

QUERY UniRef90\_UPI0004203F54 UniRef90\_Q65K57 UniRef90\_U2EB22 UniRef90\_M8D2J0 UniRef90\_G9QN00 UniRef90\_M3CZV6 UniRef90\_UPI0003608550 UniRef90\_NOAQ61 UniRef90\_C6J4U1 UniRef90\_H3SIY4 UniRef90\_L5MN65 UniRef90\_W2ED92 UniRef90\_UPI000382F2E6 UniRef90\_UPI0003794F98 UniRef90\_D3FSX8 UniRef90\_UPI0004796982 UniRef90\_UPI000417A37C UniRef90\_HODKD8 UniRef90\_UPI00047203E3 UniRef90\_A0A015KMV3 UniRef90\_W7Y9F3 UniRef90\_X0RDE1 UniRef90\_C3AXE9 UniRef90\_B1HUP2 UniRef90\_UPI00047D7C4D UniRef90\_G4HGA7 UniRef90\_UPI00046F2EC8 UniRef90\_W8YTY2 UniRef90\_Q4L719 UniRef90\_S0JHE7 UniRef90\_P24828 UniRef90\_F5LEE8 UniRef90\_UPI00040E5273 UniRef90\_E0R9R0 UniRef90\_UPI0002896EC0 UniRef90\_UPI00035C2081 UniRef90\_U7PBM0 UniRef90\_UPI000289A764 UniRef90\_N4WBL5 UniRef90\_A6TVW3 UniRef90\_W4F9F3 UniRef90\_UPI0002894D53 UniRef90\_C6CVF1 UniRef90\_UPI00040391ED UniRef90\_L5NBH1 UniRef90\_UPI000366A0C2 UniRef90\_G2SMR9 UniRef90\_W4DI24 UniRef90\_B6G244 UniRef90\_R2XN18 UniRef90\_H7CY23 UniRef90\_UPI00047E3EDD UniRef90\_S6ESF7 UniRef90\_UPI00040F6EBD UniRef90\_UPI00037B600A UniRef90\_D7UU54 UniRef90\_R5XA90 UniRef90\_UPI0002899B7E UniRef90\_I4D674 UniRef90\_E3PX24 UniRef90\_W4F8W1 UniRef90\_UPI0002886058 UniRef90\_C9XSK0 UniRef90\_UPI000371F5EF UniRef90\_S1R471 UniRef90\_UPI00037D95E6 UniRef90\_F7NDN7 UniRef90\_N9XUM1 UniRef90\_UPI0004209167 UniRef90\_A0A011UTU0 UniRef90\_UPI0003817AC8 UniRef90\_UPI000248C370 UniRef90\_G4L6C2 UniRef90\_J7Y52 UniRef90\_E3GP91 UniRef90\_D0GKG7 UniRef90\_L0F8S9 UniRef90\_K0J7Z3 UniRef90\_T1W965 UniRef90\_R9LEK7 UniRef90\_UPI000375A3FE UniRef90\_A6FUS8 UniRef90\_G7M8L5 UniRef90\_UPI0003FCF5C3 UniRef90\_C3L265 UniRef90\_C6PMT9 UniRef90\_W4BW82 UniRef90\_F2GUM0 UniRef90\_K0YUV0 UniRef90\_E0IAC1 UniRef90\_A0A037ZCT8

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

QUERY	50	60	70	80
UniRef90_UPI0004203F54	I A R K A Y E A G A K N V H V D W M D D E L S T R R L K Y E K A D E V F K N H E E Y	D D E E V T R R L K Y E L A P A E A F F S E E Y	S V E H F A N H E E Y	
UniRef90_Q65K57	L V K K A Y Q R G A K N V T H V R W Q D D E E V T R R L K Y E L A P A E A F F S E E Y			
UniRef90_U2EB22	A A K K A Y E A G A K N V T H V W A D D E E V T R R L K Y E L A P A E A F F S E E Y			
UniRef90_M8D2J0	I A R K A Y E A G A K D V H M E W R D D E E L T R R M K Y D L A P D E A F F S H E E Y			
UniRef90_G9QN00	I T T K A Y E A G A K H V Y V D W H D D D A I R R R M K Y E L A P D E A F F S D D Q E E Y			
UniRef90_M3CZV6	L T Q Q A Y E T G A K Q V V Y D W S D D A I R R R M K Y E L A P D E D S F S F S Q E E Y			
UniRef90_UPI0003608550	I A R K A Y E A G A Y L V K V N W T D D E L T R R I R Y D L A P D E D S F S F S Q E E Y			
UniRef90_NOAQ61	I V K K A Y E N G A F N V V N W N D D D V V T R R L K Y D L A S A S E E S F F N D E E Y			
UniRef90_C6J4U1	I V K K A Y E A G A R F V K V N W S D D D V V T R R L K Y D L A S A S E E S F F N D E E Y			
UniRef90_H3SIY4	V A R E A Y E A G A S N V H V D W L D D E E L T R R L K Y E K A A D E M F T D R E E Y			
UniRef90_L5MN65	V A R K A Y E A G A K H V I D W T D D E L T R R M K Y E L A P D E A F F T A D R E E Y			
UniRef90_W2ED92	I A R K A Y E A G S A N V Q V D W S D D E A L T R R L K Y E H A P D E A F F T R E E Y			
UniRef90_UPI000382F2E6	I A R K G Y E A G A Y T V K V N W S D D A V N R R L R Y E F A P N E A F F L E E Y			
UniRef90_UPI0003794F98	V V K K A Y E A E A N N V V N W T D D D I V T R R L K Y E D M A P D E A F F H E E Y			
UniRef90_D3FSX8	V A K K A Y E A G A K H V Q V W D D E Q I T K T K Y E L A P D E A F F N H E E Y			
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UniRef90_UPI000417A37C	I V K E C A Y E A G A K N V H V I E W H D D E S A R I R Y D L A P M E A F F K H E E Y			
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UniRef90_C3AXE9	V T E K A Y K S G A K H V V D W D D E L T R R L K Y D L A P E E A F F S E F F Y			
UniRef90_B1HUP2	I T K L A Y K N G A K Q V F V D L S D D E L V R A R Y E G A P K D S F D F F Y			
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UniRef90_S0JHE7	I T K K A Y E L G A D E V V V Q W S D D T I Q K E F L T H A A N D R I E T V E Y			
UniRef90_P24828	I A K T A Y E T G A K H V Y F E W N D D E A L T Y I K F H H A P E E A F F S E Y			
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UniRef90_S6ESF7	I A K E A Y T L G A K D V V V H Y N D Q K L Q R I K L E N S S E T L S F V			
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UniRef90_D7UU54	I T A F A F E A G A K D V I N W S D D S E V T A L R Y N N A P L A V F E T P			
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UniRef90_UPI00037D95E6	I T E H A Y K A G A S L V T T L F S D D E A T L M R F R H H A R D G S F V A S G			
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UniRef90_J7Y52	V A E K A Y Q E G A R D V V I Q W R D D E L F S K I R Y L H A P E E L F E E F			
UniRef90_E3GP91	L A E E A Y K A G A R D V S I N Y S D E K F S K I R Y T H A D L D V F K E V			
UniRef90_D0GKG7	V T E A S Y K A G A S D V H V K L T D D R L T R M H A E Y Q P T E V Y S H V			
UniRef90_L0F8S9	I A K L A Y Q E G A R D V A I F W Q D D E L M S K I R F L H A P D D I I E D D F			
UniRef90_K0J7Z3	V V R K A Y E L G A K D V L I N W Q D D E I S L I K Y Q N E S E E V L T D V			
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UniRef90_R9LEK7	L V A K A Y D A G A K Y V H V D W E D E Q I T R I R Y E H A T D E S L S Y Y			
UniRef90_UPI000375A3FE	L A T T A Y N A G A K E V I V S W N D D E K L E K I R F T M A P E E V F D A F			
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UniRef90_UPI0003FCF5C3	L A E E A F K A S A K D V Y I N Y S D D E L F T R I R F E N A S E E T L S S V			
UniRef90_C3L265	I A N K A Y D A G A K N V H V K W N D D E E L S L I K Y M K A P F E T F E E F			
UniRef90_C6PMT9	I S E L A Y K E G A R E V I I N W R D D E L S S K I K Y L H G K D E F D			
UniRef90_W4BW82	L V R K G Y E A G A K Q V I V K Y G D E T V N R L R F E M A P E E S F Q E P			
UniRef90_F2GUM0	I A R H A Y K A G A G L V T P F F A D D A I T L A R Y A N A P D E S F D R A A			
UniRef90_K0YUV0	V T Q E A Y A M G A H H V T V R F S D D E A I E R M H F D N C P M D V F E N V			
UniRef90_E0IAC1	I V K R A Y E A G A K R V H V I E W S D D E Q L T K L T Y G L A P D E A F E			
UniRef90_A0A037ZCT8	L A E L A Y E E G A K D V V I N W N D D E L F N K I R F S K A P K E V F E E M			

90 100 110 120

QUERY K S Y D V E A R M D Y V K R G A A N L I S I T S E N N S D P D L L M D G G I I D D S P S Q K R I I Q A F  
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UniRef90\_U2EB22 P M W R A K G G L E E T M A K E E G A A F L I S I S I S S N S N D P D L L K K G G I I V D D D S P S Q K R I I Q A F  
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UniRef90\_C6J4U1 P K W Y A G E M L E Y V E N G A A V L H V I V S S S D P D D L L K K G G V I D D P P P P R R I I L I A N F H  
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UniRef90\_UPI0003794F98 P Q W R A K G M E E L A E N G A A F M S I V V S S S N P D D L L K K G G I V D D P P P P R R I I L I A N F H  
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UniRef90\_C3AXE9 P A W K A H A R E E L A K E E G A A F M S I Y A E N P D D L L K K G G I D D A K R R I I L I A S A F  
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130 140 150 160

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

QUERY S V E E A Y I K F 170 D E V F D I V R I 180 D G N D P V E N W R Q H I A N L S V Y A Q  
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QUERY	K	L	Q	N	K	N	Y	H	A	L	H	Y	V	S	E	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_UPI0004203F54	Y	L	N	E	K	K	Y	K	A	L	H	Y	K	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
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UniRef90_A0A015KMV3	Y	L	N	A	K	K	Y	K	K	L	H	Y	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_W7Y9F3	Q	L	N	S	H	K	K	Y	H	K	L	H	F	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G
UniRef90_X0RDE1	S	L	N	E	K	N	Y	H	A	L	H	Y	K	S	E	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_C3AXE9	Y	L	N	E	K	H	Y	K	A	L	H	Y	T	G	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_B1HUP2	Y	L	N	S	K	Q	Y	K	S	L	H	Y	T	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_UPI00047D7C4D	Y	L	N	N	K	K	Y	K	K	L	H	Y	K	A	T	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G
UniRef90_G4HGA7	V	L	N	A	K	R	Y	K	K	L	H	Y	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_UPI00046F2EC8	V	L	N	A	K	R	Y	K	K	L	H	Y	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_W8YTY2	R	L	N	A	K	R	Y	A	E	L	R	Y	T	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_Q4L719	L	M	Q	E	K	N	Y	K	S	L	H	Y	Q	S	E	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_SOJHE7	E	L	N	A	E	Q	F	D	S	L	H	Y	T	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_P24828	Y	L	N	N	K	Q	Y	K	Q	L	V	Y	E	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_F5LEE8	E	L	N	A	K	Q	Y	R	K	L	H	Y	R	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_UPI00040E5273	E	L	T	D	K	G	Y	K	K	L	H	Y	R	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_E0R9R0	I	L	N	A	K	R	Y	K	K	L	H	Y	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_UPI0002896EC0	Y	L	N	K	K	K	Y	K	K	L	H	Y	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_UPI00035C2081	Y	L	N	S	K	K	F	S	K	L	H	Y	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_U7PBM0	Y	L	Q	N	K	Q	Y	S	A	L	H	Y	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_UPI000289A764	T	L	N	S	K	H	F	H	K	L	H	Y	V	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_N4WBL5	Y	L	N	S	K	S	Y	Q	A	L	V	F	Q	S	E	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_A6TVW3	Y	L	N	R	K	K	Y	K	M	L	H	F	K	G	S	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_W4F9F3	Y	L	N	E	K	K	Y	H	K	L	H	Y	R	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E	G	G	
UniRef90_UPI0002894D53	F	L	N	E	K	K	F	K	K	L	H	Y	R	A	P	G	T	D	L	T	T	V	G	L	A	K	N	H	I	W	E	D	A	T	S	Y	V	N	G	K	E</			

