

Datasheet: MCA1019SBV760

#### **BATCH NUMBER 100006558**

Description:	MOUSE ANTI HUMAN CD38:StarBright Violet 760
Specificity:	CD38
Format:	StarBright Violet 760
Product Type:	Monoclonal Antibody
Clone:	AT13/5
Isotype:	lgG1
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 conjugate	ed to StarBright Violet	760 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Violet 760	403	754
Preparation	Purified IgG prepared	by affinity chromatog	raphy on Protein A
Preparation  Buffer Solution	Purified IgG prepared Phosphate buffered sa		raphy on Protein A
•		aline	raphy on Protein A
Buffer Solution	Phosphate buffered sa	aline (NaN <sub>3</sub> )	raphy on Protein A
Buffer Solution Preservative	Phosphate buffered sa 0.09% Sodium Azide	aline (NaN <sub>3</sub> )	raphy on Protein A
Buffer Solution Preservative	Phosphate buffered so 0.09% Sodium Azide 1% Bovine Serum Alb	aline (NaN <sub>3</sub> )	raphy on Protein A

Immunogen	Namalwa human B-cell line.
External Database Links	UniProt: P28907 Related reagents  Entrez Gene: 952 CD38 Related reagents
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	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.
	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).
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	<ol> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ol>
Further Reading	1. Malavasi, F. <i>et al.</i> (1994) Human CD38: a glycoprotein in search of a function. <u>Immunol Today</u> . 15 (3): 95-7.
Storage	Store at +4°C. DO NOT FREEZE.  This product should be stored undiluted.

12 months from date of despatch

Guarantee

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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1019SBV760">https://www.bio-rad-antibodies.com/SDS/MCA1019SBV760</a> 20471
Regulatory	For research purposes only

## **Related Products**

# **Recommended Useful Reagents**

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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 'M395319:220425'

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