

50 60 70 80

QUERY	R W A L A L E D G K L L A A V N Q T L V S F D H P L T D G D E V A F F P P V T
UniRef90_J7U2Y7	R W A L A L E S G K L L C A V N Q S F V P L S H P L T D G D E V A F F P P V T
UniRef90_B4TC58	R W A L A L E D G K L L A A V N Q S F V P L S H P L T D G D E V A F F P P V T
UniRef90_C7BRZ0	R W A L A L E D G K L L S A V N Q S F V H G E H P L Q D G D E V A F F P P V T
UniRef90_M4R5C6	K W E L A L Q S G K L L V A I N Q T I S S L S S E I K D G D E V A F F P P V T
UniRef90_U5A804	K W D L A L E P G K L L A A V N Q S I V P L D T P L Q E G D E V A F F P P V T
UniRef90_D0YXF0	K W Q L A L E S G K L L V A V N Q T I C P L D T E L K D G D E V A F F P P V T
UniRef90_V3TVN1	R W A L A L E E G K L L T A V N Q S L V D M H H P L Q D G D E V A F F P P V T
UniRef90_W1IPT7	R W K L A L E E G K W T A V N Q S F V H A E H P L R D G D E V A F F P P V T
UniRef90_W9ATY3	K W Q L A L E S G K L L V A V N Q T I C R L D T A L K D G D E V A F F P P V T
UniRef90_F9QBM1	R W A L A L Q K D K L L V A V N Q T L V S L D S P L S D A D E V A F F P P V T
UniRef90_A3N056	K W Q L A L E K G K L L V A V N Q S I S P L E S A L K D G D E V A F F P P V T
UniRef90_N9V604	K W A L A L E P G K L L V A V N Q T L V S L D T P L K G G D E V A F F P P V T
UniRef90_W7QM65	E W Q Q A L T Q A N L L V A V N Q A M A N G Q T V V K A G D E V A L F P P V T
UniRef90_U4JW23	K W A L A L E A G K L L V A V N Q T L S P L D S P L Q S G D E V A F F P P V T
UniRef90_UP10003820B18	R W D L A L T S G K L L A A V N Q T L V P M D H P L Q A G D E V A F F P P V T
UniRef90_C7RBV3	T W H Q V F T Q S G L M A V N Q M A K L N S P L K D G D E V A F F P P V T
UniRef90_W0HVF0	R W A L A L E P G K L L A A V N Q A L V P V D H P L G A G D E V A F F P P V T
UniRef90_B5FCP2	K W D L A L E K G K L L V A V N Q T I S S L D S T V S D G D E V A F F P P V T
UniRef90_A7MJ07	R Y A L A L E S G K L L A A V N Q T L V P F D H P L A D G D E V A F F P P V T
UniRef90_C9P3N0	K W S L A L D A D K L L V A V N H T V A M T H P L Q S G D E V A F F P P V T
UniRef90_UP100031330E4	A W Q T A L Q E K R L L V A V N Q N M A N E H S P L N S G D E V A F F P P V T
UniRef90_UP10003943E50	K W A L A M N S D R L L A A V N Q T I V S L D T A L D D G D E I A F F P P V T
UniRef90_D2T322	R W A L A L A P G K L L A A V N Q T L V S L Q H P L R A G D E V A F F P P V T
UniRef90_UP10002E9F031	K W A L A L E S G K L L A A V N H T M V P L D S T V K S G D E V A F F P P V T
UniRef90_UP100030629E0	E W S Q A L Q S G K L L V A I N Q D M V Q M D T V V K S G D E V A F F P P V T
UniRef90_G9Y605	K W A L A L E S G K L L A A V N Q T L V E F S H P L S S S G D E V A F F P P V T
UniRef90_UP1000312F325	K W D M A L E Q G K L L A A V N Q S I V P L D S T V I S D G D E V A F F P P V T
UniRef90_UP10004646328	K W T M A L K E K T V L C A A N K Q L V D Y Q Y L I N N G D E I A F F P P V T
UniRef90_A6D3S7	K W E L A L E S G K L L A A L N Q N I V A L D E K V Q D G D E V A F F P P V T
UniRef90_E1SQE6	K W R L A L Q D K K N V L V A V N Q T L S G W D T A L T S S G D E V A F F P P V T
UniRef90_UP10002D79240	K W S L A L E S G K L L A A V N Q T I S P L T T A V S D G D E V A F F P P V T
UniRef90_J0W615	R W A L A L E S G K L L A A V N Q T L V S F D H P L V A K G D E V A F F P P V T
UniRef90_C9PQU6	C W A L A L E Q G K L L V A I N Q S L M P L E S A V K S G D E I A F F P P V T
UniRef90_UP100046742F4	K W Q L A L R D S A L L V A V N Q C L V P W N T P L S A N D E V A F F P P V T
UniRef90_Q7VNL3	K W Q L A L E K D K L L V A I N Q K I L P L D S Q L N A G D E I A F F P P V T
UniRef90_S6BQP4	D W G E A F S A H V L M A V N Q E M A G P E T P L A D G D E V G F F P P V T
UniRef90_Z5XKZ6	R W H T W L D K D V L V A V N Q I L V D D N A A V G T G D E V A M F P P V T
UniRef90_K9HPY4	A H A K A L V D D R L R F A V N Q D Y A K P D T P V K A G D E I A F F P P V T
UniRef90_K2J5B9	G Y A E A L K D A R V K V A V N Q E Y V R P D H P L K P G D E V A I F P P V T
UniRef90_A3Q914	K W G K V L A S D K L L V A V N Q T I S S W D T Q L D G D E V A F F P P V T
UniRef90_B7VLU7	K W D I A L E E G K L L A A L N Q S I V P L T T E V K D G D E V A F F P P V T
UniRef90_M4U7U8	Q W Q P I L S S Q T L M V A V N Q S M G N M S T P L C R G D E V A F F P P V T
UniRef90_B3PDN2	T W R S W F R P N V L V A V N Q E Y A R L S A M V D S G D E V A F F P P V T
UniRef90_B7VBJ1	A W E R T L G E Q N V L M C A R N E L C G L D E P V Q D G D E V A F F P T T
UniRef90_K6ZM16	D W Q A L S G N V L M C A L N Q S I C K P D T I I N D G D E I A F F P P V T
UniRef90_D4ZF52	K W A K V L A A D K L L V A V N Q T I S S W D T P V V D G D E V A F F P P V T
UniRef90_UP100036E79F7	L W R S A F V E T K V L V A I N Q M V K P Q S V I S D G D E V A F F P P V T
UniRef90_I3YC02	L W T E A L G E G R L M S A V N Q A I A Q P R T P L E G D E V A F F P P V T
UniRef90_E3BLD9	K W A L A L A N K E T T L F A V N Q T M V S S E H A V R E G D E V A F F P P V T
UniRef90_S6AGG0	T W Q E E E L A Q N K V R V A V N Q D I A D P D T A V G D G D E V A F F P P V T
UniRef90_N6XND2	A W G A M A A G R N V R S A V N Q R M V G A D A P V A A G D E V A F F P P V T
UniRef90_UP10003772C46	L W K Q A L E N T N L Q I A V N H D V A S R E T A K G D E V A F F P P V T
UniRef90_A8TQU9	G Y A E A F A F A D T R I R C A V N Q E Y V E P D H P V A S G D E V A F F P P V T
UniRef90_UP10003600D4E	K W A L A L E K G K L L V A I N Q T L M P L E S T I K S G D E I A F F P P V T
UniRef90_H3KD37	P W A S A F A N K R I R G A V N Q E M A D D D E P V K D G D E V A F F P P V T
UniRef90_C9R4Q1	K W A L A L Q S D K L L V A I N Q T L M P L E S A V K N G D E I A F F P P V T
UniRef90_UP100035F2BA1	K W N K V L S N A R L M V A V N Q T I C N D N I D L S S G D E V A F F P P V T
UniRef90_UP100036D3ABD	N W A R I L G D G Q V Q I A V N Q D M A R R H T P I K A G D E V A F F P P V T
UniRef90_L9PA78	A W Q Q A L G N P A L R M A C N Q V M C G A D M A L A D G A E V A F F P P V T
UniRef90_3IBN1	E W A E F L E N K K L L V A I N H E Y A R G D L P K S G D E V A F F P P V T
UniRef90_Q12T26	K W K V M A S D K L L V A I N Q T M S T W D A C I T D G D E V A F F P P V T
UniRef90_F4AQR9	Q W Q Q Y L T K D S I L V A V N Q T I G N D Q T V L N D G D E V A F F P P V T
UniRef90_K6B8S5	A W Q V L G E Q N V M C A R N Q E L C P L D E P V Q D G D E V A F F P P V T
UniRef90_UP100035F61BD	D W S P H L Q R D D I R M A L N Q E L A E T G A Q V K A G D E V A F F P P V T
UniRef90_Q47V88	Q W Q Q T F S N T S L L S A V N H D M V D G S H L V K S G D E V A F F P P V T
UniRef90_UP100046571F4	D W R E P L S A S G V L F A V N Q S L V K S G H P V H D G D E V A F M P P V T
UniRef90_UP100035C1387	N W R G A L A S P A L R M A C N Q V M C D A A T P V P D G A E V A F F P P V T
UniRef90_D4GMQ6	R W A L D L S E R L L A A V N Q T L T A L R H H P V Q D G D E V A F F P P V T
UniRef90_A0A011NU08	A W E D L A G I R N L R C A V N Q M V P L D S P L A D G D E V A F F P P V T
UniRef90_I2JME3	W R D V L A A E N T L C A V N Q D L A G D D T P I S L G D E V A F Y P P V T
UniRef90_L0HX11	K W D L A L E P G K L L A A V N Q S I V P L D T Q V K A G D E V A F F P P V T
UniRef90_C4UFC3	R W Q L A L E E G Q A I R A A V N Q N L A H A T H T A E G D E V A F F P P V T
UniRef90_UP100036EE370	D W T A L R A E G Q A I R A A V N Q N L V S D H P V S A G D E V A F F P P V T
UniRef90_F6B1N1	A A A E A L A P G K V R M A L N Q V L C D A G A A I R Q G D E V A F F P P V T
UniRef90_UP10003B59EA4	H W E K T L A S A S L M V A I N Q T I S N K T A T L S S G D E V A F F P P V T
UniRef90_E9CKC5	P W A L A P G K L L M A V N Q S L V K S G H P V H D G D E V A F M P P V T
UniRef90_M5QZ00	A W Q V L A E E P N M C A R N E E L C K P D E P V R A D G D E V A F F P P V T
UniRef90_W0T177	V W K E V F S D E R V L G A V N Q E M Q A D D S R V K D G D E V G F F P P V T
UniRef90_N6YKC0	N W Q A L G E G R N V R A A V N Q R M V G A D A T V V A S G D E V A F F P P V T
UniRef90_UP10003B56C55	A Y A E A L A G D R I R V A V N Q E Y A R P D T P V T E T G D E V A F F P P V T
UniRef90_K6Z857	Q W S E Y L S A D S T L V A V N Q T I G N E N T L T D G D E V A F F P P V T
UniRef90_K5XC39	A W A L A L E R N L L C A R N Q E L C S S A E T L H D G D E I A F F P P V T
UniRef90_UP100036FC84A	N W Q Q E L S H T D L L C A V N Q Q L V P L T A S R V K D G D E L A F F P P V T
UniRef90_UP10002E9CF36	E W A V L G E Q N L M C A R N Q E L C N D E P L A D G D E V A F F P P V T
UniRef90_G8ALZ8	K H A D A L A N S T L K V A V N Q E H V P Y D H P V G P G D E V A L F P P V T
UniRef90_F5RET0	D W D R L A Q M K N L R A A V N Q R M A E P D T A I R D S D E V A F F P P V T
UniRef90_D5BP16	G H A K A L G D E T V R V A V N R T Y G S C D T E I A T G D E I A F F P P V T
UniRef90_A7NN53	R L A G Y S G R L L F A V N Q E F A A S D H T L R D G D E V A F I P P V S G G
UniRef90_UP100036E101C	S Y T Q A L K R D L R I A V N Q D Y A D L D Q E I R D S D E V A I F P P V T
UniRef90_H8WDM1	A W A Q L A G Q P V M M A A L N Q S M A K P S S P V Q P G D E V A F F P P V T
UniRef90_M4X0Y4	A W A V L A E Q N L M C A R N Q E L C S L D E P L A D G D E V A F F P T V

QUERY	G
UniRef90_J7U2Y7	G
UniRef90_B4TC58	G
UniRef90_C7BRZ0	G
UniRef90_M4R5C6	G
UniRef90_U5A804	G
UniRef90_D0YXF0	G
UniRef90_V3TVN1	G
UniRef90_W1IPT7	G
UniRef90_W9ATY3	G
UniRef90_F9QBM1	G
UniRef90_A3N056	G
UniRef90_N9V604	G
UniRef90_W7QM65	G
UniRef90_U4JW23	G
UniRef90_UP10003820B18	G
UniRef90_C7RBV3	G
UniRef90_W0HVF0	G
UniRef90_B5FCP2	G
UniRef90_A7MJ07	G
UniRef90_C9P3N0	G
UniRef90_UP100031330E4	G
UniRef90_UP10003943E50	G
UniRef90_D2T322	G
UniRef90_UP10002E9F031	G
UniRef90_UP100030629E0	G
UniRef90_G9Y605	G
UniRef90_UP1000312F325	G
UniRef90_UP10004646328	G
UniRef90_A6D3S7	G
UniRef90_E1SQE6	G
UniRef90_UP10002D79240	G
UniRef90_J0W615	G
UniRef90_C9PQU6	G
UniRef90_UP100046742F4	G
UniRef90_Q7VLN3	G
UniRef90_S6BQP4	G
UniRef90_Z5XKZ6	G
UniRef90_K9HPY4	G
UniRef90_K2J5B9	G
UniRef90_A3Q914	G
UniRef90_B7VLU7	G
UniRef90_M4U7U8	G
UniRef90_B3PDN2	G
UniRef90_B7VBJ1	G
UniRef90_K6ZM16	G
UniRef90_D4ZF52	G
UniRef90_UP100036E79F7	G
UniRef90_I3YC02	G
UniRef90_E3BLD9	G
UniRef90_S6AGG0	G
UniRef90_N6XND2	G
UniRef90_UP10003772C46	G
UniRef90_A8TQU9	G
UniRef90_UP10003600D4E	G
UniRef90_H3KD37	G
UniRef90_C9R4Q1	G
UniRef90_UP100035F2BA1	G
UniRef90_UP100036D3ABD	G
UniRef90_L9PA78	G
UniRef90_I3IBN1	G
UniRef90_Q12T26	G
UniRef90_F4AQR9	G
UniRef90_K6B8S5	G
UniRef90_UP100035F61BD	G
UniRef90_Q47V88	G
UniRef90_UP100046571F4	G
UniRef90_UP100035C1387	G
UniRef90_D4GMQ6	G
UniRef90_A0A011NU08	G
UniRef90_I2JME3	G
UniRef90_L0HX11	G
UniRef90_C4UFC3	G
UniRef90_UP100036EE370	G
UniRef90_F6B1N1	G
UniRef90_UP10003B59EA4	G
UniRef90_E9CKC5	G
UniRef90_M5QZ00	G
UniRef90_W0TI77	G
UniRef90_N6YKC0	G
UniRef90_UP10003B56C55	G
UniRef90_K6Z857	G
UniRef90_K5XC39	G
UniRef90_UP100036FC84A	G
UniRef90_UP10002E9CF36	G
UniRef90_G8ALZ8	G
UniRef90_F5RET0	G
UniRef90_D5BP16	G
UniRef90_A7NN53	G
UniRef90_UP100036E101C	G
UniRef90_H8WDM1	G
UniRef90_M4X0Y4	G

UniRef90_K7A8T9
 UniRef90_UPI000237DBBC
 UniRef90_H0JGP3
 UniRef90_F1W201
 UniRef90_S6HMT8
 UniRef90_UPI0004664393
 UniRef90_Q31JB8
 UniRef90_F7QFB7
 UniRef90_A0A017HLI3
 UniRef90_D3RUJ3
 UniRef90_UPI0003B76190
 UniRef90_L0GQS7
 UniRef90_V4L9H6
 UniRef90_UPI000474CC2C
 UniRef90_F0F2C7
 UniRef90_R5E1N6
 UniRef90_B2JG41
 UniRef90_UPI00039E4D84
 UniRef90_UPI0004717C76
 UniRef90_E6QQA7
 UniRef90_UPI00036D5467
 UniRef90_B6INV0
 UniRef90_UPI000289246D
 UniRef90_H0PT11
 UniRef90_Q2SWH7
 UniRef90_UPI00047139B6
 UniRef90_F3KQT5
 UniRef90_A0A058ZGR6
 UniRef90_UPI0003806632
 UniRef90_A0A024IGG8
 UniRef90_B2UAT4
 UniRef90_UPI0004634249
 UniRef90_K2GLX5
 UniRef90_D5X3A1
 UniRef90_A1WAQ0
 UniRef90_W0V6N8
 UniRef90_R7UBD7
 UniRef90_UPI000318FB21
 UniRef90_UPI0004706406
 UniRef90_W0DZ53
 UniRef90_UPI00030F04BE
 UniRef90_Q28KC8
 UniRef90_C1DPC4
 UniRef90_UPI0003788B32
 UniRef90_W6VQD5
 UniRef90_A0A059ITE8
 UniRef90_K6E7D2
 UniRef90_D7WVG5
 UniRef90_Q2SA05
 UniRef90_Q3KEB7
 UniRef90_M1SHR9
 UniRef90_UPI00047D5330
 UniRef90_W9V1A7
 UniRef90_Q07T52
 UniRef90_D6V7I8
 UniRef90_UPI0004652945
 UniRef90_UPI00040FABA
 UniRef90_Q1LLY4
 UniRef90_UPI0004741158
 UniRef90_W4QY24
 UniRef90_I3IC51
 UniRef90_UPI000420614B
 UniRef90_K9D9A7
 UniRef90_K6Z302
 UniRef90_M7CLM2
 UniRef90_W3AAM5
 UniRef90_A9HIGO
 UniRef90_K9NR55
 UniRef90_A6X250
 UniRef90_K2NU74
 UniRef90_UPI000369D360
 UniRef90_F7TRG4
 UniRef90_H3ZFK5
 UniRef90_K2GVF8
 UniRef90_UPI000288C482
 UniRef90_J5C3B8
 UniRef90_N2JBM3
 UniRef90_U7A1R4
 UniRef90_UPI00047E0D06
 UniRef90_UPI0003B6F814
 UniRef90_S5Y2W9
 UniRef90_UPI0003FC4902
 UniRef90_E7RU25
 UniRef90_Q2W0M5
 UniRef90_D5RMRN5
 UniRef90_UPI00047A2EE3
 UniRef90_UPI00036CCA01
 UniRef90_UPI00037BDC17
 UniRef90_I3TVF4
 UniRef90_Q089W8
 UniRef90_V4QTV2
 UniRef90_F9DRM4

1 10 20 30 40

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

UniRef90_K7A8T9 G
UniRef90_UPI000237DBBC G
UniRef90_H0JGP3 G
UniRef90_F1W201 G
UniRef90_S6HMT8 G
UniRef90_UPI0004664393 G
UniRef90_Q31JB8 G
UniRef90_F7QFB7 G
UniRef90_A0A017HLI3 G
UniRef90_D3RUJ3 G
UniRef90_UPI0003B76190 G
UniRef90_L0GQS7 G
UniRef90_V4L9H6 G
UniRef90_UPI000474CC2C G
UniRef90_F0F2C7 G
UniRef90_R5E1N6 G
UniRef90_B2JG41 G
UniRef90_UPI00039E4D84 G
UniRef90_UPI000471C76 G
UniRef90_E6QQA7 G
UniRef90_UPI00036D5467 G
UniRef90_B6INV0 G
UniRef90_UPI000289246D G
UniRef90_H0PT11 G
UniRef90_Q2SWH7 G
UniRef90_UPI00047139B6 G
UniRef90_F3KQT5 G
UniRef90_A0A058ZGR6 G
UniRef90_UPI0003806632 G
UniRef90_A0A024IGG8 G
UniRef90_B2UAT4 G
UniRef90_UPI0004634249 G
UniRef90_K2GLX5 G
UniRef90_D5X3A1 G
UniRef90_A1WAQ0 G
UniRef90_W0V6N8 G
UniRef90_R7UBD7 G
UniRef90_UPI000318FB21 G
UniRef90_UPI0004706406 G
UniRef90_W0DZ53 G
UniRef90_UPI00030F04BE G
UniRef90_Q28KC8 G
UniRef90_C1DPC4 G
UniRef90_UPI0003788B32 G
UniRef90_W6VQD5 G
UniRef90_A0A059ITE8 G
UniRef90_K6E7D2 G
UniRef90_D7WVG5 G
UniRef90_Q2SA05 G
UniRef90_Q3KEB7 G
UniRef90_M1SHR9 G
UniRef90_UPI00047D5330 G
UniRef90_W9V1A7 G
UniRef90_Q07T52 G
UniRef90_D6V7I8 G
UniRef90_UPI0004652945 G
UniRef90_UPI00040FABAЕ G
UniRef90_Q1LLY4 G
UniRef90_UPI0004741158 G
UniRef90_W4QY24 G
UniRef90_I3I5C1 G
UniRef90_UPI000420614B G
UniRef90_K9D9A7 G
UniRef90_K6Z302 G
UniRef90_M7CLM2 G
UniRef90_W3AAM5 G
UniRef90_A9HIGO G
UniRef90_K9NR55 G
UniRef90_A6X250 G
UniRef90_K2NU74 G
UniRef90_UPI000369D360 G
UniRef90_F7TRG4 G
UniRef90_H3ZFK5 G
UniRef90_K2GVF8 G
UniRef90_UPI000288C482 G
UniRef90_I5C3B8 G
UniRef90_N2JBM3 G
UniRef90_U7A1R4 G
UniRef90_UPI00047E0D06 G
UniRef90_UPI0003B6F814 G
UniRef90_S5Y2W9 G
UniRef90_UPI0003FC4902 G
UniRef90_E7RU25 G
UniRef90_Q2W0M5 G
UniRef90_D5RMN5 G
UniRef90_UPI00047A2EE3 G
UniRef90_UPI00036CCA01 G
UniRef90_UPI00037BDC17 G
UniRef90_I3TVF4 G
UniRef90_Q089W8 G
UniRef90_V4QTV2 G
UniRef90_F9DRM4 G

40
5

	1	10	20	30	40
UniRef90_UPI0003B39864	V	K L V Y F A W V R E Q I G K S D E S L D P Q T T V S D L L L S H L S G I D E			
UniRef90_UPI0004627EDE	V	K V V L Y F A R L R E E L G R D G E E L P A E G C T V A G L W E N L H G E P P			
UniRef90_V5PSG4	I	N L R F F F A S V R E A L N V A E E E V P E G V A T V G D V R R W L R C N R G G			
UniRef90_V2IC76	I	E L R F F F A S V R E Q L G V A Q E R V E L P V A T V G Q V R Q W L R D R G G			
UniRef90_R8AVY5	M	R V L F F F A Q V R E L T D T G E I E V A E T Y A E L L R A A R S E E			
UniRef90_B1Y19	M	Q L R Y F A F A S L R E E A L G G A G E E L P A P T T V A A V L R D R L I A Q G G			
UniRef90_Q1QIR7	M	K V L Y F A W V R E R V G K A E E A L D P P V A T V A D L I A W L S Q R G G D P			
UniRef90_G0A931	I	Q L R F F F A S I R E A L N L S Q E T L E L P A A T V G E L R T F L R T R G G P			
UniRef90_UPI000374D87A	I	K V L Y F A R I K E A V N T T E E L D L P S D I S T I T A L K N W L A L R G M			
UniRef90_R4YK26	M	K L L F F F A D Q L G Q A E E L S L F E A G K T V A E Q Q Q V L I V Q G M			
UniRef90_UPI00037B53DF	I	R V L Y F G R L K D T A G C S E E Q L P W Q G G T T G T L L A Q L R A R S D			
UniRef90_G2DYH8	M	L R I F Y F A S I L R E R L Q T E G E S L P D S V F T V E Q L R D H H N R G G D E			
UniRef90_H5TCF0	M	L R I R F F G S I V R E Q L Q T S S I D V E A G E E T V V S D M A K I L E K G K			
UniRef90_UPI00037C5CD7	M	K L I Y F A W V R E R I V G K A E E E L P A E V K T V S D L L L W K S R G G E Q			
UniRef90_F4PF15	M	K L I L F F A H L Q E A V G N D R M Q L E M E Q T S V E Q L K L E L Q R N Y Q			
UniRef90_B0UL93	M	K L V Y F A W V R E R I G R P E E S V E P P G A T V V A A D L V A W L K T R G E			
UniRef90_J3D683	V	T V K Y F A S I L R E A L G Q G I E L R D T S A T T L A A L R D E L L A A T P			
UniRef90_W4RMB3	M	N K I L F F A H L D E A G H E S V E I E A A G K T V A E L K E M V A E K Y G			
UniRef90_A0A021X2X6	M	T K L V Y F A W V R E R I G K G E E E I D L P A S T G G D L L A Y L K T L G E			
UniRef90_C3AKG3	M	T I L L F A N L R E E V G S D Q L V I E K Q K I S V H Q L K E W L K D S Y H			
UniRef90_UPI00036114B0	M	K V L Y F A W V R E R I G G V P Y E M L E T Q S G T V M E L V E E L K Q K E E			
UniRef90_UPI0002F76EE2	M	Q V L L F F A H L Q E A A G T S R E T L K I D C E N I T V A A E L K D I L T K E H P			
UniRef90_A7H9H2	M	H V L Y F A G A R E E A A G T S R E T L K I D C E N I T V A A E L R R A S L A E A H P			
UniRef90_UPI00047C5D1B	M	N K I M F F A H L K D S V G E E S I T K D A S S K T I I A E L K Q V L S E E Y G			
UniRef90_I4XZ34	L	Q V Q Y F S R Y R E T L L G C A S E V V E G D F A C L E H R R H A S R C C			
UniRef90_A0A024K824	M	K V L Y F A W L R E R I L N K G E E T V P A E V R T V S D L I D W L A A N D P			
UniRef90_F8CD82	V	T V L L Y F A A A R E R E T L G Q T R E S L E V P V G A Q V R D D L K Q S L V D N G			
UniRef90_A0Z1X0	M	L T V R F F S L I R E A L L D C E E L Q V E H Q E T T V V G D L V R Q H L L Q R G G			
UniRef90_U6ZSL9	I	K V K F F A R Y R E A I L G L D E E T Q V D G E F R T T V V E D D V R L R L L M K R G G			
UniRef90_C3X7A1	I	R L R Y F A R V R E K L G V A E E T L P D D I R T V V D D V R L R L L M K R G G			
UniRef90_A9WDC0	V	T V R F F A G H D I V G R S S E A S Y T A E G T T V L G Q L W E Q L T A E H P			
UniRef90_UPI00029A6A88	M	Q V Q F F F A K A R E E L V G A S P V E I P P W P G G T V V S D L V Q M L H D R G G			
UniRef90_UPI0003752BAE	V	R V H Y F A R L R E E L V G R S S E E L P A G G T T V V S D L V Q M L H D R G G			
UniRef90_D5QGC2	M	P D I L Y F A W L R D R L L G H D R E S L P S G V T R V S D L V Q M L H D R G G			
UniRef90_UPI000288D043	I	T V L L F F A R Y R E A V D L D S L E V E G E F A T I D A V R Q A L A A D P			
UniRef90_F2G9L9	V	T V K T F A Q T R E I T G E D N I A L N L D S L E V E G E F A T I D A V R Q A L A A D P			
UniRef90_R8AXT0	L	T V H F F A R L R E E L A T D S L T L P V P D I T A G Q V L L S D L A A A K G G			
UniRef90_B1LYG6	M	K L V Y F A W V R E R I L G R S S E E E L P P E V A T V V A D L V G W L R G R G E			
UniRef90_A0A014NPC0	I	T V R Y F A S I V R E E A M G T G S E E A L Q T S A T V V A D L R E A L A R S P A			
UniRef90_E2CIG3	M	I R Y F A W V R E R I K V G V D E E Q L P D S I Q T V V G D L L T A Y L K T R S G G			
UniRef90_C7DCN0	M	N V V Y F A W V R E R I G L P S E Q I E T N A T T V V A D L V S E L S A K E D E			
UniRef90_A6U7K6	V	N L V Y F S W V R E R I I G R P S E E E L P A D V V T V V A D L L D H H L K S R G G			
UniRef90_U4PSD4	M	T R I V Y F A W V R E R E K I G T D E E E L D L P S A T A G E L I R R F L T A T R G G E			
UniRef90_C7TRIG2	L	K I L Y F A G L R E E T L G E S G E D V D L P A A D V V A G E L I R Q W L G A R G G			
UniRef90_UPI000372814F	I	E L L R F F A S V R E Q L G L G Q E R V P A T V A T V V A D L L D H H L K S R G G			
UniRef90_UPI000255A12D	M	K V I Y F A R V R E Q L G V D E E T L P A S V S T L V A E L V V D W L A A A R G G			
UniRef90_A4IL41	M	R L L F F A H L G E Q V G E R R Q V T W P H V P E T V V G K L K E E V E A R Y P			
UniRef90_D8GVT8	M	K V L L F F A H L Q E E V R K S S S L H D C E N I T V V A D L I E W L A D R D E			
UniRef90_UPI000362F0B9	M	A V K T F A Q R V R E I L V G K S D W H V E V S S Q T V V S E L I T E K L I I Q D A			
UniRef90_B9JCT9	M	T K L V Y F A W V R E R I G K G E E E L P V D V I T V V G D L L S H H L K T L G E			
UniRef90_E6PPJ5	T	I R Y F A S V R E A I V G R G S E T L D L P E R T L V G D V R A W L T Q R S A E			
UniRef90_D7A319	M	K V L Y F A W V R E V G R E T E E I A V P V T V V A D L V A A F L K D R G E			
UniRef90_E3E8T5	M	K L Y Y F A G L R E E V T G K S E E E M A D L L A G Q T V V G E L W Q W A T E K Y P			
UniRef90_M3F7X6	M	S L V Y F A G L K D Q T G V S E E Q V D M A G K T V V D E L I E W L A D R D E			
UniRef90_G4R679	M	K I L Y F A W L R E R I L G R D E V S L P D S V A T I V A D L I E W L A D R D E			
UniRef90_UPI0003B70EBF	L	E V L Y F A S L R E R V G T P R E T V E T Q A T V V A D L V Q A L S A R S A G			
UniRef90_Q11575	V	K M Y F A Y R Y R E L L G V D A E R L E G D F R V L D D V R Q A L V A K G G			
UniRef90_UPI00045E75A7	M	S V L L F F A G L E L A G E R T I I Q L T L P G A T V V Q D L L Q A A S S Q Y P			
UniRef90_M8E9G6	M	K V L L F F A T L L Q E E K V G A S E L L S I E N A I K I S D L L K N R L I E E Y D			
UniRef90_UPI000400B5CE	M	I Q V K F L A E E R L R G I S D I D I V P L P S P T V V A G L L K Q A L Q S H D T			
UniRef90_UPI0003773E3A	M	K V L L F F A E L L Q E D A A G T D Q L E I V D M V I G A T I V N E V K S W L H T Q Y N			
UniRef90_W4Q2W8	M	N L L Y F A W V R E R I G E P R E T V E T S A E T V V M D L L V Q A A S S Q Y P			
UniRef90_K2J736	M	M R L I Y F A W V R E R I G T S S E E D V E L P I D T V V A D L L R W L Q S R G E			
UniRef90_F7Y4Z3	M	K L L Y F A W V R E R I G T A E E T I E P P V D T V V D D L L R G W L R T Q S R G E			
UniRef90_UPI000369D5BA	M	Q V K F F F A R Y R E A L G L D G L E I E G A F A C L S R E D D V V R Q A L L S R E D			
UniRef90_UPI00046A0611	I	K V K Y F A R F R E L A G V S E E I I E L P G S R V S D L I E L I K E R H P			
UniRef90_W0I9S4	V	R V R L F F A L H R D I V G T P E L E L E A P G T T L V G E L W Q R L C A Q Y P			
UniRef90_UPI0004785498	V	T V L L F F A A L R E Q I G Q E S L S V S P G G L S V R A Q I E G A N D P			
UniRef90_UPI0004718B5B	M	T V L L F F A A L R E Q I G Q E S L S V S P G G L S V R A Q I E G A N D P			
UniRef90_U1HFH7	M	K L K Y F A W V R E R I V G K A E E T V P A E V R T V V G Q L I G W L T A R D D P			
UniRef90_UPI00037501EF	I	Q I K L F A G L A E R L G S S I I T Q L E E S T V V G Q L I G W L E T R D Y P			
UniRef90_C5BQE7	I	T I L Y F A S L R E G D A L L G L S S E E R F S Q A S A D V V A G S L R A Q L A A R D A			
UniRef90_K6QE59	V	R V R L F F A V V A E R L G A R Q L E I E L P G A T A G S V R D A L A R Q L A A R D A			
UniRef90_A1WLA2	V	T L L R Y F A A L R E A M G Q G S E S V E T T A T V V G Q L I G W L E T R D Y P			
UniRef90_D0U4G8	M	K I L Y F A S L K E N L K I S S S E E F E L S N T T V V K Q Q L I G W L E T R D Y P			
UniRef90_I4KR89	I	N V L L F F A R Y A E A V G L D S L E M E G D F A T V V D A V R L A A G D			
UniRef90_UPI000225B6C4	M	T V L L F F A Q L Q E V I G K E R I E F A S N I T V V G E L K E K L M R S F Q			
UniRef90_L0WC01	M	E L R F F A Q L Q E V I G K E R I E F A S N I T V V G E L K E K L M R S F Q			
UniRef90_UPI000375202D	M	I R Y F A W V R E R I T G V E Q E E L P D S V T T V V G E L I N W L Q T D P			
UniRef90_UPI0002489BAD	I	E I L Y F A W V R E A I G A D A E T V P A E V T T V V G E L I N W L Q T D P			
UniRef90_M5JHU0	M	R V L L F F A H L K E Q F N R Q E L I F P H Q E I T V V R Q L I G W L E T R D Y P			
UniRef90_C4GLV7	M	T L L Y F A A L R E A T G K D Q E T Y A T T V V G Q L I G W L E T R D Y P			
UniRef90_F2BDT8	I	R I L L Y F A A L R E A T G K E G E T V A L P G A T A A S V Y A Q L I G W L E T R D Y P			
UniRef90_UPI00036F8E52	I	N I L Y F A S L A D N A G D E E I T V T D E T L V P Q V F N N L A Q K H I G W L E T R D Y P			
UniRef90_B2ICS0	M	K A L Y F S W V R E R I G K S E E E D I P D S V K T V V G D L V W K H S K G Y D E			
UniRef90_S5TV00	V	K V L Y F A S L K E L F G R S E Q L N D G K T V E D V W K H S K G Y D E			
UniRef90_F2JOG9	M	K I R Y F A W V R E R I V G A D E E T V A L P V A T A G D L I A W L S T V D			
UniRef90_H3NTG6	V	K V K F F F S L I R E A V E T E E L T L D F E I S T V V A G G L K S L L G E R G E			
UniRef90_G8M462	I	D L R F F A S V R E A L G V A N E T V T V P V V N V V G D L V R A W L R V R G G P			
UniRef90_UPI0003739913	M	R V V Y F A W V R E R I V G L E E E V P A E V K T A G D L V W S V L R E R S P P			
UniRef90_G4E616	I	T V R Y F A S L R D L G T D Q L E L A A G V D T V V R A W L R V R G G P			
UniRef90_UPI000377E44B	M	K A L Y F A W V R E R I G R A E E E L P P E V E T V V G E L I G W L K S R D E			

