P E G G S D D E R I L L T R A A A Q L Q A
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UniRef90_A4ITP4					
UniRef90_M1NBB6					
UniRef90_I2GDU0					
UniRef90_D5BEA2					
UniRef90_UPI00046E7034	M S D L F T V L K Q K I Q R K M K A V V F P E G G S D D E R I L L T R A A A Q L Q A	M S D L F T D I K G R L A G N A R K I V L P E G G S D D E R I L L T R A A A Q L Q A	D L F F E S L K N K I D G K D L T I V L P E G G S D D E R I L L T R A A A Q L Q A	M A D L F E N L K N Q I K G K S L R I V L P E G G S D D E R I L L T R A A A Q L Q A	I R S L F G E L R S K V A G K G T K I V L P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI0002D597C6					
UniRef90_I0AKJ7					
UniRef90_E0UQ17					
UniRef90_H3NQV5					
UniRef90_E7ACM5					
UniRef90_W7B1H6	M S D L F T S I K K Q V A G K N V K I V L P E G G S D D E R I L L T R A A A Q L Q A	S D V R T P L M F Q L M Q R A R A D R K H I V L P E G G S D D E R I L L T R A A A Q L Q A	M K D L F S E L K E K L G K N A K I V L P E G G S D D E R I L L T R A A A Q L Q A	D L F S E L K A K I A G K N L K I V L P E G G S D D E R I L L T R A A A Q L Q A	S D R T T P L M F E L V R A K T R R Q R I V L P E G G S D D E R I L L T R A A A Q L Q A
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UniRef90_UPI000361182F					
UniRef90_R5QPL8					
UniRef90_L0RA79					
UniRef90_UPI00040CCA0D	S S R I T P F M H D L I H K A R E S K Q H I V L P E G G S D D E R I L L T R A A A Q L Q A	F E K Q L V D Q A K K T N A H I V L P E G G S D D E R I L L T R A A A Q L Q A	M S D L F T A L K D K V Q K E Q P T I V L P E G G S D D E R I L L T R A A A Q L Q A	S F T A S L I S R A R A Q R K R I V L P E G G S D D E R I L L T R A A A Q L Q A	L I D R A R S R R R H I V L P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI0003B3BFB1					
UniRef90_I8UA79					
UniRef90_X4R993					
UniRef90_F4F8Y5					
UniRef90_D5EJ49	A A F R H Q L S K R A R Q A Q K R I V L P E G G S D D E R I L L T R A A A Q L Q A	K E T L R M I N K A K C D P K R I V L P E G G S D D E R I L L T R A A A Q L Q A	N V M T P L M F Q L F E Q A R S L R K R I L L P E G G S D D E R I L L T R A A A Q L Q A	E L F D S L K A K I K G K D L K I V L P E G G S D D E R I L L T R A A A Q L Q A	F M Y R V Q Q A R S D R Q R I V L P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI00011Q835					
UniRef90_B2HPZ2					
UniRef90_F7SKX4	S A F R H Q L V K L A Q Q A K K R I V L P E G G S D D E R I L L T R A A A Q L Q A	S F T E T I K Q R A K Q D I K T I V L P E G G S D D E R I L L T R A A A Q L Q A	D L I D V L K E Q V K A E K K S V F P E G G S D D E R I L L T R A A A Q L Q A	L F D V L K A K I K G K Q T R I V L P E G G S D D E R I L L T R A A A Q L Q A	F Q N A L V L R A K E Q V K K V V F P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI0003670C1B					
