ICAM1
Recombinant Human ICAM-1 (ECD His Tag)

Catalog No.	CRH459A-His CRH459B-His	**Quantity:**	50 µg 1.0 mg

Alternate Names: Intercellular adhesion molecule 1, ICAM-1, Major group rhinovirus receptor, CD54

Description: Intercellular adhesion molecule-1 (ICAM-1) is a 90 kDa member of the immunoglobulin (Ig) superfamily and is critical for the firm arrest and transmigration of leukocytes out of blood vessels and into tissues. ICAM-1 is constitutively present on endothelial cells, but its expression is increased by proinflammatory cytokines. The endothelial expression of ICAM-1 is increased in atherosclerotic and transplant-associated atherosclerotic tissue and in animal models of atherosclerosis. Additionally, ICAM-1 has been implicated in the progression of autoimmune diseases. ICAM-1 is a ligand for LFA-1(integrin). When activated, leukocytes bind to endothelial cells via ICAM-1/LFA-1 interaction and then transmigrate into tissues. Presence with heavy glycosylation and other structural characteristics, ICAM-1 possesses binding sites for a number of immune-associated ligands and serves as the binding site for entry of the major group of human Rhinovirus (HRV) into various cell types. ICAM-1 also becomes known for its affinity for Plasmodium falciparum-infected erythrocytes (PFIE), providing more of a role in infectious disease. Previous studies have shown that ICAM-1 is involved in inflammatory reactions and that a defect in ICAM-1 gene inhibits allergic contact hypersensitivity.

UniProt ID: P05362

Accession Number: NP_000192.2

Protein Construction: A DNA sequence encoding the human ICAM1 (NP_000192.2) extracellular domain (Met 1-Glu 480) was fused with the a polyhistidine tag at the C-terminus.

Source: HEK293 Cells

Formulation: Lyophilized from sterile PBS, pH 7.4.
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Weight: The recombinant human ICAM1 consists of 464 amino acids and has a predicted molecular mass of 51 kDa. As a result of glycosylation, the apparent molecular mass of rhICAM1 is approximately 65-70 kDa in SDS-PAGE under reducing conditions.

Purity: > 98 % as determined by SDS-PAGE

Endotoxin Level: < 1.0 EU per µg of the protein as determined by the LAL method

Biological Activity: Measured by the ability of the immobilized protein to support the adhesion of PMA-stimulated HSB2 human peripheral blood acute lymphoblastic leukemia cells. When cells are added to ICAM1-coated plates (12.5 µg/ml, 100 µl/well), approximately 30%-60% will adhere specifically.

Predicted N-terminal: Gln 28

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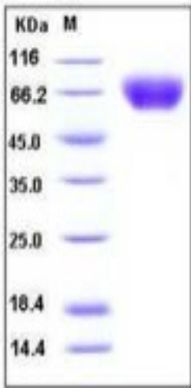
Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

SDS-PAGE



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