

Product datasheet for RC217129

CAMK1D (NM_020397) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CAMK1D (NM_020397) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CAMK1D
Synonyms:	CaM-K1; CaMKID; CKLiK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217129 representing NM_020397 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCCGGGAGAACGGCGAGAGCAGCTCCTCCTGAAAAAGCAAGCTGAAGACATCAAGAAGATCTTCG
AGTTCAAAGAGACCCTCGGAACCGGGCCCTTTCCGAAGTGGTTTTAGCTGAAGAGAAGGCAACTGGCAA
GCTCTTTGCTGTGAAGTGTATCCCTAAGAAGCGCTGAAGGGCAAGGAAAGCAGCATAGAGAATGAGATA
GCCGTCCTGAGAAAGATTAAGCATGAAAATATTGTTGCCCTGGAAGACATTTATGAAAGCCCAAATCACC
TGTAAGTGGTGTGCAGCTGGTGTCCGGTGGAGAGCTGTTTGACCGGATAGTGGAGAAGGGTTTTATAC
AGAGAAGGATGCCAGCACTCTGATCCGCAAGTCTTGGAGCCGTGACTATCTCCACAGAATGGGCATC
GTCCACAGAGACCTCAAGCCCGAAAATCTTGTACTACAGTCAAGATGAGGAGTCCAAAATAATGATCA
GTGACTTTGGATTGTCAAAAATGGAGGGCAAAGGAGATGTGATGTCCACTGCCTGTGGAAGTCCAGGCTA
TGTGCTCCTGAAGTCTCGCCAGAAACCTTACAGCAAAGCCGTTGACTGCTGGTCCATCGGAGTGATT
GCCTACATCTTGCTCTGCGGCTACCCCTCTTTTATGATGAAAATGACTCCAAGCTCTTTGAGCAGATCC
TCAAGGCGGAATATGAGTTTACTCTCCCTACTGGGATGACATCTCCGACTCTGAAAAGACTTCATTTCG
GAACCTGATGGAGAAGGACCCGAATAAAAAGATACACGTGTGAGCAGGCAGCTCGGCACCCATGGATCGT
GGTGACACAGCCCTCAACAAAAACATCCACGAGTCCGTCAGCCAGATCCGAAAAAATTTGCCAAGA
GCAAATGGAGACAAGCATTTAATGCCACGGCCGTCGTCAGACATATGAGAAAACTACACCTCGGCAGCAG
CCTGGACAGTTCAAATGCAAGTGTTCGAGCAGCCTCAGTTTGGCCAGCCAAAAAGACTGTGCGTATGTA
GCAAAACCGAATCCCTCAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC217129 representing NM_020397
Red=Cloning site Green=Tags(s)

MARENGESSSSWKKQAEDIKKIFEFKETLGTGAFSEVVLAEKATGKLFVAVKCIKKALKKGKSSIENEI
 AVLRKIKHENIVALEDIYESPNHLYLVMQLVSGGELFDRIVEKGFYTEKDASTLIRQVLDAVYYLHRMGI
 VHRDLKPENLLYYSQDEESKIMISDFGLSKMEGKGDVMSTACGTPGYVAPEVLAQKPYSKAVDCWSIGVI
 AYILLCGYPPFYDENDSKLFEQILKAEYEFDSPYWDDISDSAKDFIRNLMKEDPNKRYTCEQAARHPWIA
 GDTALNKNIHESVSAQIRKNFAKSKWRQAFNATAVVRHMRKLHLGSSLDSSNASVSSSLASQKDCAYY
 AKPESLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8054_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_020397

ORF Size: 1071 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_020397.4](#)

RefSeq Size: 1727 bp

RefSeq ORF: 1074 bp

Locus ID: 57118

UniProt ID: [Q8IU85](#)

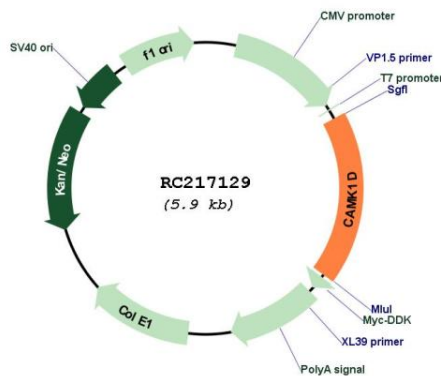
Cytogenetics: 10p13

Protein Families: Druggable Genome, Protein Kinase

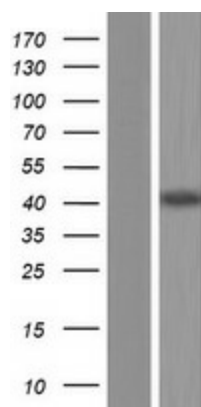
MW: 40 kDa

Gene Summary: This gene is a member of the calcium/calmodulin-dependent protein kinase 1 family, a subfamily of the serine/threonine kinases. The encoded protein is a component of the calcium-regulated calmodulin-dependent protein kinase cascade. It has been associated with multiple processes including regulation of granulocyte function, activation of CREB-dependent gene transcription, aldosterone synthesis, differentiation and activation of neutrophil cells, and apoptosis of erythroleukemia cells. Alternatively spliced transcript variants encoding different isoforms of this gene have been described. [provided by RefSeq, Jan 2015]

Product images:



Circular map for RC217129



Western blot validation of overexpression lysate (Cat# [LY412500]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217129 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).