

# Human CellExp ICAM1 /CD54, human recombinant protein

ICAM1, ICAM-1, BB2, BB-2, CD54, CD-54, P3.58 Catalog # PBV11107r

## **Specification**

### Human CellExp ICAM1 /CD54, human recombinant protein - Product info

**Primary Accession** Calculated MW

P05362

This protein is fused with Fc fragment of human IgG1 at the C-terminus and has a calculated MW of 75.7 kDa expressed. The predicted N-terminus is Gln 27. Protein migrates as 100-110 kDa in reduced SDS-PAGE resulting from glycosylation. **KDa** 

### Human CellExp ICAM1 /CD54, human recombinant protein - Additional Info

Gene ID 3383 Gene Symbol ICAM1

**Other Names** 

ICAM1, ICAM-1, BB2, BB-2, CD54, CD-54, P3.58

Gene Source Human Source HEK293 cells Assay&Purity SDS-PAGE; ≥98% N/A:

Assay2&Purity2 Recombinant Yes

Results Measured by the ability of the immobilized

> protein to support the adhesion of PMA-stimulated HSB2 human peripheral blood acute lymphoblastic leukemia cells. When 5×104 cells/well are added to rhICAM/Fc Chimera coated plates (12.5 μg/ml with 100 μl/well), >60% will adhere

after PMA 1 hour incubation at 37°C.

Target/Specificity ICAM1 /CD54

#### **Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

## **Format** Lyophilized

#### Storage

-20°C; Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM glycine, pH 7.0. Normally Mannitol or Trehalose is added as protectants before lyophilization.



### Human CellExp ICAM1 /CD54, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Human CellExp ICAM1 /CD54, human recombinant protein - Images

### Human CellExp ICAM1 /CD54, human recombinant protein - Background

Inter-Cellular Adhesion Molecule 1 (ICAM-1), also known as Cluster of Differentiation 54 (CD54), is a member of the immunoglobulin superfamily, and is a cell surface glycoprotein which is typically expressed in low concentrations on endothelial cells and cells of the immune system. The protein encoded by this gene is a type of intercellular adhesion molecule continuously present in low concentrations in the membranes of leukocytes and endothelial cells. Upon cytokine stimulation, the concentrations greatly increase. ICAM-1 can be induced by interleukin-1 (IL-1) and tumor necrosis factor alpha (TNF $\alpha$ ) and is expressed by the vascular endothelium, macrophages, and lymphocytes. ICAM-1 is a ligand for LFA-1 (integrin), a receptor found on leukocytes. When activated, leukocytes bind to endothelial cells via ICAM-1/LFA-1 and then transmigrate into tissues. ICAM-1 has been implicated in subarachnoid hemorrhage (SAH). Levels of ICAM-1 are shown to be significantly elevated in patients with SAH over control subjects in many studies. ICAM-1 expressed by respiratory epithelial cells is also the binding site for rhinovirus, the causative agent of most common colds.

## Human CellExp ICAM1 /CD54, human recombinant protein - 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.