

CD40 Monoclonal Antibody (5C3), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	5C3
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1834403

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.03 µg)/test	10 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 pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.03 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.

PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

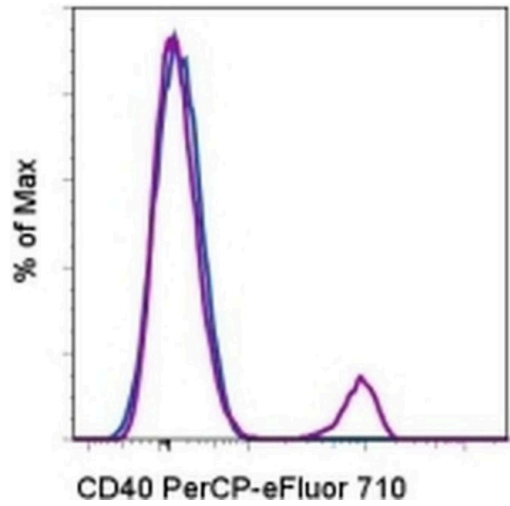
Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-822-49) (100 µL cell sample + 100 µL IC Fixation Buffer) or

1-step Fix/Lyse Solution (Product # 00-5333-54) 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: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD40 Monoclonal Antibody (5C3), PerCP-eFluor™ 710, eBioscience™



CD40 Antibody (46-0409-42) in Flow
Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (Product # 46-4714-82) (blue histogram) or Anti-Human CD40 PerCP-eFluor® 710 (purple histogram). Cells in the lymphocyte gate were used for analysis.

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Flow Cytometry (10)

<div>EBioMedicine</div> <div>SIDT1 plays a key role in type I IFN responses to nucleic acids in plasmacytoid dendritic cells and mediates the pathogenesis of an imiquimod-induced psoriasis model.</div> <div>"46-0409-42 was used in Flow Cytometry to explore the role of SIDT1, an ER-resident protein expressed in the lymphoid lineage and involved in anti-viral IFN-I responses in vivo, in the main IFN-producing cells, the plasmacytoid dendritic cells."</div> <div>Authors: Morell M,Varela N,Castillejo-López C,Coppard C,Luque MJ,Wu YY,Martín-Morales N,Pérez-Cózar F,Gómez-Hernández G,Kumar R,O'Valle F,Alarcón-Riquelme ME,Marañón C</div>	<div>Year 2022</div> <div>Species Human</div>
<div>Reproductive biology and endocrinology : RB&E</div> <div>Recombinant human IL-37 inhibited endometriosis development in a mouse model through increasing Th1/Th2 ratio by inducing the maturation of dendritic cells.</div> <div>"Published figure using CD40 monoclonal antibody (Product # 46-0409-42) in Flow Cytometry"</div> <div>Authors: Li L,Liao Z,Ye M,Jiang J</div>	<div>Year 2021</div>

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