# 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
Туре	Antibody
Clone	APA5
Conjugate	Super Bright 702
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)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	1.0 μg/test	5 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  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10^5 to 10^8 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.

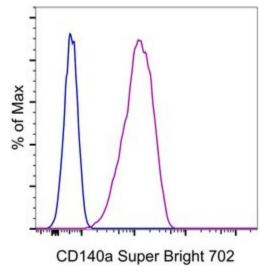
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

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 µg of Rat IgG2a K Isotype Control, Super Bright 702 (Product # 67-4321-82) (blue histogram) or 0.5 µg of CD140a (PDGF Receptor a) Monoclonal Antibody, Super Bright 702 (purple histogram). Total viable cells were used for analysis.

View more figures on thermofisher.com

#### **8** References

#### Immunohistochemistry (1)

Scientific reports	
Dlx5-augmentation in neural crest cells reveals early development and differentiation potential of mouse apical head mesenchyme.	
"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 67-1401-82) in Immunohistochemistry"	
Authors: Vu TH,Takechi M,Shimizu M,Kitazawa T,Higashiyama H,Iwase A,Kurihara H,Iseki S	
Immunocytochemistry (2)	
The Journal of pathology	

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	Species Not Applicable Dilution Not Cited Year 2020
Developmental cell	<b>Species</b> Not Applicable
Epithelial Vegfa Specifies a Distinct Endothelial Population in the Mouse Lung.	Dilution
"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 67-1401-82) in Immunocytochemistry"	Not Cited
Authors: Vila Ellis L,Cain MP,Hutchison V,Flodby P,Crandall ED,Borok Z,Zhou B,Ostrin EJ,Wythe JD,Chen J	<b>Year</b> 2020

## Flow Cytometry (5)

JCI insight	Species Not Applicable	
Cardiac fibroblast proliferation rates and collagen expression mature		
early and are unaltered with advancing age.	Dilution	
"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 67-1401-82) in Flow Cytometry"	Not Cited	
Authors: Wu R,Ma F,Tosevska A,Farrell C,Pellegrini M,Deb A	<b>Year</b> 2020	

View more Flow references on thermofisher.com

Species Not Applicable

Dilution Not Cited

**Year** 2021

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