

## Datasheet: MCA1590A647

<b>Description:</b>	MOUSE ANTI HUMAN CD40:Alexa Fluor® 647
<b>Specificity:</b>	CD40
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	LOB7/6
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS/1ml

## 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	▪			1/10 - 1/20

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.		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b> Alexa Fluor®647	<b>Excitation Max (nm)</b> 650	<b>Emission Max (nm)</b> 665
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		
<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>	<b>UniProt:</b>		

**Entrez Gene:**

[958](#)   CD40   [Related reagents](#)

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<b>Synonyms</b>	TNFRSF5
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<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
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<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>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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<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><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. <a href="#">PLoS Pathog. 2: e118.</a></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. <a href="#">J Immunol. 185: 748-55.</a></li><li>11. Huizinga R <i>et al.</i> (2015) Innate Immunity to <i>Campylobacter jejuni</i> in Guillain-Barré Syndrome. <a href="#">Ann Neurol. 78 (3): 343-54.</a></li><li>12. Yıldıırım C <i>et al.</i> (2015) Galectin-2 induces a proinflammatory, anti-arteriogenic phenotype in monocytes and macrophages. <a href="#">PLoS One. 10 (4): e0124347.</a></li><li>13. Brencicova, E. <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. <a href="#">PLoS One. 12 (4): e0175712.</a></li></ol>
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<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p>
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Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life** 18 months from date of despatch.

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA929A647\)](#)

### Recommended Useful Reagents

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

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

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