

## Datasheet: MCA1267A647T

<b>Description:</b>	MOUSE ANTI HUMAN CD4:Alexa Fluor® 647
<b>Specificity:</b>	CD4
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RPA-T4
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

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

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<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NSI myeloma cell line
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<b>Specificity</b>	<p><b>Mouse anti human CD4 antibody, clone RPA-T4</b> 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, see Piatier-Tonneau <i>et al</i>, 1997 for details. Bio-Rad recommend the use of <a href="#">Mouse anti Human CD4:Low Endotoxin (MCA1267EL)</a> for this purpose.</p>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood
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<b>References</b>	<ol style="list-style-type: none"><li>1. Zarkesh-Esfahani, H. <i>et al.</i> (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. <a href="#">J Immunol. 167 (8): 4593-9.</a></li><li>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). <a href="#">Blood. 100 (10): 3698-702.</a></li><li>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.</li><li>4. Pentón-Rol, G. <i>et al.</i> (2011) C-Phycocyanin ameliorates experimental autoimmune encephalomyelitis and induces regulatory T cells. <a href="#">Int Immunopharmacol. 11 (1): 29-38.</a></li><li>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. <a href="#">Immunology. 102 (2): 173-9.</a></li><li>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 <a href="#">PLoS Pathog 9(4): e1003310.</a></li><li>7. Bughani, U. <i>et al.</i> (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itolizumab. <a href="#">PLoS One. 12 (7): e0180088.</a></li></ol>
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<b>Storage</b>	<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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<b>Shelf Life</b>	18 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>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

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

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

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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