

Podoplanin Monoclonal Antibody (NZ-1.3), eBioscience™

Product Details	
Size	100 μg
Species Reactivity	Human, Rat
Published Species	Human, Mouse
Host/Isotype	Rat / IgG2a
Class	Monoclonal
Туре	Antibody
Clone	NZ-1.3
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_1603307

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	-
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	-
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	-	8 Publications
Immunoprecipitation (IP)	Assay-Dependent	-
Functional Assay (FN)	-	1 Publication
Inhibition Assays (IA)	-	1 Publication

Product Specific Information

Description: Podoplanin is a 40-kDa type I transmembrane sialomucin-like glycoprotein involved in platelet aggregation and cancer metastasis. This protein is expressed on lymphatic endothelial cells and follicular dendritic cells, as well as on many human cancers, including squamous cell carcinoma, glioblastoma, seminoma, and mesothelioma. Podoplanin expression has been demonstrated to be regulated by the Fos protein of the Activating Protein-1 (AP-1) transcription factor complex. Much of its functionality arises via interaction with its endogenous receptor, C-type lectin-like receptor-2 (CLEC-2).

This antibody has been reported to block the interaction between Podoplanin and CLEC-2.

Applications Reported: This NZ-1.3 antibody has been reported for use in immunoprecipitation, immunoblotting (WB), and immunohistology staining of paraffin embedded tissue sections.

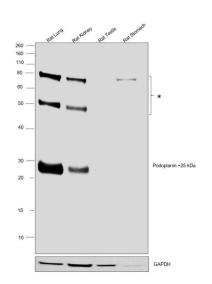
Applications Tested: This NZ-1.3 antibody has been tested by immunoblot analysis of U87 cells. This can be used at 1-5 μ g per mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Podoplanin Monoclonal Antibody (NZ-1.3), eBioscience™



Podoplanin Antibody (14-9381-82) in WB

Western blot was performed using Anti-Podoplanin Monoclonal Antibody (eBio8. 1.1 (8.1.1)), (Product # 14-9381-82) and ~25 kDa band corresponding to Podoplanin was observed in Rat Lung and Rat Kidney but not in Rat Testis and Rat Stomach as reported along with Non characterized bands (*) were observed around 50 kDa and 80 kDa. Tissue lysate (40 µg lysate) of Rat Lung (Lane 1), Rat Kidney (Lane 2), Rat Testis (Lane 3), and Rat Stomach (Lane 4) were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence F(ab)2-Rabbit anti-Rat IgG (H+L) Secondary Antibody, HRP (Product # PA1-29927, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Super Signal™ West Dura Extended Duration Substrate (Product # 34076).

-188 -98 -62 -49 -38 -28 -17 -14

Podoplanin Antibody (14-9381-82) in WB

U87 cell lysate prepared under reducing conditions was resolved on SDS-PAGE then immunoblotted with 5 µg/mL Anti-Human Podoplanin Purified. Bands were visualized using Anti-Rat IgG HRP.

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□ 15 References

Immunohistochemistry (3)

Cell research

Dissecting human embryonic skeletal stem cell ontogeny by single-cell transcriptomic and functional analyses.

"Published figure using Podoplanin monoclonal antibody (Product # 14-9381-82) in Immunohistochemistry"

Authors: He J, Yan J, Wang J, Zhao L, Xin Q, Zeng Y, Sun Y, Zhang H, Bai Z, Li Z, Ni Y, Gong Y, Li Y, He H, Bian Z, Lan Y, Ma C,Bian L,Zhu H,Liu B,Yue R

Year 2021

Nature communications

Functionally distinct disease-associated fibroblast subsets in rheumatoid arthritis.

"14-9381 was used in Immunohistochemistry-immunofluorescence to identify seven fibroblast subsets with distinct surface protein phenotypes, and characterise them into three subsets by integrating transcriptomic data."

Authors: Mizoguchi F,Slowikowski K,Wei K,Marshall JL,Rao DA,Chang SK,Nguyen HN,Noss EH,Turner JD,Earp BE, Blazar PE, Wright J, Simmons BP, Donlin LT, Kalliolias GD, Goodman SM, Bykerk VP, Ivashkiv LB, Lederer JA, Hacohen N, Nigrovic PA, Filer A, Buckley CD, Raychaudhuri S, Brenner MB

Year 2018

Species Human

View more IHC references on thermofisher.com

Immunocytochemistry (2)

Stem cells (Dayton, Ohio)

Directed induction of alveolar type I cells derived from pluripotent stem cells via Wnt signaling inhibition.

"Published figure using Podoplanin monoclonal antibody (Product # 14-9381-82) in Flow Cytometry" Authors: Kanagaki S,Ikeo S,Suezawa T,Yamamoto Y,Seki M,Hirai T,Hagiwara M,Suzuki Y,Gotoh S

Year 2021

PloS one

Human Extravillous Trophoblasts Penetrate Decidual Veins and Lymphatics before Remodeling Spiral Arteries during Early Pregnancy.

"Published figure using Podoplanin monoclonal antibody (Product # 14-9381-82) in Immunofluorescence"

Authors: He N,van Iperen L,de Jong D,Szuhai K,Helmerhorst FM,van der Westerlaken LA,Chuva de Sousa Lopes SM

Year 2017

More applications with references on thermofisher.com

Flow (8)

FN (1) IA (1)

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