

A

CKL1 (1) ----MEPRVGNKFRLLGRKIGSGSFGIEYLGTNIHTNEELAIKLENVKTKHPQLLYESKLYRILQGGTGVP  
CKL2 (1) ----MEPRVGNKFRLLGRKIGSGSFGIEYLGTNIQTNEEVAIKLENVKTKHPQLLYESKLYKVLQGGTGVP  
CKL3 (1) ----MERIIGGKYKLRKIGSGSFGIEFLATHVDTFEIVAVKIENSKTKHPQLLYEAKLYRILEGGSGIP  
CKL4 (1) ----MERIIGGKYKLRKIGSGSFGIEFLATHIDTFEIVAVKIENSKTKHPQLLYEAKLYRILEGGSGIP  
CKL5 (1) ----MEPRVGNKFRLLGRKIGSGSFGIEYLGTVDQTNNEEVAIKLESVTKAHPQLYSRIRYVQLQGGTGIP  
CKL6 (1) MDLKMNDVIGGKFKLRKIGSGSFGELFLAVSLQTGEAAVKLEPAKTKHPQLHYESKIYMLLQGGSGIP  
CKL7 (1) ----MDLVIIGKFKLGRKIGSGSFGELYLGVNVQTEGEAVKLENVKTKHPQLHYESKLYMLLQGGSGIP  
CKL8 (1) ----MDRVVGGKYKLRKIGSGSFGELFLGVNVQTEGEAVKLEPARARHPQLHYESKLYMLLQGGTGIP  
CKL9a (1) ----MDLVIIGKFKLGRKIGSGSFGELYLGINVQTEGEAVKLESVTKTKHPQLHYESKLYMLLQGGTGVP  
CKL9b (1) ----MDLVIIGKFKLGRKIGSGSFGELYLGINVQTEGEAVKLESVTKTKHPQLHYESKLYMLLQGGTGVP  
CKL10 (1) ----MDHVIIGKFKLGRKIGSGSFGELYIGINVQTEGEVALKLEPVKTKHPQLHYESKLYMLLQGGTGVP  
CKL11 (1) ----MDRVVGGKFKLRKIGSGSFGIEFLGVNVQTEGEAVKLEPLRARHPQLHYESKLYMLLQGGTGIP  
CKL12 (1) ----MEPRVGNKYRLLGRKIGSGSFGIEYLGTNIHTNEEVAIKLENVKTKHPQLLYESKLYRILQGGTGVP  
CKL13 (1) ----MDRVVGGKFKLRKIGSGSFGIEFLGVNVQTEGEAVKLEPLRARHPQLHYESKLYMLLQGGTGIP

CKL1 (67) NVKWFVGECDYNVLMVDLLGPSLEDLFNFCSRKLSLKSVMMLADQMINRVEFFHKSFLHRDLKPDNFLM  
CKL2 (67) NVKWFVGECDYNVLMVDLLGPSLEDLFNFCSRKLSLKSVMMLADQMINRVEFFHQSFLHRDLKPDNFLM  
CKL3 (67) RIKWFGVDGTENALVMDLLGPSLEDLFVYCGRKFSPTVLMMLADQMLTRIEFVHSGYFLHRDLKPDNFLM  
CKL4 (67) RIRWFGVDGTENALVMDLLGPSLEDLFVYCGRKFSPTVLMMLADQMLTRIEFVHSGYFLHRDLKPDNFLM  
CKL5 (67) NMKWYVGECDYNVLMVDLLGPSLEDLFVYCGRKFSPTVLMMLADQMINRVEFFHKSFLHRDLKPDNFLM  
CKL6 (71) SLKWFVGECDYNAMVIDLLGPSLEDLFNYCNRRLTLKAVMLADQLISRVEYMHVSRGFLHRDLKPDNFLM  
CKL7 (67) NIKWFGVEGDYSVMVIDLLGPSLEDLFNYCNRKLTTLKAVMLADQLLNRRVEFMHTRGFLHRDLKPDNFLM  
CKL8 (67) HLKWFVGEYENCMVIDLLGPSMEDLFNYCNRRLTLKAVMLADQMINRVEYMHVSRGFLHRDLKPDNFLM  
CKL9a (67) NLKWYVGECDYNVLMVDLLGPSLEDLFNYCNRKLSLKSVMMLADQLINRVEFMHTRGFLHRDLKPDNFLM  
CKL9b (67) NLKWYVGECDYNVLMVDLLGPSLEDLFNYCNRKLSLKSVMMLADQLINRVEFMHTRGFLHRDLKPDNFLM  
CKL10 (67) HIKWFGVEGNVCMVIDLLGPSLEDLFNYCNRKLSLKSVMMLADQLINRVEYMHVSRGFLHRDLKPDNFLM  
CKL11 (67) HLKWFVGEYENCMVIDLLGPSMEDLFNYCNRKLSLKSVMMLADQMINRVEYMHVSRGFLHRDLKPDNFLM  
CKL12 (67) NIKWFGVEGDYNTLVMVDLLGPSLEDLFNFCSRKLSLKSVMMLADQMINRVEFFHKSFLHRDLKPDNFLM  
CKL13 (67) HLKWFVGEYENCMVIDLLGPSMEDLFNYCNRKLSLKSVMMLADQMINRVEYMHVSRGFLHRDLKPDNFLM

