

1 10 20 30 40

QUERY	S K E F D F L K T F H K T G Q E Y K Q T K M F L E G M H Y K R E F S I E E Q
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UniRef90_R7UN30	E E F A D F L L K S L R K P A L D A S K Q L K Y F I E K I Q G M P D S P V E D L
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UniRef90_K1Q8F2	E F A D Y L L K S L R K N A V D V S K H T K A I V D K L S Q Y A D A S V E E L
UniRef90_S8FXS7	F D F Q K F L D Q M K K G A E P V A K Y L R S F L S N F A K R T F T V N D Q
UniRef90_E9CFL4	F H D F L T D M K K P A Q D L V M Q T K R F I E N F S T S T A L S S E E Q
UniRef90_B2VX98	F D F H R F L E Q L H R T A D P V A K F L R S F L L E F G K K Q W M V H E Q
UniRef90_UPI00044132F8	A F D F Q R F L D Q M K R S A E P V A K F L R S F L S N F S K K T F T V N D Q
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UniRef90_M1WAR1	F D F H R F L E Q L R K K A D P V A R Y L K S F L S E F G K K Q W M V H E Q
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UniRef90_UPI0004560EC2	F D F Q R F L D Q L H K S A D P I A R Y L K S F L N E F G N K R N W S T D E Q
UniRef90_UPI0004572A02	F Q G G F L K D L K K S A E P V A R Y L K S F L S N F V K K P F T V N E Q
UniRef90_A0A024JGW1	T F D F H R F L E Q M K P S A A H I A R Y T K G F I A A F H R R E A W T V N E Q
UniRef90_Q5KDW4	D F T S F L K L R P S S Q R L Q S R C T A F L N T M E A Y H G P V Q K Q
UniRef90_S2JMY4	F D F Q R F L E Q M N K S A E P V S K Y L K S F L S N F A K R T F T V N D Q
UniRef90_B5X4E2	F D F H R F L E Q L R K S A D P V A R Y L R S F L G E F G K R Q W M V H E Q
UniRef90_D8Q1M8	D F P G F L K L L R K P A Q R L Q S R C T A F L N T I E A Y H D P V E K Q
UniRef90_N1QP21	D F D F H R F L E Q L R K S A D P V A R Y L K Y F I N M L K H T S S N I D E V
UniRef90_W5L2E1	Q E Y V D A L K A L K V D E P A K Q E L K Y F I N M L K H T S S N I D E V
UniRef90_W5JWN7	F D F N R F L E Q M R R N A K P I T R Y F K S L Q A F D R R P W T V N E Q
UniRef90_S2JWF8	F D F G K F L Q Q M N P S A Q N I A R Y V K N F E K E F E R K A W T V N E Q
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UniRef90_T11A4	A F N F A G F L R D L K K S A E P V A R Y L K R S F L V D S L H T E T D K Q L P D Q
UniRef90_J5T773	S K D F V D F L I V A F Q E P A A D V L L K K C H E F D T K L T S N N E S T I D E K
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UniRef90_I1FY98	L K N E Q H D Y E I R S Y Q G N N T K N I D E L L
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UniRef90_D6X0Y7	U R I H K Y I S S F Y K K L V D N P N S S I E D L
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UniRef90_T1L217	K D V R K C H S F V V D I L Q N K D K R I E E L
UniRef90_E9ILS2	F D F N L F L E Q M R P Q A E P I A K Y L R S F L K E F T K R K Q T G V A E Q
UniRef90_G3KLH0	I D F L A N L K K P A Q D V A Q D L K R K T F E A E G D M T P K Q Q
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UniRef90_S9W837	H D F L Q R M R P T A A D F V K S I K S F I V S F L N N A P D A E R D
UniRef90_M1CMP4	Y A F L S S N K A A Q D A A T Q M R R F L K A F E E S S P T T V A E K
UniRef90_A9VCN1	F D F N R F Q E Q L R S S A A P V A K Y M K S F L Q E F S K R Q W S N T E Q
UniRef90_R4X4I1	F H D F L D R M H P Q A V D L V K S I V E F M S R T P D P D K D
UniRef90_A9S5I1	E Y F Q M F D A S K R S V F S D V K K Q L R N I L N Y A L K G D K T I D E L
UniRef90_E0VBJ6	F D F H R F L E Q L H R T A D P V A K F L R S F L N E F G K R Q W M V H E Q
UniRef90_D4B5N9	F D F H R F L E R M R P S A A F V K S I K S F I V T F S N R A P D P E K D
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UniRef90_F1KW25	T D H F S D Y L K K N L P P A A E I W R Q T R H A I T K I E Q Q T N I S M D D L
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UniRef90_Q5B702	F D F H R F L E Q L H R T A D P V A K F L R S F L H E F G K R Q W M V H E Q
UniRef90_A0A059BY07	S M E F Y D F L D R M R N P A S D L V R S I K S F I V S F S Y P P N P E N D
UniRef90_B5RSR5	F D F Q Q F L N H L K K S A D P I V R Y I R S F L V S F S R Q H T F T S D Q K
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UniRef90_F9G0C7	F D F H R F L E Q L R K K A D P V A R Y I K S F I S E F G K R Q W M V H E Q
UniRef90_G8B548	S F D F Q T F L L Q I R K S A D P I V R Y I R S F L G S Y K Q V N S F S A E Q R
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UniRef90_M3K5X5	F D F Q N F L T H L R K S A D P I V R Y I R S F L S S F T K Q H T F T A E Q R
UniRef90_Q6CRC1	D F Q A F L K I M R P K A D P I V K H T K S F I R N F V S Q R N W T T S E Q
UniRef90_U6PTF2	D F L V M S L P T A Q E I T R Q V K Y A V M K I S E L R V T P D E L
UniRef90_I0Z835	P A A D L V R S I K N F I K T F E D R K P D P E R D
UniRef90_G3B1P2	F D F H V F L E Q L Q R K S A E P I V K Y I R S F L V S F T R Q R G F S L Q Q K
UniRef90_W0TAJ2	D F Q S F L N I M R P K A E P I V K Y T K S F I R N F L T Q K N W T T A E Q
UniRef90_H2SXJ2	T K F E E K K N A E K
UniRef90_A5DFK9	F D F D Q F L V H L R K S A D P I V R F I R S F L L N F N R Q H A L S Y E Q K
UniRef90_UPI0003C1624E	S D D H K R L G F K Q E L C H E F V K V L N N T L E K M E F K K N E S M E S M
UniRef90_UPI00026579DE	F D F Q R F L K Q L R K D C E P V L K Y I L K S F L T Q F Q A R T W S V D E Q
UniRef90_C4R3U5	D F R K F V N Q L R K S A I S I A K Y M K S F I Y E F L Q K P W T I K E K
UniRef90_M7NTH7	S K E F I D F L K T Y H K T G Q E I Y K Q T K M F L E G M H Y K R E F S I E E Q
UniRef90_K5VBG6	F D F H R F L E Q L R K K A D P I V A R Y I R S F L S E F G K R Q W M V H E Q
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UniRef90_C9SN47	D F Y G F L D R M R R P A A D L F R S I V K Y T K S F L I K S F L D E P S A E E D
UniRef90_J3LUN7	D F Q A F L K Q F K D P A E P L V K Y T K S F L I K S F L D E P S A E E D
UniRef90_P54787	D F Q T F L T Q L R K S A D P I V R Y I R S F L G S Y K Q G A T F T A D Q R
UniRef90_I1GL07	D F Y G F L D R M R R P A A D L F R S I V K Y T K S F L T S L D E P S A E E D
UniRef90_A5E5E1	D F Q L F I K Q F K D P A E P L V K Y T K S F L I K S F L D E P S A E E D
UniRef90_A7TR29	D F Y G F L D R M R R P A A D L F R S I V K Y T K S F L T S L D E P S A E A D
UniRef90_W5FB21	D F Q S F L N I M R P K A E P I V K Y T K S F I R N F L T Q K N W T T A E Q
UniRef90_C1CMX54	F Q S F L E K M H P S A S E L V K S I K G F I A S F D D A A V R D S D A D
UniRef90_H9IZY8	D F R V R F P S F P Q I D R D A R G F V H T F K W A I M N V D E L

50 60 70 80

QUERY	Sequence
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UniRef90_G1MZJ5	S E C V Q D F Y Q S L A D R L M S H F K G S S E S V D Q V M D Q I V E K Y I M T R
UniRef90_F1R8D3	S E C A Q D F Y Q N V A E K L Q T R W K A P P E K V E K A M D Q I V E K Y I M T R
UniRef90_UPI0001CBB7B8	S D I V Q D F Y Q N M G E R L Q T H K G A S A E Q Y E T M M E H M E K Y I M T R
UniRef90_V4CG08	S E M V Q D F Y Q T L N D K L H S M S V F D H D A I E K I M D F T E R Y I L T R
UniRef90_UPI0003595159	S E M V Q D F Y G I L S D K L N T F R G F S Q E V I E K I L D Y T E R Y I L T R
UniRef90_R7UN30	S E S V V N F Y Q S L S D R L H S Y K G L S Q E S V D L L M D Y A E K Y L L I R
UniRef90_U4LAN2	V K I V R D F L N F I Y A K M E V W R E V G D G E M D N A M E G M E K L V M N R
UniRef90_K1Q8F2	S E M I Q D F Y Q N M S D R M N S H N T Y K P E M S E K L L D Y I E K Y V M V R
UniRef90_S8FXS7	V K L I N D F L G F I A E R M R V W R N A T D A E F D N A M E G M E K L V M N R
UniRef90_E9CFL4	S E S I Q I F L Q N M G N R O S T W K N S Q Q E E L E N A I D G I E K Y V M T K
UniRef90_B2VX98	V K I I G D F L E F I S K K M E V W R T V S D A E F D N A R E G M E K L V M N R
UniRef90_UPI00044132F8	V K V I I N D F L L N F I T E R M E P W R S A S E Q E F D N A V E A M E K L V M N R
UniRef90_A0A023G601	S N L V Q D F Y Q R M H E R F E T H A H L E P D E V E R L M D L T E N Y L M S L
UniRef90_G1XNV1	V K I I I S D F L D F I H N K M D V W R E V S D L E F D N A K E G M E K L V M N R
UniRef90_M1WAR1	V K I I I S D F L A F I A N K M M M W G N V S D A E F D N A R E G M E K L V M N R
UniRef90_Q4SPM5	S E C V Q D F Y H N L S E R L Q T Q F K G S L E H V E I V M D E V E K Y M M S R
UniRef90_UPI0003EA8FD0	T R K V T T V K K F F S P S S R T A S K K E R V E R V M D Q V E K Y L M T R
UniRef90_G3R475	S E C A Q D F Y H N V A E R M Q T R G K G L G N R A R L L K K I T S M V V L P
UniRef90_W4K0L8	V K L I I N D F L N F I S H K M R V W R H V S D A A F D N A M E G M E K L V M N R
UniRef90_U1GT39	V K I I I G D F L T F I A N K M D V W R D V S D A E F D N A R E G M E K L V M N R
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UniRef90_UPI0004572A02	S D L V Q D F Y Q N I T S H F T G Q S L E H T E R M M D N V E K F I M T R
UniRef90_A0A024JGW1	V K I I I S D F L K A F I A R K M D P F S T L S D V Q M D N A L E G M E K L I M N R
UniRef90_Q5KDW4	I K L I I H D F L A F I S E K M E P W K S Q S S A E F D N A L E A M E K L V M N R
UniRef90_S2JMY4	I K F I I Q D F L N F T Y V R M R V W R D I S E K E F E N A K E G M E K L V M N R
UniRef90_B5X4E2	S D L V Q D F Y Q N I T A V H F S S L E V Q V S Q M M E H M E K L I M T R
UniRef90_D8Q1M8	I K I I I N D F L N F I A Q R M R Q W R K C T E Q F E F D N A M E G M E K L V M N R
UniRef90_N1QP21	V K I I I S D F L E F I S R K M E V W R T V S D A E F D N A R E G M E K L V M N R
UniRef90_W5L2E1	S D H V Q D F Y Q N I T V H F N G L P E A Q V S Q M M E H I E K L I M T R
UniRef90_W5JWN7	S E L V Q N G Y T K F R E Y M H R F A N A S D M E R Q V L D F F E R C I M T K
UniRef90_S2JWF8	I K I I I Q D F L D F I F I K M R V W R D M S E Q F E G N A K E G M E K L V M N R
UniRef90_A0A015JV83	I R I I I H D F L D F I A L K M R N W R N S S D V E F E N A K E G M E K L V M N R
UniRef90_T11A4	S E R T Q N F Y Q I L T K K I E E F I Y R D E Y K E Q L L D Y T E K H A M T C
UniRef90_J5T773	Q E A V Y H A N S Q F I S E R M R P W K S Q S E A E F D N A L E A M E K L V M N R
UniRef90_H2Z0V2	S E M V Q V F Y Q S M T D R L L S H S H A H E E D H D K I M N N V E K F I M T K
UniRef90_I1FY98	S D L V Q E F Y R S T S E R L V T H K T M S D L E Q E E T M D G I E K H L T T S
UniRef90_T1PJJ3	S E L L V Q N A Y S K F S D L V H S F Q I A T N E D R E M T I D F F E K V V M T R
UniRef90_D6X0Y7	A E M A Q K Y Y N L Y S N R V E T Y Q E V T T D V R D E L L D F F E K Y V M V S
UniRef90_B4MXZ5	S D L V Q N T Y T K V A D I V H N D P R A T N E D R D S A I D F F E K V V M T Q
UniRef90_T1G4J6	S E M L S T F Y Q Y L M N D N M T S K H L Y K A E E A E E L L N I C E R Y V L T R
UniRef90_E9C8X3	T E M V Q L F M Q N T A R K L V V W K G A S P E A L D N A I E G L E K Y L M H K
UniRef90_X8JKZ3	I R I V H D F L V F I S A R M R V W G K A D E T E F D N A I V E D M E K L V M T R
UniRef90_T1L217	S E V V Y E F Y T S M A D R F A S N A I Y E E E S I D Q L V D Y T E T R L L S T
UniRef90_E9ILS2	S E I T Q N F Y H V F G K R L E N S T K Y A D D I K E K L L D Y V E R Y A M T L
UniRef90_G3KLH0	V K V V N D F L D F I S I K M R E I R T C N E A E F D N A V E A M E K L V M N R
UniRef90_F2U088	I Q S V Q N F Y Q V L D L E R L T T F A H M S D E Q L D V I Q A G A E R H V M H H
UniRef90_X1WIT2	S E L T Q H F Y Q N I L D M L N S Y D G L S H E K K E Q I L D Y A E K Y S M I K
UniRef90_S9W837	V K L I I Q D F L A F I G E K L E Q W A S G S Q A E I D N A K E G M E K L V S N R
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UniRef90_A9S5I1	S E S V Q S F S L T T E G F A G A H P N A T D E E L L D S A G E G L E K Y L M T K
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UniRef90_D4B5N9	V K L I I S D F L A F I T N K M E V W K G V S D V E F D N A K E G M E K L V M N R
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UniRef90_V4LB11	C D A V Q Q E F F F S K M E A A F R A W S G C S E E E L L D S A G D G L E K Y V M T K
UniRef90_F1KW25	S G M V Q H F Y Q V L S D R M R H S P S V N D A N V E E V V A E I E Q Y V C V R
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UniRef90_D8R0M8	S A S A Q D F L S T T E V A F R A W A G A T E E E L E N A A E G L E K Y V M T K
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UniRef90_A0A059BY07	G K K V Q D F F F M T M E G A L R D W A G A S D N E I D C A M E G L E K Y V M T K
UniRef90_B5RSR5	I K I I R D F K E F M N D K F E P F A S M D D I D L E N S R E G L E K L I M N R
UniRef90_C1C513	A E D V Q T L Y R Q I G D H P D T S E E K D R L L I E K L V M T R
UniRef90_A0A022U0J6	V K I I I S D F L A F I T N K M E V W K G V S D V E F D N A K E G M E K L V M N R
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QUERY				
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UniRef90_I1FY98	I Y R Y V F A P P S C D D D I K D L L F V R R I N M L H W I E P S I L D V T L D			
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UniRef90_T1G4J6	L Y S H L F S P S V T D D E Q L D L K L Q A R I R S L H W I S V H L L D V V L N			
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QUERY

