

QUERY  
UniRef90\_Q0TQJ7  
UniRef90\_UPI00042651EC  
UniRef90\_Q9RSF8  
UniRef90\_UPI00037D1D99  
UniRef90\_A6TVU0  
UniRef90\_B1QZN7  
UniRef90\_C5D2F9  
UniRef90\_C4L2Y4  
UniRef90\_X1JAW5  
UniRef90\_D6XWS7  
UniRef90\_U2ER10  
UniRef90\_UPI00037B5DD9  
UniRef90\_S6A9A9  
UniRef90\_R713E7  
UniRef90\_V6M308  
UniRef90\_UPI000255558B  
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UniRef90\_UPI0003456876  
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UniRef90\_D1AIR7  
UniRef90\_R6L4E4  
UniRef90\_G2PMV8  
UniRef90\_U2FR11  
UniRef90\_Q92AF2  
UniRef90\_F2F4V1  
UniRef90\_R6S1S4  
UniRef90\_E0NN16  
UniRef90\_R7CP47  
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UniRef90\_R6QTF9  
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UniRef90\_Z9JPE7  
UniRef90\_B2U698  
UniRef90\_F8HYC1  
UniRef90\_G9YKG6

	10	20	30	40
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S   H   G A K E G Q I   A E T   I L L P G D P   R A K F I   A E T   F L   E N P   V C Y N N				
S   H   G A K P G D I   A D T   V L L P G D P   R A Q Y I   A Q T   Y L   E N P   V Q Y N				
S   H   N A E K G Q I   A E T   V L L P G D P   R A R H   A E T   F L   E N P   V Q H N				
S   H   A A K P G D I   A E T   I L L P G D P   R A K Y I   A E T   Y L   Q D   V T C Y N E				
S   H   G A K K G E I   A E T   I L L P G D P   R A K F I   A E N   F L   E D   V V I C Y N E				
S   H   N A K Q G E I   A E S   V L L P G D P   R A K Y I   A E T   F L   E D   V V I C Y N E				
S   H   E A K Q G E I   A D K   I L L P G D P   R A K Y I   A E T   F L   E G A T C Y N R				
S   H   G A Q E G Q I   A E T   V L L P G D P   R A K Y I   A E T   F L   E D   V E L Y N E				
S   H   G A K E V D I   A S T   V L L P G D P   R A K Y I   A E N   F L   T D   V I C Y N E				
S   H   G A N K G D V A E S   V L L P G D P   R A K Y I   A D N   F L   E D   V T Q Y N E				
T   P   G A K A G E I   A K T   V L M P G D P   R A K Y I   A E T   F L   E D   V V Q F N S				
S   H   L A A K P G D I   A P   V A L M P G D P   R A K Y I   A E T   F L   E N A K C Y S E				
S   H   E A K Q G E I   A D K   I L L P G D P   R A K F V   A E N   F L   E N P   K C Y N N				
T   P   H N K A N V G D I   A K T   V L M P G D P   R A K Y I   A E E   F L   D N V   V C F N T				
S   H   G A K P G E I   A E T   I L L P G D P   R A K Y I   A E T   F F   E G A T C Y N N				
S   H   A A K P G D I   A E T   I L L P G D P   R A K F I   A E N   F L   L E K   P   V Q Y T G				
S   H   E A K P G E I   A D K   I L L P G D P   R A K Y I   A E T   F L   E N P   V C Y N Q				
T   P   H S A A P G D F A E T   V L M P G D P   R A Q Y I   A E H   F L   D D A K Q   V T S				
S   H   L E A K A G E I   A E S   V L L P G D P   M R A K W   A E I   F L   E N A K C Y N D				
S   H   H N Q A K Q K G E I   A K T   V L L P G D P   R A K F I   A E H   F L   T D A   V C Y N E				
S   H   A A K K G E I   A E T   V L L P G D P   R A K Y I   A E K   Y L   E N P   V Q Y N N				
T   A   H N S A K A G D F A K T   V L M P G D P   R A K Y I   A E T   Y L   E N P   R   Q   V N A				
S   T   H   E A K Q G E I   A E T   V L M P G D P   R A K W   A E T   F L   E N P   F   C Y N K				
T   A   H   E V K E S D I   A E T   V L L P G D P   R A K F I   A E N   F L   E N P   V Q F N T				
S   T   H   L E A K A G E I   A E S   V L L P G D P   M R A K W   A E I   F L   E D V V L F N Q				
S   H   H N Q A K Q K G E I   A K T   V L L P G D P   R A K F I   A E H   F L   T D A   V C Y N E				
S   H   A A K K G E I   A E T   V L L P G D P   R A K Y I   A E T   F F   E D V V V Q Y N E				
T   P   H   E A K Y G D F A E T   V I M P G D P   R A S H   S E N   F L   I N A K L I N S				
T   P   H   L R A K E N E F A K T   V L M P G D P   R A K Y I   A E N   F L   D N V V L V N D				
T   P   H   N S A K K G D I   A K K   V L M P G D P   R A K Y I   A E T   Y L   E N P   V C F N T				
S   H   H T A A K K G E I   A E T   V L L P G D P   K R A K W   A E N   F L   L K D   I Y C Y T D				
T   A   H   L A A E K G A F A K T   V L M P G D P   R S K F I   A E T   F L   E S   P   V L V N D				
S   H   H T A K K K G D I   A E T   V L L P G D P   M R A K W   A E T   F L   L K N   P   T C Y N D				
T   P   H   N G A E K G Q I   A K T   V L M P G D P   R A K Y I   A E T   Y L   E N P   V C F N G				
T   P   H   E A K A G D F A K T   V L M P G D P   R A K Y I   A E T   Y L   E E Q   V   R   C   V   S   R				
T   P   H   S T H I L E A K V G D I   A E T   V L L P G D P   R A K Y I   A E N   F L   E N P   V C Y N D				
T   P   H   L E A K A G D F A K T   V L M P G D P   R A K Y I   A E T   F F   E D V V Q Y N T				
S   T   H   H N G A E K G Q I   A K T   V L L P G D P   R A K F I   A E T   Y L   D N P   V   R   Y   S   E				
T   P   H   V L E G Q E I   A E T   I L L P G D P   R A K L   A D T   F L   D N S   V   Q   F N H				
T   H   H T H H I S A K P G E F A E T   V L M P G D P   R A K S I   A E N   Y L   E N V   R   Q   I   N   E				
T   P   H   N N A K P G D F A K T   V L M P G D P   R A K F I   A E T   F L   E N P   Q   L   V N N				
T   I   H   G A Q P G E I   A E T   V L L P G D P   Y R A R W A   A E N   F L   T D A   K   L   V N E				
T   P   H   K A E R G D F A D T   V L M P G D P   L R A Q Y I   A D T   F L   S   N   V   R   Q   V   N   A				
T   P   H   T H H I N A E M G D F A D V   V L M P G D P   L R A K Y I   A E T   F F   E D V   K   Q   V   C				
T   I   H   G A K P G Q I   A E T   V L M P G D P   Y R A R W A   A E T   F F   D D A   P   E   L   V N D				
T   P   H   K A E R G D F A D T   V L M P G D P   L R A R Y I   A D T   F F   E D A   V   C   F   N T				
T   P   H   H N A A H E G Q I   A K T   V L L M P G D P   L R A K Y I   V A D   H   Y   L   E N V   V   E   C   F   N T				
T   A   H   T H H I N A N N K G D F A K T   V L M P G D P   L R A K Y I   L A E   H   Y   L   E N V   V   R   E   V   N   A				
T   P   H   I S A S P G D F A E T   V I L M P G D P   L R A R Y I   S E R   F   L   E N A   R   S   V   T   A				
T   P   H   K P N G V E I   A A E T   I L L P G D P   L R A K F I   A E T   F F   E D A   V   C   F   N E				
S   L   H   I A A R D G E I   I A D R   I L L P G D P   L R A K Y I   A E T   F F   D D A   V   C   Y   T D				
T   P   H   G A R P G D F G Q T   V L M P G D P   L R S K F I   A E N   F L   T D P   V   L   V N N				
S   T   H   H N G A K P G E I   I A E R   V L M P G D P   L R A K W   A E T   Y L   E G A   Q   C   Y   S   T				
S   L   H   L E A E K G A I   I A E T   V I L L P G D P   L R A K W   S E   H   Y   L   K   D   A   V   C   F   N T				
T   P   H   N S A L Q G Q I   A E T   V L L P G D P   L R A K F I   A E T   F F   E D A   E   Q   F   N T				
T   P   H   I N P S G A P I   A E T   I L L P G D P   L R A K F I   A E T   Y L   D D   V   V   Q   F   N   S				
T   F   H   I G A K P G E I   A E T   V L L P G D P   Y R A R W A   A Q   T   F   K   D   A   R   L   I   N   E				
T   P   H   I D A K P E D F A K T   V L M P G D P   L R A K F V   A E T   F F   F D S   P   K   L   I   N   E				
T   P   H   I K A E K G D F A E T   V L M P G D P   L R A K H   I A D T   F F   L   S   N   V   K   L   V   N   E				
T   P   H   H N Q A T K G E I   I A K T   V L M P G D P   L R A K F L   A E T   Y L   E E N   V   K   Q   F   N   T				
S   T   H   H N G A Q P G Q I   A E T   V L F M P G D P   L R A K F I   A E N   F F   E D V   E   Q   Y   N   A				
T   P   H   I N P H G V E I   A E T   V L M P G D P   L R A Q Y I   A E N   Y L   E E N   P   V   Q   F   N   E				
T   P   H   I S A P A G A F A E T   V L M P G D P   L R A Q Y I   A E T   F F   E N A   E   Q   V   T   A				
T   P   H   I N A Q A G A F A E T   I L M P G D P   L R A K F I   A E T   Y L   D D   V   T   Q   V   C   D				
T   P   H   I N A Q S G A F A E T   I L L P G D P   L R A K Y I   A E K   Y   L   N   N   A   E   L   V   C   D				
T   P   H   I N A V D G A F A E T   V L L P G D P   L R A K Y I   A E T   F F   E D   V   V   Q   V   T   D				
T   P   H   I N P Q G P I   A K T   I L L P G D P   L R A K F I   A E T   Y L   E D A   Q   Q   F   N   S				
T   V   H   I N A S M G D F D E V   V L M P G D P   L R A Q Y I   A Q   Y   F   L   S   N   A   R   E   I   N   Q				
T   P   H   I G A Q P G E I   A E T   V T L M P G D P   L R A A F   V   A E N   W   L   S   E   V   H   Q   Y   N   S				
S   I   H   I G A Q P G E I   A E T   V T L M P G D P   L R A E W   A   H   N   F   L   D   N   P   V   C   V   N   R				
T   I   H   I G A E A G Q I   A A E T   V T L L P G D P   L R A R Y I   A E T   F F   D G   A   T   C   V   N   R				
S   L   H   I A A S K G Q I   A A E S   V T L L P G D P   L R A Q Y I   I A E N   F F   E E   P   V   R   Y   T   D				
S   I   H   I G A Q Q G D I   A E R   V L L P G D P   L R A K F V   I A E   H   F   L   E E   V   Y   C   Y   N   E				
T   P   H   I S S V P G D F A E   V V L M P G D P   L R A R Y I   A E R   F   L   T   Q   P   K   Q   I   T   S				
T   T   H   I G A A P G E I   I A E T   V T V L L P G D P   L R A Q W   A A E T   F F   D G   A   T   C   V   N   R				
S   T   H   I A A Q K G E I   I A D T   V T V L L P G D P   L R A K Y I   I A E T   F F   E N A   E   C   Y   N   T				
T   P   H   I N A E K G Q I   I A K   V V L M P G D P   L R A K F I   I A E T   F F   K   D   V   K   Q   F   N   D				
T   P   H   I N S G R K G D F A K   V C L M P G D P   L R A K F I   I A E N   F F   E N P   V   Q   V   N   G				
T   P   H   I H E A K K G E I   I A K   V L L P G D P   L R A K H   I A E T   F F   D D   P   R   C   Y   N   T				
T   P   H   I G A Q A G E I   I A E T   I L L P G D P   L R A K Y I   I A E N   F F   T   D   V   K   Q   F   N   G				
T   P   H   I H N S A E K G Q F A K T   V T V L M P G D P   L R A K F I   I A E T   F F   T   D   V   P   V   L   V N N				
T   P   H   I Q P N G V K I   I A K   V T V L M P G D P   L R A K F I   I A E N   F F   E N V   E   Q   F   N   D				
S   T   H   I A A D P G Q I   I A P   V L F P G D P   L R A R W   I A E T   F F   D D A   E   L   Y   S   E				
T   P   H   I N A A K P G D I   I A E T   V T V L L P G D P   L R A K Y I   I A D N   F F   E N V   V   Q   Y   N   T				
T   P   H   I D P Q G E T   I A E T   I L L P G D P   L R A K F I   I A E T   Y L   D D   N   P   R   C   F   N   R				
T   P   H   I N A E M G D F A D V   V I M P G D P   L R A K F I   I A D N   F F   T   T   N   V   V   Q   V   C   D				
T   P   H   I N C K P G D F A K T   V T V L M P G D P   L R A K K   I A E T   F F   E N A   V   L   V   V   N   N				
T   I   H   I G A E P G D I   I A K   V T V L M P G D P   M R A Q W   A A R T   F F   D S   P   R   Q   I   N   A				
S   T   H   I G A A P D Q   I A P   Y   V L M P G D P   Y R A R W   I A E T   F F   E D   P   V   Q   I   T   D				
T   A   H   I N A K L G D F A P   T V I M P G D P   L R A K F I   I A E N   F F   L   Q   D   H   R   E   V   T   N				
T   P   H   I N E A K M G D Y A E T   V L L P G D P   L R A K Y I   I A E T   F F   D D   V   V   Q   V   N   G				
S   I   H   I E A Q A G A I   I A D R   I L L P G D P   L R A K Y I   I A E N   F F   E D   A   V   C   Y   N   T				

QUERY	50	60	70	80
UniRef90_Q0TQJ7	V R G M [L] G F T G T Y K G K R	V S Q Q G T G M G [V P S I S   S	Y V N E L I   Q S Y G G	
UniRef90_UPI00042651EC	V R G M [L] G Y T G T Y K G K K I	S V Q Q G T G M G M [V P S I S   S	Y V N E L I   R D Y G G	
UniRef90_Q9RSF8	V R G M [L] G F T G T Y K G K R I	S V Q Q G T G M G M [V P S I S   S	Y V H E L I   M E Q Y G G	
UniRef90_UPI00037D1D99	V R G M [L] G F T G T Y Q G K R I	S V Q Q G S G M G I [P S I S   S	Y A N E L I   T E Y G G	
UniRef90_A6TVU0	V R G M [L] G F T G T G S Y K G K R I	S V Q Q G T G M G M [P S I S   S	Y V N E L I   S D Y G G	
UniRef90_B1QZN7	V R G M [L] G F T G T Y K G K R I	S V Q Q G T G M G M [P S I S   S	Y A N E L I   N E Y G G	
UniRef90_C5D2F9	V R G M [L] G F T G T Y K G H R I	S V Q Q G T G M G V [P S I S   S	Y V N E L I   Q S Y G G	
UniRef90_C4L2Y4	V R G M [L] G F T G T Y K G K R I	S V Q Q G T G M G V [P S I S   S	Y V N E L I   M S Y G G	
UniRef90_X1JAW5	V R G M [L] G Y T G T Y K G K R I	S V Q Q G T G M G I [P S I S   S	Y V H E L I   T N Y K	
UniRef90_D6XWS7	V R G M [L] G F T G T Y K G K R I	S V Q Q G T G M G V [P S I S   S	Y V H E L I   F N F Y G G	
UniRef90_U2ER10	V R N M F G Y T G T Y K G K R I	S V M G G G M G M [P S I S   S	Y S Y E L I   F K D Y G G	
UniRef90_UPI00037B5DD9	V R G M [L] G Y T G T Y K G K P I	S T V Q Q G S G M G V [P S F A I	Y S T E L I   Q D Y G G	
UniRef90_S6A9A9	V R G M [L] G F T G T Y K G V P I	S V Q Q G T G M G Q [P S L S   S	Y V N E L I   F N F Y G G	
UniRef90_R713E7	V R N M F G Y T G T Y K G K P L	S V M G H G M G M [P S M G   S	Y I N E L I   M Q S Y D	
UniRef90_V6M308	V R G M [L] G F T G T Y K G K R	S V Q Q G T G M G V [P S I S   S	Y V N E L I   F R D Y G G	
UniRef90_UP1000255558B	V R N M F G Y T G I Y K G K R	S V Q Q G T G M G M [P S I S   S	Y A H E L I   N S Y N G	
UniRef90_F0PEL8	V R G M [L] G Y T G T Y K G Q R	S V Q Q G T G M G M [P S A G   S	Y A R E L I   V S F G	
UniRef90_UP10003456876	V R N M F G F T G T Y K G K P V	S I M G S G M G I [P S M S   S	Y C H E L I   N D Y G G	
UniRef90_I3YRR6	V R G M [L] G Y T G T F Q G K P I	S V Q Q G T G M G L [P S A L   S	Y A T E L I   E E Y G G	
UniRef90_UP1000470A130	V R G M [L] G Y T G T Y Y N G Q K V	S V Q Q G T G M G M [P S I S   S	Y A T E L I   T E Y G G	
UniRef90_D1AIR7	V R G M M G F T G T Y K G K K V	S V Q Q G T G M G M [P S I S   S	Y S Y E L I   F N F Y D	
UniRef90_R6L4E4	V R N M F G Y T G T Y K G K E I	S V M G G G M G M [P S I S   G	Y F H E L I   T D Y G G	
UniRef90_G2PMV8	I R G M [L] G Y T G T Y K G K R	S V Q Q G S G M G M [P S A M   S	Y V N E L I   H F Y G G	
UniRef90_U2FR11	V R N M F G F T G T Y K G K K I	S V M G S G M G M [P S I S   G	Y S Y E L I   H F Y G G	
UniRef90_Q92AF2	V R G M [L] G F T G T Y K G E K V	S V M G T G M G I [P S I S   S	Y V N E L I   Q S Y D	
UniRef90_F2F4V1	V R N I L G Y T G T Y K G K R I	S V Q Q G T G M G V [P S I S   S	Y A T E L I   M Q E Y G G	
UniRef90_R6S1S4	V R G M Y A Y T G E Y Y Q G K K V	S V M A S G M G M [P S M G   S	Y S Y E L I   Y N F Y D	
UniRef90_E0NNI6	V R N M L G Y T G E Y Y K G K K V	S V M G S G M G M [P S I S   G	Y S Y E L I   I K F Y G G	
UniRef90_R7CP47	V R N M F G Y T G T Y K G E Q V	S V M G S G M G M [P S M G   S	Y S Y E L I   Y N F Y D	
UniRef90_UP100039AA906	I R G M [L] G F T G T Y K G R K I	S I Q G T G M G I [P S A S   S	Y I N E L I   I K D Y G G	
UniRef90_R6QTF9	V R G V Q G Y T G T Y K G V P V	S V M A S G M G I [P S I G   S	Y S Y E L I   Y S F F G G	
UniRef90_UP10004071711	V R G M [L] G F T G I Y Q G K R	S V Q Q G T G M G L [P S T L   S	Y T H E L I   T E Y G G	
UniRef90_R9MFF5	V R N M L G Y T G T Y R G K E I	S V M G S G M G M [P S I G   S	Y S Y E L I   Y H F Y D	
UniRef90_S0JJU5	V R G M [L] G Y T G L Y K G K E L	S V M G S G M G M [P S I G   S	Y S Y E L I   Y N F Y D	
UniRef90_K0J1H7	V R G M [L] G Y T G T Y K N E R	S V Q Q G T G M G V [P S I S   S	Y V N E L I   Q E Y D	
UniRef90_R5XCZ4	V R G M Y G Y T G T Y Y N G K R	S V Q Q G S G M G M [P S M G   S	Y S Y E L I   H F Y G G	
UniRef90_J9W740	V R N M F G Y T G T Y K G H R	S V Q Q G S G M G M [P S L A   S	Y T T E L I   K E Y G G	
UniRef90_R2S632	V R N M F G Y T G E Y Y K G K K	S V M G T G M G M [P S M G L   S	Y S Y E L I   H T F G G	
UniRef90_M1ZHQ9	I R C M Y A Y T G T Y K G K P V	S V M A H G I G T P S M T V   H	A Y E L I   F K L Y D	
UniRef90_R5RZ31	V R G V Q G Y T G T Y K G V P V	S V M A S G M G M [P S I A   S	Y S N E L I   Y T H	
UniRef90_A0A037ZEZ3	V R G M [L] G F T G T Y K G N P V	T I H G S G M G M [P S L S   S	Y A N E L I   I K D Y G G	
UniRef90_H2G0F8	V R N M L G F T G S Y K G R P V	S V M G H G M G I [P S V S   S	Y A K E L I   T E F D	
UniRef90_R1GTV4	V R N M F G F T G T Y K G R K I	S V M G H G M G I [P S C   S	Y A T E L I   K D F G G	
UniRef90_Q2C146	V R G M [L] G Y T G T W R G N R V	T I Q G S S G M G M [P S L S   S	Y A N E L I   R D Y G G	
UniRef90_W1N933	V R N M Y G Y T G T Y R G R E I	S V M G H G M G I [P S V S   S	Y A K E L I   T E F G G	
UniRef90_N2BQI5	V R N M F G Y T G T Y N G K P I	S V M G G G M G M [P S I G   S	Y S Y E L I   Y N F Y D	
UniRef90_M2P708	V R G M [L] G Y T G T Y K G K E I	S I M G S G M G M [P S I G   S	Y S Y E L I   F T Q Y D	
UniRef90_H8MFM2	V R N M L G F T G T F R G K R I	S V M G H G M G V [P S I S   S	Y A T E L I   V R N Y G G	
UniRef90_C5NVG2	V R G M [L] G Y T G T Y K G K K I	S V M G T G M G P A S G   S	Y S Y E L I   L H T F G G	
UniRef90_G0VPJ4	I R N I L G Y T G T Y K G V R I	S V Q Q T G M G I [P S I S   S	Y A T E L I   M R D Y G G	
UniRef90_R6LTE5	V R G V Q G Y T G T Y D G V R V	S V M A S G M G M P S I G   S	Y S W E L I   F T V Y G G	
UniRef90_A8LXV0	V R G M F G F T G R W N G V D	S V Q Q G S G M G M P S A S   S	Y A H E L I   N D Y G G	
UniRef90_T2KHV7	V R N M F G Y T G T Y K G K R I	S V M G T G M G M [P S I S   S	Y A T E L I   T D F G G	
UniRef90_U2JE92	V R N M F G Y T G N Y K G K K I	S V M G T G M G C P S I S   G	Y S Y E L I   S H F G G	
UniRef90_C2GF48	V R N M L G F T G T Y E G H E V	S V M G S G M G M [P S I S   S	Y S W E L I   H D F G G	
UniRef90_C8S3D4	V R G M [L] G Y T G T W Q G H P V	T I H G T G M G M S S L S   S	Y V N E L I   R D Y G G	
UniRef90_R6GUB5	V R G Q Q G Y T G L Y K S V P V	S V M A S G M G M P S I G   S	Y S Y E L I   Y N F F E	
UniRef90_A4BK16	V R N M F G Y T G E Y Y K G K T V	S V M G S G M G M [P S I S   S	Y A K E L I   T E F D	
UniRef90_R5R9K3	V R N M F G Y T G T Y K G K E V	S V Q Q G S G M G M P S I G   S	Y S Y E L I   F S Q Y D	
UniRef90_UP10002490873	V R N M F G Y T G T Y K G H R I	S V Q Q G S G M G M P S I S   S	Y A T E L I   I K F Y G G	
UniRef90_UP10003B3E677	V R G M [L] G F T G T Y K G K R I	S V Q Q G T G M G Q [P S I S   S	Y V H E L I   F D C Y G G	
UniRef90_UP100041F09A5	V R N I L G F T G T F Q G T P V	S V M G S G M G M [P S I S   S	Y A W E L I   H E F G G	
UniRef90_UP1000478E033	V R N M Y G Y T G T Y Q G K R L	S V M G H G M G I [P S C   S	Y A K E L I   T E Y G G	
UniRef90_C9P7M1	V R N M F G Y T G F Y K G V K L	S V M G H G M G I [P S A S   S	Y V H E L I   A E Y G G	
UniRef90_E8M147	V R N M Y G Y T G D Y Q G K P V	S V M G H G M G I [P S A S   S	Y F H E L I   S E Y G G	
UniRef90_UP100037EB453	V R N M L G F T G T Y K G K R I	S V M G S G M G I [P S C   S	Y A T E L I   R E Y G G	
UniRef90_N6W878	V R N M L G F T G Y Y Q G T Q V	S V M G S G M G I [P S I S   S	Y A W E L I   H V Y G G	
UniRef90_J3Z487	V R G M [L] G Y T G Q Y K G R C I	S V M G H G I G L [P S S S   S	Y T K E L I   T D F G G	
UniRef90_UP1000373C75D	V R G M [L] G F T G L W K G E R I	S V Q Q S G G M G M P S M A I   S	Y A T E L I   M R F F F	
UniRef90_I1AXG5	V R G M F G F T G T W N G H P V	T I H G S G M G M P S L S   S	Y A N E L I   R D Y G G	
UniRef90_R6E7R8	I R N M Y G F T G R Y Y K G V P V	S V Q Q S G G M G M P S M G I   S	Y S W E L I   T E Y G G	
UniRef90_D3EHZ4	V R G M Y G Y T G L Y K G V P V	S V Q Q T G G M G N P T M S I   S	Y A T E L I   Q D Y G G	
UniRef90_E3FJV8	V R N M Y G Y T G T F Q G R K V	S V M G H G M G I [P S I S   S	Y A T E L I   K E Y G G	
UniRef90_A0A017HUT1	V R G M [L] G Y T G Q Y K G R C I	S V M G H G M G I [P S S S   S	Y V N E L I   R D Y G G	
UniRef90_R0EPK5	V R G M [L] G F T G T W R G H R V	T I H G S G M G M P S L S   S	Y T K E L I   T D F G G	
UniRef90_F5WUG0	I R N A F G Y T G T Y K G K R V	S V Q A T G M G I [P S I S   S	Y T N E L I   N E Y G G	
UniRef90_R5ZDI3	V R N M F G Y T G T Y E G V E V	S V M G S G M G Q [P S I S   G	Y S Y E L I   Y S Q F D	
UniRef90_N2A114	V R N A L G Y T G T Y K G I K I	S V Q Q T G G M G M P S L S   G	Y A E E L I   F R F Y G G	
UniRef90_D4MQB7	V R N M F G Y T G F Y K G K R V	S V M G T G M G G C P S I G   G	Y S Y E L I   I H F Y G G	
UniRef90_E7MP34	V R G V Q G Y T G T W K G K P V	S V M A S G M G M P S I G   G	Y S Y E L I   F T E Y G G	
UniRef90_A0A033UPV9	V R N M L G Y T G T Y K G K E V	S V M G S G M G M P A S I G   G	Y S Y E L I   Y N F F D	
UniRef90_UP1000469D333	T R G M L G F T G T W E G H R V	S V Q Q S G G M G Q P S M A I   S	Y A T E L I   F T Q Y D	
UniRef90_F2JIZ8	V R N M F G Y T G T Y K G K K I	S V Q Q S G G M G M P S I G   G	Y S H E L I   H V Y G G	
UniRef90_G7GPH1	V R N M L G Y T G T Y R G R E I	S V M G T G M G I [P S I S   S	Y S H E L I   H T F G G	
UniRef90_UP1000367799C	V R N M L G F T G E Y Y K G R R I	S V M G H G M G I [P S V S   S	Y T T E L I   I K D F G G	
UniRef90_UP10003B51E0A	V R G V Q G Y T G F Y Q G K R V	S V M A S G M G M P S I G   G	Y S Y E L I   F N F F G G	
UniRef90_A6FLY3	V R G M L G Y T G T W R G Q P V	T I H G S G M G M P S L S   S	Y A N E L I   R D F G G	
UniRef90_Z9JPE7	I R G M L G F T G T Y H G V R T	T A Q G S S G M G Q P S M G I   S	Y A H E L I   F Q D Y D	
UniRef90_B2U698	V R N M L G Y T G F Y Q S G Q L I	S V M G H G M G I [P S M T L   S	Y A H E L I   V N D F D	
UniRef90_F8HYC1	V R G A L G F T G K Y K G H R I	S V Q Q S G G M G I [P S M S I   S	Y V K E Y G G	
UniRef90_G9YKG6	V R N I F G Y T G M Y R G E R I	S V Q Q G T G M G I [P S I S   S	Y A T E L I   M R D Y G G	

QUERY	90	100	110	120
UniRef90_Q0TQJ7	V K N L I R V G T C G A I Q K D	V K V R D V I I A M T A C T D S N M N R L T F P		
UniRef90_UP100042651EC	V K N L I R V G T A G M Q E D I V R D L V L A M S S H T D S A I N K V R F F N			
UniRef90_Q9RSF8	C K N L I R V G T A G S Y Q E G V H V R D V I L A Q A S C T D S S M N R H V F G G			
UniRef90_UP100037D1D99	V K N L I R V G T C C G G M Q E H V R D V I L A Q A S C T D S S M N R H V F G G			
UniRef90_A6TVU0	V K N L I R V G T C G G M A Q M E E I Q L R D V I L A M S A S T D S A I N K V R F F N			
UniRef90_B1QZN7	V K N L I R V G T C G G Y H E D V K V R D L V I A M S A C T D S N L N T R F Q			
UniRef90_C5D2F9	V Q T L I R V G T C G A I Q K D V N V R D V I L A M S A S T D S N M N R L T F R			
UniRef90_C4L2Y4	A K N L I R V G T A G G I Q Q E D V K V R D V I L A M S A S S E M G Q N R V R F N			
UniRef90_X1JAW5	A K N L I R V G S C C G S M Q A D I K I R D I I L A S A S T D S H H I N K I R F F H			
UniRef90_D6XWS7	V K N L I R V G T C G A I Q K D V K V R D V I L A M S A S S E M G Q N R V R F N			
UniRef90_U2ER10	V D N I I R V G T A G S M N E N V K V R D V I V A L G A S T N S N Y A Q Y C L			
UniRef90_UP100037B5DD9	V K T I I R V G T C G A I Q E D V K I R D V L I A Q A V C T D S S I N H T R F P			
UniRef90_S6A9A9	V Q K A I R I G T A G A L L Q K D I G L R S V V L G M S A C T D D S G I N T H R F R			
UniRef90_R713E7	V K N I I R I G T A G A L L Q K D I G L R S V V L G M S A C T D D S G I N T H R F R			
UniRef90_V6M308	V E N I I R I G S A G G L S D E D V K L M D I V I L A M G A S T N S N Y A S Q Y K L			
UniRef90_UP1000255558B	V R R A I R I G T A G A I V P E L K L R D L V I A M S A S T D D S G A N S I R F F G			
UniRef90_F0PEL8	V K K L I R V G T C C G S I S E K V N V R E L V I A Q A A A T P P S S A I R N D F P			
UniRef90_UP10003456876	V K N I I R I G T C G G I A Q D T K I R D V I F A Q G A S T D S N V N R A R I S			
UniRef90_I3YRR6	V K N L I R V G S A G G S Y Q K D V N D I V I A M A A S S N S G I N N T R F V			
UniRef90_UP1000470A130	C E Q L I R I G S C C G S L Q S K V Q L R D V I L A Q G A C T D D N G M N Q V R F G			
UniRef90_D1AIR7	C K N L I R I G S A G G S Y Q K D V K I R D I V V A M A T S T D S N I N N L R F P			
UniRef90_R6L4E4	V D Q V I R I G S A G A F Q Q D N I K L M D V V I G M G A C T D S D S N S Y A Y Q Y G L			
UniRef90_G2PMV8	V K N L I R V G S A G S Y Q K D V N D I V I G M G A S I V S D Y P D Q F D C			
UniRef90_U2FRI1	V K N L I R V G S C C G A F Q P N V L N V Y D I V I G M G A S I V S D Y P D Q F D C			
UniRef90_Q92AF2	V K N L I R V G T M M G G I Q A D V K V R D V I I A Q A A S T D S Q I N R N T F A G			
UniRef90_F2F4V1	V Q K L I R V G T C G A I Q K D V K V R D V I I A Q T S S T D S N L N R V I F G			
UniRef90_R6S1S4	V K N I I R T G T A G A I S D K L H I R D V I L A M A S C Y N S Y A Q Y K L			
UniRef90_E0NNI6	V K N I I R V G S C C G A I Q D D V S V M D V V I A M S A C T D D S S I N N K R F N			
UniRef90_R7CP47	V E K I I R I G S A G A G L Q D D V S V M D V V I A M S A C T D D S S I N N K R F N			
UniRef90_UP100039AA906	V K N L I R V G S A G S Y Q K E I K V R D V I I A M A T S T D S S I N N K R F N			
UniRef90_R6QTF9	V E N I I R I G S A G A I S D K L Q I R D V I V A G M S S H T N S N F A Q Y Q N L			
UniRef90_UP10004071711	V K N L I R V G S A G A M Q D D V N V M D V V I A M G A C T T S N S N Y G E Q Y Q I			
UniRef90_R9MFF5	V E N I I R I G S A G A I L D D V N V M D V V I A M G A C T T S N S N Y G E Q Y Q I			
UniRef90_S0JJU5	V D N I I R V G S A G A I L D D V N V M D V V I A M G A S I V S D Y P D Q F D C			
UniRef90_K0J1H7	V K K L I R V G T C G A I Q K D V K V R D V I I A Q G A C T T D S Q V N R M V F G			
UniRef90_R5XCZ4	V K N L I R I G S A G A I S D D V L N L H D V I L A Q G A C T T D S Q V N R M V F G			
UniRef90_J9W740	V K T I I Y R V G S C C G M S P D V K I R D V I L Q G S G T T D S S I I Q N T F P			
UniRef90_R2S632	V K N L I R I G S C C G A L Q E E I P L H D L V I A M A A A T T N S S Y A D Q Y E L L			
UniRef90_M1ZH99	V Q N I I R V G T T G G I S P E K I R D V I L A M G A C Y D T N Y I N Q Y N L L			
UniRef90_R5RZ31	V E N I I R V G S A G A G M A R A D M E L G S [C] A G M G A C T T S S F A D Q Y E L L			
UniRef90_A0A037ZEZ3	A K T L I R I G S C C G A I Q M Q H V N V R D V I L A M T S S T L S T P S R G F F K M			
UniRef90_H2G0F8	V K N L I R V G S C C G A V R D D V K L M D L V I G L G A S T E S R V N R T R F F M			
UniRef90_R1GTV4	V K K L I R V G S C C G A V R E D V K L R E V I I G V G A S T D D A K I N R T R F F M			
UniRef90_Q2CI46	A Q T L I R I G S C C G A M Q E K V K V R D V I I A M S A S S I S T P S L G I F K			
UniRef90_W1N933	A K R L I R V G S C C G A V R D D V K V R D V I I A Q G A S T D D S V N R S R F R			
UniRef90_N2BQI5	V D A I I R I G S A G G L A P Q V V Q L R D L V I G M G A C T T D S N S Y A A Q Y R L L			
UniRef90_M2P708	V E N I I R I G S A G S I I N K D V V H I R E V I I A Q G A C T T D S S A W A H Q Y E L L			
UniRef90_H8MFM2	V K N L I R V G S C C G A M Q E K V K V R D V I I A M G A G T T D S S V N R M R V M			
UniRef90_C5NVG2	A K V L I R V G S C C G A M R K D I R R L D V I I A Q G A C T T D S S V N R M R V M			
UniRef90_G0VPJ4	V K K L I R V G T C G A M R K D I R R L D V I I A Q G A C T T D S S V N R M R V M			
UniRef90_R6LTE5	V E N I I R I G S A G A L A D E I L Q L R D V I I A Q G A C T T D S S V N R M R V M			
UniRef90_A8LXV0	V R S L I I R V G T C G A L T D D V L Q L R D V I I A Q G A C T T D S S V N R M R V M			
UniRef90_T2KHV7	V Q N L I I R V G S A G S Y Q E D D V L K I R D T V I I A M A A S S S G I N K T R F N			
UniRef90_U2JE92	V K N L I I R V G S C G A F S E D D V L E L D V I I I G M G S S T T N S N F A T Q Y H L			
UniRef90_C2GF48	C K K L I R V G S C C G T I Q K D I V D L Y D V I I Q Q A A C T T D S N F A S Q Y N L L			
UniRef90_C8S3D4	A Q T L I R I G S A G A M Q P Q V K V R D V I I A M S A C T T D S S V N R M R V M			
UniRef90_R6GUB5	V E N I I R V G S A G G I V P T V R V R D V I I G Q Q A C T T D S N S Y A Q S Q F C			
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UniRef90_R5R9K3	V E N I I R I G S C C G S F K E N V H L R D V I I V Q G C C T T D S N F A H Q Y E L L			
UniRef90_UP10002490873	V K T I I R V G T A G G M R E D V K V G D V I I G Q Q S T T D D S A V T A N T F G			
UniRef90_UP10003B3E677	V Q K A I R V G T C G A V S E D V E L R D V I I L A N G A C T T D S S L Q N Q R F F G			
UniRef90_UP100041F09A5	V K K I I R V G S C C G S L Q E N V L D V I I I A Q S A S T D D S N F L S Q Y N L L			
UniRef90_UP1000478E033	V K N L I I R V G S C C G A V L D D V H V R D V I I I G M G A C T T D S N V N R M R F N			
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UniRef90_N6W878	V K N L I R V G T C G S L Q P E V N V F D V I I A Q Q A A C T S N S N F I N Q Y N L L			
UniRef90_J3Z487	C E K L I R I G T C G S L Q P E V N V F D V I I G G A C T T D S S V N R M R F N			
UniRef90_UP1000373C75D	V Q R L I R I G S C C G A M Q S E I A L R E L I I A S T N S A M N R S R F G			
UniRef90_I1AXG5	A K T L I R V G S C C G A M Q P A V G L R D V I I G M T A S S L S T P S R G I F R			
UniRef90_R6E7R8	V Q N L I R I G T A G A F T D E L E G L R D V I I I L M E K I F H			
UniRef90_D3EHZ4	V K K L I R I G T C G A M Q K E L Q V R D V I I A Q A V V S S D S N L M E K I F H			
UniRef90_E3FJV8	AR[V] L I R V G S C C G A I R R D V P V R S V I I A H G A G T D D S K V N R M R L L			
UniRef90_A0A017HUT1	A R T L I R V G S C C G G Q P H T G L R D V I I I A Q A A S S V S T P S S A L L R			
UniRef90_R0EPK5	A R T L I R V G T C G G M S P D I H V R D V I I I A Q A G A S T D D S K V N R M R F N			
UniRef90_F5WUG0	V E A I I R I G S A G S Y V E G L D V Y D V I I I S D S A Y S E S S F A K V G F G			
UniRef90_R5ZD13	V E K I I R V G S C C G G Y D P E I K V R D V I I V Q S A S T N S S W A K Q Y E L L			
UniRef90_N2A114	C E I L I R V G T C G G M A P E I K V R D V I I V Q S A S T N S S W A K Q Y E L L			
UniRef90_D4MBQ7	C K N L I R V G T A G A L Q E N V L K I R D V I I I G M G A C T T D S N Y V K Q F R L			
UniRef90_E7MP34	V E N I I R I G S A G A Y Q P E I K L F D V I I I A D A A Y S E S S F A R E Q C G			
UniRef90_A0A033UPV9	V D T I I R I G S C C G A M Q E D I N N L V Y D I I I A Q Q A S T N S R Y V D Q F N V			
UniRef90_UP1000469D333	V Q T I I R V G S C C G A L T E K L A V R D I I I I A N G A S T D D S G I N R V R F P H			
UniRef90_F2JZ8	C K N L I R I G S A G G S M S A D P L P L R H I V F G M G A C T T D S N Y A I Q Y N L L			
UniRef90_G7GPH1	V R N L I R V G S C C G S M Q E H V P L Y D V V I I A Q G A S T D D S D S N Y L S Q F G I			
UniRef90_UP1000367799C	V K T I I R V G S C C G A V L D D V N L L G D V I I I A A G A S T D D S D S K V N R I R F N			
UniRef90_UP10003B51E0A	V S S I I R V G S A G A L D P E I K L F D V I I I G Q G A S T D D S N F F R N F N L			
UniRef90_A6FLY3	V T T L I M R I V G S C C G G M Q P H I K M R D I I I I A V A S G T D D S V T N F K R F S			
UniRef90_Z9JPE7	V Q A I I R V G T C G A I S D R V I K M R D I I I I A V A S G T D D S V T N F K R F S			
UniRef90_B2U698	V K R I I R V G S L Q G A T Q R T I K M R D I I I I A V A S G T D D S V T N F K R F S			
UniRef90_F8HY1C	V K T I I M R V G S F F G G M A P E I L N L G D V V L I A S G G S T D D S S V I A N T F P			
UniRef90_C6VCK6	V P T I I R V G T C G A I S D R V I K M R D I I I I A V A S G T D D S V T N F K R F S			

130                  140                  150                  160

QUERY	G F D F A P A A N F D	L L K K A Y D A G T E K G L H V R V G N V L T A D V F Y R		
UniRef90_Q0TQJ7	G   D F A P T A S F K	L L K A A Y D T A V E K G Y S P K V G S V F T A D S F Y N		
UniRef90_UPI00042651EC	N I D Y A P T A N F S	L L Q T A Y Q V A K E L A V D D V H V G N V F T A D A F Y N		
UniRef90_Q9RSF8	E R T F A P I A D F E	L L R A Y D R G T A K G L K L H V G N I M S S D T F Y N		
UniRef90_UPI00037D1D99	G Y D Y A S P I A S F P	L L K A A Y D R G T A K G L K L H V G N I F S S D M F Y R		
UniRef90_A6TVU0	G M D Y A P T A S F R	L L K K A Y D V A Q E K G I L T R V G N V L T V D T F Y N		
UniRef90_B1QZN7	G R T Y A P T A N F E	L L R T A Y E V G V E K G L K L K V G N V F T A D M F Y N		
UniRef90_C5D2F9	G R D Y A P T A H F D	L L R T A Y E V G V E K G L K L K V G N V F T A D M F Y N		
UniRef90_C4L2Y4	G M D Y A P T A T F D	L L H R A Y M N A E K A G I P V K V G Q I F T A D Q F Y Q		
UniRef90_X1JAW5	G M D Y A S T A N F E	L L K K A Y D I A L E K D I S V K V G S V L T T D T F Y N		
UniRef90_D6XWS7	G I D F A P T A D F G	L L K K A Y D G A V A K D M N V K V G N V F T S D I F Y N		
UniRef90_U2ER10	P G T F A P I A S F D	L A S A A V Q V A K E K N I N A V V G N I L S S D T F Y C		
UniRef90_UPI00037B5DD9	G Y S F A P I A S F D	L L K N A Y D Y A V K M G V T P L V G Q I A S S D V F Y		
UniRef90_S6A9A9	G C H Y A P S A D W S	L L K N A Y D Y A V K M G V T P L V G Q I A S S D V F Y		
UniRef90_R713E7	P G I L A P I A D F G	L L R T A V E V A E K K Q C K V Q V G N I L S S D T F Y T		
UniRef90_V6M308	Q I D F A P T A N F D	L L H K A Y M A A T S R N P V K V G P I V S S D M F Y T		
UniRef90_UPI000255558B	G R N F A P T A A F S L	L L K T A Y D T A V A K G W Q P K V G P I V S S D M F Y T		
UniRef90_F0PEL8	K Y D F P Q I A S F D	L L L K S Y E I A K A K G F T T H V G N V L S D D V F Y K Q		
UniRef90_UPI0003456876	G Y D Y A A I A D F G L	L L E N G V R A A R D L G I D A K V G N V F T T D T F Y Q		
UniRef90_I3YRR6	N C D F S P T A N F E	L L F M K A L Y A K E R N I P I K A G N V L S S D Q F Y E		
UniRef90_UPI000470A130	G L Q F A P L A D F D	L L H R A Y T I S R G K D V N L H V G N V M S S D T F Y G		
UniRef90_D1AIR7	G A N F A P T A S Y E	L F A K A T A A A K E K G I E F K A G N V L S S D T F Y G		
UniRef90_R6L4E4	P G T F A P I A D Y E	L L N R A V E V T A K R Q G T N V V V G N V L S S D V F Y N		
UniRef90_G2PMV8	N S D Y S P T A N F E	F L K A V N Y A Q E Q N P I K A G N V L S S D E F Y V		
UniRef90_U2FR11	P G S Y A P T A S Y T	L L K K A V D I A E D K G Y D V N V G N V L S S D I F Y D		
UniRef90_Q92AF2	G V D F A P V A D F S L	L L K K A Y D A G V E K G L S L K V G N V F S A D R F Y N S		
UniRef90_F2F4V1	G I D Y A P T A D F D L	L L L K A Y N A A K E A N L N V R V G N I F T A D M F Y S		
UniRef90_R6S1S4	P G T A V P T A N F D M L	N S A Y N K A K E I N M P V Y V G T I I L S T D N F Y Y		
UniRef90_E0NN16	N G I H S A T A S F E	L L L S A Y Y K S C E K L L G V K P H V G N V L L S S D I F Y H		
UniRef90_R7CP47	P G T F A P T A S Y E	L L V A R A V E V A K E Q Q G T P V R V G S V V S S D A F Y G		
UniRef90_UPI00039AA906	N A N F A P T A N F D L	F S A A L K V I A E E K N I K I N A G N V L T S S D E F Y T		
UniRef90_R6QTF9	P G T F A P T A D F T L	L L S T A V E S A K E D L G L D L K V G P L L L S S D T F Y D		
UniRef90_UPI0004071711	G A D Y A A T A S F T L	F Q K A L A I A S K K N I T V K A G N V L S S S D E F Y A		
UniRef90_R9MFF5	P G A F A P I A D Y G L	L L E K A V N A A R E K G A N V K V G N V L S S S D V F Y H		
UniRef90_S0JJU5	G   D F A P L A D Y D L	L L K N A Y Q V G L E K Q L D L D I V T I G N V F T S D S F Y R		
UniRef90_K0J1H7	P G T Y A P I A S F D L	L L E K A V V N K A R E K G A N V K V G N I F A A D R F Y N		
UniRef90_R5XCZ4	U H R O A P L A D F E	L L K N A Y Q V G L E K Q L D L D I V T I G N V F T S D S F Y R		
UniRef90_J9W740	G M Y Y S P I A D F G L	L L D S A Y H T A Q E M G I N T K V G N I F A A D R F Y N		
UniRef90_R2S632	P G Q L P A T A S Y D L	L L E K A V V N T A K A K G Q S F H V G T I I L T S D I F Y H P		
UniRef90_M1ZHQ9	K G T F S A I P S F S	L L R K A V E S A E S L G I E Y K V G N I L T T D I F Y P		
UniRef90_R5RZ31	G A T Y A P I C N Y D L	L L A A A V E S A N E L G V K M P V G N I Y S S D T F Y		
UniRef90_A0A037ZEZ3	E L Q Y A P C A D F K L	L L E A A A A A R S R D V P L H V G G I Y S A D D V F Y D		
UniRef90_H2G0F8	G H D L A A I A D F E	L L T Q H A V A A A T R L S V P V K V G G I F S A D D L F Y T		
UniRef90_R1GTV4	G H D F A A I A D F E M T R N A V D A A K A K G I N V R V G N I F S A D D L F Y S			
UniRef90_Q2C146	E F F N F A P C A D W S	L L S A A H A A A Q T R D V G V H G G I Y S A D D L F Y D		
UniRef90_W1N933	G L D F A A I A D F E L	I T R H S V D A A A E L G V K V G N I F S A D D L F Y H		
UniRef90_N2BQI5	P G T Y A P I A D Y G L	L L R R A V E S A E K L G V P T H V G N V L S A D D V F Y N		
UniRef90_M2P708	P G V Y S A I S S F D L	L L L E K L T V H Q A K E K N I H Y H V G N I F T S D L F Y Y H		
UniRef90_H8MFM2	G H D F P A V A D F T L	L L R R A V E S A E K L G V P T H V G N I F T S D L F Y Y H		
UniRef90_C5NVG2	P G N Y S L T A S F D L	L L L K A Y N R A Q E M G Q A V H V G N I L C S E I F Y H N		
UniRef90_G0VPJ4	G I N Y A P L A D F T L	L L R Q A Y E Q S V K Q G P A R V G N I V S V D R F Y D		
UniRef90_R6LTE5	P G T F A P I A D F R F L	R T C V D I A E E E M G A R Y Q V G N L L S S D R F Y G		
UniRef90_A8LXV0	G I D Y A P V A D F G L	L L R S S V E V A E R R G I T M R V G P V L A A D A F Y T		
UniRef90_T2KHV7	G A D Y A P T A S F E	F Q K A V T T A N A K H I A I K A G N V F S S D E F Y A		
UniRef90_U2JE92	P G T L S A T C S Y E	L L K K A T H V A A K K G I P V H V G D I F S S D I F Y F		
UniRef90_C2GF48	P G T F A P I G S F R	L L I E D T Y R R A V S Q G I D V H V G N V L S A D D V F Y N D		
UniRef90_C8S3D4	E L N F A P T A H F G	L L K K A A W D A A E R L G V P T H A G T I Y S S Q L F Y Y D		
UniRef90_R6GUB5	P G T F A P I A D Y T L	L L S K C V D T A K A L G R N Y H V G N V L S S D C F Y G		
UniRef90_A4BK16	G F D Y A A I A D Y S L	L L E A S V N A A R S A G K Q V R V G N V F S A D D L F Y S H		
UniRef90_R5R9K3	P G T Y S A I S S Y A L	L L E R A V N K A K E K D V V Y H V G N V L A S D D I F Y H		
UniRef90_UPI0002490873	G I Y Y A P L S D F E	L L L D R A Y H V T Q E M N I P V R V G N I F A A D R F Y N		
UniRef90_UPI0003B3E677	M L H Y A P V P D F G L	L L Y T A Y N K A K E M G L T V Q C V S S D R F Y		
UniRef90_UPI00041F09A5	P G T Y A P T G S W K L	L I S A L I E Q A K L Q G V T P H V G N I L S S D I F Y N		
UniRef90_UPI000478E033	G H D F A A I A D F G L	T R A L V Q S A Q Q N G I A A K V G N I F S S D L F Y T		
UniRef90_C9P7M1	G H D F A A V A D Y D L	L L E T A V N Q A R A H Q I P V K V G N I F S A D D L F Y T		
UniRef90_E8M147	G Y D Y A A P D F D L	L L L K A C C W N Q V I N N D P Q V R F G P V F T N D L F Y T		
UniRef90_UPI00037EB453	G H D Y A A I A D Y G L	L L E K A V N S A R A H G I E A K V G N I F S A D D T F Y T		
UniRef90_N6W878	P G T Y A P I G S F R	L L I E A V R E R A K A N G V T S H V G N I L S S D T F Y N		
UniRef90_J3Z487	D H D F A A I A D F N L	V R N A V D A A H A A G I K V R V G N L F S T D L F Y T		
UniRef90_UPI000373C75D	G M D Y A A T A S W S L	F R K A L A V V E E Q G I P F H A G S I L S S D T F Y D		
UniRef90_I1AXG5	E L N F A P C A D F D L	L L Q K A V V A A R S I G A T Y H V G G I Y S A D D V F Y D		
UniRef90_R6E7R8	P G Q Y S P S A S W E L	L I K K V V Y V A S N E T G I E F K A G N V V T C D D V F Y		
UniRef90_D3EHZ4	G C N Y A P T A D Y G M L	S K A H Q L A Q E K Q V N V F V G N I Y N S D E F Y R		
UniRef90_E3FV8	D H D F P A V A D F G L	V R A V E A A E R R S R V A R V G N V F S T D L F Y H		
UniRef90_A0A017HUT1	E L N L A P V A D W G L	L L S A A H R A A E G R G T R S H V G G I H S S D T F Y S		
UniRef90_R0EPK5	D I Y Y A P L A D F T M	V E K A H Q V A Q A N Q I S V Q V G N V L S S E D R F Y N		
UniRef90_F5WUG0	Y E E D V L E P S K M L	N D Q L R A S A Q K L E I P M Q E G R I H S S D V F Y R		
UniRef90_R5ZD13	P G D Y S A T P D F Q T M	L D Q L R A S A Q K L E I P T K A A D V L S S E D N F Y N		
UniRef90_N2A114	G L Y Y A P T A D F S L	L L D H A Y T A A K K E R I A V K V G N I I S S E D R F Y N		
UniRef90_D4MQB7	P G D Y S C I C S F E L	L L E K A V K A A R E K G L K V H V G N I L S S D M F Y N		
UniRef90_E7MP34	P N T S D T I K P S A E L	N E K I K K A A A N L G M K I T E G L I H S S D V F Y R		
UniRef90_A0A033UPV9	P G Y F A P I A D F G L	L V A S A K N K A D E I G A T S H V G N I F S S D L F Y N		
UniRef90_UPI000469D333	G L D Y A P L A D F A L	L R A A V E E T E P L S S T V H V G P I F S S D D Q F Y S		
UniRef90_F2JIZ8	P G T F A P V A S Y S L	L L E K A V E K A K E N N V P Y H V G N I L S S D I F Y N		
UniRef90_G7GPH1	P G T W A P L S S Y R L	L L E H K H L A D E R G A T A H V G N I L S S D I F Y N		
UniRef90_UPI000367799C	N H D F A A I A D Y Q L	V A N A M T A E T Q G L K V H V G N I V F T A D L F Y S		
UniRef90_UPI0003B51E0A	P G S F A P I A D F G L	R A A A D G C E R M G F R Y R V G N I L S S D V F Y G		
UniRef90_A6FLY3	E L R F A P C A D W G L	L R A A A H A A E T R G I T P H I G G I Y S S D T F Y D		
UniRef90_Z9JPE7	D V T Y A P A A D F E L	A R J A A E V A D Q G G M L P V V A G G L F S S D H F Y N		
UniRef90_B2U698	G Y F M A S S A Y F P L	L Q K A W S L Q A E G L E V K A G N V F F S G D I Y Y D		
UniRef90_F8HYC1	G I Y Y S T L P D F G L	L G T A Y H T A K D L D I P V T V G N I F A A D R F Y N		
UniRef90_G9YKG6	A I N Y A P L G D F G L	L C K A Y T A A G A R R L P V K V G N I I S V D R F Y D		

