

## Product datasheet for **RC211727**

### **CACNB2 (NM\_201572) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CACNB2 (NM_201572) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CACNB2
Synonyms:	CAB2; CACNLB2; CAVB2; MYSB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC211727 representing NM\_201572  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAATCAGGGGAGTGGACTGGACCTGCTGAAGATCTCATATGGAAAAGGAGCCAGAAGGAAAAACAGAT  
 TTAAGGATCTGATGGAAGCACGTCATCTGATACTACCTCAAATAGTTTTGTTCCGCCAGGGTTCGGCAGA  
 CTCTACACTAGCCGTCCATCCGATTCCGATGTATCTCTGGAGGAGGACCGGGAGGCAGTGCAGAGAA  
 GCGGAGCGGCAGGCCAGGCACAGTTGGAAAAAGCAAAGCAAAGCCCGTTGCATTTGCGGTTCCGACAA  
 ATGTCAGCTACAGTGGGCCCATGAAGATGATGTTCCAGTGCCTGGCATGGCCATCTCATTCAAGCAAA  
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 AAGGGAATTTCTACTCCAGTAAATCAGGAGGAAATTCATCATCCAGTTTGGGTGACATAGTACCTAGTTC  
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 TAGTGGGCCCTTCTCTGAAGGGCTACGAGGTACAGATATGATGCAAAAAGCGCTGTTTGTATTTTTAA  
 ACACAGATTTGAAGGGCGGATATCCATCACAAGGGTACCGCTGACATCTCGCTTGCACCAAGCTCGGTA  
 TTAACAATCCCAGTAAGCACGCAATAATAGAAAGATCCAACACAAGGTCAAGCTTAGCGGAAGTTCAGA  
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 TCATCCAGCTCAACTCAGTAAACCTCCTTGGCCCTATTATAGTATATGTAAGATTTCTTCTCCTAAG  
 GTTTTACAAAGGTTAATAAAATCTCGAGGAAATCTCAAGCTAAACACCTCAACGTCCAGATGGTAGCAG  
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 AGTGGGACAAGTCCGGCCTCTCCAGGCAAGAGACATTTGACTCGGAAACCCAGGAGAGTTCGAGACTCTG  
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 GATCGAGAGCAGGACCACAACGAGTGAACAAGCAGCGCAGCCGTATAAATCCAAGGATCGCTACTGTG  
 AAAAGGATGGAGAAGTGATATCAAAAAACGGAATGAGGCTGGGAGTGGAAACAGGGATGTTTACATCCG  
 CCAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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**Protein Sequence:**

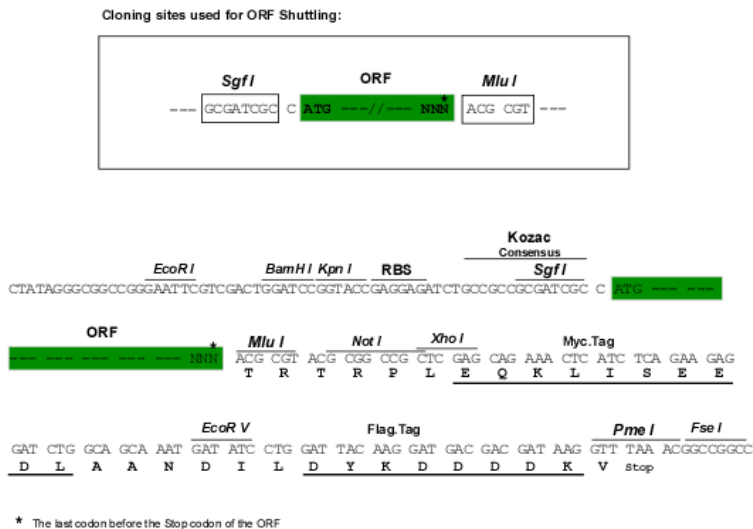
>RC211727 representing NM\_201572  
 Red=Cloning site Green=Tags(s)

MNQGSLDLLKISYKGGARRKRNRFKGSDDGSSDTSNSFVRQGSADSYTSRPSDSDVSLEEDREAVRRE  
 AERQAQALEKAKTKPVAFVVRTNVSYSAAHEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGC  
 EIGFIPSPVKLENMRLQHEQRAKQKGFYSKSGNSSSSLGDIVPSSRKSTPPSSGAKSADEQDQWKTAG  
 LFWRFTEHTPPYDVPVSMRPVVLVGPLSKGYEVTMMQKALFDFLKHREGRISITRVTADISLAKRSV  
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 VLQRLIKSRGKSQAKHLNVQMVAAADKLAQCPPELFDVILDENQLEDACEHLADYLEAYWKATHPPSSSLP  
 NPILLRSLATSSLPLSPTLASNSQGSQGDQRTDRSAPIRSASQAEPEPSVEPVKKSQHRSSSSAPHHNHR  
 SGTSRGLSRQETFDSETQESRDSAYVEPKEDYSHDHVDHYASHRDHNHRDETHGSSDHRHRESRHRSDV  
 DREQDHNECNKQSRHKSADRYCEKDGEVISKKRNEAGEWNRDVYIRQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_201572

ORF Size: 1824 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\\_201572.4](#)

RefSeq Size: 4229 bp

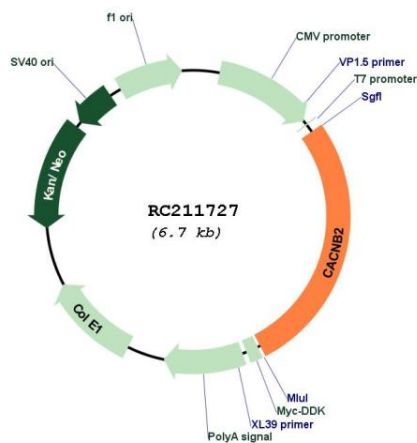
RefSeq ORF: 1827 bp

Locus ID: 783

UniProt ID: [Q08289](#)

<b>Cytogenetics:</b>	10p12.33-p12.31
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Other
<b>Protein Pathways:</b>	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway
<b>MW:</b>	68.3 kDa
<b>Gene Summary:</b>	This gene encodes a subunit of a voltage-dependent calcium channel protein that is a member of the voltage-gated calcium channel superfamily. The gene product was originally identified as an antigen target in Lambert-Eaton myasthenic syndrome, an autoimmune disorder. Mutations in this gene are associated with Brugada syndrome. Alternatively spliced variants encoding different isoforms have been described. [provided by RefSeq, Feb 2013]

**Product images:**



Circular map for RC211727