TECHNICAL DATA SHEET

CyFlow™ CD7 Pacific Blue™
Anti-Hu; Clone MEM-186

REF **CL065198**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD7
Alternative Names	gp40
Clone	MEM-186
Clonality	monoclonal
Format	Pacific Blue™
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human acute myelogenous leukaemia cell line KG-1

Specificity

The mouse monoclonal antibody MEM-186 recognizes CD7 antigen, a 40 kD type I transmembrane glycoprotein expressed on peripheral blood T lymphocytes, NK-cells, hematopoietic progenitors, monocytes (weakly) and also on acute lymphocytic leukemia.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 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

CD7 (gp40) is a member of the immunoglobulin superfamily found on T cells, NK cells, thymocytes, hematopoietic progenitors, and monocytes (weakly). CD7 is also expressed on acute lymphocytic leukemia (ALL). CD7 crosslinking induces a calcium flux in T lymphocytes, presumably as a result of cytoplasmic domain association with PI3-kinase. CD7 co-stimulation can induce cytokine secretion and modulate cellular adhesion. A ligand of CD7, epithelial cell secreted protein K12, is produced in thymus to regulate thymocyte signaling and cytokine release. In lung microvascular endothelial cells CD7 serves as an IgM Fc receptor. Expression of CD7 is an important marker used in leukemia diagnostics.

References

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

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