

CD140b (PDGFRB) Monoclonal Antibody (APB5), Super Bright 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	APB5
Conjugate	Super Bright 780
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2784900

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	3 Publications
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	1.0 µg/test	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.

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 1.0 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.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

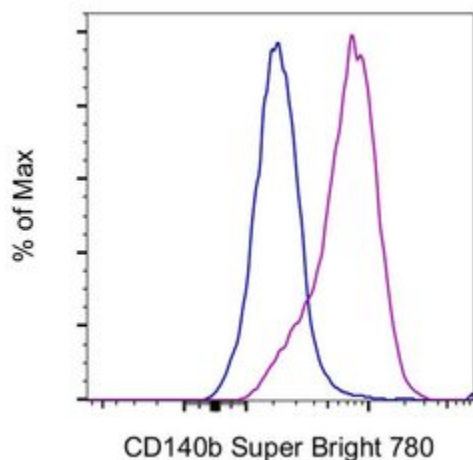
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 780 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD140b (PDGFRB) Monoclonal Antibody (APB5), Super Bright 780, eBioscience™



CD140b (PDGFRB) Antibody (78-1402-82) in Flow

Staining of the NIH/3T3 cell line with 1 μ g of Rat IgG2a kappa Isotype Control, Super Bright 780 (Product # 78-4321-82) (blue histogram) or 1 μ g of CD140b (PDGF Receptor b) Monoclonal Antibody, Super Bright 780 (purple histogram). Total viable cells were used for analysis.

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

6 References

Immunohistochemistry (3)

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 # 78-1402-82) 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 # 78-1402-82) 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](#)

Immunocytochemistry (2)

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 # 78-1402-82) in Immunocytochemistry"

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

Species
Not Applicable

Dilution
Not Cited

Year
2020

Nature

Age-dependent modulation of vascular niches for haematopoietic stem cells.

"Published figure using CD140b (PDGFRB) monoclonal antibody (Product # 78-1402-82) in Immunocytochemistry"

Authors: Kusumbe AP, Ramasamy SK, Itkin T, Mäe MA, Langen UH, Betsholtz C, Lapidot T, Adams RH

Species
Not Applicable

Dilution
Not Cited

Year
2016

More applications with references on thermofisher.com

Flow (1)

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