

## Rabbit Anti-CACNA1B (N type) /AP Conjugated antibody

SL10490R-AP

<b>Product Name</b>	Anti-CACNA1B (N type) /AP
<b>Chinese Name</b>	碱性磷酸酶 (AP) 标记的电压依赖型 N 型钙通道 $\alpha$ 1B 抗体 CAC1B_HUMAN; Voltage-dependent N-type calcium channel subunit alpha-1B; Brain calcium channel III; BIII; Calcium channel, L type, alpha-1 polypeptide isoform 5; Voltage-gated calcium channel subunit alpha Cav2.2; voltage-dependent N-type calcium channel subunit alpha-1B isoform 1; calcium channel, voltage-dependent, L type, alpha; 1B subunit; voltage-dependent N-type calcium channel subunit alpha-1B; calcium channel, N type; calcium channel, voltage-dependent, alpha 1B subunit, N type; calcium channel alpha12.2 subunit; Cav2.2 voltage-gated Ca <sup>2+</sup> channel.
<b>Alias</b>	
<b>Research Area</b>	
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human(predicted:Mouse,Rat) IHC-P=1:100-500,IHC-F=1:100-500,ELISA=1:500-5000
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	257kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human CACNA1B (N type)
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Storage</b>	

**background:**

The protein encoded by this gene is the pore-forming subunit of an N-type voltage-dependent calcium channel, which controls neurotransmitter release from neurons. The encoded protein forms a complex with alpha-2, beta, and delta subunits to form the high-voltage activated channel. This channel is sensitive to omega-conotoxin-GVIA and omega-agatoxin-IIIa but insensitive to dihydropyridines. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011].

**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-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.

**Product Detail**

**Subunit:**

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. Interacts with RIMS1 and RIMBP2.

**Subcellular Location:**

Membrane; Multi-pass membrane protein.

**Tissue Specificity:**

Isoform Alpha-1b-1 and isoform Alpha-1b-2 are expressed in the central nervous system, but not in skeletal muscle or aorta.

**Post-translational modifications:**

Phosphorylated in vitro by CaM-kinase II, PKA, PKC and CGPK.

**Similarity:**

Belongs to the calcium channel alpha-1 subunit (TC 1.A.1.11) family. CACNA1B subfamily. Contains 1 EF-hand domain.



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**Database links:**

UniProtKB/Swiss-Prot: Q00975

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.