

Product datasheet for MC225275

Cacna1b (NM_001042528) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cacna1b (NM_001042528) Mouse Untagged Clone
Tag: Tag Free
Symbol: Cacna1b
Synonyms: alpha(1B); AW050276; AW060892; AW822256; BIII; Cav2.2; Cchn1a
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC225275 representing NM_001042528
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGTCCGCTTCGGGACGAGCTAGGCGGCCGCTATGGGGCACCGCGCGGGAGCGGGCTCGGGTG
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TGTA CTTTGCAGAGTTTGT TTTCTGGGTCTCTT CCTCACAGAGATGTC CCTGAAGATGTATGGCCTAGG
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CCAATTCCTCGCTGTCCACTTTGCTGAGGGTCCAGAGCGGCTCCAGCCTTCTCCCTGGCCGTCTCAG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001042528
- Insert Size:** 6984 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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: 9772 bp

RefSeq ORF: 6984 bp

Locus ID: 12287

UniProt ID: [O55017](#)

Cytogenetics: 2 16.58 cM

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer protein (isoform 1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.