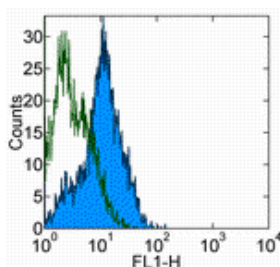


## Anti-Mouse CD54 (ICAM-1) Functional Grade Purified

Catalog Number: 16-0542

Also Known As: Intercellular adhesion molecule-1

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57Bl/6 splenocytes with 0.25 ug of Rat IgG2a K Isotype Control Purified (cat. 14-4321) (open histogram) or 0.25 ug of Anti-Mouse CD54 (ICAM-1) Functional Grade Purified (filled histogram) followed by Anti-Rat IgG FITC (cat. 11-4811). Cells in the lymphocyte gate were used for analysis.

### Product Information

**Contents:** Anti-Mouse CD54 (ICAM-1) Functional Grade Purified

**Formulation:** aqueous buffer, no sodium azide


**REF** Catalog Number: 16-0542

 **Temperature Limitation:** Store at 2-8°C.

**Clone:** eBioKAT-1 (KAT-1, KAT1)

**LOT** **Batch Code:** Refer to Vial

**Concentration:** 1 mg/mL

 **Use By:** Refer to Vial

**Host/Isotype:** Rat IgG2a, kappa

**Handling Conditions:** Use in sterile environment.

**Endotoxin Level:** Less than 0.001 ng/ug antibody, as determined by the LAL assay.

### Description

The eBioKAT-1 monoclonal antibody reacts with mouse CD54 (ICAM-1), which is a 95 kDa member of the immunoglobulin superfamily. CD54 is expressed at low levels on leukocytes and high endothelial venules, and expression increases in response to inflammatory cytokines. ICAM-1 binds to LFA-1 and this interaction is required for the transendothelial migration of T cells. ICAM-1-deficient mice are viable, however the migration of leukocytes to sites of inflammation is reduced leading to impaired immune and inflammatory responses. Based on the regulated expression of ICAM-1, it has been suggested that ICAM-1 may increase leukocyte extravasation at sites of inflammation, whereas the constitutively high expression of ICAM-2 mediates leukocyte traffic into non-inflamed tissue. The eBioKAT-1 monoclonal antibody recognizes a different epitope than the YN1/1.7.4 monoclonal antibody.

### Applications Reported

This eBioKAT-1 (KAT-1, KAT1) antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistology staining of frozen tissue sections. The KAT-1 monoclonal antibody has also been reported to inhibit the *in vivo* ICAM-1-mediated migration of leukocytes.

### Applications Tested

This eBioKAT-1 (KAT-1, KAT1) antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

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hearts with acute myocarditis caused by coxsackievirus B3.J Clin Invest. 1993 Apr;91(4):1327-36. (**KAT-1**, FA, PubMed)

**Related Products**

11-4811 Anti-Rat IgG FITC

16-0541 Anti-Mouse CD54 (ICAM-1) Functional Grade Purified (YN1/1.7.4)

16-4321 Rat IgG2a K Isotype Control Functional Grade Purified (eBR2a)

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