

For Research Use Only

# CACNA1B Polyclonal antibody

Catalog Number: 19681-1-AP

4 Publications



## Basic Information

<b>Catalog Number:</b> 19681-1-AP	<b>GenBank Accession Number:</b> NM_000718	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 350 µg/ml by Nanodrop and 233 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 774	<b>Recommended Dilutions:</b> IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> calcium channel, voltage-dependent, N type, alpha 1B subunit	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 262 kDa	

## Applications

<b>Tested Applications:</b> IHC, ELISA	<b>Positive Controls:</b> IHC : mouse brain tissue, mouse cerebellum tissue
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, rat	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

CACNA1B, also named as CACH5, CACNL1A5 and BIII, belongs to the calcium channel alpha-1 subunit (TC 1.A.1.11) family. 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. CACNA1B 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). CACNA1B may play a role in directed migration of immature neurons.

## Notable Publications

Author	Pubmed ID	Journal	Application
Ying Xue	36137995	Cell Death Dis	WB
Yong-Mei Jin	33100116	J Recept Signal Transduct Res	WB
Kang Zhang	28603497	Front Pharmacol	WB

## Storage

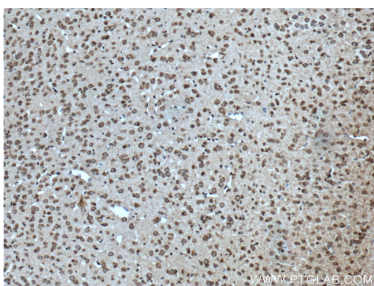
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

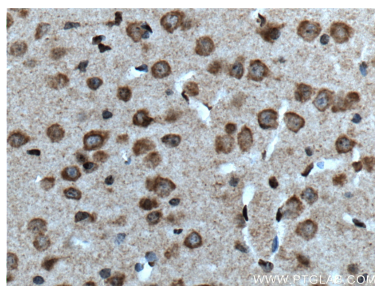
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## Selected Validation Data



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19681-1-AP (CACNA1B Antibody) at dilution of 1:100 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19681-1-AP (CACNA1B Antibody) at dilution of 1:100 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).