

QUERY 1 10 20 30 40
UniRef90_Q0ACR5 RTAADVVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_P15124 STADVVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00036DFCC SAKDEVLSFIRKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00047A437D NASDEVLSKSIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0003A4F6DC KTSPEEVVNLKFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_D3DJN1 QTAKAVVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_I2E2C8 SAENVVLSKFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q9KNJ2 SADDVVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_R4V4U9 SAEEHVFALIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_I0QN07 KTAATEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_B0UD23 NNATDEVVLAAYIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI000255E260 SAQDDVLMQMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0003B6F8AB TADVVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_J5PEAO SAKDEVLSKFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_E0TCC2 SKDVVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_L0E1U8 SAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_C7M2G8 RAPHEVLAAMASEEKGLVAFEMVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_B2V9R7 QTSPDDVLMRVTIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_C7RJP1 SQQDDVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_W6MOX2 NAAADVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0003F68A8A KKVSDVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0003610862 TAEEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q0SHK2 SAENVVLSKFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_I1XIA6 SAEDVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q3J7U1 SPEGHVDLFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_B9L065 RNADVLAFAIRKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_A0LTD6 TANDVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_B2S5L6 SAEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0003B573D2 TAEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_V8G9V1 TAADVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_D8J142 RTAAEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00037D1ECC KTAADVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_D5CQC7 TSPDEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_T0ZAL7 TPEEALAFKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_C7R4W3 ETPEEQIEKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00035C45AF EAHVLSMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_P28786 SANKLVLDTIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_K2KDX5 SAKTLLNMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_A0Y8T9 QSVDLDFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_E6RIH2 KTAASEALQYFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_I0RON2 NPADEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00047E06CE NPQEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q2J142 TKNDVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q3AE76 TTSADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_G8PJV1 SPEEVLGYVQKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0003FA7A84 TAQADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_B5IKD7 QAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_U4THH6 QSKEEAVLFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_K0YWQ3 SQADEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_D2NSC7 TAKEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_C9R9J2 ETAQEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_O50210 TADVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_E8N4H3 SAENVVLSKFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI000428AD6D SDEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00040E7E3E SAEHLDLFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_K2JE10 TAAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_E8RSE5 QAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_F4HD48 TAAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI000399FBCC ETAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00035DB32D SANDVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_D9SHR3 TPADEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_C6HYA0 TPKVLDYAKKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_I0AN64 SDKVVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0003B3A516 SYENVQKLIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI000360E368 DAVLNFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_C6LHW0 TKQDVLRFVQKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI000374AADE SAEEVLAAYIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_A0A021VPZ6 SADEVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_I1EVA1 SAEKVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_D8EZN8 KTKDVMDLTIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0000E0E60E SLEKALDLIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_F3WZN0 NTAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00046EFF00 KTKDVLRFVQKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_R5PP55 SAADVLMKMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_A8TUU8 TADRVMEMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI0002EF150A TAAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q47R91 NAAADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00036CC85A TPKADVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_R6ZUT4 SKEDVLMNLFVNDDEVVFFIRLQKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_F3LIX7 ENTENLFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI000478A8B5 ANKVLNFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q2Y6P1 DAVLNFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_G5ZVN6 AKAVLMEMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_A0A023NY34 QKVLDFQMIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q8FNM8 NPEVLFKLAQKDEKVVVEYVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_L8XZ13 TASSLRFQKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_D7BNG5 STQQAREFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_L0EG65 AQQVLETFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_E3D8X0 QTKEDAEALIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_UPI00025562FE SLDQNVMLFIKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD
UniRef90_Q565W7 TPEQVLEFAKRDNDVQKFFVDDLRFRFTTDDTTRGGKKEQQHVVTTIIPASAEHLDD

QUERY	50	60	70	80
UniRef90_Q0ACR5	K S V F D D G L A F D D G S S I	R G F Q Q S I	H E S S D M L L L P D	P E T A R I L D P
UniRef90_P15124	E D M F E D G K M F D D G S S I	A G W K G S I	N E S S D M I M M P D	P E T A T L D P F
UniRef90_UPI00036DFCC	E A A F F E E G K M F D D G S S I	A G W K G S I	N E S S D M I L M P D	D A T A V I M D P
UniRef90_UPI00047A437D	T D F F T E N G L M F D D G S S I	R G F Q Q E I	H E S S D M L L L P D	P A T A V I M D P
UniRef90_UPI0003A4F6DC	E D M F A D G V M F D D G S S I	A G W K A T I	N E S S D M T L M P D	P E T A V I M D P
UniRef90_D3DJN1	E D F T F E N G R Q L F D D G S S I	D G F A T I	N E S S D M Q L I P D	V T A Y L D P
UniRef90_I2E2C8	L D T T F E N G R G F D D G S S I	R G W Q S I	H E S S D M L A F P D	A S T A F V D P F
UniRef90_Q9KNJ2	Q A T F A N G L M F D D G S S I	A G W K T V	N E S S D M I L M P D	P T S T A Q V V I P F
UniRef90_R4V4U9	A D A F A E D G K M F D D G S S I	A G W K G I	N E S S D M V M M P D	P S S A V L D P F
UniRef90_I0QN07	P D F F E D G K M F D D G S S I	G G W K T I	N D S S D M V L M P D	P S T A V L D P F
UniRef90_B0UD23	E D L F A E G T M F D D G S S I	A G W K A I	N E S S D M L L M P D	P A T A Y M D P F
UniRef90_UPI000255E260	E D A F N T G Q M F D D G S S I	R G F K S I	H E S S D M K L I P D	P Q T A Y L D P F
UniRef90_UPI0003B6F8AB	E D L F E E G K M F D D G S S I	E G W K G I	N E S S D M I L M P D	A S T A V I M D P
UniRef90_J5PEAO	E E T F S E G V M F D D G S S I	A G W K A I	H E S S D M C L M P D	P A T A T I D P F
UniRef90_E0TCC2	E E E L F E D G T M F D D G S S I	A G W K A I	N E S S D M I L M P D	P A E T A I V D P
UniRef90_L0E1U8	E D T F E D G K M F D D G S S I	A G W K G I	N E S S D M I L M P D	P E S A V L D P F
UniRef90_C7M2G8	E D S F E E G F G F D D G S S I	R G F K T I	N E S S D M L L K P D	P R S A Y I D P F
UniRef90_B2V9R7	L H S F E N G L P F D D G S S I	R G W K G I	Q E S S D M L L I P D	P K T A F I D P F
UniRef90_C7RJP1	E D K F E N G H A F D D G S S I	A G W K G I	Q A S S D M Q L M P D	P S T A V V D P F
UniRef90_W6M0X2	E D V F E S D G K M F D D G S S I	A G W K G I	Q E S S D M I L M P D	P A T A Y I D P F
UniRef90_UPI0003F68A8A	E D K F E S A G H A F D D G S S I	A G W K G I	E S S S D M L L M P D	P N T A N I D P F
UniRef90_UPI0003610862	E D M F K D G K M F D D G S S I	A G W K G I	E E S S D M V L M P E	A A T A V I M D P
UniRef90_Q0SHK2	Q D V F E D G L A F D D G S S I	R G F Q S I	H E S S D M M L L P D	V A T A Q L D P F
UniRef90_I1XIA6	E D T F S E E G V M F D D G S S I	A G W K G I	N E S S D M I L M P D	A S T A V L D P F
UniRef90_Q3JU1	E E S F R E E G K M F D D G S S I	A G W K A I	Q E S S D M I L M P D	P E T A V L D P F
UniRef90_B9L065	L A D F T E R G L G F D D G S S I	R G F Q A I	E E S S D M L L V P D	P T T A F I D P F
UniRef90_A0LTD6	E S V F T D G L A F D D G S S I	R G F Q A I	H E S S D M Q L L P D	P T T A F I D P F
UniRef90_B2S5L6	E D M F V D G V M F D D G S S I	A G W K A I	N E S S D M V L M P D	P E T A H I D P F
UniRef90_UPI0003B573D2	L D K F F E N G Q L F D D G S S I	R G F Q G I	Q E S S D M Q L I P D	V A T A F V D P F
UniRef90_V8G9V1	E D K F E S G Q P F D D G S S I	A G W K G I	E A S S D M L L I P D	A S T A R M D P F
UniRef90_D8J142	L D K F E S G H A F D D G S S I	A G W K G I	E A S S D M L L I P D	P N T A N I D P F
UniRef90_UPI00037D1ECC	E E L F T D G K M F D D G S S I	A G W K G I	N E S S D M I L M P D	A D S A F I D P F
UniRef90_D5CQC7	A D K F T E G H A F D D G S S I	A G W K G I	Q A S S D M L L M P D	P D S C Y I D P F
UniRef90_T0ZAL7	E D L F R D G K M F D D G S S I	A G W K G I	N E S S D M V L M P D	A A T A V I D P F
UniRef90_C7R4W3	E A A F T D G M M F D D G S S I	R G F Q A I	H E S S D M K L V P D	V T S A Y I D P F
UniRef90_UPI00035C45AF	E D A M Q E G L A F D D G S S I	K G F T T I	E E S S D M N L L P D	L S T A M V D P F
UniRef90_P28786	D D F F E E G K M F D D G S S I	G G W K G I	N E S S D M V L M P D	A S T A M L D P F
UniRef90_K2KDX5	E D F F E G G K L F D D G S S I	A G W K G I	N E S S D M V L M P D	D E S T L V L D P F
UniRef90_A0Y8T9	E G F F E D G K M F D D G S S I	S G W K G I	N E S S D M I L M P D	D D S T A V I D P F
UniRef90_E6RIH2	E D F F E D G K M F D D G S S I	A G W K G I	N E S S D M V L L P D	A D S I K L D P F
UniRef90_I0RON2	E E F F A L G Q L F D A S S I	R G F A S I	H E S S D M Q L I P D	V T T A W E D P F
UniRef90_UPI00047E06CE	A D A L A E G L M F D D G S S I	R G F Q A I	H E S S D M K L I A D	P A T A F V D P F
UniRef90_Q2J142	E E T F T E G L P F D D G S S I	R G W K A I	N E S S D M Y M V P D	P K T A W I D P F
UniRef90_Q3AE76	K A L N N E L M F D D G S S I	E G F V R I	E E S S D M Y L R P D	P N T F A V F P W
UniRef90_G8PJV1	E D M F A E G V A F D D G S S I	G G W K A I	N E S S D M M L M P D	P E T A H V D P F
UniRef90_UPI0003FA7A84	A D L L E E G L A F D D G S S I	R G F Q E I	H E S S D M L L L P D	V A T A F I D P F
UniRef90_B5IKD7	E D A F T S G V A F D D G S S I	R G W K A I	N E S S D M A M V P D	P K T A W I D P F
UniRef90_U4THH6	E E L F E V G K M F D D G S S I	A G W K G I	D E S S D M I L M P D	S S T A V L D P F
UniRef90_K0YWQ3	D A A L T D G L M F D D G S S I	R G F V A I	N E S S D M K L I P D	V S T A F I D P F
UniRef90_D2NSC7	D D F F T E N G Q L F D D G S S I	R G F Q G I	A E S S D M Q L I P D	V Q S A Y I D P F
UniRef90_C9R9J2	E E S F T E G I G F D D G S S I	R G F K S I	H E S S D M L L I P D	P S T A V I D P F
UniRef90_O50210	E N S F V E G V P F D D G S S I	R G W K A I	N E S S D M T M V P D	P T A W I D P F
UniRef90_E8N4H3	A S L F E E G L G F D D G S S I	R G F K E I	H E S S D M L L I P D	P S T A F I D P F
UniRef90_UPI000428AD6D	A S L F E D G K M F D D G S S I	L G W R G I	Q Q S S D M V L L P D	P S T A F L D P F
UniRef90_UPI00040E7E3E	V D A M E E G L A F D D G S S I	R G F T T I	D E S S D M T L L P D	L A T A R V D P F
UniRef90_K2JEI0	V D F L E D G K M F D D G S S I	L G W K H I	N E S S D M L L K P D	L T A V L D P F
UniRef90_E8RSE5	E D F L N D G T M F D D G S S I	A G W K A I	N E S S D M K L R P D	L K T A Y I D P F
UniRef90_F4HD48	E D F F E D G K M F D D G S S I	G G W K T I	N K S S D M V L M P I	P E S A L V D P F
UniRef90_UPI000399FBCC	E D M F T D G V M F D D G S S I	G G W K A I	N E S S D M V L M P D	P A S A H M D P F
UniRef90_UPI00035DB32D	E D N L A D G L A F D D G S S I	R G F T T I	D E S S D M S L F P D	L S T A R I D P F
UniRef90_D9SHR3	L D K F E E G H A F D D G S S I	A G W K G I	Q A S S D M L L M P D	P A T A F L D P F
UniRef90_C6HYA0	E E T F E E G L G F D D G S S I	R G F Q S I	N E S S D M L L V P D	P K T A F L D P F
UniRef90_I0AN64	E G S F E D G F G F D D G S S I	R G W K P I	N E S S D M L L I P D	P N T M F V D P F
UniRef90_UPI0003B3A516	P A L F E D G K M F D D G S S I	S G W K G I	N E S S D M I L L P D	V G T A V I D P F
UniRef90_UPI000360E368	E D F F N G K M F D D G S S I	M S G W K G I	N E S S D M L L M P D	P E T I K L D P F
UniRef90_C6LHW0	R A L D N K C M F D D G S S I	E G F V R I	E E S S D M Y L H P D	L D T F V I F P W
UniRef90_UPI000374AADE	P E V F E D G L Q F D D G S S I	R G F Q Q I	H E S S D M S L L P D	P T T A Y L D P F
UniRef90_A0A021VPZ6	A S F F T E G K M F D D G S S I	R G F Q A I	H E S S D M K L L A D	L T A Y L D P F
UniRef90_I1EVA1	E E L F E E G K M F D D G S S I	A G W K G I	Q E S S D M V L M P D	S T A V M D P F
UniRef90_D8EZN8	E G T F E D G L G F D D G S S I	R G W Q A I	N E S S D M L V K P V	P E T A F I D P F
UniRef90_UPI0000E0E60E	D D F F E E G K M F D D G S S I	A G W K G I	N E S S D M V L M P D	P T T V I D P F
UniRef90_F3WZN0	E D E L T D G L M F D D G S S I	E G W K A I	N E S S D M V L K P D	L D A V Y T D P F
UniRef90_UPI00046EFF00	E D A F H D G L A F D D G S S I	R G W K S I	N E S S D M A M V P D	P E T A W I D P F
UniRef90_R5PP55	E D T F E L G Q P F D D G S S I	F V G W R G I	E S S S D M L L Q P D	P S T A R M D P F
UniRef90_A8TUU8	E D S L V E G F M F D D G S S I	A G W K A I	N E S S D M G L K P D	L T A V M D P F
UniRef90_UPI0002EF150A	E D M L N D G F M F D D G S S I	A G W K A I	N E S S D M I L M P D	L D A T Y I D P F
UniRef90_Q47R91	E D F L T N G Q M F D D G S S I	R G F Q A I	H E S S D M L L L P D	L S T A V L D P F
UniRef90_UPI00036CC85A	E D V F E S G L G F D D G S S I	R G W Q A I	H E S S D M L V L P D	P R T A F V D P F
UniRef90_R6ZUT4	K A L D N K C M F D D G S S I	E G F V R I	E E S S D M Y L Y P D	L S T L E I F P W
UniRef90_F3LIX7	D S F F E E G K M F D D G S S I	E G W K G I	N E S S D M I L M P D	G D A V L D P F
UniRef90_UPI000478A8B5	E D T F E D G K M F D D G S S I	A G W K G I	E A S S D M I L R P D	P E T A F I D P F
UniRef90_Q2Y6P1	A D K L E D G H T F D D G S S I	A G W K G I	Q A S S D M L L I P D	T G T A R M D P F
UniRef90_G5ZVN6	E E T L E E G F M F D D G S S I	A G W K A I	N E S S D M T L M P D	L S R A Y I D P F
UniRef90_A0A023NY34	E G T F E D G K M F D D G S S I	A G W K G I	N E S S D M V L M P D	P D T A Y I D P F
UniRef90_Q8FNM8	E S T A M E N G L A F D D G S S I	S G Y T T V	D D S S D M M L L P D	L S T A F I D P F
UniRef90_L8XZ13	E D F F E E G K M F D D G S S I	F K G W K G I	E D S S D M L L M P D	P K T A R L D P F
UniRef90_D7BNG5	P D S L D Q G I M F D D G S S I	R G F T E I	H E S S D M K L V P D	L S T A F I D P F
UniRef90_L0EG65	E D T F V N G V A F D D G S S I	P G F R G I	E E S S D M V M M P D	P E T S Y I D P F
UniRef90_E3D8X0	N S A F T D G M A F D D G S S I	M Q G F Q A I	N E S S D M K L I P D	V D T A Y I D P F
UniRef90_UPI00025562FE	E D F F T D G K M F D D G S S I	A G W K G I	N D S S D M I L M P D	P E T A K L D P F
UniRef90_Q565W7	L Q S F T Q G F G F D D G S S I	R G W Q A I	N E S S D M L I I P	V P D T A F I D P F

QUERY	90	100
UniRef90_Q0ACR5	FDDPTLNLNLTCCDIIV	EPSTMQGGY
UniRef90_P15124	FDDPTLNLNLTCCDIIV	EPATMQGGY
UniRef90_UPI00036DFFCC	RRHKTLLNLFNFVHD	PLTGGEPY
UniRef90_UPI00047A437D	FAPQPTLALIFCDI	LEPSTGEPY
UniRef90_UPI0003A4F6DC	RAEPTLVMIIFDIYN	PRRTGELRY
UniRef90_D3DJN1	MEPKTLVMIICDII	LEPSTRERY
UniRef90_I2E2C8	TASASTLMTIICDII	LEPSTGEPY
UniRef90_Q9KNJ2	TEDATLNLIRCCDI	LEPSTMQGGY
UniRef90_R4V4U9	FDDATLILLCNII	LEPNTMQGGY
UniRef90_I0QN07	FEESTLILIRCCDI	LEPNTLQGGY
UniRef90_B0UD23	FSAATMSLIVCDV	LEPSTGEPY
UniRef90_UPI000255E260	RVEKTLIMNFSDI	VDFPTDEPY
UniRef90_UPI0003B6F8AB	FQDPTLITIRCCDI	IVLEPDTMQGGY
UniRef90_J5PEAO	FAETTIVLVCCDVL	LEPSTGEPY
UniRef90_E0TCC2	FAQPTLSILICDVL	LEPSTGQPY
UniRef90_L0E1U8	FEDLTLLNLRCCDV	VLEPSTMQGGY
UniRef90_C7M2G8	RKHRTLVLNCFIYD	PVITGQPY
UniRef90_B2V9R7	LEEPTLSLILCCDV	VDFPILTKEPY
UniRef90_C7RJP1	FDETTVVIITCCDV	VDFPADGGRGY
UniRef90_W6MOX2	FEEPTLALLTCCDV	ILEPNTMQGGY
UniRef90_UPI0003F68A8A	FEDPTLILQCCDV	HDFPLDGGPY
UniRef90_UPI0003610862	SDENTLILIRCCDI	LEPNTMQGGY
UniRef90_Q0SHK2	RAAKTLLNINFFVHD	PFTRESY
UniRef90_I1XIA6	MDDTTLIVRCCDI	IVLEPSTMQGGY
UniRef90_Q3J7U1	MEEKTLVLRCCDI	IVLEPSTLQGGY
UniRef90_B9L065	AAVPTLVMLICNV	VDFPETRQPY
UniRef90_A0LTD6	RTEKTLAMNFFIHD	PPLTGEAY
UniRef90_B2S5L6	FQASTLVILCCDI	IVLEPPLSGESY
UniRef90_UPI0003B573D2	RVEKTLAMNFSI	VDFPRTGEPY
UniRef90_V8G9V1	REEPTLILITCCDV	VDFPSTLQGGY
UniRef90_D8J142	MEETTLMFMCCDV	IVLEPSTLQGGY
UniRef90_UPI00037D1ECC	FEDSTLVLSCCDI	IVLEPSTGQGGY
UniRef90_D5CQC7	FDEPTIVLITCCDV	VDFPSTGKGY
UniRef90_T0ZAL7	FEEETTVDVIRCCDV	IVLEPSTMQGGY
UniRef90_C7R4W3	RQRKTLVVNFSDI	VDFPFTGEPY
UniRef90_UPI00035C45AF	RKAKTLLNLFNFVHD	PFTYEPF
UniRef90_P28786	FQDPTLITIRCCDV	IVLEPSTMQGGY
UniRef90_K2KDX5	TDEMTLILIRCCDV	IVLEPSTMQGGY
UniRef90_A0Y8T9	TDDTLMNLRCCDI	IVLEPSTMQGGY
UniRef90_E6RIH2	TEETTLLIVRCCDV	VDFPSTLQGGY
UniRef90_I0RON2	RVEKTLIMNFSDI	YNPRNGELRY
UniRef90_UPI00047E06CE	RKAKTLLALNFSI	VDFPFTGEPY
UniRef90_Q2J142	LEVPTLSITCSIV	LEPRTGQPY
UniRef90_Q3AE76	RPRNVARLITCCDV	YNPFEGDP
UniRef90_G8PJV1	FAQSTMSIFCCDV	VDFPRTGEGY
UniRef90_UPI0003FA7A84	REQKTLALNFFIHD	PFTREAY
UniRef90_B5IKD7	YSHKTLSSLITCSI	QEPSTGQGGY
UniRef90_U4THH6	CSEPTLNLIRCCDI	IVLEPSTLMSGY
UniRef90_K0YWQ3	RKAKTLLVVNFSDI	VDFPFTDDPF
UniRef90_D2NSC7	RTEKTLVVIICSDI	VDFPRTGEPY
UniRef90_C9R9J2	CEIPTLSLITCNV	FDFPVKKGPY
UniRef90_O50210	MKEPTLSMIICDII	YEPRTNTPY
UniRef90_E8N4H3	LEVPTLVITICDVI	YDFPSTTRQPY
UniRef90_UPI000428AD6D	TADPTLVLLICDII	LDPTTMQGGY
UniRef90_UPI00040E7E3E	RKAKTLLNVRFNFVHD	PFTLEPF
UniRef90_K2JE10	AEEVTLLILRCCDI	IVLEPSTLQGGY
UniRef90_E8RSE5	YQQTTLFLFCCDV	IVLEPSTNEPY
UniRef90_F4HD48	FSVPTLSIRCCDV	YEPSTMQGGY
UniRef90_UPI000399FBCC	FAASTLVLLCCDI	LDVPSTGENY
UniRef90_UPI00035DB32D	RTAKTLLNMQFFVHD	PFTREPF
UniRef90_D9SHR3	TEDVTLLITITCCDV	VDFPSTGKGY
UniRef90_C6HYA0	TQVPTLSLITCNIKD	PSTGESSY
UniRef90_I0AN64	VEAPTILSILICDVI	YEPSTKKEY
UniRef90_UPI0003B3A516	TADPTLILVCCDI	LDPATMQAY
UniRef90_UPI000360E368	YEYPTVQIRCCDI	LEPSTMQGGY
UniRef90_C6LHW0	RPGKVARLITCDI	YTLFEGDP
UniRef90_UPI000374AADE	RDKKTLIVNFNFVHD	PPLTGEAY
UniRef90_A0A021VPZ6	RDRKTLIINMNSI	VDFPYTDEPY
UniRef90_I1EVA1	TEESTLILRCCDV	IVLEPSTMAGY
UniRef90_D8EZN8	FAAKTLLVLSCCNI	CDFPSTGEGDY
UniRef90_UPI0000E0E60E	AEEQTILNIRCCDI	IVLEPSTMEGY
UniRef90_F3WZN0	SATPMLIVFCCDV	VDFPSTGELY
UniRef90_UPI00046EFF00	YRDNTLSLITCSI	KEPSTGESY
UniRef90_R5PP55	REANTLVLLNCCDV	IVLEPSTGKGY
UniRef90_A8TUU8	FAQPTLALITCCDI	IVLEPSTGQPY
UniRef90_UPI0002EF150A	SATPMLILVCCDI	IVLEPSTGQLY
UniRef90_Q47R91	REYKTLNITFFVHD	PPLTRESY
UniRef90_UPI00036CC85A	SNIPTLVLLYCNIL	LDPLTKERY
UniRef90_R6ZUT4	RPGKVARLITCDI	VDFPFEGDP
UniRef90_F3LIX7	TDEVTLLIMRCCSI	VDFPSTGEGY
UniRef90_UPI000478A8B5	FEATTVVVTCCDV	IVLEPSTGQGGY
UniRef90_Q2Y6P1	MDEATLFIITCCDV	VDFPADGKGY
UniRef90_G5ZVN6	FSQTTLALFCCDV	LDPLTGEAY
UniRef90_A0A023NY34	SHTQMVIHCCDV	IVLEPSTMQAY
UniRef90_Q8FNM8	RRSKTLLNIFNFVHD	PYTRPEPF
UniRef90_L8XZ13	YNHKTLLMIHCCDI	VDFPSTLQHY
UniRef90_D7BNG5	RKAKTLLVINHFV	VDFPFTNESY
UniRef90_L0EG65	TEHPTLIVTCCNI	YTPDGERY
UniRef90_E3D8X0	RKHKTLLNVAFSDI	VDFPSTDEPY
UniRef90_UPI00025562FE	YAYPTVMLIRCCDI	IVLEPSTMQGGY
UniRef90_Q565W7	CQHPTLSMIICDII	IQDPLTRQRY

