TECHNICAL DATA SHEET

CyFlow™ CD148 PE

Anti-Hu; Clone MEM-CD148/05

REF **BH775758**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD148
Alternative Names	DEP-1, HPTP-a, SCC1
Clone	MEM-CD148/05
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG2b
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human recombinant CD148 (amino acids 1-444)

Specificity

The mouse monoclonal antibody MEM-CD148/05 recognizes CD148 antigen, a highly glycosylated up to 250 kDa receptor-like protein tyrosin phosphatase expressed mainly in lymphocytes, myeloid cells and epithelial cells.

Contact Information:

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (1 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

CD148 (HPTP-eta, DEP-1) is a transmembrane protein tyrosin phosphatase containing eight fibronectin type III extracellular domains. This protein is known to inhibit transduction of mitogenic signals in non-hematopoietic cells (fibroblasts, epithelial cells), and signal transduction downstream of T cell receptor, however, it also augments immunoreceptor signaling in B cells and macrophages via dephosphorylating C-terminal tyrosine of Src-family tyrosine kinases. CD148 expression increases after in vitro activation of peripheral blood leukocytes. It can be also used as marker of the most mature human thymocytes, and leukemic cells corresponding to this stadium of thymocyte differentiation. In contrast, in mice the CD148 expression sharply drops through the double positive stage to the single positive thymocytes.

References

- Stepanek O, Kalina T, Draber P, Skopcova T, Svojgr K, Angelisova P, Horejsi V, Weiss A, Brdicka T: Regulation of Src family kinases involved in T cell receptor signaling by protein-tyrosine phosphatase CD148. J Biol Chem. 2011 Jun 24; 286(25):22101-12. < PMID: 21543337 >

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

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