

Datasheet: MCA749PE

BATCH NUMBER 173048

Description:	MOUSE ANTI GUINEA PIG CD4:RPE
Specificity:	CD4
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	CT7
Isotype:	IgG1
Quantity:	100 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	▪			

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	Guinea Pig						
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized						
Reconstitution	Reconstitute with 1.0ml distilled water						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
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 Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose						

Immunogen	Guinea pig peritoneal T-cells.
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the X63.Ag8.653 mouse myeloma cell line.
Specificity	Mouse anti Guinea Pig CD4 antibody, clone CT7 recognizes the CD4 antigen present on T Helper/Inducer lymphocytes.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole Guinea Pig peripheral blood.
References	<ol style="list-style-type: none"> 1. Tan, B.T. <i>et al.</i> (1985) Production of monoclonal antibodies defining guinea pig T-cell surface markers and a strain 13 Ia-like antigen: the value of immunohistological screening. Hybridoma. 4 (2): 115-24. 2. Liversidge, J. & Forrester, J.V. (1988) Experimental autoimmune uveitis (EAU): immunophenotypic analysis of inflammatory cells in chorio retinal lesions. Curr Eye Res. 7 (12): 1231-41. 3. Steerenberg, P.A. <i>et al.</i> (1991) Tumour rejection after adoptive transfer of line-10-immune spleen cells is mediated by two T cell subpopulations. Cancer Immunol Immunother. 34 (2): 103-10. 4. Debout, C. <i>et al.</i> (1991) The Kurloff cell in estrogenized guinea pigs as a CT7+ 8BE6-CT6- MR-1- CT10- IgM- lymphocyte with natural killer activity. Nat Immun Cell Growth Regul. 10 (6): 327-35. 5. Dascher, C.C. <i>et al.</i> (1999) Conservation of a CD1 multigene family in the guinea pig. J Immunol. 163: 5478-88. 6. Hiromatsu, K. <i>et al.</i> (2002) Induction of CD1-restricted immune responses in guinea pigs by immunization with mycobacterial lipid antigens. J Immunol. 169: 330-9. 7. Rousseau, C. <i>et al.</i> (2003) Sulfolipid Deficiency Does Not Affect the Virulence of <i>Mycobacterium tuberculosis</i> H37Rv in Mice and Guinea Pigs Infect Immun. 71: 4684-90. 8. Jeevan, A. <i>et al.</i> (2003) Differential expression of gamma interferon mRNA induced by attenuated and virulent <i>Mycobacterium tuberculosis</i> in guinea pig cells after <i>Mycobacterium bovis</i> BCG vaccination. Infect Immun. 71: 354-64. 9. Turner, O.C. <i>et al.</i> (2003) Immunopathogenesis of pulmonary granulomas in the guinea pig after infection with <i>Mycobacterium tuberculosis</i>. Infect Immun. 71: 864-71. 10. Schleiss, M.R. <i>et al.</i> (2007) Preconceptual administration of an alphavirus replicon UL83 (pp65 homolog) vaccine induces humoral and cellular immunity and improves pregnancy outcome in the guinea pig model of congenital cytomegalovirus infection. J Infect Dis. 195: 789-98. 11. Mishra, N.C. <i>et al.</i> (2010) Sulfur mustard induces immune sensitization in hairless guinea pigs. Int Immunopharmacol. 10: 193-9. 12. Wang, Y. <i>et al.</i> (2010) Local host response to chlamydial urethral infection in male guinea pigs. Infect Immun. 78: 1670-81. 13. Yang H <i>et al.</i> (2011) Three protein cocktails mediate delayed-type hypersensitivity responses indistinguishable from that elicited by purified protein derivative in the guinea pig model of <i>Mycobacterium tuberculosis</i> infection. Infect Immun. 79 (2): 716-23. 14. Komori, T. <i>et al.</i> (2011) A Microbial Glycolipid Functions as a New Class of Target Antigen for Delayed-type Hypersensitivity. J Biol Chem. 286: 16800-6.

15. Lacy, H.M. *et al.* (2011) Essential role for neutrophils in pathogenesis and adaptive immunity in *Chlamydia caviae* ocular infections. [Infect Immun. 79 \(5\): 1889-97.](#)
16. Shang, S. *et al.* (2011) Activities of TMC207, rifampin, and pyrazinamide against *Mycobacterium tuberculosis* infection in guinea pigs. [Antimicrob Agents Chemother. 55 \(1\): 124-31.](#)
17. Kramp, J.C. *et al.* (2011) The *in vivo* immunomodulatory effect of recombinant tumour necrosis factor-alpha in guinea pigs vaccinated with *Mycobacterium bovis* bacille Calmette-Guérin. [Clin Exp Immunol. 165: 110-20.](#)
18. Gupta, A. *et al.* (2012) Efficacy of *Mycobacterium indicus pranii* immunotherapy as an adjunct to chemotherapy for tuberculosis and underlying immune responses in the lung. [PLoS One. 7 \(7\): e39215.](#)
19. Shang, S. *et al.* (2012) Drug treatment combined with BCG vaccination reduces disease reactivation in guinea pigs infected with *Mycobacterium tuberculosis*. [Vaccine. 30 \(9\): 1572-82.](#)
20. Jeevan A *et al.* (2013) Guinea pig skin, a model for epidermal cellular and molecular changes induced by UVR *in vivo* and *in vitro*: effects on *Mycobacterium bovis* Bacillus Calmette-Guérin vaccination. [Photochem Photobiol. 89 \(1\): 189-98.](#)
21. Chitano, P. *et al.* (2014) Ovalbumin sensitization of guinea pig at birth prevents the ontogenetic decrease in airway smooth muscle responsiveness. [Physiol Rep. 2 \(12\): e12241.](#)
22. Podell, B.K. *et al.* (2014) Increased severity of tuberculosis in Guinea pigs with type 2 diabetes: a model of diabetes-tuberculosis comorbidity. [Am J Pathol. 184 \(4\): 1104-18.](#)
23. Miszczyk, E. *et al.* (2014) Antigen-specific lymphocyte proliferation as a marker of immune response in guinea pigs with sustained *Helicobacter pylori* infection. [Acta Biochim Pol. 61 \(2\): 295-303.](#)
24. Eckhardt, E. *et al.* (2023) Phosphatidylinositolmannoside vaccination induces lipid-specific Th1-responses and partially protects guinea pigs from *Mycobacterium tuberculosis* challenge. [Sci Rep. 13 \(1\): 18613.](#)

Storage	This product is shipped at ambient temperature. 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 #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA749PE
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M441316:250523'

Printed on 09 Jun 2026

© 2026 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)