UniRef90_A5D3U8
UniRef90_A5G314
UniRef90_A3JZC0
UniRef90_M7N8C8
UniRef90_B7R6K0
UniRef90_UPI0003632133
UniRef90_M5DZA6
UniRef90_UPI0003B525BC
UniRef90_UPI0003633EEF
UniRef90_UPI00035E87EB
UniRef90_Q3SG00
UniRef90_E3HYT6
UniRef90_A0A024F4C5
UniRef90_A1TYP7
UniRef90_UPI000381C38E
UniRef90_G8N2J4
UniRef90_C5JAT4
UniRef90_S2KIV0
UniRef90_UPI00038223D1
UniRef90_K6DIW9
UniRef90_I4C9L4
UniRef90_UPI00036A35B9
UniRef90_UPI00037B3AC1
UniRef90_UPI00041EF274
UniRef90_J0MXU9
UniRef90_D6XU51
UniRef90_UPI000413C27E
UniRef90_Q3AE68
UniRef90_UPI00037FB54E
UniRef90_D4ZT17
UniRef90_UPI0003790A9F
UniRef90_L8M859
UniRef90_H0A3U6
UniRef90_G2LIY0
UniRef90_W4F1K4
UniRef90_I4EDQ4
UniRef90_D5XCf2
UniRef90_H2G5L8
UniRef90_S3K006
UniRef90_UPI00035F1CD3
UniRef90_A6NZA3
UniRef90_UPI0002626C9C
UniRef90_S7W0K3
UniRef90_E4NA23
UniRef90_S3A682
UniRef90_R6LLT5
UniRef90_D5WPU2
UniRef90_V9HEB7
UniRef90_F2JUC0
UniRef90_U2ERC0
UniRef90_B3PG80
UniRef90_A0LFS3
UniRef90_J9Z2G1
UniRef90_S2LA81
UniRef90_F4A052
UniRef90_R5Z2W1
UniRef90_D3EQV7
UniRef90_U1R361
UniRef90_W5TK60
UniRef90_A0A031MD08
UniRef90_Q0C0G2
UniRef90_Q2SN56
UniRef90_C6J7C5
UniRef90_B5YGY6
UniRef90_C0W1G0
UniRef90_S3WZQ3
UniRef90_M1PQ05
UniRef90_D7CNP6
UniRef90_C1D8S0
UniRef90_R4KJ17
UniRef90_UPI0003F544E0
UniRef90_F6D9B4
UniRef90_G2DPU1
UniRef90_D1B3K6
UniRef90_UPI00037EA5B1
UniRef90_R4KGR2
UniRef90_A0L6B3
UniRef90_J7IRV0
UniRef90_UPI0003B44014
UniRef90_R6N5H1
UniRef90_F0S3Z3
UniRef90_R6JMV4
UniRef90_D1Z110
UniRef90_F7YVU8
UniRef90_UPI0003600619
UniRef90_D7CNP4
UniRef90_UPI0003B7A5BD
UniRef90_X5MN34
UniRef90_E1VHM8
UniRef90_UPI00036EAE29
UniRef90_UPI0002FA69B0
UniRef90_Q9CDL9

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

UniRef90_A5D3U8
UniRef90_A5G314
UniRef90_A3JZC0
UniRef90_M7N8C8
UniRef90_B7R6K0
UniRef90_UPI0003632133
UniRef90_M5DZA6
UniRef90_UPI0003B525BC
UniRef90_UPI0003633EEF
UniRef90_UPI00035E87EB
UniRef90_Q3SG00
UniRef90_E3HYT6
UniRef90_A0A024F4C5
UniRef90_A1TYP7
UniRef90_UPI000381C38E
UniRef90_G8N2J4
UniRef90_C5JAT4
UniRef90_S2KIV0
UniRef90_UPI00038223D1
UniRef90_K6DIW9
UniRef90_I4C9L4
UniRef90_UPI00036A35B9
UniRef90_UPI00037B3AC1
UniRef90_UPI00041EF274
UniRef90_J0MXU9
UniRef90_D6XU51
UniRef90_UPI000413C27E
UniRef90_Q3AE68
UniRef90_UPI00037FB54E
UniRef90_D4ZT17
UniRef90_UPI0003790A9F
UniRef90_L8M859
UniRef90_H0A3U6
UniRef90_G2LIY0
UniRef90_W4F1K4
UniRef90_I4EDQ4
UniRef90_D5XCF2
UniRef90_H2G5L8
UniRef90_S3K006
UniRef90_UPI00035F1CD3
UniRef90_A6NZA3
UniRef90_UPI0002626C9C
UniRef90_S7W0K3
UniRef90_E4NA23
UniRef90_S3A682
UniRef90_R6LLT5
UniRef90_D5WPU2
UniRef90_V9HEB7
UniRef90_F2JUC0
UniRef90_U2ERC0
UniRef90_B3PG80
UniRef90_A0LFS3
UniRef90_J9Z2G1
UniRef90_S2LA81
UniRef90_F4A052
UniRef90_R5Z2W1
UniRef90_D3EQV7
UniRef90_U1R361
UniRef90_W5TK60
UniRef90_A0A031MD08
UniRef90_Q0C0G2
UniRef90_Q2SN56
UniRef90_C6J7C5
UniRef90_B5YGY6
UniRef90_C0W1G0
UniRef90_S3WZQ3
UniRef90_M1PQ05
UniRef90_D7CNP6
UniRef90_C1D8S0
UniRef90_R4KJ17
UniRef90_UPI0003F544E0
UniRef90_F6D9B4
UniRef90_G2DPU1
UniRef90_D1B3K6
UniRef90_UPI00037EA5B1
UniRef90_R4KGR2
UniRef90_A0L6B3
UniRef90_J7IRV0
UniRef90_UPI0003B44014
UniRef90_R6N5H1
UniRef90_F0S3Z3
UniRef90_R6JMV4
UniRef90_D1Z110
UniRef90_F7YVU8
UniRef90_UPI0003600619
UniRef90_D7CNP4
UniRef90_UPI0003B7A5BD
UniRef90_X5MN34
UniRef90_E1VHM8
UniRef90_UPI00036EAE29
UniRef90_UPI0002FA69B0
UniRef90_Q9CDL9

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

50
60
R G F K T I
A G W K V
A G W K S
H G F A G
D G F V R
A G W K S
D G F T R
E G F A R
A G W K A
T G F Q T
A G W K G
A G W K A
R G W K G
A G W K G
E G W K G
E G F V R
A G W C E
S G W K E
H G W K E
E G F V R
R G W Q P
E G Y V R
A G W K G
R G F A S
E G F V R
E G F V R
E G F V R
R G F Q A
R G W K A
E G F V R
R G W A N
E G F V R
R G F Q R
Q G F T R
R G F T T
E G F V R
P G W K G
D G F V R
R G F Q S
R G F Q S
R G F T A
E G F A R
L G F V R
A G W K G
D G W K G
A G W K G
R G W Q P
H A S D M L I
R C F Q S
R G W Q A
E G F V R
E G F A R
R G W K T
R G F Q A
R G F Q S
A G W K A
A G W K A
A G W K A
P G F R G
H G F A R
R G F T Q
V G F T T
E G F T R
R G F Q Q
A G W K G
E G F V R
R G F T A
R G W K G
M G W K G
I E H W Q P
R G F T T
Y G F T R
T G W C E
A G F S G
M A G W K G
E G F V R
R G W Q P
D G F V R
E G F V R
E G F A R
G G F I R N
A G F V G
R G F Q K
A G W K A
Q G W K G
R G F Q E
R G W Q A
E G F V R

70
80
N E S D M I L L P D P
N E S D M L L M P D P
N E S D M Q L L P D V
E E S D M Y L R P D P
D Q S D M K L R P D P
Q E S D M Y L R P D Y
E E S D M Y L H P D P
N E S D M T L M A P D A
N E S D M T L L P D V
Q A S D M L L K A D P D
N E S D M T L M P D P
E E S D M I L M P D D
N E S D M L L M P D A
E E S D M Y L Y P D L
N Q S D M V Y K P D A
N E S D M I L R P D L
N E S D M L L M P D L
E E S D M Y L Y P D Y
E E S D M Y L Y P D L
N E S D M L L M P D P
E E S D M Y L Y P D L
E E S D M Y L Y P D L
E E S D M Y L Y P D L
H E S D M K L V P D J
N E S D M M M V L D P
E E S D M Y L V P D L
N A S D M A M V P D P
N E S D M I L M P D A
S E S D M L L I P D P
E E S D M Y L Y P D L
H E S D M L L R P D P
E E S D M Y L R P D P
D E S D M N L H P D J
E E S D M Y L R P D V
E A S D M L L L P D A
D E S D Q Y L Y P D L
H E S D M L L L P D P
H E S D L Q L I P D V
H E S D M A L V P D L
H E S D M K L V P D L
E E S D M Y L H P D L
E E S D M Y L R P D L
N E S D M I L I P D A
E A S D M L V V P D P
E E S D M Y L R P D P
E E S D M Y L Y P D L
N E S D M C M V P D P
H E S D M K L V P D V
E A S D M I L L P D A
N E S D M L L K P D D
N E S D M I L L A D D
E E S D M V M M P D H
D E S D M I A R P D P
H E S D M K L V A D J
D Q S D M A L M P D P
E E S D M Y L K P D F
Q E S D M I L I P D P
Q A S D M L L A D P A
E E S D M Y L H P D P
H E S D M K L I P D I
Q N S D M L L M P Q T
Q A S D M Q L R P D P
N K S D M L L K P E A
D E S D M T L L P D P
E E S D M Y L R P D P
N N S D M A Y V P D P
E E S D M F L E P D P
E A S D M L L L P D D
E E S D M Y L Y P D L
N A S D M M F K L D P
D E S D M Y L H P D Y
E E S D M Y L K P D M
E E S D M Y L R P D L
E E S D M Y L R P D L
E E S D M Y L V P D P
Q E S D M I L M P D P
N D S D M L L M P D P
E A S D M L L M P D D
H E S D M L L M P D P
N E S D M L V K P V P
N E S D M Y L Y P D L

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

70
80

UniRef90_A5D3U8 C K V A T L S L I C N V V D P V T R Q K Y 90 100
UniRef90_A5G314 A A K P S M V I F C D I L E P S T G L P Y
UniRef90_A3JZC0 Y A E K T L C V H C S V V E P D T G E A Y
UniRef90_M7N8C8 R L E K T L A F N F S I V N P R T G E P Y
UniRef90_B7R6K0 K K E S G A R L I C D I Y N P F E G D P
UniRef90_UPI0003632133 Y A E K T L C L H C D I V L E P D T N E P Y
UniRef90_M5DZA6 R P E E V A R L I C C D V Y K P D G E P F
UniRef90_UPI0003B525BC R P G K V A R L I C C D V Y D P F E G D P
UniRef90_UPI0003633EEF Y A Q K T V N L I C D I L E P G T G E P Y
UniRef90_UPI00035E87EB R A Q K T L N M N F F V H D P L T L E A Y
UniRef90_Q3SG00 F D E P T L I L T C D V I E P S D G K G Y
UniRef90_E3HYT6 F A Q S T L A I E C D I L E P A T G E R Y
UniRef90_A0A024F4C5 M Q V P T L S L I C C D V C L P E T L Q A Y
UniRef90_A1TYP7 T E E T T V N I T C C N I V E P S T M Q G Y
UniRef90_UPI000381C38E F E A P T L I R C C D I L E P A T M Q S Y
UniRef90_G8N2J4 E K G K V A R F I C C D I Y N P D G T P F
UniRef90_C5JAT4 T D V P T L I L I C D I V D P F T G E G Y
UniRef90_S2KIV0 T E D A T L V L R C C D I E P A T M Q G Y
UniRef90_UPI00038223D1 A A Q P H L I I V C C D V V D P A T G Q L Y
UniRef90_K6DIW9 E K G K V A R L I C D I Y N P F E G D P
UniRef90_I4C9L4 M E H P T L S L I C C N I V D P V I T M E R Y
UniRef90_UPI00036A35B9 V A D R V A R L I C C D V Y M P F S G D P
UniRef90_UPI00037B3AC1 F Q D V T I N L T C C T I V D P A T M S G Y
UniRef90_UPI00041EF274 R A E P T L I I S C C D I F N P R T G E L Y
UniRef90_J0MXU9 S G G K T A R L I C C D V Y T P F E G D P
UniRef90_D6XU51 T P E K V A R L I C C D V Y N P F A G D P
UniRef90_UPI000413C27E T S E S V A R L I C C D I Y T P D G E P F
UniRef90_Q3AE68 A D Q R Y A R L I C C D I Y T Y D G K P F
UniRef90_UPI00037FB54E R K A K T L I V N F S I V D P F T G D A Y
UniRef90_D4ZT17 M A E P T L S V I C S I K E P R T G E W Y
UniRef90_UPI0003790A9F G K G K V A R M I C C D V Y E P F L G D P
UniRef90_L8M859 M E I P T L S M I C S I K E P R T G E W Y
UniRef90_H0A3U6 S A K P Q L I L I C C D I E P S T G Q S Y
UniRef90_G2LIY0 F E E P T L C L F A D V E P L T H Q G Y
UniRef90_W4F1K4 T T G K V C R F I C D V Y N P F A G D P
UniRef90_I4EDQ4 L E V P T L V M T C C D V I D P T T M E P Y
UniRef90_D5XCF2 R P G A V A R L I C C D V Y T P F E G D P
UniRef90_H2G5L8 R K A K T L N M K F F V H D P F T R E P F
UniRef90_S3K006 R P Q P V A R L I C C D V Y N P F E G C P
UniRef90_UPI00035F1CD3 R E E K T L V L V C C D V L D P V D L K G Y
UniRef90_A6NZA3 R P G K V A R L I C C D V Y N P F V G D P
UniRef90_UPI0002626C9C R A E K T L L M N F F V H D P F T R E S Y
UniRef90_S7W0K3 R V E R T L I I I F D I Y N P R N G E L Y
UniRef90_E4NA23 R T E K H L N I N F F I Q D P I T G E A Y
UniRef90_S3A682 R D R K T L V V N F S I V D P F T D E P F
UniRef90_R6LLT5 R P G K V A R F I C C D I Y R P D G T A Y
UniRef90_D5WPU2 D G G R V A R L I C C D I Y T P F P G D P
UniRef90_V9HEB7 R P G K V A R L I C C D V I T P F E G D P
UniRef90_F2JUC0 T E E P T V I V R C C N I I E P S T M Q G Y
UniRef90_U2ERC0 F E E P T V I I R C C D V L E P N T M M G Y
UniRef90_B3PG80 Y D E P T I I L R C C N I V E P S T M Q G Y
UniRef90_A0LFS3 M A V P T L T M I C C D V V D P V I T K E R Y
UniRef90_J9Z2G1 F A D S T L V L I C C D I Q D P I T G Q K Y
UniRef90_S2LA81 T E V A T L S L I C C D I V D P V T R E A Y
UniRef90_F4A052 R P G K V A R L I C C D V Y N P D G T P F
UniRef90_R5Z2W1 R P G K V A R L I C C D V Y T P Y E S D P
UniRef90_D3EQV7 Y K E P T L S L T C C G I K E P R T G D W Y
UniRef90_U1R361 R S E K T L V M N F S V V D P F T D E V Y
UniRef90_W5TK60 R A A K T L N V N C F V Q D P F T R A D Y
UniRef90_A0A031MD08 T E E P T L I I V C C D I E P A T M Q R Y
UniRef90_Q0C0G2 F Q Q T T L V V F C C D I L D P I S G Q A Y
UniRef90_Q2SN56 T E E T T L N L T C C N I I E P T T M Q G Y
UniRef90_C6J7C5 T A H P T L N V F C C D I Y T P D G E R Y
UniRef90_B5YGY6 R P S V A R M F C C D I Y E P D G T P Y
UniRef90_C0W1G0 R T V P T L N M N F S I V D P F T D E P F
UniRef90_S3WZQ3 R E A R T L V V N F F V H D P L T K E P F
UniRef90_M1PQQ5 E P G K V A R L M C C D I Y T P E G E P F
UniRef90_D7CNP6 C K A F T L S M I C C D I Y D P I T R Q P Y
UniRef90_C1D8S0 F D E P T L F M S C C D V V D P A D G K G Y
UniRef90_R4KJ17 R D G A V A R L I C C D I Y N P F L G D P
UniRef90_UPI0003F544E0 R A A K T L V V T F S I V D P F T D E P F
UniRef90_F6D9B4 T N D P T I V I R C C M I V E P S T L E P Y
UniRef90_G2DPU1 Y D D A T V V I T C C D V I D P A D G Q G Y
UniRef90_D1B3K6 T A D P T I V V F C C D V Y D I Y K G E L Y
UniRef90_UPI00037EA5B1 R E V K T L N M Q F F V N D P F T F E P F
UniRef90_R4KGR2 R P G G V A R L M C C D I Y N P D G T P F
UniRef90_A0L6B3 S E D A T L I L A C C N I I D P F T G E D Y
UniRef90_J7IRV0 R P G K V A R I I C C D I H D G F E G D P
UniRef90_UPI0003B44014 T Q E P T L I L V C C D V I E P S T M Q G Y
UniRef90_R6N5H1 E H G K V A R L I C C D V H K P F E G D P
UniRef90_F0S3Z3 S E I P T L V V I A D I V D P V I T K E P Y
UniRef90_R6JMV4 R K H Q T A R L I C C S V Y T P F M G D P
UniRef90_D1Z110 Q S E N V A R L I C C D V Y N P D G K P F
UniRef90_F7YVU8 S T D K S A R L I C C D V Y E P F E G D P
UniRef90_UPI0003600619 R P G K V A R F I C C D I Y Q E D G T P Y
UniRef90_D7CNP4 R P G A V A R L I C C D V Y T P F V G C P
UniRef90_UPI0003B7A5BD C Q V P T L S I L C C D I Y D P I T K E P Y
UniRef90_X5MN34 Y A Q T T L A I M C C D I V D T Y E R D P
UniRef90_E1VHM8 T D E P T L I V R C C D V L E P A T M L G Y
UniRef90_UPI00036EAE29 C G T P T L S L I C C D V I D P V L R Q P Y
UniRef90_UPI0002FA69B0 C R E Q T L T L I C C N I Y E P L T D E D Y
UniRef90_Q9CDL9 G D E K V A G V I C C D V Y T P E G E P F

UniRef90_F4FVR8
UniRef90_A9WAB7
UniRef90_Q30PB8
UniRef90_B7RQA8
UniRef90_U6ECD6
UniRef90_A8EW08
UniRef90_U1APM5
UniRef90_L0JII2
UniRef90_R9LXE9
UniRef90_UPI000288DCA4
UniRef90_UPI0004715283
UniRef90_E6SHP8
UniRef90_E0XXY8
UniRef90_D4Z2D9
UniRef90_D7E9S8
UniRef90_UPI00036C3BF0
UniRef90_X1KKU7
UniRef90_K1Z5Y5
UniRef90_D9QS44
UniRef90_H8I4H8
UniRef90_A6Q567
UniRef90_A7HIN2
UniRef90_D1JBX9
UniRef90_UPI00036B6B17
UniRef90_C8WWW3
UniRef90_UPI0003B48AA4
UniRef90_UPI0003732165
UniRef90_D9QU15
UniRef90_H9UBL4
UniRef90_UPI0003B3D6F1
UniRef90_J0UQD0
UniRef90_UPI000362CFCD
UniRef90_S9UEH6
UniRef90_R5EJH9
UniRef90_K1YJ10
UniRef90_R9NL17
UniRef90_M5J8K9
UniRef90_V2YJT4
UniRef90_K4MBK2
UniRef90_D6ZH46
UniRef90_UPI0003B46C15
UniRef90_F4BRT2
UniRef90_UPI00047B032D
UniRef90_Q491W3
UniRef90_UPI0003662A47
UniRef90_X1BPB8
UniRef90_A4ELC8
UniRef90_UPI000370553F
UniRef90_E4U4D9
UniRef90_UPI00041EA0BD
UniRef90_K9AQF0
UniRef90_UPI00037D879F
UniRef90_F8I4K6
UniRef90_UPI00037CE37D
UniRef90_UPI000361761C
UniRef90_V8C5D2
UniRef90_C0W3V3
UniRef90_Q9RAY7
UniRef90_UPI0003B3792C
UniRef90_UPI000474F13D
UniRef90_W1TS11
UniRef90_UPI0003B35658
UniRef90_B6BHY0
UniRef90_D1BTT7
UniRef90_A0B5S2
UniRef90_UPI0003B330AC
UniRef90_UPI000248665E
UniRef90_UPI0003B44026
UniRef90_U2T0S1
UniRef90_G7WCM5
UniRef90_V4HEU7
UniRef90_G2KUZ5
UniRef90_Q9ZLW5
UniRef90_D8PD04
UniRef90_UPI0003602ADA
UniRef90_B9L8G1
UniRef90_C6PX30
UniRef90_D8EZQ2
UniRef90_UPI0003B683E5
UniRef90_U4KK88
UniRef90_G4AXP4
UniRef90_X1M7L3
UniRef90_L0HG28
UniRef90_A3CXF8
UniRef90_E3CKD0
UniRef90_B9KCP1
UniRef90_C3XP03
UniRef90_K1ZDK1
UniRef90_UPI000219603A
UniRef90_C7P632
UniRef90_UPI0003F94BEF
UniRef90_UPI00040270CD