QUERY	170	180	190	200
UniRef90_Q0TQJ7	E S M D M V K K L G D Y G V L A V E	M E T T A A L Y T L A A K Y G V N A L S V L T		
UniRef90_UPI00042651EC	D N P E A W K Q W A K F G T L A V E	E M E T A A L Y T L A A K Y G V N A L S V L T		
UniRef90_Q9RSF8	E D E S A V H K W A Q Y G V L A L E	E M E T A A L Y T L A A K F G R R A L T I L T		
UniRef90_UPI00037D1D99	D D N P T E F Q R W A E F G V L A V E	E M E A A G L Y T L A A K Y G V R A L T I L T		
UniRef90_A6TVU0	D D K S V V E K L M Q Y G I L G V E	M E T T A A L Y T L A A R H G V Q A L T I L T		
UniRef90_B1QZN7	D D N E D W K K W A A F G C L G V E	M E T A A L Y T L A A K F G V D A L T I L T		
UniRef90_C5D2F9	D D P D W E T W A R Y G V L A V E	M E T A A L Y T L A A K Y G V K A L T I M T		
UniRef90_C4L2Y4	D D F H H F K K W A D F G C L A I	E M E A A G L Y T L A A K H K V N A L S V L T		
UniRef90_X1JAW5	D D P N S W K H W A N Y G I L A V E	M E T A A V L Y T L A A K F K V N A L S V L T		
UniRef90_D6XWS7	E D E T L I P N L A K H Q V L A V E	M E S S A A L Y T L A A K H K I K G L G M F T		
UniRef90_U2ER10	A D Q T A T E K W I S M G I L A V E	M E A A A L Y M N A A Q A K K N A L C L L T		
UniRef90_UPI00037B5DD9	E D N E T T M M K L G Q Y G V L A V E	M E T A A L Y T L A A K H K I K G L G M F T		
UniRef90_S6A9A9	D D L E T W K L W A E Y G V L A V E	M E A A E L Y T L A A K Y G R R A L A V L T		
UniRef90_R713E7	D D P K D N D L W K R M H V L A V E	M E S A A L Y Y N A A R L G K K A L C I L T		
UniRef90_V6M308	E S L D L Y K K L A S Y Q V L A V E	M E S S A A L Y T L A A K Y K R N A L S V L T		
UniRef90_UPI000255558B	E D P E E W K L W A K F G V M A V E	M E T A E L Y T L A A K Y G R E A L A L L T		
UniRef90_F0PEL8	D S L D D V F R L G R Y G V L A I	E M E A A M L Y Y L A A K F D V E A L A I M T		
UniRef90_UPI0003456876	A D G S F S Y E Q L N K L G V L A V D	M E T A A G L Y G V A A E Y G A K A M A L F T		
UniRef90_I3YRR6	D D F N N Y K K W A E F G V L C	E M E A A G L Y T I A A K F N V K A L A I L T		
UniRef90_UPI000470A130	D D H D P F A V W Q K F N V L A V E	M E T A A L Y T I A A K Y K K K A L S L L T		
UniRef90_D1AIR7	D D K E A W K H W A D F G I L C	E M E A A G L Y T L G A K Y N V N T L A I L T		
UniRef90_R6L4E4	A M S N V N D L W R D M G V L A V E	M E A A A L Y M N A A K A G K K A L C M L T		
UniRef90_G2PMV8	D D P E E Y K L W A E Y G V L C	E M E T A A G L Y T I A A K Y N V R A L T I L T		
UniRef90_U2FR11	D D A D A W K R W A K M G V L A V E	M E A A A L Y M N A N R A G V N A L T I L T		
UniRef90_Q92AF2	D Q L D K Q Q L A D Y G V L G I	E M E A A A L Y T L A A K Y G R R A L A I L T		
UniRef90_F2F4V1	D E A Q N E K L A Q Y G V L A V E	M E T S A L Y T L A A K F G R Q A L T V L T		
UniRef90_R6S1S4	D D P D T L K Q W Q K L G I A T E	M E S A A L Y F N A M R A G K N A L C I C T		
UniRef90_E0NNI6	D D P N D W K N W Q K M G V L A I	E M E A H A L Y L N C N R L G A N G L T I L T		
UniRef90_R7CP47	D N P E S S K A W R K M G V L C	V E M E C A A L F M N A A R A G K E A L G I L T		
UniRef90_UPI00039AA906	D D S N Y Y K K W A D F G V L A V E	M E T A A G L Y T L A A K Y K A R A L S I L T		
UniRef90_R6QTF9	D D E E A L H K W A K M G A L A V E	M E S A G L Y Y M N A A R L G K R A L A M V T		
UniRef90_UPI0004071711	D F E S Y K K W A E Y G V L C	V E M E T N G L Y T V A A K H K V N A L S I L T		
UniRef90_R9MFF5	D R E D F N D R F R R M G V L A V E	M E S A A L Y M N A A R A G K K A L C I L T		
UniRef90_S0JJU5	D R P P N S K D C F R K M G V L A V E	M E S G A L Y L N A A R A G K R A L C I L T		
UniRef90_K0J1H7	D N G E L F E K L A N Y Q I L G	V E M E A A G L Y T L A A K Y N R Q A L A I L T		
UniRef90_R5XCZ4	D D G E S F K S W Q K M G A L C	V E M E A A A L Y M N A A R A G V N A L C I V T		
UniRef90_J9W740	D E L D I H K L I D Y G V L A T E	M E T S G L Y L L A A K H H I R A L T I L T		
UniRef90_R2S632	P S K T F N Q K W Q E M G V L A I	D M E T A A L Y W N A I A A N V N A L S I L M T		
UniRef90_M1ZHQ9	E D K N S Q L K W K D M G V L S	V E M E T A A L Y I V A A E K K N A L S L L T		
UniRef90_R5RZ31	D A A G R N A R A F G K M G V L A	V E M E A A G L Y C T A A Y A G K R A L A I C S		
UniRef90_A0A037ZEZ3	E R P D L N E Q M T R H G V L A V E	M E A A E L Y T V A A R Y G C R A L A V L T		
UniRef90_H2G0F8	P Q S E L F E L L K R Y G V V G	E M E A A G L Y Y G V A A E Y G A R A L T I C T		
UniRef90_R1GTV4	P E P D F D T M A K Y G I L G	V E M E A A G I Y Y G V A A E F G A K A L T I C T		
UniRef90_Q2C146	E R P D L N E Q M T R H G I L G	V E M E A A E L Y N L A A R H G R R A L A I L T		
UniRef90_W1N933	P D P A L V E T M R D Y G I V G	E M E A A G L Y Y G V A A E F G A R A M T I C T		
UniRef90_N2BQI5	D D P T V N E R W A G M G V L A V E	M E S A G L Y Y M N A A R A G K K A L C V C T		
UniRef90_M2P708	A D S T S T A A W S K M G V L A V E	M E T Y A L F S T A A Y L G K K A L T L L T		
UniRef90_H8MFM2	P Q E A L N A T L E K M G I L A V E	M E I A G L Y Y G V A A E F G A R A L S L L T		
UniRef90_C5NVG2	A D E K A M E N W I K M G V L A V E	M E S T A L Y Y A N A T A A G V N A L T I L T		
UniRef90_G0VPJ4	D E I D N D K L T Q Y G I M A V E	M E T A A G L Y T L A A K Y G A Q A L G L F T		
UniRef90_R6LTE5	D D G G V P E A W K K M G V M A I	E M E A A A L Y M N A A R C G K R A L A V C T		
UniRef90_A8LXV0	A R R D L Y D S L A D Y G V L A V E	M E S A A L Y T T A A R H K A R A L T I L T		
UniRef90_T2KHV7	D D F E S Y K K W A D F G V L C	V E M E A A G L Y T T V A A K H H V N A L T I L T		
UniRef90_U2JE92	A D P E E W K K W A R M G I L A V E	M E S Y A L Y C N A K W L G A D A L T I L T		
UniRef90_C2GF48	Y D S S V N E R W A A M G V L G	V E M E S A G L Y S V A A E A G V E A M G I F T		
UniRef90_C8S3D4	E R P D L Q E Q L Q R H G A L C	V E M E A A E L Y T L A A K Y G R R A L A V L T		
UniRef90_R6GUB5	D H M Q P K N V W G K M G V L A V E	M E S A A L Y Y M N A A R A G K K A L G I F T		
UniRef90_A4BK16	P V D G I M D T L A K M N V L A V E	M E A A G L Y Y G V A A E Y G A N A L A M M M T		
UniRef90_R5R9K3	A D Q G S V E K W A S M G C V A T E	M E S Y A L F A T A A Y L N K R A L T L L T		
UniRef90_UPI0002490873	D E I D M K K L A D Y G C V A T E	M E S A G L F L I G A K Y N I K T L S I L T		
UniRef90_UPI000383E677	D D N E N W K L W K Y K G A K G I	E M E S A E L F L I G A K Y N I K T L S I L T		
UniRef90_UPI00041F09A5	A D E T A N A R W A R M G V L G	V E M E T A A L Y Y A I A A Y S G I D A L G I F T		
UniRef90_UPI000478E033	P D R S I T D T L R R Y G I L G	V E M E A A G L Y Y G V A A E F G A K A A C I C T		
UniRef90_C9P7M1	P E P E I F E K M K K L G I L G	V E D M E V A G I Y Y G V A A E H G A R A L A I L T		
UniRef90_E8M147	C D E N L V P A L L K M K I L G	V E M E T A A L F A I A A E Q D V R A L S I L T		
UniRef90_UPI00037EB453	P P E P V F D T L E K Y N I L G	V E M E A A G L F A V A A E E G A K A L C I L T		
UniRef90_N6W878	A D P S F N D R W A K K M G I I A V E	M E T A A G L Y Y A T A A D A G V E A L G I F T		
UniRef90_J3Z487	P D S D M L A I L E K Y G I L G	V E M E A A G I Y S V A A E F G A R A V A I C T		
UniRef90_UPI000373C75D	D D P S Q W K V W A R H G V L A V E	M E A A N Q L Y T L A A R H G R E A L V A L L T		
UniRef90_I1AXG5	E R P D L N D I M T R H G I L G	V E M E A A E L Y N L A A R H G V R A L A V L T		
UniRef90_R6E7R8	E F G D W W K K W A K M G V K A V E	M E T A A L Y Y M N A A Y N N V N A L S I I I S		
UniRef90_D3EHZ4	E T L D R L H K F M E G V L A V E	M E T A A L Y T L A A K Y G V R A L S I I I T		
UniRef90_E3FJV8	P Q G S I L L D V L E R M G L L A I	V E M E V A G L Y Y G V A A E H G A R A L G I F T		
UniRef90_A0A017HUT1	E R R D D H T E Q L I R H G V L G	E M E A A E L Y Y L L A A R H G V R A L A V L T		
UniRef90_R0EPK5	D E I D I D R Q K L V Q Y G V K G A E	M E A A A A L Y Y L L A A K Y G V R A L A V L T		
UniRef90_F5WUG0	D S V T W Q E L A K N H G V T C V E	M E S F A L F A N A K K L N K H A A C I C L L T		
UniRef90_R5ZD13	D N P E G W K K W T S M G I S A C E	M E S F A L F C I A C H K K A L T I L T		
UniRef90_N2A114	E E I D R K K L I Q Y N V L G A E	M E A A G L Y Y L I I A A K Y N V R A L A V L T		
UniRef90_D4MQB7	P D P Q T G M S W A Q M G V L A V E	M E A A A L Y Y S N A A A A G V N A I C I L T		
UniRef90_E7MP34	E K N V T Y K V M N E L H C	V E M E S F A L F S N A N V L G K N A A C I C L L T		
UniRef90_A0A033UPV9	A D S E V T S K W A R L G I L G	V E M E S A G L Y Y V N A A A G G K K A L G I F T		
UniRef90_UPI000469D333	T R P E L T A P F V Q H G I L G	V E M E A A G L Y T L A A F H G R R A L A I C T		
UniRef90_F2JIZ8	A D T T T T E R W S K M G V L A V E	M E A A A A L Y M E A A A A G V N A I A M V T		
UniRef90_G7GPH1	A D D Q T L G K W A R M G V L A V E	M E S A G L F A N A A A A G V D A L G I F T		
UniRef90_UPI000367799C	A E P E F F K K M A S Y G V L G	D M E A A G V Y Y G V A A E Y G A K A L T I L T		
UniRef90_UPI0003B51E0A	E A G D G S L A W S K M G V L A V E	M E A A A A L Y M N A A R A K K K A L A I C T		
UniRef90_A6FLY3	E R P D L N D Q M T R H G T L A V E	M E T A A E L Y T L A S R Y G A R A L S V L T		
UniRef90_Z9JPE7	P D A S I T G T L A Q Y G G V L G	V E M E A A A L Y T L A A Q F S R R A L A V C T		
UniRef90_B2U698	P D D N L I P A L E K F G V L G I D	M E V A G L Y Y A H Q F G I E A L A I L T		
UniRef90_F8HYC1	D E I D M Q K L T D Y G G I L G	T E M E V A G L Y Y L G A K Y N I K T L D I L T		
UniRef90_G9YKG6	D E I D N D K L R E Y G I L A V E	M E T A A A L Y T L G A K Y G A K C I G I F T		

QUERY	210	220	230
UniRef90_Q0TQJ7	S D H   F T G E E T T S E E R Q T T F N E M   E   A   L   D A A I   Q		
UniRef90_UPI00042651EC	I S D H   L I T A E E E T T S E E R Q T T F T K M M E   V A L   D A A I		
UniRef90_Q9RSF8	V S D H   V L T T G E A T S A E E R Q T T L N Q M I E   I G L   E T A L   R		
UniRef90_UPI00037D1D99	I S D H   L V T H E   V T S A E E R Q L T F N G M I E   V A L   D A A L		
UniRef90_A6TVU0	V S D S L   I T G G Q T T S S E E R Q N T F M G M V K   I A L   E   L A		
UniRef90_B1QZN7	V S D H   F I T G E I T S S E E R Q K T F T N M M E   V A L   D T I V		
UniRef90_C5D2F9	V S D H   L T G E E E T T S S E E R Q S T F D E M I R   V A L   D T A V   R		
UniRef90_C4L2Y4	I S D H   L L T G E E E T T S S E E R Q S T F D E M I R   V A L   D T A V   E		
UniRef90_X1JAW5	V S D S L   L V T R E E E T T S S E E R Q K T F N Q M V E   V A L   E   L A		
UniRef90_D6XWS7	V S D H   L T G E E E T T S S Q E R Q E T F N D M I Y   V A L   D A A		
UniRef90_U2ER10	I S D S L   I T G E S L S A E E R Q L S F T D M M E   I A L   E   L A		
UniRef90_UPI00037B5DD9	V S D H   L I T H E A T S A E E R Q T T F N D M I V   V A L   E T A I   K		
UniRef90_S6A9A9	I S D N V V T H E   I T T P E E E R Q K T F K N M M E   I A L   E A A   I   K		
UniRef90_R713E7	I S D H   L Y S G K E L S A E E R Q T G F R Q M M E   I A L   E T G I   L N		
UniRef90_V6M308	V S D H   I L T G E E E T T S A D E R Q T T F H E M I E   V A L   E A A   L   N		
UniRef90_UPI000255558B	I S D S L   V S G E E T T S S A E E R Q T A F T R M M E   V A L   E T A I		
UniRef90_F0PEL8	V S D S L   L V T G E E E T T T A E E R Q Q T T F N E M I E   V G L   E T A I		
UniRef90_UPI0003456876	V S D D H   V I T G E A T P A E E R Q S T F N E M V K   I A L   E S I		
UniRef90_I3YRR6	I S D S L   L V T G E S T T A E E R E G S F S K M I E   I A L   N T L   L		
UniRef90_UPI000470A130	V S D D H   P E G K S T T S A E E R Q T T F T Q M M D   I A L   K L   A		
UniRef90_D1AIR7	I S D S L   L V T G E A T T S S E E R E E K T F N D M I E   M A L   G T L		
UniRef90_R6L4E4	I S D D H   L Y T G E S L S A E D R Q L G F G K M M E   I A L   E   L A		
UniRef90_G2PMV8	I S D S L   I T Q E R L S A H A R E T T F K D M V E   I A L   A A A		
UniRef90_U2FR11	V S D S L   L V T H E Q T T S S E E R Q T A F T K M M E   I A L   E   L A		
UniRef90_Q92AF2	V S D H   I F T G E E T S A E E R Q T T F N D M I V   V A L   E A A   I   K		
UniRef90_F2F4V1	V S D D H   I L T G E V T T S S E E R Q T T F N D M M V   I A L   E A A   I   Q		
UniRef90_R6S1S4	I S D C P L   T G E S A S S E E R Q T S F N D M I K   L A L   N		
UniRef90_E0NNI6	V S D S L   L V T G E E E T T A T E R E R S F N Q M I E   V A L   N		
UniRef90_R7CP47	I S D H   V F R D E A I S A E A R Q T S F N R M M E   I A L		
UniRef90_UPI00039AA906	I S D S L   V S E E I T S A E E R E R T F S T M V E   L   A L   E T A   L   K		
UniRef90_R6QTF9	I S D M P F T   G E A T T P E E E R Q N T F T Q M M E   I A L   E T A   L   R		
UniRef90_UPI0004071711	I S D S L   L V T G E R T T S S S E E R E Q T F K E M I E   I A L   G I   A		
UniRef90_R9MFF5	V S D H   L Y K E A S L S A K E R E T G F N Q M M E   I A L   E   I   A		
UniRef90_S0JJU5	I S D H   I Y R P E Q L T S S E Q R Q T G F G K M I E   I A L   E T A R   R		
UniRef90_K0J1H7	V H   V L T G E E T T A Q E R Q T T F N D M I E   I A L   E   L A		
UniRef90_R5XCZ4	I S D C P L   R G L E T T S A E E R Q T A F T N M M K   I A L   S L   A		
UniRef90_J9W740	V S D D H   L L T G E A L S A K E R E T S F D E M A R   L S   E T A   L   K		
UniRef90_R2S632	V S D D N I   I T G E A L S A E D R Q T A F S N M M E   T A L   E		
UniRef90_M1ZHQ9	V S D D H   I T G E K T T A E E R Q S S F T T N M I E   V A L   E M   L		
UniRef90_R5RZ31	I S D D N L   L V T G K E L S A D E R Q T S F T T N M M K   I A L   E V A V   K		
UniRef90_A0A037ZEZ3	V S D D H   L L T G D A L L P S E D R E R Q T G F D Q M M E   V A L   A L   D A A		
UniRef90_H2G0F8	V S D D H   I L R G E Q L S A D E R Q T G F D Q M M E   V A L   E S V   L		
UniRef90_R1GTV4	V S D D H   K T G E Q T T S D E R Q T T F N E M I E   I A L   E S V   L		
UniRef90_Q2C146	V S D D H   I T G E A L P S S E Q R E R S F G D M V E   I A L   E A A		
UniRef90_W1N933	V S D D H   V N G D S L S S D D R A T T F D E M M M K   I A L   E A M   L   R		
UniRef90_N2BQI5	I S D D L P   L T G A S L P A D Q R E R Q T S F T Q M M E   V A L   A L   S L   A		
UniRef90_M2P708	I S D S L   L V N D E E T T A S E R E K T F T D M M E   I A L   E I   A		
UniRef90_H8MFM2	V S D D H   L R T G E H L S P E E D R Q T T F D E M I E   I A L   D V   A		
UniRef90_C5NVG2	V S D D S L   V T G E E E T T P E E E R Q T A F T K M M E   I A L		
UniRef90_G0VPJ4	V S D D H   L L T G E A C T P E E E R Q T S F D D M I H   I A L   E T A   I   Q		
UniRef90_R6LTE5	I S D D H   L R H E Y C T A E E E R Q N S F T Q M M E   I A L   R T A V   K		
UniRef90_A8LXV0	V S D D H   L R T G A K T T S S E E R E H T F S Q M V E   I A L   D T   I		
UniRef90_T2KHV7	I S D S L   V T G E R T T T A K E R E E T T F K E M I E   I A L   E		
UniRef90_U2JE92	V S D D H   A T H K E T T T E E R E E K S F T R M M E   I A L   E		
UniRef90_C2GF48	V S D D N I   V T G A Q T S S E E R Q K A F T T M M E   I A L		
UniRef90_C8S3D4	I S D D H   L L T E E A L P A D Q R E R S F G D M V E   I A L   H A A		
UniRef90_R6GUB5	V S D D H   L T G E K T T A L E R Q T S F G D M V E   I A L   E T A   I		
UniRef90_A4BK16	V S D D H   I T G E A L D A D A R Q N T F N D M V E   I T L   D A A L		
UniRef90_R5R9K3	V S D D S L   V S N E E T S P E E R E E K T F I A M M E   I A L   E   I   A		
UniRef90_UPI0002490873	C S D N   L V T G D S A S A K E R E Q S F T D M M M K   V S L   E T G   R		
UniRef90_UPI0003B3E677	V S D D H   L L G T A T T A E E R Q T A F T T M M E   L   A L   E T I   I		
UniRef90_UPI00041F09A5	V S D D N I   I T G E K T T A E E R Q T A F T T M M E   L   A L   D A A		
UniRef90_UPI000478E033	V S D D H   V R E E Y T T S S E E R Q R T F N D M I T   I A L   D T A   I   N		
UniRef90_C9P7M1	V S D D H   L R G E K L S S E E R Q K S F H E M M T   I A L   D T A   I   N		
UniRef90_E8M147	V S D D H   I T G E E E T T A Q E R E E T T F D K M M L   L   A L   N T A V		
UniRef90_UPI00037EB453	V S D D H   R T G E K S T S D E R Q N S F N E M I I   I A L   D S   V   V		
UniRef90_N6W878	V S D D S L   V T G E V T T A E Q R Q T A F T D M M E   L   A L   E S   V   L		
UniRef90_J3Z487	V S D D H   I L R G E S L S S A D R Q S T F N N M I E   L   A L   E V A R   R		
UniRef90_UPI000373C75D	V S D D S L   V L Q E K E L S S A E D R Q T G F H Q M V E   V A L		
UniRef90_I1AXG5	V S D D H   L L T H E A L S A Q D R Q S S F F G D M V R   I A L   E A		
UniRef90_R6E7R8	I S D N F I   T G A K S T V E E R Q N S F T N N M M K   I A L   E A S   V   K		
UniRef90_D3EHZ4	V G S H   L L T N E R S S H Q D E S K S F H D M V E   V A L   H T   I   L		
UniRef90_E3FJV8	V S D D Q L   R T G E V L S S E E R Q T E D M I E   I A L   D V   A   V		
UniRef90_A0A017HUT1	V S D D H   V V T H E A L P S D Q R E R S F A D M I   V A L   E A A		
UniRef90_R0EPK5	V S D N H   I T G E E E T T A E E R E K S F D D M I K   V A L   E T A   I		
UniRef90_F5WUG0	I S D S F   V T Q E V T S A E E R Q L S F T N N M M K   I A L   D A A I		
UniRef90_R5ZDI3	V S D D S V   V N H V Y T T A E E R Q L S F T N N M M Q   L   A L   E T A   L		
UniRef90_N2A114	I S S N H   I S G E S T P A S E R E R Q T S F T N D M V K   V A L   E A A   V		
UniRef90_D4MQB7	V S D S A   V T G E A T T A E E R Q T S F T N N M M E   V A L   E   L   A		
UniRef90_E7MP34	V S D S F   V S P E I T T A E E R Q T A F T D M M K   I A L   D A A   I		
UniRef90_A0A033UPV9	V S D D H   L L R D E A T T A Q E R E E Q N S F T Q M M E   I A L   E   I   A		
UniRef90_UPI000469D333	V S D D H   V T G E E E T T A Q E R E E Q N S F T Q G D M V R   I A L   R A A		
UniRef90_F2JIZ8	I S D N L   I T G E E E T T A E E R Q N T F T Q M M E   I A L   E   L   A		
UniRef90_G7GPH1	V S D D H   P S G R R T P A E R E T A F T T M I E   I A L   F E S   V   L		
UniRef90_UPI000367799C	V S D D H   I R G E A A S S E E R Q T G F K A M I E   L   A L   E		
UniRef90_UPI0003B51E0A	I S D D V   L T S Q A A E V S P E E R Q N A F T D M M R   L   A L   E   V   A		
UniRef90_A6FLY3	V S D D H   L L T G D A V V S S A D R E E T G F S A M V E   I A L   A A A   A		
UniRef90_Z9JPE7	V S D D H   L L T G E E E T T S A Q E R Q E T F E D M I V L   A L   D T   I		
UniRef90_B2U698	V S D D H   C L T G E E E T T S S E E R Q L T F N N M I E   L   A L   N T A   V		
UniRef90_F8HYC1	C S D N   V F R G E A L S S E E R Q N S F A N N M M K   V A L   E T A   I   K		
UniRef90_G9YKG6	V S D D H   L L T G A R A S A E R Q T G F N D M V T   V A L   E T A   I   Q		

	1	10	20	30	40
UniRef90_U3HAA6	T P H I	T A [L] A G D F A E T V L M P G D P	L R A K M I   A D T Y   L T D [V] R Q [V] N A		
UniRef90_E1QWQ8	S A C I	R C D K E D I [A] K V V L M P G D P	L R A K F I   A E N F L   L E G P T L F N D		
UniRef90_C5WDK2	T T H I	T N A K P G D F S E I V L M P G D P	L R A K F I   A D N F L   L A K S [L] E I S N		
UniRef90_W7Z713	T P H I	T A Q N G E I A K T V L M P G D P	L R A K F I   A E T F L   L E N P T Q F N T		
UniRef90_X2HA06	T P H I	I N A V D N A F A E T V L M P G D P	L R A K F I   A E T F L   L E D A Q E [V] T N		
UniRef90_R6TDF1	T P H I	I R V E D A E I A K V V L M P G D P	L R A Q Y V   A E H Y   L E N P [V] C F N T		
UniRef90_UPI00037677F2	T T H I	G A A E G D I A E T V L M P G D P	P Y R A R W A   A E T Y   L T G A R L V N E		
UniRef90_R5E7S8	T P H I	N N A R M G D I A K T V L M P G D P	L R V E Y I   A K N Y M E D A V [V] C F N K		
UniRef90_E4KQ30	S T H I	I E A Q A G Q I A K V V L L P G D P	L R A K Y I   A E T Y   L E D I Q Q Y N T		
UniRef90_G2LM25	T P H I	I N S K K N D F S D I V L M P G D P	V R A K Y I   A E K Y   L D D N Y V Q V N N		
UniRef90_UPI00040AA6CB	S I H I	G A K P G Q I A E T V L L P G D P	Y R A A W A   A N T F L   S G A E L V N D		
UniRef90_N1ZYPO	T I H I	H N A A K K G E I A K T V L M P G D P	P Y R A Q Y I   A E T F L   L E E Q P R L V S D		
UniRef90_UPI00031ADC5A	T P H I	I N A P Q G A F A E T V L F P G D P	L R A K Y I   A E H Y   L E S A K Q V [C] D		
UniRef90_U2DR67	T P H I	I N P K A E I A P R I L L P G D P	L R A K Y I   A E N M L   L E N A E Q F N E S T		
UniRef90_UPI0002FE14DC	T P H I	I K P D G A P I A E T I L L P G D P	L R A Q Y I   A E T F L   L E D A V Q F N S T		
UniRef90_D4IZ15	T A H I	N E A N K G D F A K T V L M P G D P	L R A K F V   A D N F L   L E N V [K] C V N T		
UniRef90_B0ETA8	T P H I	H N G A K Y G E I A E T V L M A G D P	L R V K L   L A D T Y   L T D V V Q Y N S		
UniRef90_I4DZC5	S I H I	I A A K E G E I I A D K I I L L P G D P	L R A K F I   A E I F   L E D A V [C] F N E G		
UniRef90_UPI0004797E33	T P H I	E L K D K D I I A K T V I M P G D P	L R A K Y I   A E T F L   L K D K D V V Q I N G		
UniRef90_UPI00036F7FED	S A H I	N A K K N E I L A D S V L M P G D P	L R A K W M A   A E T F L   L D K P [Y] C Y S N G		
UniRef90_UPI0003B57512	T P H I	E A Q P G D Y A D V V L L P G D P	L R A K Y I   A E H F   L E D V H Q V N G S		
UniRef90_10R0Z2	S I H I	G A E P G E I A D T V L L P G D P	L R A K W   A D T F F   L E D V F P V Q Y N S		
UniRef90_D2AMS2	T P H I	E L R K E E F A K T V I M P G D P	L R A K Y I   A D N Y   L E N V V R V N A		
UniRef90_R6RNG8	T P H I	S A K E G E I I A P S I L L P G D P	L R A K Y I   A E N F L   L A G A K Q F N S S		
UniRef90_G8N9Q5	P I H I	V R G Q P G E V A E R V L L P G D P	G R A E W I   A K T F L   L E D P V Q Y T S		
UniRef90_I0ERJ9	T P H I	I N A K I G D F H S K C I L C G D P	L R V K Y I   A K N F L   L E D A R E I T N		
UniRef90_D5E551	T P H I	I N A K K D E I A K I V I M P G D P	L R A K F I   A E T Y   L D E F K Q V N G S		
UniRef90_R5VG44	P I H I	K C N K E D I A P K V L M P G D P	L R A K F I   A E K F   L D N A R L V T S		
UniRef90_A0A023X5Q8	P V H I	R A E P G D Y A E N V L V P G D P	R R A R Y I   A E T F F   L E D F E G A K L V N E		
UniRef90_B7C830	T A H I	N S A N I E D V A K V V L M P G D P	L R A K L   A E N F L   L K D A V L F N D S		
UniRef90_H6N5U6	T P H I	I S A K L G E I I A K T V L M P G D P	L R A K W   A E N Y   L T D V K L V S S		
UniRef90_C6X005	S V H I	I A A K K G E I I A K T V L M P G D P	L R A K Y I   A E N F L   L E N I R L V S S Q		
UniRef90_R5BR35	T P H I	H N G A R L G E I I A K T V L M P G D P	L R A K V   A E T Y   L E N P I C F N T		
UniRef90_UPI000412A7B3	T P H I	I S A E V G D F A P A V L M P G D P	K R A K R I   A E L I   L D T P R Q V T D		
UniRef90_X0XPP3			T V L L P G D P   L R A K Y I   A Q T M L   L E D V F C Y N E		
UniRef90_UPI000472E769	T A H I	E L D K S [I] A K T V L M P G D P	L R A K F I   A D T Y   L K D V V Q I N G		
UniRef90_B3PM93	T P H I	I N A K D G A F A K [L] V L M P G D P	L R A K F I   A D N F L   L E D A K L V S D		
UniRef90_R7IUH8	T P H I	H N E A N L G D I A K T V I M P G D P	L R A K Y I   A E N F L   L D N Y K L V N S E		
UniRef90_UPI0003B6F0D9	T P H I	G A E P G D F A P D V L M P G D P	R R A K L   A E T F F   L D A P R L V T E		
UniRef90_U2DPN3	T P H I	H N T A E K G Q I A S T V L M P G D P	L R A K Y I   A E T Y   L D N V S E F N H		
UniRef90_G9PMH0	T P H I	I A A A P G D F A P A V L M P G D P	P R A Q R I   A E L I   L D T P M A D A R M I T D		
UniRef90_G5GGT2	T P H I	I D A K E G E I I A Q T I L L P G D P	L R A R F I   A D N F L   L D N V R Q F N S		
UniRef90_C0W2V2	T P H I	I N A E P T D F A P A V L M P G D P	R R A Q R I   A E S V L   L E S P R L V N D		
UniRef90_R5TQ85	T P H I	I E A K D G E F A K T V I A A G D P	L R A K F I   A E K Y   L E D V K L V N K		
UniRef90_Q8EWU7	T P H I	H N R A K K G E I I A K V V L M P G D P	L R A K W I   A E N F L   L E N P K L I N D		
UniRef90_UPI0003B572CA	T P H I	I N A K K E E I I A K V V L M P G D P	L R A K F I   A E K Y   L K N V K Q V N N		
UniRef90_H3NP11	T P H I	G A S K D Q I A N T V L M P G D P	K R A K F I   A D N F L   L E N V E Q F T D		
UniRef90_D7BH91	P L H I	V R G R P G D V A P Y V L L P G D P	G R A Q W   A E H F   L E N P K P Y T T		
UniRef90_Q98PS4	T P H I	I N A K K G E I I A K V V L M P G D P	P R A K T   M A E K Y   L K N Y K L V S S		
UniRef90_E2SN28	Y H I	N L K K G D V G E Y V I L P G D P	K R C E K I   A Q Y F D H   P Q L I A D S		
UniRef90_R5M2Y7	T A H I	I E S S K D D I I A K V V L M P G D P	L R A K Y I   A E H F   L T D Y K L V N S D		
UniRef90_U5MSE3	Y H I	I N I G K G E V G K Y V I L P G D P	K R C K K I   A E H F   L E N P K L I A D D		
UniRef90_N2AB61	Y H I	Q V V G K G D V G K Y V I L P G D P	K R C K A K I   A E Y F D E   A K L I A D D		
UniRef90_I5ATB1		H V A K V V L M P G D P   L R A K Y V   A E N Y   L E N P V L F N D			
UniRef90_R6TW15	T V H I	N E A K F G E I I A S T V L M P G D P	L R A K Y I   A D T Y   L E N V H C Y N R		
UniRef90_H1PWJ7	Y H I	I G L K K G D V G R Y V I L P G D P	K R C E K I   A K Y F   L E D A K L V A D D		
UniRef90_I5ASZ8	Y H I	H T S P E D V G K Y V I L T G D P	G R C E K I   A S Y F D H   A R K V A D D		
UniRef90_E8TC02	T P H I	H N E A D K D D Y A D T V L L P G D P	Q R A E W M A Q T F   L E A P R C I   N R		
UniRef90_E4QS89	T A H I	I E A K K N E I I A S I V L M P G D P	L R A E F I   I A K N F L   K D A K L V S K		
UniRef90_R5SSM5	T I H I	I E S K K E D I I A P L V L M P G D P	P K R A Q Y I   A E T Y   L K D Y K I V N K		
UniRef90_UPI000417EC67	T A H I	I A A E P G E F A P A V L M P G D P	K R A R R M A E T   L T G P R L V T D		
UniRef90_G9WLP2	Y H I	G V R P G E V G K Y V I L P G D P	K R C A K I   A K Y F D N   P V Q V A D D		
UniRef90_K6V4T1	T P H I	I S A E P G S F A S A V L M P G D P	R R A R R I   A E Q L   M P D A E L I T D		
UniRef90_U2WDS4	Y H I	G V A P S R V G R Y V I L P G D P	G R S E K I   A A Y F   E G A E K V G E D		
UniRef90_F0YYG6	Y H I	Q I G P D G V G R Y V I L M P G D P	K R C A F I   A R Y L   E N P V L I A D D		
UniRef90_D9R414	Y H I	H L S P G D I G D Y V L L P G D P	P A R S D R V   A K Y L   E D A R L V A D D		
UniRef90_I3DMU6	Y H I	G L R N G D V G E Y V I L P G D P	K R C A K I   A K Y F D D   A T L I A D D		
UniRef90_E7MLI0	Y H T	T G V G K G D V G R Y V F L P G D P	K R C A K I   A K Y F D D   A E L V A D D		
UniRef90_C7NGM9	T P H I	I A A G P D D F A P A V L M P G D P	K R A E R I   A Q L L   M P D A R L V T D		
UniRef90_F9VNS5	P V H I	I L A K K G D I I A E K V I I A G D P	S R V V K S   S K F L   E E P Q L V N E Q		
UniRef90_C4G909	Y H I	G V G A E E I I G P Y V I L P G D P	G R C E Q I   A G Y L   E D G V R V G Q		
UniRef90_R6LRV8	Y H I	Q V V A N G E V G R Y V I L P G D P	K R C K K I   A A Q Y F   E D P V M I A D D		
UniRef90_X4R8L9	T P H I	I N A E K G D F A P A V L L P G D P	K R A E R I   M A Q M   L M P D A K V V S D		
UniRef90_F7V6Y9	Y H I	Q I R K G E V G E Y V I L P G D P	K R C S K I   A E H   L E Q P R L V A D D		
UniRef90_R5UIP9	T H T	T G V G P Q D I G K Y V I L P G D P	K R C A K I   A E F   L T D A K Q V A D D		
UniRef90_D4GUE6	P H I	L L V E E G D V N D I A L I P G D P	G R V V D R I   A K Q   C E N V E E V A Q		
UniRef90_Q0TU58	F H I	I D V A P G E V G K Y V I L M P G D P	K R C A K I   A K Y   L D N   A K L V A D D		
UniRef90_R5S725	Y H I	T G V G R G R D V G R Y V I L M P G D P	K R C E K I   A A F   L D E P K F I A D D		
UniRef90_V4YC12	P H I	L L V E P G D V N D I A I P G D P	G R V V D R I   A S L C   E D A R E V A S D		
UniRef90_R7IRM3	Y H I	Q I R P G D V G K Y V I L P G D P	K R C E K I   A R H   L G Q A E L V A D D		
UniRef90_E6UF62	F H I	Q T L P D E V G R Y V I L P G D P	G R V V P K I   A A L L   D N A V Q V A N S		
UniRef90_F4GI0	Y H I	H L K K G D V G R Y V I L P G D P	G R C E R I   A R H   F D D G R F V V S S		
UniRef90_B5FER9	F H I	G V T K E D L A E M A I P G D P	A R V V Q K I   A E Q M   E N P K F L A S S		
UniRef90_R4VTB5	P H I	L L V D D G D L T D I A L V P G D P	D R V E R I   T E H   C S D V E W V A S S		
UniRef90_R5GZD5	F H I	K T R K G D I G K Y V I L P G D P	G R V V P K I   A A K   L E N A R L I A S S		
UniRef90_X4V610	F H I	G L K K A D L A T L A I V P G D P	E R V K R   A E L L   D N P V H L A S S		
UniRef90_UPI00041DF09B	Y H I	H T N A D M V G E Y V I L P G D P	G R C E K I   A S Y F   T D A K M V A S S		
UniRef90_A3DLR4	F H I	G V K P G D V S K Y V I L P G D P	G R V V K R   A A Y L   D A K L V A D D		
UniRef90_UPI0003FB0AE9	F H I	N P E M I A K L A I P G D P	Q R V V E R I   A S L L   S D A K P L A N		
UniRef90_S5ZA26	Y H I	R C K P G D V A E F V I L P G D P	V P W I   A S F W D E Q R E V A V A R		
UniRef90_R5JZ7	Y H I	V K V K K G D V G R Y V I L P G D P	K R C S K I   A A Y L   D A K L V A D D		
UniRef90_H9ZZF2	Y H I	G I S Q G D V A R Y V I L P G D P	P E R S E L   A K T W D   E W R F V A R		

	50	60	70	80
UniRef90_U3HAA6	V R N M L A F T G F Y Q A Q R I	S V M G S G M G I   P S L   S	I Y A H E   L   F S Q Y G	
UniRef90_E1QWQ8	V R N M L G Y T G S Y K G K R V	S V M G S G M G I   P S M C   L	I Y A H E   L   Y T Q L   G	
UniRef90_C5WDK2	I R G M L A Y T G F Y K G K L	S V M G H G I   G   P S S S   I	I Y T K E   I   I T D Y G	
UniRef90_W7Z713	V R N M F G Y T G T Y K G K K V	S V M G S G M G M   P S   G   I	I Y N S Y G   L   Y N S Y G	
UniRef90_X2HA06	V R A M L G F T G T Y Y K G K K V	S V M G H G M G I   P S C   S	I Y A T E   L   V K F Y G	
UniRef90_R6TDF1	V R N M L G F T G T Y K G K K V	S V M G S G M G M   P S M G   L	I Y A T E   L   Y T Q F D	
UniRef90_UPI00037677F2	V R G M L G Y T G T Y K G K R V	S V M G S G M G M   P S S   S	I Y A N E   L   I R D Y G	
UniRef90_R5E7S8	V R G M L G Y T G T Y K G K R V	S V M G S G M G M   P S M G   I	I Y S Y E   L   Y K M Y D	
UniRef90_E4KQ30	V R N M F G Y T G T Y Q G V K I	S V Q G T G M G I   P S A M   I	I Y T E E   L   I Q F Y G	
UniRef90_G2LM25	T R L M L A Y T G L Y K N R K I	S I M S H G I   G   P S A S   L	I Y A R E   L   I V E F N G	
UniRef90UPI00040AA6CB	T R G M L G Y T G T W N G H R V	S T H G S G M G M   P S L   S	I Y A N E   L   I R D H G	
UniRef90_N1ZYPO	I R N M Y C Y T G R F E G R E V	S V M A S G M G V   P S S M   S	I Y S Y E L   F H F Y D	
UniRef90UPI00031ADC5A	V R N M F G Y T G Y Y K G K K V	S V M G H G M G   P S V S   I	I Y A H E   L   I N E Y N G	
UniRef90_U2DR67	V R G A L G F T G T Y K G E K V	S V M G T G M G M   P Q V S   I	I Y V T E   L   M K F Y G	
UniRef90UPI0002FE14DC	V R N M L G Y T G T F N G R E L	S V M G T G M G   P S M A   L	I Y S W E L   I H E F F G	
UniRef90_D4IZ15	V R N C L G F T G T Y K G V P V	S V M A S G M G M   P S I   G	I F A F Y D	
UniRef90_B0ETA8	V R G A V G Y T G Y Y K G V K L	S V Q A H G M G M   P S I   G	I F N F Y G	
UniRef90_I4DZC5	I R N M F G Y T G T Y K G Q R V	S V M G T G M G   P S I   S	I Y A H E   L   I V N Y G	
UniRef90UPI0004797E33	V R N M F G Y T G K F N G K K V	S T V M G S G M G M   P S I   G	I Y S Y E L   F K F Y D	
UniRef90UPI00036F7FED	V R G M L G Y T G E F K Q R I	S L Q G S G M G I   P S A M   I	I Y Y H E   L   I N D Y D	
UniRef90UPI0003B57512	V R N C L G F T G T Y K G H R V	S T Q A S G M G   P S L   S	I Y V T E   L   A T V Y N G	
UniRef90_10R0Z2	V R N M F G S T G T Y N G Q R V	S V Q G T G M G A   P S I   G	I Y A H E   L   F E D F G	
UniRef90_D2AMS2	V R N M F G Y T G T Y K G K V V	S V M G S G M G M   P S M G   I	I Y A Y E   L   F K Y Y D	
UniRef90_R6RNG8	T R N M F G Y T G T Y K G Q R V	S V M G T G M G   P S M G   I	I Y S H E   L   M N F Y G	
UniRef90_G8N9Q5	Y R G L L G Y T G R Y R G V R	S V Q T T G M G A   P S A   S	I V A E   E   E L   L V S   L G	
UniRef90_I0ERJ9	V R N M L G F S G K Y K G K E I	S I L M G H G M G   P A S   C   T	I Y A T E   L   I Q T Y Q	
UniRef90_D5E551	V R N M L M F T G K Y K G K E I	S T I A G S G M G   C   P S   I   G	I Y S F E   L   F K F Y D	
UniRef90_R5VG44	V R N M F G F T G T Y K G V P V	S T I M G S G M G M   P S M S	I Y A F E   L   F Y Y F N	
UniRef90_A0A023X5Q8	E R G M L G Y T G T Y K G K P V	S V Q T S G M G   C   P S A A   I	V T E E   L   L V I Q   L G	
UniRef90_B7C830	V R G M L G Y T G T Y K G K R V	S V M G S G M G M   A S M G   I	I Y S Y E L   F K F Y D	
UniRef90_H6N5U6	V R N I I F F Y T G K Y K G K E I	S T V G A S G M G I   P S M G   I	I Y S Y E L   F A F Y G	
UniRef90_C6X005	T R N I I F Y Y T G L Y K G K E I	S V G A S G M G V   P S I   G	I Y S Y E L   Y T E Y D	
UniRef90_R5BR35	V R N M F G Y T G T Y H K G K E I	S V G A S G M G V   P S I   G	I Y S Y E L   F H F Y D	
UniRef90UPI000412A7B3	V R G M L G F T G T V N G H P L	S V M G S G M G Q   P S A S   I	I Y A T E   L   F T Q Y G	
UniRef90_X0XPP3	V R G M L G Y T G S Y G D K R V	S V M G T G M G   L   P T L   S	I Y I H E   L   V I T E Y H	
UniRef90UPI000472E769	V R N M L G Y T G T Y K G R K V	S V M A S G M G T G M G   P S I   G	I F E F Y D	
UniRef90_B3PM93	V R N V L M Y T G T Y Y K G R K V	S V C M A S G M G T G M G   P S I   G	I F N E Y Y G	
UniRef90_R7IUH8	V R G I I F A Y T G K Y K G K E I	S T I M A S G M G M P S M G   I	I Y S Y E L   Y K Y Y G	
UniRef90UPI0003B6F0D9	V R G I I L G Y T G T F N G K P V	S V V L A S G M G M P S M A   I	I Y S T E L   A R F F F D	
UniRef90_U2DPN3	V R G M L G F T G T Y Q G K P V	S V M G S G M G Q   P S I   G	I Y S Y E L   F H H Y G	
UniRef90_G9PMH0	V R G M L G F T G T V N G K P V	S V M G S G M G Q   P S F T   I	I F S Q F G G	
UniRef90_G5GGT2	T R N M L G F T G T Y K D R E I	S V M G T G M G   C   P S I   G	I Y S Y E L   I N F Y K G	
UniRef90_C0W2V2	V R G M L G F T G T Y Q G K P V	S V M G S G M G Q   P S F S   I	I Y A T E   L   F S Q F G	
UniRef90_R5TQ85	V R N M L M Y T G T Y K G R E V	S V S I I S H G M G M P S A G   I	I Y F Y E L   F K F Y N D	
UniRef90_Q8EWU7	V R G M L G Y T G T Y Y N N K E V	S V T V M G H G M G M A S I   G	I Y S Y E L   F A F Y D	
UniRef90UPI0003B572CA	V R N M L M F T G T Y K D K E V	S V T V A G S G M G Q   P S I   G	I Y S F E L   F K F Y D	
UniRef90_H3NP11	V R G M L G F T G T Y K G K R V	S V T V M G S G M G Q   P S A M   I	I Y Y H E   L   F A F Y D	
UniRef90_D7BH91	Y R S L L G F T G T Y K G L P V	S V T V Q T T G M G   C   P S T A   I	I V V E E L   A Q   L   G	
UniRef90_Q98PS4	V R N A F I Y T G E Y K G K Q I	S V T V A A S G M G C A S   I   G	I Y S H E   L   F D K Y E	
UniRef90_E2SN28	H R E Y V T Y T G Y L N G E K V	S V T V S T G   L   G G P S A A   I	I A M E E L   L V N   G	
UniRef90_R5M2Y7	V R N M F A Y T G Y Y K G N K V	S V T V F S S G M G   P S I   G	I Y A Y E   L   F K F Y D	
UniRef90_U5MSE3	N R E Y I T T Y T G Y L D D G V K V	S V T V T S T G   I   G G P S A A   I   A L E   E   L   V I N   C   G		
UniRef90_N2AB61	S R E Y V T Y T G Y L D D G V K V	S V T V T S T G   I   G G G P S A A   I   A M E E L   L V M S   G		
UniRef90_I5ATB1	V R G M L G Y T G L Y E G E E V	S V T V S M G S G M G   P S M G   I	I Y A K E   L   F S F F D	
UniRef90_R6TW15	V R N M F G F T G E Y K G L K I	S V T V S Q G S G M G V   P S M G   I	I Y S K E L   F E G Y G	
UniRef90_H1PWJ7	N R E Y I T T Y T G Y L D D G V K V	S V T V S T S T G   I   G G G P S A A   I   A L E   E   L   V I K S   G		
UniRef90_I5ASZ8	N R E F E T W T G E L E G K K V	S V T V T S T G   I   G G G P S M A   I   A V   E   E   L   A R   C   G		
UniRef90_E8TC02	R R G T L G F T G L F R G K S I	S V T V Q A T G L   G   V G S F L   I	I Y A H E   L   L D   H   Y G	
UniRef90_E4QS89	V R N N L I F T G E Y K G K K V	S V T V T I A A S G M G S G   I   G	I Y A Y E   L   F K F Y D	
UniRef90_R5SSM5	V R G M T A Y T G Y Y D N K L V	S V T V T F P S S M G N G   P S M G   I	I Y S Y E L   F K N Y D	
UniRef90UPI000417EC67	V R G M L G F T G T V E G R P L	S V T V M G S G M G Q   P S L   A   I   Y A T E   L   F A H   Y G		
UniRef90_G9WLP2	N R E Y V T I S G T L L G E K K V	S V T V C S T   G   L G G P S A   S   A L E   E   E   L   S Q   C   G		
UniRef90_K6V4T1	V R G M L G F T G T I D G K P L	S V T V M G S G M G M P S A T   I   Y A T E   L   F M H   Y G		
UniRef90_U2WDS4	H R E F V T Y T G K L L E G V P V	S V T V C S T   G   I   G G P S A   S   A I M E E L   R   I   C   G		
UniRef90_F0YYG6	S R E Y V T Y T G A L D D G V K V	S V T V T S T G   I   G G G P S A A   I   A M E E L   V M A   G		
UniRef90_D9R414	N R E H R T F T G S Y K G V K V	S V T V T S T G   M G   C   P S A A   I   A A E E L   I   N   G		
UniRef90_I3DMU6	N R E Y V T Y T G Y L D D G I K V	S V T V T S T G   I   G G G P S A A   I   A I   E   E   L   V K   C   G		
UniRef90_E7MLI0	S R E Y V T Y T G W L N G V K V	S V T V T S T G   I   G G G P S A S   I   A M E E L   T   A V   G		
UniRef90_C7NGM9	V R G M L G F S G T V E H P L	S V T V M G S G M G Q   P S A S   I   Y A T E   L   F R E Y G		
UniRef90_F9VNS5	N R G F L I Y T G K Y K G E R I	S V T V S I A T H G   I   G G G P S A A   I   V L E E   L   T M   G		
UniRef90_C4G909	N R E F T T Y T G K L K G V K V	S V T V T S T G   I   G G G P S A A   I   A M E E L   V M A   G		
UniRef90_R6LRV8	N R E F I T T Y T G T L D D G V K V	S V T V T S T G   I   G G G P S A A   I   A M E E L   A R   C   G		
UniRef90_X4R8L9	V R G I K A F T G T V D D G K P V	S V T V M A S G M G Q   P S L   G   I   Y V S E L   F S E F D		
UniRef90_F7V6Y9	H R E Y V T Y T G M L D D G T A V	S V T V T S T G   I   G G G P S A A   I   A V E E L   L V   Q A   G		
UniRef90_R5UIP9	N R E F T T Y T G T L D D G V R V	S V T V T S T G   I   G G G P S A A   I   A I   E E L   L S K   C   G		
UniRef90_D4GUE6	N R E Y K V V N A E Y E G V P L	S V T V T I S S T G   I   G C   P S A A   I   A I   E E L   L A R   V   C   G		
UniRef90_Q0TU58	K R E Y V T Y T G Y L D G E K V	S V T V T S T G   I   G G G P S A A   I   A L E   E   L   V   K   C   G		
UniRef90_R5S725	N R E Y V T Y T G K L D G I K V	S V T V T S T G   I   G G G P S A A   I   A L Q   E   E   L   T   A   C   G		
UniRef90_V4YC12	N R E Y V T Y T G K L D G I K V	S V T V C S T   G   I   G C   P S A A   I   A V   E   E   E   L   A N   V   G		
UniRef90_R7IRM3	N R E F V T Y T G Y L D D G E K V	S V T V T S T G   I   G G G P S A A   I   A M E E L   V R   C   G		
UniRef90_E6UF62	N R E Y N V Y T G T L D D G E K V	S V T V T C S T   G   I   G G G P S A A   I   A V   E   E   E   L   L A K   C   G		
UniRef90_F4GI0	N R E Y T T Y T S G Y L D G E M V	S V T V T S T G   I   G G G P S A A   I   A S I A I   E E L   T   R   C   G		
UniRef90_B5FER9	H R E Y T V Y L A E L D D G K I V	S V T V C S T   G   I   G G P S T S   I   A V   E   E   E   L   L A Q   L   G		
UniRef90_R4VTB5	N R E Y T I A N A T Y E G R E L T I V	S V T V C S T   G   I   G G P S A A   I   A I A E E L   A A   V   G		
UniRef90_R5GZD5	N R E Y T T Y T G C L D D G E K V	S V T V C S T   G   I   G G P S A A   I   A V E E L   L I   Q   C   G		
UniRef90_X4V610	H R E F T T W R G E M D G K A V I	S V T V T S T G   I   G G G P S T S   I   A V   E   E   E   L   L A Q   L   G		
UniRef90UPI00041DF09B	N R E F T T Y T G M L E E G T K V	S V T V T S T G   I   G G G P S A A   I   A M E E L   V H   C   G		
UniRef90_A3DLR4	H R E Y T F S G K Y K G V F I S A T S T G   I   G G G P S T A   I   A I   E E L   A R   V   G			
UniRef90UPI0003FB0AE9	H R E F S S Y L G K L G G H S V V	S V T V C S T   G   I   G G P S T S   I   A V   E   E   E   L   L A Q   L   G		
UniRef90_S5ZA26	H R E Y V T Y T G R Y L G V P S C	S V T V C S T   G   I   G G P S A A   I   A V E E L   L R   V   Q   G		
UniRef90_R5JZ7	N R E F V T Y T G Y L D D V K V	S V T V C S T   G   I   G G P S A A   I   A L E E L   V H   V   C   G		
UniRef90_H9ZZF2	H R E Y V T Y S G K Y K G A E I S V T S T G   I   G G G P S A A   I   A V E E L   L R   A   V   G			

	90	100	110	120
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UniRef90_E1QWQ8	V D A I   I R V G S T G G L   A D G V H   A R D	V V I   A M S A A T N S S I A E L   Y D S		
UniRef90_C5WDK2	V K K I   I R I G S C C G V R K D I K   K L R D	V V I   G M G A C T D S K V N R I R F H		
UniRef90_W7Z713	V E N I   I R I G S C G A I S P N V N   L G D	V V I   G M G A C T D S K V N R I R F H		
UniRef90_X2HA06	V K N I   I R I G S C G A I S P N V N   L G D	V V I   G M G A C T D S K V N R I R F H		
UniRef90_R6TDF1	V D A I   I R I G S A G G L   S D Q V K M R D	V V I   A M A A S S N S N Y G A A F D L		
UniRef90_UPI00037677F2	A K T L   I R I G S C G G M Q P Q V K I   R D	D L I   L A M T A S T Y G S P S R G I F R		
UniRef90_R5E7S8	V D N I   I R V G S A G A F K D D I V K   V R D	I I I   A Q A A C T D S N Y M S Q F K L		
UniRef90_E4KQ30	V E T I   I R I G S I G G M Q K D I V K   V R D	I I I   G Q G A T T D S N I L R N I F D		
UniRef90_G2LM25	V K K I   I R I G S C G A V R D D I N L R D	I I I   G M G A S T D S K V N R I K F N		
UniRef90UPI00040AA6CB	A K T L   I R I G T C C G A V Q P H L   G L G E	I I I   L A M T A S S R S S P S D G I F G		
UniRef90_N1ZYPO	V E S I   I R V G S A G G L H P S L   K L K D	V V V   A M A V S T D S N Y A L H E L		
UniRef90UPI00031ADC5A	V K K L I   I R V G S C C G G V S D D I F V R D	I I I   V A T G A S T A S T T N R T R L A		
UniRef90_U2DR67	V K T L   I R I G T C C G G M L P D M Q L M D	L I L   G T G A C T T S G I N R H I F N		
UniRef90UPI0002FE14DC	C R K L   V R I G S C C G G L T P E L   G L N D	I I I   V L A Q Q A S T D S N Y L A Q F D L		
UniRef90_D4IZ15	V E N I   I R I G S A G G S Y T D K L N   V L D	V V I   S E S A F S E S T F A K Y T N G		
UniRef90_B0ETA8	V K R I   I R I G S A G A F D E S L K L   G D	I I I   V I G M G A C Y D S N F E R Q Y D I		
UniRef90_I4DZC5	V K R L I   I R V G T A G S G L N K D V H   V R E	L V L   A Q Q A A T N S N I I R N D W P		
UniRef90UPI0004797E33	V E A I   I R V G S A G A Y T D K L K L   Y D	V V V   A K D A W S E S S Y A K T M G V		
UniRef90UPI00036F7FED	V K R L I   I R V G T A G S Y Q Y K D V N   M R D	V V V   A L A Q Q G S S T D S A V V A N T F A		
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UniRef90_10R0Z2	V Q K A I   R V G T S G G L A P T K L   R D	V V I   A M T S S T D S Q I N R R A T N		
UniRef90_D2AMS2	V D N I   I R V G S A G S Y K K A E F K V Y D	V V L   E E S Y C E S N F I E I V T G		
UniRef90_R6RNG8	V K K L   V R V G T A G A M Q K T T H   R D	L V L   A M G A C T G T G Y V K E L G L		
UniRef90_G8N9Q5	A R V L   L R V G T C C G A V D G A L A P G D	L V V   A Q Q G A V P L D G A T R Q Y L E		
UniRef90_I0ERJ9	V K E L   L R I G T C G A I S Q K V A L   K N	I I I   L A T G A S T D S K T N R V R F L		
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UniRef90_A0A023X5Q8	A K N I   L R V G T C C G G Y N R E M Q L G D	V I I   A T A A T P Q D G T V L S L T Q		
UniRef90_B7C830	V D A I   I R V G S T G S Y S E R L P M K S	V A L   V K G S Y S E S T Y A L A Q S G		
UniRef90_H6N5U6	V E N I   I R V G S S S G S Y K P E I K V   G D	V V L   V L T E S I A D S G A F S K I V L		
UniRef90_C6X005	V E T I   I R I G T C C G A Y T P E L K I   F D	V D L   N V E N A A S E S T Y A K F A W E		
UniRef90_R5BR35	V D K I   I R I G S A G G G I Q Q D D L R V   M D	V V V   V G L G A C T D S N Y A H Q Y Q L		
UniRef90UPI000412A7B3	V E R I   I R V G T A G G G I A P Q V K V   G D	V L I   A T G A H H T D S A M N Q L R I P		
UniRef90_X0XPP3	V K A L   I R V G T C C G A L Q P Y L K I   G D	I V L   P M T S S T N S H I N K L H F Q		
UniRef90UPI000472E769	V D N I   I R I G S A G A Y T D E L N Y   D	V V V   V L V K N C F S E S T Y A K T M G V		
UniRef90_B3PM93	V E A I   V R I G S A G S F K A E I K N   F D	V I I   L A K D A Y G E N V A F R E S M I		
UniRef90_R7IUH8	V E N I   I R I G S C C G S Y K P E I K L   F D	V I I   I L A E N V F S E G N F A L T L N N		
UniRef90UPI0003B6F0D9	V K R I   V R V G T I I G G I A P Y L E L   G D	V I A   A A S A A H T N S A M T S E W V P		
UniRef90_U2DPN3	V D N I   I R L G S S S G Y V E G N L   F D	V V V   M A T A A W S A S T Y A L A Q S G		
UniRef90_G9PMH0	V E R I   I R V G T I I G A I S P K V E   V G D	V V V   V A T G A H T D S S M N Q L R I P		
UniRef90_G5GGT2	V K N L   I R I G T A G S L M S D V H   K D	V V V   F G M G A C T T S N Y P N L M G L		
UniRef90_C0W2V2	V E R I   I R V G T A G G G I G E D V K   V G D	V V I   A T G A H T D S A M N Q L R I P		
UniRef90_R5TQ85	V D R I   I R I G T C C G T S N P V N K L   L D	T I L   A E S S Y T E S S N Y A F M F N K		
UniRef90_Q8EWU7	V D V I   I R V G S A G S Y K E N D L   D L Y	L V L   T K K A Y S E S T Y A K Y I G I		
UniRef90UPI0003B572CA	V D K I   I R I G S A G S Y K E N D L   D L Y	V F L   V E S S F S D S S A Y S E L V L		
UniRef90_H3NP11	V K T I   I R V G T A G G L Q P H L   K V R D	V I V   A T A A N T A S S V V K G K F G		
UniRef90_D7BH91	A K V L   V R V G T C C G V F S E T L K A P E	V I V   V A Q A S I P L D G T T R Q Y L G		
UniRef90_Q98PS4	V E K I   I R V G T S G S Y V K D L N   I G D	V V V   V A M S A S T N S A Y P S R F G L		
UniRef90_E2SN28	A K K F   I R V G T C C G A M Q P E I L G G D	V L V   A K S A Y T D N Q N F S L V L S		
UniRef90_R5M2Y7	V E K I   I R I G T S G T I H K D V K L L   D	V I V   I A T G A V R A E G T S R E Y A		
UniRef90_U5MSE3	A D T F   R V G T C C G G M D D V K G G D	V V V   V A T G A I R A E G T T K E Y A		
UniRef90_N2AB61	A D T F   R I G T C C G G M Q T D V Q S G D	V V I   V A S G A I R M E G T S R E Y A		
UniRef90_I5ATB1	V E A I   I R I G S A G G G V G D D V N   V R D	V V V   V A M S A S T N S A Y P S R F G L		
UniRef90_R6TW15	V E N I   I K I G S A G S G I T N E V N   V R D	I I V   V A K T I D S N S N Y L I S C G I		
UniRef90_H1PWJ7	A D T F   L R V G T C C G G M Q T E I M G G D	I V I   V A T G A I R M E G T S R E Y A		
UniRef90_I5ASZ8	A D T F   R V G T C C G G M Q T E V L S G D	L I V   V A T A A I R M E G T T R E Y A		
UniRef90_E8TC02	A R T L   I R T G T C C G S L T A K A K L   R S	L V I   S Q S A Q A E S A Q S G Q V F		
UniRef90_E4QS89	V E K I   I R I G S A G S Y D K D L E V Y S	L V I   A N S A W S D S C S F P A L I S		
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UniRef90_F9VNS5	G R I F   R Y G T S G A L V P E V N I G D Y	V I V   V T G A S Y N L V Y Q Y F K E		
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UniRef90_D4GUE6	V E T F   I R V G T I I G A L Q A D I E V G D M	V I V   A T G A A K E E G T S K R Y E S		
UniRef90_Q0TU58	A D T F   I R V G T C C G G I Q D L N V K G G D	L I I   A T G S I R A E G T S R E Y A		
UniRef90_R5S725	A D T F   R V G T C C G G M Q D D V L G G D	V I V   A N G A I R M E G T S K E Y A		
UniRef90_V4YC12	V E T F   R C G T C C G A L Q S G I A I G D M	V I V   A S G A A K E E G T S K R Y E P		
UniRef90_R7IRM3	A D T F   R V G T C C G G I D L D V K G G D	V V V   A T G A V R M E G T S R E Y A		
UniRef90_E6UF62	A D T F   I R V G T C C G G I D L K I W G G D	L I I   A S S A I R A E G T S Y E Y L P		
UniRef90_F4GI0	A D T F   R V G T C C G G I A L P V E S G D	V V I   A T G A I R M E G T S R E Y A		
UniRef90_B5FER9	V R T E L   R V G T T G A I Q P H V N V G D M	V V I   A T G A I R M E G T S R E Y A		
UniRef90_R4VTB5	V E T F   L R V G T T G A L Q S G I E I G D M	V T T G S V R L D G A S L H F A E		
UniRef90_R5GZD5	V E T F   R V G T S G G I D L K V V G G D L L	L I I   A N A A I R S E G T S H E Y I P		
UniRef90_X4V610	I R T L   R V G T T G A I Q P H L N V G D V L	V I V   T T G S V R L D G A S L H F A E		
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UniRef90_A3DLR4	S N T F I   R V G T T G A L R R N I G V G D	I I I   S T G A V R L E G T S K Q Y V F		
UniRef90UPI0003FB0AE9	V R C F I   R V G T T G A I Q P Q V N V G D V I	D G T S G H F A P		
UniRef90_S5ZA26	A S T F I   R V G T T G A I Q P D I E V G D	I I I   A T G A V R M E G T S K Q Y V R		
UniRef90_R5JZ7	A D T F I   R V G T C C G G M Q M D V L A G E	L V I   A T G A V R M E G T S R E Y A		
UniRef90_H9ZZF2	A D T F I   R V G T T G A I K G E I E I G D	I I I   S S G A V R L D G T S K Q Y A I		

