

Anti-Human CD40 PerCP-eFluor® 710

Catalog Number: 46-0409 Also Known As:TNFRSF5 RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (cat. 46-4714) (blue histogram) or Anti-Human CD40 PerCP-eFluor® 710 (purple histogram). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD40 PerCP-eFluor® 710

REF Catalog Number: 46-0409 Clone: 5C3 Concentration: 5 uL (0.03 ug)/test 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. Do not freeze. Light sensitive material.

Batch Code: Refer to Vial

Use By: Refer to Vial

🔨 Caution, contains Azide

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

This 5C3 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 5C3 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 μ L (0.03 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 uL cell sample + 100 uL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

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

25-0209 Anti-Human CD20 PE-Cy7 (2H7) 46-4714 Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (P3.6.2.8.1) Not for further distribution without written consent. Copyright © 2000-2012 eBioscience, Inc. Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com