

Product datasheet for **SC323309**

CaV1.3 (CACNA1D) (NM_001128840) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CaV1.3 (CACNA1D) (NM_001128840) Human Untagged Clone
Tag:	Tag Free
Symbol:	CACNA1D
Synonyms:	CACH3; CACN4; CACNL1A2; Cav1.3; CCHL1A2; PASNA; SANDD
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001128840, the custom clone sequence may differ by one or more nucleotides

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ATGATGATGATGATGATGATGAAAAAATGCAGCATCAACGGCAGCAGCAAGCGGACCAC
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CCCCTCTCACACCGGCAGGACTATGAGCTACAGGACTTTGGTCTGGCTACAGCGACGAA
GAGCCAGACCCTGGGAGGGATGAGGAGGACCTGGCGGATGAAATGATATGCATCACCACC
TTG

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- Restriction Sites:** Please inquire
- ACCN:** NM_001128840
- 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).
- 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_001128840.1 , NP_001122312.1
RefSeq Size:	7711 bp
RefSeq ORF:	6486 bp
Locus ID:	776
UniProt ID:	Q01668
Cytogenetics:	3p21.1
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, Type II diabetes mellitus, Vascular smooth muscle contraction
Gene Summary:	<p>Voltage-dependent calcium 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, and gene expression. Calcium channels are multisubunit complexes composed of alpha-1, beta, alpha-2/delta, and gamma subunits. The channel activity is directed by the pore-forming alpha-1 subunit, whereas the others act as auxiliary subunits regulating this activity. The distinctive properties of the calcium channel types are related primarily to the expression of a variety of alpha-1 isoforms, namely alpha-1A, B, C, D, E, and S. This gene encodes the alpha-1D subunit. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2012]</p> <p>Transcript Variant: This variant (2) includes alternate in-frame exons, compared to variant 1, resulting in a shorter protein (isoform b), compared to isoform a.</p>