

Product datasheet for MR207662L3

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OriGene Technologies, Inc.

Camk2a (NM_177407) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Camk2a (NM_177407) Mouse Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: Camk2a

Synonyms: CaMKII; mKIAA0968; R74975

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(MR207662).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_177407

ORF Size: 1434 bp



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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 177407.2</u>

RefSeq Size: 4949 bp
RefSeq ORF: 1437 bp
Locus ID: 12322
UniProt ID: P11798

Cytogenetics: 18 34.41 cM

Gene Summary: Calcium/calmodulin-dependent protein kinase that functions autonomously after

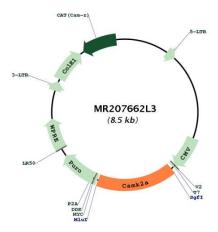
Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in synaptic plasticity, neurotransmitter release and long-term potentiation. Member of the NMDAR signaling complex in excitatory synapses, it regulates NMDAR-dependent potentiation of the AMPAR and therefore excitatory synaptic transmission (By similarity). Regulates dendritic spine

development. Also regulates the migration of developing neurons (By similarity). Phosphorylates the transcription factor FOXO3 to activate its transcriptional activity

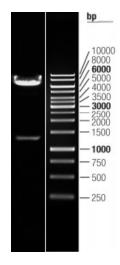
(PubMed:23805378).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR207662L3



Double digestion of MR207662L3 using Sgfl and Mlul $\,$