

1 10 20 30 40

QUERY	M D D [L T N L A A R [R [L L E D R E E I R E L I A R Y G P [L A D S G D A E A [L S		
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UniRef90_W2UB76	A Q K L Q H F S D D H L E Q S V L N L Y A S A I D K R Q W S Q L E		
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UniRef90_UPI00045E9F07	M [D A D E L L T R L C R L E D E R D A R L I A S A Y G P A V D A G D A D A A A		
UniRef90_H8INV8	E L E A I L L A R I D A L L E S D R A R A C I N R Y M D L C D H L N P D E L G		
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UniRef90_J7J5P2	T L L M D Q L A I R A L L D R Y C D G V N Q R D A T I W G		
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UniRef90_S3NP24	UniRef90_UPI0003637560	L Q T L S D H H D R E L I V A Y S S A I D N F L L D D L V	
UniRef90_UPI00036B723D	UniRef90_UPI000405E6AF	M N E Q M D L L Q R L A Q L E A Q Q A I R N C I N R Y M Q I C D A L D A D E L M	
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UniRef90_A5V4W9	UniRef90_UPI000405E6AF	T F D A L V A R I E A L E A E A E I R R L Q A R Y M F L C D T H R I D L I M	
UniRef90_UPI0003652FAB	UniRef90_UPI000405E6AF	M Q D I L S R L A Q L E A H N A I R N C I N R Y M Q I C D Q L D A N T L M	
UniRef90_S3NP24	UniRef90_H3NS08	L I E E I S D R L E I Q Q L L V A Y S T A I D T R R F D D L A	
UniRef90_UPI0003637560	UniRef90_UPI000405E6AF	A H R E T G L M A R F A R G I D L R D W E L Y R	
UniRef90_UPI00036B723D	UniRef90_A5V4W9	D E L Q Q L Q K R L Q Y V E D E R I A I Q D C V M N Q R A G H D R H D A D L M A	
UniRef90_D5PEC8	UniRef90_H3NS08	M S A G P S I E Q R L L A R I E A R A E I T D L V A R Y A R G A D R K D P A I L G	

QUERY	50	60	70	80
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UniRef90_UP1000312EE11	R L W T E D G V Y D V D T G V L R G H A A I	T A M V Q S Q A H Q G W I G G G C		
UniRef90_10RXF1	A L W C D D G V Y D V E G W L M Q G R D D I	A A M V R S S G H Q E L I N G G C		
UniRef90_V9XII0	Q L W S P D G V Y D V E G W A M N S R D D V	V A M V A S D A H Q G L I R R G A		
UniRef90_UP10003747251	E L W A E D A V Y D V D I R L M E G R D A I	T R P H Q D Y I E E G C		
UniRef90_L0IZB0	A L W T S D G C Y D V D E I F L D G Q A A I	S A M V R S A G H Q R W I Q G G C		
UniRef90_UP100036D3CE0	N L W T Q D G T Y D V E G W R M D S R D D V	H A M V S S Q S H R D L V A T G C		
UniRef90_W5TCN0	A L F V E D A V W E S G P L G R F E G R E A I	R G F F R G A S K I F T F A		
UniRef90_W2UB76	A L W S R E G S Y D V E D W R M R G R G E V	A A M V G S D A H Q G L I G R G C		
UniRef90_G8RY01	Q V F T P D A V A N F I G Q F D G R Q A I	T D L I S S V L C Q A A T		
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UniRef90_UP100045E9F07	A V F T A D A H I D Y S A M G G S K G	G L K E T K F L A S V M P G F G A Y		
UniRef90_H8INV8	A L F T P D G V F E G L E A V S G H D A L	R L R A F F S E R V P K L A E D F		
UniRef90_A6VWC0	R L W A T D G G Y D V E G W Q M H S R A D	V R A M V S S A S H Q K L V G G G C		
UniRef90_K0UMC7	D L F T E D A K W E G K G F G G Y E G R D A I	V I A M L S K Y T V E P A H F S L N		
UniRef90_UP10003803F6C	S V F T E D A H I D Y S S A G A I V G R D E	V V D W F A A N F G V I P W S		
UniRef90_U2YJB1	E L W T E D G L F A A V P Q L T M Q G R A D	I R A M V H G A G H Q S L I H G H C		
UniRef90_W4LPD4	A M W I D S G L Y D Y S G G A V A T A P D G I	L I A A Y E G P E H Q G L I A D G C		
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UniRef90_I7FCP2	D L F T E D G E F D G L G H P R G K A E L	R T F C A G L A A G G L T A F W		
UniRef90_Z5X877	G L W A Q D G V Y D V E N W Q M V G R G D V	G L V H A M V S S S H R E L V A G G C		
UniRef90_A0A028VEV6	G L F T H D A I I W E G K G F G G Y R G R E A I	I R A M F A G Y M T E P A H F A L N		
UniRef90_UP100047E4F6E	L L F T E D G V V E S I S S N G N L V G R Q Q L	K I E V F S G F L A E F H T V		
UniRef90_H0R5N9	A V F T A D A T I D Y S A T G G I T G S L D E C I V W L G E V L P A F S A Y C			
UniRef90_B0KNJ4	G L F T R E A V W E G K G F G G Y R G R E A I	I R A M F A T Y M K T P A H F A L N		
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UniRef90_A6G0B0	D L F T D D G V L D I G P F G K F E G R D A I L N A F E N L L P Q G	T K W S		
UniRef90_F2LL46	H V Y T E D A V F D R T A A P G A V G R D A L V A L V E S E A H K Q A L D G G L			
UniRef90_A5VBH3	A C F T P D A D L D Y R P V G K F G P D G I	A C F T R I A V E S P I V D V H		
UniRef90_D3F4E5	A N F T A D A V L E Y P W E G E W S R H E G Q A G L A E K L D R S F S R Y H A T			
UniRef90_R7XXD9	A L W E P E G V Y D V D E L V M N G R D E I	I V A M V E S A N H Q G W I T G G C		
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UniRef90_UP1000367E656	Q L F S E G A V V W E G K G F G R C E G R D A I	A A Q M F K K Y T L P P A H F E L N		
UniRef90_M4SM78	A L W W E D A V W D I F E V Q V K F S G I D E I S G A V E N L I W P M	W Q S T		
UniRef90_Q84G25	E C W A E D A V L E F G P W E K I H G K E A V R A K V E	E V E S P Y A S M		
UniRef90_K0VAH8	A L F T E D G V W E G P G S V R V Q G R S A I A A E L F	G Q F Q I I P F I		
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UniRef90_Q1NHE5	S L F T P D A V L D V T G N P P M S G H A I L E Q V R S A V I	I D A R S		
UniRef90_D5PJ41	K V F T A D A Y I D Y T A L G G I E G H Y P E V K K W L S E V	L P N F P V Y		
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UniRef90_K6X117	E V F T S D A V I D Y R E T G G A R G T L A Q I K A W L P L A M E R F P L F			
UniRef90_R9SUQ2	S V F T E N A V V D Y T P H G F A G G R D E V A D W V L A E N F G V L P M S			
UniRef90_UP100036DFD5C	E L Y T K D A V I W E G V G F G R A E G K D E L R A H F N W S A D Q D P K L I L N			
UniRef90_G7H5Z8	R L W A E D G V F E M S T G R T A N G R A I R D M L A A V M E R S A T P V			
UniRef90_B8KSP3	D V F T P D A L V D Y S A T G G I S G T P A E C I T W L G T V L P S F T A Y C			
UniRef90_A8H0Z6	G T W A E D A V W E L P H L E M S G I Q G R E N I V S A W V E A M K L F P F V			
UniRef90_UP10003B36B52	S T Y W E D A I E E H Q D P E L F F Y N D N A H Q F V I E P A M E G F R A L K A T			
UniRef90_M2WYL2	A C F A P G I H I D F G H Q G Q F D S R E A V V A F E E L G C H D H I V D			
UniRef90_J7J5P2	S C F W P G A I I D V H I G R H G Q L H T G T A E E F D R E W G F S D F T A S			
UniRef90_UP1000255dff3	A V F T R D A V I D Y R A M G G I A G A Y P D V K A W L R S V L P Q F P Q Y C			
UniRef90_N9SUL5	A L F T E D A I I F D M R G F G A P A G R E A V R A A F S A M I D S L S L G G			
UniRef90_J1S7V6	D L F D A S I I W E G I G F G R Y D S W Q A I Y S M F K S Y T Q K Q S H F T M N			
UniRef90_D3CSD6	E C C T W E D A V L E F G P W E W I D G R E A I L A K V V I E A A P Y V S M			
UniRef90_UP10003652FAB	A L F T D D A V L L D S T D S G G E V I T G A D A F L E F L R P A L S E S V T V			
UniRef90_S3NP24	E L Y T E D A V W E G V G F G R A D G A A A I R A H F E R A P D R T P T L V L N			
UniRef90_UP10003637560	A L F D A S I I W E G I G F G R Y A S W Q A I H D M F L S Y I Q G Q T H F V M N			
UniRef90_UP100036B723D	S V F T D E I E I D Y S S Y P G N A G P F K A D D W V Q R G R M L F P G L T A S			
UniRef90_UP1000405E6AF	S V F T E D A V I D Y S S A G A I C G R D E V A D W L A S G F Q E I P M S			
UniRef90_D5PEC8	S V Y F K D G V I D E H G P V V K L G P E Y G D Y A N E A H S K V F E D H			
UniRef90_H3NS08	N I F L D D A V I D Y E A T G A P K C S V E E M I A F L S E A M S L F P N H			
UniRef90_A5V4W9	P L F A E D A L W S A E G F A A L T G R A I A T G L A A A D R V L W S			

QUERY	90	100	110	120
UniRef90_L7K0Q4	A H F L G P A T V T V E G D T A T A R C H S V V F R C V S G T F G S H R V S A N			
UniRef90_C0ZQW1	G H I L E P G H T R I D G D T A V A T C K S Q L I I R D G D G F R V L R V T A T			
UniRef90_C1AYA6	A H M M T P A H I R I D G N K A V A T C H S Q L V I K D P E G F K V L R I T A N			
UniRef90_UPI000312EE11	A H M L E P G H V R V D G N T A V A T C K S Q L I V S D E N G F R V H R I T A N			
UniRef90_I0RXF1	V H F L G P A V V S V H G D D A T A V C A S T L L V K R E A G Y H V A R G G A N			
UniRef90_V9XII0	A H F L G P A V V T V D G D K A V A V C E S L L V V H R D G G Y T V W R A G A N			
UniRef90_UPI0003747251	G H L L D P V H I R V D G D T A V A T C H S L L L R R D S D S F R V W R V S A N			
UniRef90_L0IZB0	A H F V G P P H V T L K G D D A V A V C H S L M I V H E D G R F V V R R A T A N			
UniRef90_UPI00036D3CE0	C H F L G P C V I T V T G N T A V A M C E S L V L L R R G D E Y V V W R A T A N			
UniRef90_W5TCN0	I H Y S L N P Q I E V T G D T A R A R W Y L F M P C T V E G S Q A M W R A G I D			
UniRef90_W2U2B76	L H F H G P A V V T V A G D E A V A V C E S L L V V H E G R N V V A R T G A N			
UniRef90_G8RY01	Q H L L G N Y E I Q V N G D E A H T T C Y L S A M H A G L G K T L T V W G E Y			
UniRef90_K0F018	C H F L G P S V V T V H G D D A V A V C E S I L V L H R G E G F T V A R A G A N			
UniRef90_UPI0003625B2F	Q H L I S S N S S I T V D G D T A T G R T M C H N P M M M S G G D G P S S L M W Y			
UniRef90_UPI00045E9F07	Q H L I S S N S S I T V D G D T A T G R T M C H N P M M M S G G D G P S S L M W Y			
UniRef90_H8INV8	C H F V G P A V V T V A G D S A V A V C E S L L V L V R D G E S Y R V W R C T A N			
UniRef90_A6VWC0	V H Y L S S E V I R V D G D K A F G S W N M I Q V S S F S A G G S H L N S A R L			
UniRef90_K0UMC7	M H Y I T N V E A Q I D G D T A T V R A M F Y N P M I L P G M D T Q S A C C G Y Y			
UniRef90_UPI0003803F6C	A H V L T V P H I E I D G D R A T G R S Y A L N I R W D A D A D W V A R V S A N			
UniRef90_U2YJB1	S H L T A P P R I T L Q Q G D R A E A L A Y S Y V A R R R D G E W F L Y R A A I N			
UniRef90_W4LPD4	I H H V M N P I D V Q Q G D S A T G Q W Y L F Q P C T R A D G R A A W A A R Y			
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UniRef90_Z5X877	C H F F G P P A V T V D G D E A V A V C E S M L L V R R E S R G F A V A R A G V H			
UniRef90_A0A028VE6	V H F L C S E L I R V E G E E A S G S W V M L Q T S T F A S G A S H L N A A R L			
UniRef90_UPI00047E4F6E	Y H H N G Q Q T I D L Q Q G D K A S A T S Y C H V I L V G E Q E G K T M L Y T I Y			
UniRef90_H0R5N9	H F L G N V E I H M L G G T A T S R T L C L N P M Q T P D K S A F L L G I Y Y			
UniRef90_B0KNJ4	V H F L T S E V I E M D G E Q G V G R W M L Q T S T F A D G A S H H L N A A R L			
UniRef90_L7K817	H F I T N L E I E I D G D R A V A K S F L W Q P C V L D G V A S I A A G R Y			
UniRef90_A6G0B0	T H Y I V N P V I E V D G D A A T G D W Y Y L I L P A G E G A Q L V Q F R G G Y			
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UniRef90_A5VBH3	Q I H N G E I E I V D A D R A T A R W S L G F S T Y D P R T G G F R L I G F Y			
UniRef90_D3F4E5	Q H M S S N H Q I S I V D G D T A R S T S Y L H S S H A E D Q D H W D V G G W Y			
UniRef90_R7XXD9	A H F V G P P V V T V S G D E A L A V C H S L M I V N Q D G R F V V R A T A N			
UniRef90_J2MH03	V H F L T S E L I R V S G E T A D A S W V M L Q A S T F A S G A S H L N S A R L			
UniRef90_UPI000367E656	V H V L G N E V I N V D A D S A T G S W V L V Q P S S F T S G K S Q L S C A R I			
UniRef90_M4SM78	T H Y C T N H R L E I N G D T A K G I C D V Y C H G N L A D G Q Q A A H V V A S Y			
UniRef90_Q84G25	Q H H I L N M H V D E V E G D R A T G I G Y M W F V I A V T A P G S T S S M G G P Y			
UniRef90_K0VAH8	I H N V V M N P L I E I I N G D H A R G Q W H A I I A T T A E G Q A F W T F G R Y			
UniRef90_A5VBK6	Q H L S A T T R L D I D G D R A K A R T I L F N P M V M D G K Q Q V F F I G W Y			
UniRef90_Q1NHE5	A H Q I H S S E I E I D R G D E A D M I T A M Q D R V V I P G G Q S I T G F G H Y			
UniRef90_D5PJ41	A H M L G N F S V R I D G D K A S S R V I C F N P M V M L G G E K G Q V L F C W Y			
UniRef90_M4ZYU5	Q H I V S N H Q V T I D G D S A T H R C Y L H A Q H I R R G G P H Y V V V A G R Y			
UniRef90_M4S486	Q H M V V A T T E L K L D G D K A T A R T I L F N P M V I P G N D K V F F V G W Y			
UniRef90_UPI000317882B	A H V V G P P H V T V E G D E A V A V C H S L M V V H G A E G H R L R R A T A N			
UniRef90_UPI000349F29A	Q H M T T N H V I T F D G D D H A T C V A Y V R A S H H L P G D S D Q T V Y G Y Y			
UniRef90_B8KSQ8	L H R P S N T W C K V S G D R A V T E S Y V I A Y V T T G D A Q P H L V G G R Y			
UniRef90_W5W9Q8	Q H L V A N P D I R V D G D R A T G R V M C L L P V I E D G D P S V A L Q G L W Y			
UniRef90_W5WAB5	Q H L I A N P E I R F D G D R A T G R V M C L N T L V F P V K D G D P R I A W Y			
UniRef90_Q5YQ84	Q H L L G N Y H V T I D G D E A I S S C Y V R V V H V G Q G E R A D L Q I A G T Y			
UniRef90_UPI0002F26F0C	H Q I C G H E I E L V D A D H A R G R V Y C R A E H E D G G N W V V M A I C Y			
UniRef90_W1RWJ0	Q H A V L N H I C D L D D G D D A Y T E T Y Y I C S N I N S A P P H I L S L G R Y			
UniRef90_UPI0003B5676F	A H V L T S P R I D V G D R A V A V A N H S V V F E F P P G G W L A V R V S A N			
UniRef90_M3UWG1	Q H F I T N I E Y R F D G D R A E V R A M F Y N P M Q F A G M T E L S T C G G Y			
UniRef90_A0A031JMY7	Q H M V A T T K L D L D G D T A G S R S I L F N P M V Y Q G E G K P E Q V L W Y			
UniRef90_M4ZU18	T H M V T N P V V E V S G D S A V G S W S F A M M Y T D P D G R R F R I L G F Y			
UniRef90_G8RN37	M H Y I T N I E S D I S G D T A T V R A M F Y N P M Q L P G M T A M S T C G Y Y			
UniRef90_H6RCF2	Q H F V S N V D V A L D G D Q A R V A M F F N P M I V S T G K Q F F C G G W Y			
UniRef90_G2IQH2	Y H L L S N A L I E I E G D K A H V V S K Y L F L T Q D A D R P A P L L A G R Y			
UniRef90_A0A024QK11	Y M T C L E V D L D E S A T V A T G T W Q L L Q L C T R L E P E P V L A T A I Y			
UniRef90_H8IKJ7	L H R L S N Q V I A V E G D N A T A R T Y V A V I M F G D N Q A G V N A W G F Y			
UniRef90_Q14OL1	K H I M T N V F V N V D G D T A R S N S T F I M V R E S A E I V I A A A G R Y			
UniRef90_G7CKM6	M H Y I T N V E A E I D G D T A T V R A M F Y N P M Q L P G M S E M S A C G Y Y			
UniRef90_UPI000304E2FB	Q H H I L N L H I E V N G D A A T G I G Y M W F V I A T G A D P A D P Y A M G G Y			
UniRef90_A0A031JWI9	M H D V Q I D F V D D G S Q E A T G R V I G H A E L W R G G R M M V T A I R Y			
UniRef90_UPI0003802D13	F H R I S N I A I R I D G D R A T V R S Y V L L V T P D D P A N W V D V I G S Y			
UniRef90_F6IDA6	Q H M V A T T R L D L D G D R A T S R T I L M V Y R K D D G A E Q V F F I G W Y			
UniRef90_K6X117	Q H Y I T N I D A E I D G D S A K V C A M F Y N P M Q L P G V K G L S F C G Y Y			
UniRef90_R9SUQ2	A H Y L T S E Q I F V D G D T A E G T W I H M Q P W L Y A D G T A L L R S S R L			
UniRef90_UPI00036DFD5C	I H M E M N P R I T L E G D T A R S T M Y G V A R T Q D D G L T R V I W L G H H			
UniRef90_G7H5Z8	H F L G N T E F H I T D D T A T T R T L C L N P M Q A G A G A F L L A I Y Y			
UniRef90_B8KSP3	N M M A Q P G V I E V T G D K A T M R S Y T T E V A V T Q D G N E I R P R G E Y			
UniRef90_A8H0Z6	Q R I S N P L I E I D G D T A T A E A Y V V W A Y H V H E E D K E G I L G G R H			
UniRef90_UPI0003B36B52	M H H A Q N P L V T L T G D S A T A H I G L R F L S I T R D K L R V Q L G G H Y			
UniRef90_M2WYL2	Q H Y L C N M L I D V D G D R A V A E T Y Q F S Y V W R E P G D D P L N S N R Y			
UniRef90_J7J5P2	Q H L V G N L S I T L D G D T A R G R T I C F N P M V L P D G G T Q V M F L G W Y			
UniRef90_UPI000255DFF3	V H L T M N H L V D V D G D T A T G R V Y C H A F V L N P D G S R A E N L A L Y			
UniRef90_N9SUL5	A H F V S S E Q I Y L E Q N Q A N A T W L M L Q T S T F R D G R S H H L N A A K L			
UniRef90_J1S7V6	Q H H I L N M D F E V R G D R A T G V G Y M W F V I A V A A P G R T S A M G G P Y			
UniRef90_D3CSD6	H H C H T P E I A V T A P S T A T G I W A M E D R I R F P D G S E L I G F G H Y			
UniRef90_UPI0003652FAB	A H Y L T S E Q I H I D G D T A T G Q W I H M Q P W L F S D G T G L L R S S R L			
UniRef90_S3NP24	A H F V S S E Q I N V Q G H E A F A T W Q M L Q T S T F H N G Q S H L N A A K L			
UniRef90_UPI0003637560	A H M L G N F D V T I T G D T A T K S R T I C F N P M V L P A A D A L F C G L W Y			
UniRef90_UPI00036B723D	Q H F L S N L D I T V D G D R G T V I S Y V R A E H V L P P N T A G D A M F G Y Y			
UniRef90_UPI000405E6AF	M H Y I T N I E V E Y S G D S A L A Q A M F Y N P M Q L P G M T G L Y C G G W Y			
UniRef90_D5PEC8	L H N I T T H T C E I D G D E A H C E S Y V I G A M R A K G K I V L M G G R Y			
UniRef90_H3NS08	Q H L V S N T Q F K V D D D T A T G R V Y M C F N P M A V E V G G T Q T F I L G W Y			
UniRef90_A5V4W9	I H Y M T A P L V E L S D D G A T A R C H W Y L W S E A A G P T D S W F G G W Y			

130 140 150

QUERY	R W T F R R T P A G W R A V R R E N A	L L D G S A A A R A	L L Q F
UniRef90_L7K0Q4	R W E L E K I D G Q W K V R T R I S R I L L	D G R P E A R D L L	
UniRef90_C0ZQW1	R W E L I K T D G E W K V E L R T N A L L	D G R P E A R A L L	
UniRef90_C1AYA6	R W E L A K I D G E W K V T R R V N R L L	D G R E E E R A L L	
UniRef90_UPI000312EE11	Y F Q L R R E P G R W Q I V K R I T R L L	D G S A D S R A L L	
UniRef90_I0RXF1	H F E L L R R I D H R W Q I T A R V T R P L	D G G A Q A R E L L	
UniRef90_V9XII0	R F E L L A R I D G S W K I V R R T S R L L	D G S T A A R D L L	
UniRef90_UPI0003747251	H W R L R R E E S G W A V T V R T N R V L	D G R P E S P A L L R	
UniRef90_L0IZB0	H F E L L D R L D A G W K I V A R T S R L L	N G N P E A H G L R	
UniRef90_UPI00036D3CE0	E E E Y V R V N G R W M F K S K K S T G V	F N T P	
UniRef90_W5TCN0	H F R L R R I E D R W Q I T A R V T R T L	D G D A A A R D L L	
UniRef90_W2U2B76	T D K L V R T P E G W R I T H R Q L D S I	F A Q G D	
UniRef90_G8RY01	H F R L Q R I D G R W Q I V A R T T R A L	D G Q S E A R D L L	
UniRef90_K0F018	L D T F A R V D G S W R I A R R V		
UniRef90_UPI0003625B2F	L D T F T R V D G E W R I S S R		
UniRef90_UPI00045E9F07	D D V M R R V D G R W R F A S R R I T F Y F	L S P	
UniRef90_H8INV8	H F E L L R R I E N R W R I T K R T S R V L	D G N P G A H A L L	
UniRef90_A6VWC0	S V S F Q R D N G V W R M A H F Q T E N L	F S R P V S	
UniRef90_K0UMC7	H H E L V R T G D G W R S R R L R E E N V	W F S N P P R	
UniRef90_UPI0003803F6C	T W T W V R T P D G W R V S E R I N A N L	D G T A D H R E M L	
UniRef90_U2YJB1	H W H L V R T D G G W R I E R R T N R L L	E G T E D S Y A V M R	
UniRef90_W4LPD4	E E T Y L R V D G E W K F Q R M		
UniRef90_S3NY51	T V K F K R T E G G W K I K H F Q T E N I	F S R P I S H	
UniRef90_A0A051TYF6	H F A L L R R I D D R W Q I A T R T S R V L	D G N P D A L A L L	
UniRef90_UPI0002559CE0	R W V F E R T A E G W R A R S R R A E L L	D G Q A A A Q A L L G W	
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UniRef90_Z5X877	L I R L Q R A G H G W E I V S R T A R Q L	D G S G L A V A L I E	
UniRef90_A0A028VE6	T V R F R E E Q G V W R M A H F Q T E N L	F G R P	
UniRef90_UPI00047E4F6E	K D E F V K Q N G Q W L I K H R T S N F V	W R E V E	
UniRef90_H0R5N9	D D E W V R T V D G W R I T S R T L V		
UniRef90_B0KNJ4	T V R F A L E E G Q W R M A H F Q T E N Q F S R P		
UniRef90_L7K817	T D E L V K Q D G Q W L Y R V K K V R F	H F F G P	
UniRef90_A6G0B0	S D K Y V R V D G E W R I K E		
UniRef90_F2LL46	R W T V V R T A E G W R V V K T R K L F	P M D G S A P A R G L L	
UniRef90_A5VBH3	Y D E Y V R T A D G W R V S K S R H T I V D G T		
UniRef90_D3F4E5	H C E Y V R T A E G W R F T H L V L E A V	W Q T D G V A D I L E	
UniRef90_R7XXD9	H W R L R R G E S G W Q V A V R T N R V L	D G R P E S P A L L	
UniRef90_J2MH03	S V R F A Q E Q G Q W R M A H F Q T E N L	F S R P	
UniRef90_UPI000367E656	T A K F I K N N E R W L I D H F Q T E S L	F S R P D Q P A L L	
UniRef90_M4SM78	H D D Y E R R N G T W K I S S R		
UniRef90_Q84G25	D W E F R R G P D G W L L V R Q R L G V W W T D G E		
UniRef90_K0VAH8	L N E Y R R T D Q G W Q Y S T M S F E		
UniRef90_A5VBK6	C D E L A R T P E G W R I T H R R		
UniRef90_Q1NHE5	T E R Y V R R D G Q W K I A A L K L T R L Y		
UniRef90_D5PJ41	D D E F V R T P E G W R M T R R		
UniRef90_M4ZYU5	V D R L V R T D D G W R I S H R D L E V M W T E G		
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UniRef90_UPI000349F29A	T N R F T R T P D G W R I L A K V K L T A L W M T G		
UniRef90_B8KSQ8	L D Q H S H K N G E W R M Q H R Q Y		
UniRef90_W5W9Q8	L D E Y V R T P Q G W R I S S R		
UniRef90_W5WAB5	I D E Y T R T P E G W R I S S R		
UniRef90_Q5YQ84	H D R L Q R T S D G G W R I T H R R F D V		
UniRef90_UPI0002F26F0C	V D S Y V R Q D G Q W L F E R R V E Q H W Y A T D		
UniRef90_W1RWJ0	I D H F Q R R E G E W R I A N R V		
UniRef90_UPI0003B5676F	R W H L V R T P A G W R V E S R T N R L L D G A A A A R A L L E		
UniRef90_M3UWG1	H H S M V R T E T G W R S S R		
UniRef90_A0A031JMY7	R D R L V R T D K G W R I A E R		
UniRef90_M4ZU18	R D E F T R T D D G W R F R S L W S R V Q D		
UniRef90_G8RN37	H H E L V R T P D G W R S R R R E E N V W F D N A P G		
UniRef90_H6RCF2	H N D L V R T P D G W R S T R		
UniRef90_G2IQH2	E D D L V R L N G T W K I M K R V T		
UniRef90_A0A024QK11	H D D L V K T D D G W R F R K V S A T F		
UniRef90_H8IKJ7	D D E I V R T G E G W R I A R R R F T Q V		
UniRef90_Q14OL1	E D E L A R D N G V W R F K T R R L I I D F R		
UniRef90_G7CKM6	H H E L V R T P D G W R S R R L R E D N V W		
UniRef90_UPI000304E2FB	D W E F R R G P D G W R V A R Q R L G V S W T T G	R D P L R	
UniRef90_A0A031JWI9	D D K Y R N T D A G W K F A E R T I G F L Y		
UniRef90_UPI0003802D13	E D I F I R T T E G W R I S S R R V A R		
UniRef90_F6IDA6	R D K L V R T E K G W R I A E R		
UniRef90_K6X117	H H D L V R T E S G W R S S R M V E E N V W		
UniRef90_R9SUQ2	F N A F R K E G D S W L I T R T R T E N V F		
UniRef90_UPI00036DFD5C	H S R H V R T P D G W K I S Y R R N T V		
UniRef90_G7H5Z8	D D D W R R T D D G W R I T R R T L E		
UniRef90_B8KSP3	H D E C V K V D G E W K F S L R K F K V L H G E		
UniRef90_A8H0Z6	H F R F E R R D G I W K I K H R S T V F D W		
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UniRef90_M2WYL2	R D V F E K R N G E W R I L R R D F		
UniRef90_J7J5P2	V D R F V R T A H G W R I A A R V E E R C Y G H N V P A V L A D		
UniRef90_UPI000255DF33	E D A Y A R T V D G W K F S S R V I K P L L A G A P A S D		
UniRef90_N9SUL5	S V K F K Q Q D D G W K I K H F Q T E N I F S R P V S H		
UniRef90_J1S7V6	D W D F A R D S G G W R L T R Q R L G V R W T T G E		
UniRef90_D3CSD6	H E T Y E K A D G A W R I R S Q K L T R L		
UniRef90_UPI0003652FAB	N N S F R N E G G S W R I S R T R T E N V F V A P		
UniRef90_S3NP24	T V N F K Q Q D D G W K I K H F Q T E N I F S R P V S H		
UniRef90_UPI0003637560	E D E F V R T A E G W R M T R R V E T		
UniRef90_UPI00036B723D	T D S V V R V D G Q W K I C R K Q L T V L W N S G N P Q V L		
UniRef90_UPI000405E6AF	H H E L V R T G A G W R S A N R E E N V W F T N P P A		
UniRef90_D5PEC8	L D R L E R R D G V W K I A V R R C T V		
UniRef90_H3NS08	V D E F A R V N D R W L F A S R K		
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1 N S D N L I S N V Q K L V D R A D I E R V L Y E Y A F H L D A A D P E Q M L
 E A K L A L M V A R D E I E R L K H E Y C Y A I D D G R G Y G D W A
 Q D S I R E V R D Y Q E I Q G L R A G Y S H T I D R G D W D E F V
 M D A R I Q D L L D R E E I R Q L I T T Y C Q A A D R D H E K M R
 D L E A R I L R L E D I E E I R R L R M Q Y H F N T D D G Q W R F T
 E A L L Q R L L A T L E G E S A V R R L M A C Y M D L C D V P R A P Q L A
 D E L K Q L Q Q R V Q Y Q E I E E I S D R L E I Q Q L I A Y S T A I D S R R F D D L D
 T I E E M E A K L T Y L M D R Q E I L G E L L D R E A I R E C L Y R Y C R G C D R L D R D M V M
 M A L S L Q E M S D R F E I L Q M L Y H Y A D I I D R K A L E L T
 M N I E Q K L Q E A D D R L A I R M N L I D Q Y C A D T R D A I I G Q M
 T L E E L A H R R L T R L E D R A R I Q D L V A A Y A I A V D D H D I E T L L
 M E Q I L F R L R Q Q L E A V N A V R V N L R Y M E I C D A L D A N A L M
 M N L E Q R R L Q R L E D Q S A L K H L V D T F S N L A D D K N V A A Q M
 L A A L A A R V E V L E A E A E I R R L Q A R Y M L L C D T Q R I D A I I
 R L E D I E L D D I E A I K Q L K A R Y C R F L T T K D I D A W R
 Q A I L A R L Q A L E D K E A I S D A E Q I R S V L N Q Y C I K P D Q Y D F D G Y A
 M A E L N R R L E T L E G E S Q V R R L M A R Y M D L C D V P H A P E L A
 D I S L L E K R M R V L E A E S A V R Q L L N R Y R A R A V D A K D W Q L Y R
 M P E N D A L L A R I D R L E S L D A I R Q L P A K Y A L A L D M R D S D A W V
 I Q S M V D R F K I E D R L A I E A L R G E F T D T V M M R D P D R L A
 E L E Q R M Q C L E D I E A V R R L M A R Y M D L C D V P G P E A L G
 T S L E A L H R D V R Y L L D R T E I L D C I A R H A R G C D R H D V D L I A
 M T P I E R M E V R V R R L E D A D A I R R L K A R Y F T C C D R K D P E G M R
 S T E Q R L A R I D R L E S D R R E I K Q L K A R Y C R L L D T K D W T G W R
 M T D L I T R V E Q L E T R F A L L Q Q L S D R R E I E R L I I S E Y A H A F D S R D E T L L R
 M T D D T L A A Q V T E I D E R L A I Q D L M I A Y A H A V D T S D I D A V L
 N V D S A N R L L D E L A S K Q A L R D C I Y R Y C R G I D R A D E E T L L R
 I K E E I S D R L E L Y E L S V T Y C R G A D R G D A D L F G
 L L E E I S D R L E E K L V T D Y A T A V D T R N F T E F N D
 D D L A R L R R D V R Y L M D R T A I Q Q L I D Y S T A I D A K R F D D L D
 A R L R T L L E V E A I L D C I A A N A R G C D R H D V E L L G
 M E N T K N T E L L L Q Q L D R Q E I R Q L L V D Y S T A I D R R Q F D D L D
 L Q E M S D R L E Q D T I S R Y S Q G Q D A H Q L E Q W D
 M T Q Q N E L Q K I I D T Q A I E R L L I F T Y A F H L D M N Q T S E L A
 A E L A A L R A Q V A R L T A K D E I C D L V T T Y A R S C D V G D P V L L R
 M T D S A L L A R I D R L E S I D E R Q L L A A K Y S L A L D M R D M A M V
 M S E L E C Y K E A H A L T C Y R A Q A V D R R D F P K L A K
 Q T L L A D R A E T D L L V N L G R C D D H D F D G L K
 M T A D A E L Q E R L A R L E A R A E R D C I E R Y A R G M D R R D R A I L L R
 D T I E A L L A R V A S L E A E N A V R K T I A R Y M A L C D T L D G E T L A
 L Q E L S D R Q E I T D L I T T R Y T R A V D T R S F E D L V
 D L E A L R R D L Q Y V K D K I I R D L I H T Q A R G H D R H D V S L M T
 T I E E R L A R I D R L E D R A E I H R L Q I L Y A H Y G D K G D P N A L W
 M N A L E A R I D R L E S L A A I H D L V A R Y A L A V D S R D M D G W V
 V E D V A R R L R R R L E D R A A I H Q L V A K Y A V T M T K G D V Q G V L
 M S R T E D L L E I Q Q L L A K Y A V T M T K G D V Q G V L
 A R L D A L L D R Q D I A D C I T R F A R G M D R F D R A L F L
 A D C I E R Y A R G M D R R D R A I L L R
 N D I V D I K R R L N V L E A E A D I R R I Q A R Y M F L C D T P R I E K I L
 M S E T A A L S E R L T R L E D R E A I R D L M Q R Y A R A A D A K Y A P D L L A
 T L L A D I H D I T T L K Y R Y G R C L D T R E W D G F A
 T L L E L I E L E A L E A I R Q L K H R Y L N A C D L K D V D S I N H
 A T L L A E L Q Q Q V R E I R D I E A I K R V K H A Y F R A I D S A D L K L L A
 M S N T N S V E Q R V A R L E D I E A I K Q L K S K Y A R N L D N G D A D R V A
 M T L L E Q R I A R L E A L E A I R Q L K H R Y L N A C D L K D V D S I N H
 M T D I A A A I A D R V A R L E A A E A I R A L K L R Y L R A C D D K D P D A M R
 E V T C M D I Q L K A L L D R E E I R T L R A H H L D S N I A A L D
 M N D D I I K R I I D R L E S I D A I R Q L A A K Y S L A L D M R D A D A W V
 L L Q Q Y I D E K D A I E Q V Y V R Y C C E I V D A K T F D D R M D H
 M S D L A Q L Q Q R L R H E D I Q S T T L K A R Y C R F L D T K D W Q A W R
 A D L I E K D A I A Q V Y V R Y C C E I V D A K T F D D R M D H
 M S D L A Q L Q Q R L R H E D I Q S T T L K A R Y C R F L D T K D W Q A W R
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50 60 70 80

