

DESCRIPTION

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| Species Reactivity | Mouse |
| Specificity | Detects mouse ICAM-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant rat ICAM-1 is observed, approximately 5% cross-reactivity with recombinant human (rh) ICAM-1 and rhICAM-3 is observed, and less than 1% cross-reactivity with recombinant mouse ICAM-2 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant mouse ICAM-1/CD54 Gln28-Asn485 Accession # Q3U8M7 |
| 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. |

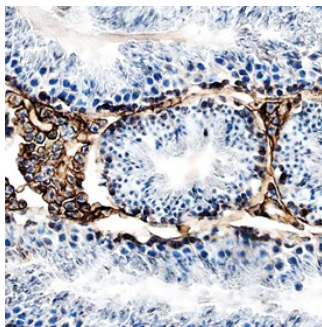
APPLICATIONS

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.

| | Recommended Concentration | Sample |
|-----------------------------|---|---|
| Western Blot | 0.1 µg/mL | Recombinant Mouse ICAM-1/CD54 Fc Chimera (Catalog # 796-IC) |
| Immunohistochemistry | 5-15 µg/mL | See Below |
| Adhesion Blockade | The adhesion of HSB2 human peripheral blood acute lymphoblastic leukemia cells (5 x 10 ⁴ cells/well) to immobilized Recombinant Mouse ICAM-1 Fc Chimera (Catalog # 796-IC, 5 µg/mL, 100 µL/well) was maximally inhibited (80-100%) by 5 µg/mL of the antibody. | |

DATA

Immunohistochemistry



ICAM-1/CD54 in Mouse Testis. ICAM-1/CD54 was detected in perfusion fixed frozen sections of mouse testis using Goat Anti-Mouse ICAM-1/CD54 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF796) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane in Leydig cells. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

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| 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. *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. 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.