130            140            150            160

UniRef90_U3HAA6	G F D F A A L   A D Y R L L   E R T V R R A D E E S G Q P   V H   V G N V   V F S A D L   F Y E
UniRef90_E1QWQ8	P   V K   L A P T   A D F E M L   R G A V T S A E E L   G V G Y K   V G Q V   V V S S D V   F Y N S
UniRef90_C5WDK2	N H D Y A A I   A D F G M L   H N A V V A A N K L S I K V H   G N L   F S T D L   F Y S
UniRef90_W7Z713	V E G N T Q L   P S S L   L N E K I   E A A A K K I   N Q P   L L T A K I   H S S D V   F Y H
UniRef90_X2HA06	D S D F A A I   A D F D   T C   N A V N A A K N L   G V N V K   V G N L   F S A D L   F Y S
UniRef90_R6TDF1	P G Y   L T P   V A D Y G M L   A N A V E S A K E L   G L S A K   V G P   V Y T S D H   F Y Y D
UniRef90_UPI00037677F2	G L N F A P C   A D Y G L   L R A A H   D A A A G I A A A G V H   V G G I   Y S S D T F Y D
UniRef90_R5E7S8	P G T F A P V   G D Y N L   I S T A A G K A E E L   G L N   R V R V G N I   L S T D S F Y T
UniRef90_E4KQ30	G Q V H Y A I   A D F K L   L D T L Y H   K A M I   P A K N I H   V G N V L   L S S D R F Y N
UniRef90_G2LM25	N H D F S A I   A D F D M I   C N T V L I   S R K M N I   K V S I   G N F F T T D S F Y N D
UniRef90UPI00040AA6CB	Q L R F A P C   C A D W G L   L Q S A A R A C D   V K G V S P H I   G G I   F S S D A F Y Y D
UniRef90_N1ZYPO	P G Y   L S P C   G D Y S L   A K A A E Y G R K H   G L S V R   V G P   V M S G E G F Y Y G
UniRef90UPI00031ADC5A	Q Y D Y A A V   P D F E L   L K A C   C W E T A D S H   H K I   P A R F G S I   F T N D L   F Y G G
UniRef90_U2DR67	G D F A P T   A D F E L   L N K A Y E   A K E R E I   K T Y T G   L   L S S D M F Y Y G
UniRef90UPI0002FE14DC	P G T W A P T   G S F R L   L D H   V Y R G A A E R G I   T A H   A G N V V V S S D T F Y H
UniRef90_D4IZ15	V E E K T L   P Y P S K K I   N D   L A I   A K A K E L   G L   D A K   L A K V   H S A D Q F Y T
UniRef90_B0ETA8	P G K Y S C I   A D F Q L   C   R E A V D A A E K L   G Y R Y K V G N I   Y S A D Y F Y T
UniRef90_I4DZC5	Q Y D F P Q I   A S F H   L D K A Y H   I   A K G F G M T T H   V G N V L   S S D V   F Y S
UniRef90UPI0004797E33	T G R K T L   P A T K S L   N N R L   L K S A A K V G V T L   H   T E T I   H   S S D V   F Y R
UniRef90UPI00036F7FED	D V N Y A P T A N F D   L M K A V T Y T K E T N I   P I K V G N V L   S S D L   Y Y E
UniRef90UPI0003B57512	G V H Y A P   L A N F E L   L D T A Y Q I   A K Q K G L   D V   V G G D I   F A A D R F Y N
UniRef90_10R0Z2	G L D F A P S A D Y E   L E K A V A K A R E   L E V   V R F H   V G G I   A S G D L   F Y Y
UniRef90_D2AMS2	S K T   D   V R S S E E L   N K E   L I A S A Q R Q D I   E L   K K A K A H C T   D V F Y R
UniRef90_R6RNG8	P D G Y S C I   A D F G L   L I K A L E   E A E Q R G L   S Y H   V G N V L   T S D V F Y A
UniRef90_G8N9Q5	G R P Y A P   P D P E L   F R A L W Q D A R K K G Y P H   V G L   V A T E D A F Y A
UniRef90_I0ERJ9	N H D L S A T P S F E   S L K A Y Q M A K R   L N I   D L K   V G N V F T S D F F Y S
UniRef90_D5E551	D D S K I   A K P S K K T   T N N D I R D   I A N K L   G V K L   H   E G R I   H   S S D V   F Y
UniRef90_R5VG44	Y D K N I   V Y P S K E   L N D K V I A T A K E   Q G K D I   H   V G T   V L T C   D   V F   F   N
UniRef90_A0A023X5Q8	G V P Y S P A A D F K L   V H A A F H   A A E A A G R K T F   L   G P   V S G D L   F Y D
UniRef90_B7C830	D T D T M Q Y P D E D L   N K L   I E S V   S Q E   V S   P   V V K T N T H   S S D V   F Y Y
UniRef90_H6N5U6	G E N N K A F   P D S S S L   N E R L   K G S A K A L   N H   K   L   I E S K M   H   S S E V   F Y W
UniRef90_C6X005	I E E   L S   S Q G N T   F A V I N D   T A R N   L S R E   L   K T T N   I   H   T S S D   I F Y R
UniRef90_R5BR35	P G T F A P I   A S Y E L   L V E K A V D   V D   V A R R Q G T   P   V   H   V G N I   L   S S D V   F Y N
UniRef90UPI000412A7B3	G V I N F S A V A D F R L   A N A A W E   E A Q R   L   D A T V   H   A G A I   I   S R D H   F Y F
UniRef90_X0XPP3	G M D Y A P A V S F D   L L   K A Y E   E A A K E R G A R   V   F   V   G G N F A S D T F Y N
UniRef90UPI000472E769	S G R K K L   P A T K A L   N T K I   K R S A Q K L   N   K   I T E   G   T   H   S S D V   F Y R
UniRef90_B3PM93	P   N D N   I   A T P D K K L   N A L   L   K N A K E L   N   M P   I   K E E R   V   L   T   E   A F Y T
UniRef90_R7IUH8	E D C H   I V S   G N Y E L   L N K I   L   E E T A K E N N   I   S   L   C K G N   T   V   C   T   D   C F   D   L
UniRef90UPI0003B6F0D9	G V T   L   S   H A P   D F A L   L   R K V   V E   H   G E A T   G K R L   H   V   G   P   L   F   T   T   D   S   F   Y   N
UniRef90_U2DPN3	Y D K D   L   T Y P   S T Q   L   N A Q   L   K E S A Q R   L   G K E   L   V E G   V   V   H   S S D V   F Y Y
UniRef90_G9PMH0	G I   N F S A V A D F H   L   A Q A A Y E   P   Q   A G   V   E   L   G   D   R   L   H   A G T   I   I   S   R   D H   F Y F
UniRef90_G5GGT2	K G T F A P I   C S Y F   L   L E K A V A   V A A A K K L   G   N   Y   H   V   G   N   I   L   S S D M F Y G
UniRef90_C0W2V2	G V S F S A V A D F R   L   A M A A Y Y Q A G   V   E   L   G   D   R   L   H   A G T   I   I   S   R   D H   F Y F
UniRef90_R5TQ85	E H I N   L   E K P   S I   I   N D K   L   K A T A S   L   K G   I   K   L   E   G   D   V   M   T   C   D   V   F   V   D
UniRef90_Q8EWU7	E A K D   S   T E G   S   D   E   L   N   D   V   R   K   T   A   L   E   N   N   I   K   L   T   D   V   V   V   H   S S D V   F Y Y
UniRef90UPI0003B572CA	G E K N   I   H   Y P   S K E   L   N   K E   I   E   K   S   A   K   D   L   E   I   N   L   N   K   G   R   V   H   S S D V   F Y A
UniRef90_H3NP11	E   I   Q   F   S   P   T   P   T   F   E   L   L   L   K   T   H   E   K   A   E   E   L   G   I   K   A   H   F   G   P   V   F   S S   D E   F   Y   R
UniRef90_D7BH91	G K P Y A P   V   P   D   Y   A   V   L   E   Q   L   V   G   A   A   R   R   L   A   Y   P   H   V   G   I   V   T   E   D   A   F   Y   S
UniRef90_Q98PS4	G A E N   V   F   Y   P   S   K E   L   N   E   Q   I   S   K   A   K   D   L   L   P   I   K   E   I   Q   V   H   S S D V   F Y Y
UniRef90_E2SN28	P   I   E   Y   P   A   V   A   D   Y   D   I   V   Q   V   L   K   E S A K N E   N   F   R   T   H   T   G   I   V   Q   C   K   D   S   F   Y   G
UniRef90_R5M2Y7	D   T   D   K   E   Y   E   S   S   S   E   L   N   N   L   I   I   E   K   G   K   E   L   G   V   N   I   K   A   G   K   I   I   T   S   D   V   F   Y   V
UniRef90_U5MSE3	P   I   E   F   P   A   V   A   N   F   E   I   A   N   A   L   V   Q   A   S   K   E   L   N   K   T   Y   H   A   G   V   V   E   C   K   D   S   F   Y   G
UniRef90_N2AB61	P   I   E   F   P   A   V   A   D   V   G   I   V   H   A   L   I   E   A   A   K   K   L   E   Q   R   Y   H   V   G   I   V   Q   C   K   D   S   F   Y   G
UniRef90_I5ATB1	P   G   S   I   A   P   T   A   D   W   G   L   V   R   D   A   V   N   I   A   D   E   M   N   V   R   T   S   V   G   S   V   Y   S   S   D   F   F   Y   Y
UniRef90_R6TW15	E   D   T   I   F   P   E   C   S   N   V   L   L   E   K   L   L   E   I   D   R   K   N   N   L   N   L   K   Y   G   E   V   F   T   S   D   V   F   Y   S
UniRef90_H1PWJ7	P   I   E   F   P   A   V   A   D   I   D   I   V   N   A   L   I   Q   G   A   K   D   L   G   E   K   Y   H   T   G   I   V   Q   C   K   D   S   F   Y   G
UniRef90_I5ASZ8	P   I   E   Y   P   A   V   A   D   Y   R   V   V   R   A   M   T   E   A   A   E   T   L   G   Y   R   Y   H   T   G   V   V   Q   S   K   D   S   F   Y   G
UniRef90_E8TC02	G   L   Y   G   P   A   G   P   D   P   A   L   L   A   S   S   R   A   K   A   V   E   F   G   I   D   H   H   V   G   L   T   V   C   S   D   I   F   Y   H
UniRef90_E4QS89	G K K   H   L   A   H   P   N   P   G   L   V   A   N   L   F   H   S   A   T   K   L   G   L   N   P   L   Y   T   R   I   H   S   T   D   V   F   Y
UniRef90_R5SSM5	H   F   N   T   I   A   S   S   N   F   L   N   D   V   I   K   E   V   I   A   K   D   I   D   I   N   I   K   E   G   T   V   Y   S   S   D   I   F   Y   F
UniRef90UPI000417EC67	G   V   N   F   S   A   V   A   D   F   H   L   A   M   A   A   H   E   A   A   V   A   S   G   I   R   T   R   T   G   T   I   S   R   D   H   F   Y   L
UniRef90_G9WLP2	P   I   E   W   P   A   T   A   D   F   F   V   T   K   E   I   Y   D   A   A   N   R   L   G   F   K   N   H   V   G   V   V   Q   C   K   D   A   F   Y   G
UniRef90_K6V4T1	G   L   N   F   S   A   T   A   S   F   P   L   A   A   A   A   M   G   A   A   A   G   R   E   G   V   H   V   G   T   V   L   S   K   D   H   F   Y   W
UniRef90_U2WDS4	P   I   E   W   P   A   V   P   D   F   H   L   T   E   I   L   V   R   A   A   E   T   L   G   F   R   Y   H   V   G   V   V   Q   C   K   D   A   F   Y   G
UniRef90_F0YYG6	P   I   E   F   P   A   V   P   D   F   G   V   T   N   A   L   V   K   A   A   K   R   L   G   T   S   H   V   G   V   V   Q   C   K   D   S   F   Y   G
UniRef90_D9R414	D   C   C   F   P   A   V   P   D   F   D   L   T   R   V   L   I   D   T   A   K   D   M   K   D   E   I   Y   Y   G   I   N   A   S   D   D   A   F   Y   G
UniRef90_I3DMU6	P   I   E   Y   P   A   V   A   D   L   E   V   T   N   A   L   V   E   A   A   K   Q   L   K   E   K   Y   H   V   G   V   V   Q   C   K   D   A   F   Y   G
UniRef90_E7MLI0	P   I   E   Y   P   A   V   P   D   L   D   I   V   N   A   L   V   E   V   E   R   H   P   Y   H   T   G   V   V   E   C   K   D   A   F   Y   G
UniRef90_C7NGM9	P   I   E   Y   P   A   V   P   D   L   D   I   V   N   A   L   V   E   V   E   R   H   P   Y   H   T   G   V   V   E   C   K   D   A   F   Y   G
UniRef90_F9VNS5	G   I   N   F   S   A   T   A   S   F   E   A   A   A   A   W   A   A   R   D   Q   V   T   E   G   S   V   L   T   G   P   I   V   S   K   D   H   F   Y   A
UniRef90_C4G909	Q   A   C   V   S   A   T   A   D   F   E   I   T   T   M   A   L   Y   N   S   F   N   K   F   N   G   L   H   G   N   V   F   S   S   D   A   F   Y   A
UniRef90_R6LRV8	P   I   E   Y   P   A   V   A   D   F   T   L   L   C   A   L   R   S   A   A   E   K   M   G   V   R   Y   H   T   G   V   V   E   C   K   D   S   F   Y   G
UniRef90_X4R8L9	P   I   E   Y   P   A   V   A   D   L   M   V   V   N   A   L   V   S   A   A   K   E   K   D   C   E   F   Y   T   G   V   V   Q   S   K   D   A   F   Y   G
UniRef90_F7V6Y9	P   E   T   H   F   P   A   V   A   V   A   S   Y   N   V   L   V   K   A   A   D   A   A   G   D   D   P   D   V   V   V   P   I   V   S   R   D   H   F   Y   G
UniRef90_R5UIP9	P   I   E   F   P   A   V   P   S   Q   D   V   F   E   A   L   R   R   G   A   D   S   C   G   F   R   A   Y   T   G   V   V   Q   C   K   D   S   F   Y   G
UniRef90_D4GUE6	P   V   E   Y   P   A   V   P   D   F   T   V   T   T   A   L   V   Q   A   A   K   K   R   G   I   R   H   H   V   G   V   V   Q   S   K   D   S   F   F   G
UniRef90_Q0TU58	E   V   Y   P   A   V   P   D   Y   D   V   L   T   S   L   V   D   S   A   E   A   N   D   E   D   V   H   V   G   P   I   V   S   D   D   A   F   Y   N
UniRef90_R5S725	P   I   E   F   P   A   V   A   N   L   D   V   I   N   A   L   V   K   G   A   K   E   L   K   V   P   Y   H   T   G   V   V   Q   S   K   D   S   F   Y   G
UniRef90_V4YC12	P   I   E   Y   P   A   V   A   D   Y   D   V   L   S   G   L   V   D   G   A   E   A   N   E   E   T   V   H   T   G   A   I   V   S   D   D   A   F   Y   G
UniRef90_R7IRM3	P   I   E   Y   P   A   V   T   D   L   A   V   T   N   A   L   A   A   A   A   K   D   L   G   Y   T   C   H   I   G   V   V   Q   S   K   D   A   F   Y   G
UniRef90_E6UF62	P   I   E   Y   P   A   V   A   D   F   E   V   V   C   A   L   K   A   A   A   D   E   L   L   G   K   R   Y   H   V   G   V   V   H   S   K   D   S   F   Y   G
UniRef90_F4GI0	P   I   E   Y   P   A   V   A   A   A   D   Y   S   V   V   R   A   L   A   D   S   A   E   E   L   L   G   K   R   Y   H   V   G   V   V   H   S   K   D   S   F   Y   G
UniRef90_B5FER9	P   M   E   F   P   A   V   A   D   F   D   V   A   T   A   M   R   K   A   V   V   D   Q   G   A   N   V   H   T   G   V   T   A   S   S   D   T   F   Y   P
UniRef90_R4VTB5	D   A   T   V   P   A   V   P   T   Y   E   V   L   S   T   L   V   D   V   A   E   A   E   D   E   A   V   H   V   G   P   I   A   T   D   D   A   F   Y   A
UniRef90_R5GZD5	D   D   N   Y   P   A   V   A   D   F   E   V   V   C   A   L   K   A   A   A   D   E   L   L   G   N   R   A   H   V   G   V   V   H   S   K   D   N   F   Y   G
UniRef90_X4V610	P   M   E   F   P   A   V   A   D   F   K   I   T   K   A   V   D   V   T   N   A   L   V   D   A   E   A   K   E   F   P   Y   H   V   G   V   V   C   K   D   S   F   Y   G
UniRef90UPI00041DF09B	P   I   E   F   P   A   V   A   S   F   D   V   T   M   A   L   I   T   A   A   E   E   L   L   G   V   K   Y   H   V   G   L   T   A   S   T   D   S   F   Y   V
UniRef90_A3DLR4	A   S   F   P   A   A   A   A   N   F   H   C   T   Q   A   L   Y   Q   S   A   Q   E   L   G   A   T   T   H   I   G   I   T   A   S   S   D   T   F   Y   P
UniRef90UPI0003FB0AE9	V   E   Y   P   A   V   A   F   A   H   F   E   V   V   S   A   L   I   H   H   A   E   A   S   L   G   A   R   H   V   G   V   V   H   S   K   D   S   F   Y   G
UniRef90_S5ZA26	P   I   E   Y   P   A   V   A   T   D   L   A   V   T   N   A   L   V   D   A   E   A   K   E   T   G   V   T   A   H   A   G   V   V   Q   S   K   D   S   F   Y   G
UniRef90_R5JZ7	P   I   E   Y   P   A   V   A   T   D   L   A   V   T   N   A   L   V   D   A   E   A   K   E   T   G   V   T   A   H   A   G   V   V   Q   S   K   D   S   F   Y   G
UniRef90_H9ZZF2	P   I   E   Y   P   A   V   A   S   S   Y   E   V   V   L   L   A   L   V   E   A   A   E   S   L   L   N   K   R   Y   W   V   G   I   T   A   S   T   D   S   F   Y   V

	170	180	190	200
UniRef90_U3HAA6	P D P A W A A R M T G M G V L   A V   E M E A A G L   Y G   V   A A E   L   G   R   Q   A   L   A   V   L   T			
UniRef90_E1QWQ8	P R P D A A R R Y R D L   G   L   L   C   V   E M E T A G L   Y   I   E   A   Q   A   S   R   K   K   A   I   S   I   L   T			
UniRef90_C5WDK2	A D K Q   L   I N T   L   E   K   Y   G   I   L   G   V   E M E T A G I   Y   A   V   A   A   E   L   G   A   K   A   L   S   I   C   T			
UniRef90_W7Z713	E S N D H   H   N   H   F   Y   N   E   E   G   C   V   C   V   E M E S Y   A   L   F   H   N   A   K   V   L   G   K   H   A   A   C   I   L   T			
UniRef90_X2HA06	V   D   P   E   M   F   D   M   E   K   Y   N   I   L   G   V   E M E A A G   I   Y   G   V   A   A   E   Y   G   A   K   A   L   A   I   C   T			
UniRef90_R6TDF1	P   T   T   L   A   N   D   K   A   R   D   L   G   H   L   A   V   E M E T A G   L   Y   W   T   A   A   S   C   H   K   K   A   L   S   I   L   T			
UniRef90_UPI00037677F2	E   R   P   D   I   E   A   E   M   T   R   H   G   V   L   C   V   D   M   E   A   A   A   L   Y   T   L   A   A   R   Y   R   V   R   A   L   A   V   L   T			
UniRef90_R5E7S8	Y   D   P   S   D   N   D   A   W   K   R   M   G   V   L   C   V   D   M   E   A   A   A   L   Y   A   N   A   A   A   L   S   K   K   A   L   C   M   L   T			
UniRef90_E4KQ30	Q   E   M   D   K   E   K   L   A   A   Y   G   V   L   G   V   E M E A A G   M   Y   A   V   A   A   K   H   H   K   R   A   L   A   I   C   T			
UniRef90_G2LM25	D   D   N   K   M   L   D   I   L   K   K   Y   N   I   I   G   V   D   M   E   T   A   G   I   Y   S   V   A   A   E   F   K   K   A   K   A   L   S   I   C   T			
UniRef90UPI00040AA6CB	E   R   P   D   M   I   E   T   L   A   R   H   G   V   L   A   V   E M E A A E   L   Y   Q   V   A   A   R   H   G   A   R   A   L   A   V   L   T			
UniRef90_N1ZYPO	S   E   E   W   N   R   K   W   A   G   I   G   M   L   A   V   E M E S   A   A   L   Y   I   N   A   M   E   A   G   K   K   A   V   A   L   L   C   T			
UniRef90UPI00031ADC5A	K   D   P   N   L   M   P   A   L   L   K   M   N   I   L   A   C   E   M   E   T   S   A   L   F   A   I   A   A   E   S   H   V   Q   A   L   S   I   L   T			
UniRef90_U2DR67	E   N   K   E   D   S   E   M   W   K   K   Y   G   V   I   A   G   E   M   E   G   A   A   L   Y   T   L   A   A   K   Y   R   C   R   A   L   T   M   L   S			
UniRef90UPI0002FE14DC	A   Q   D   D   D   T   T   Q   R   W   A   R   M   G   V   I   A   V   E M E T   V   G   L   Y   A   N   A   A   A   A   G   V   E   A   L   A   M   F   T			
UniRef90_D4IZ15	E   M   G   G   W   K   A   V   K   E   R   C   Q   C   D   C   V   E M E S   F   A   L   F   N   N   A   N   M   L   G   K   N   A   T   C   M   L   T			
UniRef90_B0ETA8	D   D   G   D   H   S   G   A   K   M   G   V   L   A   V   E M E A   A   A   L   Y   M   I   A   A   R   A   R   K   Q   A   L   C   M   L   T			
UniRef90_I4DZC5	N   Y   G   E   K   N   I   E   L   G   K   M   G   V   L   A   V   E M E A   A   A   L   Y   Y   L   A   A   Q   Y   N   V   E   A   L   L   G   I   M   T			
UniRef90UPI0004797E33	N   P   D   E   F   K   D   I   Y   E   K   H   H   N   A   V   C   V   E M E S   F   A   L   F   T   N   A   K   A   L   G   K   K   A   A   C   L   L   T			
UniRef90UPI00036F7FED	H   D   P   R   A   Y   K   K   W   A   E   Y   G   V   C   V   E M E A   A   G   L   Y   S   I   A   A   K   F   N   I   E   A   L   A   I   L   T			
UniRef90UPI0003B57512	D   E   I   D   M   K   K   L   A   D   F   G   V   L   G   T   E   M   E   S   A   G   F   Y   L   G   L   A   K   L   G   F   R   K   A   L   S   I   L   T			
UniRef90_10R0Z2	D   T   T   D   S   L   E   Q   W   K   K   L   G   I   L   A   L   E   M   E   T   N   Q   L   Y   T   L   A   A   R   F   G   R   K   A   L   S   I   V   T			
UniRef90_D2AMS2	K   N   S   D   D   Y   K   K   I   K   K   Y   N   C   D   L   V   E   M   E   T   A   A   L   F   A   T   A   A   E   L   G   K   K   A   S   A   V   V   T			
UniRef90_R6RNG8	P   E   K   K   A   G   E   Y   E   D   V   G   V   L   A   A   E   M   E   T   A   A   L   Y   A   N   A   A   L   A   G   A   Q   A   L   S   I   L   T			
UniRef90_G8N9Q5	T   T   P   E   G   A   K   A   W   A   R   Y   G   V   L   A   F   E   M   E   A   S   A   L   F   L   I   G   K   L   R   G   V   K   A   G   A   L   T			
UniRef90_I0ERJ9	F   E   T   H   A   F   D   L   L   A   K   Y   N   H   L   G   I   E   M   E   A   A   G   L   Y   A   T   A   M   E   L   N   A   K   A   L   C   L   C   S			
UniRef90_D5E551	S   S   V   P   L   E   Q   R   I   Q   T   T   D   A   L   C   V   E M E S   Y   A   L   F   T   N   A   E   K   L   G   K   N   A   A   C   L   L   T			
UniRef90_R5VG44	M   D   N   V   L   K   R   I   P   G   N   I   K   P   A   E   E   M   E   A   Y   A   L   V   H   V   A   N   S   F   N   R   K   A   T   A   I   V   T			
UniRef90_A0A023X5Q8	P   T   E   D   P   G   A   Q   W   S   G   L   G   V   L   A   V   E M E A   A   A   I   F   T   I   A   A   M   K   G   V   S   A   G   C   L   L   T			
UniRef90_B7C830	E   L   E   Q   P   E   K   M   V   E   E   Q   D   A   L   C   V   E M E S   F   A   L   F   H   N   A   K   V   L   N   K   K   A   A   C   L   L   T			
UniRef90_H6N5U6	D   T   P   I   E   E   V   V   I   A   N   T   G   A   D   C   V   E M E S   Y   A   L   F   V   N   A   K   K   L   G   K   K   A   A   C   I   V   T			
UniRef90_C6X005	K   N   P   G   T   P   L   I   A   E   K   Y   N   C   T   A   V   E M E A   F   A   L   F   A   N   A   Q   Y   L   G   K   N   A   A   T   L   L   T			
UniRef90_R5BR35	E   V   V   S   S   E   Q   W   K   Q   M   G   V   L   C   V   E M E A   A   A   L   Y   M   M   A   A   R   A   G   K   Q   A   L   C   L   L   T			
UniRef90UPI000412A7B3	T   P   E   G   Q   T   E   K   L   A   A   Y   G   V   L   G   V   E M E A   A   A   L   Y   G   V   A   A   E   F   G   K   Q   A   L   A   I   L   T			
UniRef90_X0XPP3	D   D   P   E   W   W   K   K   W   A   A   Y   G   V   L   V   V   V   E M E T   S   G   L   Y   T   L   A   A   K   F   K   I   R   A   L   S   V   L   T			
UniRef90UPI000472E769	M   N   P   D   Y   K   E   I   Y   E   K   H   G   A   L   C   V   E M E S   F   A   L   F   A   N   A   I   A   T   G   K   N   A   A   C   I   L   T			
UniRef90_B3PM93	T   K   S   A   Q   D   R   V   E   L   S   G   G   A   V   C   V   E M E S   Y   S   L   F   S   V   A   E   R   L   N   K   K   A   A   C   I   L   T			
UniRef90_R7IUH8	Y   M   T   D   V   N   K   F   L   K   D   F   N   P   V   S   A   E   M   E   A   F   A   L   F   Y   V   A   K   V   L   N   K   K   A   S   C   I   M   S			
UniRef90UPI0003B6F0D9	P   D   T   A   L   V   P   N   L   L   K   Y   G   T   I   G   I   D   M   E   A   A   G   L   Y   A   V   A   R   K   E   G   F   D   A   L   M   V   G   T			
UniRef90_U2DPN3	H   G   V   D   I   E   K   L   N   R   E   H   G   C   I   C   I   D   M   E   S   F   A   L   F   H   N   A   A   L   N   G   K   R   A   T   L   L   T			
UniRef90_G9PMH0	T   P   Q   G   Q   T   E   A   L   A   A   Y   G   V   L   G   V   E M E A   A   A   L   Y   G   V   A   A   E   Y   G   K   Q   A   L   A   V   L   T			
UniRef90_G5GGT2	P   Y   K   E   I   S   M   D   W   S   D   M   G   V   M   A   V   E M E A   A   A   A   Y   T   T   N   A   A   A   G   G   G   A   N   A   L   S   I   L   T			
UniRef90_C0W2V2	T   P   E   G   Q   T   D   R   L   A   H   Y   G   T   L   C   V   E M E A   A   A   A   Y   G   V   A   A   E   F   G   K   Q   A   L   A   V   L   T			
UniRef90_R5TQ85	T   P   K   Q   D   R   L   D   I   V   A   T   E   M   E   S   F   A   L   F   Y   I   A   K   V   L   H   K   E   A   A   C   L   L   T			
UniRef90_Q8EWU7	W   K   A   I   N   A   R   I   P   K   D   L   D   I   V   A   T   E   M   E   S   F   A   L   F   Y   I   A   K   V   L   H   K   E   A   A   C   L   L   T			
UniRef90UPI0003B572CA	A   N   R   S   V   E   Q   I   A   S   D   T   K   S   Q   V   V   E M E S   F   S   L   F   A   N   A   I   K   L   N   K   K   A   A   T   L   L   T			
UniRef90_H3NP11	S   R   P   L   S   E   T   L   A   I   T   Q   A   D   C   V   E M E S   Y   A   L   F   V   N   A   K   K   L   N   K   Q   A   A   T   L   L   T			
UniRef90_D7BH91	K   W   T   N   E   I   D   N   L   I   K   Y   N   T   L   G   V   E M E A   A   G   L   F   M   S   A   L   E   N   G   K   Q   A   L   C   I   C   T			
UniRef90_Q98PS4	P   L   E   H   H   G   Q   A   M   A   P   F   G   A   L   A   E   M   E   S   S   A   L   F   L   I   A   K   M   R   G   M   K   A   G   A   V   L   A			
UniRef90_E2SN28	T   R   P   L   E   E   T   K   I   T   Q   S   Q   A   V   E M E A   S   A   L   F   A   V   A   N   K   F   N   K   Q   A   A   T   L   L   T			
UniRef90_R5M2Y7	Q   H   N   P   Q   W   E   A   W   K   K   M   G   C   L   A   S   E   M   E   S   A   A   L   F   L   V   A   Q   Y   R   K   V   Q   C   G   S   I   F   L			
UniRef90_U5MSE3	Y   H   S   N   K   W   D   A   W   L   K   L   G   C   L   A   S   E   M   E   S   A   A   L   F   V   V   A   S   Y   L   K   V   R   V   G   S   V   F   L			
UniRef90_N2AB61	Q   H   S   N   K   W   D   A   W   K   R   I   G   C   L   A   S   E   M   E   S   A   A   L   F   V   V   A   S   S   L   G   V   R   I   G   S   C   F   L			
UniRef90_I5ATB1	P   D   P   D   V   A   Q   K   E   K   D   A   G   L   L   A   V   E M E T   A   G   L   Y   T   M   A   M   Y   T   H   K   K   A   L   G   L   F   T			
UniRef90_R6TW15	S   R   E   I   L   I   E   R   R   S   K   K   D   I   I   G   V   E M E T   A   L   Y   A   N   A   K   V   S   G   K   N   A   I   A   Y   T			
UniRef90_H1PWJ7	Q   H   M   N   K   W   E   A   W   I   R   L   G   C   K   A   S   E   M   E   S   A   A   L   F   V   V   G   D   Y   L   R   V   R   V   G   S   V   L   L			
UniRef90_I5ASZ8	Q   H   E   N   K   W   D   A   W   V   R   C   G   A   L   G   S   E   M   E   S   A   A   L   F   V   V   G   S   V   L   R   A   R   V   G   S   V   L   L			
UniRef90_E8TC02	P   D   G   R   R   R   F   A   D   A   R   A   Q   G   A   L   A   V   D   M   E   T   S   A   L   Y   G   I   S   E   H   F   G   A   R   A   L   S   M   C   V			
UniRef90_E4QS89	S   S   R   N   L   E   K   T   I   E   L   S   K   A   K   A   V   E M E S   F   A   L   F   T   I   A   N   Y   L   G   K   K   A   A   S   I   L   T			
UniRef90_R5SSM5	E   N   I   D   Y   Q   R   L   A   N   K   Y   N   I   Q   G   V   E M E T   F   F   T   F   C   N   A   K   L   L   K   K   D   A   T   A   L   L   T			
UniRef90UPI000417EC67	T   P   E   G   Q   T   E   R   L   A   A   Y   G   T   L   C   V   E M E S   A   V   L   Y   A   V   A   A   E   Y   D   R   R   A   L   A   V   L   T			
UniRef90_G9WLP2	Q   H   K   D   K   W   Q   A   W   L   K   L   G   C   K   A   S   E   M   E   S   A   A   L   F   T   V   V   A   A   Y   L   K   K   K   I   G   T   V   L   F			
UniRef90_K6V4T1	T   P   F   A   D   L   Y   D   R   Y   G   I   L   G   A   E   M   E   A   A   A   L   F   G   V   A   A   E   F   G   K   D   A   L   A   V   L   T			
UniRef90_U2WDS4	Q   H   K   Q   K   W   E   A   W   K   K   L   G   C   K   A   S   E   M   E   S   A   A   L   F   T   V   V   A   S   Y   L   R   V   R   A   A   A   V   L   F			
UniRef90_F0YYG6	Q   H   T   E   K   W   D   A   W   V   K   L   G   C   K   A   S   E   M   E   S   A   A   L   F   I   V   V   A   S   Y   L   K   V   R   A   G   S   V   F   L			
UniRef90_D9R414	E   T   T   Q   E   W   L   E   K   L   S   K   G   C   L   N   V   E M E S   S   A   L   Y   T   V   C   R   R   K   V   R   G   A   M   I   S   A			
UniRef90_I3DMU6	Q   H   E   N   K   W   E   A   W   I   R   M   G   C   K   A   S   E   M   E   S   A   A   L   F   I   V   G   N   Y   L   K   V   R   V   G   S   C   F   L			
UniRef90_E7MLI0	Q   H   R   R   K   W   D   A   W   L   K   M   G   A   K   A   S   E   M   E   S   A   A   L   F   I   V   V   A   S   Y   L   H   V   R   C   G   T   V   L   L			
UniRef90_C7NGM9	T   V   P   G   M   I   E   G   L   R   A   H   G   T   L   G   V   E M E A   A   A   A   Y   G   V   A   N   E   F   G   R   Q   A   L   A   V   L   T			
UniRef90_F9VNS5	E   D   E   D   F   A   K   W   S   E   R   G   N   I   A   V   E M E C   A   T   V   F   M   L   S   K   L   R   K   I   R   S   G   A   V   V   V   I			
UniRef90_C4G909	Q   H   Q   N   K   W   E   A   W   K   R   L   G   C   L   A   S   E   M   E   S   A   A   L   Y   T   V   A   Q   A   L   G   V   R   V   A   S   V   L   L			
UniRef90_R6LRV8	Q   H   I   N   K   W   E   A   W   K   K   L   G   C   L   A   S   E   M   E   T   A   A   L   Y   I   V   A   A   K   L   H   V   R   V   G   A   C   F   L			
UniRef90_X4R8L9	V   P   A   Q   V   N   E   A   A   Q   V   G   T   A   G   E   M   E   A   G   L   Y   G   L   A   A   R   Y   G   K   Q   A   L   A   V   L   T			
UniRef90_F7V6Y9	Q   H   E   E   K   W   E   A   W   K   R   L   G   C   I   A   S   E   M   E   S   A   A   I   F   I   V   V   A   S   A   L   H   V   R   A   G   S   V   L   L			
UniRef90_R5UIP9	Q   H   T   Q   K   W   Q   A   W   L   R   M   G   C   L   A   S   E   M   E   S   A   A   L   F   I   V   V   A   S   F   L   H   V   R   V   G   A   C   F   L			
UniRef90_D4GUE6	E   S   D   E   Y   V   E   D   W   N   D   A   G   L   L   A   I   E   M   E   A   A   T   V   F   S   L   A   R   R   R   G   L   R   A   G   A   I   C   T			
UniRef90_Q0TU58	Q   H   S   N   K   W   E   A   W   K   R   C   G   C   L   G   S   E   M   E   G   A   A   L   F   I   V   G   S   Y   L   R   V   R   V   G   A   V   F   L			
UniRef90_R5S725	Q   H   Q   N   K   W   D   A   W   L   K   M   G   A   K   A   S   E   M   E   S   A   A   L   F   I   V   G   N   Y   L   R   V   R   V   G   A   C   F   L			
UniRef90_V4YC12	E   T   E   S   Y   V   A   D   W   E   D   A   G   L   L   A   V   E M E A   A   A   T   V   F   S   L   A   R   R   K   G   L   R   A   G   A   I   C   T			
UniRef90_R7IRM3	Q   H   Q   N   K   W   E   A   W   K   R   M   G   C   K   A   S   E   M   E   S   A   A   L   M   I   V   V   A   G   H   L   R   V   R   F   G   A   D   F   L			
UniRef90_E6UF62	Q   V   E   P   R   W   K   S   F   V   K   C   G   C   L   S   S   E   M   E   C   A   A   I   Y   S   V   G   M   V   L   G   V   R   C   G   G   V   L   T			
UniRef90_F4GI0	Q   H   E   P   R   P   K   W   E   A   W   K   K   L   G   V   L   A   S   E   M   E   S   A   A   T   I   F   V   V   A   A   S   K   L   G   V   R   V   G   A   C   F   L			
UniRef90_B5FER9	G   Q   E   R   Y   M   Q   E   W   Q   D   M   G   V   L   N   F   E   M   E   S   A   T   L   L   T   M   C   A   S   S   G   L   R   A   G   C   V   A   G			
UniRef90_R4VTB5	E   T   E   A   Y   V   E   A   W   E   A   A   G   L   L   A   V   E M E A   A   A   L   F   T   L   A   R   R   H   G   M   Q   A   G   A   I   C   T			
UniRef90_R5GZD5	E   L   C   S   A   W   E   G   Y   L   K   C   G   C   L   T   S   E   M   E   A   A   I   F   S   V   A   L   L   R   R   V   R   A   G   A   V   L   T			
UniRef90_X4V610	Q   H   E   N   K   W   K   A   W   M   R   C   G   V   L   G   S   E   M   E   S   A   A   L   L   T   M   C   S   Q   G   L   R   A   G   M   V   A   G			
UniRef90UPI00041DF09B	Q   H   E   N   K   W   K   A   W   M   R   C   G   V   L   G   S   E   M   E   S   A   A   L   F   T   V   A   S   T   L   K   V   H   C   G   T   V   L   L			
UniRef90_A3DLR4	G   Q   E   R   Y   M   Q   E   W   Q   D   M   G   V   L   N   F   E   M   E   S   A   T   I   F   T   L   A   N   I   Y   G   L   R   A   G   S   V   C   A			
UniRef90UPI0003FB0AE9	G   Q   E   R   Y   M   Q   E   W   Q   D   M   G   V   L   N   F   E   M   E   S   A   T   I   F   T   I   C   A   T   Q   G   W   Q   A   G   C   V   A   G			
UniRef90_S5ZA26	G   Q   A   R   P   G   Y   L   Q   K   A   G   V   L   S   F   E   M   E   A   S   T   L   F   T   L   S   N   I   Y   G   A   R   A   G   A   V   L   A			
UniRef90_R5JZ77	Q   H   E   A   R   P   K   W   D   A   Y   C   K   G   C   L   A   S   E   M   E   G   A   A   L   M   I   A   G   A   S   L   R   V   R   V   G   A   C   F   L			
UniRef90_H9ZZF2	G   Q   G   R   P   G   Y   K   L   K   S   L   N   V   F   E   M   E   A   S   T   I   F   T   M   A   N   I   Y   G   A   R   A   S   S   I   C   A			

210            220            230

UniRef90_U3HAA6	V S D H L I S G E K L T A E Q R Q E D F H D M V R L T L D A
UniRef90_E1QWQ8	V S D T F F T G E S L S A E E R E E Q S F T D M M R V S L E T A W R
UniRef90_C5WDK2	V S D H I H T G E L T P P L E R Q T L F N D M V N I A L E S I L
UniRef90_W7Z713	I S D S L V T H A E T T A E E R Q T S F N S M M E V A L E A A I
UniRef90_X2HA06	V S D H I R K G D A M S P E Q R Q I G F K E M I T V A L E S V L
UniRef90_R6TDF1	I S D H I Y T G E A L S A Q E R Q E S F H E M M E V A L E T A W R
UniRef90_UPI00037677F2	V S D H L Q T H E A L P A A G R E R S F G D M V E I A L K A A
UniRef90_R5E7S8	I S D H L Y K S E K L D A G E R Q E G F N D M I K L A L E V A
UniRef90_E4KQ30	V S D H L L T G E E T T A Q E R Q T S F T Q M M E I A L Q T A
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UniRef90_B0ETA8	I S D L C Y S G E K M T A E E R R T K F T Q M M E V A L S L A
UniRef90_I4DZC5	I S D S L V N D E D T T A E E R Q T T F T D M M K V G L E T T L I
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UniRef90_UPI00036F7FED	I S D S L V T H E G E K C S F E E R E R T F E E M V K I A L N I C L
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 Y H I E C S A G D I A P V V I V P G D Q G R V D K I V A G L S E A R K I A E  
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 H L K I S K E Q I T P V V L V G D P G R V D K I K V V C D S Y V D L A Y  
 Y H I G F S P D D L P S M A V L S G D P E R A R L I A H T Y L Q D V C L L S E  
 F H L H V K P E Q L A D K V I L V G D P G R V V D L F A E K F K V P V T  
 R L D D F S D Y I L L T N F Q N Y V D L F A E K F K V P V T  
 F H L H L R P E Q I A D T A I L V G D P G R V V D M V A S M F D T I E C S V Q  
 D L P P R C V Y G F L E E E V E R Y A I S V G A E K E F V S A  
 F Q R Y I L F T N Y R M H V D A F L S L Y P N C V K P T N P  
 E F G Q Y V L L T N F G T Y V A W F A A Q Y D V S I K  
 K L E D F G E Y I L L T N F S N Y V D I F A E F N V P I  
 F H L H V R P E Q L A D K V I L V G D P G R V P V V A A H F E T K E C D I E

	50	60	70	80
UniRef90_D9R415	H R E Y L   T Y T G T   L A G   G V P   V   S   V   T   S   T   G   I   G G   P   S   S   A   I   A   V   E   E   L   F   E   C   G			
UniRef90_D5U8N5	Y R E Y A T Y   T G Y   I N G   V K   V   S   A   V   S   T   S   H   G   I   G G   P   S   T   A   I   A   L   E   E   L   I   K   I   G			
UniRef90_H2FSU0	K R E F T S W   L G E   L D   G K   P   V   V   C   S   T   G   I   G G   P   S   T   S   I   V   V   E   E   L   A   Q   L   D			
UniRef90_C7P052	H R E Y R T A T G E   Y D G T   P   I   S   V   T   S   T   G   I   G S   P   S   A   A   I   A   V   E   E   L   A   R   V   G			
UniRef90_G2MH42	H R E Y R T A T G H   Y D G A   D   I   S   V   T   S   T   G   I   G S   P   S   A   A   I   A   V   E   E   L   A   R   V   G			
UniRef90_D2RVE1	H R E Y R T A T G T   Y E   E   T   P   I   S   V   T   S   T   G   I   G S   P   S   A   A   I   A   V   E   E   L   A   R   V   G			
UniRef90_X1MMT3	H R E Y V   T   F   T   G   V   Y   H   G   P   I   S   V   M   S   T   G   I   G C   D   N   T   E   I   A   V   I   E   A   S   H   C   I   G			
UniRef90_U1K7F7	T R E F H   V   Y   L   G   D   L   K   G   Q   S   I   V   I   C   S   T   G   I   G G   P   S   T   S   I   A   I   E   E   L   A   N   K   G			
UniRef90_B5Y654	N R E F C   S   V   R   G   K   Y   K   G   V   S   V   I   L   V   S   T   G   I   G G   P   S   T   G   I   A   V   E   E   L   N   K   G			
UniRef90_I0GJL8	Y R   L   Y   V   Y   T   G   L   Y   K   G   E   R   I   T   A   T   T   G   M   G   A   P   S   T   A   I   V   L   E   E   L   N   L   G			
UniRef90_R9XT88	T R E F T S W   L   G   Y   V   G   G   Q   P   I   V   V   C   S   T   G   I   G G   P   S   V   S   I   C   V   E   E   E   L   A   Q   L   G			
UniRef90_Q87H86	N R E Y R   V   F   T   G   N   Y   K   G   Q   T   V   S   V   C   S   T   G   I   G A   P   S   M   I   V   A   V   E   E   L   K   Q   C   G			
UniRef90_I2F7H5	N R G   L   I   T   Y   T   G   K   Y   K   D   Y   P   V   S   V   T   S   T   G   M   G   G   P   S   A   S   I   V   Y   V   E   E   L   I   N   V   G			
UniRef90_UP10003B6A9C0	N R E Y V   T   Y   T   G   F   L   D   G   T   K   V   V   S   V   V   S   T   S   G   I   G G   P   S   T   A   I   A   E   E   L   V   R   C   K			
UniRef90_H2J3C0	N R E Y F   T   M   T   G   Y   L   N   G   E   K   V   V   M   S   T   G   M   G   A   P   C   I   S   G   I   V   G   E   E   E   L   K   T   L   G			
UniRef90_U2DXH4	N R A Y   H   V   Y   T   G   K   L   R   G   V   K   V   S   V   V   C   C   S   T   G   I   G G   P   S   A   S   I   A   E   E   L   I   K   I   G			
UniRef90_A8F6W6	█ R E F T T   W   R   G   E   L   E   G   K   S   V   V   V   C   C   S   T   G   I   G G   P   S   T   S   I   A   V   E   E   E   L   A   Q   L   G			
UniRef90_UP100037B79CE	K R E F L   T   Y   T   G   T   L   E   G   V   P   V   T   V   T   S   T   G   I   G G   P   S   A   C   I   A   I   E   E   E   L   V   R   L   G			
UniRef90_B7CDB0	N R E Y V   T   Y   S   G   Y   M   N   G   I   L   C   S   T   G   I   G G   A   S   T   A   I   V   E   E   E   L   V   R   L   G			
UniRef90_A1SYK8	H R E Y T   S   Y   L   A   Y   I   E   G   K   A   V   V   V   C   S   T   G   I   G G   P   S   T   S   I   A   V   E   E   E   L   A   Q   L   G			
UniRef90_I3VUD7	H R E F K   T   V   S   G   F   Y   K   G   V   K   I   L   V   T   S   T   G   I   G G   P   S   P   S   G   I   A   V   E   E   E   L   K   N   L   G			
UniRef90_G5HMX4	N R E Y R   T   F   V   G   E   L   E   G   A   R   V   A   V   V   T   S   T   G   I   G G   P   S   A   A   I   A   V   E   E   E   L   H   Q   C   G			
UniRef90_C5K27	N R E Y R   S   Y   N   V   T   Y   G   G   A   E   L   S   I   C   S   H   G   I   G G   P   G   A   A   I   C   F   E   E   L   I   K   C   G			
UniRef90_D9PZN7	R R E Y S   S   F   R   G   V   Y   R   G   V   D   V   V   V   S   T   S   G   I   G G   P   P   A   T   A   V   E   E   E   L   I   G   L			
UniRef90_T1AU81	H R E Y N   S   W   M   V   T   V   D   S   V   P   V   V   C   S   T   G   I   G G   P   S   T   A   I   A   V   E   E   E   L   A   Q   L   G			
UniRef90_U1P7D0	H R E Y R   T   A   T   G   Q   Y   Q   E   T   P   I   S   V   V   T   S   T   G   V   G   G   P   S   M   G   I   L   I   A   L   E   E   E   L   A   R   V   G			
UniRef90_UP1000393E780	N R E F S   V   Y   S   A   W   F   Q   G   G   K   V   T   I   C   S   T   G   I   G A   P   S   M   I   A   V   E   E   E   L   K   Q   C   G			
UniRef90_K2DVC4	S R E H   V   S   Y   L   A   N   H   F   G   Q   K   V   I   L   V   T   S   T   G   I   G G   P   S   M   G   I   A   V   E   E   L   R   N   I   G			
UniRef90_UP10003032053	N R E F R   T   V   S   G   L   Y   K   G   V   K   V   I   L   V   T   S   T   G   I   G G   P   S   M   G   I   A   V   E   E   L   R   N   I   G			
UniRef90_A3URL3	N R E Y R   I   F   T   G   A   Y   Q   Q   G   K   A   I   S   V   C   S   T   G   I   G G   P   P   S   M   I   I   A   V   E   E   E   L   K   F   C   G			
UniRef90_N9XMQ7	N R E Y H   T   Y   S   G   T   Y   K   G   V   P   V   T   V   T   S   H   G   V   G   E   G   G   A   V   F   E   E   L   C   R   A   G   G			
UniRef90_D2TWP0	█ R E F T   S   W   R   A   E   L   N   G   K   P   I   I   C   S   T   G   I   G G   P   S   T   S   I   A   V   E   E   E   L   A   Q   L   G			
UniRef90_A6G946	E R E F   V   T   Y   T   G   T   Y   R   G   M   P   M   S   V   M   G   T   G   M   G   S   A   A   N   T   E   I   A   V   E   E   L   C   Q   L   F   E			
UniRef90_B0TYM5	N R E Y T   S   Y   L   A   K   I   A   D   R   N   A   I   V   I   S   T   S   G   M   G   G   P   S   T   A   I   C   I   V   F   E   E   L   A   M   I   G			
UniRef90_M8EAB7	N R E Y H   S   Y   K   G   K   W   N   G   T   E   V   A   V   V   S   H   G   V   G   S   P   G   A   V   C   F   E   E   L   A   K   G   G			
UniRef90_B0P6N0	N R E H   K   T   W   T   G   T   L   N   G   V   K   V   S   V   T   S   T   G   M   G   C   P   S   A   A   I   A   V   E   E   L   I   K   C   G			
UniRef90_V4Y7U8	H R E Y R   T   A   T   G   T   Y   D   G   V   P   I   S   V   T   S   T   G   I   G G   P   S   A   A   I   A   F   E   E   L   A   R   I   G			
UniRef90_N2A9Q9	N R E H   K   S   V   S   G   Y   Y   K   G   V   R   V   M   A   V   S   T   G   M   G   G   A   S   T   A   I   A   V   E   E   L   S   H   I   G			
UniRef90_A1RWF6	H R G   Y   L   V   V   T   G   E   Y   R   G   E   R   V   T   L   A   T   H   G   I   G   A   P   S   A   A   I   V   F   E   E   L   A   M   L   G			
UniRef90_M1Q1M8	N R E Y K   S   I   K   G   K   F   K   K   T   T   V   G   V   S   A   G   V   G   G   P   G   A   I   A   Y   E   A   L   K   A   K   G			
UniRef90_K1Z625	N R E F R   I   G   I   G   S   F   R   E   K   R   I   V   S   T   S   G   M   G   C   P   S   T   A   I   A   V   E   E   L   I   N   A   G			
UniRef90_G5IEB0	N R E H   K   T   W   T   G   Y   L   D   G   E   K   V   S   V   T   S   T   G   M   G   C   P   S   T   A   I   C   V   E   E   L   I   K   V   G			
UniRef90_S2W9J3	N R E Y H   S   Y   V   G   E   Y   G   G   K   L   I   T   V   A   S   H   G   V   G   A   G   A   C   C   F   E   E   L   C   R   G   G			
UniRef90_L8MA01	Y R G   L   H   S   Y   L   G   D   L   T   P   K   Q   I   L   V   A   T   S   G   M   G   A   P   S   T   T   I   V   V   N   L   I   Q   V   G			
UniRef90_V5CG51	H R E Y R   A   R   L   R   G   W   Y   R   G   E   V   L   V   V   S   T   G   M   G   G   P   S   T   A   V   A   E   E   L   H   Q   I   G			
UniRef90_Q5E046	N R E Y R   V   F   N   G   V   Y   K   G   T   T   I   T   I   C   S   T   G   I   G   A   P   S   M   I   I   A   V   E   E   L   K   L   C   G			
UniRef90_G9RY32	N R E H   K   T   W   T   G   T   L   C   G   E   K   V   I   S   V   T   S   T   G   M   G   C   P   S   T   A   I   A   V   E   E   L   I   K   A   G			
UniRef90_R6SK7	N R E H   K   T   W   T   G   T   L   N   G   E   K   V   S   V   T   S   T   G   M   G   C   P   S   T   A   I   A   I   E   E   L   I   H   C   G			
UniRef90_V7T8T3	N R E H   T   S   Y   R   G   Y   I   G   D   T   P   V   M   V   V   S   T   G   M   G   G   P   S   T   A   I   C   L   E   V   L   K   L   G			
UniRef90_A8FZL3	V R   N   M   L   G   F   T   G   L   Y   K   G   K   P   I   S   V   M   A   H   G   M   G   V   P   S   V   S   V   Y   T   K   E   L   I   T   D   F   G			
UniRef90_G5LXY5	V R   G   M   L   G   F   T   G   T   Y   K   G   R   K   I   S   V   M   G   H   G   M   G   I   P   S   C   S   I   Y   T   K   E   L   I   T   D   F   G			
UniRef90_UP1000465B883	N R E F R   S   L   K   G   S   F   R   G   V   E   L   M   A   V   S   T   G   I   G   G   A   S   A   I   A   V   E   E   L   H   R   I   G			
UniRef90_G8WD71	N R E F R   A   R   A   R   G   W   Y   Q   G   E   L   V   L   V   I   N   F   G   M   G   S   P   S   T   A   I   A   I   E   E   L   R   Q   I   G			
UniRef90_UP10003F94EE8	G   L   D   K   P   M   Q   T   A   T   A   E   N   T   L   I   N   F   G   M   G   S   P   M   A   T   V   M   D   L   L   S   A   I   K   G			
UniRef90_E1QU43	H R E Y V   T   Y   T   G   T   Y   K   G   A   P   I   S   A   V   S   T   G   I   G   G   P   A   A   A   A   I   A   E   E   L   T   L   G			
UniRef90_C7LL69	█ V   R   N   A   F   V   Y   T   G   Y   Y   K   N   H   K   V   S   F   A   T   S   G   M   G   Q   P   S   I   A   I   V   Y   H   E   L   L   F   N   N   H			
UniRef90_D3EHZ7	S R E Y R   T   F   V   G   T   Y   E   G   V   E   L   A   V   T   S   H   G   V   C   P   G   A   V   C   F   E   E   L   I   R   A   G			
UniRef90_W4QJJ1	N R E Y H   S   Y   I   G   T   Y   H   G   E   K   V   I   A   V   S   H   G   V   G   G   P   G   A   A   V   C   F   E   E   L   I   G   G			
UniRef90_E0T830	N R E F R   A   L   R   G   E   F   H   G   E   I   L   A   V   S   T   G   I   G   G   A   S   T   A   I   A   V   E   E   L   R   R   I   G			
UniRef90_F7YX94	N R E Y L   T   Y   T   G   Y   I   L   G   E   K   V   S   V   M   S   T   G   M   G   A   P   A   M   A   G   I   G   E   E   L   A   T   T   N			
UniRef90_E4T1J0	S R E F N   T   I   T   G   T   Y   K   G   K   R   I   S   V   I   S   T   G   I   G   T   D   N   I   D   I   V   M   N   E   E   K   K   D   F   R			
UniRef90_F0VME1	N R E Y R   S   F   R   V   V   Y   D   G   Q   P   I   T   V   V   S   H   G   I   G   C   P   G   T   S   I   C   C   E   E   L   I   N   G			
UniRef90_R6VJR6	R E F F   L   L   M   N   G   Y   Y   K   N   Q   K   V   S   V   C   S   T   G   I   G   G   P   G   S   T   E   I   C   V   S   E   L   E   N   G			
UniRef90_L5MYD9	N R E Y H   S   Y   A   G   S   W   R   G   T   E   V   A   V   V   S   H   G   V   G   S   P   G   A   V   C   F   E   E   L   A   K   G   G			
UniRef90_R6HGW4	H R E Y T   S   W   L   A   V   V   E   G   H   N   V   L   V   C   S   T   G   M   G   G   P   S   V   A   L   G   L   E   E   L   A   R   L   G			
UniRef90_M7N313	N R E F G   K   S   K   P   M   Q   S   A   T   A   E   N   T   I   I   N   F   G   M   G   S   P   M   A   T   V   M   D   L   L   D   G   A   I   R			
UniRef90_E0NSL9	N R E F R   T   I   T   G   L   Y   K   G   K   R   I   T   V   L   S   T   G   I   G   C   D   N   I   D   I   V   L   N   E   E   Q   T   F   R			
UniRef90_G5HQ81	Y R E H   V   T   Y   T   G   K   I   G   D   M   D   I   S   A   C   S   T   G   I   G   G   G   S   T   A   S   A   L   E   D   L   A   E   V   G			
UniRef90_R3W2V3	S R E F F   L   V   V   S   G   F   W   N   N   H   L   V   S   I   C   S   T   G   I   G   V   G   S   T   E   I   L   A   V   I   E   L   I   E   N   G			
UniRef90_D8DYI9	N R E F K   T   V   T   G   T   Y   N   G   K   R   I   T   V   Q   S   T   G   I   G   C   D   N   I   D   I   V   L   N   E   D   L   A   L   D   A   N			
UniRef90_C7TLV7	S R E F F   V   L   V   V   G   M   F   R   G   H   H   V   S   V   C   S   T   G   M   G   V   P   D   N   I   D   I   V   L   T   E   L   D   A   L   N   G			
UniRef90_F0P1C9	K R E I   I   S   H   T   G   S   L   N   G   K   R   I   T   V   I   S   T   G   M   G   T   D   N   I   D   I   V   U   L   T   E   L   D   A   L   N   G			
UniRef90_R7NT69	S R E F F   K   T   I   T   G   T   Y   K   D   K   R   I   T   V   V   S   T   G   I   G   C   D   N   I   D   I   V   M   N   E   L   D   A   L   N   G			
UniRef90_G9WPH8	R R E F F   N   S   Y   T   G   T   Y   K   G   V   P   I   T   V   S   S   T   G   M   G   A   P   T   A   A   I   M   E   M   Y   E   A   G			
UniRef90_F9YTN8	K R E F C   T   H   T   G   T   Y   K   G   K   R   I   S   V   T   S   T   G   I   G   G   P   D   N   I   D   I   V   L   N   E   D   L   A   L   F   N			
UniRef90_Q3CZZ9	E Y   V   T   Y   T   G   T   L   N   G   E   K   V   S   V   T   S   T   G   I   G   G   P   S   A   X   I   A   M   E   L   K   L   C   G			
UniRef90_UP1000470EE39	N R E F G   M   G   K   A   M   Q   T   A   T   A   N   D   I   T   I   I   N   F   G   M   G   S   P   L   A   A   T   V   M   D   L   L   S   A   I   R			
UniRef90_F2L007	N R E F R   T   I   T   G   T   F   H   G   K   R   I   T   A   L   S   T   G   I   G   C   D   N   I   D   I   V   V   N   E   L   D   A   L   N   G			
UniRef90_K1Y3E0	UniRef90_R5RXL1	N R E F F   V   T   V   T   G   R   Y   K   G   K   R   I   T   V   L   S   T   G   I   G   C   D   N   I   D   I   V   M   N   E   V   D   A   L   N   G		
UniRef90_M5RUH0	N R E Y R   S   L   V   G   A   Y   R   G   A   R   I   L   A   M   S   T   G   M   G   V   S   T   G   I   G   G   P   S   A   N   K   L   T   D   H   A   L   V   R			
UniRef90_Q813X4	N R E F K   S   V   E   C   H   Y   K   G   Q   K   F   I   C   V   S   H   G   V   G   S   A   G   C   A   V   C   F   E   E   L   C   Q   N   G			
UniRef90_K9QRY8	UniRef90_R6EVMO	H R G   L   N   S   Y   L   G   Y   P   N   G   C   P   I   L   S   A   T   S   G   M   G   P   S   L   S   I   V   V   N   E   L   V   Q   V   G		
UniRef90_S8GX44	S R E F F   E   R   T   V   T   G   T   Y   K   G   K   R   I   T   V   I   S   T   G   I   G   C   D   N   I   D   I   V   M   N   E   V   D   A   L   N   G			
UniRef90_D7JET3	N R E F K   T   V   T   G   L   Y   G   G   K   R   I   T   V   I   N   F   G   M   G   S   P   N   A   A   T   V   M   D   L   L   G   A   I   H			
UniRef90_F8LW17	T K   T   D   P   V   Y   V   M   T   G   N   K   K   I   C   L   A   Q   P   V   G   V   G   P   A   A   Q   F   M   D   W   L   I   G   Y   G			
UniRef90_I4B9E2	G   A   Q   M   A   A   Y   H   V   P   D   N   A   G   I   T   L   I   N   F   G   M   G   S   P   N   A   A   T   V   I   D   T   D   H   V   A   V   L   R			
UniRef90_A3X0R9	UniRef90_UP100036168EF	L   G   R   D   A   N   M   I   S   A   T   A   G   D   I   T   I   I   N   F   G   M   G   S   P   N   A   A   I   I   M   D   L   L   S   A   I   N		
UniRef90_I4B7J02	S   R   E   F   F   T   V   T   G   T   Y   K   G   K   R   I   T   V   I   N   F   G   M   G   S   P   N   A   A   T   V   I   D   T   D   H   V   A   V   L   R			

