

## Product datasheet for **RC208102**

### CaMKK (CAMKK1) (NM\_032294) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CaMKK (CAMKK1) (NM_032294) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CaMKK
Synonyms:	CAMKKA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC208102 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGAGGGGGTCCAGCTGTCTGCTGCCAGGATCCTCGGCAGAGCTGGTAGAACGGGTGCCAGCCATCG  
 ATGTGACTCACTTGGAGGAGGCAGATGGTGGCCAGACCTACTAGAAACGGTGTGGACCCACCACG  
 GGCCAGAGCTGCCTCTGTGATCCCTGGCAGTACTTCAAGACTGCTCCAGCCCGGCTAGCCTCTCAGCC  
 AGGAAGCTTCCCTACAGGAGCGGCCAGCAGGAAGCTATCTGGAGGCGCAGGCTGGGCCTTATGCCACGG  
 GGCCTGCCAGCCACATCTCCCCCGGGCTGGCGGAGGCCACCATCGAGTCCCACCACGTGGCCATCTC  
 AGATGCAGAGGACTGCGTGCAGCTGAACCAGTACAAGCTGCAGAGTGAGATTGGCAAGGGTGCCTACGGT  
 GTGGTGAAGCTGGCCTACAACGAAAGTGAAGACAGACACTATGCAATGAAAGTCTTTCCAAAAAGAAGT  
 TACTGAAGCAGTATGGCTTCCACGTGCGCCTCCCCGAGAGGGTCCCAGGCTGCCAGGGAGGACCAGC  
 CAAGCAGCTGCTGCCCTGGAGCGGGTGTACCAGGAGATTGCCATCCTGAAGAAGCTGGACCACGTGAAT  
 GTGGTCAAACATGATCGAGGTCCTGGATGACCCAGCTGAGGACAACCTCTATTTGGTGTGGTACCTCTGA  
 GAAAGGGGCCCGTCATGGAAGTGCCTGTGACAAGCCCTTCTCGGAGGAGCAAGCTCGCCTCTACCTGCG  
 GGACGTATCCTGGGCTCGAGTACTTGCAGTGCAGAAAGATCGTCCACAGGGACATCAAGCCATCCAAC  
 CTGCTCCTGGGGATGATGGGCAGTGAAGATCGCCGACTTTGGCGTCAGCAACCAGTTTGGGGGAACG  
 ACGCTCAGCTGTCCAGCAGCGCGGGAACCCAGCATTATGGCCCCGAGGCCATTTCTGATTCGGCCA  
 GAGCTTCAAGTGGGAAGCCTTGGATGTATGGGCCACTGGCGTACGTTGTACTGCTTTGTCTATGGGAAG  
 TGCCCATTCATCGACGATTTTCCTGGCCCTCCACAGGAAGATCAAGAATGAGCCCGTGGTGTTCCTG  
 AGGAGCCAGAAAATCAGCAGGAGCTCAAGGACCTGATCCTGAAGATGTTAGACAAGAATCCCGAGCGAG  
 AATTGGGGTGCCAGACATCAAGTTGCACCTTGGGTGACCAAGAACGGGGAGGAGCCCTTCCCTCGGAG  
 GAGGAGCACTGCAGCGTGGTGGAGGTGACAGAGGAGGTTAAGAACTCAGTCAGGCTCATCCCCAGCT  
 GGACCACGGTGTCTGGTGAAGTCCATGCTGAGGAAGCGTTTCTTTGGGAACCCGTTTGGCCCCAAGC  
 ACGGAGGGAAGAGCGATCCATGTCTGCTCCAGGAAACCTACTGGTGAAGAAGGGTTTGGTGAAGGGGGC  
 AAGAGCCAGAGCTCCCCGGCTCCAGGAAGACGAGGCTGCATCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC208102 protein sequence  
 Red=Cloning site Green=Tags(s)

MEGGPAVCCQDPRAELVERVAAIDVTHLEADGGPEPTRNGVDPPPRARAASVIPGSTSRLLPARPSLSA  
 RKL~~SLQ~~ERPAGSYLEAQAGPYATGPASHISPRARRPTIESHHVAISDAEDCVQLNQYKLQSEIGKGAYG  
 VVRLAYNESEDRHYAMKVL~~SKKLL~~KQYFRRPPPRGSQAAQGGPAKQLLPLERVYQEIAILKKLDHVN  
 VVKLIEVLDDPAEDNLYLVFDLLRKGPMVEVPCDKPFSEEQARLYLRDVI~~L~~GLEYLHCQKIVHRDIKPSN  
 LLLGDDGHVKIADFGVSNQFEGNDAQLSSTAGTPAFMAPEAISDSGQSFSGKALDVWATGVTL~~Y~~CFVYGK  
 CPFIDDFILALHRKIKNEPVVFPEEPEISEELKDLILKMLDKNPETRIGVPDIK~~L~~HPVWTKNGEELPSE  
 EEHCSVVEVTEEEVKNSVRLIPSWTTVILVKSMLRKR~~S~~FGNPFEPQARREERSMSAPGNLLVKEGFGE  
 KSP~~EL~~PGVQEDEAAS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6347\\_e08.zip](https://cdn.origene.com/chromatograms/mk6347_e08.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_032294

**ORF Size:** 1515 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\\_032294.3](#)

**RefSeq Size:** 3583 bp

**RefSeq ORF:** 1518 bp

**Locus ID:** 84254

**UniProt ID:** [Q8N5S9](#)

**Cytogenetics:** 17p13.2

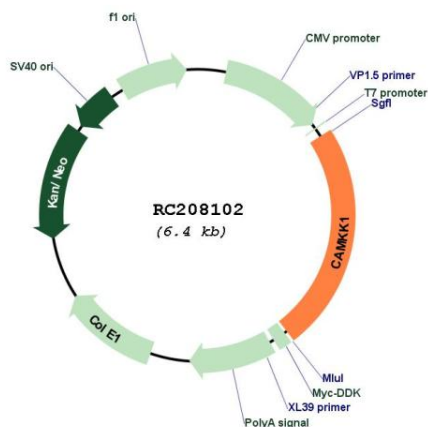
**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Adipocytokine signaling pathway

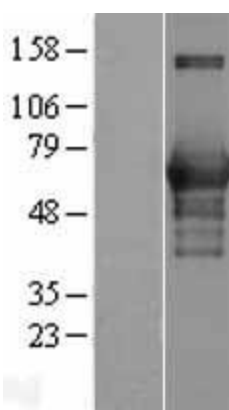
**MW:** 55.7 kDa

**Gene Summary:** The product of this gene belongs to the Serine/Threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. This protein plays a role in the calcium/calmodulin-dependent (CaM) kinase cascade. Three transcript variants encoding two distinct isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

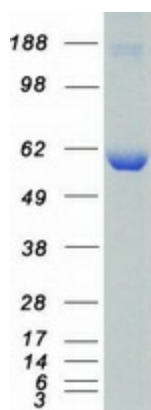
**Product images:**



Circular map for RC208102



Western blot validation of overexpression lysate (Cat# [LY406737]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC218931] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CAMKK1 protein (Cat# [TP308102]). The protein was produced from HEK293T cells transfected with CAMKK1 cDNA clone (Cat# RC208102) using MegaTran 2.0 (Cat# [TT210002]).