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UniRef90_A0A024K243	D L Y H P D A T D S H G S F S T G G V D A F I A Q L Q A A A P Y V R V S S
UniRef90_E9UWS6	T C F S D D A T A D Y A G L S F G T P G E L V D Y M R T N L P A E I I T
UniRef90_D2S002	S L Y T E D A V V D Y P Q A T L N G H D E I E E F G R D L E E L Y E Y S
UniRef90_M4RWY7	T L Y H A D A I D D H G A M F C G P A M E F I D K L P E I Q A P M E I L
UniRef90_F6F348	E L F T E D A L I D F G Y I S K A K G T E Q I R E L Y L R I P P R N L D L V
UniRef90_UP100036608AE	T V F T P D A F L D F R A A S P T S F G S R D D M G A W L R A G I G A M P M T
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UniRef90_H8IIH3	S V Y F E D G V D E H G P T V K L G P E Y G D W A N A H S M V F E D H
UniRef90_UP100037DB610	S V Y W D D A T D R H G P Y S S S A S G F I V W V L D R L A T S E R S
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UniRef90_I2JK94	D I F T P D A H D Y S A F G G T V G D L S S T I D F L K E A L P A F S A T
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UniRef90_UP1000369F10C	A L F T E D T F E V Y Y D P T S D P S E I V Q D K A N L F D H L N V Y Q R T
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UniRef90_A5VBK9	A L F A E D A T V D Y R G H V R L A G R D A I V A A L A G M F N P L F V G S H T
UniRef90_A4T8D8	T V F T E D C E L D Y G E I G V W N G V D A V T D F M V A A H D M A G H T
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UniRef90_A1T789	S V F T D D A H D Y S S A G A V V G R D E V V E W F A A N F G P W S M H Y T
UniRef90_B7RXF8	A T W S H D G T W I L M G Q E V S G R E E L F G F W Q T A M A S F K F A
UniRef90_F3L4N1	S V F T E D A T A H F I G G H Y D I D V Q G R D K L L K F Y A Y S F T E E K F G
UniRef90_K5B8Y0	A L F T D D F R S D T S P S G G I V G A D F V A F T R R S L R D Q P T
UniRef90_V7FGQ8	K I F T P D A V L D D T V T G G I R S G V D E H V A Y M K G A L S K I L I S
UniRef90_A0A031K7G0	A V F V E D A V F D G I G F P S L N G H E I R K F F E D T F A A M A A H A
UniRef90_UP10004746FE9	E L F S E D A V W E G I G F G H H Q G R E A I A A F V F S Y L P P S P H F T L N
UniRef90_D2RZX8	E I F T D D A V V N Y R G H T C H G E E V A A V Y W C E N V A Y E F S M H T V
UniRef90_L7FSF8	Q L F C Q D A L W Q G I G F G R I E G R K P V A M L M S Y L P P A P H F L S N
UniRef90_I2A8Q6	S V F T D D A H D Y S S A G A A G P R D E V A A W L E Q G F G A I P M S
UniRef90_W4CGC0	D V F A P D A V A D F N P I P V L T G R D T I V Q V F R D L V D V A V T V
UniRef90_D6U3V5	S L F T E D G V V R I P D A I E L V S R E I R A G V E R L Q G L W D Y F
UniRef90_T0IP36	N L F P E D V K V G G G K S G R K A L R D W F D E T H S R Q F T G T S
UniRef90_F8F533	S L F T E D G V W R I P P V V E F V G R E Q I R A G S K R L Q S Q W D Y F
UniRef90_A0Z4L5	A C F D E D F E I D F G F I G R F T D M G A F I A V F K S L A C H P T H I D M
UniRef90_A0A059MHN0	S L F A D A E F V Q P P G L V R R G H D P V L T I A E G V L A V A H L H S T
UniRef90_J5E7U5	A A Y H S D G I D E H G Y A T N A G P A Y G A W A N A T H A Q T S R V H T
UniRef90_B1FLG1	D C F A P G T V I D Y G R I G T F D H R D A L V G V F E R L G C H P H I V E M
UniRef90_Z5X773	E V F T D D F V S D T T A S G G V T G A D N M V A F I K K T L G K P S Q P T
UniRef90_W6WQ5	S L F V D D G L W V I K G G E A K G R E A I K Q H C R N L S A N I T W A
UniRef90_J0PUA6	S I W H D D A R L D L G A A F G H C H D G V A A I I A S A H L N W A A M P H M
UniRef90_T0HMB9	D V F T P D A F I D Y T V F G G P K G H Y P Q I K Q F L A E A L P S F A Y A
UniRef90_A4XEN7	D V F T E D A V F D L S G I G P Q V G H A G I R E F F T N V F A N M S H H A
UniRef90_A3U147	S S S Y W P D A V Y D S H G T Y V G D I E G F Y D W V W K S I W K T G P R N
UniRef90_UP1000366E209	S V W T A D A Q V D C Y G G F Q G P A S E F V R I V T T P S E L R E R S
UniRef90_E0Y1Q9	N L F L T A D A I D Y T A V G G I S G N L K E I L V Y L E T A L D F F P N Y
UniRef90_A4TE72	S V F T A D A Y I D Y R V S G G V D G R F P D V K A W L A E V L P N F P A Y Y H
UniRef90_UP1000381F4A1	S A Y H S D S W D V H G N Q V T S G P D Y A A F M N P I H D N A A Q A H T
UniRef90_B8KWE6	T L F A D D A V C E Y G P Y G S W E G K Q V I F D N Y K A T F S G D L A A P F T
UniRef90_I7G6J1	A V F T P D A Y I D Y R A M G G I D G H Y P E V K A W L A E V L P A F P A Y A H
UniRef90_E8X0V7	N T F A K D G T V D Y S A A G G T K G S R D L A K W M R A T P G S M S G F S N W
UniRef90_A4XF62	R V F T P D A R I D Y S E T G G A A G T F A Q I K A W L P V A L E R F P M F
UniRef90_A0A031MF80	A L F T E D G C E V I Y G P G G F G A Q R A A Y A K T L E G V G S F F K A T
UniRef90_J2GQH1	P L F T D D A T W T C K G F G T F H G G G D G C A L G L K V A G E K I W W S L
UniRef90_H3NS70	N L F P E D V R V G K D K V G R A H F K Q W M D E T L R V Q F T G T
UniRef90_F8GRB3	A L F T A D A W L S G P G F R M D G P Q A I A D G M A S L G Q Y S A T
UniRef90_C7QCH4	D V F T E D V G T T P A G T R E G R Q A L I D Q A R R N H E S Y E R L
UniRef90_G8RP72	S A Y H D G V A D D H V G F V G E V V D D F L D W F A Y H S T Q T R Y
UniRef90_G7CJR2	S C W T D R I D V D Y H Q L G T F T D P D A F T E V M A Q V H G P M G P T
UniRef90_W6WUS2	A L F T Q D A I W E G I G F G H L R G H E A I L A M L Q R Y L P P V P H F A T N
UniRef90_R7XTF4	H V F T D D A V L D Y S I V G G P K D V P A V V P V W I E K G L A G F D R F
UniRef90_N1MMN6	S L W V E D S H W D Y P D L G V V S G K A I V D L W A S A M P H Y P Q L
UniRef90_Q73WX9	S V Y T D D G V D E H G P T V K A A A D Y G D W A N A H S A A F D Q H
UniRef90_UP10003A5646B	A L F T E D A V W E S A A M G R F E G R E A I A A G L S G S G L A M A
UniRef90_F6FOX3	D L F P I P D V H C G R G R G E V L K S I T P A V R T F Y R S I
UniRef90_Q47QD5	G M Y A A D A V F R H A G A V L R G R E A I V A F L Q R A H L N G K T V H T
UniRef90_UP100036B214D	E V F T P D G S Y S A F G D T Y T L D L F P E L V E A A P K G L F T
UniRef90_N1MMD9	S A F H P D A T I A A A G P F V F Q G A P L Y D W G A S L H D A G Q E A T
UniRef90_G411V6	E I F T D D F V S D T T P S G G V T G A D F E V F A P L R S T L G K P S Q P T V
UniRef90_J3CZT4	E L Y S E D A I W E G V G F G R A D G K E A I R K H F Q A F W G Q D P A L L N
UniRef90_A3U0T1	R L F A E D A E W D V A G F G P K G R A A I G A F F E T S P W D Y T
UniRef90_G7H5V0	A T L A P D A T A R Y G D P L H F D G R D A I V D Y M R T S L T G N I V S T H T
UniRef90_G8RP89	G I F A D D F H S D T S P S G G I D G D A E F V A F V R K M L E K Q P T
UniRef90_U3A515	A T W A D E G W D Y P E I G T K G R D A I V A M W L E A M K A Y P G I
UniRef90_S9ZFL0	S L V T D D V E V R F I G G G Y L K G R D E Y V E A V A R N F N S S I A E H N
UniRef90_W6WZR1	A L F T D N G L W S I K G G G T A Q G K D G I R N H C R N L S S S I E W A
UniRef90_UP1000255A152	D C F A E D I L I D Y G P V Q Q F T D R D S F V A L Y Q Q L A C H E R V K D
UniRef90_G8RN91	A L L S K A S F G G T G P Q G V S G A D N I A K L H F A T T R R Y P D H P R T
UniRef90_Q0K312	A C F V P D A H I H Y D R I G S F A G R E A L V Q C F A E L A C R P T L R E M H
UniRef90_UP100036D5F21	Q V F S A D A V V E V T V G K M Q G I D A I R A G L N D A F D R Q G S Y P F I
UniRef90_W6WYU7	D V F T A D A V W D R A G H A S L T G H E Q L R A F F T G R T D I S T L H V C
UniRef90_A1SPY1	S V F T P D A E I D Y T E S G G I A D T Y P A V K A W L A E V L P A F F P R R
UniRef90_A5VBN9	G L F P E D V K V G N G E T G R A I L R A W F D D T M R Q Q F D G T S
UniRef90_UP10003697424	S L F T Q D A V W R M P D N V E F T G R E E I R A G F Q R L G D H W E Y F
UniRef90_M4RYX8	E V F T E D A T G D Y T Q A L G P P D R A S L I A S M H A N L G P D S N C G A T
UniRef90_W0A5P1	E V F T E D A V G D Y T Q A L G P P D R A S L I A S M H A N L G P Q S C G A T
UniRef90_B7WUL5	E C F V H G A V I E A D G F P P F S D R E E W V A T F T R L A V A N P S I Q D M
UniRef90_A0A022LPM6	E L W A A D G V Y D V D T G V L E G H A D L A G M V R G D A H Q G L I A H G C

		90	100	110	120
UniRef90_Q13I47	S H H V S N V I D F T G D T A T V R S V L Y A Y H K Y N R E R P D I V M G Q Y				
UniRef90_U2YX27	A H T V T N A V V D V D G D T A T G R W Y L A L Y H E T A D G D S A V Q Q A S Y				
UniRef90_A0A024K243	Q H N I T T T N F V V D G D G A R G E I Y C L V F H T F A G P E H V I I G G R Y				
UniRef90_E9UWS6	M H H L H H P E I T V E G D E A S G R W Y L Y D V F A P A F A L E G A A F Y				
UniRef90_D2S002	M H T V Q M P R L E I D G D E A T G R W Y M L V F Y V A S D G S E G H A L G Y Y				
UniRef90_M4RWY7	H H N V T T I N L A I D G D Y A E G E V Y L L A L H R A K T P D G P M D V G R Y				
UniRef90_F6F348	K Q F I H N H M V D V D G D R A S G V S Y L D A R Y A A G G D S V M V A A K F				
UniRef90_UP100036608AE	Q H Y I T N V E I T L D G D T A E V L A M F F N P M I L P G T S G L Y C G G F Y				
UniRef90_J3GHI8	L H Y L T S E S I V V D G K A A Q G Q W I M Q Q I S T Y A D G H S E L F G T R L				
UniRef90_V5XAS2	A H M L G N V D V R I A G D T A I S R T L C F N P M V L G G E G Q V L F C G W Y				
UniRef90_H8IIH3	L H N I T T H T C E I N G D E A H A E S Y V I G A M R A K G K I V L M G G R Y				
UniRef90_UP100037DB610	L H F L G N L S I A L H G D W A A V E S Y F Q A F Q R R P N P D P A Q R A G R Y				
UniRef90_UP10001DD0A49	Q H M I G N H H V E I D G E T A H C E T Y L Y S A M N T T G A P F S S I I G G R Y				
UniRef90_I2JK94	Q H L N A N I Q I T V T G D T A S G R V M C F N P M E M P L G E E T Q V F M W Y				
UniRef90_X5L874	V H H C H T P E I M L T S D T A T G I W A M Q D M L F F P D G S E L H G A G H Y				
UniRef90_UP1000369F10C	M H F G N Q N S V T L E G T T A T G I T Y C M A H T Q E E G Q Q K L M I A R Y				
UniRef90_M2Z8N5	L H S P L S D Q I C V E G D T A R G L L T G R A E L A L D G T L V M A A Y R Y				
UniRef90_A0A009SY51	A H F V N S E Q I E V N A N D H A T G R W L M L Q T S S F Q D G R A H L N A A K L				
UniRef90_A0A059KRL4	Y H L N G Q M T V N I D G D Q A T A D H Y C L V V L T A G Q A Q G T I N G V I Y				
UniRef90_UP1000371392F	Q H L L G N F R I A V D G D K A T A K C Y L Q A L H V G L G A Q T M T V W G E Y				
UniRef90_V8D271	A H Y L T S E Q I H D G D T A E G H W I H M Q P W L F S D G R S L L R S S R L				
UniRef90_A5VBK9	V H M P V I D I V G D D E A T G T W T L L A L N L A E G N K T T V G A A I Y				
UniRef90_A4T8D8	L H R I T N H T A L V N G D S A T A R A Y V D A L M A Q D N A S G V N A A G F Y				
UniRef90_W9WY82	L H I M T N M E I T L E G D T A S A S A R V W F C A T P S V L E Q H Y A F Y				
UniRef90_A1T789	N I E V T D F N T D V D G D T A T V R A M F Y N P M Q L P G A E Q S A C G G Y Y				
UniRef90_B7RXF8	F M V L N S G T I D I S G D T A T G R W Y V T E H L L G Q D G N G L H I E G V Y				
UniRef90_F3L4N1	M H N G H H P E I S V D G D N A T G L W Y L Q I F I N L E E N T T V M G S A I Y				
UniRef90_K5B8Y0	V H Q V H S P E I E L T A T T A R G V W A L E D V V R F G P G L N L R G Y G H Y				
UniRef90_V7FGQ8	Q H A I S T I L L D L R G D E A S A R V H C S C P M V V D L G E G K R Q V L W Y				
UniRef90_A0A031K7G0	H Y L T N F A I T A Y D G D T A S R A Y V I G M G K Y K A G G G I T V N G R Y				
UniRef90_UP10004746FE9	L H F L T S E S I R V D G R T A R G Q W I M Q Q L I S T Y A E G H T E L F G T R L				
UniRef90_D2RZX8	Q M P E L S I N G D E A T G R W Y M I V F Y V T P D G D D G H V L G W Y				
UniRef90_L7FSF8	M H F L A G E Q I S V D D G F Q A K G R W V M Q Q L I S R Y E S Q G S Q S I V A A L				
UniRef90_I2A8Q6	M H Y I T N V E I A L H G D S A T V R A M F Y N P M Q L P G A E L S Y C G G Y Y				
UniRef90_W4CGC0	H H V H S A E V E F V S E N E A K V I S P M E D W V T F P E G K S F H G F G H Y				
UniRef90_D6U3V5	V Q T T H P G T I Q L E G D T A V G R A Y V S E L G H R R D G S S Q L N Y S V Y				
UniRef90_T0IP36	H H I G G H V I D F D D A D N A Q G V V Y S K N E H E A G G D W V V M Q M M Y				
UniRef90_F8F533	V Q T T H P G T I Q L Q G D T A V G R A Y I S E L A R L R E G R S G L N Y A V Y				
UniRef90_A0Z4L5	H H G L A P E I T I K D T H T A E G R W R M R F Q L L E T E L K Q V L M S G Y Y				
UniRef90_A0A059MHN0	R H V L G Q H V I D F D G D R A R G E L Y C E A H H V Y P S G D G Y R D Y T R Y				
UniRef90_J5E7U5	H N I T T H T C E I G G D T A H A E S Y V I V V L I G P D A K S A Q F I G R Y				
UniRef90_B1FLG1	H H G V N P D I A V L L D D T H A R G T W G L H Y Q M L D T H T R T L T Q L G A Y				
UniRef90_Z5X773	V H Q V H A P E I E L T P T T A S G I W A L N D V V R L A P G V N L A G Y G H Y				
UniRef90_W6WQU5	L H N I V S P A V D V D E D G C H A T A T F Y L V C F V P Q G E A V F I A G K Y				
UniRef90_J0PUA6	H H W M A N P L I D S G D T A S A R V A V D C L C T H N E L L G Q V I S G L Y				
UniRef90_T0HMB9	Q H N I A T S R I T L N G D R A G R T I C T N P V G V G R E A D G G I R H H M V Y				
UniRef90_A4XEN7	H Y L T N F A V T G Y E G D T A S M R A Y V I G M G V G K D G R A V T V N G R Y				
UniRef90_A3U147	I H A V S V N V L I D F R G N H A A V E S Y F T A L Q R G T G P D G V T R A G R Y				
UniRef90_UP1000366E209	U H F T V T N H H F R L D G D S A R G E V Y V F A A S T D G E R L D Q L I G G R Y				
UniRef90_E0Y1Q9	Q H F I S N I S L T I T G N N A T G K V M C F N P M Q T K E N Q V F F L G I W Y				
UniRef90_A4TE72	M L G N V D V R L G S D G N T A T S R A I C F N P M V M G G D A G Q I Y F V W Y				
UniRef90_UP1000381F4A1	H N I T T H A C E I D G D T A H A E S Y V L V L A P D A E T S T L L G R Y				
UniRef90_B8KWE6	S L H I L T N H H V E L L S D T A R G Q C Y L I V T H V K A D E N P I L W F A I Y				
UniRef90_I7G6J1	M L G N F D V R I T Y D P D T A S S R T I C F N P M V L D G L S P Q V L F C W Y				
UniRef90_E8X0V7	Q H M L S L P I V T L T G D T A K A R T D F F A T H R G K K E N H Y N A S G A F				
UniRef90_A4XF62	Q H M V A T T R L E L E G D T A R S R T I L F N P M V H R D E A G E E R T L W Y				
UniRef90_A0A031MF80	S H H V S N I V V D F A G D E A V V R V S V L Y A W H R Y R D M P D S H V W G Q Y				
UniRef90_J2GQH1	H N M I S Q I T F D A S G E E A T G F W Y L W E A A T P N E E A C W L G G T Y				
UniRef90_H3NS70	S H H I G N H I I E F D P D R A V G V V V Y S K N E H E T P T E D G V I M Q M I Y				
UniRef90_F8GRB3	Q H H V H Q Q L V E V D D G D T A T G E T Y C V A N H L Y E Q P R K L D W G I R Y				
UniRef90_C7QCH4	A H Q V T S M L V D V D G D A A S A R A Y V T F G H A D S P E P V R V L V G Q Y				
UniRef90_G8RP72	Q Y H Y L L N H T A D I D G D E A H A E T Y Y L F V G T D K E P A N H M T L G R Y				
UniRef90_G7CJR2	Y H R M G N V V I D V D G D R A T A R S Y V L M L R P D D G E N W I D A V G H Y				
UniRef90_W6WUS2	V H F L T S E T I A V D G V R A K G R W I M L Q A S G Y V D A R A E L I A A R L				
UniRef90_R7XTF4	Q H L I G Q V S I E L D G D A A R A T A Y F T N P M V S T D P D G W E V G G Y Y				
UniRef90_N1MMN6	S F L L N P G M I R V D G D K A E A R A Y F S E V Y A E P G T G K D K R A A C Y				
UniRef90_Q73WX9	S H N I T T H S C E I D G D V A H S E S Y V I V Q A R R G N A L I M M G G R Y				
UniRef90_UP10003A5646B	V H I L L A Q A D P V I E G D E A H G N W K V T L F L K K A D G A Y L V G A G T Y				
UniRef90_F6FOX3	H Q I C G H R V E F D D A D H A G V V Y C R A E H H E N D G K W V V M A I A Y				
UniRef90_Q47QD5	P H T V V I D W V D D D T A R G T V T G H A E I E R G E F L V A A F R Y				
UniRef90_UP100036B214D	L T G T P L L E I D G D T A T G T Q P L C F V E H S A H D M R I G Y Y				
UniRef90_N1MMD9	H H N L L N Q T I E I D G E T A H V E T Y Y L F V G R N R D A T N W I A G G R Y				
UniRef90_G41V6	H Q V H A P E I A L T S S S T A T G V W A L N D I V R L A P G Q N L A G Y G H Y				
UniRef90_J3CZT4	V H Y L T S E Q I H V N G D E A D G Q W V H C Q P W I F S D G S S L L R S S R L				
UniRef90_A3U0T1	L H H Y V C P E I G L D G D T A Q V R W R L I E L G C P E K T D R V V L L S G V V				
UniRef90_G7H5V0	F G N P E I T V D D G D Q A T G S W S M S D V V I A P D F D T V I G T S Y Y				
UniRef90_G8RP89	V H Q V H A P E I E L T A T T A R G V W A L N D V V R L A P G L N L D G Y G H Y				
UniRef90_U3A515	M F E A W P G S I E V E G D V A R V R V S Y T S E V Y D Q D G Q T K R D R G V Y				
UniRef90_S9ZFL0	G N H P E I N I L S A T E A E G I W Y L H N F Y S L S K I F T T G S A F Y				
UniRef90_W6WZR1	Q H H A S P L V N I A S D H A E A T F Y L L C L C V T M R G P E A V V L S G K Y				
UniRef90_UP1000255A152	L H H G S N P E I E L L I S E T A T G R W G L F Y F N F L D A E T G A T L Q I L G A Y				
UniRef90_G8RN91	R H L V N L P I V E L T G D T A V S R S T F C V M Q T E A V P Q P I V V G R Y				
UniRef90_Q0K312	F A G Q G D I R V L D D N L A Q G S W D L A Y L A L D D A G S R T F L T G R Y				
UniRef90_UP100036D5F21	H A I A N H W V K L T G P D T A Q G R C Y L I D F E T A A D P N P L L L G L Y				
UniRef90_W6WYU7	S N V L I N V I D A D I A T G R S Y V T V F R V S V R S A V P P D L V A Q Y				
UniRef90_A1SPY1	M H S L A Q V D A R L D G D T A Q V T A Y F H N P M P L P E P G G V E F G G L Y				
UniRef90_A5VBN9	H H I L G G H I I E F D D P D H A Q G V V V Y S K N E H E T G P E W V I M Q M I Y				
UniRef90_UP10003697424	V Q N S H P G V I Q L E G D T A S G R D Y Y E G R Q R D G R C I V N Y A L F				
UniRef90_M4RYX8	H H N V G N F R V R V D G D H A H A K V H Y Y A E H L G Q G G E Q Y S M W G Q Y				
UniRef90_W0A5P1	H H N V L N P I R T D G D S A T A R V H Y Y A V H R G R G A H E G A M W G Q Y				
UniRef90_B7WUL5	H H G H N P E I R F T G A D S A K G L W D L D F Y Q I V K E R T I V N L C G Q Y				
UniRef90_A0A022LPM6	G H V P G L P V V L L V G D R A V A T G Y T Q L V V R R P G R Y T V T R V T A N				

