

Product datasheet for **TR305680**

CACNA1G Human shRNA Plasmid Kit (Locus ID 8913)

Product data:

Product Type:	shRNA Plasmids
Product Name:	CACNA1G Human shRNA Plasmid Kit (Locus ID 8913)
Locus ID:	8913
Synonyms:	Ca(V)T.1; Cav3.1; NBR13; SCA42; SCA42ND
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CACNA1G - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 8913). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM_001256324</u> , <u>NM_001256325</u> , <u>NM_001256326</u> , <u>NM_001256327</u> , <u>NM_001256328</u> , <u>NM_001256329</u> , <u>NM_001256330</u> , <u>NM_001256331</u> , <u>NM_001256332</u> , <u>NM_001256333</u> , <u>NM_001256334</u> , <u>NM_001256359</u> , <u>NM_001256360</u> , <u>NM_001256361</u> , <u>NM_018896</u> , <u>NM_198376</u> , <u>NM_198377</u> , <u>NM_198378</u> , <u>NM_198379</u> , <u>NM_198380</u> , <u>NM_198382</u> , <u>NM_198383</u> , <u>NM_198384</u> , <u>NM_198385</u> , <u>NM_198386</u> , <u>NM_198387</u> , <u>NM_198388</u> , <u>NM_198396</u> , <u>NM_198397</u> , <u>NR_046054</u> , <u>NR_046055</u> , <u>NR_046056</u> , <u>NR_046057</u> , <u>NR_046058</u> , <u>NM_198382.1</u> , <u>NM_198382.2</u> , <u>NM_198377.1</u> , <u>NM_198377.2</u> , <u>NM_198379.1</u> , <u>NM_198379.2</u> , <u>NM_198380.1</u> , <u>NM_198380.2</u> , <u>NM_198384.1</u> , <u>NM_198384.2</u> , <u>NM_198387.1</u> , <u>NM_198387.2</u> , <u>NM_198396.1</u> , <u>NM_198396.2</u> , <u>NM_018896.1</u> , <u>NM_018896.2</u> , <u>NM_018896.3</u> , <u>NM_018896.4</u> , <u>NM_198376.1</u> , <u>NM_198376.2</u> , <u>NM_198378.1</u> , <u>NM_198378.2</u> , <u>NM_198383.1</u> , <u>NM_198383.2</u> , <u>NM_198385.1</u> , <u>NM_198385.2</u> , <u>NM_198386.1</u> , <u>NM_198386.2</u> , <u>NM_198388.1</u> , <u>NM_198388.2</u> , <u>NM_001256334.1</u> , <u>NM_001256333.1</u> , <u>NM_001256332.1</u> , <u>NM_001256331.1</u> , <u>NM_001256330.1</u> , <u>NM_001256361.1</u> , <u>NM_001256360.1</u> , <u>NM_001256329.1</u> , <u>NM_001256359.1</u> , <u>NM_001256328.1</u> , <u>NM_001256327.1</u> , <u>NM_001256326.1</u> , <u>NM_001256325.1</u> , <u>NM_001256324.1</u> , <u>NM_198397.1</u> , <u>BC110995</u> , <u>BC110995.1</u> , <u>NM_198377.3</u> , <u>NM_001256359.2</u> , <u>NM_001256334.2</u> , <u>NM_198380.3</u> , <u>NM_198384.3</u> , <u>NM_001256327.2</u> , <u>NM_001256332.2</u> , <u>NM_198388.3</u> , <u>NM_198385.3</u> , <u>NM_001256328.2</u> , <u>NM_198383.3</u> , <u>NM_001256324.2</u> , <u>NM_198378.3</u> , <u>NM_198379.3</u> , <u>NM_001256361.2</u> , <u>NM_001256331.2</u> , <u>NM_001256330.2</u> , <u>NM_198376.3</u> , <u>NM_001256325.2</u> , <u>NM_198387.3</u> , <u>NM_001256360.2</u> , <u>NM_001256329.2</u> , <u>NM_001256333.2</u> , <u>NM_001256326.2</u> , <u>NM_198386.3</u> , <u>NM_018896.5</u>



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UniProt ID: [O43497](#)

Summary: Voltage-sensitive 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, gene expression, cell motility, cell division, and cell death. This gene encodes a T-type, low-voltage activated calcium channel. The T-type channels generate currents that are both transient, owing to fast inactivation, and tiny, owing to small conductance. T-type channels are thought to be involved in pacemaker activity, low-threshold calcium spikes, neuronal oscillations and resonance, and rebound burst firing. Many alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Sep 2011]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).