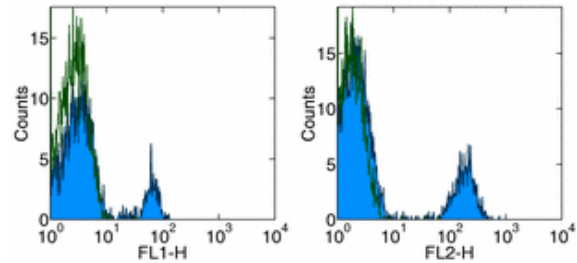


Product Information

Contents: Functional Grade Purified anti-human CD40
Catalog Number: 16-0409
Sizes: 50 ug, 500 ug
Formulation: Phosphate buffer pH 7.2,
150 mM NaCl, No NaN₃
Storage Conditions: Store at 4°C.
Avoid repeated freeze/thaw cycles.
KEEP CONTENT STERILE.
Endotoxin Level: Less than 0.001 ng/ug antibody, as determined
by the LAL assay.
Clone: 5C3
Isotype: Mouse IgG1, κ
HLDA No.: V B-CD40.4



Surface staining of normal human peripheral blood cells with anti-human CD40 (5C3) FITC (left), and PE (right). Appropriate isotype controls were used (open histogram). Cells in the lymphocyte population were used for analysis.

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
11-0409	FITC anti-human CD40	488	518	FC
12-0409	PE anti-human CD40	488	575	FC
14-0409	Affinity Purified anti-human CD40	N/A	N/A	FA FC IH/F
16-0409	Functional Grade* Purified anti-human CD40	N/A	N/A	FA FC

*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/μg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

Description

The 5C3 monoclonal antibody reacts with human CD40, a 45-50 kDa type I transmembrane glycoprotein. CD40 is a member of the TNFR family and is expressed by B lymphocytes, follicular dendritic cells, thymic epithelium, and a subset of peripheral T cells. CD40 regulates B cell development and maturation by inducing Ig isotype-switching and in combination with other signals such as IL-4, protects B cells from surface Ig-induced apoptosis and promotes proliferation. Interaction of CD40 with CD154 (gp39), its ligand on T cells, is important in T-B cell crosstalk and plays a role in costimulation and immune regulation. 5C3 is reported to be used for activation of B cells in *in vitro* functional assays.

Usage

For research use only, not for diagnostic or therapeutic use. The 5C3 antibody has been reported for use in flow cytometric analysis. 5C3 has also been reported in *in vitro* functional studies.

Applications Tested

The 5C3 antibody has been tested by flow cytometric analysis of human peripheral blood leukocytes. This can be used at less than or equal to 1 μg per 100 μl blood (or per 1 million cells in 100 μl total staining volume). It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 11-0409 FITC anti-human CD40 (clone 5C3)
Cat. 12-0409 PE anti-human CD40 (clone 5C3)
Cat. 14-0409 Affinity Purified anti-human CD40 (clone 5C3)
Cat. 11-4011 FITC Anti-Mouse IgG
Cat. 13-4013 Biotin Anti-Mouse IgG (clone Polyclonal)
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)

Cat. 12-4317 Streptavidin-PE (Phycoerythrin)
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)
Cat. 16-4714 Functional Grade Purified Mouse IgG1, K Isotype Control

References

Schlossman, S., L. Bloumsell, et al. eds. (1995). *Leucocyte Typing V: White Cell Differentiation Antigens*. Oxford University Press. New York.

Pound JD, Challa A, Holder MJ, Armitage RJ, Dower SK, Fanslow WC, Kikutani H, Paulie S, Gregory CD, Gordon J. (1999). Minimal cross-linking and epitope requirements for CD40-dependent suppression of apoptosis contrast with those for promotion of the cell cycle and homotypic adhesions in human B cells. *Int Immunol*. Jan;11(1):11-20.

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