130 140 150

UniRef90_Q13I47	H D E F [V] R T P E G W K I K R R E L	
UniRef90_U2YX27	A D E F R R [V] D G E W R I A E	
UniRef90_A0A024K243	[L] D T Y I K H D G R W K F L Q R T I V	
UniRef90_E9UWS6	E D R Y V R T P Q G W R I A H	
UniRef90_D2S002	E D E Y R R [V] D G E W L F S R V K A R V Q E D S D	
UniRef90_M4RWY7	F D K Y A R R E G R W K F L H R V I V A D W A N I H S P S I D L	
UniRef90_F6F348	[I] E Q Y R R T P D G W K I S E M L L E M Y F S V P	
UniRef90_UP100036608AE	R H Q M V R T G E G W K S R K L V E E N V W F E A A A	
UniRef90_J3GHI8	N I D F R C V D G V W L I A H F R T Q R L F S S	
UniRef90_V5XAS2	D D E F I R T A E G W R M T K R V	
UniRef90_H8IIH3	L D R L E R R D G V W K I A L R R C T L	
UniRef90_UP100037DB610	I I R F E K R N A E W R I A R R V V V Y D W V R P	
UniRef90_UP10001DD0A49	I I D R M E K R E G K W A I A H R K Y I V D W V A P	
UniRef90_I2JK94	V D R Y R R T D A G W R I S E R K	
UniRef90_X5L874	H E T Y E K R D G T W Q I T S [H] L T	
UniRef90_UP1000369F10C	Q D K F V K L Q E R W L F A E R K K L F V D W	
UniRef90_M2Z8N5	S D E Y V R D R D R W L F R R R S L R F M Y A V P	
UniRef90_A0A009SY51	S I Q F K Q Q D G Q W A M K H F Q T E N I F S R P I S H	
UniRef90_A0A059KRL4	K D Q Y V R R D G Q W L I A Q R I L A R F S W R D	
UniRef90_UP1000371392F	S D R L E R R P E G W R I V H R E L A M F Q T A G D	
UniRef90_V8D271	N N A F R K E S G A W K I S R T R T E N V F I A P	
UniRef90_A5VBK9	R D R Y V R Q D G R W L I A H S E Y D R V Y E R	
UniRef90_A4T8D8	D D D L V R T D A G W R I A R R R F T T V	
UniRef90_W9WY82	K F T F V K R H D G W K I K	
UniRef90_A1T789	H H E V V R T P D G W R S R R L R E D N V W	
UniRef90_B7RXF8	D D Q Y V R E D G R W V F A R R D Y H V I Y R G S E	
UniRef90_F3L4N1	E D T Y V K V D G E W K I K T T N Y E R L W E E I H P R	
UniRef90_K5B8Y0	H E T Y V K V D G R W L I A G S T L T R L	
UniRef90_V7FGQ8	R D R V I R T S E G W R I S E	
UniRef90_A0A031K7G0	Y F D V V R T P E G W K A K R Y T M D F L	
UniRef90_UP10004746FE9	D I D F R E I D G R W Q I S H F R T Q R L	
UniRef90_D2RZX8	E D K Y R R V N G K W M I E K L D M D V T Y D T	
UniRef90_L7FSF8	S V E F L W E A D G W R I S S F S T E R V D	
UniRef90_I2A8Q6	H H E L T R T A D G W R S R S R E E N V W F V N P P	
UniRef90_W4CGC0	H E T F V K I D G Q W Y I K H T S L K R L	
UniRef90_D6U3V5	H D R Y Q R T P D G W K F A E R E V R Y L D T T P L A	
UniRef90_T0IP36	F D R Y E R I D G R W F F R R R L P L Y W Y A S D L N R	
UniRef90_F8F533	H D R Y Q R T E D G W K F S E R V Y R Y L D T T P	
UniRef90_A0Z4L5	E D Q Y V K L E D G W K M S R S K Y T L M	
UniRef90_A0A059MHN0	R D E Y R R V P D G W R I A R R E L V V D L T A D R E V R L L R	
UniRef90_J5E7U5	L D R L E R R D G Q W R I A V R R S T V	
UniRef90_B1FLG1	D D E Y R K I D G E W K I A A T R C V V V R Y D G D A P G V L	
UniRef90_Z5X773	H E T Y E K A D G R W R I K T S T L T R L R E D	
UniRef90_W6WQU5	K D K L I K V D G K W Y F E E	
UniRef90_J0PUA6	H D R F E R R Q G Q W A F S E R R F E L H F L T P L A	
UniRef90_TOHMB9	V D E L A R T P A G W R I T N R R E E I	
UniRef90_A4XEN7	F F E V V R R T E K G W K A T R Y T M D F L	
UniRef90_A3U147	C D H F E K R G A E W R V L E R K V V F D W V E P	
UniRef90_UP1000366E209	L D E Y R R S G G V W K I A R R T F V F D W D	
UniRef90_E0Y1Q9	H D T Y I N I D D R W F I S S R	
UniRef90_A4TE72	V D E F V R T E Q G W R M S R R V	
UniRef90_UP1000381F4A1	L D R L E R R D D V W R L S V R R C T V L T G N A A L L A M E G F	
UniRef90_B8KWE6	D E E Y R K E I G R W K F V R T S L Q F F W	
UniRef90_I7G6J1	D D Q F V R T P E G W R M T R R V E T	
UniRef90_E8X0V7	H D E L V R T P E G W R I Q F R R L E V Y F G D P	
UniRef90_A4XF62	R D R L V R T P E G W R I A E R	
UniRef90_A0A031MF80	H D V I V R I N G Q W Q F K R R E L R V	
UniRef90_J2GQH1	D A R F R R D G G T W K F S	
UniRef90_H3NS70	W D H Y E R I D G R W Y F K R R	
UniRef90_F8GRB3	Q D R F V R R D G Q W R I A A R E L L L V D W T Q D	
UniRef90_C7QCH4	R N K L V R T A D G W R I S E L T V R P V F R V G E P	
UniRef90_G8RP72	V D R L E R R D G R W A I V D R V C V V	
UniRef90_G7CJR2	D D E L V R T G D G W R I R R R T A R I L L T G G D L A A Q L	
UniRef90_W6WUS2	E I D F V P A Q D G W L I Q H F R T E R L F D A P W	
UniRef90_R7XTF4	H H D L V R T P L G W R	
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 R L W L P N A V V W T L I S E P F A T I A T G N A D I V A L L K L L A P W D F F
 S A F W D D A E M A A G P F V G S A A D C W D W A V P M H E A G Q I V T
 E V F T D D A E V I V T V G S M K G L D E I K T S L R G A Y Q R K A G H F P F
 E L F T P D G A F V G L S T A R G H D E L R T F F A E L Q E G P L S A W W H
 E L F T E D G I L D L G P F G R Y E G K P A L L N A F E N L P L G T A W S
 E L F A E D A S V I Y N G R P E V F G R E A I R S F F E N F P V Q Y A
 D T L T E D V I G R Y E S I G E E H H F T N R D D L V N F M R N S L G P E I I T
 A L F T T D G V L S L P G K Q C A G Q A E I E Q W L Q A T L K A G K T
 S C Y H P D A I D R H G A Y N G G V E G F G I E W A E L L P Q F E S T
 N L F V P D V R V G K E G A G R Q A L K E W A D A T F R D Q F T G T
 S S Y H S D G L H D L G Q K Q V S G R E Y G E H A N N A H Q K L F D A T
 A T W A E D A F W E F P D L G G F T G K E A I V S G W T E S M K H G G A A R P M
 A L Y T E D A V W E G V G F G R A V G A A I L R K H F E G F W D P A L I L N C H
 S L Y H D D A F E E H G D M F V G G P D E Y M V F V E K A L S N Y A A T
 T C F I D D A A L D Y G A I G Q W T D S A G V T D F M A A A H E G M S D T K H M
 A L F S E D A V W E G I G F G R L Q Q P S D I V A M L Q R Y L P P T P H F S T N
 A I F A D D F V S D T S E A G G I A G A D F V A F T R K S I I G R P S Q A T A H
 T T L S P N I V T S Y N G K L V F H S P K E V T D Y L K S S M P K E E I S
 Q T L T D D V R A D Y G S D G E P L S F A D R D S L V K H L S R I M T P T M I T
 D L F T E D V S V R Y V G G S E A A G R D V V L E A L A N A F H S E A I A V
 K L L G R G N F M G V A G A E A I A A L F A K T T R R F P E H P R T
 A T F T E D G V L V V N Q R F E G H A A L A A F A E S V P T R I P R P
 E L F T E D G W W E W P P P G D G R R S E G R E A L R T Y F G A R P A D K L S
 A L W W P D S E I D F G L F K G S G E Q F A E A I S A P N P A V E V I S
 S L F S E G F H S D T S Q A G G I T G A D E F V A F T R R S L R G N V T
 G C F F E D A H N D Y A P F Y Q G G L D D F M Q F L A D P G G F G L F D R T
 S V Y H D S V D D H G Y W T G P G P D F A E F I V G R L T A N A L R T
 R V F T E D A Y I D Y R A M G G I D G H Y P Q V K A W L K E V L P N F P A Y
 S A Y W P D A H D N H G A Y R G S A E G F I R F A L G V F K T G P R N
 S L F F A D D G R W V V D G G G S M T G H E E I K T H F R A L S A K I P W A
 S L F H P D S H V E S G P F N G S G Q D F A R E I C A I V H T V F T Q T
 L L L A R G S F A G V A G A G P I A E L F A T T R R Y A E H P R T

	90	100	110	120
UniRef90_Q6FBB2	I H Q I T N I L I D Y H V D F A H V E S K F S A V Q R S P N A N G V M L W G R Y			
UniRef90_X5L7C4	R H L V L N P I V D V D G D H A T A R S T F V V V Q S V P E G P Q P I V V G R Y			
UniRef90_UPI000248B8C9	L H R L T N F T V E D D S T H V R A R S Y V L L M P L A T G P I H R G I G W Y			
UniRef90_G2IKR6	H M Q L Q P V I H D A D G E R A Q G R W R A F I L I A W L G E S R W G E A V Y			
UniRef90_J2LH43	H F I C N H L I S V D G D H G E G E V Y A I A W H L I P D G K G D M Q G V R Y			
UniRef90_UPI000362F994	Q H F V T N I E A D I D G D T A E V R A Q F Y N P M Q F P G P E L S F C G G Y Y			
UniRef90_A8LEQ5	A H L T A P P R V T V S G D T A E A V G Y S F V V L R E D D R W F L W R A A I N			
UniRef90_UPI00037EC883	R H L I T N P I E F D G D R A R V R S C Y T V L Q P R D G R I D I I A S G R H			
UniRef90_M3V3P3	E H R V D H P E I E I S G D T A R G R W Y L Q D R V I V A E S F M L I G A A F Y			
UniRef90_F5YYQ9	K H M L H N M V I E V D D G E H A T A V T Y V H T V Q A A D H K Q W V D A V G Q Y			
UniRef90_K5BCJ3	V H F I G N V L I E L L D D D T A A V E S Y A V A Y H A D A D P A S V I A G I R Y			
UniRef90_UPI00034D7184	H M S T N H E V E V D D G D T A T S R S S M R A V H A D D P T D W W S V G G R Y			
UniRef90_I2EUL5	Y H I N G Q Q T I T I T G D K A T G I A Y C S V L I G V Q N G K R M D M G V I Y			
UniRef90_F6IDC9	H H A T N W D I E E L T G D E A K G L W S L N F R T I L V G Q R Q V T R L A V Y			
UniRef90_D0J763	I H N G H T P E E V K G D E A T A L W Y L Y V F I N L E E K T H M H G G A I Y			
UniRef90_U2WCD4	S H V G N H I I E F D P D H A G V L Y S K N E H E T P G D E W V I M Q M L Y			
UniRef90_G2QL3	Y H W R T Q P V I L V D G R S A N L R T R L F Q P R T G K E V D G G F Y Y G A V F			
UniRef90_UPI00024885B4	Q H L I G M P Q I R F D G D R A T A M T M L F N P M Q E K G G Q I F F I G A T Y			
UniRef90_A1T572	R H L V L N P I V D V D G E T A T A R S T F C Y T V Q R T D N P L Q P I A V G R Y			
UniRef90_L0IR39	Q H N V T T V N F V I D G I L A E G E I L Y T I A T H T F G A G S R V I V G G R Y			
UniRef90_J9S3Q1	Q H F I T N I E Y T F E G D R A D V R A M F Y N P M R F V G M P E L S T C G G Y			
UniRef90_J2J844	H H M S T N F E I V I D G D Q A A A R S K F Q A V H V H V A A R T D Q H S G T Y			
UniRef90_G2QL5	V D M I F S P V V T V D G T R G K G R W H S L G I D A H Y G E R A D W S G A I Q			
UniRef90_UPI00037F0424	E H R V D H P E I T V A G D E A T G S W Y M Q D V V M D H E M M L T G A A F Y			
UniRef90_E3J931	Q H F L T N V A I E V R G D A A V S D A Y C L A F H R M P S R G G H W V G L R F			
UniRef90_K6X0Q1	G T G V L V T L D P D D P D A A I L T A R H F D I W Q P T V G K P H A A G G T Y			
UniRef90_H8J8S8	H L T G V S R I T V D D G D R A S A R S Q V L F V R C G D L Q L R P A L Y			
UniRef90_UPI0003688C71	K H L V L N S L I E L H G D T A D V V S Y M F R F D P R D G E P S V W G M G R Y			
UniRef90_W5IM01	L H F L G S E S O E V S G D T A R G Q W L M Q Q L S T Y V D G R S E L F G T R L			
UniRef90_E4RCC6	V H Q I T N I L I E L G P A S A A V E S K F L A F Q R G G E P T Q V L I L G R Y			
UniRef90_A0A013VHR1	C H N V T N V V I E V D D G D E A R A A S R I L A W H W F A I P D A L L A V G G Y			
UniRef90_A0A022MJ54	H H A T S N V A V E V D G E T A T A R A Y V T V F Q S L P D P L Q P V A A G R Y			
UniRef90_W8AEK2	Q H L I S N S S I R V D G D H A T A R T T M C H N P M L V T A A D G T R R L L M W Y			
UniRef90_E3J619	H N I T T H T C E I E G D V A H A E S Y V M G T M V G R D G K T L A M G G R Y			
UniRef90_M2W763	Q H F V S N I A V D L D D G D T A S V Q A M F F N P M I V S E A S D G V P A G W Y			
UniRef90_J3HU07	C H Y L T S E Q I H V D G S T A S G Q W V H M Q P W F F S D G K A L L R S S R L			
UniRef90_W1RVC9	A H Q V H M P E I D V D G D S A H G I W A M Q D I V W G N G R P S I V G Y G H Y			
UniRef90_M3A381	M H Y I S N I L I D L D G D T A N V E S Y C L C Y L R Q A P A D G E S T Q M R Y			
UniRef90_D3P3R3	I V I G Q V I D F D P A D P D R A T G T V Y C R A E H E D G G K W I V M A L C Y			
UniRef90_B2HFG2	H Q V H A P E I T L L S S P T T A T G V W A L Q D V V R L G P G V N L D G R G H Y			
UniRef90_UPI000370A1B4	H H G T P E I E L T S A T T A T G V W A M A D L V R W A D G S Q L T G Y G H Y			
UniRef90_T0HB34	A H H V T N H L M E F L G D D A I G L V S C R I E H E V D G S W V T A S L L Y			
UniRef90_UPI000464B9BD	V H V C S H P D I E V D G E T A T G S W C L E D T V I V P D F D V M I R A A Y Y			
UniRef90_U2YN86	V Y F M Q P G E I A V D G N A A T A V A Y T I E Y D D P T G K R V H A T G R Y			
UniRef90_UPI000248BEB2	Q H L L A N V I I D V D G D T A T T S A Y V A D M H V G L G D R S H L T L G S Y			
UniRef90_E3JDB5	F H F V G N H R C Q I D G D R A A G E A Y C E A H H L H A D E A G V R M V I R Y			
UniRef90_UPI000376F7E7	H H I H S V E V E F V S E N E A K V I S A M E D L V Q F P A E N P F R G Y G H Y			
UniRef90_D6TSC1	I H Y L T N E C I T V N G E T A V G K W K L W H P S T I Q G R A M W V A G H Y			
UniRef90_I2JLG9	S H T G N H I I E F D P D N A I G V L Y S K N E H E C G G E W V I M Q M L Y			
UniRef90_W5TLN2	V H L G T N A V I L E V H G D T A T A R G A Q L S T H V L A D G S E A V F V S A G			
UniRef90_A8L6B4	H H G T P E I T L T S P S E A T G I W A M E D R I W F A N G H A M T G F G H Y			
UniRef90_UPI000377875D	V H L I G N I M I E L H G D Q A L T E S Y F H A V Q V P G T V T E V S L Y G R Y			
UniRef90_E6JB67	Q H L M A N L E V S L D G D S A T G R C M C N P M A E K D Q Q V F F Y G L W Y			
UniRef90_XOPQC9	V H V L G S E Q I E V D D G P A A Q G R W I M Q Q L S R Y E D G S A E L L V A R I			
UniRef90_F5YYQ4	H Q V H A P D I E L T S P T T A G G V W A L E D V V R F G P G V N L R G Y G H Y			
UniRef90_UPI0004627069	V H Q I A N I L I E F N S S E A A V E S Y F T A L Q R G P D T R G T L L C G R Y			
UniRef90_UPI00026CB967	M F E A W P G S I E V T G D T A V L R S Y T A E V Y D W P D G V H R D R G R Y			
UniRef90_W2RMG0	V Q L V H S G G V V D I N G H R A T G R F I L R E V A K G P D E T Y Y N N F A I Y			
UniRef90_A0A031JCD6	H H A L L Q S N I D L D G D T A H A E T Y Y Q F V G R N R D E S L W I A G G R Y			
UniRef90_Q0FX44	V H A L A N H E I T L T G D T A T G S C Y L L D F V T D R P G T Q H L L L G R Y			
UniRef90_R7Y1C9	F S A N E T I D L V G E P A H A T G Q T W L D Q P C V D G R A H V A A G R Y			
UniRef90_A0A017SWT6	I H L I V N G I M I D V N A L T A T G N W T F L I F A T T P Y G P E A P I Y G G Y			
UniRef90_UPI000365535F	R Q F I H Q H E V S V D G D T G T Q G S Y L D G R P V H G G K S F Y V V G R F			
UniRef90_A1T280	E H R C Y T H P E I T V D G D E A Q A I W Y L Q D R V I A P D N F M L I G A G F Y			
UniRef90_J3EXS1	R H L F M P N P L I E V T P A Q A S G S M D M L I L R A G D S G W A L G A T L R Y			
UniRef90_UPI000360B5D3	Q F T G N Q Y V E V Q Q G D V G F A E H Y A Q A R H R R P D G E R P A M F I R Y			
UniRef90_K6FF86	S H H I G N H I I D F D S D S A I G L V Y S K N E H E T E T E W V I M Q M L Y			
UniRef90_J2HFK0	L H N V T M H A C E I D G D V A H A E S Y S L G L F L D K G E T S R L L A G R Y			
UniRef90_J2GX00	V Y V A H P G E I L V E G E R A S A I S Y S E I F E D P A T G K T M R L R G R Y			
UniRef90_UPI0003789218	V Y L T S E Q I H V H E G G T T A D G Q W V H M Q P W L F S D G K A L L R S S R L			
UniRef90_UPI00036DB72B	A H Y V V N T S F E I D G D R A E G E V Y K I N Y H R T H G P D A H E V I T G S			
UniRef90_K6WK16	L H N M V I D L V D D R H A T A V T Y V H T V Q R L A A D P K Q W G V G Q Y			
UniRef90_E1TJS8	V H F L T S E H I E V H G N T A Q G R W I M L Q A S A Y V D A G A E L I A A R L			
UniRef90_A0A024K0D2	Q V H A P E I E L T S A T T A R G V W A L Q D V V R F G P G L H L V G Y G H Y			
UniRef90_P19412	M H M G H T P E I T I D S E T A T G R W Y L E D R L I F T D G K G I N G G A F Y			
UniRef90_F1YGT3	E H R V D H P I I E I D G D T A T G S W Y L Q D K V I I P E Y D V L I G A A F Y			
UniRef90_UPI0003803165	H H V N H P E I D F V S P T E A T G Q W Y L K D W F L D R N K I I T D G T S F Y			
UniRef90_UPI000380029F	R H L V L N P I V E V L L D G D T A R A R S T F C V V Q Q T D T P L Q P I V V G R Y			
UniRef90_UPI0003B5CA48	R H I V S N V L V D G D S N A A S A K A Y L Q L Y A R T G D G G G L S M I G V Y			
UniRef90_L8P9P2	R R I L M S N I R V T V T P D T A E A T S Y F T T Y R V E G P A G P P V Q V G H Y			
UniRef90_N6Y1Z4	Y H F A S N E L F E L D D G E Q A T G R S Y V I G V T C T V I D E Q G R M V G G R Y			
UniRef90_UPI000463C08E	V H Q V H A P E I E L T P T T A Q G V W A L E D V V R L A P G F N L R G Y G H Y			
UniRef90_E4WEF7	F H F T G N Q L I E L D G D T A D A E T Y A M A Q H T S A A D A G L V V W L R Y			
UniRef90_F4D077	T H A V A N E L I E L D G D T A R V E T Y V F A Y L W R A T G D G D V F A G R Y			
UniRef90_G7CKQ6	A H L V G N F D I S L K P A Q A V E S Y F T A L Q R G P D K D G E M R S G R Y			
UniRef90_E8TIP5	I H Q I T N V V E F I L D G D R A S S R T L C L A L T G D G D E R Q L L F C G W Y			
UniRef90_UPI00037DC04E	L H Y M I A P R V D I D G E S A T G F F Y L L C L C T I E N S D A V I L T N Y			
UniRef90_A0A013XVG7	S H A N A H Q W V E V D G D S A K G E T Y V T A L A T P R G Q E G M L T G G R Y			
UniRef90_A1UC24	R H L V L N P I V D I D G D T A S A R S T F C V V Q Q A T E T P L Q P I V V G R Y			
UniRef90_A0A031JZQ9	G H H V C N H L I A V D G D V G S G E V Y G L A W H R E G G R E E D F M A V R Y			
UniRef90_G2JU8	R H I I S N V V K L D G N K A H G L A Y W T H M T S G P T G Y G V D F W G H Y			
UniRef90_UPI000248866C	K H L V T N P I I E V D A G T A T A R S Y Y T V Y Q A A E G P L Q L I A S G R Y			

130 140 150

UniRef90_Q6FBB2	A D Y F E K R D G E W R V S K R T V	
UniRef90_X5L7C4	Y D T F G R D A D G W H F T E R K V D V M V G D I S A H L M V D	
UniRef90_UPI000248B8C9	D D Q M V R T S E G W K I A R R Q F T P V	
UniRef90_G2IKR6	E N R Y R K V D G V W R I A	
UniRef90_J2LH43	I D S Y R R V D G Q W R F A K R V V S F	
UniRef90_UPI000362F994	H H S M V R T A T G W Q S R A L R E D N V W	
UniRef90_A8LEQ5	H W T L L R T P A G W R I R D R R N R V L D G S P E S Q A I M R L	
UniRef90_UPI00037EC883	H D T V V R A G D G W T F A S R D Y S L L D F T G D T S D H L R	
UniRef90_M3V3P3	D D T Y R R T A D G W R I	
UniRef90_F5YYQ9	R D E L L L T P D G W R I S R R H F	
UniRef90_K5BCJ3	A D R F T R G E S G W R I A D R T V	
UniRef90_UPI00034D7184	E H A Y R R V G G T W L I H T V D I T P V W	
UniRef90_I2EUL5	N D E Y V K I K G K W L I A N R K S N F T W R N	
UniRef90_F6IDC9	E D I Y R R R D G R W Y I A E S V S K V	
UniRef90_D0J763	E D R Y V K R D G R W W I A E	
UniRef90_U2WCD4	W D N Y E R I D G R W Y F R R R L P C Y W Y A T D	
UniRef90_G2QL3	N D Q L V L E G D V W R L	
UniRef90_UPI00024885B4	S D V L T R T P Q G W R I A S R T	
UniRef90_A1T572	A D T F A R D A G G W Y F T S R A V K V M F G D V S E H L L I D	
UniRef90_L0IR39	L D K Y E K R D D I W K I I E R T I V	
UniRef90_J9S3Q1	H H S M V R T A D G W K	
UniRef90_J2J844	R W E F A R T P D G W L I S S C T I S V	
UniRef90_G2QL5	E N V Y V L E D G K W K F A	
UniRef90_UPI00037F0424	T D R Y R R T A D G W K V C E	
UniRef90_E3J931	V D R M E R R D G R W K I A R R T I A Y E W S R V D P V A	
UniRef90_K6X0Q1	I N R M R R V E G R W L I A E Q R I T F	
UniRef90_H8J8S8	D D E L T R V D G Q W R F A R R R C R F I T S G G	
UniRef90_UPI0003688C71	L D T L R R D D G R W R I M M R I S E I E D	
UniRef90_W5IM01	N L D F R R V G E A W Q I T H F R T R R L	
UniRef90_E4RCC6	A D H F E K R K G Q W R I A R R T V	
UniRef90_A0A013VHR1	E D R L R R T P D G W R I H E R R	
UniRef90_A0A022MJ54	H D R F E R R D G E W R F V E R V R I H L V G D V S R H L	
UniRef90_W8AEK2	H D T F A R V A G E W R I Q Q R V	
UniRef90_E3J619	L D R L E R R E G V W K I A L R R C T I	
UniRef90_M2W763	H H E L V R T E D G W R	
UniRef90_J3HU07	N N A F R K A D G K W K I A R T R T E N V F I A P	
UniRef90_W1RVC9	R E H Y V R E S G R W K I A R L Q L T R L D F H P D A S A I	
UniRef90_M3A381	V D R F E K R N S Q W R I A A R I V V F D E S R H E	
UniRef90_D3P3R3	F D T Y Q R Y D G N W F F K S R D E R H W Y S S D A L	
UniRef90_B2HFG2	H E T Y E K L D G A W L I K S T L T R L R E D	
UniRef90_UPI000370A1B4	H E T Y R N D G N G W R I A S S A L T R L	
UniRef90_TOHB34	H D R Y V R R G G I W L I R G R V Q T R L Y A T A	
UniRef90_UPI000464B9BD	R D R Y R K D D G R W R I A H T G Y E R L Y	
UniRef90_U2YN86	D D E L K K I D G R W L F T R R E Y R T V F A D	
UniRef90_UPI000248BEB2	H D R W V R T A E G G W R I A E R V	
UniRef90_E3JDB5	G D A Y A R G A D G W R F A R R T V N V L W	
UniRef90_UPI000376F7E7	H E T F V Q L D G Q W V I K H T T L K R L	
UniRef90_D6TSC1	H N N F L R I D E V W K F R H L R I S A I F V A P	
UniRef90_I2JLG9	W D D Y Q R I D G R W Y F R R R L P C Y W Y A T D	
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UniRef90_I8ZZU2	UniRef90_TOHQC5	A A F H P D A T V T V W G S E E V T L T G P Q I V P F L A E R A R G D D H G F S
UniRef90_Z5X449	UniRef90_TOHQC5	E L F A H G G V E N G P P E T V F E G R D R V R G M Y E A R T R Y E D G T P K T
UniRef90_W5TAA2	UniRef90_TOHQC5	D T L A V D A V A D Y G S P S G F E G R D A I V G H L S G A M T G T M I T
UniRef90_M9STZ4	UniRef90_TOHQC5	E L F T E D A V W E W P G E R R V E G P E R P L R A Y F G A R P A D R L S R R V A
UniRef90_F7VAD1	UniRef90_TOHQC5	D L Y T E D A I W E G V G F G R C I G K A A I R A H F E W S Q K Q D P A L L N
UniRef90_UPI000347CB5A	UniRef90_TOHQC5	A V F A V D G R V R L Y D G D P V T G R A A L E R T F A E L I A R Y E V T
UniRef90_U5WN22	UniRef90_TOHQC5	S V F T P D G T Y S A F G D T Y H L D R F P E L V A A A P K G F L
UniRef90_J6Z3B9	UniRef90_TOHQC5	A L F A P D A L C D A G R G L W Q G R E Q I R A G L S A A F E A Y D H Y P F L
UniRef90_D9W591	UniRef90_TOHQC5	S L F T E D A T F A F P I G V C E G I E A F A A F Q R E R E R W A R I
UniRef90_E7C6Y2	UniRef90_TOHQC5	S A F A D A V M T R G G R D V V G M E A L R A E R A E R Y Q G Q T G D V G R
UniRef90_U5WR11	UniRef90_TOHQC5	A L F H A R I R D A A G H D T I D A A G L L R W K S L I V L Y P D G T P R T
UniRef90_TOAW53	UniRef90_TOHQC5	D L F T E D G V W T W P E D G R L K G R D A L R A Y F G S R P A D R L S R R V A
UniRef90_G2IMK9	UniRef90_TOHQC5	E V F A E D G V F E M L A G T P Q L R I E G R A A L E F A C Q Q I R Q D W S G
UniRef90_W0TPX3	UniRef90_TOHQC5	D L F T A D G V R L S P A A G Y Y I G P E R I G A M Q E A R Y G P L R R P R G S
UniRef90_G8X111	UniRef90_TOHQC5	S L F S D D V F E T F G T R A T G K K A F M G V V D M R Y R G P G S E K N T
UniRef90_G2ISS2	UniRef90_TOHQC5	E L W S D V G P V E E F G L G R T G K D E I R H F E V D I Y G Q M E N L
UniRef90_D0J339	UniRef90_TOHQC5	A C F T P D A R M V F E D P D I W E G H E G L R G I A E H Y R N A A G F P G R
UniRef90_A4TD50	UniRef90_TOHQC5	N L F A P D I K V G K E K V G R A H F M A W Q D S T L R D Q F T G T S
UniRef90_L8EPE3	UniRef90_TOHQC5	A L W S A D G V Y D V E G L R M S G R D E I A A M V R S G G H R R L V D N G C
UniRef90_UPI0004663050	UniRef90_TOHQC5	V L L A D A T F T G S G A P V S G A G A I E M F R E T L I V Y G D G T P R T
UniRef90_10RWZ7	UniRef90_TOHQC5	G T L T E D A I G N Y G E E H Q G G R I T L A T L V E F M R S S L D S S I V T
UniRef90_A4TD50	UniRef90_TOHQC5	A C F A E D G V L E V R N R F T A G R D A I V T S L K T V A P P P G T H H V

