

PE anti-mouse CD70

Catalog # / Size: 1123025 / 50 µg
1123030 / 200 µg

Clone: FR70

Isotype: Rat IgG2b, κ

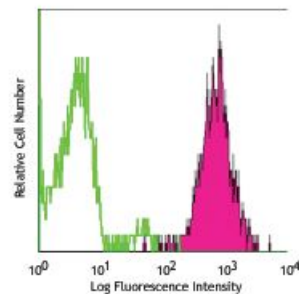
Immunogen: BALB/c mouse B lymphoma A20.2]

Reactivity: Mouse

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

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

Concentration: 0.2



Mouse B cell line A20 stained with FR70 PE

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 ≤1.0 microg per million cells in 100 microL 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. 104605/104606) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated antibody (Cat. No. 104604) or biotinylated anti-rat IgG (Cat. No. 405402) second step, followed by SAv-PE (Cat. No. 405204)). To reduce non-specific binding to cells bearing Fc-receptors, pre-incubation of cells with anti-mouse CD16/CD32, clone 93 (Cat. No. 101301/101302), is recommended prior to immunofluorescent staining. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 104608).

Application References:

1. Oshima H, *et al.* 1998. *Int. Immunol.* 10:517. (Block IP)
2. Akiba HH, *et al.* 1999. *J. Immunol.* 162:7058. (Block)
3. Takeda K, *et al.* 2000. *J. Immunol.* 164:1741. (Block)
4. Henke A, *et al.* 2000. *J. Virol.* 74:4284. (IHC)
5. Brown SL, *et al.* 2007. *J. Clin. Invest.* 117:258.

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