

1P-228-T100

## Monoclonal Antibody to CD54 Phycoerythrin (PE) conjugated (100 tests)

<b>Clone:</b>	MEM-111
<b>Isotype:</b>	Mouse IgG2a
<b>Specificity:</b>	The antibody MEM-111 reacts with CD54 (ICAM-1), a 85-110 kDa type I transmembrane glycoprotein (receptor for rhinovirus). The expression of CD54 is upregulated by activation; it is expressed on activated endothelial cells, T lymphocytes, B lymphocytes, monocytes, macrophages, granulocytes and dendritic cells. HLDA VI; WS Code AS A049
<b>Immunogen:</b>	Raji human Burkitt's lymphoma cell line
<b>Species Reactivity:</b>	Human, Rat, Bovine
<b>Preparation:</b>	The purified antibody is conjugated with R-Phycoerythrin (PE) 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 20 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD54 (ICAM-1) is a 90 kD member of the C2 subset of immunoglobulin superfamily. It is a transmembrane molecule with 7 potential N-glycosylated sites, expressed on resting monocytes and endothelial cells and can be upregulated on many other cells, e.g. with lymphokines, on B- and T-lymphocytes, thymocytes, dendritic cells and also on keratinocytes, chondrocytes, as well as epithelial cells. CD54 mediates cell adhesion by binding to integrins CD11a/CD18 (LFA-1) and to CD11b/CD18 (Mac-1). The interaction of CD54 with LFA-1 enhances antigen-specific T-cell activation.

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

**Antibodies****References:**

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- \*Burdick MM et al.: Colon carcinoma cell glycolipids, integrins, and other glycoproteins mediate adhesion to HUVECs under flow. *Am J Physiol Cell Physiol* 284, C977 (2003).
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- \*Bacáková L, Mares V, Lisá V, Svorčík V: Molecular mechanisms of improved adhesion and growth of an endothelial cell line cultured on polystyrene implanted with fluorine ions. *Biomaterials.* 2000 Jun;21(11):1173-9.
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- \*Lee DJ, Sieling PA, Ochoa MT, Krutzik SR, Guo B, Hernandez M, Rea TH, Cheng G, Colonna M, Modlin RL: LILRA2 activation inhibits dendritic cell differentiation and antigen presentation to T cells. *J Immunol.* 2007 Dec 15;179(12):8128-36.

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