90 100 110 120

UniRef90_UPI00037510F9	H H L G Q H I E F I D R D H A T G V V Y S K N E H E C G G E W V I M Q M L Y		
UniRef90_D9UVU4	M H F A G H P E I E I D G D T A T G R W L F Q D V I V A E H R V V I E G A A Y Y		
UniRef90_R7WGS8	Q H L L G N H R I E I D G D T A R S L T Y G R V H H V A A D G D A V Y C F G E Y		
UniRef90_UPI0002FE6E8C	H I Q L Q P V I H D E D G E T A H G R W R A A M M Q V G E L G G V A R L G E A I Y		
UniRef90_C1B229	E H H C G H P E I D V D A D T A T G R W Y L S D T V V P E H G M L L R G A A F Y		
UniRef90_A1U9L4	C H F L G P S I V T V D D D E A V A V C E S V V L R T T G E G Y A V W R A A A N		
UniRef90_Q1YS65	F M S I S V G D I Q V D G D T A T A R A Y T T E V G I T L D G T E I R P R G Q Y		
UniRef90_J8VQJ6	H Y Y L Q P L I V S G D G Q T A E A S W Y L W E P A T M D F P D G V W L A G E Y		
UniRef90_S2YBK7	A H H V T N V V V T A S A D G Q V H V R S K G L G I K A D G S C G S V S Y		
UniRef90_U2WSN0	Q H T I S N I I L V E V E G D K A S A E T Y F V A Y H Q I G E G D E M I A A G R Y		
UniRef90_G7CFR1	H G V L G H V I D I H D A D T A S G L V Y S R N D L E T E S V W V I E M L A Y		
UniRef90_A0A24K448	T A L L I E N L D G D S A S G T Q P L C F I D G S T H D M R I G Y Y		
UniRef90_UPI0003B742C2	V Q N T H A G Y V R V D E D S A S G R A Y V V E F G D I D G G S E L N Y S I Y		
UniRef90_UPI0003A5CB26	A H Y I L C N T H V E R D G D T A F V E T Y V L T F A R F E E P Y D T L T G G R L		
UniRef90_W6X0A9	M H F T G N Q Y V K V E G N V A F A E H Y A Q A F H R T K P A D G W V V N V R Y		
UniRef90_UPI0004638C56	V H H G H M P E I E V T G D T A K G I W S M E D L L T P D A P E G H H G Y G Q Y		
UniRef90_D9WSZ5	V Q N T H P G I R L D G D T A S G R A Y M S E V G R T R D G R G G L N Y A I Y		
UniRef90_S5STW3	I H Q I T N I L I E F N P E E A A V E S Y F A A L Q R A P D G A G V L I C G R Y		
UniRef90_UPI0002DCF937	M T G T A L I D I D G D T A T G T Q P L C F V E H S T H D M R I G Y Y		
UniRef90_G8RJ5	Q H L L G N Y Q I S T D G D R A E S L T K A R V L H V G A G A R A S L T I G V Y		
UniRef90_G8RYL2	M T G T A L I D L D P D N P D Q A S G T Q P L C F I E H S K H D M R I G Y Y		
UniRef90_A9IBH0	V H I V S N M L I E F D T D A V V E S Y V Q T V Q H Y P K P S Q L F S F A R Y		
UniRef90_UPI00037C28D3	Q H A G S N Y L V D V D G D R A N V R W N A I Q T H L P L G G T P F V S G G Y Y		
UniRef90_G8MF70	V H F L T S E H I E V T G D T A K G R W I M L Q A S G Y V D A K A E L I A A R L		
UniRef90_L0IXB9	M F N G Q S S T M L D G Q N A T G I T Y C L A H H L K V E G T R M I A A I R Y		
UniRef90_R4SPJ1	V H F A G Q P E I D V D G D T A T G T W L M R D V I V P E H R V I I E G A A Y Y		
UniRef90_E3J2Q2	L T V N E V Y E P D G D G D R V L A A S D F V F L R F A S G R L V P A I A G R Y		
UniRef90_J2JIN6	V H Q V N N I A I E L H G D V A A V E S G F F A L Q A P A D A P R T L L C G R Y		
UniRef90_I3VIM4	W H F V A N A I I Q V N S D T A E A E S Y G L A A A V E G R T T T H V F G G R Y		
UniRef90_UPI0003B68DFB	Q H L L G N F I I E V R G D S A Y S E T Y V A D L H L S K D P A S E L T L G N Y		
UniRef90_B8GWG6	V H Q V H N V M I A F E G E T A A A E S V F T A L H R Q P D D D G L H M C G R Y		
UniRef90_UPI0003AD7056	H V T N V F I D L D L A D D A A R V E S Y N L V M H P V G P E T S L V M G G R A		
UniRef90_UPI00037F646C	Q H Q L L G Q L D V R L D G D S A T V A A Y F M V Y L V D G E E R M F E C G G G V Y		
UniRef90_J5BLW8	L H F L T S E T I D V A A D A A R G R W I M L Q A S R Y A D G S A E L I G A R L		
UniRef90_D9W406	Q H H I L N L H V E V T G S R A V V G S G Y M W F V A V T D P G S A A S M G G P Y		
UniRef90_S7XKY4	L H S V T T Q Q V F L D G D K A T G E V Y C V A H I Y E D D L S H N F L I R Y		
UniRef90_G2IS43	N D F D L I V R V A P G G R E A R A R G I E L A Q L G A E G G K A G W E I N V V		
UniRef90_UPI00035DB1A0	I I S S L R I T V D G D V A A V N M H L C A T M A L K N E P S V L R W V E V		
UniRef90_M7MZ46	A H V G T A P S V A I E E G D A A V A T N H S L V F A R R G E P W T A E R V S A N		
UniRef90_A8LB8	K H V V T N V R I E V H G D R A V T S Y F L D A N R R R A S F V Y E M G R Y		
UniRef90_E2SEU9	Q H F V C Q R E I A L H G D T A D A R L Y M F N P M A D G S T W R M E F G G Y Y		
UniRef90_M7A631	E H R V T H P V I V V D G D T A T G E W Y L Q D R V I V S E D F M L I G A A F Y		
UniRef90_A5VB8	Q H L I G S I A I E L D G D A A V V S R A Y V Q A R H Q G R G D K A D R I F G D Y		
UniRef90_M4S6D6	L A L M P E I D V A E D G A V A E G R W Y M V D W A V N M A T N R M H G T A L Y		
UniRef90_U2YJ75	M H H G H M P E I T T G D T A E G V W Y L E D F I L D A R K S H T I G S A I Y		
UniRef90_A0PWJ2	K H V V S N P I I E I D P Q C A R C R S Y Y T V F Q Q V D D P L Q P I V T G R Y		
UniRef90_G8PWL4	Q H Y A A N T L V E E G G D G Q A R A K S F A L V T E S L S E A P H V R F C G Y Y		
UniRef90_F5Z270	V N H P E I T L T G D S A T G I W Y L Q D R V I M P D N L M L I G A A F Y		
UniRef90_C5T5G5	M H F L G N C L I E F A G D H A F V E T Y F V S R R L R P P T D I E R P A G R Y		
UniRef90_C1B318	V H H G H V P E I D V T D D T A T A I W P M Y D R V E S P S D S G H E G W G H Y		
UniRef90_Q396J1	HH H H H P E I L T L V S A D H A C G V W F L E D H A I L E D N Y L L H G T A F Y		
UniRef90_T0HQ5C	M H V V S N A I I Q L D G D V A C A E S S W Q D Q M L D D E Q V T R V R A G R Y		
UniRef90_A5V344	H H G H C P E V E I L S P T E A R A I W A M E D I L R W V D D D D P L H G F G H Y		
UniRef90_UPI00035E1AC0	F H I I T N H I V H F D S D T A H G T N Y V F S E G H T N G G A A F K A I A L N		
UniRef90_G7CFT3	V I L V A N H L I D F D D D R A H G Q V W A H C F A Q T E A D G F V E Q L I R Y		
UniRef90_KOVA64	V H Q V H A P E I E L T P T T A R A V W A L E D V V R L G P G N L R G Y G H Y		
UniRef90_UPI00037467AF	H H G V L P D I T I T S E T T A T G A W T L F R Q V L V I D N T E T V S T G E Y		
UniRef90_G2IML5	N D R V Q N V T V K V D G N E A H A R G I E L G M L G E A D R E G W W E I A T F		
UniRef90_J2SX84	M H N G H T P E I A V N G D E A T G L W Y L N V F I N L D K Q T L L N G S A I Y		
UniRef90_G0E011	V H Y L T A E H I R V D E N R A V V G R W K M L Q A S T F R R G G S H L I N S A E L		
UniRef90_UPI0004293CDD	V D H P I L R I D G D S A T G S W Y L Q D R V L V P D H D M I V G A A F F		
UniRef90_A0A24QKT9	K H V H V S P E I T L T A D T A S G I W A M E D I L L F P D G S E L F G G A G H Y		
UniRef90_R5MHX5	H Q N G Q Q V V D F I D E T H A T G I C Y A I A T L V T E E D G K T M H A V R Y		
UniRef90_W9B244	E H R V D H P E I T I D G D E A S A T W Y L Q D R V I A P D N F M L I G A A F Y		
UniRef90_UPI00036D1766	H H V T S N I E V D V D A E T A T A R S Y V T V F Q A A P G P L Q P V A A G R Y		
UniRef90_UPI000416E1C7	H T T H D A I L V E N G D R A T L D A Q F I V F S V R G E E K P V S G S G Y Y		
UniRef90_E3J9L9	L T G T P A I D F A D D G V N A T G T Q P L C F I E H S A H D M R I G Y Y		
UniRef90_G2IQM6	Q L N E W V T L Q P V D G R S A R A R W R D L G M L G Q H K K H A E W R D G I Y		
UniRef90_UPI0002D2A2CE	A Q M G S L A I D G D R A T G R V Y T H E Y L E L A D G S V S R P I G Q Y		
UniRef90_U7DT95	T M T G S C V H V E G D T A Y A L T Y G D W L L S R D G G P D W V G R G W Y		
UniRef90_I8ZZU2	Q H L I F N P L V E V R G D L A S C E T Y Y A V L V I P P D T S L V Q S F G R C		
UniRef90_Z5X449	K H N T S N V Q L Y I D D E A G T A R S Y C V T Q A T P E L P L Q V I V T G H Y		
UniRef90_W5TAA2	S H V C S H P E I T I D G E T A A G T W C E D T V V P E H G V M I R G A A Y Y		
UniRef90_M9STZ4	S N I L V T V T S P D T A T A T S Y F T T Y R V D G T G G P V Q V G H Y		
UniRef90_F7VAD1	V H Y L T S E Q I H V K G D T A E G Q W V H C Q P W V F K D G S S L L R S S R L		
UniRef90_UPI000347CB5A	T Y L N G Q S L I D V D G D T A T G E T Y C L A M H V L D E G A G L T M S I R Y		
UniRef90_U5WN22	L F L T G T A L V E L D G D A A T G T Q P L C F I E H A T H D M R I G Y Y		
UniRef90_J6Z3B9	H A V T N H W I E F L D A D T A Q G R C Y L I D L E T M R E R D P W L L L G S Y		
UniRef90_D9W591	H H S S S N H S V V L D G D R A T L R V T T H V H A G R G P A A H F E V V G G Y		
UniRef90_E7C6Y2	R H L N G S Y L I T P T D V G A K G R A Y Y I L M D V T T R P P T M T A S G Y Y		
UniRef90_U5WRW11	K H V V T N P I I E I D G H A K T A Q C Y T V L Q Q A D D F P L Q A I V A G R Y		
UniRef90_UPI00026FFE4A	R R L M S N V L V R V A P D T A E A I S Y F T T Y R V D G Y E G G V V Q V G H Y		
UniRef90_T0AW53	L H Y M H P P R L R I D G D H A E S V I F F E F R H V M R T P T H I V T A G H Y		
UniRef90_G2IMK9	V P M H L R L V Q P V I D G D T S A R L R A R L L Q F N S N H S R P G S L T A G L Y		
UniRef90_W0TPX3	T M R R H T H V A K Q T K D T A E V R T Y M L I S S A P D G G F K V L T S G T Y		
UniRef90_G8X111	C H L T A N H V I E I H E S R A S G N C H V F A Q D V R A G G I S R A T A Y Y		
UniRef90_G2ISS2	Q H H V T Q T Q F K P Q P D G S V V M R S F A L V T E C E G E P P Y P L L R T G W Y		
UniRef90_D0J339	H H L G Q H I I E F V D R D H A T G V V Y S K N E H E C G A E W V I M Q M L Y		
UniRef90_A4TD50	A H F L G P A V V T V R G D D A V A C E S L V V L R A A H G Y A V W R A A A N		
UniRef90_L8EPE3	Q H V T S N V A I E V D A G T A D A R S Y V T V F Q A L P E P L Q A I A A G R Y		
UniRef90_UPI0004663050	D H L V N H P V I T V A G D E A S G S W Y L Q D R V I M S E S N M M L G A A Y Y		
UniRef90_10RWZ7	R H Y V A N L L F H V S P T R I E S S A Y Y V V F F A D A P D H W G R Y		

130 140 150

UniRef90_UPI00037510F9	W D D Y Q R [D G R W L] F R R R L P C Y W Y A T D	
UniRef90_D9UVU4	E D T Y R R E D G G W R I S S T G Y E R L Y E T	
UniRef90_R7WGS8	D D R W V R S P G G W R L T R R V F T V S Y E L G D	R A V L Q
UniRef90_UPI0002FE6E8C	E N R Y I K E D G V W K I A S L R	
UniRef90_C1B229	S D R Y R R T D G R W R I A H	
UniRef90_A1U9L4	H F H L R R V G G V W Q I A A R T T R L L D G N P E A H R L L	
UniRef90_Q1YS65	D D K L I K V D G E W L F I E R I F N S L Y G E	
UniRef90_J8VQJ6	F D R Y C K I D G E W K F T R	
UniRef90_S2YBK7	D D T V V R T A D G W R I S H R K L S P	
UniRef90_U2WSN0	F D K F E K R G D E W K F S H R K A V Y W N R N D P A	
UniRef90_G7CFR1	[L] D R Y Q R R D G H W F F R K R T P L F W Y	
UniRef90_A0A24K448	R D T Y S R T A D G W R I Q T R A M T F I R R S G V H	
UniRef90_UPI0003B742C2	H D R Y R R T S E G W R F V E R V Y E V R Y R D T T A	
UniRef90_UPI0003A5CB26	F D K F E K R D G K W K I A H R K M T F D W N R D A P S A	
UniRef90_W6X0A9	V D R L E K R D S E W R I A D R I V V	
UniRef90_UPI0004638C56	H E T Y R K I D G K W L I E S D L T R F R K D P	
UniRef90_D9WSZ5	H D R Y Q R T G D G W K F A E R V Y E V R Y E D	
UniRef90_S5STW3	C D L F S K R G R D W R I A E R T V V	
UniRef90_UPI0002DCF937	N D T Y V R T A D G W R L R T R A M T F I R R S G T H	
UniRef90_G8RJ5	R D R L I R T A E G W R I T H R H F D V	
UniRef90_G8RYL2	K D T Y V R T D D G W R L R T R A M T F I R R S G E H	
UniRef90_A9IBH0	V D R F E R R N G A W K I I R R T L V	
UniRef90_UPI00037C28D3	E G E V V R T A D G W R F F R E Q R Y H L V W L G G Q L P	
UniRef90_G8MF70	E M D F S R G A D A W R I R H F R T E R L F D A P W	
UniRef90_L0IXB9	L D T F V K Q D G V W Y F S Q R K L M V D W T E T R A	
UniRef90_R4SPJ1	E D T Y R R V D G V W L T A S T Q Y D R L Y E T	
UniRef90_E3J2Q2	H D Q F V R V D G E W R I A A R R E V	
UniRef90_J2JIN6	L D R F E R R R H G E W R I A A R T V V	
UniRef90_I3VIM4	L D R L A R R D G Q W L I T W R Q Y V L D W	
UniRef90_UPI0003B68DFB	S D R W V R R D G V W L L C S R H	
UniRef90_B8GGW6	L D R F E K R N G E W R I A A R Q V I F D W	
UniRef90_UPI0003AD7056	L D R F E R R D G E W R I A R R A M L V D W S R D D L P G	
UniRef90_UPI00037F646C	H H E M V R T P A G W R S R K L H E Q L V W R R A	
UniRef90_J5BLW8	T V D F A P A Q D G W L I R H R T E R V L D G	
UniRef90_D9W406	D W E F R R D P R G W L V V R Q R L G V W W T T A A G	
UniRef90_S7XKY4	D D D Y V R E D G R W V F A R R I	
UniRef90_G2IS43	S S R F V K D G G L W K I R	
UniRef90_UPI00035DB1A0	T D T L V R D P S G W R I A E R R H V P F	
UniRef90_M7MZ46	R W E L V R T Q Q G W R I S S R E N R L L T G S Q W A R E L F	
UniRef90_A8LAB8	R D R V V R C D D G W R F D E R I V E	
UniRef90_E2SEU9	L H R L V R T P E G W R	
UniRef90_M7A631	R D T Y R R T A D G W R I A	
UniRef90_A5VBF8	V D R W A R T P A G W R I V R R D A R	
UniRef90_M4S6D6	H D H Y V H R D G E W R I R H S G Y V R L F E R V E	
UniRef90_U2YJ75	K D V Y R R V G G K W K I E R T E Y D R V	
UniRef90_A0PWJ2	H D R F A C V D G K W R F S Y R D L T L I D M V G D V S H H L R	
UniRef90_G8PWL4	D D D L M F Q G G Q W L F A R R V L R V W D G E	
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UniRef90_G7CFT3	D D R Y E R R D G R W L F S H R R H R L W Y G	
UniRef90_KOVA64	R E T Y Q K V D E S W L I T S S T L T R L R E D	
UniRef90_UPI00037467AF	D D E Y V I E D G E W K M S K C H F R P Y W S	
UniRef90_G2IML5	H N R F I R Q D G V W K L Q E M R	
UniRef90_J2SX84	E D C Y V K Q Q G E W R I L R	
UniRef90_G0E011	V I E F I L K Q D Q Q W L I H H F T T R N L F S R P	
UniRef90_UPI0004293CDD	R D E Y R R T D G G W R I S	
UniRef90_A0A24QKT9	H E T Y E K R D G A W V I T S L H L T	
UniRef90_R5MHX5	Y D K Y V K T D G R W W I S E R E Q H F V Y T S V P P	
UniRef90_W9B244	H D R Y R R T P D G G W R I S	
UniRef90_UPI00036D1766	R D R F T R R G G Q W R F V E R Q V A I H L V G D V S R H L	
UniRef90_UPI000416E1C7	R P E L K K S A D G W R I T R L R I H	
UniRef90_E3J9L9	R D T Y L R T E D G W R L R T R S M T F I R R S G A H	
UniRef90_G2IQM6	E N D Y V K E D G V W K I R A L H L H V	
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UniRef90_U7DT95	D D I L V R T D K G W R I S N R V C R L I S W T G	
UniRef90_I8ZZU2	L D L F E R R D G V W R I R Y R R S I P G W W Q P L P P G	
UniRef90_Z5X449	H D T F H R I D G Q W W F D S R T M F V D Q V G D V S Q H L	
UniRef90_W5TAA2	R D T Y R R E D G R W R I A S	
UniRef90_M9STZ4	E D T F H R A G G R W R L A R R T L F L A F A G P T D R	
UniRef90_F7VAD1	N N L F R K E D G V W K I S R T R T E N V F I A P	
UniRef90_UPI000347CB5A	L D A F V R T P E G W L I A D R R L V F D W V D	
UniRef90_U5WN22	R D S Y V R T A D G W R L K T R A M T F I R R S G V H	
UniRef90_J6Z3B9	A D E Y R R V D G R W F I T T R R L D I F W	
UniRef90_D9W591	E A R A V R T P A G W R L S H V A F H V V W D S G	
UniRef90_E7C6Y2	E D V F V R T S D G W R I K H R T L H	
UniRef90_U5WR11	H D R F E C V E G T W R F S Y R D L T L I D M V G D I S H H L	
UniRef90_UPI00026FFE4	E D T F H R A D G T W L L A S R T L H L P F G G A T P R A	
UniRef90_T0AW53	R T R Y L R T S A G W R I L R	
UniRef90_G2IMK9	E D S A R I E D G T W R F S E V L I R H L W R S P	
UniRef90_W0TPX3	N A T L K K R N G K W T I T R	
UniRef90_G8X11	K D E Y V R E D G I W K F A S R K V I P L T R	
UniRef90_G2ISS2	D D H A V K E D G Q W R F H R R T V R L W D G E	
UniRef90_D0J339	W D D Y E R I D G Q W Y F R R R L P C Y W Y A S D	
UniRef90_A4TD50	H F R L R R I D G R W Q V I E R T S R V L D G N A H A H E L L R	
UniRef90_L8EPE3	R D R F E R R G G R W F A E R R V R M R L V G D V S R H L	
UniRef90_UPI0004663050	T D C Y R R T S E G W K I S S	
UniRef90_I0RWZ7	R D V L V P V D D R W L F A H R Y V T V D G G R A E G L A M	

1 10 20 30 40

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UniRef90_A8TT68	L D R L E T E L A H A R A R D G A E N I S H A F G Y Y L D D F N W D G S S
UniRef90_G2IKT7	A A L V E I E A I K Q L K A R Y S R F L D T K D W D S W R
UniRef90_A1T751	I A D Y L A I Q A L V H S Y P R R L D S G D Q G L G
UniRef90_A4XF75	R L E D I E L I K Q L K H R Y M R M L D S G D N D G L R
UniRef90_U2ZZ82	Q T L S D I E E I K K L K A R Y C R F V D T R N W E G L R
UniRef90_UPI000467BF9E	L E T L K I K E E R D L I D A Y A Y L S D E K K I S E V M
UniRef90_A6E9H6	L Q S L L D E R E I T R G L G H F A R I L D Q K R W D D L T
UniRef90_A0A031JLU9	M A Y T L Q Q L S D L E D I R T V K H R Y F R G I D T A D E T L L E
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UniRef90_D9QIN2	D L T S S L E Q I K R L K Y R Y L R C V D L K R W D E L S
UniRef90_H5WY02	L E V L Q A K S E L R E L V D A F S N L G D E K K I P E Q M
UniRef90_H6CD75	P D M A Q L R A K V D A A A A T L A I D N V S N A F A N Y I D D F R W Q D L A
UniRef90_G2IKT5	E Q L L A I E E I K R L F A R R L R C M D D K R W E V Y P
UniRef90_M2VEM2	T E I S D R I A L K E L V D T F S N L A D E K R I D E Q V
UniRef90_G9ZC12	T L E E L A K E V Q K L K D I E E I K V L K A R Y S D M C D S H D W T Q I K
UniRef90_K6V1A0	Q S R T D D I I E I E Q L L A K Y A V T M T K G D T D G V V
UniRef90_R6IF92	T Q L Q K L K D I E E I R R L Q A A Y A D M I T R R A W D E L P
UniRef90_A5V7P0	L R T L R D E R D I E R A L N L F A R A M D D R D W A T M A
UniRef90_K0VHZ7	T D A T R R L E E L A H I E A I K Q L K H R Y W R A C D A K D V N G F R
UniRef90_K6WXI3	K Q V K Y R Y L R A L D T K H W D E F A
UniRef90_X7Z923	Q D L I D R A E I L D A I N A Y S H A L D Q R E W S I L D
UniRef90_UPI0003FCCC5A	M S G A A P D L A A I A D K I A I K T L K A R Y F R C M D L K D W S G L R
UniRef90_M4S667	L E A R L L A R A E A M L D I A L E A R Y A R A W D S G D G N A W A
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UniRef90_UPI00035C0B6B	E S P P V S R L A D R I E I E D C L H R Y Y A R A V D R L D Y D G I A
UniRef90_R9J3Z9	M P D D H G V D D R L G V L L A K D E I E I A N L L Y R Y A A L L D A G D L P G M A
UniRef90_UPI000237B788	S V E D R I T R A L E A I A D I Q R L K Y R Y F R S L L D L K D W D T F G
UniRef90_U2FZC1	E T I D Q L V I A I E E I K Q C C K A R Y W R A I D S K D F D L L R
UniRef90_K6W7T7	L E E L Q A R E A I R D C L Y R Y A R G I D R A D E A A L R
UniRef90_A1UNM3	R R T A D V L E I R E L A A R Y A L A V D D H D M A T L A
UniRef90_UPI00037E8C1C	D D K L S I I E L M A R Y A W A Y D T S D V A G F T
UniRef90_UPI00037200C1	M A R I T D A A A A L Q Y V L D R V A I Q D L I V Q Y A F G Q D L H E Q Q Q W D
UniRef90_G8RGM7	M D E F L E L L E R V R Q L L K Y R Y F R A L D R H D W A A L A
UniRef90_A0A059MIJ1	E A L A A R V E R L E A L D E I R Q L L A A K Y A V A L D M R D L N A V A
UniRef90_U2YJY8	R A D D I N E I I R I T H L Y A R G L D R F D P K E A L L
UniRef90_K2JF93	D L L M A I Q K L I H S Y P R F L D A G K L D A M G
UniRef90_L7FGU5	D T I A A L T K R L E L L E A E E V R R V Q S R Y M F L C D T P R I D L I M
UniRef90_L8TIW8	S V E D R I T R A L E A I E G I K L V K A R Y F R A T D T K D Y D L L R
UniRef90_G2IS40	E T I D Q L V I A I E E I K Q C C K A R Y W R A I D S K D F D L L R
UniRef90_UPI0003699737	S E I D E V A R D V G R L E S L R A V T K L Q R I Y A Q Y A Q Y G L W Q D M A
UniRef90_J8VGJ6	D A V A A I S R L K F R Y L R S L D T K S W D E F A
UniRef90_S3ZPQ9	E I S E V A D R Q A I A N V L A Q H S R G V D R A D A G L L A
UniRef90_H8II58	E I R R M E D L F A L R A L V T R F A H A V D T R D H E A L S
UniRef90_V5BT65	A Q R L Q Q L E D Q Q A V R L C I S D Y M R L C D D L N V H A A G
UniRef90_UPI000376ED32	E L A T V M D R L A V D A L V T D Y A A A V D D G D W E A Y R
UniRef90_D7PS58	V E D R L D I S E L L A L H G H L V D N D E L D R L D
UniRef90_F1YG07	M D I E Q R V T A L E H I E A I K E L L K Y R Y W R A C D A K D P Q G F R
UniRef90_G2IQT1	N I N S L L Q R L E Y I E A C N A I N Q L I G R Y A T A A D Q R N P Q I M H
UniRef90_N9RJ03	D L A A I E D V R R L K Y R Y F R T L D L K L W D E F A
UniRef90_Q5YWX4	M T D I M D L A R R V E R L E Q V E A I K A L K H G Y W R A C D A K D P K A F R
UniRef90_M2X7Q2	Q S L P P A L Q Q A L I D K E E I R S V I Y R F A G S D R G I R D L V I Q
UniRef90_L2FJL0	L Q E A A D K F A V I E T L Y R F A A G I D L R D Q E L L A
UniRef90_A6E8Y3	D K L E I H E L A A R Y A D L C D R A D W D A V V
UniRef90_UPI00035ED22A	A I C N L L Y R Y A E A I D E G R L E D A A
UniRef90_N6YFK8	L A V L L D H H I E S L K N L K G K Y L R C L D S K L W D T I G
UniRef90_UPI00036F0E1E	M T P E E R L T A L E Q I E A I K A L K H G Y F R A C D A K D P E T F R
UniRef90_T2RFA7	M A D R E A I R H L V A A Y G H C I D R R D W D L L R
UniRef90_R4L4R7	M D E L A D R A E I I E L L M S R Y A D I A D L K D F N D L R
UniRef90_UPI000416D8A6	Y D Y R Q I Q N L I Y R Y P Y L L D A G R L P E M G
UniRef90_A4KEY2	M T T Q E T A A D L M H I E D I K R L K S R Y C R F I D T K Q W D R L N
UniRef90_K8XFV7	U H L V T L A A R A S D R K D F E M R R
UniRef90_UPI0003B608D5	U H L V T L A A R A S D R K D F E M R R
UniRef90_L8TJ25	U H L V T L A A R A S D R K D F E M R R
UniRef90_H5UKP7	U H L V T L A A R A S D R K D F E M R R
UniRef90_J2G563	U H L V T L A A R A S D R K D F E M R R
UniRef90_A0QH12	U H L V T L A A R A S D R K D F E M R R
UniRef90_F5XT55	U H L V T L A A R A S D R K D F E M R R
UniRef90_UPI00036BAF04	U H L V T L A A R A S D R K D F E M R R
UniRef90_F6F395	U H L V T L A A R A S D R K D F E M R R
UniRef90_E3J2N8	U H L V T L A A R A S D R K D F E M R R
UniRef90_C5AL89	U H L V T L A A R A S D R K D F E M R R
UniRef90_G8MMMO	U H L V T L A A R A S D R K D F E M R R
UniRef90_W6WRX8	U H L V T L A A R A S D R K D F E M R R
UniRef90_G2IKS2	U H L V T L A A R A S D R K D F E M R R
UniRef90_UPI00036948DA	U H L V T L A A R A S D R K D F E M R R
UniRef90_A2R14	U H L V T L A A R A S D R K D F E M R R
UniRef90_J2XG19	U H L V T L A A R A S D R K D F E M R R
UniRef90_B9TFI6	U H L V T L A A R A S D R K D F E M R R
UniRef90_UPI0003821559	U H L V T L A A R A S D R K D F E M R R
UniRef90_U5W852	U H L V T L A A R A S D R K D F E M R R
UniRef90_H8JE48	U H L V T L A A R A S D R K D F E M R R
UniRef90_J3G136	U H L V T L A A R A S D R K D F E M R R

