

QUERY	1	10	20	30	40
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UniRef90_CQQWM4	E	F	M	A	D
UniRef90_L8JKNO	E	F	M	A	D
UniRef90_UPI000422107F	E	F	M	A	D
UniRef90_U2E371	E	F	M	A	D
UniRef90_G7ZAD0	E	F	M	A	D
UniRef90_B0TCA0	E	F	M	A	D
UniRef90_C8WS05	E	F	M	A	D
UniRef90_R61G6	E	F	M	A	D
UniRef90_A8ERY3	E	F	M	A	D
UniRef90_W4L7Z6	E	F	M	A	D
UniRef90_UPI000366B2C7	E	F	M	A	D
UniRef90_S8FF54	E	F	M	A	D
UniRef90_UPI00046D0033	E	F	M	A	D
UniRef90_V4KTX9	E	F	M	A	D
UniRef90_Q30YH6	E	F	M	A	D
UniRef90_UPI0003711C6C	E	F	M	A	D
UniRef90_UPI000470F04B	E	F	M	A	D
UniRef90_F5YEQ2	E	F	M	A	D
UniRef90_F9N5M6	E	F	M	A	D
UniRef90_E4L9U3	E	F	M	A	D
UniRef90_S0EYC9	E	F	M	A	D
UniRef90_UPI00036E2F8F	E	F	M	A	D
UniRef90_UPI00036FAED7	E	F	M	A	D
UniRef90_H2CEE1	E	F	M	A	D
UniRef90_F0SX89	E	F	M	A	D
UniRef90_D0WGP6	E	F	M	A	D
UniRef90_UPI0003B3D0E9	E	F	M	A	D
UniRef90_L7VM58	E	F	M	A	D
UniRef90_C1A8L8	E	F	M	A	D
UniRef90_A8SMB2	E	F	M	A	D
UniRef90_T0SSV3	E	F	M	A	D
UniRef90_D7BKY8	E	F	M	A	D
UniRef90_UPI0003774E4B	E	F	M	A	D
UniRef90_A5V0S2	E	F	M	A	D
UniRef90_E4U2W5	E	F	M	A	D
UniRef90_D1VW05	E	F	M	A	D
UniRef90_R7KGU5	E	F	M	A	D
UniRef90_UPI00047E763F	E	F	M	A	D
UniRef90_UPI00029AE86	E	F	M	A	D
UniRef90_V4JHE5	E	F	M	A	D
UniRef90_K4LG54	E	F	M	A	D
UniRef90_UPI000381B08A	E	F	M	A	D
UniRef90_R7J119	E	F	M	A	D
UniRef90_K9CZ83	E	F	M	A	D
UniRef90_R5I5A5	E	F	M	A	D
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UniRef90_Q93FX6	E	F	M	A	D
UniRef90_B1C9G1	E	F	M	A	D
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UniRef90_UPI00037112BC	E	F	M	A	D
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UniRef90_K6XCA9	E	F	M	A	D
UniRef90_X0UIP9	E	F	M	A	D
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UniRef90_A9BHK4	E	F	M	A	D
UniRef90_R6LK51	E	F	M	A	D
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UniRef90_X1KRT5	E	F	M	A	D
UniRef90_A1R8M1	E	F	M	A	D
UniRef90_Q7MBC7	E	F	M	A	D
UniRef90_F8GHB0	E	F	M	A	D
UniRef90_Q9K171	E	F	M	A	D
UniRef90_I2K740	E	F	M	A	D
UniRef90_UPI000360EF9C	E	F	M	A	D
UniRef90_Q3A0V2	E	F	M	A	D
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UniRef90_B3IWT4	E	F	M	A	D
UniRef90_D8IVU9	E	F	M	A	D
UniRef90_E9V0H8	E	F	M	A	D

QUERY UniRef90_UPI0003741664 UniRef90_I7J6J6 UniRef90_CQQWM4 UniRef90_L8JKN0 UniRef90_UPI000422107F UniRef90_U2E371 UniRef90_G7ZAD0 UniRef90_B0TCA0 UniRef90_C8WS05 UniRef90_R61G6 UniRef90_A8ERY3 UniRef90_W4L7Z6 UniRef90_UPI000366B2C7 UniRef90_S8FF54 UniRef90_UPI00046D0033 UniRef90_V4KTX9 UniRef90_Q30YH6 UniRef90_UPI0003711C6C UniRef90_UPI000470F04B UniRef90_F5YEQ2 UniRef90_W4L7Z6 UniRef90_E4L9U3 UniRef90_S0EYC9 UniRef90_UPI00036E2F8F UniRef90_UPI00036FAED7 UniRef90_H2CEE1 UniRef90_F0SX89 UniRef90_D0WGP6 UniRef90_UPI0003B3D0E9 UniRef90_L7VM58 UniRef90_C1A8L8 UniRef90_A8SMB2 UniRef90_T0SSV3 UniRef90_D7BKY8 UniRef90_UPI0003774E4B UniRef90_A5V0S2 UniRef90_E4U2W5 UniRef90_D1VW05 UniRef90_R7KGU5 UniRef90_UPI00047E763F UniRef90_UPI00029AE86 UniRef90_V4JHE5 UniRef90_K4LG54 UniRef90_UPI000381B08A UniRef90_R7J119 UniRef90_K9CZ83 UniRef90_R5I5A5 UniRef90_L7VKF0 UniRef90_C7NEY9 UniRef90_C3XFJ9 UniRef90_E2FB22 UniRef90_M5DNY0 UniRef90_UPI00035CD701 UniRef90_C0VYI9 UniRef90_D4K3P3 UniRef90_Q93FX6 UniRef90_B1C9G1 UniRef90_I2JEJ4 UniRef90_UPI00037112BC UniRef90_UPI0003B5EC1C UniRef90_K9UZY8 UniRef90_K6XCA9 UniRef90_X0UIP9 UniRef90_F0RSA1 UniRef90_D4J3L2 UniRef90_Q47TE8 UniRef90_Q7TTY9 UniRef90_D7CVW2 UniRef90_V9VTZ0 UniRef90_F4KTA8 UniRef90_K6WU40 UniRef90_UPI0003FB4E62 UniRef90_D1B118 UniRef90_R6WEZ8 UniRef90_W3AAB2 UniRef90_X8INE7 UniRef90_A9BHK4 UniRef90_R6LK51 UniRef90_R6EHA5 UniRef90_X1KRT5 UniRef90_A1R8M1 UniRef90_Q7MBC7 UniRef90_F8GHB0 UniRef90_Q9KI71 UniRef90_I2K740 UniRef90_UPI000360EF9C UniRef90_Q3A0V2 UniRef90_Q8L7B5 UniRef90_B3IWT4 UniRef90_D8IVU9 UniRef90_E9V0H8

50 60 70 80

MRD LLL PVV LLE GNVA KAS GK P LVI I A E D D V I E E G E A A L A T T L V V N N K V L R G G
KDE ILL PVV LLE KLV AQQT GSK K P LLI I A A E D D I V E E E G E E A A L A T T L V V N N K K L M R R G G
MKE LLL P I L L E A T A Q T G T K K P L L I I A A E D D I V D E E G E E A A L A T T L V V N N K K T L R R G G
LRQ AML P I L L E A V V A K A N R K P L L I I A A S E E D D I V E E G E E A A L A T T L V V N N K K L M R R G G
IRDM L P V L L E K V V Q Q A S G K K P L L I I A A E E D V V E E G E E A A L A T T L V V N N R R L L R R G G
VKDI L P V V L L E R V V V Q Q A S G R K S M V I I A A E E D D V E E G E E A A L A T T L V V N N K K L R R R G G
IQE ILL P V L L E R Q I V K A G R R K L L L I I A A E D D V V E E G E E A A L A T T I I L N K K L R R R G G
LKE ML P V L L E S I V N Q S G R K P L L V I I A A E D D V D D G E E A A L A T T L V V N N R R L R R R G G
MRD LLL P V L L E S Q I A K M S R R P L L V I I A A E D D V D D G E E A A L A T T L V V N N R R L R R R G G
MKD ILL H I L L E K V A Q S S G R R P L L V I I A A E D D V D D G E E A A L A T T L V V N N K R L R R L R R G G
LKD LLL P I L L E P A V I Q S S G R K P L L V I V A A E D D V D D G E E A A L A T T L V V N N K L R A R A G G
MKT LLL P I L L E K I A N T S G G K P F I V V I A A E D D V E E G E E A A L A T T L V V N N K L R R G G
MKD LLL P I L L E S V A K M G M K G L F I I A A E D D V V E E G E E A A L A T T L V V N N K L R R G G
MKD ML P V L L E K V A K M N R K P L V I I A A E D D V I D D G E E A A L A T T L V V N N K L R R G G
MKN LLL P L L L E Q V A Q S S G K P L L I I A S E E E T D D G E E A A L A T T L V V N N K L R R G G
VQD LLL P L L L E Q V V Q Q H G K K P L L I I A A E D D I E E G E E A A L A T T L V V N N K L L R R G G
MKD ML P L L L E K V A Q S S G K P L L I I A A E D D V D D G E E A A L A T T L V L V N N K L R R G G
IAD LLL P A L L E K V V V K L G K P L L V I I A A E D D V D D G E E A A L A T T L V V N N R R L R R G G
LQE VLL P L L L E K V V V Q A G K E L L I I A A D D V D V E E G E E A A L A T T L V V N N R L R R G G
VAD ILL P V L L E L V A R A G R R P L V V I A A E D D V D D G E E A A L A T T L V V N N K L K R G G
MKD LLL P V L L E K V V V Q R G R R P L L I I I S E D D V E E G E E A A L A T T L V V N N K L K R G G
MRE LLL P V L L E K V V V Q S G G R K L L L I I S E E D V E E G E E A A L A T T L V V N N K L R R K R G G
IQD LLL P V L L E K V V V Q S G G R K A L L L V I A A E D D V E E G E E A A L A T T L V V N N K L R R K R G G
IQD MLV P L L L E Q I M K S G G R T L L L I I A A E D D V D D G E E A A L A T T I L L N K K L R R G G
LQE ILL P L L L E Q I V V K N G G R K L L L I I A A E D D V E E G E E A A L A T T L L I V N K K L R R G G
AQD LLL P A L L E L I V Q N G G G K P L L L I I A A E D D V E E G E E A A L A T T L L V N K K L R R G G
MKD LLL P A L L E K V A Q Q L G K P L L L I I A A E D D V E E G E E A A L A T T L V V N K L L R R G G
LQE VLL P V L L E Q I L S V Q G G K P L L V I I A A D D D V E E G E E A M A T T L V V N K L R R G G
MKE LLL P I L L E K S V V Q T S R P L V I I A A E D D V E E G E E A A L A T T L V V N K L I L R R G G
VKD ML P V L L E K V M Q T G R K P L V I I A A E D I E E G E E A A L A T T L V V N K I L R R G G
