

PE anti-human CD140a (PDGFR α)

Catalog # / Size: 2217525 / 25 tests
2217530 / 100 tests

Clone: 16A1

Isotype: Mouse IgG1, κ

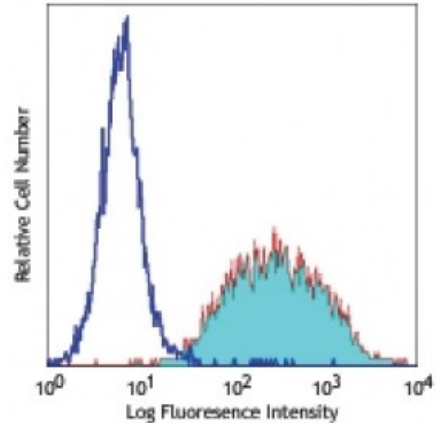
Immunogen: NIH 3T3 cells transfected with human PDGFR α

Reactivity: Human

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

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human PDGFR α transfected cells stained with 16A1 PE

Applications:

- Applications:** Flow Cytometry
- Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
- Application References:**
1. Miyazaki S et al. In: Leukocyte Typing VI Kishimoto et al. Eds, Garland Publishing Inc, New York 1998 pp 3-20.
 2. Lottaz C, et al. 2010. *Cancer Res.* 70:2030. [PubMed](#)
 3. Ricono JM, et al. 2009. *Am. J. Physiol. Renal Physiol.* 296:F406. (IF)

Description: The 16A1 monoclonal antibody recognizes human CD140a also known as the platelet-derived growth factor receptor, α polypeptide, PDGFR2, and PDGFR α . CD140a is a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. The identity of the growth factor bound to the receptor determines whether the functional receptor is a homodimer or heterodimer composed of both PDGFR- α and - β . CD140a contains three immunoglobulin-like domains and a tyrosine kinase domain with a predicted molecular weight of approximately 123 kD. CD140a is widely expressed on a variety of mesenchymal-derived cells and has been implicated in the development of some tumors including basal cell carcinoma and gastric stromal cell tumors. Binding of A-chain containing PDGF molecules as well as protease-activated PDGF-C molecules can stimulate cell proliferation. CD140a has been shown to interact with a number of proteins including CRK, Grb2, Grb14, SHP2, and others as integrin β 3, caveolin-1, and nexin sorting molecules. The PDGFR α is heavily phosphorylated on numerous tyrosine residues through both autophosphorylation and ligand-dependent processes. The 16A1 antibody has been shown to be useful for flow cytometric detection of CD140a.

Antigen 1. Gronwald RG, et al. 1988. *Proc. Natl. Acad. Sci. USA* 85:3435.

- References:**
2. Gilbertson DG, *et al.* 2001. *J. Biol. Chem.* 276:27406.
 3. Seifert RA, *et al.* 1989. *J. Biol. Chem.* 264:8771.
 4. Rupp