

QUERY	1	10	20	30	40
UniRef90_Q8R9A4	F P T W L A P V Q V V I M N I	T D S Q S E Y V N E L T Q K I L S N A G I R V K A D			
UniRef90_R6YPS8	F P T W L A P V Q V R V L P I	S E E K H H E Y A R K V Y E R L Q E H D I R V V E L D			
UniRef90_Q189B8	F P L W L S P V Q A V V L P I	S E E H H E Y A Q G V Q D V L E E A G F R V E C D			
UniRef90_B4S3D2	F P L W L A P V Q I A V L P I	T D E V H D Y A V Q V R D T L L H A A G M R V E L D			
UniRef90_F4XEN7	F P A W L A P V Q V K I L L P V	T D R A A A Y A D Q L S K Q L L D E A G Y R V E T D			
UniRef90_V2Y7X3	F P A W L A P V Q V K I L L P V	T D R A G E Y A E E V S K K L L D A Q G F R V E V D			
UniRef90_UP10004714197	F P T W L A P V Q V R I L T I	T D R T N A Y A E E V A Q K Q L R D A D I R V V E T D			
UniRef90_G8MSB3	F P A W L A P T Q V V V M N I	T D S Q S E Y V Q K V A K Q L S D A G L R V V K T D			
UniRef90_R5AHT5	F P T W L A P V Q V K V L L P I	T D R A A E R C V E V Q K A L L E A H G V R V V E T D			
UniRef90_R5DC4K	F P T W L A P V Q V K V L L P I	S D K Y M D Y A Q K V Q D T L L Y N A G I R S E I D			
UniRef90_W0EYX8	F P V W L A P V Q V K I L L P I	S D K F F D Y T K E L A Q S M F E Q D I R V V E V D			
UniRef90_T0IHQ4	F P I W L A P V Q V K I L L P I	S E R H A E Y A R E L R K A G I R V V E V D			
UniRef90_F6CQH2	F P T W L A P V Q V R V L L P I	A D R H A D Y A R Q V V E R L E K E N N V R V E L D			
UniRef90_R7PEV3	F P L W L T P D Q V A I L P I	S D K F N D Y A R K L H D Y F E E N E V R S Y I D			
UniRef90_R7NMY5	F P L W L A P V Q V K V L L P I	A D R H L D Y I Y E V K K Q L E A K G I R C E V D			
UniRef90_R7F9P3	L P L W L A P T Q A K I L P I	A D A Q V E Y A K K I E K E Y K K A G I R I E V D			
UniRef90_R7IY13	L P P K L A P V Q V M I V P I	M Q K K E D K A Y E L K E V L S G F R V K V D			
UniRef90_E2ZC97	F P V W L A P T Q V K I L L P I	S E K Q M D Y A V E L R K K F K K A G I R V V E L D			
UniRef90_A4J4Y7	F P V W L A P V Q V K V L L P I	T D R H H E Y A R E L V K R L L Q G L D I R V V E L D			
UniRef90_U2UJK4	F P T W L A P V Q V R I L P I	T D R H H E Y A E Q L V K R L L Q G L D I R V V E V D			
UniRef90_UP100047DE079	L P L W L S P V Q A K L I P V N P A Y E A Y V R E V A E K L Q L A G V R V D M D				
UniRef90_Q67PA6	L P P R L A P I Q V I M I P V G D K V M A R F D P L F D A L L K A A G V R V K A D				
UniRef90_Q67LA3	F P L W M A P V Q A R V L P I	T D R H H A Y A G E V V A K L Q E A G L R V V E G D			
UniRef90_N9XYL3	L P T W L A P V Q V K L L P I	S D K Y N D Y A D E V V I R S L R N S G V R V V E G D			
UniRef90_U9VSV1	F P L W L A P V Q V R L L P I	V S D A Q R D Y A H Q V S Q T L Q Q Q G F R V V E V D			
UniRef90_F8FM54	F P L W L A P V Q A M L L P I	V S S D A Y S E Y A H K L Q E T L T A A G L R A E V V D			
UniRef90_R6YJS3	F P T W L C P E Q V R L P I	S E K Y Q A D Y V K E L C Q K L T A S G V D A T V D			
UniRef90_I3Y987	F P L W L A P V Q V V V L L N I	T D R Q A D Y V K E L R G K F R R A E I D			
UniRef90_H2FW05	F P T W L A P T Q A V V L L N I	T D N Q S E Y A K N L V E S L N N V G I R A K A D			
UniRef90_D1B9K3	F P F W L A P V Q V R V L L P I	P V K P E F E D R S R Q V E A A L L K S W G V R V E V D			
UniRef90_K4KFQ1	F P L W L S P E Q V G V L L N I	T D N Q A E Y C Q K V E E S L K N K G F R A F S D			
UniRef90_V7PWT9	F P V W L S P V Q V T I L P I	S E E H Q K E Y Y A E S I V Y K T L K E N N I R V E L D			
UniRef90_R5PH44	F P L W L T P D Q V A V L L P I	S E E K Y N D Y A K K V C R Y L D N Q G V R A T V D			
UniRef90_W9UUFB7	L P T W L S P V Q A V V L L N I	T D K Q A D F C K K V V H E T L L E K A G I R R S N L D			
UniRef90_1MYF43	F P V W L A P V Q V M M G I P V	T D K Q S E Y A K K V Q E F L Q N Q G F R A E H D			
UniRef90_B8D611	F P T W M S P V Q V R I L P I	V S D E Y H A F K I V Q E F L Q N Q G F R A E H D			
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UniRef90_Q8GE33	F P A W L A P V Q V R V L P I	T D R H H A Y A Q K V L A H H L A E R G I R R A E V D			
UniRef90_B3EEC1	F P L W L A P V Q A V V L L P I	A E E V H D Y A K T I V H T A L L A A G I R V E I D			
UniRef90_R5SGE0	F P T W L C P E Q V R V L P I	S E E K Y A D E K V L A Q L E E A G I R R A E L D			
UniRef90_F7KV17	F P T W L A P V Q V K V L L P I	S E E K Y H L E Y Y G K K V L A Q L E E A G I R R A E L D			
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UniRef90_W1UOQ2	F P V W L A P V Q V K V I V P V	A P V R H L E Y A N E V A R Q L L N Q A G L R A Q A D			
UniRef90_JOLE36	F P L W L S P E Q F A I L P I	S E E K Y Q D F A Q Q V Y D R L Q Q E D I R G F V D			
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UniRef90_C0E9S5	L P L W I A P E Q A R I L P I	G E R Q H D A A Y A C V R D E L R K A G L R V E V D			
UniRef90_N2AQE4	F P T W L C P E Q V R I L P I	S D K Y H D Y A A E V K E R L K K N G I R C S V D			
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UniRef90_R5LFN8	F P L W L S P V Q V V I L P I	S E N E V E Y Y A E N V K E L L C K N G F R V E V D			
UniRef90_G5IHZ9	F P T W L C P E Q V R V L P I	S E K Y H E Y A E K V E K E L K N N G I L T T V D			
UniRef90_C4LFH3	F P L W L A P L Q A V V M N I	T D N Q A D Y V K E V N T L K N E S G I R A K A D			
UniRef90_K2DFM5	F P T W L A P E Q V V V I P I	A E R H V E Y A N S I Y N T L K D M D I R A H L D			
UniRef90_E6RIN3	F P T W L A P K Q V V I M N I	T D K Q A P Y V Q E I V Q K L L N K L G I R R A A A D			
UniRef90_R7FUP1	F P L W L S P V Q M R V M N V	S E E K F S E A Y A E E V Y K K L F D A G L R P D K			
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UniRef90_D3SG47	F P T W L A P V Q A E V L L T I	T E R Q D D Y A R E V T R A L L R D K G F R V E S D			
UniRef90_Q5KWD2	F P T W L A P V Q V K V I V P V	S E A H L D Y A Y D V Q R T L K E R G F R V E V D			
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UniRef90_N0B3I2	F P T W L A P V Q V Q V I P V	S P D H F D Y A K E V L E Q K L K S Q G F R V E L D			
UniRef90_W2C852	F P L W L T P D Q V V V L L P V	G E R Y N D Y A H R V A K E L E Q H D I R V L V D			
UniRef90_P46244	L P T W L S P I Q V V V I P I	T D S H I N Y V K K I V Q H F S D I N I R V E S D			
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UniRef90_R6ZU09	L P P K I A P T Q V V M I I P I	Q Q K K E E K A Y E L R D R D R L S G F R V K V D			
UniRef90_G7V991	F P F W L A P V Q V K I L P V	P V R G E Y N G Y A S E V F D K L K E K G F R V E L D			
UniRef90_I3ECM0	F P T W L A P V Q V Q V I P V	V S D A H Y D Y A K K H V A K E L Q V E K L Q A E G F R V E L D			
UniRef90_C1DF42	F P A W L A P T Q A V V M N I	T D K Q G E F A L E V E R T L L N Q G G F R A K C D			
UniRef90_D8DUN8	F P L W L I P D Q V A I L P I	S E E K Y N D Y A K K V K A Y L L D K H D V R G Y I D			
UniRef90_M4U3L9	F P T W L S P Q Q V V V M N I	T D K Q S E Y V A E V V T V K L K K S G I R V I S D			
UniRef90_Q3M248	F P L W L A P V Q L R L P V	S D E V R E Y A Q A L V V V I S L K K S G I R V I S D			
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UniRef90_R7GNR3	L P L W L A P T Q V V Q I P V	S E Y H D E Y A K E V V V A K L R K A H F R V N N D D			
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UniRef90_UP100036C7282	F P P K L A P I H V V I V P I	P Y K N E E E K A K E I K D S L D K Y N Y S V K F D			
UniRef90_UP100030BAF33	F P A W L S P V Q A R L I P V	A E A F D E Y V D G V A A T L R A A G V R V E V D			
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UniRef90_H1HTW7	F P P H I A P V Q V T I V P V	A M H K E E R A K A L L A A E L R A A G V R V N V D			
UniRef90_Q8EPF3	F P T W L A P V Q V K I I P V	S Q A H L D Y A K D I E E K L R Y Q G V R V E L D			
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UniRef90_UP1000364189A	F P L W L A P T Q V I I L P V	I S D K Y Q I Y T E K L H L E N S E I R A L V D			
UniRef90_Q9C6D2	F P T W L A P T Q A T I I P V	V N E H A D Y A W K I Q R E L Q D K G F R V V V D			
UniRef90_K9TAH5	F P L W L A P I Q I R L L P V	S E T Q R E Y A E S V A A N F K Q A G Y R V E I D			

