

Anti-TJP1 Picoband Antibody
Catalog # ABO11925**Specification**

Anti-TJP1 Picoband Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IHC |
| Primary Accession | Q07157 |
| Host | Rabbit |
| Reactivity | Human, Mouse, Rat |
| Clonality | Polyclonal |
| Format | Lyophilized |

Description

Rabbit IgG polyclonal antibody for Tight junction protein ZO-1(TJP1) detection. Tested with WB, IHC-P in Human;Mouse:Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TJP1 Picoband Antibody - Additional Information

Gene ID 7082

Other Names

Tight junction protein ZO-1, Tight junction protein 1, Zona occludens protein 1, Zonula occludens protein 1, TJP1, ZO1

Calculated MW

195459 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction. Cell junction. Cell junction, gap junction. Moves from the cytoplasm to the cell membrane concurrently with cell-cell contact. Detected at the leading edge of migrating and wounded cells.

Tissue Specificity

The alpha-containing isoform is found in most epithelial cell junctions. The short isoform is found both in endothelial cells and the highly specialized epithelial junctions of renal glomeruli and Sertoli cells of the seminiferous tubules.

Protein Name

Tight junction protein ZO-1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human TJP1 recombinant protein (Position: H1178-F1527). Human TJP1 shares 82% amino acid (aa) sequence identity with mouse TJP1.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the MAGUK family.

Anti-TJP1 Picoband Antibody - Protein Information**Name** TJP1**Synonyms** ZO1**Function**

TJP1, TJP2, and TJP3 are closely related scaffolding proteins that link tight junction (TJ) transmembrane proteins such as claudins, junctional adhesion molecules, and occludin to the actin cytoskeleton (PubMed:7798316, PubMed:9792688). The tight junction acts to limit movement of substances through the paracellular space and as a boundary between the compositionally distinct apical and basolateral plasma membrane domains of epithelial and endothelial cells. Necessary for lumenogenesis, and particularly efficient epithelial polarization and barrier formation (By similarity). Plays a role in the regulation of cell migration by targeting CDC42BPB to the leading edge of migrating cells (PubMed:21240187). Plays an important role in podosome formation and associated function, thus regulating cell adhesion and matrix remodeling (PubMed:20930113). With TJP2 and TJP3, participates in the junctional retention and stability of the transcription factor DBPA, but is not involved in its shuttling to the nucleus (By similarity).

Cellular Location

Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction. Cell junction. Cell junction, gap junction. Cell projection, podosome. Note=Moves from the cytoplasm to the cell membrane concurrently with cell-cell contact (PubMed:7798316). At podosomal sites, is predominantly localized in the ring structure surrounding the actin core (PubMed:20930113) Colocalizes with SPEF1 at sites of cell-cell contact in intestinal epithelial cells (PubMed:31473225).

Tissue Location

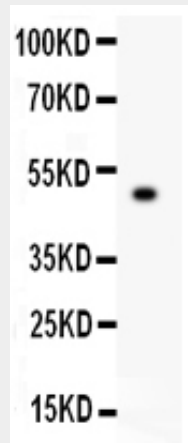
The alpha-containing isoform is found in most epithelial cell junctions. The short isoform is found both in endothelial cells and the highly specialized epithelial junctions of renal glomeruli and Sertoli cells of the seminiferous tubules

Anti-TJP1 Picoband Antibody - Protocols

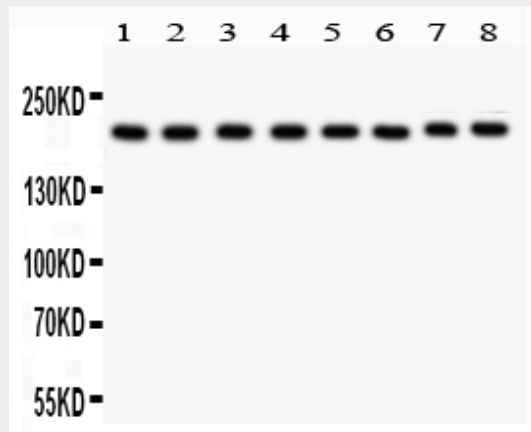
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