UniRef90_UPI00034DC5B5					
UniRef90_UPI000380DE56					
UniRef90_P77844					
UniRef90_UPI000424D5A0					
UniRef90_Q7UL90					
UniRef90_R6WY49	S F I D D I K Q R A K R E L K T I V L P E G G S D D E R I L L T R A A A Q L Q A	F Q G R L T E R A K A A P R T I V L P E G G S D D E R I L L T R A A A Q L Q A	S I T L Q S I T E K A K S N K K K I V L P E G G S D D E R I L L T R A A A Q L Q A	E L L N K I Y E L A K S N I K K I V L P E G G S D D E R I L L T R A A A Q L Q A	S V I D E L K S Q L K G K G A K I V L P E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI00037D4E99					
UniRef90_F0JUH1					
UniRef90_H1LC15					
UniRef90_H5SHC8					
UniRef90_L1QFZ6					
UniRef90_R6EN28					
UniRef90_S2VHE6					
UniRef90_L8LXG5					
UniRef90_Q8K9W5					
UniRef90_S3XF31	K E F C Y R L K I L S K S K H K R I V L P E G G S D D E R I L L T R A A A Q L Q A	E L Y K K A K S N L K T V I V L P E G G S D D E R I L L T R A A A Q L Q A	T Q V M S P F Q H E L L T K A R A A G A H I V L P E G G S D D E R I L L T R A A A Q L Q A	M S N F L N N I L K S N L E G K N V K I V L P E G G S D D E R I L L T R A A A Q L Q A	K L M N R I T Q A A R S N P K R V V F A E G G S D D E R I L L T R A A A Q L Q A
UniRef90_UPI0003641081					
UniRef90_UPI0002D32066					
UniRef90_W8F9L3					
UniRef90_U2JBX8					
UniRef90_J7UAC6					
UniRef90_E6L9L4					
UniRef90_B5E179	K E T M R Q I I N K A K C D P K K I V L P E G G S D D E R I L L T R A A A Q L Q A				



QUERY UniRef90\_K0J080 UniRef90\_UPI0003B65DBE UniRef90\_UPI0002DD62BF UniRef90\_UPI000225BCDF UniRef90\_I4CBT7 UniRef90\_C6YL9 UniRef90\_G9PH81 UniRef90\_UPI000473FAEB UniRef90\_I6ZSC8 UniRef90\_A0A033UHQ1 UniRef90\_K7WP15 UniRef90\_UPI0003680053 UniRef90\_G4SUW4 UniRef90\_UPI000299DD1C UniRef90\_D8IL55 UniRef90\_R7RRJ1 UniRef90\_R2SCQ5 UniRef90\_A0A022L4K2 UniRef90\_G7GY36 UniRef90\_C7LQT2 UniRef90\_A4ITP4 UniRef90\_M1NBB6 UniRef90\_I2GDU0 UniRef90\_D5BEA2 UniRef90\_UPI00046E7034 UniRef90\_W4VH80 UniRef90\_UPI00046A0A89 UniRef90\_U2FI41 UniRef90\_B8CWW7 UniRef90\_UPI0002D597C6 UniRef90\_I0AKJ7 UniRef90\_E0UQ17 UniRef90\_H3NQV5 UniRef90\_E7ACM5 UniRef90\_W7B1H6 UniRef90\_W9G5Y1 UniRef90\_UPI000289DDF9 UniRef90\_U7UF69 UniRef90\_I7KH29 UniRef90\_F9U8W7 UniRef90\_UPI000307FC8D UniRef90\_UPI000361182F UniRef90\_R5QPL8 UniRef90\_L0RA79 UniRef90\_UPI00040CCA0D UniRef90\_UPI0003B3BFB1 UniRef90\_I8UA79 UniRef90\_X4R993 UniRef90\_F4F8Y5 UniRef90\_D5EJ49 UniRef90\_B9M2A8 UniRef90\_A6QBS9 UniRef90\_A0A011Q835 UniRef90\_B2HPZ2 UniRef90\_F7SKX4 UniRef90\_R5XTI0 UniRef90\_C7H0E3 UniRef90\_F2I8L8 UniRef90\_I0ETQ6 