Product Datasheet

COX-1 Antibody
NB100-867

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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Publications: 5

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Updated 9/9/2025 v.20.1

NB100-867

COX-1 Antibody

Product Information

Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA

Product Description

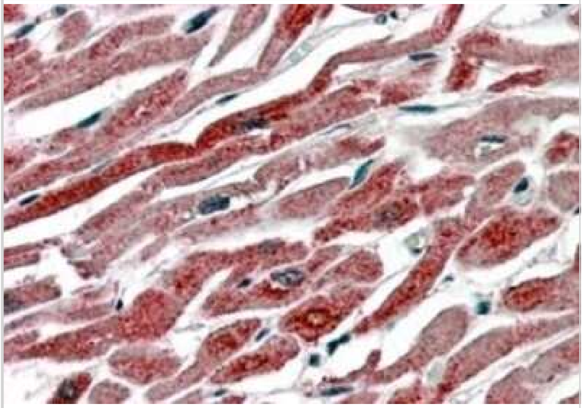
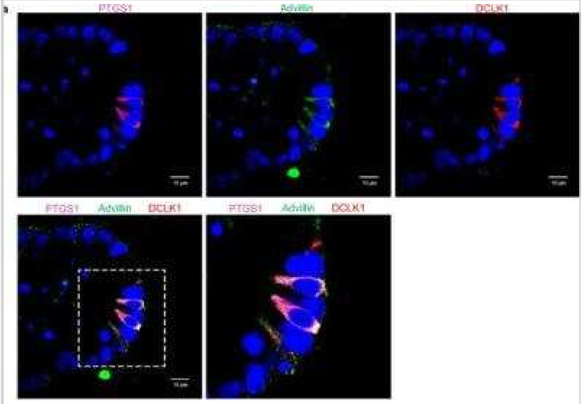
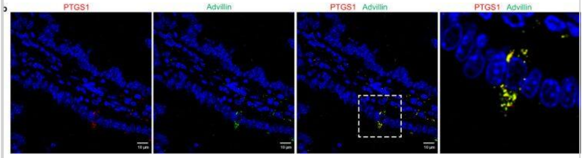
Description	Novus Biologicals Goat COX-1 Antibody (NB100-867) is a polyclonal antibody validated for use in IHC, WB, ELISA and ICC/IF. Anti-COX-1 Antibody: Cited in 3 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Goat
Gene ID	5742
Gene Symbol	PTGS1
Species	Human, Mouse
Specificity/Sensitivity	This antibody is expected to recognise both human isoforms of this protein according to NP_000953.2 and NP_542158.1.
Immunogen	Peptide with sequence C-QDDGPAVERPSTEL corresponding to C-Terminus according to NP_000953.2, NP_542158.1.

Product Application Details

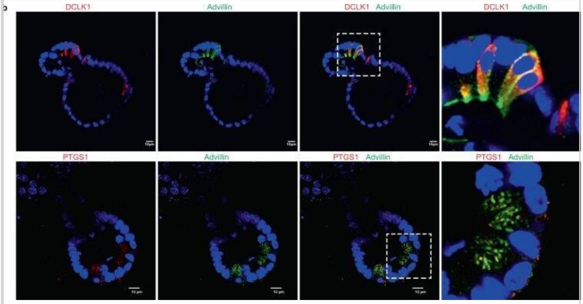
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry, Peptide ELISA
Recommended Dilutions	Western Blot 0.3-1 ug/ml, Immunohistochemistry, Immunohistochemistry-Paraffin 3 - 5 ug/ml, Peptide ELISA 1:32000
Application Notes	Western blot: Approx 70 kDa band observed in lysates of histiocytic lymphoma cell line U937 (calculated MW of 68.7kDa according to NP_000953.2). In paraffin embedded Human Heart shows patchy staining of myocardial fibres in longitudinal section.

Images

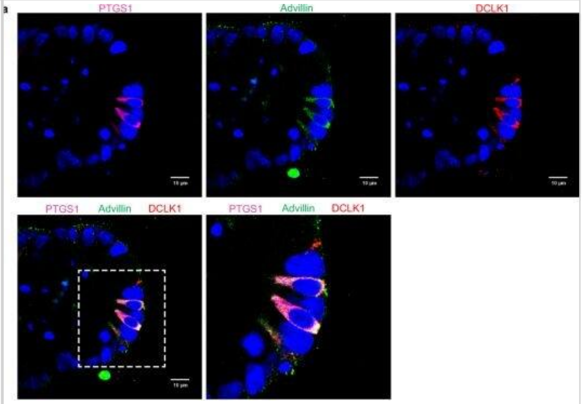
Western Blot: COX-1 Antibody [NB100-867] - Staining (1ug/ml) of U937 cell lysate (35ug protein in RIPA buffer). Detected by chemiluminescence.

