

Basic Information

Product Name	Anti-ZO-1/TJP1 Antibody	
Gene Name	TJP1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human TJP1 recombinant protein (Position: H1178-F1527). Human TJP1 shares 82% amino acid (aa) sequence identity with mouse TJP1.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	220 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

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.

Reference

Anti-ZO-1/TJP1 Antibody被引用在43文献中。

Selected Validation Data

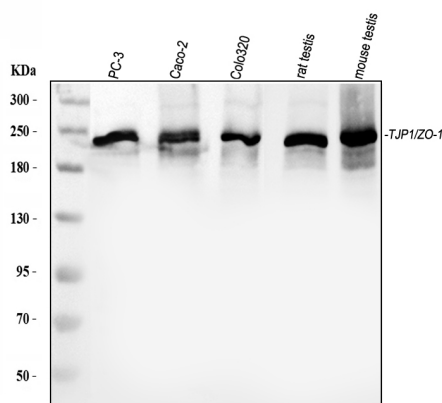


Figure 1. Western blot analysis of anti- TJP1 antibody (PB9234). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human PC-3 whole cell lysates,

Lane 2: human Caco-2 whole cell lysates,

Lane 3: human Colo320 whole cell lysates,

Lane 4: rat testis tissue lysates,

Lane 5: mouse testis tissue lysates.

Use rabbit anti- TJP1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for TJP1 at approximately 220KD. The expected band size for TJP1 is at 185KD.

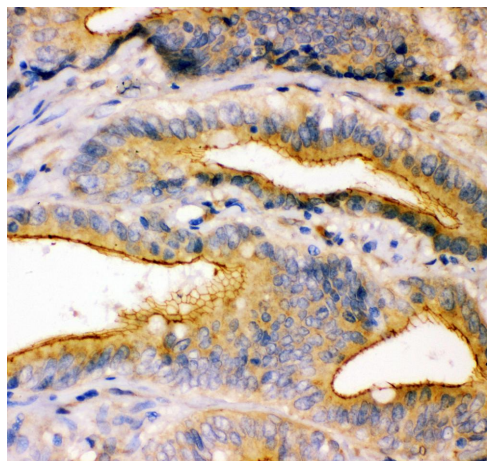


Figure 2. IHC analysis of TJP1 using anti-TJP1 antibody (PB9234).TJP1 was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml rabbit anti-TJP1 Antibody (PB9234) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

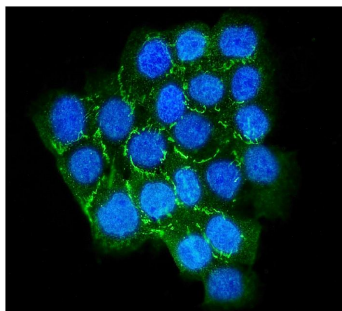


Figure 3. ICC analysis using anti-TJP1/ZO-1 antibody (PB9234) was detected in immersion fixed A431 cell line . Cells were stained using the DyLight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and counterstained with DAPI (blue).

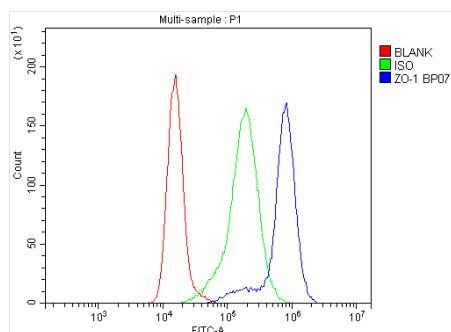


Figure 4. Flow cytometry analysis of K562 cell(1:100) DyLight 488 conjugated goat anti-rabbit IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).