

For Research Use Only

ZO-1 Polyclonal antibody, PBS Only

Catalog Number: 21773-1-PBS

Featured Product



Basic Information

Catalog Number:

21773-1-PBS

Size:

100ug, Concentration: 1 mg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG16454

GenBank Accession Number:

BC111712

GeneID (NCBI):

7082

UNIPROT ID:

Q07157

Full Name:

tight junction protein 1 (zona occludens 1)

Calculated MW:

1748 aa, 195 kDa

Observed MW:

230 kDa

Purification Method:

Antigen affinity purification

Applications

Tested Applications:

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

Species Specificity:

human, mouse, rat, canine, hamster

Background Information

Tight junction (or zonula occludens) forms 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, pH7.3

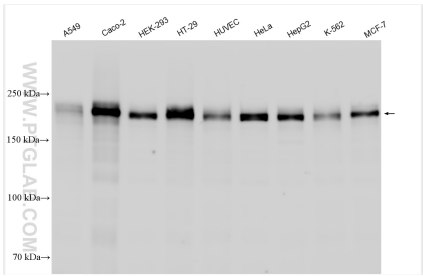
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

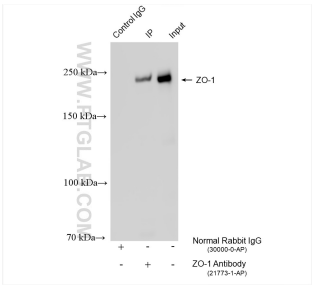
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

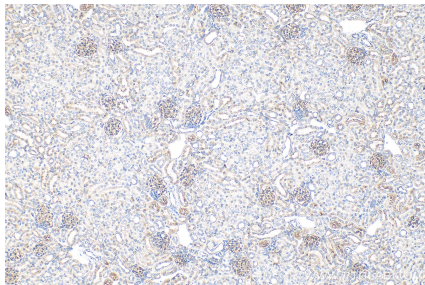
Selected Validation Data



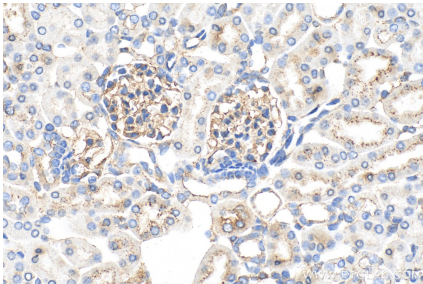
Various lysates were subjected to SDS PAGE followed by western blot with 21773-1-AP (ZO-1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 21773-1-PBS in a different storage buffer formulation.



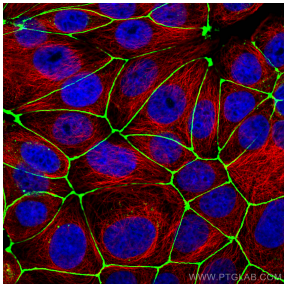
IP result of anti-ZO-1 (IP:21773-1-AP, 4ug; Detection:21773-1-AP 1:30000) with HEK-293 cells lysate 1800 ug. This data was developed using the same antibody clone with 21773-1-PBS in a different storage buffer formulation.



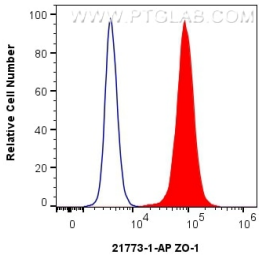
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 21773-1-AP (ZO-1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 21773-1-PBS in a different storage buffer formulation.



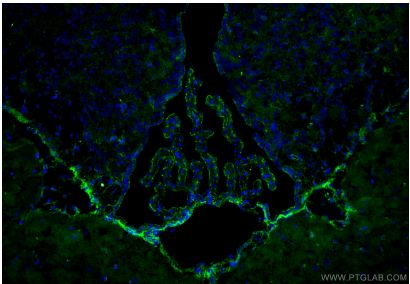
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 21773-1-AP (ZO-1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 21773-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using ZO-1 antibody (21773-1-AP) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red). This data was developed using the same antibody clone with 21773-1-PBS in a different storage buffer formulation.



1x10⁶ MCF-7 cells were intracellularly stained with 0.8 ug ZO-1 Polyclonal antibody (21773-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.8 ug rabbit IgG isotype control (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 21773-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using ZO-1 antibody (21773-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 21773-1-PBS in a different storage buffer formulation.