

Resource Summary Report

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Claudin 5 Monoclonal Antibody (4C3C2)

RRID:AB_2533200

Type: Antibody

Proper Citation

(Thermo Fisher Scientific Cat# 35-2500, RRID:AB_2533200)

Antibody Information

URL: http://antibodyregistry.org/AB_2533200

Proper Citation: (Thermo Fisher Scientific Cat# 35-2500, RRID:AB_2533200)

Target Antigen: Claudin 5

Host Organism: mouse

Clonality: monoclonal

Comments: Applications: ELISA, IHC-P, WB

Info: Independent validation by the NYU Lagone was performed for: IHC. This antibody was found to have the following characteristics: Functional in human:FALSE, NonFunctional in human:FALSE, Functional in animal:FALSE, NonFunctional in animal:FALSE

Consolidation 6/2023: AB_10836645

Antibody Name: Claudin 5 Monoclonal Antibody (4C3C2)

Description: This monoclonal targets Claudin 5

Target Organism: rat, mouse, human

Clone ID: Clone 4C3C2

Defining Citation: [PMID:24225006](#), [PMID:20029988](#), [PMID:22886143](#), [PMID:21364989](#), [PMID:22772449](#), [PMID:22509281](#), [PMID:24278454](#), [PMID:26932603](#), [PMID:15550553](#), [PMID:16087703](#), [PMID:26356851](#), [PMID:18085708](#), [PMID:19997118](#), [PMID:25411471](#), [PMID:12600828](#), [PMID:24828040](#), [PMID:24510882](#), [PMID:19570856](#), [PMID:24324834](#), [PMID:20627932](#), [PMID:12403818](#), [PMID:23567221](#), [PMID:17585317](#), [PMID:17931362](#), [PMID:20044634](#), [PMID:27421304](#), [PMID:25151950](#), [PMID:26568310](#), [PMID:26269793](#), [PMID:17306334](#), [PMID:21271259](#), [PMID:17300235](#), [PMID:26966180](#), [PMID:26377465](#), [PMID:19891526](#), [PMID:26136889](#), [PMID:19153196](#), [PMID:25795781](#), [PMID:25440958](#),

[PMID:22397627](#), [PMID:17899156](#), [PMID:22684283](#), [PMID:26518252](#), [PMID:12898148](#),
[PMID:25533682](#), [PMID:21082371](#), [PMID:18787072](#), [PMID:17965884](#), [PMID:19500802](#),
[PMID:22064711](#), [PMID:25264329](#), [PMID:19675210](#), [PMID:25075044](#), [PMID:23298398](#),
[PMID:25807533](#), [PMID:21762372](#), [PMID:21356382](#), [PMID:24858797](#), [PMID:25337791](#),
[PMID:23253490](#), [PMID:18817843](#), [PMID:17560040](#), [PMID:15226402](#), [PMID:25816133](#),
[PMID:23773766](#), [PMID:25925411](#), [PMID:20554518](#), [PMID:26333872](#), [PMID:22929066](#),
[PMID:16505274](#), [PMID:22170432](#), [PMID:16239402](#), [PMID:22547149](#), [PMID:21959309](#),
[PMID:18765838](#), [PMID:24294371](#), [PMID:20678804](#), [PMID:21529785](#), [PMID:19855054](#),
[PMID:19718040](#), [PMID:25793105](#), [PMID:20947498](#), [PMID:22833424](#), [PMID:24708805](#),
[PMID:26870320](#), [PMID:21983942](#), [PMID:18602987](#)

Antibody ID: AB_2533200

Vendor: Thermo Fisher Scientific

Catalog Number: 35-2500

Record Creation Time: 20251213T073921+0000

Record Last Update: 20260225T231141+0000

Ratings and Alerts

- Independent validation by the NYU Lagone was performed for: IHC. This antibody was found to have the following characteristics: Functional in human:FALSE, NonFunctional in human:FALSE, Functional in animal:FALSE, NonFunctional in animal:FALSE - NYU Langone's Center for Biospecimen Research and Development <https://med.nyu.edu/research/scientific-cores-shared-resources/center-biospecimen-research-development>

No alerts have been found for Claudin 5 Monoclonal Antibody (4C3C2).

