Datasheet: MCA1267SBV760 BATCH NUMBER 100006513

Description:	MOUSE ANTI HUMAN CD4:StarBright Violet 760
Specificity:	CD4
Format:	StarBright Violet 760
Product Type:	Monoclonal Antibody
Clone:	RPA-T4
Isotype:	lgG1
Quantity:	100 TESTS/0.5ml

Product Details

Applications	This product has been reported to work in the following applications. This inform derived from testing within our laboratories, peer-reviewed publications or persor communications from the originators. Please refer to references indicated for fur information. For general protocol recommendations, please visit <u>www.bio-rad-antibodies.com/protocols</u> .							
		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 Violet 760 - liquid							
Max Ex/Em	Fluorophore StarBright Violet 760	Excitation Max 403	(nm)	Emission Max (nm) 754				
Preparation	Purified IgG prepared t supernatant	by affinity chro	matogra	aphy on Protein G fror	n tissue culture			
Buffer Solution	Phosphate buffered saline							
Preservative	0.09% Sodium Azide (I	NaN ₃)						
Stabilisers	1% Bovine Serum Albumin							
	0.1% Pluronic F68							
	0.1% PEG 3350							
	0.05% Tween 20							

Immunogen	Human PHA blasts
External Database Links	UniProt:P01730Related reagentsEntrez Gene:920CD4Related reagents
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NSI myeloma cell line
Specificity	Mouse anti human CD4 antibody, clone RPA-T4 recognizes human CD4, a ~55 kDa cell surface glycoprotein, primarily expressed on a subpopulation of T lymphocytes, on peripheral blood monocytes and on tissue macrophages. Epitope mapping shows that antibodies, produced by clone RPA-T4, recognize an epitope within domain 1 of the extracellular region of the CD4 molecule.
	Mouse anti human CD4 antibody, clone RPA-T4 blocks gp120-CD4 interaction and inhibits syncytium formation (Piatier-Tonneau <i>et al</i> , 1997). The use of <u>Mouse anti Human</u> <u>CD4:Low Endotoxin (MCA1267EL)</u> is recommended for functional assays.
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 ⁶ cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	 Zarkesh-Esfahani, H. <i>et al.</i> (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. J Immunol. 167 (8): 4593-9. Voehringer, D. <i>et al.</i> (2002) Lack of proliferative capacity of human effector and memory T cells expressing killer cell lectinlike receptor G1 (KLRG1). <u>Blood. 100 (10): 3698-702.</u> Piatier-Tonneau, D. (1997) CD4 workshop panel report. In: Leucocyte Typing VI: White Cell Differentiation Antigens: Proceedings of the Sixth International Workshop and Conference Held in Kobe, Japan, 10-14 November 1996. Garland Pub., 1998. Pentón-Rol, G. <i>et al.</i> (2011) C-Phycocyanin ameliorates experimental autoimmune encephalomyelitis and induces regulatory T cells. Int Immunopharmacol. 11 (1): 29-38. Wright, G.J. <i>et al.</i> (2001) The unusual distribution of the neuronal/lymphoid cell surface CD200 (OX2) glycoprotein is conserved in humans. Immunology. 102 (2): 173-9. Zhang, Y. <i>et al.</i> (2013) Accelerated <i>in vivo</i>. proliferation of memory phenotype CD4⁺ T-cells in human HIV-1 infection irrespective of viral chemokine co-receptor tropism. PLoS Pathog. 9 (4): e1003310. Bughani, U. <i>et al.</i> (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itolizumab. PLoS One. 12 (7): e0180088.
Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign

	C	counterparts						
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To find a b	atch/lot specific	datasheet for th	is produc	t, please use our onlin 'M395321:220425'	e search tool at: b	oio-rad-antibodies.com/datasheets		

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