

For Research Use Only

ZO-1 Monoclonal antibody

Catalog Number: 66452-1-Ig

Featured Product

75 Publications



Basic Information

Catalog Number: 66452-1-Ig	GenBank Accession Number: BC111712	Purification Method: Protein A purification
Size: 150ul , Concentration: 2000 ug/ml by Nanodrop;	GeneID (NCBI): 7082	CloneNo.: 1G4A1
Source: Mouse	UNIPROT ID: Q07157	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:200-1:800 IF-P 1:200-1:800 IF/ICC 1:400-1:1600
Isotype: IgG1	Full Name: tight junction protein 1 (zona occludens 1)	
Immunogen Catalog Number: AG16454	Calculated MW: 1748 aa, 195 kDa	
	Observed MW: 230 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, IF-P, ELISA	Positive Controls: WB : HUVEC cells, HeLa cells, COLO 320 cells, A431 cells, LNCaP cells, HEK-293 cells, HepG2 cells IHC : human pancreas cancer tissue, human prostate cancer tissue IF-P : human breast cancer tissue, IF/ICC : MCF-7 cells, MDCK cells
Cited Applications: WB, IHC, IF	
Species Specificity: human, canine	
Cited Species: human, pig	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

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
Dayun Feng	36179025	Sci Adv	WB
Chengmei Huang	34583750	J Exp Clin Cancer Res	IF
Yingying Wang	36174863	Int J Biol Macromol	WB,IF

Storage

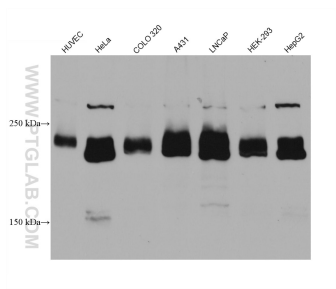
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

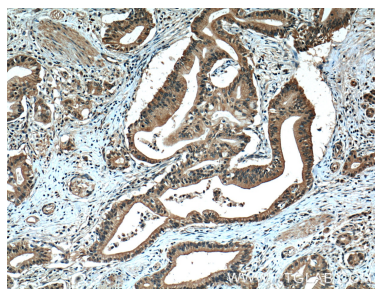
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

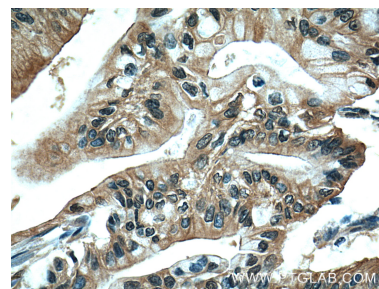
Selected Validation Data



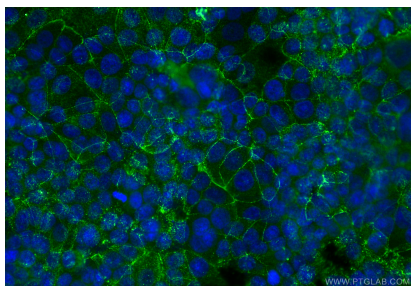
Various lysates were subjected to SDS PAGE followed by western blot with 66452-1-Ig (ZO-1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



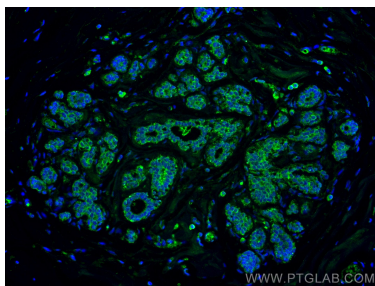
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66452-1-Ig (ZO-1 antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



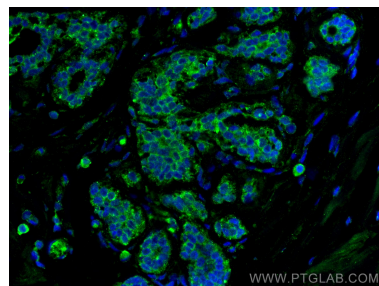
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66452-1-Ig (ZO-1 antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



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).