

CD54 (ICAM-1) Monoclonal Antibody (RR1/1), FITC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RR1/1
Conjugate	FITC
Excitation/Emission Max	498/517 nm
Form	Liquid
Concentration	10 µL/Test
Purification	Affinity chromatography
Storage buffer	TBS, pH 7.2-7.4, with 1% BSA
Contains	0.02% sodium azide
Storage conditions	4° C, store in dark
RRID	AB_10597772

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	10 µL/test	3 Publications

Product Specific Information

Description: Recognizes the D1 domain of human CD54.

Intercellular Adhesion Molecule-1 (ICAM-1) is a member of the immunoglobulin supergene family and functions as a ligand for the Lymphocyte Function-Associated Antigen-1 (LFA-1), an alpha-betacomplex that is a member of the leukocyte integrin family of cell-cell and cell-matrix receptors.

ICAM-1 is a single-chain glycoprotein with a polypeptide core of 55 kD that can be expressed on non-hematopoietic cells of many lineages such as vascular endothelial cells, thymic epithelial cells, other epithelial cells and fibroblasts and on hematopoietic cells such as tissue macrophages, mitogen-stimulated T-lymphoblasts, germinal center B cells and dendritic cells in tonsils, lymph nodes and Peyer's patches.

ICAM-1 is inducible on fibroblasts and endothelial cells by inflammatory mediators such as IL-1, TNF and IFN-gamma within few hours and is correlated to the infiltration of lymphocytes into inflammatory lesions. ICAM-1 seems to be the initial marker of inflammatory reactions and is expressed prior to, and to a greater extent than is HLA-DR.

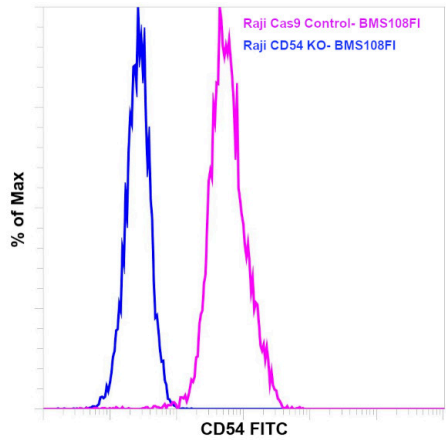
sICAM-1 serum levels were found elevated in acute renal graft rejection, insulin-dependent diabetes mellitus, anterior uveitis and in allergic inflammation.

Applications Tested: Flow Cytometry.

Purity: >95%.

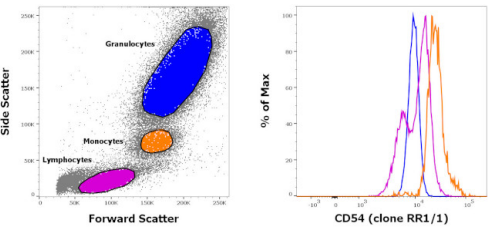
Excitation: 488 nm; Emission: 520 nm; Laser: Blue Laser

Product Images For CD54 (ICAM-1) Monoclonal Antibody (RR1/1), FITC, eBioscience™



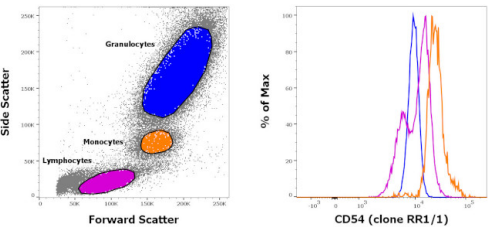
CD54 (ICAM-1) Antibody (BMS108FI) in Flow

Knockout of ICAM-1 (CD54) was achieved by CRISPR-Cas9 genome editing using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR845355_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Flow cytometry analysis of CD54 was performed by staining Raji CD54 Knock out cells (blue histogram) or Raji Cas9 control cells (pink histogram) with 10 µl CD54 (ICAM-1) Monoclonal Antibody (RR1/1), FITC, eBioscience™ (Product # BMS108FI). Loss of signal was observed in the CD54 KO cells stained with CD54 antibody clone RR1/1 but not in the control Cas9 cells. Fixable Viability Dye eFluor780 (Product # 65-0865-18) was used for staining and selecting viable cells for analysis.



CD54 (ICAM-1) Antibody (BMS108FI)

Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue and CD54 FITC. As expected based on known relative expression patterns, CD54 clone RR1/1 stains a subset of lymphocytes (pink), monocytes (orange) and granulocytes (blue). {RE}



CD54 (ICAM-1) Antibody (BMS108FI) in Flow

Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue and CD54 FITC. As expected based on known relative expression patterns, CD54 clone RR1/1 stains a subset of lymphocytes (pink), monocytes (orange) and granulocytes (blue).

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Flow Cytometry (3)

<p>Journal of atherosclerosis and thrombosis</p> <p>Azelnidipine Inhibits the Differentiation and Activation of THP-1 Macrophages through the L-Type Calcium Channel.</p> <p>"Published figure using CD54 (ICAM-1) monoclonal antibody (Product # BMS108FI) in Flow Cytometry"</p> <p>Authors: Komoda H,Shiraki A,Oyama JI,Nishikido T,Node K</p>	<p>Year 2018</p> <p>Species Human</p> <p>Dilution 1:100,000</p>
<p>Molecular and cellular biochemistry</p> <p>Interleukin-27 enhances TNF--mediated activation of human coronary artery endothelial cells.</p> <p>"BMS108FI was used in flow cytometry to examine the effects of IL-27 and TNF-alpha on the cell surface expression of adhesion molecules, inflammatory cytokines, and chemokines"</p> <p>Authors: Qiu HN,Liu B,Liu W,Liu S</p>	<p>Year 2016</p> <p>Species Human</p>

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