

## **Product Data Sheet**

## PE anti-mouse CD140a

Catalog # / Size: 135905 / 50 µg

135906 / 200 µg

Clone: APA5

**Isotype:** Rat IgG2a, κ

**Immunogen:** Mouse PDGFR-α-hlgG1 recombinant fusion protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with

PE under optimal conditions. The solution is free of unconjugated PE and

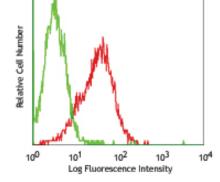
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Mouse fibroblast cell line NIH/3T3 stained with APA5 PE

## **Applications:**

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent

staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each

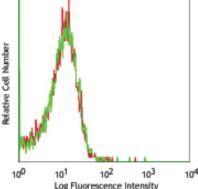
Additional reported (for relevant formats) applications include: Western Blot, **Application Notes:** 

blocking function<sup>2</sup>, and immunohistochemical staining of paraffin and frozen sections. The LEAF™ purified antibody is recommended for functional

assavs.

Application References: 1. Takakura N, et al. 1996. J. Invest. Dermatol. 107:770.

2. Liao C, et al. 2010. J. Clin. Invest. 120:242. (Block)



C57BL/6 splenocytes stained with APA5 PE

**Description:** Platelet-derived growth factor receptor- $\alpha$  (PDGFR- $\alpha$ ), CD140a, is one of two receptors for platelet-derived growth factors (PDGFs) and binds to all isoforms of PDGFs: PDGF-AA, PDGF-AB, and PDGF-BB. PDGFRa is a receptor tyrosine kinase that forms homodimers or heterodimers on the surface upon ligand binding and phosphorylates substrates. PDGFRs consist of either homodimers of  $\alpha/\alpha$ ,  $\beta/\beta$ , or heterodimers of  $\alpha/\beta$ . PDGF receptors,  $\alpha$ and β, are single glycoproteins with intracellular tyrosine kinase domain. Their ligand, PDGF, is a mitogen for connective tissue and glial cells. CD140a is expressed on embryonic tissues and mesenchymal-derived cells of adult mice. PDGF plays a role in wound healing and acts as a chemoattractant for fibroblasts, smooth muscle cells, glial cells, monocytes, and neutrophils.

- Antigen References: 1. Mukouyama YS, et al. 2006. Proc Natl Acad Sci USA. 103(5):1551

  - Miyawaki T, et al. 2004. J Neurosci. 24(37):8124
    Takakura N, et al. 1997. J Histochem Cytochem. 45(6):883

Related Products: Product Clone Application FC, ICFC FC, ICC, ICFC PE Rat IgG2a, κ Isotype Ctrl RTK2758 Cell Staining Buffer RBC Lysis Buffer (10X) TruStain fcX™ (anti-mouse CD16/32) 93

