TECHNICAL DATA SHEET

CyFlow™ CD45 Alexa Fluor™ 700

Anti-Hu; Clone MEM-28

REF AM293871

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For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD45
Alternative Names	LCA, T200, B220
Clone	MEM-28
Clonality	monoclonal
Format	Alexa Fluor™ 700
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	Horse
Quantity	100 tests
Immunogen	Human thymocytes and T lymphocytes

Specificity

The mouse monoclonal antibody MEM-28 recognizes all alternative forms of human CD45 antigen, a 180-220 kDa single chain type I transmembrane protein expressed at high level on all cells of hematopoietic origin, except erythrocytes and platelets.

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 0.09% (w/v) sodium azide and 0.2% (w/v) BSA.

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

CD45 (LCA; leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing; these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis.

Warnings

Non-Hazardous Statement: This is not considered hazardous by the criteria in 29 CFR 1910.1200 or the General Classification guideline for preparations of the EU.

Safety Data Sheet Statement: Important information regarding the safe handling, transport, and disposal of this product is contained in the Safety Data Sheet (SDS). SDS are available at http://www.sysmex-partec.com/services, or at https://us.sysmex-flowcytometry.com/ (U.S. customers only).

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Symbols

REF	Reference number	Σ	Contains sufficient for <n> tests
RUO	For research use only		Temperature limit
LOT	Batch code		Keep away from sunlight
	Manufacturer		Consult accompanying documents
	Use-by date	UDI	Unique device identifier