

### **ZO-1 rabbit-FC recombinant protein**

Catalog No: YD3108

Reactivity: Human;

**Purity:** >90% as determined by SDS-PAGE

Gene Name: ZO-1

**Protein Name :** Tight junction protein ZO-1 (Tight junction protein 1) (Zona occludens protein 1)

(Zonula occludens protein 1)

**Sequence:** Amino acid:1551-1748, with rabbit FC tag.

Human Gene Id: 7082

**Human Swiss Prot** 

No:

**Formulation :** Phosphate-buffered solution

Q07157

Source: Mammalian cells

Storage Stability: -15°C to -25°C/1 year(Avoid freeze / thaw cycles)

**Background:** 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. Alternative splicing of this gene results in

multiple transcript variants. [provided by RefSeq, Jul 2014],

**Function:** domain: The second PDZ domain mediates interaction with GJA12...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.,PTM:Phosphorylated.,similarity:Belongs to the MAGUK

family.,similarity:Contains 1 guanylate kinase-like domain.,similarity:Contains 1 PDZ (DHR) domain.,similarity:Contains 1 SH3 domain.,similarity:Contains 1 ZU5

domain., similarity: Contains 3 PDZ (DHR) domains., subcellular

location:Movement of ZO-1 from the cytoplasm to membrane is an early event occurring concurrently with cell-cell contact.,subunit:Interacts with HSPA4 and KIRREL1 (By similarity). Homodimer, and heterodimer with TJP2/ZO-2 and TJP3/ZO-3. Interacts with occludin, claudins, CGN/cingulin, CXADR, GJA12,



#### GJD3 and UBN1.,tissue specificit

# Subcellular Location:

Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction. Cell junction. Cell junction, gap junction. Cell projection, podosome. 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).

### **Expression:**

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.

## **Products Images**