QUERY	Q	A	F	I	A	N	I	P	T	E	E	V	F	T	A	P	D	R	N	G	V	D	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI0004203F54	I	E	F	M	A	N	I	P	T	E	E	V	F	T	A	P	Q	K	D	R	G	V	D	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_Q65K57	V	E	F	M	A	N	I	P	T	E	E	V	F	T	A	P	K	K	R	D	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_U2EB22	T	Y	F	V	A	N	M	P	T	E	E	V	F	T	A	M	P	K	R	D	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_M8D2J0	V	P	F	M	A	N	M	P	T	E	E	V	F	T	A	P	K	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_G9QN00	V	A	F	M	A	N	M	P	T	E	E	V	F	T	A	P	Y	K	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_M3CZV6	D	T	F	M	A	N	M	P	T	E	E	V	F	T	A	P	Y	K	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_UPI0003608550	G	R	F	V	A	N	I	P	T	E	E	V	F	T	A	P	L	A	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_NOAQ61	I	E	F	M	A	N	M	P	T	E	E	V	F	T	A	P	L	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_C6J4U1	N	T	F	L	A	N	I	P	T	E	E	V	F	T	A	P	L	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_H3SIY4	I	P	F	M	A	N	M	P	T	E	E	V	F	T	A	P	Q	K	E	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_L5MN65	A	A	F	M	A	N	M	P	T	E	E	V	F	T	A	P	L	K	K	D	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_W2ED92	I	P	F	M	A	N	M	P	T	E	E	V	F	T	A	P	H	K	H	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI000382F2E6	T	K	F	V	A	N	M	P	T	E	E	V	F	T	A	P	H	A	E	R	V	D	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI0003794F98	N	E	F	M	A	N	M	P	T	E	E	V	F	T	A	P	L	K	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_D3FSX8	V	D	F	V	A	N	M	P	T	E	E	V	F	T	A	P	A	K	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_UPI0004796982	T	Y	F	I	A	N	M	P	T	E	E	V	F	T	A	P	Q	K	K	D	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_UPI000417A37C	T	H	F	I	A	N	M	P	T	E	E	V	F	T	A	P	K	K	K	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_H0DKD8	Q	E	F	V	A	N	I	P	T	E	E	V	F	T	A	P	H	R	M	K	V	D	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI00047203E3	V	E	F	M	A	N	M	P	T	E	E	V	F	T	A	P	K	K	D	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_A0A015KMV3	I	A	F	V	A	N	M	P	T	E	E	V	F	T	A	P	L	A	Q	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_W7Y9F3	T	M	F	V	A	N	I	P	T	E	E	V	F	T	A	P	H	K	A	D	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_X0RDE1	V	P	F	V	A	N	M	P	T	E	E	V	F	T	A	A	K	K	N	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_C3AXE9	V	P	F	M	A	N	I	P	T	E	E	V	F	T	A	M	L	K	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_B1HUP2	Q	T	F	M	A	N	I	P	T	E	E	V	F	T	A	P	L	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI00047D7C4D	N	F	F	M	A	N	M	P	T	E	E	V	F	T	A	P	L	R	N	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_G4HGA7	H	S	F	V	A	N	M	P	T	E	E	V	F	T	A	P	L	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI00046F2EC8	H	A	F	V	A	N	M	P	T	E	E	V	F	T	A	P	L	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_W8YTY2	V	M	F	N	P	N	M	P	T	E	E	V	F	T	A	P	H	K	D	R	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_Q4L719	Q	A	F	I	A	N	I	P	T	E	E	V	F	T	A	P	D	D	R	N	R	V	D	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_SOJHE7	E	K	F	M	A	N	M	P	T	E	E	V	F	T	A	P	D	S	R	R	V	D	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_P24828	V	R	F	N	P	N	I	P	T	E	E	V	F	T	A	M	H	K	D	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_F5LEE8	D	A	F	N	P	N	V	P	T	E	E	V	F	T	A	V	S	Q	A	K	D	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q
UniRef90_UPI00040E5273	V	H	F	V	A	N	M	P	T	E	E	V	F	T	A	P	L	Q	A	G	V	H	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_E0R9R0	H	T	F	V	A	N	M	P	T	E	E	V	F	T	A	P	L	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI0002896EC0	I	E	F	V	A	N	M	P	T	E	E	V	F	T	A	P	L	K	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_UPI00035C2081	V	P	F	L	A	N	I	P	T	E	E	V	F	T	A	P	L	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_U7PBM0	Q	E	F	I	A	N	I	P	T	E	E	V	F	T	A	P	D	R	N	R	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI000289A764	T	S	F	M	A	N	M	P	T	E	E	V	F	T	A	P	L	R	E	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_N4WBL5	N	A	F	N	P	N	M	P	T	E	E	V	F	T	A	P	L	D	K	Y	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_A6TVW3	R	Y	F	V	P	N	I	P	T	E	E	V	F	T	A	M	L	K	E	G	I	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_W4F9F3	K	E	F	M	A	N	M	P	T	E	E	V	F	T	A	P	F	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI0002894D53	T	F	F	V	A	N	M	P	T	E	E	V	F	T	A	P	L	K	T	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_C6CVF1	V	S	F	M	A	N	M	P	T	E	E	V	F	T	A	P	L	Q	K	T	E	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_UPI00040391ED	V	E	F	N	P	N	M	P	T	E	E	V	F	T	A	M	H	K	Y	E	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_L5NBH1	I	P	F	N	P	N	M	P	T	E	E	V	F	T	A	P	H	K	Y	E	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI000366A0C2	I	V	A	C	N	P	N	I	P	T	E	E	V	F	T	A	P	H	K	D	R	I	E	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_G2SMR9	T	E	F	M	A	N	M	P	T	E	E	V	F	T	A	P	L	C	R	S	I	D	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_W4DI24	V	P	F	L	A	N	I	P	T	E	E	V	F	T	A	P	L	K	S	G	I	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_B6G244	V	S	F	V	P	N	I	P	T	E	E	V	Y	G	M	P	H	K	S	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_R2XN18	N	E	F	M	A	N	M	P	T	E	E	V	F	T	A	P	D	R	N	R	V	D	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_H7CY23	V	E	F	I	A	N	M	P	T	E	E	V	F	T	A	P	S	K	F	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI00047E3EDD	T	P	F	M	A	N	M	P	T	E	E	V	F	T	A	P	L	K	N	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_S6ESF7	I	E	F	N	A	N	M	P	T	E	E	V	F	T	A	P	L	K	K	Y	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q	
UniRef90_UPI00040F6EBD	V	T	F	N	P	N	I	P	T	E	E	V	F	T	A	M	H	K	K	G	V	N	G	Y	V	T	S	T	K	L	P	S	Y	N	G	T	I	D	Q		
UniRef90_UPI00037B600A	V	Y	F	V	A	N	M	P	T	E	E	V	F	T	A	P	S	M	H	R	S	G	T	N	G	Y	V</														

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290 300 310 320

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T E M T V E E K L A S G L N D S N V H V 370 380 F M I G S S D L T Y G I F E D G S T K  
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170 180 190 200  
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A E E T A V A N K L W D A E I F A K A V R I V G T G D D D P V V A S L W K E H H D D D G L Q Q K R A A A  
P E E D V A V A K L W Q A I F S K A S R V V D T E P D P V I V A V A W E A H H A N D R L R D A K A R T R R  
S D P E E E A D L L W N Q I F F K T I C R I V Y D Q E D P P I V I Q R A W K E H H A N D R L R D A K A R E  
U N I R E F 9 0 \_ A 0 A 0 2 4 P C 1 5 U N I R E F 9 0 \_ U P I 0 0 0 3 6 0 A 9 3 3 U N I R E F 9 0 \_ H 6 L G I 6 U N I R E F 9 0 \_ U P I 0 0 0 4 1 E 0 9 B 0  
D E E E S I N K L W D L F T T T R V I T D D D N D P I V I Q A W Q N H H I Q L L N S K A K A H  
G S R E D A I A S L W E A I F K E A V R I V G Q Q E N D A V I K A W N D H H K T F L L K A Q A K C K E  
S D T E A V D R L W E E I F K T C R I V D Q Q K D P I V I K A W Q E H H D Q T L R R K N K A K A K  
M E E A A V L E K L W Q A I F Q T S R I V G E G D D P V V E E W K A H H T F L L K A A A A K  
P A E A E A L A L W D G I F K A S R V D V A E E W K A H H N A R L H H A R A A K  
U N I R E F 9 0 \_ W 7 C T Y 4 U N I R E F 9 0 \_ R 6 G 2 M 5 U N I R E F 9 0 \_ F 5 R L T 9 U N I R E F 9 0 \_ C 4 L 2 F 8 U N I R E F 9 0 \_ C 1 F 2 I 9 U N I R E F 9 0 \_ E 8 V 7 4 9 U N I R E F 9 0 \_ W 4 C A F 5 U N I R E F 9 0 \_ A 4 E E 2 2 U N I R E F 9 0 \_ G 4 R B 8 8 U N I R E F 9 0 \_ W 0 E C N 9 U N I R E F 9 0 \_ A 8 S M S 6 U N I R E F 9 0 \_ D 4 S 8 D 7 U N I R E F 9 0 \_ U P I 0 0 0 3 5 F 4 E E 7 U N I R E F 9 0 \_ I 1 B O V 5 U N I R E F 9 0 \_ M 1 Z F G 7 U N I R E F 9 0 \_ U P I 0 0 0 3 6 A D 3 7 2 U N I R E F 9 0 \_ A 0 A 0 1 7 H K J 9 U N I R E F 9 0 \_ U P I 0 0 0 4 7 0 E 0 1 B U N I R E F 9 0 \_ B 1 H U M 8 U N I R E F 9 0 \_ R 5 J F 1 4 U N I R E F 9 0 \_ G 5 K H E 8 U N I R E F 9 0 \_ C 6 D 2 M 3 U N I R E F 9 0 \_ U P I 0 0 0 3 6 F E F E C U N I R E F 9 0 \_ X 0 Q P 3 9 U N I R E F 9 0 \_ U P I 0 0 0 3 7 C 3 6 6 6 U N I R E F 9 0 \_ K 9 Z Y K 3 U N I R E F 9 0 \_ U P I 0 0 0 4 6 6 D 8 C A U N I R E F 9 0 \_ U P I 0 0 0 2 5 5 C 0 A E U N I R E F 9 0 \_ U P I 0 0 0 3 7 3 3 F D E U N I R E F 9 0 \_ I 4 X 4 4 4 U N I R E F 9 0 \_ K 9 E 8 J 8 U N I R E F 9 0 \_ W 6 N F D 7 U N I R E F 9 0 \_ C 9 K J 1 3 U N I R E F 9 0 \_ U 5 M M Z 2 U N I R E F 9 0 \_ U P I 0 0 0 3 5 C 9 F 7 7 U N I R E F 9 0 \_ U P I 0 0 0 4 7 2 E B A F U N I R E F 9 0 \_ T 0 D S Q 6 U N I R E F 9 0 \_ Q 3 8 V F 4 U N I R E F 9 0 \_ U P I 0 0 0 3 7 5 B 0 1 A U N I R E F 9 0 \_ G 9 Z U L 6 U N I R E F 9 0 \_ U P I 0 0 0 4 2 A 8 6 3 9 U N I R E F 9 0 \_ U P I 0 0 0 3 B 6 C 9 2 8 U N I R E F 9 0 \_ F 9 Y 5 R 6 U N I R E F 9 0 \_ W 3 R Q L 8 U N I R E F 9 0 \_ J 9 Y Q E 6 U N I R E F 9 0 \_ E 7 G F 4 2 U N I R E F 9 0 \_ H 2 J 7 T 7 U N I R E F 9 0 \_ U P I 0 0 0 3 7 D 1 2 8 C U N I R E F 9 0 \_ E 6 Y G 8 3 U N I R E F 9 0 \_ U P I 0 0 0 3 8 0 9 E 2 D U N I R E F 9 0 \_ R 6 A L D 4 U N I R E F 9 0 \_ H 1 X A 5 4 U N I R E F 9 0 \_ U P I 0 0 0 4 0 5 0 4 9 7 U N I R E F 9 0 \_ S 4 Z W N 4 U N I R E F 9 0 \_ U P I 0 0 0 3 B 6 A F 1 C U N I R E F 9 0 \_ V 7 H U N 3 U N I R E F 9 0 \_ U P I 0 0 0 2 5 5 C 4 5 0 U N I R E F 9 0 \_ R 5 T Q B 6 U N I R E F 9 0 \_ U P I 0 0 0 4 7 A 0 0 0 F U N I R E F 9 0 \_ U P I 0 0 0 3 1 2 5 4 7 6 U N I R E F 9 0 \_ C 6 J Q A 1 U N I R E F 9 0 \_ E 4 K P G 5 U N I R E F 9 0 \_ D 6 S 9 E 0 U N I R E F 9 0 \_ U 2 R U U 9 U N I R E F 9 0 \_ J 0 Q W 7 8 U N I R E F 9 0 \_ Q 2 0 Z X 4 U N I R E F 9 0 \_ K 7 Q X K 2 U N I R E F 9 0 \_ M 5 J 5 8 8 U N I R E F 9 0 \_ R 5 F K C 9 U N I R E F 9 0 \_ E 7 M N 7 0 U N I R E F 9 0 \_ G 2 1 I 1 M 3 U N I R E F 9 0 \_ U P I 0 0 0 3 4 A 1 C F 9 U N I R E F 9 0 \_ H 3 N L S 8 U N I R E F 9 0 \_ B 9 Y 7 8 2 U N I R E F 9 0 \_ G 4 K S T 8 U N I R E F 9 0 \_ B 1 M V S 3 U N I R E F 9 0 \_ E 8 W Z N 9 U N I R E F 9 0 \_ D 4 Y H I 5 U N I R E F 9 0 \_ U 4 K M S 3  
L A K A V R I V G T G D D D P V V A S L W K E H H D D D G L Q Q K R A A A  
F S K A S R V V D T E P D P V I V A V A W E A H H A N D R L R D A K A R T R R  
F F K T I C R I V Y D Q E D P P I V I Q R A W K E H H A N D R L R D A K A R E  
F K E A V R I V G Q Q E N D A V I K A W N D H H K T F L L K A Q A K C K E  
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F Q T S R I V G E G D D P V V E E W K A H H T F L L K A A A A K  
F K A S R V D V A E E W K A H H N A R L H H A R A A K  
F K T M R I V D N E N H I V E A W Y A H H E K A T L T D K A A A  
L S A V R I V D T A D D P I E A W N Q T H H N A R L A K K T T A  
T S A V R I V D T A D D P I E A W N Q T H H N A R L A K K T T A  
F A A T R M D D Q E D P V V A A W D T H H D Q S L R S R T A K D  
F A A S R I V D R E D D P V V A A W K E H H D A K I H H Q R R A D  
F K A S R I V D G D D P V V Q D W K N H G A N L H H A R A A K  
F K M N R I V D G G D D A V V Q N W R E H H L D T L N T M S D  
Y A A S R I V D Q Q D D P V V A N W A E H H T A A I K E R R N  
F A A S R I V D Q Q D D P V V A A W K E H H N A R L H H A R R R D  
L K T V R I V D Q Q S D P I L K A W E N H H K N N L K N R R M N  
F Y T T R I V G E G D S I S K G W K E H H I D N E L K S R R A K E  
L K A V R I S E E D P I S A W M N H H I D H L R K T G K N S  
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F K A T R M D L E N P V V K S W E D H H L K N L K T E E K V K  
F K S V H L Y E D D P V I A Y W E H H K V Q L L Q E N K R A K  
F A V S R T R D R P D P V V A A W A E H H S A E L H A K R A K  
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F K T V H I G E G N A V E N W H Q H V T N L E S R A E  
L D C S R V S E E N P I I G D W A L H H Q K N L H S D K R E  
F K M N R I V Y E E N P I I K A W D L H H Q E K L L S K A E  
F Q M V R A D Q P D P I I A W E A H H K Q L K S K A K  
L E A T R I V N V E D P V V K E W Q A H H R T R L S E K A T A  
F K T R I V N Q A D P V V A A W Q A H H D A K L S E K A S A  
L Y T M R A D E E N P V V E A W E K H H D A E L H E K A E  
F A A T R A D E E N P V V E L W R A H H N A S F R R R V D  
F A K A V K V D C D D P V V A W D E H H R K S S D K L D  
F A T T R A D A D A D P E A A W K K H I Q S L S S D K L D  
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F K C T R T D Q Q V N P I I E A W K K H H N K L N E K V E  
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F V A S R V A V D D P V V L E W R E H H G A R L K K R M E  
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L Y T V R I V D A E N P V V E A W I E H H D K T L H D K V D  
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F K L N R I V Y E D D P I I E A W D A H H E A K L L E K A T  
Y K V T R C D Q E N P I I E A W N E H H R R S F F E R R V Q  
L K T S R V N E D D P V E L W N K H H I E N L N K T R T E  
F A A S R V D G P D P V V A A W A H H N A N L K K T R S K  
F S A S R V T Q D N A V Y E W H A H H N A L K Q R S S  
F S A S R V N V G E D A V I E A W R E H H N K N L R E R S N  
F K A V R I T G G D A V D R W R E H H C K V L E E K R E  
F K T R V G V E N D V I D W M A H H V N K L K E K A Q  
L A C A R V T G D D P E A A W Q A H H D Q N L H K R S E  
F K T C H L N G D D P V V A V W A H H D Q K L R S K A S E  
F A A T R A D L P D P V V A A W E E H H L A H L K G R R E  
L R I S R V S G E D P I I E A W N K H H N E A M H K A S E  
F C A V R I Q D G D V V Q A W R E H H D A L L S E K C E  
F K A C R V D A E N D P V V E T W K N H H N Q S Y L K T T K  
F A A S R V D A A D P V V A A W A H H N A S L H A R T R  
F S V R A D K T D P V V K E W E N H H L N S L K K N M N  
F K S T R V Y E E D P I I K A W D H H E A K L Q E K A K  
F K A T R S D T E D P I I K A W D E H H I D T M N K H A E  
L S A C R A K G E D A V A D W E K H H L R V L D E K A K  
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F A A S R V D N D D P V V A A W T A H H N A E L H A R T A  
F Q A T R V L E E D P V V A A W R E H H N R R L H E K V A  
F T T T R I N T P D P V V A A W D Q H H Q V L H E K A A  
F K T M R L D K K D P V V K A W A T H H Q K K L E K R C  
F M T S R V T E D D P L E N W R H H D G N L V E Y A R  
F Q A S R V M V D P V V A E W E A H H N A R L H A R T A  
F K V T R A D L P D P V V A A W Q E H H V A A L H R R S A  
F K T T R V D L E D P I V K A W E E H H I E K L S I K A N  
L A S V R I D Q Q D P I P L W E K H H N R Q L S E R N D  
F A A V R I S G D G N I V E K W R H H I E T L A S Q R K E  
L K D V R I D S D A I D N W N H H L K L Q A K A D  
F Y A S R A T S E D P V V A A W K A H H S A N I H Q R V A  
F K A S R V Y E E D P V V A A W N K H H R D L D E K A Q  
L N A C R V Y E E D P I E N W N L H N A V L L K H N K

