

TJP1 / ZO-1 Antibody (C-Terminus)
Goat Polyclonal Antibody
Catalog # ALS15917**Specification**

TJP1 / ZO-1 Antibody (C-Terminus) - Product Information

Application	WB, IHC-P, IF
Primary Accession	Q07157
Reactivity	Human, Mouse, Rat, Monkey, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	195kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200

TJP1 / ZO-1 Antibody (C-Terminus) - Additional Information**Gene ID** 7082**Other Names**

Tight junction protein ZO-1, Tight junction protein 1, Zona occludens protein 1, Zonula occludens protein 1, TJP1, ZO1

Target/Specificity

Detects endogenous levels of total ZO-1 by Western blot in whole cell and tissue lysates.

Reconstitution & Storage

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Precautions

TJP1 / ZO-1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

TJP1 / ZO-1 Antibody (C-Terminus) - Protein Information**Name** TJP1 ([HGNC:11827](#))**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:7798316, PubMed:9792688). Forms a multistranded TJP1/ZO1 condensate which elongates to form a tight junction belt, the belt is anchored at the apical cell membrane via interaction with PATJ (By similarity). 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. Necessary for lumenogenesis, and

particularly efficient epithelial polarization and barrier formation (By similarity). Plays a role in the regulation of cell migration by targeting CDC42BPB to the leading edge of migrating cells (PubMed:21240187). Plays an important role in podosome formation and associated function, thus regulating cell adhesion and matrix remodeling (PubMed:20930113). With TJP2 and TJP3, participates in the junctional retention and stability of the transcription factor DBPA, but is not involved in its shuttling to the nucleus (By similarity). May play a role in mediating cell morphology changes during ameloblast differentiation via its role in tight junctions (By similarity).

Cellular Location

Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction. Cell junction. Cell junction, gap junction. Cell projection, podosome. Note=Moves from the cytoplasm to the cell membrane concurrently with cell-cell contact (PubMed:7798316). Forms a condensed tight junction-linked belt of protein during junction formation which becomes anchored to the apical cell membrane via interaction with PATJ (By similarity). At podosomal sites, is predominantly localized in the ring structure surrounding the actin core (PubMed:20930113). Colocalizes with SPEF1 at sites of cell- cell contact in intestinal epithelial cells (PubMed:31473225) {ECO:0000250|UniProtKB:O97758, ECO:0000269|PubMed:20930113, ECO:0000269|PubMed:31473225, ECO:0000269|PubMed:7798316}

Tissue Location

The alpha-containing isoform is found in most epithelial cell junctions. The short isoform is found both in endothelial cells and the highly specialized epithelial junctions of renal glomeruli and Sertoli cells of the seminiferous tubules

Volume

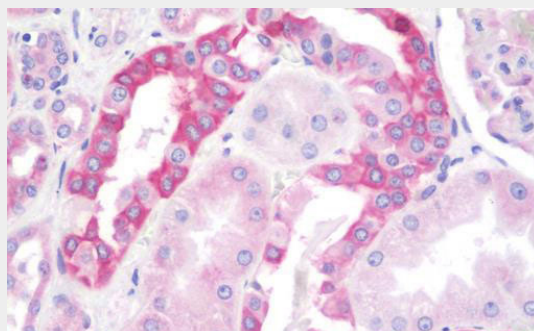
100 µl

TJP1 / ZO-1 Antibody (C-Terminus) - Protocols

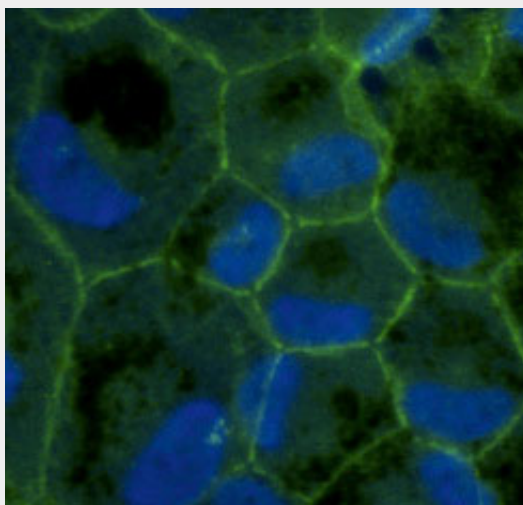
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TJP1 / ZO-1 Antibody (C-Terminus) - Images



Anti-TJP1 / ZO-1 antibody IHC staining of human kidney.



Immunofluorescence of primary RPE cells with ZO-1 antibody at 1:100 dilution.

TJP1 / ZO-1 Antibody (C-Terminus) - Background

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. Plays a role in the regulation of cell migration by targeting CDC42BPB to the leading edge of migrating cells.

TJP1 / ZO-1 Antibody (C-Terminus) - References

Willott E., et al. Proc. Natl. Acad. Sci. U.S.A. 90:7834-7838(1993).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Zody M.C., et al. Nature 440:671-675(2006).
Cohen C.J., et al. Proc. Natl. Acad. Sci. U.S.A. 98:15191-15196(2001).
D'Atri F., et al. J. Biol. Chem. 277:27757-27764(2002).