CKL1 (137) GLGRRANQVYIIDFGLAKKYRDSSTHQHPIPYRENKNTGTARYASMNTHLGEQSRDDLESLGYILMYF  
CKL2 (137) GLGRRANQVYIIDFGLAKKYRDSN-HQHPIPYRENKNTGTARYASMNTHLGEQSRDDLESLGFLVLMYF  
CKL3 (137) GLGRKANQVYIIDFGLAKKYRDANTNRHIPYRENKNTGTARYASCNTHLGEQSRDDLESLGYVLLYF  
CKL4 (137) GLGRKANQVYIIDFGLAKKYRDANTNRHIPYRENKNTGTARYASCNTHLGEQSRDDLESLGYVLLYF  
CKL5 (137) GLGRRANQVYIIDYGLAKKYRDSSTHRRHIPYRENKSLIGTPRYASLNTHLGEQSRDDLESLGYILMYF  
CKL6 (141) GLGRKANQVYIIDFGLAKKYRDLQTHRHIPYRENKNTGTARYASVNTHLGEQSRDDLESLGYVLMYF  
CKL7 (137) GLGRKANQVYIIDFGLGKKYRDLQTHKHIPYRENKNTGTARYASVNTHLGEQSRDDLESLGYVLMYF  
CKL8 (137) GLGRKANQVYIIDYGLAKKYRDLQTHRHIPYRENKNTGTARYASVNTHLGEQSRDDLESLGYVLMYF  
CKL9a (137) GLGRKANQVYIIDFGLGKKYRDLQTHRHIPYRENKNTGTARYASVNTHLGEQSRDDLEALGYVLMYF  
CKL9b (137) GLGRKANQVYIIDFGLGKKYRDLQTHRHIPYRENKNTGTARYASVNTHLGEQSRDDLEALGYVLMYF  
CKL10 (137) GLGRKANQVYIIDYGLAKKYRDLQTHKHIPYRENKNTGTARYASVNTHLGEQSRDDLESLGYVLMYF  
CKL11 (137) GLGRKANQVYIIDYGLAKKYRDLQTHKHIPYRENKNTGTARYASVNTHLGEQSRDDLESLGYLLMYF  
CKL12 (137) GLGRRANQVHIIDFGLAKKYRDNTTHQHPIPYRENKNTGTARYASMNTHLGEQSRDDLESLGYILMYF  
CKL13 (137) GLGRKANQVYIIDYGLAKKYRDLQTHKHIPYRENKNTGTARYASVNTHLGEQSRDDLESLGYLLMYF

CKL1 (207) LKGSPLPWQGLKAGTKKQKYERISEKKVSTSIIEALCRGYPSEFASYFHYCRSLRFDDKPDYAYLKRIFRDL  
CKL2 (206) LKGSPLPWQGLKAGNKKQKYEKISEKKVSTSIIEALCRGYPSEFASYFHYCRSLRFDDKPDYAYLKRIFRDL  
CKL3 (207) LRGSPLPWQGLKAVDKKQKYDKICEKKISTPIEVLCKNHPVEFASYFHYCHTLTFDQRPDYGFLKRIFRDL  
CKL4 (207) LRGSPLPWQGLKAVDKKQKYDKICEKKISTPIEVLCKSHPPVEFASYFHYCHTLTFDQRPDYGFLKRIFRDL  
CKL5 (207) LKGSPLPWQGLKAGNKKQKYDKISEKKVSTSIIEALCRGHPTEFASYFHYCRSLRFDDKPDYAYLKRIFRNL  
CKL6 (211) LRGSPLPWQGLKAGTKKQKYDRISEKKVSTPIEVLCKSYPPEFVSYFYCRSLRFDDKPDYSYLKRIFRDL  
CKL7 (207) LKGSPLPWQGLKAGTKKQKYDRISEKKVSTPIEVLCKNQPSEFVSYFYCRSLRFDDKPDYSYLKRIFRDL  
CKL8 (207) LRGSPLPWQGLRAGTKKQKYDKISEKKRLTPVEVLCKSFPPEFTSYFLYVRSRFFEDKPDYPYLKRIFRDL  
CKL9a (207) LKGSPLPWQGLKAGTKKQKYDRISEKKVATPIEVLCKNQPSEFVSYFYCRSLRFDDKPDYSYLKRIFRDL  
CKL9b (207) LKGSPLPWQGLKAGTKKQKYDRISEKKVATPIEVLCKNQPSEFVSYFYCRSLRFDDKPDYSYLKRIFRDL  
CKL10 (207) IRGSPLPWQGLKAGTKKQKYDKISEKKMLTPVEVLCKSYPPEFTSYFYCRSLRFDDKPDYSYLKRIFRDL  
CKL11 (207) LRGSPLPWQGLRAGTKKQKYDKISEKKRLTPVEVLCKNFPPEFTSYFLYVRSRFFEDKPDYSYLKRIFRDL  
CKL12 (207) LKGSPLPWQGLKAGTKKQKYERISEKKVSTSIIEALCRGYPSEFASYFHYCRSLRFDDKPDYAYLKRIFRDL  
CKL13 (207) LRGSPLPWQGLRAGTKKQKYDKISEKKRLTPVEVLCKNFPPEFTSYFLYVRSRFFEDKPDYSYLKRIFRDL

