

TECHNICAL DATA SHEET

CyFlow™ CD7 Purified Anti-Hu; Clone MEM-186

REF AW016917

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

Specifications

Antigen	CD7
Alternative Names	gp40
Clone	MEM-186
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
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

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

- Flow cytometry
- Immunoprecipitation
- Western blot
- Immunohistochemistry (paraffin-embedded sections)

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH $\approx$ 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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- Nishimura M, Takanashi M, Okazaki H, Satake M, Nakajima K: Role of CD7 expressed in lung microvascular endothelial cells as Fc receptor for immunoglobulin M. Endothelium. 2006 Jul-Aug; 13(4):287-92. < PMID: 16990185 >
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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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