50 60 70 80

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UniRef90_A8TT68	A L F A E E T V F E G F G S A P T G S T A R D F I K G I S H R M K G A V T I		
UniRef90_G2IKT7	A L F A R T G R R G K Y Q V G F Y V G P E R I R T A E L T Q Y G P P R T P R N F		
UniRef90_A1T751	S L F A D D F H S D T A G A G G K V I D G A D E F V A F T R R S L G D R A T V		
UniRef90_A4XF75	A L F A H A V H F E G R D D P V V N D P A E V T R M F A D F V R L Y D G V P R T		
UniRef90_U2ZZ82	A C F V P E A T I R Y E G G S E A G D R E E I I G L L S Q M Q N N Q Y V G M H L		
UniRef90_UP1000467BF9E	A L F T D A A R S T L G G D D H S A D E F V S L A R E W L A D S T S		
UniRef90_A6E9H6	G L F T P D V T Y K V Y M G D F L A A N V S G T E N M E K E F L G H A S L V K T		
UniRef90_A0A031JLU9	T V F A H D L A F N Y G G A G G E Q E G I E A L E E Q M R Q F L D V C G G T		
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UniRef90_D9QIN2	D L F S T H G W K E L S Y I G T Y V G R D R V Y Q S L I H R Y G D K G R V		
UniRef90_H5WY02	E V F T T D A T A C Y G T S A S F T G R D A I L G F L R D K L S P A I I T		
UniRef90_H6CD75	L L F T P D G G R Y V Y F G Q D G L V S D I S G T K Q L A E E Y T G H A S L V K R Y		
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UniRef90_K6V1A0	S V F T P D G T Y S A F G E V Y P L D Q F P I L V A A A P K G L F		
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UniRef90_K6WXI3	S C F T H G A R I D Y G P L G T F D D A E P M A K I F D Q V A D G K Y V I F D M		
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UniRef90_U2FZC1	A L F R H A R I K V A E D A P T I G A D E L L A L F D A R V K R Y P G T P R T		
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UniRef90_J8VGJ6	D C Y H P D G T V D Y R F Y D G P A P E F F A A I L A G A Q K A G P V T		
UniRef90_S3ZPQ9	T V F V P D V T M E V V P D R I D G R E K L A G M L R D D R M W A T T		
UniRef90_H8II58	R L F E H G G V E D G P P E T V F A G S A R V R E M Y E M A T R I Y D G T P K T		
UniRef90_V5BT65	Q L F T P D A R W E G V G L G V H Q G R E A L V A M L L R Y V R Q P A H F A M N		
UniRef90_UP1000376ED32	G L F T P D G R A D Y R S A G G V E G D A D G V A A W L A D S L G L F S M R Q H		
UniRef90_D7PS58	E L F T D D V V I Y E T S G H G E V H G L A A F R D M A R A R A G K P G A P V		
UniRef90_F1YG07	D A F A K G A E I D Y G R L G A F D D I E P M A Q I F T Q V A L H G A H V I F D		
UniRef90_G2IQT1	A L F A P E G R L E W A R G T A V G P E A I Y R E I G I Y K E A I K Q Y Y V L		
UniRef90_N9RJ03	N L F H E D A I I W Q A A G F G A Y Q G R Q S I V A G L S E I A R E Q I L W S L H		
UniRef90_Q5YW4X	D T L A E D A V G R Y G T H A A F E G R A A L T E F M R A N L G P A I V T		
UniRef90_M2X7Q2	D S F V E G A R I D Y G R L G A F D D A P M A E I F A R V A L H R V D G G H V		
UniRef90_L2FJL0	S V F H P D A T D N H G F Y N G P A K D M Y D A L N A E P S P D A A H H H I G		
UniRef90_A6E8Y3	S A F T V D A I S D F R P A G K K A G F E E G R E T I V S A L M G S L N Q I D T		
UniRef90_UP100035ED22A	A L Y T A D G V F D A Q D G R V A T G H D D L L D F Y K S F P T A I		
UniRef90_N6YFK8	A L F R H A R I E T G A A P L D A D G L L A L W R K I L V H P C G T P R T		
UniRef90_UP100036F0E1E	A A F W P D A T T D F G I F A G T F D E Y L A W V V P G S P A I T V V T		
UniRef90_T2RFA7	E C C F C E D V T T S Y S G G L S F T G K E E V V V N F F R S C M P P E H I T		
UniRef90_R4L4R7	R V F T D P I T L D F A S A G I P P M S L P L S D Y L E T T L R G T F E R F Q A T		
UniRef90_UP1000416D8A6	A C F I R G A D I H Y G P L G G F D D A D Q I A E V F T R I A L H K V D G K P V		
UniRef90_A4KEY2	T L Y H A D A I D D H T P Y Y C G P V D G Y I A W L P S M M A N W R A T		
UniRef90_K8XFV7	E L F A H A D I Y I D G S L A I R S D A R A V A D L W A R Y V K I Y P G T P R T		
UniRef90_UP10003B608D5	E L F A P D L Q L E G F T I V G G N G A M F A A E L A Q R L E F A M T		
UniRef90_L8TJ25	A C F H P D A V E D H G H F S G T I D D S I A F L E P H H E N Y D M F		
UniRef90_H5UKP7	A C F I R G A V L D Y G A L G R Y D D A D P I V E I F R Q V A L R K E A G A Y M		
UniRef90_J2G563	T T F T E D G R W T S H L F D A A G H A A L A E T W D G L W K D W A S V A F M		
UniRef90_A0QH12	E T F F C T R D G V L E I R G F E P L R G R A A I A A F L R G V T G G I A V D P I V		
UniRef90_F5XT55	E L W T D D G V W V I D E Q M N L H I E G V D A I A G T R A S L R S T W S F F		
UniRef90_UP100036BFA04	S L F T E D T R F L V F M D A T A A E P T Q T L H G R E S L A P V F D V Y R A T		
UniRef90_F6F395	A C Y T Q D A T V D L I N Y D P S I W P D P I A E F R R L A S T F M P G F S V R		
UniRef90_E3J2N8	G L F T P D A S Y L V Y G R S F D G H D A L R A M M R A A P G G M H G G P		
UniRef90_C5AL89	A L F T A D A I L W E G V G F G R H Q G R A A I V A M L S R Y L P P T P H F A T N		
UniRef90_G8MMMO	A T F F E D G Y D D H A D F S G K R D D F V A F V R E K H D A S S F S K S		
UniRef90_W6WRX8	G C F T T D G A F N A A L E G T P K G T E Q L K A F V P T G I A T F E T M		
UniRef90_G2IKS2	A C F T P D A R M V F E E P D I W E G H E G I L R G I A E H Y R N A E G F P G R Q		
UniRef90_UP100036948DA	A L F T Q D G R A D Y R G S G G I E G A A G D I A D W L A E T M R L F P V R		
UniRef90_A2R14	D L F T K D G S M S V Y P W N K G K A E E I N E K M L A T F E A L K Q Y E K T		
UniRef90_J2XG19	S A F T E D A I S D F R P A A A K A G F E Q G R Q T I V A A L S G S L A G D T		
UniRef90_B9TFI6	T V F A P D V R L D I D V P G T V S G P A Q I V E S V R T A L A G C T A V		
UniRef90_UP10003821559	D L F A N A V F I G G G G S A E G G A A V E R M L R D T V I R Y E D G T P R T		
UniRef90_U5W852	S S L T E D A V V D L G P A M R I G Y D A P R E T V V T S L G A V G P L D S		
UniRef90_H8JE48	A L F V D D V D A G A E G H G R D A L K R W Y D R V L R R F Y R S I		
UniRef90_J3G136	T C L A E D V T S L D S G K Y S F D C R T A F L D G L R A I M D R P T L L C K H		

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UniRef90_N6YT47	Q H L I G Q V D L Q I D G K R A R G E V Y F I A H H R I G E E K D L F V A G R Y			
UniRef90_UPI00036F0275	I H N V G N I L I T F E S D R A A V E T Y F I A F Q R G R G A D G V E R C G R Y			
UniRef90_UPI0002F575D8	F A G Q G D I E V G D D G T A R G G W D L A Y L A L D D A S G A R T F L T G R Y			
UniRef90_A8TT68	H H V C N P E I A F L G P D R A R G I W A M T D L V E L A P G R G F R G Y G H Y			
UniRef90_G2IKT7	I Q I H L R I Q P V I D G L G A K L R T R L F S F S S R N D G P G S F Q S G M Y			
UniRef90_A1T751	H Q V H A P E I E L T S P T T A T A V W A L E D V V R L A P G V N L R G Y G H Y			
UniRef90_A4XF75	R H M I C N L I V E P D G P G A A V A T S A V F V L Q D A P G V P L Q P L G D Y			
UniRef90_U2ZZ82	A L M P E I T V L D D D N A E G R W T M I D W A V N M T T N R T Q G A A F Y			
UniRef90_UPI000467BF9E	V H S V S M P E I E I T G T T A R G I W G M E D I V T F P A P K G I H G W G H Y			
UniRef90_A6E9H6	Y F M N G Q H T V K I N G D T A K G V S Q I K M I R E S G D G D V L S V K Y			
UniRef90_A0A031JLU9	Q H L I G S I L V D V D G D R A E S R A Y V Q A R H Q R R D D P V V G A I T G E Y			
UniRef90_A5VBK2	M H H G H M P D I R L T G D E A E G L W Y L E I F I S L D R R D V T T G T A I Y			
UniRef90_D9QIN2	S S F L A Q P V I T V A A D A G S A R M H L R L F Q V G P T G P G P F G G V Y			
UniRef90_H5WY02	T H F A S Q P E I D I D G D T A T G T W C F Q D T V A T E Y R T V I T G A A F Y			
UniRef90_H6CD75	F S L N G Q H N V K V D G D T A T G I S Q L M V R D E D G K E V I T S V R Y			
UniRef90_G2IKT5	I P I H A R I Q P V I D G K S A K L R T R L L Q F N A A L D R P G S M M A G I Y			
UniRef90_M2VEM2	H H G H T P E I E L T S D T T A C G V W P M L W W T N G D R E E H L H G Y G H Y			
UniRef90_G9ZC12	N G Q Q T V S F Q S P T H A T G I S Y C D V T L I K N E D I A Q R R G V R Y			
UniRef90_K6V1A0	M T G A S L I D F D D D A A T G T Q P L C F I D H T Q Q D I R I G Y Y			
UniRef90_R6IF92	G V L G H N P T V A D D G V H A T G K W H M F E G R A E T G S K S F L E Q G K Y			
UniRef90_A5V7P0	E F V I L N T V I E I G D D E A H G R M Y M C E I R H D A K A G Q T M S Y G L Y			
UniRef90_KOVHZ7	Q H L I G N I L L V D V V D D T A T S R A Y I R D V H L N S A G D P S T R L G D Y			
UniRef90_K6WXI3	H H G F H P D I T L T S E T T A T G R W T L K F R Q V L L D R T E T V M T G E Y			
UniRef90_XTZ293	E H R V T H P E I T V T G D E A T G A W Y L Q D R V I V P E N F M I L I G A A F Y			
UniRef90_UPI0003FCCC5A	Q H V N G N T R F E I D G D T A H T V T E V L W V T L Q T T D D H I R A G G G Y			
UniRef90_M4S667	V H H G H M P E I A F T S P K A T G I W A M E D K L W V G P G A T V H G Y G H Y			
UniRef90_A5V765	V P L V G N M I F D L A G D R A T G V S T L T G H K R G S G V H V F S G V Y			
UniRef90_UPI00035C0B6B	V V P G L P L L E I D G D E A I G H L H F Q F V A I G R H T M S R T A C G Q Y			
UniRef90_R9J3Z9	Y H I S G Q Q O M V A V N E D E A Q G T A Y C Q A V V N E E D G K D I I N Y V R Y			
UniRef90_UPI000237B788	Q H F V T N M L I D F D G D R A F V E S Y C L A Y L R Q Q P A D G A I T R C R Y			
UniRef90_U2FZC1	K H V I T N P V I E I D E T R A T A R S Y T V L Q A T E G P L Q P I A A G R Y			
UniRef90_K6W7T7	P E I I H L V T I D S S D T A H G R A T G H A E L A F R D T L M L T A Y R Y			
UniRef90_A1UNM3	A H Q V H T P L I E V D G D E A R V I W A M Q D R V M W E N G P A L T G Y G H Y			
UniRef90_UPI00037E8C1C	T H I A S H P E I D L D S D T A H G S W V F E D T V I V I P G H A M I R G S G Y Y			
UniRef90_UPI00037200C1	H H Y A T N V V V R L D G D S A R M L V D A D V T A T D R S G R A L M L A A S Y			
UniRef90_F2I8H4	A H M G H I P E V E I T S D T A H A Y F P F E D R V V N L G V S A F I G Y G Y Y			
UniRef90_UPI000255911C	I H H V T N I I L I S F R S E T A E V E S Y F L A L Q R G S G P D G V T R S G R Y			
UniRef90_M2YQ86	T P H P G T V D F T G E D T A R G V V P C H V E F A Q A G V Q S I L A L R Y			
UniRef90_G2IT21	H L T D H H V F E E Y D G K R C T V Y S Y Y L M P E G D P S G S N V H L M G Y Y			
UniRef90_UPI000364910C	Q H F Q G F A A V D I D G D T A T A T Q H L T D G A G W N L M Q T G F F			
UniRef90_UPI00036A6DC7	Q G H H P E I K L T A P D R A K G T W Y L E D H V I D A N S W M L H G T A F Y			
UniRef90_G8RGM7	H G P L A H V I D I H D A D H A S G L V Y S R N D L E T A S A W V I E L L A Y			
UniRef90_A0A059MJ1	H I I T N H V D F E D D D H A T G T N Y V F S E A M E K N G A A I K A I A L N			
UniRef90_U2YJY8	R H L I C N V I V E P E S D V A T A T S T V L V Q A A P D P L Q P I T G D Y			
UniRef90_K2JF93	Y L T S E Q I N V A S D G L T A T G Q W V H M Q P W L F S D G K A L L R S S R L			
UniRef90_L7FGU5	V V E P G A D E N F A S G T Q P L C F V D H S T H D L R I G Y Y			
UniRef90_L8TIW8	V H H A S V P E I E I T G P T G S G I W P M V D L L F K E G S P I V G Y G F Y			
UniRef90_G2IS40	T E L I D D P L V N L D G R S A E G R W R G L A L R G D G K G R A W M E G G V Y			
UniRef90_UPI0003699737	E H R C D H P E I D L D G D T A T G T W Y L A D T V L I P G H N M L H G A A F Y			
UniRef90_J8VGJ6	L H R T A Q M W I E T Q G D M A W S E S Y I M A Y A S S A G E A G P L I C G R Y			
UniRef90_S3ZPQ9	M H Y M S N V L P E P E G D G A T T R A N V T A V H V S R D G A A K H F G A R Y			
UniRef90_H8II58	K H N T T N V Q L Y I D E G T A T S T S Y C V T Q A T P D P L Q V I V T G H Y			
UniRef90_V5BT65	A H F L C S E M I N C E P R R L R G R W L M L Q T S A F S T G S A H L N A A E L			
UniRef90_UPI000376ED32	L I V N R Q V R F Q D T G D T A R V R A D Y L N P M R L A G T D A T V C G G R Y			
UniRef90_D7PS58	G H H V T N I V L T E A G D G R V H A R S K G I G A G P D G E C G S V T Y			
UniRef90_F1YG07	M H H G M H P E I R L T G E T A T G R W T L R F R Q L M D R T E L N S T G E Y			
UniRef90_G2IQT1	R H F I T N Q A I V Y H G D T A K G V I Y W F E V I A N N G P G H S P A I Y G H Y			
UniRef90_N9RJ03	V M G V P N L E F S E N Q Q Q A K V Q W V L W E V S T I A G S E A S Q N Y G F Y			
UniRef90_Q5YW4X	V H I A H H P E I T V D G D T A T G S W A F E D T V I A T E G A L I R G A G Y Y			
UniRef90_M2X7Q2	M H H G A H P E I T V T G G T A T G R W T L R F R Q V L I D N T E K L M T G E Y			
UniRef90_L2FJL0	Q S L I E L G D D G I T A A E T Y C I A T V V D G K D K W V T F L V R Y			
UniRef90_A6E8Y3	T H S V S N P R V K I D G D K A M M D V L V I E A Q H V P S K D H S H Y Y L M R Y			
UniRef90_UPI00035ED22A	A H H P T S I H S T I D G D R A S T R M K M L V F F A S G G F S V N Y			
UniRef90_N6YFK8	R H L V T N P I L D I D A G T A Q A R S C F T V M Q A T D A P L Q I I A S G R Y			
UniRef90_UPI00036F0E1E	Q H T L G Q T I T L E D D G V V I A V E T H V T A Y H R V N M G T E S V I G G R Y			
UniRef90_T2RFA7	M H Q C H T P E I E F E S D T A F A Y W Y L G N L I L D R N I G I R G G A F Y			
UniRef90_R4L4R7	H H V I S G H V V V T V R G D S A T I H A H V R A E H F T P G A D R W L V V G F Y			
UniRef90_UPI000416D8A6	M H H G M P H D P I T I T G G T A T G R W T L K F R Q L N M E R T E R L L T G E Y			
UniRef90_A4KEY2	M H T A M S M L F A L D D G D H A Q G E I V A R A W H T L D G E R Q F V A W G R Y			
UniRef90_K8XFV7	H H I A T N L I I E D D D G D V V R A H S Y V L V V Q N P P G P L N P I T A G D Y			
UniRef90_UPI0003B608D5	A H H C H T P E I R L T G D A A E G V W A M M D L I N F S G A T G F Y G T G F Y			
UniRef90_L8TJ25	L H F I A T P S I E V E V E G K R A Y A E T Y A I V V T L S A S P S A M I G C R F			
UniRef90_H5UKP7	H H A F H P E I S L V D D T H A H G R W T L A F R Q L L A E R T E T V A S M E Y			
UniRef90_J2G563	A E I G S M E I A G D G A A V R S Y A R E V V Q T K E G A I F K L C G R Y			
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UniRef90_F5XT55	V Q M P H A P V V A V D S D R A T S S W T V S E H A I D E G G R A Y F N Y A R Y			
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UniRef90_F6F395	Q H M V S N F D I L V Q G E E A T S R S Q V R A I H V I D G Q V W E A H A T Y			
UniRef90_E3J2N8	P S I E M L G P D Q A R T T R N L L F V D Q A G G A P R H A I Y			
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UniRef90_G8MMMO	T H L L G N C L I E F A S D H A V E T Y F V A K L Q M G P D A G S Q R V G R Y			
UniRef90_W6WRX8	Y H L L T T N E I S V D G E N T R R Q K C Y L Q F E T K K D G A I D G Y I C V Y			
UniRef90_G2IKS2	H H V T Q V V Q Y M P Q A D G T V K M R S F A F V T E C E G E T P F L L R V G Y Y			
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UniRef90_A2R14	V H F I G Q V E I A F L D S E Q A S A V Y V T I A H H V I T E N G M I A Y L R Y			
UniRef90_J2XG19	T H S V N N P R V S I A G D Q A Q V D A L V E A Q H V P Q N D H S R H Y L M K N			
UniRef90_B9TFI6	H H G F Q A E I D I T S A T T A K G I W A M E D I L R W S A D S A L H G Y G H Y			
UniRef90_UPI0003821559	H H V T T N I A V E I D A G T A T A R S Y V T V F Q A L P D P L Q P I A A G R Y			
UniRef90_U5W852	S H S I S N V R I T L D G D R A T V L A Y A Q A Q H F K P G T R H A L M M N R Y			
UniRef90_H8JE48	H L I C G H Q F D F I D P D H A T G S V Y C R A E H H E D G D G W F V I T M R Y			
UniRef90_J3G136	Q G H H P E I E I L G P D K A R G T W Y L E D H V I D E G D W M L H G T A F Y			

130 140 150

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UniRef90_UPI00036F0275	C D V F E K R A E E W R V L K R T V V
UniRef90_UPI0002F575D8	A D E Y V Q I D G A W L R A T V F T
UniRef90_A8TT68	Q E E Y R R D G R R W K F C F L R L T R L R L D P
UniRef90_G2IKT7	N D R I V L E D G V W K F Q H Q S I D E L Y F R S D G
UniRef90_A1T751	T E S Y A K V D G Y W L I T A S T L T R L R E D
UniRef90_A4XF75	R D R F E K V G D T W R F A E R F I T N L F G N L S A H G
UniRef90_U2ZZ82	Q D R Y V R R D G E W K I L H
UniRef90_UPI000467BF9E	R E E Y R K V N D H W L I H R M D L Q R L R L D P
UniRef90_A6E9H6	D D K Y V L R D E Q W L I K E R I A Y F I
UniRef90_A0A031JLU9	R D Q W E R R A D G W R I V R R
UniRef90_A5VBK2	R D R Y R R I D G T W K I A R T E Y D R I
UniRef90_D9QIN2	E D E A V L E D G V W K L S G M D L D Y I W F S G
UniRef90_H5WY02	E D R Y R R S D G A W R I E H
UniRef90_H6CD75	D D E Y V R Q N G T W L I K V R V A H F I I I E A R T L
UniRef90_G2IKT5	E D E A R L E D G V W R L A H
UniRef90_M2VEM2	H E E Y R K E G G R W L I S Y R R L T R L R E D
UniRef90_G9ZC12	E D V Y V K Q D G R W L I E S R K S N F M F S S P T A R
UniRef90_K6V1A0	N D T Y V R T T D G W R L R T R A M T F I R R S G E H
UniRef90_R6IF92	E D E Y V K I D G K W F I S Q L S F W D
UniRef90_A5V7P0	R D H Y R K Q D G R W K F R D R R Y R V M G R T
UniRef90_K0VHZ7	H D T W R R D D G R W R I T E R V
UniRef90_K6WXI3	D D E Y V V E D G E W K M S A S K L T
UniRef90_XTZ923	H D S Y R R T S K G W K I S S T G Y D R T Y D A T M S L A G L D F
UniRef90_UPI0003FCCC5A	V D D L V R T E N G W R I A R R E L A L
UniRef90_M4S667	H E T Y R H E A D G W R I A S V R L T R L
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UniRef90_UPI0003B73501	M H N G H H P E I E L L S D T A T G K W Y L Q D L V F N K E Q N W M L F T A I Y			
UniRef90_UPI00037D8B82	Q H F I L S N V L V E F T G D S A A V E S Y C L C Y L R A E G E T T Q L L A T R Y			
UniRef90_C1B307	M H H G F H P D I V L H G D T A T G T W T L Q F R Q V D L K R T E T V S S G E Y			
UniRef90_UPI00036EF94D	W H M L A P L S V R L T G T T A E G E C Y G I A L G F R R E S D G N M Y G G R Y			
UniRef90_UPI0003B4D405	R H V C Y C S N V V I D V E A D T A R G T S A M L L F T G P A P L V G S F			
UniRef90_V6JMR7	H F N G Q N K I L T L N E Q T A T G I V Y C M A H I S F D E T G M V A S I R Y			
UniRef90_K5BA60	L I V N R R V R F G I T G D T A S V R A D Y L N P M R F A T D D G L V C G G R Y			
UniRef90_A0A011NEP9	P G R H H L A S V K V T P D G E T A R T Y A C F Q F I G V G G L D H W G T Y			
UniRef90_UPI000288F091	H F N G Q N K I L T L N E Q T A T G I V Y C M A H I S F D E T G M V A S I R Y			
UniRef90_G8TNB1	V H H R G H M P A I T L A S P R S V A T W A M E V L T V Q P D G K R A L A F G H D			
UniRef90_A0A016XCW2	Y H F N G Q Q Q F T I N G D N A T G T S Y C M I L T I G M E N G K K M I G A V Y			
UniRef90_D5NX18	A H Y L T S E Q I H V H A D H A D G Q W I H M Q P W L F S D G Q A L L L R S S R L			
UniRef90_K4RC83	Q H L L H N T H F T M R G D T A R T I T E V E W T L Q T T D K P V R A G G M Y			
UniRef90_UPI00026CC896	S N I L V T V T S P D T A T A T S Y F T T Y R V D G P P G S P V Q V G H Y			
UniRef90_A0A031JN73	T H S I T N I L I D I D D R G A R S E A Q V M A T L V R R D T D P V V M G G R Y			
UniRef90_K6WXQ6	R Q S I S S L V I E V D G D T A S A R G H V D E V L R M P D G S Y Q V V I M G I Y			
UniRef90_UPI0004686355	R H T I L N P I F V Q T E S T A T V N C Y L V L T A V A D G V A R L V T T G F Y			
UniRef90_E3J7S1	F H F N G Q S L I E I A P D E A T A E T Y T L A Y H E I D G K N S L M N V A R Y			
UniRef90_UPI00036EE3EE	H L Q G N N V L T E I Q G D E A V A R G Y Q V A L V A D D Q G T R V L S A G N N			
UniRef90_UPI00035D2A9A	F S T N A Q H V V V S V D N D T A T G V L F S Q M K M V R D D E E G T D Y S V Q Y			
UniRef90_UPI0003B40297	F H A V L N Q M L S P V E G G A E G E T Y C I A R H Y F R D P A G R Y M T I R Y			
UniRef90_G4HQN6	H L I T Q G Q P L L R A E D E A I A G R V T M T E F A W M P D G T Q F F T V G T Y			
UniRef90_KOEJ99	M H F I G N H H V D F V G D T A I S E T Y L L A T H W G R P D Q G A Q T G A R Y			
UniRef90_S3HUB2	H H L G G N V C D G D T A T V T A H L T A V H I G P P A G H T S F G G F G			
UniRef90_W4MES6	T H S V S N P R V T I D G D T A R M D V L V E A Q H V P R S D P S R Y Y L M R Y			
UniRef90_UPI000366749C	Q H W L Q P P M L M D V S D Y C V T S Y W A L L A L D A N T G D K S F R S F G S Y			
UniRef90_UPI000371940B	H H H G S P P R A D L D G D R A E V G W S L I A S H V H H G S P L P Q L G G H F			
UniRef90_A0A010Z281	P E I H I L T V E S P T T A T G R M T G H A E L A V R D T L M L T A F R Y V I Q G A A F Y			

