

Product datasheet for TR314240

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CACNA2D1 Human shRNA Plasmid Kit (Locus ID 781)

Product data:

Product Type: shRNA Plasmids

Product Name: CACNA2D1 Human shRNA Plasmid Kit (Locus ID 781)

Locus ID: 781

Synonyms: CACNA2; CACNL2A; CCHL2A; LINC01112; lncRNA-N3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

CACNA2D1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID

= 781). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 000722, NM 001302890, NM 000722.1, NM 000722.3, NM 001302890.1, BC051339,

BC117468, BC117470, NM 001366867, NM 001302890.2, NM 000722.4

UniProt ID: P54289

Summary: The preproprotein encoded by this gene is cleaved into multiple chains that comprise the

alpha-2 and delta subunits of the voltage-dependent calcium channel complex. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization.

Mutations in this gene can cause cardiac deficiencies, including Brugada syndrome and short QT syndrome. Alternate splicing results in multiple transcript variants, some of which may

lack the delta subunit portion. [provided by RefSeq, Nov 2014]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





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).