

**Anti-CaV1.3 Antibody**  
**Catalog # ABO11601****Specification**

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**Anti-CaV1.3 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q01668</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Voltage-dependent L-type calcium channel subunit alpha-1D(CACNA1D) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-CaV1.3 Antibody - Additional Information**

**Gene ID** 776

**Other Names**

Voltage-dependent L-type calcium channel subunit alpha-1D, Calcium channel, L type, alpha-1 polypeptide, isoform 2, Voltage-gated calcium channel subunit alpha Cav1.3, CACNA1D, CACH3, CACN4, CACNL1A2, CCHL1A2

**Calculated MW**

245141 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse<br>

**Subcellular Localization**

Membrane ; Multi-pass membrane protein .

**Tissue Specificity**

Expressed in pancreatic islets and in brain, where it has been seen in cerebral cortex, hippocampus, basal ganglia, habenula and thalamus. Expressed in the small cell lung carcinoma cell line SCC-9. No expression in skeletal muscle. .

**Protein Name**

Voltage-dependent L-type calcium channel subunit alpha-1D

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human CaV1.3(2146-2161aa

RDEEDLADEMICITTL), different from the related mouse and rat sequences by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-CaV1.3 Antibody - Protein Information**

**Name** CACNA1D

**Synonyms** CACH3, CACN4, CACNL1A2, CCHL1A2

**Function**

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. The isoform alpha-1D gives rise to L-type calcium currents. Long-lasting (L-type) calcium channels belong to the 'high-voltage activated' (HVA) group. They are blocked by dihydropyridines (DHP), phenylalkylamines, and by benzothiazepines.

**Cellular Location**

Membrane; Multi-pass membrane protein

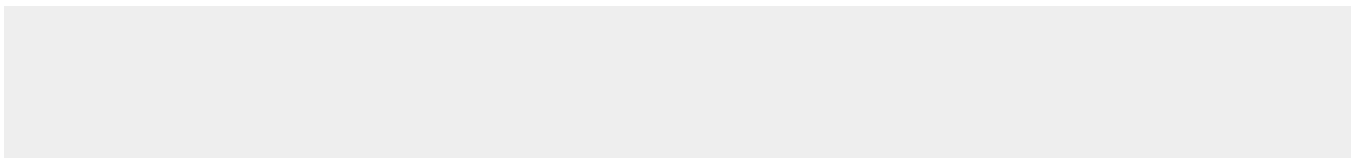
**Tissue Location**

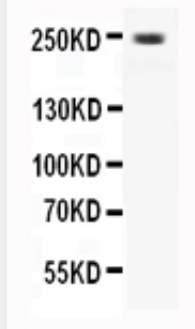
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**Anti-CaV1.3 Antibody - Protocols**

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](#)

**Anti-CaV1.3 Antibody - Images**



Anti-CaV1.3 antibody, ABO11601, All Western blotting All lanes: Anti-CACNA1D(ABO11601) at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 40ug Predicted bind size: 245KD Observed bind size: 245KD

### **Anti-CaV1.3 Antibody - Background**

Cav1.3, also known as the calcium channel, voltage-dependent, L type, alpha 1D subunit(CACNA1D), is a human gene. It is mapped to 3p21.1. Voltage-dependent calcium channels 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, and gene expression. Alpha-1D subunit can mediate DHP-sensitive, high voltage-activated, long-lasting calcium channel activity. CACNA1D can form L-type calcium channels with negative activation thresholds which is essential for normal auditory function and controlling of cardiac pacemaker activity.