# Purified Anti-Mouse CD54 Antibody[YN1/1.7.4], Functional Grade

**catalog number:** **E-AB-F10180**

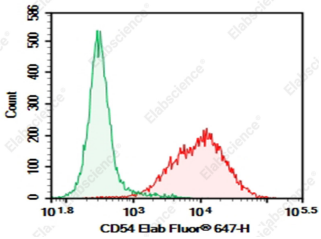
**Note:** *Centrifuge before opening to ensure complete recovery of vial contents.*

## Description

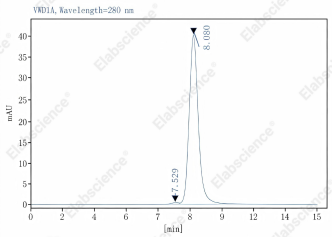
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|---|---|
| **Reactivity** | Mouse |
| **Immunogen** | Recombinant Mouse CD54 protein |
| **Host** | Rat |
| **Isotype** | Rat IgG2b, κ |
| **Clone** | YN1/1.7.4 |
| **Purification** | > 98%, Protein A/G purified, ≥ 95% monomer by analytical SEC |
| **Endotoxin** | < 1 EU/mg determined by LAL assay |
| **Conjugation** | Unconjugated |
| **Buffer** | Sterile PBS, pH 7.2. Contains no stabilizers or preservatives |

| Applications | Recommended Dilution |
|---|---|
| **FCM** | ≤ 0.2 μg per million cells in 100 μL volume |
| **Neut** | Reported in the literature |

## Data




C57/BL6 Mouse splenocytes were stained with 0.2 μg Purified Anti-Mouse CD54 Antibody[YN1/1.7.4], Functional Grade (Right) and 0.2 μg Rat IgG2b, κ Isotype Control (Left), followed by Elab Fluor® 647-conjugated Goat Anti-Rat IgG Secondary Antibody.




Monomer purity ≥95% as determined by analytical size-exclusion chromatography (SEC)

## Preparation & Storage

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|---|---|
| **Storage** | Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze/thaw cycles. This preparation contains no preservatives, thus it should be handled under aseptic conditions. |
| **Shipping** | Ice bag |

## Background

CD54 is a 90 kD immunoglobulin superfamily member also known as ICAM-1 and Ly-47. It is expressed on activated endothelial cells, high endothelial venules (HEV), T and B cells, monocytes/ macrophages, granulocytes, and dendritic cells. CD54 is an important intracellular adhesion molecule that participates in T cell-T cell, T cell-B cell, and T cell-target cell interactions via binding of LFA-1 (CD11a/CD18) and Mac-1 (CD11b/CD18). CD54 has also been shown to be involved in lymphocyte trafficking, making it an important molecule in many immune reactions and inflammation. CD54 is also a receptor for rhinovirus. The YN1/1.7.4 antibody has been reported to block binding of mouse CD54 to LFA-1 and Mac-1, inhibit cell-cell adhesion, and function in antigen presentation to T cells and leukocyte migration to inflammatory tissues.

None (Azide-Free, Low Endotoxin) are perfectly suited to be used in culture or in vivo (for nonhuman studies) for functional assays blocking, neutralizing, activation or depletion where the presence of azide may damage cells or exogenous endotoxin may signal or activate cells.

## Application References

Seddon Y Thomas, et al. J Exp Med. 2011 Jun 6;208(6):1179-88.