130 140 150

UniRef90_J2PIG0	H D S F [V R] G S E W R F A A R I Y T [V F]
UniRef90_UPI000363BFCF	Q F D S H R Y P G G W K I H R Q R F
UniRef90_U5EAS3	Y D T Y R R D G [V W] R I S S T R Y E R I Y
UniRef90_Q13HM1	E E C Y V R Q G D T W K I S L L R L T R L
UniRef90_B5WG90	R D R Y R K V D G Q W K I Y H Y E Y R R V
UniRef90_F4C9K4	H D L F K R M D G K W Y F S V R E L I I L A G D L S H H A
UniRef90_I6SUS8	H D S Y E K I E G R W L I A K R E S N F M W S R T D
UniRef90_K6V844	H E T Y R L E G S E W K L T
UniRef90_Q0UXA3	L D E L V L L P G I W R I K K R K V V F
UniRef90_UPI000382823B	E D T Y R R D D G R W W I S R T A Y T R I F E S
UniRef90_UPI00037AF44A	A T E L V R D G A L W R L A H V H I A N V W H T G
UniRef90_UPI000225E944	V D V L E K R E G A W K F R D R R I V W M R G L D G A
UniRef90_W9ATF5	R D T Y V R T E A G W R L K T R A M T F I R R S G A H
UniRef90_R8BGF7	E E T Y V W T G R G W R I A S T N L R Y L
UniRef90_K9U689	E D R L V K F G E N W K F Q A R T L I L D P N V P A P T M
UniRef90_A5V426	L D H F Q R R D G Q W K I F R R R V V
UniRef90_UPI000363CDCC	H E Q Y R L E D G Q Q W L I S Y R K L T R L R V D T T P H
UniRef90_V6JS99	T F G L S R T D D G W R L H S
UniRef90_UPI000478A233	N D T Y A R T G D G W R L R T R A M T F I R R S G A H
UniRef90_W5THH1	R Y N A R R T A D G W R F D R L E V S P V A R T P L A R A V L
UniRef90_Q2G8B5	F D T V V K V D G Q W K F K R E L L R
UniRef90_J3GQK6	L D E F E R V D G I W R F S F R N Y S H L D M M G D L R G H L
UniRef90_A0A013WWC0	H E E Y K V R V D G R W R I H R S R I S R L
UniRef90_UPI00037BB24A	N D T Y V R T E A G W R I R T R K M T F I R R S G E H
UniRef90_W5TMB1	A D E F H R T G A T W S F A S R T V T M D L I G D V I S H H L R R
UniRef90_N6YTR0	R D V W E K R D G V W K M L H R D L
UniRef90_UPI0003B67853	Y D E L I K T P E G W R V K H R
UniRef90_UPI000373AD5D	E D T F R K V D G R W L L S R R V L F L A F G G P T D H
UniRef90_Q397M8	V D R F E K R D G E W R I A R R R T V F
UniRef90_Q0FW72	S D S Y R R T A E G W K I A R R R V Y R F D F Q R E E A R R
UniRef90_G7CAY7	S D T Y R R T D G V W R F E S R V V T P L F G S
UniRef90_N1PC81	L D T L V L T D G K W L I S K R V V E F M S R L G E
UniRef90_J2GK12	D V E L V R Q R D D V W L I Q R M T I D N V W R S G D L
UniRef90_A4TDG5	L D R Y E K R D G T W K F V A R A I V T D T A H V L
UniRef90_UPI0002896002	A F T L V I R T S A G W R F T E
UniRef90_A0A031K5Q1	L D T Y A C R D G E W R I V T R M L V T D W V K D D P G T L
UniRef90_UPI000372F7B1	A F G L V R T H S G W R M H R V T V H E K W R R T P E R
UniRef90_H0SJ14	D D E Y V R E D G R W L F S K V V L T T W Y M V P V E P G
UniRef90_K6WZT4	I D E W A R G G D S W Q L T K R H I E L
UniRef90_UPI000237AE0E	R D T V R R C A D G W R I S S R T I R P L
UniRef90_UPI0002379E65	T D T Y L V R V A D K W F F H T R E L T T A W I S D Q A
UniRef90_D0LD89	D D E Y V I E D G R W K M S V C R F T
UniRef90_A5V496	T I R C A V E D G A W R I S H F I T E N L F A R D V D H
UniRef90_A0A024QJ46	D N T F V K T D A G W R Y E H L H I R F
UniRef90_C1AYD8	H D H Y V L G D A G W T F S R R E L I V D F S E D V P
UniRef90_A3VK49	D D I L F A R R G G S W V F T A R S F R I R D
UniRef90_R0G9S3	T Y E Y A R Q Q G Q W L C S R M R F E
UniRef90_TOGEF8	I D R Y R R I D G R W L I A H R R V K M L Y D
UniRef90_UPI00034CD426	R Y E L V R E G E S W L I E R N T V D N V W R S G D P A V L
UniRef90_Q2G813	L D W F V E R A G E W R V L N R L V V I F D W
UniRef90_C7QHV3	S V N F R R T D K G W R I S E L V M
UniRef90_UPI00036B0A8A	N D T Y V K Q G D K W L I T N R I A N F M
UniRef90_D9VKS1	S F A L A R T P D G W R L T
UniRef90_V7MNW6	T D E V A L L D D G E W R F T R R R A F V
UniRef90_H2JJY2	E D V F R K I I D G A W F L A S R T V F L P F G G A T E R
UniRef90_UPI00026C5F14	D D I Y V R Q N G T W L I K E R T A H F I I I E A R T L
UniRef90_T0QWU9	T D K V V K T E Q G W R F A A R T S E A I
UniRef90_M2WUG7	R V R F T R Q D G R W F I A E L R I T R L
UniRef90_G2IQM8	E N E Y R K E N G V W K I S R
UniRef90_A4XF68	V D R W E C R A E G W R I V R R
UniRef90_Q0FK55	D E T Y R K I I G G Q W R I A S L T L T R L
UniRef90_E9SWJ6	H E E Y R K V E G K W L I S Y R K L T R L R E T H T P
UniRef90_UPI00037FEFD1	R F T F R R T D G A W R I R H Q D V
UniRef90_A0A013XYE1	L D A M A R R T G V W R I A K R T M V Y D W F Q D A G A A
UniRef90_UPI0003B73501	T D H Y R L E N G D W K I Y R T E Y E R I
UniRef90_UPI00037D8B82	V D R F E Y R A G C W R I A A R T V V I F
UniRef90_C1B307	D D A Y R F E D N G W R M S R C H F T
UniRef90_UPI00036EF94D	L D T Y E K R G E E W R I A S R R Y I L L D W S M P
UniRef90_UPI0003B4D405	H D R F V R T P Q G W R F S E R R G T I L L F
UniRef90_V6JMR7	D F A L L R T P E G W R L R E
UniRef90_K5BA60	R D T V V H T P D G W R F A A R K A T V V P D S P V V R L L
UniRef90_A0A011NEP9	D D E Y R Q E N G V W I F A K R H L
UniRef90_UPI000288F091	H D T Y S L R G G R W L I T S I K S T R L
UniRef90_G8TNB1	Q D D Y V Y E N N H W L I A K R T G D F
UniRef90_A0A016XCW2	N N L F K K V D G V W K I T R T R T E N V F V A P
UniRef90_D5NX18	V D D L V K T D A G W R I Q H R K L V
UniRef90_K4RC83	E D F R R Q D G T W L S A R V L H L A F A G P T P R A
UniRef90_UPI00026CC896	L D R L S K R D G V W G I D E R T V V L D W
UniRef90_A0A031JN73	H S T F R K H G D E W L I K H R Y D Q V Y Y G S P
UniRef90_K6WXQ6	R F D L V N D D G A W S V R H
UniRef90_UPI0004686355	N D E F I K I A D T W K F K Q R N L R F V D
UniRef90_E3J7S1	Q W Q L R K V D G R W L I R E R R G A Y L G D D
UniRef90_UPI00036EE3EE	H D V Y V Q H N G K W L I K E R T S H Y I I V E A R R L
UniRef90_UPI00035D2A9A	L D R F A R T S N G W R L A R R E L V V L
UniRef90_UPI0003B40297	H D R Y V E A A G E W T F A E R S W T L K Y R G P
UniRef90_G4HQN6	V D L M E R R D G R W A I A E R R W A V R E W T R P D
UniRef90_KOEJ99	T A A A V R T A A G G W R M R R F T F T S A W S R P
UniRef90_S3HUB2	D V E L L K R S G D I W V I T R N T V D N I W R S G D
UniRef90_W4MES6	R D T C V N L N G V W L I K E K R I D P W
UniRef90_UPI000366749C	A G A A R R T P D G W R F E R L R I V W T T G S V P T
UniRef90_UPI000371940B	A D R Y V L E G E W R F Q H R E V T F M Y A V P
UniRef90_A0A010Z281	Q D E Y A R T D G A W R I S R

Sequence logo showing the conservation of amino acids across UniRef90 entries. The x-axis represents positions 1, 10, 20, 30, and 40. The y-axis lists UniRef90 entries. Colored boxes indicate the presence of specific amino acids at each position: I (light blue), V (yellow), L (green), F (orange), D (red), E (purple), R (dark red), C (cyan), H (pink), Y (magenta), W (grey), M (brown), G (light green), S (light yellow), T (light orange), A (light pink), P (light purple), N (light cyan), Q (light magenta), K (light brown), and B (light grey).

50 60 70 80

UniRef90_UPI00037F847E	T V F T D D V A V H S P R G G E L H G I D K V V D F M R Q G E V E G Q Q A	Q L F T N D G L W Q I G N Q K V Q G R D A I H T F F I S Q Q A Q K D F V S	S S Y W P D A K H T F G A Y S C S V E H Y I Q L V L R D S K I G H R T	S V H T E D V V S E T F G A R V V V G R A A L R H A E G V L D G P V P V T S V
UniRef90_K6ZLW6	A L F E P N V R V R M F D P A G I V S H D D R D S F V E A A R V G L E G G Q S I	S L F T D K T N F L V M Q G E G S S P S Q V R E D L R P V F E F L R G Y T H T	E V F L P D V Q A N Y P F N N N M K S V N E V K N A I K N R L G P V R T H H	S L F T D V Q A N Y P F N N N M K S V N E V K N A I K N R L G P V R T H H
UniRef90_F6ECT7	S A Y W P E A E D H H G V F D G N A H E F A R W I V P H L A K E Y T L T	D L Y A E D A I W E G V I G F G Q A V G K D A I R K H F Q A F W G Q D P A L L N	S C F A P D A H A T Y A G N E V E G G R Q A I V D F L A E Q L T A S A A S T H A	S C F A P D A H A T Y A G N E V E G G R Q A I V D F L A E Q L T A S A A S T H A
UniRef90_A0A059MM21	A L F T E D C E A T E E A S D G T K G K A D I H R L V L K F H D R P D F P G H	D L F T A D G V W Q W H G D R R V E G R E A L R T Y F G S R P A D R L S	A L F T E D C E A T E E A S D G T K G K A D I H R L V L K F H D R P D F P G H	A L F T E D C E A T E E A S D G T K G K A D I H R L V L K F H D R P D F P G H
UniRef90_D7A8E1	S A A Y M T D G I L S A F Y G P D I V G R D A I E T A L A T G F A K Y D F I	L V I E T A D L Q V D V S A L G Y E P V R T G P A A T Y I E V A R R R G P G S T L	S A A Y M T D G I L S A F Y G P D I V G R D A I E T A L A T G F A K Y D F I	S A A Y M T D G I L S A F Y G P D I V G R D A I E T A L A T G F A K Y D F I
UniRef90_G9PB83	L L V E T A D L Q V D V S A L G Y E P V R T G P A A T Y I E V A R R R G P G S T L	E L L A H A A Q F K V I D T Y V T G R D D I A N F L R T N L Q Y H D D T P R T	E L L A H A A Q F K V I D T Y V T G R D D I A N F L R T N L Q Y H D D T P R T	E L L A H A A Q F K V I D T Y V T G R D D I A N F L R T N L Q Y H D D T P R T
UniRef90_M2UT78	E F F T E D C L Y K L I P R E N H E R G F P L A T L V Y G I R E T L F H D P Y Y	L T L T G D A T A D Y G D R L R L A G R D E I E A T F M S R R L L G P E V I T	E F F T E D C L Y K L I P R E N H E R G F P L A T L V Y G I R E T L F H D P Y Y	E F F T E D C L Y K L I P R E N H E R G F P L A T L V Y G I R E T L F H D P Y Y
UniRef90_TOH18	D A F T E D A V Y I S G P R A L T G P E E I V V Q F F E Q R R Q K G G P R S T	E L F A D A R I T S D A G S E V T G A D Q V R A M Y E R W T R R Y P G T P R T	D A F T E D A V Y I S G P R A L T G P E E I V V Q F F E Q R R Q K G G P R S T	E L F A D A R I T S D A G S E V T G A D Q V R A M Y E R W T R R Y P G T P R T
UniRef90_D8IPV4	E L F T S T A E L V L P D P P R P V T E H G P D G V R A M A T L A G V A R T	R L Y V E D G V F D R M G Q L I V G H A A I R E V I A G R P P G T W S	E L F T S T A E L V L P D P P R P V T E H G P D G V R A M A T L A G V A R T	E L F T S T A E L V L P D P P R P V T E H G P D G V R A M A T L A G V A R T
UniRef90_X0QOR6	S C F A E G G V V L D F G P L G R T D P D T M V R Q I A L A T A K D G G P R I L D	E V F V P D V D A D Y P F N N S M K N V K E V A S A I K R L G P V R T H H N L	S C F A E G G V V L D F G P L G R T D P D T M V R Q I A L A T A K D G G P R I L D	S C F A E G G V V L D F G P L G R T D P D T M V R Q I A L A T A K D G G P R I L D
UniRef90_G2IM82	D L F L P D A T L T T P L P P R E L G P T G R Q A L V D G L G K L D G F A V T F	D C F A A D G V L E I K G S R T A V G R A A I V A T L G G G R D R P A G A P Q V	D L F L P D A T L T T P L P P R E L G P T G R Q A L V D G L G K L D G F A V T F	D C F A A D G V L E I K G S R T A V G R A A I V A T L G G G R D R P A G A P Q V
UniRef90_H1QMW6	E C F C A D D G V L E F T G G G P A Q I E A G L G A A M T R P S Q P G P P A R Q P	A C F C A D D G V L E F T G G G P A Q I E A G L G A A M T R P S Q P G P P A R Q P	E C F C A D D G V L E F T G G G P A Q I E A G L G A A M T R P S Q P G P P A R Q P	E C F C A D D G V L E F T G G G P A Q I E A G L G A A M T R P S Q P G P P A R Q P
UniRef90_G6EGD5	S L A H P G A K M R F G T R D F P H W E A Y V D W L I K A H D E M A G N	P T W A H D E S E W Q M R G D P I V G K E A I V A Y W L E A M D R F E W V V Q T	S L A H P G A K M R F G T R D F P H W E A Y V D W L I K A H D E M A G N	S L A H P G A K M R F G T R D F P H W E A Y V D W L I K A H D E M A G N
UniRef90_G8S8U9	D L F T D D A E F T D N G V T I R S R A K L H R L M E E H T R D Q P M L A G T	A L F T D D V A F V L N G T D A P T E I R G N T V V S S S V V D A V S H L H S T	D L F T D D A E F T D N G V T I R S R A K L H R L M E E H T R D Q P M L A G T	A L F T D D V A F V L N G T D A P T E I R G N T V V S S S V V D A V S H L H S T
UniRef90_G4F630	A L F T P N A T Y S I P T F G T V Y G V D A I K E K I R E I T G K A Q T	A L F T A E Q G Q V L V R P G G D T L V G P A L A E A Y A A R P A D R I T	A L F T P N A T Y S I P T F G T V Y G V D A I K E K I R E I T G K A Q T	A L F T A E Q G Q V L V R P G G D T L V G P A L A E A Y A A R P A D R I T
UniRef90_J2LGK8	S I L A E D C V L D Y R G C D P A T G I D H M P A M W P D A A S P V G P R I V T	A V L T E D T T W T F T M L G P V A G R A A V L D F I R D G H T A Q T G R V R	S I L A E D C V L D Y R G C D P A T G I D H M P A M W P D A A S P V G P R I V T	A V L T E D T T W T F T M L G P V A G R A A V L D F I R D G H T A Q T G R V R
UniRef90_W7SVG9	A C F A E G A H H Y D R I G T F A G R D A L V Q C F S E L A C R P T L R E	A C F A E G A H H Y D R I G T F A G R D A L V Q C F S E L A C R P T L R E	A C F A E G A H H Y D R I G T F A G R D A L V Q C F S E L A C R P T L R E	A C F A E G A H H Y D R I G T F A G R D A L V Q C F S E L A C R P T L R E
UniRef90_UPI000380C807	S C F T R G A V V D Y G R L G A F F D D V E P M A A I F E R V A L A R V D G R Y A	A T F H T G A A I A Q G G Y V M P A E Q F I P I V V G L L R E L E S T	S C F T R G A V V D Y G R L G A F F D D V E P M A A I F E R V A L A R V D G R Y A	S C F T R G A V V D Y G R L G A F F D D V E P M A A I F E R V A L A R V D G R Y A
UniRef90_F1YIB1	A T F H T G A A I A Q G G Y V M P A E Q F I P I V V G L L R E L E S T	N C F T P D A E I T A I F P N G A S G T S A W A D F V Y S V F Q G N G Y T A T	A T F H T G A A I A Q G G Y V M P A E Q F I P I V V G L L R E L E S T	N C F T P D A E I T A I F P N G A S G T S A W A D F V Y S V F Q G N G Y T A T
UniRef90_UPI000382EF2D	G L F V P Q G R A D Y R S A G G I E G E A P A V A A W L A E S M R L F P M R Q H	A L F Q H A D I Y M P G S Q E P E V R A G S G G F G E L L R K P P G N T P R T	G L F V P Q G R A D Y R S A G G I E G E A P A V A A W L A E S M R L F P M R Q H	G L F V P Q G R A D Y R S A G G I E G E A P A V A A W L A E S M R L F P M R Q H
UniRef90_UPI0003B4F44C	A L F Q H A D I Y M P G S Q E P E V R A G S G G F G E L L R K P P G N T P R T	A L Y A P D G L M T R P T A P D A V G H A D L L A A F T S R P P R	A L F Q H A D I Y M P G S Q E P E V R A G S G G F G E L L R K P P G N T P R T	A L F Q H A D I Y M P G S Q E P E V R A G S G G F G E L L R K P P G N T P R T
UniRef90_Q0RT59	A L Y A P D G L M T R P T A P D A V G H A D L L A A F T S R P P R	A L F A E G T V G S S G V L R G A A E V E R M L E S V I V Y E D G T P R T	A L Y A P D G L M T R P T A P D A V G H A D L L A A F T S R P P R	A L Y A P D G L M T R P T A P D A V G H A D L L A A F T S R P P R
UniRef90_UPI00029B1CAB	S A Y W P E A T D D H G V F V G A L N E Y L D W V V P G A E A I S V T	Q L F S E N A L S E T I A D G K T I L K V E G R K E M A Q A F G K F L Q D M E T	S A Y W P E A T D D H G V F V G A L N E Y L D W V V P G A E A I S V T	S A Y W P E A T D D H G V F V G A L N E Y L D W V V P G A E A I S V T
UniRef90_B2WFS7	Q L F S E N A L S E T I A D G K T I L K V E G R K E M A Q A F G K F L Q D M E T	Q L W S P D G V Y D V E G W A M N S R D D V A A M V A S D A H Q G L I R R A P	Q L F S E N A L S E T I A D G K T I L K V E G R K E M A Q A F G K F L Q D M E T	Q L F S E N A L S E T I A D G K T I L K V E G R K E M A Q A F G K F L Q D M E T
UniRef90_F1YJB2	E L F A E G T V G S S G V L R G A A E V E R M L E S V I V Y E D G T P R T	E L F A E G T V G S S G V L R G A A E V E R M L E S V I V Y E D G T P R T	E L F A E G T V G S S G V L R G A A E V E R M L E S V I V Y E D G T P R T	E L F A E G T V G S S G V L R G A A E V E R M L E S V I V Y E D G T P R T
UniRef90_UPI000369A016	R V Y W P E A I D D H A V F V R G D V E Q F I A Y S F P F M E G V V S	R L F T E S P E L V L L H E G Q P L S A D T V M E L L A A R K A A F K A E N N Q	R V Y W P E A I D D H A V F V R G D V E Q F I A Y S F P F M E G V V S	R V Y W P E A I D D H A V F V R G D V E Q F I A Y S F P F M E G V V S
UniRef90_J4TJ38	L V F A S D A V A N Y S A P L N I L T P L S T I L E T V L A A S L A S V T T	A T F T A D G E F F H S P S Y P P V V G V E A L T Q F A D A F T N A S V A G E A	L V F A S D A V A N Y S A P L N I L T P L S T I L E T V L A A S L A S V T T	L V F A S D A V A N Y S A P L N I L T P L S T I L E T V L A A S L A S V T T
UniRef90_J0KEF5	A T F T A D G E F F H S P S Y P P V V G V E A L T Q F A D A F T N A S V A G E A	D L F T E D A V W E G G G F G R T E G R E A I V E M L S A Y L P P T P H F R T N	A T F T A D G E F F H S P S Y P P V V G V E A L T Q F A D A F T N A S V A G E A	A T F T A D G E F F H S P S Y P P V V G V E A L T Q F A D A F T N A S V A G E A
UniRef90_M5A1U9	D L F T E D A V W E G G G F G R T E G R E A I V E M L S A Y L P P T P H F R T N	A T F T A D G E F F H S P S Y P P V R G S A E L T A F M R F H S G C R A S G E V L	D L F T E D A V W E G G G F G R T E G R E A I V E M L S A Y L P P T P H F R T N	A T F T A D G E F F H S P S Y P P V R G S A E L T A F M R F H S G C R A S G E V L
UniRef90_M4ZWG1	A T F T A D G E F F H S P S Y P P V R G S A E L T A F M R F H S G C R A S G E V L	A L F A E D G T W E G V G F G Q H R G P A Q V A A F M R A R R D P A M V F N T H	A T F T A D G E F F H S P S Y P P V R G S A E L T A F M R F H S G C R A S G E V L	A L F A E D G T W E G V G F G Q H R G P A Q V A A F M R A R R D P A M V F N T H
UniRef90_C0ZQL8	A L F A E D G T W E G V G F G Q H R G P A Q V A A F M R A R R D P A M V F N T H	S A F T A T A S D F R P Y P V L E G R D G I V V G A L S A A L G Q L D T	A L F A E D G T W E G V G F G Q H R G P A Q V A A F M R A R R D P A M V F N T H	S A F T A T A S D F R P Y P V L E G R D G I V V G A L S A A L G Q L D T
UniRef90_U1GLK7	S A F T A T A S D F R P Y P V L E G R D G I V V G A L S A A L G Q L D T	A L F T E D A L R M P G A E H H G R A G L A E Y V V S A D L L G R Y H R T	S A F T A T A S D F R P Y P V L E G R D G I V V G A L S A A L G Q L D T	S A F T A T A S D F R P Y P V L E G R D G I V V G A L S A A L G Q L D T
UniRef90_V5PW55	A L F T E D A L R M P G A E H H G R A G L A E Y V V S A D L L G R Y H R T	G L F P D G R A D Y R S A G G I E G D A G S V V A A W L A E S M R L F P M R	A L F T E D A L R M P G A E H H G R A G L A E Y V V S A D L L G R Y H R T	G L F P D G R A D Y R S A G G I E G D A G S V V A A W L A E S M R L F P M R
UniRef90_J2PX67	G L F P D G R A D Y R S A G G I E G D A G S V V A A W L A E S M R L F P M R	A L Y A P D G L M T R P T A P D A V G H A D L L A A F T S R P P R	G L F P D G R A D Y R S A G G I E G D A G S V V A A W L A E S M R L F P M R	G L F P D G R A D Y R S A G G I E G D A G S V V A A W L A E S M R L F P M R
UniRef90_D9WXU5	A L Y A P D G L M T R P T A P D A V G H A D L L A A F T S R P P R	S A Y W P E A T D D H G V F V G A L N E Y L D W V V P G A E A I S V T	A L Y A P D G L M T R P T A P D A V G H A D L L A A F T S R P P R	A L Y A P D G L M T R P T A P D A V G H A D L L A A F T S R P P R
UniRef90_UPI00036A6670	S A Y W P E A T D D H G V F V G A L N E Y L D W V V P G A E A I S V T	Q L F S E N A L S E T I A D G K T I L K V E G R K E M A Q A F G K F L Q D M E T	S A Y W P E A T D D H G V F V G A L N E Y L D W V V P G A E A I S V T	S A Y W P E A T D D H G V F V G A L N E Y L D W V V P G A E A I S V T
UniRef90_UPI0003F96A20	Q L F S E N A L S E T I A D G K T I L K V E G R K E M A Q A F G K F L Q D M E T	Q L W S P D G V Y D V E G W A M N S R D D V A A M V A S D A H Q G L I R R A P	Q L F S E N A L S E T I A D G K T I L K V E G R K E M A Q A F G K F L Q D M E T	Q L F S E N A L S E T I A D G K T I L K V E G R K E M A Q A F G K F L Q D M E T
UniRef90_E8UY45	Q L W S P D G V Y D V E G W A M N S R D D V A A M V A S D A H Q G L I R R A P	E L F A E G T V G S S G V L R G A A E V E R M L E S V I V Y E D G T P R T	Q L W S P D G V Y D V E G W A M N S R D D V A A M V A S D A H Q G L I R R A P	Q L W S P D G V Y D V E G W A M N S R D D V A A M V A S D A H Q G L I R R A P
UniRef90_K9QFQ6	E L F A E G T V G S S G V L R G A A E V E R M L E S V I V Y E D G T P R T	R V Y W P E A I D D H A V F V R G D V E Q F I A Y S F P F M E G V V S	E L F A E G T V G S S G V L R G A A E V E R M L E S V I V Y E D G T P R T	R V Y W P E A I D D H A V F V R G D V E Q F I A Y S F P F M E G V V S
UniRef90_S4MV87	R V Y W P E A I D D H A V F V R G D V E Q F I A Y S F P F M E G V V S	R L F T E S P E L V L L H E G Q P L S A D T V M E L L A A R K A A F K A E N N Q	R V Y W P E A I D D H A V F V R G D V E Q F I A Y S F P F M E G V V S	R V Y W P E A I D D H A V F V R G D V E Q F I A Y S F P F M E G V V S
UniRef90_U2YPG0	R L F T E S P E L V L L H E G Q P L S A D T V M E L L A A R K A A F K A E N N Q	A T F T A D G E F F H S P S Y P P V V G V E A L T Q F A D A F T N A S V A G E A	R L F T E S P E L V L L H E G Q P L S A D T V M E L L A A R K A A F K A E N N Q	R L F T E S P E L V L L H E G Q P L S A D T V M E L L A A R K A A F K A E N N Q
UniRef90_D9QIV2	A T F T A D G E F F H S P S Y P P V V G V E A L T Q F A D A F T N A S V A G E A	D L F T E D A V W E G G G F G R T E G R E A I V E M L S A Y L P P T P H F R T N	A T F T A D G E F F H S P S Y P P V V G V E A L T Q F A D A F T N A S V A G E A	A T F T A D G E F F H S P S Y P P V V G V E A L T Q F A D A F T N A S V A G E A
UniRef90_D81IU7	D L F T E D A V W E G G G F G R T E G R E A I V E M L S A Y L P P T P H F R T N	A L F T A E Q G Q V L V R P G G D T L V G P A L A L E A Y A A R P A D R I T	D L F T E D A V W E G G G F G R T E G R E A I V E M L S A Y L P P T P H F R T N	D L F T E D A V W E G G G F G R T E G R E A I V E M L S A Y L P P T P H F R T N
UniRef90_D3CT32	A L F T A E Q G Q V L V R P G G D T L V G P A L A L E A Y A A R P A D R I T	E F F T E D C L Y R V Q P P R E N H E S K G M L K D R I Y G I R D T L F H D P Y Y	A L F T A E Q G Q V L V R P G G D T L V G P A L A L E A Y A A R P A D R I T	E F F T E D C L Y R V Q P P R E N H E S K G M L K D R I Y G I R D T L F H D P Y Y
UniRef90_UPI0003FD9843	E F F T E D C L Y R V Q P P R E N H E S K G M L K D R I Y G I R D T L F H D P Y Y	E L F T P D A V Y D M S G I G T F A G I D V I R G A A A Q M I D S G H F P L	E F F T E D C L Y R V Q P P R E N H E S K G M L K D R I Y G I R D T L F H D P Y Y	E F F T E D C L Y R V Q P P R E N H E S K G M L K D R I Y G I R D T L F H D P Y Y
UniRef90_X8BMT6	E L F T P D A V Y D M S G I G T F A G I D V I R G A A A Q M I D S G H F P L	N L F C E D G V A V Y P Y G Q H V G R A G K G A W A F G G V S Y F E C C	E L F T P D A V Y D M S G I G T F A G I D V I R G A A A Q M I D S G H F P L	E L F T P D A V Y D M S G I G T F A G I D V I R G A A A Q M I D S G H F P L
UniRef90_B6R3J7	N L F C E D G V A V Y P Y G Q H V G R A G K G A W A F G G V S Y F E C C	D C F V A E G S A L D Y G E L G A M D A D G M A A L F A K I A L H G K H A I L D	N L F C E D G V A V Y P Y G Q H V G R A G K G A W A F G G V S Y F E C C	D C F V A E G S A L D Y G E L G A M D A D G M A A L F A K I A L H G K H A I L D
UniRef90_UPI000255902B	D C F V A E G S A L D Y G E L G A M D A D G M A A L F A K I A L H G K H A I L D	A L F A P D A R L I R P A A L R G D G P D P V G A I T D T I L G S L A H L V S T	D C F V A E G S A L D Y G E L G A M D A D G M A A L F A K I A L H G K H A I L D	D C F V A E G S A L D Y G E L G A M D A D G M A A L F A K I A L H G K H A I L D
UniRef90_A5V526	A L F A P D A R L I R P A A L R G D G P D P V G A I T D T I L G S L A H L V S T	A V W H D D G T A D Y G P G I F Q G R G R D F V D Q V S R N H R R L L A H	A L F A P D A R L I R P A A L R G D G P D P V G A I T D T I L G S L A H L V S T	A V W H D D G T A D Y G P G I F Q G R G R D F V D Q V S R N H R R L L A H
UniRef90_G2GHK7	A V W H D D G T A D Y G P G I F Q G R G R D F V D Q V S R N H R R L L A H	G L F T D D A V L V L P D P P R E M G P V L H R G W F E E G R V A R V M S S L E V F	A L F T D D G I L R T G R G T A V G R T S I A D F Y R R I L E R D P S E K	G L F T D D A V L V L P D P P R E M G P V L H R G W F E E G R V A R V M S S L E V F
UniRef90_K4R5V3	G L F T D D A V L V L P D P P R E M G P V L H R G W F E E G R V A R V M S S L E V F	N C F A D D A V I P A H G D I R E T R D A D G F V A N L V A S L R V T R S L	E M F T E T A N G Y G A A G R E Q V I Q T V R D H L G G C G P S	N C F A D D A V I P A H G D I R E T R D A D G F V A N L V A S L R V T R S L
UniRef90_R7WQ99	N C F A D D A V I P A H G D I R E T R D A D G F V A N L V A S L R V T R S L	S V F A P D A V F D E S D F P T P V G R D A I I Y T E H V G V A A D H V M V	E M F T E T A N G Y G A A G R E Q V I Q T V R D H L G G C G P S	E M F T E T A N G Y G A A G R E Q V I Q T V R D H L G G C G P S
UniRef90_E3IWV1	S V F A P D A V F D E S D F P T P V G R D A I I Y T E H V G V A A D H V M V	A L F T D R D A L P A P P T R T G R A E I V S A L R E A A A F P L T R H T V	S V F A P D A V F D E S D F P T P V G R D A I I Y T E H V G V A A D H V M V	S V F A P D A V F D E S D F P T P V G R D A I I Y T E H V G V A A D H V M V
UniRef90_D1ABM6	A L F T D R D A L P A P P T R T G R A E I V S A L R E A A A F P L T R H T V	A V H W H D D G T A D Y G P G I F Q G R G R D F V D Q V S R N H R R L L A H	A L F T D R D A L P A P P T R T G R A E I V S A L R E A A A F P L T R H T V	A L F T D R D A L P A P P T R T G R A E I V S A L R E A A A F P L T R H T V
UniRef90_Q47PW3	A V H W H D D G T A D Y G P G I F Q G R G R D F V D Q V S R N H R R L L A H	G L F T D D A V L V L P D P P R E M G P V L H R G W F E E G R D T I V A A L L G S L A A L D T	A M F T E T A N G Y G A A G R E Q V I Q T V R D H L G G C G P S	G L F T D D A V L V L P D P P R E M G P V L H R G W F E E G R D T I V A A L L G S L A A L D T
UniRef90_A0A022LL33	G L F T D D A V L V L P D P P R E M G P V L H R G W F E E G R D T I V A A L L G S L A A L D T	A L F T D D G I L R T G R G T A V G R T S I A D F Y R R I L E R D P S E K	E M F T E T A N G Y G A A G R E Q V I Q T V R D H L G G C G P S	E M F T E T A N G Y G A A G R E Q V I Q T V R D H L G G C G P S
UniRef90_G6EAU8	E M F T E T A N G Y G A A G R E Q V I Q T V R D H L G G C G P S	S C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I	A C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I	A C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I
UniRef90_J1EHR0	A C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I	A L Y W S D A V V E I P P G I A T L K G V E A I R E A F S R P A W Q P D P A N P Q	A C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I	A C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I
UniRef90_A0A024H8Q5	A L Y W S D A V V E I P P G I A T L K G V E A I R E A F S R P A W Q P D P A N P Q	E L F A P D G I W E H G S R I R A G A L S E Y F G T R P P D R L S R R L L M	A C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I	A C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I
UniRef90_G0EU7Z	E L F A P D G I W E H G S R I R A G A L S E Y F G T R P P D R L S R R L L M	E F F T E D C Q V Y K L I P R E N H E R G F P L C T L V Y G I Q E T L Y H D P Y Y	A C F A D D A V I C Y G P A L G S F D D A D A L V D V Y A R I A L E R V D D R Y I	A C F A D D A V I C Y G P A L G S F D D A D A L V D

