

# Datasheet: MCA1590EL

Description:	MOUSE ANTI HUMAN CD40:Low Endotoxin
Specificity:	CD40
Format:	Low Endotoxin
<b>Product Type:</b>	Monoclonal Antibody
Clone:	LOB7/6
Isotype:	IgG2a
Quantity:	0.5 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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			1/100 - 1/200
Immunohistology - Frozen	-			
Immunohistology - Paraffin (1)	-			
ELISA				
Immunoprecipitation	•			
Western Blotting			•	

Where this product 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 product for use in their own system using appropriate negative/positive controls.

(1)This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase.

Target Species	Human
Species Cross Reactivity	Reacts with: Dog  N.B. Antibody reactivity and working conditions may vary between specie
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Tris buffered saline
Preservative Stabilisers	None present
Endotoxin Level	<0.01EU/ug
Approx. Protein	IgG concentration 1.0 mg/ml

Concentrations	
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
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	Mouse anti Human CD40 antibody, clone LOB7/6 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 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
Histology Positive Control Tissue	Human Tonsil
References	1. Quadbeck, B. <i>et al.</i> (2002) Maturation of thyroidal dendritic cells in Graves' disease. Scand J Immunol. 55 (6): 612-20.  2. 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.  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. Immunology.108: 79-88.  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. J Transl Med. 7: 93.  5. Garcia-Nieto, S. <i>et al.</i> (2010) Laminin and Fibronectin Treatment Leads to Generation of Dendritic Cells with Superior Endocytic Capacity. PLoS ONE. 5: 1-10.  6. Wang, Y.S. <i>et al.</i> (2007) Characterization of canine monocyte-derived dendritic cells with phenotypic and functional differentiation. Can J Vet Res. 71: 165-74.  7. Vlachoyiannopoulos, P.G. <i>et al.</i> (2004) Anti-CD40 antibodies in antiphospholipid syndrome and systemic lupus erythematosus. Thromb Haemost. 92: 1303-11.  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. Clin Vaccine Immunol. 13: 678-83.  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. PLoS Pathog. 2: e118.  10. Kuijf, M.L. <i>et al.</i> (2010) TLR4-mediated sensing of <i>Campylobacter jejuni</i> by dendritic cells is determined by sialylation. J Immunol. 185: 748-55.  11. Huizinga R <i>et al.</i> (2015) Innate Immunity to <i>Campylobacter jejuni</i> in Guillain-Barré Syndrome.

12. Yıldırım C et al. (2015) Galectin-2 induces a proinflammatory, anti-arteriogenic phenotype in

Ann Neurol. 78 (3): 343-54.

monocytes and macrophages. PLoS One. 10 (4): e0124347.

13. Brencicova, E. et al. (2017) Interleukin-10 and prostaglandin E2 have complementary but distinct suppressive effects on Toll-like receptor-mediated dendritic cell activation in ovarian

carcinoma. PLoS One. 12 (4): e0175712.

**Storage** Store at -20°C only.

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.

Shelf Life 18 months from date of despatch.

**Health And Safety** Information

Material Safety Datasheet documentation #10170 available at:

10170: https://www.bio-rad-antibodies.com/uploads/MSDS/10170.pdf

Regulatory For research purposes only

## Related Products

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR77...) **HRP** Rabbit Anti Mouse IgG (STAR12...) **RPE** 

DyLight®800 Rabbit Anti Mouse IgG (STAR8...)

Rabbit Anti Mouse IgG (STAR13...) **HRP** Goat Anti Mouse IgG (STAR76...) **RPE** Goat Anti Mouse IgG (STAR70...) **FITC** 

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®549,

DyLight®649, DyLight®680, DyLight®800,

FITC, HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP Rabbit Anti Mouse IgG (STAR9...) **FITC** 

Human Anti Mouse IgG2a (HCA037...) FITC, HRP

## **Recommended Negative Controls**

### MOUSE IgG2a NEGATIVE CONTROL:Low Endotoxin (MCA929EL)

North & South Tel: +1 800 265 7376 America Fax: +1 919 878 3751 Worldwide

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