

Product datasheet for **RC205154**

CACNG4 (NM_014405) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | CACNG4 (NM_014405) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | CACNG4 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC205154 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGCGATGCGACCGCGGGCTGCAGATGCTGCTGACCACGGCCGGAGCCTTCGCCGCTTCTCGCTCA
TGGCCATCGCCATCGGCACCGACTACTGGCTGTACTCCAGCGCGCACATCTGCAACGGCACCAACCTGAC
CATGGACGACGGGCCCCCGCCCCGCGCCCGCGGCGACCTCACCCACTCTGGTCTGTGGCGGGTGTGC
TGCATCGAAGGGATCTATAAAGGGCACTGCTCCGGATCAATCACTTCCCAGAGGACAATGACTACGACC
ACGACAGCTCGGAGTACCTCCTCCGCATCGTGGCAGCCTCCAGCGTCTTCCCCATCCTCAGCACCATCCT
GCTCCTGCTGGGTGGCCTGTGCATCGGTGCTGGCAGGATCTACAGCCGCAAGAACAACATCGTCCTCAGT
GCCGGCATCCTCTTCGTGGCTGCAGGCCTCAGTAACATCATCGGTATCATCGTCTACATTTCCAGCAACA
CAGGTGACCCGAGTGACAAGCGGGACGAAGACAAAAGAACCATTACAACCTACGGCTGGTCTTTTACTT
TGGAGCTCTGTCTTTCATTGTGGCTGAGACCGTGGGCGTCTGGCTGTAACATTTACATTGAGAAAAAT
AAAGAGTTGAGGTTTAAGACAAACGGGAATTCCTTAAGGCGTCTTCTCTTCTCCTTATGCCAGGATGC
CGAGCTACAGGTACCGGCGACGGCGCTCGAGGTCCAGCTCAAGGTCCACTGAGGCCTCGCCCTCCAGGGA
CGTGTGCCCCATGGCCGTAAGATCACAGGGGCCATCCCCATGGGGGAGCTGTCCATGTACACGCTGTCC
AGGGAGCCCTCAAGGTGACCACCGCAGCCAGCTACAGCCCCGACCAGGAGGCCAGCTTCTGCAGGTGC
ATGACTTTTTCCAGCAGGACCTGAAGGAAGGTTCCACGTGAGCATGCTGAACCGACGGAGCCCTGT
G

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205154 protein sequence
Red=Cloning site Green=Tags(s)

MVRCDRGLQMLLTTAGFAAFSLMAIAIGTDYWL YSSAHICNGTNLTMDDGPPRRARGDLTHSGLWRVC
 CIEGIYKGHCFRINHFPEDNDYDHSSEYLLRIVRASSVPILSTILLGGLCIGAGRIYSRKNIVLS
 AGILFVAAGLSNIIGIIVYSSNTGDPDKRDEKKNHYNYGWSFYFGALSFIVAETVGLAVNIYIEKN
 KELRFKTKREFLKASSSSPYARMPYSYRYYYYRRSSSRSTEASPSRDVSPMGLKITGAIPMGELSMYTLS
 REPLKVTTAASYSYSPDQEAFLQVHDF FQQDLKEGFHVSM LNRRRTTPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6326_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_014405

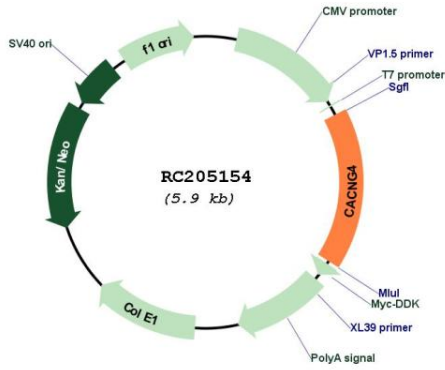
ORF Size: 981 bp

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.

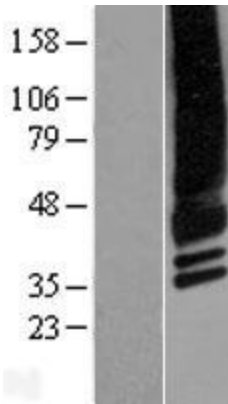
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in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

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| 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_014405.4 |
| RefSeq Size: | 3430 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 |
| MW: | 36.6 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 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] |

Product images:



Circular map for RC205154



Western blot validation of overexpression lysate (Cat# [LY415298]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205154 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).