

Product datasheet for RC219086L1

OriGene Technologies, Inc.

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CALM1 (NM_006888) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CALM1 (NM_006888) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: CALM1

Synonyms: CALML2; caM; CAM2; CAM3; CAMB; CAMC; CAMI; CAMIII; CPVT4; DD132; LQT14; PHKD

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC219086).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_006888

ORF Size: 447 bp





OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

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 006888.2</u>

 RefSeq Size:
 3718 bp

 RefSeq ORF:
 450 bp

 Locus ID:
 801

 UniProt ID:
 P62158

 Cytogenetics:
 14q32.11

Domains: EFh

Protein Families: Druggable Genome

Protein Pathways: Alzheimer's disease, Calcium signaling pathway, Glioma, GnRH signaling pathway, Insulin

signaling pathway, Long-term potentiation, Melanogenesis, Neurotrophin signaling pathway, Olfactory transduction, Oocyte meiosis, Phosphatidylinositol signaling system, Vascular

smooth muscle contraction

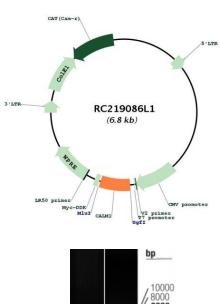
MW: 16.7 kDa



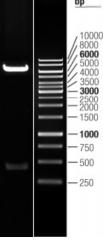
Gene Summary:

This gene encodes one of three calmodulin proteins which are members of the EF-hand calcium-binding protein family. Calcium-induced activation of calmodulin regulates and modulates the function of cardiac ion channels. Two pseudogenes have been identified on chromosome 7 and X. Multiple transcript variants encoding different isoforms have been found for this gene. A missense mutation in the CALM1 gene has been associated with ventricular tachycardia. [provided by RefSeq, May 2020]

Product images:



Circular map for RC219086L1



Double digestion of RC219086L1 using Sgfl and Mlul $\,$