

Anti-CAC1E antibody



Description Unconjugated Rabbit polyclonal to CAC1E

Model STJ191632

Host Rabbit

Reactivity Human, Mouse, Rat

Applications IHC

Immunogen Synthesized peptide derived from human CAC1E protein.

Immunogen Region 370-450aa

Gene ID <u>777</u>

Gene Symbol <u>CACNA1E</u>

Dilution range IHC-p 1:50-300

Specificity CAC1E Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity Expressed in neuronal tissues and in kidney.

Purification CAC1E antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Voltage-dependent R-type calcium channel subunit alpha-1E Brain calcium

channel II BII Calcium channel, L type, alpha-1 polypeptide, isoform 6

Voltage-gated calcium channel subunit alpha Cav2.3

Molecular Weight 254 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:1392OMIM:601013</u>

Alternative Names Voltage-dependent R-type calcium channel subunit alpha-1E Brain calcium

channel II BII Calcium channel, L type, alpha-1 polypeptide, isoform 6

Voltage-gated calcium channel subunit alpha Cav2.3

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-1E gives rise to R-type calcium currents. R-type calcium channels belong to the 'high-voltage activated' (HVA) group and are blocked by nickel, and partially by omega-agatoxin-IIIA (omega-Aga-IIIA). They are however insensitive to dihydropyridines (DHP), omega-conotoxin-GVIA (omega-CTx-GVIA), and omega-agatoxin-IVA (omega-Aga-IVA). Calcium channels containing alpha-1E subunit could be involved in the modulation of firing

patterns of neurons which is important for information processing.

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.

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