

CD54(ICAM-1) Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AP52695

Product Information

Application	WB, ICC
Primary Accession	P05362
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	57825

Additional Information

Gene ID	3383
Other Names	Antigen identified by monoclonal;BB2;BB 2;BB2;CD 54;CD_antigen=CD54;CD54;CD54 antigen; Cell surface glycoprotein P3.58;Human rhinovirus receptor;ICAM 1;ICAM-1;ICAM1; ICAM1_HUMAN;Intercellular adhesion molecule 1;intercellular adhesion molecule 1 (CD54), human rhinovirus receptor;Major group rhinovirus receptor;MALA 2;MALA2;MyD 10;MyD10; P3.58;Surface antigen of activated B cells;Surface antigen of activated B cells, BB2.
Dilution	WB~~1:1000 ICC~~1:200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	ICAM1 (HGNC:5344)
Function	Cell adhesion molecule that functions as a receptor ligand of the signaling receptor ITGAL:ITGB2/LFA-1 (lymphocyte-function associated (LFA) molecule 1) ensuring leukocyte cell-cell adhesion, by providing a calibrated system to namely adjust T-cell killing to the antigen stimulation strength (PubMed: 3086451 , PubMed: 3340213 , PubMed: 38195629). Also functions as a ligand receptor of the signaling receptor ITGAM:ITGB2/MAC-1 ensuring adhesion between stimulated neutrophils and stimulated endothelial cells (PubMed: 1980124). During leukocyte trans-endothelial migration, ICAM1 engagement promotes the assembly of endothelial apical cups through ARHGEF26/SGEF and RHOG activation (PubMed: 17875742). Promotes cell

aggregation in epithelial cells through interaction with MUC1 (PubMed:[11173916](#)).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Expressed on non-hematopoietic cells such as vascular endothelial cells, thymic epithelial cells, certain other epithelial cells, and fibroblasts, and on hematopoietic cells such as tissue macrophages, mitogen-stimulated T lymphocyte blasts, and germinal center dendritic cells in tonsils, lymph nodes, and Peyer's patches (PubMed:3086451). Expressed in low amounts on peripheral blood leukocytes (PubMed:3086451).

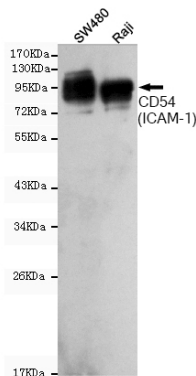
Background

ICAM proteins are ligands for the leukocyte adhesion protein LFA-1 (integrin alpha-L/beta-2). During leukocyte trans- endothelial migration, ICAM1 engagement promotes the assembly of endothelial apical cups through ARHGEF26/SGEF and RHOG activation. In case of rhinovirus infection acts as a cellular receptor for the virus.

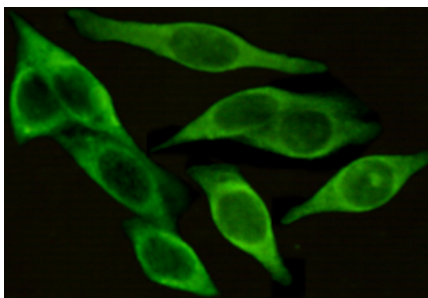
References

Simmons D.,et al.Nature 331:624-627(1988).
Staunton D.E.,et al.Cell 52:925-933(1988).
Tomassini J.E.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:4907-4911(1989).
Voraberger G.F.,et al.J. Immunol. 147:2777-2786(1991).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

Images



Western blot detection of CD54(ICAM-1) in SW480 and Raji cell lysates using CD54(ICAM-1) mouse mAb (1:1000 diluted). Predicted band size:96KDa.Observed band size:96KDa.



Immunocytochemistry staining of SW480 cells fixed by anhydrous methanol for 2 h at -20°C and using anti-CD54(ICAM-1) mouse mAb (dilution 1:200).