

T7-222-T025

Monoclonal Antibody to CD45 PE-Cy[™]7 conjugated (25 tests)

Clone: MEM-28

Isotype: Mouse IqG1

Specificity: The antibody MEM-28 reacts with all alternative forms of human CD45 antigen

> (Leukocyte Common 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. HLDA III; WS Code NL 833a

RUO Regulatory Status:

Human thymocytes and T lymphocytes. Immunogen:

Species Reactivity: Human

Negative Species: Equine (Horse)

The purified antibody is conjugated with tandem dye PE-Cy™7 under optimum **Preparation:**

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

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

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 (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label See vial label

Lot Number:

CD45 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine **Background:**

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.



PRODUCT DATA SHEET

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