

Datasheet: MCA1267A647T

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| Description: | MOUSE ANTI HUMAN CD4:Alexa Fluor® 647 |
| Specificity: | CD4 |
| Format: | ALEXA FLUOR® 647 |
| Product Type: | Monoclonal Antibody |
| Clone: | RPA-T4 |
| Isotype: | IgG1 |
| Quantity: | 25 TESTS/0.25ml |

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 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.

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| Target Species | Human | | |
| Product Form | Purified IgG conjugated to Alexa Fluor® 647 - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | Alexa Fluor®647 | 650 | 665 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative | 0.09% Sodium Azide | | |
| Stabilisers | 1% Bovine Serum Albumin | | |
| Approx. Protein Concentrations | IgG concentration 0.05 mg/ml | | |
| Immunogen | Human PHA blasts | | |
| External Database Links | UniProt: P01730 Related reagents | | |
| | Entrez Gene: | | |

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| RRID | AB_1101980 |
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| Fusion Partners | Spleen cells from immunized BALB/c mice were fused with cells of the mouse NSI myeloma cell line |
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| Specificity | <p>Mouse anti human CD4 antibody, clone RPA-T4 recognizes human CD4, a 55 kDa cell surface glycoprotein that is primarily expressed on a subpopulation of T lymphocytes, on peripheral blood monocytes and on tissue macrophages. Epitope mapping studies have shown that antibodies, produced by clone RPA-T4, recognize an epitope within domain 1 of the extracellular region of the CD4 molecule.</p> <p>Mouse anti human CD4 antibody, clone RPA-T4 has been reported to block gp120-CD4 interaction and inhibit syncytium formation (Piatier-Tonneau <i>et al</i>, 1997). Bio-Rad recommend the use of Mouse anti Human CD4:Low Endotoxin (MCA1267EL) for this purpose.</p> |
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| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood |
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| References | <ol style="list-style-type: none">1. Zarkesh-Esfahani, H. <i>et al.</i> (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. J Immunol. 167 (8): 4593-9.2. 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). Blood. 100 (10): 3698-702.3. 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., 1998.4. Pentón-Rol, G. <i>et al.</i> (2011) C-Phycocyanin ameliorates experimental autoimmune encephalomyelitis and induces regulatory T cells. Int Immunopharmacol. 11 (1): 29-38.5. 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): 173-9.6. 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): e1003310.7. Bughani, U. <i>et al.</i> (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itlizumab. PLoS One. 12 (7): e0180088. |
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| Storage | <p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p> |
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| Guarantee | 12 months from date of despatch |
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Health And Safety Information Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

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

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

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