

# CD140a (PDGFRA) Monoclonal Antibody (APA5), Super Bright™ 702, 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™ 702, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	APA5
Conjugate	Super Bright™ 702
Excitation/Emission Max	413/702 nm
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_2717165

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	6 Publications
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	1.0 µg/test	23 Publications

## Product Specific Information

**Description:** The APA5 monoclonal antibody reacts with the mouse CD140a molecule, the alpha chain of the platelet derived growth factor receptor (PDGF receptor). PDGFRa 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. CD140a is expressed by embryonic tissues and mesenchymal-derived cells of the adult mouse tissues.

**Applications Reported:** This APA5 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This APA5 antibody has been tested by flow cytometric analysis of NIH/3T3 cells. This may 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 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 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.

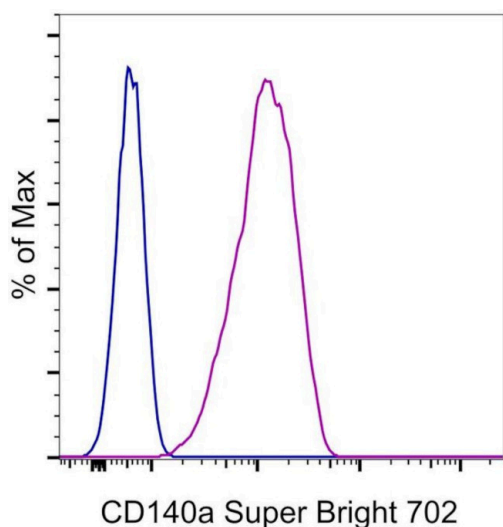
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ 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: 702 nm; Laser: Violet Laser

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

## Product Images For CD140a (PDGFRA) Monoclonal Antibody (APA5), Super Bright™ 702, eBioscience™



### CD140a (PDGFRA) Antibody (67-1401-82) in Flow

Staining of NIH/3T3 cells with 0.5  $\mu$ g of Rat IgG2a K Isotype Control, Super Bright 702 (Product # 67-4321-82) (blue histogram) or 0.5  $\mu$ g of CD140a (PDGF Receptor  $\alpha$ ) Monoclonal Antibody, Super Bright 702 (purple histogram). Total viable cells were used for analysis.

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

## 33 References

### Immunohistochemistry (6)

Nature neuroscience

#### Placental endocrine function shapes cerebellar development and social behavior.

"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 67-1401-82) in Immunohistochemistry"

Authors: Vacher CM, Lacaille H, O'Reilly JJ, Salzbank J, Bakalar D, Sebaoui S, Liere P, Clarkson-Paredes C, Sasaki T, Sathyanesan A, Kratimenos P, Ellegood J, Lerch JP, Imamura Y, Popratiloff A, Hashimoto-Torii K, Gallo V, Schumacher M, Penn AA

Year  
2021

Journal of smooth muscle research = Nihon Heikatsukin Gakkai kikanshi

#### Interstitial cells of Cajal in $W^{sh}/W^{sh}$ c-kit mutant mice.

"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 67-1401-82) in Immunohistochemistry"

Authors: Iino S, Horiguchi S, Horiguchi K, Hashimoto T

Year  
2021

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

### Immunocytochemistry (4)

Journal of extracellular vesicles

#### Extracellular vesicles synchronize cellular phenotypes of differentiating cells.

"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 67-1401-82) in Immunocytochemistry"

Authors: Minakawa T, Matoba T, Ishidate F, Fujiwara TK, Takehana S, Tabata Y, Yamashita JK

Year  
2021

The Journal of pathology

#### A smooth muscle-derived, Braf-driven mouse model of gastrointestinal stromal tumor (GIST): evidence for an alternative GIST cell-of-origin.

"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 67-1401-82) in Immunocytochemistry"

Authors: Kondo J, Huh WJ, Franklin JL, Heinrich MC, Rubin BP, Coffey RJ

Year  
2020

[View more ICC/IF references on thermofisher.com](#)

### More applications with references on thermofisher.com

## Flow (23)

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