

1F-429-T025

Monoclonal Antibody to CD54 Fluorescein (FITC) conjugated (25 tests)

Clone: 1H4

Isotype: Mouse IgG2b

Specificity: The antibody 1H4 reacts with CD54 (ICAM-1), a 85-110 kDa type I transmembrane

glycoprotein (receptor for rhinovirus) expressed on activated endothelial cells, T lymphocytes, B lymphocytes, monocytes, macrophages, granulocytes and

dendritic cells; the expression of CD54 is upregulated by activation.

Regulatory Status: RUO

Immunogen: Raji cells and spleen cells fused with NS1 cells

Species Reactivity: Human, Other not tested

Preparation: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC 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° 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.



PRODUCT DATA SHEET

References:

*Boyd AW, Wawryk SO, Burns GF, Fecondo JV: Intercellular adhesion molecule 1 (ICAM-1) has a central role in cell-cell contact-mediated immune mechanisms. Proc Natl Acad Sci U S A. 1988 May;85(9):3095-9.

*Boyd AW, Dunn SM, Fecondo JV, Culvenor JG, Duhrsen U, Burns GF, Wawryk SO: Regulation of expression of a human intercellular adhesion molecule (ICAM-1) during lymphohematopoietic differentiation. Blood. 1989 May 15;73(7):1896-903. *Springer TA: Adhesion receptors of the immune system. Nature. 1990 Aug 2;346(6283):425-34.

*Ockenhouse CF, Betageri R, Springer TA, Staunton DE: Plasmodium falciparum-infected erythrocytes bind ICAM-1 at a site distinct from LFA-1, Mac-1, and human rhinovirus. Cell. 1992 Jan 10;68(1):63-9. Erratum in: Cell 1992 Mar 6;68(5):following 994.

*Williams DT, Chaudhry Y, Goodfellow IG, Lea S, Evans DJ: Interactions of decay-accelerating factor (DAF) with haemagglutinating human enteroviruses: utilizing variation in primate DAF to map virus binding sites. J Gen Virol. 2004 Mar;85(Pt 3):731-8.

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.