

CD40 Monoclonal Antibody (1C10), Biotin, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Human, Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	1C10
Conjugate	Biotin
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_466431

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	20 Publications
ELISA (ELISA)	-	1 Publication

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 1 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.

Filtration: 0.2 µm post-manufacturing filtered.

21 References

Flow Cytometry (20)

Nature communications

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

"Published figure using CD40 monoclonal antibody (Product # 13-0401-82) 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

Frontiers in immunology

FcRI -Chain Negatively Modulates Dectin-1 Responses in Dendritic Cells.

"Published figure using CD40 monoclonal antibody (Product # 13-0401-82) in Flow Cytometry"

Authors: Pan YG, Yu YL, Lin CC, Lanier LL, Chu CL

Species

Not Applicable

Dilution

Not Cited

Year

2019

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

ELISA (1)

Mediators of inflammation

Hydrogen Sulfide Attenuates High Glucose-Induced Human Retinal Pigment Epithelial Cell Inflammation by Inhibiting ROS Formation and NLRP3 Inflammasome Activation.

"13-0401 was used in an ELISA assay to determine the role of hydrogen sulfide in the protection of retinal pigment epithelial cells from high glucose induced damage."

Authors: Wang P, Chen F, Wang W, Zhang XD

Species

Human

Dilution

Not Cited

Year

2019

More applications with references on thermofisher.com

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