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CACNA2D3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9739b

Specification

CACNA2D3 Antibody (C-term) - Product Information

Application	**FC, WB,E**
Primary Accession	Q8IZS8
Other Accession	Q8CFG5, Q9Z1L5
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**123011**
Antigen Region	**1026-1053**

CACNA2D3 Antibody (C-term) - Additional Information

Gene ID 55799

Other Names
Voltage-dependent calcium channel subunit alpha-2/delta-3, Voltage-gated calcium channel subunit alpha-2/delta-3, Voltage-dependent calcium channel subunit alpha-2-3, Voltage-dependent calcium channel subunit delta-3, CACNA2D3

Target/Specificity
This CACNA2D3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1026-1053 amino acids from the C-terminal region of human CACNA2D3.

Dilution
FC~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CACNA2D3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CACNA2D3 Antibody (C-term) - Protein Information

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Name CACNA2D3

Function The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Acts as a regulatory subunit for P/Q- type calcium channel (CACNA1A), N-type (CACNA1B), L-type (CACNA1C OR CACNA1D) but not T-type (CACNA1G) (By similarity).

Cellular Location
Membrane; Single-pass type I membrane protein

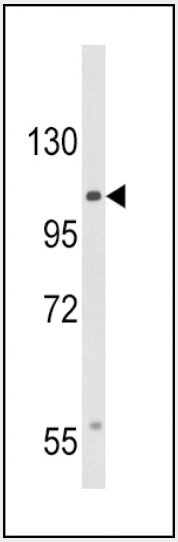
Tissue Location
Only detected in brain. Not present in lung, testis, aorta, spleen, jejunum, ventricular muscle and kidney (at protein level). According to PubMed:11687876, it is brain-specific, while according to PubMed:11245980, it is widely expressed

CACNA2D3 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CACNA2D3 Antibody (C-term) - Images



Western blot analysis of CACNA2D3 Antibody (C-term) (Cat. #AP9739b) in HepG2 cell line lysates (35ug/lane). CACNA2D3 (arrow) was detected using the purified Pab.

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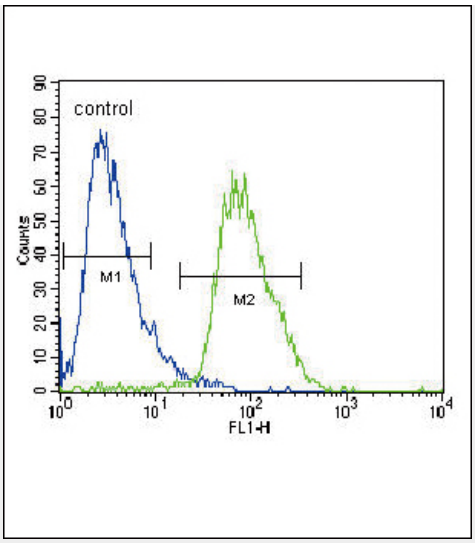

CACNA2D3 Antibody (C-term) (Cat. #AP9739b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CACNA2D3 Antibody (C-term) - Background

CACNA2D3 is a member of the alpha-2/delta subunit family, a protein in the voltage-dependent calcium channel complex. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization and consist of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. Various versions of each of these subunits exist, either expressed from similar genes or the result of alternative splicing. Research on a highly similar protein in rabbit suggests the protein described in this record is cleaved into alpha-2 and delta subunits.

CACNA2D3 Antibody (C-term) - References

Trynka, G., et al. Gut 58(8):1078-1083(2009)
Wanajo, A., et al. Gastroenterology 135(2):580-590(2008)
Uhl, G.R., et al. Arch. Gen. Psychiatry 65(6):683-693(2008)
Abo-Dalo, B., et al. Am. J. Med. Genet. A 143A (22), 2668-2674 (2007)