

CACH6/Cav2.3 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58111**Specification****CACH6/Cav2.3 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q15878
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	262 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Cav2.3
Epitope Specificity	1265-1360/2313
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Multi-pass membrane protein.
SIMILARITY	Belongs to the calcium channel alpha-1 subunit (TC 1.A.1.11) family. CACNA1E subfamily. Contains 1 EF-hand domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

Calcium channels mediate the influx of calcium ions into the cell following membrane polarisation. R-type calcium channels such as Cav2.3 belong to the "high voltage-activated" group and are blocked by nickel. The calcium channel consists of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. Each of these proteins exists as multiple isoforms, either encoded by different genes or arising from alternative splicing of transcripts. Cav2.3 is an alpha-1 subunit and has 24 transmembrane segments, which form the pore through which ions pass into the cell. Calcium channels containing the Cav2.3 subunit may be involved in the modulation of firing patterns of neurons, which is important for information processing.

CACH6/Cav2.3 Polyclonal Antibody - Additional Information**Gene ID 777****Other Names**

Voltage-dependent R-type calcium channel subunit alpha-1E, Brain calcium channel II, BII, Calcium channel, L type, alpha-1 polypeptide, isoform 6, Voltage-gated calcium channel subunit alpha Cav2.3, CACNA1E, CACH6, CACNL1A6

Target/Specificity

Expressed in neuronal tissues and in kidney.

Dilution

IHC-P~N/A
IHC-F~N/A
IF~1:50~200
E~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

CACH6/Cav2.3 Polyclonal Antibody - Protein Information

Name CACNA1E

Synonyms CACH6, CACNL1A6

Function

Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells (PubMed:30343943). They 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-1E gives rise to R-type calcium currents. R-type calcium channels belong to the 'high-voltage activated' (HVA) group and are blocked by nickel. They are however insensitive to dihydropyridines (DHP). Calcium channels containing alpha-1E subunit could be involved in the modulation of firing patterns of neurons which is important for information processing.

Cellular Location

Membrane; Multi-pass membrane protein

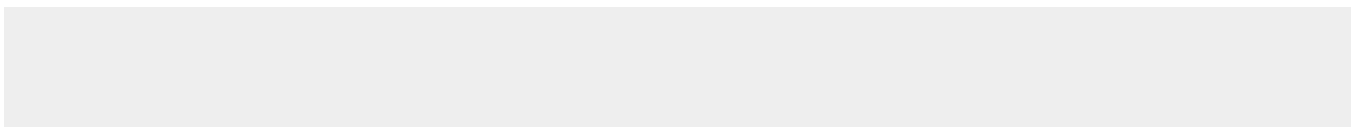
Tissue Location

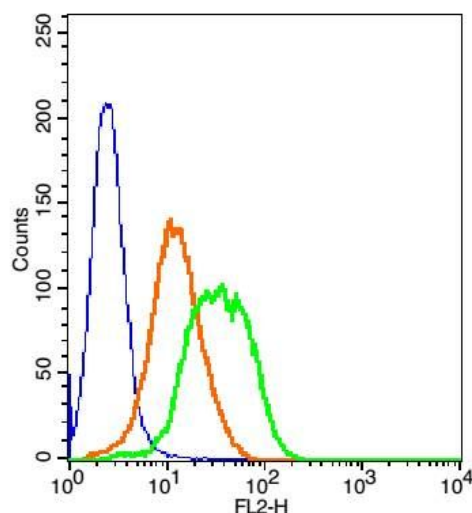
Expressed in neuronal tissues and in kidney.

CACH6/Cav2.3 Polyclonal 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](#)

CACH6/Cav2.3 Polyclonal Antibody - Images



Blank control(blue): 293T(fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice).

Primary Antibody: Rabbit Anti-CACH6/PE Conjugated antibody (bs-3933R/PE), Dilution: 1 μ g in 100 μ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG/PE(orange) ,used under the same conditions.