

# CACNA2D1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8699A

### **Specification**

# CACNA2D1 Antibody (N-term) - Product Information

Application FC, WB,E Primary Accession P54289

Other Accession <u>P54290</u>, <u>P13806</u>, <u>O08532</u>

Reactivity Human

Predicted Mouse, Rabbit, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 47-76

### CACNA2D1 Antibody (N-term) - Additional Information

#### Gene ID 781

#### **Other Names**

Voltage-dependent calcium channel subunit alpha-2/delta-1, Voltage-gated calcium channel subunit alpha-2/delta-1, Voltage-dependent calcium channel subunit alpha-2-1, Voltage-dependent calcium channel subunit delta-1, CACNA2D1, CACNL2A, CCHL2A, MHS3

# Target/Specificity

This CACNA2D1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 47-76 amino acids from the N-terminal region of human CACNA2D1.

#### **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**

CACNA2D1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### CACNA2D1 Antibody (N-term) - Protein Information



Tel: 858.875.1900 Fax: 858.875.1999

#### Name CACNA2D1

# Synonyms CACNL2A, CCHL2A, MHS3

Function The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel (PubMed: 35293990). Plays an important role in excitation-contraction coupling (By similarity).

#### **Cellular Location**

Membrane; Single-pass type I membrane protein. Cell membrane

#### **Tissue Location**

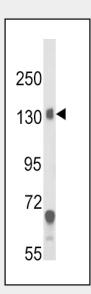
Isoform 1 is expressed in skeletal muscle. Isoform 2 is expressed in the central nervous system. Isoform 2, isoform 4 and isoform 5 are expressed in neuroblastoma cells. Isoform 3, isoform 4 and isoform 5 are expressed in the aorta.

# CACNA2D1 Antibody (N-term) - Protocols

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

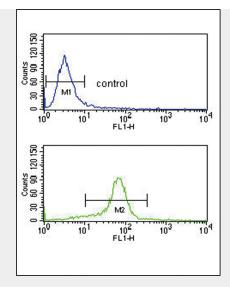
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### CACNA2D1 Antibody (N-term) - Images



Western blot analysis of CACNA2D1 Antibody (N-term) (Cat. #AP8699a) in mouse brain tissue lysates (35ug/lane). CACNA2D1 (arrow) was detected using the purified Pab.





CACNA2D1 Antibody (N-term) (Cat. #AP8699a) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# CACNA2D1 Antibody (N-term) - Background

CACNA2D1 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 1:1:11 ratio. Research on a highly similar protein in rabbit suggests the protein described in this record is cleaved into alpha-2 and delta subunits.

## CACNA2D1 Antibody (N-term) - References

Williams, M.E., et.al., Neuron 8 (1), 71-84 (1992) Chaudhuri, D., et.al., J. Gen. Physiol. 129 (5), 385-401 (2007)