QUERY

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UniRef90_K9TAH5

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UniRef90_B4S3D2	G K K I R E A T M E K I P Y M I V V G D R D M E N N T V S S V R R L R T			
UniRef90_F4XEN7	G K K I R E A T M E K I P Y M I V V G D R D M E N N T V S S V R R L R T			
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UniRef90_R5DC4K	G Y K I R E A Q M Q K I P Y M L V V G D K E E E A G V V S V R S R F G			
UniRef90_W0EYX8	G K K I R E G Q M Q K L P Y M L V V G D K E A E T R T V A V R K R G			
UniRef90_T0IHQ4	G Y K I R E G Q M Q K L P Y M L V V G D K E A E T R T V A V R K R G			
UniRef90_F6CQH2	A R N E K V N Y K I R E A Q A Q K I P Y M L V V G D R E A R E G T V A V R H R T			
UniRef90_R7PEV3	R N E K I G R K I R D N E L K H T P Y L L V V G D K E L E N G T V S V R K Q G			
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UniRef90_R7F9P3	R N E K I G Y K I R S A Q L Q K I P Y M L V V G D K E I E A N A V A V S V R S R K			
UniRef90_R71Y13	D T D K S P G F K F A E Q E M R G I P L R V E I G P K D I I E A N Q A I I A R R R D S			
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UniRef90_A4J4Y7	A R N E K I N Y K I R E A Q T Q K I P Y M L V I G D R E M E Q G A V A V S V R E R G			
UniRef90_U2UJK4	R N E K I G Y K I R E A Q L E K I P Y M L V I G D R E M E Q G A V A V S V R K H R R G			
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UniRef90_Q67PA6	L R E E T P G W K F N E W E M R G I P L R I E I G P R D V D N K Q C L M V R R R D G			
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UniRef90_U9VSV1	T S G E R L G K Q I R T A E L L E K I P V I S V I G Q R E V D S S Q T L G I R T R Q			
UniRef90_F8FM54	A R S E K I L G Y K I R E A Q L E K I P V Y M F I L G E Q E K S S S G T V S S L R S R Y			
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UniRef90_H2FW05	L R N E K I G F K I R E H T L Q R V P F M L V C G D K E V D A G K V A V R T R K			
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UniRef90_K4KFQ1	L R N E K I G F K I R E H T L Q R V P Y L L V A G D K E M E T T G T V T V R D R N			
UniRef90_V7PWT9	D S N E S L G K R I R N A K M N K R I P Y M I V I G D K E K E S S N V I T V E T R			
UniRef90_R5PH44	S R N E K I G R K I R D N E M K R I P Y M L V V G E K E Q A D G T V A V R K Q G			
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QUERY

