

## Product datasheet for **MG222977**

### **Cacnb4 (NM\_001037099) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cacnb4 (NM_001037099) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cacnb4
Synonyms:	3110038O15Rik; Cchb4; lh
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG222977 representing NM\_001037099  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCGTCCTCGTACGGCAAGAACGGGGCGGGACGGGCGCACTCCCCAGCTCACAGGTGGCCCGAG  
 GCACCACGACCCGGAGGAGCAGGTTGAAAAGATCGGATGGCAGCACCCTTCTACCAGCTTCATCCTCAG  
 ACAGGGGTCAGCAGATTCTATAACAAGCAGGCCATCGACTCCGATGTCTCCTTGGAAAGAGACCGGGAA  
 GCGATCCGGCAAGAGCGAGAACAGCAAGCAGCTATCCAGCTTGAGAGAGCGAAGTCCAAACCTGTAGCTT  
 TTGCGGTGAAAACGAACGTGAGCTACTGTGGTGCCTGGACGAAGATGTGCCCGTCCCAGCACAGCCAT  
 CTCCTTTGACGCCAAGGACTTTCTTACATTAAGAGAAATAACAATGATTGGTGGATAGGAAGACTG  
 GTAAAAGAGGGCTGTGAGATTGGCTTCATCCAAGTCCACTGCGCTTGGAGAATATTCGGATTCAACAGG  
 AACAGAAAAGAGGCCGTTTTTCATGGCGGAAATCGAGTGGAACTCTTCTCCAGTCTGGGAGAAATGGT  
 ATCAGGAACATTCGAGCAACTCCACAACAACAGCAAAACAGAAAGCAGAAAGTGACGGAGCACATTCTCT  
 CCGTATGACGTCGTGCCGTCATGCGTCTGTGGTGTAGTGGGGCCATCACTGAAAGGTTATGAGGTAA  
 CAGACATGATGCAGAAAGCCCTCTTTGATTTCTGAAGCACAGGTTTGATGGGAGGATATCAATAACAAG  
 AGTGACAGCTGACATTTCTTTGCTAAGAGATCTGTCCTCAACAATCCTAGCAAGAGAGCAATAATTGAA  
 CGTTCCAACACAGATCCAGCTTAGCGGAAGTACAAAGTGAAATTGAAAGAAATTTTGGATTGGCAAGAT  
 CTTTGAATTTGGTTGTTCTTGATGCAGACACCATCAACCACCCAGCACAGCTGATAAAGACATCCTTAGC  
 ACCCATCATCGTCCACGTGAAGGTCTCGTCCCCAAAGTTTTACAGCGGCTGATTAAGTCCAGAGGAAAG  
 TCCCAAAGCAAACACTTGAATGTTCAACTGGTGGCGCCGATAAACTGGCCAGTGCCCGCTGAAATGT  
 TTGATGTTATATTAGATGAGAATCAACTTGAGGATGCCTGTGAACATCTGGGAGAGTACCTGGAGGCATA  
 CTGGCGTGCCACCACACGAGCAGTAGCACCCCTATGACCCCTTACTGGGGCGGAACGTGGGCTCCACA  
 GCCCTCTCACCATATCCACAGCAATCTCTGGATTACAGAGTCAGCGAATGAGACACAGCAACCATTCTA  
 CAGAGAATTCTCAATTGAAAGACGAAGCCTAATGACCTCGGATGAAAATTACCACAATGAGAGGGCCCG  
 CAAGAGTAGGAACCGCTTGTCTTCCAGCTCCCAGCACAGCCGAGACCACTACCCTCTGGTGAAGAAGAT  
 TACCCGGACTCGTACCAGGACACTATAAGCCCCATAGGAACCGAGGATCGCCCGGGGGTGCAGCCATG  
 ACTCCCGACATAGGCTT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG222977 representing NM\_001037099  
 Red=Cloning site Green=Tags(s)

MSSSYGKNGAADGPHSPSSQVARGTTTRRSRLKRSDBGSTTSTSFILRQGSADSYTSRPSDSVLSLEEDRE  
 AIRQEREQAAIQLERAKSKPVAFVAVKTNVSYCGALDEDVVPVSTAI SFDAKDFLHIKEKYNNDDWWIGRL  
 VKEGCEIGFIPSPRLLENIRIQEQKRGRFHGGKSSGNSSSSLGEMVSGTFRATPTTTAKQKQKVTEHIP  
 PYDVVPSMRPVVLVGP SLKGYEVTDMMQKALFDLKHFRDGRISITRVTADISLAKRSVLNPNPKRAIIE  
 RSNTRSSLAEVQSEIERIFELARSLQLVVLADTINHPAQLIKTSLAPIIVHVKVSSPKVLQRLIKSRGK  
 SQSKHLNVQLVAADKLAQCPEMFDVILDENQLEDACEHLGEYLEAYWRATHSSSTPMTPLLGRNVGST  
 ALSPYPTAISGLQSRMRHSNHSTENSP IERRSLMTSDENYHNERARKSRNRLSSSSQHSRDHYPLVEED  
 YPDSYQDTYKPHRNRGSPGGCSDSRHRL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001037099

**ORF Size:** 1557 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\\_001037099.2](#)

**RefSeq Size:** 7981 bp

**RefSeq ORF:** 1560 bp

**Locus ID:** 12298

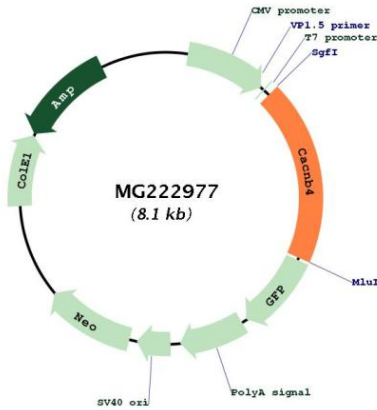
**UniProt ID:** [Q8R0S4](#)

**Cytogenetics:** 2 29.98 cM

**Gene Summary:**

The beta subunit of voltage-dependent calcium channels contributes to the function of the calcium channel by increasing peak calcium current, shifting the voltage dependencies of activation and inactivation, modulating G protein inhibition and controlling the alpha-1 subunit membrane targeting.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG222977