UniRef90\_UPI0003670C1B UniRef90\_UPI00034DC5B5 UniRef90\_UPI000380DE56 UniRef90\_P77844 UniRef90\_UPI000424D5A0 UniRef90\_Q7UL90 UniRef90\_R6WY49 UniRef90\_W1TS17 UniRef90\_Q59330 UniRef90\_R9CFT3 UniRef90\_E0NKU4 UniRef90\_NOC7N6 UniRef90\_G0V4E1 UniRef90\_Q8R9V3 UniRef90\_UPI00037D4E99 UniRef90\_ROG0E7 UniRef90\_F0JH1 UniRef90\_H1LC15 UniRef90\_H5SHC8 UniRef90\_L1QFZ6 UniRef90\_R6EN28 UniRef90\_S2VHE6 UniRef90\_L8LXG5 UniRef90\_Q8K9W5 UniRef90\_S3XF31 UniRef90\_UPI0003641081 UniRef90\_UPI0002D32066 UniRef90\_W8F9L3 UniRef90\_U2JBX8 UniRef90\_J7UAC6 UniRef90\_E6L9L4 UniRef90\_B5E179

K A E L V Q S F V E R R K G K T T E E 100 Q A Q E L L N N V N Y F G T M L V Y A G K  
F D A M V A S F V E R R K G K A T E E E Q A R R E M L L D E N Y F G T M L V Y M D K K  
Q I E H Y A Q T Y F Y E L R R K H K G A T E E D A R K D R M L L D P T Y F A T M M V H K G Q Q  
F D E L V S A S F V E R R K G K A T E E D A R K I I K D E N Y F A T M L V Y A K K  
F D E M V Q A F V E R R K G K A T E E D A R K M L L D E N Y F G T M L V Y M N E  
R E T F A Q T Y F Y E L R R K H K V S R G M A F D A V A D N T Y F A S M M V Y H G H  
F D D Y C E T Y F Y E L R R E H K G I R G M D A R D R M L L D P T Y F A S M M V Y Q K G D  
L E K Y A T E F A R L R R K K G V T L E Q A R E K V Q D V S Y F G T M M V H M G D  
F D E M V A S F V E R R K G K A T E E A A R K L L D E N Y F G T M L V H E M G K D  
L E K Y A E A F Y E R R K Q K V T P R D A R Q M M K Q P N Y F G A M M V E M G D  
K A D L V E K F V E R R K G K A T Q E Q A E E L L N N V N Y F G T M L V Y T N Q  
F E T M T E T F V E R R K G K V T E E Q A E I L K D P N C F G T M L V Y M G T  
M D G L V A A F V E R R K G K V T E E Q A F N I L L D P N Y F G T M F V Y V N K  
R Q K F A E T Y F E L R R K H K V H Y E L A F D L M T D V S F F G T M M V H H N L  
A D R F A H E Y E L R R K H K M T L D V A R D R I L D I S Y F A T M M V H T G L  
F A E M V E A F V E R R K G K N T K E Q A E T M L R D V N Y F G T M L V Y M D K  
F D T Y A E K F Y E L R R K S K V T L E Q A K E I I K D E I Y F G T M M V K M N D  
F D E M V A A F V E R R K G K A T E E Q A R E V L K D V N Y F G T M L T Y M G L  
L E K Y A E A F Y E R R K K G V T L E Q A R E K V Q D V N Y F G T M M V Y Q M G E  
T E K F A V I Q Y A E L R R K H K N V M D R A R D L M R D V S Y F G T M M V H N D M  
Y N D Q V S T F V M D L R R K K V S K E V A C D C M V D P T Y F G T M M V Y K G Q  
F D Q L V S A F V E R R K K K V T E E A A R K L L L D E N Y F G T M L V Y T G A  
T E E F I Q T F Y E L R R K H K N M P D G A R D A M S N L S Y F G T M M V Y E G M  
Y E S Y A E T F Y E L R R K A K N T L D M A R D M M L D V S Y F G T M M V Y K G H  
