

Monoclonal Anti-mouse ICAM-1/CD54-Phycoerythrin

Catalog Number: FAB796P

Lot Number: ABRF01

100 Tests

Reagents Provided

Phycoerythrin (PE)-conjugated rat monoclonal anti-mouse

ICAM-1/CD54: Supplied as 25 µg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Clone #: 166623

Isotype: rat IgG_{2B}

Reagents Not Provided

- Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

Storage

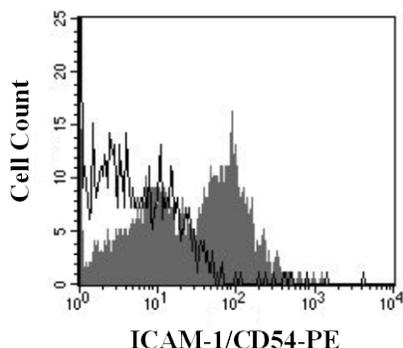
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing ICAM-1/CD54 within a population and qualitatively determine the density of ICAM-1/CD54 on cell surfaces by flow cytometry.

Product Description

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, NS0-derived, recombinant mouse Intercellular Adhesion Molecule-1 (rmICAM-1) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to PE fluorochrome. Cell surface expression of ICAM-1/CD54 is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 565 - 605 nm.



Mouse splenocytes were stained with PE-conjugated anti-mouse ICAM-1/CD54 (Catalog # FAB796P, filled histogram) or PE-conjugated isotype control (Catalog # IC013P, open histogram).

Background Information

ICAM-1 binds the leukocyte integrins LFA-1 (CD11a/CD18) and Mac-1 (CD11b/CD18). ICAM-1 expression is weak on leukocytes, epithelial cells, and resting endothelial cells, as well as some other cell types, but expression can be up-regulated upon cell activation.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using mouse splenocytes.

- Cells may be Fc-blocked with 1 µg of human IgG/10⁵ cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- After blocking, 10 µL of conjugated antibody was added to up to 1 x 10⁶ cells and incubated for 30 minutes at room temperature.
- Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Human Lyse Buffer (Catalog # FC002).
- The cells were resuspended in Flow Cytometry Staining Buffer for final flow cytometric analysis. As a control for this analysis, cells in a separate tube should be treated with PE-labeled rat IgG_{2B} antibody. This procedure may need to be modified, depending upon the cell type and final utilization. Individual users may need to titrate to determine the optimal reagent amount for their specific use.

Warning: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

R&D Systems Inc.
1-800-343-7475