		210	220	230	240																																							
UniRef90_U2N6D3	F	L	N	D	N	N	F	K	E	L	H	Y	T	S	K	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G					
UniRef90_UPI00047B526C	Y	L	N	N	K	R	F	K	K	L	L	Y	F	K	N	H	S	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G				
UniRef90_Q1ILN7	Y	M	N	N	E	K	R	F	A	A	L	L	Q	Y	T	N	G	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_E7MZE4	F	L	N	N	E	K	R	F	A	A	L	L	Q	Y	T	N	G	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_I4YVD8	L	L	N	N	G	K	N	Y	A	A	L	L	H	F	T	R	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_Q9X4A7	L	L	N	N	E	K	R	F	A	A	L	L	H	F	T	R	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_A0A024PC15	Y	L	N	N	Q	K	Q	F	S	K	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_UPI000360A933	H	L	N	N	G	R	K	Y	K	K	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_H6LGJ6	I	L	N	N	T	A	H	F	D	A	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
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UniRef90_N1ZU97	W	L	N	N	D	E	Q	F	V	A	L	L	H	Y	T	S	S	K	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_I0GSW6	F	L	N	N	E	Q	K	F	T	K	L	L	H	Y	T	S	S	M	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_Q5FQA8	Y	M	N	N	D	S	R	F	E	A	L	L	H	Y	T	S	S	G	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G	
UniRef90_W7CTY4	V	L	N	N	D	L	H	L	K	T	L	L	H	Y	T	A	S	N	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_R6G2M5	F	M	N	N	K	N	A	F	K	S	L	L	H	Y	T	A	S	N	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_F5RLT9	F	L	N	N	A	H	A	F	S	E	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_C4L2F8	L	L	N	N	E	K	K	Y	A	K	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_C1F2I9	Y	L	N	N	K	K	R	Y	H	A	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_E8V749	L	L	N	N	K	K	R	Y	H	A	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_W4CAF5	L	L	N	N	K	K	N	Y	K	S	L	L	H	Y	T	R	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_A4EE22	W	L	N	N	G	Q	N	F	A	A	L	L	H	Y	T	A	G	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_G4RB88	W	L	N	N	E	M	K	F	R	D	L	L	H	Y	T	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_W0ECN9	Y	L	N	N	A	Q	D	I	K	S	L	L	H	Y	T	Q	S	K	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_A8SMS6	Y	L	N	N	E	K	D	F	K	Y	L	L	K	Y	T	S	S	K	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_D4S8D7	F	L	N	N	A	H	D	F	A	E	L	L	H	Y	T	N	C	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_UPI00035F4EE7	L	L	N	N	G	K	K	Y	K	S	L	L	H	Y	T	R	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_I1BOV5	W	L	N	N	D	Q	R	F	T	A	L	L	H	Y	T	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_M1ZFG7	F	L	N	N	E	K	R	F	T	K	L	L	H	Y	T	S	S	N	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_UPI00036AD372	Q	L	N	N	D	E	K	F	T	A	L	L	H	Y	T	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
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UniRef90_B1HUM8	L	L	N	N	K	K	Y	A	K	L	L	H	Y	T	A	S	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_R5JF14	F	L	N	N	E	M	N	F	K	D	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
UniRef90_G5KHE8	Q	L	N	N	K	Y	F	D	A	L	L	H	Y	T	K	A	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
UniRef90_C6D2M3	Y	L	N	N	D	K	A	Y	K	Y	L	L	H	Y	T	A	E	P	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G		
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UniRef90_W6NFD7	F	L	N	N	N	N	F	R	Y	L	L	L	K	Y	K	N	Q	G	T	D	L	S	V	Q	L	P	E	R	H	V	W	V	G	G	G	E	T	C	A	D	G			
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L Y C L P N M P T E E E V F T T L P L K T G V N G G T V F S S T K P L N Y G G G N L I D E N  
V L F A A N M P T E E E V F Y T T L P Q K R D G R A N D D G G T V T A S T K P L H F M G M G N L V I Y D D  
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E S F L P N M P T E E E V F T T A P D F F T R A Y Q G V V S T S T K P L N Y A N G N L I I E G N  
M E F N P N M P T E E E V F T T M P H K R T G V N G G T V F S S T T K P L N Y A N G N L I I E N  
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I E F M A N M P T E E E V F T A A D K D H I D D G T V S S T S T K P L N Y A N G N L I L I D E D  
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T R F T A N I P T E E E V F S A A E K T A V N D N G G F V V S S T S T K P L S Y G G T N L I I D D D  
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T V F A A N L P T E E E V Y T T L P K R D G V N G G T V V V A S S T S T K P L H Y A N G N L I I S D E  
I D F I A N M P T E E E V F T L L A D K D S V N E N G H V V S S T S T K P L S Y S G N L I I I D E K  
Q Y C L P N L P T E E E V F T T T P H K D R V N G G T V S S T S T K P L S H H Q G T N L I I I E K  
I F S N A N I P T E E E V F T T P H K D R V N G G T V S S T S T K P L S H H Q G T N L I I I E N  
V Y T V A N M P T E E E V F T T M P K R S G V N D N G G T V S S T S T M P L N L N G G Q L L V I D D  
V T C Q P N I P T E E E V F T T C P H A Y R K V N D N G G T V A A S T K P L A H H Q G S L I I D D D  
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L S F T A N M P T E E E V F T T L P K K D G V N G G T V Y A S K A L H Y N G T N L I I H D D  
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E T F I A N M P T E E E V F S A P D Y R R A D G Y V V S S T K P L S Y A G V I V I D E N  
T W F V P N L P T E E E V Y S A P L R T G V N D N G G T V S S T K P L S Y A N G N I V I D N  
U P I 0 0 0 3 6 F E E F C T A F V P N M P T E E E V F T A A E K R G V N D N G G Y I S N A T K P L S Y A Q G T I D D  
X 0 Q P 3 9 E T F M A N M P T E E E V F T A A D Y R R I D D G Y I A A T K P L S Y A A G T T I D  
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U P I 0 0 0 4 7 A 0 0 0 F V V I C N P N M P T E E E A F T T M P Y A K A G T Q G G K V V A T K P L N N Y Q G T L I I R D D  
U P I 0 0 0 3 1 2 5 4 7 6 I T C N P N I P S E E E V F T T P H A A R V E D G H V R S T K P L S Y Y G G T L I I R D  
C 6 J Q A 1 V Y F V A N M P T E E E I F T L P K K D E A V N G G T V Y S S K P L F S Y S G N L I I E N  
E 4 K P G 5 Q L F I A N M P T E E E V F T A P D S F R A Q G G Y V V S A S K P L N S Y G G V T I D G  
D 6 S 9 E 0 N D F V P N I P T E E E V F T A P H R D R K V N G G V V Y S T K P L N Y Y G G N T I D K  
U 2 R U U 9 R F V A N I P T E E E V F T M P H H K E E T S G G L V Y N A K P L N H G G V L I I D D D  
J 0 Q W 7 8 I T C N P N I P T E E E V F T T P H H A K K V E G R F V S S T K P L S Y H Q G T L I I D D D  
Q 2 0 Z X 4 V T C N A N I P T E E E V F T T P H H A H R V E G R V V S S T K P L S Y Y Q G S L I I D D  
K 7 Q X K 2 V V C N P N L P T E E E V F T A P H H A R R V E G G V V R A S R P L A L G G G E L L V E R D  
M 5 J 5 8 8 T R F F A N M P T E E E V F T A P D F M D G V N G R L V S A T L P L N C E N G G E I V L R D  
R 5 F K C 9 C L F S A N M P T E E E V F S A P A M D G V N G R L V S A T L P L N C E N G G E I V L R D  
E 7 M N 7 0 V Y F D P N I P T E E E V F T T M P K K T G V N G G T V Y A S K P L S Y S G K V I I D G G  
G 2 1 I 1 M 3 I V C N P N I P T E E E V F T T P H A R K V S G T V R A T K P L F H Y Q G T L I I D D D  
U P I 0 0 0 3 4 A 1 C F 9 V V G V P N L P T D E E V F T M P H R A R D R V E G W A V A S K P L S V R Q G Q L V V E G  
H 3 N L S 8 E E F V P N M P T E E E V F T L P H K D G V N G G T V Y A S K P L I Y K G N L I I D E N  
B 9 Y 7 8 2 V V F N P N M P T E E E N F T M P K R T G V N G G K V Q A T K P L S Y N Q G N L I I Q N  
G 4 K S T 8 Q T Y I A N I P T E E E V F T S P L K T G V N G G V V Y A S M P L S Y N D G N L I I D N  
B 1 M V S 3 I F I P N M P T E E E V F T A P D N R H I D D G H V A A T M P L S Y Q G N L I I D N  
E 8 W Z N 9 V F C N A N I P T E E E V F T T P H K D R I D D G V V H A S K P L S Y A G S T I E G  
D 4 Y H I 5 S P F I A N M P T E E E V F T A P D T N V M D G G Y V T S T K P L S Y A G S T I E G  
U 4 K M S 3 V Y F N P N I P T E E E T F T M P H K F K T E G K V V A T K P L N Y Q G T L I E D

