

## Product datasheet for SC304095

### CACNG5 (NM\_014404) Human Untagged Clone

#### Product data:

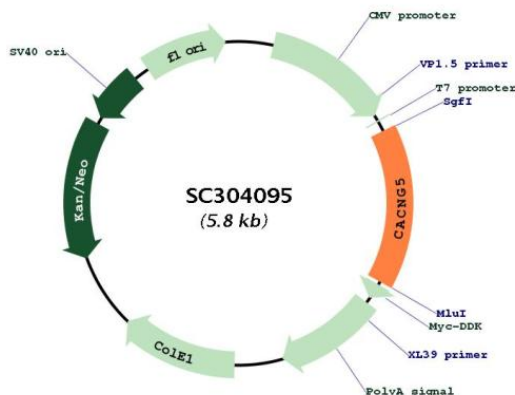
Product Type:	Expression Plasmids
Product Name:	CACNG5 (NM_014404) Human Untagged Clone
Tag:	Tag Free
Symbol:	CACNG5
Synonyms:	calcium channel, voltage-dependent, gamma subunit 5; MGC126656; MGC126682; neuronal voltage-gated calcium channel gamma-5 subunit; voltage-dependent calcium channel gamma-5 subunit
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC304095 representing NM_014404. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAGTGCCTGCGGGAGGAAGGCCCTGACCCTGCTGAGCAGTGTCTTTGCTGTCTGTGGCTTGGGCCTC
CTGGGTATCGCGGTGAGCAGCAGCAGTGTACCTGGAGGAGGTGTGATTGTGCCCAAGACCCAG
AGCACCAGATCAAGATGTCCTGCACTCAGGCCCTGCGCGGGTCTGCTTCCTTGAGGTGAGGAGCGG
GGGCGTTGCTTACCATAGAATATGTGATGCCATGAACACCCAGCTGACATCCGAGTCCACGGTCAAT
GTTCTAAAGATGATCCGCTCAGCCACACCATTCCCTCTGGTCAGCCTCTTCTCATGTTCAATGGGTTT
ATCCTGAACAACATCGGACACATCCGTCACCCACCGGACGATACTGGCCTTTGTCTCTGGCATCTTCTTT
ATCCTCTCAGGCCTCTCTCTCGTGGTGGGCTGGTGTCTACATCTCCAGCATCAACGATGAGATGCTC
AACAGGACCAAGGATGCAGAGACCTACTCAACTACAAGTATGGTGGTGGTTCCTTCGCGGCCATC
TCCTTCTTTTAAACGGAGGTAAGCCCGTCACCCTAAGTATGGATAGGCTGGGCCTGGGCACTGCCCA
CTGAGCCGGGAGAGTGGGGATGGGGAGAAGGGACATCCACAACCATTTTGGACCCCGGACCACCCA
CTCTACTTCCCTTCTCATCCCAGAATGTGCTACTGTCTTACCTTCTGGGTCTCCTCCGCCAGGATG
TCCCCAGGACCCTGCTCCTGTCCCCACGTCACCTTCCCACCCACTCGAGCTGTGCTGTGCGAGACC
CAGCCAAGGGAGATGAGGAGGCCCCAGCAGCGAGCCATCCTCTGCTGTCTTCTCCCTGTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-MluI



[View online »](#)

**Plasmid Map:**


**ACCN:** NM\_014404

**Insert Size:** 891 bp

**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:** [NM\\_014404.1](#)

**RefSeq Size:** 891 bp

**RefSeq ORF:** 891 bp

**Locus ID:** 27091

<b>Cytogenetics:</b>	17q24.2
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway
<b>MW:</b>	32.8 kDa

**Gene Summary:** The protein encoded by this gene is a type II transmembrane AMPA receptor regulatory protein (TARP). TARPs regulate both trafficking and channel gating of the AMPA receptors. 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, a type I TARP and a calcium channel gamma subunit. This gene is a susceptibility locus for schizophrenia and bipolar disorder. [provided by RefSeq, Dec 2010]

Transcript Variant: This variant (2) uses an alternate splice site in the 3' coding region compared to variant 1, resulting in a frameshift. It encodes isoform b, which is longer and which has a distinct C-terminus compared to isoform a.