

## LEAF™ Purified anti-human CD40

**Catalog # / Size:** 334303 / 50 µg  
334304 / 500 µg

**Clone:** 5C3

**Isotype:** Mouse IgG1, κ

**Workshop Number:** V CD40.4

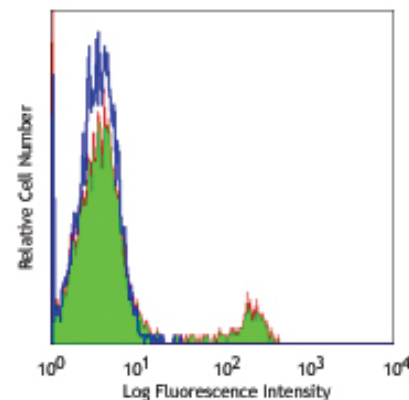
**Reactivity:** Human, **Cross-Reactivity:** Baboon, Chimpanzee, Cynomolgus Monkey, Rhesus, Squirrel Monkey

**Preparation:** The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

**Formulation:** 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

**Concentration:** 1.0 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.



Human peripheral blood lymphocytes stained with LEAF™ purified 5C3, followed by anti-mouse IgG FITC

## Applications:

**Applications:** FC - *Quality tested*  
Block, Activ - *Reported in the literature*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.5 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: costimulation of B cell proliferation<sup>1</sup>, partial inhibition of CD40 binding to CD40L, and B cell rescue from apoptosis<sup>1</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays.

**Application References:** 1. Schlossman SF, *et al.* 1995. ed. *Leukocyte Typing V: White Cell Differentiation Antigens*. New York: Oxford University Press.  
2. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

**Description:** CD40 is a 48 kD type I glycoprotein also known as BP50. It is a member of the TNFR superfamily primarily expressed on B cells, macrophages, follicular dendritic cells, endothelial cells, fibroblasts, and at low levels on plasma cells. CD40 has been reported to be involved in B cell differentiation, costimulation, isotype class-switching, and protection of B cells from apoptosis. Additionally, CD40 is important for T cell-B cell interactions. The ligand of CD40 is CD154 (CD40 ligand). The 5C3 antibody has been reported to promote B cell proliferation in the presence of anti-IgM, IL-4 or PMA, partially blocking CD40 binding to CD40L, and B cells rescue from apoptosis.

**Antigen References:** 1. Banchereau J, *et al.* 1994. *Annu. Rev. Immunol.* 12:881.  
2. Foy T, *et al.* 1996. *Annu. Rev. Immunol.* 14:591.

### Related Products:

**Product**  
LEAF™ Purified Mouse IgG1, κ Isotype Ctrl  
Cell Staining Buffer  
RBC Lysis Buffer (10X)

**Clone**  
MOPC-21

**Application**  
FC, ICFC, WB, IP, ICC, IF, FA  
FC, ICC, ICFC  
FC, ICFC



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