

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat ICAM-1 in ELISAs and Western blots. Does not cross-react with recombinant human (rh) CD31, recombinant mouse (rm) DCC, rhICAM-1, rmICAM-1, rmICAM-2, rhICAM-3, rhMAdCAM-1, or rmVCAM-1.
Source	Monoclonal Mouse IgG ₁ Clone # 141017
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat ICAM-1 Met1-Thr493 Accession # Q00238
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Rat ICAM-1/CD54 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Rat ICAM-1/CD54 Antibody (Catalog # MAB5832)
ELISA Detection	0.1-0.4 µg/mL	Rat ICAM-1/CD54 Biotinylated Antibody (Catalog # BAF583)
Standard		Recombinant Rat ICAM-1/CD54 Fc Chimera (Catalog # 583-1C)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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-1β and LPS. Rat and human ICAM-1 share approximately 52% amino acid identity. Rat and mouse ICAM-1 share approximately 52% 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*, p. 74. Academic Press.
2. Siu, G. *et al.* (1989) *J. Immunol.* **143**:3813.
3. Ballantyne, C.M. *et al.* (1989) *Nuc. Acid. Res.* **17**:5853.