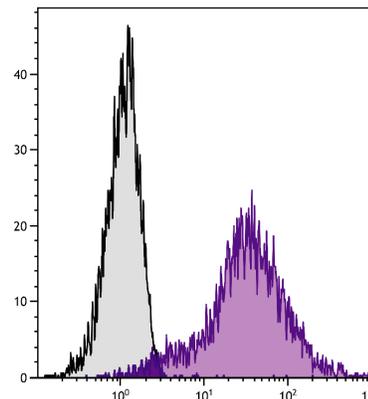




Rat Anti-Mouse CD54

Cat. No.	Format	Size
1701-01	Purified (UNLB)	0.5 mg
1701-02	Fluorescein (FITC)	0.5 mg
1701-08	Biotin (BIOT)	0.5 mg
1701-09	R-phycoerythrin (PE)	0.1 mg
1701-11	Allophycocyanin (APC)	0.1 mg
1701-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1701-26	Pacific Blue™ (PACBLU)	0.1 mg
1701-27	Alexa Fluor® 700 (AF700)	0.1 mg
1701-30	Alexa Fluor® 488 (AF488)	0.1 mg
1701-31	Alexa Fluor® 647 (AF647)	0.1 mg



C57BL/6 mouse splenocytes were stained with Rat Anti-Mouse CD54-APC (SB Cat. No. 1701-11).

Overview

Clone	YN1/1.7.4
Isotype	Rat (Fisher334) IgG _{2b} k
Immunogen	Mouse NS-1 cells
Specificity	Mouse/Porcine CD54; Mr 95 kDa
Alternate Name(s)	ICAM-1, Ly-47

Description

CD54, a member of the immunoglobulin superfamily of cell surface receptors and also known as Intercellular Adhesion Molecule-1 (ICAM-1), is a type I transmembrane glycoprotein that mediates important cell/cell interactions. CD54 is expressed on endothelial cells, dendritic cells, keratinocytes, and lymphocytes. Its expression is upregulated by inflammatory mediators such as IFN- γ , IL-1, TNF- α , lipopolysaccharide and phorbol esters. Endothelial CD54 contributes to the extravasation of leukocytes from blood vessels, particularly in areas of inflammation. CD54 on antigen-presenting cells contributes to antigen-specific T-cell activation, presumably by enhancing interactions between T cell and antigen-presenting cells. These adhesion reactions are mediated via the binding of CD54 to its major ligands, LFA-1 and Mac-1.

Applications

FC – Quality tested ⁹⁻¹¹
 IHC-FS – Reported in literature ^{3,12-14}
 ICC – Reported in literature ⁴
 WB – Reported in literature ⁶⁻⁸
 IP – Reported in literature ¹
 Block – Reported in literature ^{1,2}
 Purification – Reported in literature ⁵

Working Dilutions

Flow Cytometry	FITC, BIOT, AF488, and PACBLU conjugates	$\leq 1 \mu\text{g}/10^6$ cells
	PE, APC, AF647, and AF700 conjugates	$\leq 0.2 \mu\text{g}/10^6$ 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 0.5 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 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (RPE) and allophycocyanin (APC) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. Store at 2-8°C.
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- 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 SDS.

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