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

QUERY	170	180	190	200
UniRef90_M3ZWR2	F N A I K I T K N E P A S A D D F L	P T L I Y I V L K G N P P R L Q S N I Q Y I		
UniRef90_G1MZJ5	F N A I R I T K N E P A S A D D F L	P A L I Y I V L K A N P P R L Q S N I Q Y I		
UniRef90_F1R8D3	L T A I Q G S K K A A S A D D F L	P A L V I Y I V L K A N P P R L H S N I Q Y I		
UniRef90_UPI0001CBB7B8	F Q V L N I S R G Q P A S A D D F L	P V L I Y I V L K A N P P Q L H S N I Q Y I		
UniRef90_V4CG08	F E A L R Q T K Q G P A S A D D F L	P A L I Y I V L K A N P P R L Q S N I Q Y I		
UniRef90_UPI0003595159	F E V L R Q S K Q G P A S A D D F L	P A L I Y I V L K A N P P R L Q S N I Q Y I		
UniRef90_R7UN30	F E C L R V S K G A P A S A D D F L	P A L I Y V V L K A N P P F L Q S N I Q F I		
UniRef90_U4LAN2	F G L L R H S K S D E S A D K F V	P L L I Y V V L R A N P E H L V S N I V Q Y I		
UniRef90_K1Q8F2	F E I L R H S K T G P A N A D D F L	P A L I F I V L K A N P P L Q S N I Q Y I		
UniRef90_S8FXS7	F G F L R H L H K E E G A D S F I	P I L I Y V V L K A N P P N L Q S N I V E F I		
UniRef90_E9CFL4	F T I L Q A M A G A S H S A D E F V	P V L I F T V I R A H P A R L Q S N L Q Y I		
UniRef90_B2VX98	F G F L R T S S S D Q S A D A F V	P V L I Y T V L R A N P D H L V S N V Q Y I		
UniRef90_UPI00044132F8	F G L I R H M H A D E G A D T F I	P I L I F V V L R A H P E H L I S N V E Y I		
UniRef90_A0A023G601	F E A L R M G P Q G P R S A D E F L	P A M V Y V V L R A N P P L H S N I K Y V		
UniRef90_G1XNV1	F G L L R H A N S T Q S A D D F V	P V L I Y V V L R A N P E H L V S N I Q Y I		
UniRef90_M1WAR1	F G L L K H N K A D S S A D S F M	P M P L L I Y V V L Q C N P E H L V S N V Q Y I		
UniRef90_Q4SPM5	F N A I K V S K K E A A S A D D F L	P T L I Y I V L K A N P P R L Q S N I Q Y I		
UniRef90_UPI0003EA8FD0	F N A I K I T K S E P A S A D D F L	P T L I Y I V L K A N P P R L Q S N I Q Y I		
UniRef90_G3R475	F N A I K I T K N E P A S A D D F L	P T L I Y I V L K G N P P R L Q S N I Q Y I		
UniRef90_W4K0L8	F G L I R H L N K D E S A D S F I	P I L I F V V L K A N P P E H L L S N V E F I		
UniRef90_U1GT39	V G L L K S S K S A D T S A D S F V	P V L I Y V V L Q A H P D H L V S N I Q Y I		
UniRef90_UPI0004560EC2	F G M I R H L S T E E N A D T F I	P V L I F V V L K A N P P D N L I S N V E Y I		
UniRef90_UPI0004572A02	F S G L R V S S Q E P A A D D F L	S S L I Y V V L K A N P P R L Q S N I Q Y I		
UniRef90_A0A024JGW1	F G L L R Q S N S E E N A D G F V	P I L I Y V V L K A H P Q H M I S N L N Y I		
UniRef90_Q5KDW4	F G L I R N V Y G E T G G A D A F V	P I L I F V V L R A N P E N L I S N L E Y I		
UniRef90_S2JMY4	F G L M K H M E G D E G A D F V	P L I Y V V L R A N P P K L I S N V Q Y I		
UniRef90_B5X4E2	F Q A L S S S N S E P A N A D D Y	S G L I Y V V L K A N P P R L H S N M Q Y V		
UniRef90_D8Q1M8	F G L I R H L K K D E S A D F I	P I L I F V V L K A N P E H L L S N M E F I		
UniRef90_N1QP21	F G F L K N A K Q D Q S A D A F V	P V L I Y T V L R A R P E N L V S N V Q Y I		
UniRef90_W5L2E1	F Q A L A L T N S Q P A N A D D F L	S G L V Y V V L R A N P P R L H S N M N Y I		
UniRef90_W5JWN7	F S F L K K S V E G P A S A D D F L	P A L I F V V L K S N P V R L H S N I I N F I		
UniRef90_S2JWF8	F G L I K H V E G D A G A D K F V	P I L I Y V V L R A N P P K L V S N V Q Y I		
UniRef90_A0A015JV83	F G L I R H V D G E E G A D K F L	P I L I F V V L S A N P E H L V S N V Q Y I		
UniRef90_T11A4	L T L M Q K C V V G G P A S A D D F L	P A L I F V V L K A N P A R L K S N I N Y V		
UniRef90_J5T773	F G L I R H T S G N E A G A D A F V	P I L I F V V L R A S P D N M L S N I E Y I		
UniRef90_H2ZOV2	F E A I R R S K D D P A S A D E Y	P L I H I V L K A N P P L K S N I R Y I		
UniRef90_I1FY98	L D A L R I S H G G P A S A D E F V	P G L I F L V I H T S P Q H L Q S N I N Y I		
UniRef90_T1P1J3	F E L L K H S V V G G P A S A D E F L	P A L I F V V L K A N P V R L H S N I N F V		
UniRef90_D6X0Y7	V K V L Q H C Q G G P V S A D E F L	P A L I F I V L K A N P A R L K S N I L Y V		
UniRef90_B4MXZ5	F E L L K R A T G G P A S A D D F L	P A L I Y I V L K A N P V R L H S N I N F V		
UniRef90_T1G4J6	F E A L K F S K N E P A S A D E F L	P A L I Y I V L K A N P P L E S N I Q F I		
UniRef90_E9C8X3	Y N V L Q N A E G A A A G A D E F L	P I L I Y V V L R A N P V K L H S D L Q Y I		
UniRef90_X8JKZ3	F G L I R Y R R G D E G T N S F I	P L L V F V L I R A N P E H L L S N I E Y I		
UniRef90_T1L217	F E L L Q V A R N G P V S A D Q F L	P A L V F V V I K A N P P L H S N I K F I		
UniRef90_E9ILS2	F L L L Q Q S V D G P A S A D E F L	P A L I F I V L K A N P A R L K S N I N F I		
UniRef90_G3KLH0	F G L I R H I D Q S E G G A D T F I	P I L I L V V L R A Q P K T L I S N L Q Y I		
UniRef90_F2U088	F T Q K S A S S Q Q A A S A D D F V	P A L Y T L I Q A N P P K L Y S N I K F I		
UniRef90_X1WIT2	F Q G G G N G M K G P A S A D D F L	P V L I F V V L K A N P V R L K S N L H Y V		
UniRef90_S9W837	Y S Y L R N A V K E E S A D A F V	P V L I F V V L K A H P E H L V S N I Q Y I		
UniRef90_M1CMP4	N N L L T S V K D N N P P G A D D F L	P V L I Y V T V K A N P P Q L H S N L L Y I		
UniRef90_A9VCN1	F R I L R S Q D K K A Q A A D D F L	P A L Y I L I K V N P P M L H S N M Q F I		
UniRef90_R4X141	F G L L R H A G S D E S A D G F I	P F L L T L L R A N V A N L C S H V T F V		
UniRef90_A9S511	N N V S I G K S D N N P P G A D D F L	P V L I Y V V I K A N P P Q L N L L Y I		
UniRef90_E0VBJ6	F I L L Q Q S V V G G P A S A D E F L	P A L I F I V L K A N P A R F K S N V N Y I		
UniRef90_D4B5N9	N S D T S A D S F I P L L I Y V V L	K A N P E H L V S N V Q Y I		
UniRef90_K4A933	N N A S I V S N D N N P P G A D E F L	P V L I Y V T V K A N P P Q L H S N L L Y I		
UniRef90_V4LB11	N N A S I A S K E N A P G A D E F L	P V L I Y V T V K A N P P Q F H S N L M Y I		
UniRef90_F1KW25	F E A K E S R S G A P A S A D E Y	P V L I Y V V L K G N P P L I Q S N V K F I		
UniRef90_M5ED43	F G L I R H D T E E S A D A F M P L L I	L V V L R A N P T D N L I S N V R Y I		
UniRef90_D8R0M8	N N L L M A K S G T P P G A E E F L	P A L I L V V L K A N P P Q L H S N L Q F I		
UniRef90_Q5B702	F	A N P E H L V S N I Q Y I		
UniRef90_A0A059BY07	N N A S M S E N H V L A G A D D F L	P V L I Y V T I K A N P P E L H S N L K F I		
UniRef90_B5RSR5	F S F L R V S K R E T N A D S F I	P L L I L V I I K A K T D N L I S N M H Y I		
UniRef90_C1C513	F R A I D I S T K Q P A T T D D L L	S G L I Y I T I K A N P P R L F S N L K Y I		
UniRef90_A0A022U0J6	F G L L R H A K N S D T S A D S F I	P L L I Y V V L K A N P P A N L V S N M E F I		
UniRef90_F9G0C7	F	N L L I Q S N P E H L V S N V Q Y I		
UniRef90_G8B548	F S Y L K I S H K E T N A D S F I	P L L I L V I I K A K T E H L I S N I H Y I		
UniRef90_G0MKW7	F E A L K E S E S A T S A D E F L	P T L I Y I T I F R G N P P L I Q S N V K F I		
UniRef90_M3K5X5	F S Y L K I I N S Q E T N A D A F I	P I L I L V I I K A K T D N L I S N I H Y I		
UniRef90_Q6CRC1	F G L L K H N N K L N G G A D H F V	P L L I F T L L K S D V P H I L S N V R Y I		
UniRef90_U6PTF2	F E A L K E S G A P T S A D E F L	P V L I Y V V L K G N P P L I Q S N V K F I		
UniRef90_I0Z835	N N H V N Q V Q Q G E A R G A D D F L	P V L I Y V T I H A N P P Q L A S N L E Y I		
UniRef90_G3B1P2	F G F L K I N K Q E T N A D A F V	P V L I L I V I I K A K I K H L I S N L H Y I		
UniRef90_W0TAJ2	F G I L K H N K K A D G G G A D H F V	P V L I F T L L K S D V D Y L V S N V R Y I		
UniRef90_H2SXJ2	F E A L S T S N S E P A N A D D F L	S G L I Y V V L K A N P P R L H S N M Q Y V		
UniRef90_A5DFK9	F S F L K V N K Q E T S A D S F I	P L L I L V I I K A K T S H F I S N I R Y I		
UniRef90_UPI0003C1624E	F T A I Q A S A Q K P A T A D D F L	S C L I Y V V L K A N P P R L Q S N I Q Y I		
UniRef90_UPI00026579DE	F K M L Q A A P Q S Q G G A D D F L	P A M I Y V V L R A N P P R L H T N I K L V		
UniRef90_C4R3U5	F A L I R Q Q Q K I H K N A D I F V	P L L V F V I I K C K T R N L I S N L S F I		
UniRef90_M7NTH7	F G G L L R Y A K I E E S A D K F I	P T L I L I I L K T N P E H L I S N I Q Y I		
UniRef90_K5VBG6	F G L I R H M H K E E G A D S F I	P I L I C V V L K A N P P D H L L S N V E F I		
UniRef90_UPI0003337896	C P E W F L R Q P D S G	P L L I L W L L P G F G		
UniRef90_C9SN47	Q Q G L L K H A K S D G S A D S F M	P F L I Y V V L Q S N P E H L V S N V Q Y I		
UniRef90_J3LUN7	N N V S M S M N D R T L S G A D D F L	P I L I Y I T I K A N P P Q L H S N L K F I		
UniRef90_P54787	F G L L K H T K L E Q N G A D S F I	P V L I Y C I L K G Q V R Y L V S N V N Y I		
UniRef90_I1GL07	N N V S M S M N D R S P S G A D E F L	P I L I Y I T I K A N P P Q L H S N L K F V		
UniRef90_A5E5E1	F S Y L K L S K M E T N A D A F V	P L L I L V I I K A K T D H I S N I H Y I		
UniRef90_A7TR29	F G I L K H N K L D H N G A D S F I	P T L I F T L L K G N P E H L A S N V K Y I		
UniRef90_W5FB21	N N V S M T N D R T P S G A D E F L	P I L I Y I T I K A N P P Q L Q S N L K F V		
UniRef90_C1CMX54	N N N A T H G P T S P P G A D D F L	P A L I Y V V L R S N P A A L E S N A R F I		
UniRef90_H9IZY8	L R L A A P A P A S A D D L P A L I	L A V L K A N P P R L I S N I N Y V		

