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Product Information

Contents: Affinity Purified anti-human CD40

Catalog Number: 14-0409

Sizes: 25 ug, 100 ug

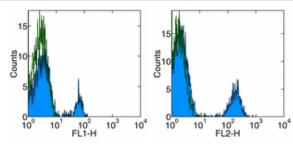
Formulation: Phosphate buffer pH 7.2,

150 mM NaCl, 0.09% NaN₃

Storage Conditions: Store at 4°C. Avoid repeated freeze/thaw cycles.

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
*Function	al Grade™ (EG™). Azide-free sterile-filtered and endot	rovin < 0.001 na/ua		'

*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, and immunohistochemical staining of frozen tissue sections. 5C3 has also been reported in *in vitro* functional studies. (Please use Functional Grade purified 5C3, cat. 16-0409, in functional assays.)

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 μ g per 100 μ l blood (or per 1 million cells in 100 μ l 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. 16-0409 Functional Grade 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. 14-4714 Affinity 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.

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