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Product datasheet for MR222882

Cacna1b (NM_001042528) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna1b (NM_001042528) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacna1b
Synonyms:	alpha(1B); AW050276; AW060892; AW822256; BIII; Cav2.2; Cchn1a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR222882 representing NM_001042528
Red=Cloning site Blue=ORF Green=Tags(s)

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GCCGCGATCGCC

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Protein Sequence:

>MR222882 representing NM_001042528
Red=Cloning site Green=Tags(s)

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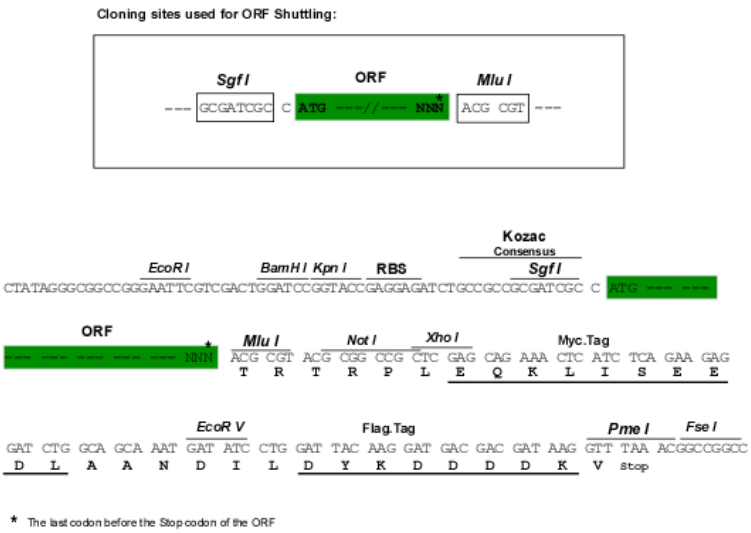
Chromatograms: https://cdn.origene.com/chromatograms/mm9010_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001042528

ORF Size: 6981 bp

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_001042528.2, NP_001035993.1

RefSeq Size: 6984 bp

RefSeq ORF: 6984 bp

Locus ID: 12287

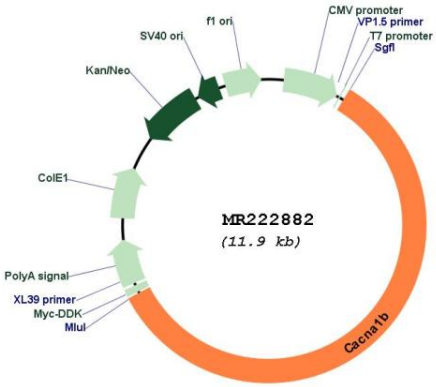
UniProt ID: O55017

Cytogenetics: 2 16.58 cM

MW: 261.9 kDa

Gene Summary: Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1B gives rise to N-type calcium currents. N-type calcium channels belong to the 'high-voltage activated' (HVA) group and are specifically blocked by omega-conotoxin-GVIA (AC P01522) (By similarity). They are however insensitive to dihydropyridines (DHP). Calcium channels containing alpha-1B subunit may play a role in directed migration of immature neurons.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222882