SONY

Product Data Sheet

PerCP/Cyanine5.5 anti-mouse CD140a

Catalog # / Size: 1279565 / 25 µg
1279570 / 100 µg

Clone: APA5

Isotype: Rat IgG2a, κ

Immunogen: Mouse PDGFR-α-hIgG1 recombinant fusion protein

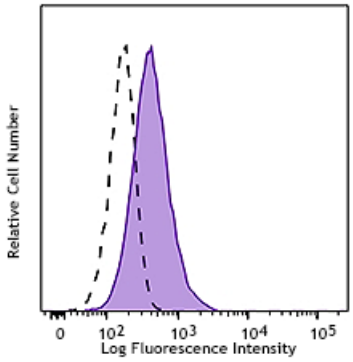
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.

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

Workshop Number: VII 70312

Concentration: 0.2



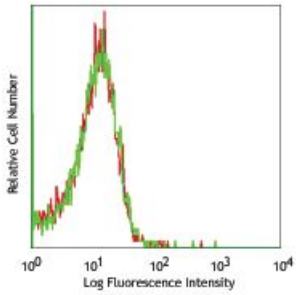
Mouse fibroblast NIH/3T3 cells were stained with CD140a (Clone APA5) PerCP/Cyanine5.5 (filled histogram), or rat IgG2a, κ PerCP/Cyanine5.5 isotype control (open histogram).

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 ≤1.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.



C57BL/6 splenocytes stained with APA5 PE

Application Notes: Additional reported (for relevant formats) applications include: Western Blot, blocking function2, and immunohistochemical staining of paraffin and frozen sections. The LEAF™ purified antibody is recommended for functional assays.

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

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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. 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 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 References:

1. Mukouyama YS, *et al.* 2006. *Proc Natl Acad Sci USA.* 103(5):1551
2. Miyawaki T, *et al.* 2004. *J Neurosci.* 24(37):8124
3. Takakura N, *et al.* 1997. *J Histochem Cytochem.* 45(6):883

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