

Datasheet: MCA1267T

Description:	MOUSE ANTI HUMAN CD4
Specificity:	CD4
Format:	Purified
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	■			1/50 - 1/100
Immunohistology - Frozen (1)	■			1/10 - 1/100
Immunohistology - Paraffin		■		
ELISA			■	
Immunoprecipitation			■	
Western Blotting			■	

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1mg/ml

Immunogen	Human PHA blasts
External Database Links	UniProt: P01730 Related reagents Entrez Gene: 920 CD4 Related reagents
Fusion Partners	Spleen cells from immunised 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, see Piatier-Tonneau <i>et al</i>, 1997 for details. 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 10 ⁶ cells or 100ul whole blood
Histology Positive Control Tissue	Human lymphatic tissue
References	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 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.
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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