		290	300	310	320																																									
UniRef90_U2N6D3	F	S	L	T	F	K	D	G	K	V	V	D	F	S	A	E	E	K	G	Y	D	T	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L				
UniRef90_UPI00047B526C	F	T	M	T	F	K	E	G	G	R	V	D	F	T	A	E	E	K	G	Y	D	T	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L				
UniRef90_Q1ILN7	I	R	L	R	F	F	R	E	D	G	R	V	E	D	A	R	T	S	R	G	A	E	V	L	K	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_E7MZE4	I	R	L	R	F	F	R	E	D	G	R	V	E	D	A	R	T	S	R	G	A	E	V	L	K	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_I4YVD8	I	R	L	R	F	F	R	E	D	G	R	V	E	D	A	R	T	S	R	G	A	E	V	L	K	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_Q9X4A7	I	R	L	R	F	F	R	E	D	G	R	V	E	D	A	R	T	S	R	G	A	E	V	L	K	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_A0A024PC15	I	R	L	R	F	F	R	E	D	G	R	V	E	D	A	R	T	S	R	G	A	E	V	L	K	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_UPI000360A933	F	S	L	T	T	F	H	G	G	K	V	I	D	C	S	A	E	E	T	G	Y	E	T	L	L	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_H6LGJ6	F	S	L	T	T	F	H	D	G	K	V	I	D	A	F	E	A	E	K	G	A	E	T	L	L	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_UPI00041E09B0	F	S	L	T	T	F	H	D	G	K	V	I	D	A	F	E	A	E	K	G	A	E	T	L	L	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_N1ZU97	I	K	F	T	F	K	A	G	H	V	T	K	I	E	A	R	E	K	S	G	G	E	D	I	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_I0GSW6	F	K	L	T	F	K	N	D	G	K	V	I	D	Y	G	A	S	H	E	E	G	G	E	D	V	L	K	K	R	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L
UniRef90_Q5FQA8	I	S	V	R	F	F	K	N	D	G	K	V	I	E	A	S	H	E	E	G	G	E	D	V	L	K	K	R	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L	
UniRef90_W7CTY4	F	K	L	T	F	K	N	D	G	K	V	I	D	Y	G	A	S	H	E	E	G	G	E	D	V	L	K	K	R	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L
UniRef90_R6G2M5	F	S	L	T	T	F	H	D	G	K	V	I	D	F	D	A	K	Q	G	G	E	V	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L				
UniRef90_F5RLT9	F	T	L	R	F	H	E	G	G	K	V	I	D	F	Y	K	Q	Q	G	G	E	V	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L				
UniRef90_C4L2F8	F	T	L	R	F	H	E	G	G	K	V	I	D	F	Y	K	Q	Q	G	G	E	V	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L				
UniRef90_C1F2I9	I	S	V	R	F	F	K	N	D	G	K	V	I	E	A	S	H	E	E	G	G	E	D	V	L	K	K	R	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L	
UniRef90_E8V749	I	Q	C	I	T	F	K	N	D	G	K	V	I	E	A	S	H	E	E	G	G	E	D	V	L	K	K	R	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L	
UniRef90_W4CAF5	M	R	I	T	F	K	D	G	Q	V	V	A	F	T	A	S	K	G	E	E	H	L	K	N	L	L	F	A	T	D	D	G	S	H	Y	L	G	E	V	A	L					
UniRef90_A4EE22	I	A	V	R	F	F	K	N	D	G	K	V	I	E	A	S	H	E	E	G	G	E	D	V	L	K	K	R	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L	
UniRef90_G4RB88	I	E	M	V	F	K	D	G	V	A	V	E	A	T	R	A	S	K	G	E	N	V	W	N	K	N	L	L	F	A	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_W0ECN9	F	S	F	T	F	K	E	G	R	I	V	D	F	S	A	E	K	G	Y	E	A	L	L	K	N	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L				
UniRef90_A8SMS6	F	K	L	E	F	K	N	D	G	K	V	I	D	S	Y	T	A	K	K	G	Y	G	V	L	K	K	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_D4S8D7	F	T	L	T	F	K	D	G	K	V	V	E	Y	D	A	A	A	G	G	E	Y	L	L	T	D	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_UPI00035F4EE7	I	T	L	T	F	K	D	G	K	V	V	E	Y	D	A	A	A	G	G	E	Y	L	L	T	D	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_I1BOV5	I	E	V	T	F	K	N	D	G	K	V	I	D	F	A	R	A	E	K	G	D	I	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L				
UniRef90_M1ZFG7	F	K	L	T	F	K	N	D	G	K	V	I	D	F	A	R	A	E	K	G	Y	E	V	L	K	K	R	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_UPI00036AD372	M	E	F	H	F	K	D	G	K	V	V	E	C	S	A	E	K	G	E	E	T	L	L	K	R	D	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_A0A017HKJ9	I	R	V	R	L	K	G	G	R	I	V	E	A	F	A	E	K	G	E	E	T	L	L	K	R	S	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_UPI000470E01B	I	R	V	T	F	K	E	G	R	I	V	E	A	H	A	S	K	G	E	E	A	L	L	K	R	S	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_B1HUM8	F	K	L	T	F	K	E	G	K	I	I	K	A	E	A	E	V	L	L	L	L	L	L	K	K	R	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_R5JF14	F	W	L	R	F	F	E	G	K	I	I	K	A	E	A	E	V	L	L	L	L	L	L	K	K	R	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_G5KHE8	M	T	F	T	F	K	D	G	Q	I	V	D	V	K	A	E	K	Q	E	T	L	L	L	K	N	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_C6D2M3	F	S	F	T	F	K	N	D	G	K	V	V	D	F	K	A	E	Q	G	E	A	L	L	K	N	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_UPI00036FEEFC	F	K	L	H	F	K	D	G	Q	V	V	D	F	E	G	A	E	A	T	G	Q	A	L	L	K	N	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_X0QP39	M	H	F	T	F	K	D	G	K	V	V	A	A	A	G	A	E	A	T	G	Q	A	L	L	K	N	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_UPI00037C3666	F	K	L	T	F	E	D	G	K	V	V	D	Y	D	A	D	I	G	L	E	F	L	L	K	N	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_K9ZYK3	I	R	I	R	F	E	D	G	R	V	I	E	A	T	A	E	S	G	Q	D	V	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L					
UniRef90_UPI000466D8CA	F	K	L	V	F	K	D	G	R	I	V	D	F	A	A	K	Q	G	E	A	T	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L					
UniRef90_UPI000255C0AE	F	S	L	T	F	K	E	G	R	I	V	D	Y	S	A	E	S	Q	G	L	D	T	L	K	K	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_UPI0003733FDE	L	S	L	T	T	F	K	E	G	R	V	D	Y	D	A	E	S	Q	G	R	E	L	L	K	K	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_I4X444	F	T	L	T	F	K	E	G	K	V	I	D	A	K	A	E	T	G	Q	E	L	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L					
UniRef90_K9E8J8	M	E	F	H	F	E	N	G	H	V	T	K	V	T	A	E	R	G	Q	E	V	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L					
UniRef90_W6NFD7	F	S	I	T	F	R	K	G	K	V	V	D	F	T	A	D	K	G	Y	E	T	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L					
UniRef90_C9KJ13	F	W	L	R	F	F	E	G	R	V	I	D	F	A	A	K	Q	G	E	A	T	L	L	K	H	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L					
UniRef90_U5MMZ2	F	S	L	T	F	K	D	G	K	V	I	D	Y	T	A	E	T	G	L	D	I	L	L	K	K	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_UPI00035C9F77	I	R	V	R	F	E	E	G	R	I	V	E	A	T	A	R	T	G	S	D	V	L	L	K	K	R	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_UPI000472EBAF	I	R	V	R	F	E	E	G	K	I	V	E	M	H	A	S	K	G	E	D	V	L	L	K	K	R	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_T0DSQ6	F	T	L	T	F	K	D	G	K	I	V	D	Y	D	V	K	V	G	Y	D	S	L	L	K	K	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L			
UniRef90_Q38VF4	M	Q	F	T	F	K	N	D	G	K	V	I	K	A	T	A	E	E	G	N	D	V	L	L	K	K	L	L	L	I	E	T	D	D	G	S	H	Y	L	G	E	V	A	L		
UniRef90_UPI000375B01A	I	A	V	R	F	F	H	G	R	I	V	E	A	T	A	T	A	G	E	D	V	L	L	K	H	L	I																			



UniRef90\_U2N6D3 D K I T N E E A V 370 K R G A N D S L T H 380 D F M I G T D D L N V V G G Y T Y T N E K  
UniRef90\_UPI00047B526C G R L S K V E L E E R Q R G A N T S S L V H V V D F M I G G N D M N I V D G G E T T L D D G K L  
UniRef90\_Q1ILN7 D K A S A E E E L L R R A R A G V N D S S L I V H H E D F W M I G G T N N K L L S D I D D G G R T A R D G G T A  
UniRef90\_E7MZE4 E D M T S E E E E L L A A A A G S N K S S L I V H H E D F W M I G G S T E R R L L S V V D G G V L Q D D G R A R  
UniRef90\_I4YVD8 G T M S E E E E L L A A A A G L N D S S L I V H H E D F W M I G G S E R R Q L M N I D D G G V L Q D D G R A R  
UniRef90\_Q9X4A7 A D M T N Q E E E L L K D A H G V N D S S L I V H H E D F W M I G G S N A Q L M N I D D G G V L Q D D G R A R  
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UniRef90\_UPI000360A933 I H M S K E E E T Q K N G L N D S S L T H V V D F M I G G S A T L D I D D G G E T T S K D G G K L  
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UniRef90\_UPI00041E09B0 S A M N D D E E L L D A A A G V N D S S L T H V V D F M I G G S A T L D I D D G G E T T S K D G G K L  
UniRef90\_N1ZU97 T T M D D E A L L A A A A G L N D S S Q I H H V D F M M G G S A D M N I D D G G V L R A D D G T K E  
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UniRef90\_Q5FQA8 E G L T P E E L L L E R G V N D S S L I V H H E D F M I G G S T R D K L E I T G T T A D N G G R N R  
UniRef90\_W7CTY4 K E M T P E E Q L L E A E G I N Q G S P V H H V D F M I G G S G E M D I D D G G K A N D G T V  
UniRef90\_R6G2M5 E N L S E E E Q L L K E Q G V N D S S L I V H H E D F M I G G T A D L L E V T G G Y T A N D G G T E S  
UniRef90\_F5RLT9 E D M T E E D E L L R Q H G V N H S L V H H E D F M I G G T A D L L E V T G G Y T A N D G G T E S  
UniRef90\_C4L2F8 P S M S Q E E E L L A A N G A N D S S M T H V V D F M I G G S A E M N I V D D G G E V N A D D G T R  
UniRef90\_C1F219 E N M K P A E L L A S K G A N S S L T H H V D W M I G G S G G T V S V D D G G L D A D D G K A  
UniRef90\_E8V749 T T M S N E E L L K H E C V S L T H V V D F M L G G S A E L D I D D G G E L Q D D G T I  
UniRef90\_W4CAF5 S E L S P E E L L K Q K G G N Q S I T H H V D W M M G G S A D A V L D I D D G G T T K T G D R  
UniRef90\_A4EE22 D K L T E D E V L T E K G G N S S L I H H V D W M T G G S G E M D I D D G I T T Q D G D R  
UniRef90\_G4RB88 A T L N A K E L L E K A G V N D S S L L H H E D F M I G G T A D L L E I T G G V T T E T G G Q E  
UniRef90\_W0ECN9 E K M T E E E L L K E R H G V N H S L V H H E D F M I G G T A D L L E I T G G V T T E T G G Q E  
UniRef90\_A8SMS6 E N M T E D E L L C R H G V N H S L V H H E D F M I G G T A D L L E I T G G R M R S V I G R M R S  
UniRef90\_D4S8D7 T Q L S K E E E L V Q R G A N V S L T H V V D F M V G G S A E L D I D D G G E L P D D G T I  
UniRef90\_UPI00035F4EE7 A S L S P D D E L T A K G G N S S L T H H V D W M I G G S P D T D I D D G I T A A D G G T A  
UniRef90\_I1BOV5 E K M T D E E L L E K A G V N D S S L T H H V D F M V G G S K D L S I T G K A T K A D G G T A K  
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Y E G K I D R Y A R L V L R K G I N L K K G Q N L F I K T G P G T Y Y F A R S  
E T L Q K Y A E L A L K V G L D F Q K D Q Q L Q I G T G V G T Y E Y A R A  
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L Q R L A D L V I G F G A N V Q R G Q L V A V I S S E I G K E P L T R A  
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U N I R E F 9 0 \_ U P I 0 0 0 2 5 5 C 5 C 2 F L N K K K Y K Q L H Y K A P E G T D L K I A F D P D Y H W D G G G A A V N N S A G G  
U N I R E F 9 0 \_ W 4 P X L 0 A L N D K H Y H A L L H Y T A S E P T D L T V I E L L P K N H H L W V A G G S Y V N N K D G G  
U N I R E F 9 0 \_ U P I 0 0 0 2 F 8 4 C 3 9 K L N E I Q F D A L L H Y T A P G T D L T V I E L L P K N H H L W A C A E S Y V N N P K G G  
U N I R E F 9 0 \_ U P I 0 0 0 4 7 1 3 A 7 7 W L N D E Q F D A L R Y E A S P G T D F T V G L P Q N H V W E A A G S T S R Q Q G G  
U N I R E F 9 0 \_ R 7 F X V 6 T L N D A K Y I T A F H F R G S P G T D V T V G M P A D G H I F C G G G A E K R G E L D D G G  
U N I R E F 9 0 \_ D 3 P T 0 7 Q L N A K R Y A A L H H F R G S P G T D L T V V G L P A D G H I F C G G G A E K R G E L D D G G  
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U N I R E F 9 0 \_ U P I 0 0 0 4 6 E D 7 6 A V L N D K R Y K K L L M Y K A P G T D L T V I E L L P A K H H L W M T S A Q S K T P L N K G  
U N I R E F 9 0 \_ I 8 U H U 5 F L N E K R I K T L L H Y R S T G T D L T V I E L L H P D H H L W M G G G H Q S T A G G  
U N I R E F 9 0 \_ U P I 0 0 0 2 F E B D 3 C A L N D K R Y K K L L M Y K A P G T D L T V I E L L P A K H H L W M T S A Q S K T P L N K G  
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U N I R E F 9 0 \_ U P I 0 0 0 3 B 3 0 0 9 B W L N Q Q Q Q F D S M R Y K S N S G T D F T V G L P P G A R W E G A G A V N H L N G G  
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U N I R E F 9 0 \_ R 5 V 3 H 6 T L N Q L H L H H L L H Y Y K S A K T N L T T V E I M P N T L F V G G G E N T I D G G  
U N I R E F 9 0 \_ B 7 F L 3 F L N E K Q F D Y L K Y E G P G T D L T V V G L P P E N H H I W L S A T Q E E N M S D G G  
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 D E R L I P E Q T D Y T L R I M S D A N T K A L T S V N P E R Q M Q I A  
 N E R D L M E K M D A Y I G I R S P N P F E L S D V P D E K M L Y  
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 I E K E I V E K A S A S I S I T S P S H T K P L A N V D P E K I K K R  
 Y S A P F T K Y L M E N V D A S L K I L H N T K N L A G V D P E K I K K R  
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 K Y E A R M E D M D A Y I G V R S M N I S E T S D V P S E K M D L Y  
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UniRef90\_E6U175 G V N P Y I S H P M Q D I L F D E K G S F H F T P G Q A Y D N A Y N G  
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UniRef90\_K4KRZ7 G F N P Y I I T P M K D T L F D E K G S F H F T P G S A Y D E C D N G  
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UniRef90\_D3F5D9 V D G D G R V G A L E T V F L E I L L D E N A A S H V A L G A A Y S  
UniRef90\_B1YKE5 G V N P F I Q H P M K D I L F D E K G S F H F T P G Q A Y A E A Y N G  
UniRef90\_R5ADB7 G V N P Y I V T W P M K D T L F D E K G S F H F T P G S C Y D E C D N G  
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UniRef90\_UPI00035DD925 G F N P Y I L H P M K D I L F D E K G S L H F T P G Q A Y E E A F N G  
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UniRef90\_UPI00035C8899 G F N P H I L H P M N D I L F D E K G S F H F T P G Q A Y E E T D N G  
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	370	380	390	400
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UniRef90_B1YKE5	N D S S L H H W D L V I Q R R P D Y G G G E I W F D D			
UniRef90_R5ADB7	N K S S Q H H W D L V I Q R T P E Y G G G E I Y F D D			
UniRef90_C6PN71	N K S S I H H W D L V I Q R P E Y G G G E I Y F D N			
UniRef90_D5U0A9	E T G G K N V S S I H H W D L I Q R K D M S K G K V Y A D G			
UniRef90_M5E0M7	E T G G K N I S T I H H W D M L C D M K N G G E I Y A D D			
UniRef90_A9B5V9	E T G G L N Q S A I H H W D M V I C D L R Q N S E V Y V D G Q			
UniRef90_H2JB90	N K S S I H H W D L V I Q R R P E Y G G G E I W F D D			
UniRef90_G8LZG9	N K S A I H H W D L V I Q R R P E Y G G G E I W F D D			
UniRef90_M1ZM39	N R S A I H H W D M M I Q R R P D Y G G G E V W F D D			
UniRef90_UPI000376AD20	P A D D P A A L K A L G I N Q S S I H L D F M V G G P E V E V D G I E A D G T A			
UniRef90_B8CVX7	E T G G K N V S S I H H W D M L C D M K K N G I Y A D G			
UniRef90_I8UCX9	N R S S V H H W D M V I Q R P E Y G G G E L Y F D D			
UniRef90_T0ISJ2	N K S V I H H W D L V I Q T A E Y G G G E I W F D D			
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UniRef90_M8DDE7	N K S S V H H W D M V I Q R P D W G G G E I W F D E			
UniRef90_W0E6Y7	N K S A I H H W D L V I Q R R P E Y G G G E I Y F D			
UniRef90_D6THP5	E T G G L N K S A L H H W D M I C Q Q G E V W V D D D			
UniRef90_X1LHY0	N D S A I H H W D L V I Q T P E Y G G G E I Y F D D			
UniRef90_U7VB73	N K S A I H H W D L V I Q R R P D F G G G E I W F D			
UniRef90_R6R9X8	E N E A P N G N H S A I H H W D L V I Q R R P E Y G G G E M Y F D D			
UniRef90_UPI00035DD925	N K S S I H H W D L V I Q R R P E Y G G G E I Y F D D			
UniRef90_H3SPP0	N R S S I H H W D L V I Q R R P E Y G G G E M Y F D D			
UniRef90_UPI00037F91E6	A N P D P A A L D S S G G N R S S L H V D W M V G S G E V D V D G V Y A D G Q V			
UniRef90_J6WDY1	T E M S D E E L A E A G L N R S S Q T H V D F M V G S D K M D I D G I R E D G S T			
UniRef90_F5SF81	N K S A I H H W D I V I Q R S D K M D I D G I Y F D G			
UniRef90_D9S2H6	N K S A I H H W D L V I Q R R P E Y G G G E I W F D D			
UniRef90_I3VYC7	E A G G K N R S A I H H W D M L C D M R Q G G E I Y A D G			
UniRef90_V71T3	D A D N T N R S A V H H W D L V I Q R R P E Y G G G E I W F D D			
UniRef90_UPI00035C8899	N R S S I H H W D L V I Q R R P E Y G G G E I Y F D D			
UniRef90_UPI000288D9FA	N R S S I H H W D L V I Q R R P E Y G G G E I Y F D D			
UniRef90_J3A5S5	E A S N G N K S N I H H W D M M I Q R R P E Y G G G E I W F D D			
UniRef90_G2FQJ2	N K S A I H H W D L V I Q R R P E Y G G G E I Y F D K			
UniRef90_N1ZE93	N K S A I H H W D L V I M T P E Y G G G E I Y F D D			
UniRef90_A3DLJ5	E T G G K N V S A I H H W D M I Q R K D M R K H R I Y A D G D			
UniRef90_M1MBN6	N H S A I H H W D L V I Q R A D Y G G G E I Y F D D			
UniRef90_U2FJL3	E G E A D N G N I S S I H H W D L V I Q R R P E Y G G G E I Y F D D			
UniRef90_UPI00035DB5AA	N K S A V H H W D M V I Q R P E W G G G E V W F D G K			
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UniRef90_R6Q501	N K S A I H H W D L V I M T P E Y G G G E I W F D D			
UniRef90_K2E0M6	G G K N Q S G L H H W D I I K N M K N G G K I Y A D D			
UniRef90_K2DEB8	S K P T K E Q W D E W G F N D S V I H T D I I S T E N R V V T A Y L K D K S E			
UniRef90_W8YVS2	N R S A V H H W D L V I Q R R P E Y G G G E V Y F D D			
UniRef90_A0A037ZAN0	E A G G K N R S T I H H W D M L C D M R H G G I Y A D G			
UniRef90_M3J6K4	N K S N I H H W D L V I Q R P E Y G G G E I Y F D D			
UniRef90_E4RL45	E T G G E N I S T I H H W D M L C D T K N G G E I Y A D D			
UniRef90_D3PDD6	E A G G K N S S G L H H W D I K R M N N G G E V Y V D G			
UniRef90_M8DZB3	N R S Q V H H W D M V I Q R P E Y G G G E I W F D D			
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UniRef90_I7LID1	E A G G Q N V S S I H H W D M L C D M K E E G K L F A D G			
UniRef90_D2MP75	I K F T K E E F E K A H L N Y S T S H V D V I F G D L S I T I T A H T K N G E V			
UniRef90_A6TM79	N R S S V H H W D L V I Q R R P E F G G G E M Y F D S			
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UniRef90_G0EGY2	E T G S R N K S A I H H W D L I K D M R D P E A R V Y A D G			
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UniRef90_S9SFW7	N E S A I H H W D M M I Q R A E Y G G G E I W F D D			
UniRef90_U4VT23	N R S S I H H W D L V I Q R R P E Y G G G E I W F D D			
UniRef90_UPI0003FFE093	E A G G K N K S S I H H W D M L C D M R N C G I Y A D G			
UniRef90_R6P3T0	E A G G K N V S G L H H W D L I K N M K N G S E I Y A D D			
UniRef90_J2ZG81	N E S A E H V D M I V D M S E S S V I E V D G D			
UniRef90_K6C0K5	N R S S I H H W D M V I Q R P E Y G G G E I Y F D D			

