

## Product datasheet for **MG207526**

### **Cacnb1 (BC077713) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cacnb1 (BC077713) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cacnb1
Synonyms:	CAB1; Cchb1; Cchl1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG207526 representing BC077713  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTCCAGAAGAGCGGCATGTCCCGGGCCCTTACCCACCTTCCAAGAGATCCCTATGGAGTCTTCG  
 ACCCCAGCCACAGGGCAAGTACAGCAAGAGGAAAGGGCGGTTCAAAGGTACAGACGGGAGTACGTCTC  
 GGATAACAACATCCAACAGCTTCGTCGCCAGGGCTCAGCAGAGTCTACACGAGCCGACCATCAGACTCT  
 GATGTGTCTCTGGAGGAGGACCGGGAAGCCTTAAGGAAGGAGGCAGAGCGCCAGGCCCTTAGCCAGCTCG  
 AGAAAGCCAAGACCAAACAGTGGCTTTTGTGTTGCGACAAATGTTGGCTACAATCCGTCTCCAGGGGA  
 TGAGGTGCCTGTACAGGGAGTGGCCATCACCTTTGAGCCCAAGGACTTCTACACATCAAGGAGAAGTAC  
 AATAATGACTGGTGGATTGGGCGCTGGTGAAGGAAGGCTGCGAGGTTGGCTTCATCCCCAGCCGGTCA  
 AACTGGACAGCCTTCGTCTGCTGCAGGAACAGACCCTGCGCCAGAACCGCCTCAGCTCCAGCAAGTCAGG  
 TGACAACCTCCAGTCCAGTCTGGGAGATGTGGTACTGGCACCCGCCGCCACACCCCTGCCAGTGAG  
 CAGGTGCCCCCTATGAGTGGTGCCTTCATGAGGCCATCATCCTGGTGGGACCGTCCGTCAGGGCT  
 ATGAGGTGACAGACATGATGCAGAAAGCGTTGTTTACTTCTCAAGCATCGGTTTATGGCAGGATTTTC  
 CATCACCCGGTAACAGCTGACATTTCCCTGGCCAAACGCTCCGTCTCAACAACCCAGCAAACACATC  
 ATCATTGAGCCCTCCAACACGCGCTCCAGCCTGGCTGAGGTACAGAGTGAATTTAGAGGATCTTCGAGC  
 TGGCCCGACCTTGCAGCTGGTGCCTTGGACGCTGACACCATCAACCACCCAGCCAGCTCTCTAAAC  
 GTCGCTGGCCCCATCATTGTTTACATCAAGATCACATCTCCAAGGACTGCAGAGGCTCATCAATCC  
 CGAGGGAAGTCTCAATCCAACACCTCAATGTCCAATAGCAGCCTCGGAGAAGCTGGCACAGTGTCCCC  
 CGAAATGTTTCGACATAATCCTGGACGAGAACCAATTGGAAGATGCCTGCGAGCACCTGGCTGACTT  
 GGAAGCCTACTGGAAGGCCACACATCCGCCTAGCAGCACGCCACCAATCCGCTGCTGAACCGCACCATG  
 GCTACCGCAGCTCTGGTGCAGCCCTGCCCCGCTCCTCAACCTCCAGGTACAGGTGCTCACCTCGCTCA  
 GGAGAAATCTCAGCTTCTGGGGCGGCTGGAGGCTCACCGCGGGGAGGCGACGCGGTGGCCAGCCTCA  
 GGAGCACGCCATG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG207526 representing BC077713  
 Red=Cloning site Green=Tags(s)

MVQKSGMSRGPYPPSQEIPMEVFDPSQKYSKRKGRFKRSDGSTSSDTSNSFVRQGSAESYTSRPSDS  
 DVSLEEDREALRKEAERQALALEKAKTKPVAFVAVRTNVGYNPSGDEVVQGVAITFEPKDFLHIKEY  
 NNDWWIGRLVKEGCEVGFIPSPVKLDSLRLLEQTLRQNLSSSKSGDNSSSLGDVVTGTRRPTPPASE  
 HVPPYDVVPSMRPIILVGPLKGYEVTMMQKALFDLKHFRDGRISITRVTADISLAKRSVLLNPPSKHI  
 IIEPSNTRSSLAEVQSEIERIFELARTLQLVALDADTINHQAQLSKTSLAPIIVYIKITSPKVLQRLIKS  
 RGKSQSKHLNVQIAASEKLAQCPEMFDIILDENQLEDACEHLAEYLEAYWKATHPPSPNPLLNRTM  
 ATAALAASPVSNLQVQLTSLRRNLSFWGGLEASPRGGDAVAQPQEHAM

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** BC077713

**ORF Size:** 1413 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 [custsupport@origene.com](mailto:custsupport@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. [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.

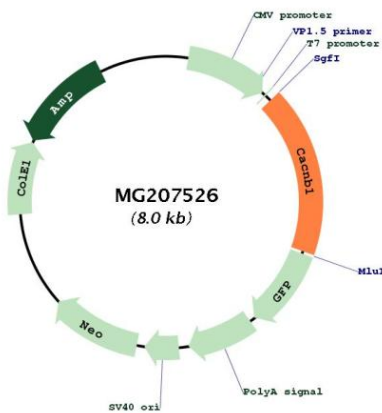
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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:** [BC077713.1](#)  
**RefSeq Size:** 1725 bp  
**RefSeq ORF:** 1415 bp  
**Locus ID:** 12295  
**Cytogenetics:** 11 61.5 cM

**Gene Summary:** Regulatory subunit of L-type calcium channels. Regulates the activity of L-type calcium channels that contain CACNA1A as pore-forming subunit (By similarity). Regulates the activity of L-type calcium channels that contain CACNA1C as pore-forming subunit and increases the presence of the channel complex at the cell membrane. Required for functional expression L-type calcium channels that contain CACNA1D as pore-forming subunit. Regulates the activity of L-type calcium channels that contain CACNA1B as pore-forming subunit (By similarity). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG207526