50 60 70 80

N Y A H A [L] R S D [V] I R [V] A I N Q E H [V] E H D T P I A G A H E I A [L] F P P P M T	V W A E T [L] G E Q R L M T A V N Q S R A G P D T P I V R D G D E V A F F P P V T T G G
UniRef90_UPI0003B39864	UniRef90_UPI0004627EDE
V W Q E A L A E G R L R M A L N H E M V P A G T R L T T G C E V A F F P P V T T G G	V W Q E A L A E G R L R M A L N H E M V P A G T R L T T G C E V A F F P P V T T G G
UniRef90_V2IC76	UniRef90_R8AVY5
R W A L A L D K E N L L V A V N Q T L T S L S H P L Q D G D E V A F F P P V T T G G	R W A L A L D K E N L L V A V N Q T L T S L S H P L Q D G D E V A F F P P V T T G G
UniRef90_B1Y1I9	UniRef90_Q1QIR7
P H A S A L A R G R L R R A A L N Q T M C S E D T E L T D G A E L A F F P P V M T	P H A S A L A R G R L R R A A L N Q T M C S E D T E L T D G A E L A F F P P V M T
UniRef90_G0A931	UniRef90_UPI000374D87A
E Y A H A F E K P K V R A A L D R M H V K Q D T M I A G A H E I A F F P P V M T	E Y A H A F E K P K V R A A L D R M H V K Q D T M I A G A H E I A F F P P V M T
UniRef90_R4YK26	UniRef90_UPI00037B53DF
V W A E V L A E G R L R M A F N Q E L A N A D T A L A E S G E V A F F P P V T T G G	V W A E V L A E G R L R M A F N Q E L A N A D T A L A E S G E V A F F P P V T T G G
UniRef90_SWAALAEGQVLRVLVNQFCPEPDAVI	UniRef90_G2DYH8
S W A A A L A E G Q V L R V L V N Q I V R G D A E I P P G A E V G I L P P V T T G G	S W A A A L A E G Q V L R V L V N Q I V R G D A E I P P G A E V G I L P P V T T G G
UniRef90_H5TCF0	UniRef90_UPI00037C5CD7
V W S E T L S E A S L L Y A V N Q E L V R P D A K I G D D D E V A F F P P V T T G G	V W S E T L S E A S L L Y A V N Q E L V R P D A K I G D D D E V A F F P P V T T G G
R W L I L E E Q D V L V A V N M T L C G K D A V I N S G D E L A F F P P V T T G G	R W L I L E E Q D V L V A V N M T L C G K D A V I N S G D E L A F F P P V T T G G
UniRef90_F4PF15	UniRef90_UPI000374D87A
E F E S A L Q H P E V R V A I N Q E H V D H R Q P V A G A R E I A L F P P M T	E F E S A L Q H P E V R V A I N Q E H V D H R Q P V A G A R E I A L F P P M T
UniRef90_B0UL93	UniRef90_J3D683
I T G L E Q V M T A V N E E Y A L N D S V I N P G D T V A F I P P V S G G	E Y A Y A F E E G V V R A A I D R V H A R P E T P A G A R E I A F F P P M T
UniRef90_C3AKG3	UniRef90_A0A021X2X6
A H A A S L A R G R V R M A L N Q V M C D E T A A L S E G C E V A F F P P V T T G G	A H A A S L A R G R V R M A L N Q V M C D E T A A L S E G C E V A F F P P V T T G G
UniRef90_W4RMB3	UniRef90_UPI00036114B0
V Q K L D T S M T A I N E E F S S N D E V I K E G D T I A F I P P V S G G	V Q K L D T S M T A I N E E F S S N D E V I K E G D T I A F I P P V S G G
UniRef90_DYAHALEHETVRIIAINQEHVEDEP L G A R E I A L F P P M T	UniRef90_DYAHALEHETVRIIAINQEHVEDEP L G A R E I A L F P P M T
UniRef90_LQSL	UniRef90_UPI0002F76EE2
L Q S L D R V M V M V A I N N E E F V T D E H V K S G D D V A F I P P V S G G	R Y K V A F S D S A L L K V A V N Q E L C E F D A G L V K S G D D V A F I P P V S G G
UniRef90_A7H9H2	UniRef90_UPI00047C5D1B
A L T R I L P R C R I A V D Q E F A P D D A P R D G A E V A V V P P V S G G	A L T R I L P R C R I A V D Q E F A P D D A P R D G A E V A V V P P V S G G
UniRef90_F8CD82	UniRef90_UPI0003752BAE
I W R V L D E P S L M C A R N Q D L C G D D G D E V A F F P P T V T G G	I W R V L D E P S L M C A R N Q D L C G D D G D E V A F F P P T V T G G
UniRef90_A0Z1X0	UniRef90_I4XZ34
T A D L A F A N R K L I A A V N A R I V T H D A P V A A N D T V A L F P P M T	T A D L A F A N R K L I A A V N A R I V T H D A P V A A N D T V A L F P P M T
UniRef90_HWREALYQPNVVHALNQRVNTDHE V K D G D T V A F I P P V A G G	UniRef90_HWREALYQPNVVHALNQRVNTDHE V K D G D T V A F I P P V A G G
UniRef90_U6ZSL9	UniRef90_C3XA71
V G A P V L G E L N L M C A R N E E L I C Q A E P L V A D G D E V A F F P P V T T G G	V G A P V L G E L N L M C A R N E E L I C Q A E P L V A D G D E V A F F P P V T T G G
UniRef90_A9WDC0	UniRef90_UPI00029A6A88
V W S E V L S A G Q L K K M A C Q L Q M A Q P D T K V T E G C E I A F F P P V T T G G	Q L Q P L I P K L L I A V N Q D Y A N D D S P V Q S S D G D E V A Y F P P V T T G G
UniRef90_UPI0003752BAE	UniRef90_UPI000288D043
A L T R I L P R C R I A V D Q E F A P D D A P R D G A E V A V V P P V S G G	E Y G E I F G Q P E L R V A V N Q S F A A L L D T C G P D D E I A F F P P V T T G G
UniRef90_F2G9L9	UniRef90_R8AXT0
K W T L A L E G S V L T A R N Q E L C S D E P L V D G D E L A L F P P V T T G G	F E V L N E T G L M C A R N E E L I C S D E P L V D G D E V A F F P P V T T G G
UniRef90_B1LYG6	UniRef90_A0A014NPC0
P W A Q L D E G Q P V M I A V N Q V M A R P E T R K A G D E V A F F P P V T T G G	P W A Q L D E G Q P V M I A V N Q V M A R P E T R K A G D E V A F F P P V T T G G
UniRef90_A0A014NPC0	UniRef90_E2CIG3
E Y A Y A F E D G V V R A A I D R A H V K P D A P I A G A R E I A F F P P M T	A A A A A L A P C K A V R M A L N Q D L C Q G D A P I K A G D E V A F F P P V T T G G
UniRef90_C7DCN0	UniRef90_A6U7K6
N H A A A F A E D T I R A A I N Q E H V D A D T P A E A A Q E I A F F P P M T	R Y A A A A F Q D S A L L R V A L D Q E L A D F S S A L D G V R E V A F F P P M T
UniRef90_A6U7K6	UniRef90_U4PSD4
E Y A A A A F E H Q N V R A A I N Q E H V E H G E P I A G A R E I A L F P P M T	E Y A A A A F E H Q N V R A A I N Q E H V E H G E P I A G A R E I A L F P P M T
UniRef90_U4PSD4	UniRef90_C7RIG2
Q W E A L G T Y R N R L R Y A V N Q E M A R L D T P V V D G D E V A F F P P V T T G G	Q W E A L G T Y R N R L R Y A V N Q E M A R L D T P V V D G D E V A F F P P V T T G G
UniRef90_UPI000372814F	UniRef90_UPI000255A12D
A W A E V L V A E G R L R M A V D H E V A G A G S A A E G C E V A F F P P V T T G G	P W D K V L Q A P D L I C A L N Q E V V D R Q V A V S D Q D E V A F F P P V T T G G
UniRef90_A4IL41	UniRef90_D8GVT8
S L S L E R I V M T A V N E E Y A H D D A P Q T G D T V A F I P P V S G G	S L S L E R I V M T A V N E E Y A H D D A P Q T G D T V A F I P P V S G G
UniRef90_UPI000362F0B9	UniRef90_UPI000362F0B9
V V I S S E I M V A I V N E E Y A N E D D I Q T G D T V A F I P P V S G G	R W K Q A L A G Q V L V A V N Q T M R D L S Y R Q D N D E V A F F P P V T T G G
UniRef90_B9JCT9	UniRef90_E6PPJ5
E Y E T A L Q P D A I R V A L N M E H A D H D E P I A G A R E I G I F P P M T	R H A I A L S D K T L R M A C G H V M A E V D A P V P G C E V A F F P P V T T G G
UniRef90_D7A3I9	UniRef90_E3E8T5
R H A I A L S D K T L R M A C G H V M A E V D A P V P G C E V A F F P P V T T G G	G Y A R A F E N P R V R A A L D R R R H A K P D T P I A G A R E V A F F P P M T
UniRef90_E3E8T5	UniRef90_M3F7X6
D M S I F L S G G A R L A V N E E Y A L P T D V Q D G D I A A F I P P V S G G	D M S I F L S G G A R L A V N E E Y A L P T D V Q D G D I A A F I P P V S G G
UniRef90_M4R679	UniRef90_G4R679
G F A L A T A N R K L L R A A V D D E L V D H Q T P N G A R T V A L F P P M T	G H A A A F A D P S L R C A V D Q Q L I A N L D A P D G V R E L A F F P P M T
UniRef90_UPI0003B70EBF	UniRef90_UPI0003773E3A
G H A A A F A D P S L R C A V D Q Q L I A N L D A P D G V R E L A F F P P M T	K Y D V L V A E Q N L M C A R N E E L I C K G E A L E D E D G D V A F F P P V T T G G
UniRef90_Q11575	UniRef90_UPI00045E75A7
A W A E E L A E G R V R V A V N Q E L A P Q A A L R A G D E I A I L P P V S G G	A W A E E L A E G R V R V A V N Q E L A P Q A A L R A G D E I A I L P P V S G G
UniRef90_M8E9G6	UniRef90_UPI000400B5CE
A L S S L L G S C F I S V N Q E Y A K P D T A R A G D E I A I L P P V S G G	A L S S L L G S C F I S V N Q E Y A K P D T A R A G D E I A I L P P V S G G
UniRef90_UPI000400B5CE	UniRef90_UPI0003773E3A
V Q E F S N C L V A I N E E Y A G D N D L A E S G D T I A F I P P V T T G G	V Q E F S N C L V A I N E E Y A G D N D L A E S G D T I A F I P P V T T G G
UniRef90_UPI0003773E3A	UniRef90_W4Q2W8
R F S S L L G E R R R V L C A V N Q V M S A D D M S T D G D E V A F F P P V T T G G	L P S S L L D Q T M V A N E E S Y A E F T Y V V R E G D V I A F I P P V S G G
UniRef90_W4Q2W8	UniRef90_K2J736
R Y E L L A F S D A S L R V A L D Q E L A E F D A P I A G V R E V A F F P P M T	R Y E L L A F S D A S L R V A L D Q E L A E F D A P I A G V R E V A F F P P M T
UniRef90_K2J736	UniRef90_F7Y4Z3
G Y E Q A L Q P D V I R V A I N Q E H V D H R E K S G A R E I A L F P P M T	G Y E Q A L Q P D V I R V A I N Q E H V D H R E K S G A R E I A L F P P M T
UniRef90_F7Y4Z3	UniRef90_UPI000369D5BA
A Y D L A L A E P A I R V A L D H D H A E H D T P I A G V R E V A L F P P M T	A Y D L A L A E P A I R V A L D H D H A E H D T P I A G V R E V A L F P P M T
UniRef90_UPI000369D5BA	UniRef90_UPI00046A0611
A A V L A L A E Q N L M C A R N E E L I C Q D E P L D G D E V A F F P P V T T G G	A A V L A L A E Q N L M C A R N E E L I C Q D E P L D G D E V A F F P P V T T G G
UniRef90_W019S4	UniRef90_UPI0004785498
K F K N E V E D A D V N V S R N G S Y V S F D E E K D G D V V A L F P P A S G	K F K N E V E D A D V N V S R N G S Y V S F D E E K D G D V V A L F P P A S G
UniRef90_UPI0004785498	UniRef90_UPI0004718B5B
A I A Q A L E Q P R L R V A V N Q T L S T F E H M K P G D E V A F F P P M T	A I A Q A L E Q P R L R V A V N Q T L S T F E H M K P G D E V A F F P P M T
UniRef90_UPI0004718B5B	UniRef90_U1HFH7
A Y A H A F E K P T V R A A I D H A H V K Q D A A I I G A R E I A F F P P M T	A Y A H A F E K P T V R A A I D H A H V K Q D A A I I G A R E I A F F P P M T
UniRef90_U1HFH7	UniRef90_UPI00037501EF
E A A S Q I Q A S F V V A V N Q E F A S S D L A F T A D D E I A L I P P V S G G	E A A S Q I Q A S F V V A V N Q E F A S S D L A F T A D D E I A L I P P V S G G
UniRef90_C5BQE7	UniRef90_K6QE59
K W A A A L S S T N L R C A V N Q S L A K P E H P C W G D E V A F F P P V T T G G	K W A A A L S S T N L R C A V N Q S L A K P E H P C W G D E V A F F P P V T T G G
UniRef90_K6QE59	UniRef90_A1WLA2
R W R P L L D C R L A V N G R Y C E P S T P G P G D E I A L I P P V S S G G	A P A A S L A R H R V R M A L N Q C L S E T A P I D G A E V A F F P P V T T G G
UniRef90_A1WLA2	UniRef90_D0U4G8
A P A A S L A R H R V R M A L N Q C L S E T A P I D G A E V A F F P P V T T G G	E R Y F P N N I L C A V N Q E I A N D S T L L K D T D E V A F F Y P P V T T G G
UniRef90_D0U4G8	UniRef90_I4KR89
P E F A V L N E S S L M C A R N E E L I C Q D E P Q A G D D V A F F P P V T T G G	P E F A V L N E S S L M C A R N E E L I C Q D E P Q A G D D V A F F P P V T T G G
UniRef90_I4KR89	UniRef90_UPI000225B6C4
L S Q L E A V A P R Y M V A I N E E L G S P A S T V Q A G D D V A F F P P V T T G G	L S Q L E A V A P R Y M V A I N E E L G S P A S T V Q A G D D V A F F P P V T T G G
UniRef90_UPI000225B6C4	UniRef90_L0WC01
T V A S A L A A P R Y M V A I N E E L G S P A S T V Q A G D D V A F F P P V T T G G	T V A S A L A A P R Y M V A I N E E L G S P A S T V Q A G D D V A F F P P V T T G G
UniRef90_L0WC01	UniRef90_UPI000375202D
A H G H A F A E P E L R V A A I D Q T H A E H D A P I A G A R E I A F F P P M T	A H G H A F A E P E L R V A A I D Q T H A E H D A P I A G A R E I A F F P P M T
UniRef90_UPI000375202D	UniRef90_UPI0002489BAD
G H A A A F A D P R L R V A A I D Q F D A G F D A T I A G A R E I A L F P P V T T G G	G H A A A F A D P R L R V A A I D Q F D A G F D A T I A G A R E I A L F P P V T T G G
UniRef90_UPI0002489BAD	UniRef90_M5JHU0
L S S V S S I M I A V N E E F A T D E E L I R E G D V V A L F P P V S G G	L S S V S S I M I A V N E E F A T D E E L I R E G D V V A L F P P V S G G
UniRef90_M5JHU0	UniRef90_C4GLV7
A F P A V P L R V A A Q N H V F C D W H A A P N D G D I V A F I P P V A G G	A F P A V P L R V A A Q N H V F C D W H A A P N D G D I V A F I P P V A G G
UniRef90_C4GLV7	UniRef90_F2BDT8
G F T L P Q E R L R C A V N Q H F C D W H A A P N D G D I V A F I P P V A G G	G F T L P Q E R L R C A V N Q H F C D W H A A P N D G D I V A F I P P V A G G
UniRef90_F2BDT8	UniRef90_UPI00036F8E52
G Y A T A F D N E K I R A A L D H V H A K P D A M G N A H E V A F F P P M T	G Y A T A F D N E K I R A A L D H V H A K P D A M G N A H E V A F F P P M T
UniRef90_UPI00036F8E52	UniRef90_B2IC50
V W A E T L G E Q R L R M A L N H E M V P A G T R V H A G D E V A F F P P V T T G G	V W A E T L G E Q R L R M A L N H E M V P A G T R V H A G D E V A F F P P V T T G G
UniRef90_B2IC50	UniRef90_S5TV00
R H A S A F A E P D I R V A I D Q V H V E H D E P A G A A E I A F F P P M T	R H A S A F A E P D I R V A I D Q V H V E H D E P A G A A E I A F F P P M T
UniRef90_S5TV00	UniRef90_F2J0G9
A W V E A L S H P N L I Q A V N Q R V V F Q E E A I N D G D E V A F F P P M T	A W V E A L S H P N L I Q A V N Q R V V F Q E E A I N D G D E V A F F P P M T
UniRef90_F2J0G9	UniRef90_H3NTG6
V W E D T L A A E G R L R M A C H N H V M T G P S Q R T E G C E V A F F P P V T T G G	V W E D T L A A E G R L R M A C H N H V M T G P S Q R T E G C E V A F F P P V T T G G
UniRef90_H3NTG6	UniRef90_G8M462
G H A F A L E E P D I R I A V D R V H A Q P D Q P A G A R E V A L F P P M T	G H A F A L E E P D I R I A V D R V H A Q P D Q P A G A R E V A L F P P M T
UniRef90_G8M462	UniRef90_UPI0003739913
P P A S T L V A R N L E Y A K W D D P V S D G D D E I A F F P P V S G G	P P A S T L V A R N L E Y A K W D D P V S D G D D E I A F F P P V S G G
UniRef90_UPI0003739913	UniRef90_G4E616
A Y A L A F E N A A V R T A I D K A H V R H E T P A G A R E I A F F P P M T	A Y A L A F E N A A V R T A I D K A H V R H E T P A G A R E I A F F P P M T
UniRef90_G4E616	UniRef90_UPI000377E44B

UniRef90_UPI0003B39864 G
UniRef90_UPI0004627EDE G
UniRef90_V5PSG4 G
UniRef90_V2IC76 G
UniRef90_R8AVY5 G
UniRef90_B1Y1I9 G
UniRef90_Q1QIR7 G
UniRef90_G0A931 G
UniRef90_UPI000374D87A G
UniRef90_R4YK26 G
UniRef90_UPI00037B53DF G
UniRef90_G2DYH8 G
UniRef90_H5TCF0 G
UniRef90_UPI00037C5CD7 G
UniRef90_F4PF15 G
UniRef90_B0UL93 G
UniRef90_J3D683 G
UniRef90_W4RMB3 G
UniRef90_A0A021X2X6 G
UniRef90_C3AKG3 G
UniRef90_UPI00036114B0 G
UniRef90_UPI0002F76EE2 G
UniRef90_A7H9H2 G
UniRef90_UPI00047C5D1B G
UniRef90_I4XZ34 G
UniRef90_A0A024K824 G
UniRef90_F8CD82 G
UniRef90_A0Z1X0 G
UniRef90_U6ZSL9 G
UniRef90_C3XA71 G
UniRef90_A9WDC0 G
UniRef90_UPI00029A6A88 G
UniRef90_UPI0003752BAE G
UniRef90_D5QGC2 G
UniRef90_UPI000288D043 G
UniRef90_F2G9L9 G
UniRef90_R8AXT0 G
UniRef90_B1LYG6 G
UniRef90_A0A014NPC0 G
UniRef90_E2CIG3 G
UniRef90_C7DCN0 G
UniRef90_A6U7K6 G
UniRef90_U4PSD4 G
UniRef90_C7RIG2 G
UniRef90_UPI000372814F G
UniRef90_UPI000255A12D G
UniRef90_A4IL41 G
UniRef90_D8GVT8 G
UniRef90_UPI000362F0B9 G
UniRef90_B9JCT9 G
UniRef90_E6PPJ5 G
UniRef90_D7A3I9 G
UniRef90_E3E8T5 G
UniRef90_M3F7X6 G
UniRef90_G4R679 G
UniRef90_UPI0003B70EBF G
UniRef90_Q1I575 G
UniRef90_UPI00045E75A7 G
UniRef90_M8E9G6 G
UniRef90_UPI000400B5CE G
UniRef90_UPI0003773E3A G
UniRef90_W4Q2W8 G
UniRef90_K2J736 G
UniRef90_F7Y4Z3 G
UniRef90_UPI000369D5BA G
UniRef90_UPI00046A0611 G
UniRef90_W0I9S4 G
UniRef90_UPI0004785498 G
UniRef90_UPI0004718B5B G
UniRef90_U1HFH7 G
UniRef90_UPI00037501EF G
UniRef90_C5BQE7 G
UniRef90_K6QE59 G
UniRef90_A1WLA2 G
UniRef90_D0U4G8 G
UniRef90_I4KR89 G
UniRef90_UPI000225B6C4 G
UniRef90_L0WC01 G
UniRef90_UPI000375202D G
UniRef90_UPI0002489BAD G
UniRef90_M5JHU0 G
UniRef90_C4GLV7 G
UniRef90_F2BDT8 G
UniRef90_UPI00036F8E52 G
UniRef90_B2ICSO G
UniRef90_S5TV00 G
UniRef90_F2J0G9 G
UniRef90_H3NTG6 G
UniRef90_G8M462 G
UniRef90_UPI0003739913 G
UniRef90_G4E616 G
UniRef90_UPI000377E44B G

	1	10	20	30	40
UniRef90_A5FZJ8	M K	I L Y F A W L R E R I G S E E D V P P E V T T I S A L T D F L S A R S P			
UniRef90_UPI0003B5229A	V T	V L Y F A R F R E Q L G R D Q D T L A L E G D T V M A L R Q H L A A R G A			
UniRef90_W1S3Z5	L T	I V Y F A W V R E A I G R D Q D V V P G P G A T L A D L V A M L A G R G G			
UniRef90_D8FVB8	I N	T V K L F A V Y Q E V Y G K P E L Q L E I P S Q T V S Q L E R L I A E H P			
UniRef90_A0P6L7	I T	N I L F F A S L R E L F N S D S M E V P E N I M S V R E L L D F Y A E K G P			
UniRef90_T0GWWY8	L T	L V Y F A W V R E A I G L D E E R I V P A S G T T I A D L V A A L A S R G G			
UniRef90_U7GL83	M N	I R Y F A W V R E R V G V E E E V P A S V A T V A D L I S H L K T L D D			
UniRef90_I2GE56	I S	V L L F G I T R D I T G Q S A V S V P L D G N R V G D L L Q R L Q Q Q Y P			
UniRef90_R9PT97	I K	K V L F F A R L K E Q L G E S S I N I E L E G S D T N T L K E T L L A R G E			
UniRef90_E3I533	V T	T I K Y F A W M R E R R V G V S E E R L P A H V A T V A D V V A W L T M R G E			
UniRef90_UPI00041CBD9D	M T	V T L Y F A A L R E R R L G K S E T A S L D A T T V G E W I A A Q G R V D P			
UniRef90_D3FW88	M T	T L L F F A E L L A E R R L N T K E M Q I D A S G K S L K E V K E M V K E Q H E			
UniRef90_L7U5W9	M T	T V L L Y F A A A R E R R V G L A R E S F P L P G A T V R E E V L R L L S V A H P			
UniRef90_Q5WJL8	M K	V L L F F A G L A E Q A G Q A E T E V D F A G R T V E E E L T E W A I D T H R			
UniRef90_D7N131	M T	T I L Y F G V L K Q R L G V A Q E E Q V A W G G T G R E L L H L L Q R R G G			
UniRef90_UPI0003B37D36	M M	I K Y F F S W I C e H I G K S E E E L P D D V K T I S E L L I N Y L S N L N D			
UniRef90_UPI0003814639	I Q	V R Y F A Q L K E I A N K D A E E W K T S S V T P S G I Y E E L K A K Y Q			
UniRef90_D8IT39	E L	R F F A S V R E A L K T S Q E E L P A S V K T V G D V V R A F L M G R G G			
UniRef90_UPI000406F9AD	V R	V I Y F A W V R E R I G L S D E H L N L P G R T A G D L I A W L S G R G D			
UniRef90_UPI0004795F9B	V T	T V L Y F A S L V R E A L D A A G V A S E S V Q S D A G T L R G F Y A Q L R E R H			
UniRef90_UPI0003674E1D	V Q	V R Y F A S V R E A L L S S S G E A L E T R A T E T S A L R D E L I A R G G			
UniRef90_A0A024PHD8	M I	T L L F F A G L K E A I G D D Q I K M P A V G M T L G E V K E K V W A E Y S			
UniRef90_UPI0004252CE8	M I	K I L L F A H L A E Q A G A Q S I D L D A E E T T T D R I R Q F L K E T Y S P			
UniRef90_UPI0003748419	V N	N L L F F G Q L K E R L Q C E N Y N I E I Q H P S I E Q L K A Y L V S L E P			
UniRef90_UPI00037E2728	E I	R F F A E L R E R L G V A K L S V Q L S S P T T S A L K M W V V S E R V I S			
UniRef90_U7NU83	I R	V K C L A E L R E R L G I G E V S V P L D S Q D V A G L K A A L K A L D P			
UniRef90_O31706	M I	K I L L F A G L A E Q A G T Q A I V E I I D M E Q A T T D E I K A S L K E Q Y G			
UniRef90_F3WT96	L T	T I L Y F A W V R E R I G Q A E V T I P P E L V T I A D I I T W L A A R G G			
UniRef90_UPI00037328F4	M I	H L Y F F A G L K E A A G K A S E D I P Q W T D G T V E D I V K W A A N T Y P			
UniRef90_F5Z491	V T	V K T F A Q L R E I T G S F T L T L P E S A V T M G D V I T L L K S R S D			
UniRef90_F6EV55	M L	N L V Y F A W V R E A V G R D E E R I I P R P A A T I R A L I J A T L A A R G G			
UniRef90_D3PKL1	V Q	V V L L F A L L F R E Q A G Q A R L Q L E P L P G S T V A D V K A L L E A Q Y P			
UniRef90_C6WVH8	I K	K L F Y F F A R L K E T L K T E D E L P D D S L T I L K K A V L A K R G D			
UniRef90_UPI00026273EC	M V	D V L L F F A E L Q E A A G S E K I N V E A D G L S V N E L R R M K L K S S Y D			
UniRef90_A0A024DTD9	M I	I I L L F A F A N L R E E V G S D R L V I E K Q E M T V Q Q L K E W L K A S Y C			
UniRef90_I4EE09	V T	T V R Y F A L V R E I T G K T R E E R E V P G T T A G E L D R I V I E Y P			
UniRef90_A0A023D109	M I	R I E Y F A Q L R D D E A G R P G E R R E T G A P T A A A L Y Q E L I A A			
UniRef90_B5JMX9	L T	T I T Y F A L L R D D Q R G L D T D E T T I D S P A A T P A E L L Y T Q L A E Q H			
UniRef90_UPI000382DEE5	L R	R V Y F A S I R E E A L L G R G D E T V L T R A T T L G E L L R D E L I A R G G			
UniRef90_S2KRS1	V R	V K C L A E L R E E R L L G V S D L D V P L E E V Q N V A G L K A A L K A R D D			
UniRef90_A0A024PRK5	M I	E V F F A E L R E E R L K I D S G K I P M D A A G K S V K E L K E M L V A K Y E			
UniRef90_UPI00029B0C87	V T	V R Y F A R Y R S L V G K G E E E V E L P G A T V R D L I E K L R E L H P			
UniRef90_A7IHU6	M K	I L Y F A W L R E R V G L A E E E V P P A E V T A V A D L A R W L A G R D E			
UniRef90_H2AI15	M I	K L L F F A G L A E Q A G T S V I E L D E K E T A A S A V K T L L K E R Y G G			
UniRef90_K2LRD6	V M	K V Y F A W V R E R V G L A E E E V A L P V T R T V A D L L G W L A G R G G			
UniRef90_Q1QVS9	I R	V K F L A E L R E E R L D V A D L E V P L D K R D V A S L K A A L Q A Q D P			
UniRef90_UPI00037D5BD0	I K	V R Y F A S L K E S L L G R S E D D L E F T G P T V K D I W C R A N V G			
UniRef90_UPI00035CEE8A	I T	V L L F F G I T R D I T G Q N T I Q Q P L P A A R V S D D L M E Q L Q N Q Y P			
UniRef90_UPI00047B11E6	M N	L L F F A G L A E K T G Q H I A G V D M T V N D V I E Q I T K Q F F T Q R Y N			
UniRef90_UPI0003658CB6	M K	L K Y F A W V R E R V G L A E E E D V D A P V A T V A E L V D W L R G R G P H			
UniRef90_M8D901	M I	R V L L F A H I K E M V G K E E I V L S E Q Q M S V R Q Q L R E R L Q H E Y H			
UniRef90_UPI000465D729	L T	V L Y F A S L R D A A G V A E E I V E T E A A D L A G L Y Q A L R A R H			
UniRef90_A9I045	I N	L L Y F A R V A E L V G T R G E A W P A E P T T G A Q L L E A L Q A R Y P			
UniRef90_UPI000364056A	V D	V Y F A W V R E R V G L A E E E V P P A E V T A V A D L L A R W L R A R G A			
UniRef90_K6DRD3	M I	N L L F A H L G E A I G E P S V T W T E L P I T V G D L K Q K I T Q R Y N			
UniRef90_C7JGM8	V N	I L L Y F A A L R E E Q L G R E G Q Q V I L P S N T V A T L L V Q E L L R Q H D A P			
UniRef90_F5SIP0	I V	I L L F F A G V A E Q V G K R D R L E L P E T P T V H T L A T E Y P			
UniRef90_UPI00046F2CE0	L T	E Y F A S L R D D E A G C A Q E Q V I E S T A P S L S A L Y D E L S Q R H			
UniRef90_UPI000476C07C	E V	L Y F A R L R D T L G R S R E T E L T L D G P T V A D L L A L L R A R G A			
UniRef90_UPI0002260356	V T	V L Y F A G L R E E Q V G R G G S E T T V A V A L D D Q T V K D F L A V L R R Q Q D A P			
UniRef90_D3SER6	V T	V H Y F A R L R E E M G R A D E E L P T E S I S V G D L W R H R G D A P			
UniRef90_W9VFU6	L R	R I F F A D I K E E K L T E S D L D L T G K T I D D I S H L S E K G D			
UniRef90_R8GDH5	M I	T I L L F A N L R E E V G L D Q V V I P E K E M A V W K L K E W L K E S Y H			
UniRef90_UPI00047B7D2E	L R	R Y F A W V R E R I G H A E E T V P P A E L A T V G E L I A W L S A R D E P			
UniRef90_D5BW53	I T	V K F F A S L R E E R L G C T E R Q I D F S E P T V A E V W T L V G D Q P			
UniRef90_A4WNE4	UniRef90_UPI0002F03156	V T	V K F F A S L R D I T G K T S E D D E P D G S T L G D L I N W F F K Q Y P		
UniRef90_UPI0002E63967	M I	M K A I Y F A W V R E R I G L S E E E V P R E I E T V R Q L V D W L A A R G D			
UniRef90_Q602K9	I D	I L L F A H L Q E A I G D S K I N W S E L P I T V G E L L K Q K L S G K Y N			
UniRef90_D2UBY7	I R	V R Y F A A L R E E Q M G R A E E Q L I A F D L A S V A D W K A V C R G K			
UniRef90_H5SQW8	V T	V L Y F A S L R E E A A G I D R E Q V R T A V P D L R A L Y A E L D A R H			
UniRef90_A9D498	V R	V K L F S L L R E E A V G T G E F F F V N F S G E T A G E L L W E E L E R Q H P			
UniRef90_DOL1V2	M R	V V Y F A W V R E E R L G K G S E E L E P V K T V G D L I A H L A T L G E			
UniRef90_J3C583	I T	I K L F A S L R E E Q F A R D E L K T T D T P A T V H D A W L R I T Q K E			
UniRef90_UPI0003636B7A	M T R	L V Y F A W V R E R I G K G E E E I I E L D P A T V S D L L A Y L K T R G E			
UniRef90_B2SLT6	V R	K F L A E L R E E R V G D S E T I L M D L D Q C D V A G L K A A L K D R D P			
UniRef90_K9SBNO	M T	V L Y F A S L R E E A V G M A D E R V Q S D A P S L R G L Y A E L D A R H			
UniRef90_A8FCP4	V T	V K L F A A Y Q E A Y G V P E L T L E F P A G T V A A V R D R L L Q A H P			
UniRef90_UPI000289CB57	M I	S V L L F F A G L K A G K Q Q I I Q K D Q T T V D E I K L E L Q E V Y G			
UniRef90_D8LMR2	I K	L L F F A S Y L R E T I G Q E E L A I E A S N W T I I A E L K Q H I E K T Y D			
UniRef90_U7G6D5	V K	V L F F A S C R E M A G T K E L E L P G D S S S I A Q L R E H I V E K L P			
UniRef90_UPI0003B77ECE	M V Q	V R F F A A L R E E R A G R D A L Q I D L P V S T V A Q L V D W L A E T D V			
UniRef90_I3REF8	V E	V R L F A L Y R E Q A G R D R M S L E L P G A T V G T A K A A L E A L F P			
UniRef90_B6YUC8	V K	V K Y L A R F R T I L A G I D E E L I E L P G A T V K D L I E E V K K R H E			
UniRef90_UPI0003792709	V K	V R Y F A R F R S L V G T G E E E L E V D G I K V R E L L I D I I K E R H P			
UniRef90_UPI000379A741	I T	T I L Y F A R I K E V V N Y S S E D V D L P V E T I V A I L K S W L S G R G D G			
UniRef90_UPI00045E6CA2	I T	T V R Y F A S L K E R V G R S E D N V S A E P L T A D T L W R Q C V			
UniRef90_Q1IPZ2	V K	V I Y F G M L R E I A G S Q Q E P I E A E G A T A G M L F A Q V L A K Y P			
UniRef90_S2X8W7	M K V	V L Y F A E I K E L L G Q S S E E T F H F D H P A V T A L K Q H I Y Q N Y P			
UniRef90_H3ZL40	V K	V R Y F A R F R E H A G T G E E E I D L P G S K I G D L V E K I K E L H P			
UniRef90_TOC8U5	L R I	A L F A N L R E E R F Q T R E L T L V P G T T V A Q L L P I L C E E Y P			
UniRef90_UPI000472EE44	I K	V L L F A A L R E T L D T E S I E V P L A S A T L S G L K E A L I A R D A			