CKL1 (277) FIREGFQFDYVFDWTILKYQQ  
CKL2 (276) FIREGFQFDYVFDWTILKYQQ  
CKL3 (277) FSREGYEFDYIFDWTIIKYQQ  
CKL4 (277) FSREGYEFDYIFDWTIIKYQQ  
CKL5 (277) FIREGFQFDVFDWTVYKYQQ  
CKL6 (281) FIREGYQFDYVFDWTALKHPQ  
CKL7 (277) FIREGYQFDYVFDWTVLKYPQ  
CKL8 (277) FIREGYQFDYVFDWTILKYPQ  
CKL9a (277) FIREGYQFDYVFDWTVLKYPQ

CKL9b (277) FIREGYQFDYVFDWTVLKYPQ  
 CKL10 (277) FIREGYQFDYVFDWTVLKYPQ  
 CKL11 (277) FIREGYQFDYVFDWTVLRYPO  
 CKL12 (277) FIREGFQFDYVFDWTVLKYPQ  
 CKL13 (277) FIREGYQFDYVFDWTVLRYPO

**B**

CKL1 (1) ---MEPRVGNKFRLLGRKIGSGSFG E IYLG T NIQTNEEVAIKLENVKT KHPQLLYE SKLYRILQGGTGV P  
 CKL2 (1) ---MEPRVGNKFRLLGRKIGSGSFG E IYLG T NIQTNEEVAIKLENVKT KHPQLLYE SKLYRILQGGTGV P  
 CKL3 (1) ---MERIIGGKYKLRKIGSGSFG E IFLATHVDTFEIVAVKIENSKTKHPQLLYEAKLYRILEGGSGIP  
 CKL4 (1) ---MERIIGGKYKLRKIGSGSFG E IFLATHIDTFEIVAVKIENSKTKHPQLLYEAKLYRILEGGSGIP  
 CKL5 (1) ---MEPRVGNKFRLLGRKIGSGSFG E IYLG T DVQTN E E V A I K L E S V K T A H P Q L S Y E S R I Y R V L Q G G T G I P  
 CKL6 (1) MDLKMNDVIGGKFKLRKIGSGSFG E IFLAVSLQ T G E E A A V K L E P A K T K H P Q L H Y E S K I Y M L L Q G G S G I P  
 CKL7 (1) ---MDLVIGGKFKLRKIGSGSFG E IYLG V N V Q T G E E V A V K L E N V K T K H P Q L H Y E S K L Y M L L Q G G S G I P  
 CKL8 (1) ---MDRVVGGKFKLRKIGSGSFG E IFLG V N V Q T G E E V A V K L E P A R A R H P Q L H Y E S K L Y M L L Q G G T G I P  
 CKL9a (1) ---MDLVIGGKFKLRKIGSGSFG E IYLG V N V Q T G E E V A V K L E S V K T K H P Q L H Y E S K L Y M L L Q G G T G V P  
 CKL9b (1) ---MDRVVGGKFKLRKIGSGSFG E IYLG V N V Q T G E E V A V K L E S V K T K H P Q L H Y E S K L Y M L L Q G G T G V P  
 CKL10 (1) ---MDHVIGGKFKLRKIGSGSFG E IYLG V N V Q T G E E V A L K L E P V K T K H P Q L H Y E S K V Y M L L Q G G T G V P  
 CKL11 (1) ---MDRVVGGKFKLRKIGSGSFG E IFLG V N V Q T G E E V A V K L E P L R A R H P Q L H Y E S K L Y M L L Q G G T G I P  
 CKL12 (1) ---MEPRVGNKYRLGRKIGSGSFG E IYLG T H I Q T N E E V A I K L E N V K T K H P Q L L Y E S K L Y R I L Q G G T G V P  
 CKL13 (1) ---MDRVVGGKFKLRKIGSGSFG E IFLG V N V Q T G E E V A V K L E P L R A R H P Q L H Y E S K L Y M L L Q G G T G I P  
 AK110592 (1) -MTTMDLRVGNKYRIGRIGSGSFG E IYLG T N I I S G E E I A I K L E S V K A K H P Q L E Y E A R V Y K S L A G G V G I P  
 AK101388 (1) ---MEHVIGGKFKLRKIGSGSFG E IYLG V N I Q S S E E V A I K L E S V K S R H P Q L H Y E S K L Y M L L Q G G T G I P  
 AK111554 (1) ---MDHVVGKFKLRKIGSGSFG E IFLAVN V Q T G E E V A V K L E N V K T K H P Q L H Y E S K L Y M L L Q G G T G I P  
 AK111597 (1) ---MDRIVGAKYKLRKIGSGSFG E IYLG T H V D T Y E I V A V K I E S S K T K H P Q L L Y E A K L Y N A L Q G G S G I A  
 AK111599 (1) ---MDRIVGKFKLRKIGSGSFG E IYLG T H V D T Y E I A A V K I E S S K T K H P Q L F Y E A K L Y N A L Q G G S G I A  
 AK111911 (1) ---MEPRVGNKFRVGRKIGSGSFG E IYLG T N V Q T N E E V A I K L E N V K T K H P Q L L Y E S K L Y R I L Q G G T G I P  
 AK111947 (1) ---MEPRVGNKYRLGRKIGSGSFG E IYLG T N V Q T N E E V A I K L E N V K T K H P Q L L Y E S K L Y R I L Q G G T G I P  
 AK111987 (1) ---MERVIGGKFKLRKIGSGSFG E IYLG V N I Q N S E E V A V K L E S V K S R H P Q L H Y E S K L Y M L L Q G G T G I P  
 AK120765 (1) ---MEQVVGKFKLRKIGSGSFG E IYLG V N I H N G E E V G I K L E S V R S K H P Q L H Y E S K V Y M Q M Q G G N G I P  
 NP\_916571 (1) ---MEPRVGNKFRLLGRKIGSGSFG E IYLG T NIQTNEEVAIKLENVKT KHPQLLYE SKLYRILQGGTGV P

