

ZO-1

Polyclonal ANTIBODY

Catalog Number: 21773-1-AP

21 Publications

Basic Information

Catalog Number:
21773-1-AP

Size:
39 µg/150 µl

Source:
Rabbit

Isotype:
IgG

Purification Method:
Antigen affinity purification

Immunogen Catalog Number:
AG16454

GenBank Accession Number:
BC111712

GeneID (NCBI):
7082

Full Name:
tight junction protein 1 (zona occludens 1)

Calculated MW:
1748aa, 195 kDa

Observed MW:
230 kDa

Recommended Dilutions:

WB 1:200-1:2000

IP 1:200-1:2000

IHC 1:50-1:200

IF 1:20-1:200

Applications

Tested Applications:
ELISA, WB, IHC, FC, IP, IF

Cited Applications:
FC, IF, IHC, WB

Species Specificity:
Human, Dog, Mouse, Rat

Cited Species:
human, mouse, rat

Positive Controls:

WB : HepG2 cells; A431 cells, COLO 320 cells, HEK-293 cells

IP : HEK-293 cells;

IHC : human kidney tissue;

IF : MDCK cells; HUVEC 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 (PMD: 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 (PMD: 3528172). It binds the transmembrane proteins occludin and the claudins linking them to cytoskeletal actin (PMD: 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 (PMD: 22782886).

Notable Publications

Author	Pubmed ID	Journal	Application
Xinmiao Yu	26325443	Oncotarget	WB
Cai Yujiao Y	23028616	PLoS One	IHC
Pei Lin	26474417	PLoS One	FC

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

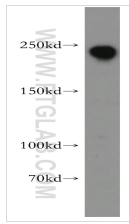
For technical support and original validation data for this product please contact:

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

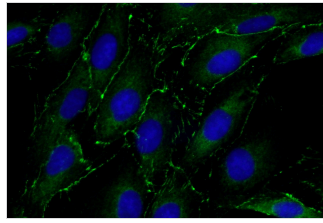
E: proteintech@ptglab.com
W: ptglab.com

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

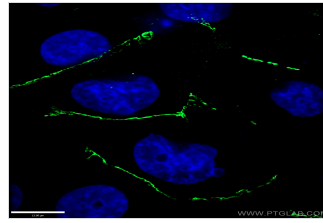
Selected Validation Data



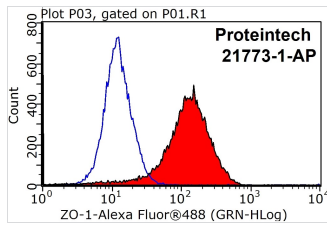
HepG2 cells were subjected to SDS PAGE followed by western blot with 21773-1-AP(ZO1 antibody) at dilution of 1:500



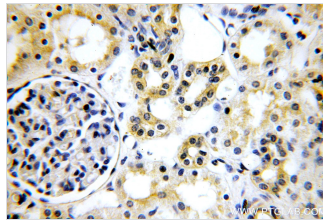
Immunofluorescent analysis of (-20°C Ethanol) fixed MDCK cells using 21773-1-AP(ZO1 Antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)



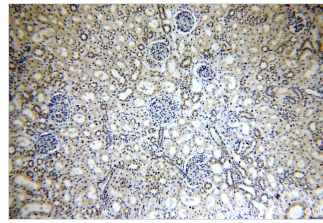
Immunofluorescent analysis of (-20°C Ethanol) fixed HUVEC cells using 21773-1-AP(ZO1 Antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)



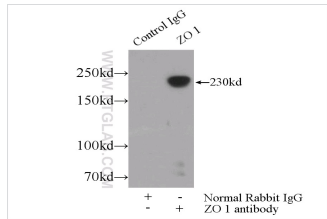
1X10⁶ MCF-7 cells were stained with 0.2ug ZO1 antibody (21773-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



Immunohistochemical of paraffin-embedded human kidney using 21773-1-AP(ZO1 antibody) at dilution of 1:100 (under 40x lens)



Immunohistochemical of paraffin-embedded human kidney using 21773-1-AP(ZO1 antibody) at dilution of 1:100 (under 10x lens)



IP Result of anti-ZO1 (IP:21773-1-AP 5ug; Detection:21773-1-AP 1:800) with HEK-293 cells lysate 1800ug.