Anti-Human CD40 Purified

Catalog Number: 14-0409
Also known as: TNFRSF5
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human CD40 Purified
REF **Catalog Number:** 14-0409
Clone: 5C3
Concentration: 0.5 mg/mL
Host/Isotype: Mouse IgG1, kappa
HLDA Workshop: V B-CD40.4

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial

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.

Applications Reported

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 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Pound JD, Challa A, Holder MJ, Armitage RJ, Dower SK, Fanslow WC, Kikutani H, Paulie S, Gregory CD, Gordon J. 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. 1999. Jan;11(1):11-20.

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

Related Products

11-4011 Anti-Mouse IgG FITC
12-0209 Anti-Human CD20 PE (2H7)
14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.8.1)

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