

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
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	4 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 10⁵ to 10⁸ 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.

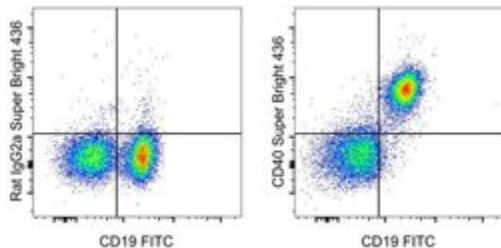
When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright

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](#)

4 References

Flow Cytometry (4)

Frontiers in cell and developmental biology

Aggregated and Hyperstable Damage-Associated Molecular Patterns Are Released During ER Stress to Modulate Immune Function.

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

Authors: Andersohn A, Garcia MI, Fan Y, Thompson MC, Akimzhanov AM, Abdullahi A, Jeschke MG, Boehning D

Species
Not Applicable

Dilution
Not Cited

Year
2020

Nature communications

Senolytics prevent mt-DNA-induced inflammation and promote the survival of aged organs following transplantation.

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

Authors: Iske J, Seyda M, Heinbokel T, Maenosono R, Minami K, Nian Y, Quante M, Falk CS, Azuma H, Martin F, Passos JF, Niemann CU, Tchkonja T, Kirkland JL, Elkhali A, Tullius SG

Species
Not Applicable

Dilution
Not Cited

Year
2020

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

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.