

PE/Cy7 anti-mouse CD70

Catalog # / Size: 1123060 / 100 µg
1123055 / 25 µg

Clone: FR70

Isotype: Rat IgG2b, κ

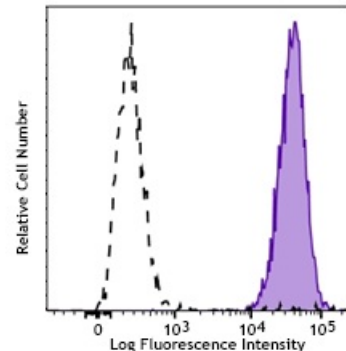
Immunogen: BALB/c mouse B lymphoma A20.2]

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2 mg/ml



B cell lymphoma cell line, A20, was stained with True-Stain Monocyte Blocker followed by CD70 PE/Cy7 (clone FR70, filled histogram) or rat IgG2b, κ isotype PE/Cy7 control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation¹, *in vitro* blocking of CD70-CD27 binding and inhibition of T and NK cell responses¹⁻³, and immunohistochemistry⁴ of acetone-fixed frozen sections. For the most successful immunofluorescent staining results, it may be necessary to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 1123025/1123030) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated antibody or biotinylated anti-rat IgG second step, followed by SAv-PE (Cat. No. 2626020)). To reduce non-specific binding to cells bearing Fc-receptors, pre-incubation of cells with anti-mouse CD16/CD32, clone 93 (Cat. No. 1106505/1106510), is recommended prior to immunofluorescent staining.

Application References:

1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Tesselaar K, *et al.* 1997. *J. Immunol.* 159:4959.
3. Akiba H, *et al.* 1999. *J. Immunol.* 162:7058.

Description: CD70 is a type II transmembrane protein. It is a member of the TNF superfamily, expressed on activated B cells, activated dendritic cells, and some activated T cells (low levels). CD70 interacts with CD27 to promote T-B cell cross-stimulation and co-stimulate B cell proliferation and immunoglobulin production. Cells expressing CD70 can co-stimulate T cell proliferation and enhance the production of cytokines. The FR70 antibody blocks CD70 binding to CD27.

Antigen References:

1. Barclay AN, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
2. Tesselaar K, *et al.* 1997. *J. Immunol.* 159:4959.
3. Akiba H, *et al.* 1999. *J. Immunol.* 162:7058.