50 60 70 80

UniRef90_A5FZJ8	A H T R A F A D R R I	I K T A L	D Q R F V P P D T L L	E G A R E I A F F P P F T G
UniRef90_UPI0003B5229A	A Y A D V F A S G P V L	A V N E V M A H A G T P	R D G D V V A F F P P M L T G G	
UniRef90_W1S3Z5	G Y A Q A L G D S R L	R A A I D Q Q F A P L D T M I	G D A R E V A I F P P V T G G	
UniRef90_D8FVB8	K L E Q W R D R T R F G V N	L E F A T P E T I L	N E G D E I A F L P P I T G G	
UniRef90_A0P6L7	W L E L S K R F S T I R V A V N H S I V D W D T L I	N E G D E I A F L P P I T G G		
UniRef90_T0GWWY8	G Y A E A L S D S R L R A A L	D Q R F V P F D D P	G E A R E L A L F P P V T G G	
UniRef90_U7GL83	N H A A A F E E D A I R V A L D	Q M H V E T D A A L	G D A R E V A F F P P M T	
UniRef90_I2GE56	R L S D I R S L L V A V N G E Y A D S D T V I	N S K D E V A L I P P V S G G		
UniRef90_R9PT97	Q W L A L N D E A I L T A V N Q N H L S Q V V T L	N N G D E V A F F P P V T G G		
UniRef90_E3I533	N Y A A A F A K P H L R R A A V D Q V H A S H E T C V	L G A R E I A F F P P V T G G		
UniRef90_UPI00041CBD9D	A L Y A D A F A S G A I R V A V N K T L A D L H A P L	T D G D E L A L F P P M T		
UniRef90_D3FW88	G I A H V I D Q S M I A V N E E Y A E G T E V L	K D G D V I A F I P P V S G G		
UniRef90_L7U5W9	G L E P L L P H L R V A V D Q E F V G V D A P V	R P G A E V A L I P P V A G		
UniRef90_Q5WJL8	L S P D S L N G A M V A V N E E F A S Q S T E L	T A G D V V A F I P P V S G G		
UniRef90_D7N131	A W A E A L E E D R I R L A I D K Q I V G W D V Q I	P D G A E V G L L P P V T G G		
UniRef90_UPI0003B37D36	D Y K K V F V K K D L I V N K T Y C S V E T K I	S N N D E I A F F P P V T G G		
UniRef90_UPI0003814639	F P H K Q K Q L M V A L N D D F A D W A T P V	K E G D E L V F L P P V A G		
UniRef90_D8IT39	I W A E V L P E K N L R M A Y D H E M T E A D T E I	A D G G E V A F F P P V T G G		
UniRef90_UPI000406F9AD	N Y A Y A L E E S P S I R V A V D Q L H I E Q D E P L	G P A R E I A L F P P M T		
UniRef90_UPI0004795F9B	G F A L P V E R L R V A V G G A F A S W D D A L	R E G S E I A F I P P V S G G		
UniRef90_UPI0003674E1D	A Y A T A L A R G K V R M A L D H V M S D E A A A L	V A F F P P V T G G		
UniRef90_A0A024PHD8	I E Q V K S C C M V A V N E E F A P E E T T I	Q E G D T I A F I P P V S G G		
UniRef90_UPI0004252CE8	L R G T D R A M I A V N E V Y T R G N S E I	V A F I L P P V S G G		
UniRef90_UPI0003748419	T W Q V A L N D N L L I A A V N Q I A Q Q H A L V	K S G D T V A F F P P V T G G		
UniRef90_UPI00037E2728	H P E A L D Q P R L L C A I H D M V Q G D S A L	V K G G D E V A F F P P V T G G		
UniRef90_U7NU83	R F S R L D E G R V L C A V N Q V M A G D S T P V	T N E D E V A F F P P V T G G		
UniRef90_O31706	L E S I D T A M I A V N E S Y V K E N T S V	S S G D T V A I I P P V S G G		
UniRef90_F3WT96	G Y A E A M A A P R L R A A I D Q N F V G L D A L	A G A R E V A I F P P V T G G		
UniRef90_UPI00037328F4	A F D F S A V Q V A V N E E Y V L E T E S V	K P G D H V A F I P P V S G G		
UniRef90_F5Z491	K W S Q A L E N G S V L M A R N Q L C D I Q T H	K P G D E L A F F P P V T G G		
UniRef90_F6EV55	G Y A E A F A Q P K L R R A A L D Q R F V P L D S P I	R E A R E L A I F P P V T G G		
UniRef90_D3PKL1	L R L S G G L A A I N E Q L A Q P H Q P L	K D G D E L A F L P P V S G G		
UniRef90_C6WVH8	V W G Q M L M G K K V R A A I N H E L V D D M A V I	V A F F P P V T G G		
UniRef90_UPI00026273EC	L T N L D N A M T A V N E E Y S R E D T V L	K S G D V V A F I P P V S G G		
UniRef90_A0A024DTD9	L Q S L D K V M V A V N E E F V M N E E M I	K A G D I V A L I P P V S G G		
UniRef90_I4EE09	A V E R L R R A S M L M V N Q E Y V Q P D H V P L	A E G D E V A L I P P V S G G		
UniRef90_A0A023D109	A Y G F S L P A G R M R V A I N A A F Q P W D H P L	K D G D T V V F I P P V T G G		
UniRef90_B5JMX9	S F T L P S S A L K V A V N D D F A H W T T P L	K D G D T I V F I P P V A G		
UniRef90_UPI000382DEE5	A Y A E V L A R Q R V V R L A L N Q D L R D E S A A L	V A G A E V A F F P P V T G G		
UniRef90_S2KRS1	R F A R L E D A R I L C A V N Q V M G G D S T P L	T A D D E V A F F P P V T G G		
UniRef90_A0A024PRK5	L K T L D N V M I V N E E Y T T E S T I L	A D D D V V A F I P P V S G G		
UniRef90_UPI00029B0C87	V L K E V F S E D D V N V S R N G R Y V G F D E I L	K E G D V V A L F P P V S G G		
UniRef90_A7IHU6	A H A Y A F E N A A V R A A L D R R H V K P D A S I	A G V R E V A F F P P M T		
UniRef90_H2AI15	L Q T I D N A M I A I N E T Y V K H D A S I	T E G D T I A F I P P V S G G		
UniRef90_K2LRD6	G Y A I A L E H A E I R V A V N H E H V D H A A L L	V A F G D E V A L F P P M T		
UniRef90_Q1QVS9	R F A A L S E A R I L C A V N Q A M A H D T S L L	S E G D E V A F F P P V T G G		
UniRef90_UPI00037D5BD0	K P A P D N L L I A A V N M E Y V D W N S V V	R D G D E V A F F P P V T G G		
UniRef90_UPI00035CEE8A	R L S E I R A L L L V A V N G E Y A E P D T P L	T P T D E V A L I I P P V S G G		
UniRef90_UPI00047B11E6	Q L A P A A R L K L A I N Q T H A K P S A P I	P R P G D E V A I F E P V T G G		
UniRef90_K6DRD3	E Y V A A L E H E N V R V A I N Q E H V D H E P I	A G A R E V A L F P P M T		
UniRef90_C7JGM8	L P L Q S V M V A V N E E Y A E D Q L E L	K A G D V V A L I P P V S G G		
UniRef90_F5SIP0	K L D E V F A A P R I R V A I N Q K L G G F D T C	K P G D E L A F F P P M T		
UniRef90_UPI00046F2CE0	D A D L I R H S V I A L N Q D Y A E A D Q V I	R P G D E I A L I P P V S G G		
UniRef90_UPI000476C07C	G F S L P A T R L R V A V N A A F A P W D Q S P R D G D H	V V F I P P V S G G		
UniRef90_UPI0002260356	P W D S E L G G D R V R V A V D Q Y M A D P A T V L V D G A E	V A L F P P V T G G		
UniRef90_D3SER6	A F D A V F L Q P R M R V A V N K V M G D L S T A V H	I A F F P P M T		
UniRef90_W9VFU6	P E R L L M V A V N Q E Q A A L D T L V R D G D E	V A Y F P P V T G G		
UniRef90_R8GDH5	I W K T T L N E K N I L C A V N Q L V K R N H V I	I N P S D E I A F F P P V T G G		
UniRef90_UPI00047B7D2E	L K S L G N V M V A V N E E F V T N E E K I	K A G D I V A L I P P V S G G		
UniRef90_D5BW53	G Y A A A F A V P E V R A A R D Q E H V E H D A P I	E G A R E I A F F P P M T		
UniRef90_A4WNE4	I S E N V L I A V N M E Y A G E T V V	V A F F P P V T G G		
UniRef90_UPI0002F03156	K A Q A F K E E L L V L V N G K S L D W S Y V L	V A I M P P V S G G		
UniRef90_UPI0002E63967	G Y A A A F A N P K I R A A I D K A H V A P D A S I	A G A R E I A F F P P M T		
UniRef90_Q602K9	V S F Q A V M V A V N E E Y A E D E M E L	K A G D T V A L I I P P V S G G		
UniRef90_D2UBY7	R L P E D V L C A V N M D Y A G A D T P V	V K D G D E V A F F P P V T G G		
UniRef90_H5SQW8	L R W P A Q R L R V A V D G A F A D W G D A L	R D G T E V V F I P P V S G G		
UniRef90_A9D498	A L A P F R P A R A I A V N R H H A R E D A R L	S D G D E V A F F P P V S G G		
UniRef90_D0L1V2	E Y E A V F A V P Q V R A A I D E E H A D H D E A I	G A A R E I A L F P P M T		
UniRef90_J3C583	R P A N I L A A V N H E Y V N F D H P L	N D G D E V A F F P P V T G G		
UniRef90_UPI0003636B7A	E Y E A A L E Y E N V R V A I N Q E H V E H D A S I	A G A T E I A L F P P M T		
UniRef90_B2SLT6	A F A A L S E R R V L C A I N Q V M A N D S A R I	T D E D E V A F F F P P V T G G		
UniRef90_K9SBNO	G L R W T P A Q L R V A V D G A F A R W E D A L	R D G S E V V F I P P V S G G		
UniRef90_A8FCP4	E L A Q V R D V T R F G I N Y Q F V D A D T P L	Q A G D E V V V L I P P V S G G		
UniRef90_UPI000289CB57	V D A A Q N V M V A V N E R Y T R G N A E R S G D T	V A F I P P I S G G		
UniRef90_D8LMR2	V A L Q Q T M T A V N E Q F A T D A T V L V	K D D D V V A F I P P I S G G		
UniRef90_U7G6D5	G L Q P V A A T V T L A L N Q E Y L D P D A T L	K E G D E V A F I P P I S G G		
UniRef90_UPI0003B77ECE	A L A Q A L E A P R R M V A I N E V L G N E D S V	V E A G D V V A L F P P V T G G		
UniRef90_I3REF8	G L R L A G G L A A V N Q D L A D P D T P L	R E G D E L A F L P P V S G G		
UniRef90_B6YUC8	K F K K E V E D A D A N I A V N G R Y V S W D E K L	K D G D V V G I F P P V S G G		
UniRef90_UPI0003792709	V F A E D D D L A D V N V S R N G R Y V S F D E V L	N D G D T I A L F P P V S G G		
UniRef90_UPI000379A741	T W Q K L F S G G G V R A A I N H E L V D D M A T	D F E D D E V A F F F P P V T G G		
UniRef90_UPI00045E6CA2	V W A R A V P D E R I L I A I N Q E Y A D G H P V	R D G D E V A F F F P P V T G G		
UniRef90_Q1IPZ2	P E L L P P P E Q I L V A I N L D Y A D W D S L V	V A F F F P P V T G G		
UniRef90_S2X8W7	E M A R F E K S L A I A V N L E Y S A H S Q P L	K E G D E V A L I I P P V S G G		
UniRef90_H3ZL40	K F K E E I D S A D V N I S R N G R Y A S F D E E L	Q P N D V V A L I I P P V S G G		
UniRef90_TOC8U5	E A K P S L E K V M V A V N Q V L V P A Q T V L	K D G D I V A L F P P T S G G		
UniRef90_UPI000472EE44	R F A L L H E Q Q V L S A V N Q R M C K S D A P L	S P G D E V G F F P P V M G		

UniRef90_A5FZJ8 G
UniRef90_UP10003B5229A G
UniRef90_W1S3Z5 G
UniRef90_D8FVB8 G
UniRef90_A0P6L7 G
UniRef90_T0GKY8 G
UniRef90_U7GL83 G
UniRef90_I2GE56 G
UniRef90_R9PT97 G
UniRef90_E3I533 G
UniRef90_UP100041CBD9D G
UniRef90_D3FW88 G
UniRef90_L7U5W9 G
UniRef90_Q5WJL8 G
UniRef90_D7N131 G
UniRef90_UP10003B37D36 G
UniRef90_UP10003814639 G
UniRef90_D8IT39 G
UniRef90_UP1000406F9AD G
UniRef90_UP10004795F9B G
UniRef90_UP10003674E1D G
UniRef90_A0A024PHD8 G
UniRef90_UP10004252CE8 G
UniRef90_UP10003748419 G
UniRef90_UP100037E2728 G
UniRef90_U7NU83 G
UniRef90_O31706 G
UniRef90_F3WT96 G
UniRef90_UP100037328F4 G
UniRef90_F5Z491 G
UniRef90_F6EV55 G
UniRef90_D3PKL1 G
UniRef90_C6WVH8 G
UniRef90_UP100026273EC G
UniRef90_A0A024DTD9 G
UniRef90_I4EE09 G
UniRef90_A0A023D109 G
UniRef90_B5JMX9 G
UniRef90_UP1000382DEE5 G
UniRef90_S2KRS1 G
UniRef90_A0A024PRK5 G
UniRef90_UP100029B0C87 G
UniRef90_A7IHU6 G
UniRef90_H2AI15 G
UniRef90_K2LRD6 G
UniRef90_Q1QVS9 G
UniRef90_UP100037D5BD0 G
UniRef90_UP100035CEE8A G
UniRef90_UP100047B11E6 G
UniRef90_UP10003658CB6 G
UniRef90_M8D901 G
UniRef90_UP1000465D729 G
UniRef90_A9I045 G
UniRef90_UP1000364056A G
UniRef90_K6DRD3 G
UniRef90_C7JGM8 G
UniRef90_F5SIP0 G
UniRef90_UP100046F2CE0 G
UniRef90_UP1000476C07C G
UniRef90_UP10002260356 G
UniRef90_D3SER6 G
UniRef90_W9VFU6 G
UniRef90_R8GDH5 G
UniRef90_UP100047B7D2E G
UniRef90_D5BW53 G
UniRef90_A4WNE4 G
UniRef90_UP10002F03156 G
UniRef90_UP10002E63967 G
UniRef90_Q602K9 G
UniRef90_D2UBY7 G
UniRef90_H5SQW8 G
UniRef90_A9D498 G
UniRef90_D0L1V2 G
UniRef90_J3C583 G
UniRef90_UP10003636B7A G
UniRef90_B2SLT6 G
UniRef90_K9SBNO G
UniRef90_A8FCP4 G
UniRef90_UP1000289CB57 G
UniRef90_D8LMR2 G
UniRef90_U7G6D5 G
UniRef90_UP10003B77ECE G
UniRef90_I3REF8 G
UniRef90_B6YUC8 G
UniRef90_UP10003792709 G
UniRef90_UP1000379A741 G
UniRef90_UP100045E6CA2 G
UniRef90_Q1IPZ2 G
UniRef90_S2X8W7 G
UniRef90_H3ZL40 G
UniRef90_T0C8U5 G
UniRef90_UP1000472EE44 G

		10	20	30	40
UniRef90_UPI000371D53F	V K	V L F F G V L K D L T G L S E E M V E A P A T T L G G L L D R Y A E R F E			
UniRef90_UPI00047A4652	I R Y F A W V R E R I G L S E E R L A L P E T T A G D L V R W L S G R G D				
UniRef90_UPI0003119F17	K V Y F Y V A W V R E R I G R P E E D I P V D V E T V V A D L L L W L K G R G E				
UniRef90_UPI0003B4048D	V K V L Y F A S L R E L V G H P S T T I A L E S P T V V E S L W S Q V N P D I E				
UniRef90_H01YS1	V R V K F L A E L R E R V G Q S D V T I H L D S R D V V A G L K A A L A E R D T				
UniRef90_B5EQ86	M I H K V F F A S V R E R V G I G E M S L P P M P G A T V V A D I L L A L A E R D T				
UniRef90_UPI000366AF1D	M T R L V Y F A W V R E R I G T G E E E I P A E V T D V V A G L L A F L Q A R G D				
UniRef90_B8HPU5	V T V K L F A A Y Q E A L G V P Q L V L E L P P G T T V N D L G D R L Y R T H P				
UniRef90_A3YWV1	M I R V R L F A S L R E Q A G W G E R S L E E S P A P T P A S L W Q Q L				
UniRef90_K2C684	M I E V I L F F A T L L K E R I G K R Q I N I E I S E P S V S R L L S E I V S N Q Y P				
UniRef90_J2GYP1	T I L L F F A G L A E R A N A R E V Q Q L L E G A T V V S D L L Q A V E K E K Y P				
UniRef90_A0A023X023	K V V F F G G A A A D R A G V R E K V P V P D E T L G G D L W E T L L A D T S P				
UniRef90_K9P9D4	V R V R L F A G L R E R A G W G E R L I P P L D A T T A A G L L W R Q L A D T S P				
UniRef90_A0A059BV45	I K V L F F A R A R D L T G L S D V H L E E V P P G S T A S D C				
UniRef90_C5A2S5	V T V R Y F A R Y R S L V G K G E E E V E L P G A T V V M D L I K E K I K E M H P				
UniRef90_Q6L061	M I R I T Y F F A A A R D R S G S T D N E E Y I E F F K G G S V R E L R V M L M E R Y P				
UniRef90_D3DJ31	M K I L Y F S I I K E K L K R S E E E I E F F K G G S V R E L R V M L M E R Y P				
UniRef90_D5VBH1	V T V L Y F F A S L A E Q A G I D D E E I L T T S H Y Y L L N D L Y S Y L L D K Y D				
UniRef90_UPI00035E8418	M K I L C F A H L S E Q L G A S S M E L E L G P I S V A D F M A E L K N R Y P				
UniRef90_UPI00046F996E	L K L L F F A G L A E H F G S P E L I Q D Q E L T P Q E L K A L L A A R Y P				
UniRef90_W8KKF8	I T V R Y F A S L R E Q L G A S E A S V S A D G I C V A D V W Q R				
UniRef90_B2Y189	I V K V L F F A T L R Q R A G M K A L E L D V P E M S V Q G L I R E L L G R D Y P				
UniRef90_E8WWJ5	V V R V L Y F G V L K D F V G V A E E S M H L D G S G V V G L I V R D L A G R S S				
UniRef90_C1EJ53	V Q V Q V L Y F A R A R E A T G V T E E S F E V E G A D T D A L R A A L V A K H P				
UniRef90_A0A033UYA9	M K V L Y F A H L K E I I N I N E E Q I T L L N Q D S V L N F K Q Y L V E K H P				
UniRef90_H8IAG4	M L K F R L F A N F R E K A G K K E I A L L D V V N G D T V V M D A V R A L I E A Y P				
UniRef90_F8IKK9	V D I R L F F A N V K E L A G Q D K L E L L D V V D D A T V V S D V L R A L I R Q A Y P				
UniRef90_O28649	M V R V K L F F A N F R E A A G V K V E V E A G T V G E V L Q E L V R R F P				
UniRef90_UPI000395DCAC	M I E I R F F G L L R E R I G E S V I S L E V P T P P V V S E L I K H I E Q N T				
UniRef90_Q8ZY1	I H I K Y F F S A L R D I T G K T S E T I E L P G Y T L G G D V I N W F F K N Y P				
UniRef90_W8A008	M I T V L L F F A G L E E R I G Q P R L A L P F A G K A I F Q L K A H I E E V Y E				
UniRef90_L0NDC4	M T K L I Y F F A W V R E R I G K P F E E E I L D L V K T V R D L L V H L K T L G E				
UniRef90_C6D8P7	K L Q L F F A G L S D R F G S P V I Q I E T D T P T V A A L L K Q E L A S R F P				
UniRef90_Q67JI8	K L F F A A A A D A V G R R T L E G D W A G R T T A Q L L E I L T Q Q Y P				
UniRef90_B8ESR5	M K A L Y F F A A V V R E T I G L A E E E I P P D V A T I I T D L M V W L S Q R G E				
UniRef90_B5II54	L Q V R L F F A R L R E E A G W G E R R W P L P A A G V V S T P L D I W R Q L K L				
UniRef90_Q5HLX9	M K I L Y F F A E L K E I L N R S T E T I H L D T T T V Q E V F E S Y L L K H H S				
UniRef90_T2LDU2	V R V K F L A E L R E R V G E S E T V V S L D Q R D I V S G L K A A L A E Q D S				
UniRef90_A0A015KZY3	M M K I H L F F A G L A E R L L G S H E L E L E S E A M T V K A L K A L K A L L A A L Y P				
UniRef90_F4B937	M I K V K Y F F A F I K D I T G K E E E T D L N C N T I D C				
UniRef90_H1G512	I T V L Y F F A S L R E F A G R P R E D M D A G E L V R R A L I R C A L V W R R A				
UniRef90_V9G7Q6	V S I L L F F A G L A D R I G T S F L T F N V P T L P L A D L K L L S E A Y P				
UniRef90_UPI00047112DF	I E L L Y F F A R V A E M L G R R G E T L P L P E P D T A G L R A A L T A R Y P				
UniRef90_UPI00035E070D	V N V F F F A R L K R E I G T E S L S L D V E A A A D V R Q I A A A I E Q P				
UniRef90_D8RBE3	V E V L V F F F A R A R E I V G V S Q M K L E L A S S T T R D C M E E L L S R F P				
UniRef90_K9CMC7	V T L V Y F F A W V R E A I G R D E E E L A S P D E T I I A E L V A R L L A A Q G G G				
UniRef90_A3HUR8	M Q V K Y F F G V I A E A A Q R D S E N I A E N N M T I L A Q V L M E L S T R H				
UniRef90_UPI0003770E35	K V R Y F F A S L K E D L G R S E D I L E A S L L T V R Q I W Q H S L K E D Y T				
UniRef90_D5EMF1	I T I L Y F A Q L A E L A G K T E E Q R H V D S S S V E Q L K Q H H S L K Q H L S T N F P				
UniRef90_I2EUC0	K I L C F G I T R D I I Q G Q F E Y A T S L E S A T V A D L T H E I S K T A P				
UniRef90_G6XTL4	V T V E Y F F A Q M R E I A G H R T E V I S T V S T S A E P L Y E E L L R				
UniRef90_UPI0004727498	V T V L V Y F F A A L R E R I G R E E L A I P P E G L V V S A L L A R L A A D A R				
UniRef90_UPI0003652AF4	M I T V K Y F F A S L R S I I A G K E E D Q F N G S E T T L I N L T H E I S K T A P				
UniRef90_A2SG18	V V Q V R Y F F A S V R E A L G P G E T T V E L A T G T R L L S G L R D Q L I A R G G				
UniRef90_I7KNN7	M K V L Y F F A E I I K E I L A K Q S E D I D L S L Y I T V D E F I T D L F K R Y P				
UniRef90_UPI0002EE9921	V S V L L F F A G L A E R A G T R Q L L E V E P E G A T V V E F L L L Q Q I G Q T A P				
UniRef90_F2KP21	M P V K V K L F F A N F R E I A G C K E L E V S A S K S L S E V E K L I C D R L I A E H P				
UniRef90_M5DWT2	M K V M M L F F A R L R D E I Q T F F I D L E P P S L A T L K I S K I S E N Y S				
UniRef90_K9WUT3	V N V K L F F A A Y Q E A C G V S E L V E E F P P G T T V A A I C D R L I A E H P				
UniRef90_F4GQC2	I K V M Y F F A Q V D A L T C V R E E E A W P L S E P S G S D W L A A L G Q R Y P				
UniRef90_UPI000237DFFA	I E L L Q Y F F A Q L Q D E V G R A H E R R H T S A P T A A A L Y D E L R				
UniRef90_UPI0003825298	V S T V L Y F F A S L A D Q A Q Q G Q K L S L D K A S P L Y S Q L Q A				
UniRef90_J8TWZ5	M I K I L L F F A E L S E Q A Q Q S G E L F I E A E G K S I A A F K D L L Q K S Y P				
UniRef90_W0PDS6	M I N V L L Y F F A R I A A E L T G K R T E Q L A L P A P T V T A W L A Q L H E A Y P				
UniRef90_UPI00014CC4C7	M K I L Y F F A S L K E N L K T S E D D I R F D S P T I L L I K K E L I D R Y G				
UniRef90_A0A023NRT4	V N N L Q Q Y Y A Q L R E Q A G Q S S G E Q V Q T A A S S L T R E L I R I R H				
UniRef90_E1Z8N1	V T V L Y F F A R S R E L S G T S E A R I S L P G S T T K T L M Q Q L L S Q Y P				
UniRef90_Q3AVN8	M L R V V L L F F A S L R D R A G W E E R S I P V S G I T A A Q V W D Q L E L L G P				
UniRef90_1J1Z37	M N I L L F F G I A K D I A G K S V I Q F E T E N P V V A D L K N R I L F H Y P				
UniRef90_UPI0004758A0B	V S V L L F F G V T R D L T Q G S K V S V P L E E A R V A D L L S L Q Q Y P				
UniRef90_S8CMC2	M I N V L L Y F F A R A R E L T G I A D V S L E V P G I T A L D C F N E V I S R Y P				
UniRef90_UPI000362AF6C	M N K I M L F F A Q L K E D M G K S L M K V E V S V G K T V V G E L R V F L E E E T P				
UniRef90_UPI0001746B55	V R V L Y F F S V V L K D L T G I E E G V I T L E G A T V V A D L T H L F Q N W P				
UniRef90_W4IC73	I T I R L F F A G L A E I I G S S S L T F H A T E N T A G K L K E L L S T Y K P				
UniRef90_C7PD88	M R I L L F F G I A K D I A G A P V I T A E E I T T V V A A I R A W L T K T Y P				
UniRef90_A0A038UVB0	M I T V L Y F F G A V R E A C K V A H E K I S S E L E G T T V V D G L V V D Q L Q D Y P				
UniRef90_UPI0003B5A3E0	M I N V L C F A H M K D I F G G E K L T I N S G G A T V E D V L E H E H L K T A Y D				
UniRef90_UPI000364D7F2	M L N L L Y F F A R V A E L V G K R A E A W P L A A E T T G E L V D Q L L Q D Y P				
UniRef90_V5BQU5	M I K V R Y F F A S L L G E H L G R S E N D L E A Q G M S V K D I W V L S T S G				
UniRef90_K9V389	I S I K L L F F A A Y Q E A Y A G V P E I K L Q F P E N T V Q G V C D R L I A E H P				
UniRef90_TOLA25	V H I K Y Y A K Y A E Y A G T K K E D L E V E N M T L L Q Q L L A F L K G K Y P				
UniRef90_K2MMG1	M K L V Y F F S W V K D R I G M A E E E V E L P V K T V V A D L L A W M P G R G A				
UniRef90_UPI00026CCE43	I E M L Y F F A W V R E R I G R G S E V V D P P G E T V V A D L L G W L I A D G S A				
UniRef90_A4CWZ0	I V Q V L L F F A S L R D R A G W S S R P F T L L S G C T A R D I I W Q L L				
UniRef90_UPI00047E749D	V T T L L Y F F A S L R D A A G A A S E P I E T A A P D L V A L Y A E A Q A				
UniRef90_L7WQ89	M K V L L F F A E L K D M I N Q Q S E S I D L S E K T V E V F K P D L L Q R H P				
UniRef90_D0MIB8	L R V L L F F S T L R E R L G S S E L E V F V P A P T G S R L L D Q L L A Q A Q Y P				
UniRef90_UPI00046E7C4B	I N V L L Y F F A S L A D E A N C C Q Q E Q V T A P D T S L A Q L Y E Q L R D				
UniRef90_W4AM51	I P L L L F F A G L A D R I G T G S L A F N V P G L T A G E L L K S L L S E A Y P				
UniRef90_UPI0004679039	M T R L I Y F F A W V R E R I G V A E E I S L P V T D V V A G L L T F L K G R G E				
UniRef90_N0AWT4	M E I L L F F S H L Q E T V G A P K I T W E V P I S V G Q L L K Q T L A E K Y P				
UniRef90_T0ZA52	I A V Q Y Y A L L R E Q A Q Q C A G E S V R T A A G T P S E L Y R E L K T R H				

50 60 70 80

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

UniRef90_UPI000371D53F G
UniRef90_UPI00047A4652 G
UniRef90_UPI0003119F17 G
UniRef90_UPI0003B4048D G
UniRef90_H0IYS1 G
UniRef90_B5EQ86 G
UniRef90_UPI000366AF1D G
UniRef90_B8HPU5 G
UniRef90_A3YWC1 G
UniRef90_K2C684 G
UniRef90_J2GYP1 G
UniRef90_A0A023X023 G
UniRef90_K9P9D4 G
UniRef90_A0A059BV45 G
UniRef90_C5A2S5 G
UniRef90_Q6L061 G
UniRef90_D3DJ31 G
UniRef90_D5V BH1 G
UniRef90_UPI00035E8418 G
UniRef90_UPI00046F996E G
UniRef90_W8KKF8 G
UniRef90_B2YI89 G
UniRef90_E8WWJ5 G
UniRef90_C1EJ53 G
UniRef90_A0A033UYA9 G
UniRef90_H8IAG4 G
UniRef90_F8IKK9 G
UniRef90_O28649 G
UniRef90_UPI000395DCAC G
UniRef90_Q8ZYL1 G
UniRef90_W8A008 G
UniRef90_L0NDC4 G
UniRef90_C6D8P7 G
UniRef90_Q67JI8 G
UniRef90_B8ESR5 G
UniRef90_B5II S4 G
UniRef90_Q5HLX9 G
UniRef90_T2LDU2 G
UniRef90_A0A015KZY3 G
UniRef90_F4B937 G
UniRef90_H1G512 G
UniRef90_V9G7Q6 G
UniRef90_UPI00047112DF G
UniRef90_UPI00035E070D G
UniRef90_D8RBE3 G
UniRef90_K9CMC7 G
UniRef90_A3HUR8 G
UniRef90_UPI0003770E35 G
UniRef90_D5EMF1 G
UniRef90_I2EUC0 G
UniRef90_G6XTL4 G
UniRef90_UPI0004727498 G
UniRef90_UPI0003652AF4 G
UniRef90_A2SG18 G
UniRef90_I7KNN7 G
UniRef90_UPI0002EE9921 G
UniRef90_F2KP21 G
UniRef90_M5DWT2 G
UniRef90_K9WUT3 G
UniRef90_F4GQC2 G
UniRef90_UPI000237DFFA G
UniRef90_UPI0003825298 G
UniRef90_J8TWZ5 G
UniRef90_W0PDS6 G
UniRef90_UPI00014CC4C7 G
UniRef90_A0A023NRT4 G
UniRef90_E1Z8N1 G
UniRef90_Q3AVN8 G
UniRef90_J1KZ37 G
UniRef90_UPI0004758A0B G
UniRef90_S8CMC2 G
UniRef90_UPI000362AF6C G
UniRef90_UPI0001746B55 G
UniRef90_W4C173 G
UniRef90_C7PD88 G
UniRef90_A0A038UVB0 G
UniRef90_UPI0003B5A3E0 G
UniRef90_UPI000364D7F2 G
UniRef90_V5BQU5 G
UniRef90_K9V389 G
UniRef90_TOLA25 G
UniRef90_K2MMG1 G
UniRef90_UPI00026CCE43 G
UniRef90_A4CWZ0 G
UniRef90_UPI00047E749D G
UniRef90_L7WQ89 G
UniRef90_D0MIB8 G
UniRef90_UPI00046E7C4B G
UniRef90_W4AM51 G
UniRef90_UPI0004679039 G
UniRef90_N0AWT4 G
UniRef90_T0ZA52 G

