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CD54(ICAM-1) Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52694

Product Information

Application	WB
Primary Accession	P05362
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
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
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).

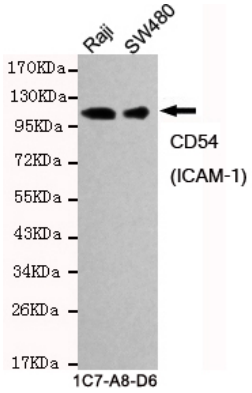
Background

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 Raji and SW480 cell lysates and using CD54(ICAM-1) mouse mAb (1:1000 diluted).Predicted band size: 58KDa.Observed band size: 96KDa.

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