

Product datasheet for RC207373

CACNG3 (NM_006539) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNG3 (NM_006539) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CACNG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207373 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGATGTGTGACAGAGGTATCCAGATGTTGATCACCCTGTAGGAGCCTTTGCCGCTTTTAGTTTAA
TGACCATTGCAGTGGGCACGGACTACTGGTTATATCCAGAGGTGTGTCAGGACTAAATCTACAAGTGA
TAATGAAACCAGCAGGAAGAATGAAGAAGTAATGACCCATTCGGGGCTGTGGAGGACCTGCTGCCTAGAA
GGGGCTTTCCGAGGCGTGTGCAAGAAAAATCGATCACTCCCTGAAGATGCTGACTACGAACAGGACACAG
CCGAATATCTCCTGCGAGCTGTGAGGGCCTCCAGTGTCTTCCCCATCCTCAGTGTACGCTGCTGTTCTT
CGGCGGGCTCTGCGTGGCAGCCAGTGAGTTCCACCGCAGCAGACACAACGTCATTCTCAGCGGGGCATC
TTTTTTGTCTCTGCAGGGTTAAGCAACATCATTGGCATCATAGTTTATATATCAGCCAACGCCGGAGACC
CCGGGCAGCGTACTCCAAAAAAGTTACTCCTATGGTTGGTCTTTTATTTCCGAGCCTTCTCTTTCAT
CATCGCAGAAATTGTAGGAGTGGTTGCCGTGCACATCTATATTGAAAAACATCAGCAGTTACGAGCCAAA
TCCCACTCGGAGTTCCTGAAGAAATCTACTTTGCCCGCCTCCACCCTACAGGTATCGATTCCGGAGGC
GGTCAAGTTCTCGCTCCACCGAGCCAGATCCCGAGACCTGTCCCCATCAGCAAAGGCTCCACACCAT
CCCTTCCACTGACATCTCGATGTTACCCTCTCCCGGACCCCTCAAAGATCACCATGGGACCCCTCCTC
AACTCCGACCGGACCACGCTTTTCTACAGTTCACAATCCACACCCAAAGAGTTCAAAGAGTCACTGC
ATAATAATCCGGCCAACAGGCGCACCCACGCCCGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC207373 protein sequence
Red=Cloning site Green=Tags(s)

MRMCDRGIQMLITTVGAFAAFSLMTIAVGTDYWLYSRGVCRTKSTSDNETSRKNEEVMTHSGLWRTCCLE
 GAFRGVCKKIDHFPEDADYEQDTAEYLLRAVRASSVFPILSVTLFFGGLCVAASEFHRSRHNVILSAGI
 FFVSAGLSNIIGIIVYISANAGDPGQRDSKKSYSYGWSFYFGAFSFIIEIVGVAVHIYIEKHQQLRAK
 SHSEFLKKSTFARLPPYRYRFRSSSRSTEPRSRDLSPISKGFHTIPSTDISMFTLSRDPSKITMGTL
 NSDRDHAFLQFHNSTPKEFKESLHNNPANRRTPV

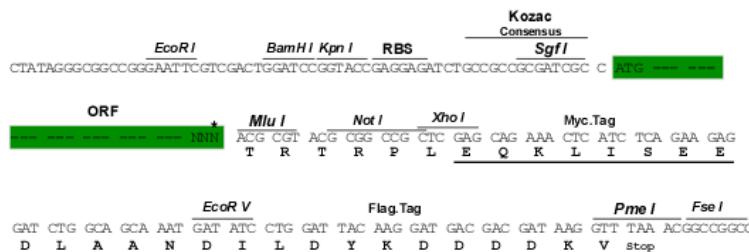
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6772_d09.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_006539

ORF Size: 945 bp

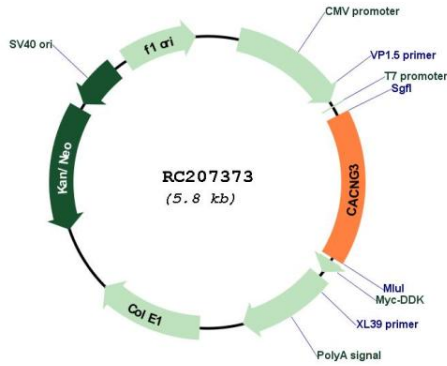
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

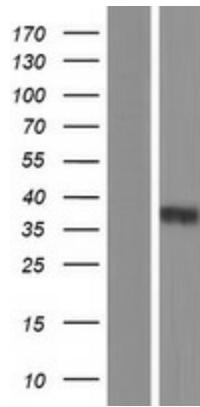
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_006539.4
RefSeq Size:	2710 bp
RefSeq ORF:	948 bp
Locus ID:	10368
UniProt ID:	O60359
Cytogenetics:	16p12.1
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
MW:	35.5 kDa
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. This gene is a susceptibility locus for childhood absence epilepsy. [provided by RefSeq, Dec 2010]

Product images:



Circular map for RC207373



Western blot validation of overexpression lysate (Cat# [LY416581]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207373 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).