		10	20	30
UniRef90_B7K664	I	T I K L F A A Y Q D S Y G V P E L Q R E F P Q T T V K G	V L D S L I H E H P	
UniRef90_UPI0002260767	I	E L E Y F A A Q L G E Q A G R V E T R E T S E T T A A A	L Y E E L R A	
UniRef90_G4RP93	I	L K L K Y F S A L R D I T G K V S E E L E V S G D T L	L V K W F F K E Y P	
UniRef90_A4CL87	M	T V L L F G V T R D I D V G N G S L S I P M N Q A T V A D	L K T Y L K K M Y P	
UniRef90_V7ZHA5	I	L Y F A S L R E E A A G V A S E Q V H S D A	Q D L R A F Y A E D K	
UniRef90_A1AWX7	M	K I L Y F A S L L K E S L K L S S E E I I L T N T T T A Q	L K K Q L I D R H G	
UniRef90_W6LV57	I	D I K Y F A S L R D R L G R A E D R L D A A T E T V A E	V W A L L	
UniRef90_B8KRP2	M	M I R E T L D T E S L Q I D W S L A D V E S L K S V L S S R G A	S S R G A	
UniRef90_UPI0002B4AD83	I	K T L F F A R A R D L T G T N D V L L E I P G S T T K D C	C L D K I I G K F P	
UniRef90_UPI00047B79D2	I	K V L Y F A S L K D R L G L S G D E L K I E A P T V L E	V W Q R L N	
UniRef90_A8UU28	M	P R V V Y F S V S L R D R L G L S G D E L V Q F R G S V S K	L R E F L K E K K H P	
UniRef90_U4T7Y1	I	N V L Y F A S L L A D E A N C Q Q E T V T L Q Q S T L T E	E Y E Q L C Q K H P	
UniRef90_L0EHU3	M	T V R L F A G L A E R L G G N E V R V S E G G M T A G K	L K A L A E R F P P	
UniRef90_Q9K818	M	E I I L L F A E L S E K A E T D R R L L L A G E G K T V G E	L K E M V I A K E I P P	
UniRef90_UPI0004755EB8	I	V T V K L F A A Y Q D C K V P E L V L E F P A P S V S A	V R D R L I A A K Y Y G	
UniRef90_Q6SH11	M	M K I L Y F A S L K E N L N T A H D E I L E F P A P S V S I	I K K Q L A A R D A	
UniRef90_B1TC02	L	T I K Y F A S I L R E Q L H T D E E E I D A D E V T V D A	L R G T L A A R D A	
UniRef90_UPI00046E6E02	L	N I K Y F G M L L A E A T A T H E E Q M Q I E T C S V A Q	L L E K L N H R Y P	
UniRef90_UPI0003583CB	M	L Q I H Y M A K L R E E L D V S N E R I D W A G G T V D E	L L N V L R G R G E	
UniRef90_Q1GU01	I	Y F A W V R E R M G M A G E L V P L A D V A A A A R D E	A A R D E	
UniRef90_K9ZYH0	V	T V L F F A R L K R E A G T E Q V H V E L P G G S A R D C	L A A G V I S E Q H G	
UniRef90_B9IQ84	I	K V L F F A R A R D I T G L A D M Q L V E V S G S T T S D C	L C L N K L I A R F P P	
UniRef90_M1YZS9	M	R V L L F F A G L G E K I K G R G A V E V E H E G M S L E D	L R L F I A E R F Y P	
UniRef90_A0A024UMH1	V	K V L Y F A A A R E M V G R R E E S L E L Q P T T E T T I	C E K Y P	
UniRef90_UPI00046EFB6	M	I K V L L F F A G L A E E A G T H E L E F F L G M T I N D I	I R R R I V D T Y P	
UniRef90_G2INA7	L	R I L L Y F A W V R E R I G L D E Q E I A P P A P T V A A	L L D R L L V A A Q S A	
UniRef90_UPI00047ED8DD	M	M N V L L F F G I T K D I V G S S E I S F E L K P T S V A S	L K K R L I E S Y S P	
UniRef90_I3BTA1	V	K V L F F A S L R E R L G K S H V L L D A E S L S V R D	V W L R S S G E	
UniRef90_UPI00034CF470	V	K V K L F F A I Y Q E V F D T P E L D L V L P Q S T V N N	V L Q S L I E Q K Y P	
UniRef90_Q10WN5	I	T L K L F F A V Y Q E A Y K V P E V Q L S I S G T T V S Q	L L E R V I S Q Y P	
UniRef90_J0Z8E1	I	S F L F F A R S R E L A G T D T Y D V E A D G A S T Q D A	L Q A V L K K F P	
UniRef90_D8U2Z7	I	V L F F A K S R E V A G L S E Q V F E A D G G N T E D	L L H Q I I S A H	
UniRef90_K1X7Y2	V	T V K L F F A A F Q E A Y G V P Q L V W E F P N G T V S H	I L D V A I C D R L I	
UniRef90_Q8YP47	I	T I K L F F A V Y Q E A Y G V P Q L V W E F P N G T V S A	V C D R L I A E R P	
UniRef90_UPI00047E4FFA	I	K T L F F G I T A D L V Q H S E L D I S V D E S T I V A S	F K S I L L K E K Y Y P	
UniRef90_UPI00036D9472	V	N V V F F A R L R E S G L E T A T E D E T P G A T V R E	L A A E V E Q E Q T I	
UniRef90_F8L7Q9	M	K I I I Y Y A L L R Q E R G V P E E T V F E F E K N T V R E	L L F N M L K A L H	
UniRef90_UPI000371B980	L	N I A L F G I A R E I V G Q P T L E I D A A G Q S A R G L	L L A E L H A R Y P	
UniRef90_UPI0003B6AE54	V	T A V F F A R L R E A G T D S L L A V E L P D A T V R E	A A A Q L E E A R	
UniRef90_H8GT97	V	K A V F F A R L K R E L G H G E L T L D A P G A T V R H	L A E Q I E A A H G	
UniRef90_UPI000472E970	I	S I R L F F A G L A E A L G S Q T L D V P P E Q V T A G K	L K K E L L S A S Y Y P	
UniRef90_F2L436	I	R V K Y F S A L R D I T G K I A E E L D V P D D T L L G E	L V D W F F K T Y Y P	
UniRef90_Q7A441	M	K V L Y F A E I K D I L Q K A Q E D I V L E Q A T V Q Q	F E D L L F E R Y Y P	
UniRef90_T0QYMO	V	R V L Y F A A A R E E L L G L R E E K I D L D A P T T F R A T	L A T K Y P	
UniRef90_U5QLE4	I	H V R L F A S Y R E A F E R D E L E L E V P G T T C T Q	L T Q L Q A A E Q	
UniRef90_UPI000360C88E	M	E M L Y F A W V R E G M G R A S E T V D A P L A S V A D	L V D W L A A R D D	
UniRef90_F2JU30	I	K V Y F A S I K E M L G K D S E V I E L D A S S V S D	L K E R L L A S Q Y A	
UniRef90_A5GWZ1	I	T V R L F F A A L R E Q A G W D Q R S W P L S G A N A L S	V W Q A L L	
UniRef90_UPI00040A3AA3	V	H V L A F G I A R D E Q A G W D Q R S W P L S G A N A L S	E A K Y P	
UniRef90_B4WJV0	M	T I K L F F A A M A E E A D E E T I K L P W E G M S T A D	V R D R L I T D Y P	
UniRef90_U1X4D6	M	K I Q L F F G S K D I V G R E E L A L P K D P S T V R D	L K K W I L Q K Y P	
UniRef90_G0J848	I	R V L K L F F A V Y Q E T L G R S E K E M V L P G T T A G E	L Q K W I L Q K Y P	
UniRef90_K9VYH1	V	T V K L F F A A Y Q E A Y N L P E I V L H L P P D T V V A	V L E Q I N Q H P	
UniRef90_T1AR31	M	R I K Y F A T L R D L S G V D E E D L T V D T S I E H	K T R D L V S Q H G	
UniRef90_L8MY75	V	T V K L F F A I F Q E V F A T D E M Q M H L S G T S V S E	V F D R L L V S Q H G	
UniRef90_D5ET72	M	K V R L F F A N V R E K A G T S E E V E V N G D T V S E	I L D E I I A A K Y P	
UniRef90_UPI00034BD299	I	L V L K L F F A V Y Q E T L G R S E E Q T L E V V Q G T T A	S D V C D R L I A Q Y P	
UniRef90_U7PFG4	M	M K V L Y F A E I K D I L Q K G T E E F F E L E M T V E A	F E K Y P	
UniRef90_UPI0003B7953C	I	N V L A F G V A K D I F G S G E V S L E M S N A T I Y N	L K Y L L E Q Q Y P	
UniRef90_UPI00036DED01	I	I I I R L F A G L A E A L G S S S L A F Q S P E T T A G R	L K E L L C A S Y Y P	
UniRef90_UPI00016C4913	L	T V K L F F A A L R D L A G S D T V T V L D G T T V G A	L R L E L G N R L P	
UniRef90_L8LMH6	V	T V K L F F A A Y Q E A Y G V S E L E R C F P Q E T V G A	V L E Q I N Q H P	
UniRef90_UPI00034D950D	V	T V K L F F A A F Q E A I A T D A M Q I T L P D A T V R Q	V Y D Y L V I D H P	
UniRef90_T2JDU4	V	T I K L F F A I Y Q E V V Y G I P E L I R Q T P E T T V S E	V L S L V I E E H P	
UniRef90_UPI00036CCE60	I	H V Q C F A G L G E L I Q G A V A T V E A H G S T V A E	L K G I M A V R Y P	
UniRef90_K9T317	I	R V K L F F A A Y Q E A Y G V S E L K L S T Q G T P V Q A	V L D Y I L R E H P	
UniRef90_X5JG79	I	T V K L F F A I Y Q E V F G V K E I V V M K F P Q S T V F A	V C E R L V A E C	
UniRef90_F8EIB4	M	T I I L S F G I A K E I I I G Q L E L S V Q L D T A T V F A	L L K Q F I L S A E F T	
UniRef90_W2UR90	M	R V K Y F G M L T E T H C S E E Q L A F S G T T V V E	V L R S A E E R Y G	
UniRef90_M5A6V6	M	A R V R L F F A S A R E A A G T G D T V I D G A T V H D	V L R S A E E R Y G	
UniRef90_H0NZC1	I	K L R Y F A S L L Q E Q A K V A E E S L V T K L N T Y Q E	L Y D S L A K R H	
UniRef90_UPI00047AC4F5	M	T I A L F F A G I A D R I G S R A L E L S W E E A T V A Q	I K Q R L Q A Q Y P	
UniRef90_W7DC76	M	T P I K F F A F I L I Q K A G T S E V S K L D L S N K T V A D	V R Q L V S K E I P	
UniRef90_UPI0003B4A11B	M	A D I L Y F G R L S D I T R K P T E T S I D L P S S H A R D	L R S W A I A R F Q	
UniRef90_E8U2Z4	I	T V I L F F A R L R E A G A L E T L H L E L P G A T A R D	A A H A V E T Q H P	
UniRef90_B0JQH3	I	T V K L F F A I Y Q E V Y Q T S Q L N L E E F P A H T V T E	V L N Y I I A P Y P	
UniRef90_Q12W49	V	K I K L F F A N L R E I L A G V S E E L E E G D I P T A A D	L D D L L Q N D H P	
UniRef90_W4C5B0	L	T I I Q L F F A G I A E R L N T S L E E F G D I P T A A D	I L D E L Q N D H P	
UniRef90_E0SRF3	I	R V R L F F S L Y R D D V V G R E Q I E I E V S G I S V N E I	L K E K I S L A Y M D M Y	
UniRef90_Q9RR88	V	R A V F F A R L R E V G L E E E L T L D V D G A D V R A	V A E H E E Q E R G	
UniRef90_H3ZKR1	M	K V R V R F F A T L R G I V V G K S E L E V Q A E T V G E	L L E K L Y N E Y Y S	
UniRef90_K2NZI4	M	Q V L L F G I T R E I L T S Q D V L D I P A S E K D V G Q	K A Y K Q K Y P	
UniRef90_W2UGY5	M	D V L L F F G R L G D F A K Q V P A T M Q A L T P A E I	I R D L L A A D F P	
UniRef90_D4TJH4	V	K I K L F F A A Y Q E A Y G V T E L E W E F P P H T V K S	C D R M I W E H P P	
UniRef90_K9SSA7	V	N V K L F F A A F Q E V I S Q P E I Y L D I P Q H S V S L	V Y E K L A T A H P P	
UniRef90_UPI0002F8FB0C	M	N V L L F F A G L K E K I G N S R I T L P V E E T T A G N	L R K M Y E E F F P	
UniRef90_D5WSL7	V	N V L L F F A G L E A D R M N R E T V I E L P G V A V R D	L R G R V G D Q F G	
UniRef90_I3C205	M	N I L L F F G I T R E I V V G D A S L Y I S A E E K T V Q Q	R L F L L M E Q Y P	
UniRef90_UPI0004727D7F	I	K I I L Y F A T V A E A L D R E E E I L L P D G I H T V V D	L L E W L R E R G D	
UniRef90_H8MZ90	V	T V L L Y F A A A R E R A G L S R E S L D V P G S R V S D	V L A L L A A K	
UniRef90_A0A031I3G8	V	T V L L Y F A A W V R E R M G R A H E T V P V T D V A G	I D W L A A R D E	
UniRef90_M4F9Z1	I	K V L L F F A R A R E E L T G V P D L T V K M P G S T T K K C	C M D E L V I K F P	

50 60 70 80

UniRef90_B7K664	E L E T W R D V T R F G / V N F K F V E A D T L L	K D G D E V V L I P P V S S G G
UniRef90_UPI0002260767	A Y G F A L P A G Q M R V A V N A A F R P W T Q S L	K E G D H V V F I P P V S S G G
UniRef90_G4RP93	K A L A L Y K D D V I F L V N G R N A T E S Y L L	R D G D E V A V M P V S S G G
UniRef90_A4CL87	D L G G L S S L A V A V N K S Y A G D G D K I	T N F D E I A L I P P V S S G G
UniRef90_V7ZHA5	R H G L R W T P T Q L R V A V D G A F A R W E D E	R D G S E I V F I P P V S S G G
UniRef90_A1AWX7	K R H F P P N N I L C A V N Q E I A N D A V I I	S E T D K V A F Y P P V T G G
UniRef90_W6LV57	W L D R P L P P N T L T A V N M E Y A E L T Q R V	R D G D E V A F F P P V T G G
UniRef90_B8KRP2	T W A D T L N E T S V I A V N Q Q V V S A D H P L	A D G D E V A F F P P M T G G
UniRef90_UPI0002B4AD83	R L E E I L G C V V L A L N E D Y T T D S T I V	K D G D E L A I I P P I S G G
UniRef90_UPI00047B79D2	P N V D M P D T M L A A I N M E Y V G L D A E V	D D G D E V A F F P P V T G G
UniRef90_A8UU28	E V A D I L D R V K F A V N E E Y V G E D Y N L	E G D E R V A I I P P V S S G G
UniRef90_U4T7Y1	E F S R P Q S E L R V A V N D Y F A K W T D P I	R D G D S V V F I T P V A G G
UniRef90_L0EHU3	S H A G L I H A S F V A R N E V Y A A D D E P L	E S G D E L A L L P P F A G
UniRef90_Q9K818	A L G S L E Q I M V A I N E E Y A N D H M T V	K A G D V V A L I P P V S S G G
UniRef90_UPI0004755EB8	E L D R W R E L T R F G I N L S F V E P D T L L	H D G D E V V L I P P V S S G G
UniRef90_Q6SH11	A Q Y F P E N I M C A V N H E M A N E S T K C	E S D E V A F F P P V T G G
UniRef90_B1TC02	R S G E A L R M D R V R A A V N L L D M V T G G F	V R D E S E V A F F P P V T G G
UniRef90_UPI00046E6E02	K L A N M D F K V A I N N Q L V R P D S I I	N S E A E I A L L P P F A G
UniRef90_UPI00035D83CB	P W Q S T L S P A N V K V A V N Q E I H D Q A Q	V A P D A E V A I L P P V T G G
UniRef90_Q1GU01	R G A S A F A E P R I R A A I D G A M M G P D A P	G A G A R E V A L F P P V T G G
UniRef90_K9ZYH0	V S L Q G C M I V L A L N E E Y T T E A A I V	K E K D E L A I I P P I S G G
UniRef90_B9IQ84	S L E E R G C I V L A L N E E Y T T E A A I V	K E K D E L A I I P P I S G G
UniRef90_M1YZS9	E T K E V L F Q A M M A V N H E Y A L P H Q Q L L	H P D D E I A F I P P V S S G G
UniRef90_A0A024UMH1	R A A Q Y L K D I T I A I N L E Y V A E G D V I	A H G D E V A L I P P V S S G G
UniRef90_UPI000468EFB6	G I S H E I E R A M I A V N E E F V N E E L Y	S D Q D V V A F I P P V S S G G
UniRef90_G2INA7	G H A A A F E R G R G L R A A L D Q R F V P L D T P V	G E A Q E L A I F P P V T G G
UniRef90_UPI00047ED8DD	E F S K L N S L A V A V N S E Y A D D S V L L	V A F F P P V T G G
UniRef90_I3BTA1	S A L P E N V L A A I N H E Y A E A E S L V	Q S G D E V V L I P P V T G G
UniRef90_UPI00034CF470	Q L A K W Q E V T R F G V N L K F V S S D T Q L	Q D G D E V V L I P P V T G G
UniRef90_Q10WN5	E L E K W Q D V T K F G I N L N F V P P E T I L	Q N G D E V V L I P P V T G G
UniRef90_I0Z8E1	G L S E I E G R C V L A L N Q E Y V V D S D S P L	K D G D E V A L I P P I S G G
UniRef90_D8U2Z7	G L E N V M K S C V F A V N Q E Y V R P C D P L	K E G D E V A I I P P V S S G G
UniRef90_K1X7Y2	Q L Q Q W R D L T R F G V N L E F V P N D T Y L	K D G D E V V L I P P V S S G G
UniRef90_Q8YP47	E L L S Q W R D I T R F G I N L I F V E P D T V L	K N G D E V V L I P P V S S G G
UniRef90_UPI00047E4FFA	Q L E E N L N S Y A I A V N E E Y A S D D L I L	K N G D E V V A I I P P V S S G G
UniRef90_UPI00036D9472	E A G Q I A V S M I A I D R E Y A P E D T V I	H E P G D E V A F L P P V A G G
UniRef90_F8L7Q9	S F R L S E S Q I K V A V N S K V A T W D T L L	S E G D S V I F I P P V A G G
UniRef90_UPI000371B980	A L A S L S S L A V A V N N E Y A A D D A P L	H E R D E I A L I P P V S S G G
UniRef90_UPI0003B6AE54	L G V S L S G G C M V A V N E T Y A T P D H P L	T E G D E V A F L P P V A G G
UniRef90_H8GT97	L S L K G C M V A V N E A Y A T P E Q V I	A D G D E V A F L P P V A G G
UniRef90_UPI000472E970	E A A G Q I A V S M I A I D R E Y A P E D T V I	S P S S E V A L I P P V S S G G
UniRef90_F2L436	K A L A Y R D D V I F L V N G R N A T E N Y L L	R E G D E V A I I M P P V S S G G
UniRef90_Q7A441	Q I N N K K F Q V A V N E E F V Q K S D F I	Q P N D T V A L I P P V S S G G
UniRef90_T0QYMO	H A A E Y I Q D I T L A V N L E Y V L G D D V L	H D D D E V A L I P P V S S G G
UniRef90_U5QLE4	V L E R W G S V V R Y G V N C R F V P P E T P	T D G D E L V L I P P V S S G G
UniRef90_UPI000360C88E	A S A A A L T D A R L R A A V D Q A F V T V D A P I	A G A R E V A L F P P V T G G
UniRef90_F2JU30	Q P E L A S S K T K A A I D Q E F A R D G D D I	D P V T E V A F F P P V T G G
UniRef90_A5GWZ1	G F G D A I P D G T R V A I N Q E F E S P R Q Q L	Q Q G D E L A F L P P V S S G G
UniRef90_UPI00040A3AA3	R L K Q L T S F M M A V N N E Y A T G E C V L	Q Q G D E L A F L P P V S S G G
UniRef90_B4WJV0	M L A P H I P S A M V A I N Q E F A N E E M L	R D G D E V A F L P P V S S G G
UniRef90_U1X4D6	R M G N L S S I G I A V D L E Y A E D D H P	G E A K E A L I P P V S S G G
UniRef90_G0J848	R M G N L S S I G I A V D L E Y A E D D H P	G E A K E A L I P P V S S G G
UniRef90_K9VYH1	K L E K W R N L T R C G V N L F V E P D T I L	Q Q G D E V V L I P P V S S G G
UniRef90_T1AR31	D I R N Q K N V L F A L N E K F A D S R S I V V	R N N N D V L A L F P P V S S G G
UniRef90_L8MY75	N L E Q W R S L T R Y A I N L N F A E P H T I L	N H G D E V A L I P P V S S G G
UniRef90_D5E7T2	N L E K L I F E D K L R G Y I N Q H L E G T D S A I	T E K D E V A I I F P P V S S G G
UniRef90_UPI00034BD299	S L A E W R S Q T R F G I N L E F V A P E T P	Q P G D E L V L I P P V S S G G
UniRef90_U7PFG4	E I S G K Q F Q I A L N E E F V P N D E M I	Q P S D V V A L I P P V S S G G
UniRef90_UPI0003B7953C	R L K Q L S S Y M V A V N N E Y A L P G D T I	H E R D E V A I I P P V S S G G
UniRef90_UPI00036DED01	D A A P Q I N V S L V A I I D H E Y A P D D S V I	S E A A E V A L I P P V S S G G
UniRef90_UPI00016C4913	L A R S L L A R S A V A V N H D T T D D E H V	A P A D E C A V I P P V S S G G
UniRef90_L8LMH6	E L E P W R P L T R F G V N L Q F V A P E T P	N D G D E V V L I P P V S S G G
UniRef90_UPI00034D950D	N L E Q W R S L T R Y A V N L D F V V E P D M L L	S N G D E V A L I P P V S S G G
UniRef90_T2JDU4	Q L K K W Q S I L T R F S I N Y Q F V V E S D T K L	Q D G D E L V F I P P V S S G G
UniRef90_UPI00036CCE60	H A A Q A I L R A F M A V N Q Q Y A A D D H M I	P Q D G D E L V F I P P V S S G G
UniRef90_K9T317	E L E S W R N L T R F G V N L Q F V E P D I L L	I L L I C D G D E V V L I P P V S S G G
UniRef90_X5JG79	Q L S D W R N L T R F G V N L K F V D P D T V M Q	D G D E V V L I P P V S S G G
UniRef90_F8EIB4	D F Q K L A S L R I V A V N T E Y A D D S A R L	H P N D E V V L I P P V S S G G
UniRef90_W2UR90	G L K S L N F Q V A Q N N D I V D L T A K V N A	D L I A L P P F A G G
UniRef90_M5A6V6	E H F T A V L S T C R I V W V N G D D V T P E T I	G P N D E L A V L P P V S S G G
UniRef90_H0NZC1	G F N L S S S Q V K V A V N D E F T T M E N I I	L D Q S T I V F I P P V S S G G
UniRef90_UPI00047AC4F5	E H A D L V A L C F M A R N R A F V S D E T Q V	G A A D E L A I I I P P V S S G G
UniRef90_W7DC76	A I A Q D M D K C M I A V N M E F Q T D S T A L	T D V S E I A I I I P P V S S G G
UniRef90_UPI0003B4A11B	A A G V F L E P T V I A V N G E I V D A H P L	A N A N E I I A F M P P V G G
UniRef90_E8U2Z4	L S L R G C M I A V N E T Y A T P D T P L	S D H D E V A F L P P V S S G G
UniRef90_B0JQH3	Q L E R W R D V T R F G V N L Q F V S G E K I	L K N G D E I V L I P P V S S G G
UniRef90_Q12W49	Q I Q E L I Y D D E I R A Y I N Q H L E G S D T V	N E G D E I A I F P P V S S G G
UniRef90_W4C5B0	E A A S Q I R T S F L A V N Q Q Y A P A D T	S S E D E L A L I I P P V S S G G
UniRef90_E0SRF3	K L K S V F S E I K P L V L I N G A I V D E N N I	D S D D A E I A I I I P P V S S G G
UniRef90_Q9RR88	V S L R G C M V A V N E T Y A S P E H L L	R E G D E V A F L P P V S S G G
UniRef90_H3ZKR1	K M K K E L E K G A V I L V N G H L E K L N T K L	K D D E D V V S I F P P V G G
UniRef90_K2NZ14	G L G R L S S L A V A V N S A Y A N E D V Q I	T C S D E L A L I I P P V S S G G
UniRef90_W2UGY5	D L V R E L N Q P Q V L V S V N K M I V G W D Q P	F D G S E V A F L P P V T G G
UniRef90_D4TJH4	Q L S Q W R D L T R F G I N L M F V D P D T I L	N H G D E V V L I P P V S S G G
UniRef90_K9SSA7	Q L E Q W R A V T R Y A I N L N F V D E T T L L	H D G D E V A L I I P P V S S G G
UniRef90_UPI0002F8FB0C	Q I A D L L D R C M V A I N G E Y A G P E R V L	S P A D E L A L I I P P V A G
UniRef90_D5WSL7	A L K K L S S L A I A V N N K Y A Q E E D N I	K S G D Q V A F I P P V S S G G
UniRef90_I3C205	P W T S V L H P D R V Q V S V N R R F S L L A T R I L	L D G D E V A I I T P
UniRef90_UPI0004727D7F	H P P L A P L P H R V A V V Q Q F V G L D S P V	A P D A E L A L I I P P V T G G
UniRef90_H8MZ9	A G A A A L A D G R L R A A V D Q A F V A I D A S I	V G A R E V A L F P P V T G G
UniRef90_A0A0313G8	K L E E V R S C V V L A L N E E Y T T D S A I V	K H R D E L A I I I P P I S G
UniRef90_M4F9Z1		

UniRef90_B7K664 G
UniRef90_UP10002260767 G
UniRef90_G4RP93 G
UniRef90_A4CL87 G
UniRef90_V7ZHA5 G
UniRef90_A1AWX7 G
UniRef90_W6LV57 G
UniRef90_B8KRP2 G
UniRef90_UP10002B4AD83 G
UniRef90_UP100047B79D2 G
UniRef90_A8UU28 G
UniRef90_U4T7Y1 G
UniRef90_L0EHU3 G
UniRef90_Q9K818 G
UniRef90_UP10004755EB8 G
UniRef90_Q6SHI1 G
UniRef90_B1TC02 G
UniRef90_UP100046E6E02 G
UniRef90_UP100035D83CB G
UniRef90_Q1GU01 G
UniRef90_K9ZYH0 G
UniRef90_B9IQ84 G
UniRef90_M1YZS9 G
UniRef90_A0A024UMH1 G
UniRef90_UP1000468EFB6 G
UniRef90_G2INA7 G
UniRef90_UP100047ED8DD G
UniRef90_I3BTA1 G
UniRef90_UP100034CF470 G
UniRef90_Q10WN5 G
UniRef90_I0Z8E1 G
UniRef90_D8U2Z7 G
UniRef90_K1X7Y2 G
UniRef90_Q8YP47 G
UniRef90_UP100047E4FFA G
UniRef90_UP100036D9472 G
UniRef90_F8L7Q9 G
UniRef90_UP1000371B980 G
UniRef90_UP10003B6AE54 G
UniRef90_H8GT97 G
UniRef90_UP1000472E970 G
UniRef90_F2L436 G
UniRef90_Q7A441 G
UniRef90_T0QYMO G
UniRef90_U5QLE4 G
UniRef90_UP1000360C88E G
UniRef90_F2JU30 G
UniRef90_A5GWZ1 G
UniRef90_UP100040A3AA3 G
UniRef90_B4WJV0 G
UniRef90_U1X4D6 G
UniRef90_G0J848 G
UniRef90_K9VYH1 G
UniRef90_T1AR31 G
UniRef90_L8MY75 G
UniRef90_D5E7T2 G
UniRef90_UP100034BD299 G
UniRef90_U7PFG4 G
UniRef90_UP10003B7953C G
UniRef90_UP100036DED01 G
UniRef90_UP100016C4913 G
UniRef90_L8LMH6 G
UniRef90_UP100034D950D G
UniRef90_T2JDU4 G
UniRef90_UP100036CCE60 G
UniRef90_K9T317 G
UniRef90_X5JG79 G
UniRef90_F8EIB4 G
UniRef90_W2UR90 G
UniRef90_M5A6V6 G
UniRef90_H0NZC1 G
UniRef90_UP100047AC4F5 G
UniRef90_W7DC76 G
UniRef90_UP10003B4A11B G
UniRef90_E8U2Z4 G
UniRef90_B0JQH3 G
UniRef90_Q12W49 G
UniRef90_W4C5B0 G
UniRef90_E0SRF3 G
UniRef90_Q9RR88 G
UniRef90_H3ZKR1 G
UniRef90_K2NZI4 G
UniRef90_W2UGY5 G
UniRef90_D4TJH4 G
UniRef90_K9SSA7 G
UniRef90_UP10002F8FB0C G
UniRef90_D5WSL7 G
UniRef90_I3C205 G
UniRef90_UP10004727D7F G
UniRef90_H8MZ90 G
UniRef90_A0A0311G8 G
UniRef90_M4F9Z1 G

		10	20	30	40
UniRef90_B8GWX4	M A R	V L L F G R L A D Q A G W R E R E I	I E A A D L S T L R A S L S Q A D P		
UniRef90_W9BXV5	M A K	L L F F G R L G D L A G G I R E S I S L S E P S V A L I G V L E A G D Q			
UniRef90_Q7U3F9	M V	R V L L F F A S L R E R A G W G E R S L P F G V S T A R E V W D Q L D L G P			
UniRef90_UPI0003B424E5	I D	V R L F A G L R E H A G T A R T T L E V P G A T A G A A R D A L W A A L G			
UniRef90_I0GI89	M I	K V L L F F G E V K R I L N K D F I E F D F T G S L S A L K N E L I A N T F P			
UniRef90_UPI000479F1D1	V T	K L F F A V F Q E A Y K V P E L V L N F P P K T I S L D A L I L D R L I Q E H P			
UniRef90_UPI0004014CFD	M E I	L L F F G R L G D A S T D L R I D K P K D V S T D T D A L T A W L S K Q N R			
UniRef90_T0ZWW6	M I	T V K Y Y A N L R Q I T G I N Q D S L D Y E E S T L G C L I D D L D R K Y G			
UniRef90_UPI00034A9F27	V T	V K L F F A V Y Q E A Y G L P E L T W Q A P G S A V V G A V L L D R I V V A D H P			
UniRef90_Q05V00	V T	V L L F F A A L R D Q A G W E E R R L P L P S T S V L D L W S V L			
UniRef90_UPI000298BFD1	V S I	L I Y F A K S A E L T G V K A E E I P A P T P S S S Q Q W G L L L Q R H P			
UniRef90_D1CDP8	I K	K L L F F A Q F R E V I G Q K E L L Y K V T G S T P A S V L R S I L G Q Q F A			
UniRef90_E0IBW0	I I	Q L F A G L P E R L G T F E L T L E Q D T M S V K Q L K T I L G Q Q F A			
UniRef90_F2ANQ1	I E	V L L F F A G A S E A A G A D R V I V Q S E N T T A S E L M K Q L A D Q Y S			
UniRef90_Q2JXS8	V T I	Q Y V A V L R E Q A Q R S S E V L Q T S A A N Y L E Y Q Q L Q A K Y			
UniRef90_Q9Z224	D V L	L Y F A K S A E L T G V K A E E I S V P Q K E A S E L W K E L M E L H P			
UniRef90_F8FF45	I L	K L L F F A G L A E S L G A P E L D I T P A G I R P G E L K L L V A G L Y P			
UniRef90_E8QZ60	R V L	V L V F F A E L K R R L N A P V A E L E L P G A T V G D L R R A L E V S H P			
UniRef90_UPI00047A9128	M I Q	V K Y F G M I A E A T S K S E A E E V A L T E K P F S E I L S E I S S K Y			
UniRef90_B6YVU4	M K	K F Y A T F E R E L I G R K E I E V H D L T V G E L I D Y D L A K H Y E			
UniRef90_X4ZNR3	I D M	Y F A R V A E L L G K R A E R L P L P Q P T V Q L W Q E L L E K L H P			
UniRef90_UPI000440D85B	V L Y	F A K S A E L T G I K S E T I S V Q S E S T L Q L W E E I V K K H P			
UniRef90_G1KCD1	V E	L Y F A R S A E L T G V R T E T I S V P Q H T S L Q L W E E I V K K H P			
UniRef90_S2JCC3	I K V	L Y F A G V K D V T C K E S E E I P A D N W T L S D T T L L I T K Y G			
UniRef90_UPI000258EFB8	V K I	L L F A K A R E L T G K K E C Y I T I P K K S Y T D L K D K V I N Q			
UniRef90_K0QYC3	V R L	V L F F A S A R E A A G T T S T T V E L L D A A D T E A L R E K L A A L Y P			
UniRef90_UPI00047C4962	V R I	L F F G A L K E I F G S S E M M E L R E G T D V A H K G L F E M R V T			
UniRef90_E8SEU7	M K V	L Y F A E I K E L V N R S E D V F H D Y P A V D T T L L Y Q T Y P			
UniRef90_UPI00041FD3B4	V K I	A L F G I T K E I I G S S K L K Y E L E N A D V N N L L E R L L K A D Y P			
UniRef90_UPI00045E7CC2	I T	V R F F G M V A E K L G K Q E L V L E N P G N S D R L L E H L N E N Y P			
UniRef90_E0THH4	M V R	V L F F G R L G E R F G A E R D V E V G P A A T V A D L I E T V C G A H P			
UniRef90_G0A347	I K V	R Y F A S L K E S V G R S E D E L H V D A L A V H A V W Q R L N P			
UniRef90_X1U69	I K L	K F V S F L R E L S G V D K A E L C L P Q A T V K D A L E K V I V Y D F P			
UniRef90_Q0C3A4	M A Q	L L F F G R L A D L V D P S V Q L P G D I Q D T L A L R A W L D T R H			
UniRef90_A0YU13	V T	V Q L F A I Y Q E V Y K V R K L V L T L P P Q T V S Q V L E H C I G E H P			
UniRef90_B2G7N6	I L N	V K L F F A I Y Q E V Y K V R K L V L T L P P Q T V S Q V L E H C I G E H P			
UniRef90_K9Z931	M K I	V K F A A L K D Y F D K D F L L E E D L K T I A D L K A H L A Q Q Q P			
UniRef90_UPI0004222816	V T L	K Y F G V I A E S A G K S S E E V L E L Q Q G L S V R D L K N Q Q I K K Y			
UniRef90_UPI0004135660	I R I	K Y F A F I K D I T G K N E E I T Q C K D I V C Y C K K Q L I N Q Y G			
UniRef90_A0A031LU15	I L L	K L F F G I S T D L V G A T S S M V F S I P N T L E F K T Q L Q E Q Y P			
UniRef90_UPI00035EB35D	V Q A L	L F A K A Q E L A G V S Q I T L E I I Q G W T T A N C F E A V M T K Y P			
UniRef90_A9U0K0	I L K I	L A F G I T K D I F G T S E K E I I E I G A S V K A L K E L L E K D F P			
UniRef90_D7W107	M V K	K F F A R A R D L T G L T D M P M E V P G S T A H D C L N K L V A K F P			
UniRef90_D7TL73	M I N	V K V F A T L I D I V G K R M L E I G G V K T V G E L D R R L D T R H			
UniRef90_C5A1Z5	M T Q	L L F F G R L G D L A G G V E R T M T L S Q P A I A D I I G L L D A S D R			
UniRef90_UPI00028A1639	I K V	L Y F G L V A E A I Q C S Q E K L V F N N T T V K E I K K I L V D K H N			
UniRef90_UPI0002F94BAB	M F L	G R L E D A A G S G R E V P A A A S L G Q A I G A L D P			
UniRef90_F4L138	I N	V F Y F G Y I R E R I H R R S E E E L D P D D T T M R G L F E T L C A N Y P			
UniRef90_R0HUN7	V S	V L L F A S Y A D A L G A R Q I E V P V T A P C V A D L V A A L R Q L P G			
UniRef90_D3PUF6	I S V	L F F G I T K D L V K S S Q L Q I E V E V E N S S V S N L K S V L K N T F P			
UniRef90_UPI00047DBF3F	V R	V L F F G A A A D R A G A R E V E L P A E G A T L G E L I D Y L L A E H Y E			
UniRef90_UPI0003815E42	M R V	R F Y A T F E R E L I G K K E I E V R G V R T V R E L L F D Q V A K Q D P			
UniRef90_Q1AT09	I T	V K L F A F L Q D R L G P T V T V R V S S P V V A D L F D Q V A K Q D P			
UniRef90_W8NTV8	V K V	Q F F A F L R D E I G K K E D E F E C D C S S P E E L L E E L V K F R Y P			
UniRef90_E3C5E6	I L L	K L F F A N F R E V A K N K E V E V N V K G S T V R D V V S A L V H D Y P			
UniRef90_A8AAQ0	M I S	V L Y F A R S A E L S G V R S E T L S V P Q Q T S M Q L W E K I V N K H P			
UniRef90_H8I7W3	M I Q	V Y F F A G L K E A A G Q E K W E I D R E E S I G E L R R E A A A A F P			
UniRef90_A4ABX0	M A R	K L F A L L R E I A G T D T V A L E V P A A N A G Q A L H E L S Q Q H P			
UniRef90_UPI00045721A3	L R I	V L Y F A S L R D A A G C E R E E V E T V A A A D L A A L K I K L S E A Y P			
UniRef90_UPI00042286D0	V K V	R F F A Q F R E L L G T D I M T E P A A G T S L T T L V A E I L A K K N R			
UniRef90_W4LW07	V K I	K L F A A Y Q E A Y N Q S E I E Q D F P E N T V Y G I L T Q M L A E H P			
UniRef90_UPI0004748566	M A N	V L Y F A G L L A D E A K C H E E K V T V R Q S S L T G L Y E H L S Q Q H P			
UniRef90_W7YV11	L R I	Q L F A G L A E R L Q T S V L T I E E S S I Q A D Q L K I K L S E A Y P			
UniRef90_L0HEX5	V K V	R F F A Q F R E L L G T D I M T E P A A G T S L T T L V A E I L A K K N R			
UniRef90_UPI0002DE6759	V K I	K L F A A Y Q E A Y N Q S E I E Q D F P E N T V Y G I L T Q M L A E H P			
UniRef90_Q4FU33	M I N	L Y F A G L L A D E A K C H E E K V T V R Q S S L T G L Y E H L S Q Q H P			
UniRef90_D3ULV8	T V K	F F A F L A E K T N K S E V K L N L Q Q C T V G E V R E L I S S E F P			
UniRef90_W7CB65	M V K	K F F A F L A E K T N G S E S R I N I A G A N S V G E L R D L I S S E F P			
UniRef90_L0FZH2	M K I	H T F G A A K D I T G S A M I D F P V E E T K V K D L K S L L F Q K Y P			
UniRef90_Q46F64	V K V	K L F A N L R E K A G T S E L Q S G E K V I D V L L A L T G K Y P			
UniRef90_E4NMQ4	R F F A N F R E A V G T K T I E R D Y E V T T V G D A L R E L E A E Y S				
UniRef90_X0Z8D7	M V	Y F G P I R E K A G R L E E I L T N A R T P E S L Y E E I R K K Y D			
UniRef90_I0ILP3	M I Q	V K V F A E Y R E R F G F D Q R E V H S E G I D P Q T V W R L M G H			
UniRef90_B5JRW1	H I Q	V F A G L A E Q M G G P I T V P T D Q M T I A A L K D L L S E R F P			
UniRef90_G7VQT1					
UniRef90_D0HFG2					
UniRef90_X5KC53	L K I	L A F G I A K D I L G G T E K E I D A E G T T V Q H L K A K L E D E Y A P			
UniRef90_UPI0001758550	V K V	L F F A K S R E I V V G Q K S A E D L P S P I S Y K K L L E T L V G P			
UniRef90_U1QVY7	M Q W K L	F A D L A E V V A G T D D Q P A V E T D A E T V G E A L A V L L E T H P			
UniRef90_D1B8V8	M K V	L F F A T I R D L A G R K E D Q A S A G T V R E L L S L L S D R Y P			
UniRef90_V8A4H9	M T L	E Y F A Q L C D E A G C P T E T V T T E A A T L A A L Y D E C S A R H			
UniRef90_UPI00036EC533	V N K	V K L F G H R F N I A N S K E V D V D A R G H T V N D V S A L V E R F P			
UniRef90_M1J1N3	I K V	V R Y F A L L R D Y T K N K E E I I E T E C K D V A C L C			
UniRef90_UPI00035C3A6D	L T I	Y L F A G L A D R I G T S R L E I L T D N A V T A D Q L K R F I A G L Y P			
UniRef90_S4W4G7	I K V	C F S Q V K Y A L G A D E L T F Q L D E N T T S D L E K I R K K			
UniRef90_U1PMB6	T L T	R F F A T F R D A V G T K T I D R E Y D A T V V G E V L T A I E S E F D			
UniRef90_W9DQE5	V K V	K L F A N L R E I A Q T S S L S T G D S V K E V L L S L S T E Q Y P			
UniRef90_Q6YVX4	L F F A R A R D L T G V T E A P V E V P G S T A G D C L A R V L A A F P				
UniRef90_J2SEQ9	M I E	K Y F G A V A E K T K C S F F E N V I S T E I S L Q D L L Q D L L D E K Y Q			
UniRef90_J1ABG9	M I E	V K Y F G A V A E K T K C S F F E N V I S T E I S L Q D L L Q D L L D E K Y Q			
UniRef90_UPI0003FB7855	M T I	L L F F G I T K D I V G S S T L S M P S N T K T V K E L R I Y L G K M Y P			
UniRef90_C7YK93	N V L	Y F A T A S S F T G K D Y D A V P A A M S L K Q L F A E L E R R Y P			

