

For Research Use Only

ZO-1 Polyclonal antibody

Catalog Number: 21773-1-AP

Featured Product

445 Publications



Basic Information

Catalog Number:

21773-1-AP

Size:

150ul, Concentration: 800 µg/ml by Nanodrop and 373 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG16454

GenBank Accession Number:

BC111712

GeneID (NCBI):

7082

Full Name:

tight junction protein 1 (zona occludens 1)

Calculated MW:

1748 aa, 195 kDa

Observed MW:

230 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:8000

IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB

IF 1:1000-1:4000

Applications

Tested Applications:

FC, IF, IP, WB, ELISA

Cited Applications:

FC, IF, WB

Species Specificity:

human, canine, mouse, rat, hamster

Cited Species:

bovine, canine, chicken, human, mouse, pig, rat

Positive Controls:

WB: A431 cells, COLO 320 cells, mouse colon tissue, HEK-293 cells, MCF-7 cells, HT-29 cells, HUVEC cells, HepG2 cells

IP: HEK-293 cells,

IF: HUVEC cells, CHO cells, mouse colon tissue, mouse kidney tissue, human breast cancer tissue, MDCK cells, 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 signalling mechanisms regulating cell proliferation and differentiation (PMID: 22782886).

Notable Publications

Author	Pubmed ID	Journal	Application
Yuanyuan Li	33003577	Mar Drugs	WB
Mingyue Liu	30396738	J Thorac Cardiovasc Surg	WB
Xin Wang	34581992	Apoptosis	IF

Storage

Storage:

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

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

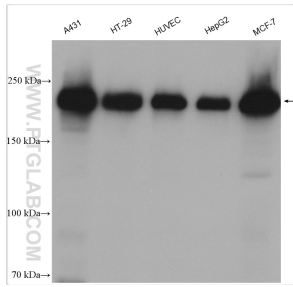
For technical support and original validation data for this product please contact:

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

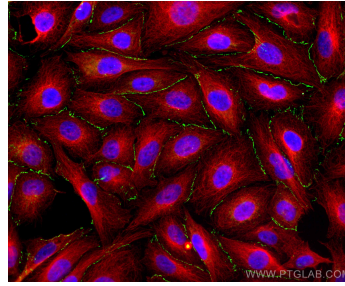
E: proteintech@ptglab.com
W: ptglab.com

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

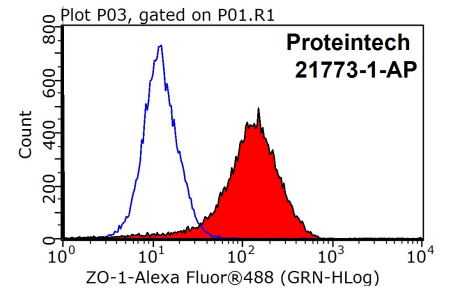
Selected Validation Data



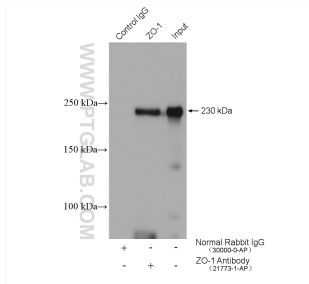
Various lysates were subjected to SDS PAGE followed by western blot with 21773-1-AP (ZO-1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HUVEC 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).



1X10⁶ MCF-7 cells were stained with 0.2ug ZO-1 antibody (21773-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



IP result of anti-ZO-1 (IP:21773-1-AP, 4ug; Detection:21773-1-AP 1:500) with HEK-293 cells lysate 2320 ug.