

A4-266-T100

## Monoclonal Antibody to CD50 Alexa Fluor® 488 conjugated (100 tests)

<b>Clone:</b>	MEM-171
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The antibody MEM-171 recognizes an epitope in the D2 domain of CD50 (ICAM-3), a 120-130 kDa type I membrane protein (immunoglobulin supergene family) expressed on leukocytes, endothelial cells and Langerhans cells; it is negative on platelets and erythrocytes. HLDA VI; WS Code BP 614 HLDA VI; WS Code NL N-L022
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	Human granulocytes
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with Alexa Fluor® 488 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 stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<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.
<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 (0.4 ml) is sufficient for 100 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD50 (intracellular adhesion molecule 3, ICAM-3) is a transmembrane glycoprotein expressed by leukocytes, that serves as a counter-receptor for the lymphocyte function-associated antigen (LFA)-1 integrin. Besides functioning as an adhesive molecule that mediates e.g. the contact between T cells and antigen presenting cells, ICAM-3 regulates affinity of LFA-1 for ICAM-1 and induces T cell activation and proliferation. ICAM-3 plays an essential role in the initiation of the immune response both on T cells and antigen presenting cells and interacts also with CD209 (dendritic cell-specific ICAM-3-grabbing nonintegrin, DC-SIGN), a C-type lectin of dendritic cells and macrophages; this process is involved in dialogue between dendritic cells and granulocytes.

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**Antibodies**

- References:**
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  - \*Arroyo AG, Campanero MR, Sánchez-Mateos P, Zapata JM, Ursa MA, del Pozo MA, Sánchez-Madrid F: Induction of tyrosine phosphorylation during ICAM-3 and LFA-1-mediated intercellular adhesion, and its regulation by the CD45 tyrosine phosphatase. *J Cell Biol.* 1994 Sep;126(5):1277-86.
  - \*Bogoevska V, Nollau P, Lucka L, Grunow D, Klampe B, Uotila LM, Samsen A, Gahmberg CG, Wagener C: DC-SIGN binds ICAM-3 isolated from peripheral human leukocytes through Lewis x residues. *Glycobiology.* 2007 Mar;17(3):324-33.
  - \*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
  - \*Linnebacher M, Wienck A, Boeck I, Klar E: Identification of an MSI-H tumor-specific cytotoxic T cell epitope generated by the (-1) frame of U79260(FTO). *J Biomed Biotechnol.* 2010;2010:841451.
  - \*Filatov AV, Krotov GI, Zgoda VG, Volkov Y: Fluorescent immunoprecipitation analysis of cell surface proteins: a methodology compatible with mass-spectrometry. *J Immunol Methods.* 2007 Jan 30;319(1-2):21-33.
  - \*Cermák L, Šimová S, Pintzas A, Horejsí V, Andera L: Molecular mechanisms involved in CD43-mediated apoptosis of TF-1 cells. Roles of transcription Daxx expression, and adhesion molecules. *J Biol Chem.* 2002 Mar 8;277(10):7955-61.

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