50 60 70 80

UniRef90_B8GWX4	V L G E A L A G P G V Q V A V D K T I V R G E A A L S A A S E V A F L P P M S G	
UniRef90_W9BXV5	L L G S A L V D P R I R Y A L N G A I V D R E T L V E D D D E L A F L P P V S G	
UniRef90_Q7U3F9	L E G I S I A V N Q E L V G A N Q P L Q A G D E L A F L P P F T G	
UniRef90_UPI0003B424E5	V D G P G G D A A M V L A V N R E Y S A P E T V L G D G D E L A L I P P V S G	
UniRef90_I0GI89	E V A S V L N T C A F A V N K E Y K T L N Y E L K G N E E V A I I P P V G G	
UniRef90_UPI000479F1D1	E E E K W R N V T R F G I N L E F V N P D T E I Q D K D E I V L I P P V S G	
UniRef90_UPI0004014CFD	T L E A E L N K A G N R I A V N K T I I S E N T P L N D G D E I A Y M S P L S G	
UniRef90_T0ZWW6	E P F S R L L R Q N V I L L N G L N V G L D E K I K S G D S V D I F P P V A G	
UniRef90_UPI00034A9F27	H L E R W R G V T R F G V N L Q F V G G D V A L V D G D E V V L I P P V S G	
UniRef90_Q05V00	D L G P W S G S L R V A V N Q V L V E P Q S F V V A G D E L A F L P P F T G	
UniRef90_UPI000298BFD1	R L S V L Q Q V V L A V R Q Q Y I A I D D T L G D G D E V A V V P P V A G	
UniRef90_D1CDP8	D L A R L E S V T K F I V N E E F V P G D T L S P G D T L A F I P P V S G	
UniRef90_E0IBW0	D H A D L I Q L C F V A C N Q A Y A T D D S Q L H A A D E L A L I P P V S G	
UniRef90_F2ANQ1	A L A P L A Q R S R L A I D Q K Y V S P N H V I Q P G A E V A L I P P V C G	
UniRef90_Q2JX8	G F F S L A A E D V K V A V N H E F C D L T R P D E G A L V V F I P P V C G	
UniRef90_Q9Z224	G L A D V R N Q V I F A V R Q E Y V E L G D L L Q P G D E V A I I P P V S G	
UniRef90_F8FF45	E A A A Q L Q A A F V A V N Q A Y A D E T V L I T P G D E V A L I P P V S G	
UniRef90_E8QZ60	S L A P L L P A C Y C R I A V N A E Y M D D T H P D P S S E L A L I P P V S G	
UniRef90_UPI00047A9128	I K R E L L E S P R V M I L V N G H N V G L D T E L K D D D E V H I F P P F S G	
UniRef90_B6YVU4	Q L S E A N R L R L A V N Q T H V K G P V A L Q P Y D V V A V F E P V T G G	
UniRef90_X4ZNR3	K L S A V R D Q V V L A V R Q E Y V S L G D I L R D G D E V A I I P P V S G	
UniRef90_UPI000440D85B	R L A A I Q D Q V V F A V R Q E Y V V L L G D Q L R S G D E V A I I P P V S G	
UniRef90_G1KCD1	D K K K E L L S M S M Y A I D M D Y V E K D T L K P N A E V A I I P P V S G	
UniRef90_S2JCC3	L K K L E S I R D T L L I V A V N K K L V S N D L Q L K E G D E I A F L P P F S G	
UniRef90_UPI000258EFB8	R L A L V K D E D N I T T A L N E E Y V Q M G E A L K N G D T V A L I P P V S G	
UniRef90_K0QYC3	G R D A L M R S I L A V A V N Q G Y A R A E D I I L H D G D E V A F L P P V S G	
UniRef90_UPI00047C4962	G R D A L M R S I L A V A V N Q G Y A R A E D I I L H D G D E V A F L P P V C G	
UniRef90_E8SEU7	A L Q N L N S L L I A I N D E Y A Q A E Q V L S E Q D E I A I L P P V F S G	
UniRef90_UPI00041FD3B4	D L Q N L N S L L I A I N D E Y A Q A E Q V L S E Q D E I A I L P P V F S G	
UniRef90_UPI00045E7CC2	G A R E A L M H P S V S I V L A D S V V N R D E R L K D A V E V A F L P P V S G	
UniRef90_E0THH4	D F A M P D A V L A A V N M D Y V A L D A V L T D G D V L A F F P P V T G G	
UniRef90_G0A347	K L K K W L P Q Y I W W M F I G N Y V K P Q T Q L K D N D E I A L F P P V A G	
UniRef90_X1IU69	A T G G A L Q E K T V R I A I N S E I V V D P A P I T N A D E I A F M P P V G G	
UniRef90_Q0C3A4	E L E R W R P L T H F G V N L Q F V P P E T P L S N G D E V V L I P P V S G	
UniRef90_A0YU13	Q L T S T L A N S R V A V I N Q F V N A D T I N L E A D E I A I I P P V S G	
UniRef90_B2G7N6	K P E L K P W E N I T R F A V N L Q F V P N F I L N D Q D E I A L I P P V S G	
UniRef90_K9Z931	K A L A L L N L C R F A V D D E F V A L S H L I H E N D E I S V I P P S S G	
UniRef90_UPI0004222816	Q I Q Q D A E S V Q I A V N Q N I N S E V E L K E G D E V A F L P P F A G	
UniRef90_UPI0004135660	Q L T D I N S Y A I A V N E S Y A R N E T V L K E G D E I A I L P P V S G	
UniRef90_A0A031LU15	Q K M E E I L E K N I A V L V N G S I S Q E A D G D E A I L P P V S G	
UniRef90_UPI00035EB35D	Q L T D I N S Y A I A V N E S Y A R N E T V L K E G D E I A I L P P V S G	
UniRef90_A9UOK0	A L K K A I R S C M M V A L N H D Y V T E P V A L P D G D E L A L I P P V S G	
UniRef90_D7W107	E L K K L K S Y F I A V D D E Y A E D D Q I I T V S N E I A I I P P V S G	
UniRef90_D7TL73	R L E E I R G C M V L A L N E E Y T P E S T V V K D R D E L A I I P P V A G	
UniRef90_C5A1Z5	G V K K E L E D G Y L I L V N G H L Q G L E T P I S D D D T V S V F P P A G	
UniRef90_UPI00028A1639	V L E K L S Y Q I A V D Q K L A S D N Q I L T T A S E I A I L P P F S G	
UniRef90_UPI0002F94BAB	L L G S A L G E P R V R Y A I N G A I V D A D A L V E D D D E L A F L P P V S G	
UniRef90_F4LJ38	Q L E P A E R L K L Q L A V N Q T H V K V G A S V R P G D E V A V F E P P V T G G	
UniRef90_T0HUN7	D L A D V L R G P R I C A V N G T L V Q G D V P L R N G D E V A F L P P V S G	
UniRef90_D3PUF6	G L D K L T A H M R I A L N E N L S C P E E R L S N G D E V V A L I P P V A G	
UniRef90_UPI00047DBF3F	G E R L P A K P L V A V N H A F A Q M A T V I H P A D E V V A L I P P V A G	
UniRef90_UPI0003815E42	E L E N I N S Y A I A V N E A Y A L D E N I L K E G D I V A I I P P V S G	
UniRef90_Q1AT09	G L S P M R E S L A F A V N G E Y A S E E R P V R P G D E V A V L P P V S G	
UniRef90_W8NTV8	I K K E L L E S P R V M I L V N G H N V G L D T E L K D D D D E V H I F P P A G	
UniRef90_E3C5E6	T L G P T L N N S R L L A V N Q E F V D A A T V L T P T D D E V V A I I P P V S G	
UniRef90_A8AAQ0	K K K E E D E Q Y K L K V L V N G E W K Y L D S L K G D E V V A L F P P A A G	
UniRef90_H81W73	K K L E P L M L T Q G V N I L L N G K S V G L E S R V K E G D I A V F P P V S G	
UniRef90_A4BX00	Q L K E C N S Y A F A V N E A Y A L D S I L L K E G D I V V A L I P P V S G	
UniRef90_UPI00045721A3	S L I A I R D H V L L A V R Q E Y I L L G D Q L Q P G D E I A I L P P V S G	
UniRef90_UPI00042286D0	E A A E V I G R S M M A V N E E F A S D S E L V T S S D N A A F L P P V S G	
UniRef90_W4LV07	A L Q P Y L D N V R L A L K M D F V D E A A S L D E G D E L L H L I P P V S G	
UniRef90_UPI0004748566	E A T A Q I A V S F L A V N Q E Y A P A T T L I T Q N D E I A L I P P V S G	
UniRef90_W7YV11	E G Y E A L F D K Q V I V M R N G K R V A G T T P I M D G D E V V A V F P P V A G	
UniRef90_L0HEX5	E L E Q W R N V T R F G I N Y K F V D P E T V L Q D G D E V V V L I P P V S G	
UniRef90_UPI0002DE6759	E L F R S R P Q S Q L R V A V N D Y F V K W N E A I P P G D D N V V F I L P P V A G	
UniRef90_Q4FU33	E I A V D L S S C M I A V N M E F Q Q D Q D V L P E E A E I A V I P P V S G	
UniRef90_D3ULV8	E I A V D L S S C M I A V N M E F Q Q D Q D V L P E E A E I A V I P P V S G	
UniRef90_W7CB65	E I A V D L S S C M I A V N M E F Q Q D D D L L P E E E E E I A V I P P V S G	
UniRef90_L0FZH2	E L V H L P S L A I S V N L F Y A S E E T M V N K H D E V V A L F P P V S G	
UniRef90_Q46F64	E L K R L K S Y F I A V D D E Y A E N D Q V I T C T N E I A I I P P V S G	
UniRef90_E4NMQ4	R L A D Y G G S L L F T V N A E Y V P A D H A L H D G D E V V A L I P P V S G	
UniRef90_X0Z8D7	L E Y P F S L L R V A V N G T F T N P D D S I V H G D T V V F I L P P F G G	
UniRef90_10ILP3	UniRef90_B5JRW1	G G A L P Q N L L C S I N W D Y V S L D T V L N E G D E L A F F P P V S G
UniRef90_G7VQT1	E V A A Q L R G S F V A R N Q A Y A P E E L V S I Y D E I A I I P P V S G	
UniRef90_D0HFG2	K W D L A L E P G K L L A V N Q S I V P L D T P Q E G D E V V A F F P P V T G	
UniRef90_X5KC53	E L K R L K S Y F I A V D D E Y A E N D Q V I T C T N E I A I I P P V S G	
UniRef90_UPI0001758550	T Y F L A E I A Q N I I L S L N E E F C D V E S V L V K G D D E V V V F I L P P V S G	
UniRef90_U1QVY7	A L A D R V D D G D L L A H V N G H H V G E D T P L Q E G D Q V S I F P V I G G	
UniRef90_D1B8V8	A F R R A V L E G N V I V L V N G H H V G E D T P L Q E G D Q V S I F P V I G G	
UniRef90_V8A4H9	E G F S L P R M R L R V A V N A A F T P W H R P V D G D H I V F I P P V S G	
UniRef90_UPI00036EC533	E L G P A L E N D Q V R P Y V N K E L N G L A T G I K E G D G I V L F P P M A	
UniRef90_M1J1N3	K E R E G F G P V R I V I L V N G K V D N E I R E G D E V V A L L P P V P P A G	
UniRef90_UPI00035C3A6D	D A A S L I N I S F L A V N Q E Y A G D L V I T E Q D D E V V F I L P P V S G	
UniRef90_S4W4G7	A G K K L N N V S L R I A I N K K Y Q K E E I V L Q N G D E V V F I L P P V Q G	
UniRef90_U1PMB6	D L G E I I A D D A V P Q V N D H E S G I E T P V L Q S N D D T V S I F P P V A G	
UniRef90_W9DQE5	A L K E L V F E G Y I N V F L N G H M E G L E T V L Q S D D D E L L G I F P P V S G	
UniRef90_Q6YVX4	R L E E I R R S M V L A L N E E Y A P E D A V G D G D E L A I I P P I S G	
UniRef90_J2SEQ9	F E S L S F S V V A V N Q K I V S T D Y S L K T R D V V A L L P P F A G G	
UniRef90_J1ABG9	F E S L T F S V V A V N Q K I V S S D Y T L Q T S D I V V A L L P P F A G G	
UniRef90_UPI0003FB7855	E L N K L S S C L V T V N L D Y V E D D T V I Q E A D E V V A I I P P V S G	
UniRef90_C7YK93	G I K A K I L D S C L V T V N L D Y V E D D T V I Q E A D E V V A I I P P V S S	

UniRef90_B8GWX4 G
UniRef90_W9BXV5 G
UniRef90_Q7U3F9 G
UniRef90_UPI0003B424E5 G
UniRef90_I0GI89 G
UniRef90_UPI000479F1D1 G
UniRef90_UPI0004014CFD G
UniRef90_T0ZWW6 G
UniRef90_UPI00034A9F27 G
UniRef90_Q05V00 G
UniRef90_UPI000298BFD1 G
UniRef90_D1CDP8 G
UniRef90_E0IBW0 G
UniRef90_F2ANQ1 G
UniRef90_Q2JXS8 G
UniRef90_Q9Z224 G
UniRef90_F8FF45 G
UniRef90_E8QZ60 G
UniRef90_UPI00047A9128 G
UniRef90_B6YVU4 G
UniRef90_X4ZNR3 G
UniRef90_UPI000440D85B G
UniRef90_G1KCD1 G
UniRef90_S2JCC3 G
UniRef90_UPI000258EFB8 G
UniRef90_K0QYC3 G
UniRef90_UPI00047C4962 G
UniRef90_E8SEU7 G
UniRef90_UPI00041FD3B4 G
UniRef90_UPI00045E7CC2 G
UniRef90_E0THH4 G
UniRef90_G0A347 G
UniRef90_X1IU69 G
UniRef90_Q0C3A4 G
UniRef90_A0YU13 G
UniRef90_B2G7N6 G
UniRef90_K9Z931 G
UniRef90_UPI0004222816 G
UniRef90_UPI0004135660 G
UniRef90_A0A031LUI5 G
UniRef90_UPI00035EB35D G
UniRef90_A9UOK0 G
UniRef90_D7W107 G
UniRef90_D7TL73 G
UniRef90_C5A1Z5 G
UniRef90_UPI00028A1639 G
UniRef90_UPI0002F94BAB G
UniRef90_F4LI38 G
UniRef90_T0HUN7 G
UniRef90_D3PUF6 G
UniRef90_UPI00047DBF3F G
UniRef90_UPI0003815E42 G
UniRef90_Q1AT09 G
UniRef90_W8NTV8 G
UniRef90_E3C5E6 G
UniRef90_A8AAQ0 G
UniRef90_H817W3 G
UniRef90_A4BX00 G
UniRef90_UPI00045721A3 G
UniRef90_UPI00042286D0 G
UniRef90_W4LV07 G
UniRef90_UPI0004748566 G
UniRef90_W7YV11 G
UniRef90_L0HEX5 G
UniRef90_UPI0002DE6759 G
UniRef90_Q4FU33 G
UniRef90_D3ULV8 G
UniRef90_W7CB65 G
UniRef90_L0FZH2 G
UniRef90_Q46F64 G
UniRef90_E4NMQ4 G
UniRef90_X0Z8D7 G
UniRef90_I0ILP3 G
UniRef90_B5JRW1 G
UniRef90_G7VQT1 G
UniRef90_D0HFG2 G
UniRef90_X5KC53 G
UniRef90_UPI0001758550 G
UniRef90_U1QVY7 G
UniRef90_D1B8V8 G
UniRef90_V8A4H9 G
UniRef90_UPI00036EC533 G
UniRef90_M1J1N3 G
UniRef90_UPI00035C3A6D G
UniRef90_S4W4G7 G
UniRef90_U1PMB6 G
UniRef90_W9DQE5 G
UniRef90_Q6YVX4 G
UniRef90_J2SEQ9 G
UniRef90_J1ABG9 G
UniRef90_UPI0003FB7855 G
UniRef90_C7YK93 G

	1	10	20	30	40
UniRef90_F5LC08	H	I R L F A G L A D E L G R P S I D I T L T S V T V Q D L L D E I G G Q F P			
UniRef90_W4TBA3	L K I L A F G I V K D I F G G P E K E L E V E D S N V Q G L L K K V L E D Q F P				
UniRef90_A0LY18	L L T R Y F G M I A E A T G R T E E V L E V E D S N V Q G L L K D Q Q I K K Y				
UniRef90_G7VGD1	L I R V K F L A T L F D L T G V L K T E V E V D G V T V R K L I D I L D E R F P				
UniRef90_V5E9Z4	V R V L Y F A S A R T T I G L S Q E T L A L P T S P L S S L V E L I L A N K H E				
UniRef90_G0RMF7	V R V L Y F A S A G S F T G R D S E S L P A P L P S L K F S E L E T R F H P				
UniRef90_E9C7U2	V T V L L F F A K S R E L V G L S S A V L P T A T V T A R H				
UniRef90_UP1000376F8E3	V R V R Y F A F V K D V T G V P E E W V Q T D C A D V N C				
UniRef90_D8H6J0			M T V Q Q L K G G W L		
UniRef90_UP100047ACE9D	M L S V K Y F G A V A E K T K I Q G E N I P F S N L S L Q E L V D E L E Q K Y D				
UniRef90_UP1000249344E	M K V K L F S V L A E K I G T V D L S L P D Q F K Q A Q D L V E Q I L H P				
UniRef90_M0LG0	I D L R F F A T F R E A V G Q K E Y T R E F S S G N T V G E V L A T E Q I Y E P				
UniRef90_Q01U18	M L R D I V G K S A E D A E F P G T D L Q S V F E C Y R T R Y P				
UniRef90_A7IA81	I K V R F F A R F R E L L G T D I V T S S Q E G T H L L T V V K K I A E K S Q				
UniRef90_UP100047E2DE8	M T I K A F G M V A E K I G G S A E L T L E N P G T L L L A L K N Q L A T R T F P				
UniRef90_B7Q3T5	V K V L L F F A K A R D L L A G V S E S L S P P F S R D V E E L F P S T H P				
UniRef90_W5MJ23	V L Y F A K S A E L L A D V R S E T I S V A E I T S L Q L W E E L V N R H P				
UniRef90_I3Z5P5	M K L L A F G K I A E I I G K Q E I E I E D F P N T D I L L G Y G L Q Q Q Y P				
UniRef90_V4PE53	M I D I L L F F G R I A D I M G R R R L S L D P G L S L L A L R A Q L F T P H G				
UniRef90_UP1000471BEB0	M M D L L Y F A A W V R E R I G T G A E Q R D P P E A N V A D L I D W L A T L S P				
UniRef90_UP100047CC66E	I K V L L F F G S V T D I T V S E L S R E D C A T D T D L E K E L L K Q Q F P				
UniRef90_UP10003F67038	M E V K V V F A S I K E K I G S D T I D L F V D S I T A G E L K S H I F V D Y P				
UniRef90_I8R6L1	M M K V K V L F A M L G E Q L G P T V T I D V A Q P T A A M V K P A L C Q Q A P				
UniRef90_G1XR90	T V L Y F A S A H T Y T G K S E D A V P G P M T V S K L F P Y L E E K Y P				
UniRef90_D3SOH2	V K F K L Y A S L R R G R G T V E V E F K G K T L R D A L R E L F K I Y P				
UniRef90_W4I565	V T V R Y F A A A R A A T G I E S E T V T L P G A T V A E L L V D G L A A R S A				
UniRef90_A4ASN1	M E V L L F G I A K D I V G S S V L D L S G K P A S V E E L I H L I K S D F P				
UniRef90_E2N4Z3	M I T I Q V F G K L T E I L G T N T Y T D F T K K T V A E L K A Q L H T A F P				
UniRef90_UP100037E1964	M V K I L F F G D L V E T L G M D E I S L P P D V T D V E R L L F V L S K R G E				
UniRef90_C2Z758		Q E E V S K P A L H I E C E N I T V A E L K E V L V K E Y N			
UniRef90_C6W6E3	M I Q V K Y F G M L A E I I A G L S D E V W T A A G G T V G Q F R T Q V T E K Y P				
UniRef90_B9XRQ7	M I L E I K L F F A Y L S E K L G C D T I E T L T D G S T I D T L L K Q L I E R F P				
UniRef90_W7BTG3	M I L Y F A G A S S Y T A K D Q E A L P A P L P L G R L F D T L E E R Y S				
UniRef90_C9SIT3	M I L R F F A T F R E A V G Q K E L T S S F D G A T V V G D V L G E L A A E Y D				
UniRef90_L0JWY7	M I K I L F F G S I A A K L G K R E C I L H V D Q M R V A D V V N V V A C N D F				
UniRef90_UP100035E7997	M I T I L F F A K A R E L T G C K L Y I P E L L S S A D L F D K I H T F K				
UniRef90_E9IX88	M I T I L R L Y F A W L A H K L R K T E S E L P A E V G D I A S L I R W L G S R K R				
UniRef90_I3Y7T8	M I V K V R A F A M L R E I P A E Y D V K L P G G S T V V G D L L D H L S T R H P				
UniRef90_A3CSC1	M A T T V R Y F A G A R D A A G T E T E T V D A A T V G E L H A A L V A R H A				
UniRef90_UP100046736C7	M I K V L F F A Q T R E L I G I D S V E L D D Q F E T V E A I R A H L V E E G G				
UniRef90_R1D816	M I T V L F F S F A A D R M N T R E K T Y E L P K E S V K E F F Q Q Y L Y P				
UniRef90_A0A034TXI4	M I K I R Y Y G Q L A E I T N K N E E F L S V N I N T V V G A L K R L L S V Q Y P				
UniRef90_UP10002D93E5E	M A T L F Y L G R L M D A L G T G T E T L L P P G V N D T A L R T W L D A E R Q				
UniRef90_C0BFS9	M I T I R L F F A K Y R E L Y G E K K I T K N E L T L K E L N I L N E S I				
UniRef90_A0A059FRX5	M V H V L F F A K S R E L A N T P R S T V V E V P E I T A T E L L D H I V S K				
UniRef90_F6BE37	M V R T I L Y F A R L K E L T G R E A E E L V E V P E G S R C I D V I R A M A D				
UniRef90_P0C919	M I T V L F F G P V A D R M Q T R E T Q V E T Q G M Q T L H D V I A H L G A Q N P				
UniRef90_UP1000365AD84	M I T V L N R Y F A A I A D A T G C R T E T L D V A S A T V V G G L R T A I H G D R H G				
UniRef90_D5CNX1	M A K V K L F A T L V E I A K R K E I I E A K T A R E V L D K L K G L Y G				
UniRef90_H0QYX1	M K I L Y F A A T T I Y T G K D S E S I L S A P M K L G E M Y E L E Q K Y P				
UniRef90_G7VAH0	M K I K I L A F G Q I A E I T G K E L V I A L D T A S L Q Q A L R D K F P				
UniRef90_U4LG68	M K I K I L F F T F F G N L C G V D K T E L N L P G A T V K E A L K I A N D F P				
UniRef90_UP10004216A6E	M I R V L L F A H L K E Q L N R S E L T I E R E K M T V K D L K E E K T Y				
UniRef90_X1FF14	M I T V L Y F A A A S S Y T G R E S E T F P A P V P L A Q L L A A V E R R H P				
UniRef90_UP10004707319	M V E V Y Y I P T P Y R S I T G E A R L Q V I E A A T V K E L L L E T T L A Q R Y P				
UniRef90_G3JLE3	M V E V R L G P F G S Q L A G V P R L T I S L P G A T V H D R Q R Y P				
UniRef90_E6SK75	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_D1C437	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y R				
UniRef90_G2YT48	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_F4Q6B6	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_E7R026	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_Q9HJR9	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_Q5TT27	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_V4JPC2	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_UP1000329CD2D	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_A2TZ18	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_B4CUD8	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_K1WTF5	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_UP100035FF454	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_Q7SGP0	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_L0JWP4	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_Q1DGL5	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_G8XAY6	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_UP100046236C7	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_Q8DJ67	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_UP100001B56A4	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_L9ZR94	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_R0KBE1	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_UP10004112EC5	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_UP1000380687B	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_G2PN48	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_C2PED9	M V E T V L Y F A T A T S Y S T S K D S E T F A A P L P L S R L F D T L E D R Y N				
UniRef90_D2RWB9	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_F6FR06	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_UP100036C54D0	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_A2BJ47	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_A6VGU3	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_G2LDH3	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_K0B911	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_V6AUG0	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_F6CRT9	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				
UniRef90_V6M2T7U	M V E T V L Y F A A A S T F T G K T S E H L P A P V Q V G S L F A V L E D R Y K				

UniRef90_F5LC08	G A R S L L T	50 H C F L A K N H A Y A A P D E L V A E T D E L A L I P P P V S G	60	70
UniRef90_W4TBA3	E F K K L K I Q D P E K S Y F I A L D E E Y A E D D Q L I H T N T N E I A I P P P V S G			
UniRef90_A0LY18	R L K S E L L Q D Q L R I L V N G R A V E W D T E L K E G D E V A F L P P P V S G			
UniRef90_G7VGD1	G V E Q V L K T C R W S V D N T L I E L D E I L K D G D E V V F I P P P V S G			
UniRef90_V5E9Z4	G F K A K I L D S S L V T V N L D Y V D E G P V I Q E G D E V A V I P P P V S G			
UniRef90_G0RMF7	A L Q P V S N S V I L A V N E E Y A D E S S A G D E V A V I P P P V S G			
UniRef90_E9C7U2	K R F R E L I K G G V R V V I L V D G S T E S K H L K D G D E V A I F P P P V S G			
UniRef90_UPI000376F8E3	L Q S L D R V M V A V N E E F V T N E E M I Q D G D I V A F I P P P V S G			
UniRef90_D8H6J0	D Y A D V L D Q S L A S L S Y S V A V N Q K I V Q D S Y M L T S N D V V A L L P P P V S G			
UniRef90_UP100047ACE9D	G L G Q L L S D G A I R V L K N G H M E G P E T E L E D G D V V S V F P V S G			
UniRef90_UP1000249344E	R L G D L A R S I V I A R N Q E F A E R T T P P L D G D E V A F L P V S G			
UniRef90_Q01U18	D G Y D A I F D A K V I V M Q N G R R R V A A S T P V T D G D E I A V F P P V S G			
UniRef90_A7IA81	E L K E M K F G F A L N K K M L T S D S V I P V G A E I A L L P P P F S G			
UniRef90_UP100047E2DE8	Q L R P L Q H C A V I A V N E S Y V E S G A T L R P N D E I A F I P P P L S G			
UniRef90_B7Q3T5	R L S A L R N Q V V L A V R Q E Y V A L E D S L R S G D E V A V I P P P F S G			
UniRef90_W5MJ23	A L K D L K F S I A I D K K Q V N E N S S I A T G A E V A L L P P P F S G			
UniRef90_I3ZP55	D V T P L M S V N Q Q V E S G D R P S D G D E V A F F S V F S G			
UniRef90_V4PE53	G H A E A M R E P R L R A A I D Q K Q F V P P D T L G S A R E V A L M P P F S G			
UniRef90_UP1000471BEB0	A L A N K K Y F L A L N Q V I H E N C P L K Q G D I V A L M P P F S G			
UniRef90_UP100047CC66E	E A L K T L I N N A R I A V N Q E F V D Q G Q V L T S E D T I A L I P P V S G			
UniRef90_18R6L1	G F R K K V L G S C A L S V N L D Y V D L E R E I L Q S T D E V A L I P P V S S			
UniRef90_G1XR90	D L S E I V E R D R V K I F V N G H L E G L D T E L K E G D E I A I F P P I A G			
UniRef90_D3S0H2	Q L A T V L G R C S Y L C D G I A V R D D T P L S S G D T L D V L P P F A G			
UniRef90_W41565	E F K K L T S L A I A V N G E Y A T N G L S S Q A H D E I A I I L P P V S G			
UniRef90_A4ASN1	M W K K L L L G N P R L N I T V N R Q F A E K S A P L R D G D E V A L Q T G D I V A M I P P V S G			
UniRef90_E2N4Z3	V A I S N E V M V A I V N E E Y A N E D D I Q T G D I V A M I P P V S G			
UniRef90_UP100037E1964	U n i f e r 9 0 _ C 6 W 6 E 3 A M R D K K F K I A V N Q K I S E D F V P E A P B E I A L L P P F A G			
UniRef90_C2Z758	K L G G M Q N S T L I A V G V E Y Q G R S Y V L K A G D Q V S L F P P V Q G			
UniRef90_C6W6E3	T L L S D E L K H C N V A V N Q A F I S E Q A V F P F T T D E L V A L I I P P V S G			
UniRef90_B9XRQ7	G I K S K I L D S C L V T I N L D Y V D D G A M I K E G D E V A I I I P P V S S			
UniRef90_W7BTG3	D L E Q L L E D G A R V L K N G H M E G P D T I L E D G D T L S V F P P V A G			
UniRef90_C9SIT3	K P L L V L A V N E Q Q V D M N M V N N D G D T V A L L M P P F S G			
UniRef90_L0JWY7	L H S L Q S Q L L I A V N E E F I V P N S L A E K D K V A V I P P P L S G			
UniRef90_UP100035E7997	G A A V L F E A G R V R V T I N K Q F S E P F T K L H D G D E V A G I P P A G G			
UniRef90_E9IX88	G L G D A L S S A G E L A P Y V N H F S G G L E T P L E D S D T V A L L F P P F A G			
UniRef90_I3Y7T8	G L A D V L P R C S L L V G G V R A S S D D A P V G A D E T D V L P P V S G			
UniRef90_A3CSC1	G L A D L L P G C A L A R N G D Y V T G T P M A E G D E L A V L P P V S G			
UniRef90_UP100046736C7	K W D L A L E Q E S Y L L L L I N L L S H L P K K R G M K L H F S P P V T G			
UniRef90_R1D816	S L K E P L E S W L F S V N E E W V D P H Y A L K P G D E L A V V P P V S G			
UniRef90_A0A034TXI4	E L E K F Q P Q F A Q D N T I V D E N Q K L N G S A V D L P P F S G			
UniRef90_UP10002D93E5E	L G G I L T E P V T R L A I N D D V V S E P C A I S D T D V A L I I P P V G G			
UniRef90_C0BSF9	N I K D D F Y Q G K A I I S V N C D V V S D D D V V I K A S D E L V I Y P P V S G			
UniRef90_A0A059FRX5	F G L T S I R D N L L I L A H N E S Y I D N D R I L K E G D E L A I I P P V S G			
UniRef90_F6BE37	R H G E A L E S G A L R I A L A L N G E R A S P E A E V R E G D T V V V I S L F P P I G G			
UniRef90_P0C919	G A F S I V S F A A V N Q N Q V H D K Q A L Q D N D E I A F M A K F S G			
UniRef90_UP1000365AD84	S R A G D L A Q L C S V L S G D E M L R D A D A V G G E V D L L P P F A G			
UniRef90_D5CNX1	P S F E K E L E H G M L F L V N G H L Q G L D T P V N E D D D V I S L F P P I G G			
UniRef90_H0QYX1	G I K G V Q G S M C T V N L D Y V E D H H E V I E A G D E V A I I P P V S G			
UniRef90_G7VAH0	N I K D D F Y Q G K A I I S V N C D V V S D D D V V I K A S D E L V I Y P P V S G			
UniRef90_U4LG68	F G L T S I R D N L L I L A H N E S Y I D N D R I L K E G D E L A I I P P V S G			
UniRef90_UP10004216A6E	L L S Q A A S S L M I A V N E E F V T D Q E V I R A G D D V V A L I I P P V S G			
UniRef90_X1FFI4	G I R A R V L D S C L V T V N L D Y V D V P Q P I Q A A D E V A I I P P V S S			
UniRef90_UP10004707319	D L R P R L F E G D L N V Y N R T L Q G A E T P L Q D G D E V V A F K P V S G			
UniRef90_G3JLE3	T L L G A A L G S A L P V V R G T S V S A D H P L A P G D E V V A L I I P P V S S			
UniRef90_E6SK75	G M K D N V L R S C L V T I N L E Y V D I E I I K D G D E V A I I I P P V S S			
UniRef90_D1C437	Q A S S V L D C M L A I N L E Y V D K D E E I K S T D E V V S S I I I P P V S G			
UniRef90_G2YT48	D L D F F E D G D L R I M R N G H I D G R E T S S D G D R L S I F P P V A G			
UniRef90_F4Q6B6	E F T T K Q M Y D G N V I V N G N M K G D T E I R N G D E L A V I P P V S G			
UniRef90_E7R026	L S I I R N N V I L A H N E Q Y C A D T I R I R N G D E L A V I P P V S G			
UniRef90_Q9HJR9	P R L T S A M A G R V L V V N G R S A E P S R A L S D G D E F V S I L P P V S G			
UniRef90_Q5TT27	R L C E L Q D G V V L A V R Q E Y V P I G I D T L K P N D V V A V I P P V S G			
UniRef90_V4JPC2	A L E N I K T Y A L N E A Y A T D D F D L F L A L F P V S I L P P V S G			
UniRef90_UP1000329CD2D	G A R L E T W R V A V D E E Y H S W D G P I G N A R E I A L I P P V S G			
UniRef90_A2TZ18	G M K G K V L E S C L V T V N L E Y V D S D Y I I C F E G D E I V A I I P P V S S			
UniRef90_B4CUD8	F P L L F E G D L N V Y N R T L Q G A E T P L Q D G D E V V A V V I P P V S G			
UniRef90_K1WTF5	G I R E A V L D H S L V T I N L G Y V D M P T V I Q D G D E I V A I I P P V S S			
UniRef90_UP100035FF454	L E D R V L E D G D L R V L R N G T N V G L E T E L E D G D E I V A I I F P V S G			
UniRef90_Q7SGP0	E L V A I R D S V I A H N E Q Y C E D L T E L A D G D E I A V I P P V S G			
UniRef90_L0JWP4	K L K E I S F K I A I N K K I Q D S E Y I V N K N E D I V A V I P P V S G			
UniRef90_Q1DGL5	G T H L G E V L A Q S Q W A V D E E M V E D P A V L K G G E D E V V F I C P V S G			
UniRef90_G8XAY6	G F T L D L A Q K V A V A N D R F V A L D Q P I R A G D E I V A I I P P V S S			
UniRef90_UP100046236C7	K V K E E L E K G Y I I L V N G H L E G V K T K K D G D V V S I F P V S G			
UniRef90_Q8DJ67	G L D G H L L R Q Q L S V L K N G H M A G P D T E L E N G D D V V S V F P V S G			
UniRef90_UP100001B56A4	G I E E K V L S S C A L T V N L E Y V D A D R Q I G E G D E I V A I I F P V S G			
UniRef90_L9ZR94	F H P L L Q A I A D D S V Q I A V N Q N L D D K I T L K D G D E I V A I I P P V S G			
UniRef90_R0KBE1	F H P L L Q A I A D D S V Q I A V N Q N L D D K I T L K D G D E I V A I I P P V S G			
UniRef90_UP10004112EC5	F H P L L Q A I A D D S V Q I A V N Q N L D D K I T L K D G D E I V A I I P P V S G			
UniRef90_UP1000380687B	F H P L L Q A I A D D S V Q I A V N Q N L D D K I T L K D G D E I V A I I P P V S G			
UniRef90_G2PN48	G L A I A D D S V Q I A V N Q N L D D K I T L K D G D E I V A I I P P V S G			
UniRef90_C2PED9	A L E E V L F E D G D L R S Q I V N F E E G L E T V L F E E G D E I V A I I P P V S G			
UniRef90_D2RW89	S A A P V L E R C A V L L D G R R A E P S D P V P D G A R L D L L P F P V S G			
UniRef90_F6FR06	A L K S A K Y A I A V D K I V K E N T V L S N N T T I V A L L P F P V S G			
UniRef90_UP100036C54D0	G L R G R L Q D D V L V L N G R S I E W K T K R S G D E I V A L L P F P V S G			
UniRef90_A2JB47	L L K E D F E N G K I V S K D F E I V S N S N D L I N K S G E D I V A L L P F P V S G			
UniRef90_A6VGU3	Y P Q L A P F E G S L L V A V N E E Y A R P D T P I R A G D D V A V F P P V S G			
UniRef90_G2LDH3	D D S P K L D T E N I L I A V N G V M D G K D T M I K N N D V V S I I P V P V S G			
UniRef90_K0B911	N N T L D L D T K N I L I A V N G A L E G R N T L I Q T N D T V V S I I P V P V S G			
UniRef90_V6AUG0	K T G H H L L D S S V H S S V F D E F T R D N D M V T S A R E I A F F P A V T G P V S G			
UniRef90_F6CRT9	G I K D K I L S S C L V T V N L D Y V D I P E V I Q E G D E I V A I I P P V S S			
UniRef90_M7TH70				