UniRef90_G9YGB5	V	P	V	F	L	N	G	S	W	A	D	
UniRef90_T3ERV9	I	Q	I	F	K	N	G	N	W	A	F	
UniRef90_Q9API7	L	P	V	M	R	R	G	E	W	A	D	
UniRef90_R6Y256	V	E	I	F	R	D	G	D	F	A	L	
UniRef90_D3FX82	V	L	I	R	K	D	G	R	F	V	I	
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UniRef90_G8S5Y6	E		I	I	R	D	D	E	W	V	L	
UniRef90_Q9K7W2	Q	L	I	R	K	D	G	R	F	V	I	D
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UniRef90_L1LRE1	I	E	I	F	Q	N	G	D	W	A	F	
UniRef90_F5ZJ61	I	P	I	F	R	G	G	E	W	A	I	
UniRef90_UPI00047B0FD9	V	L	I	R	K	D	G	R	F	V	I	
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V A K E A V A G S D R G A N P V E T L V D I P E M S E R A F L M L K I A S D E D E F L L Q E R F  
V H E L A G V D G A N P V E T L V N S D R A E R A F L R A R D S D E D E F E T P D H E  
V Y R E A T K M G A I F P Q V D L G I E E L T E I M L K H G N D E S T I L E V A  
L V R Q A R E A G A G I P L L V Q L R N N Q I L K E W V Q T A T E D E S T Q M L E V A  
L I R A V A E A G G E I P L L V S T Y H Q Q V L R A L F Q V A T A T E D S Q M L T I S V  
V F R S A I R A G A T V D T D L E F R E Q N R I F Y T E A Q S A Q L S R V I S P  
L V K E V Y A V R G A I P F V H H T E P R V D R R E L L M H A T K E Q L S  
L Y A L C L E R G A K Y V E Y D F T I P D I N R Y F Y N K A S K E Q L S  
F V R K T L E M G A H P V L R M M I S E Q Q S V F Y K Y A T E K Q L S  
V A L E V L S R G A Y P L L N L R D E Y V A E A M Y R L A P E E L L D  
L F R M F L Q Q Y H P V L R L I P P E E I E K T F F T M A H D S H L L D  
L V R A A R E V I G A V P F V Q I H S S R V S R E M A I G A S E E Q L D V A S H  
L L K E A Y L G A Y P Y V E I L M D T R R L Q R E L M M N S A E R  
L H E I C G D R G A N P V Y L N Y S K R A Q R A F K R S S D D F T E P S H R R  
T Y R Q V L R A G A H P I L Q V G L A E L D K I F F D E A S E A Q L Q D I E V  
L V E Y I L Y K G A P V I E V N Y N E R H F G R T K L Q Y A S D K V L E E V  
I V K A A V K A G A H P V E T V L T S D E I Q E I V L K N S S E E Q L N Q P P V  
V F R T A I K A G A H V E Y Q L E F S E A H K I K I D N S E E K Q L N Q P P V  
I C E L V G E R G A Y V V N T D S N S R F M R A F L R A S D G E E F E T P S H  
L J E E V Q A V G A V P F L E F R D A A V T R K L I M N G K E E Q F K R M A E  
L Y E I C G D R G A T P I W L T H S D R A S R A F L R A S G E E Y E T P D H Q  
L T R E V S E R G A F P H V E I L G N A R I A R A L A K S A G R R I L E T  
V I K E V Y R A K A I P I S H H T S P R I Q R E L L M H A T E E Q L Q L M A K  
L Y R E A L H A G A L V I T P K I V D P V F E E I M L K E G T P E Q L Q F V P S  
L V R E I Y A V I G A Y P F V F M S D N R K R E S R A L L M G S D E Q Y W E I M  
L F E E I G D A G A K P L W T V F M A G K R T S R A H L K A A G E D F E T P E H  
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L F E K A L Q L G V K P V L R M A F K G Q Q A S F F K F A E K E Q  
I V E E A Y H V I G G I P F V V I L D N E V L A I Q L N M G C S L E Q L T S M A N  
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V Y A R L L Q V G A V P F T Q V A L P G M Q E L Y F K N A R D E H Y E T T P K  
L V R E V Y K G R G L P Y V E T F D R K V Q R A L L T E T S E E H L K A M A K  
L H E V L G E R G A N P L T M S T N A R F S R A Y L R A D E F E T P E H H  
L H E I C G D R G A N P V Y L N Y S K R A D R A F K R A D E F E E P A H R  
L C A L L H D E G M I P V P R M L P T P R M E R D L Y T K A N N K R L T T  
  
L H E I I G E K G A N P V T T S Q R T K R E Q R A F L R A A S D K A S G E A A S  
M Y K E I L K L G A Y P F L R L F I P E S Q R E R M A K Y A S Y E M Q L I E  
L V K E A Y A L G A A E V I V Q W S D D T I N R E R F L H A E M N R I E E V  
L H E V I A D R G A N P L T V Q D R L G A R F R R A Y L R N H D G D F E T P A H  
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I Y Q L C L E R G A S Y V E Y G F S V P E I D R T F Y N L A N Q Q Q L A H F P Q  
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L V R Q S Y F V I G G V P F L R L I N N H E L V R E I L I D C T E E Q F L I A M A S Y  
V A D A L G E R G A N V V T T Y A S E E V Q R A Y L R A H D G D F E L P E H E L  
L H E T V G D R G A T P V H L A N D G R A R A Y L R S I D T E E L S T P T H  
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V T R E V L R V I G G H P V E S L I T S D E I E E E L K I S T I E Q L R E N N F  
V A E K L G E R G A T L L A T Y G S G E L T R A Y Q R A S G E D F D E P D H  
F I E Q I Y A K A G G H V F I D I L S N Y Q L N R K M M L L G S E E Q F T L D A K  
L Y E R C A K E A H P I T L Y S D S R A T R G F L K N H T T F D T P E H  
L I K Q V Q K L I G A K P Q F N I I N Y E T L R V M L E N A D E Q Q I K L Y G Q  
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L Y K Y I L L M K A Y P L L R M S F N E Q L Y T F Y K Y A D K S L E M  
I I R K A T E L I G G V P F Y F Y N D E H L L K A V I D N A S E E Q M  
L Y A K L I D R G M N A L Q R L S M T S F M E H H F Y S R A P K A K L L F P P  
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V A A A L G E R G A N L L A T Y G S D E M T R A Y L R A H D G D F D A D P E F  
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V A E Q L G D R G A N L L S T Y Q S D E L T R A Y L Q A H D G S F T E N P D Y  
L I R E A R N A G A I P F L R L N Q S R L N R E M L S G A T E E Q Y G I I R H  
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I Y K R V I Q K G A H P I L R T S D E F D S D I F I K Y A N D E Q L D Y D P M  
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I R R E V L K A G G H L E Y A L S V Q G D G A M R E L R G S E D Q F G Y V P T  
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V A E K L G E R G A N V V T T Y M S S E V S R A Y L Q A H D G D F D A D P A H  
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L H E E C A E R G A N P L V Y T S S S R A S R A F L R N R E G D F E T P E H L L  
V A E V L G E R G A N L L S Y T S S D E I Q R A Y L R A H D D F D A D P E F  
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V A E K I G E R G A N L V T T Y G S A E L N R A Y L R A H D G D F D D D P D H E  
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C Y R A V L R G A D P I V R L D L P G L S E F Y L Q N A T E A Q L A S P P  
L H R E A L A R G A Y P L L R M A Y P G E D A F L L E R A A W  
V A E R I L G E R G A N L L A T Y G S G E I T R A Y L H A H D A Q D R E F S E D

UniRef90\_D8IAF6 UniRef90\_D2RUB0 UniRef90\_F4A2F1 UniRef90\_V4GU35 UniRef90\_R7RSW1 UniRef90\_F0SN28 UniRef90\_S0ESG1 UniRef90\_F4L1X0 UniRef90\_R5RKC9 UniRef90\_A5GF94 UniRef90\_D4H5B3 UniRef90\_Q9YA57 UniRef90\_D6SME6 UniRef90\_B4CU37 UniRef90\_U4WP54 UniRef90\_B9LQH1 UniRef90\_L0EAK9 UniRef90\_K2EX50 UniRef90\_V7I644 UniRef90\_A0A023BYA2 UniRef90\_I3R178 UniRef90\_W2E6K0 UniRef90\_U1NUG9 UniRef90\_R7LB14 UniRef90\_UPI00035CDF27 UniRef90\_A9B102 UniRef90\_R7KA21 UniRef90\_L0I664 UniRef90\_A6CQF7 UniRef90\_UPI0003B5D37B UniRef90\_UPI0003787C80 UniRef90\_UPI00042A2F54 UniRef90\_U2RPP9 UniRef90\_E1Y8K3 UniRef90\_A0A023X1U7 UniRef90\_R6GXP0 UniRef90\_U1PF01 UniRef90\_V4ZMS8 UniRef90\_Q30XP2 UniRef90\_D9PRC2 UniRef90\_D3SUU3 UniRef90\_V2QDA6 UniRef90\_G6EP65 UniRef90\_C7P0H7 UniRef90\_G7Q3W6 UniRef90\_E6VRK2 UniRef90\_A1AQV3 UniRef90\_Q39V98 UniRef90\_C2W9P5 UniRef90\_B8FB88 UniRef90\_W4BCW7 UniRef90\_D4GST7 UniRef90\_M1XK58 UniRef90\_R7MJ07 UniRef90\_E1RAZ5 UniRef90\_L0IFK1 UniRef90\_UPI00047940F3 UniRef90\_U1PXN5 UniRef90\_R7GF37 UniRef90\_C9RPL4 UniRef90\_E4TJS9 UniRef90\_R6I656 UniRef90\_Q2LRB7 UniRef90\_D7CVY6 UniRef90\_D7NX29 UniRef90\_V4Y5F7 UniRef90\_Q5V0D0 UniRef90\_B2URM0 UniRef90\_E8R3J8 UniRef90\_R5DT15 UniRef90\_M0D1N8 UniRef90\_D8J971 UniRef90\_UPI0003621160 UniRef90\_R7EXS3 UniRef90\_J3EV42 UniRef90\_C7NSB7 UniRef90\_D7BGQ6 UniRef90\_M0D8D5 UniRef90\_U2FFY0 UniRef90\_UPI0003601CB6 UniRef90\_K1XJK3 UniRef90\_M0MED7 UniRef90\_H5SBH9 UniRef90\_A8F744 UniRef90\_B2KDZ6 UniRef90\_F5YNG1 UniRef90\_L0IDY0 UniRef90\_M0ML98 UniRef90\_J3JI16 UniRef90\_L0DR43 UniRef90\_E4U6Q2 UniRef90\_L9ZUC7

