

For Research Use Only

ZO-1 Recombinant antibody, PBS Only

Catalog Number: 82870-7-PBS



Basic Information

Catalog Number: 82870-7-PBS	GenBank Accession Number: BC111712	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 7082	CloneNo.: 240150D7
Source: Rabbit	UNIPROT ID: Q07157	
Isotype: IgG	Full Name: tight junction protein 1 (zona occludens 1)	
Immunogen Catalog Number: 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 (MAGUKs). It is a pivotal tight junction protein and may be involved in signaling mechanisms regulating cell proliferation and differentiation (PMID: 22782886).

Storage

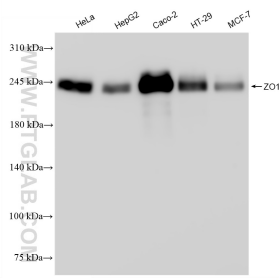
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

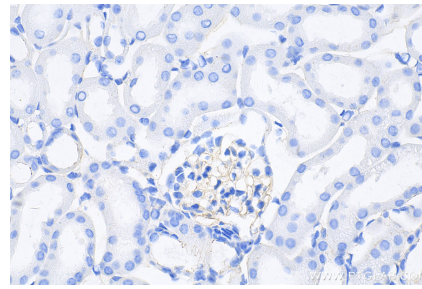
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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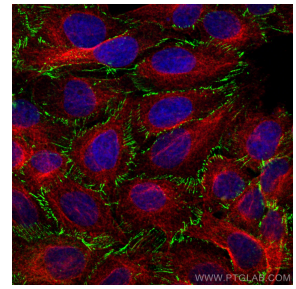
Selected Validation Data



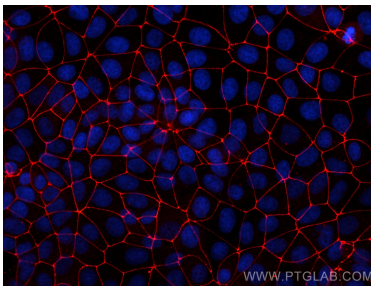
Various lysates were subjected to SDS PAGE followed by western blot with 82870-7-RR (ZO1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation.



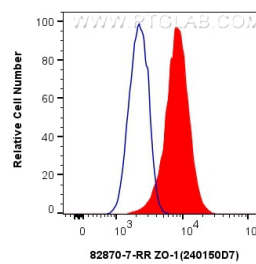
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 82870-7-RR (ZO-1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82870-7-PBS in a different storage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



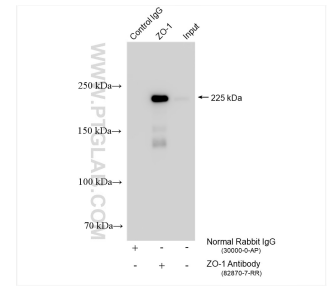
Immunofluorescent analysis of (4% PFA) fixed U2OS cells using ZO-1 antibody (82870-7-RR, Clone: 240150D7) at dilution of 1:500 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red). This data was developed using the same antibody clone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



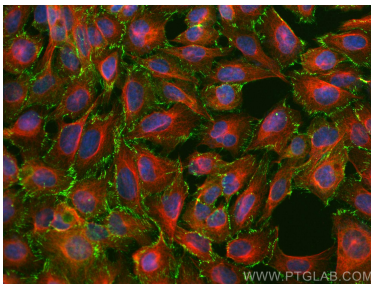
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using ZO-1 antibody (82870-7-RR, Clone: 240150D7) at dilution of 1:400 and CoraLite@594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). This data was developed using the same antibody clone with 82870-7-PBS in a different storage buffer formulation.



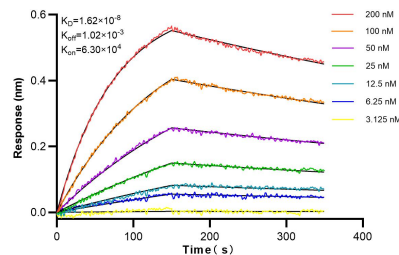
1×10^6 MCF-7 cells were intracellularly stained with 0.25 ug ZO-1 Recombinant antibody (82870-7-RR, Clone:240150D7) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed 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



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 Multi-rAb 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 (BLI) kinetic assays of 82870-7-RR against Human ZO-1 were performed. The affinity constant is 16.2 nM.