QUERY	210	220	230	240
UniRef90_M3ZWR2	T R F C N P S R L M T G E D G Y Y F T N L	L C C A V A F I E K L D A Q S L N L S Q		
UniRef90_G1MZJ5	T R F C N P S R L M T G E D G Y Y F T N L	L C C A V A F I E K L D A Q S L N L S Q		
UniRef90_F1R8D3	T R Y C N P S R L M S G E D G Y Y F T N L	L C C A V A F I E K L D A Q S L N L S P		
UniRef90_UPI0001CBB7B8	T R F A N P N K L L N Q G E V G Y Y F T N L	L C C A V T F I E N L D A Q S L S M S Q		
UniRef90_V4CG08	T R F A N P S R L M S G E E A G Y Y F T N L	L C C A V A F I E S I T A D S L S L S Q		
UniRef90_UPI0003595159	T R F A N P T R L M S G E E A G Y Y F T N L	L C C A V S F I E N L N A D S L N L S P		
UniRef90_R7UN30	T R F A N P N R L M S G E E A G Y Y F T N L	L C C A V S F I E N L N A D S L S M P Q		
UniRef90_U4LAN2	L R F R N P D K L T G E A G Y Y L S S L	M G A I Q F I E N L D R S S L T I T A		
UniRef90_K1Q8F2	T R F A N P S R L M S G E E A G Y Y F T N L	L C C A V S F I E G I N A E S L N L T Q		
UniRef90_S8FXS7	N R F R N P A K L Q S E A G Y Y L S S L	T G A V A F I E T M D H T S L N L T Q		
UniRef90_E9CFL4	S R F C N P T R L I S G E E G Y Y F T N M	M C C A V A F I E N L Q A S S F K M D E		
UniRef90_B2VX98	L R F R N Q D K L G G E A G Y Y I S S L	M G A V Q F I E G L D K T S L T V T D Q		
UniRef90_UPI00044132F8	N R F R R A P K L Q S E A G Y Y L S S L	M G A I S F I E T M D H T S L N I T Q		
UniRef90_A0A023G601	T R F S A P S R L L S G E A G Y Y F T N L	L C C A V S F I E N L T A E S L T I E D D		
UniRef90_G1XNV1	L R F R N P D K L G G E A G Y Y L S S L	S G A I Q F I E G L D R S S L T I P D		
UniRef90_M1WAR1	L R F R D Q E K L G G E A G Y Y L S S L	M G A I Q F I E N M D R S S L T I P D		
UniRef90_Q4SPM5	T R F C N P G R L M T G E D G Y Y F T N L	L C C A V A F I E K L D A Q S L N L T S P		
UniRef90_UPI0003EA8FD0	T R F C N P S R L M T G E D G Y Y F T N L	L C C A V A F I E K L D A Q S L N L S P		
UniRef90_G3R475	T R F C N P S R L M T G E D G Y Y F T N L	L C C A V A F I E K L D A Q S L N L S Q		
UniRef90_W4K0L8	N R F R N P E K L Q S E A G Y Y L S S L	M G A V S F I E T M D H T S L N I V S D Q		
UniRef90_U1GT39	L R F R N Q D K L G G E A G Y Y L S S L	S G A I Q F I E T M D R T S L S I V T Q		
UniRef90_UPI0004560EC2	S R F R N P E R L S S E S G Y Y L S S L	M G A I A F I E T M D Y T S L S I I T Q		
UniRef90_UPI0004572A02	V R F C H P K R L M T G E A G Y Y F T N L	L C C A V A F I E K L D G P S S L S I S D		
UniRef90_A0A024JGW1	Q R F R N P D K L N G E A G Y Y L S S L	Q G A V S F I E A L D R S S L S I S D		
UniRef90_Q5KDW4	Q R F R S H S K L Q G E A A Y Y L S S L	S G A I Q F I E T M D A S S L N I V T Q		
UniRef90_S2JMY4	S R F R N P D H R S E A G Y Y L T N L	M G A I E F F I E T M D V N S L S I V S Q		
UniRef90_B5X4E2	I R F G L P H S L M A G E S G Y Y F T N L	L C C A V A F I E K L D G P A L N L S P		
UniRef90_D8Q1M8	Q R F R N P A K L Q S E A G Y Y L S S L	M G A V S F I E T M D H T S L S I S D		
UniRef90_N1QP21	W R F R N Q D K L G G E A G Y Y M S S L	M G V T F F I E N L D R T N L T I Q D		
UniRef90_W5L2E1	T R F G L P H S L M A G E T G Y Y F T N L	S C A V A F I E K L D G P A L N L T T Q		
UniRef90_W5JWN7	T R F S N S A S R L M S G E G G Y Y C F	L C C A I S F I E N I T P E S L S I S I T Q		
UniRef90_S2JWF8	Y R F R N P E Q L Q S E A G Y Y L T N L	M G A I S F I E T M E A K S L S I S I T Q		
UniRef90_A0A015JV83	S R F R N P E K L Q S E A G Y Y L S S L	E N M D A S S L S I S I T Q		
UniRef90_T11A4	T R F C N A S R L M S G E G G Y Y F T N L	L C C A V S F I E N L T A E S L N M Q E		
UniRef90_J5T773	N R F R N P E K L T G E A G Y Y L S S L	S G A I Q F I E T M D A S S L N I T T Q		
UniRef90_H2ZOV2	T R F S N P I H I M S G E D A Y Y F T N L	L C C A V T Y I E N L N A E S L S I S L T Q		
UniRef90_I1FY98	T R F S N P M R V M S G E C G Y Y F T N L	C G A V T F I E S I T A D K L K M S V		
UniRef90_T1P JL3	T R F T N A S R L M S G E G G Y Y F T N L	L C C A I S F I E N N L T A Q S L S M D Q		
UniRef90_D6X0Y7	T R F C N D S R L M Q G E A G Y Y F T N L	L C C A V S F I E N N L T A E S L S M P Q		
UniRef90_B4MXZ5	T R F T N A S R V M S G E G G Y Y F T N L	C S A V A F I E N N L N G E S S L G I T N		
UniRef90_T1G4J6	T R F T N P T R L M T G E A G Y Y F T N L	L C C A V A F I K S L T H E S S L N I L P E		
UniRef90_E9C8X3	Q R F R H P D K L T S E P M Y Y F T N L	V S A V A F I Q Q V T S A Q S I D P		
UniRef90_X8JKZ3	N R F R R P S K L Q S E A D Y Y L S S L	M G A V F F I E S M D H T S L N I T R		
UniRef90_T1L217	N R F S N P R R R L M S G E A G Y Y F T N L	L C C A V A F I E K L N L G E S S L N L P		
UniRef90_E9ILS2	T R F C N A S R L M T G E G G Y Y F T N L	L C C A V S F I E E N L T A E S L N M A E		
UniRef90_G3KLH0	Q R F R N P D K M Q G E N G Y Y M S S L	N A A I S F I E R R L E H S V L N I T Q		
UniRef90_F2U088	Q N F G N P R R H E A G E A G Y Y F T N L	F S F A A V E R R L S A S H H L K M T Q		
UniRef90_U1WIT2	T R F C N A S R L M S G E A G Y Y F T N L	L C C A V S F I E N I N A E L L S M N I		
UniRef90_S9W837	Q R F R S P E K L S G E V L Y Y L S T L	M G A M S F I Q T M D T N S L T I S E		
UniRef90_M1CMP4	Q R F R R Q T R L V S E A A Y F F T N I	L S A E S F I S N I D A Q A L S M D E Q		
UniRef90_A9VCN1	E R F A E P S R L M A G E A G Y Y T N L	M S A T A Y V E H L N A E Q L E M S Q		
UniRef90_R4X141	Q S F R N P D K L S G E A G Y Y L S S L	Q G A I N F I E V L D R Q S L T I T D		
UniRef90_A9S511	N R Y R H H S R V S E A A Y F Y T N I	V I S A E H F I E D N L E A T S L S M D S		
UniRef90_E0VBJ6	T K F C N E S R L M A G E G G Y Y F T N L	L C C A L S F I E E N L T A E S L S M V Q		
UniRef90_D4B5N9	L R F R N R Q E K L S G E A G Y Y L S S L	S G A L Q F F I E S E L D R T S L T V S D		
UniRef90_K4A933	Q R Y R R Q T R L V S E A A Q Y F F T N I	L S A E S F I W N I D G E S S L S M N E		
UniRef90_V4LB11	Q R Y R R Q S K L V G E A A Y F F T N L	L S A E S F I S N I D A K S L S M D E		
UniRef90_F1KW25	Q S F R N P E K L V M S G E S G Y Y F T N L	S C A L Q F F I Q N M N A E S L K M P K		
UniRef90_M5ED43	A R F R T P Q R R R T S E E S Y Y L S S L	Q G A V A F I E R M D H T T L S V T Q		
UniRef90_D8R0M8	E R Y R H S S R L V A E A S Y F Y T S L	V S V E S F I E K L D A K S L S M D E		
UniRef90_Q5B702	L R F R N Q E K L G G E A G Y Y L S S L	S G A L Q F F I E T L D R T S L T V S D		
UniRef90_A0A059BY07	Q L Y R R Q A K L V S E A A Y Y L T N L	I S A K S F I A D L L N A R S L S I N E E		
UniRef90_B5RSR5	E H F R N E E W L S H E G T S Y Y L S S L	Q G A I Q F F I Q N L C F D D L T I D E E		
UniRef90_C1C513	E H F R N E E W L S H E G T S Y Y L S S L	Q G A I Q F F I Q N L C F D D L T I D E E		
UniRef90_A0A022U0J6	T R F C N P K R L M T G K C A Y W F T N F	L C C A S S Y I E T M N F S S L G L T E		
UniRef90_F9G0C7	L R F R N Q E K L S G E A G Y Y L S S L	V I C M G A V Q F I E N M D R T T L T I T D		
UniRef90_G8B548	L R F R N Q E K L G G E A G Y Y L S S L	M G A V Q F I E N M D R T T L T I T D		
UniRef90_G0MKW7	E S F R S K E W L S H G E T S Y Y L S S L	E G A I S F I I Q N M T K D D L T I S D		
UniRef90_M3K5X5	S R F A I P A R L M S G E A A Y F F T N L	S C A L E F A R N M N H E S L Q M E K		
UniRef90_Q6CRC1	E S F R G E E W L H G E T S Y Y L S T N L	S Q G A I G F I E N L T A E D L T I S D		
UniRef90_U6PTF2	E R F R F P S F L M G E N A Y Y L S T N L	Q G A V N F I L D M D I D S I S I T D		
UniRef90_I0Z835	S R F A L P S R L M S G E S G Y Y F F T N L	S C A L Q F F V Q D M N Y A S L K M E R		
UniRef90_G3B1P2	Q R F R M H S R M A S E S A Y F F T N L	Q Y S A A S F I E T V N A T S L S M D P		
UniRef90_W0TAJ2	E N F R G S E W H H G E T S Y Y L S S L	Q G A I S F I E N L D H E N L S I E K		
UniRef90_H2SXJ2	E R F R F P D F L T G E S A Y Y Y L S T N L	Q G A I K F I L D M D K T S I S V S D P		
UniRef90_A5DFK9	I R F G L P H S L M A G E S G Y Y F T N L	S C A V A F I E K L D G P A L S N L T P		
UniRef90_UPI0003C1624E	E N Y R G E E W L S H E G T S Y Y L S S V	Q G A V G F G I S K L D F E E Q L K I D K Y		
UniRef90_UPI00026579DE	T L F F S A Q S R L R S G E S G Y M F T N L	C C T V T F F I E E K L N A A E S L N N L T Y		
UniRef90_C4R3U5	E R F R N D R F L V G E S S Y Y V S S S L	Q G A V N F I E E N L T A A Q L Q M P P		
UniRef90_M7NTH7	S R F R N P D K L S G E S E Y Y F F S S L	Q I A A N F I T T I E Q S S L T I S A N		
UniRef90_K5VBG6	N R F R N P T K L Q S E A A Y Y L S S L	I A V A F I E N L N K S S S L T I S N T Q		
UniRef90_UPI0003337896	N R F R N P T K L Q S E A A Y Y L S S L	M G A V S F I E T M D H T S L T I S N T Q		
UniRef90_C9SN47	L R F R N Q E K L G G E A G Y Y L S S L	C C A V S F I E K L D A Q S L T I T D		
UniRef90_J3LUN7	Q L F F R R E T K L I S E V E Y Y L T N L	I S A K M F I I N V D G R S S L S M E E		
UniRef90_P54787	E R F R S P D F I R G E E E Y Y L S S L	S C A L Q F F I I N L T E R S S L T I E D		
UniRef90_I1GL07	Q L F F R R E A K L V S E V E Y Y L T N L	Q A A L N F I V N V N G H S L S M E E		
UniRef90_A5E5E1	E N F R G E E W L L H G E T S Y Y L S S V	Q G A I N F I N N I S I D E T I S Q		
UniRef90_A7TR29	E R F R Y E G F I R G E S S Y Y I S S S L	Q Q A A D F F I I S L V D K S S S L T I T D		
UniRef90_W5FB21	Q L F F R R E T K L V S E V E Y Y L T N L	Q S A K M F I I S V N G Q S S L S M E E		
UniRef90_C1MX54	S R F R L E S R L A S E A A Y Y F F T N L	I Q S A T R F R L S S C D A S A F T L E K		
UniRef90_H9IZY8	T R F C N A Q R L M T G E G G Y Y F T N L	L C C A V S F I Q N M T A E S L S M D Q		

