

Pacific Blue™ anti-mouse CD40 Antibody

Catalog# / Size	124625 / 25 µg 124626 / 100 µg
Clone	3/23
Regulatory Status	RUO
Other Names	Bp50, TNFRSF5
Isotype	Rat IgG2a, κ
Description	CD40 is a 48 kD type I transmembrane glycoprotein also known as Bp50. It is a member of the tumor necrosis factor receptor (TNFR) superfamily and is expressed on B cells, basal epithelial cells, macrophages, follicular dendritic cells, endothelial cells, and a subset of CD34 ⁺ hematopoietic progenitors. CD40 regulates B cell development/maturation, 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 its ligand CD154 (gp39), which is expressed on activated T cells, is important in costimulation and immune regulation.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Recombinant mouse CD40 protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Pacific Blue™ under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Violet Laser (405 nm)
Application Notes	For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 124627 & 124628) with a low endotoxin limit (Endotoxin < 0.01 EU/µg).
Application References	<ol style="list-style-type: none"> Hasbold J, <i>et al.</i> 1994. <i>Eur. J. Immunol.</i> 24:1835. Bourgeois C, <i>et al.</i> 2002. <i>Science</i> 297:2060.
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> Alissafi T, <i>et al.</i> 2018. <i>J Clin Invest.</i> 128:3840. PubMed

2. Zhao F *et al.* 2018. *Immunity*. 48(1):147-160 . [PubMed](#)
3. Feng S, *et al.* 2021. *Exp Ther Med*. 21:20. [PubMed](#)

RRID AB_2561475 (BioLegend Cat. No. 124625)
AB_2561476 (BioLegend Cat. No. 124626)

Antigen Details

Structure	48 kD type I transmembrane glycoprotein, a member of the tumor necrosis factor receptor (TNFR) superfamily.
Distribution	Expressed on B lymphocytes and other antigen-presenting cells, such as macrophages, follicular dendritic cells, etc.
Function	Regulates B cell growth and differentiation and Ig isotype switching. Interaction of CD40 with its ligand, CD154, on activated T cells is important for immune response.
Ligand/Receptor	CD154 on T cells
Cell Type	Antigen-presenting cells, B cells, Dendritic cells, Macrophages
Biology Area	Cell Biology, Costimulatory Molecules, Immunology, Neuroscience, Neuroscience Cell Markers
Molecular Family	CD Molecules
Antigen References	1. Grewal IS, <i>et al.</i> 1998. <i>Annu Rev Immunol</i> 16:111.
Gene ID	21939

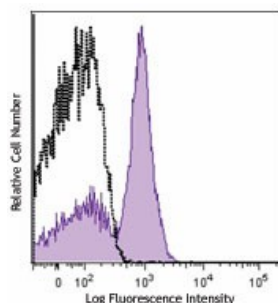
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CD40, Biotin anti-mouse CD40, FITC anti-mouse CD40, PE anti-mouse CD40, APC anti-mouse CD40, Alexa Fluor® 647 anti-mouse CD40, PE/Cyanine5 anti-mouse CD40, PE/Cyanine7 anti-mouse CD40, Ultra-LEAF™ Purified anti-mouse CD40, PerCP/Cyanine5.5 anti-mouse CD40, Pacific Blue™ anti-mouse CD40, PE/Dazzle™ 594 anti-mouse CD40, APC/Fire™ 750 anti-mouse CD40, TotalSeq™-C0903 anti-mouse CD40, TotalSeq™-A0903 anti-mouse CD40, APC/Cyanine7 anti-mouse CD40, TotalSeq™-B0903 anti-mouse CD40 Antibody

Product Data



C57BL/6 mouse splenocytes were stained with CD40 (clone 3/23) Pacific Blue™ (filled histogram) or rat IgG2a, κ Pacific Blue™ isotype control (open histogram).

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