	90	100	110	120
UniRef90_UPI00037F847E	L H T T T D L L V D I D G D Q A A A S A Y S V V Y Y Y R D G Q A P H F T G G R M	R H V L S N H K V T V N S S S A S G I S Y V T L Y H F K G D T G H P Y A V V V I Y		
UniRef90_K6ZLW6	R H Q T T N V L V E F T G P E A I V E S Y L S V L Q S G S G K G P F L F G Q Q			
UniRef90_F6ECT7	H H G H T P E I R L T S D T T A T G I W A M L W W T N G S V E E H L H G Y G H Y			
UniRef90_A0A059MM21	H Q M H N D E I D R V S E D E I S A I W S M E D M I F R P G S R M H G Y G H Y	T H F N G Q S T I D I D G K T A S G E T Y C I A Y H L S E K D G H R Q M Y V R Y		
UniRef90_D7A8E1	S L T T Q T I T F R P D A R T A Q V E T Y F Q G V H F G Q G P H E G K M L C A Y			
UniRef90_G9PB83	V H Y L T S E Q I H V N A E Q A D G Q W V H C Q P W I F G D G S S L L R S S R L			
UniRef90_M2UT78	V H N V Q F T E T G T G D L A V E S T I T A T H I V P N D N G A L R G L R Y			
UniRef90_T0HI18	Q H L L G Q S L I Q M S G P D A A A V E T Y F S S R H G H A R N G V R M V G R Y			
UniRef90_D8IPV4	V H Y L T S E Q I H V N A E Q A D G Q W V H C Q P W I F G D G S S L L R S S R L			
UniRef90_X0QOR6	V H N V Q F T E T G T G D L A V E S T I T A T H I V P N D N G A L R G L R Y			
UniRef90_G2IM82	Q H Q M A Q F L F E A D P D H W V V R S Y A W A I N H P P A P P H L H W C G H V			
UniRef90_H1QMW6	R R V M T N I L V T V D A T T A T A T S Y L T T Y R V D G Y V D G M V N V G H Y	M Q T S G A V V I E V Q G D A A F M R S S V S E W M R R S D T S Q L E C C G C Y		
UniRef90_G6EGD5	A M H V T N I I I V R A D G D G A R A W S K G M T V G E D G R V A S F T Y			
UniRef90_G8S8U9	A M H V T N I I I V R A D G D G A R A W S K G M T V G E D G R V A S F T Y			
UniRef90_G4F630	W H S V S V N V L I D K S A T S V S T V S Y F T V H Q E L P G F P L Q V I G R Y			
UniRef90_J2LGK8	Q R H V G A P L I R A A G D R F E V E A Y A V F R T K L S Q E S T V F N V G R Y			
UniRef90_W7SVG9	V H F A G Q A E I D D G D E A T G T W N M M D T V I A T D R Q V V Q G A A F Y	R H M G S S L R L Q F S D D R S V W I S Y A C N A E A P V D T L S A F M V A D F		
UniRef90_UPI000380C807	R H M G S S L R L Q F S D D R S V W I S Y A C N A E A P V D T L S A F M V A D F	K H L L T N L R I E V D E A A G E G T C H S Y F T V L Q S T P E Q P I I T G R Y		
UniRef90_F1YIB1	Q H E I V G E V Y T D A S D H A R G R I T C V A H H W T R D A D S L V W H L R Y	K H V V C S N I R V T V D A D G A S G E V D L D M M Q R G I A G S D E V Q R L G I Y		
UniRef90_UPI000382EF2D	K H V V C S N I R V T V D A D G A S G E V D L D M M Q R G I A G S D E V Q R L G I Y	G H H V T N I V L T E Q A D G R V R A R S K G I G I M A D G T T G S V L Y		
UniRef90_UPI0003B4F44C	G H H V T N I V L T E Q A D G R V R A R S K G I G I M A D G T T G S V L Y	M H H G F M P S I S V D G D T A T G T W T L Q F R Q V D R D G T E T I S T G E Y		
UniRef90_Q0RT59	M H H G F M P S I S V D G D T A T G T W T L Q F R Q V D R D G T E T I S T G E Y	T T Q T I T F R S D Q A T R V V T Y F H G H F G Q G G K M L S A F G K Y		
UniRef90_UPI00029B1CAB	T T Q T I T F R S D Q A T R V V T Y F H G H F G Q G G K M L S A F G K Y	H G L A G S M I D E T G P G R G R G R I N C V A H H V G R D A E D V V W H L R Y		
UniRef90_B2WFS7	H G L A G S M I D E T G P G R G R G R I N C V A H H V G R D A E D V V W H L R Y	R H F V T N L R F D I A P D R V E T S A Y F C V I T H H G E H L G V D H W G R Y		
UniRef90_F1YJB2	R H F V T N L R F D I A P D R V E T S A Y F C V I T H H G E H L G V D H W G R Y	P T H V R R H V S S I N A S V A R D R V E V V S S Y F A V H T E V G L D H W G R Y		
UniRef90_UPI000369A016	P T H V R R H V S S I N A S V A R D R V E V V S S Y F A V H T E V G L D H W G R Y	N H R I T N I L I E V N G D R A V S E C T G T A T L L V P K E E E R W M H S R Y		
UniRef90_J4TJ38	N H R I T N I L I E V N G D R A V S E C T G T A T L L V P K E E E R W M h s r y	A P H S V F V H V A E G A D T G T G R V I A Q E T F K R A D G V L G N L V A V Y		
UniRef90_J0KEF5	A P H S V F V H V A E G A D T G T G R V I A Q E T F K R A D G V L G N L V A V Y	R H L M L N P V I E V D G A K G N G S V D L L V I E L A D H G W R I R G S G R Y		
UniRef90_M5A1U9	R H L M L N P V I E V D G A K G N G S V D L L V I E L A D H G W R I R G S G R Y	R H I V E Q Q I L D L D P T T A H G E A Y C S A H H I Y P R G E G H R I E I R Y		
UniRef90_M4ZWG1	R H I V E Q Q I L D L D P T T A H G E A Y C S A H H I Y P R G E G H R I E I R Y	Q H L F A S E T L N V D A G T A T G N V Y L L E T V F G G L L G P N V T N T G Y F		
UniRef90_C0ZQL8	Q H L F A S E T L N V D A G T A T G N V Y L L E T V F G G L L G P N V T N T G Y F	R H L V G N V L V I D L V T S P T A R G S S M V L L W S A S A Q D H G R Q V M G E F		
UniRef90_U1GLK7	R H L V G N V L V I D L V T S P T A R G S S M V L L W S A S A Q D H G R Q V M G E F	V H Q G N D P D I T I E A S T A S G I W C F T D R F F P P S G K R L T G W G R Y		
UniRef90_V5PWS5	V H Q G N D P D I T I E A S T A S G I W C F T D R F F P P S G K R L T G W G R Y	H H L G S V V V T T T D A A T A E V R A H L L Q T R N T G E S I Q M I S T G V Y		
UniRef90_J2PX67	H H L G S V V V T T T D A A T A E V R A H L L Q T R N T G E S I Q M I S T G V Y	H M H F A G Q G Q D I R V G K D G T A A G S W D L A Y A L A D D A N A P		
UniRef90_D9WXU5	H M H F A G Q G Q D I R V G K D G T A A G S W D L A Y A L A D D A N A P	M H H G A N P E I T V L G G R A R G R W S L Q F R Q I T V I A R T D T V T V G E Y		
UniRef90_UPI00036A6670	M H H G A N P E I T V L G G R A R G R W S L Q F R Q I T V I A R T D T V T V G E Y	H H Q L S P P L I E L R G D T A F V E S Y F T G F H R L G P S E D I F I G G R Y		
UniRef90_UPI0003F96A20	H H Q L S P P L I E L R G D T A F V E S Y F T G F H R L G P S E D I F I G G R Y	Q H L L G T F N I Q V Q N N T A T M S S Y L H A T H K L S D T S I D V A N G T Y		
UniRef90_E8UY45	Q H L L G T F N I Q V Q N N T A T M S S Y L H A T H K L S D T S I D V A N G T Y	L I V N R N R V R F G V T G D T A Q V Y Q A D Y V N P M A T E G P A P D F V I C G R Y		
UniRef90_K9QFQ6	L I V N R N R V R F G V T G D T A Q V Y Q A D Y V N P M A T E G P A P D F V I C G R Y	R H V T T N H Q I H F D G S A A R M R S Y F T V L Q T K P G Q L Q A I I T G T Y		
UniRef90_S4MV87	R H V T T N H Q I H F D G S A A R M R S Y F T V L Q T K P G Q L Q A I I T G T Y	Q H V V C A N I V V V S V E S D T A S A T S A I L L F T A P D Q P P L V V G T Y		
UniRef90_U2YPG0	Q H V V C A N I V V V S V E S D T A S A T S A I L L F T A P D Q P P L V V G T Y	K H V T T N V A L E L S S G S T A S G R A Y F T V L Q A V P P G P L Q T I A A G R C		
UniRef90_D9QIV2	K H V T T N V A L E L S S G S T A S G R A Y F T V L Q A V P P G P L Q T I A A G R C	L H T L G Q S L I D I Q G A Q A S V E T H V T A Y H R I D L L G E Q E H D I G R Y		
UniRef90_D811U7	L H T L G Q S L I D I Q G A Q A S V E T H V T A Y H R I D L L G E Q E H D I G R Y	V Y H F S S Q V V E I D G D S A T G K H Y C L I T L I G S S R V K T T I G A T Y		
UniRef90_D3CT32	V Y H F S S Q V V E I D G D S A T G K H Y C L I T L I G S S R V K T T I G A T Y	R T F F W A R P W S P L T A T R		
UniRef90_UPI0003FD9843	R T F F W A R P W S P L T A T R	R H I S T N I Q L E I N K E A G V A T C K L V I Q Q T A A L P L K P I F S A D Y		
UniRef90_X8BMT6	R H I S T N I Q L E I N K E A G V A T C K L V I Q Q T A A L P L K P I F S A D Y	K H L I G Q P V V Q L L N G T R A L E T N V Q I L G R F D I A G T P V D Y T S Y		
UniRef90_B6R3J7	K H L I G Q P V V Q L L N G T R A L E T N V Q I L G R F D I A G T P V D Y T S Y	Q H R I T N I W V D L T G P E A F S E C Y F S G F H D F P A E D G R I V G G R Y		
UniRef90_UPI000255902B	Q H R I T N I W V D L T G P E A F S E C Y F S G F H D F P A E D G R I V G G R Y	R R H A L N S F W F S S A D E A T G H C Y V Q V F A I K D G G P P A D L T G C Y		
UniRef90_A5V526	R R H A L N S F W F S S A D E A T G H C Y V Q V F A I K D G G P P A D L T G C Y	Q H L L G T Q D I Q L V G P A A R S V T Y Y R A A H F G E G G E M L Y A Y G Q Y		
UniRef90_D5P3K1	Q H L L G T Q D I Q L V G P A A R S V T Y Y R A A H F G E G G E M L Y A Y G Q Y	H R H V L S A V V D R V G G D D E L E V H A Y L Q I V A T R I Q G D R I L V R F T T V		
UniRef90_M2M1N9	H R H V L S A V V D R V G G D D E L E V H A Y L Q I V A T R I Q G D R I L V R F T T V	V H L L P G T V D V K G V T A K G S W P M Q Q L S Y Y E S G F S E I M V A K L		
UniRef90_E4WAC6	V H L L P G T V D V K G V T A K G S W P M Q Q L S Y Y E S G F S E I M V A K L	R H V V S T V E V L V T G P D A S T R A Y L Q I V G T P E G E P R L H R I T T L		
UniRef90_UPI0003785A9C	R H V V S T V E V L V T G P D A S T R A Y L Q I V G T P E G E P R L H R I T T L	Y L C S E Q L T A D D D G R G A E G L W V Q F Q P W V H D D G R A L L R S S R L		
UniRef90_UPI0001FFF3AF	Y L C S E Q L T A D D D G R G A E G L W V Q F Q P W V H D D G R A L L R S S R L	T H S V S N A R V T L D G D N A R L D A L V I E A Q H V P Q S D P S R H Y L M R Y		
UniRef90_A4XXF8	T H S V S N A R V T L D G D N A R L D A L V I E A Q H V P Q S D P S R H Y L M R Y	H H L S T A H R I R I D G D H A T S R S V M H A V H H A D D P T D W W A V G G W Y		
UniRef90_UPI000347CC5B	H H L S T A H R I R I D G D H A T S R S V M H A V H H A D D P T D W W A V G G W Y	Q H L I V N R R V R F T G D T A R V Q A D Y V N P M A G P A A P D L V C G G R Y		
UniRef90_UPI0003781FC2	Q H L I V N R R V R F T G D T A R V Q A D Y V N P M A G P A A P D L V C G G R Y	Q H L I V N R R V R F T G D T A R V Q A D Y V N P M A G P A A Q D G A A S A A G R Y		
UniRef90_G2GKH7	Q H L I V N R R V R F T G D T A R V Q A D Y V N P M A G P A A Q D G A A S A A G R Y	R H D V G Q Q R Q I R E Q D G E T A T G E T W C A A H H F Y E R R G T V H V I R Y		
UniRef90_K4R5V3	R H D V G Q Q R Q I R E Q D G E T A T G E T W C A A H H F Y E R R G T V H V I R Y	S H Q I A T V G I L E V A G D R A A S E A Y V T V R L V S A A G D G E L Y A G R Y		
UniRef90_R7WQ99	S H Q I A T V G I L E V A G D R A A S E A Y V T V R L V S A A G D G E L Y A G R Y	P V T M H A L A G Q V E P G T A T G S V A C T A C H L S E R D G T V V N L A R Y		
UniRef90_E3IWV1	P V T M H A L A G Q V E P G T A T G S V A C T A C H L S E R D G T V V N L A R Y	R H F I T S P H T T W L A P G L V E I A S Y F L F T G R G T N R S V L G W G T Y		
UniRef90_D1ABM6	R H F I T S P H T T W L A P G L V E I A S Y F L F T G R G T N R S V L G W G T Y	Q H L L G N H R V H L N E D R A K S L T Y A R V L H L G T G G R S Y E C F G E Y		
UniRef90_Q47PW3	Q H L L G N H R V H L N E D R A K S L T Y A R V L H L G T G G R S Y E C F G E Y	H L G G P G D I A L E S A D R A G V W A V E D R I W A L D G R T L H G W G H Y		
UniRef90_A0A022LL33	H L G G P G D I A L E S A D R A G V W A V E D R I W A L D G R T L H G W G H Y	T N I L R V E R A S P D E A T G F C Y V L F F S G V V A D Q P G A P A V V I Y		
UniRef90_G6EAU8	T N I L R V E R A S P D E A T G F C Y V L F F S G V V A D Q P G A P A V V I Y	U N F D P P Y I V L T S D T T A T A R F R F E S Q H W F P A G R P V H N V G A Y		
UniRef90_J1EHR0	U N F D P P Y I V L T S D T T A T A R F R F E S Q H W F P A G R P V H N V G A Y	Q R H I A P P L I I R E A D G D R V V A E T Y A V L R T K P D Q M T D V Y N V G R Y		
UniRef90_A0A024H8Q5	Q R H I A P P L I I R E A D G D R V V A E T Y A V L R T K P D Q M T D V Y N V G R Y	Q H L V S T N I V I S S A A D V V I A L S K G L M V M A D G A I Q G V N H		
UniRef90_G0EUZ7	Q H L V S T N I V I S S A A D V V I A L S K G L M V M A D G A I Q G V N H	Q L L S S N F D I E F S P N R A Y V R T N C I A Q W M K R K D D H F D E G G F Y		
UniRef90_UPI0003B62AC6	Q L L S S N F D I E F S P N R A Y V R T N C I A Q W M K R K D D H F D E G G F Y	M H H G V H P D I T V H A D T A S G R W T L R F R Q V L I E R T E T V A T G E Y		
UniRef90_W9XW31	M H H G V H P D I T V H A D T A S G R W T L R F R Q V L I E R T E T V A T G E Y	V I H F L T S E S S I D V Q Q G A S A K G R W I M L Q A S G Y V D A P A E L I S A R L		
UniRef90_U5E7S1	V I H F L T S E S S I D V Q Q G A S A K G R W I M L Q A S G Y V D A P A E L I S A R L	S H S V S N P R V F L S G D A R L D A L V E A Q H L P R T D H S R H Y L M R Y		
UniRef90_B2T4Q3	S H S V S N P R V F L S G D A R L D A L V E A Q H L P R T D H S R H Y L M R Y	L H M L H S P R I D I D G D N A S G D W T L V L T L R R N G G A V D T V V M G R Y		
UniRef90_W1NCA1	L H M L H S P R I D I D G D N A S G D W T L V L T L R R N G G A V D T V V M G R Y	M H H G M H P S I E L T G D T A T G A W T L R F R Q V D R A R T E R V S A L D Y		
UniRef90_N1MPF4	M H H G M H P S I E L T G D T A T G A W T L R F R Q V D R A R T E R V S A L D Y	R H V V A N S V V T D W S D R A K V T S D V V M V K F D G A A W A P A I V A R Y		
UniRef90_A0A059ML68	R H V V A N S V V T D W S D R A K V T S D V V M V K F D G A A W A P A I V A R Y	T N I L R V T V S P T T A T A T S Y L T T Y R I D G F S E G P Q H P T N V G H Y		
UniRef90_D816D2	T N I L R V T V S P T T A T A T S Y L T T Y R I D G F S E G P Q H P T N V G H Y	Q R H V A P P V V R R V E G E R I H A E A A Y A V F R T K L D K A S T V F N V G R Y		
UniRef90_X0N2A8	Q R H V A P P V V R R V E G E R I H A E A A Y A V F R T K L D K A S T V F N V G R Y	Q H T S L N P V T V D G D D A V Y D S Q F L V Y N V L G G T I L V P V E S G Y L		
UniRef90_UPI000367A4A4	Q H T S L N P V T V D G D D A V Y D S Q F L V Y N V L G G T I L V P V E S G Y L	V T N H V I D R I D D T H A V G T V Y C R A E Q Q Q H D K S W R T Y Q L A Y		
UniRef90_UPI0003689C3D	V T N H V I D R I D D T H A V G T V Y C R A E Q Q Q H D K S W R T Y Q L A Y	Q G E L F N A N Q S S S D G A R A A G R V L C T A H H L R R R T S G A L T D L V I Y		
UniRef90_X0Q3B9	Q G E L F N A N Q S S S D G A R A A G R V L C T A H H L R R R T S G A L T D L V I Y	I H N I A N S I H L N G D A A A A E A Y F L A Y Q T D S D A A G A P R A G R Y		
UniRef90_UPI000309621A	I H N I A N S I H L N G D A A A A E A Y F L A Y Q T D S D A A G A P R A G R Y	R H E F I V S P R T T W T G P G T V E L A S Y F L F T A R A G T S V L G W G T Y		
UniRef90_UPI00039583A2	R H E F I V S P R T T W T G P G T V E L A S Y F L F T A R A G T S V L G W G T Y	Q H L V S N V R I E I D A G A A G A R A Y T V F Q A V E R L P L Q A I I A G R Y		
UniRef90_UPI0003AD52C7	Q H L V S N V R I E I D A G A A G A R A Y T V F Q A V E R L P L Q A I I A G R Y	K H L I G T P V V Q I N G N R A I V E T N A V I V V R L D L G C S V H N R F		
UniRef90_UPI00037DA0A4	K H L I G T P V V Q I N G N R A I V E T N A V I V V R L D L G C S V H N R F	H H A L S E S A I T F D G D R A F V E T P H I A V V H D V V A M P E I R S G W Y		
UniRef90_J2YNJ1	H H A L S E S A I T F D G D R A F V E T P H I A V V H D V V A M P E I R S G W Y	H N L I N M V F R R A D A D T A G V W A Y L M L T S N A G G S A T V I A T G F Y		
UniRef90_UPI000248A3E2	H N L I N M V F R R A D A D T A G V W A Y L M L T S N A G G S A T V I A T G F Y	U H M S N A H I E F I D R D H A R Y H Y Y W M T V F A G S P P P R L A A A G R G		
UniRef90_UPI000369C970	U H M S N A H I E F I D R D H A R Y H Y Y W M T V F A G S P P P R L A A A G R G	Q H L I V N R L V R L E G D S A E V R A D F L N P M R L Q A P E G R V A A G R Y		
UniRef90_G2IMV4	Q H L I V N R L V R L E G D S A E V R A D F L N P M R L Q A P E G R V A A G R Y	E I V I T S A E W A F A R S T A T G T K L F Q R G D S E P H A N Q E		
UniRef90_A0A024YMU3	E I V I T S A E W A F A R S T A T G T K L F Q R G D S E P H A N Q E	F H E A G Q I R L S I N G D Q A D A M D F T A S H W L G E Q G F W Q V I A G T Y		
UniRef90_W9XLW1	F H E A G Q I R L S I N G D Q A D A M D F T A S H W L G E Q G F W Q V I A G T Y	Q H H V H N Q L V T L D G G E A A V E T Y C H V Y V R D G V K R K L D W G L R Y		
UniRef90_Q2B2M50	Q H H V H N Q L V T L D G G E A A V E T Y C H V Y V R D G V K R K L D W G L R Y			
UniRef90_UPI0002E8F12F				

130 140 150

UniRef90_UPI00037F847E	T G T V A R T P A G W R F R E Q R I T P A W T R E
UniRef90_K6ZLW6	Q D E Y V A T K Q G W K I K S R
UniRef90_F6ECT7	I D L F Q K R N G E W R I G D R R V I C D G R D E H
UniRef90_A0A059MM21	H E R Y R K V D G L W L I A Y R N L T R L R V D H T P
UniRef90_D7A8E1	H E L L W R R G P D G W R I A R L E L R
UniRef90_G9PB83	Q D I L L K K E D D I W R F S E R K L
UniRef90_M2UT78	N D D C V R G A S G W R I T K R T V T F
UniRef90_T0HI18	I D R F A R A R G E W R I A D R L L I V D F V F D V P H
UniRef90_D8IPV4	N N L F K K V D G V W K I A R T R T E N V F V A P
UniRef90_X0QOR6	S D T V V R A A T G L L I K Q R V H R P L W S T E T
UniRef90_G2IM82	R D V V A K V D G Q W L I R S
UniRef90_H1QMW6	E D T F R K V D G E W L L A A R T L F L A F G G G T E R
UniRef90_G6EGD5	E D K L V R T G A D W R F E R R R F M P V H R G G E A R T
UniRef90_G8S8U9	A D H L V R T G H G W R I R H R T V S P
UniRef90_G4F630	V D T F E L H D G A W R Y A S R E V D P
UniRef90_J2LGK8	I D V I V R T P Q G L K F A S R
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UniRef90_R1G851	A L F A A G A F A G S G G V V R G A A E V E R M L R S V I V Y E D G T P R T
UniRef90_M1R8Y1	E T F T E D G L F A L P G R P E P R G R A A L A E G A R R A H T E R L L A S H E T
UniRef90_U5WRP1	A L F T P E E L V L L H D N R E L T A D I D T V M R L L S A R K S G F R A A G N K
UniRef90_Q53879	R T F V H D G V F A V G G E A V R G V A D I L A R A A R R T T D R F A A E G I T
UniRef90_A0A024K7P7	Q L Y V D D G T L T L G A H T L V G R D Q F H K W A D T R A A N S A R Q T
UniRef90_U2Y9M9	D C F A D D A I L L D L S G L Q V Y Y Q G S D A I I R G F Y A K V F E T M S H H M H T
UniRef90UPI0003B4CC41	D C F T Q D G V W D A R H N T V C Y C R G R A E L A A F I R T H T R A P M V Y H
UniRef90UPI00040010DF	R L F T E D V T V K S V R G A R A G E A L V A I A R K G H D K Y A R T
UniRef90UPI00031058C2	A T F T D D G A F H S P S Y P E P V G T G Q L T A F A E Q F A A D A R S A G E V
UniRef90_A0A031JQ84	T V Y W P D G E D I H G I Y V G R A E F V P F I I G E I T Q Y F A M G
UniRef90_G6EHE1	A L Y A P E G R M A R P T A P D I T G R E A I L A A F K A R P P R V T R H V C S
UniRef90_F9X9S6	Q V F T P D V D A E Y P F A S L K G V E A V A T A V E K R L E H V S T H H A L
UniRef90UPI000371BA24	G D F T D D G V F I T N A G P A P Q G R A A I T A G A G V A A N L L S D N V I
UniRef90_H2JZP4	A T F T E D G T F E A P A L D P V R G R A A L A A S I R G A A E R E A A G E V H
UniRef90UPI0003AD39CE	R V Y T R D A T W S A G G T T Q T G L E A I I A A S Q G R R D S G L T G A H N
UniRef90_Q46PT4	S I A H P E A R M Q F G K R T F P S W S A Y V D W L I K A H T E M L G N
UniRef90UPI0003ACF8F0	S A F H E D A V V D D H G W V A G N P R R D L V P G L Q A R H E T V E H S
UniRef90_B2A9N2	S L F T S N G T I T V Q N N T S P A G P A G I Q S V L N R M G P E G L S H G I L
UniRef90UPI000367EB14	R S Y F T D D V R T V T P I G S S D G I E A M D D T E E A L G R Y A R T Q H I A
UniRef90UPI00036007C7	G L F T P D G I Y Q S R D A G A V Q G R A A L K D F C D N A P F D G L H
UniRef90UPI0004634FC4	S Q S T A D A V V W D F P A N P T L T G H A E I I A A S V G A R R A S G L Q G P G T
UniRef90UPI00046726C3	A L F T A D A I I W E G V G F G R L R G P G E I V A M L L R Y L P P T P H F A T N
UniRef90UPI00016A7CCA	R I W V D D A V V M I V P G V G R Y E G R E T I M S R Y R S L A A R A S M T F S R
UniRef90_X0PW46	S L F T G D A T W E G I G F G I A H G R E D I V A L V S R Y L P P A E H F V R N
UniRef90_V9XD05	N L F D Q D C I I W E G I G F G R Y D S W Q S I L Y D M F K R Y T Q K E S H F V M N
UniRef90_K6MDL4	E V F T E D A R F E G F T F A G E G A A L F V A G V A E F L D G T R S V
UniRef90_A8LAB5	Q L F T E S A T G Y G A T G R D A I V D R V K A H L G G C G P S
UniRef90UPI00029AEDC7	A F F T E D A T Y T I R G L P A P I L H C R N R A M M R D R V V A I L R N H R Y R
UniRef90UPI00047BB798	Q L Y T A D G V V M M A P D A P T A V G R E A I I Q A A Y S G L G Q A L S F N
UniRef90UPI00046498B1	E L L F A E D A L Y V I T A R E N F E G K G M L R D I F A I E K T A M F A P R Y M
UniRef90_K2IRR2	E L L F T E T A E L R L P E P P R W H G R T G V R S A L R S L A D V A R T Q H D I
UniRef90_X5LK98	D L F V P P S P D I R I L G G G E L V V I A F S S R D V F T A A R D Y L A S A Q S
UniRef90UPI00037DEBF8	E L L F V D D A A F L I I D R Y G E L L R G R D A I A E G V A G N A D Q G F R W T
UniRef90_A5V4W4	T C F T D N P Q F I I R D P E E N D W R A S L A V G V A Q A R F T L G R I D S I
UniRef90_U2YP56	G V F W P E A T F D F G M F K G D F A A Y R K F V A E L G E G Y A R R
UniRef90_J2ZYLO	D A F A D S I T T D Y T G W G G D P V T Q P A D D L V A G W A A F L P G F E I T
UniRef90_A3XAC2	D L Y A E D G R M A R P T A P W T Q G R A A I I L A A F L A R P A R T T R H V C S
UniRef90_A0A013VJG9	R L F T A D G R A D H R G A G G I E G D A G T V A G W L A E R S A E F P V R
UniRef90_M3DZ32	S F W H A D A T L R Y E A V A L E A V A H D I A L M M T L G H Y P W A A H
UniRef90_N1MQ36	R L F T A D G T L E F V D L D R Y T G H E D I Q G F F E G V R D T G V S A R V F
UniRef90_L7L2Z7	L L F S D T A I V E L Y F E G T L K G H L E I E E T F T S F I K A F E S A
UniRef90UPI00047B5D1B	N S F Y H E V F L D Y F S L S K P G K V K S D E I V K G W S E F L P K F S F T
UniRef90UPI00037BE94D	E I F T P D G V F E H P G E A P T V G A A A I A A L P G A T A S V P F A
UniRef90_V5XBG5	D F F T D D D C L V Q P R E N H E G K G M L K D R I Y G L R E T L F H D P Y Y
UniRef90_Q46S16	A L F A P E A T I E I V D I S R L E G R D A I R V A V R Q M M A P H G Y R A W S
UniRef90_Q2G4M1	G L F T D D G W F D G K T I A N M V G R E D I S T S L G S R M S G D V Q P I
UniRef90UPI0003B5CF72	E C F T V D A D Y V T F S G Q H L K G R Q E I D E V H Q K L W D G V L R D S K L
UniRef90_D3EHP2	R M F T E D A I L E A R G A D Y W R G R A A L E T D F F R R V S P L R P A G D Q
UniRef90_X0Q996	S V L S E H C V I E G P G F R I E G C E N N L G S L D M L G K M F R K T
UniRef90_F6IDC3	A C F A K G V S M T M R I A G G F D G R D A V M G L M T G S M D E Q T D I R
UniRef90_B7RTS5	S C F A E D P E V S L E G R G K Y Q G K K E I M D F Y D Q R V E I G R M A G A I
UniRef90_R9JV66	Q T F T D T D G I F E P S P Y P A P V G R A A L I E F A R A F L V N A R A A G E V
UniRef90_W8H8R3	G C F T E D V F G A F P P M G D L Q G R H E V I G Q M K S F R R L W P W M Q H
UniRef90_KOELR5	G L F H E D A T L T F L W F S G S A R D F I D G S R R L S G G P L R N
UniRef90_F6F3S7	H V F H D D G R W R M S A F D G P E A R D T V A R I F E Q A L A M T
UniRef90_G8MGD3	R L W H P Q G V V M M A T W F Q G T G P E F I R V T R E G W A R G V S I
UniRef90_Q93Z55	R T F T E D G V F A Q N I A P E P R G R D A V A A A V R R N L E R T A D T P E Q
UniRef90_A5V7S8	K C F A R D A V F R S A T Q A E M R L Q G H A E L E E G F R S F T A Y G R A
UniRef90_K0C773	D F F T E N C L Y K V I P R E N H E I G M P T A I M W T A L R H A N I Y Q V Q W
UniRef90UPI00034C4A02	E M F T D D A S Y V V L S R E N H D G G L P V R A F A L E K T A M F A P R Y L R
UniRef90_D7AZ66	R T F T P D G E F H S P T Y P P V V G R D R L R A F A E D F A H A A R E A G E V
UniRef90UPI00039E8CCA	E L F T A D G V F A R P S A P P I H G R E A I R Q S F R E R P P R T S
UniRef90_D3F909	R T I F D A G V A V S T P G G T A E G I D A V I A Q A T R N H A A H R T
UniRef90_T0GEH9	D V F H A D A L I D K T G T P Y P V A E F V A N V A A R H P G V P N A
UniRef90_R1GVE5	H I F A D D A T A N Y G A P I G E L A G L A Q I K E T I L P P Y L T L F V G T
UniRef90UPI00036CC3E7	H L F H P D A V F T S F Q R E R R W V G R Q A I V D W Y H K Y L K R E G H F R Y T
UniRef90UPI00046B0A05	Q L F H P D G T I E V T W F E G L A R D F I D G S M R M G S S D A R T
UniRef90_B1W4N6	A L F T P D G R A D Y R G A G G V E G P A D E I A R W L E E T M R L P V R
UniRef90_I2ABU5	A C F C D E G V L E F T G G A R L T G P A Q I E A G L G A A V T R P S T P G Q P
UniRef90_Q46UQ1	R F F T E D A L Y R I T G I G M M R D R A A A I A N T Q M F A P R Y N L H V T
UniRef90_V7FYJ2	S Y F A A R V T T D Y T S F G G E V T T S G R D S L I A Q W Q A L L P G F D A T
UniRef90UPI000378B47E	S H F T E D A D Y V T F F G M N M P G R A I E S A H R S L F E G P L K G S K L
UniRef90_T0J6E3	A M F T Q D G A F A R P P D A P V R G R E A I R A F F R D R P A R R T R H V M A
UniRef90UPI000476A1DD	E V F A D R V S L D Y T S L N G G E P V T A P E V I I G A W R D A L G G Y D S T

