APC anti-mouse CD140a

Catalog # / Size: 1279540 / 100 μg

1279535 / 25 μg

Clone: APA5

Isotype: Rat IgG2a, κ

Immunogen: Mouse PDGFR-α-hlgG1 recombinant

fusion protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity

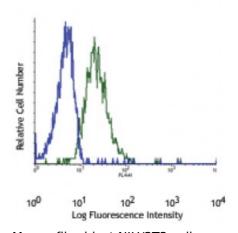
chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



Mouse fibroblast NIH/3T3 cells stained with APA5 APC

Stailled With AFAS AFC

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 ≤ 1.0 microg per 10^6 cells in 100 microL volume. 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 $^{\text{m}}$ purified antibody is recommended for functional assays.

Application References:

Takakura N, et al. 1996. J. Invest. Dermatol. 107:770.
Liao C, et al. 2010. J. Clin. Invest. 120:242. (Block)

3. Wang W, et al. 2014. PNAS. 111:14466. 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. 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