CKL1 (67) NVKWFGVEGDY NVLVM D L L G P S L E D L F N F C S R K L S L K S V L M L A D Q M I N R V E F V H S K S F L H R D I K P D N F L M  
 CKL2 (67) NVKWYFVEGDY NVLVI D L L G P S L E D L F N F C S R K L S L K T V L M L A D Q M I N R I E F V H Q K S F L H R D I K P D N F L M  
 CKL3 (67) RIKWFGVDGTENALVMDLLG P S L E D L F V Y C G R K F S P K T V L M L A D Q M L T R I E F V H S K G Y L H R D I K P D N F L M  
 CKL4 (67) RIRWFGVDGTENALVMDLLG P S L E D L F V Y C G R K F S P K T V L M L A D Q M L T R I E Y V H S K G Y L H R D I K P D N F L M  
 CKL5 (67) NLKWYFVEGDY NVLVM D L L G P S L E D L F N Y C N R R L T L K A V L M L A D Q L I S R V E Y M H S R G F L H R D I K P D N F L M  
 CKL6 (71) SLKWFGVQGDY NVLVM D L L G P S L E D L F N Y C N R R L T L K A V L M L A D Q L I S R V E Y M H S R G F L H R D I K P D N F L M  
 CKL7 (67) NIKWFGVEGDY SVMVIDLLG P S L E D L F N Y C N R K L T L K T V L M L A D Q L I N R V E F M H T R G F L H R D I K P D N F L M  
 CKL8 (67) HLKWYFVEGEY NC MVIDLLG P S M E D L F N Y C S R R F N L K T V L M L A D Q M I N R V E Y M H V R G F L H R D I K P D N F L M  
 CKL9a (67) NLKWYFVEGDY NVMVIDLLG P S L E D L F N Y C N R K L S L K T V L M L A D Q L I N R V E F M H T R G F L H R D I K P D N F L M  
 CKL9b (67) NLKWYFVEGDY NVMVIDLLG P S L E D L F N Y C N R K L S L K T V L M L A D Q L I N R V E F M H T R G F L H R D I K P D N F L M  
 CKL10 (67) HIKWFGVEGYNVCMVIDLLG P S L E D L F N Y C T R S F S L K T V L M L A D Q L I N R V E Y M H S R G F L H R D I K P D N F L M  
 CKL11 (67) HLKWYFVEGEY NC MVIDLLG P S M E E F N Y C S R S F S L K T V L M L A D Q M I N R V E Y M H V G F L H R D I K P D N F L M  
 CKL12 (67) NIKWFGVEGEY NTLVMDLLG P S L E D L F N F C S R K L S L K S V L M L A D Q M I N R V E Y F H S K S F L H R D I K P D N F L M  
 CKL13 (67) HLKWYFVEGEY NC MVIDLLG P S M E E F N Y C S R S F S L K T V L M L A D Q M I N R V E Y M H V K G F L H R D I K P D N F L M  
 AK110592 (70) FVRWFGTECDY NVLVM D L L G P S L E D L F N F C N R K F S L K T V L L A D Q L I S R I E Y I H A K S F I H R D I K P D N F L M  
 AK101388 (67) HLKWYFVEGEY NVMVIDLLG P S L E D L F N Y C N R K F S L K T V L M L A D Q M I N R V E Y M H T R G F L H R D I K P D N F L M  
 AK111554 (67) HLKWYFVEGEY NVMVIDLLG P S L E D L F N Y C S R K F S L K T V L M L A D Q M I N R V E Y M H Q K G F L H R D I K P D N F L M  
 AK111597 (67) NIKWCGIDGEDNVLVIDLLG P S L E D L F V Y C G R R F S L K T V L M L A D Q M I T R V E F M H S K G Y L H R D I K P D N F L M  
 AK111599 (67) NVKWCGVDGEENVLVIDLLG P S L E D L F V Y C G R K F T L K T V L M L A D Q M I T R I E F M H S K G Y L H R D I K P D N F L M  
 AK111911 (67) NVKWYFVEGDY NVLVM D L L G P S L E D L F S F C N R K L S L K T V L M L A D Q M I N R V E F V H S K S F L H R D I K P D N F L M  
 AK111947 (67) NVKWYFVEGDY NVLVM D L L G P S L E D L F S F C N R K L S L K T V L M L A D Q M I N R V E F V H S K S F L H R D I K P D N F L M  
 AK111987 (67) HLKWYFVEGEY NVMVIDLLG P S L E D L F N Y C N R K L S L K S V L M L A D Q M I A R V E Y M H T R G F L H R D I K P D N F L M  
 AK120765 (67) HMKWYFVAGEHNV MVIDLLG P S L E D L F N S C N R K F S L K T V L M L A D Q I I N R V E Y M H S K G F I H R D I K P D N F L I  
 NP\_916571 (67) NVRWYFVEGDY NVLVM D L L G P S L E D L F N F C S R K L S L K T V L M L A D Q M I N R V E F V H S K S F L H R D I K P D N F L M