Y E D Y A E T F Y E L R R K H K N M M A R D M M A D V S Y F G T M M I H K G D  
M E Q L V E K F V E R R K G K T S L E E A R E I L K D V N Y F G T M L V Y T K R  
F D E M V T A F V E R R K G K N T E E D A R K M L L D E N Y F G T M L V Y M D K  
F D E M V D A F V E R R K G K N T K E Q A V K M L K D N N Y F G T M L V Y M D K  
Y D Q M V E S F V E R R K G K A T E E E A R Q L L N A N Y F G T M L V Y M G L  
V N E F T D V F Y E L R R K H K I S R E D A A K T V K D P L Y F G T L L V H T G H  
F D K M K E L F L E I R R K G K A T P E V A E K L L R D V N Y F G V M L V K M G L  
C E D Y A K A F F E R R K R K G T L Y D S R N L I R K P N Y Y G S M M V A Q G D  
I Q K F E T E T F Y E L R R K H K G A T K D A A K D A M L H V N Y F A T M M V Y L D Y  
F E E Y V D A F V E L R R K G K A T R E Q A V E I L K D V N Y F G T M M V Y Q M G D  
L E D F A N T L Y A L R R Q S K G S L E E A H K L V K T S T Y F A T M L V Y S G H  
F S E L V T A F V E R R K G K A T E E Q D A E K L L L D P N Y F G T M L V F T G K  
V E R F A Q E Y T R L R R K H K G M E Q R A R T I V Q D I S Y F G T M M V H L G L  
T E K Y A E A F Y E L R R K N K V T I E K A L Q T V K D P V Y F G T M M V K M D D  
S E D M V N S L V E R R K G K L N K E E A E K L L Q D P N Y F G T M L V Y M G K  
F D E M V Q A F V E R R A R K G V T E E Q A R D I L L D V N Y F G T M L V Y M G L  
R E R Y A Q T Y F E L R R K H K I S E Q M A R D A L E D V S Y F G T M M V Y T G D  
L D E L I E K F V E R R N G K A T P E Q A R I Q L K D V N T F G T M L V Y T G Y  
R E R F A E E Y T K L R R E H K M T P D R A R E I V A D I S F F G T M M V Q D G L  
L E E Y A S L L F E L R R K S K M T E E E A K K T A L I P N Y F G T L M I K S G H  
F E R F V K E F E L R R K H K I M M D D A R D R M S D P T Y F G T M M V H T G V  
H E T Y A A P I E F A R L R R K K G V T L E Q A R E T V K D V S Y F G T M M V H M G Q  
A E E F A A D F A R L R R K K A T L E Q A R E T M R D I S Y F A T M M V H K G L  
F D Q L V A A F V E R R K G K A T E E Q A R K L L L D G N Y F G T M L V Y T N K  
V A K Y A A E F A R L R R K K G V T Y D Q A V E T I K D L S Y F G T M M V H M G D  
R D E F A E A Y A K L R A H G V T V E L J A Y D I V A Q P N Y F G T M M V W A G Y  
R E R Y V P A L M E M R K H K N M D K E A R R E A L E D T V M L G G C M M V A L D E  
T E S Y A Q E L Y M R R Q R K G T L S E A R R I M R R R T H F C M M V R M G D  
I E K F S R Q F Q A L R A S K G T L D T A R D A M E H K N Y F A T M M L Y N G M  
Y D E M V A A F V E R R K G K A T E E Q A R E Q L K D V N Y F G T M L V Y L D Y  
C N E F A D Q Y A Q L R K A K I T H E Q A R E I M N D A T Y F G T M L V Y N G M  
R A S Y I S P M V E R R R G K L N E L T A E A Q L Q D N V V L G T M M L Q L D E  
