

Junctophilin 3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2715c

Product Information

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|--------------------------|------------------------|
| Application | WB, IHC-P, E |
| Primary Accession | Q9ET77 |
| Other Accession | Q8WXH2 |
| Reactivity | Human, Rat, Mouse |
| Predicted | Human |
| 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

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|-----------------|--|
| 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 discrete neurons sites. In hippocampal formation, expressed in dendrites of hippocampal pyramidal and dentate granule cells. In cerebellum, it is highly expressed in Purkinje cells, while it is weakly expressed in granular cells.

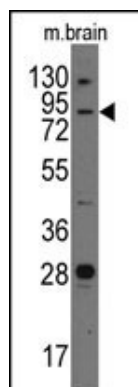
Background

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

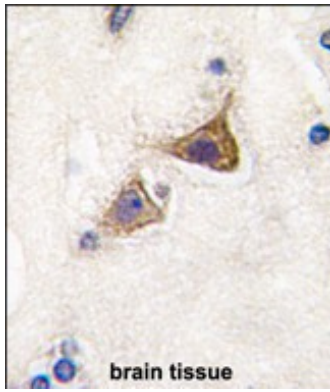
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Nishi,M., Brain Res. Mol. Brain Res. 118 (1-2), 102-110 (2003)
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Images



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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