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Anti-CaV1.3 Picoband Antibody

Catalog # ABO12020

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.

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
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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.

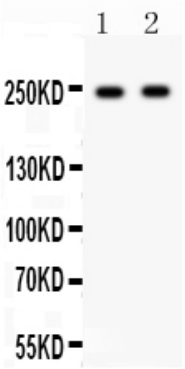
Protein Information

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

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.

Images



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