# Datasheet: MCA1590 BATCH NUMBER 164246

Description:	MOUSE ANTI HUMAN CD40		
Specificity:	CD40		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	LOB7/6		
lsotype:	lgG2a		
Quantity:	0.2 mg		

# **Product Details**

Applications	This product has been re	ported to	o work in t	he following applicatio	ns. 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	•				
	• ·		recommer	idations, please visit v	<u>vww.bi0-</u>	
	rad-antibodies.com/proto					
		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	•			20ug/ml	
	Immunohistology - Frozen	•			1ug/ml - 10ug/ml	
	Immunohistology - Paraffin (1)	-			1ug/ml - 10ug/ml	
	ELISA			•		
	Immunoprecipitation	-				
	Western Blotting			•		
	Where this product has not been tested for use in a particular technique this does not					
	necessarily exclude its us		•	••		
	necessarily exclude its us a guide only. It is recomm system using appropriate (1) <b>This product requires</b> <b>trypsin or pronase.</b>	nended t e negative	hat the us e/positive	er titrates the product controls.	for use in their own	
Target Species	a guide only. It is recomm system using appropriate (1) <b>This product require</b>	nended t e negative	hat the us e/positive	er titrates the product controls.	for use in their own	
Target Species Species Cross	a guide only. It is recomm system using appropriate (1) <b>This product require</b> <b>trypsin or pronase</b> .	nended t e negative	hat the us e/positive	er titrates the product controls.	for use in their own	
Species Cross	a guide only. It is recomm system using appropriate (1) <b>This product requires</b> <b>trypsin or pronase.</b> Human	nended t e negativo s proteir	hat the us e/positive n <b>digestio</b>	er titrates the product controls. In pre-treatment of pa	for use in their own araffin sections e.g.	
Species Cross	a guide only. It is recomm system using appropriate (1) <b>This product requires</b> <b>trypsin or pronase</b> . Human Reacts with: Dog <b>N.B.</b> Antibody reactivity a	nended t e negative s protein	hat the us e/positive n <b>digestio</b> ing conditi	er titrates the product controls. on pre-treatment of pa ions may vary between	for use in their own araffin sections e.g.	
Species Cross	a guide only. It is recomm system using appropriate (1) <b>This product requires</b> <b>trypsin or pronase</b> . Human Reacts with: Dog <b>N.B.</b> Antibody reactivity a reactivity is derived from	nended t e negative s protein and work testing w	hat the us e/positive n digestio ing conditi vithin our l	er titrates the product controls. on pre-treatment of pa ions may vary between aboratories, peer-revie	for use in their own araffin sections e.g. n species. Cross ewed publications or	
	a guide only. It is recomm system using appropriate (1) <b>This product requires</b> <b>trypsin or pronase</b> . Human Reacts with: Dog <b>N.B.</b> Antibody reactivity a	nended t e negative s protein and work testing w	hat the us e/positive n digestio ing conditi vithin our l	er titrates the product controls. on pre-treatment of pa ions may vary between aboratories, peer-revie	for use in their own araffin sections e.g. n species. Cross ewed publications or	

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Tris buffered saline
Preservative Stabilisers	<0.1% sodium azide (NaN <sub>3</sub> )
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	CD40 Ig(Fc) fusion protein containing the EC region of human CD40 and Fc region of human IgG.
External Database Links	UniProt:         P25942       Related reagents         Entrez Gene:         958       CD40         Related reagents
Synonyms	TNFRSF5
RRID	AB_321685
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<b>Mouse anti Human CD40 antibody, clone LOB7/6</b> recognizes the human CD40 cell surface antigen, a 48kDa glycoprotein expressed by B lymphocytes and weakly by some monocytes.
	CD40 is involved in the process of B cell selection in germinal centres and is vital in T cell-B cell interactions.
Flow Cytometry	Use 10µl of the suggested working dilution to label $10^6$ cells in $100µl$
Histology Positive Control Tissue	Human Tonsil
References	<ol> <li>Quadbeck, B. <i>et al.</i> (2002) Maturation of thyroidal dendritic cells in Graves' disease. Scand J Immunol. 55 (6): 612-20.</li> <li>Kirsch, B. M. <i>et al.</i> (2005) The active metabolite of leflunomide, A77 1726, interferes with dendritic cell function. Arthritis Res. Ther. 7: R694-R703.</li> <li>Cheadle, E. <i>et al.</i> (2003) <i>Mycobacterium bovis</i> bacillus Calmette-Guerin-infected dendritic cells potently activate autologous T cells via a B7 and interleukin-12-dependent mechanism. Immunology.108: 79-88.</li> <li>Carpenter, E.L. <i>et al.</i> (2009) Activation of human B cells by the agonist CD40 antibody CP-870,893 and augmentation with simultaneous toll-like receptor 9 stimulation. J Transl</li> </ol>

### Med. 7: 93.

Health And Safety Information	Material Safety Datasheet documentation #10057 available at: <u>https://www.bio-rad-antibodies.com/SDS/MCA1590</u> 10057
Guarantee	12 months from date of despatch
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
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.
	<ul> <li>Med. 7: 93.</li> <li>5. Garcia-Nieto, S. <i>et al.</i> (2010) Laminin and Fibronectin Treatment Leads to Generation of Dendritic Cells with Superior Endocytic Capacity. <u>PLoS ONE, 5: 1-10.</u></li> <li>6. Wang, Y.S. <i>et al.</i> (2007) Characterization of canine monocyte-derived dendritic cells with phenotypic and functional differentiation. <u>Can J Vet Res. 71: 165-74.</u></li> <li>7. Vlachoyiannopoulos, P.G. <i>et al.</i> (2004) Anti-CD40 antibodies in antiphospholipid syndrome and systemic lupus erythematosus. <u>Thromb Haemost. 92: 1303-11.</u></li> <li>8. Leigh, J.E. <i>et al.</i> (2006) Characterization of the immune status of CD8+ T cells in oral lesions of human immunodeficiency virus-infected persons with oropharyngeal Candidiasis. <u>Clin Vaccine Immunol. 13: 678-83.</u></li> <li>9. Newman, K.C. <i>et al.</i> (2006) Cross-talk with myeloid accessory cells regulates human natural killer cell interferon-gamma responses to malaria. <u>PLoS Pathog. 2: e118.</u></li> <li>10. Kuijf, M.L. <i>et al.</i> (2010) TLR4-mediated sensing of <i>Campylobacter jejuni</i> by dendritic cells is determined by sialylation. <u>J Immunol. 185: 748-55.</u></li> <li>11. Huizinga R <i>et al.</i> (2015) Innate Immunity to <i>Campylobacter jejuni</i> in Guillain-Barré Syndrome. <u>Ann Neurol. 78 (3): 343-54.</u></li> <li>12. Yildrim C <i>et al.</i> (2017) Interleukin-10 and prostaglandin E2 have complementary but distinct suppressive effects on Toll-like receptor-mediated dendritic cell activation in ovarian carcinoma. <u>PLoS One. 12 (4): e0175712.</u></li> <li>14. Silk, K.M. <i>et al.</i> (2011) Reapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. J Biomed Biotechnol. 2012: 172420.</li> <li>15. Tischer, S. <i>et al.</i> (2021) Acute cardiovascular effects of controlled exposure to dilute Petrodiesel and biodiesel exhaust in healthy volunteers: a crossover study. <u>Part Fibre Toxicol. 18 (1): 22.</u></li> <li>17. Milhau, N. <i>et al.</i> (2020) <i>In vitro.</i> evaluations on canine monocyte-derived dendritic cells of a nanoparticles delivery system for vaccine antigen</li></ul>

## **Related Products**

### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77)	HRP
Rabbit Anti Mouse IgG (STAR12)	RPE
Goat Anti Mouse IgG (STAR70)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87	) <u>Alk. Phos.</u> , <u>HRP</u>
Goat Anti Mouse IgG (STAR76)	RPE
Goat Anti Mouse IgG (H/L) (STAR117)	Alk. Phos., DyLight®488, DyLight®550,
	DyLight®650, DyLight®680, DyLight®800,
	FITC, HRP
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP
Rabbit Anti Mouse IgG (STAR13)	HRP
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>
<b>Recommended Negative Controls</b>	

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

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-ra	d.com	Email: antibody_sales_uk@bio-ra	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 'M410770:221028'

#### Printed on 20 Jun 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint