

## ICAM2, Human, Recombinant, 0.1 mg

Catalog Number 5107

### DESCRIPTION

The protein encoded by human ICAM2 gene is a member of the intercellular adhesion molecule (ICAM) family. All ICAM proteins are type I transmembrane glycoproteins, contain 2-9 immunoglobulin-like C2-type domains, and bind to the leukocyte adhesion LFA-1 protein. This protein may play a role in lymphocyte recirculation by blocking LFA-1-dependent cell adhesion. It mediates adhesive interactions important for antigen-specific immune response, NK-cell mediated clearance, lymphocyte recirculation, and other cellular interactions important for immune response and surveillance. Several transcript variants encoding the same protein have been found for this gene.

Full-length extracellular domain of human ICAM2 gene (25-223 aa) was constructed with 29 N-terminal T7/His tag and expressed in E. coli as inclusion bodies. The final product was refolded using a unique "temperature shift inclusion body refolding" technology and chromatographically purified.

### Characteristics

Parameter, Testing, and Method	ICAM2, Human, Recombinant Catalog # 5107
Quantity	0.1 mg (100 µg/vial)
Volume	0.2 mL
Concentration	0.5 mg/mL
Purity	≥90% as measured by SDS PAGE
Formulation	Formulated in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, L-Arginine, DTT and Glycerol.
Form	Solution
Production Type	Recombinant – E. coli
Storage Temperature	-20 °C
Shelf Life	12 months after receipt
Sterilization Method	Filtration
Cell Attachment Activity	Passes
Sterility	No growth

Gene Symbols	ICAM2 ( CD102 )
Accession Number	NP_000864
Recombinant Protein Sequence	MASMTGGQQMGRGHHHHHHGNLY FQGGFELKVFVHVRPKKLAVEPK GSLEVNCSTTCNQPEVGGLETSLDKI LLDEQAQWKHYLVSNISHDTVLQCH FTCSGKQESMNSNVSVYQPPRQVIL TLQPTLVAVGKSFTIECRVPTVEPLD SLTLFLFRGNETHYETFGKAAPAPQ EATATFNSTADREDGHRNFSCLAVL DLMSRGGNIFHKHSAPKMLEIYEPVS DSQ

### APPLICATIONS

This product is for R&D use only and is not intended for human or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### INSTRUCTIONS FOR USE

Use these recommendations as guidelines to determine the optimal coating conditions for your culture system.

1. Thaw ICAM2 and dilute to desired concentration using serum-free medium or PBS. The final solution should be sufficiently dilute so that the volume added covers the surface evenly.

Note: Use 1 ml PBS per well in a 6-well plate.

2. Add 1 – 10 µg protein to each well and incubate at 2 to 10°C overnight.

3. After incubation, aspirate remaining material.

4. Plates are ready for use. They may also be stored at 2-8°C damp or air dried if sterility is maintained.

Coating this recombinant protein at 1-10 ug / well (6 well plate) in neuronal cell specific medium can be used for 1) human lymphocyte cell / receptor interaction study *in vitro* and 2) as a culture matrix protein for anti-tumor immuno-response study *in vitro*.

### REFERENCES:

(1) Staunton, D.E., et al. Functional cloning of ICAM-2, a cell adhesion ligand for LFA-1 homologous to ICAM-1. *Nature* 339 (6219), 61-64 (1989).

(2) Hiraoka, N., et al. CXCL17 and ICAM2 are associated with a potential anti-tumor immune response in early intraepithelial stages of human pancreatic carcinogenesis. *Gastroenterology* 140 (1), 310-321 (2011).