

Product datasheet for SC331650

CACNA1E (NM_001205294) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: CACNA1E (NM_001205294) Human Untagged Clone
Tag: Tag Free
Symbol: CACNA1E
Synonyms: BII; CACH6; CACNL1A6; Cav2.3; DEE69; EIEE69; gm139
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC331650 representing NM_001205294.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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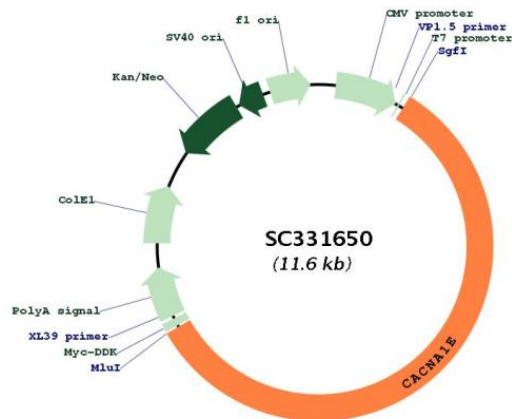
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Restriction Sites:

SgfI-MluI

Plasmid Map:



ACCN: NM_001205294

Insert Size: 6756 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:

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_001205294.1](#)

RefSeq Size: 14915 bp

RefSeq ORF: 6756 bp

Locus ID: 777

UniProt ID: [Q15878](#)

Cytogenetics: 1q25.3

Protein Families: Druggable Genome, Ion Channels: Calcium, Transmembrane

Protein Pathways: Calcium signaling pathway, MAPK signaling pathway, Type II diabetes mellitus

MW: 254.6 kDa

Gene Summary: 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]

Transcript Variant: This variant (2) is missing two non-consecutive in-frame coding exons compared to variant 1. This results in a shorter isoform (2, also known as alpha-1E-1) missing two internal protein segments compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.