Y D E F V N S F Y E L R R K N K M T I E K A K K T I K D E T Y F G M M V K Q G L  
M D E L V A K F V E R R K G K I D E A G A R E L T N D V N Y F G T M L V Y S T D K  
Y E E M V Q A F V E R R K G K A T E E Q A R E M L K D V N Y F G T M L V Y M G K  
K D E F A K C L Y E L R R K S K G S V E E A Q K L L D K T Y F A T M L V H L G Y  
R A A Y I D E M F A M R Q R K T R A E E G K R M I K N N R N Y F G A M M V H L G D  
F E E M V A A L V E R R K G K L S E D D A R K L Q N D V N Y F G V M L V Y M G V  
A E E F A A T F A E L R R K K V T L E Q A R E T M R D V S Y F A T M M I Y E G L  
L E E F A E Q F A E L R R K S K V T I D E A R E I M K D I S Y F G T M M V H N G D  
F E G Y A K T L Y E L R R K S K V T L E M A R D L M L D V S Y F G T M M V H K G E  
R N S F A S E Y Y Q L R R K H K V T T D J A H D R M I D V T Y F G T M L V H R G L  
Y E E Y A V A L Y E L R R K A K M T L E Q A K E L L L N E T Y L G M M L V K Q G Y  
L D K Y A S R L A E L R A H K V T I E K A R Q L L Q D S A Y F G T M M I E S G D  
F D K Y A T D F Y E L R R K N K I T L E K A K E T I K D N I Y F G T M M V K E G Y  
L Q Y Y I E K F Y E L R R K N K V T I E K A K S I V R D P L Y F G T M M V K C N D  
T D E M V A S L V E R R K G K L N E E E A R E T L K N P N Y F G T M M I Y M E K  
M E E M V A A L V E R R K G K L S E E E A E L L R T D V N Y F G V M L V Y L G L  
L E F Y A N Q L Y E I R R K N K M T P E K A L E T V K D E M Y F G T M M V K M K D  
L E R Y A K E Y Y E L R R K N K M T E E E A E R L M R D P M Y Y G C M M V K L G D  
R K E F A E V Y T E L R R S H K M T L K A A C D L M T D V S Y F G T M M V H L G Y  
D E K M V D K L V E R R K G K N T P E Q A V K M L E D V N Y F G T M L V Y L G K  
F E D Y A E R Y F E A R K H K G I R M A A R D R M V D P T Y F G T M M V H A G Q  
I D E M A K A T V E R R K G K G D E A K A H E W L K D P N Y F G T I L V Y M D K  
R E R Y A Q R L Y E L R R C R K G V T L E A H E L I T K P N Y F A A I M V E L G D  
L N D Y I N A F Y E S R K N K M T I E K A E K I V R D P L Y F G T M M V K L D D  
L D D Y V N L F Y E T R K A K G M E K A R E I L L N D Y L T F G T M M V K A N D  
V R R Y A E K F A E L R R K K G V T Y D Q A V E K M K D P S Y Y G T M M V Y M G D  
L N E Y I E Q L Y Q L R R K H K M T P E I A Q D Y L M D V S Y F G T M M V Y D G D  
R D Q Y V P R L L E I R R K N K I D E L A R K Q L K D N V L A T L I L E S G K  
L D E F V N E F Y E L R R K H K I T L E D A K K I M L D K N Y F A T M L V L V G K  
A N E F A A D F A E L R R K K V T I D E A K K T M E D I S Y F A T M M V H K G L  
K G E L A E S F V E R R K G K V T H E Q A D D L N D V N Y F G T M L V Y T G H  
