

1F-589-T025

## Monoclonal Antibody to CD140a / PDGF-RA Fluorescein (FITC) conjugated (25 tests)

Clone: 16A1

**Isotype:** Mouse IgG1

Specificity: The mouse monoclonal antibody 16A1 recognizes CD140a / PDGF-RA, the 170

kDa alpha chain of platelet-derived growth factor receptor, which is widely expressed on a variety of mesenchymal-derived cells and plays pro-proliferative or

anti-proliferative roles in various tumours.

HLDA VI.; WS Code E022

Regulatory Status: RUO

Immunogen: CD140a-transfected NIH 3T3 cells

Species Reactivity: Human

**Preparation:** The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC and adjusted for

direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

**Storage / Stability:** Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

**Usage:** The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (0.1 ml) is sufficient for 25 tests.

**Expiration:** See vial label

**Lot Number:** See vial label

Background: CD140a / PDGF-RA (platelet-derived growth factor receptor alpha) is a cell surface

receptor for members of platelet-derived growth factor family, whose intracellular part contains a tyrosine kinase domain. CD140a forms homodimers, or heterodimerizes with CD140b / PDGF-RB. Whereas CD140b induces in different cell types their proliferation and migration, the role of CD140a is more controversial, with pro-proliferative or anti-proliferative effects. CD140a has early developmental functions, mediates mesodermal cell migration, and later acts in

signaling associated in epithelial-mesenchymal interactions.

References: \*Andrae J, Gallini R, Betsholtz C: Role of platelet-derived growth factors in

physiology and medicine. Genes Dev. 2008 May 15;22(10):1276-312.

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\*Schmahl J, Rizzolo K, Soriano P: The PDGF signaling pathway controls multiple

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\*Faraone D, Aguzzi MS, Toietta G, Facchiano AM, Facchiano F, Magenta A, Martelli F, Truffa S, Cesareo E, Ribatti D, Capogrossi MC, Facchiano A: Platelet-derived growth factor-receptor alpha strongly inhibits melanoma growth in

vitro and in vivo. Neoplasia. 2009 Aug;11(8):732-42.

\*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).

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