QUERY E D F D R Y M S G Q T S P

UniRef90_M3ZWR2 D E F E R H M S G H A S P

UniRef90_G1MZJ5 E D F D R F M T G Q T S P

UniRef90_F1R8D3 E D F E R Y M S G A T S P

UniRef90_UPI0001CBB7B8 E E Y D S Y M S G E V I P

UniRef90_V4CG08 Q E Y D R Y M S G E L T P

UniRef90_UPI0003595159 T E F D R Y M S G E A V P

UniRef90_R7UN30 D E F D R Y M S G E A V P

UniRef90_U4LAN2 E E F E R N

UniRef90_K1Q8F2 Q E Y D R Y M S G E A I P

UniRef90_S8FXS7 E E F E R N V E

UniRef90_E9CFL4 Q E F T S R M

UniRef90_B2VX98 E E F E R N V E A A V S

UniRef90_UPI00044132F8 E E F E R N V E E A

UniRef90_A0A023G601 E E F E R Y V T G E A V P

UniRef90_G1XNV1 E E F E K N V E E A V

UniRef90_M1WAR1 E E F E A N V E A A V S

UniRef90_Q4SPM5 E E F E L Y M S G Q A S

UniRef90_UPI0003EA8FD0 E D F E R Y M S G Q A S P

UniRef90_G3R475 E D F D R Y M S G Q T S P

UniRef90_W4K0L8 E E F E K N V E S A

UniRef90_U1GT39 A E F E R N V E L A V S

UniRef90_UPI0004560EC2 E E F E R N V E Q A V

UniRef90_UPI0004572A02 E E F A E Y M H G R

UniRef90_A0A024JGW1 E E F T R N V D S S V

UniRef90_Q5KDW4 P E F E S N V E N A

UniRef90_S2JMY4 E E F D E N I E

UniRef90_B5X4E2 E E F E G Y M Q G R R A P

UniRef90_D8Q1M8

UniRef90_N1QP21 E E F E Q N V E Q A V S

UniRef90_W5L2E1 E E F S R Y M Q R R

UniRef90_W5JWN7 S E F D S L M S G E

UniRef90_S2JWF8 E E F D S N I E R

UniRef90_A0A015JV83 E D F D K N I E

UniRef90_T11A4 D E F R Q Y M D G K I L P

UniRef90_J5T773 D E F E A N V S S P T S P

UniRef90_H2ZOV2 V E F D A Y M R G E

UniRef90_I1FY98 E D F N N K M

UniRef90_T1P JL3 E E F D M L M S G

UniRef90_D6X0Y7 Q E F E A Y M N G E I T

UniRef90_B4MXZ5 E E F D A F M S G Q Q

UniRef90_T1G4J6 S E F N R Y M N G E I T

UniRef90_E9C8X3 A V F D A E M A A H L E P

UniRef90_X8JKZ3 D D F E K N V E E A V

UniRef90_T1L217 E D F Q L Y L N G E A L P

UniRef90_E9ILS2 K D F N A Y M S G E C V P

UniRef90_G3KLH0 E E F E Y N V E Q A I V

UniRef90_F2U088 E Q F E S L M D G D A S

UniRef90_X1WIT2 E E F E Q Y M N G T L V

UniRef90_S9W837 E E F N K K M E S K T

UniRef90_M1CMP4 T E F E T N M E S A

UniRef90_A9VCN1 D D F D R A L R G S V

UniRef90_R4X141 E E Y E R N V E

UniRef90_A9S5I1 S E F E K Q M Q S A

UniRef90_E0VBJ6 D E F D H Y M S G D

UniRef90_D4B5N9 E E F E R N V E A A V S

UniRef90_K4A933 L D F Q R K M D W A

UniRef90_V4LB11 A D F E K K M E S A

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 Y N N F L E S L H P S C R N V I D K V R T F I Q K F P Q N V S R D V A
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UniRef90_B0XGB6	UniRef90_A1DH09	UniRef90_K3VSM8	E E L A S R K R N R K A L E A K R S L L E E A V E R R L C E G
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UniRef90_C1H6A7	UniRef90_U4LTB6	T Q M L S K A E I V Q K K R D R K M L Q I K Q I A L E A M E K R V T D A	
UniRef90_U4LTB6	UniRef90_UP10003B69EB7	P P L	
UniRef90_UP10003B69EB7	UniRef90_A8P1G0	T D I M E R A L N S L Y E C L K M W R F A N A E R I S F V K S V E R S L M A Q	
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UniRef90_L0AWK4	UniRef90_A0A017SMT2	S E V A E K R K A R K F L S Y K R V A L E E A V E R R A C E A P P I	
UniRef90_A0A017SMT2	UniRef90_I3JQY7	S E S E Q Q M L T E L A D R K R Q R R A L E V K R S L M E A V E R R L C E G	
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UniRef90_U1LWA4	UniRef90_H2WD10	A E F L Q N L L T Y L K E R L L D D W N H A T D S M V N R A M T I E R Y V M F S	
UniRef90_H2WD10	UniRef90_X1WK18	N Q H L N R F L S T L E I E M K R W K S A S Y E Q I D D A K L T L E R A I I S R	
UniRef90_X1WK18	UniRef90_H2ZUP2	P P I	
UniRef90_H2ZUP2	UniRef90_M4C507	G G K I Q D F I N K L V E Q Q K H D K V L T A L M V D L L H E V L E A F L M E K	
UniRef90_M4C507	UniRef90_G3J5B9	A E Q Q Q M I T T E E L A N R K K A R R A L E A Q K G R L E E A V E R R L C E G	
UniRef90_G3J5B9	UniRef90_E7FC22	N V Q E T A A Y S E E K L E I I E A V E R R L C E A P P I	
UniRef90_E7FC22	UniRef90_U4U997	C D F L Q N F Y L R L F E I M K H W Q D V L H K R D F L V K V T L E R C I M S R	
UniRef90_U4U997	UniRef90_W5UHR7	D A V H A L Y T K C L Q C L R D S R L Q E L Q M T L K Q A V E M Y I H N D G	
UniRef90_W5UHR7	UniRef90_H3AMB3	I D L V N G L Y T K C L Q H L R D S R M Q E L Q M N L K Q A V E M Y V Q H G	
UniRef90_H3AMB3	UniRef90_A9ADV7	V Q P I R D F L D K I N H D L A N W R D A T D A D L E Y G Y E G M E K Y I M S K	
UniRef90_A9ADV7	UniRef90_J4DPC4	S H N F I D I Y T P K L L S L E I F M D L S D E E K L E T V E C F E K F T M Q K	

90 100 110 120

UniRef90_G6DKL7	L H D L V F S P H G T E D E R L D R A M S E R I Q Q L S W V G E K H L E C K L D		
UniRef90_D3BN55	V F H C T F M P A R L G G L E E D L K I Y K L I L T L S F I T P L H L D I Q		
UniRef90_C5D1Z7	L Y H K C F S P C H K L D L D H D A M L A D K R E E F R F I T P Q H L E I N D		
UniRef90_K3WDH1	L S D I A F N P E C Q Q W K N E D E R L F R R M K L L S F I T P D M L D I K P C		
UniRef90_J7S889	L Y S R C F S P S L K D D L L G D I K L R A K T E E Y Q F I E L E N L D I S T		
UniRef90_UP10002C300DB	L F S Q T F S S P E D A K I D R E I S Q K M R L L T F F L K P E H L D I S E V		
UniRef90_G7J0B1	L F S R T F A A S P E D A K I D H E I S E K I S L L Q F F L K P E H L D I P P V		
UniRef90_T0PTW9	L A D I P L T P R S R E W R Q E D A V L W R R M Q L L S F V T P D M L D I K P C		
UniRef90_A8IYC8	L Y D R T F A A D P L D R E R D D V L G R R L A A L A F V G P A H L E V S A S		
UniRef90_S6E6U0	L Y G R C F S P C H K Q D L A D D C N L R S K S R E Y R F I S P E E L D D I P P N		
UniRef90_G8ZN10	L Y N R C F S P C H K T K D L Q N D R L L Q E K V R E F A F V E P R D L D I V P S		
UniRef90_F0ZH26	L Y H C T F F P A R L G R L E D D L K Y K H I M I H Q F D E P Q H F D I E K F D		
UniRef90_E5SE68	C Y G V L F C P D T D E E V A D L S L Q D R I R S L H W V T C G A I D H G F D		
UniRef90_C5DP53	L Y A R C F S P E H L Q D L K D D R Q L K L K S R E Y R F I S P Q E L D I P N		
UniRef90_G2YIG8	L Y D R I W R H R S S Q D E A Q D E K L R S K T A A L S V V G I G L V D L G V D		
UniRef90_S4RKZ1	L Y K N V F C P E H T D D E R K D L A I Q K R I R A L H W V T P V L L G V P I N		
UniRef90_I4YCT1	L Y H R I F K P K N D D L A K D Q V L E Q R V R I F S W I E L K Q L D I G C S		
UniRef90_F4P5T3	V Y D R V F C A A N T D E H K S N M I L L E K K F E T F G F I E E R H D I G C S		
UniRef90_S3CX80	I Y D R I F Q H R S T Q D E A Q D E K I L R S K T A A L S V V G I G L T D L G I D		
UniRef90_L7M2P2	I Y V H A L Y P N G D G D V L R D Q V L H Q H I Q K L R V V T V D H R D I R I P		
UniRef90_Q54HF9	I Y D Y V F Q P S E E E A K K D Q D L S M I L D K L S F I T E P Q H L E I S P		
UniRef90_F1A339	V Y K F V F S S E T L E R D S L L T D R T N R L S F I L E P Q H L E I S P		
UniRef90_B3MVZ6	M Y E Q V M F P N E D A D V S R D E V L S A H I G K L Q F V H P A H P A L C A A		
UniRef90_A0A024U9K7	L A D V P L H K L R E A W K A E D A A L W R R M Q V L Q F V T P D M L D I K P S E		
UniRef90_V5FYU9	I Y D K I W R H K S T L D E V R D E K L R S K T A A L S V V G D L K D L G I E		
UniRef90_F0WL76	V F H F A M F N E C K L W E A E D R R L A R R M K I L Q F I T P E M L D I K Q C		
UniRef90_E5A838	V Y E R I W R H R S T D D E E R D H K L R S R T A A L S L V G I G L K E L I K T K		
UniRef90_Q6FRP6	L Y H H L F S P L H D D I E K D K M F I K K V A E F K F I E P T N L D I S F Q		
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UniRef90_UP1000258F6EF	V Y H N A L Y P N G D G D L Y R D Q V L L H D H I R K L K V V T P N H K D L R I P		
UniRef90_W9XTZ2	I Y N K I W R H K S T L D E V R D E K L R S K T G A L S L V G I G L K D L G I E		
UniRef90_W5K1C8	I F K L A F Y P N Q D G D I L R D Q V L Q E H I N R L S K V V S A N H R A L Q I P		
UniRef90_L8GB55	V Y N K I W R H R S T Q D E A Q D E K L R S K T A A L A V V G I G L T D L G I D		
UniRef90_U5H1X3		D P I L S A A E I R	
UniRef90_B8M8P4	V Y D K I W R H K S S L D E V R D E K L R S K T A A L S L L G M G L K D L G I E		
UniRef90_R7YSM7	M Y D R V W R H R I T D D A E R D E K L R S R T A A L S L V G I G L K E L V S T		
UniRef90_F9X624	V Y D K I W K H R S T T D D D A R D E K L R S R T A A L S L V G I G L K E L H M D		
UniRef90_M3D2Q2	I Y D K I W K H R S T D D E A R D D K L R S R T Q A L S L V G I G L K E L H A D		
UniRef90_T0Q2T9	L H A T V F P S S R S L D A A L H D R I I A S R L R F I E F A H D I T A T G		
UniRef90_B3L1E8	L H C Y V Y R M D P K D K D E D E K I Y T K I N C Q W I E M K H L E I A E G		
UniRef90_S7ZE46	V Y D K I W R H R T T L D D E R D E K L R S K T A A L S L V G I G P S D L G I D		
UniRef90_G0RD59	I Y E R I Y R H R S T Q D E A Q D A K L R S K T A A L S L V G I G P S D L G I D		
UniRef90_K2S0U6	I I Y S R I W R H R S T D D S E R D E K L R S R T A A L S L V G I G L K E L S M E		
UniRef90_H6C5K9	I Y D K I W R H K S T L D E V R D E K L R S K T G A L S L V G I G L K D I L D I E		
UniRef90_G1SPJ0	L Y K C V L K P Q D A I N S S L H E I H S R D G S R Q L K E N Q L V I L A T		
UniRef90_D5GM95	L Y D R I W R H Q S T D D E A R D E S I L R S K M A A L N V V G V K L G H L G V E		
UniRef90_I3IRW3	L Y G C L H S A H E F Q A A A W Q T L Q E N L A I A K T K R P N E L G V N		
UniRef90_N4VMU1	I Y H K I Y R H K S T Q D E A Q D S K L R S K T A A L A L V G I G P A D L G I D		
UniRef90_M2N1R0	V Y D R I F K H R S T D D E A R D E K L R S R T A A L S V V G I G L K E L H T D		
UniRef90_D6W9P5	I Y K Y A L Y P N G D G D V S R D Q V L H V L F Q H I E K L A S I S P D H K A L M I H P P		
UniRef90_V3ZNM9	I Y T Q A L F P N G D G D I S R D Q V Y H Q H I R K L S N I K P S H P D L C I P		
UniRef90_E9FSZ7	I Y N Y A L Y P N G D G D V S R D Q V L Y E H I E K L Q V V T P S H K D L R I P		
UniRef90_G0SFG5	I Y A K I Y R H R S T Q D E A Q D A K L R S K T A A L A V V G I G L G D L G V Q		
UniRef90_U7PST9	I Y D R I Y R H R T T Q D E A Q D E K L R S K T A A L D L V G I G S P A D L G V D		
UniRef90_W4VR46	L Y H F V M F P N D D G D I S R D Q V L H E H I R K L R V I S P T H S L L R I P		
UniRef90_L7IFG1	I Y P R I Y R H R T T Q D E A A D D K L R S K T A A L A V V G I G L A D L G V D		
UniRef90_A0A024TYA3	L H G A V F G A R P Q E D A N L S A R I A S G F L S F Q H L D I T A T		
UniRef90_D8LWB1	L R D L T L G V V R S G L A K E D E E L E K K M Q D L Q F I T A D N L E V A		
UniRef90_B2AXE0	V Y S K I Y R H R T T Q D E A Q D A K L R S K T A A L A V V D G P V D L G V E		
UniRef90_D8LL30	V F D Q A Y G L A A D P G R D S S I S T R L R S A L G F I L T E E H L G V P P L		
UniRef90_U1HZ61	V Y N S I W R H K S T L D E V R D E K L R S K T A A L A L V G I G L K D L G I E		
UniRef90_F0XFU5	I Y D R I Y R H R S T Q D E A Q D D K L R S K T A A L D V V G I G P A D L G V D		
UniRef90_B0XGB6	L Y Y S V M F P N E D G D L S R D R V L S E H I N R L T N I T P S H V Q L R I S		
UniRef90_A1DH09	V Y D K I W R H K S T L D E V R D E K L R S K T A A L L L V G I N L K D L G I D		
UniRef90_K3VSM8	I Y D K I W R H R S T Q D E A H D D K L R S K T A A L A L V G I G P S D L G I D		
UniRef90_C1H6A7	V Y E K I W R H K T T L D E V R D E K L R S K T A A L A L V G I E L K D L G I D		
UniRef90_U4LTB6	L Y D K I W R H K S T D D D A R D D S L H S K I A A L K V V G V N L G H L G I E D D		
UniRef90_UP10003B69EB7	M H K C V L K P L K S V I E V I L H D F Q V N S G A L Q Q L R E N L A E L L G V D S		
UniRef90_A8P1G0	L Y V Y A L Y P N G E A Q D S R D V S F H K S V Q K L A E I N P D H P Q L R I S		
UniRef90_I3NFE5	L S K Y V F C S E A T D V V K K D H I I Q K R I S L I W I Q		
UniRef90_L0AWK4	L Y P Q C Y R M D P M D P I E D E L L D I Q I K C L S W I K P Q H L E I S V S		
UniRef90_A0A017SMT2	V Y D K I W R H R T T L D E V R D E K L R S K T A A L L L V G I N L K D L G I D		
UniRef90_I3JQY7	L N S V I E T A L H Q V S S G A W Q Q L R E N L A L A K T K K P Q H L E I S V S		
UniRef90_Q2H6N0	I Y S K I Y R H R S T Q D E A Q D A K L R S K T A A L S V V G I G P V D L G V E		
UniRef90_C4JIX0	V Y D K I W R H R S T L D E V R D E K L R S K T A A L S V V G F G L K D L G V E		
UniRef90_M1VUL6	I Y E R I Y R H R T T H D E A H D E K L R S K T A A L A L V G I S P A D L G I D		
UniRef90_K8EA79	L Y S T I F A D Y G E E D D A I N D A L Q K R V E A L R N L P L T P E M I L D V P		
UniRef90_UP1000443FBD3	L Y K C V L K P L R G A I N S C L R E I H A K D R S L Q Q L H D N Q L V I L G V		
UniRef90_I3N444	L S K Y V F Y S K I T D D K K D Y T I Q K R I K L S F E H L D I T A T		
UniRef90_W4G1T2	L H G A A F G A C P Q E D A A L S Q R I I A S L G F L S F E H L D I T A T		
UniRef90_U1LWA4	V Y V L A L Y P N G D A D Q C R D S V F H R S L R K L A Q V T P D H S E L R I P		
UniRef90_H2WDI0	V Y D A A F Y P N C E D K H R D K L L R T I G K V A N V V T P M H D F L K I P		
UniRef90_X1WK18	V Y T L A M Y P N G D A D F Y R D Q V L R E H M S N L S N L V P T H N D L R I P		
UniRef90_H2ZUP2	L K S H E T T L K K F H N A D G S W K Q L K E N L Q L A K Q K K P Q D L G V		
UniRef90_M4C507	L Y V K T L T P S D E V A G Q D D A F H N R I T L L A F V T F K H L D L P E P		
UniRef90_G3J5B9	I Y G R I Y R H R S T Q D E A Q D D K L R S K T A A L A L V N Q G L T D L G I D		
UniRef90_E7FC22	I C K S V L K P L R E A V Y N G L K D I H S R A G N L K K L K E N Q Q V V Q G T		
UniRef90_U4U997	V Y F N A I Y P N G D G D R D R V L H E H I G T L S K L R P E H K D L L I P		
UniRef90_W5UHR7	I H D L L F S Y V G T L E A T Q D A A F N K T T R G L Q E L Q Q K D L G V K S D		
UniRef90_H3AMB3	I Y D L L F K Y V G T I E A S E D A A F N K V T R S L Q Q D L G I K S D		
UniRef90_A9DV7	L Y Q Y V F Q P P H S D D V H Q D Q A L T D R M K M L A F I K P E V S F M P		
UniRef90_J4DPC4	L Y P R C Y R M D P G D I V E D E K L E Q M R C L S W I E P H H L E I H E M		

