

# Rabbit Anti-ZO-1 antibody

# SL23835R

Product Name:	ZO-1
Chinese Name:	<b>胞</b> 质紧 <b>密粘连蛋白</b> 1/闭锁 <b>小</b> 带蛋白1抗体
Alias:	ZO1 tight junction protein; Tight junction protein 1; Tight junction protein ZO-1; Tight junction protein ZO1; TJP1; zo-1; ZO1; ZO1_HUMAN; Zona occludens 1; Zona occludens 1 protein; Zona occludens protein 1; Zonula occludens 1 protein; Zonula occludens protein 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	191kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ZO-1:1501-1600/1748
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene 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. Two transcript variants encoding distinct isoforms have been identified for this gene. 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.

#### **Function:**

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.

#### **Subunit:**

Interacts with BVES (via the C-terminus cytoplasmic tail). Interacts with HSPA4 and KIRREL1. Homodimer, and heterodimer with TJP2/ZO-2 and TJP3/ZO-3. Interacts with OCLN, CALM, claudins, CGN/cingulin, CXADR, GJA12, GJD3 and UBN1. Interacts (via ZU5 domain) with CDC42BPB and MYZAP. Interacts (via PDZ domain) with GJA1.

#### **Subcellular Location:**

Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction. Cell junction. Cell junction, gap junction. Note=Moves from the cytoplasm to the cell membrane concurrently with cell-cell contact. Detected at the leading edge of migrating and wounded cells.

## Tissue Specificity:

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.

#### Post-translational modifications:

Phosphorylated. Dephosphorylated by PTPRJ.

#### Similarity:

Belongs to the MAGUK family.

Contains 1 guanylate kinase-like domain.

Contains 3 PDZ (DHR) domains.

#### **SWISS:**

O07157

#### Gene ID:

7082

#### Database links:

Entrez Gene: 7082Human

Entrez Gene: 21872Mouse

Omim: 601009Human

SwissProt: Q07157Human

SwissProt: P39447Mouse

Unigene: 510833Human

Unigene: 4342 Mouse

# Important Note:

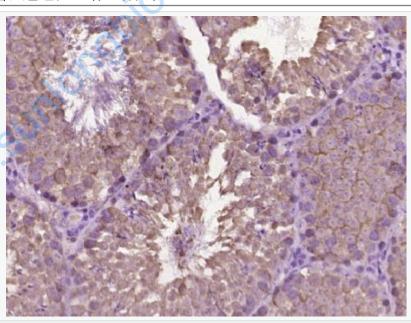
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

## 胞质紧密粘连蛋白1(ZO-

1)是多结构域蛋白家族膜结合鸟苷酸激酶的家族成员,在紧密连接蛋白的组成成分中起到对组织分化和器官形成方面起较重要的作用。ZO-

1在包括肾、胎盘、血脑屏障等许多组织都有不同的表达,可与紧密连接上的很多Tr ansmembrane protein相互作用。也有学者认为: ZO-

1的改变与细胞通透性的增加有关。



# Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ZO-1) Polyclonal Antibody, Unconjugated

(SL23835R) at 1:400 overnight at 4°C, followed by operating according to SP
Kit(Rabbit) (sp-0023) instructions and DAB staining.

