

**JPH2 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13445b**

**Specification**

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

Application	WB,E
Primary Accession	<a href="#">O9BR39</a>
Other Accession	<a href="#">NP_065166.2</a> , <a href="#">NP_787109.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	74222
Antigen Region	614-643

**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 ([HGNC:14202](#))

**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  $\text{Ca}^{2+}$  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  $\text{Ca}^{2+}$  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

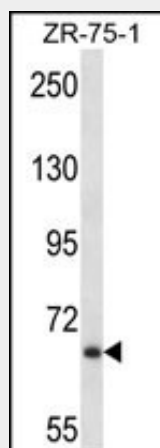
Specifically expressed in skeletal muscle and heart.

### 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](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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 JPH2 antibody detected the JPH2 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)