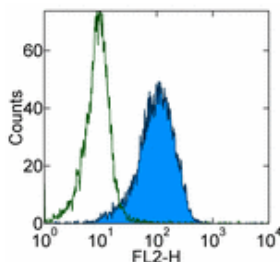


## Anti-Mouse CD140b (PDGF Receptor b) PE

Catalog Number: 12-1402

Also Known As: PDGFRbeta, PDGFR-beta, PDGFR beta, PDGFR b, PDGFR-b

RUO: For Research Use Only



Staining of NIH/3T3 cell line with 0.5 µg of Rat IgG2a κ Isotype Control PE (cat. 12-4321) (open histogram) or 0.5 µg of Anti-Mouse CD140b (PDGF Receptor b) PE (filled histogram). Total viable cells were used for analysis.

### Product Information

Contents: Anti-Mouse CD140b (PDGF Receptor b) PE

**REF** Catalog Number: 12-1402

Clone: APB5

Concentration: 0.2 mg/ml

Host/Isotype: Rat IgG2a, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

### Description

The APB5 monoclonal antibody reacts with the mouse CD140b molecule, the β chain of the platelet derived growth factor receptor (PDGF receptor). PDGFRβ 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 α/α, β/β, or heterodimers of α/β 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 β chain is reported to play a significant role in formation of fibrous atherosclerotic lesions.

### Applications Reported

This APB5 antibody has been reported for use in flow cytometric analysis.

### Applications Tested

This APB5 antibody has been tested by flow cytometric analysis of NIH-3T3 cells. 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.

### References

Sano, H., T. Sudo, et al. 2001. Functional blockade of platelet-derived growth factor receptor-beta but not of receptor-alpha prevents vascular smooth muscle cell accumulation in fibrous cap lesions in apolipoprotein E-deficient mice. *Circulation* 103(24): 2955-60.

Takakura, N., H. Yoshida, et al. 1997. PDGFR alpha expression during mouse embryogenesis: immunolocalization analyzed by whole-mount immunohistostaining using the monoclonal anti-mouse PDGFR alpha antibody APA5. *J Histochem Cytochem* 45(6): 883-93.

Sano H, Yokode M, Takakura N, Takemura G, Doi T, Kataoka H, Sudo T, Nishikawa S, Fujiwara H, Nishikawa SI, and Kita S. (2001) Study on PDGF Receptor β Pathway in Glomerular Formation in Neonate Mice *Annals of the New York Academy of Sciences* 947:303-305 (FA)

### Related Products

12-4321 Rat IgG2a K Isotype Control PE

17-1401 Anti-Mouse CD140a (PDGF Receptor a) APC (APA5)

