

## JPH2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13445b

## **Specification**

## JPH2 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q9BR39

Other Accession NP 065166.2, NP 787109.2

Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Calculated MW
74222
Antigen Region
Auman
Rabbit
Polyclonal
Rabbit IgG
74222

### JPH2 Antibody (C-term) - Additional Information

#### **Gene ID 57158**

### **Other Names**

Junctophilin-2, JP-2, Junctophilin type 2, JPH2, JP2

### Target/Specificity

This JPH2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 614-643 amino acids from the C-terminal region of human JPH2.

# **Dilution**

WB~~1:1000

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

JPH2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## JPH2 Antibody (C-term) - Protein Information

### Name JPH2 (<u>HGNC:14202</u>)

**Function** [Junctophilin-2]: Membrane-binding protein that provides a structural bridge between the plasma membrane and the sarcoplasmic reticulum and is required for normal



excitation-contraction coupling in cardiomyocytes (PubMed: 20095964). Provides a structural foundation for functional cross-talk between the cell surface and intracellular Ca(2+) release channels by maintaining the 12-15 nm gap between the sarcolemma and the sarcoplasmic reticulum membranes in the cardiac dyads (By similarity). Necessary for proper intracellular Ca(2+) signaling in cardiac myocytes via its involvement in ryanodine receptor-mediated calcium ion release (By similarity). Contributes to the construction of skeletal muscle triad junctions (By similarity).

## **Cellular Location**

[Junctophilin-2]: Cell membrane {ECO:0000250|UniProtKB:Q9ET78}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9ET78}. Sarcoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9ET78}; Single-pass type IV membrane protein {ECO:0000250|UniProtKB:Q9ET78}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9ET78}; Single-pass type IV membrane protein {ECO:0000250|UniProtKB:Q9ET78}. Note=The transmembrane domain is anchored in sarcoplasmic reticulum membrane, while the N-terminal part associates with the plasma membrane. In heart cells, it predominantly associates along Z lines within myocytes. In skeletal muscle, it is specifically localized at the junction of A and I bands {ECO:0000250|UniProtKB:Q9ET78}

### **Tissue Location**

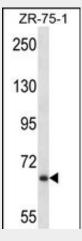
Specifically expressed in skeletal muscle and heart.

### JPH2 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# JPH2 Antibody (C-term) - Images



JPH2 Antibody (C-term) (Cat. #AP13445b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the IPH2 antibody detected the IPH2 protein (arrow).



## JPH2 Antibody (C-term) - Background

Junctional complexes between the plasma membrane and endoplasmic/sarcoplasmic reticulum are a common feature of all excitable cell types and mediate cross talk between cell surface and intracellular ion channels. The protein encoded by this gene is a component of junctional complexes and is composed of a C-terminal hydrophobic segment spanning the endoplasmic/sarcoplasmic reticulum membrane and a remaining cytoplasmic domain that shows specific affinity for the plasma membrane. This gene is a member of the junctophilin gene family. Alternative splicing has been observed at this locus and two variants encoding distinct isoforms are described.

# JPH2 Antibody (C-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Woo, J.S., et al. Biochem. J. 427(1):125-134(2010) Yamazaki, D., et al. Pharmacol. Ther. 121(3):265-272(2009) Landstrom, A.P., et al. J. Mol. Cell. Cardiol. 42(6):1026-1035(2007) Matsushita, Y., et al. J. Hum. Genet. 52(6):543-548(2007)