



# Rat Anti-Mouse CD54 (ICAM-1) Monoclonal antibody, clone YN1/1.7.4 (CABT-L4363)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

The YN1/1.7.4 monoclonal antibody reacts with mouse CD54 also known as Intercellular Adhesion Molecule-1 (ICAM-1). CD54 is a 90 kDa single-chain transmembrane glycoprotein and a member of the Ig superfamily. CD54 is typically expressed on non-hematopoietic cells such as endothelial cells, thymic epithelial cells, and fibroblasts but can also be expressed on macrophages, T-lymphoblasts, germinal center B cells and dendritic cells. CD54 is a ligand for LFA-1, a receptor found on leukocytes. When activated, leukocytes bind to endothelial cells via CD54/LFA-1 to facilitate transmigration into tissues. Pro-inflammatory cytokines such as IL-1, TNF and IFN $\gamma$  induce CD54 expression on endothelial cells and fibroblasts. The YN1/1.7.4 antibody has been shown to neutralize CD54 in vivo and inhibit CXCL1, IFN $\gamma$ , and IL-17 production and neutrophil infiltration into inflammatory lesions.

<b>Target</b>	Mouse CD54 (ICAM-1)
<b>Immunogen</b>	NS-1 mouse myeloma cells
<b>Isotype</b>	IgG2b, $\kappa$
<b>Source/Host</b>	Rat
<b>Species Reactivity</b>	Mouse
<b>Clone</b>	YN1/1.7.4
<b>Purification</b>	Protein G purified. Purity>95%. Determined by SDS-PAGE
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	in vivo ICAM-1 neutralization, IHC-F, ELISA

<b>Molecular Weight</b>	150 kDa
<b>Format</b>	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
<b>Concentration</b>	Lot specific
<b>Size</b>	5 mg
<b>Buffer</b>	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]  Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
<b>Preservative</b>	None
<b>Storage</b>	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	cell adhesion molecule; ligand for leukocyte adhesion molecule LFA-1 [RGD, Feb 2006]
<b>Keywords</b>	ICAM1;intercellular adhesion molecule 1;CD54;ICAM;ICAM-1;

## GENE INFORMATION

<b>Official Symbol</b>	intercellular adhesion molecule 1
<b>Synonyms</b>	ICAM1; intercellular adhesion molecule 1; CD54; ICAM; ICAM-1;