LRE FL P L L L E N V A K M G R P L L V V I A A E D D V E E G E E A A L A T T L V V N K K L R R G G
LQD ILL P V L L E K A A L Q V T K N L L V I I A A E D D V D D G E E A A L A T T L V V N K L L R R G G
LKD LLL P V L L E Q V V Q K T S R P L L I I I A A E D D V D D G E E A A L A T T L V V N K L L R R G G
IQD ILL P L L L E K V V L Q Q S K P L L I I I A A E D D V D D G E E A A L A T T L V V N S S L L R R G G
IRDL ILL P L L L E Q V V A K A G R R P L L I I I A E D D L E E G E E A A L A T T L V V N S S L L R R G G
IRE ILL P T L L E A V A K S G K P L L L I I A A E D D V E E G E E A A L A T T L V V N N M R R G G
IQE ILL N M L Q A S I V E Q G R P L L L I I A A D D D I T E E G E E A A L A T T L V V N S K S L R R G G
IRDL ILL P V L L E A V A K A G R R P L L L I V A A E D D I E E G E E A A L A T T L V V N N K L I L R R G G
VAE I V P V L L E A V A K A N T G R K P L L L I I A A E D D I E E G E E A A L A T T L V V N N K L I L R R G G
LRD LLL P I L L E G V A Q T S R P L L L I I A A E D D V E E G E E A A L A T T L V V N N M L R R G G
LKD ML P I L L E S T A K T S G R G I V I I A A E D D V E E Q E E A A L A T T L V V N N R L R R G G
VAD ILL P V L L E Q V V K Q G K Q I V I I S E E D L D D G E E A A L A T T I V V N N K L L R R G G
MKD LLL P L L L E P A R A Q S S E S L L L I I A A E D D V D D G E E A A L A T T L V V N N K I R R G G
MKD LLL P V L L E P V A Q S S K P L L I I I A S E E V V D D G E E A A L A T T L V V N N K I R R G G
IAD L M P V L L E K V V E T S K P L V I I A A E D V E E G E E A A L A T T L V V N N T V L R R G G
MKD ILL P L L L E A T M K S G R P L L L I I A A E D D L E E G E E A A L A T T L V V N N K L R R G G
LQD VLL P L L L E G I M Q S G R R P L L I I V A A E D D V D D G E E A A L A T T L V L N K L P R R G G
LQE LLL P V L L E A V A K S G R P L L L I I A A E D D V E E G G Q A L A T T L V V N N N L R R G G
IRDL ILL P A L L E A V Q M K A G K P V A V I A A D D I E E G E E A A L A T T L V V N N K M L R R G G
VKD L V P L L L E Q V M Q N G M K L I V A A E D I E E G E E A L S G N L I V N R R L R R G G
LQS LLL P V L L E A V V Q Q A S G K P L L L I I A A E D D V E E G E E A F S G N A R G Q Q L R R W
MQE ILL P V L L T E L V Q Q A G G N L L I I A A D D I E E G E E A L S T I V N N K L I R R G G
IRE LLL P T L L E A V A K A G R R P L L L I I A A E D I E E G E E A A L A T T L V V N N K L R R G G
LRE LLL P T L L E A V S K T G R P L L I V A A E E V D D G E E A A L A T T I V I N N K M R R G G
MKD LLL P I L L E G V S K T G K P L L V I I A A E E V E E G E E A A L A T T I V I N N K M R R G G
IQE L V P V L L E K V A R V G Q Q P L L I I A A E D V D D G E E A A L A T T L V V N N K A R R G G
LSD ILL P L L L E Q V A Q A K K P L L I I A A E D V D D G E E A A L A T T L V V N N K M R R G G
MKD LLL P L L L E K V A N T G N S F L L I I G E D V E E G E E A A L A T T L V V N N K M R R G G
MKE LLL P I L L E K I A Q S S K P L L I I A A E D V D D G E E A A L A T T L V V N S V L R R G G
IQD LLL P V L L E Q I V L Q A G R P L L L V I A A E D I E E G E E A A L A T T L I L N K K I R R G G
NNE FL P V I I E K V L Q A G R P L L V V I A A E D V E E G T A L Q T T L V I N N K I R R G G
IKD MLV P L L L E K V V Q Q G K P L L I I A A E D V D D G E E A A L A T T L V I N N R L R R G G
LKD LLL P V L L E A V V A Q Q G K P L L I I A A E D I E E G E E A A L A T T L V V N K I L R R G G
LAP MLV P L L L E A V I Q A D R K Q L L V V A A E D I D D G E E A A L A M T L V V N K I L R R G G
VKD ILL P I L L E K T S Q M G R P L V I I A A E D V D D G E S A L A T T L V V N N R L R R S R R G
IKD L I P L L L E D K T K Q A G K P L L I I A A E D V D D G E E A A L A T T L V L N Q K I R R R G G
IQD L V P L L L E Q V V Q Q A S R P I L L I I A A D D V D D G E D A M A T N L V V N K I R R R G G
LKD LLL P V L L E Q V V Q K T G K P L L L I I A A E D I D D G E E A L A T T L V V N K L L R R G G
FQD LLL P V L L E Q V V V Q S G R G L F I I A A E E V E E G E E A A L A T A L V V N K K L R R G G
IQE ILL P V L L E Q V V V Q S S K P L L I V A A E D V E E G E E A A L A T T L V V N K K L R R G G
IQD L V P L L L E D I M K S G K K L L I V A A D D V D D G E E A A L A T T L V V N K L L R R G G
VKSI V P L L L E K V A Q A G K P L L V I I A A E D V E E G E E A A L A T T L V V N K K L R R G G
IQE ILL P L L L E Q I V K G G K K L F I I A A E D V E E G E D A L A T T L V V N R R L R R G G
LQD LLL P T L L E K L V Q A T S K N I V L I A A E D V E E G E A L A T T L V V N K L L R R G G
LQD FL P L L L E K A L Q A N K P L F I I A A E D I E E G E E A A L A T T L I V N R I R R G G
ITD L V P L L L E K V A R A G R P L V I I A A E D I E E K E A A L A T T L V V N K I L R R G G
VND LLL P V L L E Q I A K T S R P L L L I V A A E D V E E G E E A A L A T T L V I N S K I R R G G
QDI V H I L A D L V I K S G K P L L I V A A E D V D D G E E A A L A T T L V L N K I L R R G G
LKD L V P M L L E Q V V Q Q S G R P L L L I I A A D D I E E G E E A A L A T T L V L N K K L R R G G
LGE LLL P L L L E K V S Q A G K P L L L I I A A E D V E E G E E A A L A T T L V V N R M L R R G G
MRD MI N I L L E A V A K A G R R P L L L I V A A E D I E E G E E A A L A T T L V V N R L R R G G
INA MLV K V L L E L A L K K Q R P L L L I V A A E D V E E S D A L A T T L I L N K L A R R A G G
IRD LLL P I M E R V A K A G R H L L I V A A E D V E E G E E A A L A T T L V V N S A V R R G G
IRDL ILL P V L L E M T A K A G K P L F I I A A E D I D D G E E A A L A T T L V V N S A V R R G G
LQE LLL P L L L E K V T A A G K P L F I I A A E D V E E G E E A A L A T T L V V N K I K R G G

QUERY UniRef90_UPI0003741664 UniRef90_I7J6J6 UniRef90_CQQWM4 UniRef90_L8JKN0 UniRef90_UPI000422107F UniRef90_U2E371 UniRef90_G7ZAD0 UniRef90_B0TCA0 UniRef90_C8WS05 UniRef90_R61G6 UniRef90_A8ERY3 UniRef90_W4L7Z6 UniRef90_UPI000366B2C7 UniRef90_S8FF54 UniRef90_UPI00046D0033 UniRef90_V4KTX9 UniRef90_Q30YH6 UniRef90_UPI0003711C6C UniRef90_UPI000470F04B UniRef90_F5YEQ2 UniRef90_F9N5M6 UniRef90_E4L9U3 UniRef90_S0EYC9 UniRef90_UPI00036E2F8F UniRef90_UPI00036FAED7 UniRef90_H2CEE1 UniRef90_F0SX89 UniRef90_D0WGP6 UniRef90_UPI0003B3D0E9 UniRef90_L7VM58 UniRef90_C1A8L8 UniRef90_A8SMB2 UniRef90_T0SSV3 UniRef90_D7BKY8 UniRef90_UPI0003774E4B UniRef90_A5V0S2 UniRef90_E4U2W5 UniRef90_D1VW05 UniRef90_R7KGU5 UniRef90_UPI00047E763F UniRef90_UPI00029AE86 UniRef90_V4JHE5 UniRef90_K4LG54 UniRef90_UPI000381B08A UniRef90_R7J119 UniRef90_K9CZ83 UniRef90_R5I5A5 UniRef90_L7VKF0 UniRef90_C7NEY9 UniRef90_C3XFJ9 UniRef90_E2FB22 UniRef90_M5DNY0 UniRef90_UPI00035CD701 UniRef90_C0VYI9 UniRef90_D4K3P3 UniRef90_Q93FX6 UniRef90_B1C9G1 UniRef90_I2JEJ4 UniRef90_UPI00037112BC UniRef90_UPI0003B5EC1C UniRef90_K9UZY8 UniRef90_K6XCA9 UniRef90_X0UIP9 UniRef90_F0RSA1 UniRef90_D4J3L2 UniRef90_Q47TE8 UniRef90_Q7TTY9 UniRef90_D7CVW2 UniRef90_V9VTZ0 UniRef90_F4KTA8 UniRef90_K6WU40 UniRef90_UPI0003FB4E62 UniRef90_D1B118 UniRef90_R6WEZ8 UniRef90_W3AAB2 UniRef90_X8INE7 UniRef90_A9BHK4 UniRef90_R6LK51 UniRef90_R6EHA5 UniRef90_X1KRT5 UniRef90_A1R8M1 UniRef90_Q7MBC7 UniRef90_F8GHB0 UniRef90_Q9KI71 UniRef90_I2K740 UniRef90_UPI000360EF9C UniRef90_Q3A0V2 UniRef90_Q8L7B5 UniRef90_B3IWT4 UniRef90_D8IVU9 UniRef90_E9V0H8

