

Product datasheet for RC216398

CACNG6 (NM_031897) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CACNG6 (NM_031897) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CACNG6
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216398 representing NM_031897
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATGTGGTCCAACCTTCTCTCTGCAAGAGGAGAACCGGGCGGGGGGGCCGGGGCCGGCGGGGGCGC
 ACGGGCAGGGCAGGTGGGGCTGACGCCGAGCGCAGGGGAAGTGAAGCTGGCGCTGCTGCTGGCCGC
 CGTGGGCGCCACGCTGGCGGTGCTGTCCGTGGGCACCGAGTTCGGGTGGAGCTCAACACCTACAAGGCC
 AACGGCAGCGCCGTGTGCGAAGCGGCCACCTGGGGCTGTGGAAGCGTGCACCAAGCGGCTGTGGCAGG
 CGGACGTGCCCGTGGACAGGGACACCTGCGGCCCGCGGAGCTGCCCGGAGGCCTGCTCTTGGTGAG
 CCTGGAGGTGTTCCGGCATTCCGTGAGGGCCCTGCTGCAGAGAGTCAGCCCGGAGCCTCCCCGGCCCCA
 CGCCTCACCTACGAGTACTCCTGGTCCCTGGGCTGCGGCGTGGGGCGCGCCTGATCCTGCTGTTGGGGG
 CCGGCTGCTTTCTGCTGCTCACACTGCCTTCTGGCCCTGGGGTCCCTCTGTCCAAGCGGGGGCACCG
 GGCCACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216398 representing NM_031897
 Red=Cloning site Green=Tags(s)

MMWSNFFLQEENRRRGAAGRRRAHGQGRSGLTPEREGKVKLALLLAAVGATLAVLSVGTEFWVELNTYKA
 NGSAVCEAAHLGLWKACTKRLWQADVPVDRDTCGPAELPGLLLLLSLEVFRHSVRALLQRVSPPEPPAP
 RLTYEYSWSLGGVAGLILLLGAGCFLLLTLPSPWWSLCPKRGRAT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_031897

ORF Size: 567 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_031897.2](#), [NP_114103.2](#)

RefSeq Size: 1673 bp

RefSeq ORF: 570 bp

Locus ID: 59285

UniProt ID: [Q9BXT2](#)

Cytogenetics: 19q13.42

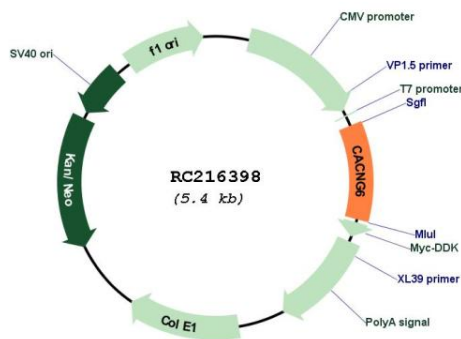
Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

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

MW: 20.4 kDa

Gene Summary: Voltage-dependent calcium channels are composed of five subunits. The protein encoded by this gene represents one of these subunits, gamma, and is one of two known gamma subunit proteins. This particular gamma subunit is an integral membrane protein that is thought to stabilize the calcium channel in an inactive (closed) state. This gene is part of a functionally diverse eight-member protein subfamily of the PMP-22/EMP/MP20 family and is located in a cluster with two family members that function as transmembrane AMPA receptor regulatory proteins (TARPs). Alternative splicing results in multiple transcript variants. Variants in this gene have been associated with aspirin-intolerant asthma. [provided by RefSeq, Dec 2010]

Product images:



Circular map for RC216398