

CD54 / ICAM-1 Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone W-CAM-1; same as Wehi-CAM-1 or 1H4] Catalog # AH11483

Product Information

Application	IHC, IF, FC
Primary Accession	<u>P05362</u>
Other Accession	<u>3383</u> , <u>643447</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Clone Names	W-CAM-1; same as Wehi-CAM-1 or 1H4
Calculated MW	57825

Additional Information

Gene ID	3383
Other Names	Intercellular adhesion molecule 1, ICAM-1, Major group rhinovirus receptor, CD54, ICAM1
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD54 / ICAM-1 Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ICAM1
Function	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.
Cellular Location	Membrane; Single-pass type I membrane protein.

Background

Recognizes an 85-115kDa protein (variation with cell type), identified as intercellular adhesion molecule (ICAM-1) (Workshop IV). It has 7 potential N-linked glycosylation sites. ICAM-1 is a single chain glycoprotein of Ig supergene family, present on unstimulated endothelial cells (EC) and on a variety of other cell types

including activated fibroblasts, EC, macrophages, and lymphocytes. ICAM-1 mediates cell adhesion by binding to integrins CD11a/CD18 (leukocyte adhesion molecule, LFA-1) and to CD11b/CD18 (Mac-1). This interaction enhances antigen-specific T-cell activation. ICAM-1 also binds to CD43 and to Plasmodium falciparum infected RBCs. W-CAM-1 MAb blocks aggregation of cell lines mediated by the ICAM-1 and blocks homotypic binding of purified populations of activated T- and B-lymphocytes and also aggregation of mixed T- and B-cell blasts. It inhibits T-cell adhesion to normal human endothelial cells. Activation induced by cell-cell contact (mixed lymphocyte reaction, T-cell mediated B-cell activation) is significantly inhibited. This MAb blocks elements of both effector arms of immune system (cytotoxic cell function and Ig production).

References

Boyd AW et. al. Blood, 1989, 73(7):1896-903. | Boyd AW et. al. Proceedings of the National Academy of Sciences, 1988, 85(9):3095 | Wawryk et al. J Clin Pathol 44, 497-501 (1991). | Fecondo et al., Proc. Nat. Acad. Sci. 88(7), 28792882, (1991)

Images



Formalin-fixed, paraffin-embedded human Melanoma stained with CD54 Monoclonal Antibody (W-CAM-1).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.