E K A T L E D L G Q A K R V V I N K D T T T I V D G V G G E A I V A A R R V T S Q I
E N I T L E D D L G G Q A K R V V I N K D T T T I V D G N G G G K K E D I V E G R R V I S Q I
R D A D I E D M L L G G R A K R V V I N K D T T T I V D N E G R G G D S K K E D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ U P I 0 0 0 3 7 4 1 6 6 4
E N A A I E T E M Q L L G G R A K R V V I N K D T T T I V D N E G R G G D S K K E D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ I 7 J 6 J 6
E N A A I E T E M Q L L G G R A K R V V I N K D T T T I V D N E G R G G D S K K E D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ C Q Q W M 4
E N A A I E T E M Q L L G G R A K R V V I N K D T T T I V D N E G R G G D S K K E D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ L 8 J K N 0
E N A A I E T E M Q L L G G R A K R V V I N K D T T T I V D N E G R G G D S K K E D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ U P I 0 0 0 4 2 2 1 0 7 F
E N A A I E T E M Q L L G G R A K R V V I N K D T T T I V D N E G R G G D S K K E D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ U 2 E 3 7 1
E N A A I E T E M Q L L G G R A K R V V I N K D T T T I V D N E G R G G D S K K E D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ G 7 Z A D 0
D S A T L E D D M L L G G R A K R V V I N K D T T T I V D N G G A G G E K K S D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ B 0 T C A 0
D S A T L E D D M L L G G R A K R V V I N K D T T T I V D D G G A G G P K K S D D I V E K K R R V V A T Q I
U n i R e f 9 0 _ C 8 W S 0 5
R N T T L E D D Q L L G G R A K R V V I N K D T T T I V D D G G A G G D A K S A I V E K K R R V V A T Q I
U n i R e f 9 0 _ R 6 1 G 6
K D A Q L E E M L L G G Q A R K V V I N K D T T T I V D D G G A G G E A A D I V E K K R R V V A T Q I
U n i R e f 9 0 _ A 8 E R Y 3
E T A E F S C L L G G T A S K R V V I N K D T T T I V D D G G A G G E A N E R D I V E V E G R R V V A T Q I
U n i R e f 9 0 _ W 4 L 7 Z 6
E N V T L E N D S Y L L G G T A S K R V V I N K D T T T I V V G G K G G E K E A I E T R R V V N A Q I
U n i R e f 9 0 _ U P I 0 0 0 3 6 6 B 2 C 7
E N A D L E N D S Y L L G G T A S K R V V I N K D T T T I V V G G K G G E K E A I E T R R V V N A Q I
U n i R e f 9 0 _ S 8 F F 5 4
E Q A T L E D D M L L G G R A K R V V I N K D T T T I V D N G G A G G S A K E A I H D D R R V V A T Q I
U n i R e f 9 0 _ U P I 0 0 0 4 6 D 0 0 3 3
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E N A T V A D E L L G G G N A K R I V V I N K D T T T I V D D G G A G G S E A I A K S R R V V A T Q I
U n i R e f 9 0 _ U P I 0 0 0 3 7 1 1 C 6 C
E N V T L E N D S Y L L G G R A K R V V I N K D T T T I V D D G G A G G T P E A I V K K R R V V A T Q I
U n i R e f 9 0 _ U P I 0 0 0 4 7 0 F 0 4 B
K E A T I E D M L L G G R A K R V V I N K D T T T I V V G G A G G D P Q E I V K K R R V V A T Q I
U n i R e f 9 0 _ F 5 Y E Q 2
E N T D I E S Q L L G G T A K R V V I N K D T T T I V D N G G A G G K A K D I Q D R R V V A T Q I
U n i R e f 9 0 _ F 9 N 5 M 6
D N S V D L E H H L L G G T A K R V V I N K D T T T I V D N G G A G G N G N D V I A K Q R R V A T Q I
U n i R e f 9 0 _ E 4 L 9 U 3
D S A T L E D D V L L G G H A H Q V R I T K D T T T I V D G G E G D A E A I A K Q R R V A T Q I
U n i R e f 9 0 _ S 0 E Y C 9
E N I T A D L L L G G R A K R V V I N K D T T T I V V E G G A G G R E A I K K G R V A T Q I
U n i R e f 9 0 _ U P I 0 0 0 3 6 E 2 F 8 F
E N V T L E D D L L G G R A K R V V I N K D T T T I V E G G A G G K R E A I V J A R M N S Q I
U n i R e f 9 0 _ U P I 0 0 0 3 6 F A E D 7
E N T R M E D D L L G G Q A R K V V I N K D T T T I V I E G K G P K K A I E G R R I S Q I
U n i R e f 9 0 _ H 2 C E E 1
E S V E L L S Q L L G G R A K R V V I N K D T T T I V S D G S G G E N A A I K K G R V A T Q I
U n i R e f 9 0 _ F 0 S X 8 9
E N T L E D M L L G G R A K R V V I N K D T T T I V D D G A G S K D A I N E R R I E E V Q I
U n i R e f 9 0 _ D 0 W G P 6
A D A T T V D M L L G G T A K R V V I N K D T T T I V D D G A G S K D A I N E R R I E E V Q I
U n i R e f 9 0 _ U P I 0 0 0 3 B 3 D 0 E 9
K E T T L E D Q L L G G R A K R V V I N K D T T T I V D D G A G G T P K K I K K R R V A T Q I
U n i R e f 9 0 _ L 7 V M 5 8
K D I K L E W F L L G G S A K R V V I N K D T T T I V D G A G G E Q S D I E E R R V A T Q I
U n i R e f 9 0 _ C 1 A 8 L 8
E N A V L T D L L G G S A K R V V I N K D T T T I V D G A G G E Q S D I E E R R V A T Q I
U n i R e f 9 0 _ A 8 S M B 2
K E T S I L E M L L G G S A K R R V T V I N K D T T T I V D G K E L T S V V N G G A G D Q S D A V E E D A R V A T Q I
U n i R e f 9 0 _ T 0 S S V 3
E T A T L E D H L L G G S A K R R V T V I N K D T T T I V D G A G G D Q S D A V E E D A R V A T Q I
U n i R e f 9 0 _ D 7 B K Y 8
E N A D I E L L L G G R A K R V V I N K D T T T I V E G A G S A D D I V A A R R V A T Q I
U n i R e f 9 0 _ U P I 0 0 0 3 7 7 4 E 4 B
E S V T T E D W L L G G E T K K V V V S D D K D T T T I V V E G K G N D E A I K A R R I K E Q I
U n i R e f 9 0 _ A 5 V 0 S 2
D S A T V E D D L L G G Q A R R V V T S K D T T T I V D G G A G G D K E A I V N G R R I K E Q I
U n i R e f 9 0 _ E 4 U 2 W 5
D S A T I A D D L L G G Q A A R V V T S K D T T T I V D G G A G G D K E A I V N G R R I K E Q I
U n i R e f 9 0 _ D 1 V W 0 5
K D T T I E M L L G G H C G K V R V E N K E L T V I V N G G A G G E K E A I D E K R R I G G N I
U n i R e f 9 0 _ R 7 K G U 5
D K A T L E H H L L G G Q A K R V V I N K D T T T I V D N G A G N P E A I D E K R R V K N I
U n i R e f 9 0 _ U P I 0 0 0 4 7 E 7 6 3 F
E G A T L Q D D L L G G T A R K V V T V G K E N T V I V D G A G G Q K D D E I D A R R V S T I
U n i R e f 9 0 _ U P I 0 0 0 2 9 A E 8 6
K D T T L D Q L L G G S A G R V T V I S K E K T V I V D G A G G D K D G E I A E R R V A T Q I
U n i R e f 9 0 _ V 4 J H E 5
E K A T L N E L L G G S A K R V V L V S K E T T T I V D G A G A D D G E I K G R C D D Q I
U n i R e f 9 0 _ K 4 L G 5 4
E N V T L D M L L G G R A G R A V V I N K D T T T I V D G K G A T E E I E K R I T Q I
U n i R e f 9 0 _ U P I 0 0 0 3 8 1 B 0 8 A
D A A T I N D L L G G Q A K K V T V I N K D T T T I V D G G A G S K D D I K K D R R V A T Q I
U n i R e f 9 0 _ R 7 J 1 1 9
S A A T I D L L L G G T A E K V T V I N K D T T T I V D G G A G S K D D I K K D R R V A T Q I
U n i R e f 9 0 _ K 9 C Z 8 3
D S V T L E D D L L G G R A E K V R S T K E E T T T I V D G G A G D K S E I A A S R R V A T Q I
U n i R e f 9 0 _ R 5 I 5 A 5
E N T P D M L L G G K A D K V S I D K D T T T I V N G K G D K K E A I A D T R V A T Q I
U n i R e f 9 0 _ L 7 V K F 0
E D A T I Q M L L G G K A D K V S I D K D T T T I V N G G F G D K K Y I A Q T R V A T Q I
U n i R e f 9 0 _ C 7 N E Y 9
S S A T L E D L L G G S A R R V Q I T K D S T T I V D G G G E K K S A V D E R V A T Q I
U n i R e f 9 0 _ C 3 X F J 9
E S I D M S H L L G G Q A A R V L V T D K D S T T I V D G G K G K K A I E E R V A T Q I
U n i R e f 9 0 _ E 2 F B 2 2
K D A T V E H H L L G G H A G K V T V I N K D T T T I V D G A G N K Q A I A D R I A V I
U n i R e f 9 0 _ M 5 D N Y 0
E T T T I D M L L G G T A K K V V I S K E N T V I V D G A G T E Q D V K G R V E Q I
U n i R e f 9 0 _ U P I 0 0 0 3 5 C D 7 0 1
E A I T E E H L L G G T A K R V I E I G K D T T T I V D G G A G A K K N I T S R I G G Q I
U n i R e f 9 0 _ C 0 V Y I 9
E T A D L D V L L G G H A R K V V V V S K D E T T T I V V D G A G T K E A I T E A R V A T Q I
U n i R e f 9 0 _ D 4 K 3 P 3
K D A T V D M L L G G H A R K V V V V S K E N T T I V V G G A G D K D A I A S R I V A T Q I
U n i R e f 9 0 _ Q 9 3 F X 6
E N V T L D M L L G G R A K K V N I N K D T T T I V D G G A G Q K A E I T A R R V N Q I
U n i R e f 9 0 _ B 1 C 9 G 1
K S T T L D M L L G G R A S Q V R V S D K E N T I V D G K G D G K E I E D R R S S Q I
U n i R e f 9 0 _ I 2 J E J 4
E H V S L E Q L L G G S A K R V V I D K D N T T I V D D G Y G K R G D I D A R R V A T Q I
U n i R e f 9 0 _ U P I 0 0 0 3 7 1 1 2 B C
E N V E L D M L L G G E T K S A V V I D K D S T T I V D D G T G S K A D D I E G R C A Q I
U n i R e f 9 0 _ U P I 0 0 0 3 B 5 E C 1 C
E N V S V K D M L L G G R A K R V V I N K D T T T I V D G G G K S A D I N G R I A G Q I
U n i R e f 9 0 _ K 9 U Z Y 8
D T A T L E M L L G G T A R K V T I T I D K E S T T I V A A G E N K A E D V Q K R I A Q I
U n i R e f 9 0 _ K 6 X C A 9
D N Q V D L T M L L G G R A R R V V V V S K D A T T I V D G G G G A E E E I E E G R V A T Q I
U n i R e f 9 0 _ X 0 U I P 9
E N V D I S Q L L G G R A K R I K I V D S K E N T T I V D G G Q G D P K E I E E A R R V A T Q I
U n i R e f 9 0 _ F 0 R S A 1
E N A D L S Q L L G G R A K S V K V V E K E N T T I V N G N G K Q S E I K D R I A Q I
U n i R e f 9 0 _ D 4 J 3 L 2
K D T T L A Q L L G G R A K S V K V V N R E N T T I V D D G V G D K D A I E A R V A T Q I
U n i R e f 9 0 _ Q 4 7 T E 8
E N T E L D M L L G G R A R K V V V V S K D E T T I V D D G A G D A S A I E A G R V A T Q I
U n i R e f 9 0 _ Q 7 T T Y 9
E S V D L P Q L L G G R A K K I I V D K D N T T I V I E G G G K S A D I K A R I D Q I
U n i R e f 9 0 _ D 7 C V W 2
E N T R L D M L L G G R A N R I R I T K D A T T I V I E G K G D Q S A I E A R V T K A I
U n i R e f 9 0 _ V 9 V T Z 0
E N V T L D M L L G G A A K K I T I T K D A T T I V D G A G V K A A I E A A R V T Q I
U n i R e f 9 0 _ F 4 K T A 8
E N T D I T M L L G G Q A E R V I S I D K D N T T I V V N G K G L E D G V K A R V S Q I
U n i R e f 9 0 _ K 6 W U 4 0
E S T D L D Q L L G G T A R K V V V S K D E T T I V V E G G G D A D Q Q I A G R V N K Q I
U n i R e f 9 0 _ U P I 0 0 0 3 F B 4 E 6 2
K D A T L D L L L G G N A S K V H V S K D D T T I V E G A G D P A A L I K Q G R V A T Q I
U n i R e f 9 0 _ D 1 B 1 1 8
E S A T L A D L L G G Q A S R I V I D K D N S T I V N G N G D K A R I D A R R V A T Q I
U n i R e f 9 0 _ R 6 W E Z 8
K D A T L D M L L G G S A K M V Q V D K D N T T I V D G A G D P A A L I K Q G R V A T Q I
U n i R e f 9 0 _ W 3 A A B 2
K S T N I T Q L L G G R A K M V V V S K E N T T I V E G A G D Q A A L I V I G R V S Q I
U n i R e f 9 0 _ X 8 I N E 7
K E A T V D M L L G G K A G T V K V V N K D H T V I V N G A G D K A E I D E R I E K I
U n i R e f 9 0 _ A 9 B H K 4
E D I S I N D L L G G Q A D L R V R V A K E D T T I V V D G G K G P T A I K K A R V A T Q I
U n i R e f 9 0 _ R 6 L K 5 1
T D V Q I S D L L G G R A R Q I K V V T K D N T T I V D D G G M G D A N E I K E R V A T Q I
U n i R e f 9 0 _ R 6 E H A 5
N E V T L D M L L G G T A A T V K V V D K E N T T I V V S G G G S S E A I V K A R I A S L
U n i R e f 9 0 _ X 1 K R T 5
D S V T I E D L L G G R A R K V V A D K D N T T I V V E G K G S S E A I V E A R I A Q I
U n i R e f 9 0 _ A 1 R 8 M 1
D T R V G L E V L L G G T A R R L T V I T K D N T T I V D D G A G T A Q D V A D R V A T Q I
U n i R e f 9 0 _ Q 7 M B C 7
E N V T T D Q L L G G K A R K M T L T K D N T T I V A E G N E A A V K A R C A Q I
U n i R e f 9 0 _ F 8 G H B 0
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D S I D D T V L L G G H A A K V I V S K D E T T I V S G A G S K E Q D I A A R V A T Q I
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E A A T L E D L L G G R A R R I V I D K E N T T I V D D G A G S K A V S G R V G Q I
U n i R e f 9 0 _ Q 3 A 0 V 2
E N A T I D M L L G G N A K R I V I D K E N T T I V D D G A G S E V D I S Q G R V K Q I
U n i R e f 9 0 _ Q 8 L 7 B 5
D N I D L S M F L L G G N C K K V T V S K D D T T I V D D G A G D K Q A I G E R C K E Q I
U n i R e f 9 0 _ B 3 I W T 4
D K V S L P E L L G G Q A K R A E V R K A K D T T I V D D G A G D A K A I N A R I K H I
U n i R e f 9 0 _ D 8 I V U 9
E K T A L E D L L G G S A K R V E V R K K D T T T I V D D G A G A D A D K I D A R V A T Q I
U n i R e f 9 0 _ E 9 V 0 H 8
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QUERY	170	180	190
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UniRef90_L8JKNO	K S Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_UPI000422107F	R A Q Q A E E A T S S D Y D K E E K L Q Q E E R V A K L A G G V V A V A V		
UniRef90_U2E371	R A Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
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UniRef90_B0TCA0	R R Q Q H E E E T T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_C8WS05	K A Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
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UniRef90_S8FF54	K A E E M Q E E T T T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
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UniRef90_V4KTX9	R T Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L I V G G V V A V A V		
UniRef90_Q30YH6	R N E I D A S D S S D Y D K E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_UPI0003711C6C	K A Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_UPI000470F04B	K A Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_F5YEQ2	K A Q Q A E E A T S S E F D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_F9N5M6	R E Q Q F K E N S T S S Q F D K D K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_E4L9U3	K R Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_S0EYC9	K K Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_UPI00036E2F8F	K R Q Q I I E E E T T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_UPI00036FAED7	R K Q Q I I E E E T T S S D Y D K E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_H2CEE1	K K Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_F0SX89	R V E I T D N A T T S S D F D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_D0WGP6	K K Q Q I I E E E T T S S D Y D K E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_UPI0003B3D0E9	R K Q Q I I E E E T T S S E Y D K E E K L S E E E R L A K L A G G V V A V A V		
UniRef90_L7VM58	R G A I D K S T S S E Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_C1A8L8	R N Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_A8SMB2	R K Q Q I I E E E T T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_T0SSV3	K T Q Q I I E E E T T S S D Y D R E E K L H E E E R L A K L A G G V V A V A V		