R E E Y A E L F Y Q R R R G I T L Y E G R R L L R E R N Y F G S M M L E T G E  
I D K M V A A F M E R R K G K V N E E A A Y K M M T D E N Y F G T M L V Y M G K  
F A E Y W Q E L Y M K R K G V T Q E Q A R A I T N P T S I G A I M V H R G E  
C E E F S A M Y Y E A R K A K M S L E E A A K L V K D R T Y F G T L L V H S S Q K  
T E G Y A A E L Y R R Q R K V I T L S E A R R I M R R R N H F G S M M V H M G D



QUERY UniRef90\_K0J080 UniRef90\_UPI0003B65DBE UniRef90\_UPI0002DD62BF UniRef90\_UPI000225BCDF UniRef90\_I4CBT7 UniRef90\_C6BYL9 UniRef90\_G9PH81 UniRef90\_UPI000473FAEB UniRef90\_I6ZSC8 UniRef90\_A0A033UHQ1 UniRef90\_K7WP15 UniRef90\_UPI0003680053 UniRef90\_G4SUW4 UniRef90\_UPI000299DD1C UniRef90\_D8ILS5 UniRef90\_R7RRJ1 UniRef90\_R2SCQ5 UniRef90\_A0A022L4K2 UniRef90\_G7GY36 UniRef90\_C7LQT2 UniRef90\_A4ITP4 UniRef90\_M1NBB6 UniRef90\_I2GDU0 UniRef90\_D5BEA2 UniRef90\_UPI00046E7034 UniRef90\_W4VH80 UniRef90\_UPI00046A0A89 UniRef90\_U2FI41 UniRef90\_B8CWV7 UniRef90\_UPI0002D597C6 UniRef90\_I0AKJ7 UniRef90\_E0UQ17 UniRef90\_H3NQV5 UniRef90\_E7ACM5 UniRef90\_W7B1H6 UniRef90\_W9G5Y1 UniRef90\_UPI000289DDF9 UniRef90\_U7UF69 UniRef90\_I7KH29 UniRef90\_F9U8W7 UniRef90\_UPI000307FC8D UniRef90\_UPI000361182F UniRef90\_R5QPL8 UniRef90\_L0RA79 UniRef90\_UPI00040CCA0D UniRef90\_UPI0003B3BFB1 UniRef90\_I8UA79 UniRef90\_X4R993 UniRef90\_F4F8Y5 UniRef90\_D5EJ49 UniRef90\_B9M2A8 UniRef90\_A6QBS9 UniRef90\_A0A011Q835 UniRef90\_B2HPZ2 UniRef90\_F7SKX4 UniRef90\_R5XTI0 UniRef90\_C7H0E3 UniRef90\_F2I8L8 UniRef90\_I0ETQ6 UniRef90\_UPI0003670C1B UniRef90\_UPI00034DC5B5 UniRef90\_UPI000380DE56 UniRef90\_P77844 UniRef90\_UPI000424D5A0 UniRef90\_Q7UL90 UniRef90\_R6WY49 UniRef90\_W1TS17 UniRef90\_Q59330 UniRef90\_R9CFT8 UniRef90\_E0NKU4 UniRef90\_NOC7N6 UniRef90\_G0V4E1 UniRef90\_Q8R9V3 UniRef90\_UPI00037D4E99 UniRef90\_ROG0E7 UniRef90\_F0JJH1 UniRef90\_H1LC15 UniRef90\_H5SHC8 UniRef90\_L1QFZ6 UniRef90\_R6EN28 UniRef90\_S2VHE6 UniRef90\_L8LXG5 UniRef90\_Q8K9W5 UniRef90\_S3XF31 UniRef90\_UPI0003641081 UniRef90\_UPI0002D32066 UniRef90\_W8F9L3 UniRef90\_U2JBX8 UniRef90\_J7UAC6 UniRef90\_E6L9L4 UniRef90\_B5E179

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





Table with columns for UniRef90 IDs (e.g., UniRef90\_K0J080, UniRef90\_UPI0003B65DBE) and a grid of amino acid sequences. The sequences are aligned in columns, with column headers 290, 300, 310, and 320. A 'QUERY' column is on the left. The grid contains letters representing amino acids (G, Y, K, I, A, Q, R, L, M, G, N, F, D, A, V, G, P, V, L, Q, Q, G, G, L, L, N, L, N, K, K, P, P, V, V, N, N, D, D, L, L) and some yellow highlighted cells (e.g., C, M, L, H, R).



