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Jph2 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI13039

Product Information

Application	WB
Primary Accession	Q9ET78
Other Accession	NM_021566, NP_067541
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	74692

Additional Information

Gene ID	59091
Alias Symbol	1110002E14Rik, JP-2, Jp2
Other Names	Junctophilin-2, JP-2, Junctophilin type 2, Jph2, Jp2
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Jph2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Jph2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

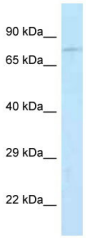
Name	Jph2 {ECO:0000312|MGI:MGI:1891496}
Function	[Junctophilin-2]: Membrane-binding protein that provides a structural bridge between the plasma membrane and the sarcoplasmic reticulum and is required for normal excitation-contraction coupling in cardiomyocytes (PubMed:10949023, PubMed:19095005, PubMed:21339484). 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 (PubMed:10949023, PubMed:19095005, PubMed:21339484). Necessary for proper intracellular Ca(2+) signaling in cardiac myocytes via its involvement in ryanodine receptor-mediated calcium ion release (PubMed:10949023, PubMed:19095005, PubMed:21339484). Contributes to

	the construction of skeletal muscle triad junctions (PubMed:10949023).
Cellular Location	[Junctophilin-2]: Cell membrane; Peripheral membrane protein. Sarcoplasmic reticulum membrane; Single-pass type IV membrane protein. Endoplasmic reticulum membrane; Single-pass type IV membrane protein. Note=The transmembrane domain is anchored in sarcoplasmic reticulum membrane, while the N-terminal part associates with the plasma membrane (PubMed:10949023). In heart cells, it predominantly associates along Z lines within myocytes (PubMed:10949023). In skeletal muscle, it is specifically localized at the junction of A and I bands (PubMed:10949023)
Tissue Location	Abundantly expressed in skeletal muscle and heart (PubMed:10949023). Weak expression in stomach and lung (PubMed:10949023).

References

Takeshima H.,et al.Mol. Cell 6:11-22(2000).
Carninci P.,et al.Science 309:1559-1563(2005).
Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009).
Yamazaki D.,et al.Pharmacol. Ther. 121:265-272(2009).
van Oort R.J.,et al.Circulation 123:979-988(2011).

Images



WB Suggested Anti-Jph2 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Pancreas

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