

Background

Intercellular Adhesion Molecule-1 (ICAM-1, CD54) binds the leukocyte integrins LFA-1 and Mac-1. ICAM-1 expression is weak on leukocytes, epithelial and resting endothelial cells, as well as some other cell types, but expression can be stimulated by IFN- γ , TNF- α , IL-1 β and LPS. Mouse and human ICAM-1 share approximately 54% amino acid identity.

Soluble ICAM-1 is found in a biologically active form in serum, probably as a result of proteolytic cleavage from the cell surface, and is elevated in patients with various inflammatory syndromes such as septic shock, leukocyte adhesion deficiency syndrome (LAD), cancer and transplantation.

References:

1. Pigott, R. and C. Power (1993) in *The Adhesion Molecule Facts Book*. Academic Press, p. 74.
2. Siu, G. *et al.* (1989) *J. Immunol.* **143**:3813.
3. Ballantyne, C.M. *et al.* (1989) *Nuc. Acid. Res.* **17**:5853.

Description

Source	Murine myeloma cell line, NS0-derived		
	<div style="border: 1px solid black; padding: 2px; text-align: center;"> Mouse ICAM-1 (Gln28 - Asn485) Accession # Q3U8M7 </div>	IEGRMD	<div style="border: 1px solid black; padding: 2px; text-align: center;"> Human IgG₁ (Pro100 - Lys330) </div>
	N-terminus		C-terminus
N-terminal Sequence Analysis	Gln28		
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	76.8 kDa (monomer)		

Specifications

SDS-PAGE	110 - 130 kDa, reducing conditions
Activity	<p>Measured by the ability of the immobilized protein to support the adhesion of PMA-stimulated HSB2 human peripheral blood acute lymphoblastic leukemia cells.</p> <p>When 5 x 10⁴ cells/well are added to rmICAM/Fc Chimera coated plates (12.5 μg/mL with 100 μL/well), approximately 65 - 95% will adhere after 1 hour incubation at 37 °C.</p> <p>Optimal dilutions should be determined by each laboratory for each application.</p>
Endotoxin Level	<1.0 EU per 1 μ g of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS. See Certificate of Analysis for details.

Preparation and Storage

Reconstitution	Reconstitute at 0.4 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

12/22/2009
FOR RESEARCH USE ONLY
NOT FOR USE IN HUMANS