90 100 110 120

A E S D L M L M K K M D A Y L G V W G N N N A E N S S I K E E N Y  
E L A L I Q N T D V Y I A I R A S D N V T Q T S D V D P E T Q A A Y  
I Q R Q V I E R A D V W L T A W G D K N T R C E K A N A N I D D P A R L Q I A  
L A I Y E N A D A V V I A R G G A N A T E K A D I D P A T T A A H  
M Y I P E S S K T A F E T V D A L L T V W G E N T R M L T N I D D A S K M K L R  
A Q I D A A R M R E M Q A Y I L G I R A S E N S A D F S D V A E A A L  
E R A R M E A V Q C Y V G V R G S H I N I T E L S D V P S E K M A L Y  
L Q L M A E I D S K E M D A M D C Y I G I R T A D N S M V M A Q A D P A E N M A M Y  
Y F P Q H K L D L M K K V D V Y I A L S A D N S V M A Q A D Q T K M I A Y  
E F I P S V M A D A E N I T A Q V Y I S T D N T K Q L T N T D K S K V S L Y  
Y L S P I D M Y M L E K V D A S I S I L S P H T K P L A T A D P G K V A R R  
F Q L P G D R E L Y S L N G M I S L L G P Q S T H L R D I D P S R I G R F  
I Q A Q M K K M E A Y I A V R G G D N I T E L S D V P P E K M K L L  
A E Y L R K W S E E R I R D G H A T I L I N G V D N D E M S D V P N D K  
A L Y E E A D V F I I A R G G S N A T E D A D I D P E T N A A Y  
M E W L Y H R A D A V I R I L G G N N K E L T G V D D P Q K L T A R  
P Q S M I E Q F Q E Y L D K N T A R L F L D G D D P N E L E G V D P K R I S K N  
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L Y A H A M E H F D A Y L K I M A P N L V E N Q N I D A Q K Q R K H  
Q L A L I E E T D V L T N V R A E E N A T E Q S D V D P A T N A A W  
I E L E R M R K M D A Y V G V R S G E N V T E T S D V P E E K M K M F  
L A C Y E N T D A F I A R G G A N V T E T S D V P P A N T A  
E A E C A L Y K L K K M D A Y I A V R G S N F E M S D V E H S R M A E L  
I D S L E E M S V D C Y I A I R S E N F E M S D V P Q S T H L R D I D P S R I G R F  
T L H E I E T M T T W C D I Y S E I N T K H F N Q A D Q Q R K L L R  
A K R D E E F M N Q M D A Y I G V R G Q N N F E T S D V K A A K M K N Y  
E L A L I E E T D V Y I A V R A G P N A T E T S D V P A T N T A Y  
L K L A Q M K E M D A V I A I L G E N N S E F A D L P S D K R N I Y  
L E F P H S V M A D A E N V T A S V F I A T A N T K E L T N A D Q K K V T T Y  
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Y E L E R M R D M D A Y I L I R A T T N I S M W H N V S D E A Q K R Y  
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L T R R V Y E E A D G F V S I M A P N T R A L A G V D P A K Q Q A V  
Y A L C R M E D M D A Y I G V R G G N N S Y D S D V P P E K N E L Y  
L A L V E E T D V Y I A I R A D A N V T E T S D V D P P K T S A A Q  
R A L Y E E T D V F V I A R G G A N V T E D A D V A P E T N A A Y  
L I P G E R D L H N H L H G T I S L L A P Q S T H L S G V E P E R L A M H  
P E F E P E H E L A L I E N T D V Y I A I R A G D N T Q T S D V D P E V S A A Y  
Y L P E F D I K Q A E I M T A S Y I Y I S T I N D T K S L T N A D H S K R I L A L M  
P A Y K K A E M E Y L L E K K A S R L G V R S S D P G A F N G V A P E R L S A H  
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W C Y R L S K M Q V Y I N L R S P R N A Y E L A D V P L D K L K M Y  
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E L A L Y E A A D V Y L R I G G R N T S A T A D V P G E T R Q A Y  
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I D T N R M K E M D A Y I G I R A I P N A A E L N G I S K E A M E L Y  
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L P E I M L T T S K T L N A V I H I R S N I D S E N T K Q L S N V N E R Q M A L Y  
K A F G E T Y R Q Q M A S S D V Y V A L R Y D D I F A L S D V V N E R Q M A L Y  
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L E L A E I R H T H A W L R V A A P T N S R A L Q S A D K T K L G K L  
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I K L E Y E T V N K F I S I G A P M N T K N M A R A D L S K L A K R  
M A L Y E E M D V Y I V I R G S D N V T Q T S D V D P E V S T A Y  
E L A M M E S A D V Y L R L G G G R N T S A L A D V P G E V R Q G Y  
L Y R K A I E D F E A Y I N I R A P F N L R S P A S P A Q Q A A Q  
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E L A L Y E N A D S V L F L G G G R N T A A T A D V P G E K  
P A H E Q A L V E A A D C H A V I R H V N V T E L E D V A P E V N S D Y  
L E Q V P P I R R Q M V E A A N A S L R V S E E N P L S L S G I D P A R I A K H  
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E R A L Y A N A D S V L L G G T R N T A G R G D V P D D R  
L D A L H P S E V E D A R T L D A S I R I L L T P T P P A P D V D P Q R A A R H  
P S H F L H G K V E Q M T H V T S V I A E A D K H E L K D I D P K K L A A R  
T L A E M E T D V V F M I G G S Q N T A E T S D V A P E M S A A R  
F R I L L A Y E Q F E G R I R I H S A T N T R G L S G I P P Q R I L Q R R  
E S Y G M E W A D V Y L R G A A N L N E C W A V D P A D K L S K L  
P K W Q L E M Q K G I N G L I A L R A P A S D H L K D V D P A K M S L T  
Y E Y E R V R M E D M D A Y I T V R N D N P A E L S D V P G E K L A L Y  
A M L A M W D E L D A I N I G H E N T Y E R S D L D P E T  
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V A L Y E A Q T I D G R I R I S A E D T R S M S R I D P A R Q A I V  
L E R V P E A E R A L V A S D A F V R V S P S D P F A A G V D G E R A A R H  
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Q Q A H R P I L L E E R L S K R W C L T Q Y P A P A N A Q Q A L A  
A R G Q S T V R W K I Y S E R M G N G T L R W C G T Q F P T A P A N A Q Q A D M S L  
N R A T R P V Q R E R L S K R W C L T Q Y P T A G H A Q Q A L A G M S L  
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E K F W W H Y V H S E I R V R V P K T R W V V L R W P H P S M A Q Q A A G M S  
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E EYEEYLFACCKLDWEAESRKQEKKKLMDK  
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YEA YQEFVYDAITLRD WEALADEMSE MKE  
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ADYEAY VTS SMLDR PDPVGA WELGRQAGLIA  
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210 220 230 240

