

## Product datasheet for **RG205154**

### CACNG4 (NM\_014405) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CACNG4 (NM_014405) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CACNG4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205154 representing NM_014405 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGCATGCGACCGCGGGCTGCAGATGCTGCTGACCACGGCCGGAGCCTTCGCCGCTTCTCGCTCA  
TGGCCATCGCCATCGGCACCGACTACTGGCTGTACTCCAGCGCGCACATCTGCAACGGCACCAACCTGAC  
CATGGACGACGGGCCCCCGCCCCGCCCGCGCCGCGGACCTCACCCACTCTGGTCTGTGGCGGGTGTGC  
TGCATCGAAGGGATCTATAAAGGGCACTGCTTCCGGATCAATCACTTCCCAGAGGACAATGACTACGACC  
ACGACAGCTCGGAGTACCTCCTCCGCATCGTGGCAGCCTCCAGCGTCTTCCCCATCCTCAGCACCATCCT  
GCTCCTGCTGGGTGGCCTGTGCATCGGTGCTGGCAGGATCTACAGCCGCAAGAACAACATCGTCCTCAGT  
GCCGGCATCCTCTTCGTGGCTGCAGGCCTCAGTAACATCATCGGTATCATCGTCTACATTTCCAGCAACA  
CAGGTGACCCGAGTGACAAGCGGGACGAAGACAAAAGAACCATTACAACACTACGGCTGGTCTTTTACTT  
TGGAGCTCTGTCTTTCATTGTGGCTGAGACCGTGGGCGTCTGGCTGTAACATTTACATTGAGAAAAAT  
AAAGAGTTGAGGTTAAGACCAAACGGGAATTCCTTAAGGCGTCTTCTCTTCTCCTTATGCCAGGATGC  
CGAGCTACAGGTACCGGCGACGGCGCTCGAGGTCCAGCTCAAGGTCCACTGAGGCCTCGCCCTCCAGGGA  
CGTGTGCCCCATGGCCTGAAGATCACAGGGGCCATCCCCATGGGGGAGCTGTCCATGTACACGCTGTCC  
AGGGAGCCCTCAAGGTGACCACCGCAGCCAGCTACAGCCCCGACCAGGAGGCCAGCTTCTGCAGGTGC  
ATGACTTTTTCCAGCAGGACCTGAAGGAAGTTTCCACGTGAGCATGCTGAACCGACGGAGCCCTGT  
G

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG205154 representing NM\_014405  
Red=Cloning site Green=Tags(s)

MVRCDRGLQMLLTTAGAFAAFSLMAIAIGTDYWL YSSAHICNGTNLTMDGPPPRRARGDLTHSGLWRVC  
 CIEGIYKGHCFRINHFPEDNDYDHDSSSEYLLRIVRASSVPILSTILLLLGGLCIGAGRIYSRKNNI VLS  
 AGILFVAAGLSNIIGIIVYISSNTGDP SDKRDEDKKNHYNYGWSFYFGALSFIVAETVGLAVNIYIEKN  
 KELRFKTKREFLKASSSSPYARMP SYRYRRRRSRSSSRSTEASPSRDVSPMGLKITGAIPMGELSMY TLS  
 REPLKVTTAASYS PDQEASFLQVHDF FQQDLKEGFHVSM LNRRRTPV

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_014405

**ORF Size:** 981 bp

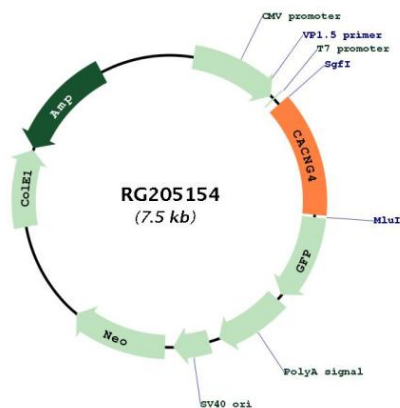
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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](#)

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

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_014405.2</a></u> , <u><a href="#">NP_055220.1</a></u>
<b>RefSeq Size:</b>	3397 bp
<b>RefSeq ORF:</b>	984 bp
<b>Locus ID:</b>	27092
<b>UniProt ID:</b>	<u><a href="#">Q9UBN1</a></u>
<b>Cytogenetics:</b>	17q24.2
<b>Domains:</b>	PMP22_Claudin
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Other, Transmembrane
<b>Protein Pathways:</b>	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway
<b>Gene Summary:</b>	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 RG205154