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# ICAM1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1383a

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | P05362 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 6G12 |
| **Isotype** | IgG1 |
| **Calculated MW** | 57825 |
| **Description** | ICAM1 is a 85-110 kDa single chain type 1 integral membrane glycoprotein with an extracellular domain of five immunoglobulin superfamily repeats, a transmembrane region and a cytoplasmic domain. It shares considerable amino acid sequence homology with ICAM3 and with ICAM2. ICAM1 is expressed by activated endothelial cells. It is detected on cells of many other lineages (e.g. epithelial cells, fibroblasts, chondrocytes, B lymphocytes, T lymphocytes (low), monocytes, macrophages, dendritic cells and neutrophils), with lower levels that increase in inflammation. ICAM1 is also detected in some carcinoma and melanoma cells. Soluble ICAM1 is detectable in the plasma and is elevated in patients with various inflammatory syndromes. It is the receptor for rhinoviruses and malaria. |
| **Immunogen** | Purified recombinant fragment of human ICAM1(28-480aa) expressed in E. Coli. |
| **Formulation** | Ascitic fluid containing 0.03% sodium azide. |

## Additional Information

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| **Gene ID** | 3383 |
| **Other Names** | Intercellular adhesion molecule 1, ICAM-1, Major group rhinovirus receptor, CD54, ICAM1 |
| **Dilution** | WB~~1/500 - 1/2000 E~~N/A |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | ICAM1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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). |

## References

1. J Neurosci Res. 1992 Feb;31(2):365-74. 2. J Cell Biol. 2002 Jun 24;157(7):1233-45. 3. J Hepatol. 2004 Mar;40(3):375-9.

## Images

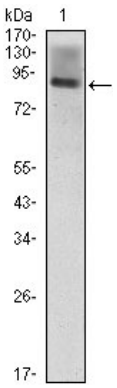
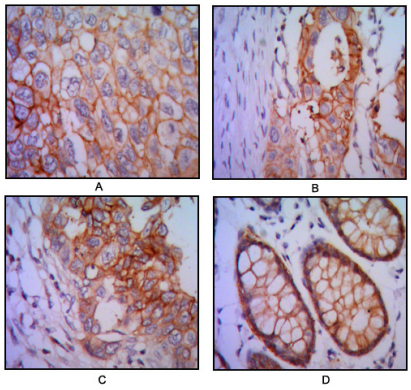



Figure 1: Western blot analysis using ICAM1 mouse mAb against ICAM1(AA: 28-480)-hIgGFc transfected HEK293 (1) cell lysate.

Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (A), colon cancer (B), breast cancer (C) and rectal cancer(D), using EPCAM mouse mAb with DAB staining.




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