

Datasheet: MCA1019SBUV400

Description:	MOUSE ANTI HUMAN CD38:StarBright UltraViolet 400
Specificity:	CD38
Format:	StarBright UltraViolet 400
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.

Target Species	Human		
Product Form	Purified IgG conjugated to StarBright UltraViolet 400 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright UltraViolet 400	347	394
Preparation	Purified IgG prepared by affinity chromatography on Protein A		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20		
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	<p>Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.</p>
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	<p>Use 5ul of the suggested working dilution to label 10⁶ cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.</p>
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.
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.
Storage	<p>Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.</p>
Guarantee	<p>12 months from date of despatch</p>
Acknowledgements	<p>This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts</p>

Health And Safety Information Material Safety Datasheet documentation #20471 available at:
20471: <https://www.bio-rad-antibodies.com/uploads/MSDS/20471.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)
'M392293:211029'

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