For Research Use Only

ZO-1 Recombinant antibody, PBS Only

Catalog Number:82870-7-PBS



Purification Method:

Protein A purfication

CloneNo.:

240150D7

Basic Information

Catalog Number: GenBank Accession Number: 82870-7-PBS BC111712

Concentration: GeneID (NCBI): 1 mg/ml 7082

Source: UNIPROT ID:
Rabbit Q07157
Isotype: Full Name:

IgG tight junction protein 1 (zona occludens 1)

Immunogen Catalog Number: occludens 1)
AG33182 Calculated MW:

1748 aa, 195 kDa Observed MW: 230 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Species Specificity: human, mouse, rat, canine

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 (MAGUIs). It is a pivotal tight junction protein and may be involved in signaling mechanisms regulating cell proliferation and differentiation (PMID: 22782886).

Storage

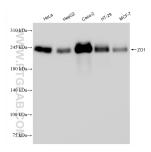
Storage:

Store at -80°C.

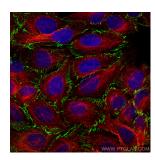
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

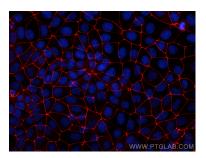
Selected Validation Data



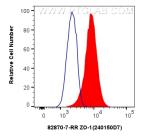
Various lysates were subjected to SDS PAGE followed by western blot with 82870-7-RR (ZO1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation.



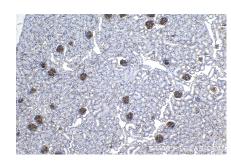
Immunofluorescent analysis of (4% PFA) fixed U2OS cells using ZO-1 antibody (82870-7-RR, Clone: 240150D7) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red). This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation.



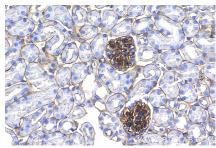
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using ZO-1 antibody (82870-7-RR, Clone: 240150D7) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation.



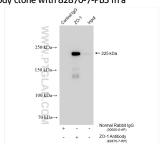
1x10^6 MCF-7 cells were intracellularly stained with 0.25 ug ZO-1 Recombinant antibody (82870-7-RR, Clone:240150D7) and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 82870-7-PBS in a



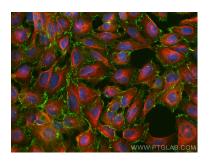
Immunohistochemical analysis of paraffinembedded mouse kidney tissue slide using 82870-7-RR (ZO-1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation.



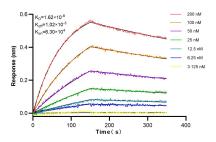
Immunohistochemical analysis of paraffinembedded mouse kidney tissue slide using 82870-7-RR (ZO-1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation.



IP result of anti-ZO-1 (IP:82870-7-RR, 4ug; Detection:82870-7-RR 1:4000) with HEK-293 cells lysate 1610 ug. This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using ZO-1 antibody (82870-7-RR, Clone: 240150D7) at dilution of 1:400 and MultirAb Coralite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation



Biolayer interferometry (BLL) kinetic assays of 82870-7-RR against Human ZO-1 were performed. The affinity constant is 16.2 nM.