

CD40 Monoclonal Antibody (5C3), Super Bright™ 702, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 702, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	5C3
Conjugate	Super Bright™ 702
Excitation/Emission Max	413/702 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2717145

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	2 Publications

Product Specific Information

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 tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at less than or equal to 5 µL (0.125) 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

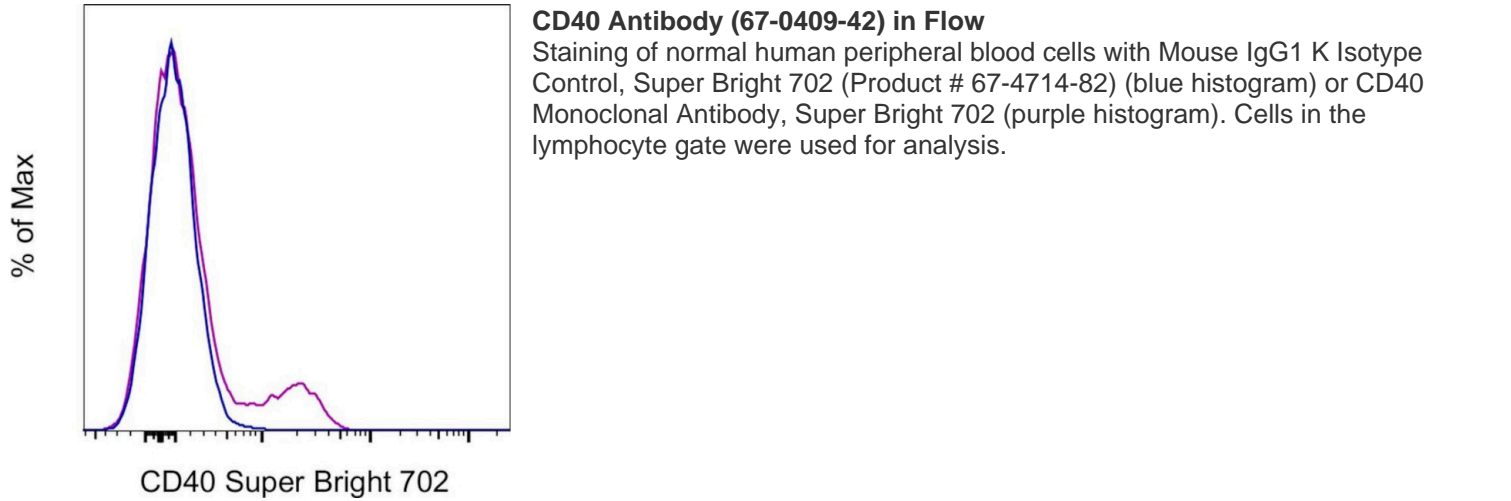
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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.

Excitation: 405 nm; Emission: 702 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD40 Monoclonal Antibody (5C3), Super Bright™ 702, eBioscience™



View more figures on thermofisher.com

2 References

Flow Cytometry (2)

<p>Reproductive biology and endocrinology : RB&E</p> <p>Recombinant human IL-37 inhibited endometriosis development in a mouse model through increasing Th1/Th2 ratio by inducing the maturation of dendritic cells.</p> <p>"Published figure using CD40 monoclonal antibody (Product # 67-0409-42) in Flow Cytometry"</p> <p>Authors: Li L,Liao Z,Ye M,Jiang J</p>	<p>Year</p> <p>2021</p>
<p>Immunology and cell biology</p> <p>Activated monocytes and markers of inflammation in newly diagnosed multiple sclerosis.</p> <p>"Published figure using CD40 monoclonal antibody (Product # 67-0409-42) in Flow Cytometry"</p> <p>Authors: Carstensen M,Christensen T,Stilund M,Møller HJ,Petersen EL,Petersen T</p>	<p>Year</p> <p>2020</p>

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