10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Zonula Occludens Protein 3 Antibody

Catalog # ABO11280

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.

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
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, tight junction .
Source	Eukaryota
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.

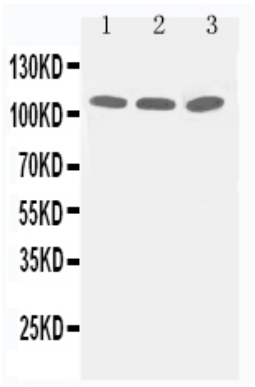
Protein Information

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}

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.

Images



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

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