	90	100	110	120
UniRef90_D9R415	A H T M M R I   G S C A S T S P K V K V   G D	V I I   P N G A   V R M E G T G   H Y   P		
UniRef90_D5U8N5	A D T F L R V   G T C C G G M N M K V I A G D	V I I   V N G A   V K G G G T M D N Y   I P		
UniRef90_H2FSU0	V R T F L R V   G T T G A I   Q P Q V A V G D	I I V   T T G A   V R L D G A S G H F A P		
UniRef90_C7P052	A E T L L R V   G S C C G A I   Q P G M E V G D	I I V   T T G A   V R Q E G T S D E Y V R		
UniRef90_G2MH42	A D T F I R V   G S C C G A I   Q P E M D V G D	L V I T S G A   V R Q E G T S D E Y V R		
UniRef90_D2RVE1	C D T F V R V   G S C C G A I   P A R I K L   G D	L V I T T G A   V R Q E G T S D E Y V R		
UniRef90_X1MMT3	D P T F V R V   G S C C G A I   P A R I K L   G D	L V I T T E A L R   R E S T S D S Y   L P		
UniRef90_U1K7F7	V N T F L R I   G T T G A I   Q P H I N E G D I	L V I L V S T A S V R   L D G A S Q H   F A		
UniRef90_B5Y654	V K T M I R I   G S C C G A L   Q D N M K V G D	L V I A Q A A A V R   D E G T S K T Y   I D		
UniRef90_10GJL8	G K V F I R V   G S A G G I   D P Q L N V G D	V V I A T G S I   R D D G T T P N Y   L R		
UniRef90_R9XT88	V R T F L R I   G T T G A I   Q P H I N V G D	V L V T T G A   V R L D G A S R H   F A		
UniRef90_Q87H86	V T H V V R   G S A G M Q S Q I Q L   G E	L I V A E G A V R   D E G G S K S Y   V		
UniRef90_I2F7H5	A R V L I R I   G S V A G L Q E Y V N E G D I	V I V P Y Y G C   V R   D D G A S N Y Y   V P		
UniRef90_UP10003B6A9C0	V H T F L R L   G T C C G G M A L   D V K G G D	L   C   A S G A I   R A E G C S R E Y   A		
UniRef90_H2J3C0	V H T F I R I   G T T G A L Q K N L K   G D	S   I   P T A A I   R G D G T M D Y Y   L P		
UniRef90_U2DXH4	V Q N F I R I   G T C C G I L D   D V M G G D	V V V V T G A I   R A E G T S K E Y   L P		
UniRef90_A8F6W6	A K T L L R V   G S A G S R Q S Y M   P I G S	L V I A T A A Y R G E G   T S H A Y A		
UniRef90_UP100037B79CE	I R T F L R V   G T T G A I   Q P H I N V G D	V V I I T T G S   V R L D G A S R H   F A		
UniRef90_C5EM61	A H T M M R I   G S A A S T S P K V R   G D	V V I P P N G A V R   R M E G   T G N H Y   L		
UniRef90_B7CDB0	C H T F L R V   G T C C G M R   D V Q G G D	I V I A S G A I   R Q E G T T R E Y   A		
UniRef90_A1SYK8	V T T F L R V   G T T G A I   Q P E V N P G D	I V I V T Q A S V R   L D G A S   L H   F A		
UniRef90_I3VUD7	V K A M I R I   G S C C G A L   Q P N I K L   G D	L V I V M A L   G A V R   D E G T S A T Y   I		
UniRef90_G5HMX4	A D T M M R V   G T C C A S V V S P K V S L   G D	V V I P P N G A V R   K M E G V S   L H Y   L P		
UniRef90_C5KW27	A K I I I R L   G T C C G S L   K P E N I N Q D   L	I V I P T A A C   R E D E G V T Q A L   V		
UniRef90_D9PZN7	A D T L L R V   G S T G A I   Q O D D I E V G D	I I I T T A A V R   M D G T S Y Q Y A P		
UniRef90_T1AU81	V K N F I R V   G T T G S I   Q K D I E F G D	I V I S L A A V R   L D G A S T H Y   A		
UniRef90_U1P7D0	A E T L L I R V   G S C C G T V   R S H I A V   V G D	L V I T S G A M R   G E G T S K E Y   I P		
UniRef90_UP1000393E780	A T H I I R V   G S A G A L Q N H V G L G E	L I I A E G A V R   R D D G G S   L S Y   L P		
UniRef90_K2DVC4	L K Y Y L R V   G T C C G A I   Q P F I N L   G D	V V I S T A A V R   L E G A S K D Y   A		
UniRef90_UP10003032053	V E T M I R I   G S C C G A L   Q R G I L   P G D	L V I A S G A V R   D D G T S T T Y   V		
UniRef90_A3URL3	V T H I I R V   G S A G A M Q S H I G L   G E	L I I I A E G A V R   D E G G S T A T Y   V K		
UniRef90_N9XMQ7	A K V I I R V   G T C C G M Q K E V T A G S	L V I V V K A A C   R E D G V T E K M   L P		
UniRef90_D2TWP0	I R T F L R I   G T T G A I   Q K N I N I   G D	V L I V T T G A   V R   L D G A S   L H   F A		
UniRef90_A6G946	D A S I I R A   G S C C G A L   Q A N I G L   G D	L V I V T Q A A H   R L E E T S   L A F   V T		
UniRef90_B0TYM5	I K K L I R V   G T C C G A I   Q E N I D F G D	L I L T T A S   V R   L D G T S Y H Y   A		
UniRef90_M8EAB7	V K T I I R V   G T A G S Y Q K E V E P G S	I V I V S S A A V R   R Q D G   L T S Q   L V P		
UniRef90_B0P6N0	A D T F I R V   G T A G A R V   C D K A Y D E D G	V I V I N T A A V R   D E G T T   I H Y   I P		
UniRef90_V4Y7U8	A D T F I R V   G S C C G A I   Q D D I A V   V G D	L V I V S T G G   V R   Q E G A S S D Y   I R		
UniRef90_N2A9Q9	V K A M I R I   G S C C G A L   K K G I R L   G D	L V I V V I N G A   V R   D D G A S K S Y   V		
UniRef90_A1RWF6	A K V M I R A   G T C C G G L   T P I A E S G K I   L	E A A A Y E N S S G T   L Y Q Y F G		
UniRef90_M1Q1M8	A N T L L V R I   G T T G S I   N R S V D S G D	L V I V V I Q S A   V R   D D G F S R Q   H   L P		
UniRef90_K1Z625	A K Y L I R V   G T C C G G A W R A D I   P A G S I	I I I I P T A S I   R D E G T T   I E Y   L		
UniRef90_G5IEB0	A R T L L I R I   G T A G A P V   K D D C E K Y D G A I	C   L   C   T A A I   R D E G T T   I H Y   I P		
UniRef90_S2W9J3	A K Y I I I R A   G T A G G V   Q R D V V D G D	L L V I V V T G A   V R   C D G Y T E L V V P		
UniRef90_L8MA01	U I K K I I R V   G T C C G A I   Q S Q I Q V G D	L V I V V I S Q A A L   C   R Q G A A N D I A   P		
UniRef90_V5CG51	V D C L V R I   G S C C G A L   Q P S M K L   G D	L V I V V I A S A A V R   R D D G T G K A Y   V P		
UniRef90_Q5E046	A T H V I R V   G S A G A M Q D H I Q L   G E	L I V I V A E G A V R   R D E G G S K A Y   I		
UniRef90_G9RY32	A D T F I R I   G T A G P V   R R D D C E R Y D G	V I V I V T A A V R   D E G T T   T H Y   I P		
UniRef90_R6SJK7	A E T F I R I   G T C C G R I   C P E S Y D E S	L V I I I T G A   V R   D E G T T   V H Y   V P		
UniRef90_V718T3	V T T F E R I   G T C C A S T S A L V E R G D	I V I I I P T G A   V R   M E G T S S H Y   L P		
UniRef90_A8FZL3	V K N L I R V   G S A A G V   V S E D I K V   R D	I I I V I V A T G A   G T A S   L T N R T R F A		
UniRef90_G5LXY5	V K K I I R V   G S C C G A V   V R M D V K L   R D	V V I I V I G M G A   C   T D S K V N R   I R F K		
UniRef90_UP1000465B883	V R A M I R I   G S C C G A L   K K G I S L   G D	L I I I I A S G A V R   R N D G A S S S Y   V		
UniRef90_G8WD71	V T T L L R I   G S C C G A L   Q D N L I A L   G D	V I I I I A H A A V R   M D D G T S R T Y   A P		
UniRef90_UP10003F94EE8	P K A A L F L   G K C C G A I   K D K V K L   G D	L I I I I P I A A I   R G E G T S N D Y   L P		
UniRef90_E1QU43	A N T F I R V   G T T G A L   H E W I R V   V G D	V I I I I I N T G A   V R   F D G A S N A Y A M		
UniRef90_C7LL69	V N T I I R V   G T C C G T Y N N N I K I   G T	V I I I I E A K N A F S E V N I F E P N K T		
UniRef90_D3EHZ7	A K T L L R V   G T A G S Y R A D T   P A G S	L V V V I V V S T A A I   R T D G L T K Q   L V P		
UniRef90_W4QQJ1	A Q T M I R V   G T A G S Y R K E I E A G S I	I V I I V I S T A A V R   C   D G L S N Q   L V P		
UniRef90_E0T830	V T T L L R I   G S C C G A I   Q D H M A M G D	V I I I I A S G A V R   D E G T S R A Y A P		
UniRef90_F7YX94	A K V I I I R V   G T T G A I   Q K H L K L   G D	V I I I I V I A T A A V R   M D G T T A Q Y   M		
UniRef90_E4T1J0	Q L T I I R I   G T S S G G M Q P E I P L   G S	F I I I I S E K S I   L G F D G M L   N F Y   A G		
UniRef90_F0VME1	A K V I I I R A   G T C C G S L   K P T L   K Q G D	V F V I I I P F A S A Q E T G L I   T H   L L		
UniRef90_R6VJR6	A K Q I V R   G G G C G A W R D D I   E P G D	I I I I I N T G M A R T T T G L   M T T Y   V P		
UniRef90_L5MYD9	V Q V I I I R V   G T A G S Y R Q Y Q E I E P G S	V I I I I V I V I S S A V R   Q D G L T S Q   L V P		
UniRef90_R6HWG4	I K N F I R V   G T T G C I   Q E N I N L   G D	V I I I I V I I I N N A A V R   L E G T S A H Y   A		
UniRef90_M7N313	P H A A L F L   G K C C G G L   K K K T K L   G D	I I I I I P I A A I   R G D G T S N D Y   M P		
UniRef90_E0NSL9	Q L T L L V R I   G T C C G G L   Q L Y T P T G T	V I I I I I A S E K S I   I G F D G L L   I N F Y   V G		
UniRef90_G5HQ81	C D T L I I R V   G T C C G A I   Q T Y I K P G D	L I I I I I C   T G A V R   K E G T S D G Y   V T		
UniRef90_R3W2V3	V I K I I R V   G G G C G A W V D G I   E P G D	L I I I I I I N S A M A R T T Q G M L   G A Y   V S		
UniRef90_D8DY19	A K K I I I R V   G T C C G G L   Q P N T P I G T	I I I I I Y V A S V K S I   G F D G L L   I N F Y   A G		
UniRef90_C7TLV7	A K Q I I I R C   G G G C G A W R D D I   N P G D	I I I I I I I N R A M A R T S G L   M G D Y   V P		
UniRef90_F0P1C9	I N T I I R V   G T S S G G M Q P E I P L   G S	I I I I I I C L G T H G L   G L D G L L   I H H Y   V G		
UniRef90_R7NT69	I D F K V R I   G T C C G G L   Q P Y T P V G T	I I I I I I C   S E K S I   I G F D G F I I N Y   M G W		
UniRef90_G9WPH8	M K V A V R   M G T V M A L R D E L L G K F	I I I I I I I L P I P I G A I R R E K T S E T Y   V		
UniRef90_F9YTN8	I D M F I R F G T S G S L   Q A D I P V D S I	I I I I I I I L P I P I G A I R R E K T S E T Y   V		
UniRef90_Q3CZZ9	A D T F I R V   G T C C G G I   D L D V K G G D	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_UP1000470EE39	P K A V L F L   G K C C G G L   Q P D I P V D S	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_F2L007	I D F K T R I   G T C C G G L   Q P Y T P V G T	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_K1Y3E0	I D L N T R I   G T S S G A I   Q P D I P L   G S	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_R5RXL1	V T H A I R I   G S C C G A I   Q T D I A P G E	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_M5RUH0	P D A M L M V   G H C C G A V   R N H Q E I G D	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_Q8I3X4	A K V I I I R A   G S C C G S I   Q P D I L K R G	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_K9QRY8	I K K I I I R I   G T C C G S I   Q S H I P V G S	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_R6EVM0	I D F K T R I   G T C C G G L   Q P Y T P V G T	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_S8GX44	P K A C L F L   G K C C G G I   S H K T R L G D	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_D7JET3	I D F A T R I   G T S S G G L   Q P E C P I G T	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_F8LIW7	V E Q I I S T G T C G V L   V D M P E N V F L I	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_I4B9E2	P D L M M M V   G H C C G G L   R N H Q D I G D	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_A3X0R9	P K A V L F L   G K C C G G L   K R K N Q R G D	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_UP100036168EF	P K A C L F L   G K C C G G I   Q P F T P E G T	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		
UniRef90_R7LJ39	I D F E T R I   G T C C G G L   Q P F T P E G T	I I I I I I I L P I P I A A I   R G E G T S D D Y   M P		

130                  140                  150                  160

UniRef90_D9R415	E E F P A I   P D Y E M L K E   L E A A A R K   L N   P Y N   I   G I   T   S   K   D   S   F   Y   T
UniRef90_D5U8N5	K E F P C V P N I D   V L E A M I   E G G R K I K T K S   H   V   G   V   V   Q   C   K   D   A   F   Y   A
UniRef90_H2FSU0	P E F P A V A D F D C T C   A L V D A A R E   Q G V A P   H   V   G   I   T   A   S   S   D   T   F   Y   P
UniRef90_C7P052	E D Y P A T A D H R V V V S A L V A A A E R L   G   H   D   Y   H   V   G   L   T   M   S   A   D   S   F   Y   A
UniRef90_G2MH42	E D Y P A V A D H E V V V S A L V A A A E R L   G   H   D   Y   H   V   G   L   T   M   S   A   D   S   F   Y   A
UniRef90_D2RVE1	E D Y P A T A D G E V V V S A L V A A A E R L   G   H   D   Y   H   V   G   L   T   M   S   A   D   S   F   Y   A
UniRef90_X1MMT3	K N I R V H S S K E V R N A L   E A A K E   L   G   C   R   Y   H   V   G   K   T   C   T   T   S   S   F   Y   G
UniRef90_U1K7F7	P   A Y P A V S D F H C T   A A M V E A C E   H   M   G   V   T   Y   H   T   G   I   T   A   S   S   D   T   F   Y   P
UniRef90_B5Y654	P P C Y P A V P D P D V M F A I   L   K   C   A   R   E   L   N   Y   R   H   C   G   I   I   R   S   H   D   S   F   Y   T
UniRef90_10GJL8	P P T F P A I A D F D V T K T L   I   D   V   G   K   E   T   K   S   N   I   T   Y   G   V   V   I   S   Q   D   A   F   Y   V
UniRef90_R9XT88	P P L E Y P A V A D F R C T N   E   L   Y   A   A   A   K   N   Q   G   D   P   Y   V   G   I   T   A   S   S   D   T   F   Y   P
UniRef90_Q87H86	D S A Y P A V A S F T L   L   K   E   V   E   R   Y   L   S   T   Q   T   P   Y   H   F   G   V   V   R   S   H   D   S   F   Y   T
UniRef90_I2F7H5	P P N F P A V P S P D V Y Y S S   L   T   T   S   A   R   E   R   G   R   E   I   V   T   G   I   N   W   T   H   S   C   F   Y   K
UniRef90_UP10003B6A9C0	P P I E F P A V P D F S V L Q A Q V Q   S   A   Q   K   L   S   L   R   F   H   V   G   V   A   H   C   K   D   S   F   Y   G
UniRef90_H2J3C0	K S F P A V G H F D V I S A L   K   E   A   A   G   I   G   N   P   H   H   L   G   V   V   L   S   T   D   S   Y   Y   G
UniRef90_U2DXH4	I   E F P A V A D L D I A Y A L   R   E   G   A   K   K   L   G   Y   R   V   H   T   G   V   V   Q   C   K   D   S   F   Y   G
UniRef90_A8F6W6	P P S A F P A V A D L Q V T S S L   I   K   A   A   E   S   L   G   Y   K   Y   Y   S   G   I   V   Y   T   R   D   A   Y   Y   V
UniRef90_UP100037B79CE	P P L S Y P A V A D F Q C T R A L   V   D   T   A   E   G   G   S   G   L   N   Y   W   T   G   I   T   A   S   S   D   T   F   Y   P
UniRef90_C5EM61	P P F E F P A V P D F E M L K A L   E   A   A   A   V   D   L   G   H   P   Y   N   V   G   V   T   I   T   K   D   S   Y   Y   T
UniRef90_B7CDB0	P P I E F P A V P H F D V L S A Q V E   S   A   K   K   L   C   L   G   Y   R   H   V   G   V   V   Q   S   K   D   S   F   Y   Q
UniRef90_A1SYK8	P P L E Y P A V A F N E C T M A I   V   A   A   C   R   E   T   G   L   E   P   H   I   G   I   T   A   S   S   D   T   F   Y   P
UniRef90_I3VUD7	E K S Y P A V P D N Y L L E N   I   E   S   A   K   S   L   G   A   T   Y   H   C   G   I   I   R   S   H   D   S   F   Y   T
UniRef90_G5HMX4	V   E F P S V P D F H M L K C   E   Q   A   A   K   N   L   D   Y   P   Y   N   V   G   V   T   I   T   K   A   S   F   Y   T
UniRef90_C5KW27	D G F P A V A D P V L C I A I   R   D   T   A   K   L   G   Y   N   T   H   F   G   I   S   L   S   L   A   A   F   Y   P
UniRef90_D9PZN7	A G Y P A S A Y E V I M A L   V   E   A   A   E   S   L   G   V   R   Y   H   L   G   I   T   A   S   T   D   S   F   Y   T
UniRef90_T1AU81	P P I E Y P A V A S L   W   L   T   N   A   L   V   N   A   A   E   K   L   K   I   P   F   H   V   G   I   T   A   S   S   D   T   F   W   P
UniRef90_U1P7D0	D E S Y P A S A D Y E V I A A L   V   A   A   A   E   R   R   L   G   H   D   Y   H   I   G   V   T   L   S   T   D   S   F   Y   A
UniRef90_UP1000393E780	Q S Y P A V A D L   A   L   T   M   R   L   D   V   A   G   K   L   K   A   A   H   H   L   G   V   R   S   H   D   S   F   Y   T
UniRef90_K2DVC4	P P I E Y P A V V S S F E F T H D M   V   E   G   A   K   E   T   K   A   P   F   H   V   G   I   T   A   S   T   D   T   F   W   R
UniRef90_UP10003032053	E K S Y P A I P D H R L L M Y   L   Y   Q   T   A   K   R   L   N   R   H   Q   C   G   R   V   R   S   H   D   S   F   Y   T
UniRef90_A3URL3	P P S Y P A Y T S F S L L K E   L   D   K   F   L   Q   Q   Q   T   T   P   Y   Y   L   G   T   V   R   S   H   D   S   F   Y   T
UniRef90_N9XMQ7	L   S   Y   P   A   V   A   D   M   D   V   V   R   A   L   E   E   S   S   G   N   L   Q   L   Q   A   H   S   G   I   V   L   T   Q   A   L   F   Y   P
UniRef90_D2TWP0	P P L E Y P A V A D F S C T N   A   L   Y   E   A   A   K   A   A   G   L   T   T   V   G   I   T   A   S   S   D   T   F   Y   P
UniRef90_A6G946	P P G Y P A V A H P E   V   V   L   A   L   A   W   A   C   E   D   T   G   A   A   H   H   L   G   I   T   A   T   A   A   G   F   Y   G
UniRef90_B0TYM5	P P I E Y P A V A D F K L   N   S   S   L   Y   N   S   A   R   S   L   N   I   D   I   H   C   G   I   T   G   S   S   D   T   F   Y   P
UniRef90_M8EAB7	P P G F P A V A N R R   V   D   A   L   V   T   A   E   Q   N   T   Q   T   G   L   H   V   A   E   G   I   T   L   T   L   D   V   F   Y   S
UniRef90_B0P6N0	I   E Y P A V A V A D R   H   V   V   D   A   L   A   R   A   A   K   K   L   G   Y   N   F   A   E   G   I   T   Q   S   K   D   S   F   Y   G
UniRef90_V4Y7U8	E D Y P A T A H   T   E   V   V   S   A   L   V   A   A   A   E   R   L   D   Y   T   Y   H   V   G   V   T   M   S   S   D   T   F   Y   V
UniRef90_N2A9Q9	D S I F P A I P D T E L   L   F   D   V   I   E   A   A   K   E   Q   G   F   P   Y   H   V   G   I   G   R   S   H   D   A   L   Y   V
UniRef90_A1RWF6	G   V   S   M   P   A   Y   A   T   P   E   V   V   L   T   L   E   S   V   L   R   E   K   G   L   S   F   V   R   G   I   A   L   S   H   D   A   F   H
UniRef90_M1Q1M8	L   E   V   P   A   V   A   D   L   E   V   T   N   K   L   V   E   A   T   V   S   F   G   Y   E   Y   A   S   G   M   V   L   T   T   D   A   F   Y   P
UniRef90_K1Z625	P P Q G F P A V A D F D   V   N   G   L   I   R   S   A   K   K   E   Q   T   K   Y   F   V   G   I   N   R   T   H   D   A   F   Y   W
UniRef90_G5IEB0	V   E Y P A V A V A D R   H   V   V   D   A   L   A   R   A   A   G   N   R   G   L   H   F   L   E   G   I   T   Q   S   K   D   S   F   Y   G
UniRef90_S2W9J3	M N Y P A V P D L   Q   V   T   S   S   L   V   H   T   A   E   E   S   D   L   N   T   H   S   G   V   V   I   T   S   A   N   F   Y   P
UniRef90_L8MA01	P P E Y P A V A D P   F   L   T   V   A   L   A   Q   T   A   Q   K   L   G   V   A   Y   H   L   G   I   T   A   S   V   D   T   F   Y   E
UniRef90_V5CG51	T   S   Y   P   A   S   A   D   S   D   L   V   Y   L   R   Q   Q   A   R   K   L   G   Y   T   T   H   C   G   Y   V   R   S   H   D   S   F   Y   T
UniRef90_Q5E046	S S A Y P A Y A S   F   A   L   L   K   E   I   S   H   F   L   E   N   Q   S   V   K   Y   Y   F   G   V   V   R   S   H   D   S   F   Y   T
UniRef90_G9RY32	P P I E Y P A V A V A D R   H   V   V   E   A   L   S   R   A   A   L   A   K   K   L   N   Y   A   E   G   I   S   Q   S   K   D   S   F   Y   G
UniRef90_R6SJK7	P P I E Y P A V A P   M   A   D   R   H   V   T   D   A   L   A   R   C   E   A   C   G   Y   K   F   A   E   G   V   A   Q   S   K   D   S   F   Y   G
UniRef90_V718T3	P P I E Y P S V P D Y   S   L   V   K   K   E   E   A   A   I   A   Q   G   F   R   Y   N   T   G   V   T   I   T   K   D   S   F   Y   T
UniRef90_A8FZL3	G   Y   D   Y   A   A   T   P   D   F   S   L   L   R   A   C   W
UniRef90_G5LXY5	D   H   D   F   F   A   A   T   A   D   F   D   M   V   R   N   A   V   D   A   A   K   A   L   G   V   D   A   R   V   G   R
UniRef90_UP1000465B883	D S A Y P A V P D P   Q   L   F   M   A   L   M   E   S   A   R   E   S   G   V   P   C   H   A   G   I   I   R   S   H   D   S   F   Y   D
UniRef90_G8WD71	A G Y P A C   A   D   P   P   L   L   T   W   E   L   V   A   Q   A   R   Q   M   N   L   P   A   A   C   G   L   V   R   S   H   D   S   F   Y   T
UniRef90_UP10003F94EE8	P P E   I   P   A   L   P   S   F   R   L   Q   R   A   V   S   S   M   I   K   K   Y   E   M   D   Y   W   T   G   T   V   Y   T   T   N   R   R   V   W
UniRef90_E1QU43	P P E   Y   P   A   V   A   S   Y   D   V   V   L   A   L   I   T   A   A   E   M   L   G   V   K   Y   H   V   G   L   T   A   S   T   A   D   F   Y   V
UniRef90_C7LL69	G   W   Q   I   N   Q   P   S   S   L   D   L   N   I   G   L   K   A   N   V   H   C   S   D   V   F   Y   R
UniRef90_D3EHZ7	D   G   F   P   A   V   A   D   S   Q   V   A   E   A   L   Y   E   S   A   L   A   I   G   E   G   V   V   R   K   G   I   T   V   T   L   D   V   F   F   N
UniRef90_W4QQJ1	S   G   F   P   A   V   A   V   A   N   R   E   R   V   V   Q   A   L   A   T   A   A   A   N   Q   K   E   T   I   T   F   E   G   I   T   L   T   L   D   A   F   Y   G
UniRef90_E0T830	A   G   Y   P   A   C   A   D   S   G   L   V   H   L   R   A   E   A   E   R   L   A   F   P   A   H   C   G   Y   V   R   S   H   D   S   F   Y   T
UniRef90_F7YX94	P   E   F   P   A   V   A   D   F   R   V   R   V   K   A   L   I   E   A   A   K   V   V   G   N   P   Y   H   V   G   I   V   L   S   T   D   S   Y   Y   G
UniRef90_E4T1J0	R   D   C   V   S   D   L   F   E   K   T   L   K   E   Q   L   D   W   N   P   Q   L   A   A   P   V   V   V   G   V   T   I   S   A   N   G   F   Y   G
UniRef90_F0VME1	P   A   G   F   P   C   V   A   S   P   H   V   Y   Q   A   L   T   N   A   A   K   E   A   N   E   E   V   A   S   G   V   G   L   T   Q   D   H   F   Y   A
UniRef90_R6VJR6	D   T   Y   P   A   V   A   D   S   L   L   V   S   R   I   A   K   H   L   S   G   S   K   K   I   H   I   G   L   G   L   T   A   E   T   Y   Y   I
UniRef90_L5MYD9	P   P   G   F   P   A   V   A   A   N   R   R   V   A   D   A   L   V   Q   A   A   K   H   E   S   G   L   H   V   A   E   G   I   T   L   T   L   D   V   F   Y   S
UniRef90_R6HWG4	P   P   L   N   F   P   A   V   A   V   S   L   K   L   T   N   A   L   N   D   A   A   A   A   L   N   V   P   H   H   V   G   I   S   V   S   S   D   T   F   W   P
UniRef90_M7N313	P   P   E   I   P   A   L   P   S   F   R   L   Q   R   A   V   S   S   M   I   K   K   H   E   M   D   Y   W   T   G   T   V   Y   T   T   N   R   R   V   W
UniRef90_E0NSL9	R   N   D   V   C   D   L   D   F   E   E   H   F   K   T   H   M   H   W   N   P   Q   L   G   A   P   Y   V   I   G   V   T   I   A   C   G   G   F   F   G
UniRef90_G5HQ81	N   S   Y   P   A   V   A   D   H   E   V   T   M   A   L   I   E   A   A   E   Q   L   G   Y   T   Y   H   V   G   I   G   Y   T   A   S   S   F   F   F   C
UniRef90_R3W2V3	D   D   N   Y   P   A   V   A   S   N   P   L   L   T   S   A   I   I   K   K   A   E   K   S   G   F   K   T   H   T   G   I   G   L   T   S   E   S   Y   Y   F
UniRef90_D8DY19	R   N   E   A   C   D   L   D   F   E   K   E   F   K   K   Q   V   S   W   N   P   Q   I   G   N   P   Y   V   R   G   V   T   I   A   C   G   G   F   F   G
UniRef90_C7TLV7	D   S   Y   P   A   V   A   D   P   P   L   L   V   N   K   I   Y   T   G   A   V   K   N   G   F   R   V   Y   T   G   I   G   L   T   T   E   T   Y   F   F
UniRef90_F0P1C9	S   E   K   V   F   D   H   A   M   G   E   A   F   T   K   H   S   N   W   S   T   K   K   A   E   P   Y   H   H   G   I   T   A   T   A   C   G   F   F   G
UniRef90_R7NT69	E   G   N   V   C   I   A   H   P   Y   V   I   N   A   D   K   E   I   L   D   R   I   A   Q   N   D   M   I   R   G   V   T   I   A   A   G   G   F   F   G
UniRef90_G9WPH8	E   Q   G   Y   P   A   V   P   D   F   S   L   V   E   I   Y   N   E   T   V   K   D   F   G   S   E   Y   Q   N   G   I   T   C   T   M   D   G   F   Y   S
UniRef90_F9YTN8	A   P   K   V   R   E   M   E   L   E   E   A   F   I   A   H   T   Q   W   D   L   Q   K   G   R   P   Y   I   V   G   C   T   G   T   A   P   G   F   Y   G
UniRef90_Q3CZZ9	P   I   E   F   P   A   V   A   D   L   E   V   T   N   A   L   V   N   V   A   A   K   K   L   G   Y   T   S   H   A   G   V   V   Q   C   K   D   A   F   Y   G
UniRef90_UP1000470EE39	S   E   I   P   A   L   P   S   F   R   L   Q   S   T   V   S   A   S   L   A   K   H   N   M   D   Y   W   T   G   T   V   Y   T   T   N   R   R   I   W
UniRef90_F2L007	R   N   Q   V   C   D   L   E   F   E   A   Q   F   K   K   Q   V   Q   V   D   W   D   P   Q   L   G   N   P   Y   V   R   G   V   T   I   A   C   G   G   F   F   G
UniRef90_K1Y3E0	R   D   S   I   S   Q   L   D   Y   E   K   A   F   M   E   H   S   N   W   P   D   N   L   P   S   P   Y   F   K   G   V   T   I   S   A   S   G   F   Y   G
UniRef90_R5RXL1	E   G   Y   P   A   V   P   D   T   E   L   L   L   A   T   E   S   I   R   A   Q   G   F   A   H   R   L   G   I   I   R   S   H   E   S   F   Y   I
UniRef90_M5RUH0	P   S   V   P   L   I   P   S   F   L   L   N   R   A   L   Q   V   L   D   Q   R   G   L   Y   R   I   G   A   V   Y   T   T   A   D   R   N   W
UniRef90_Q8I3X4	H   G   D   F   P   A   V   G   D   F   D   V   Y   D   T   L   N   K   C   A   Q   E   L   N   V   P   V   F   N   G   I   S   V   S   S   D   M   Y   P
UniRef90_K9QRY8	P   V   E   Y   P   A   T   A   D   P   F   L   T   V   A   L   V   K   A   A   Q   A   L   K   V   E   Y   Y   M   G   I   T   A   S   V   D   T   F   Y   R
UniRef90_R6EVMO	P   P   A   P   I   A   A   D   K   E   L   V   E   R   I   A   K   D   D   M   V   R   G   I   T   V   A   C   G   R   V   P   L   T   D   P   N   Q   N
UniRef90_S8GX44	P   E   V   P   A   L   P   F   M   Q   M   Q   R   A   V   S   S   A   I   R   D   H   A   R   D   Y   W   T   G   T   V   Y   T   T   N   R   R   I   W
UniRef90_D7JET3	V   W   N   W   P   R   L   P   R   P   Y   T   V   N   A   D   E   E   L   V   E   R   I   A   K   D   D   M   V   R   G   I   T   L   S   A   P   G   F   Y   G
UniRef90_F8LIW7	P   S   R   Y   I   D   M   N   E   Q   A   L   D   A   I   E   K   T   L   K   Q   K   K   I   P   Y   K   E   V   M   T   W   S   T   D   G   F   Y   R
UniRef90_I4B9E2	N   E   I   P   V   I   P   N   F   L   I   N   S   Y   L   R   R   E   L   A   D   R   S   I   P   Y   R   M   G   T   V   Y   T   T   D   N   R   N   W
UniRef90_A3X0R9	L   E   V   P   A   L   P   A   F   Q   L   Q   R   A   V   S   T   M   I   R   D   L   G   H   D   Y   W   T   G   T   V   Y   T   T   N   R   R   V   W
UniRef90_UP100036168EF	A   E   V   P   S   L   P   A   F   M   Q   L   Q   R   A   V   S   S   A   L   R   D   Y   G   R   D   Y   W   T   G   T   V   Y   T   T   N   R   R   V   W
UniRef90_R7LJ39	G   R   N   E   V   C   N   L   D   F   E   Q   K   F   L   N   H   M   Q   W   T   G   S   Q   C   I   A   H   R   G   V   T   I   A   C   G   G   F   F   G

170            180            190            200

UniRef90_D9R415	E L K S K W E A Y E K G G A T N S S M E C A T L F L V A A S L G I R M S S V M I	
UniRef90_D5U8N5	Q H A Y K W D S Y I K A G G C L A S E M E S A T L F A V G A S K N V R T G A A M L	
UniRef90_H2FSU0	G Q E R Y M K E W Q S M G V L N Y E M E S A T L F T M C A S Q G L K A G C V A G	
UniRef90_C7P052	G Q D D L V Q E L R E A N V L N I E M E A A A L M T I A N I Y G L R A G A V C S T	
UniRef90_G2MH42	G Q G G R P V E D L T E A N V K N I E M E A S A I L T L L A N L Y G L R A G A V C T	
UniRef90_D2RVE1	D N K D L V R R M R K K G V L N F E M E S A T L F A L A K V Y K I R V G A V C A G	
UniRef90_X1MMT3	G Q E R Y C E E W Q K L N V M N Y E M E S A T L F T M C A A L G L K A A C V A G	
UniRef90_U1K7F7	D R N E I D N Y W S E R G V L A A D M E T A A L F V I G R L R E V R T A S I L A	
UniRef90_B5Y654	P Y P D E M E K F V K A K V K A V E M E S G C V F I V S Q Y R G V R A G A L F A	
UniRef90_I0GJL8	G Q E R Y D K Q W Q E L V M N F E M E S A T L F T M C S A L G L R S G M V A G	
UniRef90_R9XT88	D D E E C Q Y W N K K G I L G A D M E T S A L F T V G R L R G L H V A S I L	
UniRef90_Q87H86	R D P E Y F Q S W S K R R I V S L E M E A S A L F V I S Y L R N V K A G F I G !	
UniRef90_I2F7H5	Q H E E N W Q A Y C A L G T I C S E M E S S T L F I V A S A L H V R A G A M F M	
UniRef90_UP10003B6A9C0	R F F E D D M D L F V R A N T L A I E M E M V S A L Y V L G N I Y N L R T G A I I T	
UniRef90_H2J3C0	Q H S N R W E A W K R A G T L G S E M E S A A L F T V C Q S L G C K A G A V M H	
UniRef90_U2DXH4	Q D E G L N K F L T D S G I V A A E Q E C S I A F I L L G T I K H V R V G A I L A	
UniRef90_A8F6W6	G Q E R Y M E E W Q S M G V L N Y E M E S A T L L T M C A T M G L Q A G C V A G	
UniRef90_UP100037B79CE	E A K Y K W E S Y I K G G A T N T S M E C A V L F L V G A S L G I R T A S V M I	
UniRef90_C5EM61	E L Q N K W S A Y C K D C L A S E M E S S T V F I V S Q T R H V R S G A M F L	
UniRef90_B7CDB0	G Q E R Y M K E W Q E L G V L N Y E M E S S T L F T M C A T Q G W R A A C V A G	
UniRef90_A1SYK8	D K E D E I D R W S T K G V L A A D M E S A P L F V I G R L R G I K T A S I L N	
UniRef90_I3VUD7	E L M F K W S A Y E K G G A T S T S M E C A P L F A I G S C L G I R T A C V M A	
UniRef90_G5HMX4	S S A A D S T L L K N A G A L A V E M E N A P L F V V A S L R G I R A A A V A T	
UniRef90_C5KW27	G Q G R P P G Y D L R Q M R V L N F E M E S A T L L T L A N L Y G F R A G A V H A	
UniRef90_D9PZN7	G Q E R Y D E E W R K L N V T N F E M E A A T L F T M C S A F G L S A A C L C G	
UniRef90_T1AU81	G Q D D L V K T L K S A N V A N I E M E A A T L L T L G N L Y G L R A G A V C A	
UniRef90_U1P7D0	E E M Q I C Q F W H Q R G I L A A D M E T S A L F T V G R L R G L K V A S V L N	
UniRef90_UP1000393E780	UniRef90_K2DVC4	S K R G A M D E W R A L N V M N F E M E A S A L F V M A S T M G L H A A C I C G
UniRef90_UP10003032053	D R E E Q I D R W S D K G I L A A D M E T A A L F V I G G I I K G L K V A S V L N	
UniRef90_A3URL3	D D E Q A C Q Y W N G K G I L G A D M E T S A L F T V G R L R G L N V A S I L A	
UniRef90_N9XMQ7	G L L E R V K L Y Q K A G V L A V E M E N T A L F V I V A S L H G I K A G A I L A	
UniRef90_D2TWP0	G Q E R Y M E E W Q K M G V I L N Y E M E S A T L L T M C S S Q E L S A G M I V A G	
UniRef90_A6G946	A Q G R N I A E L Q R M G I S N L E M E A S T L L T L S T L R G F R A G A V C A	
UniRef90_B0TYM5	G Q R E S S L D E W R K L N V L N L E M E S S A L L T V C A T F G L Q A S C I C T	
UniRef90_M8EAB7	G V V D F H K L Y Q K A G V L A V E M E N T A L F V I S S I L R G M K A G S I L A	
UniRef90_B0P6N0	Q H K E R W E A W R R G N V M S S E M E S A A I F V I S S I R G C R A S S I M A	
UniRef90_V4Y7U8	G Q G R A I E R L R E A N V K N I E M E A A A L M T L G N V Y D L R A G A V C S	
UniRef90_N2A9Q9	E K E D L N E L W G S R G V L G S D M E T A A L F V I G G L R G V K T A S I L	
UniRef90_A1RWF6	K V E E N A R R W A S L G V D F L E M E S A T L F A L G R L R G V K V G A M A L	
UniRef90_M1Q1M8	G K R K D R E T L A E T G V L A V E M E C A A L F T I A Q V R G V V S A G A V L A	
UniRef90_K1Z625	G E Y M Q N D R W K E T P I L S S E M E S A A L F I I A S I R G V R A G A I M N	
UniRef90_G5IEB0	E L K E R W E A W K K G N A V C S E M E S A A L F I I A S I R G V R A G A I V A	
UniRef90_S2W9J3	S P I N D Q P K W R D A G A I G V E M E V A A L F I T A S I R H V K S G A I L A	
UniRef90_L8MA01	UniRef90_V5CG51	G Q E R I I E Q Y G N I L N Y E M E A G V L F K M A G V Y G F K A A C V C A
UniRef90_Q5E046	D R Q E I C N Y W S A K G I L A A D M E T A P L M V V G A L R N M R I A S I L N	
UniRef90_G9RY32	D E E D Q C Q Y W N K K G I L G A D M E T S A L F T V G R L R G L Q V A S I L N	
UniRef90_R6SJK7	E L K E R W R A W Q R G N V M C S E M E C A A L F I V S S I R G K R A G A I M N	
UniRef90_V718T3	Q H H Q R W E A W E K S G V M A S E M E T A A L F I V S M I R G V R A G A I M A	
UniRef90_A8FZL3	E L I N K W T A Y E K G G A T S T S M E E A L L F I A A T S L G V R A A S A L I	
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UniRef90_C7LL69	L S K L D I K E H N L D V V D M E S F A L F Y L A N H F N K K A T I L T	
UniRef90_D3EHZ7	G V E E P H Q K Y K A A G A L G V E M E I A A L Y V V V A A I I R G V R A G A I V A	
UniRef90_W4QQJ1	S V P F P H E L Y K Q S N V L A V E M E N A A L F T I A S I R G V R A G A I V A	
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UniRef90_F7YX94	R K F D P E K Q L E K A G V L A V E M E L G A L Y V I G A L K G L L T G S V L T	
UniRef90_E4T1J0	P Q G R V L R L Y G N Y K I L T N Y E M E G S A I A G L A K L M G H K A M T V C C	
UniRef90_F0VME1	G P I H N W E M W S K C C D T I D M E T T G G I F G L C Q A R G I Q S G A I L A	
UniRef90_R6VJR6	G Q P N M I E E W S S L G I M N C E M E T A V L Y I L A S L Y Q I P A A N C L A	
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UniRef90_R6HWG4	G Q E R Y D K E W Q A L G A L N Y E M E T A A L F V V A Q A F G I L N A A S I C G	
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UniRef90_E0NSL9	P Q G R E L R I H N G Y R I T N F E M E S S A V A G L A R L M G H K A M T C C M	
UniRef90_G5HQ81	G Q G R P G H N M Q A A G V L N F E M E A A T V L T I S S L Y K M R A G A I F T	
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UniRef90_C7TLV7	G Q Y R Q M K F W Q D R G I I N A E M E S A V L F L L G S L Y N I P V A N C L V	
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UniRef90_Q3CZZ9	Q H E N K W E A W K R L G T K A S E M E S A A L F V A A S H L G V R C G S D F L	
UniRef90_UP1000470EE39	E H D D F K E Y L R E I R A M A I D M E T A T I F I V G F A A S P H G A L L L	
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UniRef90_K1Y3E0	P Q G R V L R R Y K G D R I T N F E M E G S A I A G L C A L G H D A A T V C C	
UniRef90_R5RXL1	D D I E L N E Y W S K K G A L G S D M E T A A L F T V G R L R G M K C A S V L	
UniRef90_M5RUH0	E L M K T K E H L R V S R S I L A V D M E S A T V A A N G F R Y R I P H A T L L C	
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210                    220                    230

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UniRef90_R9XT88	V I V N R T Q Q E I P N E A T I K G T E D R A V S V V V E A A
UniRef90_Q87H86	N N V V L Y Q Q D V K E G V G Q Y V D E M M E T A L E A L I
UniRef90_I2F7H5	C Y A N R Y K Q S A G T K V D L E N S V K E T I E I T L T A I
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UniRef90_U2DXH4	V V Q N Q N E R A A L G M E N P Y D H D T E K A I K A T I E G I
UniRef90_A8F6W6	T D S N I W L N P Q P P L E E K E K L F S K A E K K A I D V A L K
UniRef90_UP100037B79CE	V I V N R T C   N E T P D T E K L A S V E P N A I N T V I G A A
UniRef90_C5EM61	S A T N F G E Y S N D A E D Y P S G W E Q R A I E V G I E
UniRef90_B7CDB0	C L A N Q E R E K A G L   S N Q N H D L K P L M E C A V Q T I
UniRef90_A1SYK8	V I V N R T Q Q E I P D Q S T M K K T E V S A I S I V V A A A R K
UniRef90_I3VUD7	V V V A Y E G N L K E G I   N E Y V D G K D A M I L T A L E A I V R
UniRef90_G5HMX4	S A T N C R N Y S D N G R N T E I D I E D R A I R T A I E A
UniRef90_C5KW27	V D G S P L K W D D G D Y D P H G E V V E R M I K V G L E A A
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UniRef90_B0P6N0	Y T D M R K T V E
UniRef90_V4Y7U8	V Y A N R I T G E F R S E G E T R A A E C A S L A V K L
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UniRef90_A1RWF6	V V D N L L S G S E L V E G R E E L E L K M V E A G L E A L R R
UniRef90_M1Q1M8	V N G D A S E D K S L L I N R A I K R E I E V A L T A A
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UniRef90_D8DY19	V I A N R L A G E A N S S Y K N T I D G L I E K V L
UniRef90_C7TLV7	V H L S R A T Y K W E K P E D Y N R I H Q R S A E S V L E S V L
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 G T K D E F G D Y L L T N F Y N Y V T R F A D R F N C D V K G I G K K  
 W R K  
 Y H L H L K P E H I A S V V F T V G D P D R V P M V S R Y F D Q I D F Q T R  
 H L P K K C V Y A F L E E E I D R Y A R E V D C V G E F L S A  
 Y H L N I M P E D L A N T V I T V G D P D R V A E V S K Y F D H I E L K K G  
 L K A M K G D N M R Y G I I C A M D E E L K D L L E N L E D R T D K E  
 A R V A V I G A L E E E V T L I A A S L D N V S R E H A N  
 F H L H V K P E Q L A D K V I L V G D P G R V P L V A S H F D T K E C D V S S  
 F H L H V R P D Q L A D K V L L V G D P G R V E T V A A H F E T R E C E V E  
 K L E D F S D H I I L L T N F T K Y V E L F A E H F D A P I L G L R N S  
 I L A A M A E E V R E L V A A M D D Y E Q V S  
 I I C A M D E E L A I L K E A L S G E E T K H  
 D F T K H I L L T N F Q H Y V E L F S K W H N Q P I L G V N H  
 F H L H L R P E Q L S D K I V V C G D P G R V V D M I A S R F D S R E C D V S S  
 F H L H L K P E Q L A D K V I L V G D P G R V P M V A S F F D E K E C D V Q  
 P H I K L S E E H A V I P Y G L L P G D P K R L D R I A A C L T D V E E L A F  
 H L H L T A G D V G G Y A L P P N P P D H V A A L A A H H L D D P V F V A R  
 T L Y L K A D K E T I S K Y V I F S G D P W R V E M L Q K L D D P K H I A F  
 A E I D D F P K T V V T C F A R A T F N R V L N A L P H R L I A T T S  
 Y H L D L R T E E I A D L I I T V G D P G R V S L V S Q H F D K I E V Q R S  
 F H L H I K P G E L A N N I I L V G D P G R V E T V A S F F D K T D F H S V  
 K I A I I G A M E E E V V L L R D N I D G R S Q E T  
 I I G A M A Q E V N L L A S Q L E N A A R Y E  
 F H L H L K P Q H L A D K V I L V G D P G R V E Q V S S F D S I E C E V S S  
 F H L H L K P C Q L A D K V I L V G D P G R V T L V A S H F D S I E C E V E  
 P H I Q L R K G Q V H P V V L T M G D P K R V D E V T A L C D S F E N L T F  
 I Q A L P D F P K T A V T C F A R G T F A R I L A E F P H R E I A K T S  
 W R R  
 C A G G N W T A D T E A P E Q A I S D L A W K K  
 K I G I I G A M E Q E V K I L R E T M Q V P V S W E  
 Y H L N L L P E D I A D T V I T V G D P D R V T S V S R Y F D R I E I K K G  
 I N K I G V I G A M N E E V V V S L T K M L N N K K E T R  
 L M G A M R E E I A L L C E R M T D K G E E T  
 I K N  
 Q V N E G  
 G T E I S E F G E Y V L L T N F S N Y L N K F A K R F D C E I K G K G G  
 Y H L G I S P E N I A P T I I L L V G D Q D R V A L I S S F D K I T H Q S K  
 Y H L D L A P S Q L A T T I I T V G D P G R V E K V S K Y F D S I E A K A E  
 I A I I G A M E P E V A L L R E Q I S E V T T H Q  
 I A I I S A M P E E V E P L R Q Q L G I G E P E Q  
 I A I I G A M D E E V V A K I K E E M T Q V Q V T R S  
 D F P K T V V T C F A R A T F A R I L A D V P H R Q I A K T S  
 F H L H L K P E N L S D K I L L C G D P D R V G M I A S R F D S I E C D V S S  
 Y H L N L K P E N I A N D I I F V G D Q D R V E K I T C L F D S I E F T Q Q  
 A S P W R R  
 Y H L D L R P E E I A T T I V T V G D P D R V R E F S K Y F D T I E V Q R Q  
 I A I I G A M E E E V T I L R E A M E V E E V K V T  
 I A I I G A M N E E V I Q L K E A M V L N E T R E  
 K I A I L G A M D E E V K L I K E S L E D L Q Q V T  
 N I A I I G A M E E E V A L L R E K I A N R T E T T  
 K L A I M G A M E E E P L L A H F E N V N L V E  
 Y H L N L R P E H I A H D I I F V G D Q N R V E K I T Q F F D S I E Y S A Q  
 K I A I I G A M E E E V L I L R E A M E N K E V K T  
 V S E N V I I V G N L E R Q R T V N S F L G N L E K V S E E  
 L M V E P K V T E  
 I Q E E Q T  
 Y H L G L L P E E I A N T V I T V G D P A R V Q K I S V H F D S I E V K K Q  
 G T P A E S F Q R H V L F T N Y A M H V E A F L E R F D A Q G P S R S G  
 I G A M E E E V E L L K L S K I D N R V D T T  
 K T G I I G A M W V E A E K L H M A M E Q D T V K E Y E  
 Q I D P Q K V G E Y V L T V R D P L P A K L I A E K L E K S E R I G L  
 W K K  
 M M D I E K T V D

