

## Product datasheet for **SC124006**

### **CACNG6 (NM\_145814) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CACNG6 (NM_145814) Human Untagged Clone
Tag:	Tag Free
Symbol:	CACNG6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF sequence for NM_145814 edited TCGCCACCATGATGTGGTCCAATTCTTCTGCAAGAGGAGAACCGGCGGGGGGCGCCG CGGGCCGGCGGGGGCGCACGGGCAGGGCAGGTCGGGGCTGACGCCCGAGCGCGAGGGGA AGGTGAAGCTGGCGCTGCTGCTGGCCGCCGTGGGCGCCACGCTGGCGGTGCTGTCCGTGG GCACCGAGTTCTGGGTGGAGCTCAACACCTACAAGGCCAACGGCAGCGCCGTGTGCGAAG CGGCCACCTGGGGCTGTGGAAGGCGTGCACCAAGCGGCTGTGGCAGGGCGGACGTGCCCG TGGACAGGGACACCTGCGGCCCGCGGAGCTGCCCGGAGAAGCAAACCTGCACCTATTTTA AATTCTTACCACGGGGGAGAATGCACGCATCTTTCAGAGAACCACAAAGAAAGAGGTGA ATCTGGCAGCTGCGGTGATAGCAGTGTGGCCTGGCAGTCATGGCCTTGGGTGCCTCT GTATCATCATGGTGTCTCAGTAAAGGTGCAGAGTTCCTGCTCCGAGTTGGAGCCGTCTGCT TTGGCCTCTCAGGCCTGCTGCTTTGGTGAGCCTGGAGGTGTTCCGGCATTCCGTGAGGG CCCTGCTGCAGAGAGTCAAGCCGAGCCTCCCCGGCCCCACGCCTCACCTACGAGTACT CCTGGTCCCTGGGCTGCGGCGTGGGGCCGGCCTGATCCTGCTGTTGGGGCCGGCTGCT TTCTGCTGCTCACACTGCCTTCTGGCCCTGGGGTCCCTCTGTCCCAAGCGGGGGCACC GGGCCACCTAG
Restriction Sites:	Please inquire
ACCN:	NM_145814
Insert Size:	800 bp



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_145814.1](#), [NP\\_665813.1](#)

**RefSeq Size:** 1886 bp

**RefSeq ORF:** 783 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 (1) represents the longest transcript and encodes the longest isoform (a).