Data and Source Information

Source: [Antibody Registry](#)

Usage and Citation Metrics

We found 57 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Siqueira M, et al. (2026) Ethanol Alters DNMT1/3a/3b Expression Profile, Promotes Persistent DNA Hypomethylation in Human Brain Endothelial Cells and Impairs Late Cortical Angiogenesis. Journal of neurochemistry, 170(2), e70375.

O'Donnell BL, et al. (2026) Pannexin 1 phosphorylation sites differentially modulate channel activity and physiological outcomes. bioRxiv : the preprint server for biology.

Ma Y, et al. (2026) Photobiomodulation repairs the blood-spinal cord barrier in a mouse model of spinal cord injury. *Neural regeneration research*, 21(6), 2475.

Sharma K, et al. (2026) Retinal ganglion cell survival and functional maturation in transiently vascularized human retinal organoids. *Cell stem cell*.

McCarthy E, et al. (2026) The impact of cannabidiol (CBD) in hyperglycemic zebrafish (*Danio rerio*). *PloS one*, 21(5), e0348975.

Wang C, et al. (2025) Human-induced pluripotent stem cell-derived neural stem cell exosomes improve blood-brain barrier function after intracerebral hemorrhage by activating astrocytes via PI3K/AKT/MCP-1 axis. *Neural regeneration research*, 20(2), 518.

Krolak T, et al. (2025) Brain endothelial gap junction coupling enables rapid vasodilation propagation during neurovascular coupling. *Cell*, 188(18), 5003.

Manji A, et al. (2025) The role of aging on endothelial cell-cell junctions and pulmonary microvascular permeability in male mice. *Physiological reports*, 13(24), e70686.

Hikosaka M, et al. (2025) Maternal immune activation followed by peripubertal stress combinedly produce reactive microglia and confine cerebellar cognition. *Communications biology*, 8(1), 296.

Lei Y, et al. (2025) Deubiquitinase USP9X controls Wnt signaling for CNS vascular formation and barrier maintenance. *Developmental cell*, 60(11), 1618.

Banks DB, et al. (2024) Nongenomic ER α -AMPK Signaling Regulates Sex-Dependent Bcrp Transport Activity at the Blood-Brain Barrier. *Endocrinology*, 165(8).

Sobierajski E, et al. (2024) Vascular Development of Fetal and Postnatal Neocortex of the Pig, the European Wild Boar *Sus scrofa*. *The Journal of comparative neurology*, 532(12), e70011.

Jeong I, et al. (2024) The evolutionarily conserved choroid plexus contributes to the homeostasis of brain ventricles in zebrafish. *Cell reports*, 43(6), 114331.

Weber CM, et al. (2024) Impacts of APOE- ϵ 4 and exercise training on brain microvascular endothelial cell barrier function and metabolism. *EBioMedicine*, 111, 105487.

Yang N, et al. (2024) Trophoblastic signals facilitate endometrial interferon response and lipid metabolism, ensuring normal decidualization. *Cell reports*, 43(6), 114246.

Wang K, et al. (2024) The protective effects of Axitinib on blood-brain barrier dysfunction and ischemia-reperfusion injury in acute ischemic stroke. *Experimental neurology*, 379, 114870.

Pineda SS, et al. (2024) Single-cell dissection of the human motor and prefrontal cortices in ALS and FTLN. *Cell*, 187(8), 1971.

Gayger-Dias V, et al. (2024) Changes in Astroglial Water Flow in the Pre-amyloid Phase of the STZ Model of AD Dementia. *Neurochemical research*, 49(7), 1851.

Kang M, et al. (2024) Oligodendrocyte-derived laminin- α 1 regulates the blood-brain barrier and CNS myelination in mice. *Cell reports*, 43(5), 114123.

Wang W, et al. (2024) Identification of hypoxic macrophages in glioblastoma with therapeutic potential for vasculature normalization. *Cancer cell*, 42(5), 815.