P A D E I R I K S T D K V K L T G E G T N L E F S I K N I P A L K  
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V V D D A D E I R I S G E G T D V T M S V A G N T A V N D T G E K  
L L D T K K E I R I V S K G D T D I K M R V A E G R K W I N  
G Q T E R V R I V S P G T E L S F S I K N I P V V P  
T D R V R L V G P G T E L T F S I K N I P A V G  
H L N K S S E I H Y R G E G I D L H F S T A G R T W I N S D G  
Y M N R T A D K V R L V A E S D T D L T F S I K K G I P A I P  
I L T G T K E I R I E S G N T D I T F N V E G R K W I I P G I P  
L L S K A S E L R V V S S G T D I T F R V E G R I W I N D D G K K N  
W L D S M D V E Y F H V L S K N T D L K V Y P G E K R R W V G L S G H I Q A I P  
T D K V E I K G P G T D L R F S I K G I P N V I  
T D K V R L V G S E G T D L T M S I K G  
I L D T A D E V R I T S P E E T D L T M D L S G N S T L N D Y G E  
S L N D L I K D T H F I S V D T D L Y I G L S E K S K F Q A A K E T T P S G  
Y L D T K K E L H I L S E G T D I R V S I A G R K W I N C D G K Q  
Y L N K V D K V Q Y I T K G T D I Q F S V K E R K W I N S D G R T  
I L N D A D E V R I V S G D E T D V T M S V A G N T T I N D K G E H  
R L D A A E A V R I V A G D E T D L T L S V A G N H A L N D Y G E K I P A I K  
T D K V R I R G D G T D L H F R I K S M K A I P  
T D R V R L T G P G T D L S F S I K D I P V I P  
F L N S C R S I R I E G P D V D L S Y R C E D R I W I N  
L L N P A D E V H I V S G E E T D V T M S I A G N A A I N D H G K F I P A V K  
I L D G S T E K V R I L A Q G T D L S F S I K D M E G R K W I P A I K  
T T E K V R I V G G T D L S F S I K N M P V S M D A G H Q N  
T D R V R I T G P D T D L S F S I K D I P V V P  
T D K V R I V A P G T D I S F S I K G I P S F G  
W L N S M S V K T F H I E S D T D L E I T P G D Q R K W I G I S G H  
R L J E A D E I R I V G P R T E L T L S V A G R T F I N S A G R H I G A V K  
T D K V R L V A K D T D L S F S I K G  
I L D P A E E V R I V S G D T D V R M R V A G N P T L N D Y G E K  
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W L N S M D M V S L R T E S D S V D L V T L G E R R V W A G I T G  
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R M N G T K W L H L K G Q D N L K L N V T G R K W  
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UniRef90\_D8IAF6  
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L N P L L L E R G A Y P L L L L E Y P G Q Q Q E D F L L R G G E W  
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L K R A F L K R G A Y P V F R L G Y S P G E G R D F L L Y G G A W L E R I P E V E R  
V A R A A V R A G G I V V R Y F V D M P N V D A M L V K E G N D T Q I A Q P N F  
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U N I R E F 9 0 U P I 0 0 0 3 7 F 2 F 1 6 L Y K A V L K K G A Y P L V D I E F P E L N Y I Y Y K N A S E E Q L S K F P Q  
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I I K Q A K I I N A K P H L N I I N Y E D L L R N F L I N A T K E D I I J E Y G K  
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UniRef90\_R7JRL5 A S Y A R V I T G R G T D L K I S L M E L K D P E K Q T R F E N  
UniRef90\_R7AH48 V L D Q G V R A H I R G K G D N E T D M S V E L Y R L K N P Q K E T I F E N  
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UniRef90\_R5WKP7 V L D E G S Y V I V K G M G D N T Q M K V M L H E L R D K A K E T N F E N  
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UniRef90\_R6G775 T L D S C E W V E V K G K G E N T D L L I H L H T L Q E P E R Q T N F E N  
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UniRef90\_R5KLQ3 A D H C E I L K G C G N G N H T D L K V N L W K H L E R P A K E T I F E N  
UniRef90\_R6EPL3 L I G E K V H V T G R G T D I W I R L H E L T E P V K Q T N F E N  
UniRef90\_R7C7M2 A L D R G E A V R I L G M G N T D L T V Q L Y R L N D P E K E T I F E N  
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UniRef90\_R5YTL8 V L D T A Q Y V E V K G A N G N T D M K V S I M K I T D H K T Q T V F E N  
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UniRef90\_UPI000467C260 V A D V N I P V G G E V V F T T S P V L L Q G T N G G V L H V S R R V Y L N E E L Q Y R D  
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UniRef90\_R5YTL8 V A D V N I P V G G E V V F T T S P V L L T G T N G G K L H V S S Q V Y L N E L L N Y E N  
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UniRef90\_R5KAP3 C L A D V N I P V G G E V V F T T S P R L T G T E G C L N V S E V Y L N D L K F V D  
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	290	300	310	320			
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UniRef90_F0RMG5	ARLEFRKNGGRVISE	SARADAGNTDVLKAL	DDTDDPAGARRRL	GGEGFSGL			
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UniRef90_R6J4M4	IRLRFKNDGGRV	RSASQVNDDEL	FLQKIVLDDTDDAGARRRL	GGEGFSGL			
UniRef90_U1PN70	IVRLRFENKGRV	ESFSAARNDE	DLVLAGVFD	DDTDDAGARRRL	GGEGFSGL		
UniRef90_D6YTR5	IVRLKFEKGA	VVEANASAKNGE	FLREMIADQDDAGARRRL	GGEGFSGL			
UniRef90_MOD7S1	IVRLVFEKGG	VVEESANAAKNGE	FLREMIADQDDAGARRRL	GGEGFSGL			
UniRef90_E8PQH9	IVYLRFRFERGGRRV	VEEARAQEGEYLLQ	GMLQADDDPAGARRRL	GGEGFSGL			
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UniRef90_UPI00037F2F16	IYAEFKDGGK	CVRATADKNER	FFKNSMLDDTDDAGARRRL	GGEGFSGL			
UniRef90_L9ZT13	IVRLRFEDGGEV	VDHAAETGET	ALLGELLETTDAGARRRL	GGEGFSGL			
UniRef90_G8NCE3	IVYLRFRFERGGRRV	VEEARAQEGEYLLQ	GMLQADDDPAGARRRL	GGEGFSGL			
UniRef90_R6NGQ7	IKVDFDFKNGK	VVKAATAKENG	SKELNELEDDTDDAGARRRL	GGEGFSGL			
UniRef90_UPI00047E9626	VRLTFRDGGEV	VEHAAEVLGG	DYLERALATA	DDAGARRFL	GGEGFSGL		
UniRef90_K2AX82	IVLEEFKDKW	IKSASQVNDDEL	FLQKIVLDDTDDAGARRRL	GGEGFSGL			
UniRef90_R6Q9T9	VRLTFEEDGGRV	VEADAEKNA	NLLKSYIAGTDDAGARRRL	GGEGFSGL			
UniRef90_U1PUI2	AVLTFEDGRTVV	EYDATAGAEETLQIL	DDTDDPAGARRRL	GGEGFSGL			
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UniRef90_U1NFF6	AEEFTIEENTVV	VARAEQGEAVL	GGDVLDDTDDAGARRRL	GGEGFSGL			
UniRef90_C6L903	LKLTTFADG	VVTEVQAADDN	VDFVKQIL	ATDDEGARRRL	GGEGFSGL		
UniRef90_UPI000479AE7A	VQLEFRDGM	IVKATASRG	EYLLQALQRTD	DEGARRRL	GGEGFSGL		
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UniRef90_F7PF94	AVLEFRFEDG	EVIAHEAE	ALQNEAVL	TGILLNTD	GGARRRL	GGEGFSGL	
UniRef90_E6VTP7	AVLEFRFEDG	VAVARVE	EAGRGQVFL	QNLQMS	HS	DSGARRL	GGEGFSGL
UniRef90_A9U812	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_M4HJB1	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R5RJ27	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_K2GBR8	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R7FWG8	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R5QJX8	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R5EC25	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_T2GE00	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_C6LHA4	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_K2E3E2	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_UPI00035FBC3B	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_C6IWJ7	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R6LSK9	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_UPI00035CA992	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_D4M268	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R5L8U8	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_F7KDU1	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R6NHQ8	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R7HAU9	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_U2E6M2	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R9JK44	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_F0YUG4	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R6S3V3	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R5UTT3	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R5HQM3	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_K2CH66	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R5HPJ2	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_F3BCG1	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_G2T0W9	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R6K2V0	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R6R5H9	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R6C843	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R7IQD5	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_W1V1Z8	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
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UniRef90_R6G775	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
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UniRef90_C4Z476	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
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UniRef90_I0R105	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_F7V8M1	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R9LY6	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_C4ZF76	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R6BX08	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_R7D5Y5	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
UniRef90_T5KCI4	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
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UniRef90_X0VMC6	IKLHV	KQGGKIV	IEAYAND	TERMNR	ILDL	DEGARTY	ILGGEFAL
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UniRef90\_F0RMG5 G S N F G Y G I T Q R P T G N I L F D E K G T V H L A L G R S Y P  
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UniRef90\_U1P9K2 G M N R G I T D Q I T N N I L F D E K M T V H F A V G R A Y D A C L P A G  
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UniRef90\_H8GXMI G T N A G L I Q R P S M N I L F D E K G T V H L A L G N S Y P  
UniRef90\_UPI0003B57D1E G T N F G I Q H P T G N I L F D E K G T V H L A L G K S Y P  
UniRef90\_L0A3B2 G S N Y G I Q Q A S Q N I L F D E K G T V H L A L G N S Y P  
UniRef90\_R7MI33 V A D S P I A K T G R F F N T L V D E N A T C H L A L G N A Y G D C I E G I  
UniRef90\_L0ADJ0 G M N R G I T E R A T N N V L F D E K M T L H V A L G N A M D E C V P E G  
UniRef90\_R6J4M4 G V N P Y I T H P I L D I L F D E K G S F H M A I G N A Y E H A F N G  
UniRef90\_U1PN70 G M N R A I L D R F S Y N M L F D E K M T V H M A I G S A Y P A T V G E E  
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UniRef90\_E8PQH9 G T N F G L T R P T G L I L L D E K G T V H L A L G R S Y P  
UniRef90\_N1ZLX9 G T N Y G I Q K H T K N I L F D E K G S I H M A I G E A F Q  
UniRef90\_MODWV0 G M N R G I D R F T D S I L F D E K M T V H L A V G R A Y D A C L P E G  
UniRef90\_UPI00037F2F16 G M N P R V N R F T K E L L F D E K F S I H L A F G M A Y K E C G Q P  
UniRef90\_L9ZT13 G M N R G I D R F T D N L F D E K G T V H L A L V G S A Y N E C L P D G  
UniRef90\_G8NCE3 G T N F G L T R P T G L I L L D E K G T V H L A L G R S Y P  
UniRef90\_R6NGQ7 G L N P Y I V N N T M C D T L F D E K G S F H L T P G M A L E E S D N G  
UniRef90\_UPI00047E9626 G T N F G I D R A I G V I L F D E K G T V H T A I G R S Y P  
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UniRef90\_U1PUI2 G M N R G I D Q I T N K I L F D E K M T V H L A V G R A Y D A C L P A D  
UniRef90\_UPI000362F498 G S N S G I Q T P T G N I L F D E K G T V H L A L G R S Y P  
UniRef90\_U1NFF6 G M N R G I D R V T D R I L F D E K M T V H L A V G R A Y D A C L P E G  
UniRef90\_C6L903 G T N P Y I V N V C T T D I L D E K G T I H M A L G R P Y D N A Y  
UniRef90\_UPI000479AE7A G T N Y G I T Q P I G A I L F D E K G T V H L A L G R S Y P  
UniRef90\_L0RD81 T D S S I S R I D H F M A Q T I L D E N G S C H L A L G Q S L I N T F S G P  
UniRef90\_F7PF94 G M N R D I D R F T H N M L F D E K M T V H M A I G K S I E E S V G E D  
UniRef90\_E6VTP7 T DKRF SR V D R F M A H T L L D E N G N C H L A L G G S V L E S F S G P  
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UniRef90\_M4HJB1 G T N T T A Y R M A K K Y D I H L I A E K M G N T H F A V G D T C Y S W A E D D  
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UniRef90\_K2GBR8 G T N T T A Y V T A K K Y G I P I L I A E K M G P H F A V G D T C Y S W C E D D  
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UniRef90\_T2GE00 G T N T T A Y M V A E K Y Q I L I A E K M G P H F A V G D T C Y S W A E D D  
UniRef90\_C6LHA4 G M N P M I K N Y I K D I L F D E K G T I H L A I G K S Y D Y V  
UniRef90\_K2E3E2 G T N P V I E S P M Y D I L F D E K G S N H L T L G K D Y E I A P N G  
UniRef90\_UPI00035FBC3B G T N P V I E S P M Y D I L F D E K G S N H L T L G K D Y E I A P N G  
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UniRef90\_R5UTT3 G T N T T A Y R M A R K Y Q I P I L I A E K T G P H F A V G D T C Y T Y D E D D  
UniRef90\_R5HQM3 G T N T T A Y V A A K K Y G I P I L I A E K M G P H F A V G D T C Y S W S E D D  
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UniRef90\_R5HP12 G T N T T A Y R M A R D Y D I P I L I A E K T G P H F A V G D T C Y S H E E D E  
UniRef90\_F3BCG1 G T N T T A Y V V A K R Y G I P I L I A E K M G P H F A V G D T C Y S H E E D D  
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UniRef90\_R6K2V0 G T N T T A Y V M A N K Y D I P I L I V E K M G P H F A I G D T C Y S R S E D D  
UniRef90\_R6R5H9 G T N T T A Y V M A K K Y N I P I L I A E K T G P H F A V G D T C Y P M Y N P D G  
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UniRef90\_R7IQD5 G T N T T A Y V M A D K Y D I P I L I V E K M G P H F A V G D T C Y S H E E D G  
UniRef90\_W1V1Z8 G T N T T A Y V M A D K Y D I P I L I V E K M G P H F A V G D T C Y S H E E D G  
UniRef90\_R7JRL5 G T N T T A Y V M A E Q Y G I P I L I A E K M G P H F A V G D T C Y A W A E D S  
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UniRef90\_R6NZ29 G T N T T A Y R M A K D F D I P I L I A E K T G P H F A V G D T C Y S Q A E D D  
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UniRef90\_R6G775 G T N T T A Y V M A A K Y G I P I L I A E K M G P H I A I G D T C Y S Y C E D G  
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UniRef90\_R6EPL3 G T N T T A Y V A A K K L K M P I L I A E K M G P H F A V G D T C Y S H A E D G  
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UniRef90\_F7V8M1 G T N T T A Y R M A K T Y A I P I L I A E K T G P H F A V G D T C Y S H A E D G  
UniRef90\_R9LY6 G T N T T A Y R M G I D Y Q I P I L I A E K T G P H F A V G D T C Y S W A E D D  
UniRef90\_C4ZF76 G T N T T A Y R M A R V Y D I P I L I A E K T G P H F A V G D T C Y T Y D E D D  
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UniRef90\_R5KAP3 G T N T T A Y V M A N R Y Q I P I L I V E K M G P H F A V G D T C Y S Y S E D G  
UniRef90\_X0VMC6 G T N Y R I T Q F S K N M L F D E K G T I H M A L G A S Y P  
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UniRef90\_U1PN70 N E C R T R R H D R R H E R D S T [I] E [V] D G  
UniRef90\_D6YTR5 G N T N A S A [L] H W D [M] I [F] D [L] R N G G S [I] T A D E K E  
UniRef90\_MOD7S1 S D [V] E G N D S A [V] H T D [M] I [V] D [M] S E D S Y [E] V [L] D G E R  
UniRef90\_E8PQH9 E T G G K N S S A [L] H W D [L] V [L] S [L] R E G S [L] L L D G  
UniRef90\_N1ZX9 E A G G K N S S A [I] H W D [M] I [N] D M K Q Q G E [L] Y A D G Q  
UniRef90\_MODWV0 E S G N E S A [V] H [V] D [M] I [S] D D S R M E [V] D G  
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D M S K K S T V M L I Y P A G F E R I I K Y  
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K G A G T V V N R C A Q V K A G E T V L I V T E A S R M S I A E C  
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UniRef90\_L9WRK2 E F T V A Y C A E A N V T P I L P D G T N G R I V F D G P N L G I G L L R D E  
UniRef90\_C0C283 T H M L A G M I S W T P D L D T V N G V I A I D G S L V P Q G V L L K E P  
UniRef90\_R6DWS9 M H M L T G Q L N V V P K L N T V N G T I V Y D G D P P F S R I P N T P  
UniRef90\_F0Z320 R G F S S A S I E V Y V P I E E T E T E G L L P D G S L G Y I G R P D E P  
UniRef90\_R9N5T9 H F L L G Q I G W A P K E E T E T N G V I A F D G T I S G G Q L T E P  
UniRef90\_D5ENC0 K P D V A N L P A G E V Y F V P E S A D G V F P F K Y D E S T I G L

