Product datasheet for TF314247

CACNA1C Human shRNA Plasmid Kit (Locus ID 775)

Product data:

Product Type:	shRNA Plasmids
Product Name:	CACNA1C Human shRNA Plasmid Kit (Locus ID 775)
Locus ID:	775
Synonyms:	CACH2; CACN2; CACNL1A1; CaV1.2; CCHL1A1; LQT8; TS; TS. LQT8
Vector:	pRFP-C-RS (TR30014)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CACNA1C - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 775). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
RefSeq:	NM_000719, NM_001129827, NM_001129829, NM_001129830, NM_001129831, NM_001129832, NM_001129833, NM_001129834, NM_001129835, NM_001129836, NM_001129837, NM_001129838, NM_001129839, NM_001129840, NM_001129841, NM_001129842, NM_001129843, NM_001129844, NM_001129846, NM_001167623, NM_001167624, NM_001167625, NM_199460, NM_000719.1, NM_000719.2, NM_000719.3, NM_000719.4, NM_000719.5, NM_000719.6, NM_001129846.1, NM_001129844.1, NM_001129841.1, NM_001129842.1, NM_001129843.1, NM_001129840.1, NM_001129839.1, NM_001129837.1, NM_001129838.1, NM_001129836.1, NM_001129833.1, NM_001129834.1, NM_001129835.1, NM_001129832.1, NM_001129831.1, NM_001129830.1, NM_001129830.2, NM_001129829.1, NM_001129827.1, NM_199460.2, NM_199460.3, NM_001167623.1, NM_001167624.1, NM_001167624.2, NM_001167625.1, BC093695, BC146846, NM_001129827.2, NM_001167623.2, NM_001129840.2, NM_000719.7
UniProt ID:	Q13936

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Summary:	This gene encodes an alpha-1 subunit of a voltage-dependent calcium channel. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization. The alpha-1 subunit consists of 24 transmembrane segments and forms the pore through which ions pass into the cell. The calcium channel consists of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. There are multiple isoforms of each of these proteins, either encoded by different genes or the result of alternative splicing of transcripts. The protein encoded by this gene binds to and is inhibited by dihydropyridine. Alternative splicing results in many transcript variants encoding different proteins. Some of the predicted proteins may not produce functional ion channel subunits. [provided by RefSeq, Oct 2012]
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).