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Anti-Zonula Occludens Protein 3 Antibody

Catalog # ABO11280

Specification

Anti-Zonula Occludens Protein 3 Antibody - Product Information

Application	**WB**
Primary Accession	O95049
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Tight junction protein ZO-3(TJP3) detection. Tested with WB in Human.

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

Anti-Zonula Occludens Protein 3 Antibody - Additional Information

Gene ID 27134

Other Names
Tight junction protein ZO-3, Tight junction protein 3, Zona occludens protein 3, Zonula occludens protein 3, TJP3, ZO3

Calculated MW
101397 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, tight junction .

Protein Name
Tight junction protein ZO-3

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 human Zonula occludens protein 3(913-933aa RVHDAESSDEDGYDWGPATDL).

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-Zonula Occludens Protein 3 Antibody - Protein Information

Name TJP3

Synonyms ZO3

Function
TJP1, TJP2, and TJP3 are closely related scaffolding proteins that link tight junction (TJ) transmembrane proteins such as claudins, junctional adhesion molecules, and occludin to the actin cytoskeleton (PubMed:16129888). The tight junction acts to limit movement of substances through the paracellular space and as a boundary between the compositionally distinct apical and basolateral plasma membrane domains of epithelial and endothelial cells. Binds and recruits PATJ to tight junctions where it connects and stabilizes apical and lateral components of tight junctions (PubMed:16129888). Promotes cell-cycle progression through the sequestration of cyclin D1 (CCND1) at tight junctions during mitosis which prevents CCND1 degradation during M- phase and enables S-phase transition (PubMed:21411630). With TJP1 and TJP2, participates in the junctional retention and stability of the transcription factor DBPA, but is not involved in its shuttling to the nucleus (By similarity). Contrary to TJP2, TJP3 is dispensable for individual viability, embryonic development, epithelial differentiation, and the establishment of TJs, at least in the laboratory environment (By similarity).

Cellular Location
Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction. Nucleus. Note=Exhibits predominant nuclear expression in proliferating cells but is exclusively junctionally expressed after confluence is reached (PubMed:23608536). Shows an epithelial-specific tight junction localization in a TJP1/TJP2- dependent fashion (By similarity). {ECO:0000250|UniProtKB:Q9QXY1, ECO:0000269|PubMed:23608536}

Anti-Zonula Occludens Protein 3 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-Zonula Occludens Protein 3 Antibody - Images

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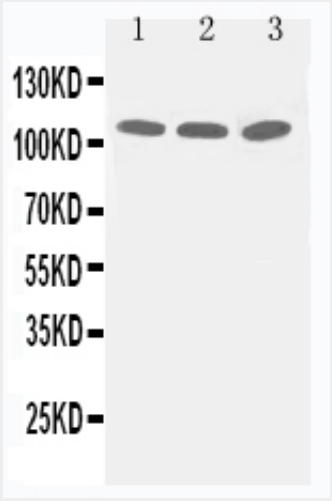

Anti-Zonula occludens protein 3 antibody, ABO11280, Western blottingLane 1: PANC Cell LysateLane 2: A549 Cell LysateLane 3: HELA Cell Lysate

Anti-Zonula Occludens Protein 3 Antibody - Background

TJP3(TIGHT JUNCTION PROTEIN 3), also called ZO3, is a protein that in humans is encoded by the TJP3 gene. TJP3 is a member of the family of membrane-associated guanylate kinase-like proteins(MAGUK) that associate with intracellular junctions(Itoh et al., 1999). Haskins et al.(1998) showed that recombinant Tjp3 binds in vitro translated Tjp1 and binds directly to the cytoplasmic tail of occludin but no binding was detected between Tjp3 and Tjp2. Roh et al.(2002) determined that Tjp3 interacted with PATJ(INADL) and that both proteins colocalized to tight junctions in vivo. In vitro studies showed that the sixth and eighth PDZ domains of PATJ mediated interaction with the Tjp3 C-terminal domain and with Cldn1, respectively.