

Product datasheet for RC218194L3

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CAMK2B (NM_172079) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CAMK2B (NM_172079) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: CAMK2B

Synonyms: CAM2; CAMK2; CAMKB; CaMKIlbeta; MRD54

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC218194).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_172079

ORF Size: 1554 bp





CAMK2B (NM_172079) Human Tagged Lenti ORF Clone - RC218194L3

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: <u>NM 172079.1</u>, <u>NP 742076.1</u>

RefSeq Size:1994 bpRefSeq ORF:1557 bp

Locus ID: 816

UniProt ID: Q13554

Cytogenetics: 7p13

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: 57.8 kDa

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 beta chain. It is possible that distinct isoforms of this chain have different cellular

localizations and interact differently with calmodulin. Alternative splicing results in multiple

transcript variants. [provided by RefSeq, May 2014]