

Product datasheet for RC203468L3

OriGene Technologies, Inc.

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CAMKK2 (NM_172226) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CAMKK2 (NM_172226) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: CAMKK2

Synonyms: CAMKK; CAMKKB

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(RC203468).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_172226

ORF Size: 1623 bp





CAMKK2 (NM_172226) Human Tagged Lenti ORF Clone - RC203468L3

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 172226.2, NP 757380.1

 RefSeq Size:
 4923 bp

 RefSeq ORF:
 1626 bp

 Locus ID:
 10645

 UniProt ID:
 Q96RR4

Cytogenetics: 12q24.31

Protein Families: Druggable Genome, Protein Kinase, Transcription Factors

Protein Pathways: Adipocytokine signaling pathway

MW: 59.6 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. The major isoform of this gene plays a role in the calcium/calmodulin-dependent (CaM) kinase cascade by phosphorylating the downstream kinases CaMK1 and CaMK4. Protein products of this gene also phosphorylate AMP-activated protein kinase (AMPK). This gene has its strongest expression in the brain and influences signalling cascades involved with learning and memory, neuronal differentiation and migration, neurite outgrowth, and synapse formation. Alternative splicing results in multiple transcript variants encoding distinct isoforms. The identified isoforms differ in their ability to undergo autophosphorylation and to phosphorylate downstream kinases. [provided

by RefSeq, Jul 2012]