UniRef90_F4FVR8 K L L D N K L M F D D G S S I E G F V Q R I E E S D M Y L Y P D L S T W M I F P W
UniRef90_A9WAB7 E D M I R E N G L G F D D G S S I K G F V Q A I N E S D M L M V P D P S T A F I D D P T W
UniRef90_Q30PB8 E D N L T E N G F F M F D D G S S I D K W F Q A P I N K S D M L L K A D V I P E T A F I D D P P F
UniRef90_B7RQA8 E D F I L E E N G F F M F D D G S S I A G W K S I E E A S D M K L M L D V I P E T A Y I D D P P F
UniRef90_U6ECD6 N A L D R N G M G F D D G S S I T G F Q D I E E S D M I A M P D P V I E T T F A I L D P W
UniRef90_A8EW08 A S T L D N G M G F F D D G S S I D A W Q P I H A R S D M V L L K P D V I G T S A F L D P P F
UniRef90_A1APM5 E D T F E E G M G P F D D G S S I R G W Q P I H A S D M L L L P D P D P T S A K M D P F
UniRef90_L0JII2 K A F T E G E T Y F D D G S S I E G F V R I Q E S D M R L K P D P E T T F A I L P W
UniRef90_R9LXE9 R A L D G E I M L D D G S S I Q G S V R I V E E S D M Q Y L K R A D L N D T F A I L P W
UniRef90_UPI000288DCA4 P D E E I A L F D G S S I R G F V Q A I H E E S D M A L R A D L D L N D T F A I L D P F
UniRef90_UPI0004715283 K A L D N K M M F D D G S S I G G F V S I E E S D M Y L Y P D L D T T F T V L P W
UniRef90_E6SHP8 K A L A G E L M F D D G S S I E G F V R I E E S D M M L R M P D P A T S T F V L P W
UniRef90_E0XYX8 E E M L E E G R M F D D G S S I R G W Q T I D S S D M K V M P D L D T T F V K M D P F
UniRef90_D4Z2D9 E D E L T Q G L M F D D G S S I E G W K A I N E S D M I L K P D L D A V Y V D P F
UniRef90_D7E9S8 K A L N E D G L S F D D G S S I E G F V R I D E S D M V L K P D D V S T A F A I L P W
UniRef90_UPI00036C3BF0 E D V V L E D G L A F D D G S S I R G F T T I D E S D M T L M P D D L A T A K I D L F
UniRef90_X1KKU7 G A L L E D G A G F D D G S S I E G F A R I D E S D M V A L P D P D T T F Q L L P W
UniRef90_K1Z5Y5 D D V F D E G L M F D D G S S I R G W K T I H E S D M V V V P D P D T T A K I D P V
UniRef90_D9QS44 E A L E G E L M F D D G S S I D G F T R I Q E S D M Y L K P D D F N T T F I F P W
UniRef90_H8I4H8 E D V F K Y G T G F D D G S S I R G F Q G I E E S D M L L I P D A E S A F V D P F
UniRef90_A6Q567 E D T F R N G L P F D D G S S L P A W Q P I N K S D M V L V M P D A E A G T A F V D P F
UniRef90_A7HIN2 E E V F E A G L G F D D G S S I R G W Q A I H A S D M L V M P D A E T A I D P F
UniRef90_D1JXB9 A A F D E G M G F D D G S S I K G F A R I D E S D M L A K P D P T T F R I V P W
UniRef90_UPI00036B6B17 L D P D M A F D D G S S I R G F Q S I H E S D M A L Y P D V S T T A Y V D P F
UniRef90_C8WWW3 K A L D N R I M F D D G S S I Q G F V R I E E S D M Y L A P D R S T W L V F P W
UniRef90_UPI0003B48AA4 E D M L I E K G V F F D D G S S I A G W K A I N E S D M I L K P D L A R P L I D P F
UniRef90_UPI0003732165 E G I F E R G S G F D D G S S L Q G F Q A I Q E S D M L L V P D P S S A F V D P F
UniRef90_D9QU15 E A L E E G N T M F D D G S S I E G F T R I Q E S D M Y L E P D Y D T F T I F P W
UniRef90_H9UBL4 T A L E S G I M F D D G S S I V E G F A R I Y E S D M Y L K P D L R T V A M L P W
UniRef90_UPI0003B3D6F1 D D F F T L G Q L F D D G S S I P G F A G I A D S D L Q L I P D D V S T A F V D P F
UniRef90_J0UQD0 K L L D N K L M F D D G S S I D G F V R I E E S D M W L Y P D L D T W M I F P W
UniRef90_UPI000362CFCD E A V F T E G L M F D D G S S I R G F Q S I H E S D M K L L P V P E S A F L D P Y
UniRef90_S9UEH6 E S T F E N G V A F D D G S S I T G F R G I E E S D M V M P D D T E S S Y V D P F
UniRef90_R5EJH9 E K F F E Q G K M F D D G S S I A G W R G I D K S D M L L M P D I T T V M L D P F
UniRef90_K1YJ10 K A L D G D M M F D D G S S I D G F V R I N E S D M Y L K P D Y D T T F I L P W
UniRef90_R9NL17 K A L D D Q L M F D D G S S I E G F T R A E E S D M Y L Y P D N T T F E I F P W
UniRef90_M5J8K9 K V L D N K M M F D D G S S I D G F V R I E E S D M Y L Y P D V S T W L F P W
UniRef90_V2YJT4 K A V N N Q I M F D D G S S I E G F T R I H E S D Q C L Y P D L N S F V I V P E
UniRef90_K4MBK2 S V F K N G V M F D D G S S I E G F T R I E E S D M K L L M P D P T A F R I L P W
UniRef90_D6ZH46 E T L T E G M M F D D G S S I N G F T A I H E S D M V L I P D P T A A F V D P F
UniRef90_UPI0003B46C15 V D N L N A G F M F D D G S S I R G F T S I Q E S D M K L L P D P S T S A F I D P F
UniRef90_F4BRT2 K A V M E K M M F D D G S S I D G F V R I E E S D M L L R P D L S T W L I F P W
UniRef90_UPI00047B032D T A L K G E I M F D D G S S I D G Y K R V E E S D M Y L K P D P S T F Q I F P W
UniRef90_Q491W3 D H L F K H G K I F D D G S S I K G W K D V S K S D M L L M P D L T S F V I D P F
UniRef90_UPI0003662A47 V A L I E E G V N F D D G S S I Q G F V R I H G F V R I D E S D M K L V P D L Q D T F L C P W
UniRef90_X1BPB8 N S L E E G S G F D D G S S I H G F T R I D E S D M I A M P D P Q T F Q I L P W
UniRef90_A4ELC8 E D F L E E G F M F D D G S S I A G W K S I D Q S D M K L M P Q A E S A Y V D P F
UniRef90_UPI000370553F E E S F E D G F G F D D G S S I R G W A A I N E S D M L I I P D T T A F L D P P F
UniRef90_E4U4D9 K A L D G E M M F D D G S S I E G F T R I E E S D M L L K P D Y D T T F V I P D
UniRef90_UPI00041EA0BD E E L F T Q G K F F D D G S S I F K G W K Q T E S S D M L L L P N P E S A F I D P L
UniRef90_K9AQF0 V D E I T E G L L F D D G S S I T G F Q G I H E S D M K L L A D V I S A F V D P Y
UniRef90_UPI00037D879F R D V L E N G L Y F D D G S S I E G F V G I N E S D M M L K P D L S T S F V L P W
UniRef90_F8I4K6 K A L N G E L M F D D G S S I E G F V R I E E E D M Y L D P D P D T T F Q V F P W
UniRef90_UPI00037CE37D K A L D G E M M F D D G S S I E G F A R V E E S D M Y L K P D D F N T W V I F P W
UniRef90_UPI000361761C E D S F E E G F A F D D G S S I V A G W C L I N N S D M A M I P D P E S A R I D P F
UniRef90_V8C5D2 K A L N N K C M F D V S S L E G I E G E E D C D M Y L Y P D L S T T F E I F P W
UniRef90_C0W3V3 A E A L V S G L M F D D G S S I R G F T A I H E S D M K L V P D V T T A F L D P F
UniRef90_Q9RAY7 E S V F T D G L M F D D G S S I R G F Q A I H E S D M L L V P D P Q T A F V D S F
UniRef90_UPI0003B3792C K A F D E G I Y F D D G S S I E G F V R I Q E S D M R L E P D P D T T F A L L P W
UniRef90_UPI000474F13D E D L L V D G V M F D A S S I R G F A H I N E S D M L L M P D D I E T A I M D P A
UniRef90_W1TS11 A D A L E N G L M F D D G S S I R G F T S I D K S D M K L I A D V I S T A Y V D P F
UniRef90_UPI0003B35658 A A F S E G L G F D D G S S I E G L S R I F E S D M L L K P D P S T F Q I L P W
UniRef90_B6BHY0 A G Q L N N G L P F D D G S S I D A W Q P I N K S D M L L K P D V I E T A F L D P F
UniRef90_D1BTT7 Q A F A E G I G F D D G S A I E G L T R V Y E A D M I A K P D P T T F Q V L P W
UniRef90_A0B5S2 K A F K T G I S F D D G S S I E G F A R I Q E S D M V L K P D L D T T F C I L P W
UniRef90_UPI0003B330AC V A L D R E L T F D D G S S I V E G F V R K N E S D M Y L Y P D L D S T F E I Y P W
UniRef90_UPI000248665E E D A M T E G L A F D G S S I S G F T S V D K S D M L L P D D L T A Y V D P F
UniRef90_UPI0003B44026 R A F E G G I P F D A S A I E G F E N P Q K S E L Y L K P D P S T L A I T P W
UniRef90_U2T0S1 G A F S E G L G F D D G S A I E G L T R A F E S D L L A H P D P T T F Q I L P W
UniRef90_G7WCM5 S A F E N G V M F D D G S A V P G F T G I E A S D M L L F P D P T T F S I M P W
UniRef90_V4HEU7 K A F T E G I Y F D D G S S I D G F V R I Q E S D M R L K P D P E T T F A V L P W
UniRef90_G2KUZ5 Q L L A G K L M F D D G S S I D G F V R I E E S D M Y L H P D L D T W M V F P W
UniRef90_Q9ZLW5 H D M F K E G L P F D A S S I F K G W Q G I E H S D M L L T P D L V R Y F I D P F
UniRef90_D8PD04 E G L F K D G S G L D D G S S I R G W R A I N N S D M L L V P D P A T A C M D P F
UniRef90_UPI0003602ADA E D E L D E G I L F D D G S S I E G W R A I N E S D M I I K P D L S T S A V M D P F
UniRef90_B9L8G1 E E V L A N G I P F D D G S S I P A W Q P I N E S D M L I K P D D F E T H F V D P F
UniRef90_C6PX30 K A L N D K V M F D D G S S I D G F V R I E E S D M Y L S P D L S T T F V F P W
UniRef90_D8EZQ2 E G M L E G M G F D D G S S I E G F S R I Q E S D M I A K P D P G T F Q V I P W
UniRef90_UPI0003B683E5 A A F E E G I G F D D G S A I E G M T R V F E D D M L V R P D P T T F Q I L P W
UniRef90_U4KK88 K V L D N Q V M F D D G S S I E G F V R I Q E A D M F L Y P D L N T W L I M S W
UniRef90_G4AXP4 E D L F E D G K M F D D G S S I V E G W K A I N K A D M L L M P I A E T A L V D P F
UniRef90_X1M7L3 G A M Q S G S G F D D G S S I Q G F A R I D E S D M V V L P D P S T F R I L P W
UniRef90_L0HG28 K A L T D G T W F D D G S S I E G F A R I E E S D M L L K P D L A T Y A V L P W
UniRef90_A3CXF8 K A L T D G L G F D D G S S I E G F V R I E E S D M Y L Y P D L S T Y T L L P W
UniRef90_E3CKD0 L D K L S N K A M F D D G S S I E G F V R I N E S D M V L K P D I D T W T V F P W
UniRef90_B9KCP1 D K T F E N G I P F D A S S L H G W Q P I E K S D M I L K P D V K S A F L D P F
UniRef90_C3XP03 A S S F E G I P F D D G S S I P A W Q P I V D K S D M V L I P D P V R Y F I D P F
UniRef90_K1ZDK1 G A I D N N V W F D D G S S I E G F A R I Q E S D M Y L K P D L D T S F V L P W
UniRef90_UPI000219603A K V L N N D L M F D D G S S I E G F V R I N E S D M Y L Y P D L S T T F L I F P W
UniRef90_C7P632 I D L F E H G L W F D D G S S I T G F V G I E E S D M L L K P D L S T L S V L P W
UniRef90_UPI0003F94BEF G A F E E G I G F D D G S A I E G F T R I F E S D M I A H P D P S T F Q V L P W
UniRef90_UPI00040270CD S A F E E G I G F D D G S A I E G F A R V Y E S D M V A M P D P T T F Q V F P F

UniRef90_F4FVR8 S T G K L A R V I C Q V Y R P N G E P Y
UniRef90_A9WAB7 L S V P T L V L I C D I I D P I T R Q P Y
UniRef90_Q30PB8 T A D P T I I I F C D S V Y D I Y K G Q M Y
UniRef90_B7RQA8 Y A E K T I C V H C S I V E P D T G E S Y
UniRef90_U6ECD6 R Q G N V G R M I C D V L K P D G Q P Y
UniRef90_A8EW08 T A D S T I I V I C D I F D P I T K E D Y
UniRef90_A1APM5 I A V P T L S L I C D V I F D P I T K E D Y
UniRef90_L0JII2 R D S A A A R M I C D V Y D T T T G E P F
UniRef90_R9LXE9 R P G K V A R M I C N V H N P F A G D P
UniRef90_UPI000288DCA4 R R D T T L N I N F F I H D P I T G E Q Y
UniRef90_UPI0004715283 E K G K V A R L I C D I H T P F A G D P
UniRef90_E6SHP8 E G R R T A R L I C D V Y N P F E G D P
UniRef90_E0XXY8 Y A H P T M S I I C D I I D P I T G E G Y
UniRef90_D4Z2D9 S A T P M L I I F C D I V E P D T G E L Y
UniRef90_D7E9S8 N Q E K V A R M I C D V H E P F E G D P
UniRef90_UPI00036C3BF0 R T A K T L N V K F F V N D P F T H E A F
UniRef90_X1KKU7 R P H A V A R M F C D I L E P F E G D P
UniRef90_K1Z5Y5 C L E K T L S L I C N V M D P I T K L P Y
UniRef90_D9QS44 R P E T V A R L V C D V Y N P
UniRef90_H8I4H8 I R E P T L S L I C D V Y D P D G L K P Y
UniRef90_A6Q567 T A D P T L V V I C D V Y D I Y K N Q P Y
UniRef90_A7HIN2 M A E P T L S L I C N V V D P I T K E P Y
UniRef90_D1JBX9 R P D V V A R M F C D I L T P Y E G D P
UniRef90_UPI00036B6B17 R K N K T I A M M Y F V H D P I T G E A Y
UniRef90_C8WWW3 D Q G K V A R L I C D V G T P F A G D P
UniRef90_UPI0003B48AA4 N S H T T V N I F C D I L D A V K K D P Y
UniRef90_UPI0003732165 F A E P T L V V L C D V Y T P Y P K D P
UniRef90_D9QU15 R P G T V A R L I C D V Y D P F S G G P
UniRef90_H9UBL4 D G H R S A R I I C D V Y S P F D G D P
UniRef90_UPI0003B3D6F1 R K H K T L C M S F S I L S P R T G E A Y
UniRef90_J0UQD0 G S E K V A R V I C E V Y N P F I G D P
UniRef90_UPI000362CFCD R K E K T L V I I F S V H N P V D N S A Y
UniRef90_S9UEH6 T A R P T L I I M C N I E T P D G E R Y
UniRef90_R5EJH9 Y A D P T I I V R C D I L E P Q T L T G Y
UniRef90_K1YJ10 R G I A A A R I I C D V Y T P F D G C P
UniRef90_R9NL17 R P G K V A R L I C D V Y S V F E S D P
UniRef90_M5J8K9 R G G K V G R L I C D I Y E P F A G D P
UniRef90_V2YJT4 K G G R T A R M F C D V Y N P F V G D P
UniRef90_K4MBK2 R P G A V A R I I G D V K R P F E G D P
UniRef90_D6ZH46 R K E P T L V L Y S S I V D P F T N E P F
UniRef90_UPI0003B46C15 R S S P T L V M N F H V V D P F T D E H F
UniRef90_F4BRT2 E E G K V A R L I C D I Y N P F S G D P
UniRef90_UPI00047B032D R T G K S A R L I C D V Y N I D G T P F
UniRef90_Q491W3 Y E D A T I I I R C D I I D P S T M K N Y
UniRef90_UPI0003662A47 E E E R V A R V I C D V R R P D G S P F
UniRef90_X1BPB8 K D K A T A R M F C D I L E P D K G D P
UniRef90_A4ELC8 Y A E K T V C I N C N I V E P D T M E A Y
UniRef90_UPI000370553F C E T R T L V M L G D I V D P I T R Q H Y
UniRef90_E4U4D9 E R G R V A R L I C D V G T P F E G D P
UniRef90_UPI00041EA0BD I K H P T L V L I C D V L E P D T M D Y Y
UniRef90_K9AQF0 R E A K T L V V T H S I V D P F T D E P Y
UniRef90_UPI00037D879F R P S E V A R V I C D V Y T P F E G D P
UniRef90_F8I4K6 S E A R T A R L M C D I K N P D G S P F
UniRef90_UPI00037CE37D E N E R I A R L I C D V Y K P F V G D P
UniRef90_UPI000361761C F E S T L V L V A Q I I D P I T G Q D Y
UniRef90_V8C5D2 R P G K V A R L I C D V Y T P Y E G D P
UniRef90_C0W3V3 R E Q K T L V L N F S I V D P F T D E V F
UniRef90_Q9RAY7 R E H K T L A M T F F I H D P I T K E Q F
UniRef90_UPI0003B3792C R S R R G A R L I C D V M N T T T G A P F
UniRef90_UPI000474F13D C K V P T L S V V C D V A D P I T S G S P Y
UniRef90_W1TS11 R A C P T L V V N C S I A D P F T D A P F
UniRef90_UPI0003B35658 R E E P T S R M F C D I L T P D A G D P
UniRef90_B6BHY0 T A D P T I I V I C D V Y D I Y K N Q A Y
UniRef90_D1BTT7 R G D R T A R M F C D I L T P T D G E P
UniRef90_A0B5S2 R S M G G A R L I C D V Y T P F E G D P
UniRef90_UPI0003B330AC R P G K V A R M F C D V Y T P F E G D P
UniRef90_UPI000248665E V E S R T L N V Q F F V H D P R T R Q P F
UniRef90_UPI0003B44026 R P G K V V R M F C N I L T P D G K P Y
UniRef90_U2T0S1 R G E P T A R M F C D I T T P D G Q P
UniRef90_G7WCM5 R P G K V A R I I C D V K N P F E G D
UniRef90_V4HEU7 R G G G A A R L I C D V M D T S T G E P F
UniRef90_G2KUZ5 G D E K V A R I T C A V Y E L F K G D P
UniRef90_Q9ZLW5 S A D V S A V V F C D V Y D V Y K N Q P Y
UniRef90_D8PD04 C S V P T L S L I G N V V D P I T R E M Y
UniRef90_UPI0003602ADA S A Q A Q L I L T C T V Y E P D S G Q L Y
UniRef90_B9L8G1 T A D P T M V V F C D V Y N T D G T P Y
UniRef90_C6PX30 T N H K E A R L I C D I Y N P F E G C P
UniRef90_D8EZQ2 R S G P V A R M F C D I L N P D
UniRef90_UPI0003B683E5 R G G P T A R M F C D I Y T P D
UniRef90_U4KK88 E D I K V A R L I C N V Y E P F E G D P
UniRef90_G4AXP4 A Q I L P T L S L R C S I F E P T T M Q S Y
UniRef90_X1M7L3 H S E E V A R M F C D V Y Q P F E G D P
UniRef90_L0HG28 R P G K V A R F I C D I Q T P F E G D P
UniRef90_A3CXF8 R P R E V A R E I C D V C T P F E G D P
UniRef90_E3CKD0 G G E N G A V L I C D I Y E P F P G D P
UniRef90_B9KCP1 T A D P T I I V I C D V Y D I Y K D Q M Y
UniRef90_C3XP03 T A D T T V V V E C D V W D I Y K D E P Y
UniRef90_K1ZDK1 T K D R I A R I I C D V Y D P F A G D P
UniRef90_UPI000219603A H G G K V A R L I A D V Y N P F A G D P
UniRef90_C7P632 R P E S V A R V I C D V Y K P F E G D P
UniRef90_UPI0003F94BEF R E G N T A R M Y C D L K M P D
UniRef90_UPI00040270CD E G G E S A R M F C D I L T P

UniRef90_UPI00046CB0F8
UniRef90_C5F3W7
UniRef90_X1P596
UniRef90_T0MJK3
UniRef90_F8AZ71
UniRef90_F6BF37
UniRef90_U1P0B5
UniRef90_C0QG51
UniRef90_A9BIZ4
UniRef90_L0DND1
UniRef90_D0LQ29
UniRef90_UPI00036F62B2
UniRef90_Q4PJ59
UniRef90_P23794
UniRef90_UPI0003B61656
UniRef90_UPI0002E29630
UniRef90_A6UPK6
UniRef90_K7S361
UniRef90_A6G034
UniRef90_D1C8Y1
UniRef90_D4YNY7
UniRef90_H4GI38
UniRef90_X1K1R4
UniRef90_A6CCK6
UniRef90_Q5SIP0
UniRef90_E1RE51
UniRef90_E4UDV6
UniRef90_Q2GI14
UniRef90_V4IZC0
UniRef90_R9KYF7
UniRef90_X1T8B2
UniRef90_D6ZCH5
UniRef90_C4FA97
UniRef90_D2S373
UniRef90_U4KSM4
UniRef90_UPI0002F61A01
UniRef90_UPI000478AF13
UniRef90_S3Y2F2
UniRef90_A3DBW4
UniRef90_U2VB94
UniRef90_H3NII2
UniRef90_U6B8R7
UniRef90_X1JTR9
UniRef90_UPI0004104128
UniRef90_I0IBV9
UniRef90_C5CCN6
UniRef90_R5SIW9
UniRef90_U2DEK2
UniRef90_E1L107
UniRef90_G9PRV7
UniRef90_X1NRQ6
UniRef90_C4XIT8
UniRef90_J9H9W5
UniRef90_I0I424
UniRef90_R4KB53
UniRef90_X1SD25
UniRef90_UPI00046E9578
UniRef90_R7HT51
UniRef90_B2A0H5
UniRef90_Q8F6J3
UniRef90_UPI00039F046F
UniRef90_UPI00036B1E99
UniRef90_UPI0003B2E762
UniRef90_K2AIW1
UniRef90_UPI00047C39B1
UniRef90_A7I3Y1
UniRef90_W2BU18
UniRef90_Z9JWB0
UniRef90_UPI000420C8B5
UniRef90_R9SHZ8
UniRef90_UPI00037DDC99
UniRef90_UPI000465F02B
UniRef90_D4K2X6
UniRef90_I7LEG9
UniRef90_UPI00037996E9
UniRef90_UPI0003647E62
UniRef90_B0SGG0
UniRef90_A0A011RQI4
UniRef90_L5N475
UniRef90_UPI0003828F9B
UniRef90_R6UZ13
UniRef90_E7QNA7
UniRef90_W7AVI9
UniRef90_F2I739
UniRef90_K0NP29
UniRef90_K2BNZ6
UniRef90_R7CCC7
UniRef90_X0W052
UniRef90_W5XZG9
UniRef90_R7K8S8
UniRef90_H6Q4E6
UniRef90_D3E026

