

Product datasheet for **MC217967**

Camkk2 (NM_145358) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Camkk2 (NM_145358) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Camkk2
Synonyms:	6330570N16Rik; AW061083; mKIAA0787
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC217967 representing NM_145358
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCATCATGTGTCTCTAGCCAGCCACCAGCGACCGGGTGGCCCCCAGGATGAGCTGGGAAGTGGGG
 GTGGCAGCCGGGAAGGCCAGAAGCCCTGTGAGGCACTGCGGGGACTCTCATCCTTAAGTATCCACTTGGG
 CATGGAATCCTTCATCGTGGTCACCGAGTGTGAGCCAGGCCGGGTGTGGACCTCAACCTGGCCAGAGAC
 CAGCCTCCGGAGGCCGATGGCCAGGAACCCCCCTCGAAGCCTCGGACCCTGAGTCCCGGTCCCCGCTTT
 CTGGTCGCAAGATGTCCCTGCAGGAGCCGTCCCAGGGCGGGCCGCATCCAGCAGCAACAGCCTGGACAT
 GAATGGACGCTGCATCTGCCATCCCTGTCTACTACCAGCCAGCTCCCACAGTCTCTCCCCGGATG
 CCCCAGCGGCCACAGTAGAGTACACCACGTCTCCATTACCGGTTTGCAGGACTGCGTGCAGCTGAATC
 AGTACACCCTGAAGGATGAAATTGGAAAGGGCTCCTATGGTGTGCAAGCTGGCCTACAATGAAAATGA
 CAATACTTATTACGCAATGAAAGTGCTGTCCAAAAGAAGCTGATCCGACAGGCTGGCTCCACAGTCGC
 CCCCACCACGAGGAGCTCGCCAGCCCCAGGGGGCTGCATCCAGCCCAGGGGCCCATCGAGCAAGTGT
 ACCAGGAGATTGCTATCCTCAAAAAGCTGGATCATCCCAACGTGGTGAAGCTGGTAGAGGTCCTGGATGA
 CCTAATGAGGACCATCTGTACATGGTGTGGTGGTGAACCAAGGGCCTGTAATGGAAGTGGCCACC
 CTCAAGCCACTGTCCGAAGACCAGGCCGCTTCTACTTCCAGGATCTGATCAAAGGCATAGAGTACTTGC
 ATTACCAGAAGATCATCCATCGGGACATCAAACCTTCAAACCTCCTGGTGGGGGAAGACGGGCACATCAA
 GATTGCCGACTTCGGTGTAAAGCAACGAGTTCAAGGGCAGCGACGCCTTGTGTCTAACCCGTGGGCACA
 CCTGCCTTCATGGCACCCGAGTCGCTCTCAGAGACCCGCAAGATCTTCTCCGAAAGGCCGTTGGATGTTT
 GGGCCATGGGTGTGACGCTGACTGCTTTGTCTTTGGCCAGTGCCTTTTCATGGATGAACGAATCATGTG
 TTTGCACAGTAAGATCAAGAGTCAAGGCCCTGGAGTTTCCCGACCAGCCCGATATAGCCGAAGACTTGAAA
 GATCTGATCACTCGGATGTTGGCAAAAATCCAGAGTCCAGGATTGTGGTGCCTGAAATCAAGCTGCACC
 CTTGGGTTACGAGGCACGGGGCCGAGCCATTGCCGTGGAGGACGAGAACTGCACACTGGTTCGAGGTGAC
 CGAAGAGGAGGTGAGAAATTCAGTCAAACACATTTCCAGCCTGGCAACTGTGATCCTGGTAAAGACCATG
 ATTCGAAAGCGCTCATTCCGGAAACCCGTTCAAGGTAGCCGCCGGGAGGAACGTTCCCTGTCAGCGCCTG
 GAAACCTGCTCACGAAGCAAGGCAGCGAAGACAGCCCCGGGGCCAGAGCCGGCCCTGTGGGGGAGGA
 GGAAGTGCTCTT**GTA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_145358

Insert Size: 1626 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_145358.2](#), [NP_663333.1](#)

RefSeq Size: 4860 bp

RefSeq ORF: 1626 bp

Locus ID: 207565

UniProt ID: [Q8C078](#)

Cytogenetics: 5 F

Gene Summary: Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade involved in a number of cellular processes. Phosphorylates CAMK1, CAMK4 and CAMK1D (By similarity). Efficiently phosphorylates 5'-AMP-activated protein kinase (AMPK) trimer, including that consisting of PRKAA1, PRKAB1 and PRKAG1. This phosphorylation is stimulated in response to Ca(2+) signals (By similarity). May play a role in neurite growth. Isoform 2 may promote neurite elongation, while isoform 1 may promoter neurite branching (By similarity). May be involved in hippocampal activation of CREB1. [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) lacks an alternate exon in the 3' coding region which shifts the reading frame, compared to variant 1. The resulting protein (isoform 2) has a shorter and distinct C-terminus when it is compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.