UniRef90_D7BKY8	R T Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L V I G G V V A V A V		
UniRef90_UPI0003774E4B	R A Q Q I I E E E T T S S D F D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_A5V0S2	R T Q Q I I E E E T T S S E Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_E4U2W5	R G Q Q I I E E E T T S S D Y D R E E K L Q Q E E R V A K L V I G G V V A V A V		
UniRef90_D1VW05	R T Q Q I I E E E T T S S D Y D R E E K L Q Q E E R V A K L A G G V V A V A V		
UniRef90_R7KGU5	R K Q Q I I E E E A T S S D Y D R E E K L Q Q E E R V A K L A G G V V A V A V		
UniRef90_UPI00047E763F	K K Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_UPI00029AEE86	R A Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_V4JHE5	K N Q Q F E V A T S S E Y D R E E K L Q Q E E R M A K L A G G V V A V A V		
UniRef90_K4LG54	H A Q Q I I E E E T K S Q Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_UPI000381B08A	K K Q Q I I A E Q T T S S D F D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_R7J119	R K Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_K9CZ83	K S Q Q I I D N T T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_R5I5A5	R K E I I E E N T D S S E W D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_L7VKF0	R T Q Q I I E E E T T S S D Y D K E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_C7NEY9	R A Q Q A E E E S T S S F D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_C3XFJ9	R A E M E A S T S S D Y D K E E K L Q Q E E R V A K L A G G V V A V A V		
UniRef90_E2FB22	K T Q Q I I E A T S S S D Y D K E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_M5DNY0	R A E I A K S D S S E Y D K E E K L S E E E R L A K L A G G V V A V A V		
UniRef90_UPI00035CD701	R N Q Q I I E A A T S S E F D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_C0VYI9	K A Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_D4K3P3	K A Q Q I I P E E T T S S E Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_Q93FX6	R A E I I E E N S S S S E Y D R E E K L Q Q E E R V A K L A G G V V A V A V		
UniRef90_B1C9G1	K A Q Q M E E N T T S S E Y D N E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_I2JEJ4	K R Q Q I I D D T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_UPI00037112BC	R K Q Q I I E N N D S S D Y D Q E E K L Q Q E E R I A K L A G G V V A V A V		
UniRef90_UPI0003B5EC1C	K S E I E E R T D S S D Y D R E E K L Q E E E R L A K L A G G V V A V A V		
UniRef90_K9UZY8	K L Q Q K E E E T T S S D Y D R E E K L Q E E E R L A K I A G G V V A V A V		
UniRef90_K6XCA9	K V Q Q I I G D T T S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_X0UIP9	R T Q Q I I D E R T T S S E F D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_F0RSA1	R A E I E E R T D S S D Y D R E E K L Q Q E E R L A R L A G G V V A V A V		
UniRef90_D4J3L2	R R E I I E E L S T S S D Y D R E E K L E E E E R L A K L A G G V V A V A V		
UniRef90_Q47TE8	R T E I I E E N T D S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_Q7TTY9	R T Q Q I I E D T T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_D7CVW2	R S Q Q I I E L T T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_V9VTZ0	R N E I E E K S D S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_F4KTA8	K A Q Q I I E E E T T S S F D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_K6WU40	K A Q Q I I A E E T S S S D Y D R E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_UPI0003FB4E62	H Q Q I I A E E T S S E F D K E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_D1B118	R S Q Q I I E E E T T S S F D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_R6WEZ8	K G E I I E E T T S S F D K E E K L Q Q E E R L A K L V G G V V A V A V		
UniRef90_W3AAB2	K A Q Q I I E N T T S S D Y E K E E T L Q Q E E R L A K L S G G V V A V A V		
UniRef90_X8INE7	K N T L A V T T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_A9BHK4	K T Q Q I I E D T T S S E F D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_R6LK51	R S E I I E E L S T S S D Y D K E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_R6EHA5	R A E L T R T D S S D W D K E E K L Q Q E E R L A K L A G G V I G V A V		
UniRef90_X1KRT5	K Q Q Q I I E E T D S S E Y D R E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_A1R8M1	H K L I I E A P T S S D Y D K E E K L Q Q E E R A A K L S G G V V A V A V		
UniRef90_Q7MBC7	R S E I I E A S D S S D Y D R E E K L Q Q E E R L A K L A G G V V A V A V		
UniRef90_F8GHB0	K T Q Q I I G T T T S S E Y D K E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_Q9KI71	R A E I I E E Q S D S D W D R E E K L Q Q E E R V A K L S G G V V A V A V		
UniRef90_I2K740	R A Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_UPI000360EF9C	R A E I I E E Q S D S D W D R E E K L Q Q E E R V A K L S G G V V A V A V		
UniRef90_Q3A0V2	R A Q Q I I E E E T T S S D Y D R E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_Q8L7B5	R S M V I E A S T S S D Y D K E E K L Q Q E E R L A K L S G G V V A V A V		
UniRef90_B3IWT4	R L Q Q I I E E E A A S S D Y D K E E K L Q Q E E R V A K L A G G V V A V A V		
UniRef90_D8IVU9	Q A Q Q I I E E E A T S S D Y D R E E K L Q Q E E R V A K L A G G V V A V A V		
UniRef90_E9V0H8	K S E I I E E R T D S S D W D R E E K L Q Q E E R L A K L A G G V V A V A V		

	1	10	20	30	40																																						
UniRef90_A9GB11	D	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_K9SXY1	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_A8PNY3	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_K9EY7P6	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_E3J245	T	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_R7LST3	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_P15599	E	G	M	N	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_D7GCB6	T	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_UPI0003B5DA46	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_Z2EMX2	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_R5W796	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_Q37757	T	E	G	M	R	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_UPI0002ED41A0	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_C7GY7	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_F0SFU8	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_X0ZA52	E	G	L	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_C1ECK1	E	G	M	K	F	E	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_UPI0004013F0E	T	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_F4KVVX9	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_I2FKQ9	E	G	M	K	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_K3W969	E	G	M	K	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_G4WV11	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_X6ENI9	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_D6YRK0	E	G	M	N	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_W9EYK1	E	G	M	E	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_U2EEI8	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_D1Y2E0	D	G	L	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_P37282	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_X6GJN1	E	G	M	Q	F	D	R	R	G	Y	L	S	P	H	F	I	T	N	R	A	K	M	R	V	E	M	Q	D	A	Y	V	L	V	S	E	K	K	I	S	N	V		