1 10 20 30 40

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

UniRef90_UPI00046CB0F8 E S A F D E G L I G F D D G S S I R G W Q P I N A S D M L V I P D P S T A R I I D P F W
UniRef90_C5F3W7 K V L N N K I T F F D D G S S I D G G F V R I E E S D M L L F P D P D T W L L F P W
UniRef90_X1P596 G A L E E R G Q V G F F D D G S S I Q G G F A R I D E E S D M M V A I P D P D T F F Q L F P W
UniRef90_T0MJK3 G A V L E E E G V Q G F F D D G S S I E G G F V R I E E S D M M A I P D P D T F F R I F P W
UniRef90_F8AZ71 G A L A E E G T G F F D D G S S I E G G F A R I V H E A D M L V K P D P S T T F Q V L P W
UniRef90_F6BF37 R D L E E N G V I Y F D D G S S I A G F V R I Q E E S D M L L K P D P V S T T F A V L P W
UniRef90_U1P0B5 K A F D E G V I Y F D D G S S I E G G F V R I Q E E S D M R L L P D P D T T F A V L P F
UniRef90_C0QG51 K A L D G K L M F D D G S S I D G G F A R I Q E E S D M Y L K P D P Y N T T F V L P W
UniRef90_A9BIZ4 S S L T E N G T M F D D G S S I E G L V R I N E A D M L L K P D P D T T F A V L P W
UniRef90_L0DND1 E E T F E E G T M F D D G S S I V V G W R A I N E A D L L V V P Q P P E T V L I D P F
UniRef90_D0LQ29 D G L E E G F G F D D G S S I R G W R A I N N S D M L M Q P D T S S A Q I D P F
UniRef90_UPI00036F62B2 D D F L E E G K M I D G S S I K G W Q K I H Q S D L T L M P D T M D T L L L D P F
UniRef90_Q4PJ59 I S D C E E N G K M F D G S S I A G W K D I N E S D M I L M P D T M D T A F S D P F
UniRef90_P23794 I L E S L K T G F G L D G S S I R G F T S I Y E S D M V L L P V P E T T A F S D P F
UniRef90_UPI0003B61656 S A L E N N D C M F D D G S T I E G L T R G L A E S D M Y L Y P D P D S T F Q L I Y P W
UniRef90_UPI0002E29630 A A F E E N G I G F D D G S T I E G L T R V I Y E S D M L L S P D P D S T F Q M L P W
UniRef90_A6UPK6 Y D V L S K G L Y F D D G S S I D G G F V S I E G S D M M L K P D P L S T L F V L P W
UniRef90_K7S361 G A F A E G V G F D D G S A V E R G Y T R V F E S D M V A H P D P S T T F Q V L P W
UniRef90_A6G034 E A F A E G F G F D D G S S I V E R G W K I N A S D M L V M P D A T T A K V D P F
UniRef90_D1CBY1 D C V E H G K W F D D G S S I V E G F A R I A E S D M L L V P D L E T F R V T P W
UniRef90_D4YNY7 S A F D E G T M F D D G S S I V E G F A R I Y E S D M V L K P D A S T F E L L P W
UniRef90_H4GI38 K L L A N K V G F D D G S S I D G G F V R I E E S D M Y L Y P D M G T W L I S P
UniRef90_X1KIR4 N A L S E G M G F D D G S S I E G F S R I E E S D V I A M P D P G T F Q I L P W
UniRef90_A6CCK6 E K S F E E G F G F D D G S S I M R G W K A I N E S D M L V V P Q P D T T F A V I D P F
UniRef90_Q5SIP0 K A L D G E I M F D D G S S I E G F T R I E E S D M L L R P D Y N T F V I L P D
UniRef90_E1RE51 K A L T A G I G F D D G S S I E G F A R I E E S D M V L K P D M D T Y S L L P W
UniRef90_E4UDV6 E E L L L N G I M F D D S S I A G W H S Q N P D L L L I P D P E T I H I L D P F
UniRef90_Q2G114 A Q V L L A G V N F D S S S I P G W Q S I E K S D M L L P D V S T A F F M D P F
UniRef90_V4IZC0 K A L D G K L M F D D G S S I D G G F V R I N E S D M Y L K P D Y S T F V V L P W
UniRef90_R9KYF7 A A F E N G M G F D D A S C I E G F S A V S E S D M L A F P D P S T T F Q V L P W
UniRef90_X1T8B2 E G L T E N G M G F D D G S S I E G G F A R I E E S D M I A K P D P T T F Q I I S P
UniRef90_D6ZCH5 G A F A E G T G F D D G S S I E G F S R V Y E A D M V A K P D P S T T F Q V L P W
UniRef90_C4FA97 V A F T E E G I G F D D G S A I E G F T T P D E A D M L A F P D P S T T F Q V L P W
UniRef90_D2S373 K A F T E G I Y F D D G S S I E G F V R I Q E E S D M R L V P D P D T F A V L P W
UniRef90_U4KSM4 R A L N N D I M F D D G S S I Q G G F V R I Q E E A D M Y L Y P D L S T W L I L N W
UniRef90_UPI0002F61A01 G A F G E G I G F D D G S A V E G F S R V F E A D M V L Y P D A S T F S I L P W
UniRef90_UPI000478AF13 S A L N N E C M F D D G V S V E G F G C D S E G D M Y L Y P D L D S F E I Y P W
UniRef90_S3Y2F2 G A F G E G T G F D D G S S I E G Y A R V F E A D M I A H P D P G T F Q L L P W
UniRef90_A3DBW4 R A F E Q G I G F D D A S L G F M N V E K S D L F L H P D P S T L S I L P W
UniRef90_U2VB94 E A F E E G L G F D D G S S I D G G F V P L E E S D M L A F P D A S T F Q I L P S
UniRef90_H3NII2 K A M D N K M M F D D G S S I D G G F V R I E E S D M Y L V P D L S T W L V F D W
UniRef90_U6B8R7 A E L L L N G I L F D A S S I E G W K S V K L S N L V L M P D L K T M H I D P F
UniRef90_X1JTR9 E S T F S D N G I L G I D A S S Y P G Y K K V A A G D M K I I P D S S T C I L D P F
UniRef90_UPI0004104128 R A F K Y G L S F D A S S I I K G F L D I E E S D L F L Y P D P S T L T I L P W
UniRef90_I0IBV9 A D R L A G G F G F D D G S A I R G W Q A I N E S D M L L V P D P C D T A R R D P F
UniRef90_C5CCN6 N A F T E G L G F D D G S S I D G Y T R I S E S D M L L Q P D P S T T F Q I L P W
UniRef90_R5SIW9 K L L G G R C R F N C A A V D G F R G V G Y E E L F L V P D L D T F V T F P W
UniRef90_U2DEK2 R A F S S G T G F D D A S A V R G F L Q V E E S D L F L F P D P G T M A I L P W
UniRef90_E1L107 E A F E E G V G F D D G S A V E G F M P Q E E S D M L A F P D P M T F Q I L P W
UniRef90_G9PRV7 R V F E S G F G F D A S A I D G G F M N I A E T D L L L H C P E T T F V L P W
UniRef90_X1NRQ6 K A L D G K L M F D D G S S I Q G G F V R I E E S D M Y L K P D H A T F M V N P W
UniRef90_C4XIT8 N A F E E G M G F D D G S S I T G F T K I Q E S D M V A F P D P A T F Q L V A W
UniRef90_J9H9W5 E D M L T N G T A F D D G S S I Q G G F R G I E D S D M V M R V L E T A F V D P F
UniRef90_I0I424 D A V T Q G V W F D D G S S I E G F A R I A E S D M Y L T P D L N T F C V L P W
UniRef90_R4KB53 D A L E G N L M F D D G S S I D G G F A R I N E S D Q C L V P D P D T F Q F M P W
UniRef90_X1SD25 R A L E E G L G F D D G S S I E G F A R V D E S D L I A R P D P Y T F S L V P W
UniRef90_UPI00046E9578 A D D F H K G L P F D D G S S I P A W Q P L H K S D M L F I P D T T T F L D P F
UniRef90_R7HT51 K V L N N E C M F D D G A A I D G F K G N N M S E L F L K P Q L D T F A I D P W
UniRef90_B2A0H5 A A M D G E L M F D D G S S I D G F A R I E E S D Q V L I P D T S T F N V M P W
UniRef90_Q8F6J3 E D S T F K G L P F D D G S S I P A W Q P L D R S D M Q L I P D T S A I F L D P F
UniRef90_UPI00039F046F L T T F S E G V G F D D G S S I P G F K T V E S G D L V L V P D P K T G F L D P F
UniRef90_UPI00036B1E99 E E A A N E G F A F D D G S S I D G F A T V D E S D M M L H P D L S T A Y I D P F
UniRef90_UPI0003B2E762 D A F I E G T G F D D G S S I E G L T R V H E S D M L L R P D A T T F Q L L P W
UniRef90_K2AIW1 A D S L G A G V V F D D G S S I E G F A R I A E S D M Y L K P D P S T Y A V I P W
UniRef90_UPI00047C39B1 R V L D N N F V F D D G S S L Y G K K S V L E Q D M Y L R P E L D T F V I L P W
UniRef90_A7I3Y1 K D F V D G T P F D D G S S V E A W Q P I N K S D M I L K P D L D T A F L D P F
UniRef90_W2BU18 S A L A E G I G F D D G S A I E G F A R L F E A D M I A H P D T A S F Q L L P W
UniRef90_Z9JWB0 T A F T E G I G L D D G S T I E G L T R A Y E S D M L L R P D P G T F Q T L P W
UniRef90_UPI000420C8B5 K A F Y E G L S F D D G S S I T G F L D S A Q S D L L L F P D P S T L S I L P W
UniRef90_R9SHZ8 E D L F T N G T L F D D G S S I D G F V E I N E S D L L L K P D P S T Y S R L P W
UniRef90_UPI00037DDC99 G S F S D G T G F D D G S A I E G F S R I S E A D T I A L P D P S T T F Q V M P W
UniRef90_UPI000465F02B N A F Q E E G I G F D D G S S I E G F A R I T E S D M L A K P D A A S F T V L P W
UniRef90_D4K2X6 K A L E D G V C G F D D G S A I A G F M H V E E S D L V L R P D A S T M T I L P W
UniRef90_I7LEG9 K V L A N D I K F D D G S S I D G G F V R L E E S D M V L Y P D F S T W A V L P W
UniRef90_UPI00037996E9 I A L E D D G I G F D D G S A V E G F S R S E S D T L A K P D P S T F Q M L P D
UniRef90_UPI0003647E62 K A L D G E V M F D D G S T I E G F T R S E E A D M L L K P D Y S T F L V F P E
UniRef90_B0SGG0 E D T F K G L P F D D G S S I A R W Q P I N A S D M Q L H P E I S T A F L D P F
UniRef90_A0A011RQI4 K V M D N E M A F D D G S S I D G G F V E I D Q S D M K L H P D L D T W L I F P W
UniRef90_L5N475 M V L N N E A M F D D G S S I S G F S A I Q E S D M Y L V P D L D T F L L P S
UniRef90_UPI0003828F9B D D L F V Y G T G F D D G S N Y G Y A P I E K S D M V F I P D P E T A T V D P F
UniRef90_R6UZ13 R A F R D G I S F D A S A I K G F G D A S R S D L L L F P D P S T L T V L P W
UniRef90_E7QNA7 K A F E E G I W F D D G S S I E G F V R I Q E S D M R L E P D P S T F A V L P W
UniRef90_W7AVI9 K A L D N K M M F D D G S S I E G F V R I E E S D M Y L F P D L D T W V V F P W
UniRef90_F2I739 K V L D N K L M F D D G S S I D G G F V R I E E S D M Y L I P D L N T W L I F P W
UniRef90_K0NP29 E S A F E D G F G F D D G S S M R A W Q A I D N S D M L V I P E A G T A K M D P F
UniRef90_K2BNZ6 D L V E G K M F D D G S S I T G W R K I Y Q S D L L L L P D F S T A V V D P F
UniRef90_R7CCC7 S I L L N R C V T F D A A A I N G F D T M H V D E L V L V P D L D T Y F T I F P W
UniRef90_X0W052 G A R D G V W F D D G S S I E G F A R I Q E S D L V L K P D M A T Y A V V P W
UniRef90_W5XZG9 S A F D E G V G F D D G S S I E G F S R I S E S D N I A L P D P S T T F Q V L P F
UniRef90_R7K8S8 K V F K H G L A I D A S A I D G F G Q E G R S D L F L V P D P S T L T V L P W
UniRef90_H6Q4E6 H Q I F Q N G K I F D D G S S I T G W K D V H E S D V L L V P D I N K I L I D P F
UniRef90_D3E026 M D L F T D G L F D D G S S I P G F V G I E G S D L V L K P D L S T Y S P L S W

	90	100
UniRef90_UPI00046CB0F8	P R D R T L S L T I G N I V D P V T K E P Y	
UniRef90_C5F3W7	E N G K I A R L I C S V H S P F A G D P	
UniRef90_X1P596	K P H A V A R L F C D I L E P F D G D P	
UniRef90_T0MJK3	G D E K G A L M F C C D I Q N P F E G D P	
UniRef90_F8AZ71	R G D S T A R M F C C D L V M P	
UniRef90_F6BF37	R P K S V A R V I C C D V Y K P F E G D P	
UniRef90_U1P0B5	R E D S A A R L I C C D I V E T D G Q P F	
UniRef90_C0QG51	R R R N G A R I M C C D V H T F I G C P	
UniRef90_A9BI24	E R E K V G R F I C C D I Y T S F Q G D P	
UniRef90_L0DND1	T A Q P T L T M V C C N I Q D P I T Q Q D Y	
UniRef90_D0LQ29	L K T P T L S L I C C D V V D P V T Q S P Y	
UniRef90_UPI00036F62B2	Y Q D N T L I L R C C N V V D P Q T M L G Y	
UniRef90_Q4PJ59	Y D E P T I N I T C C D V I E P A D G S S Y	
UniRef90_P23794	S P G V A R V L C K V F	
UniRef90_UPI0003B61656	R P G K V A R M F C C D V Y T P F S G D	
UniRef90_UPI0002E29630	R N D R V A R M F C C S V L T P D G E P	
UniRef90_A6UPK6	R E K P A A R I C C D V C K P F E G D P	
UniRef90_K7S361	R Q G T T A R M F C C D L K N P D	
UniRef90_A6G034	M Q V P T L V L L G N A V E T I T R A D Y	
UniRef90_D1CBY1	E R G E G A R I I C W V R E P F P G D P	
UniRef90_D4YNY7	R D D P T G R I E C C D I N T P	
UniRef90_H4GI38	G A E K V A Q V I C S V H E P F M G D P	
UniRef90_X1KIR4	S P K E V A R M F C C D I M E P F K G D P	
UniRef90_A6CCK6	M S N T L V M T C C N I Q D P I T R E D Y	
UniRef90_Q5SIP0	K R G R V A R L I C C D V Y Y P F E G D P	
UniRef90_E1RE51	R P E K V A R F I C C D V Y T P F E G D P	
UniRef90_E4UDV6	Y A Q S T M I F I C C N V Y D P I T L Q P Y	
UniRef90_Q2GI14	S A Q S T L V I L C C N I V D P Y	
UniRef90_V4IZC0	R N K Q G V A A A R L V C D V Y K S D G	
UniRef90_R9KYF7	R P Q A V A R M I C C N I R T P Y E G D P	
UniRef90_X1T8B2	R P R P L A R M F C C D I L N P D G T P Y	
UniRef90_D6ZCH5	G K H H S A R M F C C D L A M P D	
UniRef90_C4FA97	R P D G A A R I F C C D A C T P D	
UniRef90_D2S373	R D G A S A R M I C C D V Y N T S T G E P F	
UniRef90_U4KSM4	E N A P V G R V A R L I C C D V Y T K K P Y	
UniRef90_UPI0002F61A01	R G E P T A R M F C C D I H A P D G G	
UniRef90_UPI000478AF13	R P G K V A R M F C C N V Y T P Y E G D	
UniRef90_S3Y2F2	R T R G T A R M F C C D I S M P D	
UniRef90_A3DBW4	R P G R V I R F F C C D I K H P F E G D	
UniRef90_U2VB94	S E G P S A R I I C C D I R Q P F A G D P	
UniRef90_H3NII2	K E A K I A R L I C C D I R Q P F A G D P	
UniRef90_U6B8R7	Y A Q S T M V L I C C D I Y D S I N N K P Y	
UniRef90_X1JTR9	S E L K S L S M L C C D I L E P D G V T P Y	
UniRef90_UPI0004104128	R P G R V A R F F C C Y I K K P F E G D	
UniRef90_I0IBV9	A E R A T L A V I C C D V R D P V T K K T Y	
UniRef90_C5CCN6	R G D Q G S R M F C C D V L T P D	
UniRef90_R5SIW9	R P G K V A R F I C C D I V K P D G T P F	
UniRef90_U2DEK2	R P Q Q G R V V R F F C H R P F A G D G	
UniRef90_E1L107	R D D R V A R L I C C D I K E P F L G D P	
UniRef90_G9PRV7	R P G G V A R M F C C D I R H P F E G D G	
UniRef90_X1NRQ6	E E E K V A R I T C C D V Y N P N G L P F	
UniRef90_C4XIT8	R P R P V A R L F C C D V K N P D G T P F	
UniRef90_J9H9W5	M A A P T L A V S C C N V F E P F E R D P	
UniRef90_I0I424	E M D S T A R V I C C D V R T P F E G D P	
UniRef90_R4KB53	R P T E V A R M I C C D V Y N P D G T P F	
UniRef90_X1SD25	R P H A T A K M F C C D I Y Q P F E G D P	
UniRef90_UPI00046E9578	T A D V T A V V I C C D I Y D I Y K E Q M Y	
UniRef90_R7HT51	R P G K V A R F L C C D V V T P F E G D	
UniRef90_B2A0H5	R P S E V A S M I C C D V Y N P F E G C P	
UniRef90_Q8F6J3	T A D S T L V V F C C D V F D I Y K G T L Y	
UniRef90_UPI00039F046F	W E I P T L S F I C C N I A E A D T K Q P F	
UniRef90_UPI00036B1E99	R A R K T V N M K F F V H K P D	
UniRef90_UPI0003B2E762	R A E M V A R M F C C D V L T P D	
UniRef90_K2AIW1	D G G N T A R F I C C D V Y E P F P G D P	
UniRef90_UPI00047C39B1	R P G K V A R F L C C D I V D	
UniRef90_A7I3Y1	T S D V T V I V I C C D I Y D I Y K G K L Y	
UniRef90_W2BU18	R K A P T A R M F C C D I L M P D	
UniRef90_Z9JWB0	R G E G T A R M M C C D V L T P D	
UniRef90_UPI000420C8B5	R P G R V V R F F C C D I K T P	
UniRef90_R9SHZ8	R P D D S A R F I C C D I Y N P F A G D P	
UniRef90_UPI00037DDC99	G K P H T A R M F C C D I M N P D G Q P	
UniRef90_UPI000465F02B	R T A N A A K M F C C D I A M P D	
UniRef90_D4K2X6	R E G R V M Q F F C C D V E K P D N	
UniRef90_I7LEG9	R G G K I G R L V C S V H T P F E G D P	
UniRef90_UPI00037996E9	S Y E N T A R M F C C D I V M P D G Q P	
UniRef90_UPI0003647E62	E Q G R V A R L I C C D I A Y P F E G D P	
UniRef90_B0SGG0	T A D K T I V M F C C D V W D I Y K N Q Y Y	
UniRef90_A0A011RQI4	D N G K I A R F I C C D V H M P F A G D P	
UniRef90_L5N475	M E D R S A R F I C C D I Y T P F E G D P	
UniRef90_UPI0003828F9B	A E I P T L T M C G N V C T I	
UniRef90_R6UZ13	R P G K V M R M Y C C D I K Y P D G T P F	
UniRef90_E7QNA7	R S N G S A R L I C C D V V N P F D G G P	
UniRef90_W7AVI9	T A E K	
UniRef90_F2I739	T A G K I G L L L C C D I Y T P F I G D P	
UniRef90_K0NP29	F K V P T L A I I G N I H D P I T Q E A Y	
UniRef90_K2BNZ6	T Q I P T L I L R C H V I D P F T Q Q P Y	
UniRef90_R7CCC7	R P Q R G R V A R F I C C D V R D G T P F	
UniRef90_X0W052	E N G K T A R L I C C D I Y K P F A G D P	
UniRef90_W5XZG9	E Q D Q A A R M F C C D V I M P D G Q P	
UniRef90_R7K8S8	R P E R V V R M F C C R I C N P D	
UniRef90_H6Q4E6	Y H D P T L V V R C C D I F E P Y N R D P	
UniRef90_D3E026	R P E E S A R F I C C D I Y N P N G E P F	

UniRef90_S7T897
UniRef90_UPI00040EAB52
UniRef90_X1CEC0
UniRef90_UPI00036D6CC1
UniRef90_G9RNM8
UniRef90_R9J5P6
UniRef90_I7LBB1
UniRef90_R6NJ11
UniRef90_A0A016QV91
UniRef90_R7R740
UniRef90_X5ECW5
UniRef90_C7MNN7
UniRef90_R5YEF3
UniRef90_C2GKE2
UniRef90_R5TYR3
UniRef90_C9RSI3
UniRef90_A2SSX3
UniRef90_A9WJW4
UniRef90_E6N9Q4
UniRef90_D4LJ70
UniRef90_C7NH99
UniRef90_C7XVP7
UniRef90_UPI00047B14D4
UniRef90_UPI00037BF862
UniRef90_F8KSB6
UniRef90_B7IE45
UniRef90_F7V887
UniRef90_S3A6B8
UniRef90_UPI0003B4B897
UniRef90_R6CYN8
UniRef90_R6H0F6
UniRef90_R5WRB9
UniRef90_U1QXF7
UniRef90_UPI0003B31896
UniRef90_R7B4T6
UniRef90_E3GQ88
UniRef90_U6EAR3
UniRef90_B3T3Q0
UniRef90_Q9HH09
UniRef90_M7T9P6
UniRef90_H9UEH6
UniRef90_I0X9Y1
UniRef90_UPI00035E0005
UniRef90_D4J2G6
UniRef90_W7KK69
UniRef90_A4J8B1
UniRef90_T0Z214
UniRef90_W4Q4A8
UniRef90_R6AX90
UniRef90_T0NCJ4
UniRef90_UPI00036BA29A
UniRef90_B9XG69
UniRef90_R6R2L7
UniRef90_UPI00037338B8
UniRef90_R4YVY0
UniRef90_H7EKT9
UniRef90_D5MN15
UniRef90_M4GNR3
UniRef90_N1JRL8
UniRef90_UPI00036F3743
UniRef90_C8WSI8
UniRef90_R6TF91
UniRef90_X1NIN3
UniRef90_Q2GE57
UniRef90_UPI0003B5781C
UniRef90_W7UR42
UniRef90_B1I655
UniRef90_X1G167
UniRef90_I0GJ23
UniRef90_U5LJU4
UniRef90_D4JEU5
UniRef90_O29313
UniRef90_T0MNNH6
UniRef90_T0LEU8
UniRef90_X0YM28
UniRef90_X0Y8B1
UniRef90_B8GS77
UniRef90_C7GAE0
UniRef90_G0HK13
UniRef90_E0NV11
UniRef90_R6IEH6
UniRef90_I3RDB5
UniRef90_R5AX97
UniRef90_L1MFP5
UniRef90_U5N2Q0
UniRef90_H1Q3Z4
UniRef90_B7R468
UniRef90_UPI00025580ED
UniRef90_R6VHG3
UniRef90_V6DGQ2
UniRef90_V4M607
UniRef90_R5SGM3

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

UniRef90_S7T897 GA FEEEGMGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW80
UniRef90_UPI00040EAB52 GA FEEEGMGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_X1CEC0 DLFEEGLGEGNFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI00036D6CC1 AA FDEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_G9RNM8 RA FETEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R9J5P6 RA FEYEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_I7LBB1 SA FEEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R6NJ11 RA FEYEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_A0A016QV91 KA LNRGNDVTFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R7R740 KA LRRNDVCMFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_X5ECW5 GA FAEEGMGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_C7MNN7 ADA FSYGGMGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R5YEF3 KA FFRYGGTGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_C2GKE2 SA FAEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R5TYR3 EEFETQGGKGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_C9RSI3 DVVVYVGGKGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_A2SSX3 KA LLETGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_A9WJW4 DA LLDHGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_E6N9Q4 EDT LLDQEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_D4LJ70 RA LLDNQCGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_C7NH99 NA FTNEGKGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_C7XVP7 DA LNNKGIKGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI00047B14D4 DA LLDGRIMGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI00037BF862 KA LLDQEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_F8KSB6 KDL LLDQGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_B7IE45 EKT FFDGVDGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_F7V887 RA FFEEDGAGGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_S3A6B8 EA FVEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI0003B4B897 RA FAEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R6CYN8 RA FSYGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R6H0F6 EDT IIVYGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R5WRB9 R LLDNRRCRVDDWT LITGECMDNEAEMFLYDLDLDTFAILLPW
UniRef90_U1QXF7 KA FFDGGLYFDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI0003B31896 KA FEDDGA PISAKELI AGFRGSPYAKLYLKPDPPTTFQQLVAW
UniRef90_R7B4T6 NA FEEEGMGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_E3GQ88 RA LLYGVL PFDANS SVAGFLDADHSDLLIHPDPPTTFQQLVAW
UniRef90_U6EAR3 DDD LKDGVL PFDANS SVAGFLDADHSDLLIHPDPPTTFQQLVAW
UniRef90_B3T3Q0 RE QMD DGP KLDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_Q9HH09 ES SFK VGGFGLD GSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_M7T9P6 EA LLEKGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_H9UEH6 EKT FVEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_I0X9Y1 SA FKNKGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI00035E0005 ED SFKNGVGFGLD GSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_D4J2G6 SA FEKKGGLNFDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_W7KK69 ES SFKTFGGFLD GSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_A4J8B1 RA LQSRGLS LDDSAV LIEGKYGALHQRDVFLKDPDPPTTFQQLVAW
UniRef90_T0Z214 AGT FFDGKMFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_W4QX48 Q VTDGKGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R6AX90 ENT MKYGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_T0NCJ4 EK LFEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI00036BA29A EK LLDQNGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_B9XG69 EE VFAEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R6R2L7 VA FKKGGVTFNASSAI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI00037338B8 EKT FVEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R4YVY0 I VFEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_H7EKT9 RA FASGVLGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_D5MN15 EGL FADGGLGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_M4GNR3 PAL FFEEGKGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_N1JRL8 DSL FSEGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_UPI00036F3743 DV LAAGQVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_C8WSI8 DV LADRGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R6TF91 K LFRREGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_X1NIN3 KA LDEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_Q2GE57 ADA LTHGLS LDDSAV LIEGKYGALHQRDVFLKDPDPPTTFQQLVAW
UniRef90_UPI0003B5781C R VLDNKYS FEGL P ALFDNMYDYANDLYLKPDPPTTFQQLVAW
UniRef90_W7UR42 V TFEHGRRLIAAKKVS GFSAANGRLDLYLKPDPPTTFQQLVAW
UniRef90_B11655 RA LLEGRITFDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_X1G167 KA LLEGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_I0GJ23 KA LLEGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_U5LJU4 DA LLEGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_D4JEU5 KA FEKGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_O29313 GS AFEENGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_T0MNH6 K LLEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_T0LEU8 DA LLEGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_X0YM28 R VLFKEGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_X0Y8B1 E LFEEGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_B8GS77 DV LITDGA GFAGFAV WGLMGPHEADYMARGDLS T LSVIPW
UniRef90_C7GAE0 KA LLSNEGCMFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_G0HK13 DA LLETGGVGFDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_E0NV11 Y TILTYGERVDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_R6IEH6 DA ILLT C GERVDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_I3RDB5 EA V D T G I S F D G S S I L G G F T R L I E E S D M V A F P D P P T T F Q Q L V A W
UniRef90_R5AX97 ET ILLT C GERVDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_L1MFP5 DT VLLT C GERVDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_U5N2Q0 E T I L L T C G E R V D D G S S I L G G F T R L I E E S D M V A F P D P P T T F Q Q L V A W
UniRef90_H1Q3Z4 E T I L L T C G E R V D D G S S I L G G F T R L I E E S D M V A F P D P P T T F Q Q L V A W
UniRef90_B7R468 EA I E E G I S F D G S S I L G G F T R L I E E S D M V A F P D P P T T F Q Q L V A W
UniRef90_UPI00025580ED MD V V E K G A G F A G F A V W G M M E P H G D L N T F A S V V P W
UniRef90_R6VHG3 ES ILLT C GERVDDGSSSI LGGFTRLIEESDMVAFPDPPTTFQQLVAW
UniRef90_V6DGQ2 SA F I N G L T F D G S S I L G G F T R L I E E S D M V A F P D P P T T F Q Q L V A W
UniRef90_V4M607 S M S P G I V A F D G S S I L G G F T R L I E E S D M V A F P D P P T T F Q Q L V A W
UniRef90_R5SGM3 E T I L L S Q G E R V D D G S S I L G G F T R L I E E S D M V A F P D P P T T F Q Q L V A W

