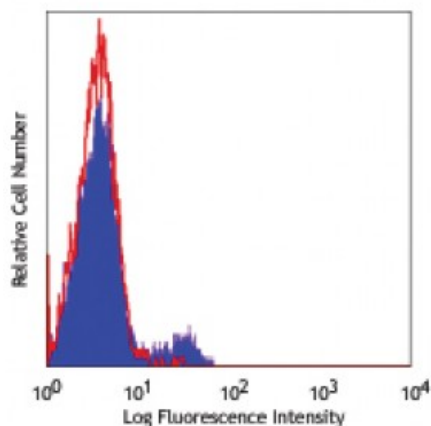


Pacific Blue™ anti-human CD40

Catalog # / Size:	2271595 / 25 µg 2271600 / 100 µg
Clone:	5C3
Isotype:	Mouse IgG1, κ
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Workshop Number:	V CD40.4
Concentration:	0.5



Human peripheral blood lymphocytes stained with 5C3 Pacific Blue™

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 or 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: Additional reported applications (for the relevant formats) include: costimulation of B cell proliferation¹, partial inhibition of CD40 binding to CD40L³, and B cell rescue from apoptosis¹. The LEAF™ purified antibody (Endotoxin <0.1 EU/microg, 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)
3. Pound JD, *et al.* 1999. *Int. Immunol.* 11:11. (Block)

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 1. Banchereau J, *et al.* 1994. *Annu. Rev. Immunol.* 12:881.

References: 2. Foy T, *et al.* 1996. *Annu. Rev. Immunol.* 14:591.