Product Datasheet

Podoplanin Antibody (8.1.1) - BSA Free
NB600-1015

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Reviews: 1 Publications: 24

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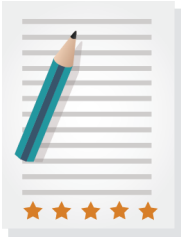
Updated 9/9/2025 v.20.1



NB600-1015

Podoplanin Antibody (8.1.1) - BSA Free

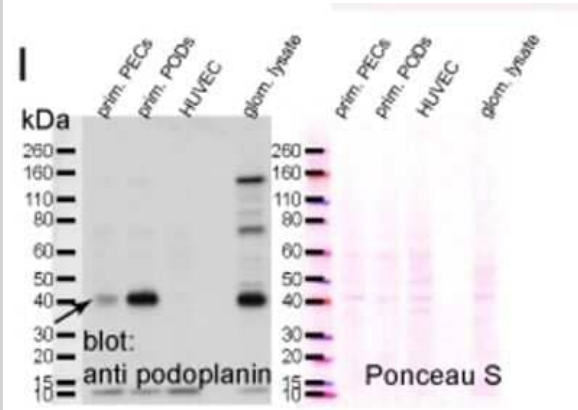
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	8.1.1
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	40 kDa

Product Description	
Description	Novus Biologicals Golden Syrian Hamster Podoplanin Antibody (8.1.1) - BSA Free (NB600-1015) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF and IP. Anti-Podoplanin Antibody: Cited in 23 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Golden Syrian Hamster
Gene ID	10630
Gene Symbol	PDPN
Species	Mouse, Human (Negative)
Reactivity Notes	Does not cross-react with human.
Marker	Lymphatic Endothelium Marker
Immunogen	Murine thymic stromal cell lines

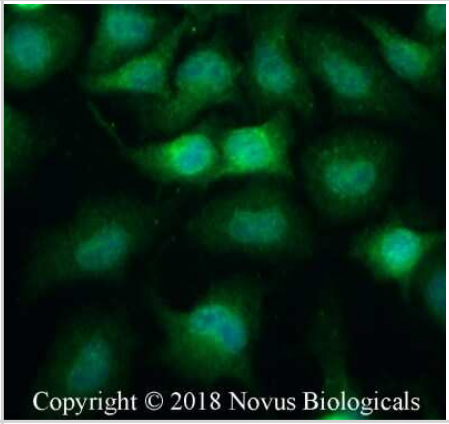
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Electron Microscopy, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation, CyTOF-ready
Recommended Dilutions	Western Blot 1:1000-1:2000, Flow Cytometry 1:400, Immunohistochemistry 1:100-1:500, Immunocytochemistry/ Immunofluorescence 1-5ug/ml, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin 1:100-1:500, Immunohistochemistry-Frozen, Electron Microscopy, CyTOF-ready
Application Notes	Optimal dilutions/concentrations should be determined by the end user. This antibody is CyTOF ready.

Images

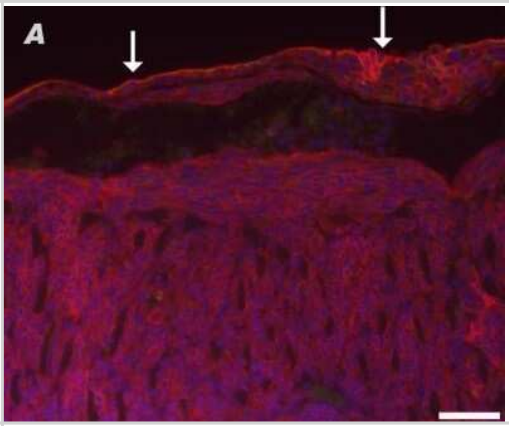
Western Blot: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Podoplanin is differentially expressed in primary podocytes relative to primary PECs after six passages in culture (arrow), consistent with mRNA expression analysis. Lysates of isolated glomeruli are used as positive control. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/22529955) licensed under a CC-BY license.



