

ZO-1 Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Bovine, Human, Mouse
Published Species	Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Recombinant fragment corresponding to a region within amino acids 373 and 615 of Human ZO-1
Form	Liquid
Concentration	0.24 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7, with 20% glycerol, 1% BSA
Contains	0.025% ProClin 300
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2546334

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:3,000	3 Publications
Immunohistochemistry (IHC)	-	4 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:1,000	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	Assay-dependent	-
Immunocytochemistry (ICC/IF)	Assay-dependent	1 Publication

Product Specific Information

Recommended positive controls: 293T, A431, HeLa, HepG2, A549, H1299, HCT116.

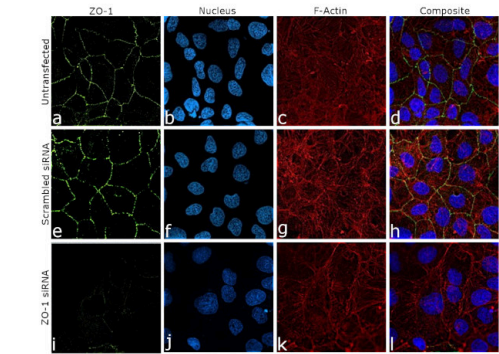
Predicted reactivity: Mouse (100%), Rat (99%), Dog (100%).

Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.

Product Images For ZO-1 Polyclonal Antibody

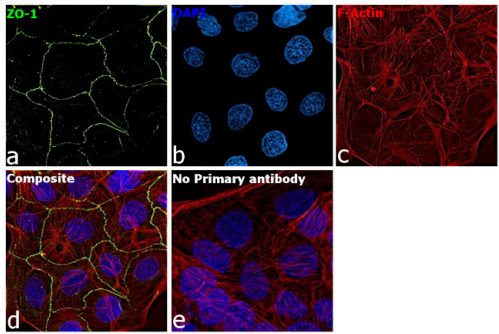
ZO-1 Antibody (PA5-28858)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. Caco-2 cells were transfected with ZO-1 siRNA and decrease in signal intensity was observed in ICC application using Anti-ZO-1 Polyclonal Antibody (Product # PA5-28858). {KD}



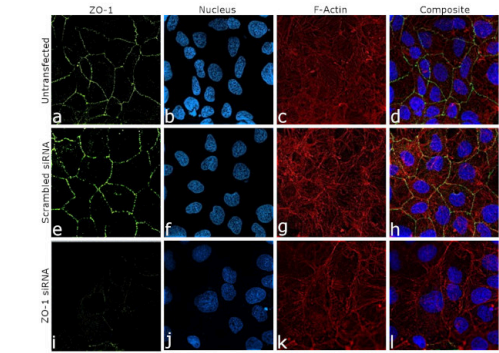
ZO-1 Antibody (PA5-28858) in ICC/IF

Immunofluorescence analysis of ZO-1 was performed using 90% confluent log phase Caco-2 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with ZO-1 Polyclonal Antibody (Product # PA5-28858) at 1:100 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32790), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300 dilution). Panel d represents the merged image showing Junctional localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



ZO-1 Antibody (PA5-28858) in ICC/IF

Knockdown of ZO-1 was achieved by transfecting Caco-2 cells with ZO-1 specific siRNA (Silencer® select Product # s14155, s14156). Immunofluorescence analysis was performed on untransfected Caco-2 cells (panel a-d), transfected with non-specific scrambled siRNA (panels e-h) and transfected with ZO-1 specific siRNA (panel i-l). Cells were fixed, permeabilized, and labelled with ZO-1 Polyclonal Antibody (Product # PA5-28858, 1:100 dilution) followed by Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32790), (1:2000 dilution). Nuclei (blue) were stained using ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962), and Rhodamine Phalloidin (Product # R415, 1:300 dilution) was used for cytoskeletal F-actin (Red) staining. Reduction in signal of specific signal was observed upon siRNA mediated knockdown (panel i-l) confirming specificity of the antibody to ZO-1 (Green). The Images were captured at 60X magnification.



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Western Blot (3)

<p>Folia morphologica</p> <p>Curcumin reduces blood-nerve barrier abnormalities and cytotoxicity to endothelial cells and pericytes induced by cisplatin.</p> <p>"PA5-28858 was used in Western Blotting to investigate if cisplatin causes blood-nerve barrier disruption in the nerves and might result in neuropathy."</p> <p>Authors: Kobutree P,Tothonglor A,Roumwong A,Jindatip D,Agthong S</p>	<p>Year 2023</p> <p>Species Human</p> <p>Dilution 1:200</p>
<p>Frontiers in immunology</p> <p>Anesthesia and Surgery Impair Blood-Brain Barrier and Cognitive Function in Mice.</p> <p>"PA5-28858 was used in Western Blotting to promote mechanistic studies of postoperative cognitive impairment, including postoperative delirium."</p> <p>Authors: Yang S,Gu C,Mandeville ET,Dong Y,Esposito E,Zhang Y,Yang G,Shen Y,Fu X,Lo EH,Xie Z</p>	<p>Year 2023</p> <p>Species Mouse</p> <p>Dilution 1:500</p>

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Immunohistochemistry (4)

<p>Journal of lipid research</p> <p>Combining ASBT inhibitor and FGF15 treatments enhances therapeutic efficacy against cholangiopathy in female but not male Cyp2c70 KO mice.</p> <p>"Published figure using ZO-1 polyclonal antibody (Product # PA5-28858) in Immunohistochemistry"</p> <p>Authors: Hasan MN,Chen J,Matye D,Wang H,Luo W,Gu L,Clayton YD,Du Y,Li T</p>	<p>Year 2023</p>
<p>Frontiers in pharmacology</p> <p>miR-4456/CCL3/CCR5 Pathway in the Pathogenesis of Tight Junction Impairment in Chronic Obstructive Pulmonary Disease.</p> <p>"Published figure using ZO-1 polyclonal antibody (Product # PA5-28858) in Immunocytochemistry"</p> <p>Authors: Yu W,Ye T,Ding J,Huang Y,Peng Y,Xia Q,Cuntai Z</p>	<p>Year 2021</p>

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IHC (P) (1) ICC/IF (1)

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