

Recombinant Mouse ICAM-1/CD54 Protein (His Tag)

Catalog No. PKSM040683

Note: Centrifuge before opening to ensure complete recovery of vial contents.

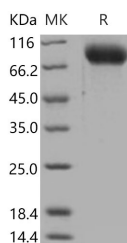
Description

| | |
|------------------------------------|---|
| Synonyms | CD54;Icam-1;Ly-47;MALA-2 |
| Species | Mouse |
| Expression Host | HEK293 Cells |
| Sequence | Met 1-Asn 485 |
| Accession | NP_034623.1 |
| Calculated Molecular Weight | 51.7 kDa |
| Observed molecular weight | 80-90 kDa |
| Tag | C-His |
| Bioactivity | 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 mouse ICAM1 coated plates (12.5 µg/mL, 100 µL/well), approximately > 40% cells will adhere specifically. |

Properties

| | |
|-----------------------|---|
| Purity | > 96 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 96 % as determined by reducing SDS-PAGE.

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Background

Intercellular adhesion molecule-1 (ICAM-1, or CD54) 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.

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