

Product datasheet for RC219542L3V

OriGene Technologies, Inc.

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CACNA2D2 (NM 006030) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: CACNA2D2 (NM 006030) Human Tagged ORF Clone Lentiviral Particle

Symbol: CACNA2D2

CACNA2D: CASVDD Synonyms:

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK NM 006030 ACCN:

ORF Size: 3429 bp

ORF Nucleotide

Sequence: OTI Disclaimer:

Cytogenetics:

The ORF insert of this clone is exactly the same as(RC219542).

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through

naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: NM 006030.2

RefSeq Size: 5337 bp RefSeq ORF: 3432 bp Locus ID: 9254 **UniProt ID:** Q9NY47

Protein Families: Druggable Genome, Ion Channels: Other

3p21.31





CACNA2D2 (NM_006030) Human Tagged ORF Clone Lentiviral Particle - RC219542L3V

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cardiac muscle contraction, Dilated

cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway

MW: 128.9 kDa

Gene Summary: Calcium channels mediate the entry of calcium ions into the cell upon membrane

polarization. This gene encodes the alpha-2/delta subunit of the voltage-dependent calcium channel complex. The complex consists of the main channel-forming subunit alpha-1, and auxiliary subunits alpha-2/delta, beta, and gamma. The auxiliary subunits function in the assembly and membrane localization of the complex, and modulate calcium currents and channel activation/inactivation kinetics. The subunit encoded by this gene undergoes post-translational cleavage to yield the extracellular alpha2 peptide and a membrane-anchored delta polypeptide. This subunit is a receptor for the antiepileptic drug, gabapentin. Mutations in this gene are associated with early infantile epileptic encephalopathy. Single nucleotide polymorphisms in this gene are correlated with increased sensitivity to opioid drugs. Alternative splicing results in multiple transcript variants encoding different isoforms.

[provided by RefSeq, Mar 2014]