CKL1 (137) GLGRRANQVYI IDFG LAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGI EQSRRDDLES LGYVLLMYF  
 CKL2 (137) GLGRRANQVYV IDFG LAKKYRDSN-HQHIPYRENK NLTGTARYASMNTHLGI EQSRRDDLES LGFVLLMYF  
 CKL3 (137) GLGRKANQVYL IDFG LAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGI EQSRRDDLES LGYVLLYF  
 CKL4 (137) GLGRKANQVYL IDFG LAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGI EQGRRDDLES LGYVLLYF  
 CKL5 (137) GLGRRANQVYI IDYGLAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGI EQSRRDDLES LGYVLLMYF  
 CKL6 (141) GLGRKANQVYI IDFG LAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGV EQSRRDDLES LGYVLLMYF  
 CKL7 (137) GLGRKANQVYI IDFG LAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGV EQSRRDDLES LGYVLLMYF  
 CKL8 (137) GLGRKANQVYI IDYGLAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGI EQSRRDDLES LGYVLLMYF  
 CKL9a (137) GLGRKANQVYI IDYGLAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGV EQSRRDDLES LGYVLLMYF  
 CKL9b (137) GLGRKANQVYI IDFG LAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGV EQSRRDDLES LGYVLLMYF  
 CKL10 (137) GLGRKANQVYI IDYGLAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGI EQSRRDDLES LGYVLLMYF  
 CKL11 (137) GLGRKANQVYI IDYGLAKKYRDLQTHRHIPYRENK NLTGTARYASMNTHLGI EQSRRDDLES LGYVLLMYF

CKL12 (137) GLGRRANQVHIIDFGLAKKYRDNTHQHIPYRENKNTGTARYASMNTHLGI EQSRRDDLESLGYILMYF  
CKL13 (137) GLGRKANQVYIIDYGLAKKYRDLQTHKHIPYRENKNTGTARYASVNTHLGI EQSRRDDLESLGYLLMYF  
AK110592 (140) GTGKRGNOVNVIDFGLAKKYRDPKTHFHIPYRENKNTGTARYASINTHLGV EQSRRDDMESLGYVLMYF  
AK101388 (137) GLGRKASQVYVIDYGLAKKYRDLQTHKHIPYRENKNTGTARYASVNTHLGV EQSRRDDLESLGYVLMYF  
AK111554 (137) GLGRKANQVYIIDYGLAKKYRDLQTHKHIPYRENKNTGTARYASVNTHLGI EQSRRDDLESLGYVLMYF  
AK111597 (137) GLGRKANQVYIIDFGLAKKYRDATTNRHIPYRENKNTGTARYASCNTHLGI EQSRRDDLESLGYVLLYF  
AK111599 (137) GLGRKANQVYIIDFGLAKKYRDNTHQHIPYRENKNTGTARYASCNTHLGV EQSRRDDLESLGYVLLYF  
AK111911 (137) GLGKRANQVYVIDFGLAKKYRDTSTHQHIPYRENKNTGTARYASVNTHLGI EQSRRDDMESLGYVLMYF  
AK111947 (137) GLGKRANQVYVIDFGLAKKYRDTSTHQHIPYRENKNTGTARYASVNTHLGI EQSRRDDLESLGYVLMYF  
AK111987 (137) GLGRKANQVYVIDYGLAKKYRDLQTHKHIPYRENKNTGTARYASVNTHLGV EQSRRDDLESLGYVLMYF  
AK120765 (137) GLGRKANQVYIIDYGLAKKYKDLQTHKHIPYRENKNTGTARYASVNTHLGI EQSRRDDLESLGYVLLYF  
NP\_916571 (137) GLGRRANQVYIIDFGLAKKYRDTSTHQHIPYRENKNTGTARYASVNTHLGI EQSRRDDLESLGYVLMYF

