

Datasheet: MCA1267PET

Description:	MOUSE ANTI HUMAN CD4:RPE
Specificity:	CD4
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	RPA-T4
Isotype:	IgG1
Quantity:	25 TESTS

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.

Target Species	Human		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
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		
	5% Sucrose		
Immunogen	Human PHA blasts		
External Database Links	UniProt: P01730 Related reagents		
	Entrez Gene: 920 CD4 Related reagents		

RRID AB_1101984

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 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.

Mouse anti human CD4 antibody, clone RPA-T4 has been reported to block gp120-CD4 interaction and inhibit syncytium formation (Piatier-Tonneau *et al*, 1997). Bio-Rad recommend the use of [Mouse anti Human CD4:Low Endotoxin \(MCA1267EL\)](#) for this purpose.

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells or 100ul whole blood

References

1. Zarkesh-Esfahani, H. *et al*. (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. [J Immunol. 167 \(8\): 4593-9.](#)
2. Voehringer, D. *et al*. (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. *et al*. (2011) C-Phycocyanin ameliorates experimental autoimmune encephalomyelitis and induces regulatory T cells. [Int Immunopharmacol. 11 \(1\): 29-38.](#)
5. 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.](#)
6. 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.](#)
7. Bughani, U. *et al*. (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itlizumab. [PLoS One. 12 \(7\): e0180088.](#)

Storage Store at +4°C. DO NOT FREEZE.
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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10306 available at: 10306: <https://www.bio-rad-antibodies.com/uploads/MSDS/10306.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

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

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

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