

Datasheet for ABIN968283

anti-TJP1 antibody (AA 1048-1247)



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Overview

Quantity:	150 µg
Target:	TJP1
Binding Specificity:	AA 1048-1247
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TJP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human ZO-1 aa. 1048-1247
Clone:	1-ZO
Isotype:	IgG1
Characteristics:	<ol style="list-style-type: none"> 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	TJP1
Alternative Name:	ZO-1 (TJP1 Products)
Background:	<p>Tight junctions (zonulae occludens) are critical to the maintenance of cell polarity and intracellular barriers between epithelial and endothelial cells. Protein components of the tight junctions include actin filaments, symplekin, occludin, Rab3B, AF-6, 7H6, ZO-1, and ZO-2. Analysis of ZO-1 and -2 resulted in their inclusion in the MAGUK protein family. This family also includes the discs large tumor suppressor protein (Dlg-A) of Drosophila, p55, an erythrocyte membrane protein, and PSD-95/SAP90, a synaptic membrane protein. All family members contain a region homologous to guanylate kinase (GuK), a src homology (SH3) domain, and multiple PDZ domains. Through these elements, MAGUK proteins function in signal transduction and, possibly, tumor suppression. ZO-1 is a peripheral membrane phosphoprotein that binds to other tight junction proteins such as occludin and AF-6. Via its SH3 domain, ZO-1 interacts with a serine protein kinase that phosphorylates a region immediately C-terminal of the SH3 domain. Taken together, these data indicate that ZO-1 is a critical element in the formation of tight junctions and may also serve an important role in signaling and tumor suppression. This antibody is routinely tested by western blot analysis.</p>
Molecular Weight:	220 kDa
Pathways:	Carbohydrate Homeostasis , Cell-Cell Junction Organization

Application Details

Comment:	Related Products: ABIN968535, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % 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

Handling

Storage Comment: Store undiluted at -20° C.

Publications

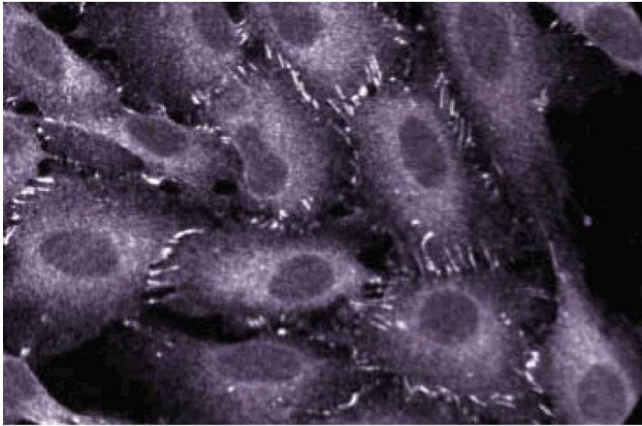
- Product cited in: Hirase, Kawashima, Wong, Ueyama, Rikitake, Tsukita, Yokoyama, Staddon: "Regulation of tight junction permeability and occludin phosphorylation by Rhoa-p160ROCK-dependent and -independent mechanisms." in: **The Journal of biological chemistry**, Vol. 276, Issue 13, pp. 10423-31, (2001) ([PubMed](#)).
- Nix, Chishti, Anderson, Walther: "hCASK and hDlg associate in epithelia, and their src homology 3 and guanylate kinase domains participate in both intramolecular and intermolecular interactions." in: **The Journal of biological chemistry**, Vol. 275, Issue 52, pp. 41192-200, (2001) ([PubMed](#)).
- Ebnet, Schulz, Meyer Zu Brickwedde, Pendl, Vestweber: "Junctional adhesion molecule interacts with the PDZ domain-containing proteins AF-6 and ZO-1." in: **The Journal of biological chemistry**, Vol. 275, Issue 36, pp. 27979-88, (2000) ([PubMed](#)).
- Willott, Balda, Fanning, Jameson, Van Itallie, Anderson: "The tight junction protein ZO-1 is homologous to the Drosophila discs-large tumor suppressor protein of septate junctions." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 90, Issue 16, pp. 7834-8, (1993) ([PubMed](#)).

Images



Western Blotting

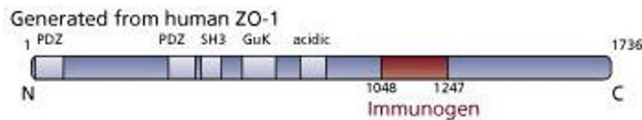
Image 1. Western blot analysis of ZO-1 on a HeLa cell lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti- ZO-1 antibody.



Immunofluorescence

Image 2. Immunofluorescent staining of EAHY human endothelial cells.

Image 3.



Please check the [product details page](#) for more images. Overall 4 images are available for ABIN968283.