

Datasheet: MCA1143GA

BATCH NUMBER 161201

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| Description: | RAT ANTI MOUSE CD40 |
| Specificity: | CD40 |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | 3/23 |
| Isotype: | IgG2a |
| Quantity: | 0.1 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 www.bio-rad-antibodies.com/protocols.

| | Yes | No | Not Determined | Suggested Dilution |
|----------------------------|-----|----|----------------|--------------------|
| Flow Cytometry | ▪ | | | 1/10 - 1/50 |
| Immunohistology - Frozen | ▪ | | | |
| Immunohistology - Paraffin | | | ▪ | |
| ELISA | ▪ | | | |
| Immunoprecipitation | | | ▪ | |
| Western Blotting | | | ▪ | |
| Immunofluorescence | ▪ | | | |

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.

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| Target Species | Mouse |
| Product Form | Purified IgG - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.09% Sodium Azide |

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|---------------------------------------|---|
| Carrier Free | Yes |
| Approx. Protein Concentrations | IgG concentration 1 mg/ml |
| Immunogen | Extracellular Domain of Mouse CD40 and the Fc portion of Human IgG1. |
| External Database Links | <p>UniProt: P27512 Related reagents</p> <p>Entrez Gene: 21939 Cd40 Related reagents</p> |
| Synonyms | Tnfrsf5 |
| RRID | AB_323810 |
| Fusion Partners | Spleen cells from immunised LOU/c rats were fused with cells of the Ag8 mouse myeloma cell line. |
| Specificity | <p>Rat anti Mouse CD40 antibody, clone 3/23 recognizes the murine CD40 cell surface glycoprotein. It does not react with normal mouse Ig or with human IgG1 and will stain most mature mouse B cells. It does not cross react with mouse T cells. The specificity of Rat anti Mouse CD40 antibody, clone 3/23 was demonstrated by ELISA and flow cytometry using BHK cells transfected with mouse CD40.</p> <p>Rat anti Mouse CD40 antibody, clone 3/23 is a powerful activator of normal B cells especially in the presence of IL-4.</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul. |
| References | <ol style="list-style-type: none"> 1. Parry, S.L. <i>et al.</i> (1994) Plastic-immobilized anti-mu or anti-delta antibodies induce apoptosis in mature murine B lymphocytes. Eur J Immunol. 24 (4): 974-9. 2. Hasbold, J. <i>et al.</i> (1994) Properties of mouse CD40: cellular distribution of CD40 and B cell activation by monoclonal anti-mouse CD40 antibodies. Eur J Immunol. 24 (8): 1835-42. 3. Hasbold, J. & Klaus, G.G. (1994) B cells from CBA/N mice do not proliferate following ligation of CD40. Eur J Immunol. 24 (1): 152-7. 4. Bedoret, D. <i>et al.</i> (2009) Lung interstitial macrophages alter dendritic cell functions to prevent airway allergy in mice. J Clin Invest. 119 (12): 3723-38. 5. Mohan, J. <i>et al.</i> (2005) Skin-derived dendritic cells acquire and degrade the scrapie agent following in vitro exposure. Immunology. 116: 122-33. 6. Mukhopadhyay, S. <i>et al.</i> (2004) Activation of murine macrophages by Neisseria meningitidis and IFN-gamma in vitro: distinct roles of class A scavenger and Toll-like pattern recognition receptors in selective modulation of surface phenotype. J Leukoc Biol. 76: 577-84. 7. Russo, S. <i>et al.</i> (2003) Platelet-activating factor mediates CD40-dependent |

- angiogenesis and endothelial-smooth muscle cell interaction. [J Immunol. 171: 5489-97.](#)
8. Shakib, S. *et al.* (2009) Checkpoints in the development of thymic cortical epithelial cells. [J Immunol. 182: 130-7.](#)
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11. Yang, Y.F. *et al.* (2000) Requirement for IFN-gamma in IL-12 production induced by collaboration between v(alpha)14(+) NKT cells and antigen-presenting cells. [Int Immunol. 12: 1669-75.](#)
12. Legutko, A. *et al.* (2011) Sirtuin 1 Promotes Th2 Responses and Airway Allergy by Repressing Peroxisome Proliferator-Activated Receptor- γ Activity in Dendritic Cells. [J Immunol. 187: 4517-29.](#)
13. Pletinckx, K. *et al.* (2015) Immature dendritic cells convert anergic nonregulatory T cells into Foxp3- IL-10+ regulatory T cells by engaging CD28 and CTLA-4. [Eur J Immunol. 45 \(2\): 480-91.](#)
14. Malada-Edelstein, Y.F. *et al.* (2017) Regulatory role of cytosolic phospholipase A₂ alpha in the induction of CD40 in microglia. [J Neuroinflammation. 14 \(1\): 33.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1143GA>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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| Goat Anti Rat IgG (STAR73...) | RPE |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | DyLight@550 , DyLight@650 , DyLight@800 |
| Rabbit Anti Rat IgG (STAR21...) | HRP |
| Rabbit Anti Rat IgG (STAR16...) | DyLight@800 |
| Goat Anti Rat IgG (STAR131...) | Alk. Phos. , Biotin |
| Rabbit Anti Rat IgG (STAR17...) | FITC |
| Goat Anti Rat IgG (STAR72...) | HRP |
| Goat Anti Rat IgG (STAR69...) | FITC |

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

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|----------------------------------|---|------------------|---|---------------|---|
| 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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