QUERY L S F I T A A Q A L  
 UniRef90\_K0J080 L A I I T A A Q A L  
 UniRef90\_UPI0003B65DBE T V A I T A I Q A  
 UniRef90\_UPI0002DD62BF L A L I T A L Q A L  
 UniRef90\_UPI000225BCDF L A L I T A A Q A V  
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 UniRef90\_A0A033UHQ1 L S I I T A A Q T L  
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V M R P V F A T A K T K A A R I V F A E E G E D E R V L R A A Q F V L  
S F L G V R K K A L Q A N R R I V L P E S F D D E R I L R A V I A E I L L  
M F G K L I N I L K E N P K K I V F T E G S D P R I L E A A S R L L  
I M K P V F A A A R G A P M R V I Y A D G E D E R V L R A A Q V V I  
K I T R L L N R A K Q N P K R I V Y A E A D H L D V L K A A Q Q V Y  
F E H M L I E R A R Q G D R R H V V L P E E G T E R V L J A A E V L V  
M M K P V Y E R A R A D I Q R V V Y A E E G E E N V L R A V I Q T V V  
T D R V T P M M H K L I E R A R A D R R V V L P E G L E R V L R A A D V L L  
M F K K L S E Q L A R A N P R T I V F T E G T D A R I L E A A D K L T  
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P D K R T Y L F A D T G L N N E Q N P T T S A E E Q L A G I T A S S A A R T V R L F G M E P V  
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E T E M Y A M A D C A I N N L D P P T S A E D Q L V E I I A Y E T A R T A K T F F G L E P R  
P D Q V L V Y G D C A V I N N P D P P T S A E E L A E I I A L Q S A A S A R A F G L E P R  
D K K E Y L F S D C C G V I N P N P P T S A E E L A D I I A E S V G K A R S V M K E P R  
D H T R Y M F S G D C A I N I H P P D A E Q T L A E I I A E S V G K A R S V M K E P R  
C Q P F H I F S D C A L V I D P P D A E Q L A E I I A L S A A K S A V T L L Q E P R  
R N R V I F C A D A T V N N D P P D A E Q L A E I I A L S A A K S A V T L L Q E P R  
P D Q V L V Y G D C A V N N P D P D A E Q L A E I I A L S A A K S A V T L L Q E P R  
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P E C V A L L A D C A V N N I E P S S A E E Q L A D I I A L A S A Q T A R E F G V D P R  
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R K N Y V E R L C H R R R H G G I T L A H A N E L V K D N S I L L S T L I L L E R S K E  
S K R F I D R Y L E L E R R M K G V S A D S E A A Q A A I A D R P L G F A A M M L V R R M G D  
F D E H F E D R Y W M E R R K G V S A D S F A R R E V R R R A S L F G A M M V E R R M G D  
Y R D Y W Q A Y Y M A R R R G V T P A R A R T V V R T R N T V I G A M M V H L G D E  
