Product Datasheet

Collagen IV Antibody - Azide and BSA Free
NBP1-26549

Unit Size: 0.1 mg

Store at 4C. Do not freeze.

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Reviews: 1 Publications: 20

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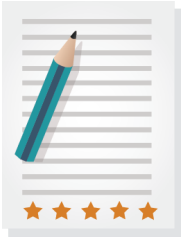
Updated 2/21/2025 v.20.1



NBP1-26549

Collagen IV Antibody - Azide and BSA Free

Product Information

Unit Size	0.1 mg
Concentration	0.4 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	No Preservative
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	0.1M BBS (pH 8.2)

Product Description

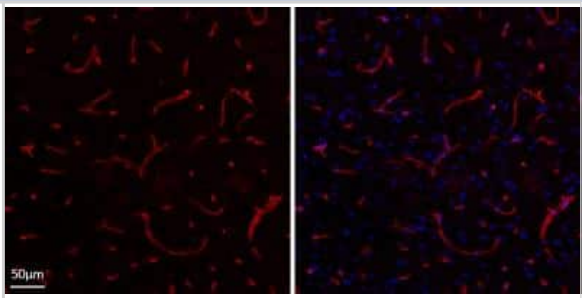
Host	Goat
Gene ID	1282
Gene Symbol	COL4A1
Species	Human, Mouse, Rat, Monkey
Reactivity Notes	Monkey reactivity reported in scientific literature (PMID: 27417518), Mouse reactivity reported in scientific literature (PMID: 32479919), Rat reactivity reported in scientific literature (PMID: 30362896).
Specificity/Sensitivity	Reacts with conformational determinants on human type IV collagen as demonstrated by ELISA. May react with type IV collagen from other species. Exhibits <10% cross reactivity with collagen type I, II, III, V and VI. The antibody has not been tested for reactivity with other ECM proteins (e.g., laminin, fibronectin).
Immunogen	Goats were hyperimmunized with human type IV collagen.

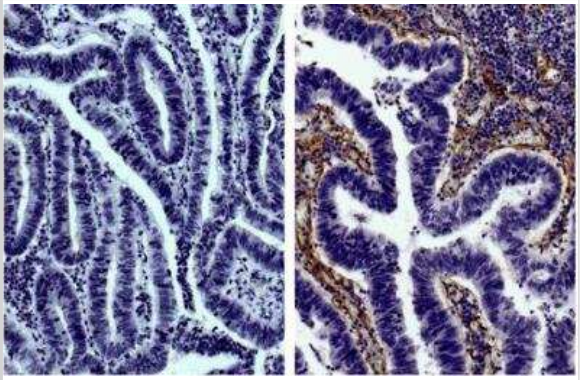
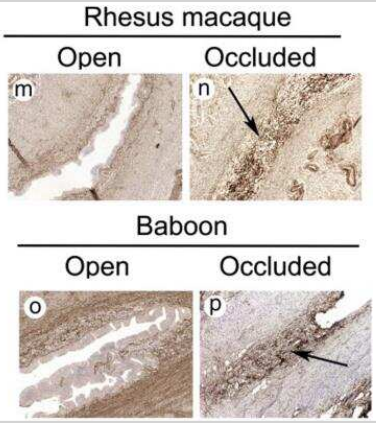
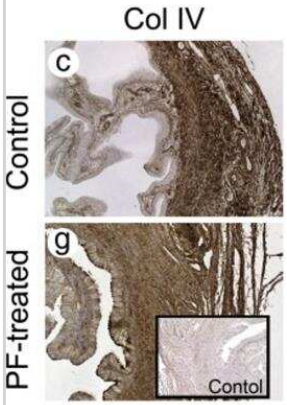
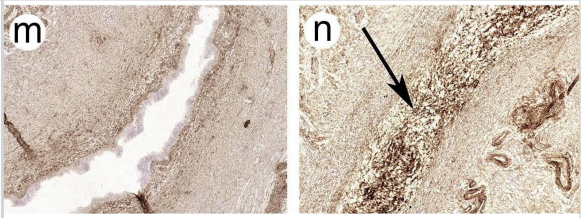
Product Application Details

Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:100-1:2000, ELISA 1:1000-1:4000, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1:10-1:500, Immunohistochemistry-Frozen
Application Notes	IHC, IHC-FR reported in (PMID: 32029859), ICC/IF reported in (PMID: 32479919), IHC-P reported in (PMID: 27417518).

