

Anti-CACNA1b(Voltage-dependent N-type calcium channel alpha-1B subunit) Polyclonal Antibody

Cat. #: 60B781-C

Description:

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-1B gives rise to N-type calcium currents. N-type calcium channels belong to the 'high-voltage activated' (HVA) group and are blocked by omega-conotoxin-GVIA (omega-CTx-GVIA) and by omega-agatoxin-IIIa (omega-Aga-IIIa). They are however insensitive to dihydropyridines(DHP), and omega-agatoxin-IVA (omega-Aga-IVA). Calcium channels containing alpha-1B subunit may play a role in directed migration of immature neurons. Multisubunit complex consisting of alpha-1, alpha-2, beta and delta subunits in a 1:1:1:1 ratio. The channel activity is directed by the pore-forming and voltage-sensitive alpha-1 subunit. In many cases, this subunit is sufficient to generate voltage-sensitive calcium channel activity. The auxiliary subunits beta and alpha-2/delta linked by a disulfide bridge regulate the channel activity.

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to C-terminal residues of mouse CACNA1b (Voltage-dependent N-type calcium channel alpha-1B subunit)

References

Coppola,T., et al, FEBS Lett. 338 (1), 1-5 (1994)
Coppola,T., et al, J. Biol. Chem. 276 (35), 32756-32762 (2001)

Species: mouse, rat, human

Storage and Stability: at -20oC

Storage buffer:

This antibody is stored in PBS, 0.01% sodium azide and 50% glycerol.

Preparation:

Purified by antigen-specific affinity chromatography.

Applications :

ELISA

Western Blotting (1µg/ml for 2hrs)