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

50            60            70            80

UniRef90_R6YN43	S R E F H T T T G T Y R G K R I	S I I S T G I	G C D N V D I V L N E I D A L A N
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UniRef90_UPI000478A0DA	K R E F K T Q T G T Y K G K R I	T V M S T G I	G P D N I D I V M N E L D A L V N
UniRef90_F4B5L6	F A G Y Y T Y V G K Y K G E K V	S V V F H G I	G I P S L T L V T H D L Y N L G
UniRef90_R6LQ4A	M R E F N T Y T G T Y K G V E I	T V T S T G I	G A P S A A I A M E E M Y E S G
UniRef90_UPI00047815F1	N R E F F K S A G T F K G H K L	V L L S T G I	G A P S M V I A I E E L K A L G
UniRef90_UPI000255D852	N R E F F V F R T G T N Y K G T R	F T V L S T G I	G T D N I D I V L N E L D A L V N
UniRef90_UPI00047BFEB9	K R E F F A V I T G T Y K G H P S I C S S G I	G G P S T E I A L V E L S M L G	
UniRef90_H1Z7M4	K R E F K T Q T G T Y K G K R F S	V I S T G I	G P D N I D I V V N E I D A L F N
UniRef90_U2JK14	H R E Y R S L R G K Y K E M P V	L A L S T G I	G G P S A G I A L E E L K N I G
UniRef90_F0IC60	K R E F F V T H T G T F Q G K R L	S V V S T G I	G T D N I D I V L N E I D A L F N
UniRef90_H8KL84	L R G Q D K P M N A T S R D I	T I I N F G M G S P	P N A A L I M D L L S A I K
UniRef90_UPI000465AC87	I V G V D R P M P S A T A D G I	T M I I N F G M G S P	N A A T M M D L L S A I R
UniRef90_G4AIM0			
UniRef90_G5GEJ2	N M R A V T A N G T M I I N F G I G S P	P N A A I I M D L L S A I V K	
UniRef90_UPI000428E2A0	I Y G L D K P M Q S V T A D G I	T I I I N F G M G S A L A T M M D L L T A I K	
UniRef90_L7WDS7	K R E F H T H T G I Y K N K R I	S V I S T G I G T D N I D I V F N E L D A L V N	
UniRef90_D5BFC4	K R E F H T Q T G S Y R G K R I	S V I S T G I G T D N I D I V F N E L D A L V N	
UniRef90_F9ZBY6	G A D K T M P N V S C N G I	T L V I N F G M G S P	N A A T I I M D L L S A I E
UniRef90_UPI00016C3A73	V M G R D R P M T S A T A E N T I	T I I I N F G M G S A M A A T V M D L L S A I E	
UniRef90_R7PPX4	H R D Y T T W T I Y V N K Q P V	L V M S T G I G M G G P C V T F A V E E L A R L G	
UniRef90_Q1Q2B4	K R E Y C S Y L T E V S G Q K V	L I I T S T G I G G G P S A S I A V D E L A Q L G	
UniRef90_I6YWH3	P M Q T A T N S K G L S I I I N F G I G S A N A A T I I M D L L I A R N	R	
UniRef90_V4P9Z2	H Q M P A Y H L M R E G R Q G I	T L V N I I G V G P S N A K N I T D H L A V M R	
UniRef90_B1H2H8			
UniRef90_UPI00042913BD	K R E F F V T H T G R K N G Q R V	T V M S T G M G T D N I E I L M T E L D A L V N	
UniRef90_E1M2L4	T K T Y P V Y V M S Y V K G K E V C L A Q A P V G S A P A V Q F M D W L I G Y G		
UniRef90_D7VPC2	K R E F I T H T G T V R G K R I S V I S T G I G T D N I D I V V N E L D A L V N		
UniRef90_R6S7J0	V G G T E F Y T G K I L K G K E V V L V L V R C G L K V Q S G I T T A L M I V E F N		
UniRef90_UPI0003FD42D7	V A H H G S M T T R S G D T I E V A A T V G G M G L V N A A A T T Q F L I D Q Y H		
UniRef90_R6A758	N R E F R T I T G T Y H G K R I T V V V S T G I G G C D N I D I V V N E L D A L A N		
UniRef90_J9FNB3	S R E F R T V T G T Y R G K R I T V V V S T G I G G C D N I D I V V N E L D A Q F R		
UniRef90_W2C624	S M P N A S G G G T I I I N F G M G S S N A A T I I M D L L S A V M		
UniRef90_UPI0003783EBF	Y G G Q I F Y D G T L S G I S V T L V Q S G I G K V N A A M A T T L L I E H F T		
UniRef90_F4FSY1	Y G N A D Y Y L G T I H G Q T L V I V K S G I G K V Q A G I T T S T L I N E F H		
UniRef90_UPI000237D3F7	N N P M N C S A E G I T I I I N F G M G S P N A A T I I M D L L S A I N		
UniRef90_UPI0003730558	S R E F H T I I T G T Y V K G K R I V T A L S H I G G D N I E I V M N E L D A L A N		
UniRef90_C9LDK4	S R E F R T I I T G R F Q N K R I T V V V S T G I G G C D N I D I V V N E L D A L A N		
UniRef90_D9R6U2	H R E F R S L K G K Y R G V P V M A V S T G I G G G A S A A I A V E E L A R I G		
UniRef90_K0K033	N R E F E T W R G T L D R E T V V V V S T G I V G G P S T A L A V E E L A A Y D C O		
UniRef90_V7I2U9	N R E F N T Y T G T Y H G I P V T I S S T G I G A P S A A I A M E E L Y D C O		
UniRef90_S0JRW4	N R E F N T Y T G T Y H G I P V T I S S T G I G A P S A A I A M E E L Y D C O		
UniRef90_C0MC30	G A V F Y A G T Y A G H D V I V V I Q S G I G K V L S S L T T S L L I Q Q Y E G		
UniRef90_E17I2W8	V A N I P I Y E L D V K G H K L G F F N S Y V G A A G C V V G V L E D I I A M		
UniRef90_UPI00029A3EF7	H R E F V T H T G Y L G T N R I T V L V S T G I G M P N I D I V M N E L D A L A N		
UniRef90_UPI00047E2583	N R E F V S Q T G T Y K G L P V T V L V S T G I G T D N I D I V V N E L D A L V N		
UniRef90_H0IXV8	V A G G C E F T F G Q M H G A N V I I L R S G I G K V N A A M S T T I L L E K Y K		
UniRef90_D3IDP6	H A G F V F Y T G T R Y G L E V V V L V Q S G I G K V N A A V G T A I L L E R H Q		
UniRef90_R5CRT0	N R E F K S V T G V Y K D K R I T V V V S T G I G C D N I D I V V N E L D A L A N		
UniRef90_C6Q1P7	S R E F H S I T T G L Y S G K R I T V T S T G I G C D N I D F C T R M E K D E F R		
UniRef90_U6GEW8	N M L F N S G K I Y N Q E V V V V R S G I G K V N A A I C T Q I L I D D F Q		
UniRef90_F0Vvx7	N R E F K S A N A V K N G Q K F T V I S H G I G S C S S M I C F E E L I K L G		
UniRef90_UPI0001DD076B	V T N I P I Y E L N F Q G Q G K I A F F N S Y V G A S G C V A I L E D I V A M G		
UniRef90_R9VKG7	H Q M P A Y H L I G E D G D G T L V N I I G V G P S N A K T I C D H L A V L R		
UniRef90_R3WKM6	H Q M P A W H L V T A D G Q G Q T L N I I G V G P S N A K T I C D H L A V L R		
UniRef90_W2UPN7	R A G A L F V S G T I I G K H E V I V V R S G I G K V L S S I T T S L L I Q Q Y G		
UniRef90_R5JJ18	K R E F V T H T G E L N G K R L S V I S T G I G T D N I D I V V N E L D A L V N		
UniRef90_G9RSH4	V A G L T F Y E G Q I V V V L V Q S G I G K V N A A M T T Q I L I S E F K G		
UniRef90_UPI0001C37173	V A G V T F Y T Q G R I V V V L V Q S G I G K V N A A C A A Q L L I A R F G		
UniRef90_W3AD12	I S G F D F Y I N Q H C G K T I V I N A C C G I A K V N A A L C T Q V M I D N F H		
UniRef90_UPI000287AC7C	I A N C E F T T G T Y K G Q D V V L L K S S G I G K V N A A M S T T L L Q Q F K		
UniRef90_F2IG40	P M Q T A T N S N G L S I I N F G I G S A N A A T I I M D L L T A C N		
UniRef90_UPI00041253DC	H R E F V C H T G T Y K G K R I S V I S T G I G P D N I D I V V N E L D A L V N		
UniRef90_I1E292	H R E F K T H T G T Y K G K R I S V I S T G I G P D N I D I V V N E L D A L V N		
UniRef90_F5SCY3	S G G Y T F Y Q G T L A G M P V V L V V Q S G I G K V A A A L T A L L I Q Q F K		
UniRef90_R6ZDU0	V G G L E L S M T E W N G L Q V I T A V S G I G K A Q A G A C Q Y L I T R H H		
UniRef90_T0UK37	T A G M D F Y V G K L C G Q D A V V V V R S G I G K V N A G M C T Q I L A D R F Q		
UniRef90_R7EW76	V A N I P I Y E L E F K G Q K I G F F N S Y V G A S G C V A I L E D I I A M G		
UniRef90_UPI0004701F83	C Y F P I Y R V R G T N I G F F N S Y V G A S G C V A I L E D I I A M G		
UniRef90_G2Z1D2	N R E F R T I I T G F Y K G K R L T V Q S H G I G G D N I E I V V N E V K D D F R		
UniRef90_Q0C2N1	K R E F T Q T Q G W Y K G K R I T V L V S T G I G P D N I D I V V N E L D A L V N		
UniRef90_I2J4F1	F Q M P A Y H L R A A N G A G I T L V N I I G V G P S N A K T I T D H L A V L R		
UniRef90_W0EZL5	V L G I N T Y H T G S I I S S V E V V L V V E S G I G K V M S A M S V A I L A D H F Q		
UniRef90_D4W1V2	H R E F V T H T G L I A G K R L T V L V S S G I G P D N I D I V V N E L D A L V N		
UniRef90_U7VCL1	I A H V E F T K G L L N G T S V V L L V R S S G I G K V N A A I T T L L F E H F D		
UniRef90_G4QJW8	L G G Y K F Y R G T L L G K E I V L V V E C G I G K V N A A I C S T L L I Q E F K		
UniRef90_B7GIU7	Y S H L V F Y T G K L H G H E I V L V V K C G I G K V A A A V A T T M I I E K F D		
UniRef90_G2HXT3	V A N C C S F Y S G T L D G A N V V L L K S S G I G K V N A A M S T T I L L E R F A		
UniRef90_J0RTP2	F A N N K Y Y E V N Y N G L D I V I A Y S K I G K V F A S T A A T M L E K F G		
UniRef90_UPI000371DED3	K R E F K T Q T G I Y K G K R I S V V S T G I G P D N I D I V V N E L D A L V N		
UniRef90_Q6L2U4	I A G S E F T T G T L R G V D V I I L L R S S G I G K V N A A M T T S V L I H E F Q		
UniRef90_A0A011LZV1	F A G Y T S Y Q G E Y Y N N K K V T T V F H G I G P S I S L I T D D L I S L G		
UniRef90_D5TNU7	L A G G C K I F E G K I N H T R V A L L Q S S G I G K V S A A V G T T L L I Q L V Q		
UniRef90_A0M1U8	L A G M P F Y G E F M G T E V I I A R S G V G K V N A A A C A Q T L H K F N		
UniRef90_UPI0003755FEA	K R E F C T H T G I Y K G K R I T V M S T G M G T D N I D I A L T E L D A L V N		
UniRef90_S5U209	V Q M P A W H H Q T E N G D G V S L I N I G V G P A N A K T A T D H V A V L R		
UniRef90_J8T6U4	I A G C E F F H Q G T M N G K E V V L L V K S G I G K V N A A V G T T L L I Q L V Q		
UniRef90_R6DRQ9	Y N G M K F Y E G R I C G C D V V L V S I C G V G K V N A A I T Q L M D K F A		
UniRef90_UPI0003B56985	S G M F T S Y S G T Y K G A R I T V V S G G S G A S E A E L L L Y D Y M E Y S A		
UniRef90_S5U209	Y Q M P A Y H L I A K E G P G I T L V N I I G V G P S N A K T I C D H L A V L R		
UniRef90_R5Y2M5	K A S L K F Y G K L E G K D I V L V V Q C G I G K V N A A I L C A Q I L I S E F G		
UniRef90_E3H7P1	N L T F Y R G K L K G K D I V L V V E C G I G K V N A A I C T T L L I D H Y K		
UniRef90_C5LA72	P R G H D G Y G K Y D A P D I G V I S T G M G A P S V D I I A T E M I K L G		

	90	100	110	120
UniRef90_R6YN43	I D F Q T R I   G T C G G L   Q P D T P   I   G T Y I   C S E V S I   G F D G W S G N M   C C			
UniRef90_UP100041BC787	I D N I I R I   G T S G S L   Q E D I P   P   V D S F V   M S K F G L   G L D N M L   R S Y L   I			
UniRef90_UP1000478A0DA	I D N I V R I   G T S G S L   Q A D I P   P   V D G V   M S D S A I   G L D N M L   R S Y L   I			
UniRef90_F4B5L6	V K E I I R F G S A T G L   K D V K P   G E V V V   P   A A M R R E G T S Q S Y V			
UniRef90_R6LQA4	M Q V A V R M G T V M S M Q D D M   G H F M I   P   A A M R R E G T S Q S Y V			
UniRef90_UP100047815F1	V E S V I R A G S C   G A M D S S F K V   G E I M V   V T G A V   R D E G L T E K Y V   P			
UniRef90_UP1000255D852	V D F I V R I   G T S G S L   Q D Y L P   V D S W L   L S D K A I   G F D G L L   N F Y N G			
UniRef90_UP100047BFEB9	A K R V I R I   G G M S A L   V P Q I   Q T G S F L   V V Q N A I   G M T G V G D L   Y G E			
UniRef90_H1Z7M4	I D N I V R I   G T S G S L   Q A D I P   V N S F I V L   S Q Y G L   G L D N M M R S Y L   I			
UniRef90_U2JKI4	V R Y A I R I   G S C   G A L   Q K D I   P   L G E   L I L   A E G A V   R E E G T P K M Y V   R			
UniRef90_F0IC60	I D K F I R I   G T S G S L   Q A E I   P   V D S I V L   S A Y G L   G M D C L   H S Y K D			
UniRef90_H8KL84	P K A S L F L   G K C G G L   K K K N E L   G D L   V P   A A I   R G D G T S N D Y F   P			
UniRef90_UP1000465AC87	P K A V L F L   G K C G G L   K R K N R   G D L   I L   P   A A I   R G D G T S N D Y   P			
UniRef90_G4AIM0		M V I G V S A   C   T D S K V N R   I R F K		
UniRef90_G5GEJ2	P S A C   L F   G K C G G I   S E K T Q   G D Y I   L P   L A G I   R G E G T S N D Y F   P			
UniRef90_UP1000428E2A0	P K A V V F L   G K C G G L   K K K N Q   G D   L I   P   A A I   R G E G T S N D Y   P			
UniRef90_L7WDS7	V D F N T R V   G T S G A V   Q S D I   P   V D S F L   L S Q R G I   G F D S L   M H W Y D S			
UniRef90_D5BFC4	I D F I I R I   G T T G S I   Q A E I   P   D T F L L   S E K A I   G F D G L L   H F Y Q S			
UniRef90_F9ZYB6	P E A V L F I   G K C G G I   K E K K N S   V G D Y I   L P   A A I   K G E G T S D D Y   L P			
UniRef90_UP100016C3A73	P K G V L F L   G K C G G L   K R S T E I   G H F I   P   A A I   R G E G T S N D Y F   P			
UniRef90_R7PPX4	I T R F I R V   G T T G S I   Q E Y I   D I   G D V I   T T G A V   R L   D G   A S T H   Y A			
UniRef90_Q1Q2B4	I Q T F I R V   G T S G A I I   Q E Y I   D I   G D V I   T T G A V   R L   D G   A S T H   Y A			
UniRef90_I6YWH3	P K G V L F L   G K C G G L   K R S T E I   G H F I   P   A A I   R G E G T S N D Y F   P			
UniRef90_V4P9Z2	P H V W L M I   G H C G G L   R P S Q S   G D Y V L   A H A Y   R D D H   M D D V L   P			
UniRef90_B1HZH8		M I L A Q A A T S   D T R M N Q   I W G		
UniRef90_UP100042913BD	V N Q I I R   L G T S G S M   Q E S   I P   V G S   L   A S E A A   V G M D T L   M S Y Y P   E			
UniRef90_E1M2L4	V E Q I I S T G T   C G V L   A   D   E E N A F   L   V P   V R A L   R   D E G A S Y H Y V   A			
UniRef90_D7VPC2	I D F Q I R   V G T S G A V   Q A D   L P   M G T   I   L A S E V G I   G F D A L   L M Q Y Y I   G			
UniRef90_R6S7J0	V D C V I   N S G S A G G I   G N G L   H V G D V V L   S T G A A Y   H D G Y K K G Q   P			
UniRef90_UP10003FD42D7	P D A I V F S G   A G S L   N K D   L H   I N D   V V L   G T   L R Y   L   D S D M R A Q W K			
UniRef90_R6A758	I D F A T R I   G T C G G L   Q P N T   P   E G T F I   A S E I S I   G F D G L L   I N F Y A G			
UniRef90_J9FNB3	Q L E M V   W R I   G T C G G L   Q P Y   T P   E G T F V A S V K S I   G F D G L L   I N F Y A G			
UniRef90_W2C624	P K A V L F L   G K C G G L   K R A N S   L   G D Y V L   P   A A I   R G E G T S N D Y   L P			
UniRef90_UP10003783EBF	C Q V I L N T   G S A G G I   D D S   L S   I Q D   L V I   A D D   L T Y   Q D G Y V   Y Q G I   P			
UniRef90_F4FSY1	V D A V I N S   G S A G G I   G E G L   S   V G D I   V V S T E T A Y   H D G Y Q M G Q L   P			
UniRef90_UP1000237D3F7	P K A V L F L   G K C G G L   K R S T E I   G R P   I   N G E   L   A V V T A A I   R D E G T T R Q Y   L P			
UniRef90_UP10003730558	I D T I V R V   G T S G G L   Q E D   D P   V P   G A Y V   A S E Y S I   I G F D G V L   H F Y A D			
UniRef90_C9LDK4	I D F E T R I   G T C G G L   Q P N T   P   E C   D   L A M E K A F   V Q H   M G W K G A Q   C I			
UniRef90_D9R6U2	V K A M I R I   G S C   G A L   Q K G I   R L   G D L   L I L   V N G A V   V R D D D G A S S S Y V			
UniRef90_K0K033	V H T M I R V   G V S G S L   R P D   I   N G E   L   A V V T A A I   R D E G T T R Q Y   L P			
UniRef90_V7I2U9	M E V A I R M G T V M G   L   K D G M L   G L K L   L I P   N G S M R M E S   T S D T Y V			
UniRef90_S0JRW4	V D C V I   N T   G S A G G I   G A G L   A V V G D   L V I   S E K L A Y   H D Y A Y G Q V   P			
UniRef90_C0MC30	M K Q L L V F G T C   G V L   D A T I   S E N S   I I   P   T S A I   R D E G T S Y H Y Q P			
UniRef90_I7I2W8	I D T I I R L   G T T G G V   T A N C   C M P   G D   A I   S R Y A I   G F D S L I   D Y Y Q Y			
UniRef90_UP100029A3EF7	U N I F I V R   G T C G G L   D S S   I K E T S   I I   P   T S A I   R D E G T S Y H Y A P			
UniRef90_UP100047E2583	P D A V I N T   G S A G G F   A T D L   N I   G D V I   I S D E V R   H   H D G Y E L   G Q V   P			
UniRef90_H0IXV8	I D F E T R I   G T C G G L   Q P Y   V   P   T   G T Y   I   A S E K S I   G F D G L L   I N F Y A G			
UniRef90_D3IDP6	Q L E F V   R I   G T C G G L   Q T Y   T P   E G S F   I   C S   V K S I   G F D G L L   I N F Y A G			
UniRef90_R5CRT0	V D K V I N V   G I   A G G M   D T K V   V C   D   I   V I S N E V L   P   H D L   H F   K D Y   P			
UniRef90_C6Q1P7	A K V I I I R A G T C G S M   K P A T I   K Q G D   I V V P   Y A A R   D N D V   C D   L Y V			
UniRef90_U6GEW8	A E N I L V F G T C G V L   D S S   I K E T S   I I   P   T S A I   R D E G T S Y H Y A P			
UniRef90_F0VXV7	P E A W L M I   G H C G G L   R E S S   Q   I   G D Y V L   A H A Y   R D D H V L   D P V L   P			
UniRef90_UP10001DD076B	P D V W L M I   G H C G G L   R E S S   Q   I   G D Y V L   A H A Y   R D D H V L   D A V L   P			
UniRef90_R9VKG7	V N M V I N T   G S A G G I   G E G L   H   V G D   L V I   S E K L A Y   F D G Y E P G Q L   P			
UniRef90_R3WKM6	I D D I I R I   G T S G S L   Q P D   P   V   D S F   L   L S E Y A I   G F D S L L   H Y Y   S			
UniRef90_W2UPN7	V D A V I N T   G V A G G   L   H Q G I   R L   G D V V I   V V S T E A I   Q Y D V D A S F M G D			
UniRef90_R5JJ18	A K A L V F S G I   A G N M T   D T K V   V C   D   I   V I S N E V L   P   H D L   H F   K D Y   P			
UniRef90_G9RSH4	V D A V I N T   G V A G G   L   H Q G I   R L   G D V V I   V V S T E A I   Q Y D V D A S F M G D			
UniRef90_UP10001C37173	P D C V I N A G I   A G G M   D T K V   V C   D   I   V I S N E V L   P   H D L   H F   K D Y   P			
UniRef90_W3AD12	P D V V I N T   G S A G G F   D Q A L   E E V G A   V I S D E V R   H   H D G Y E M G Q   V   P			
UniRef90_UP1000287AC7C	P K G V L F L   G K C G G L   K Q S A E   I G R Y   I   P   A A I   R G E G T S N D Y   L P			
UniRef90_F2IG40	I D N L I I R I   G T C G I   Q A D   P   I   V   H S Y   L   S T   H A I   G I   D N V A H F Y P   L			
UniRef90_UP100041253DC	I D F I I I R I   G T A G G G L   T P   E   V   V D S F   L   I S T   M G I   G L   D N V M N Y Y D N			
UniRef90_I1E292	P A A V V N T   G S A G G F   D P   E   V   N V   G D   V V I   S T E V R   H   H D G Y A M G Q   V   P			
UniRef90_F5SCY3	P T E V V N I   G A A G G F   A G L   S D Q   N   R I   G D   L V L   V E E S I Y   H D G Q P   P   H T F   P			
UniRef90_R6ZDU0	A D A V I N T   G I   A G S L   K N E I   N   G D   I   V I S T D T V   Q   H D V D A S G F G Y			
UniRef90_T0UK37	A E N L L I F G T C G V L   D S N I   K E T S   I I   P   S A A I   R D E G T S Y H Y A P			
UniRef90_R7EW76	C R K F V M F G S C   G G G L   D S S   I A P   G K L   I V   P   T   H A Y   R D E G M S Y H Y A P			
UniRef90_UP10004701F83	Q L T M V R   I   G T S G G I   Q P E   A P   I   G T Y   V A A E K A   I G F D G V I   N F Y A			
UniRef90_G2Z1D2	I D N I I I R I   G T S G S L   H A N I   P   V   G S F   V   M S K L   G I   G L   D N M L   R S Y Q   I			
UniRef90_Q0C2N1	P Q V W L M V   G H C G G L   R H S   Q S   I   G D   Y V L   A H A Y   M R E D   H V L   D A V L   P			
UniRef90_I2J4F1	V D A I I I N T   G S A G A V   A D G I   A V   V G D   V V I   A D K   L A Y   H D G Y D Y G Q M A			
UniRef90_W0EZL5	I D F I I I R I   V R   G T S G S L   Q A D   P   I   V   D S F   V   A S T   H G   L   G L   D N L   L N F Y R P			
UniRef90_D4W1V2	I E A V I N T   G S A G G F   H P E   A N   I   G D   V V I   S D G A I   Y   H D N Y A Y G Q   V   P			
UniRef90_U7VCL1	V D K V L F T   G V A G G   L   N P   D   I   N   I   G D   V V I   V S T D L   I E   H D F N   C   T A F   G Y			
UniRef90_G4QJW8	P D Y V V N T   G S A G G F   D K E   L   N   I   G D   V V I   V S D V V T   H   H D G Y V   P   G Q   C   A			
UniRef90_B7GIU7	P D V V I N T   G S A G G F   A P   S   L   N   V   G D   V V I   V S T E V V   H   H D G Y A Y G Q   V   P			
UniRef90_G2HXT3	C D T L L F   S G V A G G   I   N P   K   L   K   G D   L   I   A D K   L   C   O   H D G H A H G Y V   P			
UniRef90_J0RTP2	I D N I I I R I   G T S G S L   Q E D   I   P   V   D S F   V   M S K F G L   G L   D N M L   R S Y L   I			
UniRef90_UP1000371DED3	P N V I I N T   G S A G G F   S P E   E   L   Q   V   G D   I   V   I S S E   V R   H   H D G Y E Y G Q   V   P			
UniRef90_Q6L2U4	A R R I I R F   G S C   N A A I   K E E   I   E P   G   S   V   V   P   Q   G   Y   S   Y   N   F   G   G   T   F   Y   L			
UniRef90_A0A011LZV1	P D L L I I N T   G S A G G F   D S N   L   N   V   G D   I   V   I S T E V R   H   H D G Y E I   Q   G   L   P			
UniRef90_D5TNU7	V D S I I I N T   G V A G G   I   H P   D   V   K   L   G   D   I   V   S T N   T   V   H   H D K N Q M K K   L   F			
UniRef90_A0M1U8	I D D I I I R I   G T T G S I   R K E   I   P   V   G   S   Y   I   I   S E L   A   L   G   F   D   G   L   M   H   Y   Y   K   D			
UniRef90_UP10003755FEA	P D T M M M I   G H C G G L   R R N   H   Q   N   I   G D   F   V   L   A T   S   Y   L   R   H   H V L   D   D V   L			
UniRef90_J8T6U4	V D A V V N T   G V A G G   I   H S   L   D   V   G   D   I   V   I S T E V R   H   H D G Y E F G Q   V   P			
UniRef90_R6DRQ9	P D E L I I H T   G I   A G S   L   D   P   A   V   K   H   L   D   V   V   I A N G   L   T   Y   H   D   V   R   K   S   Q   E   L   F			
UniRef90_UP10003B56985	A T T Y   I R   V   G G S G G   M G D   D   V   N   P   G   D   I   V   I S S G   V   V   R   E   D   G   M   T   S   S   Y   I   P			
UniRef90_S5U209	P H V W L M I   G H C G G L   R E S   Q   L   L   G   D   Y   V   L   A H A Y   L   R   R   D   D   H   I   L   D   A   V   L   P			
UniRef90_R5Y2M5	V D A V V N T   G V A G G   I   H S   L   D   V   G   D   I   V   I S T E V R   H   H D G Y E F G Q   V   P			
UniRef90_E3H7P1	V D K I I F T   G V A G G   I   V   N   P   D   I   E   V   G   D   I   V   I S T E L   I   Q   H   D   F   D   H   G   V   I   P   R			
UniRef90_C5LA72	A K V L V R   V   G T A G A M   Q   K   T   L   G   I   G   D   I   V   A T   G   A   I   R   D   E   G   T   T   R   H   Y   M   P			

UniRef90\_R6YN43  
 UniRef90\_UP100041BC787  
 UniRef90\_UP1000478A0DA  
 UniRef90\_F4B5L6  
 UniRef90\_R6LQA4  
 UniRef90\_UP100047815F1  
 UniRef90\_UP1000255D852  
 UniRef90\_UP100047BFEB9  
 UniRef90\_H1Z7M4  
 UniRef90\_U2JK14  
 UniRef90\_F0IC60  
 UniRef90\_H8KL84  
 UniRef90\_UP1000465AC87  
 UniRef90\_G4AIM0  
 UniRef90\_G5GEJ2  
 UniRef90\_UP1000428E2A0  
 UniRef90\_L7WDS7  
 UniRef90\_D5BFC4  
 UniRef90\_F9ZBY6  
 UniRef90\_UP100016C3A73  
 UniRef90\_R7PPX4  
 UniRef90\_Q1Q2B4  
 UniRef90\_I6YWH3  
 UniRef90\_V4P9Z2  
 UniRef90\_B1HZH8  
 UniRef90\_UP100042913BD  
 UniRef90\_E1M2L4  
 UniRef90\_D7VPC2  
 UniRef90\_R6S7J0  
 UniRef90\_UP10003FD42D7  
 UniRef90\_R6A758  
 UniRef90\_J9FNBN3  
 UniRef90\_W2C624  
 UniRef90\_UP10003783EBF  
 UniRef90\_F4FSY1  
 UniRef90\_UP1000237D3F7  
 UniRef90\_UP10003730558  
 UniRef90\_C9LDK4  
 UniRef90\_D9R6U2  
 UniRef90\_K0K033  
 UniRef90\_V7I2U9  
 UniRef90\_S0JRW4  
 UniRef90\_C0MC30  
 UniRef90\_I7I2W8  
 UniRef90\_UP100029A3EF7  
 UniRef90\_UP100047E2583  
 UniRef90\_H0IXV8  
 UniRef90\_D3IDP6  
 UniRef90\_R5CRT0  
 UniRef90\_C6Q1P7  
 UniRef90\_U6GEW8  
 UniRef90\_F0VXV7  
 UniRef90\_UP10001DD076B  
 UniRef90\_R9VKG7  
 UniRef90\_R3WKM6  
 UniRef90\_W2UPN7  
 UniRef90\_R5JJ18  
 UniRef90\_G9RSH4  
 UniRef90\_UP10001C37173  
 UniRef90\_W3AD12  
 UniRef90\_UP1000287AC7C  
 UniRef90\_F2I4G0  
 UniRef90\_UP100041253DC  
 UniRef90\_I1E292  
 UniRef90\_F5SCY3  
 UniRef90\_R6ZDU0  
 UniRef90\_T0UK37  
 UniRef90\_R7EW76  
 UniRef90\_UP10004701F83  
 UniRef90\_G2Z1D2  
 UniRef90\_Q0C2N1  
 UniRef90\_I2J4F1  
 UniRef90\_W0EZL5  
 UniRef90\_D4W1V2  
 UniRef90\_U7VCL1  
 UniRef90\_G4QJW8  
 UniRef90\_B7GIU7  
 UniRef90\_G2HXT3  
 UniRef90\_J0RTP2  
 UniRef90\_UP1000371DED3  
 UniRef90\_Q6L2U4  
 UniRef90\_A0A011LZV1  
 UniRef90\_D5TNU7  
 UniRef90\_A0M1U8  
 UniRef90\_UP10003755FEA  
 UniRef90\_S5U209  
 UniRef90\_R5Y2M5  
 UniRef90\_E3H7P1  
 UniRef90\_C5LA72

130            140            150            160

	170	180	190	200
UniRef90_R6YN43	E K I G S F E	Y D G L R I T N Y E M E S S A L	A G L S R L L G H R A T T V C L	
UniRef90_UPI00041BC787	P Q K M D N F K F E D N R I T N L E	M E T A A I Y G L S A L L G H N A L S F N A		
UniRef90_UPI000478A0DA	P Q G R V L R L Y N G I R M T N L E	M E T A A I Y G L G K L L G H E T L S M N A		
UniRef90_F4B5L6	H S K E F L D K L S S R N H I A V E	L E G A G L Y F L A N L L G F K A V S V H L		
UniRef90_R6LQA4	D M S K T F E E V K K L G V T G I D	M E S S C I L T L G R L L M G V K T C I L T V		
UniRef90_UPI00047815F1	D N N M A V E F W S R K Q V L G A D	M E T S A L Y V V G H L R G I R T L S I L Y		
UniRef90_UPI000255D852	P Q G R V I R L F E G E K I T N Y E	M E C S A I Y G L S Q L L G H R A T V C A		
UniRef90_UPI00047BFEB9	A A S K Y L D R F R E Q G A L G V D	M E S H V I L S V S K R L G L K A A C L L G		
UniRef90_H1Z7M4	P Q G R D N F K F N D Y R I T N F E	M E T S A I Y G L A K L L G H H A V S L N T		
UniRef90_U2JKI4	D T E E E S A Y W S S K G V L G A	D M E T A T L Y T I G R L R K I C C A S I L N		
UniRef90_F0IC60	E D E H L N E K L H S F C Y T N M E	M E T A A I Y G L S K L L G H Q A V S L N A		
UniRef90_H8KL84	E H D D D F K Y L R R L I R S M A I	I D M E T A T L F S A G F S N Q I P L G A L L L		
UniRef90_UPI000465AC87	E H D D D F K Y L R R L I R C M A I	I D M E T A T I F A A G F A N R I P S G A L L L		
UniRef90_G4AIM0	P D V A M F D V M E K Y G I L G V E	M E M E A A G I Y G V A A E Y G A R A L T I C T		
UniRef90_G5GEJ2	E H D E R F K Y L R E T R A M A V D	M E T A T L F T C G F Y N H I P T G A L L L		
UniRef90_UPI000428E2A0	E H R E F K K Y L K K L G R A M A I	I D M E T A T I F T T G F A N K I P T G A I I L L		
UniRef90_L7WDS7	P Q S R K I R L Y E G S K I T N L E	M E T A G I Y A M A S L L G H R A V S L N A		
UniRef90_D5BFC4	P Q G R S L R L Y H D Q K I L T N L E	M E T S G I Y G M S K L L G H H A V S M N V		
UniRef90_F9ZBY6	E Y D D R F E Y L K S T R A M A V D	M E T A T I F T V G F A N R I P T G A L L L		
UniRef90_UPI00016C3A73	E H D E R F K Y L R D R A S A I D	M E T A T I Y V V G F V N R I P K G A L L L		
UniRef90_R7PPX4	G Q E R Y D H E F Q Q L G C T N Y E	M E N A T L F T L T S V L G L Q A A S I C A		
UniRef90_Q1Q2B4	K F Q G I T K E L Q S L N V L N Y E	M E T A S T V L T L T A S M G L K G G C I T		
UniRef90_I6YWH3	E W D E T F K Y L K K L G V I A I D	M E T A T I F I V G H S N Q I A R G A L L L		
UniRef90_V4P9Z2	E L R Y T A R R F S Q S R A V A I D	M E S A T L A A Q G Y R F R V P Y G T L L C		
UniRef90_B1H2H8	D E H Q N E K L A Q Y Q G V L A V E	M E S A A I Y T L A A K F G R K A L S V L T		
UniRef90_UPI00042913BD	P Q G R E V R L R P R F D S M N F E	M E T A G Y Y A M G K L L G H E M L S L N A		
UniRef90_E1M2L4	E T A E K V A Y R K E E G C A V V E	M E M E C S A I L A A V A Q L R G V L W G E L L F		
UniRef90_D7VPC2	P Q G R N R F R V G D R R I T N L E	M E T A G I Y A M A A L G H H A L S I N A		
UniRef90_R6S7J0	S D E A I A Q I K A I Y D A L C C E	M E G A A I A Q A A Y Q L R T P F V V V R A		
UniRef90_UPI0003FD42D7	T P Q K V A A V I E E T Q A D A V E	M E G A A V A H V A A R N D V P A L V I R A		
UniRef90_R6A758	P Q G R Q V R L Y E G K H I T N F E	M E M E S S A V A G L S L L M G H K A L T C C M		
UniRef90_J9FNB3	P Q G R Q L R L Y G G L H I T N F E	M E M E S S A L A G L G R L M G H K A M T C C M		
UniRef90_W2C624	E D T S F K E Y L V R T H A T G I D	M E T A T L L T A G F A N Q I P T G A L L L M		
UniRef90_UPI0003783EBF	S S K H I A T I K K H P Q A L V T E	M E G A A V A Q V C Y Q F Q V P A L V V R C		
UniRef90_F4FSY1	D S N K I L A Q L K H N F D A L C S E	M E G A A V V Q G V A Y Q N K V P Y A V I V R A		
UniRef90_UPI000237D3F7	E Y D D R F K Y A K T R A M A I D	M E S A T I F T V G F A N S I P S G A L L H L		
UniRef90_UPI0003730558	P Q G R M D F E Y R G H R I T N F E	M E G A A L A G I G S I L L G H R C L T V C T		
UniRef90_C9LDK4	E E K E V I C A F W A G K G V M G S	D M E T A A L F I V V G G L R G V K T A S I L N		
UniRef90_D9R6U2	E E M E R R L D I W R R G G A I S S E	M E T A A V L V L V G S V L D V R T G V V L M		
UniRef90_K0K033	Q M R E T F D D I S R Y N I S G V D	M E T S C O M L V L G S L S M D I K V C S V T M		
UniRef90_V7I2U9	D P E K I Q V I L E H F P E L A C E	M E G A A I A Q T A M Q F D V P F L V I R A		
UniRef90_S0JRW4	E T R R D K M I Q R K Q E G A I C V	D M E C S A I A A L A A F R Q L E H F Q F F Y		
UniRef90_C0MC30	P Q G R Q L R L T Q N Y S V I N L E	M E T A A I Y A L G S M L G H K C L S L S V		
UniRef90_U17I2W8	P Q G R V L R L R Y E D E R I T N Y E	M E M E C S A I Y G L S K L M G H N A A T V C A		
UniRef90_UPI00029A3EF7	D P A R V D F V R S K F N D L A V E	M E M E A A A I A Q V A H R F G V P F V I I R S		
UniRef90_UPI00047E2583	D P E R V A T T R A Q F T M L A V E	M E G A A I A Q T C H L Y G C P F V V I R A		
UniRef90_H0IXV8	P Q G R E L R I Y N G Y K I T N F E	M E M E S S A L A G L A K L M N H K A M T C C M		
UniRef90_D3IDP6	P Q G R Q L R L I Y D G L K I T N F E	M E M E S S A L A G L S C L M G H K A T T C C M		
UniRef90_R5CRT0	D T Q K I K W L N E K F E A L A C E	M E G G S I A Q V C Y L N I P F V V I R S		
UniRef90_C6Q1P7	H G Q E H I D N L T N W S K D I V D C	E M E G G S I A Q V A H R F G V P F V I I R S		
UniRef90_U6GEW8	E T H Q K T A N R K T Q G A I A V D	M E G G S I A Q T C H L Y G C P F V V I R A		
UniRef90_F0VXV7	D S A T K N A I A A D C A P D C V	E M E G G A A V A H V A A K Y G V P C V V L R A		
UniRef90_UPI0001DD076B	S T E V K N A I K D K F D P Y A V D	M E S A A V G H C C Y L N K M S F V S V R C		
UniRef90_R9VKG7	D P E R V E K V R A F F P M K A S E	M E M E A A A V A Q V C H Q F N V P F V V I R A		
UniRef90_R3WKM6	E W D N F R K R L I D L S A I G I D	M E T A T L F I V G H R E N P F V V I R A		
UniRef90_W2UPN7	P T Q D I N E K L E Q H R V L N F E	M E S S A L F S L G K A M G H Q C V T I C L		
UniRef90_R5JJ18	P Q G R V L R R Y K N K E I T N L E	M E T A T M Y A M A K L G H R A L S M N A		
UniRef90_G9RSH4	D K D T K I E L R D H F K G Y C C E	M E T A T M Y A M A K L G H R A L S M N A		
UniRef90_UPI0001C37173	D S A T K N A I A A D C A P D C V	E M E G G A A V A H V A A K Y G V P C V V L R A		
UniRef90_W3AD12	S T E V K N A I K D K F D P Y A V D	M E S A A V G H C C Y L N K M S F V S V R C		
UniRef90_UPI000287AC7C	D P E R V E K V R A F F P M K A S E	M E M E A A A V A Q V C H Q F N V P F V V I R A		
UniRef90_F2IG40	E W D N F R K R L I D L S A I G I D	M E T A T L F I V G H R E N P F V V I R A		
UniRef90_UPI00041253DC	P T Q D I N E K L E Q H R V L N F E	M E S S A L F S L G K A M G H Q C V T I C L		
UniRef90_I1E292	P Q G R V L R R Y K N K E I T N L E	M E T A T M Y A M A K L G H R A L S M N A		
UniRef90_F5SCY3	D K D T K I E L R D H F K G Y C C E	M E T A T M Y A M A K L G H R A L S M N A		
UniRef90_R6ZDU0	D S A T K N A I A A D C A P D C V	E M E G G A A V A H V A A K Y G V P C V V L R A		
UniRef90_T0UK37	E T Q Q K M A M R K A Q Q G A I A V D	M E G G A A I A Q Q A A Y L N G I P Y V I R A		
UniRef90_R7EW76	E T D V L C R K R R A E G C I A V E	M E G G A A I A Q Q A A Y L N G I P Y V I R A		
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UniRef90_G2Z1D2	P T K M D Q F L Y E N Y Q I T N M E	M E T A T M Y A M A K L G H R A L S M N A		
UniRef90_Q0C2N1	E F T A S A R R F N K S R A V A I D	M E S A T I A A N G F R L R V P Y G T L L C		
UniRef90_I2J4F1	G N D K I E E I K S H F N V L A V E	M E G G A A I A Q Q A A H S L D L P F L V I R A		
UniRef90_W0EZL5	P Q G R V L R R Y K N K E I T N L E	M E T A T M Y A M A K L G H R A L S M N A		
UniRef90_D4W1V2	R P D Q M E L I K K N C N V V A I E	M E T A T M Y A M A K L G H R A L S M N A		
UniRef90_U7VCL1	S N D K I K W L R D T F V G E C T E	M E G G A S V A H Q V C H Q Y V L N K P F V I I R S		
UniRef90_G4QJW8	S D E L A A A T L Q K F P M M A V E	M E G G A A I A Q T A Y L M G I P F L V I R S		
UniRef90_B7GIU7	D P A R V D F V R T Q F P D L A V E	M E M E A A A I A Q V C H Q F N V P F V V I R A		
UniRef90_G2HXT3	S T Q R K D F L Q S T F N A D A L E	M E M E G A S V A V V C D A L N V P F F I L R A		
UniRef90_J0RTP2	P N K M D N F R F N E T K I T N L E	M E T A A I Y G L S A L L G H N A L S L N A		
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UniRef90_Q6L2U4	H S R E F I E K M A K D N H M A L E	M E M E A A A I A Q V A H Q F N V P F V I I R A		
UniRef90_A0A011LZV1	G A E K I A E I R R N F N V V A V E	M E M E A A A I A Q V C H A F D V P F V V V R A		
UniRef90_D5TNU7	D S K L K A K L D E Y E A P H C T E	M E G G A A I G H V Y A I N D L P F L V I R C		
UniRef90_A0M1U8	P Q G R I L R A Y N G H S V T N L E	M E T S G I Y G I S R L L G H N A A S M N L		
UniRef90_UPI0003755FEA	E Q R A P L A A I Q T A R C L A A D	M E T S G I Y G I S R L L G H N A A S M N L		
UniRef90_J8T6U4	D H N R V L E L K E I F N P A C A E	M E T S G I Y G I S R L L G H N A A S M N L		
UniRef90_R6DRQ9	D A A S K T R K L K E Q F P M L C V E	M E S C A V A Y T A F V N K I P F L V I V R C		
UniRef90_UPI0003B56985	W N V Q M P G I Y N R A G V L N G D R E	S A A V T L A N L F G F R G G S V C S		
UniRef90_S5U209	E F F S A T S R R F S L S R A V A V D	M E S A T I A A Q G Y R F R V P Y G T L L C		
UniRef90_R5Y2M5	S K E L K E E L D K D F N A Y C G E C	M E G G A A I A H A C T V N N I P F V I I R A		
UniRef90_E3H7P1	S I D K I K W L R D T F N G E C T E	M E G G A A V A H V C Y L N F T P F L L I R S		
UniRef90_C5LA72	E H K R Y M E V L E K L G C L A S E	M E V A M L F T L G Q V Y G V K T G C V L A		

210            220            230

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UniRef90_UP1000478A0DA	I I A N R A N G T F S E D P Y K A V D E L I V Y V L N K L V N	
UniRef90_F4B5L6	I Y R N A N G E S M S A E D I N K T E K V I A E A L L E S L	
UniRef90_R6LQA4	V T V L E N L K E T L K G Q D R V D A E D L L C R T A L E G I Y N	
UniRef90_UP100047815F1	M E P L A D G V N E L V S G E S Q M K I G E L I K L A L T V L T E	
UniRef90_UP1000255D852	I I A N R K A G T Y S K N Y K H G M K A L L I Q Y V L E R L	
UniRef90_UP100047BFEB9	V H G N R A T N D W L V D Y E S T Q R N L L C I A	
UniRef90_H1Z7M4	I I A N R A N G T F S E D P Y A A V D Q L I L Y T L D K L S E	
UniRef90_U2JKI4	N V V L Y G Q D T S E S I G D Y A Q G E K N E I H L A L E T	
UniRef90_F0IC60	I I A N R P T G T F T A D T K K A V E K L I E Y A L	
UniRef90_H8KL84	V S D Q P M T G V K T A E S D K K V T V E Q H L R I G I D S L Y Q	
UniRef90_UP1000465AC87	V S D Q P M V P E G V K T E A S D E F V E N H I Q I G I E A L L	
UniRef90_G4AIM0	V S D H I R T H E Q T S A E E R Q L T F N E M I L K I A L L E A L L	
UniRef90_G5GEJ2	V S D N P M E A E G I K T G E S D R K V T N F A E T H V R I G I E	
UniRef90_UP1000428E2A0	V S D Q P M T A E A D A S Q T A V K H V E S H L K I G I D S L	
UniRef90_L7WDS7	I I L A N R A T G E F S T T P Q K T M E K L I G H C L D K L	
UniRef90_D5BFC4	I I L A N R A T G E F S T T P Q K T M E K L I G H C L D K L	
UniRef90_F9ZBY6	V S D R P M I S D G I K T A E S D K H V T N F V K Q H L E I G V E	
UniRef90_UP100016C3A73	V S D N P M T P E G V K T S K S D A T V T E M V R K H D L G I	
UniRef90_R7PPX4	V V V A K R T E K E S I A P C E Y Q Q A E Q R F Q Q V V	
UniRef90_Q1Q2B4	G V V N K R G M E K I T E Q C L K T G E T H L I K A A I A S L	
UniRef90_I6YWH3	V S D L P M F P E G I K T E K S D K Y V T K H L D I G I E A M T E	
UniRef90_V4P9Z2	V S D K P L H G E L K I P G Q A N H F Y E R A I R E H I D I G I E	
UniRef90_B1HZH8	V S D H I L T G E V T T S E E R Q T T E N D M M V V A L E A A I Q	
UniRef90_UP100042913BD	I V A N R P L G Q F D K E A E K T V D R M I R A A I E V F V	
UniRef90_E1M2L4	T A D S L A D L D Q Y D S R D W S E A F E K A L E L C L E I A F Q	
UniRef90_D7VPC2	I L A S R V S A T F S P E P Q K I V E K A I Q Y V L E R I	
UniRef90_R6S7J0	M S D N G N G D A A Q S F D E F I	
UniRef90_UP10003FD42D7	L S D N A D T D E E F K E F D I S E Y A N V A A K I T I D I	
UniRef90_R6A758	V I A N R V A H R A N P N Y K N S I D T T L I K L V L D R I	
UniRef90_J9FNB3	V I A N R A A G K A N P N Y K N S I D T T L I Q T V L D R I	
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UniRef90_UP10003783EBF	V S D V A N Q E A S V D F D T F I I E Q A	
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UniRef90_UP1000237D3F7	V S D Q P M I S T G I T A E S D Q K V T R E F V E Q H L Q I G I	
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UniRef90_C9LDK4	V I A N R L A G R A N P N Y K N S I E L L I E R V L E R I	
UniRef90_D9R6U2	V V V E H E E S I E D S I N S Y T G G E S A M M R T A L E A F V R	
UniRef90_KOK033	W S E D A I R D G G P A P A V E P L F A T A V G A L R R	
UniRef90_V7I2U9	T T V L K N L K E V L Q G E A R T K S E E D L C K I V L D G I	
UniRef90_S0JRW4	M S D T A D H D A T Q S F D E F I E I A	
UniRef90_C0MC30	S A D N L D A D E W L A N E A D L E A K D N I A F I A L E L A L R	
UniRef90_I7I2W8	V I N N R I H G S F V T D	
UniRef90_UP100029A3EF7	I I A N R K A G A Y S K D Y K P V I K S L I Q Y V L D R L	
UniRef90_UP100047E2583	L S D I A G K E S E V S F D Q F I D Q A	
UniRef90_H0IXV8	L S D I P G S G D N H L S F E Q F L D I A A D	
UniRef90_D3IDP6	V I A N R R A K E V N S N Y K N S I D G L I E R V L N R I	
UniRef90_R5CRT0	V I A N R L T K K S D T G Y K T H I D D L I R L V L D R I	
UniRef90_C6Q1P7	I S D N A N N G A H M D Y E K	
UniRef90_U6GEW8	V D G S P L Q W D Q A N Y D P T G K V V E R M L K V A I H T C A E	
UniRef90_F0Vvx7	S A D N L D A E T W L A N D A D L E T K D R I A N I A L S F A V E	
UniRef90_UP10001DD076B	V S D K P L H G E I K L P K Q A N T F Y E E A I A A H L Q I G I	
UniRef90_R9VKG7	V S D K P L H G E I K L P G Q A N R F Y E G A I S E H L Q I G I R	
UniRef90_R3WKM6	I S D T A D E A A T Q S F D A F I I E E A	
UniRef90_W2UPN7	I I A N R P N G T F S K D P K T S V D N L I K Y T L K K L T N	
UniRef90_R5JJ18	I S D N A D D E A G V S Y E D F V V E A A E I S R E M V V N	
UniRef90_G9RSH4	M S D N A D D E A E Y D T L V V K E F D I T E Y C T T A A R I C	
UniRef90_UP10001C37173	I S D N A D D E G A M S F D E F E K I A A L R V A E I V L K	
UniRef90_W3AD12	L S D I A G K E S N L S F D E F L P V A	
UniRef90_UP1000287AC7C	V S D M P L M P E G V K T Q E M D K K V T K Y V D M H L E M G I Q	
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UniRef90_UP100041253DC	I I A N R A R G T F S K N A S K T I D A L I Q Y T L G K I T E	
UniRef90_I1E292	L S D I A G K E S P Q S F E A Y L E V A	
UniRef90_F5SCY3	V S D N A D G G A E V S F Q T F L T E V S K R N A T L L E A Y L R	
UniRef90_R6ZDU0	I S D K A D D S A G M D Y A E F E Q A I R H S V N L L I L E M A	
UniRef90_T0UK37	S A D N L D T E S W T L A N D A D L E T K D C I A I A L N F A T E	
UniRef90_R7EW76	R A D N L D A E S W E S S Y L A K M P H D E H F Y V A L E E I A R R	
UniRef90_UP10004701F83	I I A G R Q N L N M N T D Y K G S I E G L I D L V L D R I	
UniRef90_G2Z1D2	I I A N R A S G T F S E D P L A A V D Q L I E Y I L N K I	
UniRef90_Q0C2N1	V S D K P L H G E G A A N R F Y E R A I G E H I R I G I E T L	
UniRef90_I2J4F1	M S D N A N H E A N V T F D E	
UniRef90_W0EZL5	I V A N R I V K E F S K D S K T A I E N L I L K F L D T	
UniRef90_D4W1V2	L S D I A G K E S H I S F N E F I L E V A	
UniRef90_U7VCL1	I S D K A N H D A N M N F D E F V K L A A Q N S K I I I E G M L E	
UniRef90_G4QJW8	L S D D I A G K E S N V S F E Q F L Q K A	
UniRef90_B7GIU7	I S D T A D M D A G F D F D E A K N S A D Y L I K I V K E L I	
UniRef90_G2HXT3	I I A N R A S G T F S A D P Y K A V D E L I A Y T L N K L	
UniRef90_J0RTP2	L S D I A G K E S D I S F E Q	
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UniRef90_A0A011LZV1	I S D S A D D E A Q V S Y D N F A K T A A N Y C E L I I E I L L	
UniRef90_D5TNU7	V L A N R A T G E F L E N A S E M M D E L I I Y T L N K I	
UniRef90_A0M1U8	V S D K P M H A A P K L S G E A V K F Y Q S S K R Q H L D I A L	
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UniRef90_UP10003B56985	V S D K P L H G E I K L P G Q A N H F Y E G A V S E H L Q I G I	
UniRef90_S5U209	M S D K A D G S A D V T Y E E F V D K A A E N S K D I V L R	
UniRef90_R5Y2M5	I S D K A N H D A D V D F A E F V H L A A K N S K E I L E G I L E	
UniRef90_E3H7P1	I S D K A N H D A D V D F A E F V H L A A K N S K E I L E G I L E	
UniRef90_C5LA72	I S D K A N H D A D V D F A E F V H L A A K N S K E I L E G I L E	

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1                    10                    20                    30                    40

50            60            70            80

UniRef90_I2K6H2	Y G N N K Y Y E G S Y H G Q E	V V V A Y S K I	G K V F A T L T A T T L I E K F G
UniRef90_R9L096	K A G M K F H E G I L N G K D V	V V I V Q C G I	G K V N A G M C V Q I L A D L F N
UniRef90_F8DHJ3	N L N G K F Y I Y E V D G L K L	A V A M A T I	G A P M V V G F L E E L K A R G
UniRef90_H1PZ36	I G N L E F F D G K L L G K D V	L V E G G I	G K V N A A I C A T L M I N H F K
UniRef90_UPI00037264A6	K R E F K T H T G Y Y K K K R I	T V I S T G I	G P D N I D I V L N E L D A L V N
UniRef90_S1R8F8	R A G V L F V S G T L G K H D V	I V V V R S G I	G K V A A S V T T S L L I Q Q Y G
UniRef90_UPI0004641BC4	V A G L E M Y T G T L N G T D V	A L L K S G I	G K V S A A M G A A L L L E H C K
UniRef90_J0S8H4	N G Q F L W Y I Y K C D E N K V	A V M T A L I	G A P S M I G Q L E E L A A R G
UniRef90_C5ZVN7	A F G N T F Y K V S L G D K T L	I I A C S R I	G K V H S S L S A A T M I L Y F G
UniRef90_UPI00040DCAC3	I A G C C E F F F G K L L Q G V E	V V V S K S G I	G K V N A A I C T T L M N Q L Y H
UniRef90_W1Q241	V A G Y T F Y Q G Q L S S Q D V	V L V Q S G I	G K V N A A M T V T L L K Q L F D
UniRef90_J4KDW9	I A G C K I Y E G K I N N K D V	A L L Q S G I	G K V A A A I G T T L L L E M T K
UniRef90_B1YJD6	I A N Y H F Y E G L L N S V P V	V I L K S G I	G K V N A A I G T T L L L D H F K
UniRef90_F8CTA1	I A N C E F S T G R L N G V D V	I L L K S G I	G K V N A A M A T A V V L L E R F R
UniRef90_B0NA55	N G V L P V Y G I E Y A G I R M	A F Y L S R V G A P A C V A G L E	E M A M G
UniRef90_R7FB19	I F N L K F F E G K I N K N Q I	I L V K C G V G K V N A A R T T Q I	M D K F D
UniRef90_A0KIZ1	G C E F Y Q G T L A G K E V I L	T R S G I G K V V A A S V A T S L L	E K F A Q
UniRef90_R6NTX8	V S V T R G T I E T N K G T R V	N V A V G G M G T V N I A A T T Q H	L I D A D Q
UniRef90_UPI000474C578	V A W H R F Q M P A Y H G H G V	T L V N I I G V G P A N A K N I T D	H L I A V L R
UniRef90_A7NLM5	N R G L H S S V G T P N G A P I	L S A T S G M G A P S L S V V N E L	V Q V G G
UniRef90_S5R5Y1	V L G N T Y Y E G K L G N Q V	L V Q S G I G K V M S A M S V A I L	S D H F G
UniRef90_B8D909	I N T Y K I Y G K F K S H D V	F L I K S G I G K V V S A S I A T M I	L I D L Y K
UniRef90_R7R4L9	K A S M K F Y E G M L R G K D V	V I V Q C G L G K V N A G I C V Q I	L I A D L F Q
UniRef90_Q4DKS7	N R E I F I A T G T Y K G T P V	S V L S T G M G T D N V E I V I N E I	H K V F D
UniRef90_UPI0004151AAE	R E F V T H T G Y F Q G K R L T	V M S T G I G T D N V D I V M N E L	D A L V N
UniRef90_K2PTA5	K R E F I T H T G W Y N S Q R L	S V I S T G I G T D N I D I V L N E L	D A L V N
UniRef90_T4VWWY0	K A S L K F Y V G K L E N K D I	V L V R C G I G K V N A A L C A Q I I	L I S E F K
UniRef90_U1KK58	K G G F T F Y T G E L A G H T V	T L V Q S G I G K V V A A V V G T A V	L L I D N F T
UniRef90_A5Z754	I A A M D F Y K G T L A G K E V	V V A V K C G I G K V N A A I C A Q I	L V S V F G
UniRef90_UPI00046909E9	Y A N N N Y Y K V N Y K N S E I	V I A Y S K I G K V N S T I T A S T M I	Q K F G
UniRef90_UPI00041C1EE5	K R E F I T H T G Y I I G K K R I	T V I S T G I G T D N I D I V L N E L	D A L A N
UniRef90_UPI000479F0F1	M T F Y Q G K L E D K D V V V V R	C G I G K V N A A I C T Q L L I D Q F N	E R Y Q
UniRef90_N0C4R6	R L G H V Y Y T G R I G H H E V	V L V E S G I G K V M S A M S V A V L	A N D F E
UniRef90_R7BLD6	A A G M V F K K G F L K G K E A	V V V V R S G I G K V N A A V V C T Q I	L A D R Y G
UniRef90_F2PCB7	K A G G C T I Y T G T L N G A D	V V V L L Q S G I G K V V A A A V G T A V	L L I E T F Q
UniRef90_W4QKP9	I A R O C E Y H Q G Q F I G N Q E	V I I L L K S G I G K V N A A I G T T L L I Q	L F K P
UniRef90_C2SLJ2	I I A G I P Y H Q G N F M D T E I	I I T R C G V G K V N A A A C T Q I L I	N K F D
UniRef90_T0CWJ9	V A G M E F Y E G T M D G K N I	V L V R S G V G K V N M A A C T Q I L I	D E F K
UniRef90_E6UHP4	V S G I E F V Y G E L F G M M N	V V A A V C G I G K V F A A I I C A E A M I	V T F F K
UniRef90_I7LJ30	K A N M E F Y K G I L L D K D	V V V V R S G I G K V N A A I C T Q I L I	D D F N
UniRef90_UPI000468D26A	H A G S T F H I G Q L H G I K V	V V L L Q S G I G K V N A A A V G A C Q M	E R Y Q
UniRef90_J3D924	P Q M P A Y H L Q R A D G T G I	T L V N I I G V G P S N A K T I T D	H I A V L R
UniRef90_D9SKL2	K A S M K F V K G H L Y G K E V	V V V V R C G I G K V N S A I C A Q I I	L V D D F N
UniRef90_G2KUE5	I G T L P F Y K G T I N G K N V	V L V V K S G I G K V E A G I T A A L L L	T N F K
UniRef90_B8F704	I A G C K I Y E G K I N N T D I	A L L Q S G I G K T A A A M G T A L L L	Q L T K
UniRef90_UPI000467BB32	P Q M P A F H L V I E P G Y R G I	T L I N I I G G P S N A R N I T D	H V A V L R
UniRef90_C5LL50	P R G H D G Y I G K Y D A P D I	G V I S T G M G A P S V D I V A T E M I	K L L G
UniRef90_D3R3N9	V A R G T L T D A G E E L D V	A V A T V G G M G L V N A A A T T Q F L I	D L V H
UniRef90_R5TQX1	N G A L P V Y K T Y Y K N Q D I	A F Y L S R V G A P A C V A G F E E V V	A M G
UniRef90_U3H766	Y Q M P A Y H L I A A D G H G V	T L V N I I G V G P S N A K N I T D	H L A V L R
UniRef90_S5IX33	V A N H T F Y I G E L E G K S V	V V V T Q S G V G K V N A A M T T T L L I	E S F G
UniRef90_I2FJB3	V G G N T Y Y E I T K G V H K F	A Y S K I G K V H A A L T V S T M L H F Q	L H F Q
UniRef90_A0A031K6E4	H Q M P A Y H L I R K D G S G T	T L V N I I G V G P S N A K T I T D	H L A V L R
UniRef90_S5ZY84	I A G G N F Y E G I I N G Q S K V	L A C S G I G K V N A A M C C Q I L I	S E F K
UniRef90_A3UF19	F Q M P A Y H L K A K D G R G T	T L V N I I G V G P S N A K N I T D	H L A V L R
UniRef90_W4BGR1	S R E Y R T F V G L Y E G V Q I	A V V S H G V G P S G A A V V C F E E L I	R A G
UniRef90_R5Q965	I L D C V F Y E G K I D N K Q V	V I I L Q G G I G K V N S A I C V T L L L T	N Y D
UniRef90_E6UAZ2	S A G L T I Y S F N Y K G D T I	G F Y L L S P I G S A A S V G L M E E I	A F K K
UniRef90_B2VE28	G C E I Y T G T L N G V D V	A V V L L K S G I G K V S A A L G T T L L I E	L C
UniRef90_K2EEZ1	H E G S M F K V A H S E K D D	V S V I S T G I G P D N I D I V F N E L	D A L A N
UniRef90_A6VPH1	I G S A V F V E G E V N G K S V	V S I L D F K I G S P A A A L V V D	C S F L P
UniRef90_A3QBQ0	Y A G I E F V A Q G Q L E G K E V	V I V T R S G I G K V T A S V A T T L L I E	K Y A
UniRef90_UPI00041DD9B8	H R E F I T H T G I I G K K R I	S V V S T G I G P D N I D I V F N E L	D A L A N
UniRef90_UPI0004718BE2	I L I G F N F I K G T I H G V E V	V V V L V E S G I G K V M A A M V A T I I	E R F E
UniRef90_Q2BGV0	I A G Y H L H T G K L H G K D I	V V V L L K S G I G K V N A A I I G T T I L L Q	T F K G
UniRef90_T2BHY6	T R R Y P I Y E C L Y N Q E K I	C L C P A P V G S A A A V Q V L E Y L I A G G	I
UniRef90_UPI0003686110	P M T S A T N S Q G V S I I I N F G I	G S A N A A A T I M D L L S C V T	G
UniRef90_C5WHF6	T K V Y P V Y L L T Y K E Q D I	C L A Q A P V G S A P A A Q F M D W L I G Y G	G
UniRef90_UPI0002D271FB	P Q M P A Y H L L R A D G S G I	T L I N I I G G P S N A K T I T D	H V A V L R
UniRef90_A6DBX5	N K F Y L A K F D D N K D L V	L V L A Y S K I G K V N S A T T A T I M E K F K	G
UniRef90_UPI0004787D94	K A S L K F Y K G I L E G K E I	V L V R C G I G K V N S A L C T Q I L I S E F D	G
UniRef90_G5HEY8	N G A I L P V Y A V K Y A D M T F	G F G L F L S R V G A P A C V A G L E E I I A	L G
UniRef90_R8AMV4	R A G C E I Y S G T L H G T D V	A L L L K S G I G K V V A V A L G T T L L I E	H F A
UniRef90_F7VDI2	Q M P A Y H L C R P D G D G I T	V L V N I I G V G P S N A K T I T D	H V A V L R
UniRef90_A7ZC47	Y A N N K F Y E A N Y K G K D L V	I A Y S K I G K V N A A I I T A T L L M I E K F K	G
UniRef90_D4M501	M K F Y K G Q L Y G K E A V V V	V V V Q S G I G K V N A G I C T Q I L I D F Y Q	G
UniRef90_R6TB9	M T F Y K G T L C G K D T V V V R S G I	G K V N A A I C A Q I I L V D K F G	G
UniRef90_UPI00036008B5	I S S F S F Y E G L I N N V S V	V V V L L S G I G K V S A A V A T T L L I E	H F Q
UniRef90_UPI0002EF1B58	V S A N T Y Y T G E I S G K P V	V V T R S G I G K V V N A A I I T T Y V L I N	H F N G
UniRef90_A6QB43	Y G N N L Y H E A K Y K E L D I	V L G Y S K I G K V N S A L T A A T L M I E	H F G
UniRef90_X0R5U7	K A D I K F Y E G T L L G K P I V	L C K S G I G K V V N A A L T T Q I L I D Y F Q	K
UniRef90_K6CBZ6	F S I G K I N N I N V V L L K S G I	G K V V N A A V G T T L L L D H F K	G
UniRef90_D2U407	R G G C E I Y C G K F N D L D I	A L L K S G I G K V S A A L G T T L L I E	H F A
UniRef90_UPI0002491EE1	I A G G V E F T Q G G Y V D H Q V	I V I L A Q S G I G K V Q A G M T A T I L N E K Y Q	G
UniRef90_UPI00021976E4	V A G V E F T L G S Y K N H E V Y	L A Q S G I G K V Q A G M T A T L M N D R Y R Q	G
UniRef90_A0LI68	I Y L S D A Y A G E Y G G V P I A L V G P M L G A P Q A V M V L E K M I A L G	G	
UniRef90_U1S7Z9	L A S G T I Y E G T L H G K Q V A L L Q S G I G K V V A A A M G T T A L L Q L T Q	G	
UniRef90_Q30QR2	Y A G N K Y Y E A T Y Q G V E L V I A Y S K I G K V F S A L S A A T M I E H F G	G	
UniRef90_UPI0003F6E774	L A G C C E F Y S G T I E G H R V	V L L T R S G I G K V V A A A I A T T V L I E R Y Q	G
UniRef90_U2PY9	K A K M F T F N K G S L W G K D V	V V A V V C G I G K V V N A A I C T Q I L A S E Y K	G
UniRef90_E6U8J4	P H F Y K V W E G T Y G N N T V L F A C S G I G K V V N A A A C A Q H I I D A F G	G	
UniRef90_A8H2V2	I A K N T Y Y T G V I Q G K P V V V A R S G V G K V V N A A I T T Y V L I N H F D	G	