UniRef90_UPI0004793A79	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_C8W932	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_F2N768	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_D3QA85	T	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_H1A7A5	E	G	M	K	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_A0A010ZJV5	E	G	L	Q	F	D	R	R	G	Y	L	S	P	Y	M	I	T	N	P	D	R	M	E	A	V	L	D	D	A	N	I	L	I	V	D	G	K	I	S	N	V		
UniRef90_A6C9D5	D	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_V9QYB2	E	G	M	R	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_W5XAL8	E	G	L	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_UPI000237A5AA	T	E	G	V	Q	F	D	R	R	G	Y	L	S	P	H	F	I	T	N	A	E	R	M	E	A	V	L	D	A	Q	I	L	L	I	T	H	R	E	K	I	S	N	V
UniRef90_UPI00037AA744	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_K9B1P7	T	E	G	M	Q	F	D	R	R	G	Y	L	S	P	H	F	I	T	N	A	D	R	Q	E	A	I	L	G	D	A	L	I	L	I	N	Q	G	K	I	S	N	V	
UniRef90_D7B7M7	T	E	G	L	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_K0ZAL1	E	G	M	Q	Y	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_UPI00035CCD95	T	E	G	M	R	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_Q05FT9	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_UPI0003B42536	T	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_R7FYG8	D	G	M	S	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_S9P1R1	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_Q565W9	E	G	M	Q	F	D	R	R	G	Y	L	S	P	H	F	I	T	N	A	E	R	M	E	A	V	L	D	A	Q	I	L	L	I	T	H	R	E	K	I	S	N	V	
UniRef90_UPI00016211A5	E	G	M	K	L	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_W2EQT4	T	E	G	L	Q	F	D	R	R	G	Y	L	S	H	Y	M	V	T	D	P	E	R	M	E	S	V	L	E	E	Y	L	I	H	H	Q	G	K	I	S	N	V		
UniRef90_L0DFD0	E	G	M	Q	F	D	R	R	G	Y	L	S	P	H	F	I	T	N	A	D	R	Q	E	A	V	L	D	A	Y	L	I	Y	E	E	K	I	S	N	V				
UniRef90_C1DIS7	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V				
UniRef90_UPI000255EAA1	T	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I	S	N	V			
UniRef90_UPI0003699939	T	E	G	L	Q	F	D	R	R	G	Y	L	S	P	H	F	I	T	N	A	E	R	M	E	A	V	L	D	A	Y	L	I	T	T	Q	K	I	S	N	V			
UniRef90_UPI00016C36B2	E	G	M	Q	F	D	R	R	G	Y	L	S	P	Y	F	V	T	D	S	E	R	M	A	V	L	T	N	P	L	L	V	H	E	K	K	I							

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

	130	140	150	160
UniRef90_A9GB11	E S A T V R D M L	G G T A K R R V E I I	D K D N T V V D G G G	Q G D K T A I K G R I E A Q I
UniRef90_K9SXY1	D T A T T L D M L	G T A K R K R V E I I	K E D N T V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_A8PNY3	K D T T L D D D L	G G S A K R K A I V V	K D D N T V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_K9E7P6	S D A T T L A D M L	G G R I R R R V V V V	D K D D T T T V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_E3J245	D A A T T L A D M L	G G R I R R R V V V V	D K D D T T T V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_R7LST3	E N T V T T A M L	G G K A K K K V T V V	S K D E D T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_P15599	E N T T T L A M L	G G K A K K K V T V V	S K D E D T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_D7GCB6	A E V S L A E D L L	G G K A K R R V V V V	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_UPI0003B5DA46	E N A T L E X X Q L	G G X A K R R V X I I	D X D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_Z2EMX2	E K A T L E E Q L L	G G S A K K K V T V V	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_R5W796	E D V K L E E M L L	G G T A D K K V T T I	N K K E N T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_Q37757	D S I K L D V L L L	G G K A R K V N I T T	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_UPI0002ED41A0	E T A D L S M L L L	G G J A T K V I T L L	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_C7GY77	K D V T L S E Q L L	G G T A G T I K A T T	K D N T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_F0SFU8	E N I D V L S H L L	G G R A R R Q L E K I	T D K D N T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_X0ZA52	E N V K L D M L L L	G G R A R R Q L E K I	T D K D N T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_C1ECK1	D Q V D I S M L L L	G G T A K K V I T V I	S K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_UPI0004013F0E	K M A D L S E H L L	G G S A R K V I T V I	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_F4KVVX9	E N A G L S E H L L	G G S A R K V I T V I	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_I2FKQ9	E N V D V R S L L L	G G S A K R V I T V V	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_K3W969	E T T T P D M L L L	G G S A K R V I T V V	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_G4WV11	E K V A L T D M L L	G G R A K R V I E I I	G K E E T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_X6ENI9	E N V T L A M L L L	G G R A K K V I S I I	S K E E T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_D6YRK0	E S T T V E H L L L	G G K A K K V V V V	T K D E N T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_W9EKV1	K D T T I N Q L L L	G G R A K K V I V V	T K D N T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_U2EEI8	K E T A I N Q L L L	G G R A K K V I V V	T K D N T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_D1Y2E0	E N V E L S K L L L	G G R A K K V I R I I	T K D E T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_P37282	K D A T L E A L L L	G G R A K A K A T R I	D K D H T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_X6GJN1	E H A S L D M L L L	G G R T K K V M L M L	D K A N T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_UPI0004793A79	R D A T L A H L L L	G G S A R K V V K S T	N K E T T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_C8W932	N E I T A D M L L L	G G S A R K S V T V V	T K D T T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_F2N768	A D I T A D M L L L	G G T A K S V T V V V	T K D T T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_D3QA85	D Q V G L E D Q L L	G G T A R K V V V V	V E K D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_H1A7A5	E T T E L E A L L L	G G T A R K V V T I I	V E K D D T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_A0A010ZJV5	D S A D V A D L L L	G H A K K V K V I T	K E D T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_A6C9D5	E S V E L A Q Q L L	G G R A K Q V E I I	S K D S T A L I V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_V9QYB2	E Q V Q L A Q Q L L	G G R A K Q V E I I	S K D S T A L I V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_W5XAL8	E N V T P D M L L L	G G S Q R R V I V I T	K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_UPI000237A5AA	S S A G P E V L L L	G G S A R R I V T V V	T K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_UPI00037AA744	D S A D I N M L L L	G G G A R R R I A T T	K E N T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_K9B1P7	D Q V T L D E L L L	G G N A R R T I T V T	K D D T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_D7B7M7	E N V D L D A L L L	G G A R R V T V T I T	K D A T T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_K0ZAL1	G E A T L D M L L L	G G T A K T V K V I	T K D S T V I V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_UPI00035CCD95	D G T T V D L L L L	G G R A R R V I V I T	A D E N T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_Q05FT9	E N I D L S L L L L	G G F A K K V T S T	T K E N T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_UPI0003B42536	D Q V G L E D L L L	G G S A G R V V V V	T K D L T T V T H G	G G G E N K V N V V K D S R R I A Q I
