

Product datasheet for **RR209882**

Camk2d (NM_012519) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Camk2d (NM_012519) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Camk2d
Synonyms:	CAMK1; Camk2; Camki; RATCAMKI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RR209882 representing NM_012519
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTCGACCACCACCTGCACCCGGTTCACCGACGAGTATCAGCTCTTCGAGGAGCTCGGAAAGGGG
 CATTCTCAGTGGTGAGAAGATGCATGAAAATCCCTACTGGACAAGAGTATGCTGCCAAAATTATCAACAC
 CAAAAAGCTTTCTGCTAGGGATCATCAGAACTGGAAAGGGAAGCTAGAATCTGCCGTCTTTGAAAGCAC
 CCCAATATTGTGAGACTTCATGACAGCATATCCGAAGAGGGCTTCCATTACTTGGTGTGTTGACTTAGTTA
 CTGGTGGCGAACTCTTTGAAGACATAGTGGCAAGAGAATATTACAGTGAGGCTGATGCCAGTCATTGTAT
 ACAACAGATTCTAGAGAGTGTAAATCATTGTACCTAAATGGCATAGTTCACAGGGACCTGAAGCCTGAG
 AATTTGCTTTTAGCTAGCAAATCCAAGGAGCAGCTGTGAACTGGCAGACTTCGGCTTAGCCATAGAAG
 TTCAAGGGCACCAGCAGGCGTGGTTTGGTTTTGCTGGCACACCTGGGTATCTTTCTCAGAAGTCTACG
 TAAAGATCCTTATGGAAAACAGTGGACATGTGGGCATGTGGCGTCATCTCTACATCTTGTGGTGGGA
 TACCCACCTTCTGGGATGAAGATCAGCATAGACTGTATCAGCAGATCAAGGCTGGAGCGTACGATTTTC
 CATCACCAGAATGGGACACAGTGACACCTGAAGCCAAAGACCTCATCAACAAAATGCTGACCATCAACCC
 TGCCAAACGCATCACAGCCTCTGAGGCCCTGAAACACCCATGGATCTGTCAACGTTTACTGTTGCCTCC
 ATGATGCACAGGCAGGAGACTGTAGACTGCTTGAAGAAATTTAATGCTCGACGAAATTAAGGGTGCCA
 TCTTGACAATATGCTGGCTACGAGAAATTTTTCAGCAGCCAAGAGTTTGTGAAGAAACCGGATGGGGT
 AAAGATAAACAAAGCAACGCTGGTAACCAGCCCCAAAGAAAATTCCTACCCGGCGCTGGAGCCC
 CAAACTACTGTAATCCACAACCCTGATGGAAACAAGGAGTCAACTGAGAGCTCAAATACCACCATGAGG
 ATGAAGACGTGAAAGCACGAAAGCAAGAGATCATCAAAGTCACTGAGCAGCTGATTGAACCTATCAACAA
 TGGGGACTTCGAGGCTTACACGAAAATCTGTGATCCAGGCTCACTGCCTTTGAACCCGAAGCATGGGC
 AACTTAGTGGAAGGGATGGACTTTCACAGATTCTACTTTGAAAATGCTTTGCCAAAATCAATAAACCAA
 TCCACACTATCATCTGAACCTCACGTACACCTGGTAGGGGATGATGCAGCCTGCATAGCATACATTTCG
 GCTCACACAGTACATGGATGGAAATGGAATGCCAAAGACAATGCAGTCAGAAGAGACTCGAGTGTGGCAC
 CGCCGTGATGGGAAGTGGCAGAATTTCACTTTCATCGTTCGGGGTCCCCAACAGTCCCATCAAGCCAC
 CCTGTATCCAATGGGAAAGAAAATCTCTCAGGAGGCACCTCTTTGTGGCAAAACATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR209882 representing NM_012519
 Red=Cloning site Green=Tags(s)

MASTTTCTRFTDEYQLFEELGKGAFSVVRRRCMKIPTGQEYAAKIINTKKLSARDHQKLEREARICRLLKH
 PNIVRLHDSISEEGFHYLVFDLVTGGELFEDIVAREYYSEADASHCIQQILESVNHCHLNGIVHRDLKPE
 NLLLASKSKGAAVKLADFLAIEVQGDQAWFGFAGTPGYLSPEVLRKDPYGKPVDMWACGVILYILLVG
 YPPFWDEDQHRLYQIKAGAYDFPSPEWDTVTPEAKDLINKMLTINPAKRITASEALKHPWICQRSTVAS
 MMHRQETVDLKKFNARRKLKGAILTMLATRNFSAKSLKKPDGVKINNKANVVTSPKENIPTPALEP
 QTTVIHNPDGNKESTESSNTTIEDEDVKARKQEIIKVTEQLIEAINNGDFEAYTKICDPGLTAFEPEALG
 NLVEGMDFHRFYFENALPKINKPIHTIILNPHVHLVGDDAACIAYIRLTQYMDGNGMPKTMQSEETRVWH
 RRDGKWNQIHFHRSGSPTVPIKPPCIPNGKENFSGGTSLWQNI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_012519

ORF Size: 1599 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_012519.2](#), [NP_036651.1](#)

RefSeq Size: 2301 bp

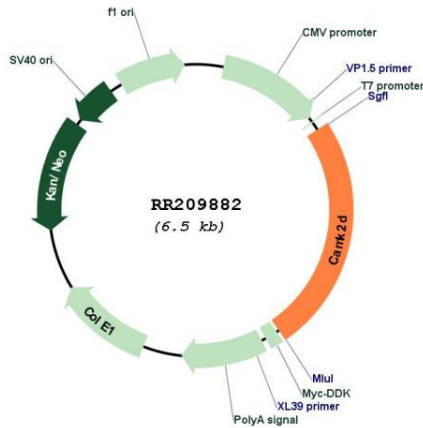
RefSeq ORF: 1602 bp

Locus ID: 24246

UniProt ID: [P15791](#)

Cytogenetics: 2q42
MW: 60.1 kDa
Gene Summary: subunit of calcium/calmodulin dependent protein kinase II; regulates potassium currents in brain capillary endothelial cells under hypoxic conditions; expressed as different isoforms in different tissues [RGD, Feb 2006]

Product images:



Circular map for RR209882