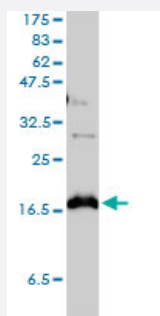


CLDN1 monoclonal antibody (M01), clone 1C5-D9

Catalog # H00009076-M01

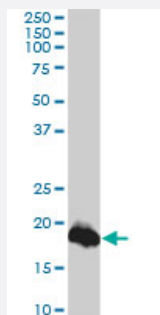
Size 100 ug

Applications



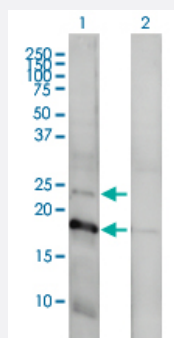
Western Blot (Cell lysate)

CLDN1 monoclonal antibody (M01), clone 1C5-D9. Western Blot analysis of CLDN1 expression in PRC/PRF/5.



Western Blot (Cell lysate)

CLDN1 monoclonal antibody (M01), clone 1C5-D9. Western Blot analysis of CLDN1 expression in A-431 (Cat # L015V1).

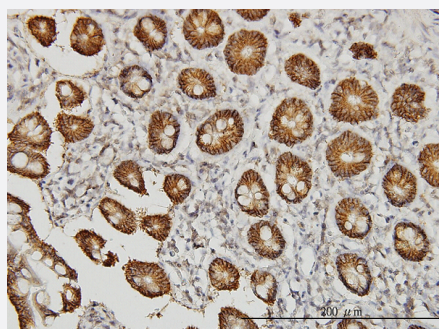


Western Blot (Transfected lysate)

Western Blot analysis of CLDN1 expression in transfected 293T cell line by CLDN1 monoclonal antibody (M01), clone 1C5-D9.

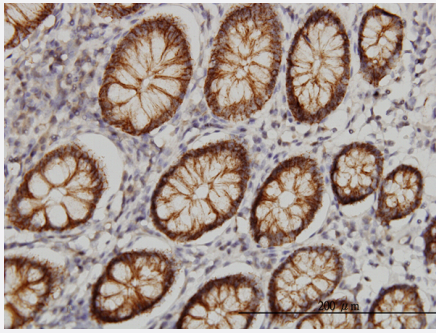
Lane 1: CLDN1 transfected lysate(23 KDa).

Lane 2: Non-transfected lysate.



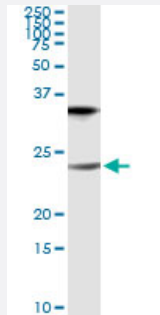
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to CLDN1 on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 3 ug/ml]



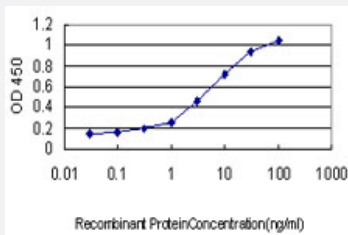
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to CLDN1 on formalin-fixed paraffin-embedded human colon. [antibody concentration 5 ug/ml]



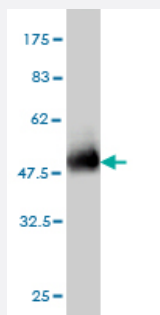
Immunoprecipitation

Immunoprecipitation of CLDN1 transfected lysate using anti-CLDN1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with CLDN1 MaxPab rabbit polyclonal antibody.



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CLDN1 is approximately 0.03ng/ml as a capture antibody.



Western Blot detection against Immunogen (48.95 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a full length recombinant CLDN1.

Immunogen

CLDN1 (AAH12471.1, 1 a.a. ~ 211 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Sequence	MANAGLQLLGFILAFILGWIGAVSTALPQWRIYSYAGDNVTAQAMYEWLWMSCVSQSTGQIQCKV FDSLLNLSSTLQATRALMVVGILLGVIAIFVATVGMKCMKCLEDDEVQKMRMAVIGGAIFLLAGLAIL VATAWYGNRIVQEFYDPMTPVNARYEFGQALFTGWAAASLCLLGALLCCSCPRKTTSYTPRPY PKPAPSSGKDYV
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (90); Rat (90)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (48.95 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

CLDN1 monoclonal antibody (M01), clone 1C5-D9. Western Blot analysis of CLDN1 expression in PRC/PRF/5.

[Protocol Download](#)

- Western Blot (Cell lysate)

CLDN1 monoclonal antibody (M01), clone 1C5-D9. Western Blot analysis of CLDN1 expression in A-431 (Cat # L015V1).

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of CLDN1 expression in transfected 293T cell line by CLDN1 monoclonal antibody (M01), clone 1C5-D9.