R N I Y A K K L S E K R R R G G M T F D E A Y E K M Y R R N Y F G S M M M V E T R G D  
L E S Y A Q K L Y E K R R R K G V D E H A M A L M R R N S Y F G S M M M V E R R G D  
F R D F W Q T Y L A E R K G V T E S F A K L E M R R R N S L I G S V M I L T K G M  
F A R Y V A R Y W E L R R R G V T V E A R R R R I R T R T N Y F G A V M L E L G D E  
Y E R H A D V Y Y M C R R R G V T P A Y A K R V M T S R T T Q L A A V M M V E L G D E  
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F N D Y W Q Y Y H T E R R R G V T V S A A K E L M R S R P T L I A S V M M V A R G E  
F R E Y W Q A Y Y Q K R N G I S P V D L A Q R R H V I A N T P T L I G A L M L H L F G Y H  
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L N T Y I E S L L C E A R K S K G P E D A K E I L L S N P L F F G A T M V R V G D  
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F R S Y W E E Y H R C R H K G V S P E S A K V S V R R R N T V I A S L A V R L G D  
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F H Q Y W T T Y W E C R R R G I S K E M A R V E M R R R N T L I G A V M V R L G D  
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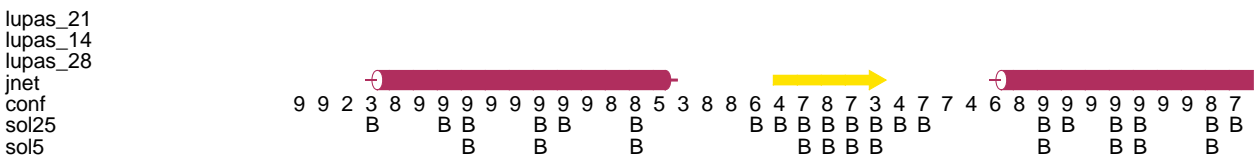
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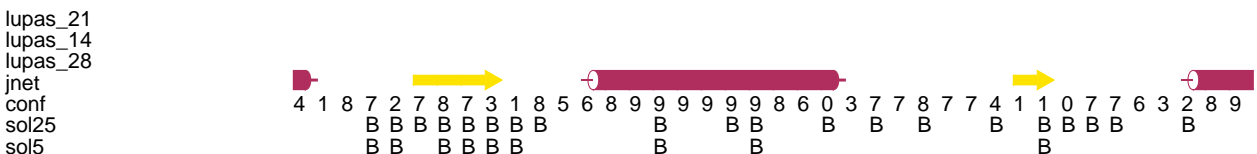
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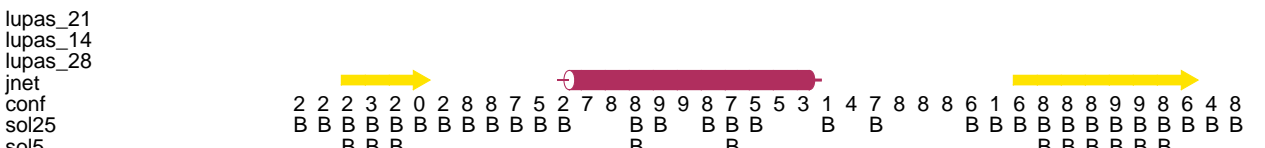
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Q K G L G N F L L F G P K E V V I Y D E N Q V K V  
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H L G F V E A F L V G E V H A P L L E K L S S E T A A W V H H L P A S D A  
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170 180 190 200

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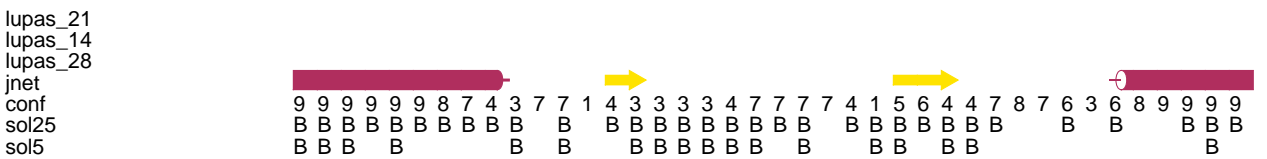




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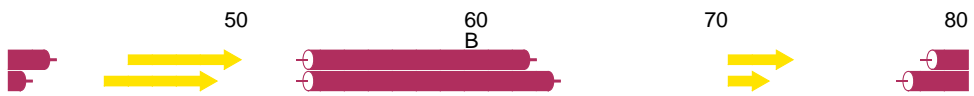
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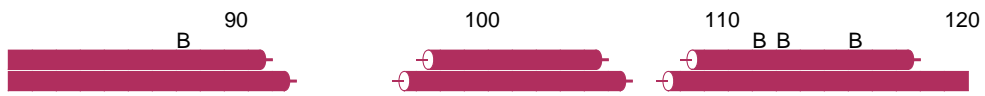
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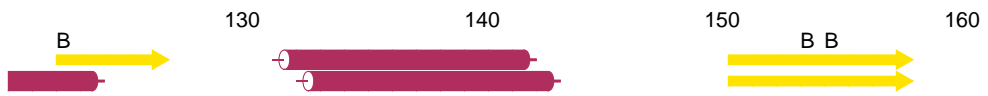
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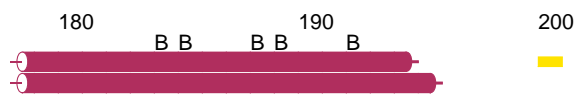




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sol0  
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sol0  
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jpssm



210



240

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