## For Research Use Only

## **ZO-1** Recombinant antibody

Catalog Number:82870-1-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

82870-1-RR BC 111712 GeneID (NCBI):

Nanodrop: **UNIPROT ID:** Q07157 Rabbit Full Name:

100ul , Concentration: 1000  $\mu g/ml$  by 7082

Isotype: tight junction protein 1 (zona

occludens 1) IgG Immunogen Catalog Number: Calculated MW:

AG33182 1748 aa, 195 kDa Observed MW:

230 kDa

**Applications** 

**Tested Applications:** 

IF, IP, WB, ELISA

Species Specificity:

Human

**Purification Method:** 

Protein A purification

CloneNo.: 2P13

Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IF 1:750-1:3000

Positive Controls:

WB: Caco-2 cells, MCF-7 cells, HeLa cells, HepG2 cells

IP: HEK-293 cells, IF: MCF-7 cells,

## **Background Information**

Tight junction (or zonula occludens) form the continuous intercellular barrier between epithelial and endothelial cells, which is required to separate tissue spaces and regulate selective movement of solutes across the epithelium and endothelium (PMID: 20066090). ZO-1 (also known as TJP1) is a peripheral membrane phosphoprotein located on the cytoplasmic face and is expressed in tight junctions of both epithelial and endothelial cells (PMID: 3528172). It binds the transmembrane proteins occludin and the claudins linking them to cytoskeletal actin (PMID: 17418867). ZO-1 belongs to a family of multidomain proteins known as the membrane-associated guanylate kinase homologs (MAGUKs). It is a pivotal tight junction protein and may be involved in signaling mechanisms regulating cell proliferation and differentiation (PMID: 22782886).

Storage

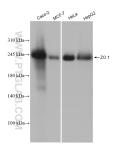
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

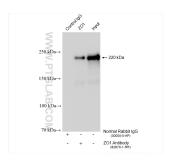
\*\*\* 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

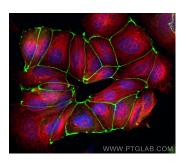
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 82870-1-RR (ZO-1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



IP result of anti-ZO-1 (IP:82870-1-RR, 4ug; Detection:82870-1-RR 1:2000) with HEK-293 cells lysate 920 ug.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using ZO-1 antibody (82870-1-RR, Clone: 2P13) at dilution of 1:1500 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).