

For Research Use Only

ZO-1 Polyclonal antibody

Catalog Number: 30487-1-AP

4 Publications



Basic Information

Catalog Number:

30487-1-AP

Concentration:

300 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG33182

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

Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:400-1:1600

IF-P 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

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

Cited Applications:

WB, IF

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HEK-293 cells, HT-29 cells, HUVEC cells, HepG2 cells

IHC : human stomach tissue,

IF-P : mouse heart tissue,

IF/ICC : MCF-7 cells,

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).

Notable Publications

Author	Pubmed ID	Journal	Application
Canmin Wang	39702605	Int J Colorectal Dis	WB,IF
Qijin Lu	39383730	Biomed Pharmacother	WB,IF
Huimin Zhou	38607060	Cells	WB

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:

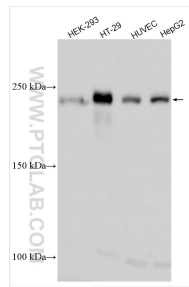
T: 4006900926

E: Proteintech-CN@ptglab.com

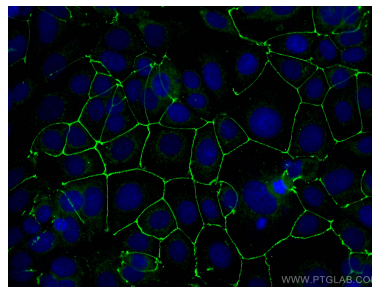
W: ptgcn.com

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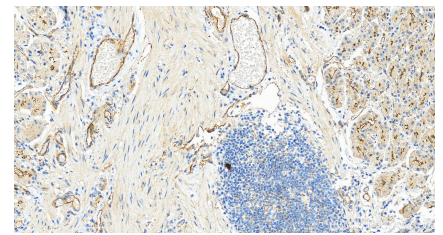
Selected Validation Data



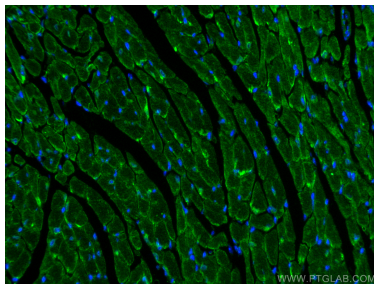
Various lysates were subjected to SDS PAGE followed by western blot with 30487-1-AP (ZO-1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



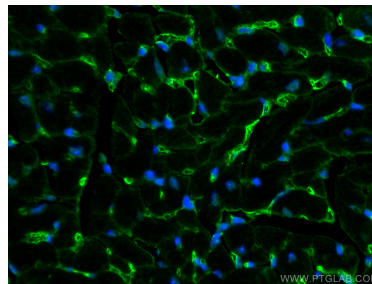
Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using ZO-1 antibody (30487-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 30487-1-AP (ZO-1 antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using ZO-1 antibody (30487-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using ZO-1 antibody (30487-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).