

# CD40 Monoclonal Antibody (1C10), Super Bright™ 436, eBioscience™

| Product Details             |  |
|-----------------------------|--|
| Size                        | 100 µg   |
| Species Reactivity          | Mouse  |
| Host/Isotype                | Rat / IgG2a, kappa   |
| Recommended Isotype Control | Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 436, eBioscience™ |
| Class                       | Monoclonal   |
| Type                        | Antibody   |
| Clone                       | 1C10   |
| Conjugate                   | Super Bright™ 436  |
| Excitation/Emission Max     | 413/431 nm   |
| Form                        | Liquid   |
| Concentration               | 0.2 mg/mL  |
| 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_2716991   |

| Applications          | Tested Dilution | Publications   |
|-----------------------|-----------------|----------------|
| Flow Cytometry (Flow) | 0.5 µg/test     | 9 Publications |

## Product Specific Information

**Description:** The 1C10 monoclonal antibody reacts with mouse CD40, a 45-50 kDa type I transmembrane glycoprotein. CD40 is a member of the TNFR family and is expressed by mouse B lymphocytes, follicular dendritic cells, thymic epithelium, and a subset of peripheral T cells. CD40 regulates B cell development/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.

The monoclonal antibody 1C10 is reported to have agonistic activity in vitro and in vivo.

**Applications Reported:** The 1C10 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** The 1C10 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

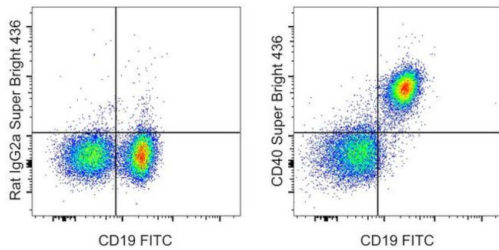
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

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

## Product Images For CD40 Monoclonal Antibody (1C10), Super Bright™ 436, eBioscience™



### CD40 Antibody (62-0401-82) in Flow

Staining of BALB/c splenocytes with Anti-Mouse CD19 FITC (Product # 11-0193) and 0.25 µg of Rat IgG2a K Isotype Control Super Bright 436 (Product # 62-4321) (left) or 0.25 µg of Anti-Mouse CD40 Super Bright 436 (Product # 62-0401) (right). Total viable cells were used for analysis.

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

## 9 References

### Flow Cytometry (9)

Frontiers in immunology

#### Neuroimmune Consequences of eIF4E Phosphorylation on Chemotherapy-Induced Peripheral Neuropathy.

"Published figure using CD40 monoclonal antibody (Product # 62-0401-82) in Flow Cytometry"

Authors: Agalave NM, Mody PH, Szabo-Pardi TA, Jeong HS, Burton MD

Year  
2021

Journal for immunotherapy of cancer

#### Modulation of lactate-lysosome axis in dendritic cells by clotrimazole potentiates antitumor immunity.

"Published figure using CD40 monoclonal antibody (Product # 62-0401-82) in Flow Cytometry"

Authors: Wang Z, Xu F, Hu J, Zhang H, Cui L, Lu W, He W, Wang X, Li M, Zhang H, Xiong W, Xie C, Liu Y, Zhou P, Liu J, Huang P, Qin XF, Xia X

Year  
2021

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

## More applications with references on thermofisher.com

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