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Product datasheet for SC300941

CACNA1H (NM_001005407) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACNA1H (NM_001005407) Human Untagged Clone
Tag:	Tag Free
Symbol:	CACNA1H
Synonyms:	CACNA1HB; Cav3.2; ECA6; EIG6; HALD4
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

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>OriGene ORF sequence for NM_001005407 edited
ATGACCGAGGGCGCACGGGCCGCCGACGAGGTCCGGGTGCCCCTGGGCGCGCCGCCCCCT
GGCCCTGCGGCGTTGGTGGGGGCGTCCCCGGAGAGCCCCGGGGCGCCGGGACGCGAGGCG
GAGCGGGGGTCCGAGCTCGGCGTGTCACCCTCCGAGAGCCCGGCGGCCGAGCGCGGCGCG
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TGGTTCGAGCACGTGAGCATGCTGGTAATCATGCTCAACTGCGTGACCCTGGGCATGTTC
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AGCGAAGCAGGAGTAGCTGCCGGGCCCCACGAGCCTCCATCCGTTCTGGTTCGGGTTTCT
CCGAGTTTTGCTACCAG

Restriction Sites: Please inquire

ACCN: NM_001005407

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).

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OTI Annotation:	There are 9 nucleotide differences between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of 1 amino acid.
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_001005407.1, NP_001005407.1
RefSeq Size:	8079 bp
RefSeq ORF:	7044 bp
Locus ID:	8912
UniProt ID:	O95180
Cytogenetics:	16p13.3
Protein Families:	Druggable Genome, Ion Channels: Calcium, Transmembrane
Protein Pathways:	Calcium signaling pathway, MAPK signaling pathway
Gene Summary:	This gene encodes a T-type member of the alpha-1 subunit family, a protein in the voltage-dependent calcium channel complex. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization and consist of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. The alpha-1 subunit has 24 transmembrane segments and forms the pore through which ions pass into the cell. There are multiple isoforms of each of the proteins in the complex, either encoded by different genes or the result of alternative splicing of transcripts. Alternate transcriptional splice variants, encoding different isoforms, have been characterized for the gene described here. Studies suggest certain mutations in this gene lead to childhood absence epilepsy (CAE). [provided by RefSeq, Jul 2008] Transcript Variant: This variant (2) lacks an alternate in-frame exon, compared to variant 1, resulting in a shorter protein (isoform b).

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