Monoclonal Anti-mouse CD27/TNFSFR7-Fluorescein

Catalog Number: FAB5741F
Lot Number: ABKI01
100 Tests

Reagents Provided

Carboxyfluorescein (CFS)-conjugated rat monoclonal anti-mouse CD27/TNFSFR7: Supplied as 75 μg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Clone #: 137915

Isotype: rat IgG_{2A}

Reagents Not Provided

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

Storage

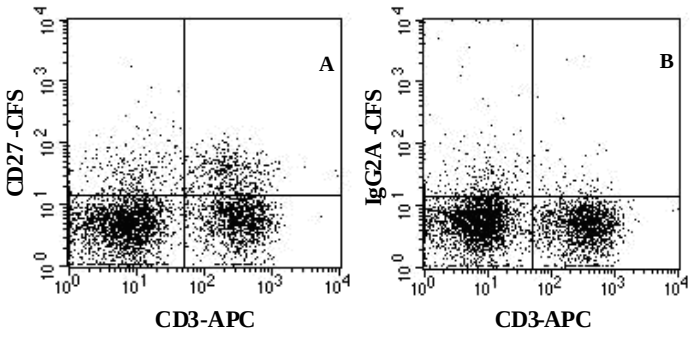
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing CD27/TNFSFR7 within a population and qualitatively determine the density of CD27/TNFSFR7 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 CD27 (rmCD27) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to CFS fluorochrome. Cell surface expression of CD27/TNFSFR7 is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 515 - 545 nm.



Mouse splenocytes were stained with APC-conjugated anti-mouse CD3 (Catalog # FAB4841A) and either A) CFS-conjugated anti-mouse CD27/TNFRSF7 (Catalog # FAB5741F) or B) isotype control (Catalog # IC006F).

Background Information

CD27, expressed on subpopulations of T and B cells, delivers a co-stimulatory signal upon binding to its ligand, CD70. CD27 is a member of the tumor necrosis factor receptor superfamily and has been designated TNFRSF7.

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 1 - 2.5 x 10^5 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 CFS-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.

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