130 140 150 160

UniRef90_G6DKL7	H S N E C S Q L L Y K A I S E L L A M D G A P Y G G G K L A H V R R A C L H V		
UniRef90_D3BN55	K F V Q S N G A L I E K S M I E L R K M N T Y K T P R D K M I C I Y N S C K V I		
UniRef90_C5D1Z7	K I S S K L E T F T Q L S A K E L G R M N G Y K A P R D K M V C A L N A C R V I		
UniRef90_K3WDH1	M R N E V V W S M A E D E L R R I N S F R A P R G D K I N C I V R C C S V I		
UniRef90_J7S889	E I S T K L N K F M K L A I N E L S K I N K F K A P R D K V V C I L N C C K V I		
UniRef90_UP10002C300DB	L W N E A S L Y H A I K E L Q R I K A F K A P R S K L L C I V M N S C K V I		
UniRef90_G7J0B1	L H N E A S W L L A E K E L Q K I N A F K A P Q E K I L S T M N C C S V I		
UniRef90_T0PTW9	M R N E V V W S L A T D E L L R R M N A V R S P G D K I H C I V R C C S I		
UniRef90_A8IYC8	L Q G P L A A D Q L A A A Q R E L L R R M S L Y K S P R D K I L V Q I L N C C K V I		
UniRef90_S6E6U0	V L S E K K L N K L V G L S G R E L N K M N H F K A P R D K M I C V L N S C K V I		
UniRef90_G8ZN10	L L A E R L S K F V K L S G E E L D K I N R F K A P R D K M I C V L N S C K V I		
UniRef90_F0ZH26	F T V N E Q R Q N L A I S E L K K M N T Y K T P R D K M V C V Y N C C K V I		
UniRef90_E5SE68	F T N K N V Q D R F D K T F K E I I E M N S H R S P D D K L L C S I T R C C K L I		
UniRef90_C5DP53	L L S D K L N K L V E S G K E L L N K V N H F K A P R D K M I C V L N S C K L I		
UniRef90_G2YIG8	L G I E E V V R E W L E G A R R E L I A M N D E R Y P L G K L N H K A A H K G I		
UniRef90_S4RKZ1	G D S P Q V T F L S R L R T T G T C M R G T R V L L R P S P S V I		
UniRef90_I4YCT1	L G E T F N L I A T E Q L Q S I N K Y H C P Q D K T L V I L N T S I		
UniRef90_F4P5T3	F N L S L E V A Q A E L L R I N G Y K S P R D K I L V I L Q N V L Q L V		
UniRef90_S3CX80	L G N S E V R E W L E G A R A Q L I A M N N D K Y P L G K L H H K L A H K S I		
UniRef90_L7M2P2	R A Y H A E S P W P S A Q A Q L G A L A A H K S P Q D K V A C V A A C C A S L I		
UniRef90_Q54HF9	G F S E A M W Y K A G K Y L K I N F T Q S C R H K V M Y M K C C K T I		
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UniRef90_B3MVZ6	Q E Y L G E A P W T F A Q Q Q C H M A A Y K T P R E K L I N C I S S I		
UniRef90_A0A024U9K7	U R N E V V W S I A Q D E L R H I N E Y R S P G D K I L Q C V R C C S I		
UniRef90_V5FYU9	K K Q E E A E N E W L T T A R E S M R M N D E K Y P L G K L H H T A A H K A I		
UniRef90_F0WL76	M Q N E I V W S M A Q D E L R R I N G V T S P G D K I G C E R C C N V I		
UniRef90_E5A838	E K D P E I R E W L S T A R Q D L L K M N D E K Y P L G K L H H A A A H K S I		
UniRef90_Q6FRP6	N V K R V K F T S F A S E L N K M N N F K A P R D K M V C L N A S K I L		
UniRef90_UP10001582F6F	K R E L E V R E W L E G A R R E L I A M N D E R Y P L G K L N H K A A H K G I		
UniRef90_UP1000258F6EF	K M Y H Y E C P W P W A Q A E L A V I S A Y K T P R D K L Q C V F R C A T T I		
UniRef90_W9XTZ2	K T A E D D V Q A S L I P A R E E E L A K M N E E H Y P L G K L Q H T A A H K A I		
UniRef90_W5K1C8	E V Y L K E A P W P S A Q A E I R T I S A Y K T P R D K V Q C I L R M C S T I		
UniRef90_L8GB55	L K E E E V K S W L E G A R Q E L L L M N S D T S P L G K L Q H K A A H K C I		
UniRef90_U5H1X3	E R N R Q A Q A F L D F S R R E L C K I N S Y K A P R D K I I C L N C C K I L		
UniRef90_B8M8P4	E K E K D A N T R L S A A G S D L E K M N D A R Y P L G K L Q H L I S A H K A I		
UniRef90_R7YSM7	E K E E D I C N W L A G A R E S I R K M D E E R Y P V G K L Q H T A A H K N I		
UniRef90_F9X624	E K E Q E I H Q S L L S S A R E A L Q R M D D E H Y P L G K L Q H T A A H K S I		
UniRef90_M3D2Q2	E R E D E I N L S L A P A R E A L H R M D D D H Y P L G K L H Q T A A H Q A I		
UniRef90_T0Q2T9	S D L L E R W T A I Q D D E L A A L P R Y L S P R R M M T C L H V I C Q E L I		
UniRef90_B3L1E8	I Q L L D R L E V Q A Q A E L R I Q K M R A P N D K I L I M I L N C C R V V I		
UniRef90_S7ZE46	I D M Q E A N D F L L A Q A R D H L A K M N E P K Y P L G K L Q Q L A A A H K A I		
UniRef90_G0RD59	E K T E T I R A Q L E P A R K E L I R M A E S R Y P L G K L N R L K A A H K S I		
UniRef90_K2S0U6	E K K D K I P E M L A E V R E S I I Q K M N D E K Y P L G K L Q H T G A H K S I		
UniRef90_H6C5K9	K T P E D V Q A S L L P A S E G L A K M N E E H Y P L G K L Q H T A A H K A I		
UniRef90_G1SPJ0	T S T D P E L P T M E K I L Q K F T S M H K A Y S P E K K I S L L K T C K L I		
UniRef90_D5GM95	L E G A E V E D E L L R P A V E A L V G M N N L K F P L G K L S S I L K Q A H K A I		
UniRef90_I3IRW3	G A Q A P D T H A I Q R I R R K L R A M C S M Y S P E R K I L M V L L K V C K L I		
UniRef90_N4VMU1	E K V E E I K K W L E Q A Q R K D L V I M N E K R Y P L G K L H H K A A H K S I		
UniRef90_M2N1R0	E K E E D I S Q S L A S A R E A L Q R M D D E H Y P L G K L R H T D A H K S I		
UniRef90_D6W9P5	K M F L L R E M P W L P A Q D A L K A M N A Y K T P R D K V K C V V H C A K C I		
UniRef90_V3ZN9	S K Y H F E C P W P A A Q R E I I F L I N A Y K T P K D K L G C I L R C S T T I		
UniRef90_E9FSZ7	K I Y R Y E C P W P S A Q A E L V S I S A Y K T P R D K V A C V I R C A T T I		
UniRef90_G0SFG5	I D P P E V R E W L E G A R K E L V L M T Q A R Y P L G K L E H K R A H K R I		
UniRef90_U7PST9	L G L K E V R E W L E P A R Q Q L V Q M G M Q H Y P L G K L N R L K A A H K S I		
UniRef90_W4VR46	Q T Y L N E A P W P Y A Q Q Q I S Y I S A Y K T P I E K V Q C V V K C I T S I		
UniRef90_L7IFG1	E R Q E E V R K W L D Q A R R D L E L M N E S R Y P L G K L N R L K A A H K S I		
UniRef90_A0A024TYA3	S D L A R W T L I Q A R L M E L P R Y L S P R R Q M A C I L Q V C H D I		
UniRef90_D8LWB1	E V C K Q N P E T M E T V T K Q L Q K I Q N V A S P A E K L D C I E A C R T I		
UniRef90_B2AXE0	L G T P E V K E W L E G A R K E L T L M S Q A R Y P L R K I N H K A A F K S I		
UniRef90_D8LL30	V D A Q E D G A L W A D A E A Q L L K M S R M R C P G D M L R C V K C T R I V		
UniRef90_U1HZ61	I D L D I R D S L A P A R D E L G R M N Q E K S P L G K L Q C T I A H K T I		
UniRef90_F0XFU5	L G Q K E V R Q W L E P V R K E I V R M N N T H Y P L G K L N R L K S A H K G I		
UniRef90_B0XGB6	A V Y L N E A P W P F A Q R Q L S Y I S A Y K T P Q E K V A C V I K C I K S I		
UniRef90_A1DH09	E D Q K E A D Q C L S V A R E C L A R M N E A K Y P L G K L Q H L A G A H K A I		
UniRef90_K3VSM8	L T G E D I K E K L E P A R R D I I M M T Q K R Y P L G K L N H K A A H H R S I		
UniRef90_C1H6A7	M G K T E V S D Y L S S A R E A L M R M N N D E K F P L G K L Q H T A A H K A I		
UniRef90_U4LTB6	L E S E K V N K E L Q E A V K S L Q Q M N N E R S P L G K L T Q K V A H K T I		
UniRef90_UP10003B69EB7	G A V P P D S V A I E K I R Q K F L N M R K M Y S P D Q K V S L L L R V C K L I		
UniRef90_A8P1G0	V R L R G E C P W P S A Q A E I G I I N A Y K S P R D K M A C V R C C E T I		
UniRef90_I3NFE5	S L C P D K V C T E		
UniRef90_L0AWK4	G D H D I L E E D A Q T Q L K N I H K Y K A P R D K L I A L N T C R L		
UniRef90_A0A017SMT2	L D I S E A N D Y I Y V A C E R I L A K M N E E K F P L G K L Q H S Y A H K A I		
UniRef90_I3JQY7	G A V P P D A V A I E K I R Q K F L N M R K M Y S P E K K V S L R V C K L I		
UniRef90_Q2H6N0	K K Q E E V R E W L E Q A Q R N H L A L M S Q S R Y P L G K L N H K S A H K S I		
UniRef90_C4JIX0	V D A S Q S E E W L A N A R K S L M Q M S D A K F P L G K L Q H T A A H K A I		
UniRef90_M1VUL6	E V T E R M R Q S L E E A R T D I V K M S E A R Y P L A K A N H K A A H K S I		
UniRef90_K8EA79	H Q N N N I P K S L R L A S M E L E K M N T Y K A P R D K M N C V L N A C R I I		
UniRef90_UP1000443FBD3	T T S V P E V P V M D K I L H K F T S M H K A Y S P E K K I S L L K T C K L I		
UniRef90_I3N444	V I D R D L K H V P Q D K I A C I T K C S K H N		
UniRef90_W4G1T2	S D V A R W T C I Q A R L S Q L P R F L S P R R Q M A C I L Q V C H D L		
UniRef90_U1LWA4	S R F H G E C P W P S A Q A E I A I I N A Y K S P R D K M A C V V R C C E T I		
UniRef90_H2WD10	E H L L S E A P W P S A Q A E I S L L D I Y V T A Q D K L S C V V R C C D V I		
UniRef90_X1WK18	K E F H F E C P W P S A Q A E I S A L S A Y K T P K D K L Q C V F R C T T I		
UniRef90_H2ZUP2	Y A P A P D S V T L E K I K H K F I T M Q K M Y S P E K K V M L L L R V C K L I		
UniRef90_M4C507	E T D E Q A Q T W L R L A T Q L D A A T L Y P S P R R K M D G V L R V C Q D L I		
UniRef90_G3J5B9	L G Q E E I R Q Y L E S A R K E L I A M T D S H Y P L G K I N H L K A V H K S I		
UniRef90_E7FC22	T T T D P E T P I M E K I Q T R L G N L H Q E Y S P Q K K I D L L K T C K L I		
UniRef90_U4U997	S A F L R E S P W L P A Q E A L R A L D A A R T P R D K L R C V S R C A K C I		
UniRef90_W5U9R7	F S I N I P P R A K R E L S Q L N R C S S P P Q Q K L L C R K V A F T I I		
UniRef90_H3AMB3	F S I N I L R A K R E L G Q L N R C T S P Q Q K L I C R K V V H T I I		
UniRef90_A9DV7	S R L D A L D A V R H G H K V T I		
UniRef90_J4DPC4	G D L D T L K Q A Q N Q L K N L Y K Y K S P R D K I I I L N F C R L V		

