

Anti-CAC1F antibody



Description Unconjugated Rabbit polyclonal to CAC1F

Model STJ191629

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, WB

Immunogen Synthesized peptide derived from human CAC1F protein.

Immunogen Region 140-220aa

Gene ID <u>778</u>

Gene Symbol <u>CACNA1F</u>

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity CAC1F Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity Expression in skeletal muscle and retina . Isoform 4 is expressed in retina .

Purification CAC1F antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Voltage-dependent L-type calcium channel subunit alpha-1F Voltage-gated

calcium channel subunit alpha Cav1.4

Molecular Weight 217 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:1393OMIM:300071</u>

Alternative Names Voltage-dependent L-type calcium channel subunit alpha-1F Voltage-gated

calcium channel subunit alpha Cav1.4

Function Isoform 1: 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-1F gives rise to L-type calcium currents. Longlasting (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). Activates at more negative voltages

and does not undergo calcium-dependent inactivation (CDI), due to incoming calcium ions, during depolarization. Isoform 4: Voltage-dependent L-type calcium channel activates at more hyperpolarized voltages and exibits a robust calcium-dependent inactivation (CDI), due to incoming calcium ions, during depolarizations. Isoform 6: Voltage-dependent L-type calcium channel activates at more hyperpolarized voltages and exibits a robust calcium-

dependent inactivation (CDI), due to incoming calcium ions, during

depolarizations.

Sequence and Domain Family Each of the four internal repeats contains five hydrophobic transmembrane

segments (S1, S2, S3, S5, S6) and one positively charged transmembrane segment (S4). S4 segments probably represent the voltage-sensor and are characterized by a series of positively charged amino acids at every third

position.

Cellular Localization Membrane. Multi-pass membrane protein.

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