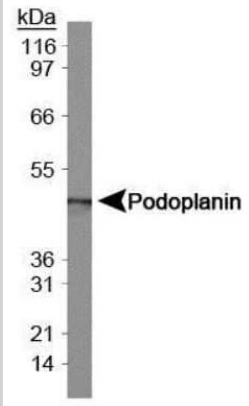
Immunocytochemistry/Immunofluorescence: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Neuro2a cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton X-100. The cells were incubated with anti- at 5 ug/ml overnight at 4C and detected with an anti-Golden Syrian hamster DyLight 488 (Green) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



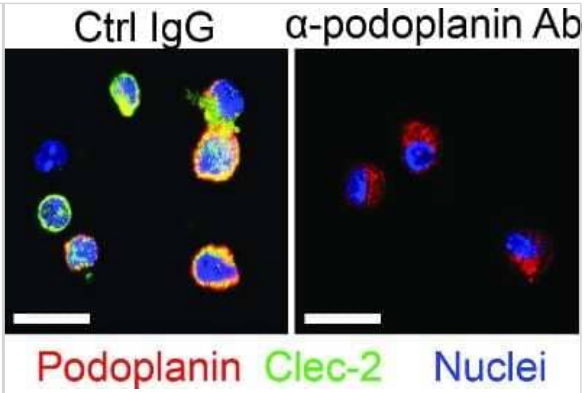
Immunohistochemistry-Paraffin: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Staining for podoplanin (red) and cytokeratins (green) in malignant serosal tumors morphologically consistent with sarcomatous mesothelioma. In A, the lining mesothelium (solid arrows) stained positively for podoplanin in this double label immunofluorescent image of diaphragm. The cells beneath the mesothelial lining are also red due to expression of podoplanin and these are cells of a malignant serosal tumor. Promotion of lung adenocarcinoma following inhalation exposure to multi-walled carbon nanotubes. *Part Fibre Toxicol* (2014)



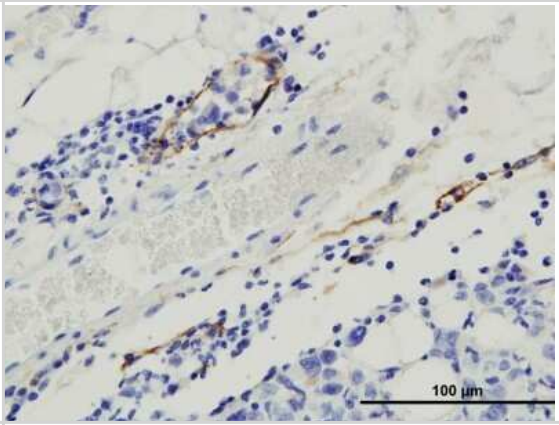
Western Blot: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Analysis of Podoplanin in mouse kidney tissue extract.



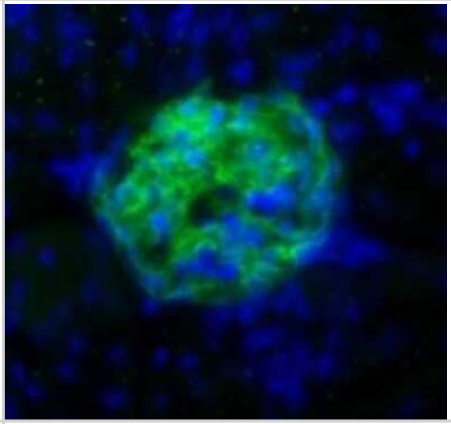
Immunocytochemistry/Immunofluorescence: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Macrophages were isolated from wild-type (WT) mice treated with acetaminophen (APAP) for 3 hr. The cells were treated in vitro with either control IgG (Ctrl IgG) or an anti-podoplanin antibody (alpha-podoplanin Ab) before incubation with platelets. Immunofluorescence (IF) staining was performed to detect podoplanin on Macrophages and C-type lectin-like receptor 2 (Clec-2) on platelets. Scale bar, 25 um. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/34110284/) licensed under a CC-BY license.



