

**ZO1 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP4783b****Specification**

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**ZO1 Antibody (C-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q07157</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	195459
Antigen Region	1570-1600

**ZO1 Antibody (C-term) - 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**

This ZO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1570-1600 amino acids from the C-terminal region of human ZO1.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ZO1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ZO1 Antibody (C-term) - Protein Information****Name** TJP1

## Synonyms ZO1

**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](#)). 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).

## 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](#)). 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](#)).

## Tissue Location

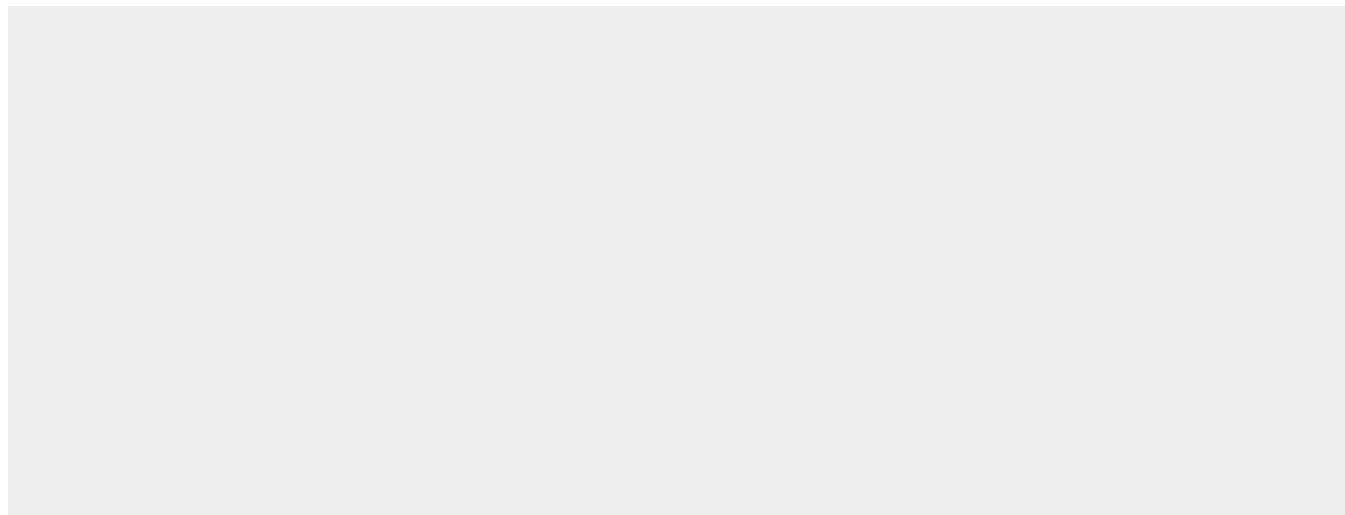
The alpha-containing isoform is found in most epithelial cell junctions. The short isoform is found both in endothelial cells and the highly specialized epithelial junctions of renal glomeruli and Sertoli cells of the seminiferous tubules

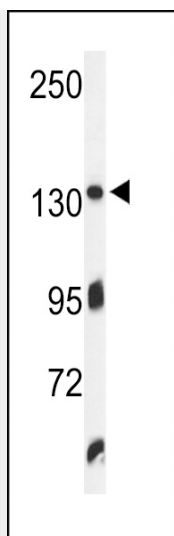
## ZO1 Antibody (C-term) - Protocols

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

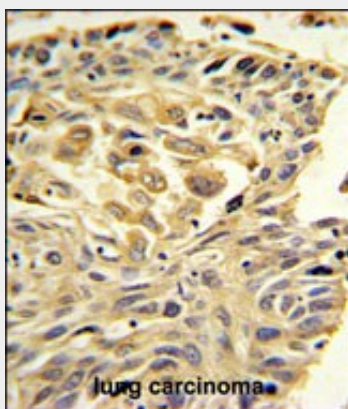
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## ZO1 Antibody (C-term) - Images

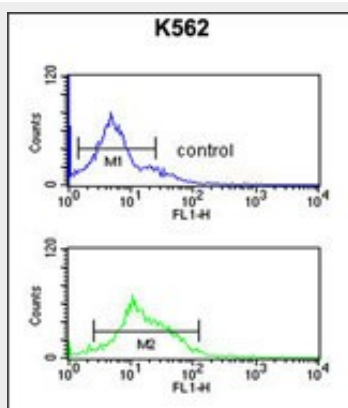




Western blot analysis of ZO1 Antibody (C-term) (Cat. #AP4783b) in K562 cell line lysates (35ug/lane). ZO1 (arrow) was detected using the purified Pab.



ZO1 Antibody (C-term)(Cat. #AP4783b) IHC analysis in formalin fixed and paraffin embedded lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ZO1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



ZO1 Antibody (C-term) (Cat. #AP4783b) flow cytometric analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **ZO1 Antibody (C-term) - Background**

ZO1 encodes a protein located on a cytoplasmic membrane surface of intercellular tight junctions. The encoded protein may be involved in signal transduction at cell-cell junctions.

#### **ZO1 Antibody (C-term) - References**

Ohira, M., et al. Int. J. Mol. Med. 24(6):829-835(2009)  
Hirakawa, H., et al. Int. J. Oncol. 35(6):1271-1276(2009)  
Meerschaert, K., et al. Cell. Mol. Life Sci. 66(24):3951-3966(2009)  
Kirschner, N., et al. Am. J. Pathol. 175(3):1095-1106(2009)

#### **ZO1 Antibody (C-term) - Citations**

- [Pharmacodynamic Effect of Ellagic Acid on Ameliorating Cerebral Ischemia/Reperfusion Injury.](#)