

**Anti-TJP2 Antibody**  
**Catalog # ABO11279****Specification**

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**Anti-TJP2 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O9Z0U1</a>
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Tight junction protein ZO-2(TJP2) detection. Tested with WB, IHC-P in Mouse;Rat.

**Reconstitution**

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

**Anti-TJP2 Antibody - Additional Information**

**Gene ID** 21873

**Other Names**

Tight junction protein ZO-2, Tight junction protein 2, Zona occludens protein 2, Zonula occludens protein 2, Tjp2, Zo2

**Calculated MW**

131280 MW KDa

**Application Details**

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

**Subcellular Localization**

Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Nucleus . Cell junction, tight junction . Also nuclear under environmental stress conditions and in migratory endothelial cells and subconfluent epithelial cell cultures. .

**Protein Name**

Tight junction protein ZO-2

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of mouse TJP2(1149-1167aa AHSKRGYYSQPSRYRDTTEL), identical to the related rat sequence.

**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-TJP2 Antibody - Protein Information**

**Name** Tjp2

**Synonyms** Zo2

**Function**

Plays a role in tight junctions and adherens junctions (PubMed:<a href="http://www.uniprot.org/citations/10026224" target="\_blank">10026224</a>). Acts as a positive regulator of RANKL-induced osteoclast differentiation, potentially via mediating downstream transcriptional activity (PubMed:<a href="http://www.uniprot.org/citations/22437732" target="\_blank">22437732</a>).

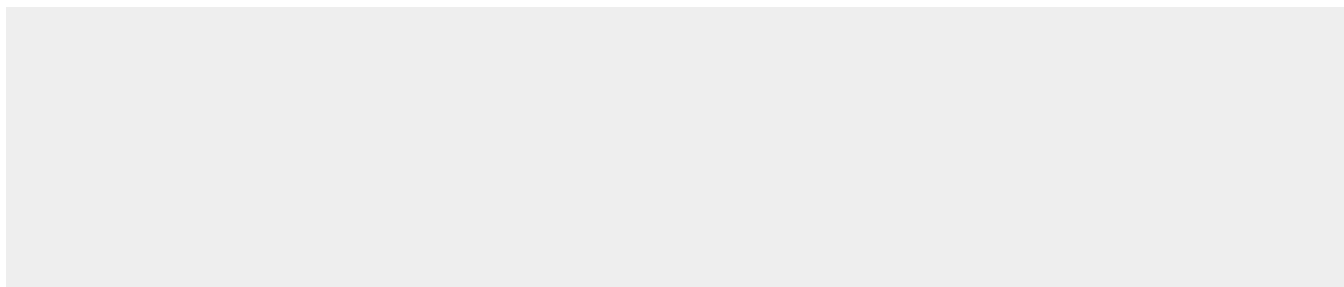
**Cellular Location**

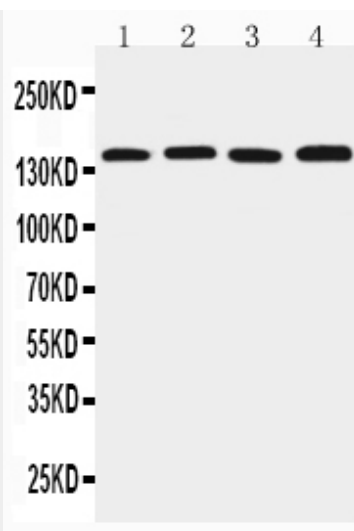
Cell membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus. Cell junction, tight junction. Note=Also nuclear under environmental stress conditions and in migratory endothelial cells and subconfluent epithelial cell cultures.

**Anti-TJP2 Antibody - Protocols**

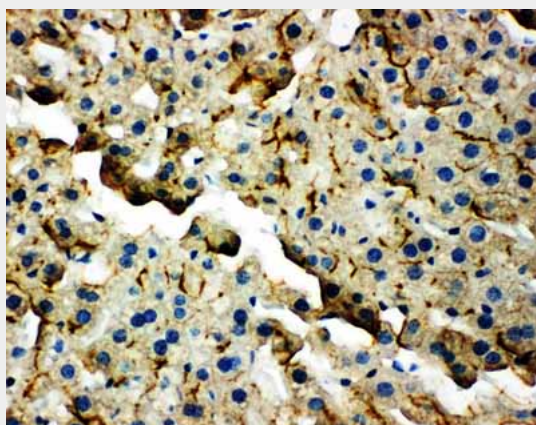
Provided below are standard protocols that you may find useful for product applications.

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

**Anti-TJP2 Antibody - Images**



Anti-TJP2 antibody, ABO11279, Western blotting  
Lane 1: Rat Brain Tissue Lysate  
Lane 2: PC-12 Cell Lysate  
Lane 3: Mouse Brain Tissue Lysate  
Lane 4: HEPA Cell Lysate



Anti-TJP2 antibody, ABO11279, IHC(P)  
IHC(P): Mouse Liver Tissue

### Anti-TJP2 Antibody - Background

TJP2(Tight Junction Protein 2), also known as Zona Occludens 2 or ZO2, is a protein that in humans is encoded by the TJP2 gene. Tight junction proteins(TJPs) belong to a family of membrane-associated guanylate kinase(MAGUK) homologs that are involved in the organization of epithelial and endothelial intercellular junctions. Duclos et al.(1994) mapped the TJP2 gene telomeric to the Friedreich ataxia critical region on chromosome 9q13-q21. TJP2 lies about 70 kb centromeric to the X123 gene and is transcribed in the centromere-to-telomere direction. Using in vitro assays and immunoprecipitation studies, Itoh et al.(1999) showed that the mouse Tjp1, Tjp2, and Tjp3 PDZ1 domains interacted with the C-terminal cytoplasmic domains of Cldn1 through Cldn8. In the mouse inner ear, Walsh et al.(2010) found that Tjp2 expression decreased rapidly between E16.5 and age 1 week to a level in adult mice that was approximately 50% of the level at birth(P0).