

Product datasheet for **SC312948**

CACNG2 (NM_006078) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNG2 (NM_006078) Human Untagged Clone
Tag:	Tag Free
Symbol:	CACNG2
Synonyms:	MRD10
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_006078 edited
 ATGGGGCTGTTTGATCGAGGTGTTCAAATGCTTTTAACCACCGTTGGTGCTTTTCGCTGCC
 TTCAGCCTGATGACCATAGCTGTGGGAACCGACTATTGGCTCTACTCCAGAGGGGTTTGC
 AAGACCAAAAGTGTCAAGTGTGAGAATGAAACCGCAAAAAGAACGAGGAAGTTATGACCCAT
 TCCGGATTATGGAGAACCTGCTGCCTAGAAGGGAATTTCAAAGGTCTGTGCAAGCAAATT
 GATCACTTCCCAGAGGATGCAGATTACGAAGCTGACACAGCAGAATATTTCTCCGGGCC
 GTGAGGGCCTCCAGCATTTTCCAATCCTGAGTGTGATTCTGCTTTTCATGGGTGGCCTC
 TGCATCGCAGCCAGCGAGTTCTACAAAACCTCGACACAACATCATCCTGAGTGCCGGC
 TTCTTCGTGTCTGCAGGTCTGAGTAACATCATTGGCATCATAGTGTACATATCTGCCAAT
 GCCGGAGACCCCTCCAAGAGCGACTCCAAAAGAATAGTTACTCATAACGGCTGGTCTTC
 TACTTCGGGGCCCTGCTCTTCATCATCGCCGAGATGGTGGGGTCTGGCGGTGCACATG
 TTTATCGACCGGCACAAACAGCTGCGGGCCACGGCCCGCCACGGACTACCTCCAGGCC
 TCTGCCATCACCCGATCCCCAGCTACCGCTACCGCTACCGCGCCGAGCCGCTCCAGC
 TCGCGCTCCACGGAGCCCTCACACTCCAGGGACGCCTCCCCGTGGGCATCAAGGGCTTC
 AACACCTGCCGTCCACGGAGATCTCCATGTACACGCTCAGCAGGGACCCCTGAAGGCC
 GCCACCACGCCACCGCCACCTACAACCTCCGACAGGGATAACAGCTTCTCCAGTTTAC
 AACTGTATCCAGAAGGAGAACAAGGACTCTCTCACTCCAACACAGCCAACCGCCGGACC
 ACCCCCGTATAA



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_006078 unedited</p> <pre> NTTGTTTAACCCCGTGGTGTCTTCGCTGCCTTCAGCCTGATGACCATAGCTGTGGGAACC GACTATTGGCTCTACTCCAGAGGGGTTTGAAGACAAAAGTGTGAGTGAAGTAAACC AGCAAAGAGAACGAGGAAGTTATGACCCATTCCGGATTATGGAGAACCCTGCTGCCTAGAA GGGAATTTCAAAGGTCTGTGCAAGCAAATTGATCACTCCAGAGGATGCAGATTACGAA GCTGACACAGCAGAATATTTCTCCGGGCGTGAGGGCCTCCAGCATTTTCCCAATCCTG AGTGTGATTCTGCTTTTTCATGGGTGGCCTCTGCATCGCAGCCAGCGAGTTCTACAAAAC CGACACAACATCATCCTGAGTGCCGGCATCTTCTTCGTGTCTGCAGGTCTGAGTAACATC ATTGGCATCATAGTGTACATATCTGCCAATGCCGAGACCCCTCCNAGAGCGACTCCNAA AAGAATAGTTACTCATAACGGCTGGTCTTCCACTTTCGGGCCCTGTCTTCATCATCCCC GAGATGGTCGGGGTGTGGCGGTGCACATGTTTATTCGACCGGGCAAAANGCTGCGGGCC AAGGGCCGGGCCCGGAGTATCTCCAGGGTCTTGCAATTTACCGGTATCCCGGTATCGGTT CCGGTACAAGGCCAACCCTTCACTTGGGTTCAAGGAGCTTTAATCCAGGGCCCCCCCC CTGGCATAAGGGGTTACACCTGGGGTCCGGATTCAGTACGCCCTGCAGGAGCCCGGAGG CGCCCCGGCCCCCCCCCTC </pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_006078 unedited</p> <pre> NATTGTCTGTCTCCTCTGGATACAGTTGTGACCTGGAGGAAGCTGTTATCCCTGTCGGA GTTGTAGGTGGCGGTGGGCGTGGTGGCGCCTTCAGGGGGTCCCTGCTGAGCGTGTACAT GGAGATGTCCGTGGACGGCAGGGTGTGAAGCCCTTGATGCCACGGGGGAGGCGTCCCT GGAGTGTGAGGGTCCGTGGAGCGGAGCTGGAGCGGCTGCGGCGCTGGTAGCGGTAGCG GTAGCTGGGGATCGGGTGTGGCAGAGGCCTGGAGGTAGTCCGTGGCGCGGGCCGTGGC CCGCAGCTGTTTGTGCCGTCGATAAACATGTGCACCGCCAGCACCCCGACCATCTCGGC CATGATGAAGGACAGGGCCCCGAAGTAAAAGGACCAGCCGTATGAGTAACATTCTTTTT GGAGTCCCTCTTGAGGGGTCTCCGGCCTTGGCAGATATGTACACTATGATGCCGATGAT GTTACTCAAACCTGCCGACACGAAGAAAATGCCCGCACTCAAGATGATGTTGTGTCGAGT TTTTTAAACTCGCTGGCTGCGATGCAAAAGGCAACCCTGGAGAAGCAGAATCACACGTA AGATTGGGGAAAAGGCTGAAGGCCATAAGAGCTCGAAGGAAATTCGCGGGGGGACTTAC AAGGGCCGAGCCCGAAAAGAATAATATGGGTGGACGAAGTTTGGAAATTCCTTATTAGCG GTGGTTGGCAGAAAGGGAGGGGAGAACACCCGGNNCCATAGGTTTATTCGGAACATG TTGAAACGTAGAAGGGG </pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_006078
Insert Size:	4600 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:	The ORF of this clone has been fully sequenced and found to be a perfect match to NM_006078.2.
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:	<ol style="list-style-type: none">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_006078.2 , NP_006069.1
RefSeq Size:	1548 bp
RefSeq ORF:	972 bp
Locus ID:	10369
UniProt ID:	Q9Y698
Cytogenetics:	22q12.3
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:	<p>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. The AMPA subtype of ionotropic glutamate receptors are ligand gated ion channels that are typically activated by glutamate released from presynaptic neuron terminals and mediate fast neurotransmission in excitatory synapses. TARPs thus play an important role in synaptic plasticity, learning and memory. Mutations in this gene cause an autosomal dominant form of cognitive disability. [provided by RefSeq, Jul 2017]</p>