

Datasheet: MCA1590T

BATCH NUMBER 170617

Description:	MOUSE ANTI HUMAN CD40
Specificity:	CD40
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	LOB7/6
Isotype:	IgG2a
Quantity:	25 µg

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.

	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 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.

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

Target Species	Human
Species Cross Reactivity	<p>Reacts with: Dog</p> <p>N.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.</p>
Product Form	Purified IgG - liquid

Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Tris buffered saline
Preservative Stabilisers	0.09% Sodium Azide
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	<p>UniProt: P25942 Related reagents</p> <p>Entrez Gene: 958 CD40 Related reagents</p>
Synonyms	TNFRSF5
RRID	AB_1102010
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>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.</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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
Histology Positive Control Tissue	Human Tonsil
References	<ol style="list-style-type: none"> 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. *et al.* (2010) Laminin and Fibronectin Treatment Leads to Generation of Dendritic Cells with Superior Endocytic Capacity. [PLoS ONE. 5: 1-10.](#)
6. Wang, Y.S. *et al.* (2007) Characterization of canine monocyte-derived dendritic cells with phenotypic and functional differentiation. [Can J Vet Res. 71: 165-74.](#)
7. Vlachoyiannopoulos, P.G. *et al.* (2004) Anti-CD40 antibodies in antiphospholipid syndrome and systemic lupus erythematosus. [Thromb Haemost. 92: 1303-11.](#)
8. Leigh, J.E. *et al.* (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. *et al.* (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. *et al.* (2010) TLR4-mediated sensing of *Campylobacter jejuni* by dendritic cells is determined by sialylation. [J Immunol. 185: 748-55.](#)
11. Huizinga R *et al.* (2015) Innate Immunity to *Campylobacter jejuni* in Guillain-Barré Syndrome. [Ann Neurol. 78 \(3\): 343-54.](#)
12. Yildirim C *et al.* (2015) Galectin-2 induces a proinflammatory, anti-arteriogenic phenotype in 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.](#)
14. Silk, K.M. *et al.* (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. [J Biomed Biotechnol. 2012: 172420.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10057 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1590T10057>

Regulatory

For research purposes only

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...) | Alk. Phos. , HRP |
| 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...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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