

# CD140a (PDGFRA) Monoclonal Antibody (APA5), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	APA5
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467491

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	2 Publications
Immunohistochemistry (IHC)	-	25 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	4 Publications
Immunocytochemistry (ICC/IF)	-	11 Publications
Flow Cytometry (Flow)	1 µg/test	44 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:** The APA5 antibody has been reported for use in flow cytometric analysis, immunoblotting (WB), and immunohistochemical staining of frozen tissue sections. It has also been reported in blocking of ligand binding. (Please use Functional Grade purified APA5 in functional assays.)

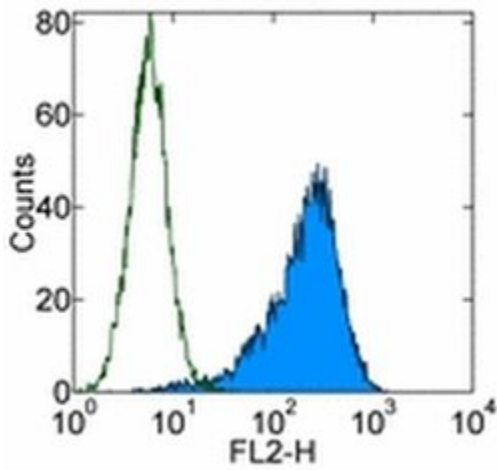
**Applications Tested:** This APA5 antibody has been tested by flow cytometric analysis of the NIH/3T3 cell line. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be 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.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

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



#### CD140a (PDGFRA) Antibody (14-1401-82) in Flow

Staining of NIH/3T3 cells with 0.5 µg of Rat IgG2a K Isotype Control Purified (Product # 14-4321-82) (open histogram) or 0.5 µg of Anti-Mouse CD140a (PDGF Receptor a) Purified (filled histogram) followed by Anti-Rat IgG Biotin (Product # 13-4813-85) and Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

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## Western Blot (2)

### PLoS genetics

#### Cell-cycle dependent expression of a translocation-mediated fusion oncogene mediates checkpoint adaptation in rhabdomyosarcoma.

"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 14-1401-82) in Western Blot"

Authors: Kikuchi K,Hettmer S,Aslam MI,Michalek JE,Laub W,Wilky BA,Loeb DM,Rubin BP,Wagers AJ,Keller C

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2014

### Molecular cancer research : MCR

#### Dynamic and nuclear expression of PDGFR and IGF-1R in alveolar Rhabdomyosarcoma.

"Published figure using CD140a (PDGFRA) monoclonal antibody (Product # 14-1401-82) in Flow Cytometry"

Authors: Aslam MI,Hettmer S,Abraham J,Latocha D,Soundararajan A,Huang ET,Goros MW,Michalek JE,Wang S,Mansoor A,Druker BJ,Wagers AJ,Tyner JW,Keller C

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2013

## Immunohistochemistry (25)

### 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 # 14-1401-82) 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

### Developmental cell

#### Sphingosine 1-Phosphate Receptor Signaling Establishes AP-1 Gradients to Allow for Retinal Endothelial Cell Specialization.

"14-1401 was used in Immunohistochemistry to show that retinal endothelial sphingosine 1-phosphate receptors (S1PRs), which restrain vascular endothelial growth factor (VEGF)-induced angiogenesis, spatially restrict expression of JunB, a member of the activator protein 1 (AP-1) family of transcription factors (TFs)."

Authors: Yanagida K,Engelbrecht E,Niaudet C,Jung B,Gaengel K,Holton K,Swendeman S,Liu CH,Levesque MV,Kuo A,Fu Z,Smith LEH,Betsholtz C,Hla T

**Species**  
Mouse

**Dilution**  
1:100

**Year**  
2020

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

## More applications with references on thermofisher.com

IHC (P) (3)

IHC (F) (4)

ICC/IF (11)

Flow (44)

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