

# CD40 Monoclonal Antibody (5C3), PE, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	5C3
Conjugate	PE
Excitation/Emission Max	565/576 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_1963582

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.015 µg)/test	12 Publications

## Product Specific Information

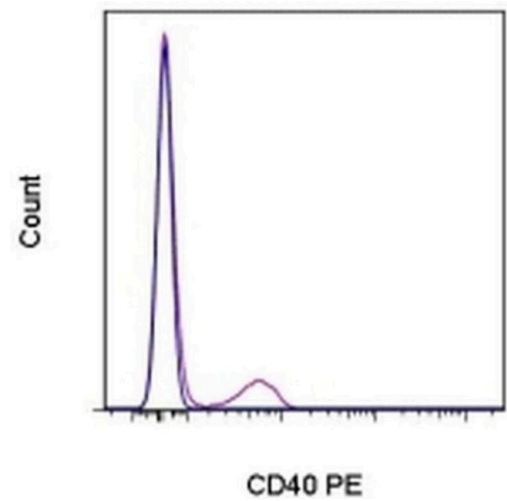
**Description:** The 5C3 monoclonal antibody reacts with human CD40, a 45-50 kDa type I transmembrane glycoprotein. CD40 is a member of the TNFR family and is expressed by B lymphocytes, follicular dendritic cells, thymic epithelium, and a subset of peripheral T cells. CD40 regulates B cell development 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:** The 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 (0.015 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.

**Excitation:** 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

**Filtration:** 0.2 µm post-manufacturing filtered.



**CD40 Antibody (12-0409-42) in Flow**  
Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control PE (Product # 12-4714-81) (blue histogram) or Anti-Human CD40 PE (purple histogram). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.cn](#)

📄 12 References

Flow Cytometry (12)

Reproductive biology and endocrinology : RB&E	Year 2021
<b>Recombinant human IL-37 inhibited endometriosis development in a mouse model through increasing Th1/Th2 ratio by inducing the maturation of dendritic cells.</b>	
"Published figure using CD40 monoclonal antibody (Product # 12-0409-42) in Flow Cytometry"	
Authors: Li L,Liao Z,Ye M,Jiang J	
The Journal of clinical investigation	Year 2020
<b>Tendon-derived cathepsin K-expressing progenitor cells activate Hedgehog signaling to drive heterotopic ossification.</b>	Species Mouse
"12-0409 was used in Flow cytometry/Cell sorting to show that Ctsk-Cre labels a subpopulation of TDPCs contributing to HO and that their cell-fate changes are driven by activation of Hh signaling."	
Authors: Feng H,Xing W,Han Y,Sun J,Kong M,Gao B,Yang Y,Yin Z,Chen X,Zhao Y,Bi Q,Zou W	

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

More applications with references on thermofisher.cn

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