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JPH2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13445b

Product Information

Application	WB, E
Primary Accession	Q9BR39
Other Accession	NP_065166.2, NP_787109.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32526
Calculated MW	74222
Antigen Region	614-643

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 E~~Use at an assay dependent concentration.
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.

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 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.

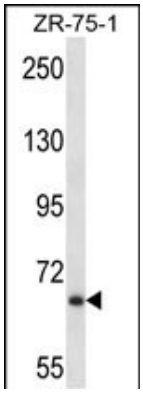
Background

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.

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)

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.