Monoclonal
Anti-mouse CD40/TNFRSF5-PerCP

Catalog Number: FAB440C
Lot Number: ABBJ01
100 Tests

Reagents Provided

PerCP-conjugated rat monoclonal anti-mouse CD40/TNFRSF5: Supplied as 50 μg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Clone #: 1C10

Isotype: rat IgG_{2A}

Reagents Not Provided

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

Storage

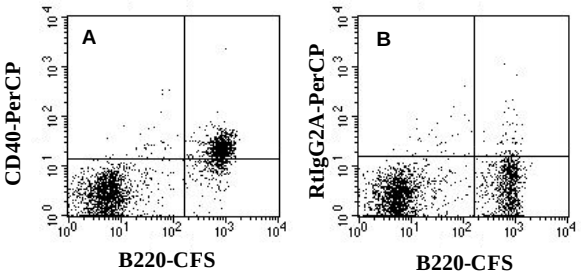
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2-8 °C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing CD40/TNFRSF5 within a population and qualitatively determine the density of CD40/TNFRSF5 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 COS7-derived recombinant mouse CD40/TNFRSF5 (aa 20-193; Accession # P27512). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to PerCP fluorochrome. Cell surface expression of CD40/TNFRSF5 is determined by flow cytometry. PerCP has a maximum absorption of 482 nm and 564 nm and a maximum emission of 675 nm.



Mouse splenocytes were stained with CFS-conjugated anti-mouse B220 (Catalog # FAB1217F) and **A)** PerCP-conjugated anti-mouse CD40/TNFRSF5 (Catalog # FAB440C) or **B)** isotype control (Catalog # IC006C).

Background Information

CD40 is a 50kDa type I transmembrane glycoprotein belonging to the TNF receptor superfamily (TNFRSF5). Ligation of CD40 on B cells with CD40L on T cells promotes B cell proliferation and immunoglobulin isotype switching.

Flow Cytometry Validation

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

1. Cells may be Fc-blocked with 1 μg of mouse IgG/10^5 cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
2. After blocking, 10 μL of conjugated antibody was added to up to 1 x 10^6 cells and incubated for 30 minutes at room temperature.
3. 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 Mouse Lyse Buffer (Catalog # FC003).
4. 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 PerCP-labeled rat IgG_{2A} 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.

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