	90	100
UniRef90_S7T897	R P R P V A R M F C S I R T P F V G D P	
UniRef90_UPI00040EAB52	Q H D S S A R M F C D I S M P D G Q P	
UniRef90_X1CEC0	R K E K V A R V I C D I Y K P Y E G D P	
UniRef90_UPI00036D6CC1	D E R Q T A R M F C D I L T M P D G E P	
UniRef90_G9RNM8	R P Q T G R V V R F F C S V R T A D P Y	
UniRef90_R9J5P6	R P E H G K V V R M F T Y	
UniRef90_I7LBB1	D E E K A A R M F C D I V L P D G Q P	
UniRef90_R6NJ11	R P E H V V R M F C S I T Y P D	
UniRef90_A0A016QV91	S P E D A L R L A R L I C D P F E G D P	
UniRef90_R7R740	R P G K V A R F I C D V Y T P F E S D	
UniRef90_X5ECW5	D T A G T A R M F C D I A M P D G E P	
UniRef90_C7MNN7	R P D S V A R M F C S I R T P F E G D	
UniRef90_R5YEF3	R P G R V V R M F C S I T R L D G T P F	
UniRef90_C2GKE2	E G D D T A R M F C D I T T P D G Q P	
UniRef90_R5TYR3	T E I P T L T M C G D V C	
UniRef90_C9RSI3	T V E E G A R F L C S V T N P F E G D P	
UniRef90_A2SSX3	S D E K V A R F I C D V Y E P F I G D P	
UniRef90_A9WJW4	D Q H T T A R L I C S V Y T P D G K P F	
UniRef90_E6N9Q4	S D G P T A R M V C D V Y	
UniRef90_D4LJ70	R P G K V A R L I C D M	
UniRef90_C7NH99	R G G E G A R M F C D I T L P D G T P	
UniRef90_C7XVP7	V A D K T A S M I C D V H N P F I G D P	
UniRef90_UPI00047B14D4	T D A T V A R L I C N V C R P F A G D P	
UniRef90_UPI00037BF862	T L D R T A R L L C Q I Y D R F K G D P	
UniRef90_F8KSB6	S A D I T A V V F C D V W D I Y K Q Q E Y	
UniRef90_B7IE45	G D D K V L S M I C D V Y D V E T G E P	
UniRef90_F7V887	R P G R V A K M F C D I T Y P D G T P F	
UniRef90_S3A6B8	E G E T V A N V F C D I Q E P F E G D P	
UniRef90_UPI0003B4B897	R D G S V I R M Y C D I Q Y P D G T P F	
UniRef90_R6CYN8	R P G R V A R M F C H V L R P D	
UniRef90_R6H0F6	T E I P T L T M I G D V	
UniRef90_R5WRB9	R P G K V A R F L C D L Y C A D G T P Y	
UniRef90_U1QXF7	R D S E A A R L I C D I I N T S T G K P F	
UniRef90_UPI0003B31896	R P G R V L R M F C D V Y T	
UniRef90_R7B4T6	R P A E V A R M F C S I R T P Y D G D	
UniRef90_E3GQ88	R P G K V A R L I C D V K Y P F E G D	
UniRef90_U6EAR3	R P E E V C R F I C D I Y T P F E G D P	
UniRef90_B3T3Q0	T D K K S A R M L C D I Y	
UniRef90_Q9HH09	M Q G V A R V L T K V F	
UniRef90_M7T9P6	E K R K T A K L N C D I Y E P	
UniRef90_H9UEH6	D G E K V L S M I C D V Y E V E N M T P	
UniRef90_I0X9Y1	R P G K V V R M F C T I S H P D G S P Y	
UniRef90_UPI00035E0005	N Q G L A R V I S K V Y	
UniRef90_D4J2G6	R P G R V V R L Y C D L V L A D G T P F	
UniRef90_W7KK69	S Q G V A R V M T R	
UniRef90_A4J8B1	R P R E V A R L I C D V V D A T G K P Y	
UniRef90_T0Z214	S S A K Q L I L T C D V L E P S T M Q A Y	
UniRef90_W4Q4A8	T E Q E G A R F L C S V K K P F D G D P	
UniRef90_R6AX90	A E V P T L T M S G D	
UniRef90_T0NCJ4	C K V P T V S M I A N I Y T V F S G D P	
UniRef90_UPI00036BA29A	E P E K I L Y F F C D V F D A Q T G E S F	
UniRef90_B9XG69	A P C P	
UniRef90_R6R2L7	R P G R V V R L F C T I	
UniRef90_UPI00037338B8	D G Q K L L S M I C D V Y N V D N G K	
UniRef90_R4YVY0	G E D G T A A M F C D I G E P F S G D P	
UniRef90_H7EKT9	R P G R V V R F F C S V R S P F E G D	
UniRef90_D5MN15	R P	
UniRef90_M4GNR3	F A D P T I V L T C D I L D P A T M Q S Y	
UniRef90_N1JRL8	Y E A S T L S F L C D L I K T S D G K P F	
UniRef90_UPI00036F3743	T E E E D G R F I C S V T Y P F E G D P	
UniRef90_C8WSI8	F G G R A L R I I C D V V L P F A G D P	
UniRef90_R6TF91	R P Q H G R V V R F F C H T A F E G D G	
UniRef90_X1NIN3	P Q D K T A R I V C D V Y D R F D G D P	
UniRef90_Q2GE57	A A Q P T L C V V C D I V E P	
UniRef90_UPI0003B5781C	R P G K V G K L I C D V V N S D G S P	
UniRef90_W7UR42	R P G R V I R M F C F L R T P F E G D	
UniRef90_B1I655	R P G A V A R L I C Q A A D L D G N P Y	
UniRef90_X1G167		
UniRef90_I0GJ23	T D I K I A K I V C D V Y T P F D G D P	
UniRef90_U5LJU4	S I E E G A R L L C S V A N P F E G D P	
UniRef90_D4JEU5	R S M D G A V I R C D I K D	
UniRef90_O29313	I D D P I A I M F G N V Y E	
UniRef90_T0MNH6	D G G K A A R F V C S I M T P F M G D P	
UniRef90_T0LEU8	S G G K L A R Y I C N A Y S P F Q G D P	
UniRef90_X0YM28	E N E K T A I M S G D I F T P E G N P Y	
UniRef90_X0Y8B1		
UniRef90_B8GS77	Q P G Y A R I V C D G Y V N G E P Y	
UniRef90_C7GAE0		
UniRef90_G0HK13	E G I A R V Y G Y I Y K D G S P Y	
UniRef90_E0NV11	S E I P T L A L L C S Y F D	
UniRef90_R6IEH6	A E L P T L T M L C S F F N K D G E P	
UniRef90_I3RDB5	D N V A R V Y G Y I Y K P Y S A D P	
UniRef90_R5AX97	A E I P T L T L L C S F F D	
UniRef90_L1MFP5	A E I P T L C L L C S Y F D K D G Q P	
UniRef90_U5N2Q0	M A D P T L V L T C D I L D P A T M Q S Y	
UniRef90_H1Q3Z4	E E I P T L C M L C S F F N R D G E P	
UniRef90_B7R468	E G I A R V Y G Y I Y K D G K P Y	
UniRef90_UPI00025580ED	Q P G Y A R I A C D G Y V N D A P H P Y	
UniRef90_R6VHG3	S E I P S L D I L C S Y Y T K D G E P F	
UniRef90_V6DGQ2	T S D K T A W V I C D I Y	
UniRef90_V4M607	R P E R A R V L S R I Y W P Y E K D P	
UniRef90_R5SGM3	A E I P T L D M L C S F Y D P F E C D P Y	

UniRef90_UPI0003B423A1
UniRef90_UPI0004743F83
UniRef90_L0ACP1
UniRef90_H2L2Y9
UniRef90_D0WPT0
UniRef90_D1Y0P9
UniRef90_C6A5B7
UniRef90_B9NN82
UniRef90_UPI00036E7FF4
UniRef90_D9PZP4
UniRef90_D7R618
UniRef90_X0TQB3
UniRef90_I7JZA2
UniRef90_X0V7S8
UniRef90_F2JV27
UniRef90_A3M777
UniRef90_J1LNP2
UniRef90_H3A2C0
UniRef90_A0A023Y4Q8
UniRef90_R5CDM4
UniRef90_UPI00047A6B6A
UniRef90_H2IH71
UniRef90_H0DHE3
UniRef90_C0N1N8
UniRef90_G3RZM5
UniRef90_U5Q3H0
UniRef90_L0T1C3
UniRef90_UPI000469DFDD
UniRef90_X1EBT8
UniRef90_X1N3X5
UniRef90_N0B399
UniRef90_A3V6S8
UniRef90_W5NK79
UniRef90_UPI000155470C
UniRef90_H3NXH2
UniRef90_UPI0004575FCA
UniRef90_UPI000441C924
UniRef90_UPI0003018F0F
UniRef90_B3SZZ8
UniRef90_G2FKP3
UniRef90_B7S1K5
UniRef90_X0TZA7
UniRef90_Q8ZT45
UniRef90_S5Y7D8
UniRef90_UPI000368805C
UniRef90_C7D9B0
UniRef90_UPI000327C4D
UniRef90_F8CKT9
UniRef90_W9H833
UniRef90_UPI0003B3CE45
UniRef90_UPI00037E7A26
UniRef90_A0A028V658
UniRef90_G7GRU0
UniRef90_K9U728
UniRef90_UPI0003653047
UniRef90_UPI000376055B
UniRef90_UPI0003696A0D
UniRef90_UPI00035EAE3E
UniRef90_A0A037ZEX3
UniRef90_E6TU17
UniRef90_D7DQ76
UniRef90_C1F1J4
UniRef90_A3TWF2
UniRef90_UPI0004651183
UniRef90_F7DFP2
UniRef90_U1Y546
UniRef90_Q936T0
UniRef90_UPI00039922F2
UniRef90_V5SFA1
UniRef90_UPI000380351D
UniRef90_K7GE82
UniRef90_X0S352
UniRef90_A0Z8M0
UniRef90_K0EQ39
UniRef90_U4PQR8
UniRef90_Q986L1
UniRef90_A8LR39
UniRef90_I3CJN4
UniRef90_E0MQ28
UniRef90_Q01X25
UniRef90_D5AP04
UniRef90_V9Y1H7
UniRef90_W1VLN5
UniRef90_Q2C9T7
UniRef90_X5L1D5
UniRef90_F7E645
UniRef90_A0A024ILK2
UniRef90_A1RDQ0
UniRef90_Q0JZ51
UniRef90_H6LKC1
UniRef90_K2QAS8
UniRef90_L8MUG8

UniRef90_UPI0003B423A1 M A D G F G F D G S S I R G W R S I N E S D M L V V P D P E T A F I I D P F W
UniRef90_UPI0004743F83 F T E G L A F D G S S I R G W K A I N A S D M S M V P D A S T A W I D P F W
UniRef90_L0ACP1 H E K V K G F V G A F D G S S V L E E A S T Q P I N K S S D M F L L K A D D E K S T Y S V L P F W
UniRef90_H2L2Y9 E K K A V Y G V G P M P R G S S Y L E E A S T A N F S S S D V L L I P D D E K S T Y F K L L P W
UniRef90_D0WPT0 E R V L T M G E R V D G S S L F S F V D A V S S S D L Y V V P Q L R T A F L I N P F W
UniRef90_D1Y0P9 E T I L L T C G E R I S F D G S S I L F S F I A A G S S S D L Y V M A P R Y A T A F I D P F W
UniRef90_C6A5B7 D V V K E G E R S F D G S S I L P G F Q A G I E D S S D L T F K A P D Y A D T Y V E V P W
UniRef90_B9NN82 D S I F Y Q T I T G D W G E A A G E D G G F I E R D M I L L K P D F S T V S A A P W
UniRef90_UPI00036E7FF4 S L V D D G A G F A G A A V V E G M G G P E S H D L M A R T D I D T Y V Q L P W
UniRef90_D9PZP4 K K S D G F I A A F D G S S V E G F E P I N R S S D L L L A A D K S T T F S R I P W
UniRef90_D7R618 T V V T D G A G F A G F A I W G M T P N V D A D Y M A V G D A S T L S L V P W
UniRef90_X0TQB3 D A V D E G A G F A G A A V V G G Q G P H S H D M L A R A D L D S Y T P L P W
UniRef90_I7JZA2 F A L T L G I G F D G S S I A G F R D V N E S D M V L M P D A S T A V M D P F
UniRef90_X0V7S8 F D V V E A G A G F A G F A T N G L G E P H G P D F M A R G D L S T L S I V P W
UniRef90_F2JV27 D R V L T L G E R V D G S S I L F S F V E A T S S D L Y V V P R L A T A F L I N P F W
UniRef90_A3M777 Q D K V I H G I S M P R N Y L E L T A A N F N S S D L L L I P D D L S T F R I L P W
UniRef90_J1LNP2 H D Y G T R P E G I F A T T V T G L T S P S D S D M I L R P D A D T V R M V P W
UniRef90_H3A2C0 E T I L L T D G E R V D G S S L F S F V E A E S S S D L Y V V P R F R T A F V S P F
UniRef90_A0A023Y4Q8 H D Y F A T T V T G D P D E Y D E L V S P S S D M L L R P D P D T A R L V P W
UniRef90_R5CDM4 R E I F F Q T V N G D W P D D E S M I D L T E K D M N L E P D P N T V R L V P W
UniRef90_UPI00047A6B6A A A M E D G V N M F D E F T E G G A Y G S N D G D F F A I P D P D T Y A V V P F
UniRef90_H2IH71 S L L T T G A G F A G A G L I W R M G I A P N S P D Y M A V G D L S T L T L P W
UniRef90_HODHE3 E K V S H G V C M N E M N H I R A T C P N G S D I V L M P E L S T F R V L P W
UniRef90_CON1N8 D T I L L S Y G E R V D G S S L F P Y I E A G S S D L Y I I P R F S T A Y L D P F
UniRef90_G3RZM5 H D Y F A T T V T G E P D D Y Y D L T S P S S S D M Q L R P D P D T V R M V P W
UniRef90_U5Q3H0 D S I F Y Q T I T G D W G E A A G E D G F T E K D M I L K P D M E T A T A A P W
UniRef90_L0T1C3 N A L S E G M G F D G S S I L E G F S R I E E S S D V I A W
UniRef90_UPI000469DFDF D Q L L S A G E R V D G S S L F S Y I L D A A S S D L Y V I P R Y K T A Y V N P F
UniRef90_X1EBT8 I S I F H Q T I T G D G F E E D G Q Q L Y A E S S D L M M V P D L S T I R P A P F W
UniRef90_X1N3X5 N S I F F Q T I T G D W G E A S G P D G F L I E P D M I L K P D L S T A T A A P W
UniRef90_W5NK79 Q E K A I Y G V S M P R G Y L E L T L S P F N S G D V L L I P D L S T F R I L P W
UniRef90_UPI000155470C Q E K A I H G V I S M P R G Y L E L T A P N F N S D I L I P D D L S T F R I L P W
UniRef90_H3NXH2 S I M V Q T V T G E Y T D D H W D F V E P T D T D M L L V A D P K T L R K V P W
UniRef90_UPI0004575FCA E K A L H G V A I P E T S Y L E M T T S V E D A D I L L I P D L S T F R I L P W
UniRef90_UPI000441C924 T K A I H G V A M P E T S H I L T S S F N C D I L L R P D L S T F R I L P W
UniRef90_UPI0003018F0F R R I L T F G E R V D G S S L F S F M E T G S S D L Y V V P R Y H T A F L I N P F
UniRef90_B3SZZ8 K D M Q K N G A G F A G A A W L D M S P A D P D M F A I P D P D S S L T Q L P W
UniRef90_G2FKP3 E V F E N G I S F G A G S L K G F L E T I D D M K V V A D P S T F V V L P H
UniRef90_B7S1K5 M G E P R L P E S I M V Q S V T G L V E P T D A D M I L V P D P S T M R I L V P W
UniRef90_X0TZA7 K A L D G E I L F D G S S I L Q G F V R I E E S D M L L K P D L Q N A V Y V E S W
UniRef90_Q8ZT45 E A F L D G V A Y D G S S I L P A Y T T V N K S D L V A V P D L L A V Y V E S W
UniRef90_S5Y7D8 A D M Q E N G A G F A G F A T W L D L T P A H P D M L G M P D A S T A I Q L P W
UniRef90_UPI000368805C A A M E K G V T F D E Y I P N P M Y G A N D G D F F A V P D P E T A F I L P Y
UniRef90_C7D9B0 N S I Y F Q T I T G G W G E A A G P E G F V E P D M I L K P D M E T A T A A P W
UniRef90_UPI000327C4D H E K A T H G V S M P R G Y L E G Y S T S F H R D T I L S P D L S T F R I L P W
UniRef90_F8CKT9 K S A D N L T F D G S S I R G F S A Q Q E S D L R L N I D W G A F Y W L P F
UniRef90_W9H833 G M V K G G A G F A G F A T W L D M S P A D S D L L A M P P D P D S I Q L P W
UniRef90_UPI0003B3CE45 E L F S E G V G F A G F A A G H I Q G P Q S P D V E I I P D P T T F R I V P W
UniRef90_UPI00037E7A26 R M I D D G V P F A G S A I P G L Q A P N S H D M A A R I D L D S Y T L V P W
UniRef90_A0A028V658 K A V A E E G A G F A G F A I W G M M P H G P D F M A R G D L S T L M P V P W
UniRef90_G7GRU0 E L A T D G V G F A G Y A V G A T Q E P K D P D L M A V P D P S S F L P V P F
UniRef90_K9U728 D I L H P G A G F A G F A V W G L M E P H S P D Y M A V G D L S T L S L V S W
UniRef90_UPI0003653047 E T V F G M T I T G D Y A L W N D Y L S E T E R D V V L L P D L D T L C M T P W
UniRef90_UPI000376055B D S I F I Q T V T G G Y P D D E D F W N P A E L D M Q L I P D P N A V Y I L V P W
UniRef90_UPI0003696A0D N A I Q G G T V A G Y P S A D E S G F A G G F P S F L L L P D L S T F V V L P W
UniRef90_UPI00035EAE3E S A L Y R H T I S G D Y P P L E S G S F R Y E D S D L K L V P D L S T L T T V P W
UniRef90_A0A037ZEX3 N S I F L Q T I T G D W A D L D G E A F T E P D M V L T P D Y D T A V J A A P W
UniRef90_E6TU17 K D I E E G N L M F D G S S I K G F T P I N K S D L Y L K P
UniRef90_D7DQ76 T D R A M F G M T V T G E S P D G N E G V T D K D M V L I P D P T T L R L V P W
UniRef90_C1F1J4 V K S F D N L T F D G S S I R G F T A Q R E S D L R L A I D W S A F Y L G P F
UniRef90_A3TWF2 A D M A R D G A G F A G F A T W L D M T P A H A D M L A L P D P D S V I Q L P W
UniRef90_UPI0004651183 D M Q K D G A G F A G F A T W L D L T P A H P D M L A V P D P D S S V I Q L P W
UniRef90_F7DFP2 Q E K V S Q G V C M P R G Y L E V M A T C F N S D I V L M P E V I S T F R V L P W
UniRef90_U1Y546 Q A V M V Q T V T G E Y P E D G S L T G V T D P D M V C V P D D T S T I R L I P W
UniRef90_Q936T0 N K A A L D G T Q I D G L E F T G W D S G Y P D I A L I P D D L S T L S L V P W
UniRef90_UPI00039922F2 H E K A L H G V A M P R S Y L E L N A T N F N C D I I L N P D L S T F R I L P W
UniRef90_V5SFA1 I S I F H Q T I T G D Y V G F E D G E E S D L R M V P D L A T I R P A P W
UniRef90_UPI000380351D F A S P T M N M P S S I F G G D P A D S D L V L E P D F S T L A V V P W
UniRef90_K7GE82 T K S V N G V S M P R G S E V D H I A T N F N C D I L L S P D L S T F R V L P W
UniRef90_X0S352 Q K H F E E G V G Y D G S S G A G F V G K V E D G D V A A M P D P T A A F L D P F
UniRef90_A0Z8M0 E S I L V Q T V T G E T D D H W D F V E P T D T D M M L R P D A S T L R R V P W
UniRef90_K0EQ39 A N G M S D G V G L S S A V L A W D S N G Y P D I F L R P D V A T L R I L V P W
UniRef90_U4PQR8 G D T L A L P S A L Y R H T I S G E Y P D E D S D L K L V P D L S T L S V P W
UniRef90_Q986L1 A D M Q K D G A G F A G F A T W L D L T P A H P D M L A V P D P D S S V I Q L P W
UniRef90_A8LR39 N S I F F Q T I T G G W A A L D G F T E P D M V L K P D F S T A T P A P W
UniRef90_I3CJN4 K E I F I Q T I T G D Y P E D E S A V D P A E G D M V L Q P D P S T I R L V P W
UniRef90_E0MQ28 S I L F M Q T I S G D W P E T D H F F P P H D G D L R L V P D L S T L S A V P W
UniRef90_Q01X25 K S W D N L T F D G S S I R G F T A Q R E S D L R L N M D W S A F Y W A P F
UniRef90_D5AP04 Y D R F Y L P N S I F L Q S T I T G M G A F T E P D M V L T P D W S T T S A A P W
UniRef90_V9Y1H7 P G K Q F A L Q S T I L Y G L D A N G Y P D V F L V P D P A T L R P V P W
UniRef90_W1VLN5 N S I F Y Q T I T G D W G E A A Q D G F T E P D M I L R P D L D T W T V F P W
UniRef90_Q2C9T7 E L A K D G V G F A G Y A G A M Q G E P K D P D L I A I P D P A S F T P I P F
UniRef90_X5L1D5 H E K A V S G I H V I S R S Y L E P N M N P F N S D I V L K P D L S T F R V L P W
UniRef90_F7E645 P A V L T M T V T G D Y P E K D Y T S V A D P D M H L L P D A T T L R P V P W
UniRef90_A1RDQ0 E S V A E L G T N I C N I T F G W D T G Y P D V T L L P D L S T L K V V P G
UniRef90_Q0JZ51 G S V L A E G A G F A G F A I W G V G E P H G P D F M A R G D L D T I G L V P W
UniRef90_H6LKC1 E I L F G D G A F C T V S L A M Y F S E T N D D M K V I G D P S T F V I L P H
UniRef90_K2QAS8 A D M Q K E G A G F A G F A A W L D L T P A H P D F A I P D A S S V I Q L P W
UniRef90_L8MUG8 S M E A N G A G F A G F A T W L D M T P A D P D I F A I P D R N S L F P L P W

