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Anti-CaV1.3 Picoband Antibody
Catalog # ABO12020

Specification

Anti-CaV1.3 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	Q01668
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 Picoband 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, Mouse, Rat, Human

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 Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human CaV1.3 recombinant protein (Position: M1-I180). Human CaV1.3 shares 99%

and 98%amino acid (aa) sequence identity with mouse and rat CaV1.3, respectively.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, 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 Picoband 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
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

Anti-CaV1.3 Picoband 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 Cytomety
- Cell Culture

Anti-CaV1.3 Picoband Antibody - Images

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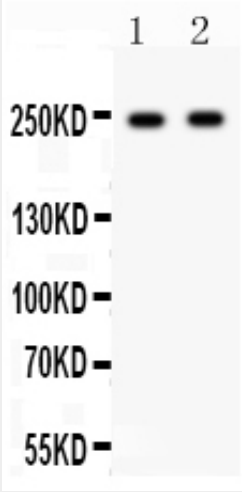

Anti- CAV1.3 Picoband antibody, ABO12020, Western blottingAll lanes: Anti CAV1.3 (ABO12020) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 245KDObserved bind size: 245KD

Anti-CaV1.3 Picoband Antibody - Background

CACNA1D is also known as PASNA, SANDD or Cav1.3. 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. Calcium channels are multisubunit complexes composed of alpha-1, beta, alpha-2/delta, and gamma subunits. The channel activity is directed by the pore-forming alpha-1 subunit, whereas the others act as auxiliary subunits regulating this activity. The distinctive properties of the calcium channel types are related primarily to the expression of a variety of alpha-1 isoforms, namely alpha-1A, B, C, D, E, and S. This gene encodes the alpha-1D subunit. Several transcript variants encoding different isoforms have been found for this gene.