	290	300	310	320
UniRef90_R6RF55	L T M E F K E G R V T S V S A E A G R K L V V Q E I M N Q H E T L P M G E F A I			
UniRef90_UPI0003B4C0FA	L T L E F K D G R V T S Y S C E E K N K K Y I S D N I L F H H E T L P I G G E F A I			
UniRef90_UPI000479E913	L V I K F K D G M T A A Y T C C E E K N K A Y I K K E N V L H Y N H D D A L P I G G E F A I			
UniRef90_R9J8J3	L E I R F E D G G K V T A Y S C C E E Q G R A Y I V K Q V I M Q G H H E W L P L G G E F A I			
UniRef90_G5HE35	L S L T F A D G G M V C D Y S C C E E K G R A Y I E E N I L F F H H K D T L P M G E F A I			
UniRef90_R5C6G9	L V M T F E N G M V I K D Y S C C E E S E G K A L V K Q V I L F H H K D T L P M G E F A I			
UniRef90_D9RAC4	V Y L R F Q E G G Q V V E A R N A E V G E D Y L R A A L A T D E D G A R R L G G E V G I			
UniRef90_H7GIL1	L E M K F E D G G K V S Y S C C E E E E N K K Y I F S D N V L F F N H H K D T L P I G G E F A I			
UniRef90_D4IYK7	L E I T F E D G G C I K D Y S N C C E E E N K K Y I F S D N V L F F N H H K D T L P I G G E F A I			
UniRef90_UPI0003B69F54	L E I T F E D G G C I K D Y S N C C E E E N K K Y I F S D N V L F F N H H K D T L P I G G E F A I			
UniRef90_R5RNF0	L E L K F K D G G C V T D Y A S C C E E E N K K Y I H E N V L F Y R H H K D T L P I G G E F A I			
UniRef90_C4GBU9	L R L T F R D G G M L V E D Y S C C E E E N G R K A Y I R R D N I L Y Q H H K D T L P I G G E F A I			
UniRef90_R5U9I8	L E I V F K D G M L V E R Y S N C C E E E Q N K A Y I R R D N I L Y R H H K D T L P M G E F A I			
UniRef90_C0D4A2	L R I R F A E G R V T D F S C C E E E Q G R K L V K Q V I L R G H H W L P L G G E F A I			
UniRef90_UPI0002899491	L S L T F K D G G Y V E E Y S C C E E E N K K Y I E E N L L F F H H K D T L P L G G E F A I			
UniRef90_R7CGT4	L K L V F D C G Q V I D Y S C C E E E N R K Y I E E D N I L F H H P K L A M G E F A I			
UniRef90_X1MWE1				
UniRef90_T0PJY7	L E L L F E D G Y V I K E Y S R C E G D N K K Y I E D D E N L L F P N K T L P L G G E F A I			
UniRef90_UPI0003B4BF10	L S F T V K D G M V I T E Y S C C E G D G K K L V I E D D E N L L F P N K T L P L G G E F A I			
UniRef90_X1B2K6	I R L D F K D G K V I K A T A E K A K E E L Q E I V A I E N A N L L G G E F A I			
UniRef90_A1SLX9	L E F E F E D G G R I E S E R A A A D G V D F V R E L L D A D D D G A R R L L G G E F A I			
UniRef90_H1LRU1	L C I K V K D G M I E D Y T A A A D N K R L I D D S V L K R H K S L P M G E F A I			
UniRef90_B0VHY4	L K I D F E D G W I K D Y S C C E E E G K K Y I Y E N L L L P H K S L P I G G E F A I			
UniRef90_F0RVR0	A R F T V K D G K V I T D W A A D T G K P A L D A D F F N L D E N A R H V S E L S L			
UniRef90_D1Z246	V R L K F K D G T L D E C T A E H N G E V L R D R T L F H K A K K V A E L G I			
UniRef90_X1ILF7	I K L W F K K G K V V K A E A S K F G K F L E S M L D M D K G A R			
UniRef90_G5GJT2	L I I K F K D G M V I D Y S C C E E S N F D E L I E E N V L L K G Y H K T L P M G E F A I			
UniRef90_UPI00037FCE3A	L K L T F K D G M V I D Y S C C E E E N R K Y I E E N V L L F P H K T L P M G E F A I			
UniRef90_G2KPC8	L T M E F K N G E L V K Y E A K A G L D A F K R A V I E M D E G A R N F V I G G E F A I			
UniRef90_O58749	I E I T V K D G G F A E D I R S C E E E A E K L R E L L R Y Y P K E T L P V G E F A I			
UniRef90_UPI000467D971	L K L W F E D G E I V D F S C C E E E G R E T I L E S L F Y P Y E T L P V G E F A I			
UniRef90_F4HKH2	I K L V I R E G F V E K V E G G D E A R R L L E E I L R Y G R E A R N L A G E F A I			
UniRef90_F2NU81	I C V K V E K G F V S E V E G G E E A K R L L T D L Q Q A E E N A N L G E F A I			
UniRef90_E8T2T6	L H V V V K N G K L Q E V T G D K S E N L D I L L A N E R N A T I G E L G I			
UniRef90_C5ER26	L R C T L E K D G V T D I I K G E D E E A A E L R R L Y A K N S R N I G E L G I			
UniRef90_F5YD32	L T L R V F K D G A V E I E I G F E D E E R Y L E R V F R E H D K A R N I G E L G I			
UniRef90_D3SMN6	P I V V D V D G Y V T S I I T A K S G K A A E K A A I E M E K N A R N I G E L G I			
UniRef90_U2M3L5	L E L L I E N G M V V E A K G A H A D D L K E L F K K M G E P G A R N V A E L G I			
UniRef90_H8I647	A K F F V E N G R V V A V S G G D K Q V E Y L N A I F E K M G E E N R N V A E L G I			
UniRef90_UPI0003B6E74D	V V C Q V R D G K I I S I E G G R Q A Q L L R E D L E N D P N V Y N I A E M G M			
UniRef90_R6BPH3	L Y M R I E N G H L K E V I K G S E K I S I L L E N E N N S S L C E L G I			
UniRef90_D1AMF5	L Y L K I K D G K L K E I K G K D A D K L S I L L Y N E N K S S L C E L G I			
UniRef90_U5RP56	L T L Q I R G G Q A V E A R G G R A A D W L V D V W R Y G E P A R L V A E L G V			
UniRef90_K4LWW2	L I C K V E K G F I T S I E G G G Q A E I L S K D L A D D P N V Y N V A E L G I			
UniRef90_D6LGJ6	M V L E F K D G Y V S I E Q G G V G A E F S R L V L A G D D P N V R R N C A E L G I			
UniRef90_F6B869	I T M K F I D G G V E S I E G G F E D Y R F T I E D V F K K M P E A R F I A E F G V			
UniRef90_A8UTJ6	I T C K V E K G V T E I E T G G A E A R R L L K T I M E A E N A R N I G E L G I			
UniRef90_UPI0003B3833D	V K L T I E K S R I N I E G G E A A E K L K N I L N S D P N A Y I G E L G I			
UniRef90_E7GHS4	L T I E I A A N R I T R C S S A N Q D L E R D F W H T D E N S D R V G E F A I			
UniRef90_UPI00047B1303	L R L T V K D S V I V K I E A A E Y E K W L K N F N D P G M L K M A H V A Y F			
UniRef90_G0QFT2	T K L R I E D G E V K E I L S S E D T S E E I K E A I H D I E N G E N I A E F G F			
UniRef90_Q0V035	L V M C V E D G Y V T K L S S E D K D Q K V N E I S V D D E A S L C G E F G I			
UniRef90_R6M6U1	L E L T F K D G G V T D Y T C C K D N K K Y I H E N V L Y R H D T L P I G E			
UniRef90_C5EG77	L R M R F K D G R V T E F S C C G N F K			
UniRef90_A4J119	V V M K V D K G R V V E I S G G Q Q A M E F K A W L E S D P N M F R V A H G C Y			
UniRef90_D4GS17	R E L R F E D G Y V T E I S D D D R E Q V E A A A E E V G D D N A Y N I A E I G I			
UniRef90_Q0W0V3	V Q V T V M D G L V T D V Q G G E T A R A L L N V I E H E K D N A R N I G E L G I			
UniRef90_C7NYK1	L E F T V E D G L V T E I E G D D A V R Q Q I E V G D A A Y N L A E L G I			
UniRef90_R5C745	L R I I E V E D G Y L R K I E G E E A D L L R K S L E Q D P R V N Y L A A E V G F			
UniRef90_K1YJ55	T K I E V E N G M V L K K I E S T T G G K K L R K Y L E R N K N A Y N I A E L G I			
UniRef90_UPI0003714E68	L T I N I E G N R I T R V S S E N K E R D F W A Y T H T D E N S D R V G E F A I			
UniRef90_Q5WKI1	T L L T V K D G R L T S A S G P E G A K L L E L L G D G D G N G R Y L A E F A I			
UniRef90_D6TJG5	L T I K V E N G Y I T E I S S A N K A Q E V H D Y L F S T P E N T V V C E L G F			
UniRef90_S9SNE1	V I L S I E G G K V V Y S N D E K L N P F L G T L T P E N T V V C E L G F			
UniRef90_L9X354	V T M E I E D G A V T S V E G G G E A E T I Q R V W E E D P A V S Y N I A Q L A V L			
UniRef90_C6A1T1	V K V Y I E N G F L S R I E G G E A A K K L E K A I E E S A K N S W N I G E L G I			
UniRef90_R8W0Y6	I C L T I E N S V I T E V T G G E A A V F R K H L L E S D P G M F K L A H I A Y			
UniRef90_W0I5R4	V K V Y I E G R F V Q A I K R A E E R A L L K M G K E E V G A K N A W H L G E L G I			
UniRef90_F7XMU1	I T I R V E G R R A V A I T G K A G D K L C T L V D S V G P S A R N I A E L G I			
UniRef90_W0JHA5	L C F V I K D G M L N E I I G S D N A K T L K K I I D Q H P Q A A N V A E L G I			
UniRef90_O58751	I K L E V E R G K I V N I E G G R E A R E F S S W L E N D P N M Y Q L A H I S Y F			
UniRef90_UPI000403CB64	F V L S I E D G V I T S S E N N D E L N A L I E F G P E N V T V C E L G F			
UniRef90_Q3AEI9	L I V R V E D G R V V S V E G P G S T V L E E Y F N Y G E K A R L I G E F G I			
UniRef90_R5N1F3	L R L T I E N S K L V K I E G G G R D A A L F E E H L F E D E G M F K L A H I T A Y			
UniRef90_Q12VJ3	L V I E I R N R S A V S F E G G E G A E K L E A M V E N G A G R N I A E L G I			
UniRef90_H3ZQG6	I I L E V E Q G T V V R I E G G G Q E A K I F E K W L K S D P N M F K I A H I S Y			
UniRef90_UPI0004043A63	V V L T V E K D G V I E H S D N D E L L N E V L S S Y G P K E N S T V C E L G I			
UniRef90_G5HS06	I T L Y I E N S F V T K V E A V K F E K V L K E I Y D P K R I Y R I G E I G V			
UniRef90_Q88L15	I T V T V K N G M A V S I E E G K Q A A M W R E I F A K H E S F N C P A E I A I			
UniRef90_UPI0003F9D419	I T M T I K N G R V T D S D C D A L N E L L S Q E E G A R L V G E L G I			
UniRef90_R6WUU1	V K L T L E N G V T K I E G G A Q A E T F K A W L E S D D G N S Y R L A H Y S Q			
UniRef90_UPI00040D56A6	V I T V K D G R V T D S N C T A F N E F L S G Q E E G A R V V G E L G I			
UniRef90_D8IP21	I E V T V K D G F V T R I E G G L D A E L L S D Y M A S D P E A Y A M S H I G W			
UniRef90_X0RII9	V R L T I K A G E I V K V E G G K Q A V E F E A W M K S H P R M L K L A H V C Y			
UniRef90_T0ZZC4				
UniRef90_L9WRK2	L T M E I D D G S V S I D G A E G E R V E A L W Q R Y D P P A R E V A H V A V			
UniRef90_C0C283	V K I Y M K D G V I D H V I S A R Q W E K Y M R D F Q H P Q M L R P A H V C V			
UniRef90_R6DWS9	V R L T V E N S K I V A I D S G S E A V E F K K Y L E A D P N M L K M A H V A Y			
UniRef90_F0Z320	F R I C L E H G C I Q E I R T E A A G K L T E Y M A D F D P G Y I V A S E L G I			
UniRef90_R9N5T9	V S Y I V K E G R I Q E I R G E G A Q D I L R A Y K L D D P N M Y I A A H V C Y			
UniRef90_D5ENC0	L H V K D G K I F K S Q F V Y G D E A H N A Q L A D D P M T G A I G E L G F			

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UniRef90\_UPI000479E913 GT N T T A Y T F A R K F N I D I L L I A E K T G P H F A V G D T C C Y S Y N E E D D N  
UniRef90\_R9J8J3 GT N T T A Y M T A K K Y N I P I L I A E K T G P H F A V G D T C C Y C Y N E D D G  
UniRef90\_G5HE35 GT N T V A Y A M A Q K F G I P I L I A E K M G P H F A V G D T C C Y S F A E E D D G  
UniRef90\_R5C6G9 GT N T T A Y A E G I R Y G I P I L I A E K T G P H F A V G D T C C Y S D E E D D G  
UniRef90\_D9RAC4 GT N T T A Y A M A R K F G I P I L I V E K M G P H F A V G D T C C Y S W A E R D  
UniRef90\_H7GIL1 GT N F A L Y D R P T G L V L L D E K G T V H L A L G R S Y P E T  
UniRef90\_D4IYK7 GT N T R A F V M G Q K Y G I P I L I A E K T G P H F A V G D T C C Y P M Y N P D G  
UniRef90\_UPI0003B69F54 GT N T T A Y Q I A R D Y S I P I L I A E K T G P H F A V G D T C C Y S H E E D D D  
UniRef90\_R5RNF0 GT N T T A Y M M G L K Y N I P I L I A E K T G P H F A V G D T C C Y S H E E D D G  
UniRef90\_C4GBU9 GT N T T A Y R M A K D Y G I P I L I A E K T G P H F A V G D T C C Y S H E E D D G  
UniRef90\_R5U9I8 GT N T T A Y R M A K E Y Q I P I L I A E K T G P H F A V G D T C C Y S H A E E D D  
UniRef90\_C0D4A2 GT N T A Y A M A K R F G I P I L I A E K M G P H F A V G D T C C Y S F A E E D D  
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UniRef90\_T0PJY7  
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GT N T V A L K H D I Q A K L P I L L I A E K T G P H F A V G D T C C Y S H S E D D  
UniRef90\_X1B2K6 GT N Y G I T K F T K N M L F D E K G T M H C A L G S G P  
UniRef90\_A1SLX9 GT N A A L T L M T G D L L I D E K G T V H I A P G R A Y P E C  
UniRef90\_H1LRU1 GT N V I A Y N V A K K Y D I P I L I A E K M G P H F A V G D T C C Y S H E E D D  
UniRef90\_B0VHY4 GT N T L A Y Q M A R K Y N L P I L I I E K M G P H F A I G D T C C Y S H E E D G  
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UniRef90\_D1Z246 G L N P V I D R A I G Y I L T D E K G S V H V A F G R S D  
UniRef90\_X1ILF7  
UniRef90\_G5GJT2 GT N T A A Y A A A K K Y G I P I L I A E K T G P H F A V G D T C C Y S H E E D D  
UniRef90\_UPI00037FCE3A GT N T L A Y I V A Q K F N I P V L L I A E K M G P H F A V G D T C C Y T F E E D D  
UniRef90\_G2KPC8 GT N P H L K Q H V A N G L L V I E K G S F H L A L G R P Y S Y T E Y Q G  
UniRef90\_O58749 GT N P K A R I S G N I L E D E K G T V H I A L G S N Y D F  
UniRef90\_UPI000467D971 GT N T R A F R C K K Y Q L P I L I Y E K M G P H L A I G D P C Y K G A E D G  
UniRef90\_F4HKH2 GT N P K A R I S G N I L E D E K G T V H I A L G S N Y D F  
UniRef90\_F2NU81 G L N P A A G I T G N M L E D E K A T C H F A I G E N Y D G D A P  
UniRef90\_E8T2T6 GT N D R A K V K T N I L E A E K I L G T C H V A V G D N S S F  
UniRef90\_C5ER26 GT N E A A V L N G V I L E D E K G T V H I A F G T N T S F  
UniRef90\_F5YD32 G L N P A A R I S G R M L E D E K A T C H F A I G H N Y D N D A P  
UniRef90\_D3SMN6 GT N P G A K R P R I S D N V L E A E K G T I H L A I G D N H T F  
UniRef90\_U2M3L5 G L N P A A R I T G N M L E D E K A T C H F A I G S N Y D N D A N  
UniRef90\_H8I647 G M N P K A R L W G L L E D E K A T V H L A L G N N I G F  
UniRef90\_UPI0003B6E74D GT N E A A V R F D N I L E G E K I L G T C H I A V G  
UniRef90\_R6BPH3 G M N P H C Y F C G F M L E D E G V E G S V H I G I G T S I T L  
UniRef90\_D1AMF5 GT N K S A V L C G I L E D E K G T V H I A F G T N T S F  
UniRef90\_U5RP56 GT N P E A K V T G V I L E D E K G T V H I A F G T N T S F  
UniRef90\_K4LWW2 G F N P R A A V T G K V L E D E K G T A H I A L G D N M S M  
UniRef90\_D6LGJ6 G L N P N C R F I G L M L E D E G V Y G S C H I G I G T S L N L  
UniRef90\_F6B869 GT N P K A K K P D N V L E A E K I K G T I H I A I G D S S H L  
UniRef90\_A8UTJ6 GT N P K A S R P D N L L I A E K G T V H I A I G D N H T F  
UniRef90\_UPI0003B3833D G L N P A A N I T G N M L E D E K A T C H F A I G E N Y D N D A P  
UniRef90\_E7GHS4 G L N P N C K L S G S M L E D E G G T I H L A C G D N V S F  
UniRef90\_UPI00047B1303 GT N I G V I E R V I G N I L Q D E K F G I H I A F G N P Y G E H T G  
UniRef90\_R6DRU1 G F N P G A K L S G N V V E D E R V W G A T E W G I G Y V I S P T V I G G  
UniRef90\_Q0QFT2 GT N P Q A E I I G H V L Q D E K G T V H I A I G N S M P I A E K E G  
UniRef90\_Q0V035 G L N P K A R L T G L L L E D E K G T L H I A F G H N S D M P  
UniRef90\_R6M6U1  
UniRef90\_C5EG77  
UniRef90\_A4J119 G F N P G A K L T G N I L E D E R V W G C T E W G L G Y  
UniRef90\_D4GS17 GT N V I G V T D L V I G S V L L D E K A A G T V H I A V G D D A G I G G D  
UniRef90\_Q0W0V3 G M N P M A G P S T N L L E A E K A T I H F A I G E N F D H D A P  
UniRef90\_C7NYK1 GT N V A V R D L V I G S V L L D E K A G T V H I A I G D D H A I G G D  
UniRef90\_R5C745 G L N P A A S L S G R M L E D E G G T M H I G I G N N L S Y  
UniRef90\_K1YJ55 GT N P T A K V T G C V L E D E K G T A H I A L G D N T S Y T  
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UniRef90\_L9X354 G M N P E C P E F N G W F S N D H G R Y G N V H F G I G T S S N L  
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UniRef90\_F7XMU1 G L N P A A I R G I V L E D E K G T V H I A L G N N A T F G  
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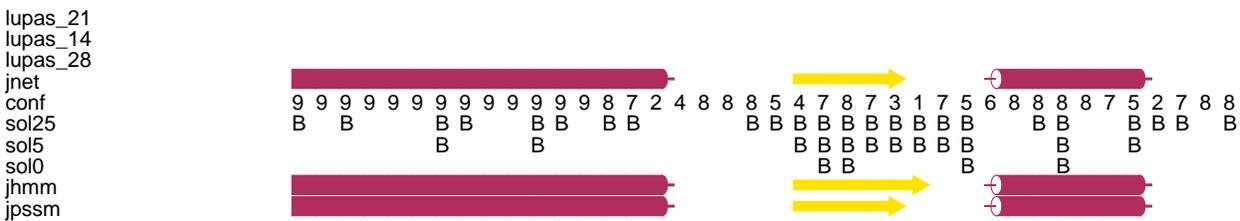
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