

Datasheet: MCA1019SBR815

BATCH NUMBER 64592532

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| Description: | MOUSE ANTI HUMAN CD38:StarBright Red 815 |
| Specificity: | CD38 |
| Format: | StarBright Red 815 |
| Product Type: | Monoclonal Antibody |
| Clone: | AT13/5 |
| Isotype: | IgG1 |
| 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.

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| Target Species | Human | | |
| Product Form | Purified IgG conjugated to StarBright Red 815 - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | StarBright Red 815 | 654 | 811 |
| 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 | | |

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| Immunogen | Namalwa human B-cell line. |
| External Database Links | <p>UniProt: P28907 Related reagents</p> <p>Entrez Gene: 952 CD38 Related reagents</p> |
| Fusion Partners | Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line. |
| 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> |
| 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. 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. 6. Kelleher, M. <i>et al.</i> (2011) Comparative Kinetics of Immune Responses and Changes in Cellular Sub-Sets Detected in Colorectal Cancer Patients Vaccinated with MVA-5T4 (TroVax) Administered Alongside Two Different Chemotherapy Regimens J Cancer Therapy. 02 (01): 54-64. |
| Further Reading | 1. Malavasi, F. <i>et al.</i> (1994) Human CD38: a glycoprotein in search of a function. Immunol Today. 15 (3): 95-7. |
| Storage | Store at +4°C. DO NOT FREEZE. |

This product should be stored undiluted.

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| Guarantee | 12 months from date of despatch |
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| Acknowledgements | This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts. |
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| Health And Safety Information | Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1019SBR815 20471 |
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| Regulatory | For research purposes only |
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Related Products

Recommended Useful Reagents

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

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

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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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