

Monoclonal Antibody to CD54 / ICAM1 - PE

Alternate names:	ICAM-1, Intercellular adhesion molecule 1, Major Group Rhinovirus Receptor
Catalog No.:	AM03205RP-N
Quantity:	100 Tests
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.
Uniprot ID:	P05362
NCBI:	9606
Host / Isotype:	Mouse / IgG2b
Clone:	1H4
Immunogen:	Raji cells and spleen cells fused with NS1 cells
Format:	State: Liquid purified IgG fraction Purification: Size-Exclusion Chromatography Buffer Solution: PBS Preservatives: 15 mM Sodium Azide Stabilizers: 0.2% (w/v) high-grade BSA (Protease free) Label: PE – R-Phycoerythrin
Applications:	Flow Cytometry: Use 20 µl to label 10e6 cells or 100 µl whole blood or blood or 10e6 cells in a suspension. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody 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.
Species Reactivity:	Tested: Human.
Add. Information:	The content of a vial (2 ml) is sufficient for 100 tests.
Storage:	Store the antibody undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. Shelf life: one year from despatch.

For research and in vitro use only. Not for diagnostic or therapeutic work.
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

- General Readings:**
1. 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. PubMed PMID: 3362863.
 2. Boyd AW, Dunn SM, Fecondo JV, Culvenor JG, Dührsen U, Burns GF, et al. Regulation of expression of a human intercellular adhesion molecule (ICAM-1) during lymphohematopoietic differentiation. *Blood.* 1989 May 15;73(7):1896-903. PubMed PMID: 2469503.
 3. Springer TA. Adhesion receptors of the immune system. *Nature.* 1990 Aug 2;346(6283):425-34. PubMed PMID: 1974032.
 4. 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. PubMed PMID: 1346257.
 5. 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. PubMed PMID: 14993659.

Pictures: Surface staining of U937 Human histiocytic lymphoma cell line with anti-Human CD54 antibody (1H4) PE conjugated. Total viable cells were used for analysis.