	90	100
UniRef90_UPI0003B423A1	T K Y K T I S I C D I V D P I T R E R Y	
UniRef90_UPI0004743F83	Y K H K T L S M I C S I Q E P R S G E P Y	
UniRef90_L0ACP1	N E K K A R V L T E L Y D F Y G K R Y	
UniRef90_H2L2Y9	A E Q T A R V I C D P C T V T G S P	
UniRef90_D0WPT0	N P I P S L D L M C G F Y D V N G D P	
UniRef90_D1Y0P9	Q L T P T L C F L C T F F D R D G	
UniRef90_C6A5B7	E E V A K V F G Y L Y E P Y Y A D P	
UniRef90_B9NN82	T G D W T L Q V I H D A Y D R D G D P	
UniRef90_UPI00036E7FF4	I P N V A I A N C D L Y	
UniRef90_D9PZP4	R P E R A R V L G K L Y E P S G Q R Y	
UniRef90_D7R618	Q P G Y A R I A C D G H T H G K P	
UniRef90_X0TQB3	L P N T A R F A A D L Y V D G E S Y	
UniRef90_I7JZA2	F E D S T L I R C D L L E P G T L Q G Y	
UniRef90_X0V7S8	E T P G I A T M F C	
UniRef90_F2JV27	Q P G Y A R I A C D G Y V N N E P H P Y	
UniRef90_A3M777	F A E P T V V V T C D V I E P S T G Q G Y	
UniRef90_J1LNP2	S A I P T V E F L C G F Y D V	
UniRef90_H3A2C0	S E K T A R V I C D S C T V	
UniRef90_A0A023Y4Q8	A T D P T A Q V I H D C F T K T G E P	
UniRef90_R5CDM4	S E I P T L C L L C S F F D K D G Q P F	
UniRef90_UPI00047A6B6A	A E A P T A Q I I H D C Y T	
UniRef90_H2IH71	T K D P T G Q V I H D C F T V D G E P	
UniRef90_H0DHE3	R E K T A R M L C D L Y D V N G E P	
UniRef90_C0N1N8	Q P G Y A R I I C N G H V N G K P Y	
UniRef90_G3RZM5	A D R T A R V I C D T F T V T G E P	
UniRef90_U5Q3H0	S S I P T L G L L C S Y F N	
UniRef90_L0T1C3	A T D P T A Q V I H D C Y T K D G Q P	
UniRef90_UPI000469FDFD	T G D W T L Q V I H D A Y D	
UniRef90_X1EBT8		
UniRef90_X1N3X5	A T I P T V D L I C S Y Y T	
UniRef90_N0B399	A S S P T A Q V I H D	
UniRef90_A3V6S8	A A D G T L Q V I H D A Y D	
UniRef90_W5NK79	S E R T A R V I C D S C	
UniRef90_UPI000155470C	A E R T A R V I C D	
UniRef90_H3NXH2	A R E P T A Q I I A D C Y K A S G E P	
UniRef90_UPI0004575FCA	L E R T A R V L C D Q C	
UniRef90_UPI000441C924	T E Q T A R V I C D	
UniRef90_UPI0003018F0F	S D M P S L E L L C S F F D	
UniRef90_B3SZZ8	K K E	
UniRef90_G2FKP3	E K R T A L L L G D M Y Y H G Q P	
UniRef90_B7S1K5	A R E P T A Q I I H D C Y T M D G K P	
UniRef90_X0TZA7	G E A R V A R L I C D I	
UniRef90_Q8ZT45	N G G K T A L V F T N T V D P H P M D P	
UniRef90_S5Y7D8	K K E V A W V A S N C V M L G S G	
UniRef90_UPI000368805C	R K N T A R M L C D L V D V D	
UniRef90_C7D9B0	T G D W T L Q V I H D A Y D	
UniRef90_UPI0003C27C4D	T E Q T A R V I C D P F T G K P	
UniRef90_F8CKT9	G P G K V L V F S E V L E R D G T P Y	
UniRef90_W9H833	K P E V G W L A A D L W M D G E P	
UniRef90_UPI0003B3CE45	Q K G L A H V I G D V	
UniRef90_UPI00037E7A26	T D G V A R F A S D L F V D G E P	
UniRef90_A0A028V658	Q P G Y G R V V C V G H V N G Q P	
UniRef90_G7GRU0	I K E G L A I V H C D P H	
UniRef90_K9U728	M P G F A R I A C V G H V K G K P Y	
UniRef90_UPI0003653047	Q P E P T A A V I C D C E L D N G D P	
UniRef90_UPI000376055B	A D D P T A Q I I H D C Y Y L T G E P	
UniRef90_UPI0003696A0D	V P G T A R V I A D I V R P D	
UniRef90_UPI00035EAE3E	E S D P T A Q V I C D V V	
UniRef90_A0A037ZEX3	T G D W T L Q V I H D I	
UniRef90_E6TU17		
UniRef90_D7DQ76	A V D P T A Q V I M D C V D	
UniRef90_C1F1J4	G P G K V L V F	
UniRef90_A3TWF2	K P E V A W V A A D C	
UniRef90_UPI0004651183	K P E V A W L A S D C L M	
UniRef90_F7DFP2	A E R T A R V I C D T F T V	
UniRef90_U1Y546	A V D P T A Q V I H D C V H F D G S P	
UniRef90_Q936T0	Q E K T A S V L C D I Q H L N G E P	
UniRef90_UPI00039922F2	T E Q T A R V I C D S F T V	
UniRef90_V5SFA1	A S S P T A Q V I H D A E W Q N G E P	
UniRef90_UPI000380351D	A S D P T A Q I I H D A F H R D G	
UniRef90_K7GE82	T E Q T A R V I C D	
UniRef90_X0S352	W E Q P T I S F L C D T V D P F A G D P	
UniRef90_A0Z8M0	A R E P T A Q I I A D C	
UniRef90_K0EQ39	K P K T A L V F C D V V D	
UniRef90_U4PQR8	E T D P T A Q V I C D V V D P Y T P	
UniRef90_Q986L1	K K E V A A N C I M D K E V D	
UniRef90_A8LR39	T A D W T L Q T I H D I E D	
UniRef90_I3CJN4	A T E A T A Q V I H D C F	
UniRef90_E0MQ28	E T D P T A Q V I C D M S D	
UniRef90_Q01X25	G A G K V L V F G E V I D K D G T P Y	
UniRef90_D5AP04	T A D I T L Q V I H D V F D	
UniRef90_V9Y1H7	R P A T A L V F C D V V D R A G Q P	
UniRef90_W1VLN5	G D E N V A G L I C D V Y E P F A G D P	
UniRef90_Q2C9T7	A D D G T L Q V I H D A F D Q A G D P	
UniRef90_X5L1D5	V K E G L A L V H C D V H V E G K P	
UniRef90_F7E645	A E K T G K V I C D A Y T I	
UniRef90_A0A024ILK2	A K E P T A Q I I H D C F	
UniRef90_A1RDQ0	E P G V A S V I C D A Y E M S G E P	
UniRef90_Q0JZ51	Q P G L A R I V C	
UniRef90_H6LKC1	C D K T A F V L G E L Y	
UniRef90_K2QAS8	K P E V A W V A A D C	
UniRef90_L8MUG8	Q P E I G W M P A D L Y M N G E P	

UniRef90_E3J5R3 UniRef90_K2FSH7 UniRef90_Q6F9G9 UniRef90_UPI0003716CFE UniRef90_C1DA77 UniRef90_UPI0004068244 UniRef90_E7GK13 UniRef90_E8RLS9 UniRef90_A1T512 UniRef90_I1B001 UniRef90_F2L2A1 UniRef90_UPI0003744A5D UniRef90_Q988Z8 UniRef90_A0A022LQZ4 UniRef90_R7AFE0 UniRef90_I0HSH7 UniRef90_UPI00035FDD7A UniRef90_S9QVY7 UniRef90_UPI00022608A4 UniRef90_A1RC11 UniRef90_UPI000371CD40 UniRef90_B5IB82 UniRef90_UPI000476945E UniRef90_UPI000477D7A2 UniRef90_A4Z070 UniRef90_H6LJR7 UniRef90_D1Y6T5 UniRef90_W4XCT6 UniRef90_U3THJ3 UniRef90_D2BFL8 UniRef90_UPI0003721A8A UniRef90_W9UWY7 UniRef90_UPI00037C2428 UniRef90_G2NVA7 UniRef90_UPI000478D14C UniRef90_UPI0003B3A59F UniRef90_W7Q3R4 UniRef90_Z5XGP9 UniRef90_D7DC69 UniRef90_UPI00036CEF21 UniRef90_D1B6X7 UniRef90_UPI00046B063D UniRef90_W9HAD9 UniRef90_UPI00034B86A7 UniRef90_UPI000237539B UniRef90_UPI0003688111 UniRef90_Q2JM4 UniRef90_UPI00047843E2 UniRef90_Q60GF5 UniRef90_A0LW13 UniRef90_UPI00034DB5DE UniRef90_UPI00047A51C6 UniRef90_K9HN93 UniRef90_UPI000471D53B UniRef90_UPI00037380CD UniRef90_A1UEP3 UniRef90_Q31EN3 UniRef90_Q11M09 UniRef90_E6WBC2 UniRef90_A9W3A2 UniRef90_K8R831 UniRef90_UPI0003B59CA4 UniRef90_I9C5T6 UniRef90_Q120M2 UniRef90_UPI00037FAB47 UniRef90_D5CTN0 UniRef90_D4YQC1 UniRef90_UPI00035C1FE3 UniRef90_A3VM47 UniRef90_UPI000365A8C8 UniRef90_D0KYX0 UniRef90_K9P634 UniRef90_U1MV11 UniRef90_A1UP61 UniRef90_R7T6B1 UniRef90_UPI0004639E36 UniRef90_Q0BQ94 UniRef90_A0A031LSQ4 UniRef90_D6BA99 UniRef90_UPI0002DFB7C8 UniRef90_R7TLQ7 UniRef90_D1C895 UniRef90_I0HS15 UniRef90_UPI00031AF641 UniRef90_UPI0003A33A60 UniRef90_U7FS27 UniRef90_U6ZNS3 UniRef90_Q1IVC9 UniRef90_A0LTV8 UniRef90_Q11S58 UniRef90_UPI0003700395 UniRef90_UPI0002898BCB

1 10 20 30 40

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

UniRef90_E3J5R3 A L V T D G V G F A G Y A V G A I Q Q P S D P D L M V I P D P A S Y T P L P 80
UniRef90_K2FSH7 N S Y D N M T F D G S S I R G F S R Q Q A E S D D L R L G L D W G A F W W L P F
UniRef90_Q6F9G9 K A I E K D G V G F A G F A I S G M G M P H G A D S D D F M V K G D D A N S L T F P V P W
UniRef90_UPI0003716CFE T M A T N G A G F A G F A A W L D L S P A D S D D L L A I P D D A N S L T F Q L P W
UniRef90_C1DA77 E A V L I Q T V T G D Y P A D N Y L D L D L T D P D M L L R P D P A S L I R F V P W
UniRef90_UPI0004068244 N A L D A G P F F F D R G Y A T I E G L G G S P N V K M L P D P D P G T T F Y Q L L P W
UniRef90_E7GK13 K A I K E G Y A I N R F A L G G L D R A G N V M E L Y L K P D D M T Y T Q L L P W
UniRef90_E8RLS9 T S I F Y Q T I T G D F P D L E G L V G T V I Q S D I F L R P D D F R T T L A A V P W
UniRef90_A1T512 D S V A R R G S S M D C F A T V S G W H T G Y A S D V V L A P D D L S T T L R P V P W
UniRef90_U1B001 A G M V Q D G A G F A G F A T W L D L T P A H A D M L A M P D P E T V I Q L P W
UniRef90_F2L2A1 R D A F I D G I A Y D G S S I P A Y T T V N K S D F V A E V D A D A V Y I E T W
UniRef90_UPI0003744A5D E S V L L Q T A T G D Y P E D D E A Y Y N I L D P D D M L L R P D D E K A A F M V P W
UniRef90_Q988Z8 S N F M T T I S G G Y P E D G N G F H Y P E D D D L K L M P D D L S T L T V V P W
UniRef90_A0A022LQZ4 Q E V L T R G E R V D G S S V F P G T D T D A S D V Y I V P R H R T A F L N P F
UniRef90_R7AFE0 K A M K E G Y A I N R F A L G G L Q K A E S V E L L K P D D A S T Y Q V L P W
UniRef90_U10HS17 E A I V A M G V T G E F P E E G P Y Y D V T D R D M H L Q P D A S T V I R V P W
UniRef90_UPI00035FDD7A K S V L L N T V N G E Q P N N S P Y V G S T D P D M I C V P D P A S T I R V V P W
UniRef90_S9QVY7 G D M A V E G A G F A G F A T W L D L T P A H P D D L M A V P D P D S S V I Q L P W
UniRef90_UPI00022608A4 T S T Q K N G A G F A G F A A S F D M S P A D P D L I A M A P D P S T V I Q L P W
UniRef90_A1RC11 E S V A S K G T N I C N Q S I P G W Q T G Y P D I T L L P D D L S T L K L V P W
UniRef90_UPI000371CD40 K A M Q T E G A G F A G F A T Y L D M S P A D P D M V A I P D D P T S T L I Q L P W
UniRef90_B5IB82 E S F F K N G I G I D G S I P G F A S V N R S D D L V A K P D M R T S F V K I P W
UniRef90_UPI000476945E N M L E G S E L F T G A A L E G I Q S I N D D E V A A Y P D R D S A T I L P W
UniRef90_UPI000477D7A2 M R N L E K G I Q F H R T A M S D L Q M G V Q A S E L I A L P D D D T F N I V P W
UniRef90_A4Z070 G M V K T G A G F A G F A T W L D M T P A D P D V F A M P D P A S T L I Q L P W
UniRef90_H6LJR7 Q N Y I E N G L N F Y G G L T C D V E V T Y G D A C T I P D D L S T F Q V L P W
UniRef90_D1Y6T5 E K V L R D G L G F D G S N Y G Y A K V E S N A D M V A V P D M G R A L L E R R
UniRef90_W4XCT6 E K A T G G M S L Q A D V I P G T G Y A E E A D A V L F P D Y S T F T V L P W
UniRef90_U3THJ3 R D Y V A S F D G S S V Y G F T P I E N S D L L L K H V P E T T L V S V P W
UniRef90_D2BFL8 R A V Y H T S P Q Q G T V A V P G G L D L G L P D V C I R P D D L S L V E L P W
UniRef90_UPI0003721A8A F P M V G V V Q S V T G D C L Q E L V P E V D P D M I L V P D D T G S L R Q I P W
UniRef90_W9UWY7 A E K G M R G D F V D D D V Y S L L D P A D D M I C H P D P D A I F L I P W
UniRef90_UPI00037C2428 P D S Q G A G C T I F T P V D D V W L T R H S F M K A R P D D T T A V P L N W
UniRef90_G2NVA7 H A V G H G A F L G H S H I P G G L E A G M P D I L V R P D D L T L V A L P W
UniRef90_UPI000478D14C E F V F F Q A V T G D S A V E S K I V N P L D R D V R C V P D L A T L R L V P W
UniRef90_UPI0003B3A59F G M Q K A G A G F A G F A T W L D M T P A D P D L F A K P D D P E S L I Q L P W
UniRef90_W7Q3R4 E S V L L Q T V T G D Y V E D E L Y Y S L L D P D M I C K P D D I S A V Y P V P W
UniRef90_Z5XGP9 L L A T E G V G F A G Y A V G A M Q E P K D P D L M A M P D P E S F T P I P F
UniRef90_D7DC69 E D P S S V T A L F D G S S V Y G F L D I S F S D V V L K P V K E T E L L P W
UniRef90_UPI00036CEF21 Q G L H N D S H R L P Q S I F G G Y A T E G E E L I L R P D D C H A W L E D R
UniRef90_D1B6X7 E E I F S D G V G F D A S N Y G F A K V H Q S D M V A I P D D C H A W L E D R
UniRef90_UPI00046B063D S A F E K G I G I E G A H V A D D L P L A G A G S D V L T R P D D P A R F I L P W
UniRef90_W9H4D9 E A I F I Q T V T G E Y P D D E D V T S P A N S D I Y M R P D D A N T I R L V P W
UniRef90_UPI00034B86A7 E D V M D H G N T V D G Y A L T S W E R G Y G D M A M V P D D L S T L R V L P W
UniRef90_UPI000237539B M V L E A G A G F A G F A I W G V G I E P N G S D F M A V G D L S T L T T V P W
UniRef90_UPI0003688111 H A L L A D G E R V D G S S L F G I V D A F L S D L Y I V P E Y K T A F L N P F
UniRef90_Q2JM4 F M A E G Q A G F A G F A A W L D L T P A D P D V F A Q P E R E R L F Q L P W
UniRef90_UPI00047843E2 R S L R G G E L F S F H A L D G L G S P E P D G E V A V A P D D W E R G F P V P W
UniRef90_Q60GF5 S A F F D T V S T F S P S D G G F G N P E S P N V V M V P D D P T T F R V L P W
UniRef90_A0LW13 D E V A G H G T V S G Y D I S S W E R G Y G D F L L Q P D D M S T L R L I P W
UniRef90_UPI00034DB5DE K S V L L N T V N G Q Q P D N G P F V G D T D P D D M V C V P D D A A T V R L V P W
UniRef90_UPI00047A51C6 Q M A A G S E L F T G A A L D G L Q D I S D E E L S A R P D D L D S A V Q L P W
UniRef90_K9HN93 A Y R T G R P G V D V E D A G L L W E I G D R D C T L R P V A G T L V R C P W
UniRef90_UPI000471D53B P D L G L N T V S G D Y P E D W S A V Q P S D R D M V L R P D D E S T L R L V P W
UniRef90_UPI00037380CD H D N F Y Q T I T G E D V E M D I K N D W A E S D M V L V P D D M S T A M A V P W
UniRef90_A1UEP3 D D V A A H G N T V I G Y A I S S W E T G Y G D M V M T P D F D T L R L L P W
UniRef90_Q31EN3 H M L E G S E L Y T G Y A L D G L Q M P N E D D I A S V P D D L D S L I Q L P W
UniRef90_Q11M09 S A V F M A T I S G E Y P E D G G F T Y P E D D D L K L V P D D L S T L S V V P W
UniRef90_E6WBC2 Q M A Q G S E R Y T G Y A L D G L Q S P H E D E L T S V P D D L D H I I Q L P W
UniRef90_A9W3A2 S T C R N G A G F A G F A T W L D M S P A D A D L L A M P D D A E G L I Q L P W
UniRef90_K8R831 K A V Y E N G G G F D M P E M Q G A C D T L M V A D P E T F R T L P W
UniRef90_UPI0003B59CA4 R A I L A E G E R V D G S S L F G M V E T S L S D L Y V V P E Y R T A F F N P F
UniRef90_I9C5T6 G V M F T Q G A G G E P A L Q G G G D V I M V P D D P T L R R L P W
UniRef90_Q120M2 A A L W D G V N A G G G F A I E G F Q G G A D F T V V A D P S T F K V L P W
UniRef90_UPI00037FAB47 E L C I G K G P Q F A V H S V S P E L T P A D P D Q I M L P D D L N S V Y I C P W
UniRef90_D5CTN0 H M A K G S E R Y T G Y A L D G L Q A P N D D E L T S V P D D L D S V I Q L P W
UniRef90_D4YQC1 D E A M H G N T V D G Y E I S S W A K G Y G D L V M R P D D L S T I R R I P W
UniRef90_UPI00035C1FE3 T Q D S R L P E S I L V Q T V T G L V D P A D T D M L L V P D P D S V R L N P W
UniRef90_A3VM47 S V L A D G M K A F P V W S G D D V P M A G A S D M L L V P D D A A T F R R L P W
UniRef90_UPI000365A8C8 Q V V F A V M L N N D I S E D S G V A D V S Y S D M K I P D D L N T F T L V P Y
UniRef90_DOKYX0 H M A Q G S E L Y T G Y A L D G L Q R P N D D E I A S V P D D L D H I I Q L P W
UniRef90_K9P634 A E L A R S G A G F A G F A T W L D M T P A D P D V L A I P D D P T S L M V L P W
UniRef90_U1MV11 M A K V S G G F T P F N T A T E G S Q H G P M G E I R L I P D A D T F Q R L P Y
UniRef90_A1UP61 V Q M A G G S E L F T G A A L D G L Q D V S D E E L S A H P D D R G F V L P W
UniRef90_R776B1 H M W E H G A L V F C G S E V P H A E V E F G N M K V I P D D P G T F H V V P W
UniRef90_UPI0004639E36 G S L E S G C S I T T S G G G F G M K E M A D I L M V P D D P T F R V L P W
UniRef90_Q0BQ94 G M V K S G A G F A G F A S W L D L T P A H P D V N A V P D D S L I Q L P W
UniRef90_A0A031LSQ4 T I T Q R D S G I S Y P E S L A L L D Y K D Q P D L L A I P D D P S T F V A I P Y
UniRef90_D6BA99 D E V L D H G N T V D G Y A M A S W D R G Y G D F A L H A D P A T L R R V P W
UniRef90_UPI0002DFB7C8 G A L R G G V N M T T T S A G G G F Q F E G M Q D F V L V A D P S T F R I L P W
UniRef90_R77LQ7 E S V L I Q G V T G D Y V D D D L I S A A E P D M I L K P D D E S A V H M V P W
UniRef90_D1C895 R V G T R G L R F Y G T D D G R A S N N A P D F T L L M P D D F D T L A L P Y
UniRef90_I0HS15 E V L L A T G A G F A G P S I W G T A L P R C S E Y Y A R G D A A T A L P L P W
UniRef90_UPI00031AF641 P V E R D G A F F C S F A S N L G L G P E A E I A A V P D P D S L I Q L P W
UniRef90_UPI0003A33A60 K A Y E K P A S I F A L N I Q G T T E I G D A D R V C L P I P G T L C V E P W
UniRef90_U7FS27 A S I F A Q T I S G D Y P D D D W H N P I D G D L Y F K P D Y S T L T T V P W
UniRef90_U6ZNS3 H E R L L Q T V T G D F D D D D L Y Y E L L D P D M L C R P D D P S S I F L V P W
UniRef90_Q11VC9 Q A I L A D G E R V D G S S L R D M V D V N L S D L Y V V P V Y K S A F L N P F
UniRef90_A0LTV8 H H L G E G G I A F C R G V V A G G L D A G L P D V L A K P D D L S T V R K I P W
UniRef90_Q11S58 D G L N K E G L G F C D S A D A G Y D S N V G Y P D K L A Q P D L S T F R L I P W
UniRef90_UPI0003700395 E V L N K G G V F E D Y A D V P F S N Y Y D V I A V P D D L S T F K I P Y
UniRef90_UPI0002898BCB L L C A G K G P Q F A V H S V S P E L G P N D S D Q I P V P D D L D S L M I C P W

