

CD54 / ICAM-1 Ab-1 (Clone 15.2)

Mouse Monoclonal Antibody

Cat. #MS-114-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)

Cat. #MS-114-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Description: ICAM-1 (intercellular adhesion molecule) has 7 potential N-linked glycosylation sites. It is a single chain glycoprotein of Ig supergene family, present on unstimulated endothelial cells (EC) and on a variety of other cell types including activated fibroblasts, EC, macrophages, and lymphocytes. ICAM-1 mediates cell adhesion by binding to integrins CD11a/CD18 (leukocyte adhesion molecule, LFA-1) and to CD11b/CD18 (Mac-1). This interaction enhances antigen-specific T-cell activation. ICAM-1 also binds to CD43 and to *Plasmodium falciparum* infected RBCs.

Comments: Ab-1 inhibits adhesion of infected RBCs and LFA-1 to ICAM-1³.

Mol. Wt. of Antigen: 85-115kDa

Epitope: Not determined

Species Reactivity: Human. Others-not known.

Clone Designation: 15.2

Ig Isotype / Light Chain: IgG₁ / κ

Immunogen: Human Monocytes

Applications and Suggested Dilutions:

- Blocks binding of LFA-1 & infected RBCs to ICAM³ (Order Ab without azide)
- Flow Cytometry
(For direct, use 10µl of conjugated Ab/10⁶ cells)
(For indirect, 0.5µg unconjugated Ab/10⁶ cells)
- Immunohistology (Acetone fixed frozen)

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Tonsil

Cellular Localization: Cell membrane

Supplied As: 200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

1. Bailly P; et al. Proc Natl Acad Sci USA, 1994 7, 91:5306-10.
2. Fujita H; et al. Archives of Biochemistry and Biophysics, 1994, 309:62-9.
3. Berendt AR; et al. Cell, 1992, 68(1):71-81.
4. J Cell Biol (1992) 116:1527-1535.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

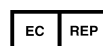
This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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Additional Key References:

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- Fujita H; Morita I; Murota S. A possible mechanism for vascular endothelial cell injury elicited by activated leukocytes: a significant involvement of adhesion molecules, CD11/CD18, and ICAM-1. Archives of Biochemistry and Biophysics, 1994, 309:62-9.
- Ganser A; Seipelt G; Verbeek W; Ottmann OG; Maurer A; Kolbe K; Hess U; Elsner S; Reutzel R; Wormann B; et al. Effect of combination therapy with all-trans-retinoic acid and recombinant human granulocyte colony-stimulating factor in patients with myelodysplastic syndromes. Leukemia, 1994, 8:369-75.
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