

## ICAM-1 Human Chinese Hamster Ovary Cells (CHO)

### Product Data Sheet

<b>Type:</b> Recombinant	<b>Cat. No.:</b>	
<b>Source:</b> Chinese Hamster Ovary Cells (CHO)	RBG10180010	(10 µg)
<b>Species:</b> Human	RBG10180050	(50 µg)
<b>Other names:</b> Intercellular adhesion molecule 1, Major group rhinovirus receptor, CD54 antigen, Surface antigen of activated B cells	RBG10180100	(100 µg)

### Description

ICAMs are members of the Ig superfamily of calcium-independent transmembrane glycoproteins. ICAM-1 is a ligand for the lymphocyte function-associated antigen (LFA) and Mac-1 integrins, as well as the major human rhinovirus receptor. The primary function of ICAM-1 is to provide adhesion between endothelial cells and leukocytes after stress or injury. The human ICAM-1 gene codes for a 505 amino acid transmembrane glycoprotein containing a 29 amino acid cytoplasmic domain, a 23 amino acid transmembrane domain, and a 453 amino acid extracellular domain. Recombinant Human ICAM-1 is a 49.5 kDa glycoprotein comprising the extracellular domain (453 amino acid residues) of ICAM-1. Monomeric glycosylated ICAM-1 migrates at an apparent molecular weight of approximately 72.0-80.0 kDa by SDS-PAGE analysis under reducing conditions.

### Introduction to the Molecule

ICAM-1 (55 kDa) is a member of the immunoglobulin supergene family that functions as a ligand for the Lymphocyte Function-Associated Antigen-1. It is a single-chain glycoprotein that can be expressed on non-hematopoietic cells of many lineages. The role of ICAM-1 as a disease marker has been demonstrated for a number of different indications and pathological situations. ICAM-1 upregulation in allergic airway inflammation is responsible for the recruitment of activated leukocytes and the pathogenesis of allergic rhinitis. In lymphoproliferative disorders, ICAM-1 is related to the degree of malignancy.

### Research topic

Animal studies, Cell adhesion proteins

### Amino Acid Sequence

QTSVSPSKVI LPRGGSVLVT CSTSCDQPKL LGIETPLPKK ELLLPGNRKY VYELSNVQED SQPMCYSNCP DGQSTAKTFL  
 TVYWTPERVE LAPLPSWQPV GKNLTLRCQV EGGAPRANLT VVLLRGEKEL KREPAVGPEA EVTTTVLVRR DHHGANFSCR  
 TELDLRPQGL ELFENTSAPY QLQTFVLPAT PPQLVSPRVL EVDTQGTVVC SLDGLFPVSE AQVHLALGDQ RLNPVTYGN  
 DSFSAKASVS VTAEDEGTQR LTCAVILGNQ SQETLQVTI YSFPAPNVIL TKPEVSEGTE VTKCEAHPR AKVTLNGVPA  
 QPLGPRAQLL LKATPEDNGR SFSCSATLEV AGQLIHKNT RELRVLYGPR LDERDCPGNW TWPENSQQTP MCQAWGNPLP  
 ELKCLKDGTG PLPIGESVTV TRDLEGTLYC RARSTQGEVT RKVTVNVLSP RYE

### Source

Chinese Hamster Ovary Cells (CHO)

### Purity

98%

### Biological Activity

ICAM-1 supported the adhesion of more than 50% PMA-stimulated HSB2 cells to plates coated at 25 µg/ml ICAM-1 concentration.

### Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

### Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

## Storage, Stability/Shelf Life

-20°C

<b>HEADQUARTERS:</b>				
BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: info@biovendor.com sales@biovendor.com Web: www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail: infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail: infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail: infoUSA@biovendor.com