# **PRODUCT INFORMATION**

**Expression system** Baculovirus

**Domain** 28-485aa

**UniProt No.** P13597

NCBI Accession No. NP\_034623.1

Alternative Names ICAM1, CD54, Icam-1, Ly-47, MALA-2, Intercellular adhesion molecule 1, MyD10

# **PRODUCT SPECIFICATION**

Molecular Weight 51.2 kDa (466aa)

**Concentration** 0.5mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

### **Biological Activity**

Measured by the ability of the immobilized protein to support the adhesion of HSB2 human peripheral blood acute lymphoblastic leukemia cells. When cells are added to ICAM-1/CD54 coated plates 5ug/ml. This effect is more to 60%.

# Tag

His-Tag

Application

SDS-PAGE, Bioactivity

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.



# BACKGROUND

## Description

ICAM-1, also known as CD54 (Cluster of Differentiation 54), belongs to the ICAM proteins. This protein is ligand for the leukocyte adhesion protein LFA-1 (integrin alpha-L/beta-2). When activated, leukocytes bind to endothelial cells via ICAM-1/LFA-1 and then transmigrate into tissues. During leukocyte trans-endothelial migration, ICAM-1 engagement promotes the assembly of endothelial apical cups through ARHGEF26/SGEF and RHOG activation. It is constitutively present on endothelial cells, but its expression is increased by proinflammatory cytokines. Also, It has been implicated in the progression of autoimmune diseases. Recombinant mouse ICAM1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

### **Amino acid Sequence**

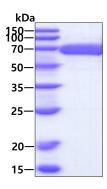
QVSIHPREAF LPQGGSVQVN CSSSCKEDLS LGLETQWLKD ELESGPNWKL FELSEIGEDS SPLCFENCGT VQSSASATIT VYSFPESVEL RPLPAWQQVG KDLTLRCHVD GGAPRTQLSA VLLRGEEILS RQPVGGHPKD PKEITFTVLA SRGDHGANFS CRTELDLRPQ GLALFSNVSE ARSLRTFDLP ATIPKLDTPD LLEVGTQQKL FCSLEGLFPA SEARIYLELG GQMPTQESTN SSDSVSATAL VEVTEEFDRT LPLRCVLELA DQILETQRTL TVYNFSAPVL TLSQLEVSEG SQVTVKCEAH SGSKVVLLSG VEPRPPTPQV QFTLNASSED HKRSFFCSAA LEVAGKFLFK NQTLELHVLY GPRLDETDCL GNWTWQEGSQ QTLKCQAWGN PSPKMTCRRK ADGALLPIGV VKSVKQEMNG TYVCHAFSSH GNVTRNVYLT VLYHSQNN<VE HHHHHH>

## **General References**

Siu G., et al. (1989) J. Immunol. 143:3813-3820. Lord K. A., et al. (1990) Oncogene 5:387-396.

# DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain