

Product datasheet for RC210440L1

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OriGene Technologies, Inc.

CACNB4 (NM_000726) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CACNB4 (NM_000726) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: CACNB4

Synonyms: CAB4; CACNLB4; EA5; EIG9; EJM; EJM4; EJM6

Mammalian Cell None

Selection:

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

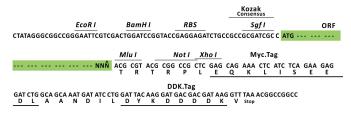
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC210440).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_000726

ORF Size: 1560 bp





CACNB4 (NM_000726) Human Tagged Lenti ORF Clone - RC210440L1

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 000726.2</u>

RefSeq Size: 7979 bp
RefSeq ORF: 1563 bp
Locus ID: 785

UniProt ID: 000305

Cytogenetics: 2q23.3

Domains: Ca channel B, SH3, GuKc

Protein Families: Druggable Genome, Ion Channels: Other

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cardiac muscle contraction, Dilated

cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway

MW: 58.2 kDa

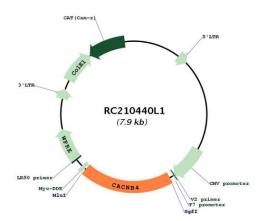
Gene Summary: This gene encodes a member of the beta subunit family of voltage-dependent calcium

channel complex proteins. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization and consist of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. Various versions of each of these subunits exist, either expressed from similar genes or the result of alternative splicing. The protein encoded by this locus plays an important role in calcium channel function by modulating G protein inhibition, increasing peak calcium current, controlling the alpha-1 subunit membrane targeting and shifting the voltage dependence of activation and inactivation. Certain mutations in this gene have been associated with idiopathic generalized epilepsy (IGE), juvenile myoclonic epilepsy

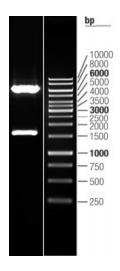
(JME), and episodic ataxia, type 5. [provided by RefSeq, Aug 2016]



Product images:



Circular map for RC210440L1



Double digestion of RC210440L1 using Sgfl and Mlul $\,$