CD54 Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	CD54, Monoclonal Antibody
Full Product Name	Anti-Human CD54 Monoclonal Antibody (PE/Cy7 Conjugated)
Product Gene Name	anti-CD54 antibody
Product Synonym Names	Intercellular adhesion molecule 1; Icam1; MALA-2; MyD10; CD54; Icam-1
Clonality	Monoclonal
Isotype	IgG1
Clone Number	15.2
Host	Mouse
Species Reactivity	Human
Form/Format	PBS with 0.05% Proclin300, 1% BSA
Preparation and Storage	Store at 2-8 degree C and protect from prolonged exposure to light. Do not freeze.
Matching Pairs	Antibody: CD54 (MBS2558325) Isotype Control: IgG1 Clone #MOPC-21 (MBS2557736)
OMIM	147840
3D Structure	ModBase 3D Structure for P05362
Conjugation	PE/Cy7
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CD54 antibody	Flow Cytometry (FC/FACS)
Related Product Information for anti-CD54 antibody	CD54 is a 85-110 kD type I transmembrane protein also known as ICAM-1. It is expressed on activated endothelial cells, high endothelial venules, T and B cells, monocytes/macrophages, granulocytes, and dendritic cells. The expression of ICAM-1 can be released from the cell surface. CD54 plays a role in cellular adhesion and is involved in inflammation and leukocyte extravasation. CD54 has also been shown to be the major cellular receptor for rhinovirus. ICAM-1 binds to CD11a/CD18 (LFA-1), CD11b/CD18 (Mac-1), CD11c/CD18 (p150, 95) as well as hyaluronan and fibrinogen.
Other Notes	Small volumes of anti-CD54 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CD54 purchase	MBS2558325 is an antibody targeting CD54. Also known as Anti-Human CD54 Monoclonal Antibody (PE/Cy7 Conjugated). Reactive in Human. Host: Mouse.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD54. It may not necessarily be applicable to this product.

NCBI GI #	167466198
NCBI GeneID	3383
NCBI Accession #	NP_000192.2

UniProt Primary Accession #	P05362
UniProt Related Accession #	P05362
GenBank Nucleotide #	NP_000192.2
NCBI Official Full Name	intercellular adhesion molecule 1
NCBI Official Synonym Full Names	intercellular adhesion molecule 1
NCBI Official Symbol	ICAM1
NCBI Official Synonym Symbols	BB2; CD54; P3.58
UniProt Protein Name	Intercellular adhesion molecule 1
UniProt Synonym Protein Names	Major group rhinovirus receptor
Protein Family	Intercellular adhesion molecule
UniProt Gene Name	ICAM1
UniProt Synonym Gene Names	ICAM-1
UniProt Entry Name	ICAM1_HUMAN
NCBI Protein Information	intercellular adhesion molecule 1
NCBI Summary for CD54	This gene encodes a cell surface glycoprotein which is typically expressed on endothelial cells and cells of the immune system. It binds to integrins of type CD11a / CD18, or CD11b / CD18 and is also exploited by Rhinovirus as a receptor. [provided by RefSeq, Jul 2008]
UniProt Comments for CD54	ICAM1: a type I membrane protein of the immunoglobulin superfamily. Is a ligand for the leukocyte adhesion LFA-1 protein (Integrin alpha-L/beta-2) and a Rhinovirus receptor. Typically expressed on endothelial cells and cells of the immune system. ICAM1 binds to integrins of type CD11a / CD18, or CD11b / CD18. Its expression is activated by p53 in an NF-kappaB-independent manner. Induced by TNFalpha in a process that involves IKKbeta. Protein type: Cell adhesion; Membrane protein, integral; Immunoglobulin superfamily Chromosomal Location of Human Ortholog: 19p13.3-p13.2 Cellular Component: extracellular space; cell surface; focal adhesion; membrane; integral to plasma membrane; plasma membrane; immunological synapse; external side of plasma membrane Molecular Function: integrin binding; viral receptor activity; protein binding; transmembrane receptor activity; receptor activity Biological Process: entry of virus into host cell; extracellular matrix organization and biogenesis; positive regulation of nitric oxide biosynthetic process; T cell antigen processing and presentation; response to organic cyclic substance; activation of NF-kappaB transcription factor; positive regulation of cellular extravasation; regulation of cell shape; leukocyte adhesion; cellular response to nutrient levels; sensory perception of sound; ovarian follicle development; T cell activation via T cell receptor contact with antigen bound to MHC molecule on antigen presenting cell; membrane to membrane docking; response to sulfur dioxide; cell adhesion; regulation of leukocyte mediated cytotoxicity; acute inflammatory response to antigenic stimulus; regulation of cell adhesion; response to drug; virion attachment, binding of host cell surface receptor; regulation of immune response; negative regulation of calcium ion transport; cytokine and chemokine mediated signaling pathway; response to amphetamine; cell aging; response to amino acid stimulus; heterophilic cell adhesion; positive regulation of peptidyl-tyrosine phosphorylation; response to ethanol; response to copper ion; positive regulation of actin filament polymerization; positive regulation of vasoconstriction; cell adhesion mediated by integrin; adhesion to host; response to ionizing radiation; leukocyte migration Disease: Malaria, Susceptibility To
Research Articles on CD54	**1.** Foxc2 attenuated adhesion of THP-1 cells to human umbilical vein endothelial cells by suppressing ICAM-1 expression.

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