	90	100	110	120
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UniRef90_UPI00036FBF8E	Q H L I A N Q L V T V E G D R A V C Y T A S F Q A T H R L A A H G W T L G G D Y			
UniRef90_D9WP90	H A P H S C V L D E L D E E S A R G T V L G H V E L G L A D T T H Y G A L R Y			
UniRef90_W0A5R1	A H F G Y M P R I D I V S D T A R A I W S M E D W L W V P E G H P V H G W G H Y			
UniRef90_UPI0004151409	F H Q N G Q Q T V T L D G D R A A A F S			
UniRef90_K6VY76	K H L V T N L T C T V T P H G Y D V D A Y V Q A I S R T A D T G M M V L A E Y			
UniRef90_A0A034ULM2	S A F S S Q P R H D L A G D R A T A Y A Y M P S I S A D D A A P R L A Y C E F M			
UniRef90_R7WQE6	H H G H S P E I T F T S E T T A S G I W A M E D H L W W T D G E T L H G W G H Y			
UniRef90_L8TMS8	Q H V L G Q S V I A V D G D R A S A E T Y F V H Y A E R G R S P L P N V V G R Y			
UniRef90_G2ITH5	N I L I T V L S P T E A K G N S Y V T M M S A A D P D A P W P R I G S F			
UniRef90_U2ZYF0	H Q T W F S D V S A D T V H A V T P F T L Y T A Q H E G D G P A A I A E F			
UniRef90_UPI0004638A61	H H G H T P E I E L T S D T T A R G V W A M W T N A A T D A E E H L H G Y G H Y			
UniRef90_M3BBA4	G P V N G F I L D H L D G R T A Q G R H T S R A Y R P E G L P Q F W E A G V Y			
UniRef90_X8BHM5	V R T E H A I V G E V Y D D A A R G R I T C V A H H W D H R G D Q L V D V V R Y			
UniRef90_J2PAC5	S N I I V L H I S E E S A G S E A Y V T A T L R M E R E G K M M H M E I W A R Y			
UniRef90_Q0RJK9	M H H L G N V L V D I D A H V A V A E S Y G V A Y H A G E P A G D V R A G F R Y			
UniRef90_R1G851	K H V T T N I A L E V S G P V A S G R A Y F T V L Q A V P G P L Q T I A A G R Y			
UniRef90_M1R8Y1	H R H W H G M I R P Q D D G S V H V R C Y A L V V A T P R G G E P L H R S C V C			
UniRef90_U5WRP1	R R H A L N S L W F Q S A D E A T G H C Y V Q V F S I R Q G G S P V D L T G C Y			
UniRef90_Q53879	R H W G G M L T V D G K P D E V T A R S Y A V V L E T P P D G D P V R R S T V C			
UniRef90_A0A024K7P7	H H Q C T N I R L R P D E E G A S G T V M L V L H V S D S G Q S P V D F I G E Y			
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UniRef90_UPI0003B4CC41	K H M L S E P M I T V E G D H A T C D S Y F I R L D V V D D T P R V S G M G R Y			
UniRef90_UPI00040010DF	L H H K S N L V I D L D G D T A A V R A D G L A V Y V L D D K T E A L A A A V H			
UniRef90_UPI00031058C2	R R H V L T N L V V H S E E T A D G E A Y L Q I V A T P R G G D P L V R F T T V			
UniRef90_A0A031JQ84	T H C L L N I H I E V S G D F A V A E S Y L Y S A C Y R D P D N A M F V M A G R Y			
UniRef90_G6EHE1	N V E I T V V D A D T A L G E S A M L L F T G E G A P K V G S F			
UniRef90_F9X9S6	T T Q F I R L G D E G R T A K A M T Y F T G V H H F G E G G M K V T A W G R Y			
UniRef90_UPI000371BA24	R R H C Y T T L D I R P Q P D T I L A S S Y A I I V R T P P G G T A V E F L C T C			
UniRef90_H2JZP4	R H W H G M I T V A V R S D G A A V R C Y A L V F A S P K G G P R L H R V C V C			
UniRef90_UPI0003AD39CE	R H V T M P V S V T I D H D Q A E A V S Y F M F V T S T N A T P Q I K M F S T Y			
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UniRef90_UPI0003ACF8F0	A H V L T N V A Y T F L S S T A R V E S Y V T V A Q R E R P G S R T Q A L V R Y			
UniRef90_B2A9N2	N E H I F G T V V N V S P D H K T A V A R G L E I G L I G D D T G Q W Q F C V F			
UniRef90_UPI000367EB14	S D V L V D T E A A S G S A K A S W N A L M T H V H D T T L Q Q R G G Y Y			
UniRef90_UPI00036007C7	H Q L F T H E I D V E S A D T A S A V W A M S D L I F R G D S R T M R G W G H Y			
UniRef90_UPI0004634FC4	L L F H L P Q V T I L D G T A T A R I H L E V W P R D P G A P Q V N M V G Y Y			
UniRef90_UPI00046726C3	Q H V I T N V V D L I S A D T A R A R S S W M F L R Q T L T A P A V S G A G H Y			
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UniRef90_X0PW46	H H L T S T R L T F L D K S H A E G I T Y L V I T D A G Y D H S G T Y			
UniRef90_V9XD05	T H I L L G S E R I R A E R D S A H G R W I M Q Q L S I L Y T D G T A E L L C A R L			
UniRef90_K6MDL4	A H F V N S E Q I Y V N Q N D A N A S W L M L Q T			
UniRef90_A8LAB5	H H G C Y M P S L R A L S E T R V R G R W S M H D Y V T W R P G T R T F R Y G Y Y			
UniRef90_UPI00029AEDC7	Q H L L G N H R V E L D P D C A R S R T Y G R V L H L G A D D L A G L T Y G E Y			
UniRef90_UPI00047BB798	H S T S G P V I L E A D G D S I V R T E T S Y I V V R T G Q A G D A V Y S A G S Y			
UniRef90_UPI00046498B1	L A F T V D E I E L I D D E T A L L L R S H S N G T V M V N G G Q A A N E A A F			
UniRef90_K2IRR2	R H F I S V N V E T R A N G E I V A T S N Y I L L Q T D R P E P T L H Q I G T Y			
UniRef90_X5LNK98	V V Y I A A G P S V D Y A L G R I T A V A H H W N F G A D Q P T D L V W H V R Y			
UniRef90_UPI00037DEBF8	I H Q V H H N D E L L T V S D S E I S A I W S M E D I T R T D S R P S R H H G Y G H Y			
UniRef90_A5V4W4	L H Y L V S P K V A L A D D R A D I E F Y L W E V A T A A S G R A Y W G G R Y			
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UniRef90_J2ZYL0	L H M F G M P S I T L S G D R A R V D V G C V I V C R T D P A P D V F W G R Y			
UniRef90_A3XAC2	H H V V T N H I S E L T D A T A K A E A D F T T A H R I K D G F W V L G G R Y			
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UniRef90_L7L2Z7	H H L T T H V I D M T G P R T A R G T A Y V A L I R H F G L A E W G R Y			
UniRef90_UPI00047B5D1B	Y H F N G Q Q I L T I N N E T A T G I A Y C T V T L I E G K R K T T I G M H Y			
UniRef90_UPI00037BE94D	H H V I T N F E I T V A V A N A V A F C K G H A L H L P D G T W T V I G T Y			
UniRef90_V5XBG5	M H A F L N P V L V V D G D H A R G Q W L M W V A A D D G D S P R A A Y L G A			
UniRef90_Q46S16	Q R H I T P L R E A T G E K I V A E T Y A V L R T K P D Q M S D V Y N V G R Y			
UniRef90_Q2G4M1	Q N V V N A P I I V I E G D H A V L D A Q F M V F S V P D G G W P P I E A G Q Y			
UniRef90_UPI0003B5CF72	H Q L F T H E I T V E S P T S A S A V W A M A D L I F R G D S R T M R G W G H Y			
UniRef90_D3EHP2	V A G P T P Q L R F L T P E I A I Q A T G A V Q L R F H K K P P T S R F S I N			
UniRef90_X0Q996	R V Y S G H H D I E V A A D S A R L V G R F F E M T G R Q G Q T L L A I S G T H			
UniRef90_F6IDC3	R H I V H Q I H A E V D G D E A V S E T Y C T A D H L M R E S D E I L S W S R Y			
UniRef90_B7RTS5	R H I I S N I F F D E S A A V T T V V S N L T L V I A T E N G E I Q L L S A G V Y			
UniRef90_R9JV66	V E H G A A A L I E I A G D K K T A R V S L L S P C L P Q A E S E A W D M G R Y			
UniRef90_UPI0003B6AA27	R K H I N N L T V A Q D E T Q T W V E A Y V T I A A T P I G T N S W F R L T V V			
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UniRef90_KOELR5	K H F I G S P A I E F A G D R A F V E T N V I L L A H L D S G L G A T I H N R F			
UniRef90_F6F3S7	F H Q V S N I S I S L N G A E A F A E T Y C V G Y H R V R A D A P L I A A L R Y			
UniRef90_G8MGD3	L H F L L G G T S I D L V Q G T R A I A Q T K M T I S Q R G D H R C D V V C T G R F			
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UniRef90_A5VTS8	C H S V A T M E I H V D G Q T A R S R T C H L S G K A E P G G P V F V R G L R Y			
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UniRef90_T0GEH9	S H M V T N I L I D V D T D T A F V E S W C I A L E R G A D G R T V D R V V R Y			
UniRef90_R1GVE5	Q H V L G T Q L V D V S P T T A V S I T Y F T A A H E R N D T S S P Y A Y G Q Y			
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UniRef90_UPI00046B0A05	K H I I G T P V V S F N Q D A T K A I V E T N A V I V G E N N V G C E G H N R F			
UniRef90_B1W4N6	Q H L I V N R R I D L E G D R A E V A D Y L N P M C L A H R T A D V T G G R Y			
UniRef90_I2ABU5	A H V R H H V V S S I R F G S V A N T R V E V V S S Y F A V H T D G L D H W G R Y			
UniRef90_Q46UQ1	N T R V T D E T A D G D I V A Q S N F L L L Q T L V E G P T T M H M A G T Y			
UniRef90_V7FJY2	Q H L I T N V I V E G A D K H A V A R S H V R A T H W I G S R F W T V G G S Y			
UniRef90_UPI000378B47E	V S G G G E P V R F I R P D V A I V V S G G G S S L S G G D K P E P G R E S T L			
UniRef90_T0J6E3	N I V V D L V S P V C A Q A R S Y V V L Y S G E R G E N V L V G D F D			
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130 140 150

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UniRef90_D9WP90	A D R Y V P R R A D R W V F A R E R M T Y V H M G P W S	
UniRef90_W0A5R1	E D R Y A K V G D R W L M S A T R L T R I	
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UniRef90_L8TMS8	D D L F V K T G N G W K F K S R I G N V L Y Q G G H V P A I	
UniRef90_G2ITH5	H D E L R L T D G A W R I A H R R S V P	
UniRef90_U2ZYF0	H E E Y R N V E G R W L I S Y R N L T R L R V D A T	
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UniRef90_Q0RJK9	E D R F T R E A G H W R F T E R R A A V D L V G D V S H H L	
UniRef90_R1G851	R D V L V P A G S Q W Q V R S R R V T	
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UniRef90_V9XD05		
UniRef90_K6MDL4		
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UniRef90_L7L2Z7	T D E Y T L T D S G W R F S Y R R V T	
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UniRef90_UPI00037BE94D	D F K L V K V S N E W K V V N S M V F N L L Y E D G	
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UniRef90_X0Q996	T L R C R R E S T G W I I Q S L T I E I	
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UniRef90_F6F3S7	I D R F E L R A S G W G I T S R T	
UniRef90_G8MGD3	Y D F Y E K V N G E W I L R L R Q	
UniRef90_Q935Z5	E D E L V P H G D G W L V R H R R V E	
UniRef90_A5VTS8	E D R W I V E D G R W V I A E R V H E A L W	
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UniRef90_R1GVE5	Q D R W R K Q A D A W K V E H R N L V Y M	
UniRef90_UPI00036CC3E7	D D T L E P Y E G K W L K S R H I D I H Y I P A P V Q A	
UniRef90_UPI00046B0A05	Y D R V E K R D G I W K I L H R Q S	
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UniRef90_I2ABU5	R D V L V P L N G R W L F A H R R I S V	
UniRef90_Q46QU1	H D R F Q R T G N G L L R E R Q V	
UniRef90_V7FYJ2	L H R L V R T S E G W R V K A I S R R L Y E E G D R A L L	
UniRef90_UPI000378B47E	T Y V L V E E A G G W R V V A S F Q N T R V S D P A A S A	
UniRef90_T0J6E3	E D E L C L E P D G W R F A R R K	
UniRef90_UPI000476A1DD	R F S L T R S D R W R I D G M V M T A V W G D G	

1 10 20 30 40

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UniRef90_B9XPA8	A D E Q K I R D L I A T W L R A S A A G D L P Q L L
UniRef90_I0RYG5	D R Q A I V D A L Q A F P E N F N A R D I D A V C
UniRef90_F6F360	E A L L H R L R I R E T A E R Y F R H A D T P D P V G V A
UniRef90_UP10002ED9E3D	Q A L Q Q L Y S D Y A S A V D S G Q W E L W P
UniRef90_W7X5Z3	E L A T V R D R L A A D G L V T E Y A V A V D D G D W E A F R
UniRef90_D9XW14	D R L A V S D L V H L Y A S A V D D R R F A D V V
UniRef90_E6TN35	E D R W E I T E T L S L L G H L A D S G R A D R L E
UniRef90_C6WC17	A D E Q A I R E L I A R W L Q A T R D G D V D A V L
UniRef90_UP1000364CD1F	D R L G I D E L I T E Y A V A V D D G D W E A Y R
UniRef90_Q827A8	D E A A V E A A N T A F Y E A M E T G D F E G V S
UniRef90_UP10002DF4809	D A M T A L V L S A D S Q L E L S G L V H R Y A G Y V D A R R F D E V I A
UniRef90_UP100037E401F	D D L M D R L A I R D L V E N W A V W R D A G D W E R F R
UniRef90_UP10003626945	M P D K L A I R E L V E N W V V W R D A G D W E R F R
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UniRef90_Q0RTS9	D R L E A E V I A R Q S H I I D R G E L E M L D
UniRef90_UP10003B6910C	E E T Q F Y A W H M A L M D E G E P D A W A
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UniRef90_G4HQR3	L D R L M I A D R I A R Y G W A F D E G D R E A L A
UniRef90_A0A034UPL6	S D R I A I R A L I E N W A L W R D A G D W E R F A
UniRef90_A0R6Y4	A D R A S A I D F I I N R V N L F D A W D I D A M V
UniRef90_I0RNRM1	S E L L Q A L Q H E I F R L N A V R E I Q N L M G A Y T V N H N M H D H I E L F
UniRef90_18QRP1	L A L L Q A E S H C R H L I I A A A E A V D G Q Q Y E A F V
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UniRef90_S3IDE1	V Q Q F Y A R Q M R L L D D G R A E E W A
UniRef90_A1C176	E L L N L Y S D Y A M V C D S A E W E K W P
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UniRef90_X6D7J3	E L Y A Q Q Q F Y A K Q M G L M D D R R P D E W A
UniRef90_UP100037DA5F6	L S D E D Q I R Q L V A T W M S A T R A G D T E A V M
UniRef90_J1EBF7	D Q Q A D F L L E R Y C H T L D D G L F E D W S
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UniRef90_K0MBQ7	D T Q E I R D L L A A H T R L W D H E M D A W G
UniRef90_UP100034B7F38	M T N K A V R R K G L S M S S D E Q E I R Q L V A T W I E A T K A G D T D T V L
UniRef90_UP10002E9E559	M S T D D F V G A L R D R A D I T A L A D L Y V T H L D R H R D D W F G
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UniRef90_UP1000289F720	Y R E I I E D L L F R E A H H L D E R R F H E W L
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UniRef90_I0L7G2	E L I A R E Q V R D T V A A Y N H S G D R F L L D E L A
UniRef90_D8I0D5	S D V A K I R E V L L D R Y A T S L N D S D A E V A V
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UniRef90_UP100036312FE	A T R Y R Q I L D K M S I S E I L L Y R Y Y H Y F D S A N I E S W L
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UniRef90_G2ISI0	U N D Q A A I Q A V L N D S Y Q A W E A G D A D G M V
UniRef90_A1UYC2	U N D Q A A I Q A V L N D S Y Q A W E A G D A D G M V
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50 60 70 80

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UniRef90_UPI0002ED9E3D	E T F T A D G E F C S P S Y P A P V G T D D L V A F A E R F H [G A Q A A G E V		
UniRef90_W7X5Z3	E F F T T D G V Y K L Q P R E N H E S Q A M L R D R V Y G I Q Q E T L F H D P Y Y		
UniRef90_D9XW14	G L F T P D G R A D Y R S A G G I E G N A R A V A G W L A D S L G D F P V R		
UniRef90_E6TN35	E L F T D T A E F R V P D P P R S L E P V L R H H G R D G V R T A L A A L N Q V		
UniRef90_C6WC17	E V F T P D A V Y V D L S A A G L G A F T G I D A I R E A A G R I G A H G P V		
UniRef90_UPI000364CD1F	A L M A P D V I F L V P G Q P P M Q G R D A F E Q G L R G M L A G H A I D S H S		
UniRef90_Q827A8	G L F T A D G R A D Y R S A G G I E G D A R Q V A A W L A E N M R L F P M R Q H		
UniRef90_UPI0002DF4809	A L W L D D G T C V H P G W P V L T G R G E V L R S Y A L I M A N T E Y I		
UniRef90_UPI00037E401F	E L L F T A D A E L H L E P C V R H N G H A G V V A A L S A L S T V A R T Q H G I		
UniRef90_UPI0003626945	T V W H D D G V M M A T W F Q G V A D D F I R V S R E G F E K G V N I		
UniRef90_H0A5J9	T V W H D D G V M M A T W V Q G T A D E F I A A S R A G W D K G V S I		
UniRef90_UPI0004641111	G Y F A D R V R V D F S S L G Q P E S T I P A D D L I A G W A G N L K G S K T S		
UniRef90_V419Q1	G D F M P D A V F A T N A R P E R G R A E I A R N A E A A A R Q L Q E K G I L		
UniRef90_B9TBH3	T L W H P E S R L L L G A N G N S E G M E A I L A Q A R I N M K R M P H M		
UniRef90_Q0RTS9	L V F T A D V A V E F Q R S G R L R G L A E V A Q F Q R G L P P D A A D		
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UniRef90_K4R2J3	D A Y T E D A V F E E P G R T N V R G R E A I R A S I T K R T A E L A A A G T V		
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UniRef90_Q3S4D2	E F F V E E G T Y R L Q P R E N F E S K N M I R D R V Y G V K E T L Y H D P Y Y		
UniRef90_X6D7J3	R F F A P E T T I D Y T S W G G E P Q R F A P S A L M D A W A D L L P G F D A T		
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UniRef90_D8I0D5	R L F T E D A D Y V T F F G A N P G R E A I E L E S S H R A L F E G P L K G S K L		
UniRef90_G6EGF5	E V W D E D C V W D H D M D R P A M R G A N R R E S I L K L G K L L S R I G Q T		
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UniRef90_UPI000345D2BB	A Y F T E D A D F I T H R G L W W R T R A E N V D G H K D V P A S V L A Q K A D		
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UniRef90_M3FMJ6	E Q F T E D G T F A Q N K P G V K R G R A D I A A G M R K G I D A L A R G L T		
UniRef90_X8BGZ7	D G G T V D A A T M L R F W R A A V V L Y P D G T P R T		
UniRef90_D6X9C5	D H F T D D A R M V A P V G V F E G A E A V R G T E E A I R R F A R T Q H M A		
UniRef90_Q0UTX1	G L F A K Q G H K L S P F A G F F H T P A R I T A M T A S Y G T N R S T L R T S		
UniRef90_UPI00036D22D9	R T F T Q D G V F F D S P S Y P P A V G T A L T A F A E Q F A D A T A A R E K R		
UniRef90_G2G7H4	A T F T E D G V F G Q N G A E P V R G R T A I T A A V R A N Q A R L A A D P Q Q		
UniRef90_A0YD35	A S F A K Q A S F S M R I A G G F E G R D A I M G L M N S S M S E Q K D V R		
UniRef90_UPI0003707EEE	A L F V E D C D Y R V Q P R E N H E S R G M L V D R A Y G I K E T L F H D P Y Y		
UniRef90_K5C8L6	A N Y T E D S V Y G G I P P Y K T V G P Q N I R K L W E G C L P H F P E F K S V		
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UniRef90_H1S785	A L F T E D T V F I V Y M D S R A S E P S Q G R T S L A P V F D N L N T Y Q A T		
UniRef90_C5CYU2	D F F S Q E A T Y R V T G L I Y C E G L D M I I D R A L A V A H S Q M F A P R H		
UniRef90_W6WVA0	T M F T E D G V F G S G E S A Y T G R Q K I K A F Y D W R V S R G D R V A		
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UniRef90_Q13G03	T L F T E D C T Y E I I G I I H C T N Q R M L R D R V V S L R N A N I F E A H T		
UniRef90_M5AL13	S A Y W P D A H D N H G A Y C G S A E G F F E V A F G L F K T G P R L		
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UniRef90_U5W710	A D Y T E D A T A V M P G S L R T G R D M I R D N M A Q A F E G P L K G S S T		
UniRef90_S2ETP9	A C F T A Q A V W Y G A E F G G D R G R E A L A Q W F E Q S P W C F A		
UniRef90_J0KDT6	S L F T Q D G V L M G S V D A P T M E G A E Q L K A F F D H G F G I I R L		
UniRef90_U3A626	P L F A A D G S W S E G F A A L E G R E A I A A G L A A I A A D K V L W S I H		
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UniRef90_A1UYC2	E L F T E D C L Y E I I G I V Y C T N R R M L R D R V V S L R H A N I Y E A H T		
UniRef90_U7Q3R3	E L F A E E D T V Q F L G G R Y L H E G V Q R L Y L K R F G G F V G G R N		
UniRef90_UPI000347D28C	A Y F T E D A D F I T H R G L W W R T R Q E N V E G H K D V P D S V I A Q K A A		
UniRef90_B1G653	E A F L P D A V A Y H F G T I N G H T E I R R F F E H D Y P Y L I P G V		
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	90	100	110	120
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UniRef90_UPI00034D0EC6	T H Q V A N P R V A V A G D T A R M T A L V E A Q H □ L S E D H A V F A L L K N			
UniRef90_B9XPA8	Q I □ Q E I Q I S G E M A Y C W N H L S V T M T P R E G S P V Q R S G F V			
UniRef90_I0RYG5	Y D P P Q I □ H E V L V D G D □ A T V A L T W V L T V R D A A G E L D T I E E D G			
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UniRef90_W7X5Z3	Q R H V V S A P V V R H I D E Q G R L H C Y A V F R T K L D G A S S V F N V G R Y			
UniRef90_D9XW14	Q H L L V I N R R L R F A G D T A E V Q A D Y V S P L A R A G A D G T S A V G R C			
UniRef90_E6TN35	T R T E H A I V G E V D R D Y A L G R I T C V A H H W T V D G S G V V W H L R Y			
UniRef90_C6WC17	A H H L T N V V V D G E E G G V V S V L S K G L L M A D G K V E S I V M A			
UniRef90_UPI000364CD1F	T I E E V V V V G D M A Y S R T Q L S V T L T S K H G N P L R R T G H T			
UniRef90_Q827A8	L I V N R R V R F G V R G D T A R V Q A D Y V N P M R F A G S D G G V C G G R Y			
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UniRef90_V419Q1	L H L R T N H E V T V E G D R A T V Q S Y A W N R M E G N G D P L W E V W G T Y			
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UniRef90_Q0RTS9	H H W M A N A L I T I L D G D N H G			
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UniRef90_K4R2J3	A H H V T N V F I A R D G D E A E V D S K G F M L T S D D R M R S V T H			
UniRef90_G4HQR3	M H W M S N L A V T P Q P D T L R A T Y Y S L A M R A P R G E R P D I F A V V C			
UniRef90_A0A034UPL6	V H A C F M P D I Q L T G A T A T G L W S M I D V V S H P T D P G M R F I G R Y			
UniRef90_A0R6Y4	H I Y T N V V V G D A E D K A I A Y A M P S I I A D D A P V L A H L E F L			
UniRef90_10RNRM1	L H F L L G G H T A D V V G D R A V A Q T K M T I S Q R D G V E V D V T C T G R F			
UniRef90_18QRP1	S R L A T N P L V D R D G E G V I V R Y H N L L V R T P G E I L P A I W V Y S A M			
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UniRef90_G8MMV6	Q H L L C N H R V V V D P S G A E S S C K V L L Y V S D R R R E L A H H V G E F			
UniRef90_S3IDE1	L H F V S N V R I L N A T D E E I V S N Y M L L Q T L V E G A T T L H Q A G R L			
UniRef90_A1C176	H Q V H N D E I D I V S D T E I S A V W S M E D Y L I F P D G A S M H G Y G H Y			
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UniRef90_X6D7J3	Q R H I V S V E R D I Y G E R I T S E A N Y T V I R T F D G D S T V F N V G Y Y			
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UniRef90_D8I0D5	K H V T T N L I I E V D A G T A S A R S Y F T V L Q A L P D P L Q T I A S G R Y			
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UniRef90_UPI000345D2BB	H H L I A N Q R I S L D G D T A R V E C L V R T F H A P D G P Q G F W E S L S R			
UniRef90_A0A058ZEQ3	Q F F L T D V R V S V C G D T A V V T C T E N I L S G G P A E E A V G Q L V V A			
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UniRef90_Q0UTX1	Y T Q E V A S V R E I A P D V A L V H W T W P G H R L P G A R P A E D R R S G I			
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UniRef90_W0HAP3	Y R E I R R L S P D A A M D S G V Y T F T L T A A D G K K S K V Q A R Y			
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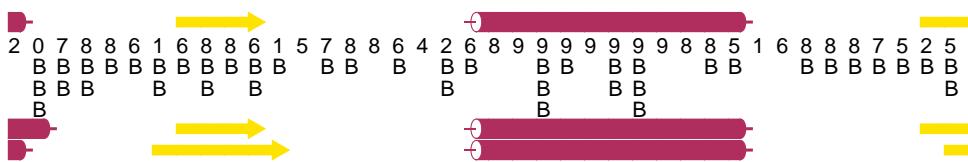
The figure displays a grid of amino acid sequence alignment for UniRef90 entries. The top row labels are 90, 100, 110, and 120. The left column labels are UniRef90 identifiers. The grid uses a color key to indicate conservation levels: black, white, red, blue, green, yellow, and purple. The grid is mostly black and white, with occasional colored boxes indicating specific conservation patterns or mutations.

130 140 150

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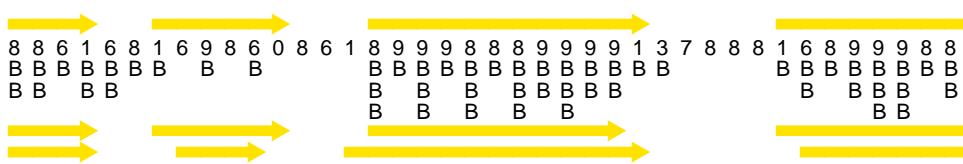
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