

## Product datasheet for **RG235385**

### CACNA1E (NM\_001205293) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CACNA1E (NM_001205293) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CACNA1E
Synonyms:	BII; CACH6; CACNL1A6; Cav2.3; DEE69; EIEE69; gm139
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235385 representing NM_001205293 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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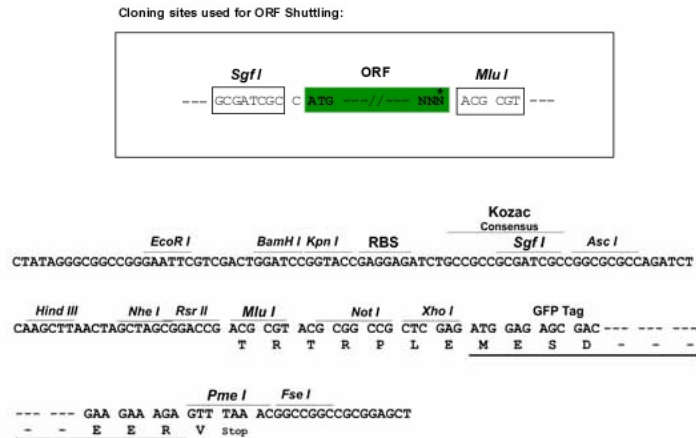
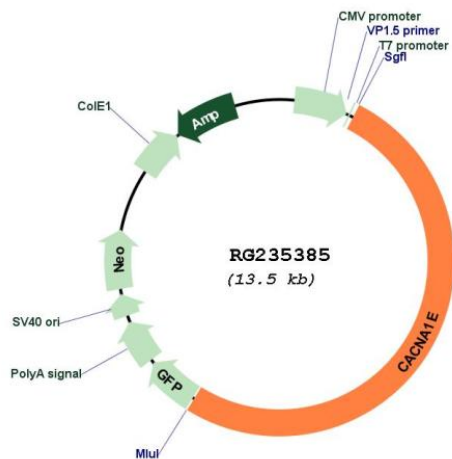
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG235385 representing NM\_001205293  
 Red=Cloning site Green=Tags(s)

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 DKC

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001205293

**ORF Size:** 6939 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).

<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>	<a href="#">NM_001205293.3</a>
<b>RefSeq Size:</b>	15101 bp
<b>RefSeq ORF:</b>	6942 bp
<b>Locus ID:</b>	777
<b>UniProt ID:</b>	<a href="#">Q15878</a>
<b>Cytogenetics:</b>	1q25.3
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Calcium, Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, MAPK signaling pathway, Type II diabetes mellitus
<b>Gene Summary:</b>	Voltage-dependent calcium channels are multisubunit complexes consisting of alpha-1, alpha-2, beta, and delta subunits in a 1:1:1:1 ratio. These channels mediate the entry of calcium ions into excitable cells, and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. This gene encodes the alpha-1E subunit of the R-type calcium channels, which belong to the 'high-voltage activated' group that maybe involved in the modulation of firing patterns of neurons important for information processing. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Apr 2011]