

Datasheet for ABIN1109612 **anti-TJP1 antibody**



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Overview

Quantity:	0.1 mg
Target:	TJP1
Reactivity:	Human, Mouse, Rat, Dog
Host:	Guinea Pig
Clonality:	Polyclonal
Conjugate:	This TJP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	Human peptide antigen corresponding to ten residues at the splice junction
Isotype:	Ig Fraction
Specificity:	The antibody recognizes specifically ZO-1 alpha-minus.
Cross-Reactivity (Details):	Species reactivity (tested): Human, Mouse, Rat, Canine.
Purification:	Protein A

Target Details

Target:	TJP1
Alternative Name:	ZO-1 / Tight Junction Protein 1 (TJP1 Products)
Background:	Zona occludens 1 (ZO-1) is an ~220 kDa tight junction protein belonging to the membrane-

Target Details

associated guanylate kinase (MAGUK) family. Members of this family are involved in epithelial and endothelial intercellular junctions. They each contain at least one PSD95/Dlg/ZO-1 (PDZ) domain, a Src homology 3 (SH3) domain, and an enzymatically inactive guanylate kinase domain. PDZ domains are 90-amino acid protein-protein binding domains that recognize at least a 3-residue peptide motif in the COOH termini of their binding partners. PDZ domain-containing proteins, like ZO-1, typically act as scaffolding proteins that organize membrane receptors and cytosolic proteins into multimeric signaling complexes often at the sites of cell-cell contact. The effectiveness and stability of the epithelial barrier depends on a complex of proteins composing different intercellular junctions, which include tight junctions, adherens junctions, and desmosomes. ZO-1 is a peripheral membrane protein bound on the cytoplasmic surface of junctional contacts and is expressed in all tight junctions regardless of their properties. ZO-1 immunoprecipitates with its family member ZO-2. ZO-1 was shown to undergo tyrosine phosphorylation during tight junction formation and remodeling. Two different isoforms of ZO-1, alpha-minus and alpha-plus, have been described, which result from alternative splicing of an mRNA encoded by a single gene. The ZO-1 alpha-plus contains an 80 amino acids motif called alpha which is not present in ZO-1 alpha-minus. The alpha-containing isoform is found in most epithelial cell junctions. The short isoform (ZO-1 alpha-minus) is found both in endothelial cells and the highly specialized epithelial junctions of renal glomeruli and Sertoli cells of the seminiferous tubules. This difference in distribution provides molecular distinction among tight junctions. Synonyms: Tjp1, Zo1, Zona occludens protein 1, Zonula occludens protein 1

Gene ID:	7082
NCBI Accession:	NP_003248
UniProt:	Q07157
Pathways:	Carbohydrate Homeostasis , Cell-Cell Junction Organization

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Concentration:	0.1 mg/mL
Buffer:	PBS, 0.02 % Sodium Azide, 0.1 % BSA

Handling

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:	4 °C
Storage Comment:	Store at 2 - 8 °C.