

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 FTCSGKQESMNSNVSVYQPPRVIL 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).