

**CACNA2D1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8699A**

**Specification**

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**CACNA2D1 Antibody (N-term) - Product Information**

Application	WB, FC, E
Primary Accession	<a href="#">P54289</a>
Other Accession	<a href="#">P54290</a> , <a href="#">P13806</a> , <a href="#">O08532</a>
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**

WB~~1:1000  
FC~~1:10~50

**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**

**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**

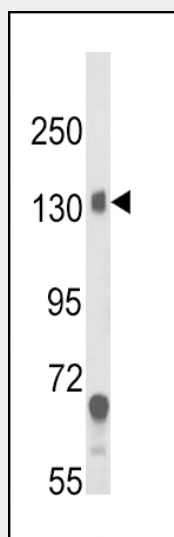
Isoform 1 is expressed in skeletal muscle. Isoform 2 is expressed in the central nervous system. Isoform 2, isoform 4 and isoform 5 are expressed in neuroblastoma cells. Isoform 3, isoform 4 and isoform 5 are expressed in the aorta.

**CACNA2D1 Antibody (N-term) - Protocols**

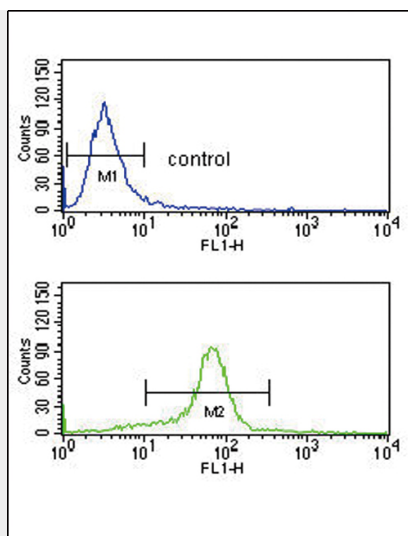
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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 1:1:1:1 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)