170 180 190 200

UniRef90_G6DKL7	L E L C G A P A S A D D L P K L I F T V L K A N P P R L V S N I N F V
UniRef90_D3BN55	F R L L S S M N N T P S G A D D F L P I L I F V V L K A N P P M L H S N I Q Y I
UniRef90_C5D1Z7	F G F L K H L K L E R D G A D F I P L L I Y A I L K S N V E S L I S N V N Y I
UniRef90_K3WDH1	F S V L N S D N D S R P G A D D F L P V F I Y I V L H S Q I P R L V S N C E Y I
UniRef90_J7S889	F G L L R H N N L D K E G A D F I P L L I T V V L K G N V G N L Y S N V W K Y I
UniRef90_UP10002C300DB	Y N A S K S Q A P V I L G A D F I P V L I Y V V I M A N P P Q L H S N L K F I
UniRef90_G7J0B1	F S V L N L S R G N R P G A D D F I P V F I Y I V L H S Q I P G L Y S N A E Y I
UniRef90_T0PTW9	N N N A A M S E Y V P A G A D D F I P V L I Y V T I K A N P P M L H S N L K F I
UniRef90_A8IYC8	N N L L A S K R A G A G A D F T P T L I Y V T I K A Q P E A L A S N L A F V
UniRef90_S6E6U0	M A M L T K N K L E N G A D S F I P L L I Y T I L K G N L S A L A S N I R Y I
UniRef90_G8ZN10	F A I L R R H H K L E D K G A D F I P L L I F T I L K G D I R V L V S N V R Y I
UniRef90_F0ZH26	F K L L K N T N N N P T G A D F I P L L I Y V V L K A N L P M K S N L I Y V
UniRef90_E5SE68	F E N L K E S R G E L A S A D F I P P A L I Y V I L K T N P P L I L S N V K F I
UniRef90_C5DP53	M A M L T N N K L E N G A D S F I P L L I Y T I L K S N L S S L A S N T R Y I
UniRef90_G2YIG8	V D T L S H F H P S S A D E I M P M L I F T L I T S R P E N V I S N L Y F I
UniRef90_S4RKZ1	F T H V R P C L D L S D F V Y I A L S C P T P R A S S V F P R L
UniRef90_I4YCT1	L T D I L N K S P A T T S A D S L L P L F V Y T L L Q T N P S H L I S N I E Y I
UniRef90_F4P5T3	V D L I K R N D P E G D N A D N L L P T L I L V F R A K P P K M I S N I K Y I
UniRef90_S3CX80	V D T L S H F H P S S A D E I M P M L I Y T L I T S R P E S I I S N L Y F I
UniRef90_L7M2P2	A S L L S A A A G A P A A D D L V P V L V F V L R A N P P H L L S T V Q F V
UniRef90_Q54HF9	L K H F S T H L K E L S G A D F L P P N L W V L L K T N P F L H S N V I F I
UniRef90_F1A339	L Y L L S S S D S P G G A D D F L P H L I Y V I H A N V P H L V S N F E F I
UniRef90_B3MVZ6	M S L L R M S S G R V P A A D D L L P V L I Y V V I M A N P P Y L L S T V E Y I
UniRef90_A0A024U9K7	F S V L N S D V M S R P G A D D F L P V F I Y L V H S Q V P S L V S N A E Y I
UniRef90_V5FYU9	V D T L T N L P P S S S A D E I P T L I Y S L T C P P D G L I S N L L F I
UniRef90_F0WL76	F S V L S L S R E S R P G A D D F L P L F I Y I V R S Q I P Q L Y S N C E Y I
UniRef90_E5A838	V E A L S A K I F P S T S S A D E I L P T L I Y A L I T L P P V H L I S D L K F I
UniRef90_Q6FRP6	F G L M K H S E T G A D C F V P L L I Y T L I T S R P E N V I S N L Y F I
UniRef90_UP10001582F6F	V D T L S H F H P S S A D E I L M P M L I F T L I T S P I E N V I S N L Y F I
UniRef90_UP1000258F6EF	M N L L S M A T E R V P A A D D F I P V L V Y V I K T N P P S L L S T I Q Y V
UniRef90_W9XTZ2	V D T L Y S I H P S S S A D E I L P T L I Y T L I T S P I E N V I S N L Y F I
UniRef90_W5K1C8	M N L L S A N E D A V P G A D F V P V L V F V R A N P P C L L S T I Q Y V
UniRef90_L8GB55	V E T L S H F H P S S A D E I M P M L I Y T L I T S P T E D L I S N L Y F I
UniRef90_U5H1X3	F G L I R Q V S K D Q G A D S F I P F L I Y V L K S N P E H L V S N I Q Y I
UniRef90_B8M8P4	V D A L T V L L G S S S S A D E I L P A L I Y T L I T S P P E N V I S N L L F I
UniRef90_R7YSM7	V E T L S R L F P S S S S A D E I L P T L I Y T L I T S P P E N V V S N L N F I
UniRef90_F9X624	V E T L S Q S F P T S S S A D E I L P T L I Y T L I T C P P D N V V S N L A F I
UniRef90_M3D2Q2	V E T L S Q S I F P P S S S S A D E I L P T L I Y T L I T S P P E N V V S N L N F I
UniRef90_T0Q2T9	T H L L R A H H G R Y P G A D E F L P A L I Y T L I K A N P V H L H S V V Q Y I
UniRef90_B3L1E8	T S A V Y A A K K N S P C A D E V L P V L I Y V I K T N P P E L I S N I A Y I
UniRef90_S7ZE46	V D A L T N L P P S S S A D E I L P T L I Y C L T C P P E D I V S N L L F I
UniRef90_G0RD59	V D T L L A Q F H P S A S A D E I M P M L I Y T L I T L P P E H L H S D L H F I
UniRef90_K2S0U6	V E A L S S Q I F P P S S S S A D E I L P T L I Y A L I T S P P D S V S N L F F I
UniRef90_H6C5K9	V D T L L S S I H P P S S S S A D E I L P T L I Y T L I T T P F E N I I S N L F F I
UniRef90_G1SPJ0	Y D S S M A S N P G K P Y G A D D F L P V L M Y V L A R S S L T E L L D V E Y I
UniRef90_D5GM95	V D W L S T H N S S S A D F I L P T L I Y T L I I S P P T N I I S N L F F I
UniRef90_I3IRW3	Y S I M Q E H E V R M F G A D D F L P M L I Y T L V Q C D P Q L D T E I L Y I
UniRef90_N4VMU1	V E T L A H F H P S A S A D E I M P M L I F T L I T L P P E H L H S D L H F I
UniRef90_M2N1R0	V E T L S E L F P P S S S S A D E I L P T L I Y T L I T S P P E S V V S N L N F I
UniRef90_D6W9P5	M D L L A S Q N S G S S T A D D F T P V L V Y V R V N P P D L L S T I Q Y V
UniRef90_V3ZNM9	M N L L S S S N E K V P A A D D F M P V L I Y V I R A N P P C L L S T I Q Y V
UniRef90_E9FSZ7	M N A A A A E R G V P A A D D F M P V F V F V I K A N P P C L L S T V E Y V
UniRef90_G0SFG5	L D T L A H F H P S S S A D E I L M P M L I Y T L I T M P P E Q L H S D A A F V
UniRef90_U7PST9	V D T L A H F H P S S S A D E I M P M L I Y T L I T L P P E Q L V S D L N F I
UniRef90_W4VR46	M N L L S S A M A D R V P A A D D L T P V L I Y V I K A N P P Y L L S T I E Y V
UniRef90_L7IFG1	V D T L A H F H P S S S A D E I M P M L I Y T L I T L S P E N V I S D L S F I
UniRef90_A0A024TYA3	T H L L K D H G G K Y P G A D E F L P A L I Y T L I L K A N P P H L H S T V E Y I
UniRef90_D8LWB1	L L Q Q S G A K G G R D A G A D D F L P A P F I V L K S G I P K L P S T V E Y I
UniRef90_B2AXE0	I D T L A H F H P S S S A D E I L M P M L I Y T L I T L P P Q N L I S D I N F I
UniRef90_D8LL30	L T G D R A A G G A L P G A D D F L P A L I L L V K R A N P P G L H S T L E F F I
UniRef90_U1HZ61	V D T L S T I H P A S S A D E V L P T L I Y T L I T S P P E N I I S N L S F I
UniRef90_F0XUF5	V D T L A H F H P S S S A D E I M P M L I Y T L I T L P P E Q L V S D L N F I
UniRef90_B0XGB6	I S L L S M G S D K P V A A D D I P V L I Y V I Q T N P P N L L S T I E Y V
UniRef90_A1DH09	V D A L T K L L P P S S S S A D E I L P T L I Y T L I T C P P E N I I S N L L F I
UniRef90_K3VSM8	V D T L A H F H P S A S A D E I M P M L I Y T L I T L P P E N L H S D L H F I
UniRef90_C1H6A7	V D T L T K V L L P P S S S S A D E I L P T L I Y T L I S T P A E N L I S N L L F I
UniRef90_U4LTB6	V D C L T R H I S T T S A D S L P T L I Y A L I L S P P E N A V S N L Y F I
UniRef90_UP10003B69EB7	Y T I I M Q D N S G R M Y G A D D F L P M L I Y V V A Q C D P Q L D T E V Q Y I
UniRef90_A8P1G0	E N I I L L A S E R G A A S A D D I T P V L V Y V L I Q A N P A L L S N I Q Y I
UniRef90_I3NFE5	T N A T K I T N N E P A S G N D F L P K L I Y I V L K G N P P N P V S Y I Q Y I
UniRef90_L0AWK4	V Y S I Q K I S N R D V S A D E A F P L L I Y T I I R S N P R E L H S S I E F I
UniRef90_A0A017SMT2	V D A L T K L L P P S S S S A D E I L P T L I Y T L I T C P P B E S V I S N L L F I
UniRef90_I3JQY7	Y T I I M Q D N S G R M Y G A D D F L P M L I Y V V A Q C D P Q L D T E V Q Y I
UniRef90_Q2H6N0	I D T L S H F H P S S S A D E I M P M L I Y T L I T L P P E Q L V S D L N F I
UniRef90_C4JIX0	V D S L T K I L P P S S S S A D E I L P T L I Y A L V T S P P E S V I S N L L F I
UniRef90_M1VUL6	V D T L A D V H P S S A S A D E I M P M L I Y T L I T V P P E K L H S D L H F I
UniRef90_K8EA79	S N A V L R F S G G A D F I P S L I Y S L A H A N V Q N L W K N I K Y I
UniRef90_UP1000443FBD3	Y D S S M A L N P G K P Y G A D D F L P V L M Y V L A R S N L T E M L L D V E Y I
UniRef90_I3N444	F N T I K I T N N E P A S A S D F L L K I I Y I V V K G N L T P P V V L H P V Y
UniRef90_W4G1T2	T H L L K D H G G K Y P G A D D F L P A L I Y T I L K A N P P N L H S T V A Y I
UniRef90_U1LWA4	E N L I S A A E R G A A S A D D I T P V L V Y V L I Q A N P Q A L L S N I Q Y I
UniRef90_H2WDI0	N N L I A S S K N A I A S A D D F T P V L V F V L I K A N P R S L L S N L Q F I
UniRef90_X1WK18	L N L M S M H G N M H P A A D D F L P V L V Y V L I K A N P P S L L S T V Q Y I
UniRef90_H2ZUP2	Y T V M E N N S G R M Y G A D D F L P M L I Y V L A Q C E M P Q L D I E V E Y I
UniRef90_M4C507	T S F L K M Q N D R P S A D E F L P A L I Y V L H A N P C E L K R N V A Y I
UniRef90_G3J5B9	V D T L S H F Q P S A S A D E I M P M L I Y T L I T L P P E H L H S D L H F I
UniRef90_E7FC22	Y E S M S V G C P G R H G A D D F L P V L M Y V L A R C N I T A L L L D V E Y I
UniRef90_U4U997	V D L L G L S G S C A A D D F T P V L V Y V I K V N P V A L L S T V Q F V
UniRef90_W5UHR7	M Q S P S R K V N E A V C A D D L S V V L Y L L V K T E I P N W K A N L S Y I
UniRef90_H3AMB3	M Q R P S Q R K F E N M C A D D L S V L Y L L V K T E I P N W M A N L S Y I
UniRef90_A9DV7	F F F A V A S Q H L E I S A A V T N H E A D L A E A Q T E L I K I
UniRef90_J4DPC4	V Y S I Q K V T N K E V S C D E A F P L I I L T N P S E L Y S S I E F I

210 220 230 240

UniRef90_G6DKL7	T R F C N A Q R L M T G E A G Y Y F T N L C C A V S F I E N L T A E S L S M D K
UniRef90_D3BN55	S T F R N P S R M S T E T G C Y F T H L V S A L T F I E N I Q P S D L T I E E
UniRef90_C5D1Z7	E R F R Y P G F L R G E S S Y Y L S S L Q G A A G F V A N M Q V E S L H I N Q
UniRef90_K3WDH1	A A Y R N P A D L M S K A G Y C F V N L R S A I E F I N V L D G S M L S I S M
UniRef90_J7S889	E R F R D N K F M K S E E T Y Y L S S V L G A I N F I Q E M D E S T L T I A D E
UniRef90_UP10002C300DB	E L Y R R E A K L V S E A A C C L T H L V S A K T F I S E L D A K S L L S I S I D E
UniRef90_G7J0B1	K L Y R R Q T K L I S E A E Y Y F T N L V S A K T F I I E L N S K S L L S I S I D E
UniRef90_T0PTW9	A A Y R R H P A D L M S K A G Y C F V N L R S A I E F I L V L D A S M L T I A P
UniRef90_A8IYC8	E R Y R Y A A H L G G E A A Y F F V Q M Q G A A T F I E T L T T S S L G C D P
UniRef90_S6E6U0	E R F R F E S F L R G E A L Y Y L N S L Q A A V S F I I R L E Q A A F T I I N N
UniRef90_G8ZN10	E R F R Y E E F I R G E A S Y Y L N S L E A A I N Y I M T L E K D A L A A T A
UniRef90_F0ZH26	S T F R D Q S R M M T E I A C Y F T H L V S A V T F I E N I T P A D L S I E E
UniRef90_E5SE68	S R F T L P S K L M S G E A G Y Y F T N L C C A L D F I Q N L N A E S L K M H P
UniRef90_C5DP53	E R F R F E S F F R G E A L Y Y L N S L Q A A V S F I I S I N E S T F T I E
UniRef90_G2YIG8	Q R F R C E T K I D G E A A Y C L T N L E A A I S F I E T V D L A S L R A D E
UniRef90_S4RKZ1	A R A A P P R P P P Q C C A V A F I E K L D A H S L S L T P
UniRef90_I4YCT1	Q R F T N N E Q L S G E V G Y Y F Y T L T A A V V S F I I N N L D H K A L N I E K
UniRef90_F4P5T3	M R F R N A H E L E Q G S N Q Y C I T N V M G V I S F I Y N M N A K S L T L T E
UniRef90_S3CX80	Q R F R N E S K I D G E A A Y C L T N L E A A L T F I E T V D L A S L R A D E
UniRef90_L7M2P2	E T F Q R A T R C C Q G E A A Y W W T Q F C A A I E F I K T M D Y
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 P | D | D | M

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 F | S | A | F | M | S | A | E | R | K | L | A | Q | D | K | E | T | Y | F | G | N | L | V | Q | D | Y | K | A | Y | S | L | D | M | M | A | K | Q