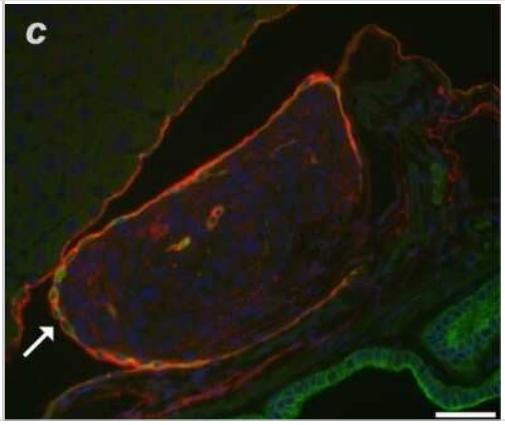
Immunohistochemistry-Paraffin: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Analysis of Podoplanin in mouse mammary gland after MDA-MB-231 orthotopic transplantation. Image courtesy of product review by Luana Schito.



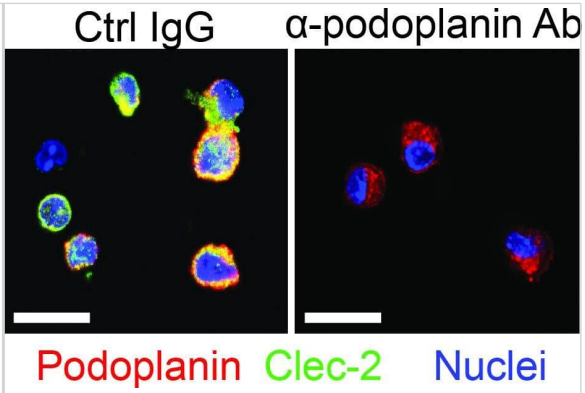
Immunohistochemistry: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Podoplanin (8.1.1) antibody labeling (Green) of glomeruli from mouse kidney. Nuclei were counterstained with DAPI (Blue).



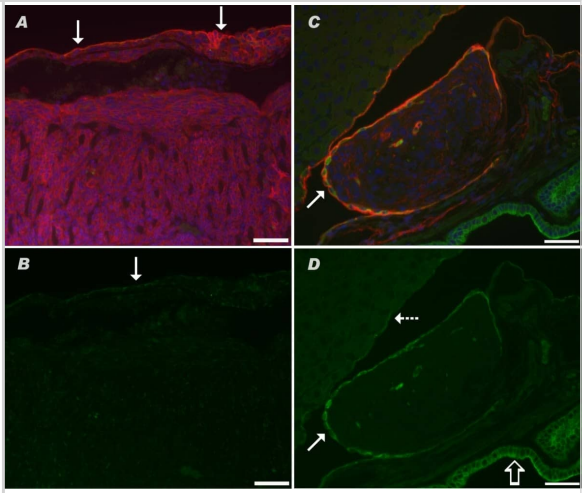
Immunohistochemistry-Paraffin: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Staining for podoplanin (red) and cytokeratins (green) in malignant serosal tumors morphologically consistent with sarcomatous mesothelioma. In C, a double label immunofluorescent image demonstrates a malignant serosal tumor between the liver and gall bladder that is lined by reactive mesothelium (solid arrow) which stains red for podoplanin as well as green for cytokeratins. The cells of the subjacent malignant serosal tumor stain weakly red for podoplanin. Promotion of lung adenocarcinoma following inhalation exposure to multi-walled carbon nanotubes. *Part Fibre Toxicol* (2014)



Podolanin expressing on Mϕs mediates interactions with platelets.Mϕs were isolated from wild-type (WT) mice treated with acetaminophen (APAP) for 3 hr. The cells were treated in vitro with either control IgG (Ctrl IgG) or an anti-podoplanin antibody (α-podoplanin Ab) before incubation with platelets. Immunofluorescence (IF) staining was performed to detect podoplanin on Mϕs and C-type lectin-like receptor 2 (Clec-2) on platelets. Scale bar, 25 µm.



