

Datasheet: MCA1590PET

BATCH NUMBER INN1608

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

	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.

Target Species	Human			
Species Cross	Reacts with: Dog			
Reactivity	reactivity is derived t	vity and working conditi rom testing within our lations from the originate	aboratories, peer-revie	wed publications
Product Form	Purified IgG conjuga	ted to R. Phycoerythrin	(RPE) - lyophilized	
Reconstitution	Reconstitute in 0.25	ml disilled water		
Neconstitution				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	

Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin
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_2275836
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 ⁶ cells in 100ul.
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. et al. (2005) The active metabolite of leflunomide, A77 1726, interferes
	with dendritic cell function. Arthritis Res. Ther. 7: R694-R703.
	with dendritic cell function. <u>Arthritis Res. Ther. 7: R694-R703.</u> 3. Cheadle, E. <i>et al.</i> (2003) <i>Mycobacterium bovis</i> bacillus Calmette-Guerin-infected
	with dendritic cell function. <u>Arthritis Res. Ther. 7: R694-R703.</u> 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
	with dendritic cell function. <u>Arthritis Res. Ther. 7: R694-R703.</u> 3. Cheadle, E. <i>et al.</i> (2003) <i>Mycobacterium bovis</i> bacillus Calmette-Guerin-infected
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	with dendritic cell function. <u>Arthritis Res. Ther. 7: R694-R703.</u> 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. <u>Immunology.108: 79-88.</u> 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. <u>J Transl Med. 7: 93.</u>
	with dendritic cell function. <u>Arthritis Res. Ther. 7: R694-R703.</u> 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. <u>Immunology.108: 79-88.</u> 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. <u>J Transl</u>
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	with dendritic cell function. Arthritis Res. Ther. 7: R694-R703. 3. Cheadle, E. et al. (2003) Mycobacterium bovis 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. et al. (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.
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	with dendritic cell function. Arthritis Res. Ther. 7: R694-R703. 3. Cheadle, E. et al. (2003) Mycobacterium bovis 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. et al. (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.

Candidiasis. Clin Vaccine Immunol. 13: 678-83.

lesions of human immunodeficiency virus-infected persons with oropharyngeal

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- 10. Kuijf, M.L. *et al.* (2010) TLR4-mediated sensing of *Campylobacter jejuni* by dendritic cells is determined by sialylation. <u>J Immunol. 185: 748-55.</u>
- 11. Huizinga R *et al.* (2015) Innate Immunity to *Campylobacter jejuni* in Guillain-Barré Syndrome. <u>Ann Neurol. 78 (3): 343-54.</u>
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- 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.
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- 15. Tischer, S. *et al.* (2011) Heat shock protein 70/peptide complexes: potent mediators for the generation of antiviral T cells particularly with regard to low precursor frequencies. J Transl Med. 9: 175.
- 16. Unosson, J. *et al.* (2021) Acute cardiovascular effects of controlled exposure to dilute Petrodiesel and biodiesel exhaust in healthy volunteers: a crossover study. <u>Part Fibre Toxicol</u>. 18 (1): 22.
- 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. <u>Front Immunol. 12: 702453.</u>

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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1590PET 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:RPE (MCA929PE)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)

HUMAN SEROBLOCK (BUF070B)

 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M375344:210104'

Printed on 21 Feb 2024

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