UniRef90_F5LC08	G
UniRef90_W4TBA3	G
UniRef90_AOLYI8	G
UniRef90_G7VGD1	G
UniRef90_V5E9Z4	G
UniRef90_G0RMF7	G
UniRef90_E9C7U2	
UniRef90_UP1000376F8E3	G
UniRef90_D8H6J0	G
UniRef90_UP100047ACE9D	G
UniRef90_UP1000249344E	G
UniRef90_M0LG10	G
UniRef90_Q01U18	G
UniRef90_A7IA81	G
UniRef90_UP100047E2DE8	G
UniRef90_B7Q3T5	G
UniRef90_W5MJ23	G
UniRef90_I3Z5P5	G
UniRef90_V4PE53	G
UniRef90_UP1000471BEB0	
UniRef90_UP100047CC66E	G
UniRef90_UP10003F67038	G
UniRef90_I8R6L1	G
UniRef90_G1XR90	G
UniRef90_D3SOH2	G
UniRef90_W4I565	G
UniRef90_A4ASN1	G
UniRef90_E2N4Z3	G
UniRef90_UP100037E1964	
UniRef90_C2Z758	G
UniRef90_C6W6E3	G
UniRef90_B9XRQ7	G
UniRef90_W7BTG3	G
UniRef90_C9SIT3	G
UniRef90_L0JWY7	G
UniRef90_UP100035E7997	G
UniRef90_E9IX88	G
UniRef90_I3Y7T8	
UniRef90_A3CSC1	G
UniRef90_UP100046736C7	G
UniRef90_R1D816	G
UniRef90_A0A034TXI4	G
UniRef90_UP10002D93E5E	G
UniRef90_C0BFS9	G
UniRef90_A0A059FRX5	G
UniRef90_F6BE37	G
UniRef90_P0C919	G
UniRef90_UP1000365AD84	G
UniRef90_D5CNX1	G
UniRef90_H0QYX1	G
UniRef90_G7VAH0	G
UniRef90_U4LG68	G
UniRef90_UP10004216A6E	G
UniRef90_X1FF14	G
UniRef90_UP10004707319	G
UniRef90_G3JLE3	G
UniRef90_E6SK75	G
UniRef90_D1C437	G
UniRef90_G2YT48	G
UniRef90_F4Q6B6	G
UniRef90_E7R026	G
UniRef90_Q9HJR9	G
UniRef90_Q5TT27	G
UniRef90_V4JPC2	G
UniRef90_UP1000329CD2D	G
UniRef90_A2TZI8	G
UniRef90_B4CUD8	G
UniRef90_K1WTF5	G
UniRef90_UP100035FF454	G
UniRef90_Q7SGP0	G
UniRef90_L0JWP4	G
UniRef90_Q1DGL5	G
UniRef90_G8XAY6	G
UniRef90_UP100046236C7	G
UniRef90_Q8DJ67	G
UniRef90_UP100001B56A4	G
UniRef90_L9ZR94	G
UniRef90_R0KBE1	
UniRef90_UP10004112EC5	G
UniRef90_UP1000380687B	G
UniRef90_G2PN48	G
UniRef90_C2PED9	G
UniRef90_D2RW89	G
UniRef90_F6FR06	G
UniRef90_UP100036C54D0	G
UniRef90_A2BJ47	G
UniRef90_A6VGU3	G
UniRef90_G2LDH3	G
UniRef90_K0B911	G
UniRef90_V6AUG0	G
UniRef90_F6CRT9	G
UniRef90_M7TH70	G

	1	10	20	30	40
UniRef90_Q97AK2	V	T	V	R	Y
UniRef90_B3M269	V	H	V	L	F
UniRef90_I3R6R4	U	E	L	R	F
UniRef90_D3TBJ0	U	E	L	R	F
UniRef90_M0IF43	M	E	W	K	L
UniRef90_A3MV20	U	E	W	K	L
UniRef90_UPI00047CF854	U	E	W	K	L
UniRef90_A0A010RCK9	U	E	W	K	L
UniRef90_N1VZ61	N	V	L	F	A
UniRef90_Q2NCE2	I	Q	L	S	F
UniRef90_U2XKY1	I	T	I	L	F
UniRef90_V41XD0	M	A	R	V	R
UniRef90_G0ECT9	M	R	W	K	L
UniRef90_K7QW71	M	P	V	N	L
UniRef90_B8D487	V	K	V	N	L
UniRef90_L0HJG3	V	K	I	R	L
UniRef90UPI0002DF1DF1	M	A	V	V	R
UniRef90_A1RT41	I	R	V	K	F
UniRef90UPI0003773298	M	K	V	R	F
UniRef90_M7N4T3	V	N	I	A	F
UniRef90UPI00036DB46D	V	K	V	R	F
UniRef90_E6ZSD1	V	R	I	L	Y
UniRef90_Q3IMQ7	M	E	W	R	L
UniRef90_J3KDY0	Q	I	H	Y	F
UniRef90_A1RWZ4	L	Q	V	R	Y
UniRef90_T5A5I0	N	V	L	F	F
UniRef90_G0V4N7	V	T	V	K	L
UniRef90_Q9HP17	M	E	W	Q	L
UniRef90_B1V935	V	R	V	K	F
UniRef90_C6R3F9	M	Q	V	H	F
UniRef90_P0CT28	V	R	V	L	Y
UniRef90_B2GCN5	V	T	V	K	L
UniRef90UPI000463F3F7	V	R	V	K	F
UniRef90_U1NQF7	M	I	V	R	L
UniRef90UPI00036786F2	M	R	W	K	L
UniRef90_D3L614	M	I	V	K	F
UniRef90_H1Z1H5	M	I	K	V	A
UniRef90_A0A026X034	M	T	I	L	F
UniRef90_D4GVB0	M	V	E	L	R
UniRef90_E7FZA5	M	V	R	Y	F
UniRef90_V4XUT1	M	V	R	Y	F
UniRef90_M0CY74	M	V	R	Y	F
UniRef90UPI0004057676	M	M	T	V	K
UniRef90_U5E4P2	M	V	R	Y	F
UniRef90_B8D2Z1	M	V	R	Y	F
UniRef90_V4Q1E5	M	M	T	I	R
UniRef90_I0JYT1	M	M	I	R	I
UniRef90_F1YJ97	M	V	Q	A	L
UniRef90UPI000371261B	M	V	Q	A	L
UniRef90_T1JGE4	M	V	Q	A	L
UniRef90_F4F4A7	M	V	Q	A	L
UniRef90_J0NGF0	M	V	Q	A	L
UniRef90_S2Z9I2	M	M	T	I	R
UniRef90UPI0003B5FA13	M	M	V	Q	A
UniRef90_I0ENC6	M	M	V	Q	A
UniRef90_F4C4A9	M	M	V	Q	A
UniRef90_U1NSJ5	M	M	V	Q	A
UniRef90_Q3EU73	M	M	V	Q	A
UniRef90_L9W0J7	M	M	V	Q	A
UniRef90_L9X507	M	M	V	Q	A
UniRef90_L0HLA9	M	M	V	Q	A
UniRef90_R1EM28	M	M	V	Q	A
UniRef90_I0I7G7	M	M	V	Q	A
UniRef90_S6BDL4	M	M	V	Q	A
UniRef90_E3QWJ9	M	M	V	Q	A
UniRef90_V4P2A2	M	M	V	Q	A
UniRef90_Q5V0P0	M	M	V	Q	A
UniRef90UPI00047B0E55	M	M	V	Q	A
UniRef90_U2RV60	M	M	V	Q	A
UniRef90_G2FVR8	M	M	V	Q	A
UniRef90_K4LDX0	M	M	V	Q	A
UniRef90_G4LX65	M	M	V	Q	A
UniRef90_D7W1C9	M	M	V	Q	A
UniRef90_M5BY39	M	M	V	Q	A
UniRef90_U2G3Z6	M	M	V	Q	A
UniRef90_Q9Y8C2	M	M	V	Q	A
UniRef90_W3XMA7	M	M	V	Q	A
UniRef90_J4SCU3	M	M	V	Q	A
UniRef90_L9XB24	M	M	V	Q	A
UniRef90_B8D538	M	M	V	Q	A
UniRef90_M0PC31	M	M	V	Q	A
UniRef90_I9C4W9	M	M	V	Q	A
UniRef90_A0A059DP61	M	M	V	Q	A
UniRef90_M5GG48	M	M	V	Q	A
UniRef90_W8YSH1	M	M	V	Q	A
UniRef90_G7WND8	M	M	V	Q	A
UniRef90_S3UQC5	M	M	V	Q	A
UniRef90_I7L0V9	M	M	V	Q	A
UniRef90_E4U9C5	M	M	V	Q	A
UniRef90_A7EG04	M	M	V	Q	A
UniRef90_G2REC2	M	M	V	Q	A
UniRef90_R4VW09	M	M	V	Q	A

50 60 70 80

UniRef90_Q97AK2	E K F R K L L Y P N V I I L L N G N [I] E G L K T P L K D G D N I D V F P P V A G
UniRef90_B3M269	[L A S I K D N L L I L A H N E S Y I S D K I L L F R E G D E L A V I P P L S G G
UniRef90_I3R6R4	G F G Q L I E N G D I R P H V N V H L D G L E T D L E D G D A V S V F P P V A G
UniRef90_D3TBJ0	F L K D E V I E V S I N G K Y A K N D D P L A P E I S V F P I I S G
UniRef90_M0IF43	A L S R V F T D G E L N V L R N G E T A T L E D D A E D G D E L A L F P P V S G
UniRef90_A3MV20	K L K A E I L E G D Y N I L V N G R A V E W E T R L K D G D E V V F I P P A A G
UniRef90_UPI00047CF854	G L R S V I K F I I A V N K K L C S E R A E I P V G A E V A I L P P F S S G S G
UniRef90_A0A010RCK9	G F K E R F L G S C L V T V N L E Y V D P D D I I R S G D E V A I I P P V S S G
UniRef90_N1VZ61	E A T N L L K I S R I S I N Q T I A K D S D S L I E G S V I A I L P P S S G
UniRef90_Q2NCE2	Q V A D Q L Q Q D R V N V A C A G T V L A D K T A L A D G D E V A L L P P V S G
UniRef90_U2XKY1	G L A A I L P K C A V L V D G A R A A D S S E I G P D V T V D I L P P F A G
UniRef90_V41XD0	A L A A L D E E G E L R P H V N H E T E G E L A T P L D A D D E L L A L F P P V S
UniRef90_G0ECT9	E L L R K S I E E Y S T L I L V N G R P V G E K T V L R D G D R V A L I P P A A G
UniRef90_K7QW71	A L R A E L F E G S E R V S V F L E L E G L A T P L E E G A T L D L F P P V A G
UniRef90_B8D487	I L G R D F I D E V L I I L V N G R H I Q F I E E L K D G D V I A I F P P I A G
UniRef90_L0HJG3	D G Y A A I F D E Q V I L M R N K R V E T A E V D T G D E I A V F P P V A G
UniRef90_UPI0002DF1DF1	E L G G I L P R C A V L V G G A R V D D D T P L A A D D L V D V L P P F A G
UniRef90_A1RT41	N L E T E I L L D E T Y N I L L V N G R L N G L A T K L K D G D E V V F I P P A A G
UniRef90_UPI0003773298	E S A S A S A P P R C S F L H N S T L R D D G T S M S L G D T V D V L P P F A G
UniRef90_M7N4T3	A L Q G M R Y A L A L N K K I I T A D T P L S E G A E L A L L P P F S S G
UniRef90_UPI00036DB46D	A A A S V L G S C A V F I D D H L A D S S R P L T V E S M D L L P P F A G
UniRef90_E6ZSD1	A K G A Q A V L R T C R W S V D N T L I E I E D L L K G G E E V A A I P P V S
UniRef90_Q3IMQ7	D L E A E V L L D D H I R V L R N D R F V S D D T T L E E G D E L L A L F P P V S
UniRef90_J3KDY0	G I K E K V L S S C A V S V G L E Y V D A D R I Q A G E E V A I I P P V S
UniRef90_A1RWZ4	V P M L S G E E M L V L V N G R R S G L K E K V D L P D D G S Q V V I A P P V S
UniRef90_T5A5I0	G V I K A K I L D S C G V T L N L E Y V D E D M V I R E A D E V A I I P P V S S G
UniRef90_G0V4N7	L P L N E V F N C T I N G Q N A D F N T K I K D G D T V G F Y P P Y I V G G
UniRef90_Q9HP17	A L G D L A A D G S L A V L V N G V T V D L D T A I A A G D E L A M F P P V S
UniRef90_B1Y935	G L E S E L L D E S Y N V L V N G R A V E W A T A L R E G D E V V F I P P A A G
UniRef90_C6R3F9	G L T L A Q V M E Q C S F L V N G A R S D A Q A P Q D A D R V V D V L P P F A G
UniRef90_P0CT28	S R G A E A V L R T C R W S V D N T L I E I D E T L H G R E E V A A I P P V S
UniRef90_B2GCN5	A L E A T L A N S R V A V D Q E F I N E E D V L L S E A S E V A L I P P V S
UniRef90_UPI000463F3F7	G F F E K I K I L G A V R V S L D L E Y C S W D C P I G E A S E L L A V I P P V S
UniRef90_U1NQF7	E L A D G D L E P H L N L L R N G E N V G L T T P V S D D D E L A L F P P V S
UniRef90_UPI00036786F2	A E F A D V L S R C S V M I D G R R A D D D V P V A A A G A T L D I L P P F A G
UniRef90_D3L614	R E R L V L K G D G L M V L V N G H L Q G F D T P L G K G S V I D V F P P P V A G
UniRef90_H1Z1H5	G L G V L I F D G S S L R K F V E F L A G L D T A L A D G D L I A L F P P P A A G
UniRef90_A0A026X034	F K L E S I R N Q I I L A L N E E F I A P N S V L S E K D E I A V I I P P L S G
UniRef90_D4GVB0	G L A R L I E D G E V K P H V N R E V V H L D T A L D D G D A V S V F P P P V A G
UniRef90_E7FA5	L H S W L S V S A V A I N G E L I E D H T P L R A G D E V V F L P P V C
UniRef90_V4XUT1	L R D R V L L D D G E V A D H I N H H A D G L S T T V S A G D E L A L F P P P V S
UniRef90_M0CY74	G L E S E V L D G H V R V L L H E G A E G F E T A V D D D G D E L A L F P P P V S
UniRef90_UPI0004057676	F D T V S Y S V A V N H E L I Q D V A T L Q S N D V V A L L P P F A G
UniRef90_U5E4P2	S E I D T L V G V C A F L I G D E L T R D P T A M L R D R V D V L P P F A G
UniRef90_B8D2Z1	L P S K P E P I V L I N G E I A S D Q Q L R D G D T V Y I V P P F S G
UniRef90_V4Q1E5	R L F I G D D D S K V L M S V N Q V I Q S G D Q A L H D G D E V A F F S V F S G
UniRef90_I0JYT1	S F F E K I H G A R V A I D Q R Y A S W D Q P I E E A E E M A I I I P P V S G
UniRef90_F1YJ97	E F A R V L T C C S V L L V A V N Q E T Q D M D Y I L Q D G D E V A L L M P P F S G
UniRef90_UP1000371261B	Q P K L S V V L G N C I L A H N E E Y I G I D D E L K S G D V I A I I I P P L S G
UniRef90_T1JGE4	R L V P V L A V A N F L V D G V T C H D D K P L P A G V T I D V L P P F A G
UniRef90_F4F4A7	E M S R I I G S S C L V N A L S T P D S L T P L K D G D R I D I L P P F A G
UniRef90_J0NGF0	H A A N V L D Q C A I F A N N T Q V T D F S M P A E K A E S V D F L P P F A G
UniRef90_S2Z9I2	L E K K L A I P E K Q V I F L V N G R D Y S L D E P L S D G D V I A I F P P V G G
UniRef90_UP10003B5FA13	V K E W L S V C A I A L N D K L I D D D T P L K D G D V I S L L P P V C
UniRef90_I0ENC6	K L T L Q T K Y V I A I N K K L I R T K V A L S Q E V E V A L L P P F S G
UniRef90_F4C4A9	L K E L S C I R D S C L L A V N Q E Y V N D D A S I T P N S E I A V I I P P L S G
UniRef90_U1NSJ5	V P V S E P I M V A I N E E Y A N E D D R V Q S G D V V A L I I P P V S G
UniRef90_Q3EU73	G L G Q L L E D G D D G V A I N G H M A G V E T T L E D G D R L S V F P P V A G
UniRef90_L9W0J7	D L E G T L L A D S V T V L R N G T N V T H A T E L A D G D T L L S S I T P P V T G
UniRef90_L9X507	V L K N E I E C A V V S I D G K Y A Q E D M P I A H E V S V Y P M I S S G
UniRef90_U0HLA9	G I R A Q V L L D S C A V T V N L Q Y V D L E D Q I K E G D E V A L I I P P V S S
UniRef90_R1EM28	D L A S R L Q R A V P M V A G R H A A P G D R V N D G E E V A F L L P P V A G
UniRef90_I0I7G7	E R G Y L L A P E H V R V T V N K Q F A E P F T R L D P G D E V A I I
UniRef90_S6BDL4	G I K E R I L E S C L V T V N L E Y V D I P G P I R A G D E V A V I I P P V S S
UniRef90_E3QWJ9	A L G Q V Q S D A I H M S V N Q V T T R E D L V L S E G D E I A F F S V F S G
UniRef90_V4P2A2	E M D L F E D G E L R I L R N G H L D G L E T P L E D G D E L S V F P P V A G
UniRef90_Q5V0P0	E L T T T K F S L A I N K K L I S G N Q E I P E N A E A L L I P P F S G
UniRef90_UP100047B0E55	D L E R V L P V C S F L V D E A S A A D T P L G D D A L V D V L P P F A G
UniRef90_U2RV60	E I A I C F I N G K D A N E E N S V L K D G D T L L A I L F P P P V G G
UniRef90_G2FVR8	K E Q E K Q L S S D V I L V N G H L A G L A T P L K E E D E V A I I F P R L A G
UniRef90_K4LDX0	L V K L E P L K D S L T V A V N W K Y T D I N T S L N E I E E L A I I L P P I S S G
UniRef90_G4LX65	R L K E T T F L V A V D G L K A D N N Q L I S D T S E I A L L P P Y S S C
UniRef90_D7W1C9	G T K L Q E V L D I S S W S V D E E M V D D N Q V L K G G E E V G V I C P V S S G
UniRef90_M5BY39	G A A D L L S R T A C A R G D T L L A A D T P L G D G D T I A L I I P P V S S G
UniRef90_U2G3Z6	G I K E K V L L S S C S I S L G D E Y V D L V S L I Q G G D E V A I I I P P V S S S
UniRef90_Q9Y8C2	G I K A K I L D F S L V T V N L N Y V D L P E V I K E G D E V A I I I P P V S S S
UniRef90_W3XMA7	R L A T V L T R C S Y L I A V R D E T T A L Q T G D T I D V L P P F S S G
UniRef90_J4SCU3	G L E G Q L L R S Q L S I V L K N G H M E G P E T E L D G G D R L S V F P P V A G
UniRef90_L9XB24	G L A K Y I S E S Q I I V L H N S K T S G L D T V L M D M D T V V L M P P V S S G
UniRef90_B8D538	A L G D L D A D G E V A D H I N H H D E G D A T L E S G D E L A L F P P V S S G
UniRef90_M0PC31	W Y S S D L V D A R V K I A V R D E T T A L Q T G D T I D V L P P F S S G
UniRef90_I9C4W9	S E A L L E R T V R A A V N D E L V L D T H M V Y P A D T V E E F M S P P V S G
UniRef90_A0A059DP61	G K G L G K V L E R C R W S V N D E M V E D E V V L R G G E E V A V I I P P V S G
UniRef90_M5GG48	A H A S L I G V S F V A C N E A Y A P D G Q M L D C G D R L A L L I P P V S G
UniRef90_W8YSH1	U N I F R 9 0 _ G 7 W N D 8
UniRef90_S3UQC5	G L E R V L S E L E V T V L L N R R G A D P S T V L E E G D E V A I I I P P F S S G
UniRef90_I7L0V9	D S S D L L R L C R F A I N Q T I V A D E V K L F D G A S V A V L P P S S S G
UniRef90_E4U9C5	E A H K A L L Q G Y V I L M H N G R R V R R A E V L A D G D E V A L L F P P V A G
UniRef90_A3MV20	E M Q G E L F E A R V S V F V N G R D V G L A T P L G P E D V L D L F P P V A G
UniRef90_UPI00047CF854	G I R D Q V L H S C L V T I N F E Y V D P E I I I K D G D E V A I I I P P V S S S
UniRef90_G2REC2	G F R A S V L D H S L V T I N L T Y V D E E V I Q E G D E V A I I I P P V S S S
UniRef90_R4VW09	D L A T L D E D G E V Y D H V N A T D A G L E T A V E D G D E L A L F P P V S G

UniRef90_Q97AK2	G
UniRef90_B3M269	G
UniRef90_I3R6R4	G
UniRef90_D3TBJ0	G
UniRef90_M0IF43	G
UniRef90_A3MV20	G
UniRef90_UPI00047CF854	G
UniRef90_A0A010RCK9	G
UniRef90_N1VZ61	G
UniRef90_Q2NCE2	G
UniRef90_U2XKY1	G
UniRef90_V4IXD0	G
UniRef90_G0ECT9	G
UniRef90_K7QW71	G
UniRef90_B8D487	G
UniRef90_L0HJG3	G
UniRef90_UPI0002DF1DF1	G
UniRef90_A1RT41	G
UniRef90_UPI0003773298	G
UniRef90_M7N4T3	G
UniRef90_UPI00036DB46D	G
UniRef90_E6ZSD1	G
UniRef90_Q3IMQ7	G
UniRef90_J3KDY0	G
UniRef90_A1RWZ4	G
UniRef90_T5A5I0	G
UniRef90_G0V4N7	G
UniRef90_Q9HP17	G
UniRef90_B1Y935	G
UniRef90_C6R3F9	G
UniRef90_P0CT28	G
UniRef90_B2GCN5	G
UniRef90_UPI000463F3F7	G
UniRef90_U1NQF7	G
UniRef90_UPI00036786F2	G
UniRef90_D3L614	G
UniRef90_H1Z1H5	G
UniRef90_A0A026X034	G
UniRef90_D4GVB0	G
UniRef90_E7FZA5	G
UniRef90_V4XUT1	G
UniRef90_M0CY74	G
UniRef90_UPI0004057676	G
UniRef90_U5E4P2	G
UniRef90_B8D2Z1	G
UniRef90_V4Q1E5	G
UniRef90_I0JYT1	G
UniRef90_F1YJ97	G
UniRef90_UPI000371261B	G
UniRef90_T1JGE4	G
UniRef90_F4F4A7	G
UniRef90_J0NGF0	G
UniRef90_S2Z9I2	G
UniRef90_UPI0003B5FA13	G
UniRef90_I0ENC6	G
UniRef90_F4C4A9	G
UniRef90_U1NSJ5	G
UniRef90_Q3EU73	G
UniRef90_L9W0J7	G
UniRef90_L9X507	G
UniRef90_L0HLA9	G
UniRef90_R1EM28	G
UniRef90_I0I7G7	G
UniRef90_S6BDL4	G
UniRef90_E3QWJ9	G
UniRef90_V4P2A2	G
UniRef90_Q5V0P0	G
UniRef90_UPI00047B0E55	G
UniRef90_U2RV60	G
UniRef90_G2FVR8	G
UniRef90_K4LDX0	G
UniRef90_G4LX65	G
UniRef90_D7W1C9	G
UniRef90_M5BY39	G
UniRef90_U2G3Z6	G
UniRef90_Q9Y8C2	G
UniRef90_W3XMA7	G
UniRef90_J4SCU3	G
UniRef90_L9XB24	G
UniRef90_B8D538	G
UniRef90_M0PC31	G
UniRef90_I9C4W9	G
UniRef90_A0A059DP61	G
UniRef90_M5GG48	G
UniRef90_W8YSH1	G
UniRef90_G7WND8	G
UniRef90_S3UQC5	G
UniRef90_I7L0V9	G
UniRef90_E4U9C5	G
UniRef90_A7EG04	G
UniRef90_G2REC2	G
UniRef90_R4VW09	G

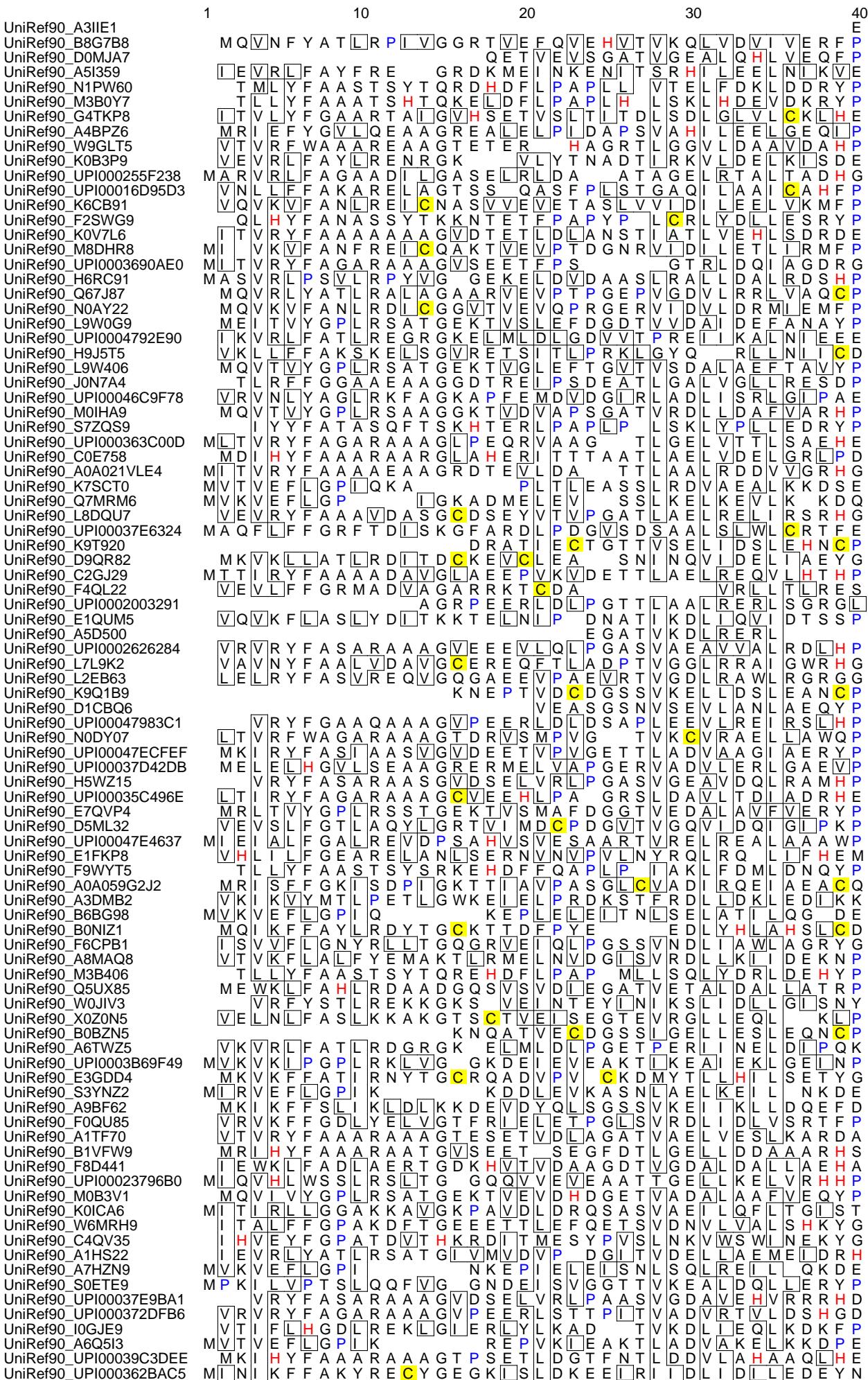
UniRef90_F0LLB5
 UniRef90_A3CV65
 UniRef90_M1VFC2
 UniRef90_I2FSE1
 UniRef90_Q0PIE1
 UniRef90_H8G3S6
 UniRef90_I5AP57
 UniRef90_D3S1J2
 UniRef90_UPI0003B32E76
 UniRef90_J7INL6
 UniRef90_A4A0J7
 UniRef90_W0K112
 UniRef90_D3SZ34
 UniRef90_V4XPU4
 UniRef90_V4NV54
 UniRef90_D5EAN0
 UniRef90_B8D4M9
 UniRef90_R4Z339
 UniRef90_C3XM84
 UniRef90_N0B1D4
 UniRef90_Q74EQ4
 UniRef90_A0A024JP22
 UniRef90_Q2G9V2
 UniRef90_V4JMS2
 UniRef90_D4HC14
 UniRef90_L9W466
 UniRef90_R9A8R4
 UniRef90_T1CIY2
 UniRef90_L0AGY9
 UniRef90_V2YBG3
 UniRef90_UPI0003602C9F
 UniRef90_UPI000382163E
 UniRef90_C1F3F4
 UniRef90_Q09412
 UniRef90_L0I9H6
 UniRef90_B0K0E7
 UniRef90_W4RRV3
 UniRef90_A4GI22
 UniRef90_Q3A7C9
 UniRef90_M1Y5E2
 UniRef90_I4B770
 UniRef90_F9JHS2
 UniRef90_M1RJJ0
 UniRef90_V4PK07
 UniRef90_K0KJD4
 UniRef90_B0SEP8
 UniRef90_A0LVK0
 UniRef90_UPI0003641D01
 UniRef90_UPI0004796FE5
 UniRef90_K0F3U2
 UniRef90_A7NKD3
 UniRef90_S6A5C2
 UniRef90_UPI0003B371FB
 UniRef90_A6E7T3
 UniRef90_W0E9W4
 UniRef90_Q2HD73
 UniRef90_A0A017SF14
 UniRef90_B8GIR4
 UniRef90_UPI000474492C
 UniRef90_Q3ADY9
 UniRef90_L9VR15
 UniRef90_X0W854
 UniRef90_Q7MSI9
 UniRef90_G2DGW0
 UniRef90_Q8FU31
 UniRef90_K9TQF2
 UniRef90_G6CJK9
 UniRef90_K5W2V5
 UniRef90_M0BMR0
 UniRef90_D1B3P5
 UniRef90_UPI000287E0EA
 UniRef90_UPI00047454C8
 UniRef90_B4SL64
 UniRef90_UPI000364158F
 UniRef90_UPI0003B42FB
 UniRef90_D4GU6
 UniRef90_UPI0003FD78AA
 UniRef90_R4TI03
 UniRef90_N1V576
 UniRef90_UPI00035C48FF
 UniRef90_W4KB66
 UniRef90_E7AA76
 UniRef90_D9V379
 UniRef90_S3VH26
 UniRef90_F8ADU8
 UniRef90_C9R13
 UniRef90_H3ZNJ6
 UniRef90_A7H0B6
 UniRef90_Q2JFW1
 UniRef90_D8QJA2
 UniRef90_K6CGK5
 UniRef90_A8ZW73

1 10 20 30 40
 M I R I K L M G A L A H L A G S R E I Y I E V D K P T V D E I L K E I V K G Y D
 V R V R T F A R L R E A I G G D T L E V P E G A T M S R L L A V V A E T S E Q
 V R V L L F A A C Y R C R A V N K D S I V V E V P A A T V E T L R K R L P E V L Q
 V R V Y Y F A S V R T T I G Q S N E T F V L P S T P L S S L I A L I S Q T H S
 M K V N F Y A Y F R E Y A N A K E L T V D H C A T V E D L I L F L G Q R C G
 V R V R Y F A S A R A A R G T E H E V I Q I P A A T V A D A V E H L R T A H P
 I H V L F F A K C R E L S Q T T R S V F T V P S E R A S D L L D K I V I Q
 M I K V K Y L G Y F S Q I G K R E E K V S L D G A T V E V L L Q N L A K K Y G
 V H I R Y F A A A K A I L G V S E E Q R A A A G Q T I G E L M T E L A T S A P
 V T I K L F A T F R D R F K V V E E R E L P T G S K V L N I L E P L N I
 UniRef90_A4A0J7
 UniRef90_W0K112
 UniRef90_D3SZ34
 UniRef90_V4XPU4
 UniRef90_V4NV54
 UniRef90_D5EAN0
 UniRef90_B8D4M9
 UniRef90_R4Z339
 UniRef90_C3XM84
 UniRef90_N0B1D4
 UniRef90_Q74EQ4
 UniRef90_A0A024JP22
 UniRef90_Q2G9V2
 UniRef90_V4JMS2
 UniRef90_D4HC14
 UniRef90_L9W466
 UniRef90_R9A8R4
 UniRef90_T1CIY2
 UniRef90_L0AGY9
 UniRef90_V2YBG3
 UniRef90_UPI0003602C9F
 UniRef90_UPI000382163E
 UniRef90_C1F3F4
 UniRef90_Q09412
 UniRef90_L0I9H6
 UniRef90_B0K0E7
 UniRef90_W4RRV3
 UniRef90_A4GI22
 UniRef90_Q3A7C9
 UniRef90_M1Y5E2
 UniRef90_I4B770
 UniRef90_F9JHS2
 UniRef90_M1RJJ0
 UniRef90_V4PK07
 UniRef90_K0KJD4
 UniRef90_B0SEP8
 UniRef90_A0LVK0
 UniRef90_UPI0003641D01
 UniRef90_UPI0004796FE5
 UniRef90_K0F3U2
 UniRef90_A7NKD3
 UniRef90_S6A5C2
 UniRef90_UPI0003B371FB
 UniRef90_A6E7T3
 UniRef90_W0E9W4
 UniRef90_Q2HD73
 UniRef90_A0A017SF14
 UniRef90_B8GIR4
 UniRef90_UPI000474492C
 UniRef90_Q3ADY9
 UniRef90_L9VR15
 UniRef90_X0W854
 UniRef90_Q7MSI9
 UniRef90_G2DGW0
 UniRef90_Q8FU31
 UniRef90_K9TQF2
 UniRef90_G6CJK9
 UniRef90_K5W2V5
 UniRef90_M0BMR0
 UniRef90_D1B3P5
 UniRef90_UPI000287E0EA
 UniRef90_UPI00047454C8
 UniRef90_B4SL64
 UniRef90_UPI000364158F
 UniRef90_UPI0003B42FB
 UniRef90_D4GU6
 UniRef90_UPI0003FD78AA
 UniRef90_R4TI03
 UniRef90_N1V576
 UniRef90_UPI00035C48FF
 UniRef90_W4KB66
 UniRef90_E7AA76
 UniRef90_D9V379
 UniRef90_S3VH26
 UniRef90_F8ADU8
 UniRef90_C9R13
 UniRef90_H3ZNJ6
 UniRef90_A7H0B6
 UniRef90_Q2JFW1
 UniRef90_D8QJA2
 UniRef90_K6CGK5
 UniRef90_A8ZW73

