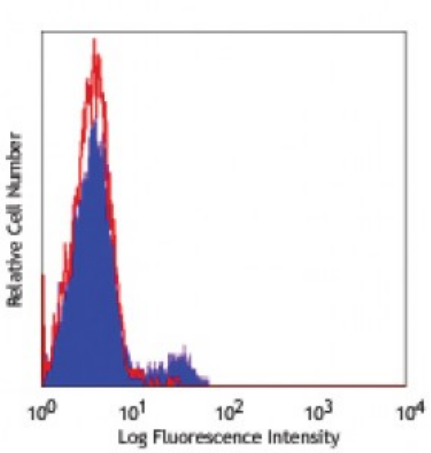
SONY

Product Data Sheet

Pacific Blue™ anti-human CD40

Catalog # / Size:	2271600 / 100 µg 2271595 / 25 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 ≤1.0microg 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.

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