

# CD140b (PDGFRB) Monoclonal Antibody (APB5), Super Bright 600, 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 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	APB5
Conjugate	Super Bright 600
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_2784865

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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 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.

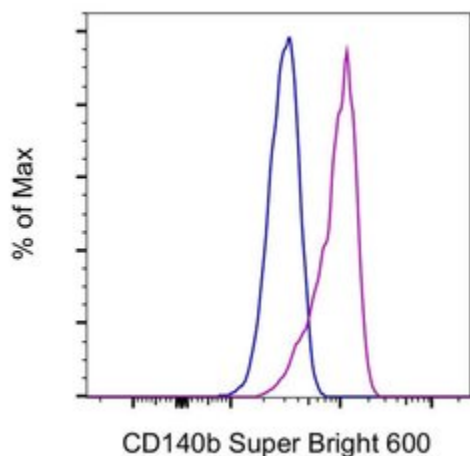
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 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 fluorochrome performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 600 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 600, eBioscience™



### CD140b (PDGFRB) Antibody (63-1402-82) in Flow

Staining of the NIH/3T3 cell line with 1  $\mu$ g of Rat IgG2a kappa Isotype Control, Super Bright 600 (Product # 63-4321-82) (blue histogram) or 1  $\mu$ g of CD140b (PDGF Receptor b) Monoclonal Antibody, Super Bright 600 (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 # 63-1402-82) 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 # 63-1402-82) 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 # 63-1402-82) 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 # 63-1402-82) 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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