

Datasheet: MCA1143PE

BATCH NUMBER 172938

Description:	RAT ANTI MOUSE CD40:RPE
Specificity:	CD40
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	3/23
Isotype:	IgG2a
Quantity:	100 TESTS

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	▪			Neat

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 conjugated to R. Phycoerythrin (RPE) - lyophilized						
Reconstitution	Reconstitute with 1 ml distilled water						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% sodium azide (NaN ₃)						
Stabilisers	1% bovine serum albumin 5% sucrose						

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_321691
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. The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).
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. 8. Mohan, J. <i>et al.</i> (2005) Skin-derived dendritic cells acquire and degrade the scrapie

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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. Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1143PE
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M439589:250523'

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