

Product datasheet for SC305359

OriGene Technologies, Inc.

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CACNG6 (NM_031897) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CACNG6 (NM_031897) Human Untagged Clone

Tag: Tag Free Symbol: CACNG6

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_031897, the custom clone sequence may differ by one or more

nucleotides

TGTCCCAAGCGGGGCACCGGGCCACCTAG

Restriction Sites: Please inquire **ACCN:** NM 031897

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 031897.2</u>, <u>NP 114103.2</u>

 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

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] Transcript Variant: This variant (3) lacks two alternate in-frame exons in the central coding region, compared to variant 1, resulting in a shorter isoform (c) with the same N- and C-termini as isoform a. This variant lacks publicly available transcript support but it is supported

by RT-PCR data in PubMed ID:11170751.