

Product datasheet for **SC309461**

CAMK2G (NM_001222) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CAMK2G (NM_001222) Human Untagged Clone
Tag:	Tag Free
Symbol:	CAMK2G
Synonyms:	CAMK; CAMK-II; CAMKG; MRD59
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >SC309461 representing NM_001222.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGATCGCC
ATGGCCACCACCACCCTGCACCCGTTTCACCGACGACTACCAGCTCTTCGAGGAGCTTGCAAGGGT
GCTTTCTCTGTGGTCCGAGGTGTGTGAAGAAAACCTCCACGCAGGAGTACGCAGCAAAAATCATCAAT
ACCAAGAAGTTGTCTGCCGGGATCACCAGAACTAGAACGTGAGGCTCGGATATGTCGACTTCTGAAA
CATCCAAACATCGTGCCTCCATGACAGTATTTCTGAAGAAGGGTTTACTACCTCGTGTTTGACCTT
GTTACCGCGGGGAGCTGTTTGAAGACATTGTGGCCAGAGAGTACTACAGTGAAGCAGATGCCAGCCAC
TGTATACATCAGATTCTGGAGAGTGTAAACCACATCCACCAGCATGACATCGTCCACAGGGACCTGAAG
CCTGAGAACCTGCTGCTGGCAGTAAATGCAAGGGTGCCGCCGCTCAAGCTGGCTGATTTTGGCTAGCC
ATCGAAGTACAGGGAGAGCAGCAGGCTTGGTTTGGTTTGGCTGGCACCCAGGTTACTTGTCCCCTGAG
GTCTTGAGGAAAGATCCCTATGAAAACCTGTGGATATCTGGCCTCGGGGTATCCTGTATATCCTC
CTGGTGGCTATCCTCCCTTCTGGGATGAGGATCAGCACAAGCTGTATCAGCAGATCAAGCTGGAGCC
TATGATTTCCCATCACCAGAATGGGACACGGTAACTCCTGAAGCCAAGAAGTTGATCAACCAGATGCTG
ACCATAAACCCAGCAAAGCGCATCACGGCTGACCAGGCTCTCAAGCACCCGTGGGTCTGTCAACGATCC
ACGGTGGCATCCATGATGCATCGTCAAGGAGACTGTGGAGTGTTCGCGCAAGTTCAATGCCCGGAGAAAA
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AAGAAGTCGGATGGCGGTGTCAAGGAGCCACAAACCACTGTGGTACACAACGCTACAGATGGGATCAAG
GGCTCCACAGAGAGCTGCAACACCACCACAGAAGTGAAGACCTCAAAGTGCAGAAACAGGAGATCATT
AAGATTACAGAACAGCTGATTGAAGCCATCAACAATGGGGACTTTGAGGCCTACACGAAGATTTGTGAT
CCAGGCTCACTTCCTTTGAGCCTGAGGCCCTTGGTAACCTCGTGGAGGGGATGGATTTCCATAAGTTT
TACTTTGAGAATCTCCTGTCCAAGAAGCAAGCCTATCCATACCACCATCCTAAACCCACACGTCAC
GTGATTGGGAGGACGCAGCGTGCATCGCTACATCCGCCCTACCCAGTACATCGACGGGAGGGTCCG
CCTCGCACCAGCCAGTCAGAAGAGACCCGGTCTGGCACCGTCCGGATGGCAAGTGGCTCAATGTCCAC
TACTACTGCTCAGGGGCCCTGCCGACCCTGCAAGTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
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Restriction Sites: SgfI-MluI

Plasmid Map: □

ACCN: NM_001222

Insert Size: 1488 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:	<ol style="list-style-type: none">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_001222.3
RefSeq Size:	3635 bp
RefSeq ORF:	1488 bp
Locus ID:	818
UniProt ID:	Q13555
Cytogenetics:	10q22.2
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Calcium signaling pathway, ErbB signaling pathway, Glioma, GnRH signaling pathway, Long-term potentiation, Melanogenesis, Neurotrophin signaling pathway, Olfactory transduction, Oocyte meiosis, Wnt signaling pathway
MW:	56 kDa
Gene Summary:	<p>The product of this gene is one of the four subunits of an enzyme which belongs to the serine/threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells the enzyme is composed of four different chains: alpha, beta, gamma, and delta. The product of this gene is a gamma chain. Many alternatively spliced transcripts encoding different isoforms have been described but the full-length nature of all the variants has not been determined.[provided by RefSeq, Mar 2011]</p> <p>Transcript Variant: This variant (4) lacks in-frame segments of the coding region, compared to variant 1. It encodes a shorter isoform (4), that is missing internal segments 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.</p>