Recombinant Protein Human ICAM-1, D1-D2-Fc domains

Ref: human ICAM-1-D1-D2-Fc

DESCRIPTION:

ICAM-1 (Intercellular Adhesion Molecule-1) is a transmembrane protein continuously present in low concentrations in the membrane of leucocytes and endothelial cells. Upon stimulation, its concentration increase greatly. It is a ligand for the leukocyte adhesion protein LFA-1 (Integrin alpha-L/beta-2). During leukocyte trans-endothelial migration, ICAM-1 engagement promotes the assembly of endothelial apical cups through ARHGEF26/SGEF and RHOG activation. Member of the immunoglobulin gene superfamily, it contains 5 Ig-like C2-type (immunoglobulin-like) domains.

This product is a chimeric protein composed of the domains 1 and 2 and the Fc of the immunoglobulin superfamily.

Synonymous gene names (ICAM-1, cell surface glycoprotein P3.58, intercellular adhesion molecule 1 (CD54), human rhinovirus receptor, major group rhinovirus receptor, BB2, CD54, P3.58,)

NCBI GENE ID: 3383
UniProtKB/Swiss-Prot: 05362
Presentation: Stored in PBS at -80ºC. Contains a His-Tag in the N-terminal.
Source: E. coli
Molecular weight: 50 KDa.
Buffer: PBS.

QUALITY CONTROL:

Protein concentration: Lot specific
Purity by SDS-PAGE: Lot specific

LOT SPECIFICATIONS:

1. Concentration: Lot specific
2. Total quantity per aliquot: see references
3. Storage: should be kept frozen at -20 or -80 degrees.
4. Applications
   b. Expression of ICAM-1 ligands in cells by flow cytometry.
   c. Analyses of ICAM-1 ligands.
   d. Quantification of ICAM-1 ligands by ELISA
5. Observations: Avoid freeze thaw cycles.
6. References:
   - Kuby “Immunology” W.H. Freeman & Company; Sixth Edition (August, 2006)

Conformational change of integrin (LFA-1) from bent to extended triggers an activation signal to the I domain which binds ICAM-1.