Datasheet for ABIN6655950

anti-TJP1 antibody

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Overview

Quantity:	25 µL
Target:	TJP1
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TJP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF), Flow Cytometry (FACS), Fluorescence Microscopy (FM), Multiplex Assay (MA)

Product Details

Purpose:	ZO-1 Antibody
Immunogen:	Anti-ZO-1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal portion of human ZO-1 conjugated to Keyhole Limpet Hemocyanin (KLH).
Isotype:	IgG
Cross-Reactivity (Details):	This affinity purified antibody is directed against human ZO-1.
Purification:	This product was affinity purified from monospecific antiserum by immunoaffinity purification.
Sterility:	Sterile filtered

Target Details

Target:	TJP1

Target Details

Alternative Name:	ZO-1 (TJP1 Products)
Background:	Synonyms: rabbit anti-ZO-1 antibody, ZO 1, ZO1, Tight junction protein ZO-1, Tight junction protein 1, Zona occludens protein 1, Zonula occludens protein 1, TJP1 Background: ZO-1, also called TJP1, belongs to the MAGUK family. 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. The N-terminal may be involved in transducing a signal required for tight junction assembly, while the C-terminal may have specific properties of tight junctions. The alpha domain might be involved in stabilizing junctions. ZO-1 plays a role in the regulation of cell migration by targeting CDC42BPB to the leading edge of migrating cells. ZO1 may be associated the following disorders, celiac desease, congenital nephrotic syndrome finnish type, and macular degeneration. Anti-ZO-1 Antibody is useful for researchers interested in Apoptosis Research and Insulin Research. Gene Name: TJP1
Gene ID:	7082
NCBI Accession:	NP_003248
UniProt:	Q07157
Pathways:	Carbohydrate Homeostasis, Cell-Cell Junction Organization

Application Details

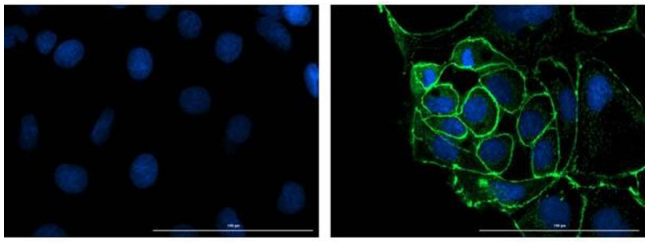
Application Notes:	ELISA_Dilution: 10,000-1:50,000 Immunohistochemistry_Dilution: 1:100 - 1:200 Flow_Cytometry_Dilution: User Optimized IF_Microscopy_Dilution: 10 µg/mL Western_Blot_Dilution: 1:1000
Comment:	Anti-ZO-1 Antibody has been tested in Western Blot, ELISA, Immunohistochemistry, Immunofluorescence, and Flow Cytometry. Expect a band at ~245 and/or 195.5 kDa in western blot using appropriate lysates. Positive control whole cell lysates used A549 and PC3 @ 1µ g/mL for WB, CACO2 and PC3 with PFA and MeOH @ 10µg/mL for IF. Positive control cells for FC were PC3 and positive control tissues for IHC was mouse adipose tissue.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiry Date:	12 months

