

A6-223-T025

## Monoclonal Antibody to CD45RA Alexa Fluor® 647 conjugated (25 tests)

<b>Clone:</b>	MEM-56
<b>Isotype:</b>	Mouse IgG2b
<b>Specificity:</b>	The antibody MEM-56 reacts with CD45RA, a 205-220 kDa single chain type I glycoprotein, variant of CD45 (CD45RA isoform). CD45RA is expressed on most of B lymphocytes, resting and native T lymphocytes, medullar thymocytes and monocytes. HLDA IV; WS Code NL 907
<b>Immunogen:</b>	Human thymocytes and T lymphocytes.
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with Alexa Fluor® 647 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
<b>Storage / Stability:</b>	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. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.1 ml) is sufficient for 25 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD45RA is a high molecular weight isoform of a receptor-type protein tyrosine phosphatase, CD45 glycoprotein. CD45 is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases, promotes cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis. CD45 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. CD45RA is expressed e.g. on naïve T cells and normal plasma cells.

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

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- \*Dawes R, Petrova S, Liu Z, Wraith D, Beverley PC, Tchilian EZ. Combinations of CD45 isoforms are crucial for immune function and disease. *J Immunol*. 2006 Mar 15;176(6):3417-25.
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