

PB-206-T100

Monoclonal Antibody to CD7 Pacific Blue™ conjugated (100 tests)

Clone: MEM-186
Isotype: Mouse IgG1

Specificity: The MEM-186 antibody reacts with CD7, 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.

HLDA VI; WS Code T 6T-015

Regulatory Status: RUO

Immunogen: Human acute myelogenous leukaemia cell line KG-1.

Species Reactivity: Human

Preparation: The purified antibody is conjugated with Pacific Blue™ under optimum conditions.

The conjugate is purified by size-exclusion chromatography and adjusted for direct

use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10⁶ cells in a suspension.

The content of a vial (0.4 ml) is sufficient for 100 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD7, also known as 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.



PRODUCT DATA SHEET

References:

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*Lam GK, Liao HX, Xue Y, Alam SM, Scearce RM, Kaufman RE, Sempowski GD, Haynes BF. Expression of the CD7 ligand K-12 in human thymic epithelial cells: regulation by IFN-gamma. J Clin Immunol. 2005 Jan;25(1):41-9.

*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.

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