

## Rabbit Anti-PATJ antibody

SL12142R

**Product Name** PATJ

**Chinese Name** PSD95 相关紧密连接蛋白 PATJ 抗体

**Alias** Channel interacting PDZ domain protein; Cipp; FLJ26982; hINADL; Inactivation no after potential D like protein; INAD like; InaD like Drosophila; INAD like protein; INADL; INADL protein; PALS 1 associated tight junction protein; PALS1 associated tight junction protein; PATJ; PDZ domain protein; PDZ domain protein Drosophila inaD like; Post synaptic density 95 / discs large / zonula occludens 1 domain protein; Protein associated to tight junctions; INADL\_HUMAN .

**Research Area** Neurobiology Channel protein Cell adhesion molecule

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** (predicted: Human, Mouse, Rat, Chicken, Dog, Cow, Horse, Rabbit, Sheep, )  
IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000  
(Paraffin sections need antigen repair)

**Applications** not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 196 kDa

**Cellular localization** cytoplasmic The cell membrane

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human PATJ: 1001-1200/1801

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed**

[PubMed](#)

The membranes of myelinating Schwann cells are joined by tight, gap and adherens junctions, all of which are found in regions of noncompact myelin: the paranodal loops, incisures of Schmidt-Lanterman and mesaxons. Tight junctions help establish polarity in mammalian epithelia by forming a physical barrier that separates apical and basolateral membranes. Pals-associated tight junction protein (PATJ), the human homolog of *Drosophila* Discs Lost, is differentially localized in myelinating Schwann cells. PATJ associates with Claudin-1, CRB1 (a transmembrane protein that plays a role in epithelial cell polarity and photoreceptor development), and Pals1 (a Lin-7 associated protein). The PATJ/Pals1/CRB1 complex can form a tripartite tight junction in epithelial cells crucial to their integrity.

**Function:**

PATJ contains multiple PDZ domains. PDZ domains mediate protein-protein interactions, and proteins with multiple PDZ domains often organize multimeric complexes at the plasma membrane. PATJ localizes to tight junctions and to the apical membrane of epithelial cells. A similar protein in *Drosophila* is a scaffolding protein which tethers several members of a multimeric signaling complex in photoreceptors.

**Subunit:**

Interacts with ASIC3, KCNJ10, KCNJ15, GRIN2A, GRIN2B, GRIN2C, GRIN2D, NLGN2, MPP7, HTR2A and SLC6A4 (By similarity). Forms a ternary complex with MPP5, CRB1 and CRB3. Interacts with TJP3/ZO-3 and CLDN1/cludin-1. Component of a complex whose core is composed of ARHGAP17, AMOT, MPP5/PALS1, INADL/PATJ and PARD3/PAR3. Directly interacts with HTR4 (By similarity). Interacts (via PDZ domain 8) with WWC1 (via the ADDV motif).

**Product  
Detail**

**Subcellular Location:**

Membrane. Cell junction; tight junction. Apical cell membrane. Note: Localized in the paranodal region of myelinating Schwann cells. Membrane-associated. Localizes to tight junctions in epithelial cells. Also found at the apical plasma membrane.

**Tissue Specificity:**

Expressed in bladder, testis, ovary, small intestine, colon, heart, skeletal muscle, pancreas and cerebellum in the brain.

**Similarity:**

Contains 1 L27 domain.  
Contains 10 PDZ (DHR) domains.

**SWISS:**

Q8NI35



**Gene ID:**  
10207

**Database links:**

[Entrez Gene: 424682](#) Chicken

[Entrez Gene: 536993](#) Cow

[Entrez Gene: 479550](#) Dog

[Entrez Gene: 100070486](#) Horse

[Entrez Gene: 10207](#) Human

[Omim: 603199](#) Human

[SwissProt: Q8NI35](#) Human