Immunocytochemistry/ Immunofluorescence: Podoplanin Antibody (8.1.1) - BSA Free [NB600-1015] - Immunofluorescence staining for podoplanin (red) & cytokeratins (green) in malignant serosal tumors morphologically consistent with sarcomatous mesothelioma. In A, the lining mesothelium (solid arrows) stained positively for podoplanin in this double label immunofluorescent image of diaphragm. The cells beneath the mesothelial lining are also red due to expression of podoplanin & these are cells of a malignant serosal tumor. In B, only the single label green fluorescence is shown to demonstrate weak expression of cytokeratins in the lining mesothelium (solid arrow), while staining of the subjacent tumor for cytokeratins is equivocal. In C, a double label immunofluorescent image demonstrates a malignant serosal tumor between the liver & gall bladder that is lined by reactive mesothelium (solid arrow) which stains red for podoplanin as well as green for cytokeratins. The cells of the subjacent malignant serosal tumor stain weakly red for podoplanin. In D, the photomicrograph shows this same tumor but only the green fluorescence for cytokeratins. The reactive mesothelium lining the malignant serosal tumor (solid arrow) stains green for cytokeratins while the serosal tumor has no evidence of cytokeratin expression. The normal mesothelium lining the liver is weakly positive for cytokeratins (dashed arrow). The epithelium lining the gall bladder (open arrow) strongly expresses cytokeratins. Magnification bar is 50 µm. Image collected & cropped by CiteAb from the following publication (http://particleandfibretoxicology.biomedcentral.com/articles/10.1186/1743-8977-11-3), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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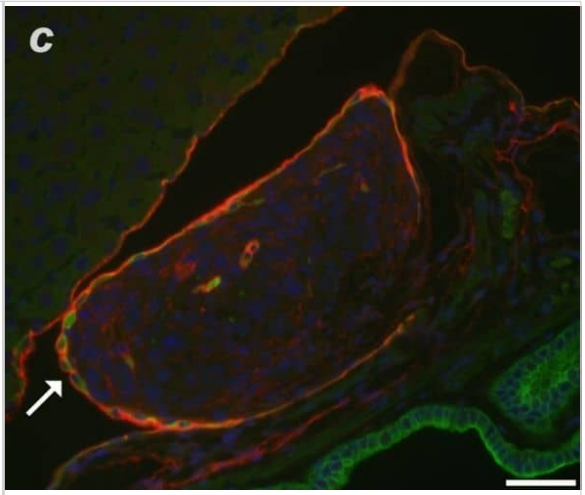

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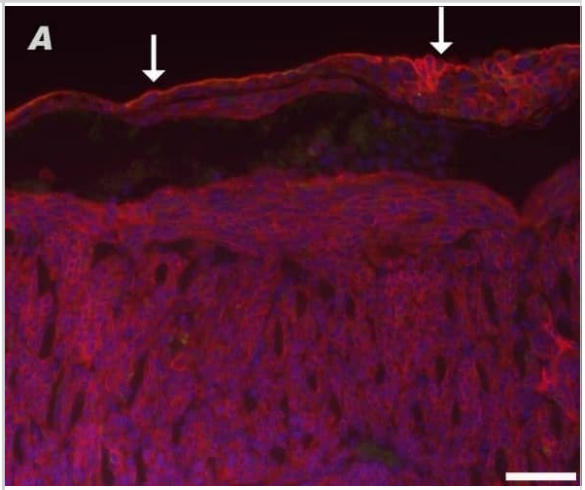
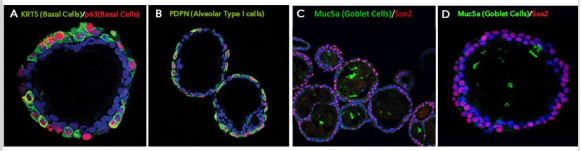


Adult stem cells isolated from human lung biopsy tissue were cultured following the steps detailed in the human lung organoid culture protocol. Lung organoids were stained with a (A) Goat Anti-Human p63/TP73L Polyclonal Antibody (Catalog # AF1916; red) and a rabbit anti-human cytokeratin 5 (KRT5) monoclonal antibody (green) to visualize basal cells; a (B) Hamster Anti-Mouse Podoplanin (PDPN) Monoclonal Antibody (Novus Biologicals, Catalog # NB600-1015; green) to visualize alveolar type I cells and a Goat Anti-Human p63/TP73L Polyclonal Antibody (Catalog # AF1916; red) to visualize basal cells; and a (C, D) Mouse Anti-MUC5AC Monoclonal Antibody (Novus Biologicals, Catalog # NBP2-15196; green) to visualize goblet cells and a Mouse Anti-Human/Mouse/Rat SOX2 Monoclonal Antibody (Catalog # MAB2018; red). All samples were counterstained with DAPI (Catalog # 5748; blue).



