

## Product datasheet for **RG206813**

### **CAMKIV (CAMK4) (NM\_001744) Human Tagged ORF Clone**

#### **Product data:**

<b>Product Type:</b>	Expression Plasmids
<b>Product Name:</b>	CAMKIV (CAMK4) (NM_001744) Human Tagged ORF Clone
<b>Tag:</b>	TurboGFP
<b>Symbol:</b>	CAMKIV
<b>Synonyms:</b>	caMK; CaMK-GR; CaMK IV; CaMKIV
<b>Mammalian Cell Selection:</b>	Neomycin
<b>Vector:</b>	pCMV6-AC-GFP (PS100010)
<b>E. coli Selection:</b>	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG206813 representing NM\_001744  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTCAAAGTCACGGTGCCTCCTGCTCCGCCTCGTCTCGTCTTCGGTCACCGCCAGTGCGGCCCGG  
 GGACCGGAGCCTCGTCCCGATTACTGGATCGACGGCTCCAACAGGGATGCGCTGAGCGATTTCTTCGA  
 GGTGGAGTCGGAGCTGGGACGGGTGCTACATCCATTGTGTACAGATGCAAACAGAGGGGACCCAGAAG  
 CCTTATGCTCTCAAAGTGTAAAGAAAACAGTGGACAAAAAATCGTAAGAAGTGAAGATAGGAGTCTTTC  
 TTCGCCTCTCACATCCAAACATTATAAACTTAAAGAGATATTTGAAACCCCTACAGAAATCAGTCTGGT  
 CCTAGAAGTCTCACAGGAGGAGAACTGTTTGTAGGATTGTGAAAAGGGATATTACAGTGAGCGAGAT  
 GCTGCAGATGCCGTTAAACAAATCCTGGAGGCAGTTGCTTATCTACATGAAAATGGGATTGTCCATCGT  
 ATCTCAAACCAGAGAATCTTCTTATGCAACTCCAGCCCAGATGCACCACTCAAATCGCTGATTTTGG  
 ACTCTCTAAAATTGTGGAACATCAAGTGTCTCATGAAGACAGTATGTGGAACCCAGGGTACTGCGCACCT  
 GAAATCTTAGAGTTGTGCCTATGGACCTGAGGTGGACATGTGGTCTGTAGGAATAATCACCTACATCT  
 TACTTTGTGGATTTGAACCATTCTATGATGAAAGAGGCGATCAGTTCATGTTTCAGGAGAATTCTGAATTG  
 TGAATATTACTTTATCTCCCCTGGTGGGATGAAGTATCTCTAAATGCCAAGGACTTGGTCAGAAAATTA  
 ATTGTTTTGGATCCAAAGAAACGGCTGACTACATTTCAAGCTCTCCAGCATCCGTGGGTACAGGTAAGG  
 CAGCCAATTTGTACACATGGATACCGCTCAAAGAAGCTCCAAGAATTCATGCCCGGCGTAAGCTTAA  
 GGCAGCGGTGAAGGCTGTGGTGGCCTCTCCCGCTGGGAAGTCCAGCAGCAGCCATGGCAGCATCCAG  
 GAGAGCCACAAGGCTAGCCGAGACCTTCTCCAATCCAAGTGGCAACGAGGACATGAAAGCTATTCCAG  
 AAGGAGAGAAAAATCAAGCGCATGGGGCCCAAGCCGAGTTAAGGGGGCACAGGCTGAGCTGAAGGT  
 GCAAGCCTTAGAGAAAGTTAAAGGTGCAGATATAAATGCTGAAGAGGCCCCCAAAATGGTGCCCAAGGCA  
 GTGGAGGATGGGATAAAGGTGGCTGACCTGGAAGTGAAGGAGGGCCTAGCAGAGGAGAAGCTGAAGACTG  
 TGGAGGAGGCAGCAGCTCCAGAGAAGGCAAGGAAGCTCTGCTGTGGGTTTTGAAGTTCACAGCAAGA  
 TGTGATCTGCCAGAGTAC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

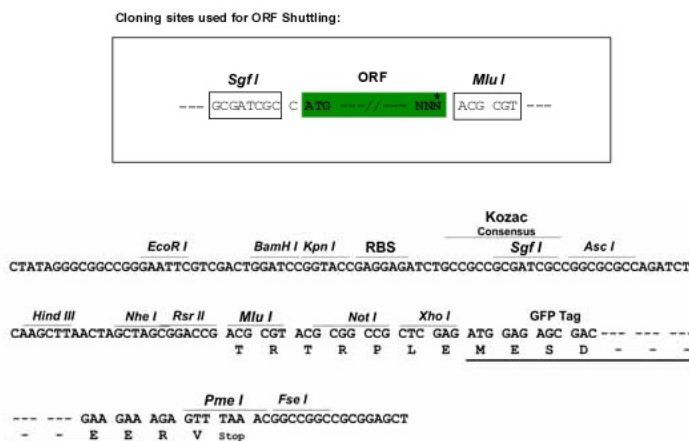
>RG206813 representing NM\_001744  
 Red=Cloning site Green=Tags(s)

MLKVTPSCSASSCSSVTASAAPGTASLVPDYWIDGSNRDALSDFFEVESELGRGATSIYVRCKQKGTQK  
 PYALKVLKKTVDKKIVRTEIGVLLRLSHPNIIKLKEIFETPTEISLVLELVTGGELFDRIVEKGYYSERD  
 AADAVKQILEAVAYLHENGIVHRDLKPENLLYATPAPDAPLKIADFGLSKIVEHQVLMKTVCGTPGYCAP  
 EILRGCAYGPEVDMWSVGIITYILLCGFEPFYDERGDQFMFRILNCEYYFISPWWDVSLNAKDLVRKL  
 IVLDPKKRLTTFQALQHPWVTGKAANFVHMDTAQKQLQEFNARRKLLKAAVKAVVASSRLLGSASSSHGSIQ  
 ESHKASRDPSPIQDGNEDMKAIPEGEKIQGDGAQAAVKGAQAEMLKVQALEKVKGADINAEAPKMPKPA  
 VEDGIKVADLEEEGLAEELKTVVEEAAAPREGQGSsavGFVPPQDQVILPEY

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001744

**ORF Size:** 1419 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\\_001744.4](#)

**RefSeq Size:** 2168 bp

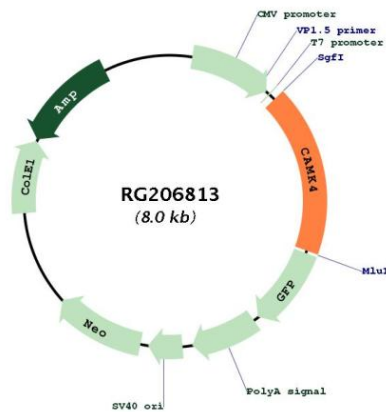
**RefSeq ORF:** 1422 bp

**Locus ID:** 814

**UniProt ID:** [Q16566](#)

**Cytogenetics:** 5q22.1  
**Domains:** pkinase, TyrKc, S\_TKc  
**Protein Families:** Druggable Genome, Protein Kinase  
**Protein Pathways:** Calcium signaling pathway, Long-term potentiation, Neurotrophin 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. This enzyme is a multifunctional serine/threonine protein kinase with limited tissue distribution, that has been implicated in transcriptional regulation in lymphocytes, neurons and male germ cells. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG206813