

1P-590-T100

## Monoclonal Antibody to CD140b / PDGF-RB Phycoerythrin (PE) conjugated (100 tests)

Clone: 18A2

**Isotype:** Mouse IgG1

Specificity: The monoclonal antibody 18A2 recognizes CD140b / PDGF-RB, the 180-190 kDa

beta chain of platelet-derived growth factor receptor, which is widely expressed on

a variety of mesenchymal-derived cells and plays pro-proliferative roles.

Regulatory Status: RUO

Immunogen: CD140b-transfected NIH 3T3 cells

Species Reactivity: Human

Preparation: The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography 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

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

The content of a vial (2 ml) is sufficient for 100 tests.

**Expiration:** See vial label

Lot Number: See vial label

Background: CD140b / PDGF-RB (platelet-derived growth factor receptor beta) is a cell surface

receptor for members of platelet-derived growth factor family, whose intracellular part contains a tyrosine kinase domain. CD140b forms homodimers, or heterodimerizes with CD140a / PDGF-RA. Whereas CD140a can have both pro-proliferative or anti-proliferative effects, the CD140b induces in various cell types their proliferation and migration. CD140b has also developmental roles in the cardiovascular system and is preferentially expressed on some tumours such as

medulloblastoma.

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.

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MSC. PLoS One. 2012;7(8):e43255. doi: 10.1371/journal.pone.0043255

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