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UniRef90_F9ZAS8	L P P K L A P L Q V V V I V P I Y Y K I I S D K V Q G L I E K L R A K G L S V K Y D				
UniRef90_S9XNC5	W P F W L S P R Q V M V V P V G P T C D E Y A Q K V W Q Q F H D A K F M V D I D				
UniRef90_R5E9H4	L P T W L A P V Q V K V M P V N E E L L M A Y A H E V V C D L L D D S N V R V E L D				
UniRef90_R6XEK5	F P L W L A P K Q V T I I P V N D A H L A Y A K E E E I L R Q T L E N Q G L R V V S D				
UniRef90_B5JRT5	F P V W L A P V Q V K V L P S D N F V E Y G S E V I G K L R E A G I R C E I D				
UniRef90_F8NC18	W P D A I A P F Q V S I V P M N E E V V K E A A E K L Y A D L T T A A G L D V L F D				
UniRef90_E1NSU6	F P T W L A P L Q V K V I I P V N D A H G E Y A Q N V K D Q L M K L G F R A E V D				
UniRef90_R7HRD5	L P P H L A P L Q V V I V P I Y Y R K Q E E K V A G I V E G L K T K G I S V K Y D				
UniRef90_A6ERT2	F P L W L M P E Q V A I L S L S E E K Y E E Y A E K V L N L L E N H D I R A L V D				
UniRef90_R6FX04	F P V W L A P V Q V K V L P S D N F V E Y G S E V I G K L R E A G I R C E I D				
UniRef90_D0YWB7	UniRef90_R7IKP9	W P D A I A P F Q V S I V P M N E E V V K E A A E K L Y A D L T T A A G L D V L F D			
UniRef90_S0NZ01	L P P W L A P T Q V A V I A S I T D S Q A D Y A H E V Y Q K L F N A G Y R V E E D				
UniRef90_KOTA00	F P T W L A P L Q A T I I P V S E A H S D Y A Y E V V K E M L Q T K G I R V E V D				
UniRef90_A0P714	W P L W L S P R Q V M I P I H A D F N D Y C Q Q V R D R L H D E G F Y A D V D				
UniRef90_E8RJU3	L P P L W L A P E Q A R I M N I T D D Q E Y C E Q V H A R L R A M G V R I D K D				
UniRef90_UP10004446CD9	W P F W L S P R Q V M I P V G P T C D E Y Y A L K V S S E F F E E G F M V D V D				
UniRef90_D1KCX7	F P S W L A P L Q A V I L N I S E K Q H D F V A N V E V K K L L K K Q G L R V I S D				
UniRef90_V4SUZ7	W P F W L S P R Q A I V C P V S E K S Q P Y A L Q V R D H I Y R A G Y Y V D V D				
UniRef90_E7RV91	F P T W L A P V Q V A V L T V T D T A D Y A E D V R Q R L I K Q G F R V I S D				
UniRef90_A4AY45	F P V W L S P V Q V V V I P I A D R H I P Y A E E V V A S A F S R H N V R V N V D D				
UniRef90_D1CDN7	F P V W L S P V Q V V V I P I A D R H I P Y A E E V V A S A F S R H N V R V N V D D				
UniRef90_UP10003B50BB7	F P M W L A P V Q V G V P I S E K H L E Y Y A R S V K A K L E A Q G L R V V E L D				
UniRef90_UP1000262C93A	L P P P W L S P T Q A I V L T T D S Q H E Y A K N V E K M L V A Q G L R V K L D				
UniRef90_J5GW99	L P P H A P V Q V N I P V K E G V L E A A N A L K D R L Y A A G V R V K L D				
UniRef90_I0QP60	W P D A I A P F Q V A I L P M M M S K S D A A E E L K Y N T L R A K G I D V I L D				
UniRef90_E5WPX2	L P P K I A P T Q V V L I P V N P A I M E K L D E I F A A L K A E G I R V R L D D				
UniRef90_UP100036E307C	F P T W L A P P Q Q V T V I P I S N E H T D Y A W E V A K N L K D R G V R V E V D D				
UniRef90_UP100035F4146	L P P N L A P P L Q V V I V P I Y Y K G D E Q F Q K Q M A R L R K L G I T V K Y D				
UniRef90_B0THPO	W P M A I A P F Q V L V P V S N K Q M E A A E A I Y K E L I A K G V D T L L D				
UniRef90_Q8ZWK4	L P T W L S P V Q V R V I P V S K E N L K Y A I S I A D V L E A E G I R V D I D				
UniRef90_K1Z915	L P P L W L A P Q Q A V V I N I T D A Q S E Y V K K V T Q I L Q D K W R A I C D				
UniRef90_UP100046A81EC	L P P L W L A P Q Q V V V I N I T D A Q S E Y V K K V T Q I L Q D K W R A I C D				
UniRef90_UP100037C9106	L P T W L S P V Q V R V I P V S E E V L D Y A N S V L D K L R S A K V R A D L D				
UniRef90_R5VQB5	F P L W L A P K Q V V V I P V S N N E H R H Y A H Q I V V Q A L K K H G I R A H I D				
UniRef90_Q251L3	F P T W L A P V Q V R V L P I S E R H E D Y A Q D I V R R R L N D L D I R A E V D				
UniRef90_R2P294	F P F W L A P K Q V V V I P V S N K Q M E A A E A I Y K E L F H E L H A A G I R V E K D				
UniRef90_Q55806	F P L W L A P Q V R V L P I S E F L P F Q A Q S I V Q Q M Q S L G L R A E V D				
UniRef90_U2RDF5	L P T W L A P V Q A R I M P V K T T D D P E Y A Q K I Y D A L D A A D V R V E L D				
UniRef90_UP10003626F9F	F P V W L A P V Q L Q V I P I S E H Q I D Y A K L I L Q A L R D A N I R A D L D				
UniRef90_R5QED2	F P V W L A P Q C V A T S I T D N Q G Y A K D V A A K L H A A G L R V Q T D				
UniRef90_B1HMM6	L P P R I A P T Q V V L P V P G P W K M E Q L D A I F A A L K A K G L R V R L D				
UniRef90_UP100041C8D7B	F P T W L A P V Q I K A I P V S E V H Q D Y V K K V T Q I L Q D K W R A I C D				
UniRef90_F1T534	W P V S W L A P Y E V V A V I P L D V H D E P V A Q R L I K A G I E V V I V D				
UniRef90_D7WUU6	F P T W L A P Q Q V Q V I G V A E A H Q G Y A K Q V V E A L L R S A K V R A D L D				
UniRef90_R71KF1	L P P R V I A P I Q A V I L P I A A H K M E A C E K L L E E L R K E G I R V K L D				
UniRef90_H5SNM8	F P V W L S P V Q A V V L P I T D R Q H E Y A Q K V L Q R L K D C Q I R A E L D				
UniRef90_UP100046F007B	F P L W L A P D Q V A I L P I S E K Y N D Y A Y G V V A K T L L A R N D I R A Y V D				
UniRef90_UP100035D597B	W P D A I A P F K V A L I P M M H K S E V A E K L Y T E L V A A G I E V V I F D				
UniRef90_D0KS75	L P D W L N P L Q V R L P V K T K D F L D F S I Q V A E R L R K E G I R V N I D				
UniRef90_G5F4E3	F P T W L S P C Q V K V L P V S E K A R D Y A K E V G E R L R A A G I R V K V D				
UniRef90_R5EZ21	L P P K I A P I Q V I I L P I A Q H K L E A A A Q L K E R L V N A G F R V K V D				
UniRef90_V5PQN2	F P V W L A P Q V I V M N V S E K T A D Y A Q E V T K K L K E Q G L R A R S D				
UniRef90_Q31F14	F P T W L A P T Q L V I A S I A D V H N E Y V N D F A K K L K H G F R V E S D				
UniRef90_R5M8Q0	L P L W L A P P H Q V N I P V N N H L E Y A K E V V E E L L R K N G I R V N L D				
UniRef90_Q0V9S0	W P F W L S P R Q V M I P V G P S C D E Y A Q Q V V C K D V F E A G F M A E V D				
UniRef90_F4MNA8	L P P N L A P P I Q V I I L P I Y Y K G E E Q K V E K I R N S L I S K G I S V K F D				
UniRef90_D3E105	L P T W L S P S Q V R I L P I G E K H L E Y A N Q L A D K L A A E N I R V D L D				
UniRef90_K9RDD3	F P L W L A P V Q A R I L P V T E V Q L D F A K E V V A A K M I S L G I R A E V D				
UniRef90_G2PMY1	F P L W L I P T Q A I V L P V S E R H E K Y A E K V L N S L E N H E I R A L I D				
UniRef90_W4VIH7	F P T W L A P I Q A R I I P V S S E A H E F E Y A K K V E E E L R F A G V R A E V D				
UniRef90_UP100041FEBD4	F P T W L A P V Q V K V L T I N D E V A P Y A Q E V V D M L K E S G I R A E I D				
UniRef90_U7V943	L P P K I A P T Q V V L I P V G P E I L E K L E D I Y K V L K A K G I R V K L D				
UniRef90_R7ZAN3	L P P K I A P T Q V V L I P V G P E I L E K L E D I Y K V L K A K G I R V K L D				
UniRef90_F5LQC0	L P T W L M P V Q A K V I P V S P S Y E A Y A N D V T E K L L A A G I R V K L D				
UniRef90_UP1000423750A	L P P K L A P I Q V V I P V N D T Q L E K A N E I K K N L E A K G V S V K Y D				
UniRef90_U6EEZ0	F P L W L S P T Q V R V I P I A E R H N E Y A H K V L A Q E I R V N A R I R V D V D				
UniRef90_C8WSB2	L P P K L A P T Q V V I P I G E A V V V A K A R D L R F D A L K R A D L R V H L D				
UniRef90_G6DSA8	W P F W L S P R Q T C V V P V G P S F D D Y A T Y V V N E K L F A G F M S E V D				
UniRef90_A4NWY8	W P D E I A P F T V A I P V M M H K S E Y A E E L Y R T L Q S Q G V D V I F D				
UniRef90_UP1000412ABF1	L P P R V I A P T Q V V I P I G P Q K E N H A E D L R Q R L L A A N I R V R M D				
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	50	60	70	80
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UniRef90_U1PJM8	L S D D R F G K K I R N A A K E K I P F T L I A G G E D A E A G A V S F R Y R R D			
UniRef90_S6G310	L R D E R L S Y K I R D A Q T N K I P Y Q L V L G D Q E M N E N K V S V R L R N G			
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UniRef90_B1YD09	D R D E T L S K R I R D A E V A W V P Y C V V G S K E E A E G V V V S V R P Y G			
UniRef90_F0K3K7	F R N E K I G Y K I R E S Q T Q K V P Y T L V L G D D E M N A G T V N V R P Y G			
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UniRef90_S6F6U0	Y R A E K I G Y K I R E A R L E R I P Y I L V V G E D R E A A N N E V S V R S R K			
UniRef90_Q0RTX6	A S D G R L P A R V R T A V T R K I P L V V V G R R E V E E G S V S V R D R			
UniRef90_Q5QW31	D R K E R P G V M F T D M E L I G I P H Q V V G E R N L D E N Q V E Y Q S R K			
UniRef90_UP100040B27ED	E R N E K I G R K I R D N E M M K R I P Y M L V L G D K E I E E N E A V N V R K Q G G			
UniRef90_UP100047ED685	E R D E K I G Y K I R E A Q M Q K P Y M L V L G D R E K E E E E N V V S V R S R Y			
UniRef90_UP10004762F8E	E I N D K I G A K I R K A E M E K I P Y M L I F G D K E V E E G F A S V R K R G G			
UniRef90_Q2YBS6	L R N E K I T Y K I R E H S L Q K L P Y Q I V G D K E V I A A Q R V A V R T R S			
UniRef90_Q7UJ52	A S D G K V Q A K I R N A Q I D L V N Y M A V W G P K E A E S G Q V A L R D R I			
UniRef90_H8L6D7	L R N E K I V G Y K I R E H T L Q K V P Y L L V V G D R E K E E Q G M V S V R T R A			
UniRef90_R7IR96	N R S E K I G F K I R D A R L K R V P Y M L V V G Q K E E E E N V V S V R S R Y			
UniRef90_F0SQF6	M R S C V N A K I R D A Q L E I P Y M L V V G P K E A E Q N A V S V R D R E			
UniRef90_U1R845	S S N D R R F G K K I R N A S S K S V P F I L V G E E D M N N N A V S F R F R D			
UniRef90_F9ZAS8	D R D Q K P G W K F A D Y E L K G V P V R L A M G E R D L E N G T I E V A R R D			
UniRef90_S9XNC5	D P G C T L N K K I R N A Q L A Q Y N F I L V V G E K E K T S G T V N I R T R D			
UniRef90_R5E9H4	D R A E K L G Y R M R E G Q M Q K V P Y L L V L G F N E Q E G R T V S F R L H G			
UniRef90_R6XEK5	D R E E K L N Y K I R E T Q T V K K I P Y T L V L G D Q E K A N N S V T Y R H H			
UniRef90_B5JRT5	L R N E K I G F K I R E H T L Q R V P Y L F V V G D R E V I E N S V A V R T R S			
UniRef90_F8NC18	D D N K R P G F K F A D Y E L K G V P V R L V M G G R D L E N N T I E I M R R D			
UniRef90_E1NSU6	F R N E K L G Y K I I R E A Q T Q K V P Y T L V L G D D E L L Q H N S V E N V R K Y G			
UniRef90_R7HRD5	D D N K R P G F K F A D Y E L K G V P V R L V I G P K D L E N T A E V M R R D			
UniRef90_A6ERT2	N R N E T I G K K I R E A E M N K I P Y M L I L V G E Q E K T H G N I S V R K H S E R R			
UniRef90_R6FX04	N R S E K I G Y K I R E A R E N R V P Y M I I V G E Q E K T H G N I S V R K H S E R R			
UniRef90_D0YWB7	D R K E R P G V M F A D H E L I G I P H T I V I G N R S L E N G E M E Y K N R R			
UniRef90_R7IKP9	L R S E K I N Y K I H E L S T K V P Y I L V V G E K E K Q A G T V A V R E R G G			
UniRef90_S0NZ01	D R N E K M G Y K I R A S Q T Q K I P Y Q I V V G D Q E M N D G T V N I R R Y D			
UniRef90_KOTA00	L S K A T F S K K V R T A Q V D Q Y N F Q L V V G K N E V E N G T V N I R T R D			
UniRef90_A0P714	L R N E K I T Y K I R E H S M Q R I P Y M V V L G D R E M Q E K Q V T V R K R D S Q S			
UniRef90_E8RJU3	V R N E K I L N Y K I R E A Q L M K V P Y M L I V G E R E K Q T N H A V N V R T R D			
UniRef90_UP10004446CD9	D R S C T L N K K I R N A Q L A Q Y N F I L V V V G E E E A K S G Q V S V R V R D			
UniRef90_D1KCX7	L R N E K I G F K I R E H S M Q R Y P Y I L V V V G E R E M E N D E I S V R K R G			
UniRef90_V4SUZ7	T T D R K I Q K K V R E A Q L A Q Y N F I L V V V G E E E A K S G Q V S V R V R D			
UniRef90_E7RV91	L R G D K I G Y K I R E H S L Q K I P Y L V V V G E K D R Q A G T L A V R A R G			
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UniRef90_J5GW99	D S E K S P G F K F A E S E M M R G I P L R I E I G P K D I E N N N Q C V F V R R D			
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UniRef90_E5WPX2	D S D Q S P G Y K F N E W E L K G V P V R I E L G P R D L D Q N Q C L M K A R D			
UniRef90_UP100036E307C	E R N E K M Q Y K I R Q S Q T Q K I P Y Q L I V G D K E M A D K S V N V R R Y G			
UniRef90_UP100035F4146	D R D H K P G F K F A E Y E L K G V P V R V A I G P N D L A N G T F E V A R R D			
UniRef90_B0THPO	D R P E R A G V K F K D A D L I G I P V R I T V G N K L A S D G V V E V K L R R			
UniRef90_Q8ZWK4	D R E E T L S K K I R D A E T S W I P Y I V V V V G S K E E A E G V I A V R E R G			
UniRef90_K1Z915	L R N E K I G F K I R E H T L S K V P F M L I A G N K E V E T N T I A V R S S D			
UniRef90_UP100046A81EC	L R N E K I G Y K I R E H S L Q K V P Y I L V V V G D K E K Q A G T V A V R K R G			
UniRef90_UP100037C9106	A S E G T L G K K I R D A Y A E S V P Y L V V V G R K E K S G T V T V R G R N			
UniRef90_R5VQB5	D R D E K L G Y R I R E A N L K K I T Y Q V V V V G D E E I Q N K T L K V R H Y G			
UniRef90_Q251L3	E R R E K I S Y K I R E A Q T H K I P F A L V V G D Q E A E T D T V A V R R Y G			
UniRef90_R2P294	L R N E K I G F K I R E A Q T H K I P Y I L V V V G D K E L A E G T F A V R K H G			
UniRef90_Q55806	T S G D R L G K M I R N A E M K K I P V M A V I G A K E V E A N A L I N R T R A			
UniRef90_U2RDF5	D R A E K L G Y R M R E G Q V Q K V P Y L L V V G M K E K E D G T V A Y R L H G			
UniRef90_UP10003626F9F	V Q N E K V V G Y K I R E A E K Q K I P Y M I V V G N K E V E N N N I S V R K H L			
UniRef90_R5QED2	L R S E K I N Y K I R E L S L Q K L V P Y I L V V V G E K E A Q T G T V S V R A R G			
UniRef90_B1HMM6	D S D Q S P G F K F N E W E L K G V P V R I E L G P R D L E N N Q A L L K A R D			
UniRef90_UP100041C8D7B	F R G E K L G Y K I R E A Q T S K P Y L L V V G D K E I E A E G V N V R R Y G			
UniRef90_F1T534	D R G E R P G K F N D A D L M G F P Y Q V V C G K K A L A H A C V E V V K N R A G			
UniRef90_D7WUU6	D R Q E K L G K K I R E A Q L Q K V P Y I V V G D R E V A N Q T V A V R R H D			
UniRef90_R71KF1	D R D V S A G Y K F N D W E M M G V P V R L E V G P R D L E N G V V T V F R R D			
UniRef90_H5SNM8	S S S H T L N Y R I R H H Q S Q K V P Y M I V G E R E A Q S E Q V A V R L R T			
UniRef90_UP100046F007B	D R N E K I G R K I R D N E L K R V P Y L L I V G E K E A E T N S V S V R K H G			
UniRef90_UP100035D597B	D R K D R P G V M F A D M E L M V G V P H S I V G E R N L D E G L V E Y K H R R			
UniRef90_D0KS75	D D D S L G N K I R R A G T D W I P F V I V G E R E V K T N T L T V K I R A			
UniRef90_G5F4E3	E R D E K I G Y K I R E A R I D R V P Y M I L L G E K E A E A G N I S V R D R			
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UniRef90_V5PQN2	L R N E K I S Y K I R E H S L Q K V P Y L L V V V G D K E I E A E G V N V R R Y G			
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UniRef90_U7V943	T R A E S L G Y K I R E A N R Y K V P V Q L L I G K N E V E N R E V N V R R F G			
UniRef90_R7ZAN3	D S D L T P G F K F N K W E Q K G A S L R I E F G P R D F Q N H Q V V V K L R D			
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UniRef90_UP1000423750A	N R D Q K P G W K F A E Y E L Q G V P V R I A G A R D L E N G T A E V A R R D			
UniRef90_U6EEZ0	D R P E T V G K K I R N A G K E W V P Y V I V G D R E M E S G S L T V N V R E D			
UniRef90_C8WSB2	D R D D S P G W K F N E Y E L R G V P I R L E L G P R D L E A S Q A V L A R R D			
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UniRef90_A4NWW8	D R K D R P G V M F A D M E L I G V P H M V I I G E K N L D N G E I E Y K N R R			
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90 100 110