Lane 1: CLDN1 transfected lysate(23 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to CLDN1 on formalin-fixed paraffin-embedded human small intestine. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to CLDN1 on formalin-fixed paraffin-embedded human colon. [antibody concentration 5 ug/ml]

[Protocol Download](#)

- Immunoprecipitation

Immunoprecipitation of CLDN1 transfected lysate using anti-CLDN1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with CLDN1 MaxPab rabbit polyclonal antibody.

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CLDN1 is approximately 0.03ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — CLDN1

Entrez GeneID	9076
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GeneBank Accession#	BC012471
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Protein Accession#	AAH12471.1
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Gene Name	CLDN1
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Gene Alias	CLD1, ILVASC, SEMP1
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Gene Description	claudin 1
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Omim ID	603718 607626
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Gene Ontology	Hyperlink
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Gene Summary

Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. Loss of function mutations result in neonatal ichthyosis-sclerosing cholangitis syndrome. [provided by RefSeq]

Other Designations

senescence-associated epithelial membrane protein 1

Publication Reference

- [Infection with hepatitis C virus depends on TACSTD2, a regulator of claudin-1 and occludin highly downregulated in hepatocellular carcinoma.](#)

Sekhar V, Pollicino T, Diaz G, Engle RE, Alayli F, Melis M, Kabat J, Tice A, Pomerence A, Altan-Bonnet N, Zamboni F, Lusso P, Emerson SU, Farci P.

PLoS Pathogens 2018 Mar; 14(3):e1006916.

Application: IF, IP, WB, Human, Huh7 cells, Human liver cancer, Primary human hepatocytes

- [Development of a Perfusion Platform for Dynamic Cultivation of in vitro Skin Models.](#)

Strüver K, Friess W, Hedtrich S.

Skin Pharmacology and Physiology 2017 Jun; 30(4):180.

Application: WB-Ce, Human, Human fibroblasts, keratinocytes

- [Mouse homologues of hepatitis C virus human entry factors inhibit the entry of HCV pseudoparticles \(HCVpp\) into human hepatoma cells.](#)

Islam MJ, Amin MB, Uddin MKM, Hikosaka K, Noritake H, Wu Y, Aoto K, Miura N.

BioResearch Communications 2016 Jan; 2(1):128.

Application: WB-Tr, Mouse, NIH/3T3 cells

- [Hepatitis C Virus Sensing by Human Trophoblasts Induces Innate Immune Responses and Recruitment of Maternal NK Cells: Potential Implications for Limiting Vertical Transmission.](#)

Giugliano S, Petroff MG, Warren BD, Jasti S, Linscheid C, Ward A, Kramer A, Dobrinskikh E, Sheiko MA, Gale M Jr, Golden-Mason L, Winn VD, Rosen HR.

The Journal of Immunology 2015 Oct; 195(8):3737.

Application: IHC, Human, Trophoblast cells

- [Type AB thymoma is not a mixed tumor of type A and type B thymomas, but a distinct type of thymoma.](#)

Miki Y, Hamada K, Yoshino T, Miyatani K, Takahashi K.

Virchows Archiv 2014 Jun; 464(6):725.

Application: IHC-P, Human, Thymoma

- [Phospho- \$\Delta\$ Np63 \$\alpha\$ regulates AQP3, ALOX12B, CASP14 and CLDN1 expression through transcription and microRNA modulation.](#)

Ratovitski EA.

FEBS Letters 2013 Nov; 587(21):3581.

Application: WB-Tr, Human, SCC-11, SCC-11M, SCC-25, SCC-25CP cells

- [Establishment of a Human Corneal Epithelial Cell Line Lacking the Functional TACSTD2 Gene as an In Vitro Model for Gelatinous Drop-Like Dystrophy.](#)

Kitazawa K, Kawasaki S, Shinomiya K, Aoi K, Matsuda A, Funaki T, Yamasaki K, Nakatsukasa M, Ebihara N, Murakami A, Hamuro J, Kinoshita S.

Investigative Ophthalmology & Visual Science 2013 Aug; 54(8):5701.

Application: IS, WB-Ce, Human, imHCE cells

- [HCV glycoprotein E2 is a novel BDCA-2 ligand and acts as an inhibitor of IFN production by plasmacytoid dendritic cells.](#)

Florentin J, Aouar B, Dental C, Thumann C, Firaguay G, Gondois-Rey F, Soumelis V, Baumert TF, Nunès JA, Olive D, Hirsch I, Stranska R.

Blood 2012 Nov; 120(23):4544.

