

Product datasheet for **RC230323**

CACNB2 (NM_001167945) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNB2 (NM_001167945) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC230323 representing NM_001167945
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATCAGGGGAGTGGACTGGACCTGCTGAAGATCTCATATGGAAAAGGAGCCAGAAGGAAAAACAGAT
 TTAAGGATCTGATGGAAGCACGTCATCTGATACTACCTCAAATAGTTTTGTTCCGCCAGGGTTCGGCAGA
 CTCCTACACTAGCCGTCCATCCGATTCCGATGTATCTCTGGAGGAGGACCGGGAGGCAGTGCAGAGAA
 GCGGAGCGGCAGGCCAGGCACAGTTGGAAAAAGCAAAGCAAAGCCCGTTGCATTTGCGGTTCCGACAA
 ATGTCAGCTACAGTGCAGCCATGAAGATGATGTTCCAGTGCCTGGCATGGCCATCTCATTCAAGCAAA
 AGATTTTCTGCATGTTAAGGAAAAATTTAACAATGACTGGTGGATAGGGCGATTGGTAAAAGAAGGCTGT
 GAAATCGGATTCATTCCAAGCCAGTCAAAGTAAAGCAATGAGGCTGCAGCATGAACAGAGAGCCAAGC
 AAGGAAATTCCTACTCCAGTAAATCAGGAGGAAATTCATCATCCAGTTTGGGTGACATAGTACCTAGTTC
 CAGAAAATCAACACCTCCATCATCTGCTAAGCAGAAGCAGAAATCGACAGACACACTCCTCCGTATGAT
 GTGGTACCTTCCATGCGACCAAGTGGTCCAGTGGGCCCTTCTCTGAAGGGCTACGAGGTCACAGATATGA
 TGCAAAAAGCGCTGTTTGATTTTTTAAACACAGATTTGAAGGGCGGATATCCATCACAAGGGTACCCGC
 TGACATCTCGCTTGCACCAAGCTCGGTATTAACAATCCAGTAAAGCAGCAATAATAGAAAAGTCCAAC
 ACAAGGTCAAGCTTAGCGGAAGTTCAGAGTGAATCGAAAGGATTTTTGAACTTGAAGAACATTGCAGT
 TGGTGGTCTTGACGCGGATACAATTAATCATCCAGTCAACTCAGTAAAACCTCCTTGGCCCTATTAT
 AGTATATGTAAGATTTCTTCTCCTAAGGTTTTACAAAGGTTAATAAAATCTCGAGGGAAATCTCAAGCT
 AAACAGCTCAACGTCCAGATGGTAGCAGCTGATAAACTGGCTCAGTGTCTCCAGAGCTGTTCCGATGTA
 TCTTGGATGAGAACCAGCTTGAGGATGCTGTGAGCACCTTGCCGACTATCTGGAGGCCTACTGGAAGGC
 CACCCATCCTCCCAGCAGTAGCCTCCCCAACCCCTCCTTAGCCGTACATTAGCCACTTCAAGTCTGCCT
 CTTAGCCCCACCCTAGCCTCTAATTCACAGGGTCTCAAGGTGATCAGAGGACTGATCGCTCCGCTCCTA
 TCCGTTCTGCTTCCCAAGCTGAAGAAGAACCTAGTGTGGAACAGTCAAGAAATCCAGCACCCTCTTC
 CTCCTCAGCCCCACACCACAACCATCGCAGTGGGACAAGTCCGCGCCTCTCCAGGCAAGAGACATTTGAC
 TCGGAAACCCAGGAGAGTCGAGACTCTGCCTACGTAGAGCCAAAGGAAGATTATCCCATGACCAGTGG
 ACCACTATGCCTCACACCGTGACCACAACCACAGAGACGAGACCCACGGGAGCAGTGACCACAGACACAG
 GGAGTCCCGGCACCGTTCCCGGGACGTGGATCGAGAGCAGGACCACAACGAGTGAACAAGCAGCGCAGC
 CGTCATAAATCCAAGGATCGCTACTGTGAAAAGGATGGAGAAGTGATATCAAAAAACCGAATGAGGCTG
 GGGAGTGAACAGGGATGTTTACATCCGCCAA

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC230323 representing NM_001167945
 Red=Cloning site Green=Tags(s)

MNQSGSLDLLKISYKGGARRKNRFGKSDGSTSSDTSNSFVRQGSADSYTSRPSDSVLSLEEDREAVRRE
 AERQAQAQLEKAKTKPVAFVVRTNVSYSAAHEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGC
 EIGFIPSPVKLENMRLQHEQRAKQKGFYSSKSGNSSSLGDIVSSRKSTPPSSAKQKQKSTEHTPPYD
 VVPSMRPVVLVGPLKGYEVTMMQKALFDLKHFRFEGRISITRVTADISLAKRSLNPNPSKHAI IERSN
 TRSSLAEVQSEIERIFELARTLQLVVLADTINHPAQLSKTSLAPIIVYVKISSPKVLQRLIKSRGKSQA
 KHLNVQMVAADKLAQCPELFDVILDENQLEDACEHLADYLEAYWKATHPPSSSLPNPLLSRTLATSSLP
 LSPTLASNSQGSQDQRTDRSAPIRSASQAE EEPVPEVVKKSQHRSSSAPHNHRSRGSRLSRQETFD
 SETQESRDSAYVEPKEDYSHDHVDHYASHRDHNRDETHGSSDHRHRESRHRSDVDREQDHNENKQRS
 RHKSKDRYCEKDGVEISKRNEAGEWNRDVYIRQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8068_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001167945

ORF Size: 1782 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_001167945.2](#)

RefSeq ORF: 1785 bp

Locus ID: 783

Cytogenetics: 10p12.33-p12.31

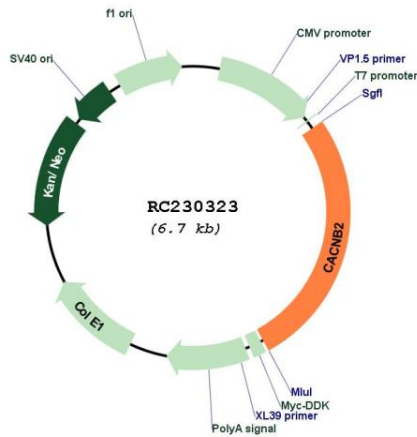
Protein Families: Druggable Genome, Ion Channels: Other

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway

MW: 67.1 kDa

Gene Summary: 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 RC230323