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UniRef90_S6G310	S E Q Q I T V P V Q E F I D M L T Q Q I K D K	
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UniRef90_W4VIH7	E K N S D T I L L E D F K A L I K K E I Q D R T L R N	
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UniRef90_F8KVH0	F P W L I S P L Q V R I L P I V A D R H V E Y A R T L R K Q F K Q A G F H C D I D				
UniRef90_R5YIX0	L P P H L A P I Q V V I V P I Y K N A E Q L A Q G I A E T L L R G M G I S V K Y D				
UniRef90_T1BK28	L P P W L C P V Q V R I L P V T D R H V E L A Q G L L L E E L R A S H H L R V E V D				
UniRef90_K3WC49	L P P R V A P L Q V I V V P I P F K D K D K A D E I S K L L L K A G V R I E V D				
UniRef90_D4LA02	F H P A L A P F K A A V V L P I L S K K L L S E K A T E V I Y E M L A K H F P V D Y D				
UniRef90_F8AE99	L P P T I A P Q V V I V P I P K K D A E Y A R E I A E E L K V A G I R V V H V D				
UniRef90_T0IY32	W P A P I A P Y H V V V I V P V S E Q Q M A L A E K I Y T E L N A N G I E A I L D				
UniRef90_A7HWJ3	F P M W L A P V Q A V V T I T I S D A D P Y A E E M L Q K L L R D A G I R A E L D				
UniRef90_Q4N763	L P F W L S P N Q L L F I P I T D S H L D Y A L E Y E K F N A L G Y N V D V D				
UniRef90_E1VPW4	W P D A I A P F H I A L I P M N Q H K S P A A E A L Y E R L K Q A G Y E V F Y D				
UniRef90_R5B9E2	L H P A I A P Y K A A V V L P L Q K N K L L D K A R E I Y N M L S K K F M V D Y D				
UniRef90_F5WT10	F P L W M A P K Q I E I I P V N T E H M D Y A N E V C D L L L E K G I R A H V D				
UniRef90_UPI0003B4741A	L P P K L A P R Q V V I V P I V A K V L E A C E R I E Q E L S D A G I S V K L D				
UniRef90_E6W563	L P F W L A P V Q C S I I P V N D E L L P F C Q Q R Q I L T R L G Y R V E V D				
UniRef90_K4C807	L P P K V A T T Q V V V I V P V P Y K D A D A C A T T V K S L N E S G I R A E A D				
UniRef90_W5Y0C4	F P V W L A P P H Q V V G I P V S E D N V G H L E Q V I A K L R K K G I R A E V D				
UniRef90_A5DQS9	L P P R V A P Q T V V V I V P V G K G I N D G A A D I E A R L Q N A A D V R V T S D				
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UniRef90_R5ILX6	L P P A I A P Q V V F V P I Y K G Q E E Y M K E I A A E L E K K A G I S T K I D				
UniRef90_I2GH95	L P P K L A P I Q V V I V P I Y R K E E Q L A K P L I Q E L R K A G G I S V K Y D				
UniRef90_L1MCA3	L P P H V A P I Q V V I V P I Q E K F D A V L G E L T K K L Q T K G I R V V K Y D				
UniRef90_G8AHF5	F P M W L A P V Q A V V C T I T N E A D G Y G Q E V V S L L K R H G I R A E L D				
UniRef90_W7PRZ5	L P A W L A P V Q V V V L S I T E Q H A D Y A L E V A Q A L R G S G L R V V E A D				
UniRef90_R1D4Y2	W P F F L S P R Q A V V V P V S A A F N E Y A E E V R N Q L H A A G F Y C D V D				
UniRef90_UPI0001E88FF0	P P R I A P T Q V M I V P I A Q H K E D F A Y D L K E K I L S E F I R V G I D				

50 60 70 80

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UniRef90_E6TSM1	D S D Q S P P G Y K F N E W E L K G V P V R I E L G P R D L L E G N Q V M M K A R D
UniRef90_R5NRW0	D E A G S I I G K R Y R R E D E I G T P Y C V T V D F D T L E D G Q V T V R D R D
UniRef90_B8B9C0	E T D R T I I Q K K V R E A Q L A Q P H M I I I G N N E V I E A K T V S V R V R D
UniRef90_D3PEE1	S R N E K I I G Y K I R E A Q L Q K P H M I I I G N N E V I E A K T V S V R V R D
UniRef90_UPI00046345E3	D R K E R P P G V M F N D M E L I G V P F T L V I G E R N L L D E N K V E L K N R R
UniRef90_C0N838	D R G L R P G V A F A D M E L I G I P H T L V I G D R S I L D N G V I E Y K D R A
UniRef90_UPI0003FF3047	D R K E R P P G I M F A D A E L I G I P H T L V I G D R S I L D N G V I E Y K D R A
UniRef90_A0A024QFK0	A S D K M P P G W K F N E Y E M K G I P V R I E M G P K D M E K E Q V V L V R R D
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UniRef90_J0L4E7	D R N E K I M G Y K V R Q A Q V T K V P Y I L V V G D Q E V A S N E V A V R R Y G
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UniRef90_H6QP51	L R N E K I I G F K I R E Y T L R C I P Y I L C G K Q E L D S K T V S V R T Q K
UniRef90_B4P1Y9	D A G D T I M N K K I R N A Q L A Q F N F I L V V G D K E R S S N T V N V R T R D
UniRef90_L2F7B8	L R N E K I I G F K I R E H T L Q R I P F M V V M G D K E V E S S N Q V N V R T R E
UniRef90_U5QFL5	G T S E R L S S K K I R N G E V A K V P V L L V V G E K E A Q T G T V A V R D R S
UniRef90_B2GIM5	T S S D R F P K K I R T A S K D K I P F V V I A G G E D A E A G T V S F F R F R D
UniRef90_V5SDQ1	L R N E K I I N Y K V R E H S L A K V P V I V V V G K G R E A E E R K V S I R R L
UniRef90_R8BT89	D S G E T L P K K I R R A Q L A Q Y N F V F V V G A E E Q E N R Q V N V R Y R D
UniRef90_T0N9D1	E A G S I I G K R Y R R E D E I G T P F C T V D F D T L E D N T V T V R D R D
UniRef90_K9TJJ1	T S G E R L R G K L I R N G E K Q K I P V M A V V G G A K E V E A N Q L S I R T R A
UniRef90_W7BZJ1	F R E E E K L L G Y K M R E A Q M R K I P F I L V V G D K E R D S G S V S V R E Y G
UniRef90_V7B1P9	C H G E R L P K L I R N A E K Q K I P L M A V V G S K E V E T E T V T V I R S R F
UniRef90_UPI00047DE348	D R D Q T P P G F K F A D W E L K G V P V R L A I G L R D L E N Q T V E L A R R D
UniRef90_UPI0004787800	D S D D R M P K K I R T H T K S K V P F Q L I A G E E D R S N N A V S F F R F R D
UniRef90_H2S6G1	D A G C L L N K K I R N A Q L A Q Y N F I L V V G E K E K M T N G V N V R T R D
UniRef90_Q8IIA4	T S V N T L N K K I R E A Q L K Q F N Y I L V V G E K E L T T N T V T L R D R D
UniRef90_UPI00037A10C4	D K N E S L N K K I R T A E K Q R V P Y V V V I G D E E E V I Q N G T V A I I R N R R
UniRef90_F2I7K9	D S N N S A G Y K Y N E A E V K G V P L R I E F G P R D M E N G Q C M I K M R D
UniRef90_E8U628	D S S S N R M N A K V R A A E L L S K I P V M L I V G D K E Q E G R Q V S V R T R D
UniRef90_A0A023FMZ3	D P G C T L N K K I R N A Q L D Q Y N F I L V V G E K E K T S G T V N V R T R D
UniRef90_W5JP3	A S D D D R F G K K I R N A S K S K T P F I L I V G D D D Q A R G A V S F F R F R D
UniRef90_Q2JLF3	A D S D R L P K K I R N A E K A R I P F M I V G E Q E Q A A G T V S V R Q R H
UniRef90_B2V0R1	L R D T R F N K K I K Q A T L N R T P Y I V I V G D K E S K N M V T I R N R H
UniRef90_S3J6N9	D R K E R P P G V M F A D M E L I G I P H T I V I G D R N L D N E E V E Y K H R R
UniRef90_M1NT36	T S D D D R M Q K K I R N H T T G K V P F M L L A G A R D V I E A G A V S F F R F R D
UniRef90_D5X0W1	L R N E K I I N Y K I R E N A L S K V P Y L L V V G D Q E R D A G T I A V R A R G
UniRef90_D6XSU4	V R N E K L L G Y K I R E A Q M Q K V P Y L L V L G D Q E R D N A S S V N V R R Y G
UniRef90_I3Z0Q7	K R D H K P P G W K F A E Y E L K G V P L R I A M G P R D L E N N T I E V A R R R D
UniRef90_X1AAI1	K R D G T P P G W K F N Y W E M K G V P I R V E V G P R D L K A R K A V L F R R D
UniRef90_R7K7L3	N R S E K V G F K I R E A Q L E K I P Y M L V V G D K E A A E N K V S V R H R S G
UniRef90_B2RJD6	D R N E K V G R K I R D N E L K R I P Y M L I V G E N E S R E E E V S V R K Q G
UniRef90_E6UBS0	D S D Q S P P G W K F A E Y E M K G V P V R I E L G P K D I E N G Q C V I V T R H
UniRef90_R9C782	D S N E K L L G Y K I R A G Q M Q K I P Y L L V L G D K E E M K Q H T V N V R K Y G
UniRef90_E9E554	V S G N T L L Q K K I R A A Q L A Q Y N F V M V G A E E I E K R A V V N I R N R D
UniRef90_L5K3V5	D C G L T L S S R R V R R A Q L A N Y N F Q F V V G P R E Q S K G T V N I R T R D
UniRef90_X0UXH3	E R S E S T S K K V R D A Q L E K V N Y I L V V G D K E K Q D N T V N V R T R N G
UniRef90_X1F869	L S N E K I N A K I L A K A H S E K L P C M L V V G P K E T R S N T V N V R I R G
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UniRef90_UPI00047B5ED0	D G N D R F P K K I I R N A S K D K V P F V L I A G G E D A E A G A V S F F R F R D
UniRef90_K0BZG2	D R K V R P G F M F S D M E L L I G P H R I V L G D K G L D N G M V E Y R A R T
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UniRef90_UPI00042371CA	L R N E K I T Y K I R E H S L Q K P Y I L V V A G D K E R Q A G A V A V V R A R G
UniRef90_D2EFX6	I E N G T L D Y K I R E A Q L E K I P F I L V I V G D K E E E K K T I A V R N R K
UniRef90_C7LQ27	D R D E R P P G V K F N E A D L L G I S P M Q I V I G G K G L E K G V L E V V K N R K
UniRef90_T0MW88	D T D S S L N K K I I R N A E Q N W V P F V C V I G D K E M E S G K L A V R I R G
UniRef90_R6JR87	D A G S I I G K R Y R R Q D E I G T P Y C T Y D F D S V I E D G C T V V R D R D
UniRef90_B9DZA7	D S D K M P G W K F S E H E M K G V P I R L E V G P K D I A K N Q V V L V R R D
UniRef90_F6SI05	D P G L T L N K K I I R T A Q L E Q Y N F I L V V G E K E T N G T V N I R T R H
UniRef90_R7KWN8	D S D N S P P G W K F A Q Y E M K G V P L R I E I G P K D I E Q N Q C V I V T R H
UniRef90_UPI000368A48E	N R T H R P G A K F A Q H E L Q G V P L R I I A I G A R D L A N G T V E L A R R D
UniRef90_UPI0003AA2693	A S A D R M Q K K I I R N A Q K N K V P F M V I A G D D D M A N G A V S F R Y R D
UniRef90_F8KVHO	E S N E S V S K K V R N A Q L S Q I N Y M L T V G D Q E V Q N H T V N L R T R D
UniRef90_R5YIX0	N D N K R P G F K F A D Y E L K G V P V R L V I G G R D L L E N N T V E V M R R D
UniRef90_T1BK28	D T L E T L P K R I V R E A E V E R V P Y I A V V G D Q E I A D G T V A L R I R G
UniRef90_K3WC49	T R R Y T P P G W K Y N H W E L K G V P L R I F L E G P K D I A K E Q V V R V R D
UniRef90_D4LA02	E S G S I I G K R Y R R Q D E I G T P Y C T Y D F D T L L E D N C C V T I R D R D
UniRef90_F8AE99	E R D I R P G R K F Y D W E L L K G V P L R I E V G P R D V I E G K T V V I A R R D
UniRef90_T0IY32	D R N E R P P G V K F K D A D L I G Y P I K I T I G P K A I N E N L I E I K I R R
UniRef90_A7HWJ3	L R N E K I I N Y K V R E H S V A K V P A I F V A G K R E A E E G T V S S I R R L
UniRef90_Q4N763	R S S N N T L N K K I K F G Q Q Q R W N Y M G I V G D R E V E T R T V S S I R P
UniRef90_E1PVW4	D R K E R P P G V K F A D A E L L I G I P H R I V I V G D R G L D D Q Q V E Y K H R T
UniRef90_R5B9E2	D S G A I I G K R Y R R H D E I G T P M C T V D F D T L L E D N T V T V R D R D
UniRef90_F5WT10	G R N E K I L G Y R L R E A Q K N K I P L Q L I I G D K E I I E D R S V N V R R Y G
UniRef90_UPI0003B4741A	A S D Q K P P G W K F A E Y E L Q G V P V R L G I P G P R D L L E N N N V E L A R R D
UniRef90_E6W563	A S S E S M G K K I I R R S Q T Q K H P Y T L V V G K K E L L E E R I F A V R A Y G
UniRef90_K4C807	F R D N S P P G W K Y S H W E M K G V P L R I E I G P K D L A N N Q V R A V R R D
UniRef90_W5Y0C4	T S S D D R M Q K K I I R N H T T G K V P F M L L A G A R D V I E A D A V S F R F L
UniRef90_A5DQS9	Y R D Y T S G W K F A N W E L K G V P L R I V E F G P K D M A Q E Q V T A V R R D
UniRef90_U5C3K8	N R D T K P P G W K F A E Y E L K G V P L R I A L G P R D L L E N N S L E L A R R D
UniRef90_A6G4V6	D R S E K I L G L K I R E A T L L R V P Y M L V L G D K E V E A Q G V A P R T R D
UniRef90_UPI000376D5C4	T R N E K I I N Y K V R E H S H K K V P V I A V V G K R E A E E G K V A L R R L
UniRef90_R5ILX6	D R D N R S G K F F A E W E L K G V P V R I V I V G P R D L E R G E V E I C R R D
UniRef90_I2GH95	D S D N S P P G W K F A E Y E L R G V P V R L A M G A R D L L E N G T I E I V T R R D
UniRef90_L1MCA3	N E N K R P P G F K F A D Y E L K G V P V R L V M G G R D L L E N G T I E I V T R R D
UniRef90_G8AHF5	T R N E K I I N L K V R E H S L Q K V P V L V V V G K R E A E E E R T V A L L R T L
UniRef90_W7PRZ5	I R N E K I V G V Y K I R E E Q T L Q R V P F Q L I V G A R E A A S G S V A I R T R E
UniRef90_R1D4Y2	A S N R T L N K M V R E E A Q L S Q Y N F I L V V G K R E E A A E A A V N V R T R D
UniRef90_UPI0001E88FF0	A S D K K P P G W K F A E Y E M K G I P L R I E A G P R D I E Q Q Q V V L V R R D