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

K | K | A | S | L | R | E | Q
 A | K | R | E | P | L | L | E | Q | L
 R | K | E | P | L | L | E | Q | L

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

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

F | E | S | Q | I | H | D | L | E | E | R | R | A | L | K | E | H | L | Q | Q | L | P | L | R | E | C

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

E | Q | F | Q | D | I | I | R | R | L | E | Q | S | N | Y | K | L | L | I | S | L | D | T | F | I | E | N | I | K | N | D | L | T | L | S | I | D | D | I
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 I | S | D | E | E | D | Q | M | R | R | S | L | E | T | A

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

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

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

R | D | T | V | S | E | L | Y

50 60 70 80

V K L I N E F L N F I S G K M R V W R N V S E A F D N A M E G M E K L V M N R			
A K L V H E F L N K F L E L I K T T A F S A P W A H H D V S E G L E K F T L Q K			
T D H V E Q F L Q Y L Y Q A M N Q W Q A A N E C Q I E D A Q L A I E R Y I M S R			
P P I			
V K L I N E F L N F I S G K M R V W R N V S E A F D N A M E G M E K L V M N R			
A K L V H E F L N K F L E L I K T T A F S A P W A H H D V S E G L E K F T L Q K			
T D H V E Q F L Q Y L Y Q A M N Q W Q A A N E C Q I E D A Q L A I E R Y I M S R			
P P I			
C R F V E Q F L E K L Y T E L E V W L G A S D D H R E E G Y I A I E R D I M G R			
S E M L Q E I R L M M T Q L K S Y L V Q S T E D P A S Y T E E Q L E V I A E T A			
A E F L Q N L L T Y L R E R L M Q W N F A T E S M I A R A M T T M E R F V M F A			
S E N F Q D F F N S I R E Q L L E Q H A Q H D R I E R Q L E A V E T V L C E E			
U n i R e f 9 0 _ H 0 W 0 9			
U n i R e f 9 0 _ G 1 P 8 P 2			
U n i R e f 9 0 _ U P I 0 0 0 2 B 4 6 9 9 3			
U n i R e f 9 0 _ U P I 0 0 0 3 F 0 5 B D 6			
U n i R e f 9 0 _ V 9 K C Z 5			
U n i R e f 9 0 _ U P I 0 0 0 1 8 0 C F A 4			
U n i R e f 9 0 _ U P I 0 0 0 2 6 5 1 8 4 7			
U n i R e f 9 0 _ A 0 A 0 2 3 F C D 0			
U n i R e f 9 0 _ W 5 L 0 Y 6			
U n i R e f 9 0 _ W 5 K W X 3			
U n i R e f 9 0 _ G 3 P 1 6 2			
U n i R e f 9 0 _ I 3 K Q F 2			
U n i R e f 9 0 _ L 1 J N M 6			
U n i R e f 9 0 _ U P I 0 0 0 3 C 9 1 7 A C			
U n i R e f 9 0 _ E 6 Z U Q 2			
U n i R e f 9 0 _ W 5 L 5 8 8			
U n i R e f 9 0 _ U P I 0 0 0 3 4 F B E A 2			
U n i R e f 9 0 _ H 3 B I F 7			
U n i R e f 9 0 _ U P I 0 0 0 3 9 5 7 8 F E			
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U n i R e f 9 0 _ K 7 V E H 3			
U n i R e f 9 0 _ E 7 F A G 3			
U n i R e f 9 0 _ T 1 K 1 D 3			
U n i R e f 9 0 _ W 5 N 9 T 8			
U n i R e f 9 0 _ U P I 0 0 0 3 5 A 0 D 7 4			
U n i R e f 9 0 _ U P I 0 0 0 3 8 8 C 5 E 1			
U n i R e f 9 0 _ V 8 P 6 M 1			
U n i R e f 9 0 _ V 9 K D 9			
U n i R e f 9 0 _ A 0 A 0 2 4 G Q B 0			
U n i R e f 9 0 _ U P I 0 0 0 1 D E 6 F 2 C			
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U n i R e f 9 0 _ F O W X 7 6			
U n i R e f 9 0 _ C 1 G 6 G 7			
U n i R e f 9 0 _ U P I 0 0 0 3 8 8 A 0 9 F			
U n i R e f 9 0 _ U P I 0 0 0 3 F 1 2 0 0 8			
U n i R e f 9 0 _ I 3 L D 9 1			
U n i R e f 9 0 _ V 8 N J N 8			
U n i R e f 9 0 _ G 3 P V 3 4			
U n i R e f 9 0 _ A 0 A 0 2 3 F 1 N 0			
U n i R e f 9 0 _ H 0 W Q V 3			
U n i R e f 9 0 _ E 3 R J 7 7			
U n i R e f 9 0 _ U P I 0 0 0 3 5 9 8 0 F C			
U n i R e f 9 0 _ V 9 K Q Q 8			
U n i R e f 9 0 _ K 9 J 5 V 7			
U n i R e f 9 0 _ A 0 A 0 2 6 V Z N 9			
U n i R e f 9 0 _ G 0 U X E 1			
U n i R e f 9 0 _ B 7 Q 1 8			
U n i R e f 9 0 _ H 3 A Y Q 0			
U n i R e f 9 0 _ U P I 0 0 0 3 2 8 A 0 8 5			
U n i R e f 9 0 _ V 8 P 3 K 5			
U n i R e f 9 0 _ U P I 0 0 0 3 8 3 8 4 D 6			
U n i R e f 9 0 _ H 3 B Q 1 2			
U n i R e f 9 0 _ U P I 0 0 0 3 3 3 B 8 4 C			
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U n i R e f 9 0 _ W 5 M 5 1 9			
U n i R e f 9 0 _ W 3 X J Z 6			
U n i R e f 9 0 _ U P I 0 0 0 3 9 8 F C A E			
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U n i R e f 9 0 _ G 3 N 5 K 6			
U n i R e f 9 0 _ G 1 S N H 2			
U n i R e f 9 0 _ A 1 A 4 T 0			
U n i R e f 9 0 _ U P I 0 0 0 4 4 0 C 4 A 5			
U n i R e f 9 0 _ M 2 T 1 H 8			
U n i R e f 9 0 _ L 7 M E 8 3			
U n i R e f 9 0 _ Q 0 D T 9 3			
U n i R e f 9 0 _ U P I 0 0 0 4 5 7 2 1 F 9			
U n i R e f 9 0 _ U P I 0 0 0 3 3 7 0 D D			
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U n i R e f 9 0 _ A 0 A 0 2 4 J G B 6			
U n i R e f 9 0 _ F 7 A N P 1			
U n i R e f 9 0 _ U P I 0 0 0 2 9 8 A 6 8 A			
U n i R e f 9 0 _ H 2 S K G 2			
U n i R e f 9 0 _ E 4 Y 7 E 5			
U n i R e f 9 0 _ K 1 Q F R 6			
U n i R e f 9 0 _ B 6 A B 2 6			
U n i R e f 9 0 _ Q 2 H F 1 4			
U n i R e f 9 0 _ D 7 F J N 4			
U n i R e f 9 0 _ W 5 L 9 7 3			
U n i R e f 9 0 _ U P I 0 0 0 2 0 3 B 3 4 9			
U n i R e f 9 0 _ F 2 U 6 X 5			
U n i R e f 9 0 _ H 9 I S E 6			
U n i R e f 9 0 _ K 2 N 4 U 3			
U n i R e f 9 0 _ G 4 V R E 8			

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UniRef90_G3N5K6	L W S A L V V L F R R V V H R E R E E Q A F E A S M K R Y R D A S P A D V G V P L D		
UniRef90_G1SNH2	L W P P L L A L Y R S V H R P R E E V A L A R S M E Q H R H A G P T D M G L S S R		
UniRef90_A1A4T0	L K G H V E A M L K D F H M A D G S W K Q L K E N L Q L V R Q R N P Q E L G V		
UniRef90_UPI000440C4A5	P V Y S S L Y V C M K A S R Q N D D S L Q R L E A N Q K T L S G R S L E E L E G		
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UniRef90_L7ME83	L R R Y I L Y Q L F V K Q Y T E A L K L L S D S M K Y A R T K T A Q E L G I K S D		
UniRef90_Q0DT93	L F N R V F A S V P E D V K S D E E L F E K M S L Q F I R P E N L D I K P E		
UniRef90_UPI00045721F9	I W M F L L A L F R K V N H S R E E M A L D K S L K L Y R T A G P A D D K L F P H		
UniRef90_UPI00033370DD	L W A P L L A L Y R S V H Q A R E E E A L S R S M E L Y G N S A P T A L G I Q V T		
UniRef90_V4B4X1	L K H Y I Y K L F V Q Q Y N R N L E L M S S N I K Y A R N K T A E E I G I K P G		
UniRef90_A0A024JGB6	V Y E R I F Q P G V G D D V E R S E G I Q A R V K A I R E L P V T F R H F D F D		
UniRef90_F7ANP1	P L R P I L L A R L R L R F T A D G S L R R L A R L R G P G A F G L H P G		
UniRef90_UPI000298A68A	M F S C V L R P L R T H L N R A L S E L H S R D G S T Q R L V Q N L L R L K G D		
UniRef90_H2SKG2	L W T A L V A L F R K V Y M D R E Q A Y E I S A K A L Y Q D A S P G D V G V P L K		
UniRef90_E4Y7E5	I Y H L I I Y P N R E V D I E R D R V F T H I E Q I S K I R T D H P K L Q I P		
UniRef90_K1QFR6	L K L H Y N L E F V T E Y T R N L Q T L S S N V R Y A R T K S A R D L G I R P D		
UniRef90_B6AB26	L Y N K L I K I I S L E N K A I D E Y L S S K L K K L S F V Q L N H F D V S E M		
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UniRef90_H9ISE6	L Y W R A F G V D P E E R E R N K E L N E K L H R L S F V N A E E L D A		
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130 140 150 160

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UniRef90_UPI0002651847	E K Y R R E S P W P A A Q A E I L N I N A Y K T P K D K V Q C V L R C C T I		
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UniRef90_I3KQF2	D A Q P P D T V A L E K I K H K F H T M C K Y S P E K K V V S M L L R V C K L I		
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UniRef90_UPI00034FBEA2	F S L N I P S A K R V L C Q L N K C T S P Q Q K I L L C I R K V V Q T I		
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UniRef90_H2SKX0	T A V P E A S A M E K I S I K L N K L H D Y S P Q K K I E L L L K A C K I I		
UniRef90_K7VEH3	K V Q H N E A L W L L A V K E L Q K I N S F K A P R E K I L L C I M S C C Q V I		
UniRef90_E7FAG3	F S I N I P R A K R E L I Q L N V C T S P Q Q K I L E H L R K V I L T I		
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UniRef90_W5N9T8	T T S V P E T P V M E K I H K F T N L H K E Y S P E K K I I A I L L K T C K I I		
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UniRef90_V8P6M1	T T S V P E S A L E R I F H K F T M T K A Y S P E K K I I S L L K S C K L I		
UniRef90_V9K9D9	F S I N I P R A K R E L S Q L N R C T S P Q Q K I L I C I L Q N V V H A I		
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UniRef90_F0WX76	E A D A I M L Q R W D A L V V Q V R E F V V R I S P R R K I M D C I L E V C R V L		
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UniRef90_UPI000312008	L T Q D P G T Y P R S A V Q E L G L L V L E S C P Q R K K I L E C I V R T L R V I		
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UniRef90_H0WQV3	L L P Q D A S Y P Y C A A T Q E L G L L V L E S C P Q R K K I L E C I V R A L R V I		
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UniRef90_H3BQI2	L L P Q N P E A P Y C A A A Q E L G L L V L E S C P Q K K I L E C C V R T L L R I		
UniRef90_UPI000333B84C	L L P P G P E Y P Y C S A A A Q E L G L L V L E S C P Q K K I L G C V R T L L R V I		
UniRef90_S4RN2	G G G V P D A C L E R I R V T L A R M H A T Y S P S K K V V L L L K A C K F I		
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UniRef90_M2T1H8	H G R K G K Q E L L S R A V D M F K K M G V A G S P Q E M L E I L L A V Q K H I		
UniRef90_L7ME83	F E P P P R G V T L E L V Q H F L V L Q K A Y S P L R K I L E N L L S A I S V I		
UniRef90_Q0DT93	Y Q S E T S W L L A Q K E L L Q K I N M Y K A P R D K I L A C I L N C C K V I		
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UniRef90_K1QFR6	I P L P D S G T M D T I K G H L H S M Q K A Y S P L K K I M E C I L A A T S T I		
UniRef90_B6AB26	D V L N T E N S W L D I C N N E L Y K F V R V K S P R D K V I L I V N V C K V L		
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UniRef90_H9ISE6	L Y H T V P K A K Q I L S K I D T Y N T V L E K L V C C L K Q A L N S I		
UniRef90_K2N4U3	L K E V E K H H L W S Q A M D L E G M F N F K T P P R E K I C A V R A C E G G L		
UniRef90_G4VRE8	P N S S E E L A H L D L A T F A L I K V N T L L A S E D K I L N Q I V Q C C R S V		

170 180 190 200

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UniRef90_U3JID2	Y D S M A Q G N P K P Y G A D D F L	P V L M Y V L A R S N L T E V L L N V E Y M	
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UniRef90_W5KWX3	T Q T P R T D N Q S V I T T D D L S	V I L Y L L V K T E I P N W M A N L S Y I	
UniRef90_G3P162	Y T I L M E D N S G R L Y G A D D F L	P M L T Y V L A Q C D M P Q L D N E I L Y M	
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UniRef90_H2SKX0	N N I S M S N D R T L S G A D E F L	P I L I Y V T I K A N P P Q L H S N L K F V	
UniRef90_K7VEH3	M Q S T R R R D I E S M C A D D L L L	V I L Y L L V I L I K T E I P N W M A N L S Y I	
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 E E F I H E G Y L I G E E G Y C L T S L Q S A L S Y V E L L P R G A L G
 E R F R A E S L V Q G E T S Y C L V N V Q A A V A F L E N V D V K D L G L D S

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

1 10 20 30 40

S L E T A

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 E N F [] S C T K E S R E A A P Q V V R N M R Q F M S G M K N Y [] L V K H G E G K
 S D [] K Q F [] E N F S S [] L Q E V S G E D K
 T G S E F [] Q E V R [] S L T S L R E T L L E Y A E
 Y E F I R T A A K K K D R I D A K V Q Q F V R A N G D F A R W R Y E E Q
 Y Q K I L K T K E V S I Q T D Q F V V G F G E M K G M N [] D E R
 E S K E T N P Q I I M R N M R Q F M S G M K N Y [] L V K H G E
 P D E M
 S L E S A
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 F K T F L S S C N T T [] Q D I L V S I K R F P N L V K G M G L K E R
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 S L E T A
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 E F L
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 E I A S N L K A K I I D F I R K V Q Q N P D D M
 A A A A V K D [] R N T V T S I E K Y I S E N L D P Q
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 I K E F I S S L V H P Q L L S P D E I
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 K L F [] D F R C N S H F P Q F I S A S I K K F P G M V V G K D L K E R
 P A T E L L Q D V R H L L T D L Q D H L A K D
 E F A R L T V S D D K
 P A T E L L Q D V R H L L T D L Q D H L A K D P D
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 Y R Y L R A R L T S N S G N P Y R P G D P A
 V L G N V R Q F I N G L K N Y [] L V K Q G E A A
 F L E C T R E S A Q M [] C S N V R Q F V D G M T N Y I V D K R G R D
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 UniRef90_E9C4F3
 UniRef90_W4G8C2
 UniRef90_UP10003317DC
 UniRef90_G6D8A8

50 60 70 80

Detailed description: This figure displays a sequence alignment of approximately 80 UniRef90 proteins. The alignment is presented in a grid where each row represents a different protein sequence. The columns represent amino acid positions, with labels at positions 50, 60, 70, and 80. A color key at the top indicates conservation levels: black for high conservation, white for moderate conservation, and red for low conservation. Yellow boxes highlight specific residues at positions 50, 60, 70, and 80 across multiple rows. The sequences consist of standard amino acid abbreviations (e.g., D, E, G, H, I, K, L, M, P, R, S, T, V, W, Y) and some gaps represented by dashes.