50 60 70 80

UniRef90_F0LLB5	R H D K	I M V N G K V A R G D V I V	K D G D E I K V M P V L S G
UniRef90_A3CV65	Q A G E A L F E G Y V I L M H	N G R R V R R A E A L	A D G D E V A L F P P V A G G
UniRef90_M1VFC2	K L A A H S A	V A V N L E Y A E A W Q R V	Y S Q D E V A L I P P V S G G
UniRef90_I2FSE1	D K N V D S N L Q S C R W S V D	N T L I E D I L	K G G E E V A A I P P V S G G
UniRef90_Q0PIE1	R Q K E L L K E G T V I L V N G H	L G G P Q A R L	Q P D D E I S I F P L V A G G
UniRef90_H8G3S6	D S L A R I L E A A S F L L D G V A V R D	D R P L	P D G A E L D V L P P F A G G
UniRef90_I5AP57	F G L T T I R H N L I A H N E S F V N	N D S I F L	K D G D E L A V I P P L S G G
UniRef90_D3S1J2	R F F E A V A V A S R A F R S A V	N G E Q A D M K R K L	N H G D N V V I S F P M G G G
UniRef90_UPI0003B32E76	D A S A A V T L D R C S F L V N	R A T T D R S V L L	R D G D Q L D V L P P F A G G
UniRef90_J7INL6	K P E E V I A I C L V N G R D V N A Q H	H L L	N D G D T I A L F P P V G G G
UniRef90_A4A0J7	Q L E P Y A Q F L N F A V N Q T Y A T A A T R V	A A D D E I A C I	P P P V S G G
UniRef90_W0K112	A L A D L T E D G D L R H H	V N R N L D G	L A T E L D A G D E L A M F P P V S G G
UniRef90_D3SZ34	G L G Q L L E S D E I R V L K N G H	M A G A E T V L	E D G D V V S V F P P
UniRef90_V4XPU4	L E D R V M E D G D L S S H I N R E A A G	D T P	V E A D D E L A L F P P V S G G
UniRef90_V4NV54	V L G A L F E E G G L Q M S V N Q V R V T	G D T T L	S D G D E V A F F S A F S G G
UniRef90_D5EAN0	E E F E L F E G N E G E I R R F V N R H	L S G I E T E I	K A S D E V S I L P A V S G G
UniRef90_B8D4M9	F L Q E I L R N I P L I T Y V N G R H V D L	N H V L	E D N D E V I L I A P P F
UniRef90_R4Z339	S N F D Q V V V E N S K V W L N G E P T D V A V G	V G	G A D D E V A V L P P I S G G
UniRef90_C3Xム84	I N A W L K D C A I A L N N T I S L D T P I	K D G D K I	A L L P P V C G G
UniRef90_N0B1D4	K K L E V F E D N K L I I L V N G R H I D H H T K	I L V N H	K Q D D V I C I F P V V A G G
UniRef90_Q74EQ4	P L S R K R K L L D G D T I I L V N H L E G	L E T P I	R D G D T V A L F P P P G A G G
UniRef90_A0A024JP22	A V A E L D A L N T C A V A V N M D Y V G R D V T	I	A A G D E V A I I P P V S S G G
UniRef90_Q2G9V2	A L A V E L L G E K V R M A L N G R L L T D G V V	L	G D G D E L A F L P P P V S G G
UniRef90_V4JMS2	R S L R A L G I G V Y L I A D G R T L R P H D Q I	P D D A A V V H V L	P P S S G G
UniRef90_D4HC14	G L G R L L G V C T L F V D G S A V R G E Q V	E P A R A Q V	V E V L P P F A G G
UniRef90_L9W466	G L E G Q I L L E D Q L S V L K N G H M A G P E T G	G L E D G D T L S V F P P	V A G G
UniRef90_R9A8R4	D A T N L L K I S R I S I N Q I I A K D S D S I	V D G A V V V A I I L P P	P S S G G
UniRef90_T1CIY2	A H W P A F R A G L L R V S S F A S D T T L	R D G D R I A I L P P	V S G G
UniRef90_L0AGY9	A L G R V L L D D G E L R V L R N G T N V G L E T E L	E D G D E L A L F P P V S G G	
UniRef90_V2YBG3	D T G L G K I L E T S Q W S V D E E M I D N E V T L	K G G E Q V A V I C P	V S G G
UniRef90_UPI0003602C9F	P G F F E R N F G A R V S L D E E Y C S	W D A P V G E A G E M A V L P P	V S G G
UniRef90_UPI000382163E	G L T T V L P R C A L L V A G A R T T A D P A P	V D G V T V D V L P P F A G G	
UniRef90_C1F3F4	L Q N S V W Q T M A V V N R E Y A S R E Q V L	R E G D E V A V A L L P P	V S G G
UniRef90_Q09412	A L Q K I E K V M M L A V D Q E Y A N P G D E L	V R F T E I A V I P P L	S G G
UniRef90_L0I9H6	L R D R V L L D E D G T I V L R N G Q K G E Q	L E A G D E L A M F P P V S G G	
UniRef90_B0K0E7	E K D V A I F L V N G L D G K I D P L	S D G D V I S L F P P V V G G G	
UniRef90_W4RRV3	A L H E E I Y T E E V H V Y V I N G R N I V H	D Q E L K E S D Q F A L F P P V A G G	
UniRef90_A4G122	E W V N L F E N K N Y K L A I N Q E L C S W K D P I	H E G D E L A I F P P I T G G G	
UniRef90_Q3A7C9	E L G V A L I N G R H V P P E H V L V D G E T	T L S L F P P K V G G G	
UniRef90_M1Y5E2	S L E A I V L D D D I R R L L Y N E R D E G F	T V L E A G D D L A L F P P V S S G G	
UniRef90_I4B770	L A A D W L K V S R A A S D E A F L T P D T V L	E A G D D L T A G A R C C Y I L P P	
UniRef90_F9JHS2	T L G P T I L N N S R L A V N Q E F V D A A T V L	T P D E V A I I I P P V S G G	
UniRef90_M1RJJ0	H L C D I L K S S R F A K E N E Y V V K E F	K N S D T V F A I L P P V S G G	
UniRef90_V4PK07	F A G D A A A V R V R M S V N Q V Q F S D Q T	L A D G D E V A F F S V F S G G	
UniRef90_K0KJD4	K E F S E Y V K E N C G I T V D Y E Y I D K E V	F E N G D E I C I I P P V S S G G	
UniRef90_B0SEP8	N A V K I L N V S R V S I N Q R I V K E A E I I	P E N A I I I A I L P P S S G G	
UniRef90_A0LVK0	G L R E R I V D D K V N V Y V N D E L A G	D T P V K D G D T V T V L P A V A G G	
UniRef90_UPI0003641D01	A M T S V L D V A S V L I D G R A V Q G D A P L	A D A E T V V E I L P P F A G G	
UniRef90_UPI0004796FE5	G T G L P R I L D A A G F L L D G V A V R D H T R L	P D G A Q L D V L P P F A G G	
UniRef90_K0F3U2	D L D K M L S V C A Y L V G D E L T R D P A A A L	T Q R V D V L P P F A G G	
UniRef90_A7NKD3	K L R Q E L L N D E V H V F V N G R D A G V E T	L I Q A G D T I D I F P A V A G G	
UniRef90_S6A5C2	M E E S P V E E L L V L V N G K R L D P D E Y I	P D E S Q I I A P P V S S G G	
UniRef90_UPI0003B371FB	K L T A I L Q A S S V L V D G V V A Q A P D T I L	M A G A T V D I L P P F A G G	
UniRef90_A6E7T3	Q L A A M K Y K L A L N K N I V Q H N L K I	K H Q D T I I A I M P P F S S G G	
UniRef90_W0E9W4	E V A I C L V N G R D A K E D R I L E E G D T L	T S L F P P V V G G G	
UniRef90_Q2HD73	G I Q A S V L D H S L I T N L V Y V D V D Y V I	V E G D E V A I I I P P P V S S S G G	
UniRef90_A0A017SF14	G I R E K V L Q S C G V S V G D E Y V D V D E V I L	Q A G D E V A I I I P P P V S S S G G	
UniRef90_B8GIR4	V I S T A L F D G A L L P A V N I F L N G L	E E G D L I S V F P P V V A G G	
UniRef90_UPI000474492C	E I N D E I F T Q E V H V Y V N G R N I D L E T E V	H E T D Q I A L F P P V V A G G	
UniRef90_Q3ADY9	E I A I L L V N G L D A E P D R V V L K D G D Y I	S L F P P P V V G G G	
UniRef90_L9VR15	A L E E R V I L D G E G Q L A I N L L H A G	L D T E L E S G D E L A L F P P V	
UniRef90_X0W854	E L R H M L F D E S I N I Y V N H S L K G K E T	P T L E D G D E V A V I P A I A G	
UniRef90_Q7MSI9	L Y P I G I M V L N G R H A S L E T I L H E G D	V L G L F P K V G G G	
UniRef90_G2DGW0	D R A D M L E M E S I R P T V N K Q F A E S F T	L L E D G D E V G L I I P	
UniRef90_Q8FU31	G M T L A Q V F D R C T F L I D G R S A Q P D A S	V D V L P P F A G G	
UniRef90_K9TQF2	G I K E R L C D E K P L N V Y V N E E V C S E D	V S I V P A V A G G	
UniRef90_G6CJK9	L E T I K K N I L L A K N E E V C S E D V E L	R E S D N I A V I P P L S G G G	
UniRef90_K5W2V5	K T N L L D K V L L S S Q W S V D A D M V D E P E	V A V I C P P V S S G G	
UniRef90_M0BMR0	D L R E R V L L D E D I N V L R N G Q K G E Q	L E T T L E A G D E L A M F P P V S S G G	
UniRef90_D1B3P5	H L E S V S P L G V L M V N G R H V D V N Y I L	Q E G D T I I A L F P K V V G G G	
UniRef90_UPI000287E0EA	Q A A P I L K S T R L A N E D E Y V G K Q T L L	T D G A E Y Y C L I P P V S S G G	
UniRef90_UPI00047454C8	E M A R V I G I S T F L V N G L S T P A D S L A P	V D G D R V D V L P P F A G G	
UniRef90_B4SL64	A R W P G F R A G L L A F A D Q R V L R D H E A L	P D D G R V A I I I P P P V S S G G	
UniRef90_UPI000364158F	D V A K V L S R C S F L V A V R D L D T A L A T E	T L D V L P P F A G G	
UniRef90_UPI0003B42FB	A M D R V L V L K S G S F L V D G T V V R R D P A	H P V G G A V D I L P P F A G G	
UniRef90_D4GU6	A L E S R V F G D D I N V L R N G E A A A G E A	T A A G D E L A L F P P V S S G G	
UniRef90_UPI0003FD78AA	D A G N G Q P A M A S V V A R N E V L R D T A P	L A D D D V I D I L P P F A G G	
UniRef90_R4TI03	E K L A K L L D A V A S Y L L D G V A V R D T R P	L N D A A E L D V L P P F A G G	
UniRef90_N1V576	A P A L A T V I S R S S F L V N E I A A R D T S	M K D A D T I D I L P P F A G G	
UniRef90_UPI00035C48FF	P E L D P D M L K V C A F L I D D E L T R D D A A	V L T A R V D V L P P F A G G	
UniRef90_W4KB66	N T P L D K V L L E G S Q W S V D A E M V D D K	V L K G G E E V A V I C P V S S G G	
UniRef90_E7AA76	L K P W L S I S A V A L N G V L I D H T P L K E	G D H I V L L P P V C	
UniRef90_D9V379	G Q L S R V L V D A A S F L V N E V A V R D G	R A L S D G A T H D V L P P F A G G	
UniRef90_S3VH26	L S G P L L R I S R F A V D Q V I V G E D H S	L V D G Q T V A V L P P F A G G	
UniRef90_F8ADU8	G I Q E L L E D E K L R L L V N G H L E E L A T Q	I K P G D T V V V I F P P P G A G G	
UniRef90_C9R13	P P S Q V F S V L V N G R H V F L E T P L R E	G D R V A L F P P L G G G	
UniRef90_H3ZNJ6	E F H D K I L I L I N G K P A K G D A V V E E	G D E I K V M P V L S G G G	
UniRef90_A7H0B6	E L D L K E W L Q V C A V A N D E V V S L E T P	K D G D K I S I L P P V C	
UniRef90_Q2JFW1	G T L P A L L R R C S Y L V D Q P V G R R D P	R D G C V V E A L I P P F A G G	
UniRef90_D8QJA2	G T N L N A G I L R D S Q W S V D A E M V D D	T G G E E V A V I C P V S S G G	
UniRef90_K6CGK5	D L R D E I F T P E V H V Y V N G H L D D L Q	T R V A E E D Q F A L F P P P V A G G	
UniRef90_A8ZW73	E I K L V F L N G K H A G L D A A V K E G D R I	G L F P P V G G G	

UniRef90_F0LLB5	G
UniRef90_A3CV65	G
UniRef90_M1VFC2	G
UniRef90_I2FSE1	G
UniRef90_Q0PIE1	G
UniRef90_H8G3S6	G
UniRef90_I5AP57	G
UniRef90_D3S1J2	G
UniRef90_UPI0003B32E76	G
UniRef90_J7INL6	G
UniRef90_A4A0J7	G
UniRef90_W0K112	G
UniRef90_D3SZ34	G
UniRef90_V4XPU4	G
UniRef90_V4NV54	G
UniRef90_D5EAN0	G
UniRef90_B8D4M9	G
UniRef90_R4Z339	G
UniRef90_C3XM84	G
UniRef90_N0B1D4	G
UniRef90_Q74EQ4	G
UniRef90_A0A024JP22	G
UniRef90_Q2G9V2	G
UniRef90_V4JMS2	G
UniRef90_D4HC14	G
UniRef90_L9W466	G
UniRef90_R9A8R4	G
UniRef90_T1CIY2	G
UniRef90_L0AGY9	G
UniRef90_V2YBG3	G
UniRef90_UPI0003602C9F	G
UniRef90_UPI000382163E	G
UniRef90_C1F3F4	G
UniRef90_Q09412	G
UniRef90_L0I9H6	G
UniRef90_B0K0E7	G
UniRef90_W4RRV3	G
UniRef90_A4GI22	G
UniRef90_Q3A7C9	G
UniRef90_M1Y5E2	G
UniRef90_I4B770	G
UniRef90_F9JHS2	G
UniRef90_M1RJJ0	G
UniRef90_V4PK07	G
UniRef90_K0KJD4	G
UniRef90_B0SEP8	G
UniRef90_A0LVK0	G
UniRef90_UPI0003641D01	G
UniRef90_UPI0004796FE5	G
UniRef90_K0F3U2	G
UniRef90_A7NKD3	G
UniRef90_S6A5C2	G
UniRef90_UPI0003B371FB	G
UniRef90_A6E7T3	G
UniRef90_W0E9W4	G
UniRef90_Q2HD73	G
UniRef90_A0A017SF14	G
UniRef90_B8GIR4	G
UniRef90_UPI000474492C	G
UniRef90_Q3ADY9	G
UniRef90_L9VR15	G
UniRef90_X0W854	G
UniRef90_Q7MSI9	G
UniRef90_G2DGW0	G
UniRef90_Q8FU31	G
UniRef90_K9TQF2	G
UniRef90_G6CJK9	G
UniRef90_K5W2V5	G
UniRef90_M0BMR0	G
UniRef90_D1B3P5	G
UniRef90_UPI000287E0EA	G
UniRef90_UPI00047454C8	G
UniRef90_B4SL64	G
UniRef90_UPI000364158F	G
UniRef90_UPI0003B42FBD	G
UniRef90_D4GU6	G
UniRef90_UPI0003FD78AA	G
UniRef90_R4TI03	G
UniRef90_N1V576	G
UniRef90_UPI00035C48FF	G
UniRef90_W4KB66	G
UniRef90_E7AA76	G
UniRef90_D9V379	G
UniRef90_S3VH26	G
UniRef90_F8ADU8	G
UniRef90_C9RD13	G
UniRef90_H3ZNJ6	G
UniRef90_A7H0B6	G
UniRef90_Q2JFW1	G
UniRef90_D8QJA2	G
UniRef90_K6CGK5	G
UniRef90_A8ZW73	G



50 60 70 80

UniRef90_A3III1	H P Q L K K W Q D I T R F S V N Y Q F V E A D T K L Q D G D E L V F I P P V S G G		
UniRef90_B8G7B8	R L R K E L L N P H V H V F I N G R D A G V E T V I K P G D T V D I F P A I A G G		
UniRef90_D0MJA7	R L K P H L E E G R L R S F V N I Y L G D E D T P L K P G A E L S I V P S V A G G		
UniRef90_A51359	E V A I L L I N G R D G K V D T L L K D G D V L S L F P P V G G		
UniRef90_N1PW60	G I K E K V I L L S S A V T V N L D Y V D L E E E I E P G D E V A V I I P P P V S S S		
UniRef90_M3B0Y7	G I K Q K V L S T S A V T V N L E Y V D P E E V I E E G D E V A V I I I P P P V S S S		
UniRef90_G4TKP8	G R G L K D V L N V S Q W S V D L E M V E D P E K L V G G E E V A V I P P F		
UniRef90_A4BPZ6	A L Q S H L P R I A C A V G D E V I P R S E M V T G D A P L V V L P P V S G		
UniRef90_W9GLT5	A L A T V V V K A S T F L I D G R S A D R S A L L E D G S T V E V L P P F A G G		
UniRef90_K0B3P9	D A H I I L L N G H D A D R E H S L K D G D V L S I F P Q V G G		
UniRef90_UP1000255F238	I S A E R V I A R C S I L V D G V R A V D D G H P V R E D S L V D V L P P F A G		
UniRef90_UP100016D95D3	E L R P I R D H V I I A V N E Q Y C E D L T A I R D G D E V A V I I I P P P V A G		
UniRef90_K6CB91	A M E D E I F T E E V H V F I N G H N I G L L T K I N P D D Q F A L F P P V A G		
UniRef90_F2SWG9	G M K E K I L S S C A V S V R L Q Y V D G E E M I E C N D E V A V I I I P P P V S S G		
UniRef90_K0V7L6	E L A R V L K R C S Y L V A V R D M D K P V S T S Q T V D V L P P F A G G		
UniRef90_M8DRH8	A L I E E E V F T P E V H V F I L N G R N V G L E T R V Q E D D Q F A L F P P V A G		
UniRef90_UP10003690AE0	H L G K V L L S A S F L V D G L A W H D R S V P L P A G V T V D V L P P F A G G		
UniRef90_H6RC91	A L I E R R I L R D G R L R R Y V N R S L D G D T A L R P G S E V M I I P A V A G G		
UniRef90_Q67J87	G L A A L L P H V Q V F I A G R D L Q G M A T P V P P G A D L A V F P P P V A G G		
UniRef90_NOAY22	K Y D E I F T E E K V H V Y V L N G H L E G L Y T V K G T D Q F A L F P P P V A G G		
UniRef90_L9W0G9	R A V Q Y L Y D D S V R V S V D G E R A R L E E P V S D D A S L A L V P A V Q G G		
UniRef90_UP10004792E90	E V I A I L L I N G R D G E L D T L L K R D D V V S I F P P P V G G		
UniRef90_H9J5T5	K Y N L N S I K K N I L L A K N E V V I C E D D I E I N E Q D N L L A V I I P P L S G G		
UniRef90_L9W406	R A T P Y L Y D G S V R V T V N G E R A A L E A P V S N D A E L T L M P A V Q G G		
UniRef90_J0N7A4	A L A P V L D V S S Y L V N E R S A T L D T P L A P G A R V D D V L P P F A G G		
UniRef90_UP100046C9F78	K P K I L L V N G R H A D S S G Q V L A E G D E V A L F P P V A G G		
UniRef90_M0IHA9	S A E T H L Y D P S V R V R M V G A R K A A L D D A I P D G E P V K L F P P A M R G G		
UniRef90_S7ZQS9	G I R T K V L A S C G I S L Q N E Y V D A D R V Q A G E E V A I I I P P V S S G		
UniRef90_UP1000363C00D	E L A R V L K A S F L V N E V S C R D H A A L P A G A T V D V L P P F A G G		
UniRef90_C0E758	G L S L A Q V L S R C S F L V D G R H A N M D T A I S A A E R V D V L P P F A G G		
UniRef90_A0A021VLE4	E L E R V L R R C S F L V A G A R A E D G G T P L P D G V T V D V L P P F A G G		
UniRef90_K7SCT0	M A Q W L E N C A V A V N D T L V S L D T Q L K S G D K V S L L P P V C G G		
UniRef90_Q7MRM6	E L S S W L E D C C A V A V N D T I V S L E V A L R S G D R V S S L L P P V C G G		
UniRef90_L8DQU7	A P M E P I L R V S A Y L V G D D L T R D L D R A I G S R V D V L P P F A G G		
UniRef90_UP100037E6324	G F E A Q W Q R A G A R M A V N Q V L V M G S A P V T I G D E I I A F M S A L S G G		
UniRef90_K9T920	G I K A R L E E G K L R F Y V N S E L D G A E T P L K D G D E V S I V P A V A G G		
UniRef90_D9QR82	S A M E L L D D K E V R I L V N G R L D G L E T E L K T K D V V T I F P R V A G G		
UniRef90_C2GJ29	H A R A V L E Q C A I F V D N A Q A T D R R A P V T S A Q S V D F L P P F A G G		
UniRef90_F4QL22	F F G A D V A A V R M S V N Q V Q V F A D Q A L N D G D E V A F F S V F S G G		
UniRef90_UP10002003291	E M A R V I P I C S F L V N S V S T P A D S L T P L T D G D A V D V L P P F A G G		
UniRef90_E1QUM5	N F S K V I L D D N G R I L V N G R L N G L S T K L S N G D E V V F L P P A G G		
UniRef90_A5D500	A L P E S K V F V V S V N G N M V G E D Y R L A E G D E V V F F P P A A S G G		
UniRef90_UP10002626284	E T L P R I L Q A A S F L V D G V A V R D R S R P L P E G A E L D V L P P F A G G		
UniRef90_L7L9K2	D R A G E L A A H C S V L D G D R L L R A D T E V I G S Q V D V L P P F A G G		
UniRef90_L2EB63	A W A E T I S A C T C		
UniRef90_K9Q1B9	G I K A R L C D D Q L N I Y V N E E L D N V D T A L N D G D E V S I V P A V A G G		
UniRef90_D1CBQ6	G L K S Q L A D G S V R L F V N G E D V G L D T P L N D G D K I G I L P A M A G G		
UniRef90_UP100047983C1	D G D P S M A R D R R S S F L L N E V L R S R T E P I R R R G D V L D V L P P F A G G		
UniRef90_N0DY07	D L A P V L E V S S L L A D G L V V G D D A E L D A G S T L L E V L P P F A G G		
UniRef90_UP100047ECFEF	N A A E L L P S C S Y L I N G K A A G M E K I V T D E D T V D V L P P F A G G		
UniRef90_UP100037D42DB	E L A P H L A R V A C A V G D T L V P R A T V L E G N E R L L A L L P P V S G G		
UniRef90_H5WZ15	G E L A R L I D A A S F I L D G M A V I R D V T R Q L P D G A E L L D V L P P F A G G		
UniRef90_UP100035C496E	R L G A V L G V A S F L V G V N W H D R R A P L P A G A T I D V L P P F A G G		
UniRef90_E7QVP4	R S E T Q L F F D D S A R I S V N G E R V E V D D A C P A D A E V T V F P A V Q G G		
UniRef90_D5ML32	Y P T M I L V N G I H A D P D T Q L Q E G D L L A L L F P P L A G G		
UniRef90_UP100047E4637	S Q A R A L L S R S A F A S T T I L R D A D A L P D D G R L L A L L P P V S G G		
UniRef90_E1FKP8	L K E L S P I E E C C I L A L N Q E Y I G D H N E I S A H S E I A V I I P P V S A G		
UniRef90_F9WYT5	G I K S R V L D S S A V T V N L D Y V D V E E L I K E G D E V A I I I P P V S A G		
UniRef90_A0A059G2J2	T E L I L D Q T I T R A A V N D K I V M E D H R V M P G D E L M F M S V L S G G		
UniRef90_A0A059G2J2	I K D D L E K K G R L I I L V N G K H I G M D T V L N D G D E I A I F P P A A G G		
UniRef90_A3DMB2	Q M R E W L E N S A V A V N D T L V S R D F A L K D G D R V A L L P P V C G G		
UniRef90_B6BG98	Q V Y G D R L R K E E I I I L V N G R H V A H H A K I L P G D V V S I F P V V A G		
UniRef90_B0N1Z1	G L R D Q L I D P G M A L A V N G K I L N F S L I L K T G D E V L F L P P A L G G		
UniRef90_F6CPB1	N I S K T L L D D S G L R I L V N G R A I D L D T V L K D G D E V V L L P P I D G		
UniRef90_A8MAQ8	G I R E K V L S T S A L T V N L D Y V D V E E A L Q A G D E V A I I I P P V S A G		
UniRef90_M3B406	A L A E E V L D E N I R V L V N D G E D E G L A T A V D E E T E L L A L F P P V S G G		
UniRef90_Q5UX85	I L D N N N L L A G T M I L V N G H L N G L D T I V Q N S D S I D F F P P A A G G		
UniRef90_W0JIV3	A H A V K L V F L N G V H A R G D E I L K D G D R V G V F P P V A G G		
UniRef90_X0ZON5	G I K A R L E Q G E L R R F V N R F L E G Q Q T A L K D G D E V S I I I P A I A G G		
UniRef90_B0BZN5	S L K E W L E I S A V A V N D K I I S L D K E I K N G K D V S I L P P V S G G		
UniRef90_A6TWZ5	I K F T E A V L L D G E Y V V V L V N G K L N G L A T K L N D D D E V V F L P P A E G G		
UniRef90_UP10003B69F49	A L S K V L A R C S Y L V A V R D M R T E L G T A A T I D V L P P F A G G		
UniRef90_E3GDD4	G L S L A D I L E R C T F L V D G Q R A E R A F V L D G A Q R V D V L P P F A G G		
UniRef90_S3YNZ2	E L E G R V L L D S Q I N V L R N G T N V R E E E G L E T E D E L L A L F P P V S G G		
UniRef90_A9BF62	R L Q A P I D A G V S V A V D G R I T G L S E P I P E G A E V Y L M Q R L R G G		
UniRef90_F0QQU85	R A K S Q L L R G S V R V S V D G D R S T P D D Q C P T D A S V S V Y P A I Q G		
UniRef90_A1TF70	D A R L L Q P N N L I V A V N G V L Q G Q G T V A K S G D T V T I V T V H G		
UniRef90_B1VFW9	E K F A E Y I Y N S C G I A V N L E Y V S L Q I T L V E G D E L T V I P P V S S S		
UniRef90_F8D441	T E F G D Y L T A C N C I A L N T E Y L D F D V Q V K D G D E V V I L P P V S S S		
UniRef90_UP100023796B0	E V K P W L E T S A I A V N D K I V S K N F K L E N G D K I A I L P P V C G G		
UniRef90_M0B3V1	N V K P W L E T S A I A V N D K I V S K N F K L E N G D K I A I L P P V C G G		
UniRef90_K0ICA6	U R K H L D K G E L R H F V N R A L Q G L E T P V T D A D E L L S I V P S L A G G		
UniRef90_W6MRH9	R L P R V L L D A C C G F L V A V R D M T R S L P D G S E D I L P P F A G G		
UniRef90_C4QV35	A L A R V V M A A C C G F L V D G V A V R E N A P V A D G A E F D V L P P F A G G		
UniRef90_A1HS22	N L E D D V K F G R L I I I N G R L I E D F D I L V L K D G G M D F F P P D G G		
UniRef90_A7HZN9	U N V K P W L E T S A I A V N D K I V S K N F K L E N G D K I A I L P P V C G G		
UniRef90_S0ETE9	U R K H L D K G E L R H F V N R A L Q G L E T P V T D A D E L L S I V P S L A G G		
UniRef90_UP100037E9BA1	R L P R V L L D A C C G F L V A V R D M T R S L P D G S E D I L P P F A G G		
UniRef90_UP1000372DFB6	A L A R V V M A A C C G F L V D G V A V R E N A P V A D G A E F D V L P P F A G G		
UniRef90_I0GJE9	N L E D D V K F G R L I I I N G R L I E D F D I L V L K D G G M D F F P P D G G		
UniRef90_A6Q5I3	L Q K W L S E C A V A V N D T L I E K S D I L K E G D R I T L L P P V C G G		
UniRef90_UP100039C3DEE	G L A D V F E R C T Y V D G R R A E R D A T V A S A T R V D V L P P F A G G		
UniRef90_UP1000362BAC5	I I K E D F N N G N V I V S K D C E I T T G E D V I N G D S E I G I Y P P V S G		

UniRef90_A3IIIE1	G
UniRef90_B8G7B8	G
UniRef90_D0MJA7	G
UniRef90_A51359	G
UniRef90_N1PW60	G
UniRef90_M3B0Y7	G
UniRef90_G4TKP8	
UniRef90_A4BPZ6	G
UniRef90_W9GLT5	G
UniRef90_K0B3P9	G
UniRef90_UP1000255F238	G
UniRef90_UP100016D95D3	
UniRef90_K6CB91	G
UniRef90_F2SWG9	G
UniRef90_K0V7L6	G
UniRef90_M8DHR8	G
UniRef90_UP10003690AE0	G
UniRef90_H6RC91	G
UniRef90_Q67J87	G
UniRef90_N0AY22	G
UniRef90_L9W0G9	G
UniRef90_UP10004792E90	G
UniRef90_H9J5T5	G
UniRef90_L9W406	G
UniRef90_J0N7A4	G
UniRef90_UP100046C9F78	G
UniRef90_M0IHA9	G
UniRef90_S7ZQS9	G
UniRef90_UP1000363C00D	G
UniRef90_C0E758	G
UniRef90_A0A021VLE4	G
UniRef90_K7SCT0	G
UniRef90_Q7MRM6	G
UniRef90_L8DQU7	G
UniRef90_UP100037E6324	G
UniRef90_K9T920	G
UniRef90_D9QR82	G
UniRef90_C2GJ29	G
UniRef90_F4QL22	G
UniRef90_UP10002003291	G
UniRef90_E1QUM5	G
UniRef90_A5D500	G
UniRef90_UP10002626284	G
UniRef90_L7L9K2	G
UniRef90_L2EB63	
UniRef90_K9Q1B9	G
UniRef90_D1CBQ6	G
UniRef90_UP100047983C1	G
UniRef90_N0DY07	G
UniRef90_UP100047ECFEF	G
UniRef90_UP100037D42DB	G
UniRef90_H5WZ15	G
UniRef90_UP100035C496E	G
UniRef90_E7QVP4	G
UniRef90_D5ML32	G
UniRef90_UP100047E4637	G
UniRef90_E1FKP8	G
UniRef90_F9WYT5	G
UniRef90_A0A059G2J2	G
UniRef90_A3DMB2	G
UniRef90_B6BG98	G
UniRef90_B0NIZ1	G
UniRef90_F6CPB1	G
UniRef90_A8MAQ8	G
UniRef90_M3B406	G
UniRef90_Q5UX85	G
UniRef90_W0JIV3	G
UniRef90_X0Z0N5	G
UniRef90_B0BZN5	G
UniRef90_A6TWZ5	G
UniRef90_UP10003B69F49	G
UniRef90_E3GDD4	G
UniRef90_S3YNZ2	G
UniRef90_A9BF62	G
UniRef90_F0QU85	G
UniRef90_A1TF70	G
UniRef90_B1VFW9	G
UniRef90_F8D441	G
UniRef90_UP100023796B0	G
UniRef90_M0B3V1	G
UniRef90_K0ICA6	G
UniRef90_W6MRH9	G
UniRef90_C4QV35	G
UniRef90_A1HS22	G
UniRef90_A7HZN9	G
UniRef90_S0ETE9	G
UniRef90_UP100037E9BA1	G
UniRef90_UP1000372DFB6	G
UniRef90_I0GJE9	G
UniRef90_A6Q5I3	G
UniRef90_UP100039C3DEE	G
UniRef90_UP1000362BAC5	G

1 10 20 30 40

UniRef90_V5XHH3
UniRef90_Q47MC0
UniRef90_B1I125
UniRef90_U5WC48
UniRef90_D7BJX5
UniRef90_Q0CX10
UniRef90_D3PDB8
UniRef90_A3TRJ3
UniRef90_UP1000225DFDC
UniRef90_Q3A7X8
UniRef90_W0JYK2
UniRef90_UP10003613BE3
UniRef90_F6D3P5
UniRef90_K7SFR4
UniRef90_A1ULP8
UniRef90_K9P498
UniRef90_C6WHY6
UniRef90_H016K5
UniRef90_UP10003F9BB21
UniRef90_R4TID8
UniRef90_A1UJV7
UniRef90_V8CW33
UniRef90_E3BC98
UniRef90_UP10003FD1008
UniRef90_M0LT86
UniRef90_V7I6Q3
UniRef90_UP10003478299
UniRef90_UP100041CA771
UniRef90_D2RWF8
UniRef90_F3Z1U0
UniRef90_M0JVZ1
UniRef90_J0L663
UniRef90_C0GFW5
UniRef90_U5E8F6
UniRef90_C0QTK3
UniRef90_K9RRW1
UniRef90_R4M3Q0
UniRef90_A0R444
UniRef90_UP10003654100
UniRef90_A0A059INW2
UniRef90_A2QYG2
UniRef90_S8EN89
UniRef90_UP10003C7EB3E
UniRef90_UP100036954F4
UniRef90_D2RWY4
UniRef90_X1GM25
UniRef90_Q1JZL5
UniRef90_V8D2Y6
UniRef90_A4WJL6
UniRef90_F0T6B4
UniRef90_UP10003B6C1FC
UniRef90_UP10003CDD89
UniRef90_A0YA94
UniRef90_E6TFY1
UniRef90_F3YKF8
UniRef90_I1EXL2
UniRef90_D6Y766
UniRef90_X1BV59
UniRef90_D3L3W2
UniRef90_T0Z6A4
UniRef90_X0ZB69
UniRef90_A0ZMN2
UniRef90_MOLF07
UniRef90_UP1000345CDE8
UniRef90_Q7VK46
UniRef90_UP100016C5085
UniRef90_I4ENI4
UniRef90_B3V6H0
UniRef90_K2DN14
UniRef90_UP100047A0C40
UniRef90_D2Q191
UniRef90_C6PXF5
UniRef90_H2G664
UniRef90_UP100047BD928
UniRef90_W0JVI3
UniRef90_I3CKT3
UniRef90_I4CC29
UniRef90_Q2RKJ8
UniRef90_B2A7W3
UniRef90_A0A010YY24
UniRef90_F8KSC1
UniRef90_F6W6N7
UniRef90_D5UWP8
UniRef90_J9RJ88
UniRef90_R6IGZ6
UniRef90_G7WIE6
UniRef90_L0ABM0
UniRef90_S0G682
UniRef90_I3ZD83
UniRef90_Q8ZT89
UniRef90_K6H8D2
UniRef90_C8PEF4

