For Research Use Only

CACNA1B Polyclonal antibody

Catalog Number:19681-1-AP 4 Publications

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Basic Information

Catalog Number:
19681-1-AP

Size:
150ul , Concentration: 650 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_000718

GeneID (NCBI):
774

UNIPROT ID:
Q00975

Full Name:
calcium channel, voltage-dependent, N type, alpha 1B subunit

Calculated MW:
262 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
IHC 1:50-1:500

Applications

Tested Applications:
IHC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

IHC : mouse brain tissue, mouse cerebellum tissue

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

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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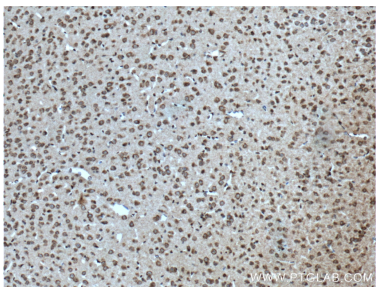
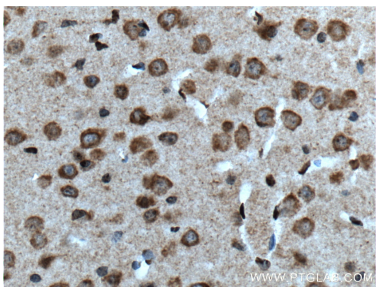
Selected Validation Data



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).