

## Datasheet: MCA1590PE

**BATCH NUMBER INN1608**

<b>Description:</b>	MOUSE ANTI HUMAN CD40:RPE
<b>Specificity:</b>	CD40
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	LOB7/6
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human								
<b>Species Cross Reactivity</b>	Reacts with: Dog <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.								
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized								
<b>Reconstitution</b>	Reconstitute with 1ml distilled water								
<b>Max Ex/Em</b>	<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							
<b>Buffer Solution</b>	Phosphate buffered saline								

<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	1% Bovine Serum Albumin
<b>Immunogen</b>	CD40 Ig(Fc) fusion protein containing the EC region of human CD40 and Fc region of human IgG.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P25942</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">958</a> CD40    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	TNFRSF5
<b>RRID</b>	AB_321688
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><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.</p> <p>CD40 is involved in the process of B cell selection in germinal centres and is vital in T cell-B cell interactions.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Quadbeck, B. <i>et al.</i> (2002) Maturation of thyroidal dendritic cells in Graves' disease. <a href="#">Scand J Immunol. 55 (6): 612-20.</a></li> <li>2. Kirsch, B. M. <i>et al.</i> (2005) The active metabolite of leflunomide, A77 1726, interferes with dendritic cell function. <a href="#">Arthritis Res. Ther. 7: R694-R703.</a></li> <li>3. 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. <a href="#">Immunology.108: 79-88.</a></li> <li>4. 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. <a href="#">J Transl Med. 7: 93.</a></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. <a href="#">PLoS ONE. 5: 1-10.</a></li> <li>6. Wang, Y.S. <i>et al.</i> (2007) Characterization of canine monocyte-derived dendritic cells with phenotypic and functional differentiation. <a href="#">Can J Vet Res. 71: 165-74.</a></li> <li>7. Vlachoyiannopoulos, P.G. <i>et al.</i> (2004) Anti-CD40 antibodies in antiphospholipid syndrome and systemic lupus erythematosus. <a href="#">Thromb Haemost. 92: 1303-11.</a></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. <a href="#">Clin Vaccine Immunol. 13: 678-83.</a></li> </ol>

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17. Milhau, N. *et al.* (2020) *In vitro.* evaluations on canine monocyte-derived dendritic cells of a nanoparticles delivery system for vaccine antigen against *Echinococcus granulosus.* [PLoS One. 15 \(2\): e0229121.](#)
18. Uetz-von Allmen, E *et al.* (2021) CAL-1 as Cellular Model System to Study CCR7-Guided Human Dendritic Cell Migration. [Front Immunol. 12: 702453.](#)

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**Storage**

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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1590PE>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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