Human ICAM-2 / CD102 Protein (His Tag)

Catalog Number: **10332-H08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CD102

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Gln 223) of human ICAM2 (NP_000864.2) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio 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 ICAM2-coated plates (12.5 μg/ml, 100 μl/well), approximately 35 %-45% will adhere specifically .

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ser 22

Molecular Mass:

The recombinant human ICAM2 consists of 213 amino acids after removal of the signal peptide and has a predicted molecular mass of 24 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhICAM2 is approximately 50-55 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

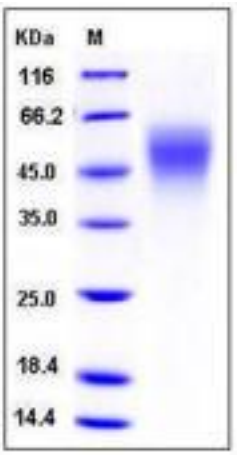
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Intercellular adhesion molecule 2 (ICAM-2, CD102), belongs to the ICAM family consisting of three members identified as ligands for integrin receptors. It is a type I transmembrane glycoprotein with two Ig-like C2-type domains, and binds to the leukocyte integrins LFA-1 (CD11a/CD18) and Mac-1 (CD11b/CD18). As a second ligand of leukocyte function-associated antigen-1, ICAM-2 functions as a costimulatory molecule for effector cells. ICAM-2 is mainly expressed on vascular endothelial and hematopoietic cells. Interactions of ICAM-2 and the integrin receptors mediate cell adhesion in a wide range of lymphocyte, monocyte, natural killer cell, and granulocytewith other cells, and play important roles in many adhesion-dependent immune and inflammation responses, such as T cell aggregation, NK-cell cytotoxicity and migration, lymphocyte recirculation, etc. Serum levels of ICAM-2 correlated significantly with the inflammatory and course sequences of trichinosis in mice and had a similar relation with blood eosinophilia. So, estimation of ICAM-2 serum levels may prove useful in diagnosis of trichinosis recent infections, and in monitoring the prognosis and response to treatment.

References

1.Weber KS, *et al.* (2004) Sialylation of ICAM-2 on platelets impairs adhesion of leukocytes via LFA-1 and DC-SIGN. Inflammation. 28(4): 177-88. 2.Tanaka H, *et al.* (2004) ICAM-2 gene therapy for peritoneal dissemination of scirrhous gastric carcinoma. Clin Cancer Res. 10(14): 4885-92. 3.Younis AI, *et al.* (2005) Intercellular adhesion molecule-2 (ICAM-2) in experimental trichinosis. J Egypt Soc Parasitol. 35(3): 1019-26.