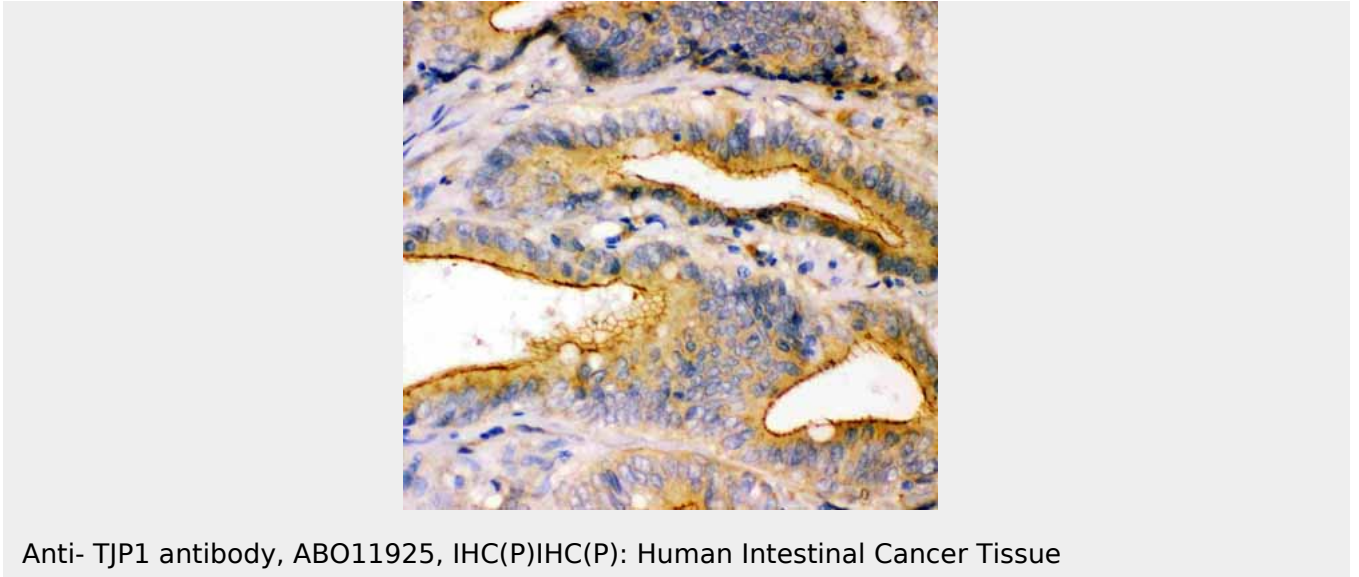
Anti-TJP1 Picoband Antibody - Images



Anti- TJP1 antibody, ABO11925, Western blotting All lanes: Anti TJP1 (ABO11925) at 0.5ug/ml WB: Recombinant Human TJP1 Protein 0.5ng Predicted bind size: 48KD Observed bind size: 48KD



Anti- TJP1 antibody, ABO11925, Western blotting All lanes: Anti TJP1 (ABO11925) at 0.5ug/ml Lane 1: Rat Liver Tissue Lysate at 50ug Lane 2: Mouse Liver Tissue Lysate at 50ug Lane 3: NRK Whole Cell Lysate at 40ug Lane 4: PC-12 Whole Cell Lysate at 40ug Lane 5: HELA Whole Cell Lysate at 40ug Lane 6: SMMC Whole Cell Lysate at 40ug Lane 7: HEPA Whole Cell Lysate at 40ug Lane 8: COLO320 Whole Cell Lysate at 40ug Predicted bind size: 195KD Observed bind size: 195KD



Anti-TJP1 Picoband Antibody - Background

Tight junction protein ZO-1 is a protein that in humans is encoded by the TJP1 gene. It is mapped to 15q13.1. This gene encodes a protein located on a cytoplasmic membrane surface of intercellular tight junctions. The encoded protein may be involved in signal transduction at cell-cell junctions. It has been found that injected CagA associates with the epithelial tight-junction scaffolding protein TJP1 and the transmembrane protein junctional adhesion molecule, causing an ectopic assembly of tight junction components at sites of bacterial attachment, and altering the composition and function of the apical-junctional complex.