CKL1 (207) LKGSLLPWQGLKAGTKKQKYERI SEKKVSTSI EALCRGYPS EFASYPHYCRSLRFDDKPDYAYLKRFRLDL  
CKL2 (206) LKGSLLPWQGLKAGNKKQKYEKI SEKKVSTSI EALCRGYPS EFASYPHYCRSLRFDDKPDYAYLKRFRLDL  
CKL3 (207) LRGSLLPWQGLKAGTKKQKYDKI CEKKISTPIEVLCKNHPVEFASYPHYCHTLTFDQRPDYGFLKRFRLDL  
CKL4 (207) LRGSLLPWQGLKAVDKKQKYDKI CEKKISTPIEVLCKSHPVEFASYPHYCHTLTFDQRPDYGFLKRFRLDL  
CKL5 (207) LKGSLLPWQGLKAGNKKQKYDKI SEKKVSTSI ETLCRGHPT EFASYPHYCRSLRFDDKPDYAYLKRFRLDL  
CKL6 (211) LRGSLLPWQGLKAGTKKQKYDR ISEKKVSTPIEVLCKSYPPEFVSYFQYCRSLRFEDKPDYSYLKRFRLDL  
CKL7 (207) LRGSLLPWQGLKAGTKKQKYDR ISEKKVSTPIEVLCKNQPSEFVSYPHYCRSLRFDDKPDYSYLKRFRLDL  
CKL8 (207) LRGSLLPWQGLRAGTKKQKYDKI SEKKRLTPVEVLCKSFPEFVSYFLYVRSRLEFEDKPDYPYLKRFRLDL  
CKL9a (207) LKGSLLPWQGLKAGTKKQKYDR ISEKKVATPIEVLCKNQPSEFVSYPHYCRSLRFDDKPDYSYLKRFRLDL  
CKL9b (207) LRGSLLPWQGLKAGTKKQKYDR ISEKKVATPIEVLCKNQPSEFVSYPHYCRSLRFDDKPDYSYLKRFRLDL  
CKL10 (207) LRGSLLPWQGLKAGTKKQKYEKI SEKKMLTPVEVLCKSYPSEFVSYPHYCRSLRFEDKPDYSYLKRFRLDL  
CKL11 (207) LRGSLLPWQGLRAGTKKQKYDKI SEKKRLTPVEVLCKNFPPEFVSYFLYVRSRLEFEDKPDYSYLKRFRLDL  
CKL12 (207) LKGSLLPWQGLKAGTKKQKYERI SEKKVSTSI EALCRGYPS EFASYPHYCRSLRFDDKPDYGYLKRIFRLDL  
CKL13 (207) LRGSLLPWQGLRAGTKKQKYDKI SEKKRLTPVEVLCKNFPPEFVSYFLYVRSRLEFEDKPDYSYLKRFRLDL  
AK110592 (210) CRGSLLPWQGLKAGTKKQKYDR ISEKKMLTPVEVLCKRGNPEFAIYLNRYTRSLRFDDKPDYSYLKRFRLDL  
AK101388 (207) LRGSLLPWQGLKAGTKKQKYDKI SEKKMLTPVEVLCKSYPPEFVSYPHYCRSLRFEDKPDYSYLKRFRLDL  
AK111554 (207) LRGSLLPWQGLKAGTKKQKYDKI SEKKMLTPVEVLCKSYPSEFVSYPHYCRSLRFEDKPDYSYLKRFRLDL  
AK111597 (207) LRGSLLPWQGLKAGTKKQKYDKI SEKKLATPIEVLCKSHPVEFASYPHYCHSLTFDQRPDYGFLRRLDL  
AK111599 (207) LRGSLLPWQGLKAGTKKQKYDKI CEKKISTPIEVLCKSYPSEFVSYPHYCHSLTFDQRPDYAFVKKRLDL  
AK111911 (207) LRGSLLPWQGLKAGNKKQKYEKI SERKIATSTEALCRGYPT EFASYPHYCRSLRFEDS PDYQYLKRFRLDL  
AK111947 (207) LRGSLLPWQGLKAGTKKQKYEKI SERKIATSTEALCRGYPT EFASYPHYCRSLRFEDLEPDYQYLKRFRLDL  
AK111987 (207) LRGSLLPWQGLKAGTKKQKYDR ISEKKMLTPVEVLCKSYPSEFVSYPHYCRSLRFEDKPDYSYLKRFRLDL  
AK120765 (207) LRGSLLPWQGLKAGTKKQKYDR ISEKKMLTPVEVLCKSYPSEFVSYPHYCRSLRFEDKPDYSYLKRFRLDL  
NP\_916571 (207) LRGSLLPWQGLKAGTKKQKYEKI SEKKVATSI EALCRGYPT EFASYPHYCRSLRFDDKPDYSYLKRFRLDL

CKL1 (277) FIREGFQFDYVFDWTILKYQSQS --- TAPPSR-ALNPVGTSAALPPGISNIDRYTGEERG-RPHMES-  
CKL2 (276) FIREGFQFDYVFDWTILKYQSQS --- STPPPR-HHGPVVGSSALPPAITSAPERPSGGDEARPSGWSS-  
CKL3 (277) FSREGYEFDYIFDWTIIKYQQAQKSRNQSAVPGSSNPRAMPVDTSNHRGGPNISYEAEEASERVRSANAI  
CKL4 (277) FSREGYEFDYIFDWTIIKYQSQKTRSQSAVPGSSNARAI PMDTSNHRGGTKISHEAQVSDRVRPANAS  
CKL5 (277) FIREGFQFDYVFDWTIVKYQSQS --- GNPQPR-PHDGGVGTSSGLNPAVGNSE-----E-----  
CKL6 (281) FIREGFQFDYVFDWTALKHPQS -SARSHSTHERHR -- TGKPGMGAGPSAEKPERISVGNIR -DKFSGAV  
CKL7 (277) FIREGFQFDYVFDWTILKYPQIGSSSSSSSRTRHHT -- TAKPGFNADP -IERQERILGKETTRYKIPGAV  
CKL8 (277) FIREGFQFDYVFDWTILKYPQFSSSSSSSKPRSSLRPAMNPPVPIAERPDKPSAGAQDSR -DRFSGAL  
CKL9a (277) FIREGFQFDYVFDWTILKYPQIGSSSSSSSRTRVVY -- AAFSFGS-----  
CKL9b (277) FIREGFQFDYVFDWTILKYPQIGSSSSSSSRTRHNT -- TANPLTAGASLEKQERIAGKETRENRFSGAV  
CKL10 (277) FIREGFQFDYVFDWTILKYPQSGS --- ISKPRPNPKPALDPPGSAERNEKP -- IVQDLR -ERFSGAV  
CKL11 (277) FIREGFQFDYVFDWTILRYPQFSSSSSSSKPRPTLRPAMNIPVPSADKAERP -- PIGQDSR -ERFSGVF  
CKL12 (277) FIREGFQFDYVFDWTILKYQSQS --- TAPPSRGLVSPAVGTSAGLPPGLTSDRYGGEEGGRRPMDSD-  
CKL13 (277) FIREGFQFDYVFDWTILRYPQFSSSSSSSKPRPTLRPAMNIPVPSADKAERP -- PIGQDSR -ERFSGVF  
AK110592 (280) FVREGFYDYVFDWTIVKYQKN --- AQATAQAANQCGGEE --- DDKGRG-----  
AK101388 (277) FIREGFQFDYVFDWTIKQGS --- ESNRLRSSG -- R -- TSGLVGPSAERTERAARQDVPDRFSGTV  
AK111554 (277) FIREGFQFDYVFDWTILKYPQI --- GSKPLMRPSE -- R -- TSGAAGPSMEKMEKAPG-----  
AK111597 (277) ADREGYQYDHFVDWTLLKCKQSQKA --- KQQQDPGVSSRAVPTNIEKHQVSVSRPTEASGQLES --- EQ  
AK111599 (277) FTRQVYEFDYVFDWTVLRYKQSQ --- KVQHGSGATI TRATPGDLKTAGVNGAFPHNEARQGTGPHSLA  
AK111911 (277) FIPEGFQFDYVFDWTILKYQSQM --- TSAPPR-AIAPATGQSSAMAPIANNN-RLSATEEGRRSGWSDM  
AK111947 (277) FIREGFQFDYVFDWTILKYQSQS --- TSVPPR-AIAAAGQSSGMSPIANNN-RLSATEEGRRSGWSD-  
AK111987 (277) FIREGFQFDYVFDWTMLKYPQI --- RDNKLRSPG -- K -- TSGLVGRSAERTERTTG-----  
AK120765 (277) FTRQVYQDYIFDWTTSKNPQ --- MGSTNKLIQQQ --- SGRMIGIGPSVDRPDKTSVQGEIRDRTFGAV  
NP\_916571 (277) FIREGFQFDYVFDWTILKYQSQS --- ASAPPR-AVGHGAGPSGLAPPALQND-RQSGVDEGRGTSGWSS-

