

1P-266-T025

## Monoclonal Antibody to CD50 Phycoerythrin (PE) conjugated (25 tests)

Clone: MEM-171

Isotype: Mouse IgG1

Specificity: 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

Regulatory Status: RUO

Immunogen: Human granulocytes

Species Reactivity: Human

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<sup>o</sup> 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:** 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.



## PRODUCT DATA SHEET

## References:

\*Campanero MR, del Pozo MA, Arroyo AG, Sánchez-Mateos P, Hernández-Caselles T, Craig A, Pulido R, Sánchez-Madrid F. ICAM-3 interacts with LFA-1 and regulates the LFA-1/ICAM-1 cell adhesion pathway. J Cell Biol. 1993 Nov;123(4):1007-16.

\*Hernandez-Caselles T, Rubio G, Campanero MR, del Pozo MA, Muro M, Sanchez-Madrid F, Aparicio P: ICAM-3, the third LFA-1 counterreceptor, is a co-stimulatory molecule for both resting and activated T lymphocytes. Eur J Immunol. 1993 Nov;23(11):2799-806.

\*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 L, Klar, E: Identification of an MSLH

\*Linnebacher M, Wienck A, Boeck I, Klar E: Identification of an MŚI-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, Símová 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.

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.