

Product datasheet for **SC300005**

CACNA1S (NM_000069) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: CACNA1S (NM_000069) Human Untagged Clone
Tag: Tag Free
Symbol: CACNA1S
Synonyms: CACNL1A3; Cav1.1; CCHL1A3; HOKPP; HOKPP1; hypoPP; MHS5; TTPP1
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for NM_000069, the custom clone sequence may differ by one or more nucleotides

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ATGGAGCCATCCTCACCCAGGATGAAGGCCTGAGGAAGAAACAGCCCAAGAAGCCAGTT
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 GGCATGGCCAGCTCCCTGGGATGCCTGAACCTCGGGTCTCCCTGGGCAGCCTCGACCAA
 CACCAGGGCTCCCAGGAGACCCTTATTCCTCAAGGCTGTGA

Restriction Sites: Please inquire

ACCN: NM_000069

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 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_000069.1](#), [NP_000060.1](#)

RefSeq Size: 6160 bp

RefSeq ORF: 5622 bp

Locus ID:	779
UniProt ID:	Q13698
Cytogenetics:	1q32.1
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 one of the five subunits of the slowly inactivating L-type voltage-dependent calcium channel in skeletal muscle cells. Mutations in this gene have been associated with hypokalemic periodic paralysis, thyrotoxic periodic paralysis and malignant hyperthermia susceptibility. [provided by RefSeq, Jul 2008]