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

50 60 70 80

UniRef90_V5XHH3	E L A K V L A R C S Y L V D G V A V R D N V P L S T S E T L D V L P P F A G
UniRef90_Q47MC0	G I G E R L E N G Q L R R F I N R F L G G L D T P V N D G D T V T V L P A V A G G
UniRef90_B1I125	A G V P L D Q V K I M V N N R H A G P E R V L A H G D R V A V F P P V A G G
UniRef90_U5WC48	R L A L V L K A A S F L V D G L A C H D Q A A L P A G A T V D V L P P F A G
UniRef90_D7BJX5	E M F G M D L A V C A L M V N G Q R F N E H D V L P E A V E I D A L P P F A G
UniRef90_Q0CX10	G I S K V L S S C G V S L G E E Y V E V D A E T V I Q A G D E V A I I P P T T
UniRef90_D3PDB8	F Y N I P L N D I K I I L V N G K D A S L E T E V N D N D T V T F F S P V G G
UniRef90_A3TRJ3	A L R D V V A V C S V L L D G R S V G R D A E V G E D K V V E V L P P F A G
UniRef90UPI000225DFDC	A V A E Q L R E P H V H V A C A G K V L S D K A D L Q D G D E V A L L P P V S G G
UniRef90_Q3A7X8	E L G V A L I D G R H V T S D Q V L H A G V T I S L F P K V G G
UniRef90_W0JYK2	G A R A L L G E A D V V V T I N K R L E G R E T V L T D G D L V R I S P P I H
UniRef90UPI0003613BE3	E P M E R V V R S G S F L V G G V V S R D P S R E L T A T V D V L P P F A G
UniRef90_F6D3P5	E F K D V L F D D N L K V I V N G E I N G M E T P L K D G D Q V V M F Q T I A G
UniRef90_K7SFR4	G L A R T M P V C S F F L D G S A A R R D A V P A G D S R V D V L P P F A G
UniRef90_A1ULP8	E L G R V L A R C S Y L C D G V A V R D T T A L A N A Q T L D V L P P F A G
UniRef90_K9P498	G I Q A R L E N G K L R R F L N L Y V N S E D T V L S D G D E V S I V P A V A G
UniRef90_C6WHY6	A N L T R V L A A S F F L D G L A V R D H A A V V S A G A E L D V L P P F A G
UniRef90_H016K5	E L E R V L A R C S F L V A V R D R S Q R P T T S G A V V D V L P P F A G
UniRef90UPI0003F9BB21	E L L G I V M V N G E H A P L D Q A L E P H D V L A I F P L V G G
UniRef90_R4TID8	A L E R R L R D G A L R R Y V N R R L D G A K T S L A E A E E V Q I I P S V A G G
UniRef90_A1UVJ7	G I S E R L V D P D V N I Y V N D E D V G L D T P I S D G D S V T I L P A V A G
UniRef90_V8CW33	G L K D R L I A S G V N V Y V N D E D V G L D T S V A D G D E V T I L P A V A G
UniRef90_E3BC98	D I E A V L A R C S L L H G G R R L A D D A S F E P S D V V E V L P P F V G G
UniRef90UPI0003FD1008	R L L A A V L S C S Y L V A V R D Q E A A L R P G E T V D V L P P F A G
UniRef90_M0LT86	A L E E I V E D G T V R D H I N L D G D G L D T R L D E G D E L A A F P P V T G
UniRef90_V7I6Q3	I M E E D V A I L L R N G R D A S L D D F P E D K D T L S V F P P V G G
UniRef90UPI0003478299	G I K A R L C D D A L N F Y V N S E L D N T E T S L I N D G D E V S I V P A V A G
UniRef90UPI00041CA771	E M A R V I G V S S F L V N A V S A P A D S L A L D G D R V D V L P P F A G
UniRef90_D2RWF8	R A E S Q L Y D G S V R V T V D G E R A A L K D P I S A D A S L T L M P A V Q G G
UniRef90_F3Z1U0	G L V P E D V K L I F V N G V K A E L D T R L K D G D R L G L F P A V G G
UniRef90_M0JVZ1	R A E S Q L V D P S V R V M V D G D N A T H D Q R V P S G A V E L F P A M R G
UniRef90_J0L663	I A E W L D K C A I A V N D E I V F D N R T L F S G D K I S L L P P V C G G
UniRef90_C0GFW5	D L A S Q L W W D D L S V F L N D E N V G P D T P L V G E K D E I S V I P A I A G
UniRef90_U5E8F6	A L E R R L E R G T L L R R Y V N R T L D G V D T P L S A T T E L M I I P A I A G
UniRef90_C0QTK3	G I K E R L L V E P N V N F F V N D E L K G K D T E L L K D G D I V A I I P A I A G
UniRef90_K9RRW1	G I K G R L E S G Q L R F Y V N N E L L D G P Q T P L Q D G D E V S I I P A I A G
UniRef90_R4M3Q0	R L A T V L S C S Y L V D G I V V R D D A V L S A G D T I D V L P P F A G
UniRef90_A0R444	E L A R V L K R C S Y L V A V R D M A K P L V T P Q T V D V L P P F A G
UniRef90UPI0003654100	R L E R R I R D E S V N V Y V D G E P A G L D T L A P D G A E I Q V L P S V A G
UniRef90_A0A59INW2	G L G P Q I E R G V S L A V D G K I Y A W F T P I K P D S E V V L M P Y M Q G
UniRef90_A2QYQ2	G I K E C V K L T S C G V S L G D E Y V D V E A M I H P D E V V A V I P P V S S G
UniRef90_S8EN89	H T N F S A V L A Q S G W A V D E E M V D D A V V L K G G E E V A V I C P V S S G G
UniRef90UPI0003C7EB3E	G I K E R L E D G E V R V Y V N D E D E D I A L E T A V G D G D T V V I L P A V A G
UniRef90UPI00036954F4	G I K D R L I D N G V N V Y V N D E D V G L E A E L K D G D A V V I L P A V A G
UniRef90_D2RWY4	G L E G Q L I R P Q L S V L K N G H M A G P E T P L E D G H R L S V F P P V A G
UniRef90_X1GM25	E E K K L I F M V N G L R Y D R N L V I K D K D I L A I F P P I G G
UniRef90_Q1JZL5	E L G I V L M V N S R H A D L D Q E L K D G D T V S I F P L V G G
UniRef90_V8D2Y6	Q L A E V L E R C S Y L V A V R D R S R V L S S G D T V D V L P P F A G
UniRef90_A4WJL6	G L R Q K L L K G E E I I W V N G R Q G Q L K T P R E G D V L Q I I P P F G G
UniRef90_F0T6B4	E T F L L D E D G T V R V M V N G E D I R D E T K L N D G D E V V M F Q T I A G
UniRef90UPI0003B6C1FC	A L G E I L P R C S V L V D G A R T D D A E P L P A G A V V D I L P P F A G
UniRef90UPI00036CDD89	G I K A R L E Q G K L R R F V N R F L D N E N T A L K D G D E V S I I P A I A G
UniRef90_A0YA94	R L E D H L E E G I A V A I D G T I D W E T P I P V G S E V F L P F R I I G
UniRef90_E6TFY1	G L A S V L A R C S Y L V A V R D M G V V L D D A Q T I D V L P P F A G
UniRef90_F3YKF8	E I A V D L A T C M L A V N M E F Q Q D Q D L L P E E T E I A V I P P V S G G
UniRef90_I1EXL2	L V H L V L I D G V F V P L E E L L V E G E A I A I F P P V A V A G
UniRef90_D6Y766	G L K D R L V D E S V N V Y L N D E D V G L D T P V S D G D T V T V L P P F A G
UniRef90_X1BV59	L K N L I W D E K A V S I I N N Q A V H E K D P L K D N D T I A F L L P V
UniRef90_D3L3W2	E I K I V F V N N I F R D M G Y S L K N G D M V V S I F P P V G G
UniRef90_T0Z6A4	G I G E R L L A D E S I I N Y V N E E D I G L D T K I K P G D E V V S I I P A I A G
UniRef90_X0ZB69	G F P E K I R K M P I M V L V N M K F C K S D V K K D G D E V V L W P V G G
UniRef90_A0ZMN2	G I K A R L C D E K L N F Y V N S E D I T P L K D G D E V V S I V P A V A G
UniRef90_MOLF07	L E E R V L D D S Q I N V L R N G A N V T L E T E L E G D D E L A L F P P V S G G
UniRef90UPI000345CDE8	D G H F Q R V L G V S S I L V D E K P V G R D V A I T E G S V I E V L P P F A G
UniRef90_Q7VK46	L R S W L D I S A V A V N D E I I D L S Y P T S Y G D K V A L L P P V C G G
UniRef90UPI00016C5085	G V E P L F A D G K L R P Y V R Y L D E M D T A V T D G V I V V V A V A G
UniRef90_I4ENI4	G I Q A R I P D G R I R R F V N R S L G G A N A E I K D G D E I G I I P A M A G
UniRef90_B3V6H0	L S K I L N D D G L L T L L N G Q S I T A D S R L A D N D L L I F P P I S G G
UniRef90_K2DN14	E I Q I V F V N N I Q E S S S S L K D G D V V G I F P P V G G
UniRef90UPI00047A0C40	M L G R R I R D G Q V R R F V N V Y V D G D T P V P R D G A E V V Q V L P S V A G
UniRef90_D2Q191	E L A R V L G I C T F L L D G E R V D P S T P L T D G A Q V D A L P P F A G
UniRef90_C6PXF5	E V A I L L I D G D R G K L E T V L H D N D I V S L F P P V G G
UniRef90_H2G664	G M S L A Q V L D R S T F L V D G A A A H T D T M I S D A Q R V D V L P P F A G
UniRef90UPI00047BD928	D L S E N L E R C A C A L G D E L V S R S M L V D A N T R V A L L P P V A G
UniRef90_W0JVI3	E L E Q L L F D D S V T V M Q N G R N V G P E T P V A D G D V L A A S P P A E G
UniRef90_I3CKT3	E I P E Q S A H L V L I N G V Y V A P D A R L N Q G D I V V M F P P V A G
UniRef90_I4CC29	U I P E D I P K L V F L N G I H A R E D E V L K P G D R V A V F P P V A G
UniRef90_Q2RKJ8	R R Q L L T A D G Q L K L I N G R L Q G L D T P L P P R D K A T I I P P A A G
UniRef90_B2A7W3	D L H L I I K N G I V N D L E E T V V D E G D R I G F F P P I G G
UniRef90_A0A010YY24	G L R G R L V T D E V N V Y V N D E D V A L E T G L K D G D E V T V L P A V A G
UniRef90_F8KSC1	V R P W L A M S A I S V N D V L V D L H T P L R D G D R V M V L P P V C G G
UniRef90_F6W6N7	G L A D V R N Q I L F A V H Q E Y D K L D Q L R F N Q E T K L L F P I S G G
UniRef90_D5UWP8	G L K D R L V D D G V N V Y V D D E D V G L D T P L P D D G D V I C L V P A V A G
UniRef90_J9RJ88	G L K E R L V A P D V N Y V N D E D V G L D T P L P D D G D E V T I L P A V A G
UniRef90_R61GZ6	N T K L T I K D V K C I L S R G G K Q I S P S T R L P D D G D V I C L V P A V A G
UniRef90_G7WIE6	K H Q L P L E K V A V C F V N H S V E F G Q P L Q N G D T V A F S P P I G G
UniRef90_L0ABM0	E V K L V F F L R D D Y I V V N G K G A K L N N K V K G G D T V T V L P Q T G G
UniRef90_S0G682	A L Q H L A E G K L R S F V N V Y V N D D T A L K A S D E L S I I P S I A G
UniRef90_I3ZD83	G L R Q K L L R G E E I I W V N G R L Q G L K T A L A E G D V V Q I I P P F G G
UniRef90_Q8ZT89	E V K L V F F L R D D Y I V V N G A A V S L D A A T T D G D R V G I F P P V G G
UniRef90_K6H8D2	S L R E W L A N C A V A V N D K M I D A N F A L K S G D R V S S L L P P V C G G

UniRef90_V5XHH3	G
UniRef90_Q47MC0	G
UniRef90_B1I125	G
UniRef90_U5WC48	G
UniRef90_D7BJX5	G
UniRef90_Q0CX10	
UniRef90_D3PDB8	G
UniRef90_A3TRJ3	G
UniRef90_UP1000225DFDC	G
UniRef90_Q3A7X8	G
UniRef90_W0JYK2	G
UniRef90_UP10003613BE3	G
UniRef90_F6D3P5	G
UniRef90_K7SFR4	G
UniRef90_A1ULP8	G
UniRef90_K9P498	G
UniRef90_C6WHY6	G
UniRef90_H0I6K5	G
UniRef90_UP10003F9BB21	G
UniRef90_R4TID8	G
UniRef90_A1UJV7	G
UniRef90_V8CW33	G
UniRef90_E3BC98	G
UniRef90_UP10003FD1008	G
UniRef90_M0LT86	G
UniRef90_V7I6Q3	G
UniRef90_UP10003478299	G
UniRef90_UP100041CA771	G
UniRef90_D2RWF8	G
UniRef90_F3Z1U0	G
UniRef90_M0JVZ1	G
UniRef90_J0L663	G
UniRef90_C0GFW5	G
UniRef90_U5E8F6	G
UniRef90_C0QTK3	G
UniRef90_K9RRW1	G
UniRef90_R4M3Q0	G
UniRef90_A0R444	G
UniRef90_UP10003654100	G
UniRef90_A0A059INW2	G
UniRef90_A2QYG2	G
UniRef90_S8EN89	G
UniRef90_UP10003C7EB3E	G
UniRef90_UP100036954F4	G
UniRef90_D2RWY4	G
UniRef90_X1GM25	G
UniRef90_Q1JZL5	G
UniRef90_V8D2Y6	G
UniRef90_A4WJL6	
UniRef90_F0T6B4	G
UniRef90_UP10003B6C1FC	G
UniRef90_UP10003CDD89	G
UniRef90_A0YA94	G
UniRef90_E6TFY1	G
UniRef90_F3YKF8	G
UniRef90_I1EXL2	G
UniRef90_D6Y766	G
UniRef90_X1BV59	
UniRef90_D3L3W2	G
UniRef90_T0Z6A4	G
UniRef90_X0ZB69	G
UniRef90_A0ZMN2	G
UniRef90_MOLF07	G
UniRef90_UP1000345CDE8	G
UniRef90_Q7VK46	G
UniRef90_UP100016C5085	G
UniRef90_I4ENI4	G
UniRef90_B3V6H0	G
UniRef90_K2DN14	G
UniRef90_UP100047A0C40	G
UniRef90_D2Q191	G
UniRef90_C6PXF5	G
UniRef90_H2G664	G
UniRef90_UP100047BD928	G
UniRef90_W0JVI3	G
UniRef90_I3CKT3	G
UniRef90_I4CC29	G
UniRef90_Q2RKJ8	G
UniRef90_B2A7W3	G
UniRef90_A0A010YY24	G
UniRef90_F8KSC1	G
UniRef90_F6W6N7	G
UniRef90_D5UWP8	G
UniRef90_J9RJ88	G
UniRef90_R6IGZ6	G
UniRef90_G7WIE6	
UniRef90_L0ABM0	G
UniRef90_S0G682	G
UniRef90_I3ZD83	G
UniRef90_Q8ZT89	
UniRef90_K6H8D2	G
UniRef90_C8PEF4	G

UniRef90_H3ZRD1
 UniRef90_E9U66
 UniRef90_UPI0004750AE4
 UniRef90_A9W9Z3
 UniRef90_E6LBG1
 UniRef90_E5Y646
 UniRef90_H8L0Y6
 UniRef90_R7K9Q8
 UniRef90_U2U3L3
 UniRef90_X0W1Y2
 UniRef90_UPI00047EBF02
 UniRef90_A1WW87
 UniRef90_M1NDZ7
 UniRef90_V4YCV5
 UniRef90_A0A044V1B8
 UniRef90_N6ZQA3
 UniRef90_L0DPJ5
 UniRef90_X6D670
 UniRef90_L0J464
 UniRef90_C4XQM3
 UniRef90_F8D3T3
 UniRef90_Q51740
 UniRef90_D7AVG9
 UniRef90_UPI00035CE409
 UniRef90_E8N6U9
 UniRef90_W0EBQ6
 UniRef90_UPI0003128E2A
 UniRef90_D1B4Z4
 UniRef90_L9XBC2
 UniRef90_T2J739
 UniRef90_D0RN74
 UniRef90_UPI0004677B35
 UniRef90_D1AIF2
 UniRef90_Q2JEP1
 UniRef90_D8PE88
 UniRef90_K2C589
 UniRef90_B5Y6W1
 UniRef90_I0IQ69
 UniRef90_F2LVH4
 UniRef90_R1HFF9
 UniRef90_Q0EZF1
 UniRef90_UPI00046947E1
 UniRef90_C2CSE1
 UniRef90_Q09E72
 UniRef90_B5IE9
 UniRef90_UPI000365123E
 UniRef90_C8WZK0
 UniRef90_F4H5B8
 UniRef90_F0M802
 UniRef90_C8XF6
 UniRef90_S0EUV3
 UniRef90_UPI0003487309
 UniRef90_D8GIZ2
 UniRef90_K1W331
 UniRef90_UPI0004151938
 UniRef90_UPI00034A7511
 UniRef90_R9T8W5
 UniRef90_W5W0D2
 UniRef90_UPI0004417884
 UniRef90_S5TFM0
 UniRef90_F0EEE8
 UniRef90_I1F0J0
 UniRef90_D5ECM6
 UniRef90_D5C0Z4
 UniRef90_L9XVE6
 UniRef90_D5X979
 UniRef90_UPI000379BF36
 UniRef90_D9WM24
 UniRef90_C3PJ69
 UniRef90_S6JDN9
 UniRef90_A1SPK1
 UniRef90_E4NF2
 UniRef90_F9VVL9
 UniRef90_H0Q3J6
 UniRef90_G7Q4C6
 UniRef90_D2RZZ7
 UniRef90_E6V96
 UniRef90_C4RHV1
 UniRef90_W5VZC3
 UniRef90_M0D9X4
 UniRef90_G1USJ3
 UniRef90_R7WQK6
 UniRef90_S5UVN9
 UniRef90_UPI0003B5C01E
 UniRef90_E1VST8
 UniRef90_B5XPK8
 UniRef90_D2Q0V7
 UniRef90_UPI00037E5864
 UniRef90_Q6AKB9
 UniRef90_N8WQ65
 UniRef90_X0WLT3
 UniRef90_F2L2F1

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

50 60 70 80

UniRef90_H3ZRD1	E H H L I L	N E R K V S K N H P L	S D G D T L K V V L P V V Y G
UniRef90_E9UU66	G I K E R L I I D G D L R V Y I N D E D V G L D A E L	K D G D Q V V V L P A V A G G	
UniRef90_UPI0004750AE4	E R L D R V L R G C S F L L D G V A V R D R N T P I	T A G S E L D V I P P P F A G G	
UniRef90_A9W9Z3	A L G R H L L D G R L R S F V N L Y V G D E D T P L	K S G D T I A L L P P V C	
UniRef90_E6LBG1	S L K E W L E L C A V C L N G V M V D E N V S L	P P V A G G	
UniRef90_E5Y646	I P E S E A R I I F V N G I G V E K D A L L	H D G D R V G I F P P V G G	
UniRef90_H8L0Y6	A L A D A I E R C A C V S G D T I V K R S H P I	P A D R I I G L L P P V A G G	
UniRef90_R7K9Q8	V Y T V K E L K N A I I Y V N D K L K K Y R T K L	M S P A S Q I P A M A G G	
UniRef90_U2U3L3	G I G V L D E R G A V R R Y V N R A L S G L D T P V	K D S D R I T L I P A V A G G	
UniRef90_X0W1Y2	K Y A E P G A Y K N V F I A I N G T M G G L D A E I	S Q G D T I S V L P T V A G G	
UniRef90_UPI00047EBF02	G L K D R L V K D G V N V Y V N D E D V G L D A T V	S D G D N L T I L P A V A G G	
UniRef90_A1WW87	E L A S H L P Q V A V A M G D T L V P Q D T P V	N E D S T L I L P P V S G G	
UniRef90_M1NDZ7	E V G V L M V N S R H C T F E T V L H E G D I Y A I	F P V I G G	
UniRef90_V4YCV5	G L G E G G V A G G V A I T V N R H G K H L D G A V	E D G D V V R L T P S V H	
UniRef90_A0A044V1B8	L K E L S P I E Y C M I L A L N Q E Y I D D D T I I	P H S E I A I I P P I N G G	
UniRef90_N6ZQA3	V P E R S A H L V L V N G H F V P P S E R L R D G E L	L A I W P P I A G G	
UniRef90_L0DPJ5	E F Q K R I F D G T V N V Y V N N E L D D L A T A V	V E K D V V D I I P A V A G G	
UniRef90_X6D670	G I E P L I D K G I A V A I D G T I Y T W S K E L	P K G S E I F L L P R L A G G	
UniRef90_L0J464	E L L A N V L S R C S Y L I A V R D L G L T L S D A Q T	V D V L P P F A G G	
UniRef90_C4XQM3	A L G S V L V N E A P A G L D T V L A P G S V V S F V	P P I T G G	
UniRef90_F8D3T3	A L G D D L F D D S V I V L R N D H Q C G A E T P V	P A D G D V L S A A P A V E G	
UniRef90_Q51740	G F K K E L E Q G		
UniRef90_D7AVG9	G I A G R L I D D G K L R V Y L N D E D V G L E A K L S D G D N V T I L P A V A G G		
UniRef90_UPI00035CE409	A I G P L F E S G K V R P Y N R Y L D D M D T A T A D G T I L A I I P A V A G G		
UniRef90_E8N6U9	A L G G I L D R C A V A L L D G T R H D D D A P L A G V I T H V D V L P P F A G G		
UniRef90_W0EBQ6	H N L P L D K V A I C L V N S N N V E F E Q V L Q N G D T V A F S P P V G G		
UniRef90_UPI0003128E2A	G L K A R L V K E D I N V Y V N D E D V G L D A E V K D G D N V T I L P A V A G G		
UniRef90_D1B4Z4	D K A L Q E W L G I C A V A V N D T L V D L N M P I A S E D K I S L L P P V C		
UniRef90_L9XBC2	D L E V L T D D G E L R S Q V I N V L R N G T N V L V E E E D E L A L F P P V S G G		
UniRef90_T2J739	G I K D R L C D D S L N F Y V N S E L E N T E T E L K D G D E V S I V P A V A G G		
UniRef90_D0RN74	E N N N Y L E M E K S A F S S K D E I I E D T Y K L K N N N D A V S I I I P P I G G		
UniRef90_UPI0004677B35	V S S W L A S C A V A V N D T L V S S K S E L K D G D K V S L L P P V C		
UniRef90_D1AIF2	D V A I I L L G I D G K T D Y K F K D N D R L V S L F P P V G G		
UniRef90_Q2JEP1	G L R G R L V T G D V N I Y V N D E D V G L D A K L S D G D E V T I L P A V A G G		
UniRef90_D8PE88	G L K N R L C D E K V N I Y V N E E L N G K E T S L V P E P G K V A V F P P V A G G		
UniRef90_B5Y6W1	U N I Q K V M K Y L S I S V N S N S V A R N H Q V A D N D E I A F F S R P G G		
UniRef90_I0IQ69	V S E E L L F R G D E V I L L L N G H L N G I H T P L E P G K V A V F P P V A G G		
UniRef90_F2LVH4	A M R E R R M M D E S I N I Y V N E E D I R F A T P I S P G D E V S I I I P A I A G G		
UniRef90_R1HFF9	G K K F L I E N G K L L V L V N H H L E G L K T L I K N G D K I D L F P P G G G		
UniRef90_Q0EZF1	E G L P R I L D A V S Y L L D G I A V R D Q G R L L T D G A E L D V L P P F A G G		
UniRef90_UPI00046947E1	G L K E R L C D D A V N V Y V N D E D V G R T T V L K D G D E V S I I V P A I A G G		
UniRef90_C2CSE1	A L K S M K Y K L A L N K N I V Q E N T Q I I N K A T I V A I M P P F S G G		
UniRef90_Q09E72	G M G L G E V L E R C T F L V D G K N A E R A A T L E G A T R V D V L P P F A G G		
UniRef90_B5IE9	G I G A R L L I D D K V R R Y I N I F H N D E D T P V T E G D R I T I V P A M A G G		
UniRef90_UPI000365123E	G I L K A R L E N G K L R I Y V N S E L E N Q A T G L K D G D E V S I I V P A V A G G		
UniRef90_C8WZK0	A L E R R L I R D G T L R R H V N R V L R G V D T V L R D G G E V V R V I P S V A G G		
UniRef90_F4H5B8	E V K I L T F V N S R S V A V E T P L H D G D R V G I F P A V V G G		
UniRef90_F0M802	D L A G V L P R C A L L A D G V R V E D S D Q V R P G A T L D V L P P F A G G		
UniRef90_C8XF6	P P A G T P P L P R I L F L L N E V A V R D H A V L K A D D V V D L P P F A G G		
UniRef90_S0EUV3	G L G D R L I K N G V N I Y V N D E D V G L E T A V A E G D N V T I L P A V A G G		
UniRef90_UPI0003487309	G I S E R L V D E N V N I Y V N E E D V G K D T P V A D G D T V T V L P A V A G G		
UniRef90_D8GIZ2	E V A I I L L I N G R D G K A N T E L N D N D V L S L F P P V G G		
UniRef90_K1W331	G I L K S I L C D D E L N F Y V N S E L D G T N T A L A D G D E V S I I V P A V A G G		
UniRef90_UPI0004151938	R F G Q V V D V C A L I V G G Q A L A G D P I R L D G E V S I E V L P P F A G G		
UniRef90_UPI00034A7511	E D R F Q R V L G I S S F L V D E K P V G A D V S L T E G S V I E V L P P F A G G		
UniRef90_R9T8W5	E K K I L F P G G S L E F I I N G R L E G E T E K I K D G D T V S V L P M T A G G		
UniRef90_W5W0D2	G L K S R L I V K D G V L V Y V N D E D V G L E A K I K D G D N V T I L P A V A G G		
UniRef90_UPI0004417884	F H D F R L S S P A L L W S V D A E M V D E D V V L K G G E E V A V I C P V S G G		
UniRef90_S5TFM0	G A T E A G M T D R C T F L V D G R N S P R D T V L S G A R R V D V L P P F A G G		
UniRef90_F0EEE8	G I R S R L I M D A Q V N L Y L N D E L D N L D T V V A D R D E L T I L P A V A G G		
UniRef90_I1F0J0	G L G A W L E E E T A V A V I N G E I H D H F Q P L P E N A E V F F L P K I E A G		
UniRef90_D5ECM6	E W S S N E V P H R L M I M V N G H L N G L D T P L C D E D V V N I F P P V G G		
UniRef90_D5C0Z4	G I R L L T P E G E V R P F V N L A L Q G L E T P L K D G D V L T I I P A V A G G		
UniRef90_L9XVE6	G L E G L L A G D T V V T K D A K H V G E T A L E D D G S V I R L V P S V Y G G		
UniRef90_D5X979	I P E K A A F V I T L V N G S A S P A S T V L K D R D R V V G I F P P V G G		
UniRef90_UPI000379BF36	G T R L G D V L A V C S T L V D D R P T A S E D A V R P G Q A V Q F L P P F A G G		
UniRef90_D9WM24	G I Q E R L V D G E L R R F V N V Y L N D E D T K I L S D G D N V T I L P A V A G G		
UniRef90_C3PJ69	G M S F A E V L E R C T F L V D G A S A T E D A V L A D A S R V D V L P P F A G G		
UniRef90_S6JDN9	G L A A R L I D G G I N I Y V N D D L Q S L D S A V T Q Q D Q I T I L P A V A G G		
UniRef90_A1SPK1	G T R L P D V L K I C S T L V G D R P V N S E D P V P P G S S V E F L P P F A G G		
UniRef90_E4NF82	G I A A R L L I D D T V N V Y V N D D D V G L E T E I K D G A S S V S I I P A V A G G		
UniRef90_F9VVL9	T F A D V L A Y S R V W V N G E H P G A D A L V G D D D E I A I L P P I S G G		
UniRef90_H0Q3J6	F Q V P E R S A H L V L V N G H F I P P T H R L V G G D E E V A I I W P P I A G G		
UniRef90_G7Q4C6	I P R D E V K I V F V N G V T S D L A R P L A D G D R V G I F P P V G G		
UniRef90_D2RZZ7	A L E E S L D D G T L R E S I N R T N I G L L A T P V E E G D E L L I T P P I H G		
UniRef90_E6VV96	E V A I L L F I I N S A R A Y L D S K L K D G D R V V G I F P A V V G G		
UniRef90_C4RHV1	R L A R R L E R G E V R R Y V N R H L G G L D A P V R P G A E V R V L P S V A G G		
UniRef90_W5VZC3	S A V A R V L P A C S I L L D G I A V H D K G I R L A S G Q Q L D V L P P F A G G		
UniRef90_M0D9X4	A F D P E S L S S E L V C Y R V N G G D A D R T T R L A D G D A V V V L P P F A V G G		
UniRef90_G1USJ3	Q L P A A E V K I I F I L N G V A V E P D A V L H D D G D R V G L F P A V G G		
UniRef90_R7WQK6	R M R R V L S V A A F L V E D D L T R D R T V L A G P A V D V L P P F A G G		
UniRef90_S5UVN9	I Q A R L V D N G Q L R V Y L N D D E D V G L D T K L S D G D T V T I L P A V A G G		
UniRef90_UPI0003B5C01E	A T D G W L L D E R I S V F V N G E R S T P E A P V G E A D R V D V L Q A I S G G		
UniRef90_E1VST8	D M A Q V L R A G S F L I I N G V V I R D A G E L G T A D T V D V L P P F A G G		
UniRef90_B5XPK8	D I Q P H L Y D G A L R S F I V K T T G G L E T P V S D G A E V V L L V P A I A G G		
UniRef90_D2Q0V7	A L R R R L T D G T L R R H V N R D L D G L D T K L P D G A E L L V L P S V A G G		
UniRef90_UPI00037E5864	R L A T V L R R C A F L L D D E P V G A T V P L R E G A V V E V L P P F A G G		
UniRef90_Q6AKB9	E V G I V L M I E R C A C A I G E D I I S R Q T P L S A D S T L V L L S P V A G G		
UniRef90_N8WQ65	D A F G M I E R C A C A I G E D I I S R Q T P L S A D S T L V L L S P V A G G		
UniRef90_X0WLT3	G I K K Q L F S E N I I S V N G E I A Y P E Q P V V K D G D E L K I M L I I G G		
UniRef90_F2L2F1	L Y E R I K G R P D I Y I A V N D V L S G L D T Q L K E G D V V L I L A Y I H		

UniRef90_H3ZRD1	G
UniRef90_E9UU66	G
UniRef90_UPI0004750AE4	G
UniRef90_A9W9Z3	G
UniRef90_E6LBG1	G
UniRef90_E5Y646	G
UniRef90_H8L0Y6	G
UniRef90_R7K9Q8	G
UniRef90_U2U3L3	G
UniRef90_X0W1Y2	G
UniRef90_UPI00047EBF02	G
UniRef90_A1WW87	G
UniRef90_M1NDZ7	G
UniRef90_V4YCV5	G
UniRef90_A0A044V1B8	G
UniRef90_N6ZQA3	G
UniRef90_L0DPJ5	G
UniRef90_X6D670	G
UniRef90_L0J464	G
UniRef90_C4XQM3	G
UniRef90_F8D3T3	G
UniRef90_Q51740	G
UniRef90_D7AVG9	G
UniRef90_UPI00035CE409	G
UniRef90_E8N6U9	G
UniRef90_W0EBQ6	G
UniRef90_UPI0003128E2A	G
UniRef90_D1B4Z4	G
UniRef90_L9XBC2	G
UniRef90_T2J739	G
UniRef90_D0RN74	G
UniRef90_UPI0004677B35	G
UniRef90_D1AIF2	G
UniRef90_Q2JEP1	G
UniRef90_D8PE88	G
UniRef90_K2C589	G
UniRef90_B5Y6W1	G
UniRef90_I0IQ69	G
UniRef90_F2LVH4	G
UniRef90_R1HFF9	G
UniRef90_Q0EZF1	G
UniRef90_UPI00046947E1	G
UniRef90_C2CSE1	G
UniRef90_Q09E72	G
UniRef90_B5IIE9	G
UniRef90_UPI000365123E	G
UniRef90_C8WZK0	G
UniRef90_F4H5B8	G
UniRef90_F0M802	G
UniRef90_C8XF6	G
UniRef90_S0EUV3	G
UniRef90_UPI0003487309	G
UniRef90_D8GIZ2	G
UniRef90_K1W331	G
UniRef90_UPI0004151938	G
UniRef90_UPI00034A7511	G
UniRef90_R9T8W5	G
UniRef90_W5W0D2	G
UniRef90_UPI0004417884	G
UniRef90_S5TFM0	G
UniRef90_F0EEE8	G
UniRef90_I1F0J0	G
UniRef90_D5ECM6	G
UniRef90_D5C0Z4	G
UniRef90_L9XVE6	G
UniRef90_D5X979	G
UniRef90_UPI000379BF36	G
UniRef90_D9WM24	G
UniRef90_C3PJ69	G
UniRef90_S6JDN9	G
UniRef90_A1SPK1	G
UniRef90_E4NFB2	G
UniRef90_F9VVL9	G
UniRef90_H0Q3J6	G
UniRef90_G7Q4C6	G
UniRef90_D2RZZ7	G
UniRef90_E6VV96	G
UniRef90_C4RHV1	G
UniRef90_W5VZC3	G
UniRef90_M0D9X4	G
UniRef90_G1USJ3	G
UniRef90_R7WQK6	G
UniRef90_S5UVN9	G
UniRef90_UPI0003B5C01E	G
UniRef90_E1VST8	G
UniRef90_B5XPK8	G
UniRef90_D2Q0V7	G
UniRef90_UPI00037E5864	G
UniRef90_Q6AKB9	G
UniRef90_N8WQ65	G
UniRef90_X0WLT3	G
UniRef90_F2L2F1	G

UniRef90_F6G9H1
UniRef90_UPI000472BBC7
UniRef90_K7W2H0
UniRef90_O29699
UniRef90_L7EXB4
UniRef90_A8MDP2

1 10 20 30 40

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

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
incsm

UniRef90_F6G9H1	G Q A R L Q D G R L	50	H R F M N L Y V N D D D A P V R A G D S I T I L P A V A G
UniRef90_UP1000472BBC7	G I S E R L I D S G V N	60	I N D E D V G L D T V I A D G D S V T I L P P A V A G
UniRef90_K7W2H0	A I K G R L R K P N	70	N F Y V N S E L Q N T E T P L E D K D E V V S I L P P A V A G
UniRef90_O29699	D L E K I L K R D G I	80	S F V N G R N V G L E T E V R S G D E V S I L P P T V A G
UniRef90_L7EXB4	V Q A R I V D D G K L		R F V N V Y L N D D E T D L A D G D D T V I T P P A V A G
UniRef90_AMDR2	P L K P P E D D V X V		L N D T L N C D L T P P V V L E I H

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
incsm

UniRef90_F6G9H1 G
UniRef90_UP1000472BBC7 G
UniRef90_K7W2H0 G
UniRef90_O29699 G
UniRef90_L7EXB4 G
UniRef90_A8MDP2 G

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
solo
jhmm
jpssm