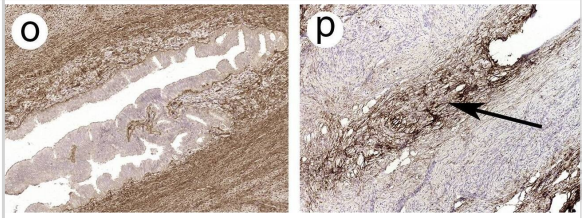
Images

Immunohistochemistry-Frozen: Collagen IV Antibody [NBP1-26549] - Left panel: NBP1-26549 signal, identifying Collagen IV in extracellular basement membrane of brain endothelial cells. Right panel: counterstained image with DAPI. Mouse brain tissue (12um thickness) was incubated overnight with NBP1-26549 (1:400) in PBS 1x at 4C. The day after, the slide was washed 3 x PBS 1x and then incubated with secondary anti-goat antibody (Alex Fluor 568-conjugated), 1:1000 for 2 hours at r.t. After counterstaining with DAPI, image was acquired with confocal microscopy. Left panel: NBP1-26549 signal, identifying Collagen IV in extracellular basement membrane of brain endothelial cells. Right panel: counterstained image with DAPI. Image from verified customer review.



Immunohistochemistry-Paraffin: Collagen IV Antibody [NBP1-26549] - Human gastric cancer tissue was stained with Goat IgG-UNLB isotype control (left) and Goat Anti-Type IV Collagen-UNLB; (right) followed by Swine Anti-Goat IgG(H+L), Human/Rat/Mouse SP ads-HRP DAB, and hematoxylin.	
Immunohistochemistry: Collagen IV Antibody [NBP1-26549] - Col-IV in the rhesus macaque and baboon intramural tube. Images of open fallopian tube (m, o) were obtained from control animals. Occluded tube (n, p) were from animals treated with 5% PF. Arrows indicate fibrotic response. All images were captured at original magnification 200x. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/27417518) licensed under a CC-BY license.	
Immunohistochemistry: Collagen IV Antibody [NBP1-26549] - Photographs showing Col-IV staining in rhesus macaque ampulla. Staining for Col-IV was undetectable from the epithelium. No increase in collagen was detected in the PF-treated animals. Control inset shows staining with an irrelevant antibody. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/27417518) licensed under a CC-BY license.	
Immunohistochemistry: Collagen IV Antibody [NBP1-26549] - Photographs showing H&E staining & immunostaining for Col-I, Col-III, Col-IV & Col-V in the rhesus macaque & baboon intramural tube. Images of open fallopian tube (a, c, e, g, i, k, m, o, q & s) were obtained from control animals. Occluded tube (b, d, f, h, j, l, n, p, r & t) were from animals treated with 5% PF. Arrows indicate fibrotic response. All images were captured at original magnification ×200. Insets (frame r & s) show negative control with an irrelevant antibody. Treatment with PF increased collagen immunoreactivity in the lamina propria of the intramural tube. Image collected & cropped by CiteAb from the following publication (https://linkinghub.elsevier.com/retrieve/pii/S0010782416301445), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Immunohistochemistry: Collagen IV Antibody [NBP1-26549] - Photographs showing H&E staining & immunostaining for Col-I, Col-III, Col-IV & Col-V in the rhesus macaque & baboon intramural tube. Images of open fallopian tube (a, c, e, g, i, k, m, o, q & s) were obtained from control animals. Occluded tube (b, d, f, h, j, l, n, p, r & t) were from animals treated with 5% PF. Arrows indicate fibrotic response. All images were captured at original magnification ×200. Insets (frame r & s) show negative control with an irrelevant antibody. Treatment with PF increased collagen immunoreactivity in the lamina propria of the intramural tube. Image collected & cropped by CiteAb from the following publication (https://linkinghub.elsevier.com/retrieve/pii/S0010782416301445), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Koundal S, Chen X, Gursky Z et Al. Divergent brain solute clearance in rat models of cerebral amyloid angiopathy and Alzheimer's disease iScience 2024-11-23 [PMID: 39720539]