90 100

```

UniRef90_E3J5R3  V K E G L A L V H C D P H
UniRef90_K2FSH7  G P G K V L M M G K I N D Q D G K P Y
UniRef90_Q6F9G9  K P G Y G R V V C E G Y V I N G K P
UniRef90_UPI0003716CFE  K P E V A W L P A D L C R V D
UniRef90_C1DA77  A T D P T A Q L I Y D C F
UniRef90_UPI0004068244  A P K T A L V E C D L Y M T N G Q P F
UniRef90_E7GK13  D S E N V A G V I C D V M D P D
UniRef90_E8RLS9  A T D P T A Q I I H D A F H P D
UniRef90_A1T5I2  E P G H A F V L C D V V N
UniRef90_I1B001  K P D
UniRef90_F2L2A1  N G G K T A L A F T S T L D P H P M D P
UniRef90_UPI0003744A5D  A L E P T A V V I H D C Y D V D
UniRef90_Q988Z8  E E D P T A A V I C D L V
UniRef90_A0A022LQZ4  G E R T S L D V L C S F Y E D G T P L P Y
UniRef90_R7AFE0  D S E N V A R V I C Q V C N
UniRef90_I0HSH7  A T D P T A Q V I H D C Y D
UniRef90_UPI00035FDD7A  A S E R V A L V I H D C Q E F D G T P
UniRef90_S9QVY7  K K E
UniRef90_UPI00022608A4  K P E
UniRef90_A1RCI1  E P G T A S V I C D I Y E
UniRef90_UPI000371CD40  Q P D
UniRef90_B5IB82  R H D E Y L V L L K T Y Y E A F D K D P
UniRef90_UPI000476945E  N R E V A W F A S D L Y L Q G K P F
UniRef90_UPI000477D7A2  D K Q M G S F F C T A Y E P
UniRef90_A4Z070  K P E
UniRef90_H6LJR7  V P N T A R I I V D P H W Y D G T P
UniRef90_D1Y6T5  G E F N T V H V E C D V V
UniRef90_W4XCT6  A E N T A R I L L
UniRef90_U3THJ3  R S G
UniRef90_D2BFL8  E P G V A H C L G D A Y D P A T G L P
UniRef90_UPI0003721A8A  A K E P T A L L I H D C V
UniRef90_W9UWY7  A Q E P T A Q V I H D C Y D
UniRef90_UPI00037C2428  R E N T A A V I Y D M Y N P D G S P Y
UniRef90_G2NVA7  E P G V A G C I G D V R D P A T G L P
UniRef90_UPI000478D14C  Y D E P T A Q V I C D C H
UniRef90_UPI0003B3A59F  K P E
UniRef90_W7Q3R4  A L E P T A Q V I H D C Y D
UniRef90_Z5XGP9  I K D G L A I V H C D P H
UniRef90_D7DC69  D K
UniRef90_UPI00036CEF21  Y E D P T A Q V I C D
UniRef90_D1B6X7  E G L S V L H V I C D V V S T E R E P F
UniRef90_UPI00046B063D  S P H S A V L L C D V I D
UniRef90_W9H4D9  Y T E A T A Q V I S D C D Y A D G S P
UniRef90_UPI00034B86A7  Q T A T A L V I A
UniRef90_UPI000237539B  Q P G L A R L V C
UniRef90_UPI0003688111  D E G S L D F I C
UniRef90_Q2JMQ4  Q P E V A W M P A D L V Q V N G D P
UniRef90_UPI00047843E2  K P E
UniRef90_Q60GF5  A D R T G W M L A D L Y M R S G R P F
UniRef90_A0LW13  L P A T A M V I Q C D V
UniRef90_UPI00034DB5DE  A A E P V A V V I H D C Q E
UniRef90_UPI00047A51C6  R K E V A Y F S S D L Y H E G K P F
UniRef90_K9HN93  M A T P T A Q V L M A V D P D S L P A Y
UniRef90_UPI000471D53B  A T E P T A Q I I H D C F
UniRef90_UPI00037380CD  A K Q A T L Q I I H D L N D R E G K P
UniRef90_A1UEP3  L P G T A L V M A
UniRef90_Q31EN3  Q P E V A W M A A D N T L H G E P Y
UniRef90_Q11M09  E T D P T A Q V I C D
UniRef90_E6WBC2  E P K I A W M P A D N H F Q G E P Y
UniRef90_A9W3A2  K P E
UniRef90_K8R831  A P H T G W I L C D V Y
UniRef90_UPI0003B59CA4  D K G S L D F I C
UniRef90_I9C5T6  A P G S A W M L C D L Y Y P D
UniRef90_Q120M2  T P R T G W V L C D A Y M P D G K P
UniRef90_UPI00037FAB47  D K T T A I I F A D L F W E G A P Y
UniRef90_D5CTN0  E P K I A W M A A D N H F Q G K P Y
UniRef90_D4YQC1  Q P G T V L V T C D I
UniRef90_UPI00035C1FE3  A N D P T A Q I I H D C Y T
UniRef90_A3VM47  S P H S G W L L C D V
UniRef90_UPI000365A8C8  L D G T A R M I G D I Y E P F A Q S P
UniRef90_D0KYX0  Q P E M A W M P A D N T F H G E P Y
UniRef90_K9P634  Q P D
UniRef90_U1MV11  A E N T A V M L C D K Y T V D
UniRef90_A1UP61  R K D I A L F L S D L Y V G G E P F
UniRef90_R7T6B1  A G G K D A R I A E V I C E G Y
UniRef90_UPI0004639E36  A P A T G W L L C D I Y
UniRef90_Q0BQ94  K P E V G W L A A D L H M
UniRef90_A0A031LSQ4  L E R T A R V L S F L F Y P F T P S P Y
UniRef90_D6BA99  N D G T A L L M A
UniRef90_UPI0002DFB7C8  S P R S G W V L C D A Y M
UniRef90_R7TLQ7  A L E P T A L V I H D C Y D
UniRef90_D1C895  A P G E A R V I C E L Y D
UniRef90_I0HSI5  W P G V A R L V G N V V A G E P F
UniRef90_UPI00031AF641  E P T V G W V T S D V Y Y E G K P F
UniRef90_UPI0003A33A60  Q K R P T G Q L L M T M Y E L D R K T P F
UniRef90_U7FS27  E S D P T A Q L I H D A V T
UniRef90_U6ZNS3  A L E P T A I V I H D T F D K F
UniRef90_Q1IVC9  G E P S L E L T C
UniRef90_A0LTV8  E D G V A H V L A D I V E P D
UniRef90_Q11S58  E
UniRef90_UPI0003700395  L E R T A R V L
UniRef90_UPI0002898BCB  D K T A W V F S D L W W E D K P Y

```

UniRef90_B8IVY4
UniRef90_V6L7L5
UniRef90_S6FLR9
UniRef90_A3VWA1
UniRef90_G8MLU8
UniRef90_V4RHR0
UniRef90_UPI00042360A6
UniRef90_UPI00029A83FA
UniRef90_A1RZ58
UniRef90_U11JM5
UniRef90_UPI00036EE161
UniRef90_A0A046I950
UniRef90_A0A059INY2
UniRef90_UPI000363B02C
UniRef90_M2XKA2
UniRef90_A5FVY0
UniRef90_UPI000378C134
UniRef90_A3YX05
UniRef90_I9A225
UniRef90_J9Z0R0
UniRef90_A0A022G9I4
UniRef90_A4EH92
UniRef90_L9PHJ7
UniRef90_B9R2E9
UniRef90_F6AFB9
UniRef90_UPI00047D417F
UniRef90_UPI0002FD1E39
UniRef90_K9ESY5
UniRef90_S6BK97
UniRef90_UPI000349E4AE
UniRef90_A5EAE5
UniRef90_X5KY12
UniRef90_K2MM07
UniRef90_I3TH92
UniRef90_UPI000288B892
UniRef90_H6RTX2
UniRef90_Q1AR77
UniRef90_X1CW29
UniRef90_K9XHJ5
UniRef90_V5XBU9
UniRef90_M5QZ87
UniRef90_UPI00047E4476
UniRef90_G8WY20
UniRef90_A5W3J1
UniRef90_R6YXG6
UniRef90_K5BEN1
UniRef90_UPI00046F0FB6
UniRef90_N0B9D2
UniRef90_C1DK81
UniRef90_E8ZF58
UniRef90_R7ZR27
UniRef90_F4FBM7
UniRef90_R4T1D7
UniRef90_A0A023CES3
UniRef90_D5AP01
UniRef90_K0F3Z9
UniRef90_K9UGM2
UniRef90_H0QK45
UniRef90_B4WKMO
UniRef90_W5W0U1
UniRef90_L1KPS5
UniRef90_UPI000364B6BE
UniRef90_Q3AE70
UniRef90_UPI000367F747
UniRef90_S5XVW0
UniRef90_D3T1D2
UniRef90_T2GUF1
UniRef90_UPI0002E13504
UniRef90_UPI00023772A
UniRef90_E9SZ71
UniRef90_UPI00047C9665
UniRef90_UPI0004686216
UniRef90_S9Q7A6
UniRef90_H2C2Y1
UniRef90_UPI000476E0C3
UniRef90_A3SRH2
UniRef90_T2RS11
UniRef90_U1PHS8
UniRef90_A1BAR6
UniRef90_UPI000360EBEF
UniRef90_D0KX59
UniRef90_UPI00047CFBA9
UniRef90_D2AT75
UniRef90_Q1QZR8
UniRef90_V4Y0L3
UniRef90_S6GRZ0
UniRef90_D0CNW2
UniRef90_K2ML31
UniRef90_A5EGK9
UniRef90_UPI0003B659D4
UniRef90_E8NFX7
UniRef90_W0J585

1 10 20 30 40

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

UniRef90_B8IVY4 T S H R T V F P V F T A G G G F G M R E M E A A D V V M V P D P T T F R T L P W
UniRef90_V6L7L5 D E V L L E S G N T V D G Y E M A S W E R E M E A A D V V M V P D P T T F R T L P W
UniRef90_S6FLR9 R L W R N G R Y M P G S L I S L D A D V E E D T G L V W R P V P P A S T L L V P V P W
UniRef90_A3YWA1 Q L A R D G A G F A G F A A W L A M T P A D P D D V L G L P D P A S T L A V L P W
UniRef90_G8MLU8 K A M K S G V F A K D T S S A G G G F G M P E M P C D T L M V A D P P E T S F R V L P W
UniRef90_V4RHR0 G A M A K N G A G F A G F A G G M D M T P A H P D L I A L P D P A S T F R V L P W
UniRef90_UPI00042360A6 S A L H S G V N M G G G F A D G D M Q G G A D F T M V A D P D P A T F R V L P W
UniRef90_UPI00029A83FA Q E V C K N G A P F A G F A T W L D L T P A D P D V F A K P D P E S T I Q L P W
UniRef90_A1RZ58 P D D V J A R G F R L D A F S T G F S G V E D S D A T L L P D L S T L R V Y E S
UniRef90_U11JM5 T S H K T V F P V F T A G S G G F G M K E M E A A D V L M V A D P T T F R V L P W
UniRef90_UPI00036EE161 D D T L J A H G T E G D M N T V A G Y A M S G Y G D F V M R P D L A T L R R T P W
UniRef90_A0A0461950 D D I A T R G N T V P G Y A M A S W D T G Y G D M V M T P D L S T L R L P W
UniRef90_A0A0591NY2 Q D S F F L P N S I F L Q T I T G E W A E N E P D M V L V P D L T T A T A A P W
UniRef90_UPI000363B02C K A Y E Q G P I S I Y G M N I K G N L E I G E S D A I C F P V S G S L T R Q P W
UniRef90_M2XKA2 E L A T D G V F A G Y A A G A M Q E P K D P D L V A I P D P S S F T P I P F
UniRef90_A5FY0 R G G A R L P E S I F I Q S V T G E Y P E D P P E D T L L I P D P A T V R L V P W
UniRef90_UPI000378C134 R S I Y G T S P M G D V I D I D G G L S A G L P D V L A L P D L S T I Q P V P W
UniRef90_A3YX05 A M L J A G S E L F T G A A L D G V Q D V S D D E V A A I P D L A T A T V L P W
UniRef90_I9A225 R A Q A D G V F A G F A A G G T G Q V G D P D I I A M P D L D S T A V A L P S
UniRef90_J9Z0R0 S V A N K G F Q L V Y G A T A N L F T G P E A H E L V G I P D P E T F V Q I P W
UniRef90_A0A022G914 S A V F M T T I S G D Y P E D G G F E Y P T D G D L R L D P D L S T L S I V P W
UniRef90_A4EH92 P D A F Y Q T I S G E Y V D M D I E N Q W L E K D V V L K P D M A T A C A I P W
UniRef90_L9PHJ7 Q E R V T G N Y P T E N A A Y D R A I S T D R D M I L R A D P G S T I T K V P W
UniRef90_B9R2E9 F S G P V M T M P A S D I F A Q T N P T D G D L Y F R A D Y S T L T T V P W
UniRef90_F6AFB9 H K V Y E K G I N L P A S D I F A Q T N P T D G D L Y F R A D Y S T L T T V P W
UniRef90_UPI00047D417F D E I V E H G N T V D G Y A M S S W S R G Y G D F V M A P D L D T L T V V P W
UniRef90_UPI0002FD1E39 T T A E S G F Q A M D R R S Q Y L G Y G P E A A E L V A I P D P E T F C Q L P W
UniRef90_K9ESY5 T M A E K G I Q L V Y G A A I D R T Q G P E S A E L V A I P D P E T F C Q L P W
UniRef90_S6BK97 A E G G M R L P E S V L Y A L L D E A D D M V C R P D P D A I F L V P W
UniRef90_UPI000349E4AE S I A Q A G A G F A G F A A W L D M T P A D P D L A I P D D R D R L T Q L P W
UniRef90_A5EAE5 T S L E D G C S I D T S A G G G F G M S E M S D A L M V A D P D T T F R V L P W
UniRef90_X5KY12 D R A R G S G F A F C E A S L G W N T D G Y P D V H A V P D L T T F R R L P W
UniRef90_K2MM07 A S G F E E T H G L E M P V T V E G F K E A G Y G D Y T M K P D L S T I R R I P W
UniRef90_I3TH92 R S L T S H G L R L P E P V F E D I T D E A M P D V W M K P D E N S I R K V P W
UniRef90_UPI000288B892 D E V L I Q H G T E G D M N T V R G Y A E S G Y G D F A M H P D L T T L R R I P W
UniRef90_H6RTX2 E E V L P H G N T V P G Y A M T S W E S G Y G D F A L S P D T S T L R V V P W
UniRef90_Q1AR77 E E V V E H G N T V G G Y A M S W E R G Y G D F V F K P D L S T L R V V P W
UniRef90_X1CW29 S I M S N G I G F D G S S I A G I T T V D D S D R L L L L P I R D S F R V V E F
UniRef90_K9XHJ5 T A V E N D G A C F A P F A S N L G L G P D A H D L A A V P D P N S L T V L P W
UniRef90_V5XBU9 E E V A A H G A E V D M N T V E G Y A E T G Y G D M V M T P D F D S L R L P W
UniRef90_M5QZ87 N E Q L L Q T V I T G D Y V E D D I Y Y D A A D D M H C R P D Q D A V F I V P W
UniRef90_UPI00047E4476 R G G L D H G T H F D G Y A L M H W E T G Y G D W L A K P D D W S T L R V L P W
UniRef90_G8WY20 D E V L T G G N T V D G Y A M S W E R G Y G D F A L R P D P A T A R R T P W
UniRef90_A5W3J1 H E R G M R G D Y V D D I Y Y N L L D A A D D M V C R P D P T A V Y Q I P W
UniRef90_R6YXG6 K D I Y N N L V K C D G S S L C G L G T A D N S D R V L C L D E N S H Y P F
UniRef90_K5BEN1 R R A L G S G F A F C E A S L G W N S D G Y P D V F A V P D L S T Y R P L P W
UniRef90_UPI00046F0FB6 E D V M D H G S T V D G Y E V S S W E T G Y G D M V M K P D L A T L R L L P W
UniRef90_N0B9D2 S D L V S G V T Y V T P N S I Y G C V G E L K H I P D L N T F R I V P Y
UniRef90_C1DK81 E S V L L Q T V T G D Y V N E D V Y Y R P A E I D M F C H P D E S A F L V P W
UniRef90_E8ZF58 R A L R Q G V G M G G T A D L P G F A G A S N L L L L P D P E S F I E L P W
UniRef90_R7ZR27 N S I L D G G M G F C A Y A V S F G W D M D D K S W H N G Y P D F D A L V D V
UniRef90_F4FBM7 D Q V V F H G N T V D G Y A M S W E R G Y G D F V M K P D F D T L R R V P W
UniRef90_R4T1D7 N E V V E H M N T V D G Y A M S S W E T G Y G D F V M R P D F D T L R L P W
UniRef90_A0A023CES3 R N L E K G V Q F H R T A V S D L Q T S R S G E L A I P D I D S F N V L P W
UniRef90_D5AP01 S K V F S E G T R F P F S A I W G E D I E E S P L V L R P T E R G F M P M P W
UniRef90_K0F3Z9 D E V V E H A T E V D M T T V A G Y A D T G Y G D F V L R P D L N T L R L V P W
UniRef90_K9UGM2 Q M M A G S E L F T G A A L D G V Q E V S D D E V A A H P D P D S A T L L P W
UniRef90_H0QK45 K V A E T G V A A S S A A L I W G V M A E G F P D M K L I P R E E S L R K V P W
UniRef90_B4WKM0 A S V E K D G A F F S A F A S N L G L G P E A A E I A A I P D P T S L I Q L P W
UniRef90_W5W0U1 D T V L E H M N T V S G Y Q V S W E R G Y G D F V M R P D L S T L R L T P W
UniRef90_L1KPS5 R A C E H G S P Q Q D V V P V P G G L D A G L P D I C V R P D L D T L V A L P W
UniRef90_UPI000364B6BE Q M A A G S E R Y T G Y A L D G L Q A P N E D E L A S V P D F S G L I Q L P W
UniRef90_Q3AE70 D E V L K K E M T F I H N G E K V L F E P D L E S L T V L P W
UniRef90_UPI000367F747 G E V L R H G T P V A G Y D V S G W E R G Y G D F V L T P D L A T L R P I P W
UniRef90_S5XVW0 E K L L T E G T K F A Y S D I W G E D V E D S P L I L M P T E R G F M P M P W
UniRef90_D3T1D2 D S W E D G F T M N P R S D I V E G S K E I D Y A D A L V H P D P R T C R R V P W
UniRef90_T2GUF1 D E A A A T G N T V G G Y A I E S G W D T G Y G D L V M R P D L S T L R R I P W
UniRef90_UPI0002E13504 E H V L D G G N T V D G Y E M S S W E R G Y G D F A M H G D T G T L R R V P W
UniRef90_UPI00023772A D N I A A H G N P V D G F A M A S W D R G Y G D M A L I P D F A T L R M L P W
UniRef90_E9SZ71 E L Q E D G V G F A G Y A A G A M G Q V P A D P D L V A V P D A A S F T P I P F
UniRef90_UPI00047C9665 D E V A G H G N T V D G Y A M A S W E R G Y G D F V M R P D L A T L R R L P W
UniRef90_UPI0004686216 E T S F K E T H T P D G Y A S T S W E S G Y G D Y I M A P D L S T I R L T P W
UniRef90_S9Q7A6 H K V V E D G T R F P F S A I W G E D I D D S P L V L H P T Q R G F V P M P W
UniRef90_H2C2Y1 K V M G Q D M G V P Y A E S L V L L D Y L D Y E D I A M P D P Q S F I I T P Y
UniRef90_UPI000476E0C3 H L G F C D V I F G D N A K Y T G W H T G Y P D A M A C V P D L S T Y R P I P W
UniRef90_A3SRH2 A S A W E T H C L E M A T P E G F A E Q G Y G D Y V M K P D L T T L R P V P W
UniRef90_T2RS11 E Q V L D H G T V D G Y A M T S W E T G Y G D F V L R P D L A T L R L V P W
UniRef90_U1PHS8 T V F E E G A N M Q S F N A L D A L V D G G S G E V R L R P D P E T F T T P Y
UniRef90_A1BAR6 E N H D E T H C T V P G Y A S A S W A A G Y G D Y V M K P D L S T L R R L P W
UniRef90_UPI000360EBEF S V A M K G F Q L V Y G A T V N L F T G P E A A E L V G I P E P E T F M Q L P W
UniRef90_D0XK59 D I V S P G A G F G S P S I N G T G L P R H G P F Y G Q G D L S T L Q A M P W
UniRef90_UPI00047CFBA9 H Y F E H G G V P V M Y D A V T G L G P V G E V C L V P D W S F T S L P Y
UniRef90_D2AT75 E E V V H H M N T V D G Y A M S W E R G Y G D F V M R P D L S T L R R V P W
UniRef90_Q1QZR8 H G W E E T H C T P G G Y A S T S W Q A G Y G D Y I M K P D L A T L R C V P W
UniRef90_V4Y0L3 K A L D N G V G M V S T A D L P G F E Y A N T L T L H P I P S T L R K I L P W
UniRef90_S6GRZ0 N N A Y D E T H S L E M A T V E G Y K S A G Y G D Y V M K P D M S T L R R V P W
UniRef90_DOCNW2 L A T D L E M A T P D G Y A S T S W E R G Y G D Y V M K P D L S T L R P V P W
UniRef90_K2ML31 S A L D S G F A F C D V V L G W D S N D Q G W H T A Y P D P E S C R E L P M
UniRef90_A5EGK9 Y N P F V D G G G F G M A E M A G F A N V I L V P D P T T F R V L P W
UniRef90_UPI0003B659D4 E E Y A A H G N T V G G Y A I S S W Q R G Y G D M V M K P D L G T L R A A P W
UniRef90_E8NFX7 D E V L P H G N T V D G Y A M S S W D K G Y G D M L L V P D L D T L R R V P W
UniRef90_W0J585 H F A H G S E L Y T G Y A I L D G L Q S P N D D E I A S L P D L D R G L V L P W

90 100

```

UniRef90_B8IVY4      A P R T G W L L C D L Y
UniRef90_V6L7L5     N P G T T A D L A W H D G T P V T A S P
UniRef90_S6FLR9     K A E P S A Q L L
UniRef90_A3YWA1     Q R S V A W V A T D
UniRef90_G8MLU8     A P H T G W V L C D V H
UniRef90_V4RHR0     K P E
UniRef90_UPI00042360A6 A R K T G W L L C D T Y
UniRef90_UPI00029A83FA K P E V G W L A A D L W M D G Q P
UniRef90_A1RZ58     S I G R T G F L I G D L Y
UniRef90_U11JM5     A E N T G W V L C D L Y
UniRef90_UPI00036EE161 H P G T A Q V N A D
UniRef90_A0A0461950 L P G T A L V I A
UniRef90_A0A059INY2 T A D W T L Q I I H D A Q D
UniRef90_UPI000363B02C Q K R P I A Q V M L E M Y E P F F G D P
UniRef90_M2XKA2     V R P G L A L V H C D P H V E G K P
UniRef90_A5FVY0     A H E P T A Q I I H D C
UniRef90_UPI000378C134 E P G V A H V I A D V F N P D
UniRef90_A3YX05     R R D V V W L A S S L H L H G Q P F
UniRef90_I9A225     V R P G L A M V Q C D P Y
UniRef90_J9Z0R0     D K R L A R V F C T C F
UniRef90_A0A022G914 E G A P T A Q V I C D L
UniRef90_A4EH92     A D D V S L Q V I C D M F N R D G S P
UniRef90_L9PHJ7     A I D P T A Q V I H D C Y
UniRef90_B9R2E9     E S D P T A Q L L H D A Y T R E G
UniRef90_F6AFB9     Q K R P T A Q L L M T M H E P F F A D P
UniRef90_UPI00047D417F Q E G T A L C L
UniRef90_UPI0002FD1E39 D K R V A R V Y C
UniRef90_K9ESY5     D K R V A R V Y C F C F
UniRef90_S6BK97     A L E P T A M V I H D T V D K Y
UniRef90_UPI000349E4AE Q P D V V W M P A D L Y S V T G E
UniRef90_A5EAE5     A P G T G W V L C D L Y
UniRef90_X5KY12     R P T A G H V I S D I V
UniRef90_K2MM07     L E G T A L V L C D V L D H H T H E
UniRef90_I3TH92     Y V D A T A Q V L C D C Y
UniRef90_UPI000288B892 H P G T A L L I A D
UniRef90_H6RTX2     H Q G T A L V L C D V
UniRef90_Q1AR77     L E G T A L V V C D
UniRef90_X1CW29     K D E K L G F F I G K I Q N
UniRef90_K9XHJ5     Q P N V G W L A S D V Y L D G E P F
UniRef90_V5XBU9     L P G S A L L M A
UniRef90_M5QZ87     A S E P T A Q V I H D T Y D
UniRef90_UPI00047E4476 Y E K T A V V L A N P Y D D E T D S P
UniRef90_G8WY20     H P G T A L V L A
UniRef90_A5W3J1     A I E P T A I V I H D T F D
UniRef90_R6YXG6     I S D N T L E I E G F L Q E
UniRef90_K5BEN1     R P N A G H V I A D I V T
UniRef90_UPI00046F0FB6 Q P G S A M V N C D L L T
UniRef90_NOB9D2     A E K T A M V I G D F Y T I F E A D P
UniRef90_C1DK81     A V E P T A M V I H D T S D
UniRef90_E8ZF58     S P G T A W L R
UniRef90_R7ZR27
UniRef90_F4FBM7     Q P G T A M L L A D L E W P D G G G P
UniRef90_R4T1D7     Q E G T A L V L L A
UniRef90_A0A023CES3 D K S I G S F F C R M Y E P D H R
UniRef90_D5AP01     L E A P T A W M F H M D G R P Y S G D P
UniRef90_K0F3Z9     W P G T A L V L C D V V E P A G K P
UniRef90_K9UGM2     N P T V A W F A S D L Y L G D P F
UniRef90_H0QK45     K P G V V Q V G C D I Y T M D G
UniRef90_B4WKMO     E P T V G W V A S N V F F E G E P F
UniRef90_W5W0U1     L P G T A L V M C D V
UniRef90_L1KPS5     E P G V A T C L G E V L D P A T G S P
UniRef90_UPI000364B6BE E S K L A W C P A D L T F Q G Q P Y
UniRef90_Q3AE70     R P R E G A V L
UniRef90_UPI000367F747 L P G T A L V L L A
UniRef90_S5XVW0     L D A P T L W M F H D D G R P Y D G D P
UniRef90_D3T1D2     R D D A V R V I C D
UniRef90_T2GUF1     L P G T A L V I A D V V
UniRef90_UPI0002E13504 N P G T A L
UniRef90_UPI00023772A L E A T A L V
UniRef90_E9SZ71     V R P G L A L V H C D P H V Q G E P
UniRef90_UPI00047C9665 Q E G A A L V
UniRef90_UPI0004686216 L E G T A M V L C D V L D H H T H A P
UniRef90_S9Q7A6     L E A P S A W M F H E D G R P F E G D P
UniRef90_H2C2Y1     L E R T A R V L S Y L F S P D
UniRef90_UPI000476E0C3 E P G T A F F L M D L C
UniRef90_A3SRH2     L E G T V M V L C D V L D H H T H E P
UniRef90_T2RS11     Q E A T A L V L C D V L W H S G E P
UniRef90_U1PHS8     A D R T A T M L C D M Y E
UniRef90_A1BAR6     A A G T A L C M C D L Y D H K T H E
UniRef90_UPI000360EBEF A P K I G R F Y C
UniRef90_D0KX59     M P G Y A R I A C D V L D E P Y
UniRef90_UPI00047CFBA9 C Y G H V R V M G N M I L H G E P
UniRef90_D2AT75     Q E G T A L V M A
UniRef90_Q1QZR8     L E G T A M V L C D L L D H R T
UniRef90_V4Y0L3     A D K T G W V Q C
UniRef90_S6GRZ0     L E G T A L V L C D V L D H H D Y Q P
UniRef90_DOCNW2     L E G T V M V M C D V L D H H T H E
UniRef90_K2ML31     E D D T V L
UniRef90_A5EGK9     S P G T G W V L G D L Y
UniRef90_UPI0003B659D4 L V K T A I V T A D
UniRef90_E8NFX7     Q P G T A L V V A
UniRef90_W0J585     R P E V A W F P A D N T F H G A P Y

