

CD140b (PDGFRB) Monoclonal Antibody (APB5), Functional Grade, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Fish, Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	APB5
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_469070

Applications	Tested Dilution	Publications
Western Blot (WB)	-	3 Publications
Immunohistochemistry (IHC)	-	33 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	8 Publications
Flow Cytometry (Flow)	1 µg/test	11 Publications
Neutralization (Neu)	Assay-Dependent	1 Publication
Functional Assay (FN)	Assay-Dependent	1 Publication

Product Specific Information

Description: The APB5 monoclonal antibody reacts with the mouse CD140b molecule, the beta chain of the platelet derived growth factor receptor (PDGF receptor). PDGFRb is a receptor tyrosine kinase that forms dimers on the surface upon ligand binding and phosphorylates substrates. Dimers of PDGFR consist of either homodimers of alpha/alpha, beta/beta, or heterodimers of alpha/beta and serve as a substrate for its kinase activity. CD140b is expressed by embryonic tissues and mesenchymal-derived cells of the adult mouse tissues. The PDGFR beta chain is reported to play a significant role in formation of fibrous atherosclerotic lesions.

Applications Reported: The APB5 antibody has been reported for use in flow cytometric analysis. It has also been reported in blocking of ligand binding.

Applications Tested: The APB5 antibody has been tested by flow cytometric analysis of NIH/3T3 cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

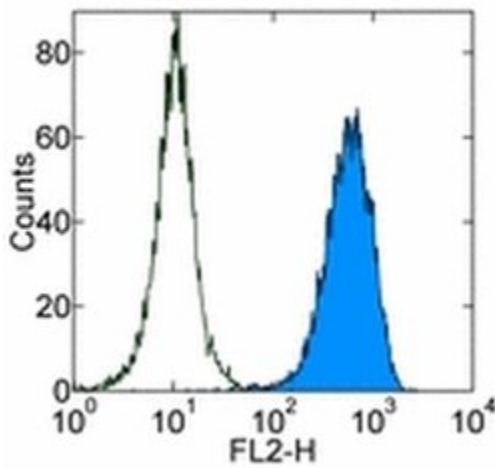
Filtration: 0.2 µm post-manufacturing filtered.

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

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

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

Product Images For CD140b (PDGFRB) Monoclonal Antibody (APB5), Functional Grade, eBioscience™



CD140b (PDGFRB) Antibody (16-1402-82) in Flow

Staining of NIH-3T3 cell line with 0.5 µg of Rat IgG2a kappa Isotype Control Functional Grade Purified (Product # 16-4321-82) (open histogram) or 0.5 µg of Anti-Mouse CD140b (PDGF Receptor b) Functional Grade Purified (filled histogram) followed by Anti-Rat IgG Biotin (Product # 13-4813-85) and Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

[View more figures on thermofisher.com](http://thermofisher.com)

Western Blot (3)

Scientific reports

The role of pericytic laminin in blood brain barrier integrity maintenance.

"Published figure using CD140b (PDGFRB) monoclonal antibody (Product # 16-1402-82) in Immunofluorescence"

Authors: Gautam J,Zhang X,Yao Y

Species
Not Applicable

Dilution
Not Cited

Year
2016

The Journal of biological chemistry

Fibroblast Growth Factor 9 Imparts Hierarchy and Vasoreactivity to the Microcirculation of Renal Tumors and Suppresses Metastases.

"Published figure using CD140b (PDGFRB) monoclonal antibody (Product # 16-1402-82) in Immunofluorescence"

Authors: Yin H,Frontini MJ,Arpino JM,Nong Z,O'Neil C,Xu Y,Balint B,Ward AD,Chakrabarti S,Ellis CG,Gros R,Pickering JG

Species
Mouse

Dilution
Not Cited

Year
2015

[View more WB references on thermofisher.com](#)

Immunohistochemistry (33)

Fluids and barriers of the CNS

Angiomodulin (IGFBP7) is a cerebral specific angiocrine factor, but is probably not a blood-brain barrier inducer.

"Published figure using CD140b (PDGFRB) monoclonal antibody (Product # 16-1402-82) in Immunocytochemistry"

Authors: Bar O,Gelb S,Atamny K,Anzi S,Ben-Zvi A

Species
Not Applicable

Dilution
Not Cited

Year
2020

Physiological reports

TGF1 orchestrates renal fibrosis following Escherichia coli pyelonephritis.

"Published figure using CD140b (PDGFRB) monoclonal antibody (Product # 16-1402-82) in Immunohistochemistry"

Authors: Hreha TN,Collins CA,Daugherty AL,Twentyman J,Paluri N,Hunstad DA

Species
Not Applicable

Dilution
Not Cited

Year
2020

[View more IHC references on thermofisher.com](#)

More applications with references on thermofisher.com

IHC (P) (1)

IHC (PFA) (1)

IHC (F) (1)

ICC/IF (8)

Flow (11)

Neu (1)

FN (1)

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