

DESCRIPTION

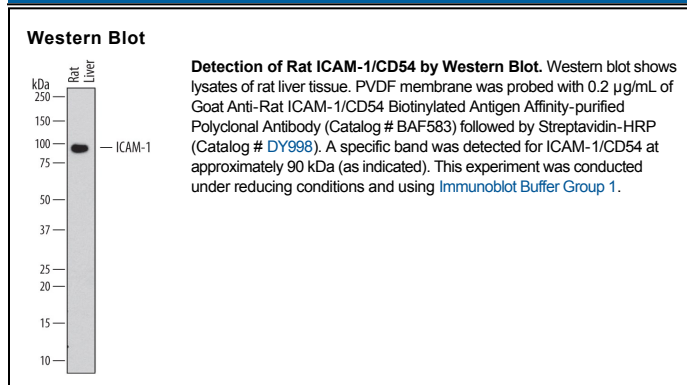
| | |
|---------------------------|---|
| Species Reactivity | Rat |
| Specificity | Detects rat ICAM-1/CD54 in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant mouse (rm) ICAM-1, recombinant human (rh) ICAM-1, rhICAM-3, rmlCAM-5, and rmlCAM-2 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant rat ICAM-1/CD54 Gln28-Thr493 Accession # Q00238 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details. |

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.

| | Recommended Concentration | Sample |
|---|---------------------------|---|
| Western Blot | 0.2 µg/mL | See Below |
| Rat ICAM-1/CD54 Sandwich Immunoassay | | Reagent |
| ELISA Capture | 2-8 µg/mL | Rat ICAM-1/CD54 Antibody (Catalog # MAB5832) |
| ELISA Detection Standard | 0.1-0.4 µg/mL | Rat ICAM-1/CD54 Biotinylated Antibody (Catalog # BAF583) Recombinant Rat ICAM-1/CD54 Fc Chimera (Catalog # 583-IC) |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.2 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 | 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 lipopolysaccharide (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.