Application: Flow Cyt, Monkey, COS-7 cells

- [Permissiveness of human hepatoma cell lines for HCV infection.](#)

Sainz B Jr, Barretto N, Yu X, Corcoran P, Uprichard SL.

Virology Journal 2012 Jan; 9:30.

Application: IF, Human, Huh7, PLC, Hep3B, HepG2

- [Hepatitis C Virus Infects the Endothelial Cells of the Blood-Brain Barrier.](#)

Fletcher NF, Wilson GK, Murray J, Hu K, Lewis A, Reynolds GM, Stamatakis Z, Meredith LW, Rowe IA, Luo G, Lopez-Ramirez MA, Baumert TF, Weksler B, Couraud PO, Kim KS, Romero IA, Jopling C, Morgello S, Balfe P, McKeating JA.

Gastroenterology 2012 Mar; 142(3):634.

Application: IF, Human, Brain, hCMEC/D3 cells, HBMECs

- [Epigenetically coordinated GATA2 binding is necessary for endothelium-specific endomucin expression.](#)

Kanki Y, Kohro T, Jiang S, Tsutsumi S, Mimura I, Suehiro J, Wada Y, Ohta Y, Ihara S, Iwanari H, Naito M, Hamakubo T, Aburatani H, Kodama T, Minami T.

The EMBO Journal 2011 Jun; 30(13):2582.

Application: Flow Cyt, Human, HMVECs

- [Cigarette smoking reprograms apical junctional complex molecular architecture in the human airway epithelium in vivo.](#)

Shaykhiev R, Otaki F, Bonsu P, Dang DT, Teater M, Strulovici-Barel Y, Salit J, Harvey BG, Crystal RG.

Cellular and Molecular Life Sciences 2011 Mar; 68(5):877.

Application: IF, Human, Small airway epithelium

- [Tumor-Associated Calcium Signal Transducer 2 Is Required for the Proper Subcellular Localization of Claudin 1 and 7. Implications in the Pathogenesis of Gelatinous Drop-Like Corneal Dystrophy.](#)

Nakatsukasa M, Kawasaki S, Yamasaki K, Fukuoka H, Matsuda A, Tsujikawa M, Tanioka H, Nagata-Takaoka M, Hamuro J, Kinoshita S.

The American Journal of Pathology 2010 Sep; 177(3):1344.

Application: IF, IHC, Human, Human cornea

- [Novel HCV replication mouse model using human hepatocellular carcinoma xenografts.](#)

Guevin C, Lamarre A, Labonte P.

Antiviral Research 2009 Oct; 84(1):14.

Application: Flow Cyt, Human, Huh7, Huh7-7 cells

- [Three-dimensional Huh7 cell culture system for the study of Hepatitis C virus infection.](#)

Sainz B Jr, TenCate V, Uprichard SL.

Virology Journal 2009 Jul; 6:103.

Application: IF, Human, Huh7 cells

- [Hepatitis C virus association with peripheral blood B lymphocytes potentiates viral infection of liver-derived hepatoma cells.](#)

Stamataki Z, Shannon-Lowe C, Shaw J, Mutimer D, Rickinson AB, Gordon J, Adams DH, Balfe P, McKeating JA.

Blood 2008 Oct; 113(3):585.

Application: Flow Cyt, Human, Human PBMC-derived primary B cells

- [Protein kinase A-dependent step\(s\) in hepatitis C virus entry and infectivity.](#)

Farquhar MJ, Harris HJ, Diskar M, Jones S, Mee CJ, Nielsen SU, Brimacombe CL, Molina S, Toms GL, Maurel P, Howl J, Herberg FW, van Ijzendoorn SC, Balfe P, McKeating JA.

Journal of Virology 2008 Jun; 82(17):8797.

- [CD81 and Claudin 1 Coreceptor Association: Role in Hepatitis C Virus Entry.](#)

Harris HJ, Farquhar MJ, Mee CJ, Davis C, Reynolds GM, Jennings A, Hu K, Yuan F, Deng H, Hubscher SG, Han JH, Balfe P, McKeating JA.

Journal of Virology 2008 Mar; 82(10):5007.

- [Effect of cell polarization on hepatitis C virus viral entry.](#)

Mee CJ, Grove J, Harris HJ, Hu K, Balfe P, McKeating JA.

Journal of Virology 2007 Oct; 82(1):461.

Application: IF, Human, Caco-2, Huh-7.5 cells

Pathway

- [Cell adhesion molecules \(CAMs\)](#)
- [Leukocyte transendothelial migration](#)
- [Pathogenic Escherichia coli infection - EHEC](#)
- [Tight junction](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Hepatitis C](#)
- [Substance Abuse](#)
- [Tobacco Use Disorder](#)