

Product datasheet for **RG235352**

CACNA1F (NM_001256789) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNA1F (NM_001256789) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CACNA1F
Synonyms:	AIED; Cav1.4; Cav1.4alpha1; COD3; COD4; CORDX; CORDX3; CSNB2; CSNB2A; CSNBX2; JM8; JMC8; OA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235352 representing NM_001256789 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGGAATCTGAAGGCGGAAAGACACCACCCAGAGCCAGTCCAGCCAATGGGGCAGGCCCTGGTC
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 GCCTGCGTCCACGCCCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG235352 representing NM_001256789
 Red=Cloning site Green=Tags(s)

MSESEGGKDTTPEPSPANGAGPPEWGLCPGPPAVEGESSGASGLGTPKRRNQHSKHKTAVASASQSRPR
 ALFCLTLANPLRRSCISIVEWKPFDILILLTIFANCVALGVYIPFPEDDSNTANHNLEQVEYVFLVIFTV
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 NRAQGSWATPPQRGRLLYAPLLLVEEGAAGEGYLGRSSGPLRTFTCLHVPGTHSDPSHGKRGASDSLVEA
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 ACVHAL

TRTRPLE - GFP Tag - V

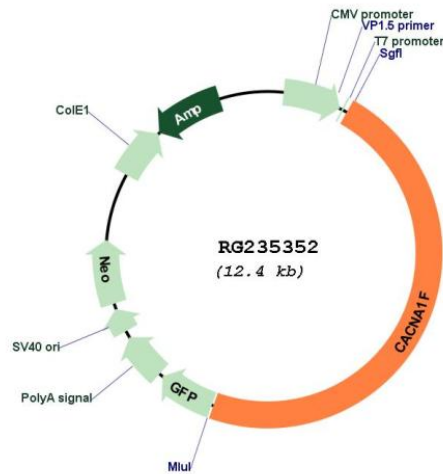
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001256789

ORF Size: 5898 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_001256789.3
RefSeq Size:	6037 bp
RefSeq ORF:	5901 bp
Locus ID:	778
UniProt ID:	O60840
Cytogenetics:	Xp11.23
Protein Families:	Druggable Genome, Ion Channels: Calcium, Transmembrane
Protein Pathways:	Alzheimer's disease, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Calcium signaling pathway, Cardiac muscle contraction, Dilated cardiomyopathy, GnRH signaling pathway, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway, Vascular smooth muscle contraction
Gene Summary:	This gene encodes a multipass transmembrane protein that functions as an alpha-1 subunit of the voltage-dependent calcium channel, which mediates the influx of calcium ions into the cell. The encoded protein forms a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. Mutations in this gene can cause X-linked eye disorders, including congenital stationary night blindness type 2A, cone-rod dystrophy, and Aland Island eye disease. Alternatively spliced transcript variants encoding multiple isoforms have been observed. [provided by RefSeq, Aug 2013]