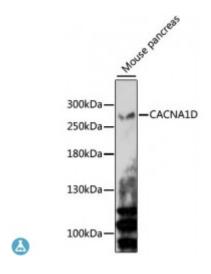


Anti-CACNA1D Antibody



Description

Voltage-dependent 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, and gene expression. Calcium channels are multisubunit complexes composed of alpha-1, beta, alpha-2/delta, and gamma subunits. The channel activity is directed by the pore-forming alpha-1 subunit, whereas the others act as auxiliary subunits regulating this activity. The distinctive properties of the calcium channel types are related primarily to the expression of a variety of alpha-1 isoforms, namely alpha-1A, B, C, D, E, and S. This gene encodes the alpha-1D subunit. Several transcript variants encoding different isoforms have been found for this gene.

Model STJ117228

Host Rabbit

Reactivity Mouse

Applications WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 1882-2181 of human CACNA1D (NP_000711.1).

Gene ID <u>776</u>

Gene Symbol CACNA1D

Dilution range WB 1:500 - 1:2000

Tissue Specificity Expressed in pancreatic islets and in brain, where it has been seen in cerebral

cortex, hippocampus, basal ganglia, habenula and thalamus, Expressed in the small cell lung carcinoma cell line SCC-9, No expression in skeletal muscle

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Voltage-dependent L-type calcium channel subunit alpha-1D Calcium channel

L type alpha-1 polypeptide isoform 2 Voltage-gated calcium channel subunit

alpha Cav1.3

Molecular Weight 245.141 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:1391OMIM:114206Reactome:R-HSA-400042

Alternative Names Voltage-dependent L-type calcium channel subunit alpha-1D Calcium channel

L type alpha-1 polypeptide isoform 2 Voltage-gated calcium channel subunit

alpha Cav1.3

Function Voltage-sensitive calcium channels (VSCC) 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, The isoform

alpha-1D gives rise to L-type calcium currents, Long-lasting (L-type) calcium

channels belong to the 'high-voltage activated' (HVA) group, They are blocked by dihydropyridines (DHP), phenylalkylamines, benzothiazepines, and by omega-agatoxin-IIIA (omega-Aga-IIIA), They are however insensitive to omega-conotoxin-GVIA (omega-CTx-GVIA) and omega-agatoxin-IVA

(omega-Aga-IVA),

Cellular Localization Membrane

St John's Laboratory Ltd

F +44 (0)207 681 2580 **T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com