UniRef90_R7FYG8	K D V T P D M L L L	G G R A G Q V K V I	D K D N T V I V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_S9P1R1	E H V G P D D L L L	G G R A K R V V V V	T Q E E T T V V V D G G G	G G G E N K V N V V K D S R R I A Q I
UniRef90_Q565W9	E K M N L S E L L L	G G K A K R V V V V	V D K E D T C T L I	V D G G G A G R T Q D V K G R I E A Q I
UniRef90_UPI00016211A5	E K I E L D M L L L	G G A K K V T V V V	S K D D T T L I L D	G G G A G D K A I E E R L E A Q I
UniRef90_W2EQT4	E H V G L D V L L L	G G T A R R V V V V	N K D D T T V V V D G G G	G G G A G D A Q A I E D R V A Q I
UniRef90_L0DFD0	E S V G L T D L L L	G G R A R K I T I I	D S E N T T V V V D G G G	G G G A G T Q E E I K G R V E M I
UniRef90_C1DIS7	A D T T L A Q L L L	G G R I Q R V V V V	D K E T T T V I V D G G G	G G G A G D S A A I E S R M K Q I
UniRef90_UPI000255EAA1	E S V G L E V L L L	G G T A R R V V A T T	K D D T T T V V V D G G G	G G G A G D A Q A V S D R V A Q I
UniRef90_UPI0003699939	D A V G L E V L L L	G G Q A R R V V V V	T K D T T T V V V D G G G	G G G A G Q A S E V S Q A R V S A Q I
UniRef90_UPI00016C36B2	E T V T M E D L L L	G G T A K K I K V I	D K D N T T V I V D G G G	G G G A G T A A A I K E R I A T I
UniRef90_C7REA8	K D T A M D M L L L	G G S A K K V K V I	D K D N T T V I V D G G G	G G G A G D K A A I E A K R V A T I
UniRef90_R6RA69	K D T T I E Q L L L	G G R A R Q I K V I	V D K E N T T V V D G G G	G G G M G D K Q E I E A K R V A L L
UniRef90_UPI00029AB4AC	E N V E L S D L L L	G V A K K I R I I D	A E N T T V V V Q G	G A G K A E I E G R A A L I
UniRef90_R4Z309	E S V E L G L L L L	G G R A E K V V V V	T K D E T T V V V D G G G	G G A G S A E D L V K G R I A Q I
UniRef90_K9RPI9	D Q V E V G M L L L	G G Q A R K V V V V	T K D T T T V I V D G G G	G G G T A A A I V K E R I A Q I
UniRef90_D0L7W9	S T V G L E V L L L	G G S A R R V V V V	T K D A T T V I V D G G G	G G A G T K E A I A D R A A Q I
UniRef90_G8ASC9	E N I T L D V L L L	G G R A R R V R V I	D R E S T T V I V D G G G	G G A G R K E E I A Q A R V A A I
UniRef90_K9PB00	K A T L A D L L L L	G H A H R R T I I I	S K D T T T V I V D G G G	A A D N Q R A A V A D R V A A I
UniRef90_E6PVE5	E K V T L A D L L L	G N A K R V E A A	K E N T T V I V D G G G	A G V A D I E A R V A K Q I
UniRef90_P48216	E T A T L E H L L L	G G N A K R V I L S	K E N T T I V I D G G G	A G A D T E A R V A K Q I
UniRef90_A0A022LNU8	S D C G L E V L L L	G H A R R V T V V V	S K D E T T V I V D G G G	D G D G D Q A D V E A R V A Q I
UniRef90_R5JKQ0	K E V D L S M L L L	G G R A Q T V K V I	N K E T T T V V A G	G E G S K L E I N N R I G Q I
UniRef90_U4LL01	D K L T P D M L L L	G G S T G A V S I I	T K E D T T V I V D G G G	G D G H K D M I A Q R I C E Q I
UniRef90_Q7UM99	E S V K V S D L L L	G G R A K Q I R I I	T S E A T T V I V D G G G	G A G K K A D I A Q R V A Q I
UniRef90_Q3LDT0	E K T D P S V M L L	G T A K Q V I I T	K D D T T I M N G	G A G K K A D I D S R I A Q I
UniRef90_D5E9S6	E D V T D D M L L L	G G S A H K V S V I	D K Q K T T I T H	G G G D K N A I E S R M E M Q I
UniRef90_F8KY79	K E I P A S A L L L	G G S A E K I I V I	S K E N T V I H H	G G S G S Q E D I D A R V A Q I
UniRef90_I6QYY4	X K T T M E B M L L	G G Q A K R I I V I	T K D A T T I I D	G X G D K I H I S S R I K Q I
UniRef90_G1Y006	D S V T L A M L L L	G G R A R R V I S I	T K E T T I V I D	G A G A E A I E A R V A Q I
UniRef90_Q3AUZ9	D K V T L E D L L L	G H A H R R V T I I	S K E S T T V I V	A N D N H S E N R V A A I
UniRef90_E1ZRQ6	D K A D D S I L L L	G L A A K V S V I	S K E H I T I V V	G D G S T Q A S V E A R V A Q I
UniRef90_P94820	E D V R I E D L L L	G G R A R D T V I V	E K D N T T V I V D G G G	P A R S S V A K E R A Q I
UniRef90_D81Z5	E A A G L P V L L L	G G R A R R V V V V	T K D D T T V I V D G G G	N G G E R A R I A G R A A Q I
UniRef90_UPI000194E849	E D I Q P H D F L L	G G K V G E V I V V	T K D D T M L L L K	G K G E K T Q I E K R I Q E I
UniRef90_C5KZ22	S D D F P A L L L L	G G S C K S V S V I	K K D D T T V I V D G G G	G A R E N I D D Q R C C E Q I
UniRef90_UPI00040A024JKM0	E N A T Q D L L L L	G G S S G S I T I I	T K E D T T V I V D G G G	N G E G S R E N I V D Q R C C E Q I
UniRef90_M4I7B0	E K S S L E D L L L	G G S K K V I N K E	T T I V I D G G S	G N K E D I K N R I S Q I
UniRef90_X5E765	S E T T L E Q L L L	G G T A R R I T V T	K D E T T V I V D G G G	A G T A E D L E A R R T A Q I
UniRef90_Q33659	D Q V G L E V L L L	G G T A R R I T V T	K D E T T V I V D G G G	P G K R D E V A Q R I A Q I
UniRef90_R5ZH88	K D M T L N E L L L	G N V K R L V V T	K D N T T M I G G	A G N K E A V A D R V A Q I
UniRef90_I0IFV5	D S L E L D Q L L L	G G T A R K V S V I	G K E T T T I I V	E G D G K K A D V D G R V K Q I
UniRef90_R9AF14	E K A T V D M L L L	G G S C G S T S I I	T K E D T L V I N	G D G Q K G E V A N R C C E Q I
UniRef90_R7R3A6	K D T S M E M L L L	G G R A K S V K V I	T K D S T T I V D	G G E G K S E D I Q E R I T S I
UniRef90_E3H5L5	E Q A T L S E E T L	G G S A R R V T V T	K N D T T T V I V	D G G G S K E A I E D R V V Q Q I
UniRef90_W2BP73	E T A D L S L L L L	G G T A K S V T V T	K D A T T T V I V	D G A G D K E Q I E G R V K Q I
UniRef90_H2B651	E D I Q L H D F L L	G R V G E V T L T	K D D T L F L K	G K G E Q K D I D S R V E Q I

		170	180	190
UniRef90_A9GB11	R	K	Q	I
UniRef90_K9SXY1	R	K	E	L
UniRef90_A8PNY3	D	A	Q	K
UniRef90_K9E7P6	R	K	Q	A
UniRef90_E3J245	R	A	E	T
UniRef90_R7LST3	K	N	Q	I
UniRef90_P15599	K	K	Q	I
UniRef90_D7GCB6	H	A	E	I
UniRef90_UPI0003B5DA46	R	Q	Q	I
UniRef90_Z2EMX2	E	K	Q	I
UniRef90_R5W796	R	K	Q	I
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UniRef90_F0SFU8	R	S	H	I
UniRef90_X0ZA52	K	A	E	I
UniRef90_C1ECK1	R	D	A	L
UniRef90_UPI0004013F0E	R	K	Q	A
UniRef90_F4KVBX9	K	Q	Q	I
UniRef90_I2FKQ9	R	A	A	M
UniRef90_K3W969	R	A	S	I
UniRef90_G4WV11	R	K	Q	I
UniRef90_X6ENI9	K	Q	Q	I
UniRef90_D6YRK0	K	R	Q	I
UniRef90_W9EKV1	K	N	Q	I
UniRef90_U2EEI8	R	M	Q	I
UniRef90_D1Y2E0	R	T	E	I
UniRef90_P37282	K	A	Q	I
UniRef90_X6GJN1	K	L	E	L
UniRef90_UPI0004793A79	R	N	E	F
UniRef90_C8W932	K	A	E	I
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UniRef90_D3QA85	K	T	Q	A
UniRef90_H1A7A5	R	E	A	A
UniRef90_A0A010ZJV5	K	K	E	L
UniRef90_A6C9D5	R	G	Q	L
UniRef90_V9QYB2	R	G	Q	M
UniRef90_W5XAL8	K	Q	Q	I
UniRef90_UPI000237A5AA	R	K	E	I
UniRef90_UPI00037AA744	K	A	Q	I
UniRef90_K9B1P7	R	S	E	I
UniRef90_D7B7M7	R	K	E	I
UniRef90_K0ZAL1	R	A	E	L
UniRef90_UPI00035CCD95	R	A	E	I
