Datasheet: MCA1143 BATCH NUMBER 155369

Description:	RAT ANTI MOUSE CD40
Specificity:	CD40
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3/23
Isotype:	lgG2a
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 <u>www.bio-</u>						
	•	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 supernatant	affinity c	hromatog	raphy on Protein G froi	m tissue culture		
Buffer Solution	Phosphate buffered saline	е					

Stabilisers	Preservative	0.09% Sodium Azide
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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	UniProt: P27512 Related reagents Entrez Gene: 21939 Cd40 Related reagents			
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	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. Rat anti Mouse CD40 antibody, clone 3/23 is a powerful activator of normal B cells especially in the presence of IL-4.			
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.			
References	 Parry, S.L. <i>et al.</i> (1994) Plastic-immobilized anti-mu or anti-delta antibodies induce apoptosis in mature murine B lymphocytes. <u>Eur J Immunol. 24 (4): 974-9.</u> Hasbold, J. <i>et al.</i> (1994) Properties of mouse CD40: cellular distribution of CD40 and B cell activation by monoclonal anti-mouse CD40 antibodies. <u>Eur J Immunol. 24 (8):</u> <u>1835-42.</u> Hasbold, J. & Klaus, G.G. (1994) B cells from CBA/N mice do not proliferate following ligation of CD40. <u>Eur J Immunol. 24 (1): 152-7.</u> Bedoret, D. <i>et al.</i> (2009) Lung interstitial macrophages alter dendritic cell functions to prevent airway allergy in mice. <u>J Clin Invest. 119 (12): 3723-38.</u> Mohan, J. <i>et al.</i> (2005) Skin-derived dendritic cells acquire and degrade the scrapie agent following in vitro exposure. <u>Immunology. 116: 122-33.</u> 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. <u>J Leukoc Biol.</u> <u>76: 577-84.</u> 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. 8. Shakib, S. <i>et al.</i> (2009) Checkpoints in the development of thymic cortical epithelial cells. J Immunol. 182: 130-7. 9. 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. 10. 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. 11. 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. 12. Legutko, A. <i>et al.</i> (2011) Sirtuin 1 Promotes Th2 Responses and Airway Allergy by Repressing Peroxisome Proliferator-Activated Receptor-{gamma} Activity in Dendritic Cells. J Immunol. 187: 4517-29. 13. Pletinckx, K. <i>et al.</i> (2015) Immature dendritic cells convert anergic nonregulatory T cells into Foxp3- IL-10+ regulatory T cells by engaging CD28 and CTLA-4. Eur J Immunol. 45 (2): 480-91.
	14. Malada-Edelstein, Y.F. <i>et al.</i> (2017) Regulatory role of cytosolic phospholipase A ₂ alpha in the induction of CD40 in microglia. <u>J Neuroinflammation. 14 (1): 33.</u>
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. 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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1143 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16)	DyLight®800
Rabbit Anti Rat IgG (STAR17)	<u>FITC</u>
Goat Anti Rat IgG (STAR73)	RPE
Rabbit Anti Rat IgG (STAR21)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71)DyLight®550, DyLight®650, DyLight®800
Goat Anti Rat IgG (STAR131)	Alk. Phos., Biotin
Goat Anti Rat IgG (STAR72)	HRP
Goat Anti Rat IgG (STAR69)	<u>FITC</u>
Recommended Negative Controls	

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody sales us@bio-rad	l.com	Email: antibody sales uk@bio-rad	d.com	Email: antibody sales de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M364832:200529'

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