

Product datasheet for **SC128198**

CAMK2D (NM_172127) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CAMK2D (NM_172127) Human Untagged Clone
Tag:	Tag Free
Symbol:	CAMK2D
Synonyms:	CAMKD
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_172127, the custom clone sequence may differ by one or more nucleotides

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ATGGCTTCGACCACAACCTGCACCAGGTTACGGACGAGTATCAGCTTTTCGAGGAGCTTGAAAGGGGG
CATTCTCAGTGGTGAGAAGATGTATGAAAATTCCTACTGGACAAGAATATGCTGCCAAAATTATCAACAC
CAAAAAGCTTTCTGCTAGGGATCATCAGAACTAGAAAGAGAAGCTAGAATCTGCCGCTTTTGAAGCAC
CCTAATATTGTGCGACTTCATGATAGCATATCAGAAGAGGGCTTTCCTACTTGGTGTGGATTTAGTTA
CTGGAGGTGAAGTGTGAAAGACATAGTGGCAAGAGAATACTACAGTGAAGCTGATGCCAGTCATTGTAT
ACAGCAGATTCTAGAAAGTGTTAATCATTGTACCTAAATGGCATAGTTCACAGGGACCTGAAGCCTGAG
AATTTGCTTTTAGCTAGCAAATCCAAGGGAGCAGCTGTGAAATTGGCAGACTTTGGCTTAGCCATAGAAG
TTCAAGGGGACCAGCAGGCGTGGTTTGGTTTTGCTGGCACACCTGGATATCTTTCTCCAGAAGTTTTACG
TAAAGATCCTTATGAAAAGCCAGTGGATATGTGGGCATGTGGTGTCTTCTATATTCTACTTGTGGGG
TATCCACCCTTCTGGGATGAAGACCAACACAGACTCTATCAGCAGATCAAGGCTGGAGCTTATGATTTTC
CATCACCAGAATGGGACACGGTGACTCCTGAAGCCAAAGCCTCATCAATAAAATGCTTACTATCAACCC
TGCCAAACGCATCACAGCCTCAGAGGCACTGAAGCACCATGGATCTGTCAACGTTCTACTGTTGCTTCC
ATGATGCACAGACAGGAGACTGTAGACTGCTTGAAGAAATTAATGCTAGAAGAAAATAAAGGGTGCCA
TCTTGACAACATGCTGGCTACAAGGAATTTCTCAGCAGCCAAGAGTTTGTGAAAGAAACCAGATGGAGT
AAAGGAGTCAACTGAGAGTTCAAATACAACAATTGAGGATGAAGATGTGAAAGCAGAAAAGCAAGAGATT
ATCAAAGTCACTGAACAACCTGATCGAAGCTATCAACAATGGGGACTTTGAAGCCTACACAAAAATCTGTG
ACCCAGGCCTTACTGCTTTTGAACCTGAAGCTTTGGGTAATTTAGTGGAAGGGATGGATTTTCCCGATT
CTACTTTGAAAATGCTTTGTCCAAAAGCAATAAACCAATCCACACTATTATTCTAAACCCTCATGTACAT
CTGGTAGGGGATGATGCCGCTGCATAGCATATATTAGGCTCACACAGTACATGGATGGCAGTGGAAATGC
CAAAGACAATGCAGTCAGAAGAGACTCGTGTGTGGCACC GCCGGATGAAAAGTGGCAGAATGTTTCATT
TCATCGCTCGGGTCCCAACAGTACCCATCAAGTAA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_172127 unedited</p> <pre>TTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTCGCTTCTGGTCCG TCGCGCTCCCAGCCAGGGCACAGCCGGACCGAGGATGGCTTCGACCACAACCTGCACCA GGTTCACGGACGAGTATCAGCTTTTCGAGGAGCTTGAAAGGGGGCATTCTCAGTGGTGA GAAGATGTATGAAAATTCCTACTGGACAAGAATATGCTGCCAAAATATCAACACCAAAA AGCTTTCTGCTAGGGATCATCAGAACTAGAAAGAGAAGCTAGAATCTGCCGTCTTTTGA AGCACCTAATATTGTGCGACTTCATGATAGCATATCAGAAGAGGGCTTTCACACTTGG TGTTTGATTTAGTTACTGGAGGTGAACTGTTTGAAGACATAGTGGCAAGAGAATACTACA