Publications

Huang L, Lu W, Wu R et al. Interferon-driven CAF reprogramming augments immunogenic response to neoadjuvant radiotherapy in colorectal cancer. Cell Reports Medicine 2025-07-23 [PMID: 40730191]

S Roy, S Kumaravel, P Banerjee, TK White, A O'Brien, C Seelig, R Chauhan, B Ekser, KJ Bayless, G Alpini, SS Glaser, S Chakrabort Tumor Lymphatic Interactions Induce CXCR2-CXCL5 Axis and Alter Cellular Metabolism and Lymphangiogenic Pathways to Promote Cholangiocarcinoma Cells, 2021-11-09;10(11):. 2021-11-09 [PMID: 34831316]

Xia CH, Lin W, Li R et al. Altered Cell Clusters and Upregulated Aqp1 in Connexin 50 Knockout Lens Epithelium Investigative Ophthalmology & Visual Science 2024-09-17 [PMID: 39287589]

Guo L, Bao W, Yang S et al. Rhei Radix et Rhizoma in Xuanbai-Chengqi decoction strengthens the intestinal barrier function and promotes lung barrier repair in preventing severe viral pneumonia induced by influenza A virus Journal of ethnopharmacology 2023-09-30 [PMID: 37783404] (IHC-P, Mouse)

Details:
1:100 dilution

Tang AT, Buchholz DW, Szigety KM et al. Cell-autonomous requirement for ACE2 across organs in lethal mouse SARS-CoV-2 infection PLoS biology 2023-02-01 [PMID: 36745682] (IHC, Mouse)

Fraser K, Hubbs A, Yanamala N et al. Histopathology of the broad class of carbon nanotubes and nanofibers used or produced in U.S. facilities in a murine model Particle and fibre toxicology 2021-12-20 [PMID: 34923995] (IHC-P, Mouse)

Shan Z, Li L, Atkins CL et al. Chitinase 3-like-1 contributes to acetaminophen-induced liver injury by promoting hepatic platelet recruitment eLife 2021-06-10 [PMID: 34110284] (IHC-P, Mouse)

Asfahani RI, Tahoun MM, Miller-Hodges EV et al. Activation of podocyte Notch mediates early Wt1 glomerulopathy. kidney Int. 2018-04-01 [PMID: 29398135] (ICC/IF, Mouse)

Neto LMM, Zufelato N, de Sousa-Junior AA et al. Specific T cell induction using iron oxide based nanoparticles as subunit vaccine adjuvant Hum Vaccin Immunother 2018-06-18 [PMID: 29913109] (Mouse)

Jia Y, Chen K, Lin P et al. Treatment of acute lung injury by targeting MG53-mediated cell membrane repair. Nat Commun 2014-07-18 [PMID: 25034454] (IHC-P, Mouse)

Details:
Podoplanin/AT1 alpha antibody used in IHC-P as a specific cell marker for type I alveolar epithelial cells in lungs of wild-type and mg53-/- mice - tissue fixed in 4% neutral-buffered paraformaldehyde for 24 hous at 4C, paraffin blocks cut into 4um sections, staining detection with IF labelled secondary (Figure 1e and 1f; Supplementary Figure 2).

Sargent LM, Porter DW, Staska LM et al. Promotion of lung adenocarcinoma following inhalation exposure to multi-walled carbon nanotubes. Part Fibre Toxicol 2014-01-15 [PMID: 24405760] (IHC-P, Mouse)

Porter DW, Hubbs AF, Mercer RR et al. Mouse pulmonary dose- and time course-responses induced by exposure to multi-walled carbon nanotubes. Toxicology 2010-03-10 [PMID: 19857541] (ICC/IF, IF/IHC, Mouse)

More publications at http://www.novusbio.com/NB600-1015

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Products Related to NB600-1015

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
NB120-7141	Goat anti-Golden Syrian Hamster IgG (H+L) Secondary Antibody (Pre-adsorbed)
NBP1-97035-5mg	Golden Syrian Hamster IgG Isotype Control
NB600-1015B	Podoplanin Antibody (8.1.1) [Biotin]

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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