**BIO·RAD**

# Datasheet: MCA1267FT

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| **Description:** | MOUSE ANTI HUMAN CD4:FITC |
| **Specificity:** | CD4 |
| **Format:** | FITC |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | RPA-T4 |
| **Isotype:** | IgG1 |
| **Quantity:** | 25 µg |

## 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 - 1/10 |

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

**Max Ex/Em**

| Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|---|---|---|
| FITC | 490 | 525 |

**Preparation**

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

0.09% sodium azide ($NaN_3$)
1% bovine serum albumin

**Approx. Protein Concentrations**

IgG concentration 0.1 mg/ml

**Immunogen**

Human PHA blasts

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| **External Database Links** | **UniProt:** |
| | [P01730](#)   [Related reagents](#) |
| | **Entrez Gene:** |
| | [920](#)   CD4   [Related reagents](#) |
| **RRID** | AB_1101978 |
| **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 10µl of the suggested working dilution to label $10^6$ cells or 100ul whole blood |
| **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. |

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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.](#)

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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.](#)

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| **Storage** | This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.<br><br>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. |
| **Guarantee** | 12 months from date of despatch |
| **Health And Safety Information** | Material Safety Datasheet documentation #10041 available at: [https://www.bio-rad-antibodies.com/SDS/MCA1267FT](https://www.bio-rad-antibodies.com/SDS/MCA1267FT) |
| **Regulatory** | For research purposes only |

# Related Products

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)](#)

## 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
'M417287:230307'

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