

Mouse ICAM-2 / CD102 Protein

Catalog Number: 50644-MCCH



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CD102; Icam-2; Ly-60

Protein Construction:

A DNA sequence encoding the mouse ICAM2 (NP_034624.1) (Met 1-Gln 222) was expressed with six amino acids (LEVLFQ) at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % 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 5×10^4 cells/well are added to rmlCAM1 coated plates (12.5 $\mu\text{g/mL}$ with 100 $\mu\text{L/well}$), > 30% cells will adhere after 1 hour incubation at 37°C.

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 °C

Predicted N terminal: Ser 20

Molecular Mass:

The recombinant mouse ICAM2 consists of 210 amino acids and has a calculated molecular mass of 23.6 kDa. The recombinant protein migrates as an approximately 38-42 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

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:

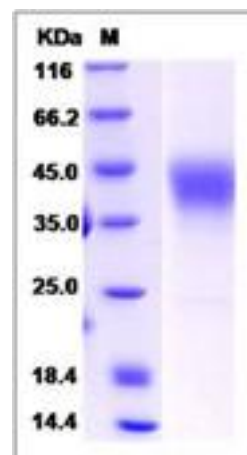
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 granulocyte with 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.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>