

## PE/Cyanine7 Anti-Mouse CD54 Antibody[YN1/1.7.4]

Catalog Number: E-AB-F1018UH

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

### Description

<b>Reactivity</b>	Mouse
<b>Host</b>	Rat
<b>Isotype</b>	Rat IgG2b, $\kappa$
<b>Clone No.</b>	YN1/1.7.4
<b>Isotype Control</b>	PE/Cyanine7 Rat IgG2b, $\kappa$ Isotype Control[LTF-2] [Product E-AB-F09843H]
<b>Conjugation</b>	PE/Cyanine 7
<b>Conjugation Information</b>	PE/Cyanine7 is designed to be excited by the Blue (488 nm), Green (532 nm) and yellow-green (561 nm) lasers and detected using an optical filter centered near 775 nm (e.g., a 780/60 nm bandpass filter).
<b>Storage Buffer</b>	Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.

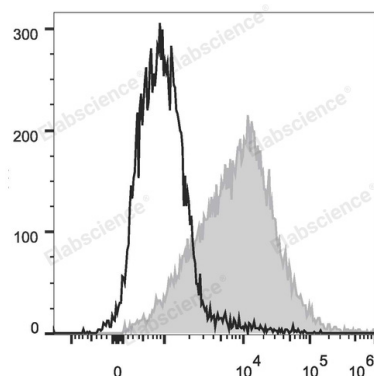
### Applications

### Recommended usage

#### FCM

Each lot of this antibody is quality control tested by flow cytometric analysis. Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use. We suggest each investigator should titrate the reagent to obtain optimal results [The recommended concentration is 0.1-1  $\mu\text{g}/10^6$  cells in 100  $\mu\text{L}$  volume].

### Data



C57BL/6 murine splenocytes are stained with PE/Cyanine7 Anti-Mouse CD54 Antibody (filled gray histogram). Unstained splenocytes (empty black histogram) are used as control.

### Preparation & Storage

<b>Storage</b>	Keep as concentrated solution. This product can be stored at 2-8°C for 12 months. Please protected from prolonged exposure to light and do not freeze.
<b>Shipping</b>	Ice bag

### Antigen Information

<b>Alternate Names</b>	CD54;Icam-1;Icam 1;Intercellular adhesion molecule 1;MALA-2;MyD10
<b>Uniprot ID</b>	P13597
<b>Gene ID</b>	15894

### For Research Use Only

## 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.