

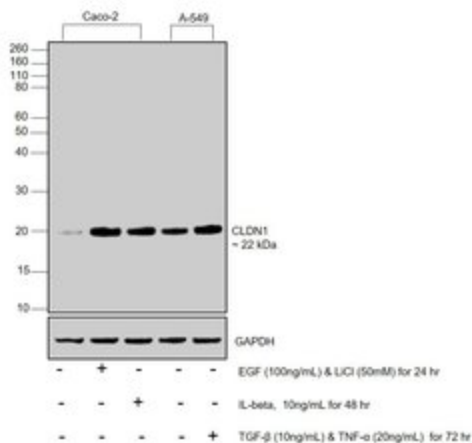
Claudin 1 Polyclonal Antibody

Product Details

Size	100 µg
Species	Chicken, Human, Rat
Published Species	Tag, Pig, Rat, Non-human primate, Virus, Hamster, Bovine, Human, Mouse, Chicken, Dog, C. elegans
Expression System	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide derived from the C-terminus of the human Claudin-1 protein
Form	Liquid
Concentration	0.25 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage Conditions	-20°C
RRID	AB_2533916

Applications	Tested Dilution	Publications
ELISA (ELISA)	0.1-1.0 µg/mL	-
Immunofluorescence (IF)	5-10 µg/mL	30 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:20-1:200	9 Publications
Western Blot (WB)	0.25 - 2 µg/mL	61 Publications
Immunocytochemistry (ICC)	-	23 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	10 Publications
Immunohistochemistry (IHC)	-	23 Publications
Immunoprecipitation (IP)	-	6 Publications
Miscellaneous PubMed (Misc)	-	8 Publications

Advanced Verification Data



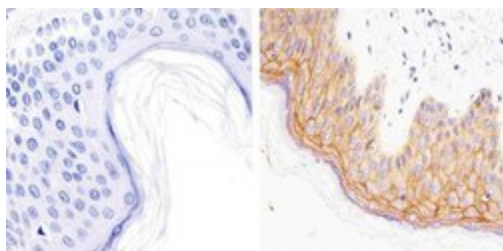
Claudin 1 Antibody (51-9000)

Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot using Anti-Claudin 1 Polyclonal Antibody (Product # 51-9000), shows increased expression of CLDN1 in Caco-2 cell line upon EGF with LiCl and IL-beta treatment and A549 treated with TGF-β with TNF treatment. Cell treatment validation info.

Product Images For Claudin 1 Polyclonal Antibody

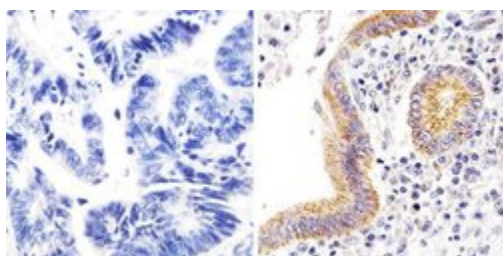
Claudin 1 Antibody (51-9000) in IHC (P)

Immunohistochemistry analysis of Claudin-1 showing staining in the cytoplasm and membrane of paraffin-embedded human skin tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H₂O₂-methanol for 15 min at room temperature, washed with ddH₂O and PBS, and then probed with a Claudin-1 Rabbit Polyclonal Antibody (Product # 51-9000) diluted in 3% BSA-PBS at a dilution of 1:100 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Claudin 1 Antibody (51-9000) in IHC (P)

Immunohistochemistry analysis of Claudin-1 showing staining in the membrane of paraffin-embedded human colon carcinoma (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H₂O₂-methanol for 15 min at room temperature, washed with ddH₂O and PBS, and then probed with a Claudin-1 Rabbit Polyclonal Antibody (Product # 51-9000) diluted in 3% BSA-PBS at a dilution of 1:20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



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Western Blot (61)

Toxins

Effects of Claudin-1 on the Action of *Clostridium perfringens* Enterotoxin in Caco-2 Cells.

"51-9000 was used in Western Blotting to show that CLDN-1 positively and negatively influences Clostridium perfringens enterotoxin (CPE) action."

Authors: Mehdizadeh Gohari I, Li J, Navarro M, Uzal F, McClane B

Species
Human

Dilution
Not Cited

Year
2019

Cells

Syncytiotrophoblast of Placentae from Women with Zika Virus Infection Has Altered Tight Junction Protein Expression and Increased Paracellular Permeability.

"51-9000 was used in Western Blotting to determine whether ZIKV can open the paracellular pathway of STB cells which have been seen to be resistant to ZIKV infections."

Authors: Miranda J, Martín-Tapia D, Valdespino-Vázquez Y, Alarcón L, Espejel-Nuñez A, Guzmán-Huerta M, Muñoz-Medina JE, Shibayama M, Chávez-Munguía B, Estrada-Gutiérrez G, Lievano S, Ludert JE, González-Mariscal L

Species
Human

Dilution
1:1000

Year
2019

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

Immunohistochemistry (23)

The Journal of clinical investigation

Epithelial HIF-1/claudin-1 axis regulates barrier dysfunction in eosinophilic esophagitis.

"51-9000 was used in Western Blotting to reveal HIF-1's critical role in maintaining barrier and highlight the HIF-1/claudin-1 axis as a potential therapeutic target for EoE."

Authors: Masterson JC, Biette KA, Hammer JA, Nguyen N, Capocelli KE, Saeedi BJ, Harris RF, Fernando SD, Hosford LB, Kelly CJ, Campbell EL, Ehrentraut SF, Ahmed FN, Nakagawa H, Lee JJ, McNamee EN, Glover LE, Colgan SP, Furuta GT

Species
Mouse

Dilution
Not Cited

Year
2019

American journal of physiology. Gastrointestinal and liver physiology

Knockout of CIC-2 reveals critical functions of adherens junctions in colonic homeostasis and tumorigenicity.

"51-9000 was used in Immunohistochemistry to demonstrate that in the absence of CIC-2, adherens junctions are disrupted, revealing critical functions of the junctional structures, such as maintenance of homeostasis and differentiation."

Authors: Jin Y, Ibrahim D, Magness ST, Blikslager AT

Species
Not Applicable

Dilution
1:500

Year
2018

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

More applications with references on thermofisher.com

ICC (23) IHC (P) (9) Misc (8) IHC (F) (10) IF (30) IP (6)

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