

Product datasheet for **RG219238**

CACNA1I (NM_001003406) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNA1I (NM_001003406) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CACNA1I
Synonyms:	ca(v)3.3; Cav3.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219238 representing NM_001003406 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGAGAGCGCTCCCCGCCCTCCTCATCTGCAGCAGCCCCAGCCGCTGAGCCAGGAGTCACCACGG
AGCAGCCCGGACCCGGAGCCCCCATCTCCCCGCCAGGCTGGAGGAGCCTCTGGATGGAGCTGATCC
TCATGTCCACACCCAGACCTGGCGCTATTGCCTTCTTCTGCCTGCGACAGACCAGCCCCGGAAC
TGGTGCATCAAGATGGTGTGCAACCCGTGGTTTGAATGTGTGAGCATGCTGGTATCCTGCTGAAGTGC
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG219238 representing NM_001003406
 Red=Cloning site Green=Tags(s)

MAESASPPSSSAAAPAAEPGVTTTEQPGRSPSSPPGLEEPLDGADPHVPHDLAPIAFFCLRQTTSRPN
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 LGQALMSLFLVASKDGVNIMYNGLDVAVDQPPVTNHNPMWMLLYFISFLLIVSFFVLMFVGVVVENFH
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 RLSLRGRGLFSLRGLRAHQSHSSGGSTSPGCTHHDSMDPSDEEGRGGAGGGGAGSEHSETLSSLTSL
 FCPPPPPAPGLTPARKFSSTSSLAAPGRPHAAALAHGLARSPSWAADRSKDPGRAPLPMGLGLAPPP
 QPLPGELEPGDAASKRKR

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

OTI Disclaimer:	<p>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.</p> <p>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</p>
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_001003406.2
RefSeq Size:	9902 bp
RefSeq ORF:	6567 bp
Locus ID:	8911
UniProt ID:	Q9P0X4
Cytogenetics:	22q13.1
Protein Families:	Druggable Genome, Ion Channels: Calcium, Transmembrane
Protein Pathways:	Calcium signaling pathway, MAPK signaling pathway
Gene Summary:	This gene encodes the pore-forming alpha subunit of a voltage gated calcium channel. The encoded protein is a member of a subfamily of calcium channels referred to as is a low voltage-activated, T-type, calcium channel. The channel encoded by this protein is characterized by a slower activation and inactivation compared to other T-type calcium channels. This protein may be involved in calcium signaling in neurons. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Oct 2011]