

TECHNICAL DATA SHEET

CyFlow™ CD140b PE Anti-Hu; Clone 18A2

REF CM847869

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD140b
Alternative Names	PDGFRB, PDGFRF1
Clone	18A2
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	CD140b-transfected NIH 3T3 cells

Specificity

The monoclonal antibody 18A2 recognizes CD140b antigen, the 180-190 kDa β chain of platelet-derived growth factor receptor, which is widely expressed on a variety of mesenchymal-derived cells and plays pro-proliferative roles.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD140b (PDGF-RB; platelet-derived growth factor receptor β) 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 tumors such as medulloblastoma.

References

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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

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- Fekete N, Rojewski MT, Fürst D, Kreja L, Ignatius A, Dausend J, Schrezenmeier H: GMP-compliant isolation and large-scale expansion of bone marrow-derived MSC. PLoS One. 2012; 7(8):e43255.
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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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