

## Product datasheet for **RG234113**

### **CACNB3 (NM\_001206915) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CACNB3 (NM\_001206915) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** CACNB3  
**Synonyms:** CAB3; CACNLB3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG234113 representing NM\_001206915  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTATGACGACTCCTACGTGCCGGTGGTTGAGGACTCGGAGGCGGGTTCAGCCGACTCCTACACCAGCC  
 GCCCATCTCTGGACTCAGACGTCTCCCTGGAGGAGGACCGGGAGAGTGCCCGCGCTGAAGTAGAGAGCCA  
 GGCTCAGCAGCAGCTCGAAAGGGCCAAGAAGTACAGCAATGACTGGTGGATCGGGCGCTAGTGAAGAG  
 GCGGGGACATCGCTTTCATCCCAGCCCCAGCGCTGGAGAGCATCCGGCTCAAACAGGAGCAGAAGG  
 CCAGGAGATCTGGGAACCTTCCAGCCTGAGTGACATTGGCAACCGACGCTCCCCTCCGCCATCTTAGC  
 CAAGCAGAAGCAAAGCAGGCGGAACATGTTCCCCATATGACGTGGTGCCTCCATGCGGCTGTGGT  
 CTGGTGGGACCTCTCTGAAAGTTATGAGGTCACAGACATGATGCAGAAGGCTCTCTTCGACTTCTCA  
 AACACAGATTTGATGGCAGGATCTCCATCACCCGAGTCACAGCCGACCTCTCCCTGGCAAAGCGATCTGT  
 GCTCAACAATCCGGGCAAGAGGACCATATTGAGCGCTCCTCTGCCCGCTCCAGCATTGCGGAAGTGCA  
 AGTGAGATCGAGCGCATATTTGAGCTGGCAAATCCCTGCAGCTAGTAGTGTGGACGCTGACACCATCA  
 ACCACCCAGCAGCTGGCAAGACCTCGCTGGCCCCATCATCGTCTTTGTCAAAGTGTCTCACAAA  
 GGTACTCCAGCGTCTCATTGCTCCCGGGGAAGTACAGATGAAGCACCTGACCGTACAGATGATGGCA  
 TATGATAAGCTGGTTTCAGTGCCACCGGAGTCATTTGATGTGATTCTGGATGAGAACCAGCTGGAGGATG  
 CCTGTGAGCACCTGGCTGAGTACCTGGAGGTTTACTGGCGGCCACGCACCCAGCCCCCTGGCCCCGG  
 ACTTCTGGGTCTCCAGTGCCATCCCCGACTTCAGAACCAGCAGCTGTGGGGAGCGTGGCAGGAG  
 CACTCCCCCTTGAGCGGGACAGCTTGATGCCCTCTGATGAGGCCAGCGAGAGCTCCCGCAAGCCTGGA  
 CAGGATCTTACAGCGTAGCTCCCGCCACCTGGAGGAGGACTATGCAGATGCCTACCAGGACCTGTACCA  
 GCCTACCCGCCAACACACCTCGGGGCTGCCTAGTGCTAACGGGCATGACCCCAAGACCGGCTTCTAGCC  
 CAGGACTCAGAGCACAACCACAGTGACCGGAACGGCAGCGCAACCGCCTTGGCCCAAGGATAGCTAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



View online »

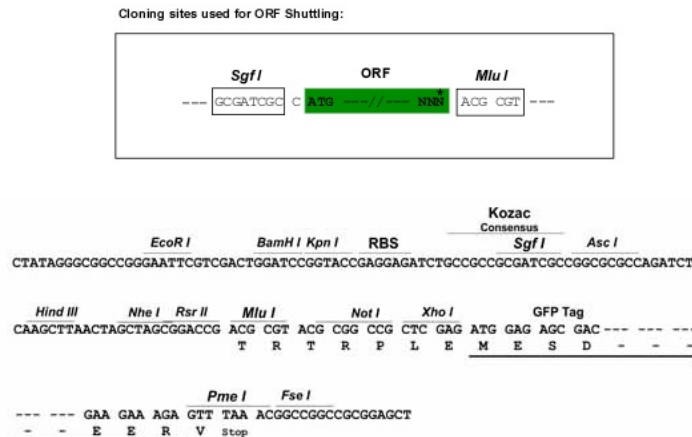
**Protein Sequence:** >RG234113 representing NM\_001206915  
Red=Cloning site Green=Tags(s)

MYDDSYVPGFEDSEAGSADSYTSRPSLSDVSLIEDRESARREVESQAQQQLERAKKYSNDWWIGRLVKE  
GGDIAFIPSPQRLESIRLKQEQAARRSGNPSSLSDIGNRRSPPPSLAKQKQKQAEHVPPYDVPVSMRPVV  
LVGPSLKGYEVTMMQKALFDLKHFRDGRISITRVADLTLAKRSLVNNPGKRTIERSARSSIAEVQ  
SEIERIFELAKSLQLVVLADDTINHPAQLAKTSLAPIIVFVKVSSPKVLQRLIRSRGKSQMKHLTVQMA  
YDKLVQCPPESFDVILDENQLEDACEHLAEYLEVYWRATHHPAPGPGLLGPPSAIPGLQNQLLGERGEE  
HSPLEKSLMPSDEASESSRQAWTGSSQSRSSRHLEEDYADAYQDLYQPHRQHTSGLPSANGHDPQDRLLA  
QDSEHNHSDRNWQRNRPWPKDSY

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001206915

**ORF Size:** 1329 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\\_001206915.2](#)

**RefSeq Size:** 2835 bp

**RefSeq ORF:** 1332 bp

**Locus ID:** 784

**UniProt ID:** [P54284](#)

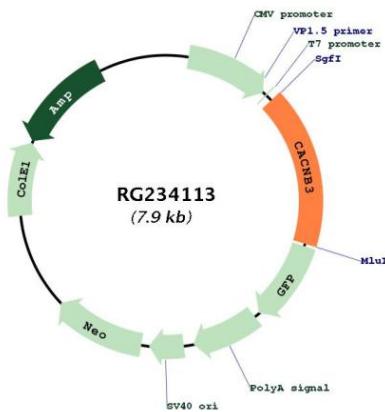
**Cytogenetics:** 12q13.12

**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

**Gene Summary:** This gene encodes a regulatory beta subunit of the voltage-dependent calcium channel. Beta subunits are composed of five domains, which contribute to the regulation of surface expression and gating of calcium channels and may also play a role in the regulation of transcription factors and calcium transport. [provided by RefSeq, Oct 2011]

**Product images:**



Circular map for RG234113