

**CACNA1H / Cav3.2 Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16430****Specification**

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**CACNA1H / Cav3.2 Antibody (Internal) - Product Information**

Application	IHC, IF
Primary Accession	<a href="#">O95180</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	259kDa KDa

**CACNA1H / Cav3.2 Antibody (Internal) - Additional Information****Gene ID** 8912**Other Names**

Voltage-dependent T-type calcium channel subunit alpha-1H, Low-voltage-activated calcium channel alpha1 3.2 subunit, Voltage-gated calcium channel subunit alpha Cav3.2, CACNA1H

**Target/Specificity**

CACNA1H antibody is human, mouse and rat reactive. Multiple isoforms of CACNA1H are known to exist.

**Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

**Precautions**

CACNA1H / Cav3.2 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

**CACNA1H / Cav3.2 Antibody (Internal) - Protein Information****Name** CACNA1H ([HGNC:1395](#))**Function**

Voltage-sensitive calcium channel that gives rise to T-type calcium currents. T-type calcium channels belong to the 'low-voltage activated (LVA)' group. A particularity of this type of channel is an opening at quite negative potentials, and a voltage-dependent inactivation (PubMed:<a href="http://www.uniprot.org/citations/9670923" target="\_blank">9670923</a>, PubMed:<a href="http://www.uniprot.org/citations/9930755" target="\_blank">9930755</a>, PubMed:<a href="http://www.uniprot.org/citations/27149520" target="\_blank">27149520</a>). T-type channels serve pacemaking functions in both central neurons and cardiac nodal cells and support calcium signaling in secretory cells and vascular smooth muscle (Probable). They may also be involved in the modulation of firing patterns of neurons (PubMed:<a href="http://www.uniprot.org/citations/15048902" target="\_blank">15048902</a>). In the adrenal zona glomerulosa, participates in the signaling pathway leading to aldosterone production

in response to either AGT/angiotensin II, or hyperkalemia (PubMed:<a href="http://www.uniprot.org/citations/25907736" target="\_blank">25907736</a>, PubMed:<a href="http://www.uniprot.org/citations/27729216" target="\_blank">27729216</a>).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Note=Interaction with STAC increases expression at the cell membrane.

#### **Tissue Location**

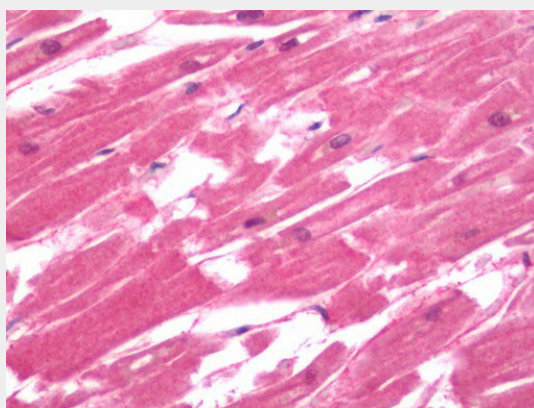
Expressed in the adrenal glomerulosa (at protein level) (PubMed:25907736, PubMed:27729216). In nonneuronal tissues, the highest expression levels are found in the kidney, liver, and heart. In the brain, most abundant in the amygdala, caudate nucleus, and putamen (PubMed:9670923, PubMed:9930755). In the heart, expressed in blood vessels. [Isoform 2]: Expressed in testis, primarily in the germ cells, but not in other portions of the reproductive tract, such as ductus deferens (PubMed:11751928). Not expressed in the brain (PubMed:11751928).

### **CACNA1H / Cav3.2 Antibody (Internal) - Protocols**

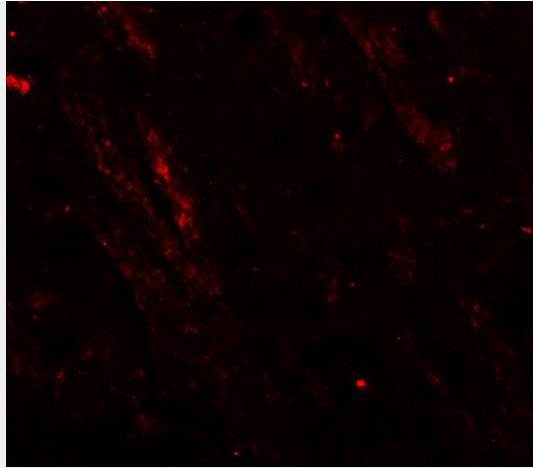
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **CACNA1H / Cav3.2 Antibody (Internal) - Images**



Human Heart: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence of CACNA1H in mouse brain tissue with CACNA1H antibody at 20 ug/ml.

#### **CACNA1H / Cav3.2 Antibody (Internal) - Background**

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-1H gives rise to T-type calcium currents. T-type calcium channels belong to the "low-voltage activated (LVA)" group and are strongly blocked by nickel and mibefradil. A particularity of this type of channels is an opening at quite negative potentials, and a voltage-dependent inactivation. T-type channels serve pacemaking functions in both central neurons and cardiac nodal cells and support calcium signaling in secretory cells and vascular smooth muscle. They may also be involved in the modulation of firing patterns of neurons which is important for information processing as well as in cell growth processes.

#### **CACNA1H / Cav3.2 Antibody (Internal) - References**

Cribbs L.L.,et al.Circ. Res. 83:103-109(1998).  
Cribbs L.L.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.  
Williams M.E.,et al.J. Neurochem. 72:791-799(1999).  
Jagannathan S.,et al.J. Biol. Chem. 277:8449-8456(2002).  
Daniels R.J.,et al.Hum. Mol. Genet. 10:339-352(2001).