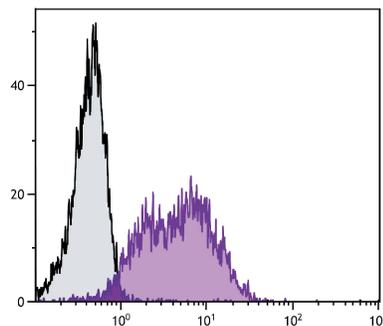




Mouse Anti-Human CD54

Cat. No.	Format	Size
9441-01	Purified (UNLB)	0.1 mg
9441-02	Fluorescein (FITC)	100 tests
9441-08	Biotin (BIOT)	100 tests
9441-09	R-phycoerythrin (PE)	100 tests
9441-11	Allophycocyanin (APC)	100 tests



Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD54-PE (SB Cat. No. 9441-09).

Overview

Clone	15.2
Isotype	Mouse (BALB/c) IgG ₁ κ
Immunogen	Rheumatoid synovial cells and human monocytes
Specificity	Human/Porcine CD54; Mr 90 kDa
Alternate Name(s)	ICAM-1, intracellular adhesion molecule-1, Ly-47
Workshop	N/A

Description

CD54, also known as intercellular cell adhesion molecule-1 (ICAM-1), is a 90 kDa type I transmembrane glycoprotein and a member of the immunoglobulin superfamily. It exhibits a wide tissue distribution being expressed on both hematopoietic and non-hematopoietic cells. ICAM-1 expression on leukocytes is low but is rapidly upregulated upon activation. Expression on endothelium and other non-hematopoietic cells is strongly upregulated by inflammatory mediators. The ligands of CD54 are CD11a/LFA-1α and CD11b/Mac-1α. Endothelial CD54 contributes to the extravasation of leukocytes from blood vessels particularly in areas of inflammation. CD54 on antigen-presenting cells (APC) contributes to antigen-specific T cell activation presumably by enhancing interactions between T cells and APC.

Applications

FC – Quality tested ¹⁴⁻¹⁷
 IHC-FS – Reported in literature ¹⁻³
 ICC – Reported in literature ^{4,18}
 IP – Reported in literature ⁷
 WB – Reported in literature ⁵
 Block – Reported in literature ^{6,8,9}
 Neut – Reported in literature ⁷
 ELISA – Reported in literature ¹⁰⁻¹³

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 1 μg/10 ⁶ cells
	FITC, BIOT, PE, and APC conjugates	10 μL/10 ⁶ cells
For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL		

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS

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