

# **Anti-TJP2 Antibody**

Catalog # ABO11263

# **Specification**

# **Anti-TJP2 Antibody - Product Information**

Application WB, IHC-P, IHC-F

Primary Accession

Host
Reactivity
Clonality
Format

Polyclonal
Lyophilized

**Description** 

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

### Reconstitution

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

## **Anti-TJP2 Antibody - Additional Information**

# **Gene ID 9414**

#### **Other Names**

Tight junction protein ZO-2, Tight junction protein 2, Zona occludens protein 2, Zonula occludens protein 2, TJP2, X104, ZO2

### Calculated MW 133958 MW KDa

### **Application Details**

Immunohistochemistry(Frozen Section), 0.5-1  $\mu$ g/ml, Human, -<br/>br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human<br/>br>

# **Subcellular Localization**

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

#### **Tissue Specificity**

This protein is found in epithelial cell junctions. Isoform A1 is abundant in the heart and brain. Detected in brain and skeletal muscle. It is present almost exclusively in normal tissues. Isoform C1 is expressed at high level in the kidney, pancreas, heart and placenta. Not detected in brain and skeletal muscle. Found in normal as well as in most neoplastic tissues. .

#### **Protein Name**

Tight junction protein ZO-2

### **Contents**



Tel: 858.875.1900 Fax: 858.875.1999

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 human TJP2(1171-1190aa SEHSKRGYYGQSARYRDTEL).

#### **Purification**

Immunogen affinity purified.

### **Cross Reactivity**

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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 TIP2 (HGNC:11828)

#### **Function**

Plays a role in tight junctions and adherens junctions (By similarity). Acts as a positive regulator of RANKL-induced osteoclast differentiation, potentially via mediating downstream transcriptional activity (By similarity).

# **Cellular Location**

Cell junction, adherens junction {ECO:0000250|UniProtKB:Q9Z0U1}. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction

{ECO:0000250|UniProtKB:Q9Z0U1}. Nucleus. Note=Also nuclear under environmental stress conditions and in migratory endothelial cells and subconfluent epithelial cell cultures. Localizes to tight junctions during initial stages of their formation (By similarity). {ECO:0000250, ECO:0000250|UniProtKB:Q95168}

### **Tissue Location**

This protein is found in epithelial cell junctions. Isoform A1 is abundant in the heart and brain. Detected in brain and skeletal muscle. It is present almost exclusively in normal tissues Isoform C1 is expressed at high level in the kidney, pancreas, heart and placenta. Not detected in brain and skeletal muscle. Found in normal as well as in most neoplastic tissues

## **Anti-TJP2 Antibody - Protocols**

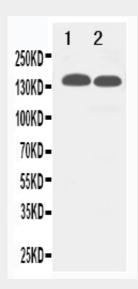
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

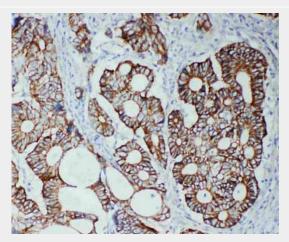


- Flow Cytomety
- Cell Culture

# Anti-TJP2 Antibody - Images



Anti-TJP2 antibody, ABO11263, Western blottingLane 1: 293T Cell LysateLane 2: MCF-7 Cell Lysate



Anti-TJP2 antibody, ABO11263, IHC(P)IHC(P): Human Intestinal Cancer 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).