

Product datasheet for **RG218464**

CaMKI (CAMK1) (NM_003656) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CaMKI (CAMK1) (NM_003656) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CaMKI
Synonyms:	CAMKI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218464 representing NM_003656 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGGGGCAGTGAAGGCCCCAGGTGGAAGCAGGCGGAGGACATTAGAGACATCTACGACTCCGAG
ATGTTCTGGGCACGGGGCCTTCTCGGAGGTGATCCTGGCAGAAGATAAGAGGACGCAGAAGCTGGTGGC
CATCAAATGCATTGCCAAGGAGGCCCTGGAGGGCAAGGAAGGCAGCATGGAGAATGAGATTGCTGTCCTG
CACAAGATCAAGCACCCCAACATTGTAGCCCTGGATGACATCTATGAGAGTGGGGCCACCTCTACCTCA
TCATGCAGCTGGTGTGGGTGGGAGCTCTTTGACCGTATTGTGAAAAAGGCTTCTACACGGAGCGGGA
CGCCAGCCGCCTCATCTCCAGGTGCTGGATGCTGTGAAATACCTGCATGACCTGGGCATTGTACACCGG
GATCTCAAGCCAGAGAATCTGCTGTAACAGCCTGGATGAAGACTCCAAAATCATGATCTCCGACTTTG
GCCTCTCAAGATGGAGGACCCGGGAGTGTGCTCTCCACCGCCTGTGGAACCTCCGGGATACGTGGCCCC
TGAAGTCTGGCCAGAAAGCCCTACAGCAAGGCTGTGGATTGCTGGTCCATAGGTGTCATCGCCTACATC
TTGCTCTGCGGTTACCCTCCCTTCTATGACGAGAATGATGCCAACTCTTTGAACAGATTTTGAAGGCCG
AGTACGAGTTGACTCTCCTTACTGGGACGACATCTCTGACTCTGCCAAGATTTTCATCCGGCATTGAT
GGAGAAGGACCCAGAGAAAAGATTACCTGTGAGCAGGCCTTGCAGCACCCATGGATTGCAGGAGATACA
GCTCTAGATAAGAATATCCACCAGTCGGTGAGTGAGCAGATCAAGAAGAACTTTGCCAAGAGCAAGTGGA
AGCAAGCCTTCAATGCCACGGCTGTGGTGGGCACATGAGGAACTGCAGCTGGGCACCAGCCAGGAGGG
GCAGGGGCAGACGGCAGCCATGGGAGCTGCTGACACCAAGTGGCTGGGGGGCCGGCAGCTGGCTGTTGC
TGTCGAGACTGCTGCGTGGAGCCGGGCACAGAAGTGTCCCCACACTGCCCCACCAGCTC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG218464 representing NM_003656
Red=Cloning site Green=Tags(s)

MLGAVEGPRWKQAEDIRDIYDFRDVLTGAFSEVILAEDKRTQKLVAIKCIAKEALEGKEGSMENEIAVL
 HKIKHPNIVALDDIYESGGHLYLIMQLVSGGELFDRIVEKGFYTERDASRLIFQVLDAVKYLHDLGIVHR
 DLKPENLLYYSLDEDSKIMISDFGLSKMEDPGSVLSTACGTPGYVAPEVLAQKPYSAVDCWSIGVIAYI
 LLCGYPPFYDENDAKLFEQILKAEYEFDSPYWDDISDSAKDFIRHLMKDPKRF TCEQALQHPWIAGDT
 ALDKNIHQSVSEQIKKNFAKSKWKQAFNATAVVRHMRKLQLGTSQEGQGQTASHGELLTPVAGGPAAGCC
 CRDCCVEPGTELSPTLPHQL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003656

ORF Size: 1110 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_003656.5](#)

RefSeq Size: 1501 bp

RefSeq ORF: 1113 bp

Locus ID: 8536

UniProt ID: [Q14012](#)

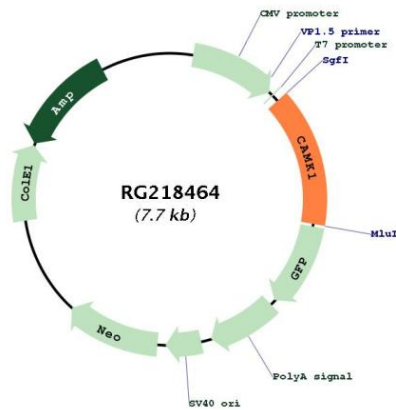
Cytogenetics: 3p25.3

Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

Gene Summary: Calcium/calmodulin-dependent protein kinase I is expressed in many tissues and is a component of a calmodulin-dependent protein kinase cascade. Calcium/calmodulin directly activates calcium/calmodulin-dependent protein kinase I by binding to the enzyme and indirectly promotes the phosphorylation and synergistic activation of the enzyme by calcium/calmodulin-dependent protein kinase I kinase. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG218464