

LEAF™ Purified anti-mouse CD140a

Catalog # / Size: 135904 / 500 µg

Clone: APA5

Isotype: Rat IgG2a, κ

Immunogen: Mouse PDGFR-α-hlgG1 recombinant fusion protein

Reactivity: Mouse

Preparation: The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

Formulation: 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

Concentration: 1.0 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.

Applications:

Applications: FC - *Quality tested*
Block - *Reported in the literature*

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 or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

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)

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 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

Related Products:	Product	Clone	Application
	LEAF™ Purified Rat IgG2a, κ Isotype Ctrl	RTK2758	FC, ICFC, WB, IP, ICC, IF, IHC, FA
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC



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