

Datasheet: MCA1143

Description:	RAT ANTI MOUSE CD40
Specificity:	CD40
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3/23
Isotype:	IgG2a
Quantity:	0.25 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	Extracellular Domain of Mouse CD40 and the Fc portion of Human IgG1.
External Database Links	<p>UniProt: P27512 Related reagents</p> <p>Entrez Gene: 21939 Cd40 Related reagents</p>
Synonyms	Tnfrsf5
RRID	AB_321689
Fusion Partners	Spleen cells from immunised LOU/c rats were fused with cells of the Ag8 mouse myeloma cell line.
Specificity	<p>Rat anti Mouse CD40 antibody, clone 3/23 recognizes the murine CD40 cell surface glycoprotein. It does not react with normal mouse Ig or with human IgG1 and will stain most mature mouse B cells. It does not cross react with mouse T cells. The specificity of Rat anti Mouse CD40 antibody, clone 3/23 was demonstrated by ELISA and flow cytometry using BHK cells transfected with mouse CD40.</p> <p>Rat anti Mouse CD40 antibody, clone 3/23 is a powerful activator of normal B cells especially in the presence of IL-4.</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl.
References	<ol style="list-style-type: none"> 1. Parry, S.L. <i>et al.</i> (1994) Plastic-immobilized anti-mu or anti-delta antibodies induce apoptosis in mature murine B lymphocytes. Eur J Immunol. 24 (4): 974-9. 2. Hasbold, J. & Klaus, G.G. (1994) B cells from CBA/N mice do not proliferate following ligation of CD40. Eur J Immunol. 24 (1): 152-7. 3. Salomon, B. <i>et al.</i> (1998) Three populations of mouse lymph node dendritic cells with different origins and dynamics. J Immunol. 160: 708-17. 4. Yang, Y.F. <i>et al.</i> (2000) Requirement for IFN-gamma in IL-12 production induced by collaboration between v(alpha)14(+) NKT cells and antigen-presenting cells. Int Immunol. 12: 1669-75. 5. Ogasawara, K. <i>et al.</i> (2002) Profiles of cell-to-cell interaction of Mycobacterium intracellulare-induced immunosuppressive macrophages with target T cells in terms of suppressor signal transmission. Clin Exp Immunol. 129: 272-80. 6. Russo, S. <i>et al.</i> (2003) Platelet-activating factor mediates CD40-dependent angiogenesis and endothelial-smooth muscle cell interaction. J Immunol. 171: 5489-97. 7. Mukhopadhyay, S. <i>et al.</i> (2004) Activation of murine macrophages by Neisseria meningitidis and IFN-gamma in vitro: distinct roles of class A scavenger and Toll-like pattern recognition receptors in selective modulation of surface phenotype. J Leukoc Biol. 76: 577-84.

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9. Bedoret, D. *et al.* (2009) Lung interstitial macrophages alter dendritic cell functions to prevent airway allergy in mice. [J Clin Invest. 119 \(12\): 3723-38.](#)
10. Shakib, S. *et al.* (2009) Checkpoints in the development of thymic cortical epithelial cells. [J Immunol. 182: 130-7.](#)
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13. Malada-Edelstein, Y.F. *et al.* (2017) Regulatory role of cytosolic phospholipase A₂ alpha in the induction of CD40 in microglia. [J Neuroinflammation. 14 \(1\): 33.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1143>
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Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@550 , DyLight@650 , DyLight@800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M408303:221011'

Printed on 04 Sep 2023

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