90 100 110

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UniRef90_R5NRW0	T M E Q V R I P I N E V E K Y I E E R I E
UniRef90_B8B9C0	K A E L A T V S I D D I L T R F K E E V A A
UniRef90_D3PEE1	G E N K N N L D F Y E Y I S V L K E L D K T K S T N L W R
UniRef90_UPI00046345E3	T G E K L M V D I D T A I D V I K A A V K
UniRef90_C0N838	T G E G D E F P I E S V I E T I K Q K L
UniRef90_UPI0003FF3047	S G E K Q E V K I E E V I E F I K A K F A
UniRef90_A0A024QFK0	T G E K E F V P L T E L Q T R L T A L L E E V Q L N L Y T K A K N H R D
UniRef90_D3BMT5	N V V R G S I T V D A L I E E F K L N N K E F K
UniRef90_A0A024KIN1	T E G Q K V V P S M D A I V E L M A E V Q P P D L K R A
UniRef90_UPI0004792D2D	G E D L G A I D V T M F T D L V N K E I N S T L K T F K E
UniRef90_J0L4E7	E K K T V N V T K D E F V N E I L A D I A S Y S
UniRef90_A0A011P401	G R D L G Q M T L E A L T G R L L E E V A S R S
UniRef90_A0A058Z0N7	T G D K A T L S L D T I A T E I P A L L D T I H H N D M L A R A T A E R D A H
UniRef90_H6Q5P1	G K K F E K I N I E E F Y Y K L S Q E I
UniRef90_B4P1Y9	N K V H G E V S V A E L I T K I Q K
UniRef90_L2F7B8	G E N L G V M R V D E L L I K L V N T A V A L K
UniRef90_U5QFL5	D R Q Q S T Q S L E D L V A T I Q A R I T T Q R T
UniRef90_B2GIM5	G S Q H N G V S Q A E A V E L I A R H V A E R S N E N
UniRef90_V5SDQ1	S Q A Q T V M T L D E A L A S L K D E A T A P D L R
UniRef90_R8BT89	D T S T Q D V P L D E A V Q K L I K L R D E R A Y N P F P A A K T E G D A
UniRef90_T0N9D1	T M E Q I R L S I D E L A K Y I E E K M E
UniRef90_K9TJJ1	G G D L G T M A V A E A I E K M K V A N R E R T N
UniRef90_W7BZJ1	S E Q V E E M Q L A D F T R K L A G L I E A K S L
UniRef90_V7B1P9	G G E L G T M S V D D F I N R I K
UniRef90_UPI00047DE348	K E D K L S V P L A D V V T Q I L E E M Q Q S I Y Q K A L D F R Q A N T H
UniRef90_UPI0004787800	G S Q R N G V P V A E A I E L I T G A I E E R K N V N A A E
UniRef90_H2S6G1	N R I L H G E L S A A E V L A R T T L L K E S R C R N A A E E F
UniRef90_Q2IIA4	D Q N N Q H V T I Q E L I N K F N K L V N S K K F N Q K E F
UniRef90_UPI00037A10C4	T R E Q Y N L T K D E F M V E L N K Q L T E
UniRef90_F2I7K9	L E D K E A V N L D D L D K V A S E M E T M Q K R L Y D K A D Q F R H D H
UniRef90_E8U628	H K E R K G V A F D D L K A E L E R Y R T R A
UniRef90_A0A023FMZ3	N K V H G E F A V D D L V E R L N R L K K E
UniRef90_W5JP3	G S Q L N G V A V D N A L A W I N Q A I T S H Q
UniRef90_Q2JLF3	G Q E L L G S L T V A D F L D Q V Q A L
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UniRef90_K1X126	F P L W L A P Q Q I K F V P V A E I F T G Y A K E I A A Q M K A L W R A S V D				
UniRef90_W0JIT8	W P I S I A P F E V E I V Q L D K I N S Y C Q N L Y N Q L N A S N I E V L Y D				
UniRef90_T0DHB9	F P F W L A P E Q I V I V P V N D A H G E A A H K L K D Q L F A Q G Y R V K V D				
UniRef90_UP10003616EB0	W P N T A P F E V V L V P M N A H K S E R A E R L Y A D L T A Q G F D V L L D				
UniRef90_A0NWQ2	F P L W F A P L Q V A I V P V T D A V A D D Y G Q E V A D L L K A K G L K V E T D				
UniRef90_UP10002559FF8	L P P K L A P L Q V A I V P V T D A V A D D Y G Q E V I S S A I L R A K G I S V K F D				
UniRef90_V7ID36	W T N A M A P F Q A V I V P M N Y K K S E A A D K I Y A E L T A A G V D V L D				
UniRef90_R5QBE2	W P D A I A P F E V V I V C P M N Y A K S E A A D A L Y E D L K A R G V D V I L D				
UniRef90_R7IH41	L P L W L A P V G I V I I P V N K E H L E Y A T S Y E M L K D A N Y R V E L D				
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UniRef90_A7H7J7	W P P A I A P F Q A T V V T L G P E L K K A A D E L V K A L S D A G L E V L H D				
UniRef90_J0AX65	W P R A L A P F E V V I C P G D A V R Q T A T D L Y K Q L R K Q G V D V I L D				
UniRef90_Q8SSD7	L P P R V A M T Q V V V P C G E S L R A Y I N G C V Q L K N S G V R V H L D				
UniRef90_UP1000472741B	L H P A L A P F K A A V L P L V K K L G P A Q Q L Y E M L L K K F M V D Y D				
UniRef90_Q6U5R9	L P A W L S P V Q A V V M T I T D K Q H R Y A E Q V L K A L R R K G L R C E T D				
UniRef90_UP100036ADEED	P P R V A P L Q I V I V P I G E G V T E Y S R E I F E E L E S I K I R V K L D				
UniRef90_E1L1X2	W P I S V A P Y E V E I V A L D T N D D P Q A T A E K L T A R G I E V I V D				
UniRef90_U9UBW3	W P F W L S P R Q V I V P V A N S F S S Y A Q K V A D A C Y P D A K L Y V E T D				
UniRef90_C9ZNN3	W P F W L S P R Q V I V P V S L E N A A Y A Q T V R D T F F A G F F A D V D				
UniRef90_H1PRD1	W P T A L A P Y I V D V I P A N E E Q V K V A E E I Y E A L L N D G I D S M D				
UniRef90_N6WTL9	W P A A I A P F E V A V T L N A H K M E A A E K L Y D E L R H A G L D V L L D				
UniRef90_C4Y8C8	W P F W I N P R Q A I I I P V S D K H I H E A A E K L Q K Q L T G Y N F F V D V D				
UniRef90_X0SQV8	F P L W L A P V Q A V I I P I A D R H T E Y A E S I N E T F K N R R L R T L V D				
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UniRef90_I5AU0M0	F H P A L A P V K A A V L P L S K K L G E S A E K V F D M L S S K F N C E Y D				
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UniRef90_UP10003766D37	F P K E L A P F D I H V V P V N D T Q R E L S E K V T A M L E D A G Y Q V L V D				
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UniRef90_B3S7Z1	W P F W L S P R Q A M V I P V A A K F D E Y A M L I A Q V E E Q L M S H G Y E V L T D				
UniRef90_Q1WUG0	W P R E I A P F D I H V V P V N D T Q R E L S E K V T A M L E D A G Y Q V L V D				
UniRef90_D1NSS8	F P R L A P Y K A A V L P L S K K P E S V A H N L A A D L R L N D W M V D Y D				
UniRef90_Q1JXE2	F P M P I A P F Q V I I T L N P K D E Q V M Q E I Y Q Q L M D A G V E V L L D				
UniRef90_S7UPL4	L P P S A P F E A V V V S L A G K D A A K A E D I Y R E L G A L G L D V L L D				
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UniRef90_UP100047ACEF9	P P F L A P Y K A A V L P P M K K D H S E K A T E V I Y N M L S K Y F D V V Y D D				
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UniRef90_XOPUV0	W P K D I A P F D I H V V P V P V N A K Q M Q L A D N V D M L E E N H Y S V L L D				
UniRef90_D3HVV2	F P L W L T P D Q V A I L P I S E K Y N D Y A K S V A R Y F D S V G V R A I I D				
UniRef90_A6DET7	F P T F I A P F K A I F V P I S E N H I D Y A K E L Q K E L L K D D L K T E I Y D				
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UniRef90_K2EXC6	W P M S V A P F K V G I L N E G C K R L C D D L Y E K L L N N G V E V L Y D				
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UniRef90_W2BSG5	W P R S I A P Y D V M V L A T G D E V A K K A E I A E Q L A E E G F E V L L D				
UniRef90_A9TQ78	F P P R V A P L Q V V I V P I W K K D E A A A E K T E K I L K G A G L R V K L D				
UniRef90_E2SD78	W P R A L A P Y D V H I A A G K D E A V H A A R L Y D E L R A A G L D V L F D				
UniRef90_G5E132	L P P R V A C V Q V I I I P C G D A L L K K C D Q Y L K R L L N V N V R A R A D				
UniRef90_B0ER93	P P R A Q Q K V V I I T L N D M D A K A E E I L T Q I V R A F A D				
UniRef90_Q0G2G6	P L W F V P Q Q A V V A T I T S E A D D Y A R E V T V E L R D A G L K V E T D				
UniRef90_W6WFD2	P L W F A P M Q V V V A T I T S D A D D Y G R E V A E A L R E V G M V V E T D				
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UniRef90_S5ZWD3	L P V E V A P V Q V V V I P I Y Y K D A D K C R R L E E L L K G A G Y R V Q V D				
UniRef90_A4ITQ8	L H P A L A P Y K A A V L P L S K K L G D G A R R I Y E E L L A K H F M V D Y D				
UniRef90_G0UY53	L P P R V A S V Q V V I I P V G D K L V D G C K M L E R K L N S G G V R A R T D				
UniRef90_A0A031LPS6	L P T W L S P V Q V R V L P V N Q S V Q E Y A K T L S E M L K E K I R A E L L D				
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UniRef90_F2J532	F P P L W L A P R Q V V V A T I T S E A D D Y A K E V H A A L T K A G L R A D L D				
UniRef90_Q1IST4	L P A Q I A P F E V V V T P T N E K I A K G A E E I A A K L E A A G F D V I L D				
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UniRef90_C1F9K5	W P R S I S P F E I V I C P I G N K V Q E T A I K M Y E L I K K S N I D V I L D				
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UniRef90_I3EFS9	L P P R V A S V Q V V V I P C G E A L M A K C N E Y R R R L L G A D I R A R V D				
UniRef90_Q6TXE9	W P E A V A P F K V G L I N L K A G D G A C C E D M Y R A L S E Q G V E V L Y D				
UniRef90_V6EYK1	W P E A V A P F K V G L I N L K A G D G A C C E D M Y R A L S E Q G V E V L Y D				
UniRef90_C7MPD7	W P L S V A P A Q V C I P L A E E V E P A A E A L R H E L T A K L G E A A E A A G S V L V D				
UniRef90_B5JJC0	W P W A V A P Y Q V V I T P G M E E A D T L A I K L G E A A E A A G S V L V D				
UniRef90_K0SBF7	L P P R V A P L Q C V I V P I T E K I L A P Y C G S I L E S L Q E K D I R V K L D				