CKL1 (341) -SRRR-VSGALDNSGINSQPT-----SSSARDSMIP-----SSSLFAQSAGSSRRVTAVSGSR--  
CKL2 (341) -GIPRRNSGQIFNSGSLAKQKAPVSSDPAISKDVVLS-----SSSFL-RATGSSRA-AVSSSR--  
CKL3 (347) GPSPQINNTAAGRTPGFDHP --- VHKNMNMMP-----STSLSPAGTSKRNVG-----  
CKL4 (347) GPSPQIN --TAVGRSLGFDQ --- VHKNMNMPS-----STSLSPAGTSKRNVN-----  
CKL5 (327) --KRPDVPNRQTNPDFTLKQDKNGNDSIAIKDKLLP-----GSLNLRSEGSSSRRVVDTSR--  
CKL6 (347) EAFARRNVRGSPSPHQNHTRHR --- TLDEIPSMKPAVMVS --- EKGRNTRSYGSAS -RAVASGS ---  
CKL7 (344) EAFSRRHPTTSSPRDRSRSR --- NSDDGPFQKTHGDS --- ERANSSSRYSRASSSRKAVAASSS ---  
CKL8 (346) EAYARRNGSGSVVQADRSR --- RTSENVLASSKDTTPQNYERVERPISSTRHASSS -RKAVVSS -V--

CKL9a (320) -----  
CKL9b (345) EAFSRRHPATSTT-RDRSASR---NSVDGPLSKHPPGDS-----ERPRSSSRYGSSS-RAIPSSS---  
CKL10 (340) EAFARRNVP SHGIRPKHIFSD---DASKEVQVS-----EKTRNEIAT-KMAVMSS-S---  
CKL11 (344) EAYTRRNGSGTGVQADQSSRP---RTSENVLAS-KDTQNO---ERPNSLSRNLSSS-RKAIAGSSV--  
CKL12 (343) -SRRR-MSGALENSGNLSS-----RGPMP-----SSSLFAQSAGSSR---RVTSEE--  
CKL13 (344) EAYTRRNGSGTGVQADQSSRP---RTSENVLAS-KDTQNO---ERPNSLSRNLSSS-RKAIAGSSV--  
AK110592 (323) ---RHVTTTAAANAGTAAGTK-----RGPVNA-----RQEGTGMQLRSAN-----  
AK101388 (335) DPFARRTGSGSGHYGEHTKHR---NILDSSLAPKTAVDLKD---RRPTSSSRNGSTS-RKALLSSS---  
AK111554 (327) EASGRNPTGSLNQSDNYAQRPSMSLKEIMHSTDRSGERTV---ERPRTSSRTGSAS-RAVAVSSS---  
AK111597 (341) RPAIRMQFKSTAENS-RSSNR---HTDKLRVGTST-----ENVLLQSTSFGHADAPRRN-----  
AK111599 (343) GSAAQLQVKKRSTERGPHPNIQ---HTENITQDMTA-----RKHLAASVLPGAEWRKDGNSRQLGQ  
AK111911 (342) DAMRRQVPPPAINAGSLAKQKSPIGHEQSTSKDAVFS-----SSTFLGRSSGSSRRP-AVSSSR--  
AK111947 (341) DPTRRQVPPTGINAGSLSKQKSPVRPDMSTSKDALFS-----SSTMLGRSSGSLRRP-VVSSSR--  
AK111987 (326) EALARRTGSGSGRNGEPTKHR---TLLDLSLMSKATADTDK---TRPTSLSRNGSTS-RAVAVSSS---  
AK120765 (340) EAFARRNP-GSRLGDNSRHK---SLADSFSGSSTEAVVDS-----ERTRTISRNRSSAKMPTAAAAATPS  
NP\_916571 (341) -MDRRRAPPIASVGTLAKQKAPVGNDAFSKPEVIS-----ASNFLGRSSGSSRRP-AVSSSR--

