

Datasheet: MCA1267SBUV510

BATCH NUMBER 64649959

| | |
|----------------------|---|
| Description: | MOUSE ANTI HUMAN CD4:StarBright UltraViolet 510 |
| Specificity: | CD4 |
| Format: | StarBright UltraViolet 510 |
| Product Type: | Monoclonal Antibody |
| Clone: | RPA-T4 |
| 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 510 - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | StarBright UltraViolet 510 | 340 | 513 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative | 0.09% sodium azide (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:

[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 ([Piatier-Tonneau *et al*, 1997](#)).

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

1. 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.
2. Zarkesh-Esfahani, H. *et al.* (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. [J Immunol. 167 \(8\): 4593-9.](#)
3. Wright, G.J. *et al.* (2001) The unusual distribution of the neuronal/lymphoid cell surface CD200 (OX2) glycoprotein is conserved in humans. [Immunology. 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. [PLoS Pathog. 9 \(4\): e1003310.](#)
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. [Hepatology. 45 \(5\): 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. [Proc Natl Acad Sci U S A. 115 \(16\): 4223-7.](#)

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 [J Cancer Therapy. 02 \(01\): 54-64.](#)

13. Turuntaš, V. *et al.* (2024) The Effect of Static Magnetic Fields of Different Strengths and Polarities on Cytokine Production by Human Lymphocytes *In Vitro* [Bioengineering. 11 \(8\): 749.](#)

| | |
|--------------------------------------|--|
| 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 counterparts |
| Health And Safety Information | Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1267SBUV510 |
| Regulatory | For research purposes only |

Related Products

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M408904:221015'

Printed on 28 May 2026