

Datasheet: MCA1019B

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| Description: | MOUSE ANTI HUMAN CD38:Biotin |
| Specificity: | CD38 |
| Format: | Biotin |
| Product Type: | Monoclonal Antibody |
| Clone: | AT13/5 |
| Isotype: | IgG1 |
| 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 | ▪ | | | 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.

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| Target Species | Human |
| Product Form | Purified IgG conjugated to Biotin - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.09% Sodium Azide 1% Bovine Serum Albumin |
| Approx. Protein Concentrations | IgG concentration 0.1 mg/ml |
| Immunogen | Namalwa human B-cell line. |
| External Database Links | UniProt: |

Entrez Gene:

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| RRID | AB_322221 |
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| Fusion Partners | Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line. |
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| Specificity | <p>Mouse anti Human CD38 antibody, clone AT13/5 recognizes CD38, also known as ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 1, 2'-phospho-ADP-ribosyl cyclase, 2'-phospho-ADP-ribosyl cyclase, ADP-ribosyl cyclase 1, Cyclic ADP-ribose hydrolase 1 or T10. CD38 is a 300 amino acid ~45 kDa single pass type II transmembrane glycoprotein and Mouse anti Human CD38 antibody, clone AT13/5 has a reactivity pattern consistent with other antibodies of the CD38 cluster. CD38 is expressed by plasma cells, monocytes, early lymphoid cells and activated T cells.</p> <p>CD38 is widely used to study the processes of B and T differentiation and activation. CD38 is a multifunctional enzyme involved in calcium signaling and nicotinamide adenine dinucleotide (NAD⁺) metabolism (de Oliveira et al. 2018).</p> |
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| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood |
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| References | <ol style="list-style-type: none">1. Corcione, A. <i>et al.</i> (2009) CX3CR1 is expressed by human B lymphocytes and mediates [corrected] CX3CL1 driven chemotaxis of tonsil centrocytes. PLoS One. 4: e8485.2. Hovden, A.O. <i>et al.</i> (2011) Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. BMC Immunol. 12: 2.3. Tipping, A.J. <i>et al.</i> (2009) High GATA-2 expression inhibits human hematopoietic stem and progenitor cell function by effects on cell cycle Blood. 113: 2661-72.4. Slyker, J.A. <i>et al.</i> (2012) Acute cytomegalovirus infection is associated with increased frequencies of activated and apoptosis-vulnerable T cells in HIV-1-infected infants. J Virol. 86 (20): 11373-9.5. Slyker, J.A. <i>et al.</i> (2012) The impact of HIV-1 infection and exposure on natural killer (NK) cell phenotype in Kenyan infants during the first year of life. Front Immunol. 3: 399. |
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| Further Reading | <ol style="list-style-type: none">1. Malavasi, F. <i>et al.</i> (1994) Human CD38: a glycoprotein in search of a function. Immunol Today. 15 (3): 95-7. |
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| Storage | <p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p> |
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| Guarantee | 12 months from date of despatch |
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Health And Safety Information Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

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

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

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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](https://www.bio-rad-antibodies.com/datasheets)
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