TECHNICAL DATA SHEET

CyFlow™ CD140b Purified
Anti-Hu; Clone 18A2

REF **BX650702**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD140b
Alternative Names	PDGFRB, PDGRF1
Clone	18A2
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
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

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunocytochemistry

Storage Buffer

The reagent is provided in 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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- 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. < PMID: 18483217 >
- French WJ, Creemers EE, Tallquist MD: Platelet-derived growth factor receptors direct vascular development independent of vascular smooth muscle cell function. Mol Cell Biol. 2008 Sep; 28(18):5646-57. < PMID: 18606782 >
- 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. < PMID: 22905242 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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