

# Junctophilin 2 / JPH2 Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS13023

## **Specification**

Junctophilin 2 / JPH2 Antibody (C-Terminus) - Product Information

Application IHC
Primary Accession O9BR39

Reactivity Human, Mouse,

Rat Rabl

Host Rabbit
Clonality Polyclonal
Calculated MW 74kDa KDa

Junctophilin 2 / JPH2 Antibody (C-Terminus) - Additional Information

## **Gene ID 57158**

### **Other Names**

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

## **Target/Specificity**

Multiple isoforms of JPH2 are known to exist.

## **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

#### **Precautions**

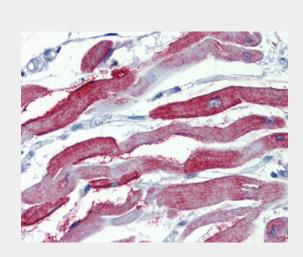
Junctophilin 2 / JPH2 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

Junctophilin 2 / JPH2 Antibody (C-Terminus) - Protein Information

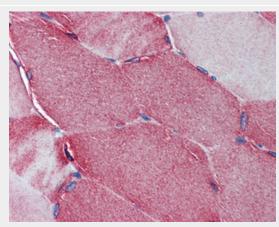
## Name JPH2 (HGNC:14202)

#### **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:<a href="http://w



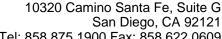
Anti-JPH2 antibody IHC of human heart.



Anti-JPH2 antibody IHC of human skeletal muscle.

# Junctophilin 2 / JPH2 Antibody (C-Terminus) - Background

Junctophilins contribute to the formation of junctional membrane complexes (JMCs) which link the plasma membrane with the endoplasmic or sarcoplasmic reticulum in excitable cells. Provides a structural foundation for functional cross-talk between the cell surface and intracellular calcium release channels. JPH2 is necessary for proper intracellular Ca(2+) signaling in cardiac myocytes via its involvement in ryanodine







ww.uniprot.org/citations/20095964" target=" blank">20095964</a>). 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.

# Junctophilin 2 / JPH2 Antibody (C-Terminus) - Protocols

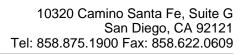
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>

receptor-mediated calcium ion release. Contributes to the construction of skeletal muscle triad junctions.

# Junctophilin 2 / JPH2 Antibody (C-Terminus) - References

Stavrides G.S., et al. Submitted (NOV-1999) to the EMBL/GenBank/DDBI databases. Deloukas P., et al. Nature 414:865-871(2001). Mural R.I., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Nishi M., et al. Biochem. Biophys. Res. Commun. 273:920-927(2000). Olsen J.V., et al. Cell 127:635-648(2006).





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