



1P-228-T025

Monoclonal Antibody to CD54 Phycoerythrin (PE) conjugated (25 tests)

Clone:	MEM-111
Isotype:	Mouse IgG2a
Specificity:	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
Regulatory Status:	RUO
Immunogen:	Raji human Burkitt's lymphoma cell line
Species Reactivity:	Human, Rat, Bovine
Preparation:	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.
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 20 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.5 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	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:**

- *Leeuwenberg JFM et al.: E-selectin and intercellular adhesion molecule-1 are released by activated human endothelial cells in vitro. *Immunology* 77, 543 (1992).
- *Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- *Nagaraju K et al.: A variety of cytokines and immunologically relevant surface molecules are expressed by normal human skeletal muscle cells under proinflammatory stimuli. *Clin Exp Immunol* 113, 407 (1998).
- *Tachimoto H. et al., Eotaxin-2 Alters Eosinophil Integrin Function via Mitogen-Activated Protein Kinases. *Am J Respir Cell Mol Biol* 26, 645 (2002).
- *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).
- *Hertel L et al.: Susceptibility of Immature and Mature Langerhans Cell-Type Dendritic Cells to Infection and Immunomodulation by Human Cytomegalovirus. *J Virol.* 77, 7563 (2003).
- *Bacáková L, Mares V, Lysá 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.
- *Bacáková L, Mares V, Bottone MG, Pellicciari C, Lisá V, Svorčík V: Fluorine ion-implanted polystyrene improves growth and viability of vascular smooth muscle cells in culture. *J Biomed Mater Res.* 2000 Mar 5;49(3):369-79.
- *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.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

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

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz