

Junctophilin 3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2715c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9ET77
Other Accession	Q8WXH2
Reactivity	Human, Rat, Mouse
Predicted	Human, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB9251
Calculated MW	81229
Antigen Region	549-578

Additional Information

Gene ID	57340
Other Names	Junctophilin-3, JP-3, Junctophilin type 3, Jph3, Jp3
Target/Specificity	This Junctophilin 3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 549-578 amino acids from the Central region of human Junctophilin 3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
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	Junctophilin 3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Jph3
Synonyms	Jp3
Function	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. JPH3 is brain- specific and appears to have an active role in certain neurons involved in motor coordination and memory.

Cellular Location

Cell membrane; Peripheral membrane protein. Endoplasmic reticulum membrane; Single-pass type IV membrane protein Note=Localized predominantly on the plasma membrane. The transmembrane domain is anchored in endoplasmic reticulum membrane, while the N- terminal part associates with the plasma membrane

Tissue Location

Specifically expressed in brain. Highest levels in the olfactory tubercle, caudate putamen, nucleus accumbens, hippocampal formation, piriform cortex and cerebellar cortex. Expressed in discete neurons sites. In hippocampal formation, expressed in dendrites of hippocampal pyramidal and denate granule cells. In cerebellum, it is highly expressed in Purkinge cells, while it is weakly expressed in granular cells.

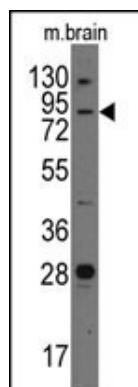
Background

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. Junctophilin 3 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.

References

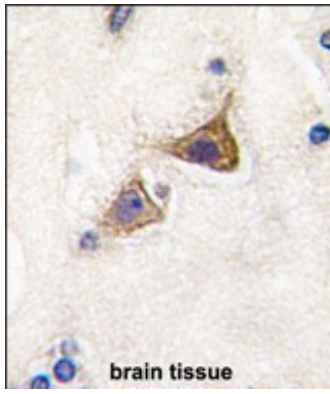
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Nishi,M., Brain Res. Mol. Brain Res. 118 (1-2), 102-110 (2003)
Nishi,M., Biochem. Biophys. Res. Commun. 292 (2), 318-324 (2002)

Images



Western blot analysis of anti-Junctophilin 3 Pab (Cat.#AP2715c) in mouse brain tissue lysates (35ug/lane). Junctophilin 3 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human brain tissue reacted with Junctophilin 3 Antibody (Center) (Cat.#AP2715c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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