

Product datasheet for **SC122095**

CACNG4 (NM_014405) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNG4 (NM_014405) Human Untagged Clone
Tag:	Tag Free
Symbol:	CACNG4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_014405, the custom clone sequence may differ by one or more nucleotides

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ATGGTGCGATGCGACCGCGGGCTGCAGATGCTGCTGACCACGGCCGGAGCCTTCGCCGCCTTCTCGCTCA  
TGGCCATCGCCATCGGCACCGACTACTGGCTGTAATCCAGCGCGCACATCTGCAACGGCACCAACCTGAC  
CATGGACGACGGGCCCCCGCCCCGCGCGCCGCGGCGACCTCACCCACTCTGGTCTGTGGCGGGTGTGC  
TGCATCGAAGGGATCTATAAAGGGCACTGCTTCCGGATCAATCACTTCCCAGAGGACAATGACTACGACC  
ACGACAGCTCGGAGTACCTCCTCCGCATCGTGCGAGCCTCCAGCGTCTTCCCCATCCTCAGCACCATCCT  
GCTCCTGCTGGGTGGCCTGTGCATCGGTGCTGGCAGGATCTACAGCCGCAAGAACAACATCGTCTCAGT  
GCCGGCATCCTCTCGTGGCTGCAGGCCTCAGTAACATCATCGGTATCATCGTCTACATTTCCAGCAACA  
CAGGTGACCCGAGTGACAAGCGGGACGAAGACAAAAGAACCATTACAACACTACGGCTGGTCTTTTTACTT  
TGGAGCTCTGTCTTTCATTGTGGCTGAGACCGTGGGCGTCTGGCTGTAACATTTACATTGAGAAAAAT  
AAAGAGTTGAGGTTAAGACAAACGGGAATTCCTTAAGGCGTCTTCTCTTCTCCTTATGCCAGGATGC  
CGAGCTACAGGTACCGGCGACGGCGCTCGAGGTCCAGCTCAAGGTCCACCGAGGCCTCGCCCTCCAGGGA  
CGTGTGCGCCATGGGCCTGAAGATCACAGGGGCCATCCCCATGGGGGAGCTGTCCATGTACACGCTGTCC  
AGGGAGCCCTCAAGGTGACCACCGCAGCCAGCTACAGCCCCGACCAGGAGGCCAGCTTCTGCAGGTGC  
ATGACTTTTTCCAGCAGGACCTGAAGGAAGTTTCCACGTGAGCATGCTGAACCGACGGACGCCCTGT  
GTGA
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5' Read Nucleotide Sequence: >OriGene 5' read for NM_014405 unedited
 NNGGAGTTTANAATTTGTAATACGACTCACTATAGGCGGCCGCGNAATTCGCACGAGGGC
 GATGCGACCGCGGGCTGCAGATGCTGCTGACCACGGCCGGAGCCTTCGCCGCCTTCTCGC
 TCATGGCCATCGCCATCGGCACCGACTACTGGCTGTAATCCAGCGCGCACATCTGCAACG
 GCACCAACCTGACCATGGACGACGGGCCCGCCCGCCCGCGCCCGCGGGACCTCACCC
 ACTCTGGTCTGTGGCGGGTGTGCTGCATCGAAGGGATCTATAAAGGGCACTGCTTCCGGA
 TCAATCACTTCCCAGAGGACAATGACTACGACCACGACAGCTCGGAGTACCTCCTCCGCA
 TCGTGCGAGCCTCCAGCGTCTTCCCATCCTCAGCACCATCCTGCTCCTGCTGGGTGGCC
 TGTGCATCGGTGCTGGCAGGATCTACAGCCGCAAGAACAACATCGTCTCAGTGCCGGCA
 TCCTCTTCGTGGCTGCAGGCCTCAGTAACATCATCGGTATCATCGTCTACATTTCCAGCA
 ACACAGGTGACCCGAGTGACAAGCCGGACGAAGACAAAAAGAACCATTACAACACTCGGCT
 GGTCTTTTTACTTTGGAGCTCTGCTTTTATTGTGGCTGAGACCGTGGCGCTCCTGGCTG
 TAAACATTTACATTGAGAAAAATAAGAGTTGAGGTTTAAAGACCAAACGGGAATTCCTT
 AAGCGTCTTCTCTTCTCTTATGCCAGGATGCCGAGCTACAGGTACCGCGACGGCGCT
 TGAGGTCCAGCTCAGGGTCCACCGAGTCTCGCCCTCCAGGGACGTGTCGCCCATGGGC
 CTGAAGACACAGGGGCCATCCCCAGGGGAGCTGGCCACGTCCACGCTGTGCAGGGGGCG
 CCTCAAG

3' Read Nucleotide Sequence: >OriGene 3' read for NM_014405 unedited
 TTCAAATTTTTTCGNACAACCAACCCAAAACCAGTGTAGGTAAGTGGAGTCACATGTGCTT
 AACTGGCGAAACACACAGGCGTGGGGGCGAGGGGGCGGGTCGGGAGGATGGAGACGAAGT
 GGGCTCAGGCCACCACATCCCTTCGTTGGGTGTCAGGTCTGAGATGCACCGGGAGGGCCA
 GCAATGGGCAGGACTATGGCCAGGGTCTTCGGCGCACCCACCTGTCCGCGGGAGAATG
 CTGACAATGCCCGGCTGTCTGATGTGGTTTTGCTTCTCTGCTCGTCCCTTTTTTCTACTC
 TTTCTTGGCCCTAAGCGGGCCCTGCTTACTCTGCCTGTTACTGGCAAGATGTAGGATT
 CATCGCACACACCTTTTTTTATGGAACGATAGAAACCTTCTGGCTCTGCGGCAGGTTT
 GGTGCTGGTTCCACAGTGATTTCCACCACACGCCCGCCTTGCTCTGCGTAATCTCACCT
 ATCCACTCCGTGCCTGTTTGACAACCGTATTTGCTGTAGGCGTTCCTGCCTTCTCCCGC
 CCTGCTATTTATCTTTGCAACGCCGCCCTACCCACTTAAGCCTGACTCTGCCGTTTTAA
 ACTCTGTGTGCCACTGGCTTGCATTATTAATCCATCCCCCGGATTTTGCTTTTGACTTC
 CCCCAGGTCTTTGAGGCTTACTTATACCTATTACGCGTTGTTTACCGGCTGATATGG
 GGCCGCGTCTTTGTTGGTATGACCATGCTCGCACTTCATTACTCAGTTCATTGCCGCG
 CCCACCCTTTTGTTCATCCCCCGCCCCCGCTTATTATGTTTTCTCTTCCAT
 TTTTTCTTTTTCTCACTTCTTCTACCCCCCTTCTTATTTATGCACCCTTTTCTTT
 ATCCCTGCTCTAAATGGGTTTTTCTTCTGCCCCGTTCTTCTTATTTTCTTCTTTTC
 TCGCGGCCAATTTGCTAN

Restriction Sites: NotI-NotI
ACCN: NM_014405
Insert Size: 3520 bp

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 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_014405.2](#), [NP_055220.1](#)

RefSeq Size: 3397 bp

RefSeq ORF: 984 bp

Locus ID: 27092

UniProt ID: [Q9UBN1](#)

Cytogenetics: 17q24.2

Domains: PMP22_Claudin

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: The protein encoded by this gene is a type I 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 II TARP and a calcium channel gamma subunit. [provided by RefSeq, Dec 2010]