Immunohistochemistry-Paraffin: COX-1 Antibody [NB100-867] - Staining (3.8µg/ml) of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-Staining.	
Immunohistochemistry: COX-1 Antibody [NB100-867] - Immunohistochemistry and Virtual Channel confocal microscopy of IL-4 and IL-13 treated enteroids from distal ileum of C57BL/6 J mice, show co-localization of advillin (green), DCLK1 (red) and PTGS1/COX-1 (magenta) within the same cells identified as tuft cells. Nuclei are counter stained with DAPI. Right panel shows higher magnification of boxed area. Image collected and cropped by CiteAb from the following publication (nature.com/articles/s41598-020-65469-0), licensed under a CC-BY license.	
Immunocytochemistry/ Immunofluorescence: COX-1 Antibody [NB100-867] - Intestinal tuft cells express advillin. (a) Immunohistochemistry of paraffin-embedded tissue from distal ileum of C57BL/6 J mice using advillin (green) & DCLK1 (red) antibodies. Nuclei are counter stained with DAPI. Both proteins co-localize in the same cell. Note that not all DCLK1 positive cells are positive for advillin expression. Right panel shows higher magnification of boxed area & shows co-localization of DCLK1 & advillin in a tuft cell. (b) Immunohistochemistry of paraffin embedded tissue from distal ileum of C57BL/6 J mice using advillin (green) & PTGS1 (red) antibodies. Nuclei are counter stained with DAPI. Right panel shows higher magnification of boxed area & co-localization of PTGS1 & advillin in a tuft cell. (c) Immunohistochemistry of cryopreserved tissue from distal ileum of C57BL/6 J mice using Alexa Fluor 568 Phalloidin (red) & advillin (green). Nuclei are counter stained with DAPI. Right panel shows higher magnification of boxed area & co-localization of advillin & F-actin at the apical surface of a tuft cell. Data shown are representative of n = 5 animals. Scale bar represents 10 µm. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32483224), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Immunocytochemistry/ Immunofluorescence: COX-1 Antibody [NB100-867] - In intestinal enteroids, tuft cells express advillin. (a) Immunohistochemistry of enteroids from distal ileum of C57BL/6 J mice shows tuft cell hyperplasia 72 hours post IL-4 & IL-13 treatment. Control refers to untreated enteroids from C57BL/6 J mice. Advillin (green) & DCLK1 (red) co-localization was used to identify tuft cells. Nuclei are counter stained with DAPI. Right panel shows higher magnification of the boxed area. (b) Immunohistochemistry of IL-4 & IL-13 treated enteroids from distal ileum of C57BL/6 J mice, show co-localization in tuft cells of advillin (green) & DCLK1 (red) in the upper panel; & advillin & PTGS1 (red) in the lower panel. Nuclei were counter stained with DAPI. Right panels show higher magnification of boxed area. Data shown are representative of n = 5 animals. Scale bar represents 10 µm. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32483224), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: COX-1 Antibody [NB100-867] - Tuft cells positive for advillin are negative for villin. (a) Immunohistochemistry & Virtual Channel confocal microscopy of IL-4 & IL-13 treated enteroids from distal ileum of C57BL/6 J mice, show co-localization of advillin (green), DCLK1 (red) & PTGS1 (magenta) within the same cells identified as tuft cells. Nuclei are counter stained with DAPI. Right panel shows higher magnification of boxed area. (b) Immunohistochemistry of IL-4 & IL-13 treated enteroids from distal ileum of C57BL/6 J mice show co-localization in tuft cells of advillin (green) with F-actin (red) in the upper panel; & co-localization of advillin (red) & tubulin (green) in the lower panel. Nuclei were counter stained with DAPI. Right panel shows higher magnification of boxed area. Note the co-localization of advillin to the apical tuft that terminates near the perinuclear region of the cells. Advillin appears in vesiculated structures that co-localize with tubulin near the lateral cell surface & in the cytoplasm. (c) Immunohistochemistry of IL-4 & IL-13 treated enteroids from distal ileum of C57BL/6 J mice show the absence of villin (red) from advillin (green) expressing tuft cells. Nuclei are counter stained with DAPI. Right panel shows higher magnification of boxed area. Data shown are representative of n = 5 animals. Scale bar represents 10 µm. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32483224), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Wang J, Ni H, Wang Y et al. Cyclooxygenase-1 deletion in 5 × FAD mice protects against microglia-induced neuroinflammation and mitigates cognitive impairment Translational Neurodegeneration 2025-08-22 [PMID: 40847374]

Giordano I, Pasolli E, Mauriello G. Transcriptomic analysis reveals differential gene expression patterns of Lacticaseibacillus casei ATCC 393 in response to ultrasound stress. Ultrasonics sonochemistry 2024-06-17 [PMID: 38843696]

Wang J, Ni H, Wei I et al. Genetic Deletion of cyclooxygenase-1 ameliorates neuroinflammation and cognitive impairment in 5□FAD mice Research Square 2023-02-03 (WB, ICC/IF, Mouse)

Esmaeilniakooshkghazi A, George SP, Biswas R et al. Mouse intestinal tuft cells express advillin but not villin Scientific Reports 2020-06-01 [PMID: 32483224] (Mouse)

Yokoyama C, Tanabe T. Cloning of human gene encoding prostaglandin endoperoxide synthase and primary structure of the enzyme. Biochem Biophys Res Commun 1989-12-15 [PMID: 2512924]

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Products Related to NB100-867

NBL1-14943	COX-1 Overexpression Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
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HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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