

Datasheet: MCA1267P647

BATCH NUMBER 151797

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| Description: | MOUSE ANTI HUMAN CD4:RPE-Alexa Fluor® 647 |
| Specificity: | CD4 |
| Format: | RPE-ALEXA FLUOR® 647 |
| Product Type: | Monoclonal Antibody |
| Clone: | RPA-T4 |
| Isotype: | IgG1 |
| Quantity: | 100 TESTS/1ml |

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 R. Phycoerythrin (RPE) - Alexa Fluor® 647 - lyophilized | | |
| Reconstitution | Reconstitute with 1 ml distilled water | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | RPE-Alexa Fluor®647 488nm laser | 496 | 667 |
| | RPE-Alexa Fluor®647 561nm laser | 546 | 667 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |

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| Preservative Stabilisers | 0.09% Sodium Azide |
| | 1% Bovine Serum Albumin |
| | 5% Sucrose |
| Immunogen | Human PHA blasts |
| External Database Links | <p>UniProt: P01730 Related reagents</p> <p>Entrez Gene: 920 CD4 Related reagents</p> |
| RRID | AB_566747 |
| Fusion Partners | Spleen cells from immunized BALB/c mice were fused with cells of the mouse NSI myeloma cell line |
| 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> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood. Tandem conjugates of RPE-Alexa Fluor® 647 display fluorescence properties that are virtually identical to those of RPE-Cy5 tandem conjugates. |
| 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 Itolizumab. [PLoS One. 12 \(7\): e0180088.](#)

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| Storage | <p>Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.</p> <p>DO NOT FREEZE.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p> |
| Guarantee | 12 months from date of despatch |
| Acknowledgements | The Alexa Fluor® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays, and are covered by pending and issued patents. |
| Health And Safety Information | Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1267P647 20487 |
| Regulatory | For research purposes only |

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE-Alexa Fluor® 647 \(MCA928P647\)](#)

Recommended Useful Reagents

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

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

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| North & South America | Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com | Worldwide | Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com | Europe | Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com |
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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
'M375299:210104'

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