

Datasheet: MCA1267SBUV795

Description:	MOUSE ANTI HUMAN CD4:StarBright UltraViolet 795
Specificity:	CD4
Format:	StarBright UltraViolet 795
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 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 795 - liquid
Max Ex/Em Fluorophore Excitation Max (nm) Emission Max (
StarBright UltraViolet 340 792
Preparation Purified IgG prepared by affinity chromatography on Protein supernatant
uffer Solution Phosphate buffered saline
reservative 0.09% sodium azide (NaN ₃)
170 bovine serum albumin
0.1% Pluronic F68

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Human PHA blasts

External Database Links

UniProt:

P01730 Related reagents

Entrez Gene:

920 CD4 Related 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 (<u>Piatier-Tonneau et al, 1997</u>). The use of <u>Mouse anti Human CD4:Low Endotoxin (**MCA1267EL**)</u> is recommended for functional assays.

Flow Cytometry

Use 5µl of the suggested working dilution to label 10⁶ cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

References

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- 2. Zarkesh-Esfahani, H. *et al.* (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. <u>J Immunol. 167 (8): 4593-9.</u>
- 3. Wright, G.J. *et al.* (2001) The unusual distribution of the neuronal/lymphoid cell surface CD200 (OX2) glycoprotein is conserved in humans. <u>Immunology</u>. 102 (2): 173-9.
- 4. Pentón-Rol, G. *et al.* (2011) C-Phycocyanin ameliorates experimental autoimmune encephalomyelitis and induces regulatory T cells. Int Immunopharmacol. 11 (1): 29-38.
- 5. Zhang, Y. *et al.* (2013) Accelerated *in vivo*. proliferation of memory phenotype CD4⁺ T-cells in human HIV-1 infection irrespective of viral chemokine co-receptor tropism. <u>PLoS Pathog. 9 (4): e1003310.</u>
- 6. Bughani, U. *et al.* (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itolizumab. PLoS One. 12 (7): e0180088.
- 7. Agrawal, S.M. *et al.* (2013) Extracellular matrix metalloproteinase inducer shows active perivascular cuffs in multiple sclerosis. Brain. 136 (Pt 6): 1760-77.
- 8. Malmassari, S.L. *et al.* (2007) Impact of hepatitis B virus basic core promoter mutations on T cell response to an immunodominant HBx-derived epitope. <u>Hepatology. 45 (5):</u> 1199-209.
- 9. Wooldridge, L. *et al.* (2006) Anti-coreceptor antibodies profoundly affect staining with peptide-MHC class I and class II tetramers. Eur J Immunol. 36 (7): 1847-55.
- 10. Wildum, S. *et al.* (2006) Contribution of Vpu, Env, and Nef to CD4 down-modulation and resistance of human immunodeficiency virus type 1-infected T cells to superinfection.

J Virol. 80 (16): 8047-59.

11. Kirchhof, J. *et al.* (2018) Learned immunosuppressive placebo responses in renal transplant patients. <u>Proc Natl Acad Sci U S A. 115 (16): 4223-7.</u>

12. Kelleher, M. *et al.* (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 Therapy</u>. 02 (01): 54-64.

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	This product should be stored undiluted.
	DO NOT FREEZE.
Storage	Store at +4°C.

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 counterparts
Health And Safety	Material Safety Datasheet documentation #20471 available at:

Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1267SBUV795 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 'M408909:221015'

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