

PE/Dazzle™ 594 anti-mouse CD140a

Catalog # / Size: 1279605 / 25 µg
1279610 / 100 µg

Clone: APA5

Isotype: Rat IgG2a, κ

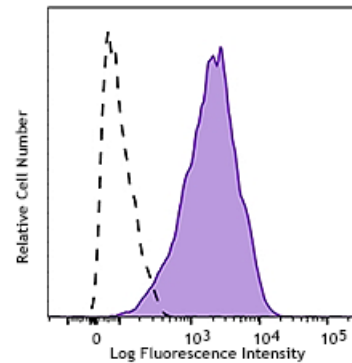
Immunogen: Mouse PDGFR-α-hlgG1 recombinant fusion protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

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

Concentration: 0.2 mg/ml



Mouse fibroblast NIH/3T3 cells were stained with CD140a (clone APA5) PE/Dazzle™ 594 (filled histogram) or rat IgG2a, κ PE/Dazzle™ 594 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric 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 application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application Notes: Additional reported (for relevant formats) applications include: Western Blot, blocking function², and immunohistochemical staining of paraffin and frozen sections.

- 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)
 3. Chen H, *et al.* 2015. *ASN Neuro* 8:7. [PubMed](#)

Description: Platelet-derived growth factor receptor-α (PDGFR-α), 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. PDGFRα 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 α/α, β/β, or heterodimers of α/β. PDGF receptors, α 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** 1. Mukoyama YS, et al. 2006. *Proc Natl Acad Sci USA*. 103(5):1551
- References:** 2. Miyawaki T, et al. 2004. *J Neurosci*. 24(37):8124
3. Takakura N, et al. 1997. *J Histochem Cytochem*. 45(6):883