GTGAAGCTGATGCCAGTCATTGTATACAGCAGATTCTAGAAAAGTGAATCATTGTCACC TAAATGGCATAGTTCACAGGGACCTGAAGCCTGAGAATTTGCTTTTAGCTAGCAAATCCA AGGGAGCAGCTGTGAAATTGGCAGACTTTGGCTTAGCCATAGAAGTTCAAGGGGACCAGC AGGCGTGGTTTGGTTTTGCTGGCACACCTGGATATCTTTCTCCAGAAGTNTACGTANAG ATCCTTATGNGAAGCCAGTGGATATGTGGGCATGTGGTGCATTCTCTATATTCTACTTG NGGGGTATCCACCCTTCTGGGATGAAGACCAACACAGACTCTATCAGCAGATCAAGGCTG GAGCTTATGATTNTCCATCACCAGAATGGGACACGGTGACTCCCTGAGCCAAAGACCCTC ATCATAAATGCTTACTATCAACCCTGCCAACGCATCACAGCCTCAG</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_172127 unedited</p> <pre>TTTATTCACTCTTAATATATCAATCAGTCCTTTACCATTATGGCAAGAAAATATACAGTG TCCCATGGTAAACTGCAGTGTTCAAAATGATAGAAGATAATAAATGTGTAATTCATTTG TGGTGGAGAGAACAAATCACAATTTCTCACATCTTAGTGCGGAAGACAACTTGATCTA CAGTAATACTTCAACACCACATGCTAAGTTAAAAGTGTAACAAAAAACTCTACATCTAT TTTTTTTTCTTTAAATACATGTATGCCACGTATAGCTGCTTCACAAAAGGGTAAAAGAAA TTAAAAAGAGAAAATGAGGCCATTATTTTTTCACAGATCTCATTGGCAGGTTAACATGG CTCAATATATTTACTGTATATATTTATTTTAAATATATATGTTGTTTTAAATTGTGTAAT AATTATCAGAAAAGCTTCAACCCATCTACCATACATCCACTAGCAATAATATCTAAGATG ATTAGTAATCAACACAGAGAGGTGAGATGAGAGAAAAGGAAGGGTTGTTTTTGTATT TTGTTTTTCTTTTTGCTTCTGCTTTAAAAATAGGCTTCTGAGGACTGTGAATTACTATC GTTAANATAACAATGATGGAGATTCCATGCACTGTAAAGCACTTCAGGGAAGAGAACAAA AATCACAGGAATTGAATCAACAAAGGANAAATGAGAAGCACANAGAAAACCTAGGACATT TCCCTTTTTGTTTTAACTGGGAAATTTCTAACTCCTTGGAGGAAGACAATGATACTCT GATTCAGAGAGAAGCTAAAAAGCCCAAGTCACAAAGATCAGGTTTCAAACACTTATG AGAATGGCAAACAT</pre>
Restriction Sites:	ECORI-NOT
ACCN:	NM_172127
Insert Size:	4100 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_172127.1](#), [NP_742125.1](#)

RefSeq Size: 4098 bp

RefSeq ORF: 1437 bp

Locus ID: 817

UniProt ID: [Q13557](#)

Cytogenetics: 4q26

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

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. 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 delta chain. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Distinct isoforms of this chain have different expression patterns.[provided by RefSeq, Nov 2008]

Transcript Variant: This variant (1) has multiple differences in the 3' coding region, compared to variant 3. The resulting isoform (1) has a shorter C-terminus, compared to isoform 3. Isoform 1 is encoded by transcript variants 1 and 4. Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The extend of this RefSeq trasncript is supported by transcript alignments.