Hein M, Qambari H, Yu P et Al. Interpericyte Tunneling Nanotubes Are Nonuniformly Distributed in the Human Macula Invest Ophthalmol Vis Sci 2024-11-14 [PMID: 39540858]

Napit PR, Ali MH, Shakya M et al. Hydrogen sulphide mitigates homocysteine-induced apoptosis and matrix remodelling in mesangial cells through Akt/FOXO1 signalling cascade Cell. Signal. 2019-05-11 [PMID: 31085234]

SK Juin, S Pushpakuma, SC Tyagi, U Sen Glucosidase inhibitor, Nimbidiol ameliorates renal fibrosis and dysfunction in type-1 diabetes Scientific Reports, 2022-12-15;12(1):21707. 2022-12-15 [PMID: 36522378]

Xu M, Tan J, Zhu L et al. Palmitoyltransferase ZDHHC3 Aggravates Nonalcoholic Steatohepatitis by Targeting S-Palmitoylated IRHOM2 Advanced science (Weinheim, Baden-Wurttemberg, Germany) 2023-08-06 [PMID: 37544908]

Chandrakumar S, Santiago Tierno I, Agarwal M et al. Mechanical regulation of retinal vascular inflammation and degeneration in diabetes Diabetes 2023-11-21 [PMID: 37986627] (IHC-Fr, Mouse)

Ma P, Wang S, Geng R et al. MiR-29a-deficiency causes thickening of the basilar membrane and age-related hearing loss by upregulating collagen IV and laminin Frontiers in Cellular Neuroscience 2023-05-18 [PMID: 37275774] (IHC-Fr, WB, Mouse)

Knoll Machado S, Peil H, Kraushaar T et al. Modulation of Extravascular Binding of Recombinant Factor IX Impacts duration of Efficacy in Mouse Models Thrombosis and haemostasis 2023-05-10 [PMID: 37164314] (Immunohistochemistry-Paraffin, Mouse)

Details:
20 µg/mL

BErenger-Currias NM, Mircea M, Adegeest E et al. A gastruloid model of the interaction between embryonic and extra-embryonic cell types Journal of tissue engineering 2022-06-11 [PMID: 35707767] (ICC/IF, Mouse)

WR Swindell, M Randhawa, G Quijas, K Bojanowski, RK Chaudhuri Tetrahexyldecyl Ascorbate (THDC) Degrades Rapidly under Oxidative Stress but Can Be Stabilized by Acetyl Zingerone to Enhance Collagen Production and Antioxidant Effects International Journal of Molecular Sciences, 2021-08-15;22(16):. 2021-08-15 [PMID: 34445461] (IHC, Human)

Kuang, X, Sun, L Et al. A novel missense mutation of COL4A5 gene alter collagen IV alpha 5 chain to cause X-linked Alport syndrome in a Chinese family. Transl Pediatr 2020-10-01 [PMID: 33209720] (IF/IHC, Rat)

Juin SK, Pushpakumar S, Sen U. GYY4137 Regulates Extracellular Matrix Turnover in the Diabetic Kidney by Modulating Retinoid X Receptor Signaling Biomolecules 2021-10-07 [PMID: 34680110]

More publications at http://www.novusbio.com/NBP1-26549

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Products Related to NBP1-26549

HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control
NBP1-97268	Collagen IV Native Protein

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