

Brilliant Violet 421™ anti-mouse CD140a

Catalog # / Size: 1279615 / 50 µg

Clone: APA5

Isotype: Rat IgG2a, κ

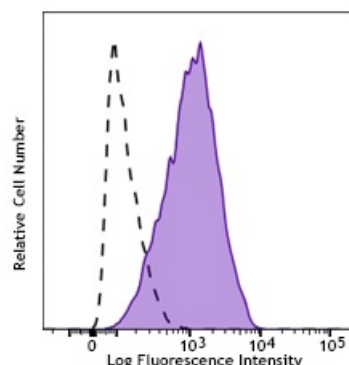
Immunogen: Mouse PDGFR-α-hlgG1 recombinant fusion protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: 0.2 mg/ml



Mouse fibroblast NIH/3T3 cells were stained with CD140a (clone APA5) Brilliant Violet 421™ (filled histogram) or Rat IgG2a, κ Brilliant Violet 421™ 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 ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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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. PDGFR α 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. Mukoyama 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