CKL1 (393) ----DNFP-GSEELLQRSRTGDVSRG-----V-----IPRNSP-GEAGKSTRRHYE  
CKL2 (397) ----EAAVLGTDSEPSNPQIVEAGSGSN-S-----KIPVSRNSPIVSEINKLSSP-SRATTSVMKNYE  
CKL3 (391) ----PETSNSGYGSGNRTG--WTSS-----FMSPEK-----  
CKL4 (389) ----PETSNSGFGSGNKTGG-WTSP-----FMSPGK-----  
CKL5 (384) ----EPFS---GGSDNANYETALKG-----IDGLRINNNAGDETAATPQSNGD  
CKL6 (405) --RPSSSGEQRES---RDSSRVASS---GGGVRPSVFQRTQAAAAVSGYE-SKTASAFNRDRVAASRTARD  
CKL7 (403) --RPSSAGGPSES---RTSSRLVSSSGGGSGNGRPTSRVQAGYE-SKTLFSFRAT--AARNTRED  
CKL8 (409) --RATSSADFTEN---RSSRVVPSNG-----RSSTAQRTQLVDPDTPTRPSSSFTRAAPSRTARD  
CKL9a (320) -----  
CKL9b (401) --RPSSAGGPSDS---RSSRLVTSTGGVGTVSN--RASTSQRIQAGNE-SRTSSFSR---AARNTRED  
CKL10 (387) --QPGSSGELSEN---RSSKLFSSS-----AQK-----IQPVQETKLSARLGRD  
CKL11 (402) --RATSSADFTEN---RLSRLIPNND-----RSSTTLRTQFAPS-----SSSVATKAAPTRAARD  
CKL12 (385) -----L-----QRCRTGAGLRN-----S-----PVVTTPEGKRSSTRKHID  
CKL13 (402) --RATSSADFTEN---RLSRLIPNND-----RSSTTLRTQFAPS-----SSSVATKAAPTRAARD  
AK110592 (360) ----K-----RGGDQYASGGY-----  
AK101388 (394) --RP-SSGDPIDP--NRSNLIPTSSG-----SSRPSTMQRHLHQSTGLETR--SSLTKTARNVHDD  
AK111554 (389) --RPGSSVEPMEQQYSRTSRLFSSS-----GSRPSSTQVNPVSVGETRATSLSRAAVARGSGDE  
AK111597 (391) -IAISKTOGLVDSNAHGTN-----NPGPSNHL-----  
AK111599 (400) LDALHQKQSFVSNNTGSSSGRFPTFL-----HDS PAN-----  
AK111911 (400) ----EP---STEADQSRRTTDASPGAF-Q-----RSGAPRWSPQMVSDSDNRRTP-SGRHPSNAKNYE  
AK111947 (399) ----ELQ---SSEAEPSRRTPDASPGTF-Q-----RSAPRRSSQMLDYS DPRHSS-SGRHAAN-KNYE  
AK111987 (385) --KP-NCGDPSDT--NRTSRLFSSS-----SSRPSAAQRALQSAGAE LRS-SSLSKTRKSSRD  
AK120765 (401) SRGTSSKGDGGEQ--NRAGRWVSSGS-----GSNRPSAAAQRHHHHHHHSAADDRSPPAAKGG  
NP\_916571 (398) ----DVMP-IDTSEPSRTRATDASPGAF-R-----RTSGPQKSS-PVNSAEPKHSS-SARHSSNVKNYE

CKL1 (433) SVVKGIDNLQVSDEHHPH-  
CKL2 (455) ANLKGIESLHF-----  
CKL3 (416) -----  
CKL4 (415) -----  
CKL5 (425) DVEPQSKAL-----  
CKL6 (467) EALRSFELLSIRK-----  
CKL7 (465) QLR-SFELLSLRK-----  
CKL8 (464) ITLQSFELLTIGNGKRK--  
CKL9a (320) -----  
CKL9b (459) PLRRSLELLTLRK-----  
CKL10 (426) DGLRSFDMLTIGSGKRK--  
CKL11 (452) ITLQSLLELLS I GNSKRK--  
CKL12 (417) SAIKGIETLQVSDERFHHH  
CKL13 (452) ITLQSLLELLS I GNSKRK--  
AK110592 (372) -----  
AK101388 (447) PTLRTFERLSISADRRK--  
AK111554 (446) PLHRSLELLSLGGGKRK--  
AK111597 (417) -----  
AK111599 (431) -----  
AK111911 (455) STIRGIQGLNFDGDDRIQY  
AK111947 (454) STIRGIQGLNFDANDRIHY  
AK111987 (438) PTIRSFEMLSLADRRK--  
AK120765 (459) TAIRC FERLSIGGERRK--  
NP\_916571 (454) SALKGIEGLNFDGDERVQY