```

UniRef90_R0E3S5
UniRef90_A0A022LLR3
UniRef90_W1NCY3
UniRef90_UPI000470959D
UniRef90_A9T4A0
UniRef90_B4WL48
UniRef90_UPI0004113D19
UniRef90_UPI0003F49073
UniRef90_H0HND2
UniRef90_W4YC61
UniRef90_D3T231
UniRef90_A0A017HP69
UniRef90_A8FS48
UniRef90_K6UXJ2
UniRef90_UPI0001584D8A
UniRef90_UPI00036E4C98
UniRef90_A3W731
UniRef90_UPI000368F488
UniRef90_V5TRB7
UniRef90_D3BSH7
UniRef90_W4XH75
UniRef90_V7EFM1
UniRef90_D5WY32
UniRef90_M7XYH7
UniRef90_D7TIU8
UniRef90_A3JQL9
UniRef90_R7QGv6
UniRef90_A6X5T2
UniRef90_K0VPJ6
UniRef90_UPI00047A4E02
UniRef90_UPI000374E8DF
UniRef90_UPI0003673C1A
UniRef90_L7ULZ5
UniRef90_E4UA50
UniRef90_U7FPS8
UniRef90_M7SYQ6
UniRef90_UPI000360A5DC
UniRef90_A0A010Q0T2
UniRef90_UPI00036F3402
UniRef90_E6SFS9
UniRef90_E4PQ55
UniRef90_UPI0004757049
UniRef90_B2J2B4
UniRef90_UPI00034858BE
UniRef90_V6MBE2
UniRef90_W2UHU5
UniRef90_Q5YXZ1
UniRef90_B2JYF9
UniRef90_UPI00036475E7
UniRef90_E8R7J0
UniRef90_G7UTT2
UniRef90_S6AFX2
UniRef90_UPI000414EDE3
UniRef90_V4RB28
UniRef90_I2BXH0
UniRef90_W4YNF9
UniRef90_UPI000347D74A
UniRef90_K6BZH3
UniRef90_UPI0003019C84
UniRef90_W7X2M2
UniRef90_F9F265
UniRef90_W4HHM4
UniRef90_UPI000288B26A
UniRef90_UPI000371FCAA
UniRef90_UPI00035F8F7A
UniRef90_A3PID8
UniRef90_A0QYY2
UniRef90_G2TFW5
UniRef90_F4B660
UniRef90_B7QQA6
UniRef90_L1KYL2
UniRef90_UPI000255700B
UniRef90_T1EMS8
UniRef90_A4Y0J7
UniRef90_F4PI12
UniRef90_A0A022KUT1
UniRef90_UPI000375DA27
UniRef90_B8KTU5
UniRef90_UPI00036486E0
UniRef90_W1RXQ5
UniRef90_UPI00037B5EC4
UniRef90_G8SIF7
UniRef90_UPI00036104FA
UniRef90_S7VZH8
UniRef90_L9V606
UniRef90_U1HMZ0
UniRef90_F9VMM0
UniRef90_DOCZ27
UniRef90_I016F6
UniRef90_G3JGY3
UniRef90_W4YWJ2
UniRef90_M4CRY3

UniRef90_R0E3S5
UniRef90_A0A022LLR3
UniRef90_W1NCY3
UniRef90_UPI000470959D
UniRef90_A9T4A0
UniRef90_B4WL48
UniRef90_UPI0004113D19
UniRef90_UPI0003F49073
UniRef90_H0HND2
UniRef90_W4YC61
UniRef90_D3T231
UniRef90_A0A017HP69
UniRef90_A8FS48
UniRef90_K6UXJ2
UniRef90_UPI0001584D8A
UniRef90_UPI00036E4C98
UniRef90_A3W731
UniRef90_UPI000368F488
UniRef90_V5TRB7
UniRef90_D3BSH7
UniRef90_W4XH75
UniRef90_V7EFM1
UniRef90_D5WY32
UniRef90_M7XYH7
UniRef90_D7TIU8
UniRef90_A3JQL9
UniRef90_R7QG6V
UniRef90_A6X5T2
UniRef90_K0VPJ6
UniRef90_UPI00047A4E02
UniRef90_UPI000374E8DF
UniRef90_UPI0003673C1A
UniRef90_L7ULZ5
UniRef90_E4UA50
UniRef90_U7FPS8
UniRef90_M7SYQ6
UniRef90_UPI000360A5DC
UniRef90_A0A010Q0T2
UniRef90_UPI00036F3402
UniRef90_E6SFS9
UniRef90_E4PQ55
UniRef90_UPI0004757049
UniRef90_B2J2B4
UniRef90_UPI00034858BE
UniRef90_V6MBE2
UniRef90_W2UHU5
UniRef90_Q5YXZ1
UniRef90_B2JYF9
UniRef90_UPI00036475E7
UniRef90_E8R7J0
UniRef90_G7UTT2
UniRef90_S6AFX2
UniRef90_UPI000414EDE3
UniRef90_V4RB28
UniRef90_I2BXH0
UniRef90_W4YNF9
UniRef90_UPI000347D74A
UniRef90_K6BZH3
UniRef90_UPI0003019C84
UniRef90_W7X2M2
UniRef90_F9F265
UniRef90_W4HHM4
UniRef90_UPI000288B26A
UniRef90_UPI000371FCAA
UniRef90_UPI00035F8F7A
UniRef90_A3PID8
UniRef90_A0QYY2
UniRef90_G2TFW5
UniRef90_F4B660
UniRef90_B7QQA6
UniRef90_L1KYL2
UniRef90_UPI000255700B
UniRef90_T1EMS8
UniRef90_A4Y0J7
UniRef90_F4P112
UniRef90_A0A022KUT1
UniRef90_UPI000375DA27
UniRef90_B8KTU5
UniRef90_UPI00036486E0
UniRef90_W1RXQ5
UniRef90_UPI00037B5EC4
UniRef90_G8SIF7
UniRef90_UPI00036104FA
UniRef90_S7VZH8
UniRef90_L9V606
UniRef90_U1HMZ0
UniRef90_F9VMM0
UniRef90_D0CZ27
UniRef90_I016F6
UniRef90_G3JGY3
UniRef90_W4YVJ2
UniRef90_M4CRY3

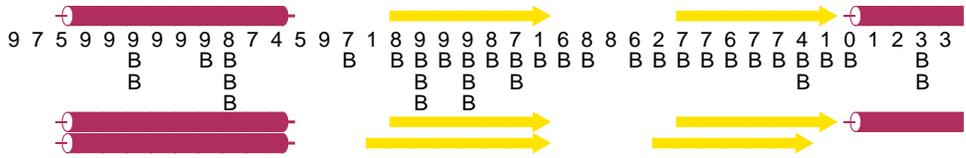
50 60 70 80
R H G Y E K N H A M D M V P V P G Y A S A G Y G D F V L K P D L S T L R L L P W
Q E A G E L G F A G Y A A D A T G Q Q T P R D P D L L V V P D A R S T F T T L D F
K A Y I N G T H L M P G S D I T V G N T Y A N G D R D F V C R P V A G S T L M P T P W
D S V V R D G T H L M E M N P V P G Y T Y A N Y G D F H M V P D F A G S T L M P T P W
E V V V E H G V G T P S C I M G M T A H S D G E V R L M P D L S T K R I T V P W
K T A A G G I Q L V Y G A T V A G Y R N S G Y G D I V L R P D D V R D T F C Q L P W
D E V V D H A T E V E M A T V A G Y R N S G Y G D I V L R P D D V R D T F C Q L P W
S A V K S E G F G F C S V V F G W D A N G Y R D L T A I I D L S T Y R R L P W
E S A Y D E T H G T D M E P V P G Y K A A G Y G D F V M K P D L S T L R R V P W
H L G Y D P Q T N F I G N S A Y S A G V G K F D A V C F P D L S T Y Q V L P W
I E K F E T G F S M D V P E G S G L G E S N F A D G T T H P V P E T F R R V P W
D S G H E E T H G V E M T T V P G Y K S A G Y G D F V H K P D L S T L R R V P W
E S V L L Q T V T G D Y V E D E P Y D A L L D S D F V C V P D E N A V F R Q L P W
D D V A A H G N T V S G Y A M S S W D T G Y G D M V M M P D L S T L R R I P W
G T A K E G F G F C S V I F G W A E N G Y H D L I A I P D L S T F R R L P W
Q C A F C T D M D M D G S A I T G W D K G F Q D F V M R P D L S T L R I P W
N S A W E E T H T P E G F A A T S W E R G Y G D Y V M K P D L S T L R P I P W
N A V D V D M N T V D G Y E L S S W E R G Y G D F V L R P D F A T L R R V P W
E A I E N G T I Q M Y N A V G R R N K D G H V G E V R L R P D P D T F R A L P Y
L Q N L V E G I R F Y D Q I L M V D S S S A R L D L T
R D K A I H G Q N F H G Q P I I W G T E I H Y E D A V C F P D L S T F R R V P W
E N V T K N G N T R F P G S D I V G G T E D I D D S P L V L R P T E R G A F M P M P W
E R M A T D G L S F P S A L I F A F D R S G Y P S W H L Q P D L S T F S V L P Y
G A M Q R D G A G F A S A I D W L D L T P A H P D L F A M P D A A S V I R I P W
D V V L K N G C M G M S A I D G P A D G T N G E T R L V P D L S T K C R I P W
S E G W D E T H C L I E M A T P D G Y V S T G Y G D Y V M K P D L S T L R I V P W
S A P S D L P H W N Y D G S S T G Q A P G E N S E V I L H P Q A V Y P D P F
E S G Y D E T H G V P G Y E A A G W D K G Y G D F V I K P D L S T L R V A T W
E S A W K E T H S I E M E T V S G Y K E K G Y G D Y T M K P D L S T L R R I P W
I R N L I E S G V K F T R N A L M D F Q D I H S K E F V A M P E P E T F N A L P W
D S A H E E T H G I D M E P V P G Y E R K G Y G D F A L R P D L S T L R V V P W
A A F A N G I N L P A S D I T G N T D S G D G D R A C M P I A G T L A V V P W
S A A K N G L G F D N T E V T G W H T G Y P D A H A T V D V S T G R M L P W
E A A A R T G N P V P G Y A F A N W E R G Y G D V H L V P D L S T L R P A P W
D S A Y H E T H T V E G Y A A T S W S G G Y G D Y V M K P D L S T L R R V P W
S I I A S S G F G F C S V I F S W Q E N G Y R D M I A I P D F S T F R R I P W
D T V L G H G N T V D G Y A L S S W S D S G Y G D L A M R P D L S T L R P L P W
D S M L I E E G N T P G G Y A I S S W E A G Y G D M S F A M D L D T I R V M P H
E K V Y S Q G G C L P G S V M A L D A T E G D Q D R I C R P V P G T L S L V P W
D H V L E Q G N T V D G F A I S S W E R G Y G D M F F D L D L T T L C R T P G
Q M M E G S E L Y T G A A L D G G V Q D I S D D E V A S M P D A D G L A I C P W
R N G L K G G T D M E M N T P G G Y Q E T G Y G D W L A Q P D D W S T L R V V P W
S A L E N G M Q I P M G S L D M P L M T G A P N L V A V P D P D T F K I V P W
N A L S N G M Q I S G G S L D M Q E M T G A P N L V A V P D P H T F H I L P W
D D A K D G I H T C A I N S F I W D Y A E N D Y H D M L V V P D L T L R R Y P W
H K L F E G G Y K M P Q S S L D S W G R D G T D D G I C T P H P E T L A I V P W
R L A A G G A G F A G Y A A G T L G Q Q P R D P D L I A I P D P A S F T P I P F
K S G Y L E T H A M E M E P V A G Y A S A G Y G D F V L K P D L S T L R R L P W
R R A E T S G F G F C D G A L A S N A R V I E S D A F A V P D L S T F R A L P W
E T L E G I R A G I D G S S I P G Y G R I E R S D L F V E P A S S T I V D L S S
K V Y S D G P M S L I A T D I T G N T D I G D E D R I C R P V P G S L R P V P W
S A H E E T H C C I D M E P V P G Y A A A G Y G D F V L K P D M A T L R R V P W
S A L E K G F G F C S V L F G W D S N D V L Y K N D S F T G W A D G F
K S E A E G S L R M P S S A G D G D E A Y A D R D L I L C R P D V A A T L H I A P G
H E R G M R L P E S V L Y D L L D P A D I D M I C R P V A N A T Y V V P W
R S K M N K G I N F S L S H V C G T G L W Y E K G M I G V P D L S S F R V L P W
H Y F E H G V G T S V G Q Q G V P V M Y L V P D W S S L K P L P Y
G I D F N T G P L F F D T A N A G F D L E E C P N Y T L V P D P L T F K I L P W
R S V L R N G M N F T G H A V A G D H G I G A G N F V L V P D P L T F Q V L P E
K S V L L N T V G N G Q P V D N T A F V G D T D P D M V C V P D L S T A R M V P W
S I A E A G F G F C S V I F G W A E N G Y H D L L A I P D L S T F R R I P W
H A V D E T H C C N Y M S T P E G Y A R K G Y G D Y T L K P D L D T L R R V P W
T R I A D H G A E M D M N P A D G F A D T G Y Q D L P V R P D L T A R V V P W
R L A T K G I P T M N G A N A E A G S E E Y D P D R I C M P V P G S T K L M P W
D S A Y D E T H C L I E M Y T V E G Y A S T G Y G D Y V M K P D L S T I R R L G W
L A I L D M E M T T V P G Y K N S G W E K G Y G D Y V M K P D M A T L R A L P W
T L G L D G G V N A S S I F G W V D I R L V P D L S T L R R V P W
R S L E D N S L R I P S S V F Y P F A D D N N T V V I L R P D F R T L C V A P G
E M V K T G F T P M D T L S P Y G S F G P E D E D V E L V P D L S T F R I F P W
R R L F E C G I A V H R T A F P V W S E N P E S D V L L V P R P E S F R I L P W
K R V A H D G A E V E M S P A D G F A E T G Y Q D L T V Q P D L A T V C V V P W
E G R R L Q Q C M M G G Y P E A K F Y G S D D S D L A L V A E P T Q I H R L P W
N Y K T D Q V C F S S T N D Y M I N P C Q Y N F N L V P D V S T F I L P W
A L Y Q S G R P T M L G L S I Q G E D V E D S G L V W Y P L P G S L V R L P W
L Q N L V E G I K F A T Q S L L V D S S S A R F D T S
K L M A G F A R Y T P R G N G I G A M S P I E D E A T T V P D L N S L T V L P W
D G L I E D G F G F C D V V W G W D S S D T P W H S G Y P D A S T F R Q L P W
E G K F T V P I T P L L G I R G D L Y D G D P D Q L L R P I S G T L A R V P W
M K N S E N N K N I K M G N I E L I P S Y D L V F L D P F
G A M K D G P Q S V I G F D H W G D D V I E D S D G I C L P V H D T P I P V P W
S V I D S N T G F C M D V V F G W D A A G Y P D A L A K L D L S T F R K I P W
D E V A G A G S E G D M N T V D G Y E S T G Y G D F V M R P D F G T L R R V P W
R T V I G G G V A F C K S D F D G G I S A G L P D I I A F P D L S T L Q P V P W
H T M F C Q G V V A T T G G D V L D G N H L P D L L A T Q I D P N T L A M M P W
N A A E E G V G F A N G V I A E L T Y G P Q H G D M M A V A D L D S V T P L S W
M I A K G Q H A T V I G G K S M L F S V T D K T S S V L H P D W R S L R V C G Y
N M A M M S F T P M D Y I S P Y G T F G P Q D E D V E L T P D L S T L S I F P W
K V V I E D G T R F P L S D I W G E D I D D S P L V L R P T E R G F V P M P W
S R M A S G G L T L A M Q A V E G M G P V G E I R L V P D P D S L V I L P Y
S V A E A G F G F C S V I F G W A E N G Y R D L L A I P D L S T F R R I P W
E L T S N L T R G F L F S P L Y F F K D P Y F T D F C A L P A L D T Y S V I P W
K S V K K S G L G L T H A S M G M D G P A E E S K L R L V P D L S T K R T I P W

	90	100
UniRef90_R0E3S5	L N A T A L V I C D V Y D D N G M P	
UniRef90_A0A022LLR3	L K P G L A L V H C D P W V S G E P	
UniRef90_W1NCY3	R N G R H A Q L L M S M H D P F F A D P	
UniRef90_UPI000470959D	L D K T A M V L C D L V D	
UniRef90_A9T4A0	C S E D A L V F V N L H E	
UniRef90_B4WL48	D K R V A R V Y C	
UniRef90_UPI0004113D19	Y E G T A L V L A D V E S T T G E P	
UniRef90_UPI0003F49073	E K N I P F F L C S F I D P D S G K P	
UniRef90_HOHN2	L E K T A L V L C D V L D H H T H D	
UniRef90_W4YC61	S K R T A R I L	
UniRef90_D3T231	R D D T A C V R C	
UniRef90_A0A017HP69	L P G T A M V M A D V L D H H G E P	
UniRef90_A8FS48	T I E A T A Q V I H D T Y D	
UniRef90_K6UXJ2	L P G T A L V I A D L T T V D G T P	
UniRef90_UPI0001584D8A	E D N V P F F L I S F Y D P D S G K P	
UniRef90_UPI00036E4C98	M P N T A F V L C D A V D E T T G E	
UniRef90_A3W731	L E G T V M V L C D V L D H H T H E	
UniRef90_UPI000368F488	Q E G T A L V I A D V	
UniRef90_V5TRB7	A E R T G V M F C N I	
UniRef90_D3BSH7	K K H K T V L V R C S	
UniRef90_W4XH75	C K K T A R V L	
UniRef90_V7EFM1	L E A P T A W M F R E N G Q P Y E G D P	
UniRef90_D5WY32	A P G V A R V I A D P F E A K G Q P	
UniRef90_M7XYH7	K P D V A W V A A D C	
UniRef90_D7TIU8	A K Q E E M V L A	
UniRef90_A3JQL9	L E G T V M V L C D V L D H H T H Q P	
UniRef90_R7QG6	R G A P H L L V M C D T Y T P D G E P	
UniRef90_A6X5T2	L E K T A I V L C D V L D	
UniRef90_K0VPJ6	L E G T A L V L C D V L D H H T H E	
UniRef90_UPI00047A4E02	D T S V G R I E S T A Y E P	
UniRef90_UPI000374E8DF	L E G T A L V L C D V L D	
UniRef90_UPI0003673C1A	Q Q R P T A Q L L M T M V E P D	
UniRef90_L7ULZ5	E P D T A A F L L D F V N P D G T P F	
UniRef90_E4UA50	H T S N S A L V L A D V V S T E T H E P	
UniRef90_U7FPS8	L E G T A M V M C D V L D H H T	
UniRef90_M7SYQ6	E D N V P F F L V S F F D P D T K E P	
UniRef90_UPI000360A5DC	L P G S V L V L A	
UniRef90_A0A010Q0T2	N P G Q V M I Q C D	
UniRef90_UPI00036F3402	Q G E D R A Q A L V S M Y D A E G L E P F	
UniRef90_E6SFS9	A P H S A T I Q C D	
UniRef90_E4PQ55		
UniRef90_UPI0004757049	L E K T A F V L A D P V D E R T G E	
UniRef90_B2J2B4	A K R T G F I L C D	
UniRef90_UPI00034858BE	A K R T G F I L C D L Y	
UniRef90_V6MBE2	I E R T A L V L G D L Y N	
UniRef90_W2UHU5	A S R P T A Q I I V S M L N P D	
UniRef90_Q5YXZ1	V R P G L A L V H C D P H	
UniRef90_B2JYF9	L E G T A L V I C D V L D Q S G Q P	
UniRef90_UPI00036475E7	R S G V G H V I S D L V T P S P L D P	
UniRef90_E8R7J0	F N G T T G R I V T H T G E P H P W D P	
UniRef90_G7UTT2	S P R P M A Q L L	
UniRef90_S6AFX2	L D C T A L V L C D V L D H H H R E	
UniRef90_UPI000414EDE3	T D A K	
UniRef90_V4RB28	Y K T T T A F V E A D T K K P D	
UniRef90_I2BXH0	A I E P T A L V I H D T F D	
UniRef90_W4YNF9	C D S A A R V I V D L T E	
UniRef90_UPI000347D74A	A P G H A R A M	
UniRef90_K6BZH3	A P N T G W I L S D A Y	
UniRef90_UPI0003019C84	R G P R T A W V L G D	
UniRef90_W7X2M2		
UniRef90_F9F265	E D D V P L F L V N F L D P D T K K P	
UniRef90_W4HHM4	L E K T A L V L G D V L D	
UniRef90_UPI000288B26A	M P R T A L V L A D A M T P E G T P	
UniRef90_UPI000371FCAA	T E R K S A Q I I V I T M R E P D G T P F	
UniRef90_UPI00035F8F7A	L E G T V M V L C D V I Q D H H T	
UniRef90_A3PID8	M P G T A L V L C D L L D	
UniRef90_A0QYY2	E P T A A L V I C D A Y H M D S D E P	
UniRef90_G2TFW5	Y R T P T A F V V V I D A Y	
UniRef90_F4B660	P S A M V I C N L Y S N G K P	
UniRef90_B7QQA6	S P H S A W I F C H V	
UniRef90_L1KYL2	M P R T A V V L G H A V D	
UniRef90_UPI000255700B	S E S P R A L A I C D A D E F D G Q	
UniRef90_T1EMS8	K K T F A W I L C N I S Y N G K P F	
UniRef90_A4Y0J7	R Q I P T A A V Q V I S M H P S E G L P	
UniRef90_F4PI12	K A C K S L V V K C S I	
UniRef90_A0A022KUT1	D N R F A W M A A D	
UniRef90_UPI000375DA27	Q D D	
UniRef90_B8KTU5	L D S P T A Q V L	
UniRef90_UPI00036486E0	R S T N T L S I L	
UniRef90_W1RXQ5	S E S P R D Q I L L A M M F N P D G T P F	
UniRef90_UPI00037B5EC4	E N D	
UniRef90_G8SIF7	Q P G T A L V L A D L F D T A G Q P	
UniRef90_UPI00036104FA	E P G V A H C I G D L Y N	
UniRef90_S7VZH8	E P G V A M V V A D A F N P D	
UniRef90_L9V606	H E N M A A V F T D L T T V D	
UniRef90_U1HMZ0	A P G H A V V M C C V Y D K F E E E P F	
UniRef90_F9VMM0	P S A V V L C Y L Y	
UniRef90_DOCZ27	L E A P T A L L I W M Y H E P F E G D P	
UniRef90_I0I6F6	A P H S A A M M C D M	
UniRef90_G3JGY3	E N N I P F F L I S F V D P E T K K P	
UniRef90_W4YVJ2	L E D T A R V	
UniRef90_M4CRY3	T K Q E S M V L A D M L L K P	

UniRef90_S7ZF31
 UniRef90_K2LU32
 UniRef90_V6UVE6

1 T A E N V A E I L Q N D R M V K V A G V D V D G Q L R G K I M K K S K F L
 9 7 5 9 9 9 9 9 8 7 4 5 9 7 1 8 9 9 9 8 7 1 6 8 8 6 2 7 7 6 7 7 4 1 0 1 2 3 3
 S R A E A Q R F F E A N D E I E L V E L L L P D V N G V F R G K R I S K Q K F L
 E G I D E L E C V T P D L N G V P R G K V M T V E F L E

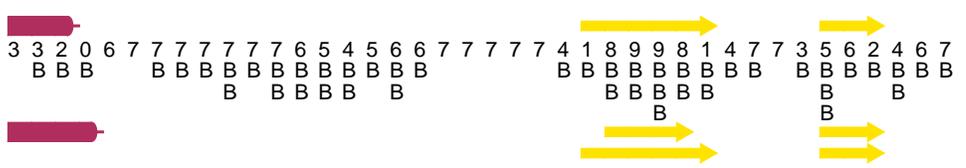
lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



UniRef90_S7ZF31
 UniRef90_K2LU32
 UniRef90_V6UVE6

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

lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



UniRef90_S7ZF31
 UniRef90_K2LU32
 UniRef90_V6UVE6

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

lupas_21
 lupas_14
 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm

