

For Research Use Only

# ZO-1 Monoclonal antibody, PBS Only

Catalog Number: 66452-1-PBS

Featured Product

1 Publications



## Basic Information

### Catalog Number:

66452-1-PBS

### Size:

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

### Source:

Mouse

### Isotype:

IgG1

### 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:

Protein A purification

### CloneNo.:

1G4A1

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

### Cited Applications:

IF

### Species Specificity:

human, 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 signalling mechanisms regulating cell proliferation and differentiation (PMID: 22782886).

## Notable Publications

Author	Pubmed ID	Journal	Application
Dan Yuan	39297569	ACS Nano	IF

## Storage

### Storage:

Store at -80°C.

### Storage Buffer:

PBS Only

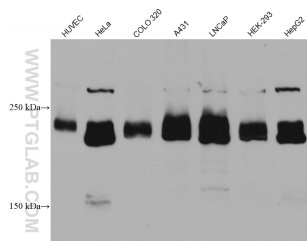
For technical support and original validation data for this product please contact:

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

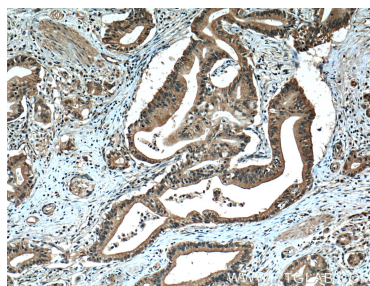
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

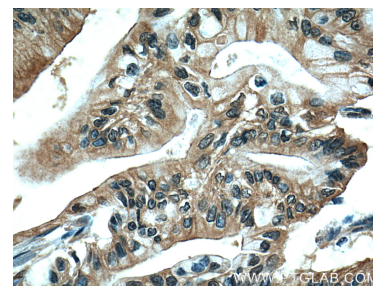
## Selected Validation Data



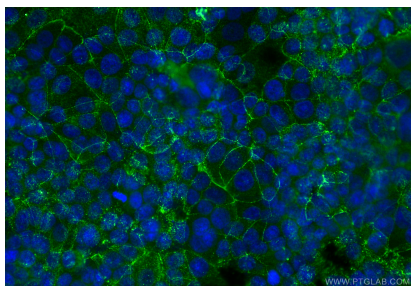
Various lysates were subjected to SDS PAGE followed by western blot with 66452-1-Ig (ZO-1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66452-1-PBS in a different storage buffer formulation.



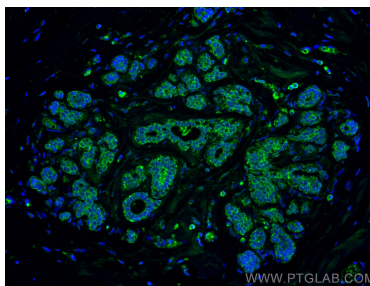
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66452-1-Ig (ZO-1 antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66452-1-PBS in a different storage buffer formulation.



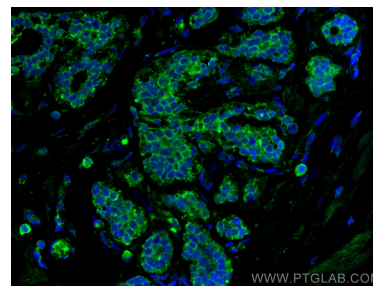
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66452-1-Ig (ZO-1 antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66452-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using ZO-1 antibody (66452-1-Ig, Clone: 1G4A1 ) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 66452-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using ZO-1 antibody (66452-1-Ig, Clone: 1G4A1 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66452-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using ZO-1 antibody (66452-1-Ig, Clone: 1G4A1 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66452-1-PBS in a different storage buffer formulation.