

# CD140a (PDGFRA) Monoclonal Antibody (APA5), 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
Туре	Antibody
Clone	APA5
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_2734880

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	0.5 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 mesenchymalderived 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 0.5 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.

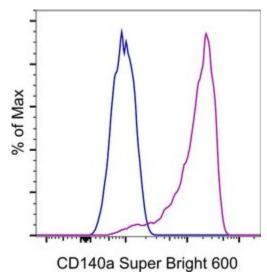
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

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: 600 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 600, eBioscience™



# CD140a (PDGFRA) Antibody (63-1401-82) in Flow

NIH/3T3 cells were stained with 0.25  $\mu$ g of Rat IgG2a kappa Isotype Control, Super Bright 600 (Product # 63-4321-82) or 0.25  $\mu$ g of CD140a (PDGFRA) Monoclonal Antibody, Super Bright 600. 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 # 63-1401-82) in Immunohistochemistry" Authors: Vu TH,Takechi M,Shimizu M,Kitazawa T,Higashiyama H,Iwase A,Kurihara H,Iseki S

Species Not Applicable

**Dilution** Not Cited

**Year** 2021

## Immunocytochemistry (2)

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 # 63-1401-82) 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

Epithelial Vegfa Specifies a Distinct Endothelial Population in the Mouse Lung.

"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 63-1401-82) in Immunocytochemistry"

Authors: Vila Ellis L,Cain MP,Hutchison V,Flodby P,Crandall ED,Borok Z,Zhou B,Ostrin EJ,Wythe JD,Chen J

**Species**Not Applicable

**Dilution**Not Cited

**Year** 2020

## Flow Cytometry (5)

JCI insight

Cardiac fibroblast proliferation rates and collagen expression mature early and are unaltered with advancing age.

"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 63-1401-82) in Flow Cytometry" Authors: Wu R,Ma F,Tosevska A,Farrell C,Pellegrini M,Deb A

**Species** Not Applicable

**Dilution** Not Cited

**Year** 2020

View more Flow references on thermofisher.com

# More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts? (Pocumentation\*). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NO INTERINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS OF RETIVED FOR OR REFUND FOR OR REFUND FOR REFUND FOR THE NON-CONFORMING PRODUCTS) AT SELECT SOLD EXPRESS OR OR SECULAR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product, the Product, the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, or vivo or in vivo therapeutic uses, or any type of consumption to human or animals.