90            100            110            120

UniRef90_I2K6H2	C D M L L   F S G V A G A I   S N E L   S   G D   L   I   I   A D G   C Q H   D G H   P F G Y V   P	
UniRef90_R9L096	V D A V I   N T G V A G S L   R A E I   N I   G D   I   V V   S T D A C E   H   D M D   V T A L   G Y	
UniRef90_F8DHJ3	F N N F I   V L L G S C G V L   D Q S I   Q A D K   I   I   I   P S S A L   R   D E G T S Y   H Y A   P	
UniRef90_H1PZ36	V D K V L   F T G V A G G V   N P D I   N   G D   I   V   G N D   L   I   E   H   D F D   S T A F   G Y	
UniRef90_UPI00037264A6	I   D F I   V R V G T S G A L   Q D D I   P   V D S   I   V L   S T H G L   D   L   N G M   L   H   A Y K   I	
UniRef90_S1R8F8	V N M V I   N T G S A G G I   G E G L   Q V G D   V V   V F   S E K   L A Y   F   D Y E Y   G Q   L   P A	
UniRef90_UPI0004641BC4	P D L I I   N T G S A G G I   G A P G L   N V G D   I   V   V S   D E T R Y   H   D G Y E   I   G Q M A	
UniRef90_I0S8H4	F K N F I   I L G S C G V L   D H S I   E A D R   I   I   I   P A A A   L   R   D E G T S Y   H Y A   P	
UniRef90_C5ZVN7	C N K I I   F N G V A G G I   N P N Y K I   G D   L   V   I   G E K   L   C Q H   D G H   P F G Y F S	
UniRef90_UPI00040DCAC3	P D A I I   I N T G S A G G F   H K E L   A V G D   V V   V I   S T E   V R Y   N   D G Y E   F   G Q V   P	
UniRef90_W1Q241	V D L V I   N T G S A G A L   G H G L   K V G D   V V   V V   A D Q   L   R   H   H   D G Y Q   I   G Q M A	
UniRef90_J4KDW9	P D V V I   N T G S A G G L   A T A N   L N V G D   L   V   V I   S T E   V R Y   H   D G Y E   I   G Q L   P	
UniRef90_B1YJD6	P S S V I   N T G S A G G F R A G L   K V G D   V V   V V   S T E   V R Y   H   D G Y E   Y   G Q V   P	
UniRef90_F8CTA1	P D Y V I   N T G S A G G F L   S T L   N V G D   V V   V I   S T E   V V   H   H   D G Y E   Y   G Q V   P	
UniRef90_B0NA55	A K K M   I F G C C G V L   D E V E   V Q D K   I   I   I   P S S T   I   R   D E G T S Y   H Y   L   P	
UniRef90_R7FB19	I   D Y I   N I G S A G G S I   L N D D   V E Y   G D   I   V   I   G K Y   V L   Q   H   D F D   I   T A F G H	
UniRef90_A0KIZ1	P D C V I   N T G S A G G F A Q D L   H   I   G D   V V   V I   A S E M R F   H   D G Y E   M G Q M A	
UniRef90_R6NTX8	P D A V I   F S G I   A G N L   N T H   H   I   N D   V V   V L   G G T   L   R Y   L   D T   D M R   L   V G Q	
UniRef90_UPI000474C578	P H C W L   M I   G H C G G L   R Q S Q M   I   G D   Y   V   L   A   H   A Y   L   R   Q   D R   I   L   D E A V   P	
UniRef90_A7NLM5	V R T I I   R V G T S G S I   Q   H   I   P P   G S   I   V   V   S S A   L   G   R   Q   G   A   A   D   D   L   A   P	
UniRef90_S5R5Y1	V D V V I   N T G S A G A S I   V   A   P   G   L   K   I   G D   V V   V V   A D R   L   V   Y   H   D   G   Y   D   Y   G   Q   M A	
UniRef90_B8D909	P D T I I   N S G S A G S L   Q S F   L   K   I   G D   I   I   I   P   K   K   T   C   Y   Y   D   G   Y   T   R   G   Q   P	
UniRef90_R7R4L9	V D A V I   N T G V A G S L   R A E I   N   I   G D   I   V   V   V   S T D A C E   H   D M D   V T A   L   G Y	
UniRef90_Q4DKS7	P S K M I   R V G T C   G P   P   D   M   P   L   A   A   L   A   I   T   R   H   V   I   G   M   D   N   T   C   L   Y   Y   K   V	
UniRef90_UPI0004151AAE	I   D K I   I   R   I   G T S G A L   Q   A   G   V   P   L   D   S   H   L   V   A   E   Y   A   I   G   L   D   T   L   M   H   F   Y   P   L	
UniRef90_K2PTA5	I   D F I   V R I   G T T   G A I   Q   K   E   L   K   V   D   S   I   L   A S K   Y   A   V   G   L   D   G   L   L   H   Y   Y   Q   S	
UniRef90_T4VWY0	V D A V V   N T G V A G A L   N   E   E   L   D   V   Y   D   I   V   I   S T   D A I   Q   H   D   F   D   T   T   V   F   G   D	
UniRef90_U1KK58	P D C V I   N T G S A G G F   E   P   S   L   N   V   G   D   V   V   I   S N E   V   R   H   H   D   G   Y   E   I   G   Q   V   P	
UniRef90_A5Z754	V S A L V   N T G V A G A S   L   N   N   D   I   N   I   C   D   I   V   V   S T   S   A   L   E   H   D   M   D   V   T   P   L   G   Y	
UniRef90_UPI00046909E9	C E K L   L   F S G V A G A V   V   S   P   D   L   K   V   G   D   L   V   V   A   T   K   L   G   Q   H   D   G   H   P   Y   G   F   V   P	
UniRef90_UPI00041C1EE5	I   D F E   Q   R   L   G T S G S I   N   K   D   V   E   M   G   S   I   I   L   A S S   H   G   L   G   L   D   S   L   M   H   Y   Y   E   R	
UniRef90_UPI000479F0F1	V S A V I   N T G V A G G L   M   P   E   L   E   V   G   D   V   V   V   S S E   L   M   E   H   D   M   D   V   T   A   L   G   F	
UniRef90_N0C4R6	UniRef90_R7BLD6	V T D C V I   N T G V A G S L   K   N   E   I   I   N   I   V   G   D   V   V   V   A D R   L   V   Y   H   D   G   Y   D   Y   G   Q   M A
UniRef90_F2PCB7	P D V V I   N T G S A G G F   E   S   S   S   L   N   V   G   D   V   V   I   S T   E   V   R   Y   H   D   G   Y   E   I   G   Q   M A	
UniRef90_W4QKP9	P D V V I   N T G S A G G F   D   E   S   S   L   K   V   G   D   I   V   I   S T   E   V   R   Y   H   D   G   Y   E   F   G   Q   V   P	
UniRef90_C2SLJ2	V V N S I I   N T G V A G G L   H   P   D   V   K   I   G   D   L   V   I   S T   N   V   T   H   H   D   V   N   K   N   Q   M   L   F	
UniRef90_T0CWJ9	V S A L V   N S G V A G T   M   D   T   K   L   N   Q   G   D   I   V   I   S T   D   A   V   Q   H   D   F   D   T   T   V   F   G   D	
UniRef90_E6UHP4	P D V V I   I   N A G V G G G S   L   T   D   K   L   D   I   G   D   A   G   I   A   S   A   V   V   Q   H   D   M   D   T   T   P   F   G   D	
UniRef90_I7LJ30	V D I V I   N T G V A G R   V   N   E   K   L   N   P   G   D   V   V   I   S S   E   V   R   H   D   G   Y   E   K   G   Q   L   P	
UniRef90_UPI000468D26A	P D A I I   I   N T G S A G G F   A   A   D   L   E   I   G   D   V   V   I   S S   E   V   R   H   D   V   D   G   T   C   I   D   Y	
UniRef90_J3D924	P H G W   M   L   G H C A G   L   S   S   S   Q   R   M   G   D   Y   V   L   A   H   A Y   V   R   D   D   H   V   L   D   D   D   L   P	
UniRef90_D9SKL2	V D Y V I   N V G   I   A   G   G   I   G   A   N   V   K   P   G   D   V   V   I   G   D   S   L   V   Q   H   D   V   E   A   I   A   F   G   Y	
UniRef90_G2KUE5	I   D V M   I   H   S   G   S A A G   I   G   D   G   L   K   V   G   D   I   V   I   A   T   E   T   A   Y   H   D   G   E   V   W   G   Q   L   P	
UniRef90_B8F704	P E M V I   I   N T G S A G G L   D   A   N   L   N   V   G   D   I   V   I   S T   E   V   R   H   H   D   G   Y   E   K   G   Q   L   P	
UniRef90_UPI000467BB32	P H A W L   M   L   G H C A G   L   R   N   T   Q   R   L   G   D   Y   V   L   A   H   G   Y   V   R   E   D   H   V   L   D   H   E   L   P	
UniRef90_C5LL50	A K V L V   R V G T A G A M   Q   K   T   L   G   I   G   D   I   V   I   A   T   G   A   V   R   D   E   G   T   T   R   H   Y   M   P	
UniRef90_D3R3N9	P E A V I   F S G   I   A   G   N   L   N   K   S   L   H   I   N   D   I   V   L   G   K   T   L   R   Y   L   D   T   D   M   R   G   Q   W   K	
UniRef90_R5TQX1	A K K F   V   M   F   G   S   C   G   V   L   D   D   E   K   V   K   D   N   M   I   P   P   S   A   V   R   D   E   G   T   S   Y   H   Y   I   A	
UniRef90_U3H766	P H C W L   M   I   G H C G G L   R   Q   S   Q   T   I   G   D   Y   V   L   A   H   A Y   M   R   R   D   G   I   L   D   R   V   L   P	
UniRef90_S5IX33	V N Q L I   F   T   G   I   A   G   A   S   D   P   K   L   D   P   L   D   V   V   I   S T   R   T   V   H   H   D   V   D   L   T   A   F   N   K	
UniRef90_I2FJB3	C E K I   F S G V A G G L   N   A   D   L   K   V   G   D   L   L   L   A   E   K   L   C   Q   H   D   G   H   P   L   G   F   P	
UniRef90_A0A031K6E4	P E A W L   M   I   G   H C   G   G   L   R   E   S   Q   R   I   G   D   Y   V   L   A   H   A Y   L   R   D   D   H   V   L   D   P   V   L	
UniRef90_S5ZY84	V N L I   I   N T G T A G G   L   K   E   G   L   N   R   V   F   D   I   V   V   V   S S   D   A   V   Q   Y   D   G   Y   S   L   G   Q   V   P	
UniRef90_A3UF19	P E C W M   M   I   G   H C   G   G   L   R   H   S   Q   R   L   G   D   Y   V   L   A   H   A Y   L   R   Y   D   S   V   L   D   R   D   L   P	
UniRef90_W4BGR1	V T T L   I   R V G T A G S   Y   T   A   D   Y   P   A   G   S   V   I   V   I   S T   A   V   R   T   D   G   L   T   T   R   Q   L   V   P	
UniRef90_R5Q965	I   E   Y   V   I   N   I   G   S   A   G   G   L   K   K   D   Y   Q   N   V   G   D   V   V   I   S S   H   V   S   Y   H   D   G   R   P   M   G   E   L   P	
UniRef90_E6UAZ2	D K K L   L   F   F   G   S   C   G   S   L   D   K   D   I   S   S   G   K   L   L   V   P   T   E   A   Y   R   D   E   G   T   S   Y   H   Y   A   P	
UniRef90_B2VE28	P D V V I   I   N T G S A G G L   A   A   T   L   K   V   G   D   I   V   V   S   D   E   V   R   Y   H   D   G   Y   E   A   G   Q   M   A	
UniRef90_K2EEZ1	I   R A S   L   L   L   G   M   C   G   G   G   L   R   R   R   Y   E   V   V   G   D   Y   L   V   P   V   A   I   R   G   E   G   T   S   D   F   Y   F   P	
UniRef90_A6VPH1	P D V V I   I   N T G S A G G G   V   Q   A   Q   L   K   V   G   D   I   V   I   S T   E   T   A   Y   H   D   G   Y   A   K   G   Q   L   P	
UniRef90_A3QBOQ0	P D Y V   I   N T G S A G G F   V   F   D   S   L   A   I   G   D   I   V   I   S S   E   V   R   H   H   D   G   Y   E   I   G   Q   M   A	
UniRef90_UPI00041DD9B8	I   D F S   T   R   T   G   T   S   G   A   L   Q   A   D   I   P   V   D   S   F   V   A   S   T   H   G   L   G   V   D   N   L   L   H   F   Y   K   Q	
UniRef90_UPI0004718BE2	V S A L   I   I   N T G S A G G V   V   N   A   K   L   S   V   G   D   L   V   L   S   N   R   L   V   Y   S   D   N   Y   D   Y   G   Q   L   P	
UniRef90_Q2BGV0	P D C V I   I   I   N T G S A G G Y   D   P   S   L   E   V   G   D   I   V   I   S S   E   V   R   H   H   D   G   Y   E   Y   Y   G   Q   V   P	
UniRef90_T2BHY6	V T K I   I   I   S   V   G   S   C   G   V   L   E   D   I   P   E   N   R   F   L   I   P   V   S   A   L   R   D   E   G   T   S   Y   H   Y   L   P	
UniRef90_UPI0003686110	P K G V   L   F   L   G   K   C   G   G   L   K   K   T   T   E   L   G   H   F   I   L   P   P   I   A   I   R   G   E   G   T   S   D   D   Y   F   P	
UniRef90_C5WHF6	V K E   I   I   M   S   T   G   T   C   G   V   L   V   P   I   E   E   N   R   F   L   V   P   T   K   A   L   R   E   E   G   T   S   Y   H   Y   V   A	
UniRef90_UPI0002D271FB	P H   V   W   L   M   L   G   H C   A   G   L   S   T   V   Q   R   I   G   D   Y   V   L   A   H   A Y   V   R   D   D   H   V   L   D   E   E   L   P	
UniRef90_A6DBX5	A K K   I   L   F   S   V   G   V   A   G   S   L   D   E   D   L   K   I   G   D   I   I   A   T   K   T   C   Q   H   D   G   Y   P   Y   G   Y   I   P	
UniRef90_UPI0004787D94	V D A   I   V   N   T   G V A G A   G   H   A   D   L   L   G   V   Y   D   I   V   I   S T   D   A   I   Q   H   D   D   K   K   G   V   I   P   R	
UniRef90_G5HEY8	A K G   I   V   L   F   G   C   C   G   V   L   N   Q   S   V   V   Q   N   K   I   I   I   P   L   S   A   V   R   D   E   G   T   S   Y   H   Y   I   P	
UniRef90_R8AMV4	P D V V I   I   I   N T G S A G G L   D   S   R   L   N   V   G   D   I   V   V   V   S   S   E   V   R   Y   H   D   G   Y   A   Y   G   Q   L   P	
UniRef90_F7VDI2	P H C W   I   M   V   G   H C   A   G   L   R   R   S   Q   I   L   G   D   Y   V   L   A   H   G   Y   V   R   D   D   H   V   L   D   D   D   L   P	
UniRef90_A7ZC47	A S K   K   L   F   T   G   V   A   G   S   L   D   E   S   L   K   I   G   D   M   L   Y   A   T   S   L   V   Q   H   D   G   H   P   Y   G   F   V   P	
UniRef90_D4M501	V D Q   L   I   I   N T G V A G A   G   H   A   D   L   L   G   V   Y   D   I   V   I   S T   D   A   I   Q   H   D   D   K   K   G   V   I   P   R	
UniRef90_R6TBN9	V D T   L   I   I   N T G   I   A   G   S   L   D   A   R   I   D   I   G   D   M   V   I   I   S T   D   A   V   H   H   D   D   A   I   G   Q   V   P   R	
UniRef90_UPI00036008B5	P D V   I   I   I   N T G T A G G   L   G   T   S   S   V   H   D   I   I   L   A   T   E   V   R   H   H   D   G   Y   E   V   G   Q   Q   A	
UniRef90_UPI0002EF1B58	A D Q   I   I   F   T   G   I   A   G   A   S   P   E   L   N   V   A   D   V   V   V   S   S   A   L   V   Q   H   D   V   D   L   T   A   F   G   A	
UniRef90_A6QB43	C D M   L   L   F   T   G   V   A   G   A   I   S   P   D   L   K   I   G   D   L   I   V   A   T   Q   L   C   Q   H   D   G   H   P   Y   V   P	
UniRef90_X0R5U7	V T S   L   I   I   F   T   G   V   A   G   G   L   L   E   E   L   D   D   V   G   D   I   V   I   S T   S   A   M   H   R   D   G   S   P   L   G   F   Q   K	
UniRef90_K6CBZ6	P D Y   V   I   I   N T G S A G G Y   H   T   E   L   L   N   V   G   D   I   V   I   S T   D   V   R   H   H   D   G   Y   E   Y   G   Q   V   P	
UniRef90_D2U407	P E   L   I   I   I   N T G S A G G L   V   P   T   L   Q   V   G   D   I   V   V   V   S   S   Q   V   C   Y   H   D   G   Y   Q   P   G   Q   M   A	
UniRef90_UPI0002491EE1	P D F   I   V   N   T G S A G G G   I   G   E   G   L   K   I   G   D   I   V   I   S D   K   L   A   Y   H   H   D   G   Y   A   M   G   Q   L   P	
UniRef90_UPI00021976E4	P D F   I   V   N   T G S A G G G   I   G   E   G   L   S   V   G   D   I   V   V   I   S D   K   L   A   Y   H   H   D   G   Y   K   I   G   Q   L   P	
UniRef90_A0LI68	V R K   V   I   F   A   V   G   W   C   G   V   L   Y   P   G   D   V   V   I   P   D   T   A   V   S   E   E   G   T   S   D   H   Y   P   L	
UniRef90_U1S7Z9	P D   L   V   I   I   N T G S A G G V   V   A   E   G   L   N   V   G   D   I   V   I   S T   E   T   Q   Y   H   H   D   G   Y   A   K   G   Q   L   P	
UniRef90_Q30QR2	A T K   L   L   F   S   G   V   A   G   A   I   S   T   N   L   K   V   G   D   I   V   V   A   T   K   L   S   Q   H   D   G   H   P   Y   G   Y   V   P	
UniRef90_UPI0003F6E774	P S   R   V   I   I   N T G S A G G F   D   P   S   L   K   V   G   D   V   V   V   I   S S   E   V   R   Y   H   H   D   N   Y   E   M   G   Q   L   P	
UniRef90_U2PY92	V D K   V   I   I   N V   G   V   A   G   G   I   G   K   D   I   P   Y   P   G   D   V   V   I   A   N   N   L   V   E   H   D   M   D   T   T   A   F   G   D	
UniRef90_E6U8J4	V D C   I   I   N M   G   I   A   G   G   I   L   A   K   H   T   L   D   V   V   I   G   N   E   V   F   Y   H   H   D   F   N   P   A   E   K   Y   Y   P	
UniRef90_A8H2V2	V N S   I   I   F   T   G   I   A   G   A   A   G   P   D   L   N   V   A   D   V   V   V   I   S T   A   L   V   Q   H   H   D   V   D   L   T   A   F   G   A	

130 140 150 160

E G E V C I P T D V G L R N A K D I A K S K G L T L K E G V I A T G D Q F V A	E P G I I P Q M E T S F F K A D R T L A Q Q A K I D V Y E G R V V S G D R F V S	A S D E I S Y D E A L L S T L E N A L N K S G I E H I R T K A W T T D A F Y R	E L G Q I P R M D T Y I F K A Q Q L I D F G K S K V C V G R I V S G D E F V A
D G I R S P D E K A F A E Q T N W H S E K A S P I V V K G S T A T A G G F Y G	G M P L Y F E A S K Y I N E M K K A A E K T G Q Q V R S G L I V T G D S F V N	G C P A A F V A D E K L V N A A E A C I R Q L D L H A V R G L I V S G D A F I N	P G D E I V Y D E P L L I Q L E A I F D K H D I E H I R A K S W T T D A F Y R
E G K I F T Q T N E A L N K L A K E V A K E S N I T I H Q G T I A T G D Q F V S S	R M P A F Y E P N D E L L K G I A E K C A G E V G V R S V P G L I I S G D S F M S	G M P A A Y E T H S A L S D L A A Q L Y Q A K G K Q V Y R G L I V S G D A F V A	A N P A A F I P N E Q L V M L A Q Q E A E K L G F H A E S G L I A S G D L F V N
UniRef90_I2K6H2	UniRef90_R9L096	UniRef90_F8DHJ3	UniRef90_H1PZ36
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UniRef90_C5ZVN7	UniRef90_UPI00040DCAC3	UniRef90_W1Q241	UniRef90_J4KDW9
UniRef90_B1YJD6	UniRef90_F8CTA1	UniRef90_B0NA55	UniRef90_R7FB19
UniRef90_A0KIZ1	UniRef90_R6NTX8	UniRef90_UPI000474C578	UniRef90_Q4DKS7
UniRef90_A7NLM5	UniRef90_S5R5Y1	UniRef90_B8D909	UniRef90_R7R4L9
UniRef90_Q4DKS7	UniRef90_UPI0004151AAE	UniRef90_K2PTA5	UniRef90_T4VWY0
UniRef90_UPI00041C1EE5	UniRef90_UPI000479F0F1	UniRef90_U1KK58	UniRef90_A5Z754
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UniRef90_W4QKP9	UniRef90_C2SLJ2	UniRef90_T0CWJ9	UniRef90_E6UHP4
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UniRef90_S5ZY84	UniRef90_A3UF19	UniRef90_W4BGR1	UniRef90_R5Q965
UniRef90_E6UAZ2	UniRef90_B2VE28	UniRef90_K2EEZ1	UniRef90_A6VPH1
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UniRef90_A6QB43	UniRef90_X0R5U7	UniRef90_K6CBZ6	UniRef90_T2BHY6
UniRef90_K6CBZ6	UniRef90_D2U407	UniRef90_UPI00021976E4	UniRef90_UPI00021976E4
UniRef90_D2U407	UniRef90_UPI0002491EE1	UniRef90_A0LI68	UniRef90_I0S8H4
UniRef90_UPI0002491EE1	UniRef90_I1S7Z9	UniRef90_Q30QR2	UniRef90_Q30QR2
UniRef90_I1S7Z9	UniRef90_UPI0003F6E774	UniRef90_A8H2V2	UniRef90_A8H2V2
UniRef90_Q30QR2	UniRef90_UPI0003F6E774	UniRef90_U2PY9U	UniRef90_E6UJ84
UniRef90_A8H2V2	UniRef90_UPI0003F6E774	UniRef90_E6UJ84	UniRef90_PKGLLDGYDDR

	170	180	190	200
UniRef90_I2K6H2	N E E R K N W I	G T T F K A D A L E M E G A S V	A V V C N A L N V	P F F I L R A
UniRef90_R9L096	D G D T K D R L I T L F N A S	C T E M E G A A I A H A A F L N K I P Y V V L R A		
UniRef90_F8DHJ3	E T A A K V K R R L A A G A K V	V D M E A S A I M A W A Q Y R Q A K V Y Q F F Y		
UniRef90_H1PZ36	S V E R I K W L R D T F E A D C	T E M E G A A V A H V C H V F N M P F L I I R A		
UniRef90_UPI00037264A6	P Q G R V L R L F N G T K I T N L E	M E T S A I Y G L S K I L G H D A I S L N A		
UniRef90_S1R8F8	S P E K I A E I K S H F P E L A C	E M E G A A I A Q T A R Q F N I P F L V V R A		
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UniRef90_J0S8H4	E T P D K V K R R L A A G A Q V V	D M E T S A I M A W S Q F R K T K V Y Q F F Y		
UniRef90_C5ZVN7	S K E R K E W I K K E F N A D A I	E M E G A S V A V V C D N L N T P L C V I R A		
UniRef90_UPI00040DCAC3	D H A R V I E D I R T R F N P Y C S	E M E A G A I A Q V C H Q F Q C P F V I I R S		
UniRef90_W1Q241	G P S Q Q A P I K A N F P T L A C	E M E S A A I A Q A A Y V L K T P C V V V R A		
UniRef90_J4KDW9	G N E A I S K I R A N F P I V A V E	M E A A A I A Q V C H A F D V P F V V T R S		
UniRef90_B1YJD6	D T E R S N L I K T N F P D V A V E	M E A A A P I A Q V C H Q F D V P F V V T R S		
UniRef90_F8CTA1	D P A R V E F V R S K F P E L C	V E M E A A A I A Q V C T Q F A V P F V I I R A		
UniRef90_B0NA55	E T H G R L K E R R E Q G C A	V E M E C S A V L A V C R F R G V P A I Q F L Y		
UniRef90_R7FB19	S R K M K M D K I R T K F D A D C	V E M E G A A I A Q T A Y L S D T P F I I I R S		
UniRef90_A0KIZ1	K P D A I A K A R A D F Q M L A	V E M E G A A I A Q V C H M F K V P Y L V V R A		
UniRef90_R6NTX8	D P K K V E Q V I R E T G A D A V E	V E M E G A A V A H V A A R N G L P V L V I R A		
UniRef90_UPI000474C578	E L R W S Q E R R R N L S R A A V D	M E S G T I A A Q G Y R L R V P Y G T L L C		
UniRef90_A7NLM5	G Q E R I T D E Y R R N L I L N Y	E M A G T I F K M G L V Y G F A A G C V C G		
UniRef90_S5R5Y1	G Q D K I D A L K A R F P E V A V E	M E G A A I A Q A A H N L H K P F I V V R A		
UniRef90_B8D909	E N E S I K I L K K Q F P S I A V E	M E S S A I A Q V C Y K F N I P L I I I K S		
UniRef90_R7R4L9	G E E I K K N K L I D L F D G S C	T E M E G A A I A H A A F L N E I P Y V V I R A		
UniRef90_Q4DKS7	C Q G R A V G R F R E H I V A N I	E M E T S A V C F L S H L L G Y Q A G S M C V		
UniRef90_UPI0004151AAE	P Q G R A L R I E T K F Q L T N F E	M E T A G Y Y A L G R L L G H E V I S L N A		
UniRef90_K2PTA5	P Q S R V L R L Y K N Q K I T N L E	M E T S A I I Y G M S K L L G H K A I S L N S		
UniRef90_T4VWWY0	N K E L K D E L V K E F N G Y C G	E M E G A A I A H V C Y V N H T P F V V I R A		
UniRef90_U1KK58	D P V R I Q D T R K D F P M L A V E	M E G A A I A Q A C H V L H T P F V V I R S		
UniRef90_A5Z754	T H E A K V Y L R D T F N G D C	A E M E G A S I V A H T A Y L N K T P Y V V I R A		
UniRef90_UPI00046909E9	D N E R K E W I A K T F Q A D A L E	M E G A S V A L T C N A L N V P V F I L R A		
UniRef90_UPI00041C1EE5	P Q G R K V V R A I N K I H N L N L E	M E T A G I Y A L A N A L G H E A I S I N A G		
UniRef90_UPI000479F0F1	R T E K V E F L K N V F N G Y A V E	M E G A A I A H C A Y L N G V P F V V I R G		
UniRef90_N0C4R6	G Q D K I D Q I K A H F D V L A V E	M E G A A I A Q A A H S L G L P F M V I R A		
UniRef90_R7BLD6	D K V T K K R I S D T F H A Y C T E	M E G A A I A Q A A Y L N K I P F L V I R A		
UniRef90_F2PCB7	S A E K Q N F I R T N F P V V A V E	M E A A A I A Q A C H Q F K V P F V V V R A		
UniRef90_W4QKP9	E H E R V Q O E L K Q R F P C S E	H Q P C S E M E A G A I A Q V C H Q F E V P F V I I R A		
UniRef90_C2SLJ2	D S K L K L E Q L V T E Y P C	T E M E G A A I A G H V A Y I N D I P F L V L R C		
UniRef90_T0CWJ9	G G E V A N R I K E N F G D V A V E	M E G A S I M A Q V A Y L N K V P F V I L R S		
UniRef90_E6UHP4	S S A K R D E L R S E F S A I I C	E M E S G A I I G H V C Y V N E V P F C V L R T		
UniRef90_I7LJ30	D S K K L I W K E T F D A L A V E	M E G A A I A H A S Y I Y I N N I P F V V I R S		
UniRef90_UPI000468D26A	D P E L V A T L T R S R F D M L A V E	M E A A A I A Q T C F V Y D M P F V V I R A		
UniRef90_J3D924	E L R D H R T R F S Q S R A I A L L D	M E S A T V A A N G F R F R V P Y G T L L C		
UniRef90_D9SKL2	D I N K I K Y I K E T F D A I A C	M E G G S I I A Q S C Y L N Q V P F V V L R S		
UniRef90_G2KEU5	G K A M V A E I K K H F D V L A G E	M E G E M A A V G Q V A H Q F N V P Y V V V R A		
UniRef90_B8F704	G N D M I A R I L R N D F P S V A V E	M E A A S I A Q V C H A F Q V P F V V V R A		
UniRef90_UPI000467BB32	E I P E V I R R M S Q S R A V A L D	M E S A A I A A N G Y R F R V P Y G T L L C		
UniRef90_C5LL50	E H K R Y R M E V L E D I G C L A S	E M E V A M L F S L A Q V Y G V K A G C V L A		
UniRef90_D3R3N9	T P Q K V I S Q V I E Q T H A D A V E	M E G A A V A H V A A R N D V P A L V I R A		
UniRef90_R5TQX1	E T I P A I E E R R Q E G C L A V E	M E C A S M L A V S Q Y R Q I P F I Q F L Y		
UniRef90_U3H766	E L R W A Q E R I N L S R A V A V D	M E S G T I A A Q G Y R L R V P Y G T L L C		
UniRef90_S5IX33	S K V K V T G I Y Q E F N A M A V E	M E G A A L I G Q V A T A F K V P Y V V I R T		
UniRef90_I2FJB3	D S E K K Q W I I S N F K A D A V E	M E G A S V A V V C D L L Q V P F C V L R S		
UniRef90_A0A031K6E4	E Y T E S A K R F S L S R A I G I D	M E S A T I I S A Q G Y R F R V P Y G T L L C		
UniRef90_S5ZV84	E L R Y N Q E A R R Q S R S I A V D	M E S A T I I A A Q G F R L R V P Y G T L L C		
UniRef90_A3UF19	G V E E P H R K Y K Q A G A L A A E M E	I A A L Y I V S T L R G A R A G A I I A		
UniRef90_W4BGR1	Q E G Q V S K I K K D F N A L C	S E M E A S V A G H T C Y K F G V P F I I T R S		
UniRef90_R5Q965	E T K R N M L A R K A E G C S A V D	M E C A A L M A C A Q F R G Y E V Y E F V Y		
UniRef90_E6UAZ2	G A A P L A H I R N T F P Q I A V E	M E A T A I G H V C H Q F G T P F V V V R A		
UniRef90_B2VE28	E F N E E F K R L K N T R A Q G I E	M E C A T L F S A S Y K R K L T L G S L L L		
UniRef90_K2EEZ1	G G E R L A Q I K A D F P P T A V E	M E A A A I A H V C H A F G V P F V V V R A		
UniRef90_A6VPH1	D P E R T K V M L N F P T M A C E	M E G A A L A Q V C H Q F K V P F V V I R S		
UniRef90_A3QBOQ0	P Q G R I L R L Y G N H R I T N F E	M E T S A M Y G L G K I L N H N C L S L S A		
UniRef90_UPI00041DD9B8	Q P H L L N R I L L D H F E T L A T E	M E G A A I I A Q V A H V T E T P C I V I R A		
UniRef90_UPI0004718BE2	Q P H L L N R I L L D H F E T L A T E	M E G A A I I A Q V A H V T E T P C I V I R A		
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UniRef90_T2BHY6	D P E R V E R K R K F P E M K A V E	M E A A A I A Q T C L Q F D T P F I V I R A		
UniRef90_UPI0003686110	E T V E M V Q Y R K E E G C Q V V E	M E C S A L A A C A K F R K V T W A M L L F		
UniRef90_C5WHF6	E H D D E F K Y L R K I R V L G I D	M E T A T I I F I T G F A N G I N R G A L L L		
UniRef90_UPI0002D271FB	E T K E K V A Y R R E E G C S V V E	M E C S A L A A V A Q L R K V L W G Q L L F		
UniRef90_A6DBX5	E L R D H R I H L N Q S R A I A L D	M E S A T V A T N G F R Y R V P Y G T L L C		
UniRef90_UPI0004787D94	S K E L K D E L V N E F D A Y C G	M E G A A I I A H V C S L N A T P F V I I R A		
UniRef90_G5HEY8	E T T G L I E E R K K Q G C I A V D	M E D E T A I F I T G F A N G I N R G A L L L		
UniRef90_R8AMV4	G A D N L A R I Q Q H F P Q I A V E	M E A A G V A H V C N Q Y Q L P F V V V R A		
UniRef90_F7VDI2	E L R Q L F T Q I N M S R A I A L V D	M E S A T I I A N G F R F R V P Y G T L L C		
UniRef90_A7ZC47	D N E K K E W I K K I F N A S A T E	M E G A S V A L V C E T L G V P F F I L R A		
UniRef90_D4M501	E K E V K E R I V N N F G A K C	M E G A A I I A H G A Y L N H V P C V I I R A		
UniRef90_R6TBN9	S G E M K A R I V E N F Q A L C	M E G A G I A H A A Y L N K V S Y V I I R A		
UniRef90_UPI00036008B5	D P A R L K Q I E A F F P Q I A V E	M E A A A I A Q T C H L L K T P F I M L R A		
UniRef90_UPI0002EF1B58	D K G V V K M L R E E F D A M A V E	M E G A A V A Q V T D M F D V P L V V I R T		
UniRef90_A6QB43	D S E R K E W I A K T F D A D A L E	M E G A S V A V V C D A L N V P F F I V I R A		
UniRef90_X0R5U7	N R E K V K L T L R E E F G G I C	M E G A A V A Q V A Y L N Q V P F F I V I R S		
UniRef90_K6CBZ6	D P V R V D F V R G K F D V Y A V E	M E A A A I A Q V C H L L K T P F F I V I R A		
UniRef90_D2U407	G A K A L T Y I R Q T F P A I A V E	M E G A A I I G H V C H Q F G L P F V V V R A		
UniRef90_UPI0002491EE1	D K A K I A T I K K A F D A L A S E	M E G A A V A Q V C T Q F Q T P F F V V I R A		
UniRef90_UPI00021976E4	G K E K I A T I K K S F D A L A A E	M E G A A V A Q V C V I E F K T P F F V V I R S		
UniRef90_A0LI68	E T R R K V L Q Y Q N S G V L A V D	M E T S A I L T V A A F R Q I R L A V V L T		
UniRef90_U1S7Z9	G G E R L A Q I K Q D F K V L A V E	M E A T A I A Q V C H A F N V P F F V V V R A		
UniRef90_Q30QR2	N E E R K N W I G T T F K A D A L E	M E G G S V G V V C N A L N I P F F I L R S		
UniRef90_UPI0003F6E774	A P E R V A K A R A D F P T M A V E	M E G A A I A Q V C H L L A N V P F F V V I R S S		
UniRef90_U2PYU7	N I E K I Q W L S S E F E A F A C E	M E G G S I A H T C Y C L I P F F V V I R S S		
UniRef90_E6U8J4	E A G E T K A L I R E L R G G V C C E	M E G A A I I G H V C F L N E V P F F I V R T		
UniRef90_A8H2V2	D K A V V S M L L K E F S A L A V E	M E G A A V A Q V T D M F D I P L V V I R T		

210                    220                    230

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UniRef90_F8DHJ3	T A D Y V D H H N H E W D E D R K A D A M T F F K I A V D I A L E
UniRef90_H1PZ36	I S D K A N H D A K V D F P E F V K L A A K N S K T I I E G I L N
UniRef90_UPI00037264A6	I I A N R V L G T F S K D P G A A V E N L I T Y T L N K L T E
UniRef90_S1R8F8	I S D T A D H Q A T M S F D E F I D E A G K R S A E M V I E
UniRef90_UPI0004641BC4	I S D V A D Q T S H L S F D E F L A V A A K Q S S L M V E T L V Q
UniRef90_J0S8H4	T A D Y V N H H N Q T W D N E R K A D A M T F F T I A L T I A
UniRef90_C5ZVN7	I S D N A G D E A L I S Y E E F E H S A K Q S A A L V I K M I
UniRef90_UPI00040DCAC3	L S D I A G K D A K V S Y D E F L E T A
UniRef90_W1Q241	I S D S A D D Q A N I T F D E F I L L A
UniRef90_J4KDW9	V S D V A D K T S H L S F D E F L A V A A K Q S S L M V E T L V Q
UniRef90_B1YJD6	I S D S A D D E E A S L S F D E F L E I A
UniRef90_F8CTA1	L S D I A G K E S N I S F E Q F L D T A
UniRef90_B0NA55	G A D N L S T D K W E P M D L M E Y G I D R Y M A L A L E C G A R
UniRef90_R7FB19	I S D S P N E E N Q I D F N K Y L K M A A D R C
UniRef90_A0KIZ1	M S D I A G K E Q V E S F D A F I E V A A E V I I K
UniRef90_R6NTX8	L S D N A D T D Y V E F K E D I S E Y A D T A A K I A V N I V
UniRef90_UPI000474C578	V S D K P L H G E I K L P G A A N A F Y E R A V G E H L E I G L K
UniRef90_A7NLM5	I V A Q R T A S E A I I V E R K A V A V A L E
UniRef90_S5R5Y1	M S D T A A H D A N I T F D E
UniRef90_B8D909	I S D A S D N N A T V N F K E N I D I V S K F V K I I L E N L I
UniRef90_R7R4L9	I S D K A D G S A H M D Y P E F E R A A A A H S A K L V E N L V K
UniRef90_Q4DKS7	V V A K R A G A E H T T S E Q S G Q A L K N A I Q I A L E A I V
UniRef90_UPI0004151AAE	I V A N R I T H Q F S S N P D A V V D D L I L K T L E R L V
UniRef90_K2PTA5	V V A N R A N G T V S K D P K L A M K K L I V F A L D K I
UniRef90_T4VWY0	M S D K A D G S A D V T V Y E E
UniRef90_U1KK58	I S D S I A G K E S P Q S F E E Y L E V A
UniRef90_A5Z754	I S D K A D G G A Q M D Y P T F E K A A E N S I K L
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UniRef90_UPI00041C1EE5	I S D K A D E K S G M S F E E F T Q
UniRef90_UPI000479F0F1	M S D T A S H D A N I T F D E F I L E A G K R S A E T L I Q
UniRef90_N0C4R6	I S D K A D D S A S M D Y G E F E R K A I E H S V L L M E N L V Q
UniRef90_R7BLD6	I S D V A D K E S P M S F D E F L P L A A K S S S I M V E K M V E
UniRef90_F2PCB7	L S D I A G H D A K V S Y D Q K K A S V N S A K Q V L L
UniRef90_W4QKP9	I S D S A D D S A Q V S Y D D F A K T A A N Y C S E I I V E
UniRef90_C2SLJ2	I S D K A N G E A D L S Y E E
UniRef90_T0CWJ9	V S D N G D D D S H H N D Y A Q S L A K A A K A E L D I L V
UniRef90_E6UHP4	I S D F A D E N H V A D Y E K Y I N I A I E
UniRef90_I7LJ30	L S D I A G K D N N S Q S F E E F L H V A
UniRef90_UPI000468D26A	V S D K P L H G E G M A N R F Y E Q R V A Q H L K I G I R A L
UniRef90_J3D924	I S D N A D N G A H M D Y E K F Q H
UniRef90_D9SKL2	M S D T G D E D A N Q S F S E F L V Q A
UniRef90_G2KUE5	I S D V A D K E S H L S F D E F L P L A A E
UniRef90_B8F704	V S D K P L H G E G M A S E F Y R Q R V E Q H L E I G L K A L
UniRef90_UPI000467BB32	I S D S A D T D E E F K D F D I S E Y A D T A A R L V V R I L
UniRef90_C5LL50	G A D S L S S E K W
UniRef90_D3R3N9	V S D K P L H S E I K A S A F Y Q R A V S Q H L R I G I A A L
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UniRef90_U3H766	I S D S A D G S A D V S F D E F E S S A K R S A E F V L E S L L E
UniRef90_S5IX33	V S D K P L H G E L K L P G Q A N R F Y E E A I A S H L K I G L
UniRef90_I2FJB3	I S D N A G K Q T A A K D E F S K Q Q A R N S A Q L V L E M I R Q
UniRef90_A0A031K6E4	V S D K P L H G E L K L P G A A N R F Y A K S V S E H L A A G I E
UniRef90_S5ZY84	I D G F A D S D L A A E Y D P H T D A V G Q A V E
UniRef90_A3UF19	L S D V Y V G H G E S S M Q F D E Y L K I A S E
UniRef90_W4BGR1	A A D C L D G D E W I L G S G E K D I C G T M A D I A I E T I I R
UniRef90_R5Q965	I S D V A G K E E T A T T F D Q F I
UniRef90_E6UAZ2	L S D V A D Q Q S H L S F D E F L A V A
UniRef90_B2VE28	I S D L P L N Q E G I T K E S S Q K V Y D L Y T K N H V E I G Q R
UniRef90_K2EEZ1	I S D A G D G E A G M S F E E
UniRef90_A6VPH1	L S D N A N N D S P V D F D S Y
UniRef90_A3QBQ0	I V A N R V Q Q S F S K D G G K A V E S L I V K S L E I L
UniRef90_UPI00041DD9B8	I S D V A G K E E T A T T F D Q F I
UniRef90_UPI0004718BE2	I S D V A G K E E T A T T F D Q F I
UniRef90_Q2BGV0	L S D I A G K E S G V S F D Q F L V T A
UniRef90_T2BHY6	S A D T L A D P H K Y Q R E R E W K T S I S I A L E L A L D A V L
UniRef90_UPI0003686110	V S D T P M I P E G V K T E E S D R E V T R H I K L G M E A M A R
UniRef90_C5WHF6	T A D T L A D I E A Y D Q R N W A D S F T F A L N L C L E V L
UniRef90_UPI0002D271FB	V S D K P L H G E G I T R H F Y E K S V N Q H L K I G I R A L
UniRef90_A6DBX5	I S D S A E E G G V D F D E
UniRef90_UPI0004787D94	M S D K A D G T A D I T Y D E F V Q D
UniRef90_G5HEY8	G A D H L D S D R W L T D Y G R H L S D K Y I A I A L E I A L
UniRef90_R8AMV4	I S D V A D K E A S M S F E E
UniRef90_F7VDI2	V S D K P L H G E G M A N A F Y R E R V S Q H L M V G I E T
UniRef90_A7ZC47	I S D G A G N E A E F D F D K F Q D S A N V S A K F I L E M V
UniRef90_D4M501	I S D K A D G S A Q V D Y P T F E E K
UniRef90_R6TB9	I S D K A D N S A T M D Y P E F E K
UniRef90_UPI00036008B5	I S D K A G E G N A I S Y E K
UniRef90_UPI0002EF1B58	I S D K A D G S A H M V I Y A E A K Q T A D N S V A I T L K
UniRef90_A6QB43	I S D D A A D T D A T F D F D E
UniRef90_X0R5U7	I S D K A N G E A S L S F A D F T K
UniRef90_K6CBZ6	L S D I A G K D S D V S F D K F L E K A
UniRef90_D2U407	I S D V A D K E S H L S F E E F L P V A
UniRef90_UPI0002491EE1	M S D V G D E N A S V N F D E
UniRef90_UPI00021976E4	V S D E L H S M H W V H G Y R E P R F L E T R E K V V D A V L
UniRef90_A0LI68	I S D A G D G K A N M S F E E
UniRef90_U1S7Z9	I S D A A D M D A S F S F D E F L E S
UniRef90_Q30QR2	L S D I A G T E S P V S F D A F L E T A
UniRef90_UPI0003F6E774	I S D N A N G A H M D Y E K
UniRef90_U2PY92	I S D L A D E T A P I T Y E E F E Q K A S V Q S N H V V E G I L K
UniRef90_E6U8J4	I S D K A D G S A H L V Y E E A K Q T A D N S V A I T L N M L
UniRef90_A8H2V2	I S D K A D G S A H L V Y E E A K Q T A D N S V A I T L N M L

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 UniRef90\_M4WS77  
 UniRef90\_E4KP53  
 UniRef90\_C4Z1B8  
 UniRef90\_UPI000366C143  
 UniRef90\_V8LWN4  
 UniRef90\_M2BAB3  
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 I I L C A M D E E I K E L K A Q L S D E T T T T  
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 E K Q S F R R I A V L G A L D E E I N L I A H N L T K V R Q I L S V  
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 M T I K N T V N  
 I A I L G A M R E E V A P L L E R I K D Y K E V K  
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 UniRef90\_D8IG97      I | G | G | W | K | F | W | K | G | T | Y | K | G | Y | P | V | V | V | S | K | T | R | M | G | M | S | N | S | A | A | A | T | A | L | A | L | Q | H | Y | Q  
 UniRef90\_H5S942      K | R | E | Y | R | T | W | L | G | Y | I | A | R | T | S | I | V | V | V | T | S | G | I | G | P | S | T | S | I | I | A | I | D | E | A | Q | L | G  
 UniRef90UPI00047C5A8F      K | A | S | M | E | F | F | E | G | T | I | G | T | T | G | T | T | E | V | V | V | V | V | R | S | G | I | G | K | V | N | A | A | I | C | V | Q | I | L | V | D | T | F | G  
 UniRef90\_B9CYE0      H | A | N | N | V | F | Y | L | A | N | F | G | G | K | E | L | V | I | A | Y | S | K | I | G | K | V | N | A | A | I | L | T | A | S | A | M | E | K | F | G  
 UniRef90\_E0WUN3      L | K | G | L | E | I | Y | T | G | E | L | Q | G | V | N | V | A | V | V | V | L | L | K | S | G | I | G | K | V | S | A | A | M | G | T | T | L | L | D | S | C | Q  
 UniRef90\_R6LKT0      D | G | N | F | R | Y | A | E | G | M | L | G | G | N | R | V | L | V | T | R | C | G | I | G | K | V | S | A | A | V | V | G | A | A | E | L | I | R | R | F | A  
 UniRef90\_C1CVJ7      F | P | G | V | T | L | H | R | G | V | L | D | G | V | P | V | V | L | V | T | R | G | G | I | G | K | V | N | A | A | M | T | T | T | Y | L | L | T | Q | G  
 UniRef90\_B0S2Q0      F | N | H | Y | E | L | Y | V | S | E | F | D | K | K | I | V | I | N | C | V | C | G | I | G | K | V | N | S | A | A | L | T | Q | R | I | D | M | Y | N  
 UniRef90\_N9GFA7      I | G | G | W | K | F | W | K | G | T | Y | K | G | Y | P | M | I | I | S | K | T | R | M | G | M | S | N | S | A | A | A | T | A | I | A | I | Q | K | Y | Q  
 UniRef90\_R7RN3R6      K | A | N | M | E | F | Y | E | G | T | L | N | G | A | D | V | V | V | V | V | R | S | G | V | G | K | V | N | A | A | L | C | V | Q | I | L | A | D | L | F | H  
 UniRef90\_G2PI25      V | L | D | M | P | V | Y | E | Y | V | Y | V | G | E | E | R | L | C | L | T | M | A | F | C | G | I | G | P | A | A | V | L | V | E | Q | L | I | A | L | G  
 UniRef90\_C6LHF3      K | R | E | F | V | T | H | T | G | W | Y | R | G | T | R | I | T | A | I | S | T | G | M | G | T | D | N | I | E | I | F | M | T | E | L | D | A | L | V | N  
 UniRef90\_M7Y3M6      Y | I | E | G | T | I | N | N | N | D | V | V | L | M | Q | C | G | I | G | K | V | N | A | A | A | A | G | A | V | E | L | I | R | N | F | T  
 UniRef90\_R6CL56      T | K | K | Y | P | V | Y | V | T | E | I | R | G | E | K | I | A | F | C | Q | A | P | V | G | G | P | A | A | T | M | V | M | D | W | L | I | G | Y | G  
 UniRef90\_X8K620      P | Q | M | P | S | Y | H | L | K | R | P | G | G | G | G | I | T | L | V | N | I | G | V | G | P | S | N | A | K | T | A | T | D | H | I | A | V | L | R  
 UniRef90UPI000255863F      N | N | S | F | Y | I | T | N | F | K | N | H | E | L | I | I | A | Y | S | K | I | G | K | V | N | S | T | L | T | A | T | I | M | I | E | K | F | K  
 UniRef90UPI000471ED76

90            100            110            120

UniRef90_UPI0004169359	I D F I I R I G T S G T L R A D I P   L D T L L A S V Y G L G L D T T L M S F Y P L
UniRef90_A8SJU5	P E I I I N I G V A G S T D D N V K I G D L V I G T E Y F Y H D F D C T E A G Y
UniRef90_C8NE51	V D L V M N T G S A G G F G S S L E I G D I V I G T E L A Y C D N Y A Y G Q M P
UniRef90_E3C6G7	V K K V I R V G S A G A M Q S G I G L I G E L I V L G T E L V E H D F D V T A F G Y
UniRef90_I3DFR8	V D A L L F T G V A G A L H P E I E I A D I V I V L G T E L V E H D F D V T A F G Y
UniRef90_B7VJ21	P D V V L N T G S A G G F D S T L N L G D I V V I S T E V R H H D G Y E I G Q M A
UniRef90_UPI00036CD2EE	V H T V L R V G G M G A L R D W V R P G S V C A V T H A V P R T G A A A V Y A R
UniRef90_F5L3X6	V D Y L I F T G V A G G V D P Q L N I G D I V I V I S T E C Q Q H D F K K G E I P F
UniRef90_U3AAS1	P H A W L M V G H C A G L R N S Q R L G D F V I L A H G Y L R E D H V L D D D L P
UniRef90_UP10002628BA5	P D V V I N T G S A G G F N K S L E V G D I V I V I S T E V R Y H D D Y E Y G Q V P P
UniRef90_UP100042A6207	P D M V I N T G S A G G F N P E L E V G D L V V S T E V R Y N D G Y E Y G Q V P P
UniRef90_R6HETO	I E Y I V N I G V A G A L N P M L N I G D V V I A D K L I Q H D G H S K G Y I T
UniRef90_M4WS77	P H C W L M V G H C G G L R Q S Q T I G D Y V L A H A Y M R R D G I L D R V L P
UniRef90_E4KP53	I N L L I N T G T A G S S L D P A V V K L G D V V I A H S L T Y H D G Y E R G Q M A
UniRef90_C4Z1B8	A D Y I I N T G I A G S S L K A E I I D I A D V V I S S D V L H H D M D A T G F G Y
UniRef90_UP1000366C143	P H A W L M L G H C A G L R N S Q Q L G D Y V L A H G Y V R E D H V L D H D L P
UniRef90_V8LWN4	V D A L I N T G S A G A V A P E L L K I G D V V V V A S R L V Y H D G Y D Y G Q M S
UniRef90_M2BAB3	V D A V I N T G A A G G G L L E G I N V F D M V V S T D A V Q H D G H P I G Q V P P
UniRef90_A7H007	A D K L L F T G V A G A I S E G G L K I G D L M Y A T S L A Q H D G H P Y G Y V P P
UniRef90_Z4WFZ5	C K K L V A V G S C G V L K E I Q E N A F L V P T K A L R A E G T S Y H Y L P
UniRef90_U1H852	P H A W L M I G H C A G L R N T Q R L G D Y V L A H G Y V R E D H V L D H E L P
UniRef90_C0QYJ4	V E K I I F T G V A G G S G N P D Y D I S D I V I S K D L I E H D F D T S A L D G
UniRef90_E9S932	P D V I I N A G V G G S S L T D K L L D I G D A G I A T A V V Q H D M D T T P L G D
UniRef90_G2LMT0	P D L I I N S G S A G S S L N S L L K I G D I I P E Y T C Y Y D G Y A Q G Q I P P
UniRef90_E4NZ11	P D A V F S G G I A G N L R N R N L H I G D V V V L G G T L R Y L D T D M R Q W K P
UniRef90_C8NRK6	P E A W V M I G H C A G L D A R M R I G D L I L G N A Y Q R E D H I L D R H I P
UniRef90_D4LIV7	V E A V I N T G I A G S S L N N D I N I V G D I I V L S T D V L H H D M D A T G F G Y
UniRef90_V6U045	P F A I V R I G T C Y G P L D E A K V G D I I V P D V Y R T V L R N P D A F V P P
UniRef90_UP1000465B2B2	I D F V I N V G S A G G L C L D Q E V G D V V I S D A V C Q Y D D R V L G E V P P
UniRef90_L7WRE8	P K Y I I N T G S A G A L L D E S L E V G D V V L I S N D V T Y H D G Y A L G Q I P
UniRef90_D8QJD1	D M A I I V R I L G S C C G G L L D V Q P G T V V V P R A C V N V W R N V D F D F L
UniRef90_S5SZ97	P E A W M I G H C A G L D G R M R I G D L I L G N A Y Q R E D D G R I I D H S M
UniRef90_D7GS21	V D G I V N T G I A G S S L R N E I N I V G D I I V L S T V A V Q H D V D A G G F G Y
UniRef90_I0TE45	P D L V I S S G C A G G A D T S L E V T D V V V V A S E C T Y H D A Y C G D E M P
UniRef90_A8UBN3	V D V I I N T G S A G G I I G E G L L A V V G D V V I S T E L A Y H D N Y V I G Q V P P
UniRef90_UP10002F0455B	V D V I I N S G S A G G I I G T G L L T V G D V V I I A D E T A Y W D D Y V Y G Q L P
UniRef90_R6ZW34	V D T V I N T G V A G G S S L N N T L E I V G D I I V L S R S C A Q Q H D M D V S P L G D
UniRef90_UP1000248E067	V E A V I F T G V A G A V V D P S L L N V G D I I V V S T E C L Q H D F P R G T I P Y
UniRef90_D1AZU6	A E Q L L F S G V A G A L N P N L R I G D V L V A T A L A Q H D G H P H G Y V P
UniRef90_U2TZC5	M R V A R M G T V M S S L D D D M L G E F V P V A A M R R E A T S D T Y V
UniRef90_U2EUP1	V D A L I N T G I A G N L L A D D L L G L G D V V V V A E Q V L Y H D F D P S I F C H
UniRef90_V5F5R3	P D V I I I N T G S A G G F D S S L L N L G D V V I V S T E V R H H D G Y E I G Q M A
UniRef90_D3FX73	V S H I I F T G V A G A L D E S L L E V V G D L V I V S T S A M Q H D D A S P L G F
UniRef90_R5FXG5	A T K F I V Y G S C G V I I K D K L C S G K I L I V P S H Y R D E G V S Y H Y M A
UniRef90_C2B147	V R E I I S T G T C G C L D M P E S T F L L P T R A V R Q E G T S F H Y V K
UniRef90_UP100040A7058	V T H V I N T G A A G S S L D A R I N I V G D I I V I S T D V C Y H D G Y K K G E I P
UniRef90_R7JUG5	V D C V I N T G I A G S S L R N E I N I V G D I I V I S T D A V Q H D M D V R I F G Y
UniRef90_W5IIQ2	P D A V I F S G I I A G N L N P S L H I I N D I V L Q G T V R Y L D S D M S G Q A Y
UniRef90_R5ESJ9	A R R F I L L G N C G V L D K R I L D C G I I P T K A I R D E G T S Y H Y A P
UniRef90_A4EGR3	P H A W L M V G H C A G L R N S Q R L I G D F V L A H A Y L R E D H V L D D D L P
UniRef90_X2HFB6	P D Y V I N T G S A G G L K A G I Q I G D V V V G C Y E I T H H D G Y V P G Q V P P
UniRef90_D3QCF4	P E M I I N T G S A G A L D E D L S I G D V V V S D S V I Y H D G Y Q Y G Q V P P
UniRef90_F6CB85	I D V I I F M T G S A G A G L Q K D V H Q E D L V L P S A F A Y Y D D Y V E G Q I P P
UniRef90_A0A033UZF5	P D L I I N T G S A G S S V D S E L N I G D I I I S N K V Y Y H D G Y K L Q G V P P
UniRef90_L0B7S6	P H V W L M L G H C A G L R D S S Q R L I G D Y V L A H G Y V R D D H V L D E D L P
UniRef90_E6LDP9	V D V L I I N T G S A G G I I G A G L S V V G D I L V L S T K V A Y H D Y E Y G Q L P A
UniRef90_UP10003687C61	P H C W L M I G H C G G L R Q S Q T I V G D Y V L A H A Y M R R D G I L D R V L P
UniRef90_B3E6E4	G R K F M V C G G C G V L D K D M S V G S L M V I S S A I R D E G V S Y H Y L P
UniRef90_UP100036C57C1	P D Y V L F S G I I A G N L T D H L H I I N D V V L G K T L V Y L D T D M R M I S Q
UniRef90_R5GV50	I T H V I N T G V A G S S L N A D L D I G D I I I S K D A I H H D V D A T V F G Y
UniRef90_E6PN80	P H G W L M L G H C A G L R N S Q R L I G D Y V L A H G Y V R E D H V L D E D L P
UniRef90_Q0ASN6	P Q C W L M I G H C G G L R H S Q R L I G D Y V L A H A Y L R Y D A V L D E D L P
UniRef90_F2NUZ3	C T H I I I N T G I A G A M A S G G L K V L D F V A S T D A V Y H D M D F G Y K K T
UniRef90_E0QJ36	P E Y V I I N I G V A G A V V S D V V S I G D I I V L S T Y L V E H D F D C T A F G Y
UniRef90_H4GL66	A D V V I I N S G S A G G I I G E G L L A V V G D V V V S T A T A Y H D G Y E N G Q L P
UniRef90_J3JC96	P D V V L I I N T G S A G G I I G S G G L K I G D V V V S S E V A Y H D G Y A L G Q L P
UniRef90_UP1000471062F	T T T I I L F T G V A G A V V D P E L N V G D M V I S S T C M Q H D M D K G I I P Y
UniRef90_UP10000E0E5FC	P D I V I I N T G S S G G Y D K R L N V G D I I V V V A D E L V Q F D G Y V I H G Q P A
UniRef90_F3PT59	P D C I I I S T G V A G G I I D A C L K V T D V V V S E R L V Y H D V W C G D N E Y
UniRef90_UP100046312E9	V T H V L I I N T G A A G S S L D A R I N I V G D I I V L S T D A C Y H D V D A T I F G Y
UniRef90_R6YQW3	V C E I I I S A G S C G A L L E Y F D E G T F L V P S K A L R D E G T S Y H Y A P
UniRef90_D0R4R9	I D V I I F M T G S A G S S L Q E D V K R K D L I L P N K F M Y D N Y V E G Q I P P
UniRef90_S8FGX6	P D C I I I S T G V A G G I I D T R L N V M D V V V A S R Q V V Y H D V W C G E N E Y
UniRef90_W9EG74	I D V L I I H S G S A A G I G E G N L Q V G D V V L S T E T A Y H D G E V L G Q L P
UniRef90_D8IG97	I E K I I T F T G V A G S S N P N Y N I I A D I V I S K N L I E H D F D T S D I D G
UniRef90_N9PS93	P I A I I I N Q G T A G G H D P D L H I V F D I I V L G K Y T T N I I G A F K T P H K P
UniRef90_H5S942	V T T F L I R V G T T G A I I Q P Y I N V G D V I I T T G A V R L D G A S T H Y A P
UniRef90_UP100047C5A8F	V T H V L I I N T G V A G S S L D A R I N I V G D I I V L V L S T D A A Y H D Y K K G E I P Q
UniRef90_B9CYE0	A D K L L F T G V A G A L N P N L K I G D M I Y A T S L V I Q H D G H P H G Y V P P
UniRef90_E0WUN3	P D Y V I I N T G S A G G L S K D L N I G D I I V I S Q E V L Y H D G Y A K G Q M A
UniRef90_R6LKT0	P D C V I S T G V A G G I I D A C L K V T D V V V S E S A Y H D V W C G E G N E Y
UniRef90_C1CVJ7	A T R V I I F T G V A G G G V H P E L R V G D I I V V S T D C I Q H D D Y P L G T V P
UniRef90_B0S2Q0	P D L V I I N C G V C G G L D K S L S F D E V I L A D K L K Y H D I I N L D I F N I
UniRef90_N9GFA7	P I A I I I N Q G T S G G H D P E L L N V F D I I V L G K Y T T N S D A L T W H E A F
UniRef90_R7N3R6	V T A V I I N T G V A G S S L N A K L N I G D I I V L V S T D A L H H D Y Q P G E V P Q
UniRef90_G2PI25	V R R I V I T V G T A A S L Q P H I N P G D I I V V C D S A L R D E G V S R H Y L P
UniRef90_C6LHF3	C E K F I I C G G A G A L A K N S K V G E I I I P V S A V R D E G T S Y H Y L E
UniRef90_M7Y3M6	I D N I I V R V G T S G S S M R R E I P E G S L L A S E Y G I G L D T L M A F Y K T
UniRef90_R6CL56	P D C V I S T G V A G G I I D T C L K V M D V V V A S A Q I V Y H D V W C G E N E Y
UniRef90_X8K620	S Q T I I I A S G C C G A G L R N S Q N L I G D F V L A H A Y L R E D K V L D D D L P
UniRef90_UP1000255863F	P H A W L M V G H C A G L R N S Q N L I G D F V L A H A Y L R E D K V L D D D L P
UniRef90_UP1000471ED76	A Q I L L F T G V A G A L K E G L K I G D I I V Y A T S V V Q H D G H P Y G F V P

130                  140                  150                  160

UniRef90_UPI0004169359	A P E Q Q Q A G V A E S F Q Q A L R L P F R P Y C D L Y Q G N T L T A P G F Y A		
UniRef90_A8SJU5	V M G Q I F V A D K K L V D I S Y E K A K K V E N R I F R G I I I A T G D I F V A		
UniRef90_C8NE51	G M P A R F A M N Q D F L P S I E Q A I A K V D L K S H T G L I V S S D S F I H		
UniRef90_E3C6G7	G I Y P A V P A F R L M A L A H K Y A P Q A V Y G I I I R S H D G F Y M		
UniRef90_I3DFR8	P L G K I P R M D V H A F P A D P R I L I F G E S H I F Q G R L S G D Q F V A		
UniRef90_B7VJ21	G Q P A A F K A D D K L M A A E Q A L A Q M E D K H A V R G L I C T G D A F V C		
UniRef90_UPI00036CD2EE	D S E P R T A D P E V L D V L R A E A T A L G T E L A R I T V A S S D T Y Y L		
UniRef90_F5L3X6	A K T S V F K A D P F L I R L A E S Y R P E E D T Q I V K G K I L S G D Q F I A		
UniRef90_U3AAS1	V W V P I P A L A E I Q I A L E E A E G Y D L K R I M R T G T V A T I D N R N W		
UniRef90_UPI0002628BA5	K M P A A Y Q A D G R L M N L A E K A A K T N A H Y V V K G G I I A T G D S F M S		
UniRef90_UPI00042A6207	Q M P A A Y A A D G G L I T A S L E A A E Q E D I P L Q K G G I I L S G D S F M S		
UniRef90_R6HETO	G V G D F I Q T D E N L K N K L E K N H N N D Y K L G I I A S G D I F C T		
UniRef90_M4WS77	P H I P I P A L A E V Q V A L Q E A A A L V T G R R L R T G T V L T Y D D R N R W		
UniRef90_E4KP53	G M P S L Y Y P D S Q L I R L S Q A V V R G M G I E P I V G Q I V S G D Q F I N		
UniRef90_C4Z1B8	P L G Q I P R M D T L S F A A D E R L I K L A G I G V H V G R V V S G D Q F I S		
UniRef90_UPI000366C143	P W V P L P A L A E I Q Q A L Q Q A V A E V L K A I L R T G T V A T T D N R N W		
UniRef90_V8LWN4	M Q P L Y F E S D P S F V E T F E K V L A Q A S I D S K I G L I A T G D S F I A		
UniRef90_M2BAB3	M T K S P F W P A F K T M Q K E S D D E H K N L K L I E G R I A S G D T F V S		
UniRef90_A7H007	G I E V F S K T D E G L N K L A I Q V A A K K G L D L K S G V I A T G D Q F V C		
UniRef90_Z4WFZ5	V S R Y I E L D K E P I S V I E E T F K K D G L P F E T C T T W S T D G F F R		
UniRef90_U1H852	L W V P I P A L A E M Q V A L E E A V G E V T G R L M R T G T V A S V D N R N W		
UniRef90_C0QYJ4	D E Y Y P A D A S L I Q L A K E S A Q K V I T E N K V Y V D T I A T G D Q F V G		
UniRef90_E9S932	P N K V Y F D C A D E C V S L L I T E A A A E H G I N C A K G V I A S G D C F V N		
UniRef90_G2LMTO	K Y P K K F I I N K K I H E F C K K N A L K Y Q L K F T K G L I I S G D S F I		
UniRef90_E4NZ11	G T E Q Q F H S D D R L L S A D Q A L S A M G V T H I I I A S G N Y F V D		
UniRef90_C8NRK6	P I P A I P E Q K A L E A S V D E I Y G D D N D L M R T G T V L S T D D R N R W		
UniRef90_D4LIV7	P K G Q I P Q M S F Q A D E C L R K I A H D V C I R V F E G R I A S G D Q F V C		
UniRef90_V6U045	G K S F P M H D D L T S I V R K H V A A L S Y K M H A G S C L S C S F Y S		
UniRef90_UPI000465B2B2	G L P P K I K A D Q E L L D R A K N V L E N L K L N Y T A G L I V S G D K F V A		
UniRef90_L7WRE8	Q M P E K Y E A N E Q L L S E T V E V V Q Q H L N A K T G L I V S G D S F I G		
UniRef90_D8QJD1	N C E E E N P K D A Y M V S K P A S A D Q E L H D I V S I S S F Y S S Q G R Q T		
UniRef90_S5SZ97	P I P A V P E V Q R A L E A T V E E I Y G D A K A L M R T G T V L S T D D R N R W		
UniRef90_D7GS21	P A G E I I F P A D E R L L A L A E E A C R E A N P D I F K G R V A S G D Q F I D		
UniRef90_I0TE45	A R F K A P T E L I E K A L S L N T R N D C K D I H V K A G L T V S G E W F V N		
UniRef90_A8UBN3	Q M P A R Y Q A D N F L V E Q T K E A A V K V G L K T V Q G L I V T S D S F V A		
UniRef90_UPI0002F455B	Q Q P A R F T A S E K W A N E I I K A A D A T G L A V K R G L I V T G D S F V A		
UniRef90_R6ZW34	P V G I I P R M D E S I F A A D E T L V K N S D L I C H V G K V V S G D Q F I A		
UniRef90_UPI000248E067	E A T S V F A A D T G L L R S A A A G A S R E L F G T V K E G R V L S G D Q F I A		
UniRef90_D1AZU6	E G S V Y V D T D A S L I R A L A H K V I K A Q N I I L Q E G I I I A T G D Q F I C		
UniRef90_U2TZC5	D K S F P A V A D F D L I N V M N E H V D Y G H R S S N G I S C S M D G F Y T		
UniRef90_U2EUP1	P Y T P V L K A D G A L I V E Q I C R C L D E I G V Y K R G V V A T G D Q F V S		
UniRef90_V5F5R3	G Q P A A F K A D E K L I N A Q S A L D K M A D T H A V H G L I C T G D T F V C		
UniRef90_D3FX73	K R G E I P M Y D G D S D F K A S T R L V E I D R Q V V C G R I L S G D Q F I A		
UniRef90_R5FXG5	P S D Y V E I K N C N K I V D I F Q K Y N L P F V V G K S W T T D A V Y M		
UniRef90_C2B147	P S R Y I G I N P I A I S A L E D L F K E R R L K Y R E V M T W T T D G F Y R		
UniRef90_UPI00040A7058	Q L G T L A F T A D A N L R K K A E A A I K V D I G V F E G R I C S G D Q F I C		
UniRef90_R7JUG5	P L G E I P Q M D E H L A E V V A E E V C K E V N P E I Q V G R V V S G D Q F I S		
UniRef90_W5IIQ2	P G L T E Y H S D P V L S A A S A V L D S L G I M Y K K G T L A S G N R F I Q		
UniRef90_R5ESJ9	A S D L I D V N T R Y I P E F I E V L R E F G Y P V Y Q G A A W T T D A F Y R		
UniRef90_A4EGR3	V W V P I P A L A E I Q I A L E T A V A Y E L K R I M R T G T V V T I D N R N W		
UniRef90_X2HFB6	Q L P A R F N A N Q Y L I A D A A R K A A H F T G A E I Y T G L I V S G D Q F V G		
UniRef90_D3QCF4	Q M P L H F E A D K H L L D N V L V V L K A Q S L N A K V G L V S G D S F I		
UniRef90_F6CB85	Q Q P A Q Y V L D S P E R A S F A E F L K K Q N V E F R E G L V V T G D S F V A G		
UniRef90_A0A033UZF5	S M P E F Y E T D K E L I D L A K S S I E Q L D L N G L V I G E V A T G D S F I G		
UniRef90_L0B7S6	L W V P V P A L A E V Q V A L E K S V A W D L K R I M R T G T V V T I D N R N W		
UniRef90_E6LDP9	G M P L Y F E A D A T L V E D F A A A A T A T K L S S K K G L I V T G D A F I D		
UniRef90_UPI0003687C61	P H I P L P A L E V Q Q A L Q E A A A Q V T G R R L R T G T V L T Y D D R N R W		
UniRef90_B3E6E4	P S R E V F A N P A G V K A L E D T L N I K N T H L V G K T W T T D A P F R		
UniRef90_UPI00036C57C1	P F L N A Y H S D D Q L L S V A D A V L A D M G I E H I Q G T I A T G N T F V		
UniRef90_R5GV50	P G I R E F I A D E T L V N I A V E S C K K V N P D V R T G R V V S G D Q F I S		
UniRef90_E6PN80	P W V P I P P L A E V Q V A I Q E A V A Y E L K R V M R T G T V V T A T D N R N W		
UniRef90_Q0ASN6	L E V P P I A I L Q I A L E Q G V V A S V S G D N L R T G T V V A T Y A D R N W		
UniRef90_F2NUZ3	E I P Q M K C S D F P A D G K M L E A A F P A E H K L V F G R I A T G D Q F I S		
UniRef90_E0QJ36	E K G I I P R D D E L L K I A E K S K N I L S D I N F F N G V I V S G D V F V S		
UniRef90_H4GL66	G Q P A R F T A D Q S L V A A L V K A G A E T G L T V R T G L I V S G D Q F I A		
UniRef90_J3JC96	Q Q P A R F K A D Q N W A V R V Q R A S A A V N L A S R T G L I V S G D Q F I S		
UniRef90_UPI000471062F	Q E V S E F A A A P A L I Q L A E Q A C S V L G A N Y R I G K V L S G D Q F I A		
UniRef90_UPI00000E05FC	G M P A R F T C D S D I L V K S T I Q C A S H H L D I N A F S G L I G T S D K F I C		
UniRef90_F3PT59	G Q V Q G F P A A Y E G C P S L K H A L S L N D R I H S G L I C T G D Q F I T		
UniRef90_UPI00046312E9	K K G E I P Q L G T Q V T A D K E K K A P D L G I F E G R V C S G D Q F I S		
UniRef90_R6YQW3	P S R F M E I N E R A K K A I E K T I V E H N M K Y Q E V I T W S T D G F F R		
UniRef90_D0R4R9	Q E P A G Y T L D N S F R A K F A A Y L K E H D I P F K E G L I V T G D S F I A		
UniRef90_S8FGX6	G Q V Q N F P A R F E G N E T L M D C A L K L D M K I Y D G L I C S G D Q F I T		
UniRef90_W9EG74	N Q P A R F A A D A E W R A R L A T A S Q A L T V H Q G L I V T G D Q F I A		
UniRef90_D8IG97	D D D N Y Y P A D E T L I E L A K S S A E I T N S K V Y V D T I A T G D Q F V G		
UniRef90_N9PS93	G G S N A L E W N E A F D A A Y K A K V N Y T K G Q V V E G V I L G S A D T W N N		
UniRef90_H5S942	P I E Y P A V A H Y T V V N A L V Q A A Q A L K I P Y H L G I T C S A D T F Y P		
UniRef90_UPI00047C5A8F	M G V L S F P A D K E L I E K A K A I K T A A P D V F E G R V C S G D Q F I A		
UniRef90_B9CYE0	E T S I F I K S D D A L N A L A S S V A V E K G I E L K G G V I A T G D Q F I C		
UniRef90_E0WUN3	G C P A R F K A N E K L I K M A E K C L Q Q L K L S V V T G G L I C S G D A F I N		
UniRef90_R6LKT0	G Q V Q G F P A V Y K G C V P L L E H A L S L N N R I H G G L V C T G D R F I T		
UniRef90_C1CVJ7	G E L P A W P A D E V L R A A A L D A A R E V G V H V V S G R I A S G D Q F I A		
UniRef90_B0S2Q0	P Y T D T F E A D P E T L K K L D E L M T Q E N L K H R I G L I V T G D Q F I S		
UniRef90_N9GFA7	D V L P E D E S D P E P I A A Y A A K A N Y S K G Q V V E G T I G S A D V W N N		
UniRef90_R7N3R6	L G C R E F V A D A R L A E L A V A A C E E V N P D I H T G R V L S G D Q F I S		
UniRef90_G2PI25	P S P S I T P P G E L T A R L T K A L R D Q D H V M V H Q G P G W T T D A P Y R		
UniRef90_C6LHF3	P S R E V E C H K T A E L V V S C L E Q M G P F T T G K T W T S D A P Y R		
UniRef90_M7Y3M6	D Y T E F E E F R P Y C I R G S E K L M K T V G K G L I I G N T V T C P G F F G		
UniRef90_R6CL56	G Q I Q G L P T F F S G N E T L Y N C A M S L D T A I H G G L I C S G D K F I T		
UniRef90_X8K620	P S R F I F E L D D K M K R N L I K E G M E R R N I N Y R E C I T W S T D A F Y R		
UniRef90_UPI000255863F	V W V P I P A L A E A V I E Q T Q L E G Y D L K R I M R T G T V A T L D N R N W		
UniRef90_UPI000471ED76	G S P I F V E T D K K L N E A L K T A K N L G L N I T P G I I A S G D Q F I N		

	170	180	190	200
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UniRef90_C8NE51	T R E Q R T H L K H F D V M A S E M E G A A I A Q A C H A F G V P F I V I R A			
UniRef90_E3C6G7	D D N A K N E F W S G K G I V G A D M E S G A L M T I G R Q R G M E T L S I L A			
UniRef90_I3DFR8	D L E K I Q F L R E T F D G Y C T E M E G A A V A H V C H I L G T P F L I I R S			
UniRef90_B7VJ21	T A E R Q E F I R K H F P V V A V E M E A S A I A Q A C H Q F Q V P F V V V R A			
UniRef90_UPI00036CD2EE	G Q G R P L A L R G L D V D G I D M E T E T V F S V A R A L G L R A G A L L V			
UniRef90_F5L3X6	D P E H V E Q L Y H M F N G S C V E M E G A A V A Q V C H L N Q V P F V I I R S			
UniRef90_U3AAS1	E L R D Q V Q Q R L S Q S R A V A L D M E S A T I A A N G F R F R V P Y G T L L C			
UniRef90_UPI0002628BA5	D S E R V A F V M T K F P D L A A E M E A G A I A Q V C Y R F E T P F V I I R S			
UniRef90_UPI00042A6207	S D E Q I A F L K Q T F D P Q C A E M E A G A I A Q V C Y R F N T P F V V I R A			
UniRef90_R6HETO	D I E M K N K I I Y S K F D A D C V E M E G A A I A Q V C Y L N E I P F V V M R S			
UniRef90_M4WS77	E L H W A Q E R I N L A R A L A V D M E S G T I A A Q G Y R L R V P Y G T L L C			
UniRef90_E4KP53	S I E K T Q E I R A S F R A R A C E M E S T A I A Q V A Q V L E V P F V I I R A			
UniRef90_C4Z1B8	D K A V K E R I S S N F D G F C T E M E G A A I A Q V S Y L N K V P F V I L R T			
UniRef90_UPI000366C143	E H Q A P V Q R F S Q S R A I A I D M E S A T I V A A N G F R F R V P Y G T L L C			
UniRef90_V8LWN4	G Q D K I D A I K G H F P E L A V E M E G A A I A Q A A Q S V K K P F I V V R A			
UniRef90_M2BAB3	D K K L R E R I I K E F F N P A C V E M E G A A A A Q V C C I N K I P F L I L R S			
UniRef90_A7H007	N K D K K D W I K A V F K A D V V E M E G A S V A Q V C T Q L G V P F F I L R A			
UniRef90_Z4WFZ5	E T K D M V E Y R L Q E G C S V V E M E C S A L A A C C R K R G A Q F G Q F L F			
UniRef90_U1H852	E I P Q V I R R R M S Q S R S I A L D M E S A T I V A A N G Y R F R V P Y G T L L C			
UniRef90_C0QYJ4	D N N K V K Q I H N K F K A G A I E M E G A A V A H A A L M Y K V P F V V I R S			
UniRef90_E9S932	S A A K R D E L R N D F S A I V C E M E M E S G A I G H V C Y V N G T P F G V L R T			
UniRef90_G2LMTO	D N A H I K I L K Q F P S A L A V E M E S A A I A Q V C Y K F N I P L I V I K S			
UniRef90_E4NZ11	T P A Q I A K V I H D T G A D A V E M E G A S V A H V A A R N E V P A L V I R A			
UniRef90_C8NRK6	E W H T P R K L W E W F N G V A I D M E S S T L A T N G Y R Y I P Y G T L L S			
UniRef90_D4LIV7	D Q G V K D N I V K E F S A Y A V E M E G A A I G Q A A A L N G I P F L I I R A			
UniRef90_V6U045	S Q G R Q D Q N F Q D Q G F S M M E M E S A H F C D L A R C V N S K C G A V H M			
UniRef90_UPI000465B2B2	D K N T V D Y I K E N F D A K C C E M E A A A V Q G T C Y K F N T K F I I T R S			
UniRef90_L7WRE8	S A E Q R K L I K S R F D A M A V E M E A T A I A Q V C Y Q F K V P F I I T R A			
UniRef90_D8QJD1	S F P D H N R L L R E V E G L A T E M E T F H L Y H L A R C C W G R K R T T A S S			
UniRef90_S5SZ97	E W H T P K D L W E W L R G A A V D M E S S T L A T N G Y R Y R V P Y G T L L S			
UniRef90_D7GS21	S K E K K N W I H D T F D Y A C T E M E G A A V A Q A A A Y L N K V P Y I V R A			
UniRef90_I0TE45	S R E E K M Q Q I L D K F P S T A V D M E S C S I A Q V C H I Y K K P F I S F R V			
UniRef90_A8UBN3	D K K V V Q K I K H H F D A L A S E M E G A A I A Q V C Y Q F K K P F V I V R A			
UniRef90_UPI0002F0455B	S D E T I L K E K T H F P E A V C E M E G A A V G Q V A H Q F D V P Y L V I R A			
UniRef90_R6ZW34	D G E K K Q Y L I D T F E G D C A E M E G A A M A Q V A Y L N H V P F L I I R A			
UniRef90_UPI000248E067	S R E T V Q Q L L H K E L Q G A C V E M E G A A V A Q A C S M N G I P F V I I R S			
UniRef90_D1AZU6	D G V K K E W I H T T F K A D A T E M E G A S V A V V C D A L K I P F C V L R A			
UniRef90_U2TZC5	Q M H D I F H E L I H N L H V G G V D M E T S C M L T V C R L L M G V K A C S L T V			
UniRef90_U2EUP1	D S A V K A D I I A R T G A D C A E M E G A A V G H T A V K N G V P F G V I R L			
UniRef90_V5F5R3	T A Q A Q Q R I R T D F P V I A V E M E A S A I A Q T C H Q F A V P F V V V R A			
UniRef90_D3FX73	N K E E V K Q Q L K E L F N G V C V E M E G A S V A H V S D M N D V P F V I I R S			
UniRef90_R5FXG5	E T Q N K V Q K R K E E G C V S V E M E S S G L Q A I C N Y Y G F E L Y T F F F			
UniRef90_C2B147	E T K D L V K Y R V E E G C S V V E M E C S A L A V A V E M R K V I W G E I L F			
UniRef90_UPI00040A7058	E Q S I K N A I V S E F S G I C C E M E G A G I A Q A C H L N N I P F L I I R A			
UniRef90_R7JUG5	S K E V K N H L I E E F N G S C A E M E G A A I A Q G A Y L N K I P Y V V L R A			
UniRef90_W5IQ2	G D T A I A E V K E Q T G A D A E M E G A A V C H I A A K N D C P A L I I R A			
UniRef90_R5ESJ9	E T P A K V A A R R R M G A V C V E M E C M A Q M C D F R G V E F F Q Y F Y			
UniRef90_A4EGR3	E L R E Q V Q R L S Q S R A I A L D M E S A T I I A A N G F R R V P Y G T L L C			
UniRef90_X2HFB6	T A E Q N R L I K E K F D V V A V E M E A A A I A Q T C Y Q L N I P F V I I R A			
UniRef90_D3QCF4	S T D Q R L L I K E R F P Q L A V E M E A T A I A Q T C H Q F K Q P F I I T R A			
UniRef90_F6CB85	S T E Q K Q D A I K Q N F N A L A C E M E G A A F A Q V A Y F N K P L V A M R A			
UniRef90_A0A033UZF5	S I D Q R K V I K S N F P T A V V E M E A G A I A Q T C Y Q Y N V P I L V T R A			
UniRef90_L0B7S6	E L H D Q V K R F A Q S R A I A L D M E S A T I I A A N G F R R L V P Y G T L L C			
UniRef90_E6LDP9	S E E K I K T L L H F D A L A C E M E G A A I A Q T A F Q F G V P F V V I R A			
UniRef90_UPI0003687C61	E L R W A Q E R I N L S R A V A V D M E S G T V A A Q Q G Y R L R V P Y G T L L C			
UniRef90_B3E6E4	E T P D R I L A K R K E E G C L A V E M E S A G M M A V A Q F R G V T L G Q I L Y			
UniRef90_UPI00036C57C1	E G E A A A E V K K L T H A D A V E M E G A A V A H V A M R N E V P V L I I R A			
UniRef90_R5GV50	S D D V K K R L I E V F H G D C A E M E G A S I A H G A Y L N K I P F I V I R A			
UniRef90_E6PN80	E L Q P F H R F Q S S R A I A L D M E S A T I I A A N G F R R L V P Y G T L L C			
UniRef90_Q0ASN6	E L R Y A A Q A R R Q S R A L A V D M E S A T I I A A N G L R L R V P Y G T L L C			
UniRef90_F2NUZ3	D K E K K S A I Q E T C S P A C V E M E G A A V A H A C C W I N E I P F V I I R C			
UniRef90_E0QJ36	S K A M K D D L Y T R Y G A M C T E M E G A S I A H V C H L N S K P F L V I R S			
UniRef90_H4GL66	S Q A Q I A V I K Q K F D V L S S E M E G A A V A G Q V A N D H Q V P Y A V V R A			
UniRef90_J3JC96	S H A A S A K I L A N F D A L A S E M E G A A I Q G V V A A Q F K V P F V V I R A			
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UniRef90_UPI00000E05FC	E A A D T Q R I I S E F P D I T A V E M E G A A I A Q A C H M L N T R C L V I R C			
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UniRef90_UPI00046312E9	S Q E V K V D A I K A D F G G M C T E M E G A G I A Q A C F L N N I P F V I I R A			
UniRef90_R6YQW3	E T R E K V E Y R R S E G C S V V E M E C S A L A A C A A F R K A I W G M I L Y			
UniRef90_D0R4R9	S E A Q K D E I K K N F D A L G V E M E G A A F A Q V A R H F N T P L V A I R A			
UniRef90_S8FGX6	A G E R I K Q K I K R R F P E L A V D M E S G A I A Q A V C Y L Y A V P F I I S F R T			
UniRef90_W9EG74	G A A M K K R I L A F P D A L A A E M E G A A V A G Q V A H Q F K V P Y V V V R A			
UniRef90_D8IG97	N N E K V K Q I H D K F K A G A I E M E G A S V A H T A L M Y K I P F V V V I R S			
UniRef90_N9PS93	E L D R I K L F H T V Y G T S V E E M E A A S V A Q I A Q Q F K V P F L G I R V			
UniRef90_H5S942	G Q E R Q D E E W R K L H V L N Y E M E A A T V L T L C N A L G L I G C V T G			
UniRef90_UPI00047C5A8F	E K D V K D A I I K D L G G M C C E M E G A G I A Q A C Y L N K I P F V I I R A			
UniRef90_B9CYE0	D N A K K E W L K T T F K A D A E M E G A S V A L V C E S L G V P F F I V L R A			
UniRef90_E0WUN3	G G K P L N D I L T T F D A I A V D M E S A A I I G H I C H Q Y G I P F V V V R A			
UniRef90_R6LKT0	D R T E L D V I K H R F P G L A V D M E S A A I I A Q T C Y L Y G I P F L S F R I			
UniRef90_C1CVJ7	S R E G V Q R L W T T F G A A C E M E G A A V A Q V C S K A G V P F V V I R S S			
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UniRef90_R7N3R6	S K A V K E H L I Q F E H G D C T E M E G A S I A Q Q G A F L N E I P F V I I R A			
UniRef90_G2PI25	E T T R A E I E Q Y A A T G V M T A D M E A A A V F A V T A H R R V E A A A L F A			
UniRef90_C6LHF3	E T P D M I L A L R R N E G C T V E M E A A F F A V S Q Y H P L A Q L L Y			
UniRef90_M7Y3M6	P Q G R E P D L I E K I G K L N F E M E T A G Y Y A M G R L L G H E V L S L N A			
UniRef90_R6CL56	D R S E L D A I K K N F D G L A V D M E S G A I I A Q V C Y L Y K V P F I I S F R I			
UniRef90_X8K620	E T P A K I K A K A E G C S V V D M E S A T I A A N G F R F R V P Y G T L L C			
UniRef90_UPI000255863F	E L R D Q R Q R L S Q S R A V A L D M E S A T I A A N G F R F R V P Y G T L L C			
UniRef90_UPI000471ED76	S N E K K E W I K T T F N A S A E M E G A S V G Q V C H A L N V G Y F L M R S			

210 220 230

I V A N R A Q G Q F S V N P L K T V D R L I Q Q T L E R L  
 I S D N A N E K A D C D F E T F V L E S A K I V K I I L D I  
 I S D I P E R G  
 G V N D L V N G D D L M A K G E V A S L K L A L D L L  
 I S D K A N H E A Q M D Y P E F V K I A A K N S K K M I E G I L Q  
 I S D V A D K E S P M S F E E  
 A H A N R A T D A W L E D Y E P A Q L A M L R L A A R S A  
 L S D K A D R E A N I N F A E F I K V A A Q R S Y E  
 V S D K P L H G E G M A S D F Y K T Q V A R H L M I G I R A  
 L S D D I A G R E A P A S F N E F L Q T A  
 L S D D I A G R E A K Q S Y D Q F L K K A S E  
 I S D S P N G K N A I T F D K F L K I A  
 V S D K P L H S E I K L P G A A T A F Y Q R A V S Q H L S I G I  
 UniRef90\_M4WS77  
 UniRef90\_E4KP53  
 UniRef90\_C4Z1B8  
 UniRef90\_UPI000366C143  
 UniRef90\_V8LWN4  
 UniRef90\_M2BAB3  
 UniRef90\_A7H007  
 UniRef90\_Z4WFZ5  
 UniRef90\_U1H852  
 UniRef90\_C0QYJ4  
 UniRef90\_E9S932  
 UniRef90\_G2LMT0  
 UniRef90\_E4NZ11  
 UniRef90\_C8NRK6  
 UniRef90\_D4LIV7  
 UniRef90\_V6U045  
 UniRef90\_UPI000465B2B2  
 UniRef90\_L7WRE8  
 UniRef90\_D8QJD1  
 UniRef90\_S5SZ97  
 UniRef90\_D7GS21  
 UniRef90\_I0TE45  
 UniRef90\_A8UBN3  
 UniRef90\_UPI0002F0455B  
 UniRef90\_R6ZW34  
 UniRef90\_UPI000248E067  
 UniRef90\_D1AZU6  
 UniRef90\_U2TZC5  
 UniRef90\_U2EUP1  
 UniRef90\_V5F5R3  
 UniRef90\_D3FX73  
 UniRef90\_R5FXG5  
 UniRef90\_C2B147  
 UniRef90\_UPI00040A7058  
 UniRef90\_R7JUG5  
 UniRef90\_W5IIQ2  
 UniRef90\_R5ESJ9  
 UniRef90\_A4EGR3  
 UniRef90\_X2HFB6  
 UniRef90\_D3QCF4  
 UniRef90\_F6CB85  
 UniRef90\_A0A033UZF5  
 UniRef90\_L0B7S6  
 UniRef90\_E6LDP9  
 UniRef90\_UPI0003687C61  
 UniRef90\_B3E6E4  
 UniRef90\_UPI00036C57C1  
 UniRef90\_R5GV50  
 UniRef90\_E6PN80  
 UniRef90\_Q0ASN6  
 UniRef90\_F2NUZ3  
 UniRef90\_E0QU36  
 UniRef90\_H4GL66  
 UniRef90\_J3JC96  
 UniRef90\_UPI000471062F  
 UniRef90\_UPI0000E0E5FC  
 UniRef90\_F3PT59  
 UniRef90\_UPI00046312E9  
 UniRef90\_R6YQW3  
 UniRef90\_D0R4R9  
 UniRef90\_S8FGX6  
 UniRef90\_W9EG74  
 UniRef90\_D8IG97  
 UniRef90\_N9PS93  
 UniRef90\_H5S942  
 UniRef90\_UPI00047C5A8F  
 UniRef90\_B9CYE0  
 UniRef90\_E0WUN3  
 UniRef90\_R6LKT0  
 UniRef90\_C1CVJ7  
 UniRef90\_B0S2Q0  
 UniRef90\_N9GFA7  
 UniRef90\_R7N3R6  
 UniRef90\_G2PI25  
 UniRef90\_C6LHF3  
 UniRef90\_M7Y3M6  
 UniRef90\_R6CL56  
 UniRef90\_X8K620  
 UniRef90\_UPI000255863F  
 UniRef90\_UPI000471ED76

The figure is a sequence logo visualization of protein sequence conservation. The x-axis represents the position of the amino acid, ranging from 1 to 100. The y-axis lists UniRef90 entries. Each position is represented by a stack of colored bars, where the height of each bar indicates the frequency of that amino acid at that position. The colors correspond to the following amino acids: A (green), C (yellow), D (red), E (blue), F (purple), G (light blue), H (orange), I (light green), K (dark blue), L (brown), M (pink), N (light pink), P (grey), Q (light orange), R (dark red), S (light green), T (light orange), V (light blue), W (dark purple), and Y (dark orange). The logo shows high conservation of certain amino acids at specific positions, such as I at position 1, V at position 10, and K at position 20.

50 60 70 80

UniRef90_W1EJU4	IG G S E I Y T G Q L H G V D V A L L K S G I G K V A A A M G A T L L L E R C Q	
UniRef90_UP100037357E4	F E F F T G E I D G E E V V L V Q S G L G K V A S S V A T T L M I M T F S S	
UniRef90_Q8IMQ8	I S A Y S Y R Y S M Y K V G P V L C V S H G M G T P S V S I L M H E M H A K C K	
UniRef90_D3PVF7	V Q M P A W H H R T P D G D G V S L V N I G V G P S N A K T I T D H V A V L R	
UniRef90_A8TLS5	P Q M P A Y H L V R E G H Q G V T M I N I G V G P M A V G H L E E L K A C G	
UniRef90_UP100042A09FC	S I N H P W Y I L L E R D G L R V A V M L A V V G A P M A V G H L E E L K A C G	
UniRef90_Q11JW2	P Q M P A Y H L K K A G H G G I T M V N I G V G P S N A K T I T D H V A V L R	
UniRef90_R9N766	Q A A M T F C K G T L C G K E V V I V R S G I G K V N A G I C A Q I L V D R F R	
UniRef90_A5TUM2	I S N L K F Y E G K L C S K D I V L V E S G I G K V N A A I S T T L L I S Q F K	
UniRef90_S2ZDN1	H Q F P R Y D L I T E K G D G I T M I N I G V G P S N A K T I T D C L A V L R	
UniRef90_H1X6T7	I A G K L F H H G K I G N V D V V V V E S G I G K V A S A L T T T L L I T N F A	
UniRef90_R6WVN5	Y A G M M N F C R G K L N G R E A V V V R S G I G K V N A A V C A Q V L V D K F Q	
UniRef90_A5EVB1	G K T A Y R G T L S G K P I I L A L S G I G K V N A A A L S T L L L T Q Y Q Q	
UniRef90_D3UVM0	S R G S M F S A A H A P Q I H T S I I D F K L G S P G A A L T V D L C S F L P N	
UniRef90_R6XIP8	K D F V T G R I G D K E I I L Q K C G I G K V N S T I G A V E M I D R Y A	
UniRef90_R5PTJ6	V A G M K F I S G K L D G I D V V V V C G P G K V F A G V C T E A M I L R Y K	
UniRef90_UP100040E989D	Y Q M P R F D L C T A R G D G I T M I N I G V G P S N A K T I T D C L A V L R	
UniRef90_C9YDH2	L P Q M P G Y H V R A D N A G I T M V N I G V G P A N A K N I T D H A V L R	
UniRef90_E0NUP7	F H G K E F V T G R M G K H D I I L Q E C G I G K V N S T I I G A V E M I D R Y Q	
UniRef90_FOF542	F D H K D F V T G R L G D K E I I L Q Q C G I G K V N A A V G A V E M I H H Y H	
UniRef90_J0K989	L N G H R F V T G Q L G Q Q R V V V T L T G I G K T N A A L T T A L V M A H F Q	
UniRef90_J0UXW2	Y A K N I Y Y Q A T F G E H E L F I V Y S K I G K V F S T V T A T V L I E K F G	
UniRef90_UP1000405BA96	V L I G R T Y Y Q G R I G Q H E V V F V Q S G I G K V M S A M S V A I L V I D R F A	
UniRef90_UP10003B4FADC	S G M F T T F S G T Y K G A T V S V S G S G S P E A E L A L V D L F E Y T D	
UniRef90_UP100036BCB2D	N G K H P W Y I Y E K N K Q K V A M I A T I G A P M A V G Q I E E L K A I	
UniRef90_B1C8E5	I K G S R Y F I G N I D D K K V V A V K C L T G K V A M A C T A Q K L I D N F A	
UniRef90_H0FCS9	I A M R D F Q V G T L W G T P C V I A L S R I G K V A A S A T A S I V I Q E F G	
UniRef90_UP100046F26A9	I G L R D F H Q G I L H G Q P C V I A L T R L G K V A A A A T T A T L L Q R F G	
UniRef90_R5ASA9	Q G L V F H T G R L G A R E V V L V R C G I G K V N A A I C T Q V L I D R F A	
UniRef90_D2FMD8	I T Q S G I G K V N A A I S T T L L I N K F K	
UniRef90_B1L8U5	T L V N I G V G P S N A K T I T D H A V L R	
UniRef90_C5DAT5	N P H W N C V V G H W K H E L I G F A N V F G G P S A A V I C H Q F A S L G	
UniRef90_E7QYI7	Y Y G D L Y S F A D A D Y A V G V L G N F G I G A P T T A M L M D E L V A D G	
UniRef90_R6BKQ5	G M E F C E G I L E G Q D V V V V R S G I V G K V N A A V V C T Q I L I D V F D	
UniRef90_R9L175	Y S M L K F H K G N Y A G I D V I A L F C G V C R V N A A I I A A Q I L I D R Y Q	
UniRef90_U4TYV3	S V F D T G T I A G T A V I L I E S G I G K V Q A G I N A A L L L A R F Q	
UniRef90_K8VXP2	I F Y C R G I G A P V A V I N L E E L I A F G	
UniRef90_C8PRA8	K A G L T F Y E A E H G T H T V I S V C G G I G K V N A A I C T Q L L I S E F H	
UniRef90_A4H689	H R E I N I I T G S Y H G V P V T V L S T G M G T D N I E L M M N E V H K E Y D	
UniRef90_UP100037B4D80	I G P F T Y Y Q G I L A N K D V V L L Q C G I G K V Q A A I G C A L M Q S F Q	
UniRef90_F8EYR1	E R G F L T I T G R Y K G V P V S I C S I G M G H P N M D F F V R E V R E C L G	
UniRef90_S7QP14	H R N I T F V T G T I G T H Q L V L L Q C G I G K V N S T I G T V E M I N R Y A	
UniRef90_UP100035C737F	A G V V Y Y S G T I F G K K R A V L C K S G V G K V N A A V V T T Q I L L D A F F	
UniRef90_UP100046F3B38	M N F L E G I L E D H A V V V V K S G I G K V N A A V C A Q I L A D E F D	
UniRef90_UP100046F7E17	I S G M V F T S G E I S G V R C A V A V S G I G K V F A A V C A Q T M I L E Y S	
UniRef90_C6LET4	V Y S G E L L D G K S V A L C L S G I G K V N A A I A T T I L I E H F A	
UniRef90_R6TMU2	G N F R Y V E G E L N G N Q V I L T Q C G I G K V N A A V G A A E L I R R Y A	
UniRef90_V9HLB1	S R Q F Y T F T G K Y G G Q R M S V C I G M G A P M A D F F I R E A S F V L E	
UniRef90_J9CBK8	I G M R D Y H Q G V L H G H E C V I A L T R V G K V A A A A T T A T L L Q R F R	
UniRef90_Q2HXR1	R A G I T Y Y K G V L N Q K N V L C K S G V G K V N A S I C T Q I L I D D F Q	
UniRef90_X4Z0I3	V L G K I Y Y V G C L G Q H E V V L V Q S G I G K V M S A M S V A I L L A E T F A	
UniRef90_UP100046ABFB	F A G L T F F E G T I N G K N L V I V R S G V G K V N A A V C A Q A L A L K F G	
UniRef90_UP10003676759	H R E Y N S W V V I V D S V P V L V C S T G I G G P S T A I A V E E L A Q L G	
UniRef90_I0XBQ5	C T Y R R A F V G E Y K G K K I Y V L N P Y F G S P A S V F A L E E I A I A Q G G	
UniRef90_T0ZLR5	I T G A A E R Y S M Y K V G P I C V H G M G N P S I S I L H M Y H A K C K	
UniRef90_W017E4	I A G F E F Y Y Q G R I A D R D V V L L R S G I G K V N A A M S T A I L I D R F A	
UniRef90_UP100032A1B2F	S G L S F Y E G M L N G T Q V V V V Q C G I V G K V N A A L C T A L L I S Y F G	
UniRef90_F6DB49	Q M P A Y H L K R A D G N G I T I V N I G V G P S N A K T I T D H A V L R	
UniRef90_U2KPH6	K A S M T F Y E G K I G D T D V V V V R S G I A K V N A A L C V Q V L V D E F F K	
UniRef90_G1Y150	G P F R Y T E G T I G R N T L M Q C G I G K V N A A A G T V E L I R T F Q	
UniRef90_UP10004260E4C	T V S Y P I Y K A R R G Q S Q I A V V E A P V G A P A A V V M V A E Y L A S A G	
UniRef90_J9DDV9	V L S N T Y Y T G R L G Q H D L V L V Q S G I G K V M S A M T V A I L V D H F D	
UniRef90_S3WVB6	I C S T D R Y A M Y K V G P V L V V S H G M G M P S I S I M L H E E Y A Q C K	
UniRef90_C5WF23	T L Y K G S W H G H Q V V I T R C G V G K V N A A I T T Q L L I D I Y H	
UniRef90_UP10003F0D730	I S T I D F Y K G N I N G V E T V V A V A G V G K V N A A V C S Q T M I L K Y S	
UniRef90_UP100041DAA34	Q M P A Y H L V R A D R G G I T M V N I G V G P A N A K T I T D H A V L R	
UniRef90_R6MDK7	G R D R A M Q T A S A G N I T I I N F G M G S A V A T T A T A L I E R F G	
UniRef90_S9ZLT9	H G G F E Y Y L G Q I N A I D V I L L R S G I G K V N A A I I G T A L L I K L Y E	
UniRef90_I2EXP6	I C G G T D R Y A M F K V G P V L S V S H G I G P S T S V M L H E Y H A R C S	
UniRef90_Q31DO5	I G K R T F Y I G K I G K H E V L V A Y S R I G K V A A A T V S T L I L H Y N	
UniRef90_B0TZL4	S G N A T F Y I G K I G K H E V L V A Y S R I G K V A A A T V S T L I L H Y N	
UniRef90_UP10003B3BFC6	I E G I Q F L T G T L N E Q N V V I A R T G V G K V N A A M T A T L L I E H F R	
UniRef90_S9X4E7	R A S M D F F E G K I G D T D V V V V R S G I A K V N A A G C V Q I L V D E F F K	
UniRef90_C0QJ87	I C M G T D R Y T M F K V G P V L S V S H G M G P S I A I M L H E L I K L L Y	
UniRef90_W7TUG5	S F T G P H M G A P Y A T M V E E A L I A K G	
UniRef90_UP100047C8922	P R G F T T Y T G T F E R T R V S I I A I G M G M P M M D F L V R E A R Q L V K	
UniRef90_M3Z392	H A G R E F W Q G E L H G Q P V V L L A L S R I G K V A A A T T A T A L I E R F G	
UniRef90_F0NZE8	I C G G T D R Y A M F K V G P V L S V S H G I G P S T S V M L H E Y H A R C S	
UniRef90_F5ZBA4	I G K R T F Y I G K I G K H E V L V A Y S R I G K V A A A T V S T L I L H Y N	
UniRef90_UP100035F8C66	I E G I Q F L T G T L N E Q N V V I A R T G V G K V N A A M T A T L L I E H F R	
UniRef90_UP10003739230	UniRef90_E3BQX3	G I P F T E G R M G E V E V V L A K S G I G K V C A A V G T I E M I R E Y A
UniRef90_N8TBQ8	T E Y S H G F I G N N E V F I G L S G I G K V N A A M T A T L L I E H F R	
UniRef90_R6QSH6	F G G W T F W E G T Y Q G Q Y P V I S K T R M G M S N S A A A T A L A I E R Y K	
UniRef90_E0RXU5	K D F V T G T I G D N E V I M Q Q C G I G K V N S A I G A V E M I D G Y H	
UniRef90_E9GTM3	P V Y L I E R N G H R F A F Y K T Y V G A P I T V G L I E D A T I E L D	
UniRef90_R5CLG6	I S Q Y S Y R Y S M Y K V G P V L S V S H G M G P S V S G I L L H M Y H A R V K	
UniRef90_R7NWU8	Y A N M T F C E G T I L G K T S V V I V K S G I C K V N A A M C V Q L L V D H F E	
UniRef90_E9CPPE1	Y T E G T I Q N N T V I L M K C G I G K V N A A A G T V E L I R N F H	
UniRef90_A0A058SR10	G S E I Y T G Q I G S V D V V L L K S G I G K V S A A I G T T L L L Q H C Q	
UniRef90_V8NLNC2	H Q M P A W H L V T A D G Q G I T L V N I G V G P S N A K T I C D H A V L R	
UniRef90_C2SL11	I C A A W E F H F H S I N E L E V I S V V T G V G K V S C A S C V Q L L I S E F Q	

	90	100	110	120
UniRef90_W1EJU4	P D V I I N T G S A G G L A S T L K V G D I V V S D E A R Y H D G Y E Y G Q L P			
UniRef90_UP100037357E4	P A C V I N T G S A G G F D P A L L H V G D I V I G D A V K H H D G Y E M G Q V P			
UniRef90_Q8IMQ8	D P V F I R I G T C G G I G V D G T V I I T E D A L D D G Q L R N S H E F T I L			
UniRef90_D3PVF7	P D T M I M I G H C G G L R N H Q R L G D F V L A T S Y L R A D R I L D D V L S			
UniRef90_A8TLS5	P N A W I M L G H C A G G L R N T Q R L G D Y V L A H A Y H R D D H V L D D D L P			
UniRef90_UP100042A09FC	F E N F I V L G S C C G V L D E S L A A D K I I L P S S A L R D E G T S F H Y A P			
UniRef90_Q11JW2	P H A W L M L G H C A G G L R H T Q A L G D Y V L A H A Y V R E D H V L D E D L P			
UniRef90_R9N766	V D T L I N T G I A G S L D A R I I D I G D M V I S T D A V H H D M D A T I F G D			
UniRef90_A5TUM2	V E K I I F T G V A G A V N P E I K V T D I V I G T D L V E S D M D V G E I P R			
UniRef90_S2ZDN1	P E V W V M I G H C A G G L D G R M R I G D L I L G N A Y Q R K D Y I L D D R I P			
UniRef90_H1X6T7	V D A V I N S G S A G G L G A D L R I G D V V V A S E L A Y S D G Y D Y G Q V P			
UniRef90_R6WVN5	A G V L I N T G V A G A S L D A A I D I G D I V I V I S T A A V Q H D M D A T V F G D			
UniRef90_A5EVB1	L T A V I N I G S A G G I G D A R V K I G D V V V A N Q V A H H D G Y K K G Q L P			
UniRef90_D3UVM0	A T A A I M L G M C G G L R S H Y Q I G D Y F V P V A S I R K D G T S D A Y F P			
UniRef90_R6XIP8	P D L V I S T G V A G G A D V E M N V T D V V V G T E Y V Y H D G D E C E Y G Q			
UniRef90_R5PTJ6	P S L I I N S G I A G S L S P S E L H I G D V A I A D K V C Q Y D M D T S G C G D			
UniRef90_UP100040E989D	P E C W V M I G H C A G G L D A R M R I G D L I L G N A Y Q R R D H I L N D R I A P			
UniRef90_C9YDH2	P H A W L M L G H C A G G L R N S Q Q L G D Y V L A H G Y V R E D H V L D E E L P			
UniRef90_E0NUP7	P E L I I V S T G V A G G A D V H L N V T E V V V S T D C T Y H D V Y C G E C A F			
UniRef90_F0F542	P D L I I V S S G C A G G A D T T L E V T D V V V V A S A C T Y H D A Y C G D E V A			
UniRef90_J0K989	P R Q V I F T G I A G G V R H D L Q P G D I V I V I G G E V G Y H D S M H P V S F T			
UniRef90_J0UXW2	V E K V L F S G V A G G I S K D L K I G D L I Y A T K L L S Q H D G H P H G F V P			
UniRef90_UP1000405BA96	V D I I V N T G S A G A V A E G I V A V G D V V V V A D Q L A Y H D G Y A Y G Q M A			
UniRef90_UP10003B4FADC	A H T F L R V G G S G G M H P S V N P G D L V I I A S G V R D E G M T A S Y V P			
UniRef90_UP100036BCB2D	F K N F V L G S C G V L D K S I Q A D K I I L P A T A L R D E G V S Y H Y A L			
UniRef90_B1C8E5	P D L I I N C G V A G G G L K T G I E V G D V V V L S T K T V Q S D M D V T Q L G Y			
UniRef90_H0FCS9	V S R V L F T G L V A G G G L H P S V R V G D V V V V A D A L M Q H D M D A R P L F G			
UniRef90_UP100046F26A9	V G R V I F T G V A G G G L H R D V R V G D I V I G S Q A L Q H D M D A R P L F A			
UniRef90_R5ASA9	P G A V I N T G I A G G G L A S G G L A V G D I V I V A D G L V Q H D G C V C M G D P			
UniRef90_D2FMD8	P D I I I N T G S A G A L L D E S L N V G D V L I S S D D V K Y H D G Y E Y G Q I P			
UniRef90_B1LU85	P D C W L M V G H C G G L R Q S Q T I G D Y V L A H A Y L R R D R I L D E L V P			
UniRef90_C5DAT5	T R W F I Q T G Y F G G L S R N V Q F G D I F I V T G A E M A D G V S H W Y L P			
UniRef90_E7QYI7	V E T F L S I G N G A G C L D D T I I E M G D F I V C D K A I R D E G T S H H Y A E			
UniRef90_R6BKQ5	V K A V I N T G I A G S L K A E I I N I G D L V I S S D L V H H D M D A V S F G Y			
UniRef90_R9L175	V E Q I I V I G V A G A I N P D L L Q I G D T V I S S Q V A Y H D V A D E Q Y H P P			
UniRef90_U4TYV3	P D L I V N T G S A G G I G Q G Q L A V G D V V V I S T G V A Y H D G Y Q P G Q L P			
UniRef90_K8VXP2	V Q N F I V I G T S G A L S L N L S I V F D L V V I S T D A V Q H D G Y A K G Q I A			
UniRef90_C8PRA8	A E V I I I N T G T A G G G L N D S L L H V F D L V V I S T G V A Y H D G Y Q P G Q L P			
UniRef90_A4H689	P K K R R R V G T C G T P N E E V Q V G C L A I T Q Y A I I G M D N T C Q Y Y D A P			
UniRef90_UP100037B4D80	V R R A V S I G G A G G L H P A Q G I G D L V V C N G A V R D E G V S Y H Y L P			
UniRef90_F8EYR1	P T A L I I N T G S A G G I I A P N L H F G D V V I S E G L L M Y H D G Y L P G Q I P			
UniRef90_S7QP14	D M I V V R L G S C G C L L D H P V G T I V V P A C V A V A S R N Y D Y D F G I G			
UniRef90_UP100035C737F	V D C V L F T G V A G A L D P E L E I G D I V I S T S A L Q H D M D V R P L G F			
UniRef90_UP100046F3B38	P Q L V V S T G V A G G A D V Q M N P L E V V V G T Q Y A Y H D L Y C G T E V A			
UniRef90_UP100046F7E17	A V R V L F T G V A G A V H P E L G I G D I V I V I S S H C I Q H D M P R G V I P Y			
UniRef90_C6LET4	V D V I I N T G I A G S L K S D I N I G D I V I S T D V V H H D M E A C G F G Y			
UniRef90_R6TMU2	P D V I I N T G V A G T L T D R L L S I G D I I V A G R T V Q H H D M D T S A L G D			
UniRef90_V9HLB1	T D C I I N T G S A G G G L G T E L H I G D A V I G T Q V A H H D G Y T H G Q V P			
UniRef90_J9CBK8	P D C I I S T G V A G G I D C S L R V A D V V V A S S R L V Y H D V Y C G Y G Q I P			
UniRef90_Q2HXR1	P L A V V R I G S C G I V D Y A T R P G T L M L S D E S M Y C Y R N Y C H F D G			
UniRef90_X4Z0I3	I G Q V I F T G V A G G I H S G V R V G D V V I G A Q A L Q H D M D A R P L F P			
UniRef90_UP100046ABFBD	V T H V I F T G V A G G V D P L L N I G D I V I S E D C Q H D L D V T A L G F			
UniRef90_UP10003676759	V D A I I N T G S A G A V A E G L A I G D V V V A E S L V Y H D G Y A Y G Q M A			
UniRef90_I0XBQ5	V A K I I N T G I G A T A G T G G G L K I F D F V I A S T E A V Y H D G Y K P G Q V P			
UniRef90_T0ZLR5	V K N F I R V G T T G S I Q K N I E F G D I V I S L A A V R L D G A S T H Y A P			
UniRef90_W017E4	K E F L V V G E A G A I K E G V T I G D V I L P T W A L R E E G T S Y H Y M P			
UniRef90_UP100032A1B2F	N P V F I R L G T C G L G V P G G T V V I I V I S S S V C H H D G Y V H G Q L P			
UniRef90_F6DB49	P Q A V I N T G S A G G F H T D L E V V G D I V I V I S S S V C H H D G Y V H G Q L P			
UniRef90_U2KPH6	V T H V I N T G V A G A V V R K D L H L F D V V V S T D A V H H D G Y K P C E L P			
UniRef90_G1Y150	P H V W L M L G H C A G G L R E T Q R L L G D Y V L A H G Y V R E D K V L D A D L P			
UniRef90_UP10004260E4C	I T H V L N T G I A G S M D A K I N I G D I V I S T D A C Y H D V D A R I F G Y			
UniRef90_J9DDV9	P D C I I S T G V A G G I D R C L K V M D V V V S Q Q I V Y H D V W C G E N A Y			
UniRef90_S3WVB6	V R V A I A V G S C G A L Q P F G E G E F L I P V R A L R D E G T S Y H Y L P			
UniRef90_C5WF23	V D A I I I N T G S A G A V A P G L A I G D V V V V A D Q L V Y H D G Y A Y G Q M A			
UniRef90_UP10003F0D730	D L T F F R I G T C G G L G K P G S V V V T E T A V D Y D K F E P V F E L Q A L			
UniRef90_UP100041DAA34	V E A I I I F T G V A G A G L D P E L E V V G D I L V V V S T S C I E H D G F E R G E V P			
UniRef90_R6MDK7	P D I M I N V G V A G G L S E E F K I G D I A V A D S V V E H D M D T S P I G D			
UniRef90_S9ZLT9	P H V W I M L G H C A G G L R N T Q Q L G D Y V L A H G Y V R E D H V L D E E L P			
UniRef90_I2EXP6	P K A V L F L G K V G G L K K T K L G D L V L P I A A I R G E G T S N D Y A R			
UniRef90_Q31DQ5	P D Y V I I N T G S A G G F H T D L E V V G D I V I V I S Q S V C H H D G Y A R G Q V P			
UniRef90_B0TZL4	V D A L L F T G V A G G G L Q D L Q V G D M I A A T A T V Q H H D G Y P Y G K I P			
UniRef90_UP10003B3BFC6	V T H I I I N T G V A G S M D A R I N I G D I V I L V L S T D A C Y H D G Y K K G E V P			
UniRef90_S9X4E7	H A R C I R I G T S G G G I G L E P G S V V I T R Q A V D A C F K P E F E Q M			
UniRef90_C0QJ87	A R T L L V F G W C G S L S T D L A I G D I V I L V L V D G A I A D E G T S R N Y M E			
UniRef90_W7TUG5	P L L I T R F G T C G A L C P D V A V V G S V V V A S P G S V S V M R N P D A F L			
UniRef90_UP100047C8922	V R R M V F T G V A G G G M G T G V K V G D V V V V A T D F M Q H D L D V S P L F P			
UniRef90_M3Z392	N V T I I I R I G T S G G G I G L K P G S V V I T Q Q A L D A S F K P V I F E Q M			
UniRef90_F0NZE8	I T Q L I I F T G V A G G G L H P D V K L N V G D I V I L V L A R K L I Q H D M N A S P L M P			
UniRef90_F5ZBA4	P R I I I I N Q G T S G G G H D P K L N V G D I V I L V L G E K S V N A S N F K T P K L E			
UniRef90_UP100035F8C66	P N R V I F T G V A G G G L N P D L Q I G D I V I A Q T T A Q H D T K N P I D G K			
UniRef90_UP10003739230	P D V I I V N T G V A G G G I D P L T R V M D I V I V I G H D V W C Y G E G N E Y G Q V Q			
UniRef90_E3BQX3	I D L I I F T G S A G A G L Q T N I H Q Y D L V L C P D A F R Y F D A H N T M Q I P			
UniRef90_N8TBQ8	P I A I I I N Q G T S G G G H D P N L V Y D I V I V L G R Y T I N G E G S N S L E W T			
UniRef90_R6QSH6	P D L V I I S T G V A G G A D S L N V T E V V V V S T E C V Y H D A Y C G E C A F			
UniRef90_E0RXU5	C E K F I I L F G G A G G C L D K E I A H G K V M I P T A A Y R D E G T S Y H Y A P			
UniRef90_E9GTM3	D P V F F R L G T C G G I G L D G G Q V L V I T D E A V D G M M R P F L E L P			
UniRef90_R5CLG6	V T H I I I N T G V A G S L D N A I N I G D I V I V V S T D A Q Y H D G Y Q K G E V P			
UniRef90_R7NWU8	P D C I I I S T G V A G G G I D S G L K V M D V V A G S Q I V Y H D V W C G E N A Y			
UniRef90_E9CPPE1	P D M V I I N T G S A G G G L A S T L K V V G D I V I V V S E E V R Y H D S Y E P G Q M A			
UniRef90_UP100058SR10	P D V W L M I G H C G G L R E S Q A I G D Y V L A H A Y L R D D H V L D A V L P			
UniRef90_V8NLC2	N V T I I I R I G T S G G G I G L T P G S V V I T K Q A V D A T F K P Q F E Q K			
UniRef90_C2SL11	P D Q L I F M T G I C G S I L S D K V K N G H I V V A L N T L Q H D G E D S F N L Y			

130                  140                  150                  160

UniRef90_W1EJU4	G C P A G F K A D E K L V A A A E S C I K A L D L N A V R G L I V S G D A F I N		
UniRef90_UP100037357E4	K M P A A F T A H K T L I T A A E K A A Q S L G L Q I K T G L I A T G D S F M C		
UniRef90_Q8IMQ8	G I H R P A K L D K K L A R E L K S L A S P D D P Y T I I G K T L C T N D F Y N		
UniRef90_D3PVF7	P V I P V I P N H R L N Q F L L D A L E K R D A S Y R L G S V C T V D N R N W		
UniRef90_A8TLS5	V W V P I P A L A E V Q Q A L E K A V A D V T G R I M R T G T V A S T D N R N W		
UniRef90_UP100042A09FC	A S D E I S Y D P A L L L T M E K A L D Q A G I E H V Q A K T W T T D A F Y R		
UniRef90_Q11JW2	V W V P L P A L A E V Q V A L Q E A V A E I T G R I M R T G T V A T I D N R n w		
UniRef90_R9N766	P I G Q V P R M D F P A D E A L V Q K A V Q A N I H T F T G R V A S G D Q F I A		
UniRef90_A5TUM2	M K S S Y F K A D P Y L F T L A E S V A I K L S D K V H K G R I I S R D E F V A		
UniRef90_S2ZDN1	A D I P I P A V P E V Q R A L E R A V A D V Y G D E M R T G T V L S T G D R N W		
UniRef90_H1X6T7	Q Q P A R F V T D A T L S A L A E A Y G D V T D A R L V R G L I V T S D S F I S		
UniRef90_R6WVN5	P L G Q V P Q M D T F Q K A K E V N E K V N P D I H T F T G I V A S G D Q F I A		
UniRef90_A5EVB1	D L P L F F P C D K N L C A L A E K A A A A F D S T V H Q G L I V S G D Q F I A		
UniRef90_D3UVM0	P E V P A L A N F V V Q K M I T N I L E A K N L P Y H I G I T H T T N I R F W		
UniRef90_R6XIP8	I I G M P A K F Q A P K E L V E K A L A A G G D T P V H G G I V S G E W F V D		
UniRef90_R5PTJ6	P V M V Y F P C D E K A I A A A V K A V S E M E K M G Y R I G T I A T G D R F I A		
UniRef90_UP100040E989D	P I P A V P E V Q R T L E N A V L E V Y G E N Q D L M R T G T V L S T D D R n w		
UniRef90_C9YDH2	L W V P I P A L A E I Q V A L E Q A V A N A L K S I M R T G T V A S T D N R n w		
UniRef90_E0NUP7	G Q M M G M P A V Y P S P S L V E K A L S L G T P V H A G L I V S G D W F V D		
UniRef90_F0F542	F G O I I G M P A Y E K A L S L N D L P D C R E L H I R S G L T V S G E W F V N		
UniRef90_J0K989	L N P L Y F P A D P E Q A T Q S L D L A M I P G P K A I V G R I L T G D E F I H		
UniRef90_J0UXW2	E G S V F V E S S S D L N R I A D E V A T D L Q G V K L K S G I I A S G D Q F I V A		
UniRef90_UP1000405BA96	G Q E L Y F P A D Q T L L K Q L R S V L E E Q E M A S H H V G L I V T G D S F I A		
UniRef90_UP10003B4FADC	P S Y P A A A A P E L V A L T E A A I E S G H F A H V G T I R S A D S F Q P		
UniRef90_UP100036BCB2D	A S D E I S Y D E A L L S T M E K A L N K A G E H V R T K S W T T D A F Y R		
UniRef90_B1C8E5	E V G C Y F V Q N K A F N E I I A E D I K Y D F D F G V Y F G N L T A D K F V S		
UniRef90_H0FCS9	R H E I P F D A D P A L S A L L L E S A R E F Q P Q V H H G L I A T G D V F V N G		
UniRef90_UP100046F26A9	R H E L P P A L S E Q L Q A S A R R F L A G R A S R V H R G L I L T G D R F V G		
UniRef90_R5ASA9	G A P T V F A P D A V L S A L L A R T A G N A A Q R V H R G L V A T G D Q F I S		
UniRef90_D2FMD8	Q M P V A F Q S S K P L I E K V S Q V V Q Q Q L T A K V G L I V S G D S F I G		
UniRef90_B1LU85	P D V P V P A L A E V Q V A L Q D E Q A D A L K R R L R T G T V V T Y D D R n w		
UniRef90_C5DAT5	D Q Q M V Q A D I Q L V E A A V Q F C E K K Q Y R Y V T G T V F T T G A I M V		
UniRef90_E7QYI7	S E K F A H A S E S L T D E T I G L L R E R D E R F H V G S S W T I D A M Y R		
UniRef90_R6BKQ5	P K G Q I P Q M D V F S F E A D R A L A D N P E I Q V F H G R V V S G D Q F I A		
UniRef90_R9LI75	W M E S I Y F T A D P S L V H G I S L A N A D D D P S V M T G R I V T G E S F I		
UniRef90_U4TYV3	Q M P Q V F A S D S H Y A A M L A E A A Q A K G Q T I R T G L I V S G D Q F I A		
UniRef90_K8VXP2	D G Y I F S P T E K W H N D L K T F L N T N I P L I T E G R T W T T D A P Y R		
UniRef90_C8PRA8	G T P S P F W K A F T Q L K T D C A E D F A H T D S M I A G R I A S G D R F I V		
UniRef90_A4H689	P A V N S T A D V Q E C T A L N S K A N A S E Q Q R Y Y V G A T C S A S G F Y G		
UniRef90_UP100037B4D80	P G E R Y V Y P N E E L T A R L L E A V E R A E H V V V G R T W T T D A P Y R		
UniRef90_F8EYR1	G Q P Q I F T T D K T L Q M L A E K A L V S L K Q N Y E K G I I S S G D I F M H		
UniRef90_S7QP14	N S P E P P Y R I S K P I A A G F Q Q P D A L S R V L S D V V N A S A D S F Y S		
UniRef90_UP100035C737F	A R G V I P F Q E Q S D F Q A D E Q G A K L F P G R Y R K G K V L S G D Q F I A		
UniRef90_UP100046F3B38	Y G Q L P A R F D A A A Q M V N C A L A D A E T P I H G G L I V S G D W F V D		
UniRef90_UP100046F7E17	Q E V S S F P A D P A L V N L A E E A C T R L K Q K S I T G V V L S G D Q F I A		
UniRef90_C6LET4	P E V F S F K A D E K L R A A A K E V I C Q R V N P Q V F E G R I V S G D Q F I C		
UniRef90_R6TMU2	P V G M Y L P C D A G F S E V L L S A A E K S G A N C I S G T V A S G D R F V		
UniRef90_V9HLB1	Q M A A R F N S H V D L V R A E L A A P N A G L R V Y R G L V A S G D Q F I H		
UniRef90_J9CBK8	Q G M P L Y Y E A H P V V L R H A L S L Q V E D V H I C G G L I C T G D R F V		
UniRef90_Q2HXR1	E L T A P V K A D K R L T D L I E A N L N A Q G A V A K R G L I N C S A E T F F A G		
UniRef90_X4Z0I3	R Y E V P L H A D G Q L S R R I L A E C A E H F G S R V H C G L V A T G D R F V		
UniRef90_UP100046ABFB	R R G E I P Y A D F V A D A K L I Q I A Q E S G E S I H T G R I L S G D Q F I A		
UniRef90_UP10003676759	G Q K L Y Y Q A D Q A L M D S L Q K V L T Q Q G Q H S H V G M I A T G D S F I A		
UniRef90_I0XBQ5	G M E P F F T A D K T M V K A F A N T K F A A E H K I L Q G R I A S G D Q F I S		
UniRef90_T0ZLR5	I E Y P A		
UniRef90_W017E4	P D Y I P K P S E R L F N V L E K E V K H Q I G R K V F K G G I W T T D A P F R		
UniRef90_UP100032A1B2F	I L G N I V A R P T K L D V N L A Q E L K S L D Y Q T V V G K T Y C A D D F Y A		
UniRef90_F6DB49	G L P A C F I P D E M L I A K A K L A I E S L G E V T H M G L I A T G D R F V H		
UniRef90_U2KPH6	G I K R I E F P A N P F L I E C A R R A W E K G N F L T E G R I A S G D I F V N		
UniRef90_G1Y150	T W I P V P P L A E V Q V A L E K A V G H V T G L E M R T G T V A T I D N R n w		
UniRef90_UP10004260E4C	P M G E I P S L G T R F F E A D K W K A A N P D V N V F E G R V I S G D Q F I G		
UniRef90_J9DDV9	G Q I Q G L P A R F E G H P T L F D C A L S L D T P I H G G L I C S G D K F V T		
UniRef90_S3WVB6	A S E W V G T D M G V R R A A R V L A S H G L V G R E V N V W T T D A F H R		
UniRef90_C5WF23	A Q P L Y F N C D P Q F V N T F K E V L A Q S S T G S R V G L I A T G D S F I A		
UniRef90_UP10003F0D730	G K I I S T P T N L N K D L A Q D C S Q D S E F D I V V G N T M C T N D F Y E		
UniRef90_UP100041DAA34	M F E Y S S V F S A D E S L A Y D A A I S L N E G Y V V K K G V V L S G D Q F I A		
UniRef90_R6MDK7	P V G L I S G I N L V N I P C D K K L A D L M E Q A V K R G V I A S G D Q F I S		
UniRef90_S9ZLT9	L W V P I P A L A E A V Q E T T Q L S G H A L K R V L R T G T V A S T D N R n w		
UniRef90_I2EXP6	P E I P A L P S F R L Q R A V V S S M I K H E L D Y L T G T V V Y T T N R R V W		
UniRef90_Q31DQ5	G H P E C Y L A D I H L I D I L A K R S I D A L Q E V T H M G L I A T G D R F V H		
UniRef90_B0TZL4	I S E V E I A T S A R I L E Q A K V I A K E L N L N L H T G V I A T G D Q F V H		
UniRef90_UP10003B3BFC6	Q M G R L E F P A D E W L R N K A K E A I K A D L G I F E G R V I S G D Q F I G		
UniRef90_S9X4E7	V L R K R V V R N T D L D E R L V R E L M Q C E F P T V V G N T M C T D F Y E		
UniRef90_C0QJ87	P G E D F P R P D S D L R A R L G N E L S A G G A C F K S G T L W T T D G I Y R		
UniRef90_W7TUG5	P L P T P S G T S A D E I D P I A T G G A P H S E H V R R G M N V S A C S F Y S		
UniRef90_UP100047C8922	R Y E V P F Y R K A R F D Q E C L A T H R F P G A R V H Q G L I A S G D R F V S		
UniRef90_M3Z392	P V V Q R T R L D E K V A Q E L M Q C A L E L T F P T V L G N T M C T S D F Y E		
UniRef90_F0NZE8	R H E L P F E V D T K F T E A K D E F H L H H P T I H F G L I A S G D L F F S		
UniRef90_F5ZBA4	A G E G S R P L N W I P M D L M A S E G E H K S G N V V K G T I G S G N F W N N		
UniRef90_UP100035F8C66	R N P V F F P A D P G E L N P F Q T P Q G Q R H P R I I K G T V V T G D V F V A		
UniRef90_UP10003739230	G L P A R F V S D K K L Y E Q A L S V E H D G N V Y G G L I C S G D R F V T		
UniRef90_E3BQX3	Q E P A Y E D L N S M L R D D F I K Y L Q A K K L R Y F S G L A V T G D S F I A		
UniRef90_N8TBQ8	E A F D V L P T D E S D P E A Q R A K T N Y S K G R V V E G T I G S A D V W N N		
UniRef90_R6QSH6	G Q I L G M P A T F A T P S E Y V E K A G N I H P K I H A G Q I V S G E W F V D		
UniRef90_E0RXU5	A A D Y I T I I N S D I V A E C M K A N G P F V Q G K T W T T D S F Y R		
UniRef90_E9GTM3	V V Q R P S K L D T E L A K E L Q S L S T Q D D P F T H V G R T M C T Y D F Y E		
UniRef90_R5CLG6	Q M G I V A F P A D P S L R A A A V R A V G H D V A V F E G Q V L S G D Q F I S		
UniRef90_R7NWU8	G Q I Q G L P A L F E G N D T L F N C A M S L D T E I H G G L I C S G D K F I T		
UniRef90_E9CPPE1	G C P A A F V A D G A L I A L A E S G I K Q L N L N A V R G L I C S G D A F I N		
UniRef90_A0A058SR10	P D I P I P S I A E V Q R A L Y D A T K A V V S G M P L R T G T V V T T D D R n w		
UniRef90_V8NLCC2	S V I R S T Y L D E K L T M E C A K E L D Q F T V I G N T L C T L D F Y E		
UniRef90_C2SL11	D G R T A P I E T T K S L V K R M K K L R S Y D P V H F G T L S G D Q R I R		

	170	180	190	200
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UniRef90_Q8IMQ8	E K M A Y L E K L R E N G V V N I E M E S T I F A A L T H H A G I K A A V V C V			
UniRef90_D3PVF7	E F N Q A G V L M R A A R C V G V D M E S A T V A A N G F R F R V P Y G T L L C			
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UniRef90_UP100042A09FC	E T A A K V K R R L T A G A M V V D M E S A S A I M A W S Q F R Q A N V Y Q F F Y			
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UniRef90_R9N766	S K D V K A K I V E N F H P M C V E M E G A G I A Q A A Y L N K V S Y V I I R A			
UniRef90_A5TUM2	S S E K V N K L R E I F S A E C V E M E G A A V A H V C E V M N I P F I V I R S			
UniRef90_S2ZDN1	E W H T P H T M W E T L R G V A V D M E S C A L A A N G Y R Y R V P Y G T L L S			
UniRef90_H1X6T7	G D E Q K Q N L K H F P E Q S A E M E G A S I A Q V A H Y F D V P F A V V R A			
UniRef90_R6WVN5	S K E A K E K E I V T N H F A H F C A E M E G A A I A Q A A Y L N K V S C V I I R A			
UniRef90_A5EVB1	G G D K L T Q I R R H F G V L A C E M E A A A I G Q I C Y Q A A V P F F V V I R A			
UniRef90_D3UVM0	E N K E F R R K L Y E N K A Q T V E M E C A T L F A A G Y R R N L P L G A L L L			
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UniRef90_UP100040E989D	E W H T H W Q L I R G S T A V A V D M E S S A L A A n g y r y r i v p y g t l l s			
UniRef90_C9YDH2	E D N Q P Q R R F S Q S R A V A L D M E S A T I A A n g f r f r r v p y g t l l c			
UniRef90_E0NUP7	S R E K M R S S L A E F P T K A V D M E S C S I A Q T C H V Y G T P P F I S F R I			
UniRef90_FOF542	S R E K M Q Q I L D R F D A T A V D M E S C A I A Q V C H Y Q Q G I P C L V I R S			
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UniRef90_UP1000405BA96	G Q D K I A I L K E H F P E L A V E M E G A A I A Q A A I N A G K P F L V I R A			
UniRef90_UP10003B4FADC	W H L D V A E S W I R A G V L N G D R E S A A V V T L A R L F G K R G G S I L C S			
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UniRef90_E7QYI7	E T K R E V E R Y A A D E G I L T V E M E A S A V F T V A A H R G V D A A S M F V			
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UniRef90_R9Li75	D Q E G R E E I I E R Y D P L C V D M E T A G V A H V C Y A N T V P F A A I R S			
UniRef90_U4TYV3	S Q A Q I D R I K G F P Q A L A V E M E G A A V A Q A A H E F Q T P C V I I R A			
UniRef90_K8VXP2	E T K S K V M S L Q Q Q G V L C V E M E A S A L F A V A E F H K V N I A S V F V			
UniRef90_C8PRA8	D P A V K Q D I I S T F K A D C V E M E G A A V A Q T C V M N A V P F V I L R C			
UniRef90_A4H689	C Q G R S V V G R F R E Q R V V N I E M E S S A L C Y L S N L L G Y Q A G A V C V			
UniRef90_UP100037B4D80	E T R E E V L H Y R A E G V L T V E M E A A S L A A V A V L H R G V A F A T A F A			
UniRef90_F8EYR1	E Q Q K I E Q M R K T F P H V A V E M E G A A L A H C C T L F H V P F L V L R S			
UniRef90_S7QP14	S Q G R Q T S F P D H N Q D L S R E T V K E L H E E M G G V C T E M E G A A L A Q V C A M N G I P Y V V I R S			
UniRef90_UP100035C737F	S K E K M R S I L E H F P E K A V D M E S C S I A H T C H R Y Q T P F V S F R I			
UniRef90_UP100046F3B38	S A A V V A E L R G Q L D G A C A E M E G A A V A Q V C Y M N E I P F V I I R S			
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UniRef90_R6TMU2	S E S D R Q L I R Q H F D I V A V E M E A A A I A Q T C V C V L N K P F V I I R A			
UniRef90_V9HLB1	D K N E L A V I K Q H F D G M A V D M E S A A L A Q V C H L Y G V A F I S F R I			
UniRef90_J9CBK8	C Q G R E L P L W N D N G V V S L E M E T H Q I F H L M H Q R Q I P N G I G L V			
UniRef90_Q2HXR1	D A V T G A D L R A S P D A L C V E M E G A A V A Q V C H E F G V P W A L L R T			
UniRef90_X4Z0I3	D R E L V Q T L I Y S E L K G A C V E M E G A A V A Q V C H F L N Q I P F V V I R S			
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UniRef90_UP10003676759	D S A V K N H I K E V F N P L C V E M E G A A I A H A C T L N K V P F L I L R C			
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UniRef90_UP100032A1B2F	L L I E D V A H T R T K F E M I A C E M E A A A V A Q V C H Q F E M P F V I I R A			
UniRef90_F6DB49	S A Q Q K E A I Q D L C D P A C V E M E G A G V A Q V C Y L S A V P F V I I R C			
UniRef90_U2KPH6	E L R D Y R E R F S Q S R A I A L D M E S A T I A A n g f r f r r v p y g t l l c			
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UniRef90_UP10004260E4C	J Q D K I D N I K T F P T V L A V E M E G A A I A Q A A H A T G K P F I V V R A			
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UniRef90_F0NZE8	T T K Q K E K L N Q R Q N I L C V E M E G A A I A Q A Y C Y E F S I P F C V M R V			
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UniRef90_UP10003739230	D K E E L E I K K R F P E L A V D M E S T S I A Q V C L G V S F L S Y R I			
UniRef90_E3BQX3	T F E T K N A I L K N F D A L C V E M E G A A F A Q V A S K F G V P L V A L R A			
UniRef90_N8TBQ8	E L D R I A F F H K N Y G T S V E M E A A S V A Q L A S Q Y K V P F L G V R I			
UniRef90_R6QSH6	S K E K M R S I L D H F P Q M A V D M E S C S I A Q T C H I Y Q T P F I S F R I			
UniRef90_E0RXU5	E T R N I F E K H K A D G C S V E M E C A A V Q A V C D F R G L E L Y P F F T			
UniRef90_E9GTM3	E K L E F L H K V H D N N L M E M E S L A F A A L T H H A G I R A A V I C V			
UniRef90_R5CLG6	T R A R K E E L M R D F H G K C T E M E G A A I A Q A S Y A N K I P Y V I I R A			
UniRef90_R7NWU8	D R Q E L N S I K A F P A G L A V D M E S G A I A Q I C H I Y K V P F L S F R I			
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UniRef90_V8NLC2	E K M Q Y L K E A H K T G V V N I E M E S S V F A A M C N L S G L K G A V V C V			
UniRef90_C2SL11	S S E M R Y L L H T V Y G A L A V D Q E V A A F A Y V C R V N N K P F L C L K A			

210

220

230

I S  
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 I S D K A D D E A G M S F D E F V K I A  
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 K D V T K  
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UniRef90_V9KEZ3				
UniRef90_R5Z5G7	H G R R D Y H V G T V H R A P C V V T L A R V G K V A A A A T V S A L I H A F D			
UniRef90_K0DNS0	N L S R S D R F V I Y K T G P V C W I N H G M G T P S L S I M L V E S M H H A G			
UniRef90_A8WM47	K A M L K F H A G Q I D S V E V V A L F S G V C K V N A A I A A Q L L I D V F C			
UniRef90_D4LY23	W P A F A G E G L G G H E V R L L E S G I G K V A A A G A V V G W A V A R Y A			
UniRef90_E4UA15	Y G M R D Y T A G K L W N V D T V C P L S R I G K V A A A M T A S I L V E K F G			
UniRef90_UPI000472CA0C	S F R P K I Y E V K I K D E Y F T L C Q A P L G A P A A T K L L D W L I N Y G			
UniRef90_R4K131				

		90	100	110	120
UniRef90_UPI000289BF8B	V S K I T F I G V A G G I H S D I K   G D V V V A S N L V Q Y D M D A S P L R P				
UniRef90_UPI00047E25AA	T P G V I F A G L A G G I H P S V G I G D I V V V A S S L V Q H D L A R P L F				
UniRef90_B61RJ1	C R L L F S G V I A G G V D P A L G I G D V V V G T R L V Q H D N G L R V Y Q P				
UniRef90_C7MPF7	V T H I I N T G A A G S L D A T L D I G D V V V A L D C V Q H D M D Q V P G L P				
UniRef90_Q4P8Q9	E M I I V R L G S C C G S M Q P D Y G I G T V V V P K A S F G I S R N Y D Y F H P				
UniRef90_UPI0003623C27	I K I I V N T G V A G G A L S T A L D M V T D M V S T N V L H D G Y E P G Q L P				
UniRef90_P96122	A R V L I N T G I A G A L D E R L L C V F D V L V S V D A V Q H D V D V T A F G Y P				
UniRef90_S2LIR7	P E A V I N T G S A G G F D D R L E V G D V V I S T E V R H H D G Y E H G Q V P				
UniRef90_I5B7C2	R L H I I L R V G T S G G L Q A S T K I G T P I T S Y A I G M D N T G L F Y E A				
UniRef90_M5JD27	V D A V I N S G S A G G L G A D L R I G D I V I A D N L A Y G D G Y A Y G Q V P				
UniRef90_R5JF27	V D S I I I N T G I A G A S L N A D I I N G D I V F A C D A V E H D G Y E P G I I P				
UniRef90_UPI00036B936D	M E T L V L F G T C G V L D D D I K E T S I I V P T M A I R D E G T S F H Y M D				
UniRef90_UPI00029A4F99	V D A V I N S G S A G G L G A G L Q V G E I V I S S Q T A Y H D G Y Q I G Q L P				
UniRef90_W5XFY1	V E T V L T I G T A G A L N D L P E N E M F L V K R A I R D E G T S F H Y M D				
UniRef90_UPI00036D12C1	V D A L I I N T G S A G A V A S D L Q I G D I V V A D K L V Y V H D G Y D Y Q G M S				
UniRef90_UPI0004680894	P D L I I I S T G V I A G G V V D T S N V T E V V V G T E C V Y H D A Y C Y G Q I L				
UniRef90_C5KDA2	R A K W I R M G T S G G C G V P P G T V V V T T Q A M N D E V E P Y W R C V				
UniRef90_F9DIT2	P D L I I V S S G C A G G A D T T T L N V M D V V V V A T E C V Y H D S C G S E A A K				
UniRef90_A7Z721	P D Y V I N T G S A G G F H H T L N V G D V V I S T D V R H H D D Y E G Q V P				
UniRef90_E0Q2F9	F K N F V L G S C G V L D Q S L Q A D K L I L P S S A L R D E G T S Y H Y M D				
UniRef90_W0X328	P H V W L M L G H C A G A L R N S Q R L G D Y V L A H A Y M R E D H V L D D D L P				
UniRef90_R6UXL9	V D C C I I N A G T A G G I Q E Q V Q L F D T V I S E R I A Y H D D D I L T E F H				
UniRef90_F9D485	P D L V V S T G V A G G A S V E L N P L D V V V V A T A C A Y H D A Y C G Q Q V M				
UniRef90_R6E1N0	P D L V V S T G V A G G A G D V S L R V M D V V V V S T E C V Y H D V V Y C G E C A M				
UniRef90_UPI0003658046	A R T I I F S G V A G G L D P A L A I G D V V I A D R L V Q H D G H L P F F L P				
UniRef90_R5LZA1	A K K I I F T G V I A G S C N P N Y V I A D I V I S K D L I E H D F D T S A L L D G				
UniRef90_X4ZV66	P E L I I I N T G A A G G I G S S L R G D V V I V A T A C A Y H D A Y C G Q Q V P				
UniRef90_UPI00037D3AEC	V R S V V F A G L A G G V H P D A L I G D V V I V A T A C A Y H D A Y C G Q Q V P				
UniRef90_B1C0L3	V N I V I N A G V A G G M D P K L K I F D T V I S T E V C Y H D V A Q D V L T E				
UniRef90_E3KVP2	D L I I I R L G S C G T L V P E I P V G R V V V V C S S S L A I W T N Y D Y F Q L				
UniRef90_U2AZX0	V K R I L V V G M C G F G K E I Q V G D V V V P E S I L C E E G T S H H Y F				
UniRef90_UPI00046E6710	C E L I I I N T G A A G G G L A A D L K V G D D V V I A E E L V Y S D F S Y A Y G Q V				
UniRef90_M7E511	I Q A V I I N T G S A G A V A P E L L N I G D D V V L A D R L A Y H D G Y D Y G Q M S				
UniRef90_R5XC11	A D E I I N I G V G C C S L S P D L V A I K N I V V A S D V C Q Y D I D T A L G E				
UniRef90_UPI0003B5A795	P E I I I L N V G V A G G S L T P D L N V T D V I V A S Q L V Q H D G S G E R F F P				
UniRef90_D3R2N4	I E G I V N I G S A G G G L R A D E E V G D I V V G T S T T Y D L L F D S A H P				
UniRef90_W5JTZ8	D P C F I R I G T C G G I G L D G G T V V V V T E S A Y D G L L R N S Y E L A I L				
UniRef90_W3VM35	E M I I V R L G S C C G S L Q P E Y G L G T V V V P K A S F G I S R N Y D Y F H				
UniRef90_J9K4G6	A K V F F R I G T S G G I G L E G G T V I I S D E A V D G T L Q P H L E L Q				
UniRef90_W5MVV5	H A K C V R I G T S G G I G L E P G T V V V T K Q S V D A K F Q P Q F E Q V I L				
UniRef90_UPI0003B6BA6A	V D E V I I F T G V I A G G M D R R R L K V G D I V V A D K L Y Q H D M D V R P I L P				
UniRef90_A6LKA1	P K Y F I H C G S A G A I N K E R K I G D I V C G T E Y I T E H D I S F R E K N V				
UniRef90_F6ZQM1	H S K C C R I R I G T S G G I G L E P G S V V I T S Q S V D A S F R P Q F E Q I				
UniRef90_UPI000258E286	D P I F F R I G T C G G I G L E G G T V V V I S E A V D G M L K P Y L D P L				
UniRef90_N9A371	P V A I I I N Q G T S S G G H D P K L N V Y D I V L G Q Y T T N I G A F K T P H R P				
UniRef90_W5MVW4	H A K C V R I G T S G G I G G L E P G T V V V T K Q S V D A K F Q P Q F E Q V K				
UniRef90_L5N644	I D A V I I N T G S A G G F A K E L L E V V G D I V V V S T S V T H H D D Y A Y G Q V				
UniRef90_G4ELV5	P Q A I I I N V G S C C G S P N K E S F I K I D Y L I N D F Y H L D Q Y E L G Q T P				
UniRef90_J9YTG5	V D A I I I N T G S A G A V A T G L N V G D D V V V V A D K L A Y H D G Y D Y G Q M S				
UniRef90_F8DFA4	V E A I I I N T G S A G A V A P G M A V G D I V V L A N K L A Y H D G Y K Y G Q M A				
UniRef90_K2NUN8	V D V T I I R T G G M G A L A A D L S L G D F L I A D E A V V R N S G V A S F Y V A G				
UniRef90_B1XX51	V A R R L I I F T G V I A G G G L G A Q V R V G D I V V L A E T L L Q H D M D A S P L F P				
UniRef90_A0A16TXU7	H A K F I R L G T S G G G V G V P G T V V V T N A M N S E L T D K F V Q W I A				
UniRef90_UPI00041E978E	P T H V I I N T G S A G G F A E E L S V G D I L V I S S E V R H H D D Y E Y G Q V				
UniRef90_Q9CEG1	V D A I I I N T G S A G A V A Q G L A I G D V V V V A D K L A Y H D V D V F G Y A Y				
UniRef90_E6MI03	V D C V I I N V G V A G G L D R R L T A Q G L V V V A K D C V Q Y D G F D L G E V P				
UniRef90_UPI000359F743	D V I F F R I G T S G G I G L E P G S V V I T Q Q A V D A A F R P E F E Q M V L G K				
UniRef90_I9BTBV2	V D T V V M T G L I A G G L A R G V A V A V G D I V V V V A D R L L Q H D L D G R P F W P				
UniRef90_W4RLL5	P D V I I I N T G S A G G F H K N L N V G D D V V I S T E V R H H D G Y E Y G Q V P				
UniRef90_D1AYC0	V K K I I Y F S G V I A G S T S N K L K I G D I V I S T E L Q E Y L F D T T E F G Y				
UniRef90_UPI000444883D	D V T I I I R I G T S G G I G P G S V V I T Q Q A V D A A F R P E F E Q M V L G K				
UniRef90_B5XM03	V R E M I I S T G T C G V L V S L A E N R F L V P V K A L R D E G T S F H Y L A				
UniRef90_M4KKJ4	A R T V I I A V G S C C G A L T A L P E E Q L L I P T V A L R D E G T S F H Y L A				
UniRef90_R9KS8	C C G C C C G V L A D I P A G D V I I P T R A L R G E G A S Y Q Y L P				
UniRef90_UPI000380901B	V D A L I I N T G S A G A L A P D L A V G D I V V V A D R L A Y H D G Y A F G Q M S				
UniRef90_U2DR91	V K K F I I L V G Y C G C F A G E V P G V L C G D A V A P P R I L V I E E G T S H Y H				
UniRef90_UPI00046969B0	V K K V L I A F G N A G A L E D L P E N A M L I P T R A I R D E G T S F H Y M G				
UniRef90_S4RF50	N V R I I F R I G T S G G I G L E P G S V V V S R T A V D E Q F R P E F R Q V				
UniRef90_W3AFC5	P A A I I I N Q G T S S G G H D P A L N V F D I V L G E R S V N G E G I E P T E W K				
UniRef90_H9JM89	D P V F F R I G T C G G I G Y E G G T V V V I S D V D G A L R N V L E L T V L G K				
UniRef90_F6QXQ0	D V T I I I R I G T S G G I G I E P G T V V V I T D V A V D S F F R P Q F E Q V				
UniRef90_G3VU46	D V V I I I R I G T C G G I G L E P G S V V L T R R A T D S C F K P Q F E Q I				
UniRef90_D0KVBO	I K D I I F I G T A G G S L S N E I L I G D L N I P K Y A I P F E N V S D F Y A D				
UniRef90_R6V0A7	I D C I I V N I G T A G G G L Q V Q Q N I L D A V I S T Q V Q H D Y D T S P V D G				
UniRef90_S5ZMJ5	A T K F I I M F G S C C G S L N K E V T A G K Y I P T E S Y R G E G I E P C Y Y A P				
UniRef90_G3X0L5	H A K C C R I I G T S G G I G L E P G S V V I T D T A V N S F F K P Q F E Q I				
UniRef90_F2F3J1	P K V V I I N T G S A G G F D A A L K V G D I V I S D E V R H H D G Y E G Q M A				
UniRef90_B0S373	A N K F I I M F G S C C G S L D K E K T F G K Y I P T E A Y R G E G A S Y Y Y A				
UniRef90_UPI00029AA6E7	V E T I I I S I G L M G S I A E G I D V V G D I V I P S K A Y V I E E G T S L H Y Y K				
UniRef90_H3H380	P M S I I I R F G T C G S V L K D V T P G S V V V V S G K G S V M V T R N P D A F F				
UniRef90_W0RPA4	A E L L L L F T G V I A G G V D P T L R V G D D V V V A T R L V Q H D L D A R P L F A				
UniRef90_M4RMC7	P E M V I I N T G S A G G L D S H L N V G D I I V I S S E V R H H D G Y E K G Q L P				
UniRef90_UPI000465B814	I T H I I I N S G T A G G G L Q E P N I K D I I V I S S E V R H H D G Y E K G Q L P				
UniRef90_UPI0003750C33	V D E I I I V F T G L I A G G G I G A R T R V G D D V V V V A D R T L Q H D L D A R P F F A				
UniRef90_V9KEZ3	D V I I I I R M G T S S G G L G L E P G T V V I I T G T A V D S F F Q P Q F E Q I				
UniRef90_R5Z5G7	V E A V V F T G V I A G G V G E Q V R V G D I V V V A N A L L Q H D L D A S P L F P				
UniRef90_K0DNS0	V K N P T F I R L G T S G G V G V P P G T V V V V S T G A M N D T Y V Q V I A G K				
UniRef90_A8WM47	V D I I I I N S G T A G G G M E P E L E I F D T V I S T E V C Y H D V I A P D I L T E				
UniRef90_D4LY23	P S R A V W L G V I A G G S L N P E L S T G D V L I V I S S A D D A V Q W D G R E P G E L D				
UniRef90_E4UA15	V T H I I I V F T G V I A G G S D V G R V G D I V V V V A D S L V Q H D M D A S P L F S				
UniRef90_UPI000472CA0C	V K R V L A I G N A G A L V D L P E N T M L P S R A I R G E G T S F Y Y L K				

130            140            150            160

UniRef90_UPI000289BF8B	K Y E I P F N T D Q D W S H E I V S K I N S L A P K V H F G T I I A S G D Q F F S		
UniRef90_UPI00047E25AA	R Y E V P F A P D A A L S Q L L Q E H A G P R R P Q A H R G A I I A T G D I F V S		
UniRef90_B6IRJ1	G V T H G Y T L D P A V E A T V R A A L D G L E P R I T F G T I I A T G D Q F V N		
UniRef90_C7MPF7	S A I F P V D G E L S D A V A A A A R A A V P E I S I Q R G R I I A T G D R F I C		
UniRef90_Q4P8Q9	D T N A Q E R S S G A M E P Y L I T K P L D A D S E V H A G N T A S A D S F Y G		
UniRef90_UPI0003623C27	G M P K F Y I A D K G L I N K A L Q A V K K N T E I T G H S G L I V S G D A F V G		
UniRef90_P96122	Q K G R I P R M D F D L C T R D P E W T E G A C S R L V E G R V A S G D L F V S		
UniRef90_S2LIR7	R M P A A Y Q P D P R L V N I A R E C I E S M G E R V L E G L I A T G D V F M A		
UniRef90_I5B7C2	P Y P D Q I C E R L E Q Q D A L L E G S A S L G V P A K L G L T V S T S G F Y A		
UniRef90_M5JD27	Q Q P A T F V P D E A L A S A M D E F A K K A T G K L Y R G L I I L T S D S F I A		
UniRef90_R5JF27	D T E M S V F K S D E H L L D I A K N A C G L T V G V F T G R V V S G D Q F I S		
UniRef90_UPI00036B936D	P V S D E I L L N Q G T Q E H L L A F L E K N Q I S Y A T G K V W T T D G I Y R		
UniRef90_UPI00029A4F99	Q Q P A R F V A D P I L Q K S L Q Q A A E Q A G L Q A K I G L I V S G D Q F V A		
UniRef90_W5XFY1	P G Q F V D L D R D F L K Q V E K A L S E L N L D Y D E V T T W T T D G F F R		
UniRef90_UPI00036D12C1	M Q P L Y F E A D R H F V D K F E E V L R K E K R K S K L G L I A T G D S F I A		
UniRef90_UPI0004680894	G M P A T F P A P S Q L I E Q A L A I N G P D V P R I H S G Q I V S G E W F V D		
UniRef90_C5KDA2	Q L G K V V K P T D C V D M K F V D A I P D N I N A V K G K T M A A N D F Y D		
UniRef90_F9DIT2	G Q I M G M P A R Y T S P T E L V E K A L S L N C T V R A G L T V S G D Y F V T		
UniRef90_A7Z721	G L P A A Y K A D E K L I S I T E E A V S E L G I Q V A K G T I A T G D S F M N		
UniRef90_EQ2F9	A S D E I L A Y D E T L L T M E E A L N K S G I E H I R T K A W T T D A F Y R		
UniRef90_W0X328	V W I P L P A L A E V Q V A L Q D A V A E V T G Y I M R T G T V A T D N R N W		
UniRef90_R6UXL9	P W M D Y F Y A D E N L L Q S A K A Y S N T T K R V I L F G T M V S G E Q F V T		
UniRef90_F9D485	G L P A R Y T A P P E L V E R A L E D A D G R P G R V C S G L T V S G D W F V D		
UniRef90_R6E1N0	G Q V M G L P A T Y K P P S E L V A K A L R L N P T V R A G Q I V T G D W F V D		
UniRef90_UPI0003658046	T E R F G Y T L R P D T R A R L E E A L S G L P P K I V F G T V V T G D Q Y V N		
UniRef90_R5LZA1	D E L T V L V K G Y D K N A K S S A E K V I K N N K V Y I D T I A T G D Q F I G		
UniRef90_X4ZV66	R M P S R Y P A Q E E F L A L A R K L A A G K D G R V F T G L I T T A D S F I G		
UniRef90_UPI00037D3AEC	K C L D Y L D N D F D K P E Q K Q R F F Q R Q K P Q F H V G L I G S G D L F V N		
UniRef90_B1COL3	F P W L K T I F F E A D R E L I K I S E R A K G K V F W G R V T G E S F I T		
UniRef90_E3KVP2	S M S R P I G C D Q T L H D A L Y E N L E K T V D Q G L V S S G A S A D T F Y A		
UniRef90_U2AZX0	E T V E F V R P E E D F F N Q V R E Y F Q G K F H T V V N S T V T T D S F Y R		
UniRef90_UPI00046E6710	P Q M P Q R Y P A A A G L L A Q A R K L V R R G E Q I V T G L I T T A D S F I S		
UniRef90_M7E511	M H P L Y F K S D S H F L E V F K E V F N K E H R P S K V G L I T T S D S F I A		
UniRef90_R5XC1	P R G Y I I P T N H A I S E K L S Q I A I A S G E R I H R G T V A S G D T F I A		
UniRef90_UPI0003B5A795	A N Q Y V V D K S I D I L N S E K E K K G E K Q I H S M F G T I A S G D L F V S S		
UniRef90_D3R2N4	R E P Y T F T T D A S W L K C M V K V L S D L N L P Y R Q G E I V T G D Q F I S		
UniRef90_W5JTZ8	G K I E H R P A L L D R R L A H H L K S P D D P Y E A I T G K T M C T Y D F Y A		
UniRef90_W3VM35	D		
UniRef90_J9K4G6	I L G K T V K R S S V L D K K L Q W E L K S L P Y P T V I G K T V C T S D F Y E		
UniRef90_W5MV5	G K T V I R P T D L D E Q E L L Q C S K E I D E F N T V I G N T M C T L D F Y E		
UniRef90_UPI0003B6BA6A	R H E I P A A Q D F V N Q D L N I D E F N L R H P D V I T A D I A S G D Q F I S		
UniRef90_A6LKA1	R I F K A S D V L M E R I Y D I F N D I K F G V I A S G D V F V D		
UniRef90_F6ZQM1	I L G K T V V R N T E L D S E L A R E F F Q C K F N T V I G N T M C T L D F Y E		
UniRef90_UPI000258E286	V L G K I V R R P A K L D R Q L A H D L K A L A H R T V I G K T M C T Y D F Y N		
UniRef90_N9A371	G G S D A L T W N E A M A A A Q R V K S T Y S K G K V V E G T G S A D V W N N		
UniRef90_W5MVW4	T V I R P T D L D E E L A Q E L L Q C S K E I D F N T V I G N T M C T L D F Y E		
UniRef90_L5N644	G M P A M F D A D E Q L M E K A M E A I A K T D A R A A K G I I A T G D S F M Q		
UniRef90_G4ELV5	K E L P Y F S S S N K L N D K I I K I L K S N E Y K F K N G K C G T T D S F I N		
UniRef90_J9YTG5	M Q P L Y F H S D K T F V S T F E A V L S E M I S K V G L I A T G D S F I A		
UniRef90_F8DFA4	G Q P L Y F E S S R Y F V S E M K K V L E E E A T T H V G I L T T G D S F I A		
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UniRef90_UPI00041E978E	G M P A Y Y Q P D E E L L V A L A E Q A T R K L D H S V R G L I A T G D S F M Q		
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UniRef90_E6M103	G M R Q A Y T A A P N L V A L A E A V A H K L N V T T R I G R V L T G D R V V A		
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UniRef90_W4RLL5	R M P A Y F A P D E K L V T V A L R S A E K I G Q I V K G L I A S G D S F M N		
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UniRef90_B5XM03	P S R Y I D I D P K M R L R I E K T L L A Q G L I A Y Q E V I T W S T D G F Y R		
UniRef90_M4KKJ4	A A D W V P L D P K V I Q V L G T T L T K A C L P W Q M V K T W T T D A F F R		
UniRef90_R9KS88	P G R Y V E L H Q Q P I Q I F K D V L E E C K I S Y M E C T T W S T D C F Y R		
UniRef90_UPI000380901B	G Q P L Y F E S D R Q M V Q T F E K V L D Q H Q I K S K I G L I T T S D S F M A R		
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UniRef90_UPI00046969B0	P G R Y I D L K S E Y L S E V E K A V N E F G L E Y D E I T T W T T D G F F R		
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UniRef90_D0KVB0	P T I A I P Q A D E K L L N E V Y E Y A E E T G V K T H S T L H A T L L F P Y S		
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E L R D Q R K R L S Q A R A A L D M E S A T I A A N G F R F R V P Y G T L L C
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 L A A H D D L V V R T E R E  
 I I G A M E E E V A I L K D K I V N L E I I N V A H  
 E H  
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 M Q A C Q S H V  
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 H S K

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

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

K M K E T P S L L I L C A M P Q E L K G I C R M V K N V K K  
 Y H [L G L T K G D V    R F I C T G G A A H R M Y T Y A L M M K E E L R I D G D  
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K M P A M Y T S D A D I L A S Q A G Q A V R Q I G I G Y R E G I I A T S D S F M G				
P E E T G Y S L D Q D L R E K I R D A L E G L D I R L I F G T I L T G D D I F L N				
Q M P A Q F V A D S H L I E L A K E A I N D Q K W V A K S G L I V S G D S F I G				
R H E V P F P T D A D L S D S S F A A L G I D R P R V H E G L V V S G D R F V A				
I L D N I V T R S T E L D K D L A E E L L N C N F P T L I G H T M C T D D F Y E				
P S R Y I L E V D G R A L T A I E T V L K Q A S P Y Q E V M T W S T D G F Y R				
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G M P A T Y K A D Q E L F K K V D K V L K S L S Q N G K E G L I V S G D S F I G				
P G R T A S P S P A L T Q Y L A E A L A P Y D L P V T R G P I W T T D A P Y R				
Y S G M S S N Y F Y L D E T I H N A L A N I G K Q M K L V T V A S G D V F V T				
R W E M P G Y C D P E M T E D L R A A H T T A P R A H Q G L I A S G D Q F V G				
Q L P A A F P A D K N L I F A A Q K A A E T I T H T K T I Q G L I C T G D I F M A				
R G Q V Q G M P A Q Y S A D A M A T V A K Q L R I P L H E G G L L C G D T F P				
P G Q F V V D L Q S N F L S E I E T K I K D L G Y N Y D E I V T W T T D G F F R				
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N G E F V E H K Q F K A N P A L V E T A L S L S E E Y K K G K V V S A D E W N R				
V Q G K V V L Y S S S K L D Q C L A N E L C E D E F C T I I G K T I C T N D F Y E				
V V V Q R P A K L D K K L V R D L K A I A D P D D W Q T V S G K T M C T Y D F Y E				
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G I L P D T K F S T P R F E K V K K L L I K S S N Q N V H F G T L V V S S D F F P				
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R R P T V I D N K L A N D I A A V G R K A M P E L N I V T G K T M C T N D F Y E				
I L G K T V V R N T D L D Q S L A E D L L Q C N F K T V V G N T M C T L D F Y E				
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N K P L Y Y L A D P E V V A D F E K L A I A D P D D W Q T V S G K T M C T Y D F Y E				
G V S Q L A H H L A R V V G D W R R G L A Q E S G P E V H F G A V A A G E I V H				
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K Y E V P E R F V T D E G T T L T E R F R L D G V R V H R G M I V S G D R F V S				
Y F P Q P T K E L Y W W L Y H E L T L Q G F S F T E G K V V S T D A L F R				
V Q Q R P S I C T K E V V D E I T Q S A Q E L L Q L P Y A V G K T I T C D D F Y D				
D V P P L L E T D E R L R Y I L E A F L K K S G A S Y R T G I I A S S D Q W N E				
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V K A G H Y D E N P D P Y F Y F D K N L I K D F P K I R T A R L A S G D K F I S				
I H E R P A V L D A A V T A E I A A V C D D I S I P Y A I G K T I C A D D F Y E				
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G G P V T Y S A D E K L L Q V A A K A V E E I G K H S H G L I A S G D V F M S				
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R F T Q P Q P P W F D W A K T A L I E A H N E G D R P P S S G G L I A T G D R F I G				
R Y E V P F A A D A T L S N A L V H A A Q T F R P A V H R G L I V S G D R F I A				
Q V F H P F G P R I A D E A A E Q A A L W G R D R K F K E G V I A T G D Q V V F				
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P E E T V T S T P A V T D H L E S A L S D T G I G T H R G P T W S M G A M Y R				
I K D D Y T F P S L D L N I D C V K T C W T T N A L Y R				
N N P L P I I P T F N L N I W L K N I L E K N R V N F R I G T V F T T E D R N W				
Y A Y G Q V P R M P K Y Y E T S N K D I I K T I S K A K I K N I A S S D I F I H				
R F T L P L P Q P D P D W L A W A S R S L N N A A Q E T V R P G L I A T G D Q F I S				
F R A R P R A W E M R H D E Q R V R R A L R G R T G V H F K P L V A G D V V L N				
Y H P W M R E I C F R S D A K L L M C E R V S S R F H V G R V V T G K K F I				
R F H I P V F N K D E L S P K K E W L E W F K K N L Y K G Q L G T G D Q F I S				
I L D N V V T R S T E L D K E L A A E L F N C N F P T L I G H T M C T Y D F Y E				
A S D Y I K I Q N A D V V A K F M E T V G L P Y V K G K T W T T D A V H R				
R M P V D Y S S S E R A A A R C D A L A G L V D H P V R L G R I V S S D S F C T				
P G L E E F S S S D F L V E A Q T L R A H G F R F L R G T I A T G D R F V S				
H E C D Q I A H H I A R T D T W A R G L P E G E R T P K V G A I A A G E V V L D				
F K S R P R V W E V S H G A D Q I A R H V A R G P E V H F G P I A A G E V V L N				
R W E V P F A A D G A L C G R L A R A A A R Q A P R V H T G L V I S G D R F V S				
I L G K T I I R S T N L D D Q L A K E L M Q C F Q F N T V I G N T M C T L D F Y E				
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E H D A F Y S T P E L V D F A Y K N V K H P A Q G K V V K G V I G T A D E W N R				
D L Y G V G V R K T F E A P N L V K E L N L K V G K L S T G D S L D M				
E S S V F V E S D P Q L N A L A K S V A Q N L N P L K E G I I A T C D Q F V S				
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E L P Q R F I A D R N L L E K A L K K A I K T N L Q D V Y T G L I L S G D Q F I D				
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F G V R F F P S D P G L L A R A E A A R A L G F P C R R G V V A T G D R F L A				
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170 180 190 200

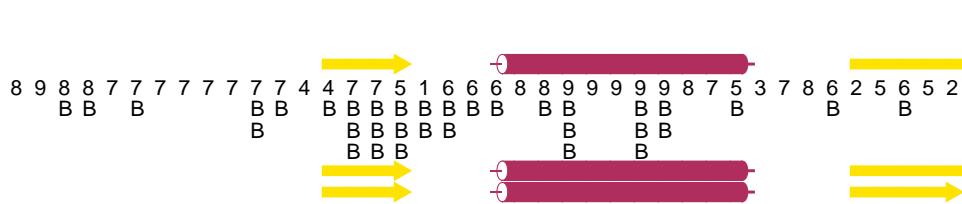
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  V S D R A D G T K E T T D R E R
  I S D R A D D D A H V D
  I S D R A D D S A H V D
  V V I N S D A K G N A M N I E E L R K R Q L E V A A V I L E
  L S N T D L H N Q D F D P
  V T D I I D G D K P T A E E F L Q N A V T A A L D L A V E Q V I N
  V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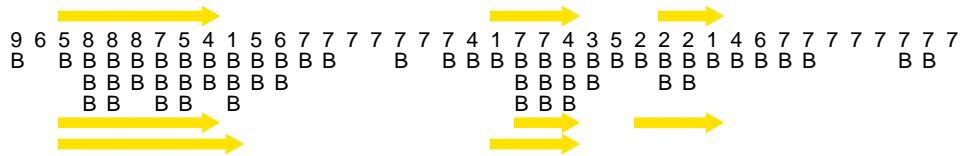


The figure displays a multiple sequence alignment of UniRef90 proteins. The sequences are arranged vertically on the left, and the alignment positions are numbered at the top. A color scheme is used to indicate conservation: black for identical residues, red for conservative substitutions, and yellow for non-conservative substitutions. The alignment shows a highly conserved region from position 50 to 70, with many yellow highlights indicating non-conservative changes.

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lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
ipssm

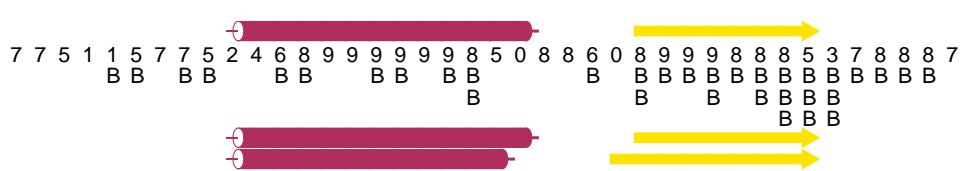
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lupas\_21  
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UniRef90_T0R7S4	V S D L <span style="background-color: yellow;">L</span> C G P Q A G Q D F H <span style="background-color: yellow;">I</span> D A A E A A E I S A T T V L		
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UniRef90_B5EF02	V S D Y I S L E E N T N S E E W S N E L T K A V		
UniRef90_H2EC51	V S D H A D G T K E S T D R H <span style="background-color: yellow;">L</span> Q R A V A N A A S F A V A L A		
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UniRef90_H2P7L4	I T D G A N D T A H <span style="background-color: yellow;">L</span> D W E E		
UniRef90_I0S2H5	V S D R A S D G		
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UniRef90_V4NUN2	V T D L V D G D K P T A E E F L Q N L T V V T A A L E		