90 100 110 120

UniRef90_M2M1J4	V H D Q V F P K V C A V R K A D D S D L D S K I R K M S D I D □ A Q V G I P V E		
UniRef90_A0A034V446	L R E H L Y G M F V D K R S E D I Q L L A Q N V K Y A C G R S P A D F G I R A T		
UniRef90_G1TTJ6	F Y K Y V F W K K D L K H W L Q D L T I Q K K F R D G A F P P P Q M L C F P V N		
UniRef90_E5SI17	M S L C V Q A L R T L S Y F D S K G L F H Q T V Q R L G D I T P T H K S L A I P		
UniRef90_J9N519	V H N Q L W P R L N A L K R P Y D L E L E A K I R K M Q F I D I S Q L G I A I D		
UniRef90_I1F9D3	L Y S T A F Y L P T S T D A E D D E S F Y Y R V R L L Q F L Q P D H L D L P K R		
UniRef90_B5DMY4	L R E H L Y G I F V D Y Y R S E D □ Q L L V Q N V R Y A C E R E A A D F G I R P		
UniRef90_A0BIL6	V Y D K V Y P K E R T Y K D A G L Y F R I K S L E W V N Y D H L E I		
UniRef90_E3R007	V H Y L L F P R L S A L K R P Y D L E L E A K I R Q M E Y I D L S Q L G I T I E		
UniRef90_UP10003942B0A	L Y S C I E T S R T N D G T L E R L Q S N L R L L E K N E V T E L G G S A G		
UniRef90_A7UX4	L Y D H V R S V I D V C R A E Q A E A F N K T V R N L G D V H C A E F E I		
UniRef90_B0EDM1	V F K Y I W P P S I N K E V E E D H L I M N K V L E H Q F V T P E L L D V D		
UniRef90_D2A1H2	L K G H L Q K L F L D H Y T K A I R L L A D N I Q F A A T R P I A E L A I K P K		
UniRef90_G2WZH5	V H H L I F P R L S A M K R P Y D L E L E A K I R Q M E F I D L S Q L G I G I D		
UniRef90_UP100045615B6	V Y D R I F C P P T S R D D Y H D D A L A S R I A A L N V L G L S L T H L G L Q		
UniRef90_F0XUY9	V H H L I F P R L S S L K R Q E D L E L E A K I R Q M D C V D L T Q L G M D I E		
UniRef90_D3BM72	L F D L L I C P I N K E K D N E I K Y A I N F L K V K P K D F L E L D P V		
UniRef90_E2C3H3	L R H I L L K S L S A G T A A E D A S L N K I T R T N L N E I R L D D L R I R P D		
UniRef90_H0W7Y5	P L R P I L A A R L R R R L S A D G S L G R L A E G L R L A R T Q G P G A F S S		
UniRef90_C4M6A2	L F N F L W P P I I E C N Q R D S E L S T T I S T H Q F V A P H H F D L G F		
UniRef90_E0VLH8	L R E H L Y K L F V D E Y I K N E N L I Y A K T K S L R D L G L K T		
UniRef90_F4X5G0	L R D V L L K S L S A G T T V E D A N L N K I I R N L D G I Q L N D L R V R S D		
UniRef90_UP100046B141D	P L R P I L V A R L Q R R L S A D G S L S R L A E G L R L A R T Q G P G A F G S S		
UniRef90_M3ZK24	L Y S C I H T S R T N D G S F Q R L Q G N F L L E K N G I E E L G G S K G		
UniRef90_M1W3B5	V N H L L F P R I S A L R P E D L E L E A K V R Q T E F I D L S Q L G I A I E		
UniRef90_A0A022T6M8	L R N L P G A V S T T S Q D D A K L N K I I K N L Y K L E L K D L		
UniRef90_L5KRA4	P L R P I L V A R L R R R L S A D G S L G R L A E G L R L A R A Q G P G A F G S S		
UniRef90_B8LUU6	V H E T L L F P L C T F R R A E D V E L D T R I R Q I E H I D V S Q V G I A I E		
UniRef90_G9NUX4	V G H L L F G G K L S A I K R R D D L E L E A K I R K M E F I D L S Q L G I A I D		
UniRef90_M3XV52	P L R P I L A A R L R R R L S A N G S L G R L A E G L R L A R T Q G S G A F G A		
UniRef90_G4LXN3	I Y P F I W I N N P S V I E K E R D E L F H R E L A F L Q N V T P T E L R I S		
UniRef90_K2HBF7	I F Y D I W P P L I E K T T E K D R D L D W R I L A L Q F I I Q L K D L E I N F		
UniRef90_K1Q415	V H S K V F S V V K E T Y E R D D K L L F T K S R Q L H N V T A E Q L G V		
UniRef90_Q5CW27	L Y N V L F D A V S F E N D D A D H Y L F R K L K V L K F V K L D H F D I S K H		
UniRef90_Q0UN83	V H H R T L F P R I C E I R R E D I L E L E R R T T R Q M V D I D L S Q V G I D I O G		
UniRef90_E9FWX9	L R S H L Y K L L Q G E A L A A G Q Q L L A G I R V A R E I H P P S S L G L K E		
UniRef90_S3CRK1	L H I I I F P R L T S I K R P E D L E L E A K I R Q M D C I D I S Q L G M D I D		
UniRef90_C4M413	L F E Y I W P P Q T S K E V V N D M K L E Q I I K I H Q F I H A S H L D V N F		
UniRef90_H2NYB4	I Y D L I F K Y V G T M E A S E D A A F N K I T R S L Q D L Q Q K D I G V K		
UniRef90_T1I249	I H R K L M Q A I T E C T A F E D A S F N K T V R N L S S D I Q L R D L D I		
UniRef90_Q921Q7	P L R P I L A A R L R R R L S A D G R L A E G F R L A R T Q G P G A F G S H L T		
UniRef90_Q553T5	I Y G Q I F P I N K S K D Q L K S I I Q Y V K Q L P I N D Y S D I D P		
UniRef90_UP10003F07DAB	V F K K V F K A V S T Y V A R E D A E L N K I T R T N L A E L Q L K D L G I R		
UniRef90_F6R767	I W P A L L A L Y R H V V L L A R E E S L L Q A M K S Y R D N A Q S V V G V P P Q K		
UniRef90_E0VNS2	T Y K K I I R S I A L C T S T D D A L N K H I R N L S D L P F K D F K L D P I		
UniRef90_UP10003C1450F	P H P R S V H R L R E A A I L S R S M E L Y R N A P P A A V G V P T P		
UniRef90_S7MTA8	P L R P I L L V A R L R R R L S A D G H L A E G F R L A R A Q G P A A F G S R L S		
UniRef90_D3BRM7	I Y N Y T F S V S K E D V K F T K Q L K S K S K A I D H R S I L Y I P		
UniRef90_F0ZN86	I F G Q I F P I N K S K D D Q L K R I I A F T R D T Q P I L N H I D V K		
UniRef90_T1PED5	I Y R Q G M F P N E D A D L S R D T V L S E H I R K L Q N V T P S H S A L C P		
UniRef90_G1NUJ3	L M P A L W T R L R T L R A P E L L R R I L R R Q Q I A L R A A G G P P G A Q G A G P		
UniRef90_Q7PVQ9	L R E H L Y S L F V D Y Y S Q D I Q L I V E K V R S T A G R G P L A F G I K G N		
UniRef90_G5BL34	I Y D L I F K Y M G T M E A S E D A A F N K I T R S L Q D L Q Q K D I G V K P E		
UniRef90_UP10003F17FFC	L K P A L W T R L R T L R A Q E L R L L R R Q I A L R A E G G P R G A Q G A G S		
UniRef90_UP100045E2493	L K P V L W T Q L R T L R A P E L K K R L R R R Q I A L R A E G G P L G A R E A E P		
UniRef90_K6UIR3	L H P Y V Y R M E T K D K D E D E K I Y T K I N C L Q W V E L K H L E I E E G		
UniRef90_W7XYC0	L H D I L M K K Y P V K Q D K R L E F Y F R V Y F E W I T L T M F E I D		
UniRef90_H3GSK0	L Y R A I L T N V R A Q T R E D S K V L K G K I E L L R S K S Q A F F G I G P D		
UniRef90_D0MRD1	L E K Q V F L V G W T V D K E A E L R L A R N I E R L K C R S Q T E S G I P E H		
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UniRef90_L8GD50	L Y D I V P V Y T K R Y I A E D R K F T Q K M A E F A D I T P K F W L L D D K		
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UniRef90_UP100038BC9C5	L C R A V L E P L K P A L W T K L R T L R Q E L R L L R R R Q T A L R A G A G P		
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170 180 190 200

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

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UniRef90_J7REA7	L F R N S P E Y G K Y N K L L D E K F Q C L L K L E T Q Q E I D F K K
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130 140 150 160

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UniRef90_I1BGH0	F A P T P D F V D V E K I K V K F M T M Q K M Y S P E K K V L L L R V C K L I		
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 Y V T V G C E K G I E R L L T V L I Y V L I K S R V K D L C V I A A V V
 S E P Q R A V A A M T I N A D I L V S M L L L V V I R A S V R H Q A R L S Y M
 H H E A A L L V G T T Q F S V E T F F P L L A Y V L V H C R L L T I H A Q L H L L
 T L E V K P F G D F L W C M D D L F P L F L Y V V L V R A R V R N L G A E V S L I
 C D V V G R T E G Q D I I L P S I I Y C I I K S S L P N I Y L E V R F M
 T P V A Q L G D A Y V W N M D D L F P L F L Y V V V V R A R I P H G A E L E F M
 T Q G N T Q M D D F C L T S D D Y I P L L I V V L A E A R P N H L A S E I F F I
 D V T I H T Y Y A G H P N A D A L V S V L A Y V V V V M A N C P H L A S H L A L M
 I A S E D D H H R K L M G A D D L I P A L S Y I L V Q S N I I P Q Y S E Y L A L
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 Q R E V A S H F V K C G I A E T L I P L V V V V L A R S R P T S F S S N I F Y I
 V Q T I D D Y Y F T G H G V D D L L P I M T Y I I I R S G M P Q L V S E S A M L
 Y H S M N A N A K P V F G A D D F L P C L T W V L L R S D V A T L Q V D T D Y M
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 Q Y H R Q H G V P V D L E P D E L L P I L T Y V V H S G L D N L M S L K V L L
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 Q R F I Y I D D V E S G E I G Y S L S T L E A V L T Y L
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 E D L M D P S L Q H G E M G L M F T T L K A C C F I Q
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 E H F M D R N L E N G E L G I M F T T L K A C Y Q Q I
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 D H F C G V K D D F S S F T L S T F K A A V E F V G K Y R G P E L
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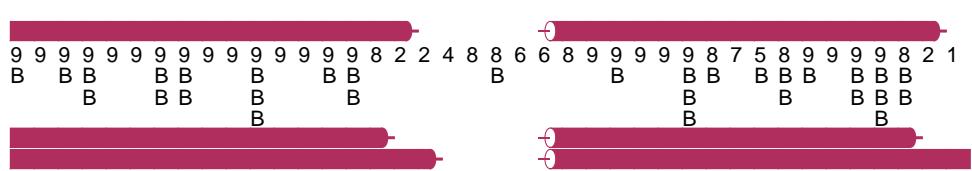
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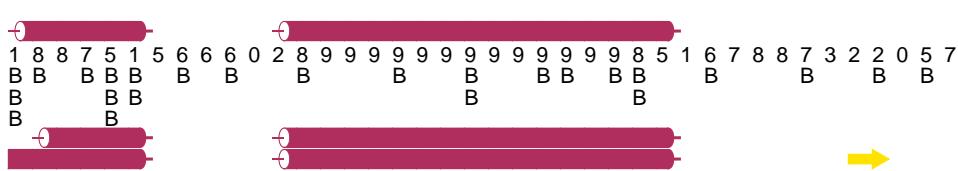
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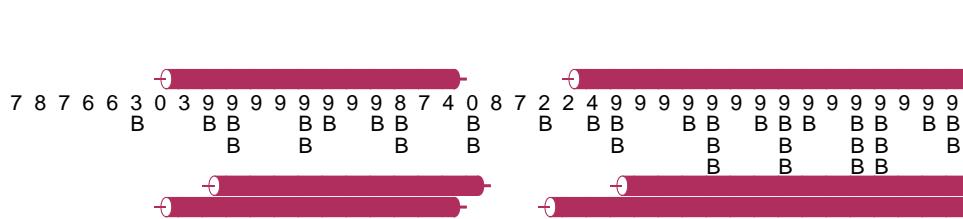
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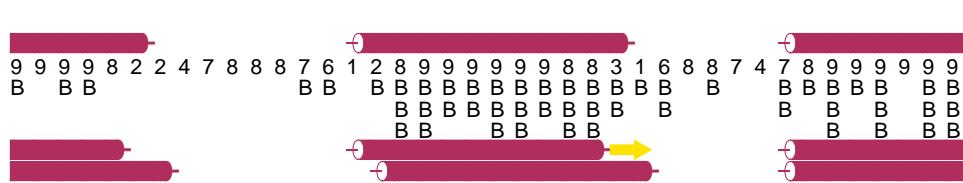
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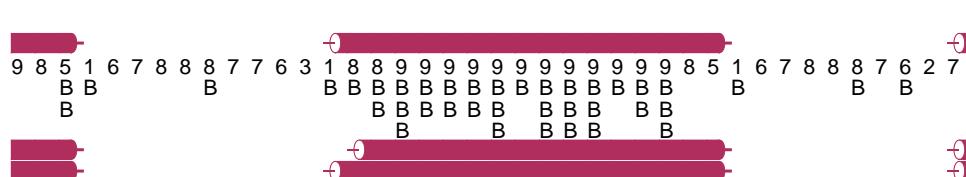
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