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Product datasheet for RG211555

CACNB2 (NM_201590) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNB2 (NM_201590) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CACNB2
Synonyms:	CAB2; CACNLB2; CAVB2; MYSB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>RG211555 representing NM_201590
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTTGACAGACGCCTTATAGCTCCTCAAACTAAATACATTATTCCTGGGGGTTCGGCAGACTCCTACA
CTAGCCGTCCATCCGATTCCGATGTATCTCTGGAGGAGGACCGGGAGGCAGTGCGCAGAGAAGCGGAGCG
GCAGGCCCAGGCACAGTTGGAAAAAGCAAAGACAAAGCCCGTTGCATTTGCGGTTCGGACAAATGTCAGC
TACAGTGCGGCCCATGAAGATGATGTTCCAGTGCCTGGCATGGCCATCTCATTCGAAGCAAAAGATTTTC
TGCATGTTAAGGAAAAATTTAACAATGACTGGTGGATAGGGCGATTGGTAAAAGAAGGCTGTGAAATCGG
ATTCATTCCAAGCCCAGTCAAACTAGAAAACATGAGGCTGCAGCATGAACAGAGAGCCAAGCAAGGGAAA
TTCTACTCCAGTAAATCAGGAGGAAATTCATCATCCAGTTTGGGTGACATAGTACCTAGTTCCAGAAAAT
CAACACCTCCATCATCTGCTATAGACATAGATGCTACTGGCTTAGATGCAGAAGAAAATGATATTCCAGC
AAACCACCGCTCCCCTAAACCCAGTGCAAACAGTGTAACGTCACCCCACTCCAAAGAGAAAAGAATGCCC
TTCTTTAAGAAGACAGAGCACACTCCTCCGTATGATGTGGTACCTTCCATGCGACCAGTGGTCCTAGTGG
GCCCTTCTCTGAAGGGCTACGAGGTCACAGATATGATGCAAAAAGCGCTGTTTGATTTTTTAAAACACAG
ATTTGAAGGGCGGATATCCATCACAAGGGTCACCGCTGACATCTCGCTTGCCAAACGCTCGGTATTAAAC
AATCCCAGTAAGCACGCAATAATAGAAAGATCCAACACAAGGTCAAGCTTAGCGGAAGTTCAGAGTGAAA
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CAAAGGTTAATAAAATCTCGAGGGAAATCTCAAGCTAAACACCTCAACGTCCAGATGGTAGCAGCTGATA
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TGTGGAACCAGTCAAGAAATCCCAGCACCGCTCTTCCTCCTCAGCCCCACACCACAACCATCGCAGTGGG
ACAAGTCGCGGCCTCTCCAGGCAAGAGACATTTGACTCGGAAACCCAGGAGAGTCGAGACTCTGCCTACG
TAGAGCCAAAGGAAGATTATTCCCATGACCACGTGGACCACTATGCCTCACACCGTGACCACAACCACAG
AGACGAGACCCACGGGAGCAGTGACCACAGACACAGGGAGTCCCGGCACCGTTCCCGGGACGTGGATCGA
GAGCAGGACCACAACGAGTGCAACAAGCAGCGCAGCCGTCATAAATCCAAGGATCGCTACTGTGAAAAGG
ATGGAGAAGTGATATCAAAAAAACGGAATGAGGCTGGGGAGTGGAACAGGGATGTTTACATCCCCCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

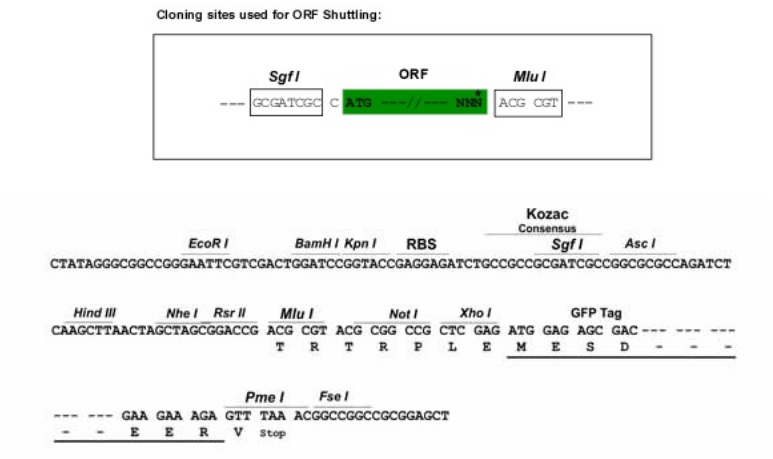
>RG211555 representing NM_201590
Red=Cloning site Green=Tags(s)

MLDRRLIAPQTKYIIPGGSADSYTSRPSDSDVSLEEDREAVRREAERQAQAQLEKAKTKPVAFAVRTNVS
YSAAHEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGCEIGFIPSPVKLENMRLQHEQRAKQGK
FYSSKSGGNSSSSLGDIVPSSRKSTPPSSAIDIDATGLDAEENDIPANHRSPKPSANSVTSPHSKEKRMP
FFKKTEHTPPYDVVPSMRPVVLVGPSLKGYEVTDMMQKALFDFLKHRFEGRISITRVTADISLAKRSVLN
NPSKHAIIERSNTRSSLAEVQSEIERIFELARTLQLVVLDADTINHPAQLSKTSLAPIIVYVKISSPKVL
QRLIKSRGKSQAKHLNVQMVAADKLAQCPPELFDVILDENQLEDACEHLADYLEAYWKATHPPSSSLPNP
LLSRTLATSSLPLSPTLASNSQGSQGDQRTDRSAPIRSASQAEEEPSVEPVKKSQHRSSSSAPHHNHRSG
TSRGLSRQETFDSETQESRDSAYVEPKEDYSHDHVDHYASHRDHNHRDETHGSSDHRHRESRHRSRDVDR
EQDHNECNKQRSRHKSKDRYCEKDGEVISKKRNEAGEWNRDVYIPQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



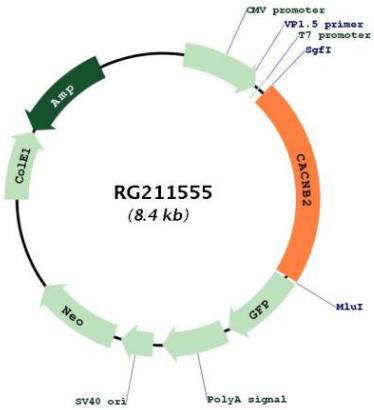
ACCN:	NM_201590
ORF Size:	1818 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_201590.1, NP_963884.1
RefSeq Size:	3375 bp
RefSeq ORF:	1821 bp
Locus ID:	783
UniProt ID:	Q08289
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

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 RG211555