50 60 70 80

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UniRef90_B6JH58	D T D Q R P G G K F A T A D L I G □ P W Q I L I G P K G L A E G K V E I K C R A
UniRef90_E6VTT5	D R D E R P G V K F A E A D L I G Y P M Q L V L G G K G L A S G I V E A K D R K
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UniRef90_G0MG90	L R N Y Q A G W K F N H W E L K G V P I R F E I G P N D I L A K N Q V T A V V R H
UniRef90_UP10004774833	D R G L R P G A M F A D W E L I G V P H R V V I G E R G L K E G N L E Y Q G R R
UniRef90_K1X126	E G D D S F S K K I R N A E V E K V P Y I V I V G E K E E T T K T L S I R E Y R
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UniRef90_T0DHB9	D R N E T M G Y K T R Q I Q K S K I P F M F V V G D R E I E N N A V A V V R K H
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UniRef90_V7ID36	D R D E R A G V L L A D S E L L L G I P H R I A I G D R G L K E G K V E Y Y T E R
UniRef90_R5QBE2	D R D M R P G V M F A E W E L I G V P H R V V I G D R G L K K N G E I E Y A E R T
UniRef90_R7IH41	D S D E K L S Y K M R E S Q L R K I P I T L I L G Q K E E V D E K T I I S F R L F G
UniRef90_C1E0A5	Q S Q E R L A K L V R N A E K A K I P V M C V V G E Q E A K D G T L A V R T Y A
UniRef90_A7H7J7	D R E E R A G V K F K D A D L V G I P L R I S V G K K G L A E G K V E W K L R G
UniRef90_J0AX65	D R D A R P G M F A D W E L I G V P L R I T I G E R G L K E G V V E M Q A R R
UniRef90_Q8SSD7	D R N V T A G F K F N H W E I R G V P L R I E I G F K D M A S S E A C L V R R D
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UniRef90_E1L1X2	D R E E L R P G V K F N D A D L M G F P Y Q V V C G K K A L E R G C V E L K C R A
UniRef90_U9UBW3	L G E N T L N K K I R N A E I S Q F N F I F V V G A E E E A T N S V N I R N R D
UniRef90_C9ZNN3	N G T A T L E K K I R N A E L A R Y N F I L V V G Q A E Q E G Q S V N I V R T D
UniRef90_H1PRD1	D R D E R P G F K F K D A D L I G F P F K V V S G K R A G E G I V E L K I R R
UniRef90_N6WTL9	D R N E R P G V K F A D M E L V G P H R V V I V S D R G L G A G T L E Y K G R S
UniRef90_C4Y8C8	R R S E T V G N R I K D A D V K K G Y S Y I L M V G D K D I E E N G T V A R S R D
UniRef90_X0SQV8	T R R E K M G Y K I R D A E T N K I P L I I L I V G D R E D V E R K T A S L R I H
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UniRef90_B8EP84	D S A D R P G A K F A K L D I G L P Y Q A I V G P K G L A E G K I E I K T R A
UniRef90_U1FUW8	D R K E R A G V K F N D A D L I G L P V R V V V G K N A A E G I V E V K R R
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UniRef90_UP10003766D37	D R N E R A G V K F S D S D L I G L P I R V T V G K K A A E G V V E V K I K G
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UniRef90_D1NSS8	E S G A I G R R Y R R Q D E I G T P L C I T V D F D T L E D Q A V T I R E R D
UniRef90_Q1JXE2	D R D E R P G S K F K D A D E L I G L P I R V T V G N R A L L K E G A F E V Q K R L
UniRef90_S7UPL4	D R D E R P G V K F K D A D L I G L P M Q L V V G A K G L E R G V V E I K C R K
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UniRef90_D0JBD0	S R N E K I I N K K I D S E E K K I P Y M I I L G E K E E K N E M I S L R R H
UniRef90_UP100047ACEF9	T Q N I I G K R Y R R Q D Q I G T Y L S I T I D H E T M E N D T V T V R N R D
UniRef90_R7KDU1	D S E K S P G F K F A E A E V N G I P V R I I E V G E R D L N A N K I V L A R R D
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UniRef90_UP100032B1067	D P S L T L S R R V R A Q L A H Y N F Q F V V G R K E Q S S R T V S V R T R D
UniRef90_XOPUV0	D R K E R A G V K F A D A D L I G L P L R I T V G K K A E E D N I V E V H R K
UniRef90_D3HVW2	E R N E K I I G R K I R D N E L K R V P Y M V I V G E K E E S A E G L V S M R K Q Q
UniRef90_A6DET7	A S N D S L N K R I R N A E K Q K V A Y V V I I G D E E E V K V D G T V A I R D R R
UniRef90_UP10003B33CDB	D R D Y S P G W R F N E W E L K G V P L R I E I P G R D L S N Q Q V V L A R R D
UniRef90_K2EXC6	D R D L G P G A K F A D M D L I G L P W Q I I V G P R S V S S G Y C E L K N R K
UniRef90_B0K712	D E T G S I I G K R Y R R Q D E I G T P F C I T Y D F D S E N D H C V T I R D R D
UniRef90_C0QY98	D R K E R L R G V K L N D C D L I G I P I R I I I V G K K S L Q K G V V E F K L R K
UniRef90_W2BSG5	D R K A S P G V K F K D S E L I G V P T S V V I G K L L A E G K A E I R D R A
UniRef90_A9TQ78	V S D Q K A G F K F N F W E M K G V P I R E I G P R D V A E N V L V V A R R D
UniRef90_E2SD78	D R P G K I G V K F K D A E L L L G M P T I V V V G K G F A D G V V E V K D R A
UniRef90_G5E132	G R D N S P G W K F N H W E L K G V P I R L E V G P R D M K N K Q F V A V R R D
UniRef90_B0ER93	T N E H K P G W K F S E Y E M R G I P I R E L G P R D Y E G K K V V I V R R D
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UniRef90_V6EYK1	D R D D R A G V K F A D M D L I G L P W Q L V A G P K G V A A G L V E L K N R R
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90 100 110

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

50 60 70 80

UniRef90_S2S4Z2	D R N E R P G V K F A D S D L I G V P L R V T V G K K A V D E I V E L K L R K																																							
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UniRef90_X0Y2N4	D R D E R P G V K F K D C D L I G F P V R V I I S A K G L L K K G L V E V V K K R I																																							
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UniRef90_L0AZN5	A S G A S I I G K R Y A R N D E L I G T P L G I T I I D F Q S I I K D N T F T L R D R D																																							
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UniRef90_I2K1T7	D S G A I I G R R Y M R A D E I I G V P F C I T V D G Q T L L K D N T V T V R D R N																																							
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90 100 110

UniRef90_S2S4Z2	T G E T I L E V K K E E L I S S I K		
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UniRef90_C9D251	E K Q T K V E S L T N V T E E L A K		
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UniRef90_B4D0E5	K G N L G A K P R A E V I A D L L A A I K E R R		
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UniRef90_C7D9D2	E K Q S K V I A F D E V A P Q L A		
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UniRef90_F2IY10	S G Q R E S L S L E A A F N R V R E A I L		
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UniRef90_S9RP47	T G E S E E L S P E E A V K K V V A A		
UniRef90_A0RU18	D G K K S K V P L D G A A V N I E E E L C R V Q T E M L G A A K R A L D		
UniRef90_UP100032A912E	N E D H I I M S I E N N L K H F K D E V A A		
UniRef90_D0JBI1	T Y E K I Y I S L L K N L I P K L L D D I Q K N I Y Q K A L D R T Q R L T T Q		
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UniRef90_U3AAY4	D G E Q T T T D R E T L V A D V E D H L E A K L Y A A A E E N L E E N		
UniRef90_K0F2P3	D A G K Q A V P L D S L P E R I L D E F Q A F L L A R A T E F R E S H T		
UniRef90_C5CXW9	D T A A T K V P A A G I A E F I A G K F A Q		
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UniRef90_C4G9A5	S M E Q V R L P I		
UniRef90_W5HVR3	N G A K V D I P S T D L V E H V K V L L D G I Q D S L F E T A K Q K R D A		
UniRef90_F7XUW5	S S D Q Q N M M N L N E F I T Q V V A E S R S P A N		
UniRef90_B1HQZ9	UniRef90_U1EH67	T G E T T F E W K K E E V I D R L N E	
UniRef90_UP100041BEE14	T G E V V I E I N K D E L V N T I		
UniRef90_H2SX03	E G T K E T V P L G M L A E A V A T A L E A A Q Q E L W D E A L R H R E		
UniRef90_S8BV06	T G A K V T V P E A E V A K Q L P A M L E D I Q T C L F K K A S D D L T S N		
UniRef90_UP10003630273	S G E K S P I S L N L N V P S V N K L L E T I Q N D L Y Q K A K H S F D S N		
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UniRef90_UP10003B75018	K I D K M Q M K F D D A L S F I Q		
UniRef90_J2Z831	T G E R T Q V P I D E V V V A A L A		
UniRef90_I0JMP9	T G E T I E V Q K S E L V N T I Q I L L K Q		
UniRef90_Q5WFT6	S S N Q Y D L E Q E E V V N Y V T N W Y K S		
UniRef90_C7P2C2	T G E Q L E L T A S E L V R W L N D F L R E		
UniRef90_X0X3I0	D G E S I T E S R D G L E T T V R D E V F A K L Y A S A E E		
UniRef90_UP1000421A187	E E E K M E I H V D E I G D L L K S R L N		
UniRef90_V6Q2U5	T G E T V E V R K E E L I E T I L N I L M N A		
UniRef90_R7HTX4	T M E Q S R V A I A D I A G I L D K E V T M K S L		
UniRef90_I1A5L7	K E E T I T L S V E S F I D F I S K L K S S K		
UniRef90_I4X9I0	T G E T T L E W T S E E L L D Q L Q Q		
UniRef90_D8K0E9	S M T Q V R I P I E E I K A Y L		
UniRef90_M5ANG1	T T E Q V R V P I D E L L L T T V S E R L		
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UniRef90_V3ZTR9	T M K Q V R A K M E E I P Q V K D L V D G R R		
UniRef90_M1LMF0	N G E M E V M K I K D V C N I I K T E F D K N N I K L		
UniRef90_W6JSU0	S G E R R T V P V A D A I A E I T R E V		
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UniRef90_B2VV77	T T E Q V R S S L D E I A K A I A N I V K		
UniRef90_UP100047D61C0	S M E Q E R V A I A D L R E K I		
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UniRef90_I2K1T7	T G A K S S I K L A E I D K K L P E L F D E I H N S L Y K K A K D T F D A H		
UniRef90_D5VQJ2	T R E Q E R V K I E E L V D Y L R S K I S S		
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UniRef90_D3F0I0	E G D E G S L P V A E F V A R V V S E T E Q R S		
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UniRef90_UP10003498B36	T G E T R E V A V E G A A R A V A E R V Q S		
UniRef90_W8RP00	T G E S E E M T P E A A I A R L A		
UniRef90_I6ZQT8	S G E K I I V Q L S E L L K D K L K E L L D		
UniRef90_A5G4T7	G N N L D S M K P A E L I E F I E K E V K S		
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50 60 70 80

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UniRef90_UPI00026276D9	D R D N R P G D K F F H W I Q	P V R V E I G P R D I	K Q S A M V A R R	R D
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UniRef90_K2FSK9	D R D A R A G E K F A D S D L I	G P Y R I V V V G	R G W S N G T V E I R	D R R
UniRef90_M3UNY6	D R K A S P G V K F K D S E L L	G M P I V V V G	R G W S N G T V E I R	D R R
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UniRef90_X4QWP0	D A G A V G R R Y R R Q D E I	G T P Y C I T V D F	D S L E D K A A T V R	D R D
UniRef90_F2N2L0	D R D K K P G V K F A D M E L I	G P H R V V S D R G L	A D G M L E Y Y K H	R R
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UniRef90_M6T3H5	D R D V G P G F K L K D S E L I	G I G F P I R I T I G	G K K F F E N G E V S I Y N R	K
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UniRef90_F4GJT6	D R K E S A G V K F A D A D L L	G M P I R I T V G N R S L L E G K V E V K L R	S D	S D
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UniRef90_UPI00047DBE9E	G R T E T V G R K I R E T E L	A K V P L M A V I G D T E A E A H T L T L R H H	G	G
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UniRef90_A0A017TH00	R R D I R G G D K Q W E W V K K G A P L R V E I G P R D V E G G G M V M V A R R	R D	R D	
UniRef90_A3JZI7	D T D E R A G G K F A T M D L I	G L P W R I T V G P R G L K N G V V E L T S R	R R	R R
UniRef90_E0DFM0	D R P K S P G V K F K D S E L L	G M P Y I V V L G R S F S N G I V E L R I	R R	R R
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UniRef90_E9C2X4	D S S A S I G G R R Y A R T D E I	G V P P F G V T I D F D T V K N S S V T L R E	R D	R D
UniRef90_U6EOB9	L Q D K T P G W K F S Q Y E L	K G V P L R I E I V G K R D L A Q D E V T V F Q R	R D	R D
UniRef90_K7RXC2	D A Q A I G K R Y R R Q D E I	G T P Y C I T V D F D T L V G D N A V T V R D	R D	R D
UniRef90_G0W571	D S G V S I S I G K R Y A R R N D E L	G T P G V V T I D F E S V R D N S V T L R E	R D	R D
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UniRef90_S2Z6M9	D R P K S P G V K F K D A E L L	G I P Y T V V L G R A F K D G E I E F R V	R A	R A
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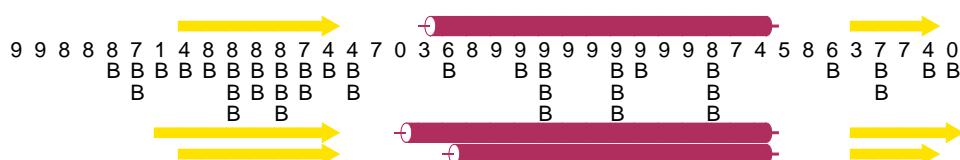
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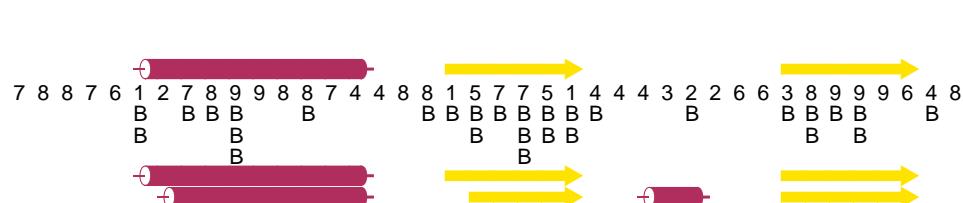
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 M | V | I | P | L | G | E | D | T | V | S | Y | A | L | K | V | C | E | I | L | R | E | K | G | K | R | V | E | L | S
 W | P | Q | A | I | V | P | Y | R | A | V | V | V | G | L | A | K | K | E | D | D | A | A | K | A | A | G | T | L | A | T | V | W | P | D | V | V | L | D
 W | P | V | A | C | A | P | F | E | Y | Y | V | I | A | G | N | V | K | K | P | E | L | A | E | A | A | Y | N | R | I | L | E | R | G | R | S | A | V | L | D



lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm

	50	60	70	80
UniRef90_B9LS53	D S G S I G R R Y R R Q D E	I G T P F C V T I	D R D G I E G D T	V T V R E R D
UniRef90_G0QB29	L K D R N V G N Q I S Y A D S S G A R H T L I L	G P E E L E D G T	V S V K D M V	
UniRef90_UPI0003B68823	K R P G K A T A K R W A W V K K G V P L I L E I	G G R D A E N G Q	V S A V R R D	
UniRef90_X1MU80	D E V G S I G R R Y R R Q D E V G T I F S I T V	D F O T L E D D T I	T C R D R N	
UniRef90_V4JYC9	D R G D T P G E K Y Y L W D A K G V P I R E V	G L R E A S S K T	V T L V R R	
UniRef90_A8L6R6	I G P E R G S L G A R V R Q S K L V P Y Q A V I	G A Q E S T D G H I	A L R L R D	
UniRef90_A0A034WFT8	D S S G S I G R R Y R R Q D E V G T P F C V T I	D F D T L K E H S V	T L R D R D	
UniRef90_R5NW92	P D S A K M K K Q M S Y A N A K A V P F V A I	G G E N E M N E G K V	T L K N M A	
UniRef90_D4KDS1	F A G R S R M K A Q M K Q A N A K A F T I L L	G E D E L Q A N S V	V L K N M N	
UniRef90_U2YRA0	D S G N I G R R Y R R Q D E V G T P F C V T V	D Y D E S V E E D T	V T L R E R D	
UniRef90_L0IZM9	D N G Q A F G W R A T D W D L Q G V P I R V E I	G P R D L A E N A A L L	Y R R D	
UniRef90_K1MQN2	P E A A K L K K Q F A Y A E K K G I H H I F I	G E K E M A T A S V A	V K N L L	
UniRef90_UPI00037BB686	D R E V A A G E K F G D A D L I G L P Y R L V I	S E K T G D K I E F	K K K R Q	
UniRef90_UPI000380ABBC	Y L S R S L K A Q M R Y A D K L G A R F V L I L	G D E E L K E N T V	T I R D M Q	
UniRef90_C9LJF7	F G E R S L K G S M K A A D K S G A Q F V V V I	G D S E I E Q G E V A	L I K R M S	
UniRef90_R5FTW0	P D S V K M K K Q M S Y A N A R N V P Y V A L	G A D E M R D G T V S	L K D M V	
UniRef90_G8TWG8	L M G R S V K A Q M K Y A D K I G A K Y T L C L	G D D E I Q R G V A T	L K N M L	
UniRef90_E7GCD1	R R N Q K I G Y K I R E A Q L Q K V P E M L V V	G A R D E E N Q T V S	V R I R E	
UniRef90_G7CD19	Q C D R G L K G Q F K S A D R F H A H F S M I I	G E E E V K K E V V N M K C N H		
UniRef90_T0GPT2	Y G D R G L K G A M R A A D R S G A A V A V V A	G D R D L E A G T F G	V K D L A G	
UniRef90_G4D1A5	Y R G N M K K R M Q R A N A S G A K W A V I L	G D D E L A R G E A A V R N L G		
UniRef90_C5KF21	T E K A K L G K K F K Y A D A L N I P Y T I V V	G E N E V Q T G K Y A I K D M A		
UniRef90_D1W340	D R D K T P G Y K F N H W E L K G V P L R I E V	G A K D L E K G G V V T F V R R N		
UniRef90_UPI00047568F6	P D A V K M K K Q M S Y A N A K Q I A F V A M A G	E N M Q E N K I T I K N M E		
UniRef90_R7GBI6	D R D E R P G V K F S D I E L T G I P F R V T V	S A R G I G N G T A E V T D R R S		
UniRef90_K1XU17	I E Q Q K L G K K F K Y A N N I N A R Y V I I I	G E D E I K N N V I T L K D M S		
UniRef90_A3Z5K0	D R K E G I L G E K L K D S D L V G I P L R A I	V S E K N G M Q I E V K K R K		
UniRef90_A6LIF7	D R Q E R A G V K F K D A D L I G I P W R I V V	G A D G Q V E L V E R A		
UniRef90_H2M0E5	P E S T K M K K Q M G Y A D A K K I P F V A I V	G E N E M A E N K I L N K N M L		
UniRef90_UPI00040554F3	D S S G S I G R R Y A R T D E I G V A F G I T I	D F D T V I N K H T A T L R D R D		
UniRef90_B1ZXR6	D R T V S P G V K F A D A E L V G V P Y I V V A	G R G L A N G V V E V K R R S		
UniRef90_Q97CE6	G G A I G R R Y R R Q D E I G T P W C V T I D	F D T I L E K D T F T L R E R D		
UniRef90_UPI000415FEA5	□ M D R S L S S Q L K Y A S Y E G C E Y A V I A	G E R D L E N N S V T V R D L S		
UniRef90_E0NQG5	P F G T K L K K Q M Q Y A N D K N I P Y V I V I	G G D E M Q S G K L T F K S M Q		
UniRef90_UPI0004797274	P D K A K M K K Q M T Y A N A K H I P F V A L A	G D D N E □ A E N K I T V K N M E		
UniRef90_P07236	P D A A K M G K Q M G Y A D K R N I P F T I L A	G D K E M E A E S F T L K N M K		
UniRef90_X4ZPQ2	I R N E P V G Y R I K S A I L K N Y S Y L I I V	G D E E I V Q L Q K Y N I R E R D		
UniRef90_I3JEL7	Y L G R K M K A Q F K S A D R M S A R T F T A	I L L G E E E L V Q L Q R G E I A L K S M A		
UniRef90_R5Z294	D S S G S I G R R Y A R S D E I G V A F G I T	D F D T I V N K H T A T L R D R D		
UniRef90_J3EXM2	V E K S S K I K K Q F K Y A N N L E I P P Y V I	G E D E I I L N N G T V S L K N M Q		
UniRef90_H3SNN5	E S G N I G R R Y R R Q D E V G T P C V T V	D E E G D T V T L R E R D		
UniRef90_A0A023NTP2	Y Q G R K M K A Q M K S A D R M H A R Y A G I	L G D D E L S R G E I A L K E L A		
UniRef90_K0AZR7	L E G G K L G K Q F K Y A D R A G I R F V I V	G E D E I L A K G V V T V K D L R		
UniRef90_UPI0001C36F86	D R N E R A G V K F K D A D L I G T P I R V T V	G K K A S E N I L E F S L R K		
UniRef90_R6Z106	L M G R G I K P Q M K Y A N K I N A A F T V V I	G D N E L E S G K V K L K E M S		
UniRef90_L1KYK8	D R D N S I G A K I K D V K I L G T P Y M I V L	G D K S K E D E F E I L E S T K		
UniRef90_H0QZK6	L E P R K L S K E L V R A D Q V G A Q V A V V I	G D R E I L A D R R V E V K D L K		
UniRef90_S3B5H6	Y G D R G L K G A M K A A D R S G A H L A L V L	G D R E I L A E G V A Q L K N L D		
UniRef90_UPI0003795856	P S K R S L R A Q M R Y A N T M K V P Y V L V I	G D E E I N R G T V V I R D M K		
UniRef90_K2RSC4	D R N V A M G W K L G D A D L V G F N V V V I	G K A W R D G G K C E V Q C R R		
UniRef90_R6PE95	T V I G R S V V K A Q M K Y A D K I G A I Y N V	G D D E I T A N D K V R L K N M L		
UniRef90_F0XWZ5	D A A G N I G R R Y R R Q D E I A R P S A L L	D D G A V T V R D R D		
UniRef90_UPI00030F614D	Y M E R K V K G Q M K Q A D R L N A K H T V V I	G D Q E L E E K N I N V K N M E		
UniRef90_UPI000382EFEC	Y G G Q G L K G A M K A A D R S G A A F A V V	G D R D L E Q Q T A Q V K D L R		
UniRef90_Q2W136	R R P L A P P E K R W E W V K K G A P I I C E	G P R D V A G G S V A M I R R D		
UniRef90_S7W8X7	M L K G T I G K K Y S I A D E I G P F C T V D	E E S I S D K Q I T I R E R N		
UniRef90_U1PKA3	D R D N R P G F K Y N E W E L K G V P L R V E	I G P N E C A E E T A T L V H R P		
UniRef90_E6L8G8	D R N E R Y G V K M N D F E L M G F N Y A L I	I G P N E C A E E T A T L V H R P		
UniRef90_W0DBH5	Y K R A G L K K Q L E L A N K L K A D Y A V I	G D E E M R E E S V S I K N L H		
UniRef90_X1L711	D R K E S P G V K F N D A D L L G I P R V T I	S P R T L E T N S V E I K W R S		
UniRef90_W4GHU8	D R G E R P G L K L T E A E L I G Y T W R V V	G K R F A S E G L V E V L H R P		
UniRef90_W8TGY9	D R S E R I G S K F I D C E L L G V R G V V V	G K L A S Q G M V E V R D R K		



90 100 110

UniRef90_B9LS53	S A V Q V R V P A E E L A T E L T A L	
UniRef90_G0QB29	S G E E R Q V D R T D V L D V L	
UniRef90UPI0003B68823	D G K V N F V A K D D F V A S A A A E L E S	□ Q A A L F A Q A E A R R D A Q
UniRef90_X1MU80	T M A Q E R V K I K D L V K S L K E K L E N	
UniRef90_V4JYC9		
UniRef90_A8L6R6	G H R L D P Q P T G D I L S R I S A L I E A H S T N □ W D	
UniRef90_A0A034WFT8	S □ L K Q V R I G I N E V T E V V K D L C T G K	
UniRef90_R5NW92	T G E Q L L L T P D E M I N I I K K	
UniRef90_D4KDS1	E S T Q E T I S □ D E L L N K L T T L T K	
UniRef90_U2YRA0	S T A Q V R V E T D D L G S V L E A L	
UniRef90_L0IZM9	T R D K V K V G I D Q V V D E V Q Q L L T S R I Q D D M F E A A T □ V R R D D	
UniRef90_K1MQN2	T G E Q T E M K V E E F I	
UniRef90UPI00037BB686	E E N S E I L G F S E V V L K R L K K D	
UniRef90UPI000380ABBC	R S Q Q W R E P L D R V V V A T L A A L V T E R L	
UniRef90UPI00037D88C5	D G V V T S V K I D E L L Q K E L S E R	
UniRef90_C9LJF7	N G E Q K T L S I E E V I R L I S E	
UniRef90_R5FTW0	S G E S A E V N L E S L	
UniRef90_G8TWG8	□ G D V G A K P W P A Y L D E L R	
UniRef90_E7GCD1	S K E Q N E V L L E N I V A F I E A	
UniRef90_G7CD19	S G E E Q V D V P M D A V L D D I L A R L N	
UniRef90_T0GPT2	T G E E Q A V A L D A L M D M L T A	
UniRef90_G4D1A5	K Q E Q E S L T I E Q I I E K L K	
UniRef90_C5KF21	T G R K	
UniRef90_D1W340	T G E Q I L V P I S D F M D V F S E Q R K	
UniRef90UPI00047568F6	T R E E T V H I P L P D V A S H L K S A L	
UniRef90_R7GBI6	S G E Q N T I T L E E T I T V V V Q K	
UniRef90_K1XU17	E K D A H L V S Q E Q L L S L V T K	
UniRef90_A3Z5K0	T R Q A D V L T V D A A I E R V L A A V A A	
UniRef90_A6LIF7	T G E Q T L V T I E E L I E R F	
UniRef90_H2M0E5	S M R Q I R A E V S E L P V I V R D L	
UniRef90UPI00040554F3	T G D R T D V E V G A L V D H L R T A L D A	
UniRef90_B1ZXR6	S M K Q S R I T E A E L F A L L D E K V Y	
UniRef90_Q97CE6	T G E Q E I V T L G D L V P F L E K	
UniRef90UPI000415FEA5	S G T Q E S L S I A E I I S Q L	
UniRef90_E0NQG5	T G T Q Q L V S A K E L I T L L	
UniRef90UPI0004797274	S G E Q R A L N F S E L E Q F L K	
UniRef90_P07236	N R K S E K L T M S Q I W E K F I E L E K N	
UniRef90_X4ZPQ2	T G E Q R T V K L E D L G E V L A E Q	
UniRef90_I3JEL7	S M R Q I R A E I T E I P D I V Q D L A N D T L K W A D	
UniRef90_R5Z294	T G E Q T E I K I D E L C E	
UniRef90_J3EXM2	S T A Q Q L R L P V D V L V E E L V A V R S G A K P F D A L R E D Y E A	
UniRef90_H3SNN5	S G E Q R F V P L S E L I A Q Q L K Q	
UniRef90_A0A023NTP2	R E D Q F E V S R A E L I K A L R V E L A Q	
UniRef90_K0AZR7	D G N K E E V N V S E V V M N K I K E E F T N Q G L R	
UniRef90UPI0001C36F86	K G E E T E V A L L D D F V G A F D S V Y I D K M F E E I D E A	
UniRef90_R6Z106	T G E K T T V K F D D L S K F F L E	
UniRef90_L1KYK8	T R E E Q I E V T L S E V V V G Q V N K L L	
UniRef90_H0QZK6	T G E Q Q Q V S L L D D V V V A S V Q G L L E	
UniRef90_S3B5H6	S G E E Q K S V A L L D R V V A E V Q A E L L R	
UniRef90UPI0003795856	Q G T Q R E V T L G E A L N E I Q N Q	
UniRef90_K2RSC4	□ G I K E D V V A E K L G E F V A Q L L	
UniRef90_R6PE95	N G E Q R E I T L L S A I I E D E L K N L	
UniRef90_F0XWZ5	T T D Q V R L K I E D V V P Y V T K L V E	
UniRef90UPI00030F614D	T G T S E R I D L N E L V N Y F R N	
UniRef90UPI000382EFEC	S G D Q Q A V P D E V V V Q R L V V Q A V V Q T Q T T K E	
UniRef90_Q2W136	G E L K Q Q I P K D E L V S R I L L E D I Q K T L F T Q A A T A L K E R T	
UniRef90_S7W8X7	S T Q Q I R V E I E G I E K T M K D L I D G K	
UniRef90_U1PKA3	D G E T D T V E R D G L A D T V Q E H L D T V H A K L Y A S A E E T L E A	
UniRef90_E6L8G8	D L G K I K L K A D T A L T E L K K V L	
UniRef90_W0DBH5	T G E Q V K L S L K E L F S H V L	
UniRef90_X1L711	E K E S Q L L P L E G I A E R L K G L I	
UniRef90_W4GHU8	T M Q M N H V L V D N V Q A H I Q Q	
UniRef90_W8TGY9	S G S T C E A S I E E L A D N L	

lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm

