

Datasheet: MCA1590SBV570

BATCH NUMBER 100008293

Description:	MOUSE ANTI HUMAN CD40:StarBright Violet 570
Specificity:	CD40
Format:	StarBright Violet 570
Product Type:	Monoclonal Antibody
Clone:	LOB7/6
Isotype:	IgG2a
Quantity:	100 TESTS/0.5ml

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 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.

Target Species

Human

Species Cross Reactivity

Reacts with: Dog

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.

Product Form

Purified IgG conjugated to StarBright Violet 570 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Violet 570	404	571

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
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 5µl of the suggested working dilution to label 10 ⁶ cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
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. <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. *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.](#)
 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. [Part Fibre Toxicol. 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. [Front Immunol. 12: 702453.](#)

Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1590SBV570 20471
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

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

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

North & South Tel: +1 800 265 7376

America 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

'M426130:231121'

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

Printed on 21 Feb 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)