

# 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
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 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	7 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 10<sup>5</sup> to 10<sup>8</sup> 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.

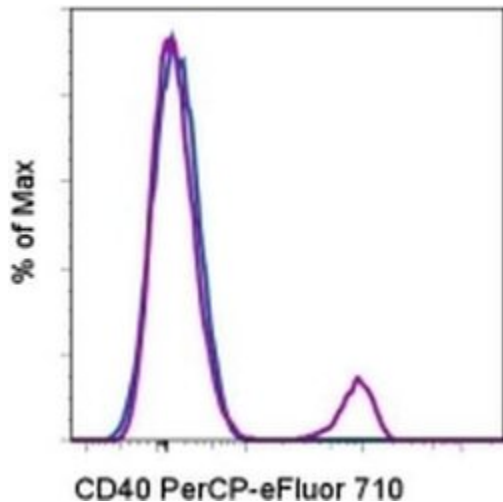
**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency

/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

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 (7)

Frontiers in immunology

### **Schistosoma mansoni rSm29 Antigen Induces a Regulatory Phenotype on Dendritic Cells and Lymphocytes From Patients With Cutaneous Leishmaniasis.**

"46-0409 was used in Flow cytometry/Cell sorting to evaluate the potential of the S.mansoni Sm29 antigen to change aspects of profiles of monocyte derived dendritic cells and lymphocytes from subjects with cutaneous leishmaniasis."

Authors: Lopes DM,Oliveira SC,Page B,Carvalho LP,Carvalho EM,Cardoso LS

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2019

BMC biotechnology

### **A simple, accurate and universal method for quantification of PCR.**

"Published figure using CD40 monoclonal antibody (Product # 46-0409-42) in Flow Cytometry"

Authors: Boulter N,Suarez FG,Schibeci S,Sunderland T,Tolhurst O,Hunter T,Hodge G,Handelsman D,Simanainen U, Hendriks E,Duggan K

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

[View more Flow references on thermofisher.com](#)

## More applications with references on thermofisher.com

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