UniRef90_Q05FT9	K	K	Q	I
UniRef90_UPI0003B42536	K	Q	S	E
UniRef90_R7FYG8	K	K	Q	L
UniRef90_S9P1R1	R	Q	Q	K
UniRef90_Q565W9	K	N	E	I
UniRef90_UPI00016211A5	R	D	S	L
UniRef90_W2EQT4	K	L	A	I
UniRef90_L0DFD0	R	R	E	I
UniRef90_C1DIS7	R	A	Q	L
UniRef90_UPI000255EAA1	Q	A	E	S
UniRef90_UPI0003699939	R	K	E	I
UniRef90_UPI00016C36B2	Q	K	E	L
UniRef90_C7REA8	R	K	Q	I
UniRef90_R6RA69	K	S	Q	I
UniRef90_UPI00029AB4AC	R	A	E	I
UniRef90_R4Z309	Q	A	E	I
UniRef90_K9RPI9	R	K	Q	L
UniRef90_D0L7W9	R	R	E	I
UniRef90_G8ASC9	R	T	Q	I
UniRef90_K9PB00	K	R	E	L
UniRef90_E6PVE5	R	Q	I	L
UniRef90_P48216	R	A	Q	L
UniRef90_A0A022LNU8	R	R	Q	A
UniRef90_R5JKQ0	R	R	Q	I
UniRef90_U4LL01	R	G	V	M
UniRef90_Q7UM99	R	R	E	L
UniRef90_Q3LDT0	K	E	M	K
UniRef90_D5E9S6	E	S	Q	T
UniRef90_F8KY79	E	N	E	L
UniRef90_I6QYY4	N	Q	Q	R
UniRef90_G1Y006	R	D	Q	V
UniRef90_Q3AUZ9	K	R	E	L
UniRef90_E1ZRQ6	K	N	L	V
UniRef90_P94820	R	S	E	I
UniRef90_D81Z5	R	A	E	I
UniRef90_UPI000194E849	I	E	Q	L
UniRef90_C5KZ22	R	D	A	L
UniRef90_A0A024JKM0	K	S	H	N
UniRef90_M4I7B0	R	Q	Q	V
UniRef90_X5E765	R	S	D	I
UniRef90_Q33659	K	A	E	I
UniRef90_R5ZH88	Q	A	Q	V
UniRef90_I0IFV5	K	Q	Q	L
UniRef90_R9AF14	R	A	L	N
UniRef90_R7R3A6	K	A	Q	A
UniRef90_E3H5L5	R	R	E	I
UniRef90_W2BP73	Q	A	E	I
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UniRef90_D2R9E0
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M K Q L V P V L L E K V A S E S R S P P L L L I I A A E D D I E E G E A L L A Q A L L V N S I R R G G
L P D F L P L L L E K I A E S S R S P T L L I I A A E D D I E E G E P L Q A L L V N S I R R G G
V A H I L P A L L E N Y A I Q Q K R P P L L V I A A E D V E E G E A M H T F L Y N K I Q Q G G
A Q S L I P A L L E L A N A Q R K P P L L V I V A A E D L D G E E V I G M L V L N K L R R K K G G
P K D M F K I L L E D S A V K E E F P P V L V I A A E D I E Q Q D A L A M L I V N K L R R K G G
I K T T L P I L L E H V L L Q Q Q A P P L L I V S E D D V D G G D A L A M L I V N K L R R K G G
V Q Q L V P I L L E L V H S K H K K L V I I A A D N I E E G D A L S A L I F N K M R R G G
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I Q D V I P A L L E I A E N R R R P P L L I V A A E D D I E E G E A L L A A C I L N K L R R G G
L Q A M L P V L L E A V V Q T S K P P L L I I S E D D V E E G E A L L A T L V I N K L R R G G
I R E L L P L L L E N V A K S G R K P P L L I I A A E D I E E G E A L L A T L V I N K L R R G G
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I A D I L P L L L E K V V K Q G K E L V I I A A E D I D G E A L L A T I V V N K L R R G G
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E N V I K L E D D M L G G Q A Q K K V T V S L D D T T T L L D G G G G D K K Q Q I I E E R R L A Q Q Q L
Q E I T K L E D D M L G G Q A Q K K V T V S L D D T T T L L D G G G G D K K Q Q I I E E R R L A Q Q Q L
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E K A T L E E D L G G Q A Q K K V T V S L D D T T T L L D G G G G D K K Q Q I I E E R R L A Q Q Q L
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A R D L I T I L E E A A I K A G G Y P L L V I A E E D I V D G E E A L A T L L V V N N R L R G K
I R E M L P V L L E E A V A K A G G K P L L V I I A E E D I V D G E E A L A T L L V V N N R L R G K
A Q A M L P L L L E H F V R T K E K P L L V I I A E E D F D G E E A L A T L L V V N N R L R G K
V Q S I V P A L L E T A N A Y H K E P L L V I I T A E E D T D T D G E A L S T L L V V N N R L R G K
L K Y I M P A L L E H C A Q N N R R P L L L V V A D D T Y D T D G E V L T T A L L I L N N R L R G K
S Q S V V P L L L E L C L A Q R N R K P L L V V I S D D T I D G E A L S T L L V V N N R L R G K
R D L L P V L L E Q V A K A G R K P L L V I V A E E D V D G E A L A T L L V V N N R L R G K
V Q S I V P A L L E I A N Q R K R P L L V I V A E E D V D G E A L A T L L V V N N R L R G K
P S S L D A A R R I A N E A G R P L L L I L A E E D M S P E A V V V T L L L G E G N R L R G K
P G E L A A V R A R V A E T G K P L L V I V A E E E I A P E V V V T L L L G E G N R L R G K
P E E V A A L Q A L A V H G K R P L L I I A E E E V A P A C M T L L L A W R D K K G G
A K D L I A L L E D A I T S G Y P V L I I A E E D I V E E G E A L A T L L V V N N R L R G K
M V Q Q N R P L L I I A E E D I V E E G E A L A T L L V V N N R L R G K
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I Q E L L P V L E Q I V I Q Q K K L L I I A E D V E G E A L S T L L V V N K L R R G G
Q Q E L I P L L E Q V A R T K R P L L L I A E D I I E K E A L A T L L I L N N K L R R G G
L K Q I L R A L E Q S L R Q R R P L L I I A E Q D I D G E A L A T L L V V N N R L R K L
V A D M L P A L L E K V L Q V T K N V V V I A E D V D G E A L A T L L V V N K L T A R G
I Q Q I K R V L W C L W E K K S L L I V A K Q V T K D V L G M L I T H N N T A R G
V Q E L M G A I N G V M R R P P L L V I L A E K V D G E A L A T L L V V N N R H H V N G G
V R S I M P V L L E R I M R D P R P L L V I I A E K V E G E A L Q M L V H N H V N G G
I R E L L P L L E S V A K S K P L L I I S E D I V E G E A L A T L L V V N S M R K G G
I Q S I L P L L E I F A K N K P L L C I I A D D F S E N E V L Q T L I I N S K L R G G
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M V V N K L R G G
I A Q L L P L L E A V S G T G K P L L V I A N D V E G E A L A T L V V N N L R G G
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M R G
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L M D L I P L L E Q V R E S Q D R S L L I I A E N I D K A L T G L L L N H I V R G
I S E V K R T L N W C A W E K R P L L I I A G N M T K D V L G M L I A H N K A N G
N K D L V P V L E K V L N Q G K P L I I I A E E V E G E A L A T L V I N N R L R G
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I Q D I L P V L E A V K Q A V H P L L I I A E D I G N E V V N T L V V N N R M H K
L Q P M L P L L E S V V I Q S G K P L L V I A E D V E G E A L A T L V V N N K L R G G
L M E L V P L L E Q V K A Q G R P L L V V A E D V V D K A L T G L L L N H I R G
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D I V L A L E L A N K Y R K P I V I V A E D V E G E A L T T L L V N R R L K V
V Q D I V P A L L E L A N K Y R K P L V V I A E D I D G E A L T T M V L N R L K V
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M R G
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V D G E A L S T L V L N N R L K V
Q A M L P V L L E A V V Q T S K P L L I I S E D V E G E A L A T L V V N K L R G
A R D L I N V L L E E A I R G G Y P I L I I A E D I E Q E A L A T L V V N K L R G D
V L S F F P L L Q E L Q E N G E R L L I I F C K G I D Q G V D G E A L A T F T V N K L E D
M H
I R Q I Q S I L L E F V I K N N K P L L I I G D L E P Q V A N A L A M N K V K G
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M R G
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G D V T A N F L K Q V F S S V K N L L I I T D D I D P V I T L G N L V I E N N G P L
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lupas_28
jnet



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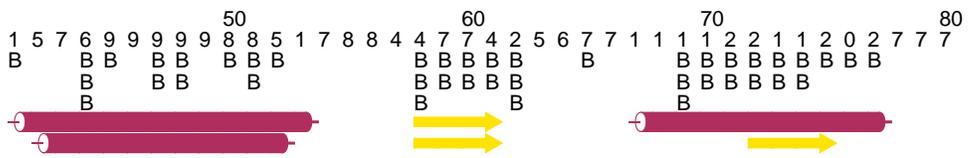
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