

Recombinant Human ICAM-1/CD54 Protein (His & Fc Tag)(Active)

Catalog No. PKSH031662

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

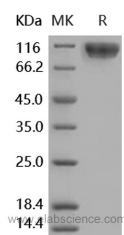
Description

Synonyms	BB2;CD54;ICAM-1;P3.58
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Glu 480
Accession	NP_000192.2
Calculated Molecular Weight	77.4 kDa
Observed molecular weight	100-110 kDa
Tag	C-His & Fc
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 5 x 10E4 cells/well are added to Recombinant Human ICAM-1/CD54 coated plates (12.5 µg/mL with 100 µL/well), >40% cells will adhere after 1 hour of incubation at 37°C.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Storage	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
Reconstitution	Please refer to the printed manual for detailed information.

Data



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

For Research Use Only

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.