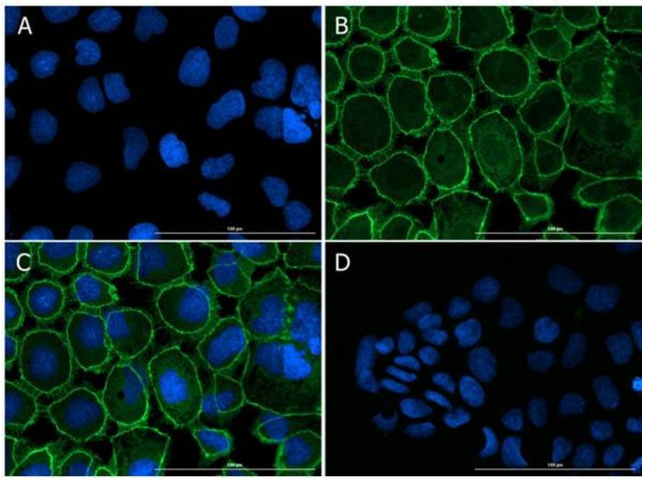
Publications

Product cited in:	Singh, Zabbarova, Ikeda, Maranchie, Chermansky, Foley, Hitchens, Yoshimura, Kanai, Kaufman, Tyagi: "Virtual measurements of paracellular permeability and chronic inflammation via color coded pixel-wise T1 mapping." in: **American journal of physiology. Renal physiology**, Vol. 319, Issue 3, pp. F506-F514, (2020) (PubMed).



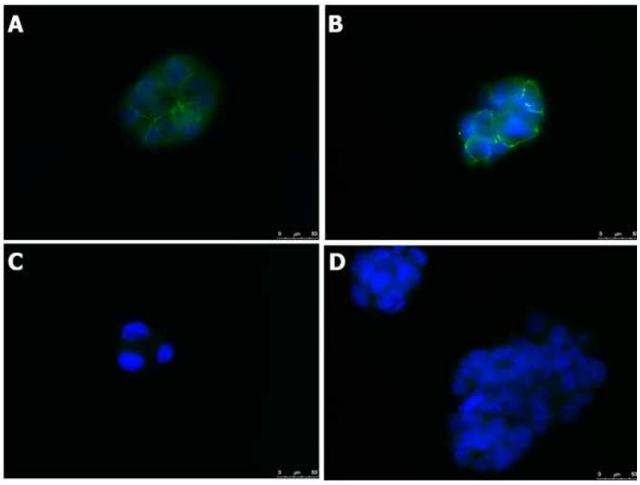
Immunofluorescence

Image 1. Immunofluorescence microscopy of ZO-1 Immunofluorescence microscopy of Anti-ZO-1 in Caco-2 cells using FITC-conjugated Fluorescent anti-rabbit IgG for detection. Caco-2 cells were fixed with 4% PFA, blocked (5% mouse serum/0.3% Triton X-100 in 1X PBS) for 1hr, then incubated with 15µg/mL of anti-ZO-1 primary antibody (Cat. No. 600-401-GU7) at 4°C overnight. Following 3 washes in 1X PBS for 5min each, 5µg/mL of FITC-conjugated Fluorescent anti-rabbit IgG was added and allowed to incubate for 1hr at room temperature. Nuclei were counterstained with DAPI present in mounting medium. Predicted cell localization is cell membrane and cell junctions. Image taken at 40X magnification. (Right) Merged DAPI (blue)/BCL3 (green) image shown (Left) secondary antibody only.



Immunofluorescence

Image 2. Immunofluorescence Microscopy of Rabbit anti-ZO-1 antibody. Immunofluorescence Microscopy of Rabbit anti-ZO-1 antibody. Tissue: CaCO2. Fixation: 4% PFA. Permeabilization: 0.3%Triton X-100. Primary antibody: ZO-1 antibody at 15µg/mL overnight at 2-8°C. Secondary antibody: Donkey Anti-Rabbit IgG 488 Conjugated Preadsorbed at 5µg/mL for 1 h at RT. Localization: membrane. Staining: (A)DAPI. (B)DyLight488. (C)Merge A-B. (D) Secondary Only.



Immunofluorescence

Image 3. Immunofluorescence Microscopy of Rabbit anti-ZO-1 antibody Immunofluorescence Microscopy of Rabbit anti-ZO-1 antibody. Tissue: Caco2. Fixation: 0.5% PFA [A,C]. 0.5% MeOH [B,D]. Antigen retrieval: not required. Primary antibody: ZO-1 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Anti-RABBIT IgG 488 Conjugated Preadsorbed at 5 ug/ml for 1 h at RT. Localization: (1) most epithelial cell junctions; (2) both in endothelial cells and the highly specialized epithelial junctions of renal and Sertoli cells. Staining: Target as green fluorescent signal with DAPI (blue) nuclear counterstain.

Please check the product details page for more images. Overall 6 images are available for ABIN6655950.