

**CACNA2D4 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5708a**

**Specification**

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**CACNA2D4 Antibody (N-term) - Product Information**

Application	FC, WB,E
Primary Accession	<a href="#">Q7Z3S7</a>
Other Accession	<a href="#">NP_758952.4</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	127938
Antigen Region	89-118

**CACNA2D4 Antibody (N-term) - Additional Information**

**Gene ID** 93589

**Other Names**

Voltage-dependent calcium channel subunit alpha-2/delta-4, Voltage-gated calcium channel subunit alpha-2/delta-4, Voltage-dependent calcium channel subunit alpha-2-4, Voltage-dependent calcium channel subunit delta-4, CACNA2D4

**Target/Specificity**

This CACNA2D4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-118 amino acids from the N-terminal region of human CACNA2D4.

**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**

CACNA2D4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CACNA2D4 Antibody (N-term) - Protein Information**

**Name** CACNA2D4

**Function** The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel.

**Cellular Location**

Membrane; Single-pass type I membrane protein

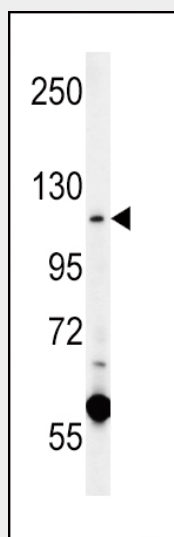
**Tissue Location**

Predominantly expressed in certain types of endocrine cells. Present in the Paneth cells of the small intestine Also present in the erythroblasts in the fetal liver, in the cells of the zona reticularis of the adrenal gland and in the basophils of the pituitary. Present at low level in some brain regions such as the cerebellum (at protein level).

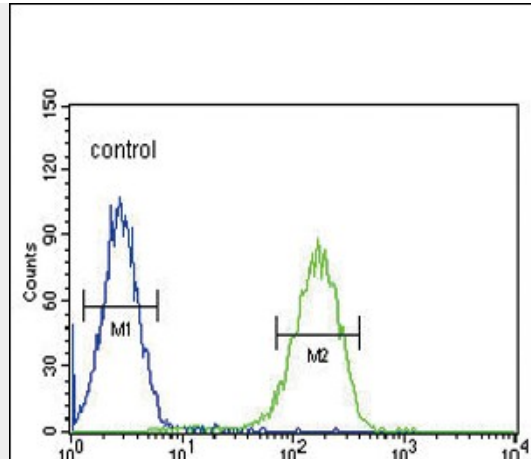
**CACNA2D4 Antibody (N-term) - Protocols**

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](#)

**CACNA2D4 Antibody (N-term) - Images**

CACNA2D4 Antibody (N-term) (Cat. #AP5708a) western blot analysis in K562 cell line lysates (15ug/lane). This demonstrates the CACNA2D4 antibody detected the CACNA2D4 protein (arrow).



CACNA2D4 Antibody (N-term) (Cat. #AP5708a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **CACNA2D4 Antibody (N-term) - Background**

CACNA2D4 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. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized.

#### **CACNA2D4 Antibody (N-term) - References**

Wycisk, K.A., et al. Am. J. Hum. Genet. 79(5):973-977(2006)  
Qin, N., et al. Mol. Pharmacol. 62(3):485-496(2002)