

# ZO-1 Monoclonal Antibody (ZO1-1A12)

## Product Details

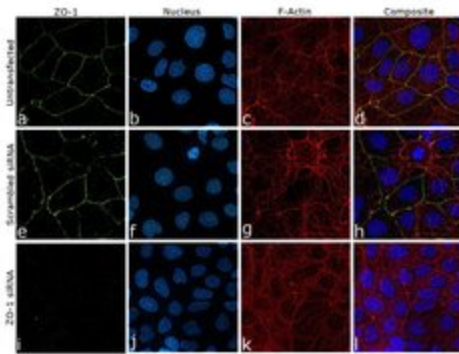
Size	100 µg
Species	Dog, Human, Mouse, Rhesus monkey
Published Species	Tag, Rat, Pig, Reptile, Non-human primate, Virus, Mammal, Sheep, Bovine, Hamster, Fish, Zebrafish, Human, Mouse, Chicken, Rhesus monkey, Xenopus, Guinea pig, Dog, Rabbit
Expression System	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	ZO1-1A12
Conjugate	Unconjugated
Immunogen	Human recombinant ZO-1 fusion protein encompassing amino acids 334-634
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage Conditions	-20°C
RRID	AB_2533147

Applications	Tested Dilution	Publications
ELISA (ELISA)	0.1-1.0 µg/mL	-
Immunocytochemistry (ICC)	5-10 µg/mL	166 Publications
Immunofluorescence (IF)	5-10 µg/mL	102 Publications
Western Blot (WB)	1-2 µg/mL	78 Publications
Flow Cytometry (Flow)	-	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	22 Publications
Immunohistochemistry (IHC)	-	119 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	-	17 Publications
Immunohistochemistry - Free Floating (IHC (Free))	-	2 Publications
Immunoprecipitation (IP)	-	5 Publications
Miscellaneous PubMed (Misc)	-	84 Publications

## Product Specific Information

33-9100 has been successfully used in ELISA, Immunofluorescence and Western Blot analysis of ZO-1.

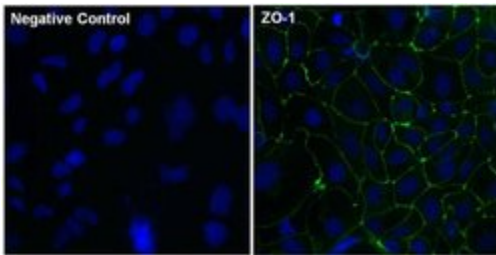
## Advanced Verification Data



### ZO-1 Antibody (33-9100)

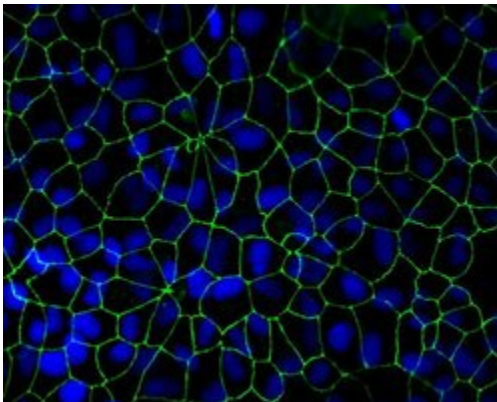
Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. Caco-2 cells were transfected with ZO-1 siRNA and decrease in signal intensity was observed in ICC application using Anti-ZO-1 Monoclonal Antibody (ZO1-1A12) (Product # 33-9100). Knockdown validation info.

## Product Images For ZO-1 Monoclonal Antibody (ZO1-1A12)



### ZO-1 Antibody (33-9100) in IF

Immunofluorescent analysis of ZO-1 (green) in Caco-2 cells. The cells were fixed with 4% paraformaldehyde for 15 minutes and blocked with 3% Blocker BSA (Product # 37525) in PBS for 15 minutes at room temperature. Cells were stained with or without ZO-1 mouse monoclonal antibody (Product # 33-9100), at a concentration of 5 µg/mL for 1 hour at room temperature, and then incubated with a Goat anti-Mouse IgG (H+L) Superclonal Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:1000 for 1 hour at room temperature (both panels, green). Nuclei (both panels, blue) were stained with Hoechst 33342 dye (Product # 62249). Images were taken on a Thermo Scientific ToxInsight at 20X magnification.



### ZO-1 Antibody (33-9100) in IF

Immunofluorescent detection of Zo-1 in MDCK cells. Confluent monolayers were fixed in 50%methanol/50%Acetone, blocked for at least 30 minutes in 1% BSA then incubated 2 hours with a Zo-1 monoclonal antibody (Product # 33-9100) at 5 µg/mL, washed, then incubated 1 hour with Alexa Fluor 488 conjugated Donkey anti-Mouse secondary antibody (Product # A-21202) at a dilution of 1:2000. Cells were counterstained with DAPI (blue). Coverslips were mounted with Prolong Gold Antifade reagent (Product # P36930) and imaged at 40X. Images generated by Joell Solan in Paul Lampe Lab at the Fred Hutchinson cancer Research Center.

[View more figures on thermofisher.com](https://www.thermofisher.com)

## Immunofluorescence (102)

Frontiers in molecular neuroscience

### Glial Cells in the Fish Retinal Nerve Fiber Layer Form Tight Junctions, Separating and Surrounding Axons.

"33-9100 was used in Immunohistochemistry-immunofluorescence to investigate the nerve fibre layer of the cichlid fish, *Astatotilapia burtoni*, for components that might regulate the extracellular environment."

Authors: Garcia-Pradas L, Gleiser C, Wizenmann A, Wolburg H, Mack AF

**Species**  
Fish

**Dilution**  
1:100

**Year**  
2020

mSphere

### Modeling Group B *Streptococcus* and Blood-Brain Barrier Interaction by Using Induced Pluripotent Stem Cell-Derived Brain Endothelial Cells.

"33-9100 was used in Immunocytochemistry-immunofluorescence to evaluate whether induced pluripotent stem cell-derived brain microvascular endothelial cells are appropriate for modelling bacterial interaction with the blood-brain barrier."

Authors: Kim BJ, Bee OB, McDonagh MA, Stebbins MJ, Palecek SP, Doran KS, Shusta EV

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2019

[View more IF references on thermofisher.com](#)

## Immunohistochemistry (119)

Frontiers in molecular neuroscience

### Glial Cells in the Fish Retinal Nerve Fiber Layer Form Tight Junctions, Separating and Surrounding Axons.

"33-9100 was used in Immunohistochemistry-immunofluorescence to investigate the nerve fibre layer of the cichlid fish, *Astatotilapia burtoni*, for components that might regulate the extracellular environment."

Authors: Garcia-Pradas L, Gleiser C, Wizenmann A, Wolburg H, Mack AF

**Species**  
Fish

**Dilution**  
1:100

**Year**  
2020

Stem cells international

### Generation of Retinal Organoids with Mature Rods and Cones from Urine-Derived Human Induced Pluripotent Stem Cells.

"33-9100 was used in Immunohistochemistry to study the ability of urine cells that have been reprogrammed into human induced pluripotent stem cells to differentiate towards retinal fates and form 3D retinal organoids."

Authors: Li G, Xie B, He L, Zhou T, Gao G, Liu S, Pan G, Ge J, Peng F, Zhong X

**Species**  
Human

**Dilution**  
1:400

**Year**  
2020

[View more IHC references on thermofisher.com](#)

## More applications with references on thermofisher.com

ICC (166)

WB (78)

Misc (84)

IHC (P) (17)

IHC (F) (22)

IHC (PFA) (1)

IHC (Free) (2)

Flow (3)

IP (5)

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