

Datasheet: MCA1019P750

Description:	MOUSE ANTI HUMAN CD38:RPE-Alexa Fluor® 750
Specificity:	CD38
Format:	RPE-ALEXA FLUOR® 750
Product Type:	Monoclonal Antibody
Clone:	AT13/5
Isotype:	lgG1
Quantity:	100 TESTS/1ml

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 <u>www.bio-</u>					
	rad-antibodies.com/protocols. Yes No Not Determined Suggested Dilution					
	Flow Cytometry		10	Not Determined	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.					
Target Species	Human					
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE):Alexa Fluor 750 - lyophilized					
Reconstitution	Reconstitute with 1 ml distilled water					
Max Ex/Em	Fluorophore	Excitation Max	(nm)	Emission Max (nm)		
	RPE-Alexa Fluor®750 488nm laser	496		779		
	RPE-Alexa Fluor®750 561nm laser	546		779		
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant					
Buffer Solution	Phosphate buffered s	aline				
Preservative Stabilisers	0.09% sodium azide (1% bovine serum albi	•				

	5% sucrose
Immunogen	Namalwa human B-cell line.
External Database Links	UniProt: <u>P28907</u> <u>Related reagents</u> Entrez Gene: <u>952</u> CD38 <u>Related reagents</u>
RRID	AB_566738
Fusion Partners	Spleen cells from immunized 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 <i>et al.</i> 2018).
Flow Cytometry	Use 10 μ l of the suggested working dilution to label 10 ⁶ cells in 100 μ l
References	 Corcione, A. <i>et al.</i> (2009) CX3CR1 is expressed by human B lymphocytes and mediates [corrected] CX3CL1 driven chemotaxis of tonsil centrocytes. <u>PLoS One. 4:</u> <u>e8485.</u> 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. <u>BMC Immunol. 12: 2.</u> 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 <u>Blood. 113: 2661-72.</u> 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. <u>J Virol.</u> <u>86 (20): 11373-9.</u> 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. <u>Front Immunol. 3: 399.</u> 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 <u>J Cancer</u> <u>Therapy. 02 (01): 54-64.</u>
Further Reading	1. Malavasi, F. <i>et al.</i> (1994) Human CD38: a glycoprotein in search of a function. <u>Immunol</u>

Today. 15 (3): 95-7.

Storage	This product is shipped at ambient temperature.				
	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE.				
	This product should be stored undiluted. This product is photosensitive and should b protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.				
Guarantee	12 months from date of despatch				
Acknowledgements	edgements The Alexa Fluor dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays, and are covered by pending and issued patents.				
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1019P750 20487				
Regulatory	For research purposes only				

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M439396:250523'

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