

Product datasheet for **SC303598**

CACNA1F (NM_005183) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNA1F (NM_005183) Human Untagged Clone
Tag:	Tag Free
Symbol:	CACNA1F
Synonyms:	AIED; Cav1.4; Cav1.4alpha1; COD3; COD4; CORDX; CORDX3; CSNB2; CSNB2A; CSNBX2; JM8; JMC8; OA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC303598 representing NM_005183. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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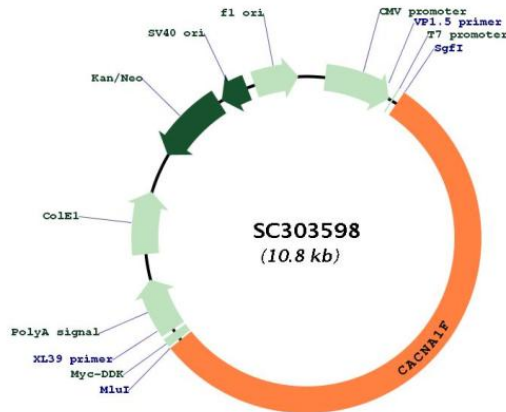
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Restriction Sites:

SgfI-MluI

Plasmid Map:



ACCN: NM_005183

Insert Size: 5934 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).

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_005183.3](#)

RefSeq Size: 6070 bp

RefSeq ORF: 5934 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

MW: 220.7 kDa

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]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).